

SERIES 2™

HUMAX
EASY DIGITAL™



User's Guide

Setting up your TiVo® Digital Video Recorder
Using the TiVo® Service

TiVo DVR User's Guide

The On-Screen Menus and the Remote Control

Arrow Buttons



To navigate the TiVo® DVR's on-screen menus, use the remote control's arrow buttons to move the highlight bar onto the option you want, then press SELECT.

The LEFT arrow button often takes you to the previous screen.

Select

Two Types of On-Screen Arrows

The arrows that appear beside or near the highlight bar show possible directions. For example, on this screen, you could press the RIGHT arrow to highlight Options or the DOWN arrow to highlight "Edit Actor WishList."

Highlight Bar



Arrows Near Highlight Bar



Page Up
Arrow

Page Down
Arrow

When you see page up or page down arrows at the top or bottom of the screen (or a list), press the CHAN UP/DOWN button to jump an entire page at a time.



CHAN UP/DOWN
Button

Programming the Remote Control

After you complete Guided Setup (see Chapter 2), you can program the TV POWER, VOL, and MUTE buttons to control your TV*:

- 1. Find the four-digit codes for your television brand.** To see a list of these codes, press the TiVo button to go to TiVo Central, then select Messages & Setup, then Settings, then Remote Control & DVR Front Lights.
- 2. Prepare the remote control.** Point the remote away from your TiVo Digital Video Recorder (DVR) and cover the front end with your hand. Press and hold the TV POWER button and TiVo button simultaneously for about 5 seconds (until the red light at the end of the remote control comes on, remains steady, then stays on when you release the buttons).
- 3. Enter a code.** Use the number buttons on the remote to enter a four-digit code (starting with the first code in the list on the screen). After you press the fourth digit of the code, the red light on the end of the remote control should flash three times and then go out.
- 4. Test the code.** Point the remote towards the TV and press the TV POWER button. If pressing the button turns the TV off, you're finished. If it does not work, repeat steps 2 and 3 using the next code in the list. If none of the codes works, see Chapter 6 of this guide for alternatives.

*You can also program your TiVo remote to control your TV's input settings, an A/V receiver, and a second DVR. See Chapter 6 for complete instructions.

Inserting Batteries into the Remote Control

Hold the remote with the battery door facing you. Place your thumb in the depression of the door and slide the door towards you.

Insert two AA batteries (supplied). Be sure to match the + and - marks on the batteries to the + and - marks in the compartment.

Replace the battery door by sliding it back into the case with the tabs towards the rear of the compartment. You'll hear a click when it's securely back in place.

Remote Control Tips

Press the **TiVo button** once to go to TiVo Central, or twice to go to Now Playing on TiVo.

Press **FORWARD** (▶▶) and **BACK** (◀◀) up to 3 times for 3 speeds. Press a fourth time to resume normal play.

INSTANT REPLAY replays the last 8 seconds of a program.

Press **CLEAR** to delete a title in a list (like the Now Playing list) or to hide things that aren't part of the program you're watching (like the TiVo channel banner).

INFO brings up the TiVo channel banner. Press the RIGHT arrow to switch among three versions of the banner, each with a different amount of information.

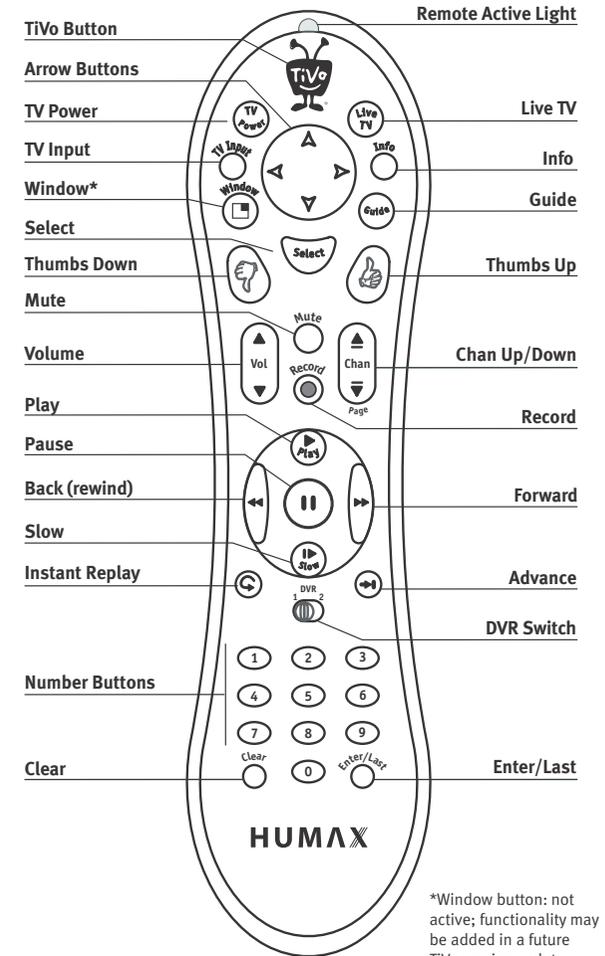
Press **GUIDE** to see the TiVo program guide, then press INFO (while the guide is visible) to see Guide Options and change the day or time, or show only a category of programs.

CHAN UP/DOWN does more than change the channel—it also pages up or down through lists of programs or menu items.

When you're watching "behind" live TV (for example, if you paused live TV and later resumed watching from the paused spot), **ADVANCE** catches you up to the live broadcast. In a recorded program, press it once to jump to the end of the program, then again to jump to the beginning.

If programmed, the **TV POWER**, **VOLUME**, **MUTE**, and **TV INPUT** buttons can control your TV and A/V equipment.

If programmed, the **DVR Switch** lets you control two different TiVo Digital Video Recorders (DVRs) with the same remote.



*Window button: not active; functionality may be added in a future TiVo service update

Welcome to TiVo®!

20005-2200

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►► **Welcome to the TiVolution®!**

It's a revolution in television. We've pioneered an exciting new category that will forever change the way you watch TV. With a new TiVo® Digital Video Recorder by HUMAX in your living room, you'll see how easy it is to watch what you want, when you want.

Never miss your favorite shows again.

The TiVo service automatically records every episode of your favorite series, all season long, even if the network schedule changes. It can even skip reruns.

No more interruptions.

Pause live TV for as long as 30 minutes—any channel, any time. You can also rewind, instant replay, and slow-motion live or recorded TV. Wow!

Watch more of what you like, less of what you don't.

Because the TiVo service is “smart,” it can automatically find and record shows that feature your favorite actor, team, hobby, etc., so you'll always catch the good stuff—even if you never knew it was on.

No more videotapes.

Because it's all-digital, the TiVo DVR saves all your programs in one place so they're ready to watch anytime. You can even start watching a show from the beginning—even while it's still recording.

Networked home entertainment.

Schedule recordings on your DVR at home from any web browser, anywhere! Connect your DVR to a home network and enjoy digital music and photos in your living room and transfer recordings to any TiVo Series2™ DVR connected to your home network.

At last, TV fits into your busy life, not the other way around!

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▶▶ Using This Guide

▶ Getting Started

1. Activate the TiVo® service (see page 24 for more on activating).
2. Connect your DVR using the *Start Here* poster and Chapter 1 of this guide.
3. Complete Guided Setup following the steps provided in Chapter 2 of this guide.

When you've finished these three steps, you're ready to use the TiVo service. Take the tours in Chapter 3 of this guide to check out the basic features.

Basic terms. These are terms used in this guide when we talk about the rest of the service:

Live TV. If you're watching a program as it's being broadcast, you're watching live TV. With the TiVo service, you can also watch recorded programs, or watch "behind" live TV (if you pause live TV, then come back later and watch from the paused spot).

Icons. These are graphic symbols used in the TiVo service to provide information and options you can select. You'll find the Glossary of Icons on the inside back cover.

Program Information screen. When you select a program title from a list, you'll see this type of screen. From it, select actions and view the program description.

Menu paths. Notes at the bottom of some pages show you how to find the screen being described. For example, page 50 describes the To Do List. At the bottom of the page you see **TiVo Central ▶ Pick Programs to Record ▶ To Do List**. This means you can find the To Do List by going to TiVo Central, selecting Pick Programs to Record, then To Do List.

Service updates. Your DVR may receive service updates which include features not described in this guide. Details about service updates are always available at www.tivo.com/support.

 Throughout this guide, you will see important and helpful notes and tips in this side column.



Connecting Your DVR

Getting Started	2
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Watching One Channel & Recording Another Another (Antenna or Cable)	18
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▶▶ Getting Started

Television used to be so simple: all you needed was an antenna and a TV. The antenna captured audio and video signals and sent them to your TV over a wire.

As TVs have acquired more features, and new devices have been created to work with your TV, it may seem that everything has become more complex. You may have a VCR, a DVD player, and a game system connected to your TV, in addition to your TiVo® Digital Video Recorder by HUMAX. However, one thing has remained the same: you still need to get audio and video (sound and pictures) from their source (an antenna, or a cable or satellite box) to your TV.

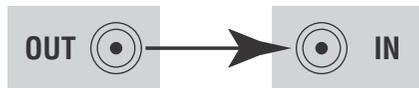
Sounds and pictures travel through cables. The choice of cables may seem overwhelming, but they all perform the same function: they transfer sounds and pictures to your TV at varying levels of quality.

All of your equipment has connectors, or jacks, where cables can be connected. Some jacks are labeled “In” and some are labeled “Out.” Pictures and sounds enter audio/video (A/V) equipment through IN jacks and leave through OUT jacks.

When you connect your DVR to your TV and other A/V equipment, you are simply creating a path that starts at the wall, or your cable or satellite box, and goes in (through IN jacks) and out (through OUT jacks) of your equipment until it reaches your TV.

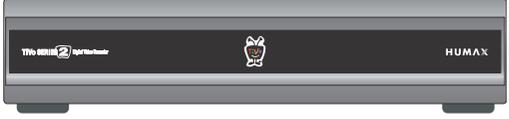
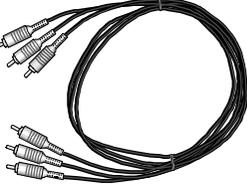
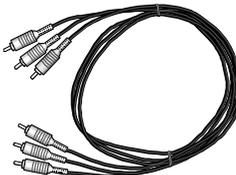


Remember, always connect cables from the OUT jack of one device to the IN jack of the next. Never connect an IN to an IN or an OUT to an OUT.

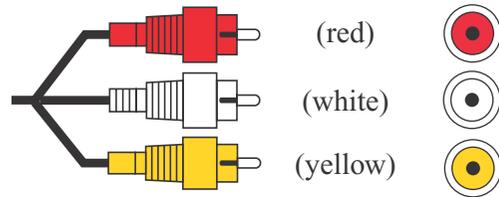


►► Cables and Accessories

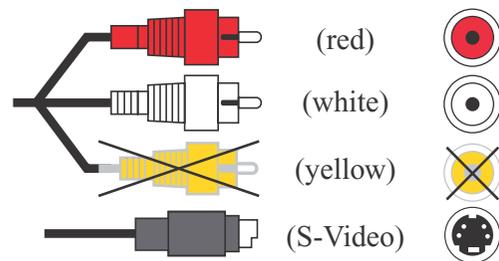
1

<p>Inside the carton, you will find your new TiVo® DVR, the Remote Control, and two bags of cables (contents listed below), along with this <i>User's Guide</i> and the <i>Start Here</i> poster.</p>	 <p style="text-align: center;">DVR</p>  <p style="text-align: right;">Remote Control</p>	<p>You may need to purchase additional items for some setups:</p>  <p style="text-align: center;">RF Coaxial cable Splitter</p>
<p>Cable Bag (A) Audio, Video, Phone, and Power These cables connect your DVR to your TV, power, and your home phone line.</p>	 <p style="text-align: center;">Power Cord</p>  <p style="text-align: center;">Composite A/V cables</p>  <p style="text-align: center;">RF Coaxial cable</p>  <p style="text-align: center;">25' Phone Cord</p>  <p style="text-align: center;">Phone Line Splitter</p>	 <p style="text-align: center;">Extra Composite A/V cables</p>  <p style="text-align: center;">Extra RF Coaxial cables</p>
<p>Cable Bag (B) Channel Changing These cables allow your DVR to change channels on a cable or satellite box. If you don't have a cable or satellite box, you won't use these cables.</p>	<p>If you have a DIRECTV® satellite box with a 9-pin Data connector, or a Motorola/GI DCT2000 series cable box, use this cable:</p>  <p style="text-align: center;">Serial (Data) Control cable</p> <p>If you can't use the Serial Control cable with your satellite box or cable box, use this cable instead:</p>  <p style="text-align: center;">IR Control cable</p>	 <p style="text-align: center;">S-Video cable</p>

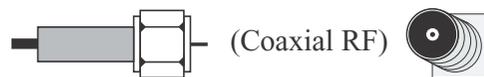
1 Composite A/V Cable and Jacks



2 Composite L/R Audio with S-Video cable



3 Coaxial RF cable and Jack



► Choosing audio and video cables

Most TVs and other audio/video devices have jacks for **Composite A/V** cables (1).

Composite A/V cables have three ends, two (white and red) for stereo audio (left and right), and one (yellow) for video, providing excellent audio and video quality. If your equipment has composite A/V jacks, use this cable. If your TV has only one white audio jack, connect just the white end of this cable instead of both the red and the white ends.

The DVR's back panel also includes jacks for **S-Video** (2). S-Video provides a higher quality video signal than composite. If you have equipment that supports this connection, you may want to purchase an S-Video cable to use in place of the yellow video end of the Composite A/V cable. (You should still use the red and white ends of the Composite A/V cable for stereo audio.)

Some TVs and VCRs only have **Coaxial RF** (3) jacks. If your TV only has an RF jack, use the Coaxial RF cable to connect your DVR to your TV. If your TV also has other kinds of A/V jacks (composite or S-Video) and you used one of these for the DVR's primary audio/video connection, you may want to use Coaxial RF cables in addition depending on the setup you choose.

If needed, extra audio and video cables are available for purchase at www.tivo.com/store.

► Choosing a Channel Changing Cable

Your DVR needs to be able to change channels in order to record programs and display live TV. If you are using a cable or satellite box, the DVR needs to send channel changing signals to it using either an IR (infrared) or a Serial (data) control cable. The following pages help you choose which control cable to use.

If you don't have a cable or satellite box, your DVR does not need a channel changing cable. Skip to "Connecting to a Phone Line" on page 8.

Serial/Data Control. You can use the Serial Control cable for channel changing if:

- You have a DIRECTV® satellite box with a 9-pin data connector like this: 
- You have a Motorola/General Instruments DCT2000 series cable box, and your cable provider has enabled it for serial control.

Otherwise, use the IR Control cable (described on the next page).

Some DIRECTV® satellite boxes have other connections that you may be able to try. To use one of these connections, you will need to purchase an additional cable or accessory (available from www.tivo.com/store):

- If your DIRECTV® satellite box has a 15-pin connector like this:  you can connect the Serial Control cable by using a 15-pin adapter.
- Some satellite boxes for the DIRECTV® service have a **Home Control** connector like this:  (similar to a phone jack, but slightly smaller).

To connect the Home Control cable, plug one end of the cable into the **Home Control** jack on your DIRECTV satellite box. This connector is sometimes labeled "Low Speed Data." (Don't try to connect a **Home Control** cable to the satellite box's phone jack.) Plug the other end into the **Control Out/Serial** jack on the DVR.



After setting up your DVR, including the control cable connection, you can change channels using only your DVR's remote control.

1



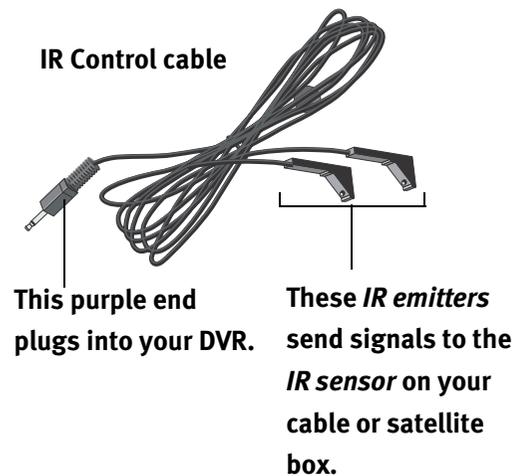
Serial Control cable



**15-pin adapter
(not included)**



**Home Control cable
(not included)**



 The small “bulbs” on the IR emitters do not visibly light up when they send an IR signal. If you find that channels are not changing, see page 129 for troubleshooting help. If channels change unreliably or inconsistently, try the tips on optimizing the IR Control connection (right).

IR (infrared) Control. The IR Control cable allows the DVR to change channels on any cable or satellite box with an IR sensor. See the *Start Here* poster for diagrams of common cable and satellite boxes, and where to find the IR sensor on each.

- **Finding the IR sensor.** To correctly position the IR Control cable, you need to find your cable box or satellite box’s IR sensor. To locate the IR sensor, look for a tiny round bulb behind the dark, translucent plastic “window”—the IR window—on the front of your cable or satellite box. A flashlight might help you see it. Position the IR emitters so they are centered on the IR sensor and stick out about 1.5 inches.
 - **Choosing an IR code in Guided Setup.** After setting up your DVR, you’ll complete Guided Setup (see Chapter 2 for more information). During Guided Setup, you’ll be asked to test and select an IR code. Each IR code signals a particular cable or satellite box model to change channels. If none of the codes changes the channel on your particular cable or satellite box, see page 129 for troubleshooting tips. If you find a code or codes that work, but none of the codes is reliable or consistent, try optimizing the IR Control connection (see below).
 - **Optimizing the IR Control connection.** The IR Control cable works better if its emitters and the IR window on the cable or satellite box are shaded from other infrared signals. You can create an “IR tent” to decrease the interference from other signals. This solution may help if changing channels with an IR Control cable is unreliable or inconsistent, but not if channels don’t change at all.
- Test whether an IR tent might be effective simply by draping a magazine, a towel, or a dark cloth over the front of cable or satellite box, including the IR emitters. (See the diagram on page 7.) Do not block the DVR’s IR window. Try changing channels several times with the TiVo remote. If channels change more reliably this way, you may want to build an IR tent.

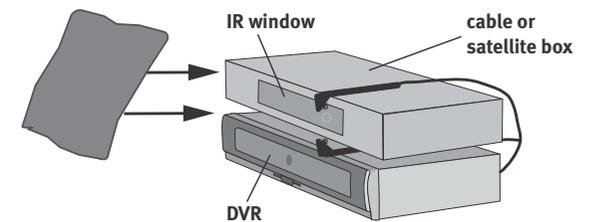
Building an IR Tent. The exact methods and materials you use to build the IR tent will depend on the shape of your cable or satellite box's IR window and the materials you have available. However, the general procedure described below will guide you.

- 1 Cover the area around the IR emitters and the cable or satellite box's IR window with a piece of thick fabric, such as black flannel. You could create a cover using cardboard or opaque tape instead. The important point is that the material you use fits snugly over the area around the translucent IR window and the IR Control cable's emitters.

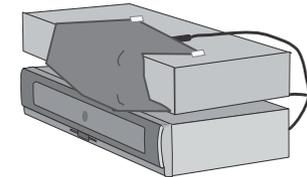
If possible, cover the entire IR window on the cable or satellite box, because signal interference can enter from anywhere in the window. For some cable and satellite boxes, covering the entire IR window will include covering the controls on the front. In that case, you won't be able to use the controls, nor will you be able to control the cable or satellite box with its remote. However, we recommend using only your TiVo remote to change the channel. If you still need to access your cable or satellite box, use materials that are relatively easy to remove.

- 2 Secure the cloth, tape, or other material (with tape or by another method), making sure that it fits closely around the IR window and the IR Control cable's emitters.

- 1 Place a piece of opaque material—for example, cloth or tape—over the IR emitters (shown on opposite page) and the IR window of the cable or satellite box.



- 2 Secure the material, making sure that it fits snugly.





Do not connect the DVR to a digital PBX phone system (these allow many phones to share a single telephone number and are usually used in hotels and office buildings). Doing so may permanently damage your DVR's modem and will void your warranty.



If your cable or satellite box is also connected to your phone line, use the provided phone line splitter so the DVR can share the same phone jack. Plug the splitter into the wall jack, then plug both phone cords into the splitter.

► **Connecting to a Phone Line**

During Guided Setup, your DVR uses a standard analog phone line to connect to the TiVo® service (see Chapter 2). After Guided Setup, your DVR needs to make regular connections to the TiVo service, using either a phone line or a shared broadband Internet connection. When it connects to the TiVo service, the DVR may receive:

- Updated program information, including episode titles, plot descriptions, ratings, and schedule information.
- Any available updates to the DVR service, including content for Showcases. (See page 41 for more information about Showcases.)
- Any recording requests you made using TiVo Central Online. (See page 57 for more information about Remote Scheduling.)

Guided Setup Requires a Phone Line. Almost every household phone line is a standard analog line, which is what the DVR needs to complete Guided Setup. After Guided Setup, you can connect your DVR to a home network and use a shared broadband Internet connection instead of a phone line for regular connections to the TiVo service. See “Connecting to a Home Network for Home Media Features” on page 101 for information.

If you don't have a home network with a shared broadband Internet connection, the DVR must use a standard analog phone line for regular connections to the TiVo service. You should leave the phone cord plugged in continuously in order to keep your DVR's program information up to date.

Phone Jack Location. If the phone jack isn't close to the DVR, you can use the 25-foot phone cord that comes with the DVR to connect it to a phone jack. Phone cords longer than 25 feet are readily available at most hardware or electronics stores.

►► Choosing a Setup Example

The rest of this chapter provides examples for connecting your TiVo DVR to your program source (antenna, cable, or satellite), your TV, and other optional A/V equipment. From the list below, choose a basic setup based on your program source. You can add other equipment after you get your basic system working.

Basic Setups: Connect your DVR to your Program Source and your TV

Your program source is antenna or cable with no cable box.	Setup 1: Antenna or Cable (No Cable Box)	p. 10
Your program source is either a cable or satellite box. (If you have both, see Setup 4, below.)	Setup 2: Cable or Satellite Box	p. 12
You have two program sources: a satellite box and an antenna; or a satellite box and cable (no cable box).	Setup 3: Satellite Box & RF Program Source	p. 14
You have two program sources: a satellite box and a cable box.	Setup 4: Cable Box and Satellite Box	p. 16

Setup Variations: These are variations on the Basic Setups

Your program source is antenna or cable with no cable box (as in Setup 1) and you want to watch one channel while recording another.	Watching One Channel & Recording Another (Antenna or Cable)	p. 18
You want to add other A/V equipment to your setup (a VCR, DVD recorder, game console, etc.).	Connecting a VCR, DVD Recorder, or Other A/V Equipment	p. 20



Before you begin:

Make sure all your equipment is turned off and the DVR is unplugged.



The DVR is not designed to support a heavy load, such as a TV. Your DVR is only capable of supporting the weight of one or two common A/V components such as VCRs, DVD players, or A/V receivers (provided they have four good, broad, padded feet that distribute of the weight near the corners of the DVR).

Also, avoid stacking your DVR on top of other electronic components—such as DVD players, A/V receivers—or the vents of your TV.

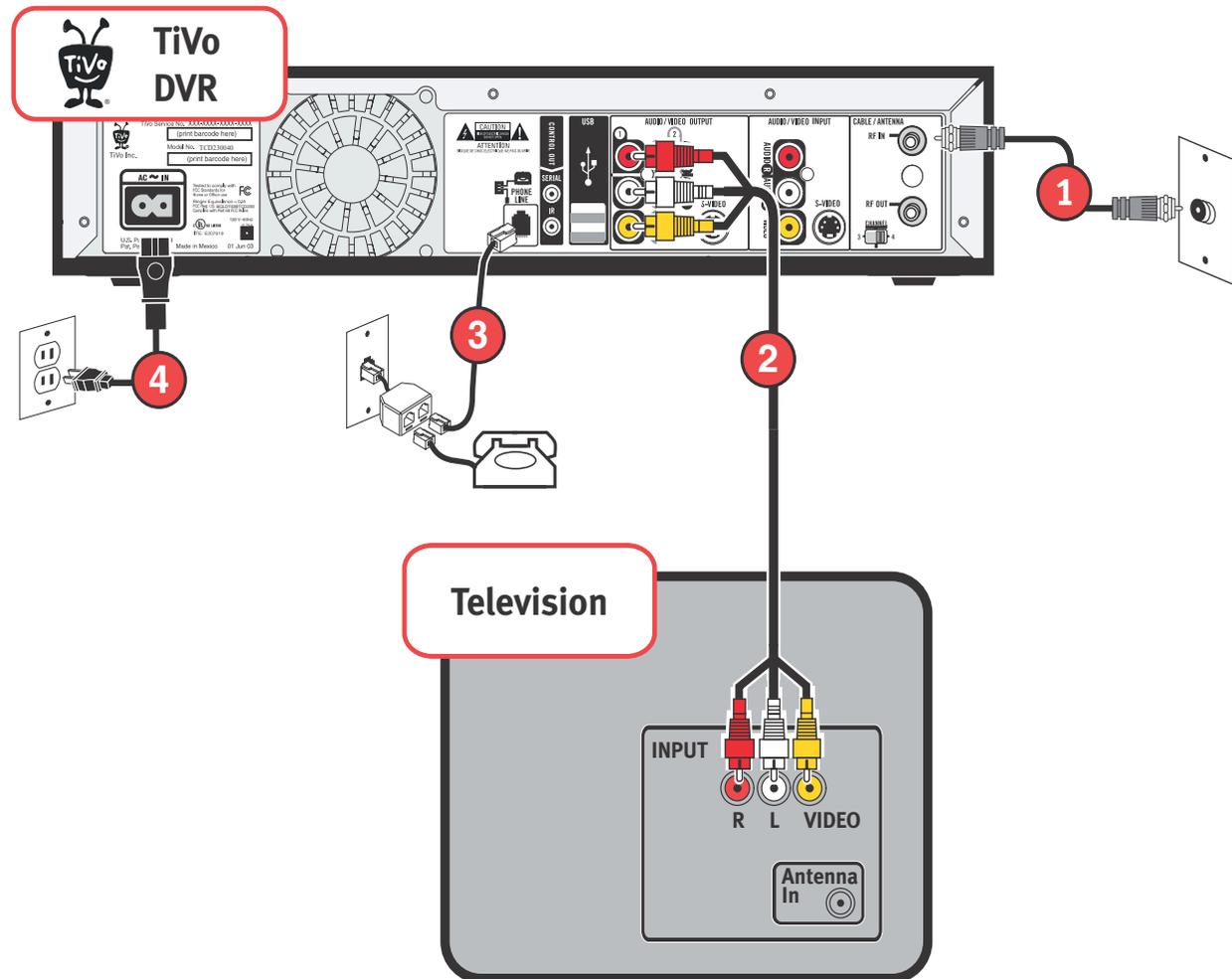
 For this setup,
use cable bag **(A)**.

The audio/video cables shown here are for
example only. For help choosing cables,
see page 4.

 For tips on adding a VCR or
DVD recorder, see page 20.

If you want to add a DVD player, a game
console, or any other type of A/V
equipment, connect it directly to another
audio/video input on your TV or A/V
receiver. You do not need to connect other
A/V equipment to your DVR. See page 20
for more information.

►► Setup 1: Antenna or Cable (No Cable Box)



- 1 Connect the Coaxial RF cable coming from the wall to the **Cable/Antenna-RF In** jack on the DVR.
- 2 Connect a Composite A/V cable from the **Audio/Video Output** jacks on the DVR to the **Audio/Video Input** jacks on the TV.

If your TV doesn't have Composite A/V input jacks, connect a Coaxial RF cable from the DVR's **RF Out** jack to your TV's **Antenna/RF In** jack.

- 3 Connect the phone cord (see page 8). After you complete Guided Setup, you can connect your DVR to a home network and use a broadband Internet connection instead of a phone line to connect to the TiVo service. See Chapter 7.
- 4 Plug in all power cords and turn on your TV.

Set your TV to display video from the input jacks you used in step 2. You may have to find the correct TV input setting by pressing the Input or TV/Video button on your TV's remote control until you see the Welcome screen. (For more help, see page 125.)

If you used a Coaxial RF cable in step 2, tune your TV to channel 3 or 4, matching the **Channel 3/4 switch** on the back of the DVR.

Once you see the Welcome screen, the final steps are to activate the TiVo service and complete Guided Setup (see Chapter 2). If you want to add a VCR, DVD recorder, or other equipment, see page 20.

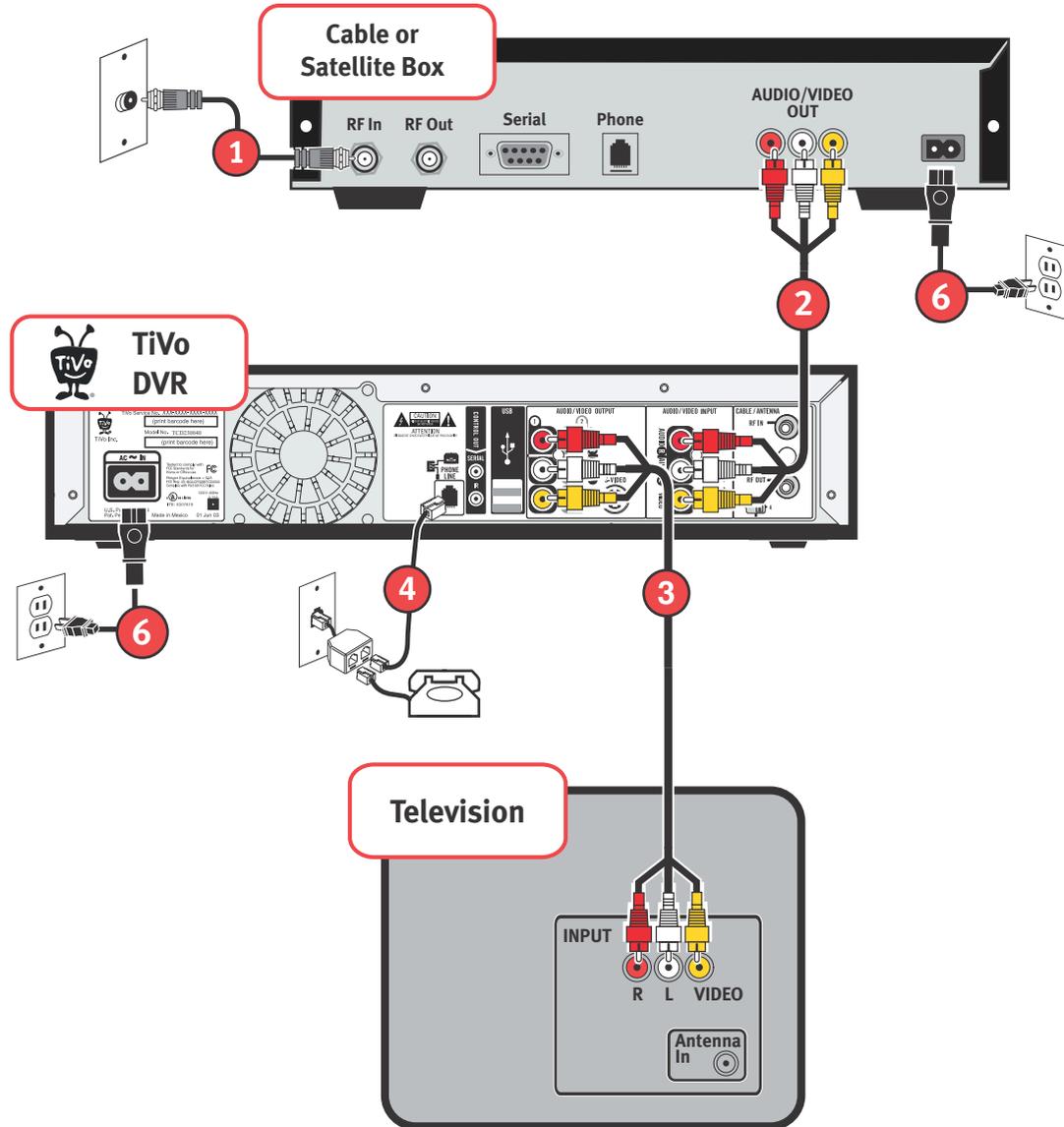
 For this setup, use cable bags (A) and (B).

The audio/video cables shown here are for example only. For help choosing cables, see page 4.

 For tips on adding a VCR or DVD recorder, see page 20.

If you want to add a DVD player, a game console, or any other type of A/V equipment, connect it directly to another audio/video input on your TV or A/V receiver. You do not need to connect other A/V equipment to your DVR. See page 20 for more information.

▶▶ Setup 2: Cable or Satellite Box



- 1 Make sure the cable from the wall is connected to your cable or satellite box.
- 2 Connect a Composite A/V cable from the **Audio/Video Output** jacks on the cable or satellite box to the **Audio/Video Input** jacks on the DVR.
- 3 Connect a Composite A/V cable from the **Audio/Video Output** jacks on the DVR to the **Audio/Video Input** jacks on the TV.
If your TV doesn't have Composite A/V input jacks, connect a Coaxial RF cable from the DVR's **RF Out** jack to your TV's **Antenna/RF In** jack.
- 4 Connect the phone cord (see page 8). After you complete Guided Setup, you can connect your DVR to a home network and use a broadband Internet connection instead of a phone line to connect to the TiVo service. See Chapter 7.
- 5 Connect a channel changing cable (see the diagrams to the right).
- 6 Plug in all power cords and turn on your TV.

Set your TV to display video from the input jacks you used in step 3. You may have to find the correct TV input setting by pressing the Input or TV/Video button on your TV's remote control until you see the Welcome screen. (For more help, see page 125.)

If you used a Coaxial RF cable in step 3, tune your TV to channel 3 or 4, matching the **Channel 3/4 switch** on the back of the DVR.

Once you see the Welcome screen, the final steps are to activate the TiVo service and complete Guided Setup (see Chapter 2). If you want to add a VCR, DVD recorder, or other equipment, see page 20.

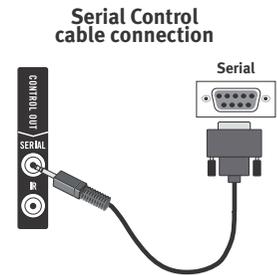
5 Connect a Channel Changing Cable

(See page 5 for help choosing a channel changing cable.)

Serial Control cable:

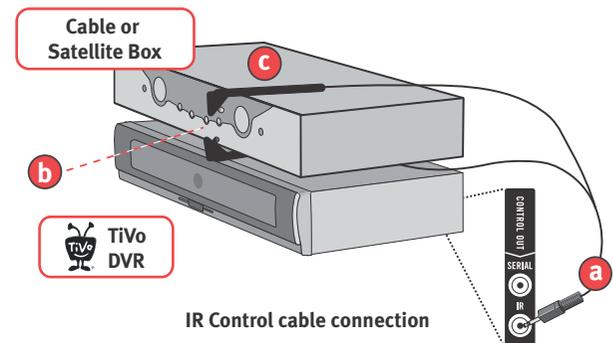
Plug one end of the Serial Control cable into the Serial/Data connector on the cable or satellite box.

Plug the other end into the Control Out-Serial connector (the upper mini jack) on the back of the DVR.



IR Control cable:

(a) Plug the purple end of the IR Control cable into the Control Out-IR connector (the lower mini-jack) on the DVR. (b) Locate the IR sensor (see page 6 for help). (c) Mount the IR emitters. Place one emitter on top of the cable/satellite box and the other underneath it. Be sure both emitters stick out about 1.5 inches directly in front of the IR sensor. Use the provided adhesive strips to hold the emitters in place.





For this setup,
use cable bags (A) and (B).

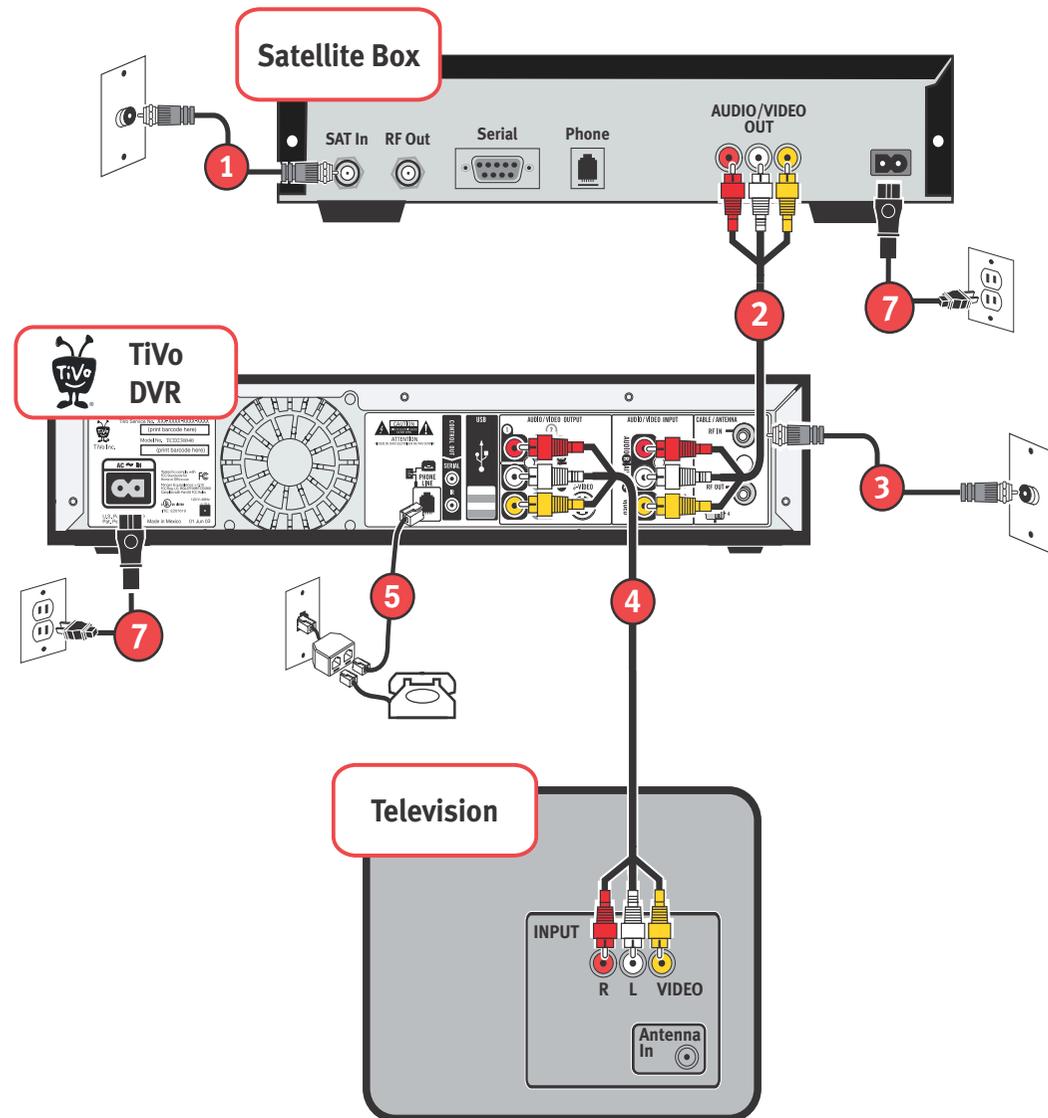
The audio/video cables shown here are for example only. For help choosing cables, see page 4.



For tips on adding a VCR or
DVD recorder, see page 20.

If you want to add a DVD player, a game console, or any other type of A/V equipment, connect it directly to another audio/video input on your TV or A/V receiver. You do not need to connect other A/V equipment to your DVR. See page 20 for more information.

► Setup 3: Satellite Box & RF Program Source (Antenna or Cable)



- 1 Make sure the satellite cable from the wall is connected to your satellite box.
 - 2 Connect a Composite A/V cable from the **Audio/Video Output** jacks on the satellite box to the **Audio/Video Input** jacks on the DVR.
 - 3 Connect the Coaxial RF cable from your antenna or cable source to the **Cable/Antenna-RF In** jack on the DVR.
 - 4 Connect a Composite A/V cable from the **Audio/Video Output** jacks on the DVR to the **Audio/Video Input** jacks on the TV.
- If your TV doesn't have Composite A/V input jacks, connect a Coaxial RF cable from the DVR's **RF Out** jack to your TV's **Antenna/RF In** jack.
- 5 Connect the phone cord (see page 8). After you complete Guided Setup, you can connect your DVR to a home network and use a broadband Internet connection instead of a phone line to connect to the TiVo service. See Chapter 7.
 - 6 Connect a channel changing cable (see the diagrams to the right).
 - 7 Plug in all power cords and turn on your TV.

Set your TV to display video from the input jacks you used in step 4. You may have to find the correct TV input setting by pressing the Input or TV/Video button on your TV's remote control until you see the Welcome screen. (For more help, see page 125.)

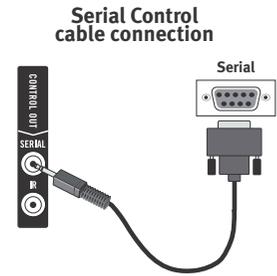
If you used a Coaxial RF cable in step 4, tune your TV to channel 3 or 4, matching the **Channel 3/4 switch** on the back of the DVR.

Once you see the Welcome screen, the final steps are to activate the TiVo service and complete Guided Setup (see Chapter 2). If you want to add a VCR, DVD recorder, or other equipment, see page 20.

- 6 **Connect a Channel Changing Cable**
(See page 5 for help choosing a channel changing cable.)

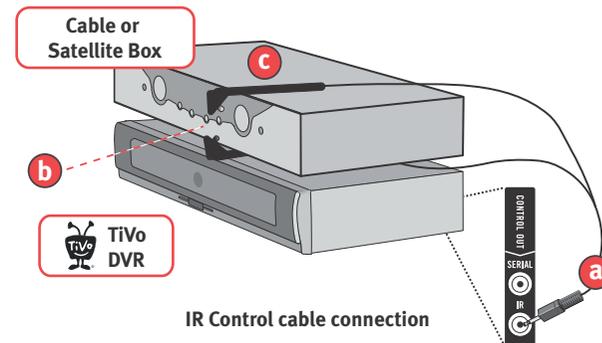
Serial Control cable:

Plug one end of the Serial Control cable into the Serial/Data connector on the cable or satellite box. Plug the other end into the Control Out-Serial connector (the upper mini jack) on the back of the DVR.



IR Control cable:

(a) Plug the purple end of the IR Control cable into the Control Out-IR connector (the lower mini-jack) on the DVR. (b) Locate the IR sensor (see page 6 for help). (c) Mount the IR emitters. Place one emitter on top of the cable/satellite box and the other underneath it. Be sure both emitters stick out about 1.5 inches directly in front of the IR sensor. Use the provided adhesive strips to hold the emitters in place.



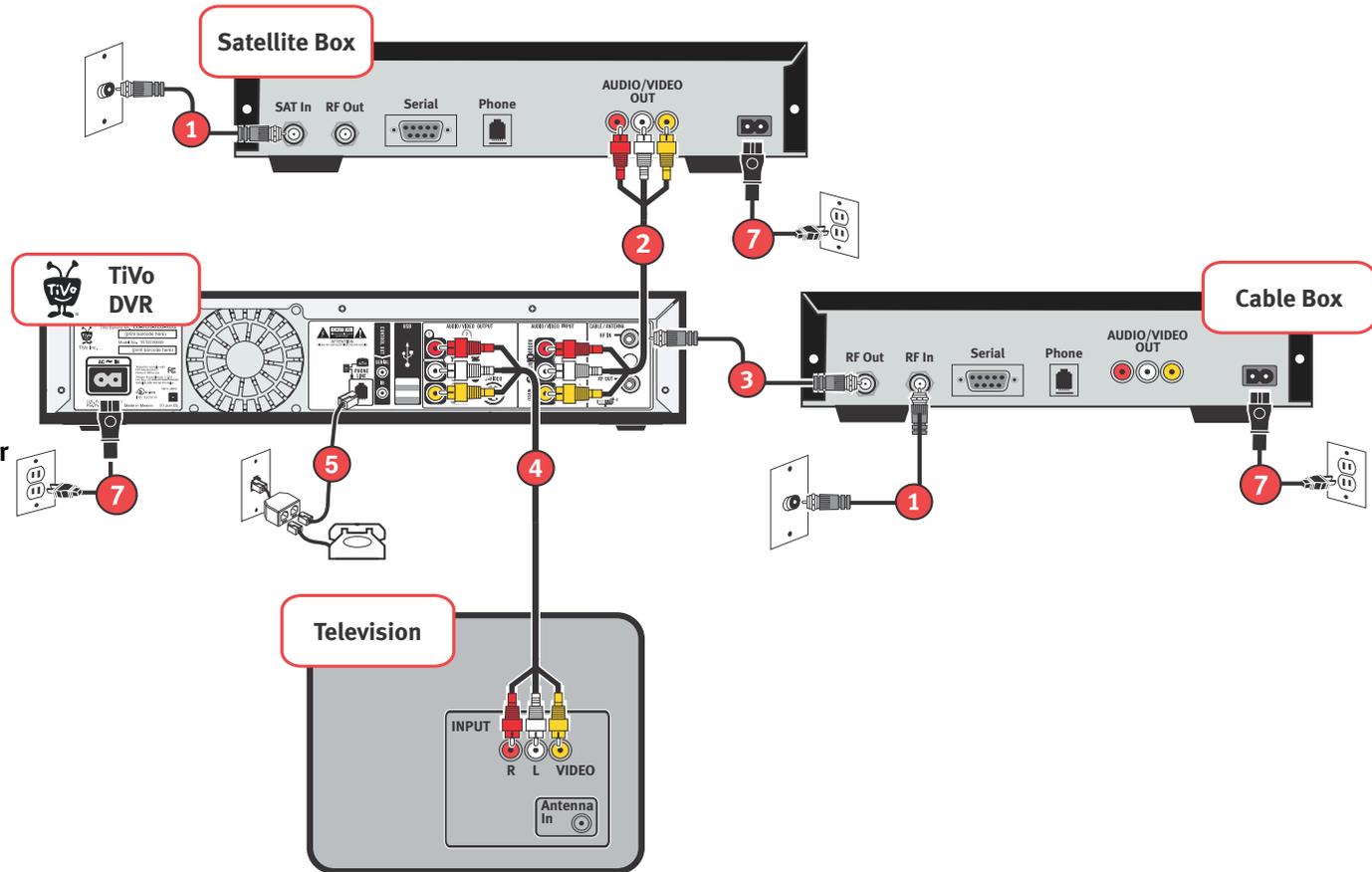
▶▶ Setup 4: Cable Box and Satellite Box

 For this setup, use cable bags (A) and (B).

The audio/video cables shown here are for example only. For help choosing cables, see page 4.

 For tips on adding a VCR or DVD recorder, see page 20.

If you want to add a DVD player, a game console, or any other type of A/V equipment, connect it directly to another audio/video input on your TV or A/V receiver. You do not need to connect other A/V equipment to your DVR. See page 20 for more information.



- 1 Make sure the cables from the wall are connected to your cable and satellite boxes.
- 2 Connect a Composite A/V cable from the **Audio/Video Output** jacks on the satellite box to the **Audio/Video Input** jacks on the DVR.
- 3 Connect a Coaxial RF cable from the **RF Out** jack on the cable box to the **Cable/Antenna-RF In** jack on the DVR.
- 4 Connect a Composite A/V cable from the **Audio/Video Output** jacks on the DVR to the **Audio/Video Input** jacks on the TV.

If your TV doesn't have Composite A/V input jacks, connect a Coaxial RF cable from the DVR's **RF Out** jack to your TV's **Antenna/RF In** jack.

- 5 Connect the phone cord (see page 8). After you complete Guided Setup, you can connect your DVR to a home network and use a broadband Internet connection instead of a phone line to connect to the TiVo service. See Chapter 7.

- 6 **Channel changing cables:** First, see page 5 to check whether you can use the Serial Control cable for either your satellite or cable box. If you can, connect it as shown in the diagram to the right. Then use the IR Control cable for the other box. If you can't use the Serial Control cable for either box, you can use the IR control cable for both. See the IR diagrams at the right.



- 7 Plug in all power cords and turn on your TV.

Set your TV to display video from the input jacks you used in step 4. You may have to find the correct TV input setting by pressing the Input or TV/Video button on your TV's remote control until you see the Welcome screen. (For more help, see page 125.)

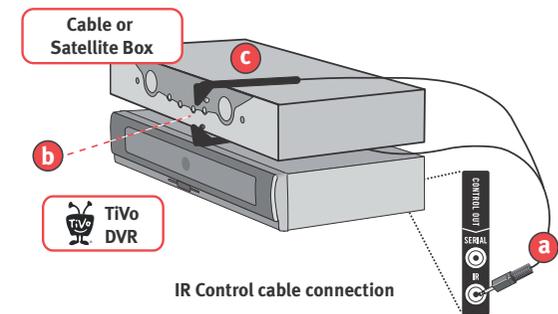
If you used a Coaxial RF cable in step 4, tune your TV to channel 3 or 4, matching the **Channel 3/4 switch** on the back of the DVR.

Once you see the Welcome screen, the final steps are to activate the TiVo service and complete Guided Setup (see Chapter 2). If you want to add a VCR, DVD recorder, or other equipment, see page 20.

6 Connect Channel Changing Cables

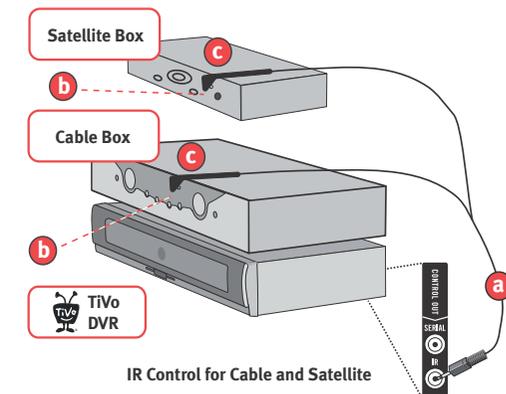
IR Control cable for one box:

(a) Plug the purple end of the IR Control cable into the Control Out-IR connector (the lower mini-jack) on the DVR. (b) Locate the IR sensor (see page 6 for help). (c) Mount the IR emitters. Place one emitter on top of the cable/satellite box and the other underneath it. Be sure both emitters stick out about 1.5 inches directly in front of the IR sensor. Use the provided adhesive strips to hold the emitters in place.



IR Control cable for both boxes:

Follow steps (a) and (b) as above. In step (c), mount the IR emitters on top of each box as shown.



 For this setup, use cable bag (A).

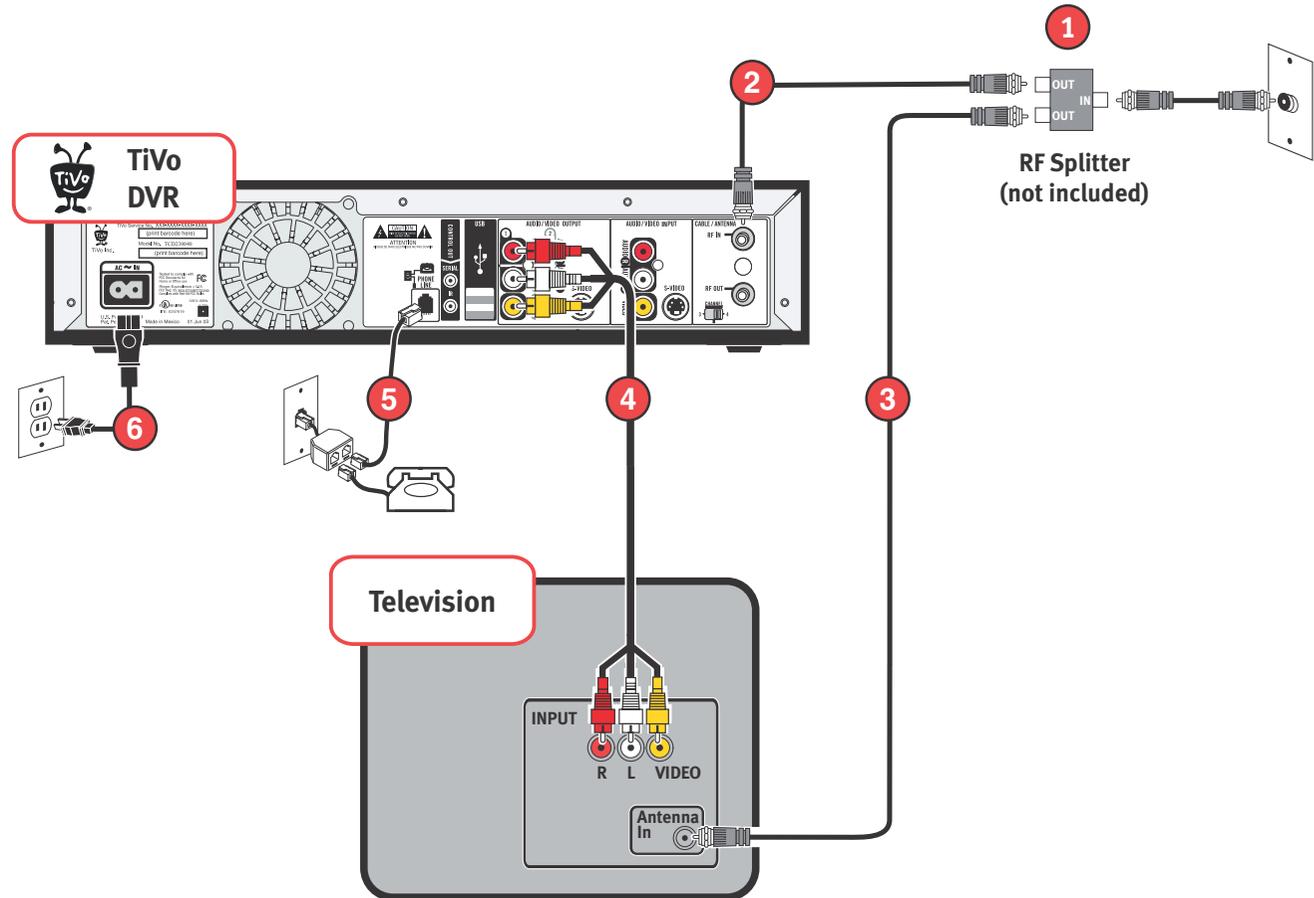
The audio/video cables shown here are for example only. For help choosing cables, see page 4.

 For tips on adding a VCR or DVD recorder, see page 20.

If you want to add a DVD player, a game console, or any other type of A/V equipment, connect it directly to another audio/video input on your TV or A/V receiver. You do not need to connect other A/V equipment to your DVR. See page 20 for more information.

▶▶ Watching One Channel & Recording Another (Antenna or Cable)

See “Choosing a Setup Example” on page 9 before starting with this setup.



This setup works best if your TV program source is antenna or cable with no cable box, and you have a TV with more than one input.

- 1 Attach an RF splitter (not included) to the Coaxial RF cable coming out of the wall (before it connects to any equipment).
- 2 Connect a Coaxial RF cable to one of the **OUT** jacks on the splitter; then attach the other end to the **Cable/Antenna-RF In** jack on the DVR.
- 3 Connect another Coaxial RF cable to the splitter's other **OUT** jack; then attach the other end directly to the **Antenna In** jack on your TV.
- 4 Connect a Composite A/V cable from the **Audio/Video Output** jacks on the DVR to the **Audio/Video Input** jacks on the TV.
- 5 Connect the phone cord (see page 8). After you complete Guided Setup, you can connect your DVR to a home network and use a broadband Internet connection instead of a phone line to connect to the TiVo service. See Chapter 7.
- 6 Plug in all power cords and turn on your TV.

Set your TV to display video from the input jacks you used in step 4. You may have to find the correct TV input setting by pressing the Input or TV/Video button on your TV's remote control until you see the Welcome screen. (For more help, see page 125.)

Once you see the Welcome screen, the final steps are to activate the TiVo service and complete Guided Setup (see Chapter 2). If you want to add a VCR, DVD recorder, or other equipment, see page 20.

If you have a cable box:

- In step 2, connect one of the Coaxial RF cables coming from the splitter to your cable box. Then, connect a Composite A/V cable from the Audio/Video Output jacks on the cable box to the Audio/Video Input jacks on the DVR.
- Then continue with step 3. Keep in mind that you can only receive basic channels on the signal that goes directly from the splitter to your TV. Also, you will not have TiVo service functionality on those channels.



How do I watch one channel and record another?

In this setup, your cable or antenna signal is split and sent to two different devices: your TiVo DVR, and your TV. To watch live TV on one channel while the DVR records another, use your TV's remote to change channels. You won't have TiVo service functionality on the signal that goes direct to your TV, so you can't pause or rewind live TV while your DVR is recording another channel.

To watch video from your DVR again: First, press the TiVo button so that the DVR displays TiVo Central®. (This will not interrupt any recording in progress.) Then press the Input, or TV/Video button on your TV's remote until you see TiVo Central.

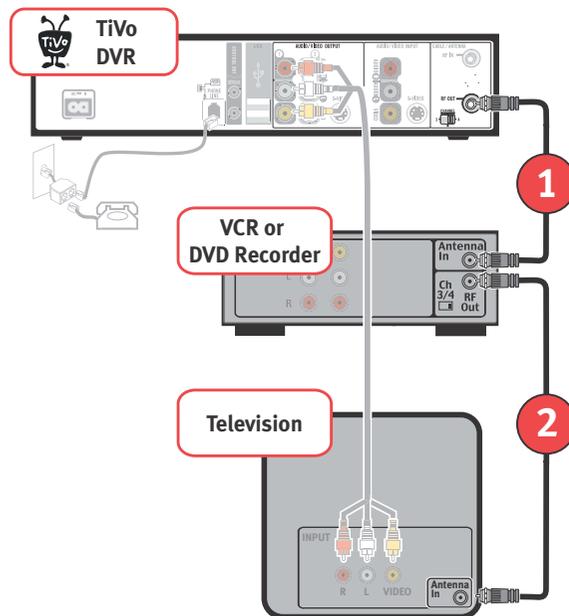
▶▶ Connecting a VCR, DVD Recorder, or Other A/V Equipment

You probably have other A/V equipment in your home entertainment center in addition to your TiVo DVR and your TV. If you have a VCR or DVD recorder, you can connect it to your DVR and save your favorite recordings to video tape or DVD. Other equipment, such as a DVD player or game console, does not connect directly to your DVR. Instead, these devices should be connected to additional inputs on your TV, or to an A/V receiver.

▶ Connecting a VCR or DVD Recorder

VCRs and DVD recorders tend to offer many different audio and video input and output jacks, giving you a variety of setup options. Refer to your VCR or DVD recorder's owner's manual for details about setup and operation.

This example is probably the easiest way to connect a VCR or DVD recorder to your DVR. (It works even if your TV only has one input.) For best results, use the best connections available on your equipment.



- ❶ Connect a Coaxial RF cable from the **RF Out** jack on the DVR to the **Antenna-RF In** jack on the VCR or DVD recorder.
- ❷ Connect another Coaxial RF cable from the **RF Out** jack on the VCR or DVD recorder to the **Antenna In** jack on your TV.
- ❸ If you do use Coaxial RF cables as pictured here, make sure the **Channel 3/4** switches on the back of each device are set to the same channel.

To watch a video tape or DVD, change your TV's input setting by pressing the Input or TV/Video button on your TV's remote control until the correct input is displayed. To save recordings from your DVR to a video tape or recordable DVD, use the DVR's "Save to VCR" feature. See page 74 for information about Save to VCR.

► **Connecting Other A/V Equipment**

You may have other devices in your home entertainment system which don't necessarily connect to your DVR. The following tips can help you complete your home entertainment setup, but be sure to consult your other devices' owner's manuals for setup information.

Connecting an A/V Receiver. An A/V receiver “receives” audio and video signals from your electronic devices, and lets you send those signals to other devices (usually, video to a TV and audio to a set of loud speakers). You can add an A/V receiver to any of the basic setups described on pages 10-17. Instead of connecting audio and video from the DVR to your TV as shown in the diagrams, connect your DVR to an available input on your A/V receiver. If your A/V receiver is already connected to your TV, you're setup is done.

Connecting other A/V equipment. Other kinds of A/V equipment, such as a DVD player or game console, do not connect to your TiVo DVR. You should connect your other devices to additional inputs on your TV or A/V receiver.



If your A/V receiver supports Dolby Pro Logic or Dolby Pro Logic II, connect L/R audio cables from your DVR to your A/V receiver and enjoy programs broadcast with Dolby® Surround Sound.

Guided Setup

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Your TiVo service number is a 15-digit number found on the label

on the back of your DVR.



The TiVo® DVR was designed to be used exclusively with the TiVo

service. The TiVo service is required for proper operation of the DVR. Without the TiVo service, your DVR will have limited functionality. No functionality is represented, warranted, or should be expected without a subscription to the TiVo service.

▶▶ Activating the TiVo® Service

To activate the TiVo service, visit the TiVo website at www.tivo.com/activate or call us. (See Chapter 8 for Customer Support contact information.) When you activate, you will provide your DVR's TiVo service number and choose a billing option.

The TiVo service consists of the program information shown in the guide, features that use the guide information such as Season Pass™ recordings, WishList™ searches, and TiVo Suggestions, as well as Showcases, Online Scheduling, and Service Updates.

Home Media Features. After you activate the TiVo service and complete Guided Setup, connect your DVR to a home network! Doing so gives you brand new ways to use your TiVo DVR as a digital home entertainment center. Connect to a home network and enjoy:

- **Digital Music Player** — Use the home entertainment center in your living room to listen to the digital MP3 music collection stored on your computer.
- **Digital Photo Viewer** — Use your television to view slideshows of digital photos stored on your computer.
- **Multi-Room Viewing** — Record programs in the living room and watch them in the bedroom. Or vice versa.

For more information about connecting your DVR to a home network to use these bonus features, see “Connecting to a Home Network for Home Media Features” on page 101. For details about using these features, download the Home Media Features Guide at www.tivo.com/guides.

Activate now! Don't miss a single day of using the TiVo service.

▶▶ Completing Guided Setup

After you connect your DVR to your TV and activate the TiVo service, you will need to complete Guided Setup, which takes less than an hour.

- **Guided Setup is easy.** The Guided Setup screens step you through the process. If you get stuck, look for tips and troubleshooting in this chapter. (You may not see all the screens described here, or you may see them in a different order, depending on your equipment.)

If you make a mistake during Guided Setup, simply press the LEFT arrow to go back and fix it. You can also change your setup information later in Messages & Setup. (See Chapter 6.)

- **Guided Setup is intelligent.** In Guided Setup, you tell your DVR your program source (antenna, cable, or satellite) and equipment setup. Then you only have to complete the steps that apply to your particular setup.
- **Guided Setup requires two phone calls.** Try to complete Guided Setup when you don't need the phone for an hour or so. After you complete Guided Setup, you'll be able to connect your DVR to a home network and use a shared broadband Internet connection instead of a phone line to connect to the TiVo service. See Chapter 7.

After completing Guided Setup, you can watch live TV and use TiVo service features to control live TV. You will have to wait a few hours while the DVR organizes information before you can set up your Season Pass™ recordings and search for programs.

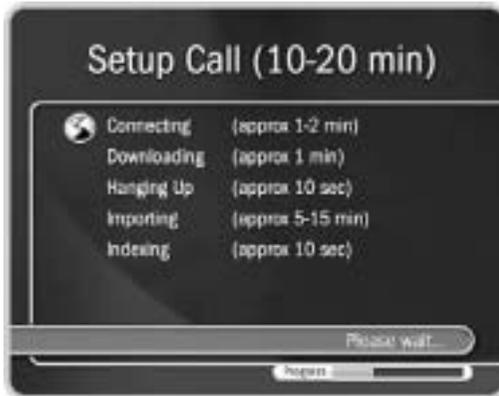


 If you can't find the help you need in this chapter, please visit online

TiVo Customer Support at

www.tivo.com/support or call us. (Refer to Chapter 8 for Customer Support contact information.)

 If you need to use the phone during either of the setup phone calls, pick up your telephone, then hang it up and wait about 45 seconds. The DVR will hang up, and the next time you pick the phone up there will be a dial tone. You can complete Guided Setup later.



► **Guided Setup Tips and Troubleshooting**

ZIP Code. If your program source is an antenna connected to your TV, the TiVo service uses the channel lineup of a nearby cable service to determine which channels you receive. If there is no cable company that serves your ZIP code, enter the ZIP code of a nearby community that has cable service.

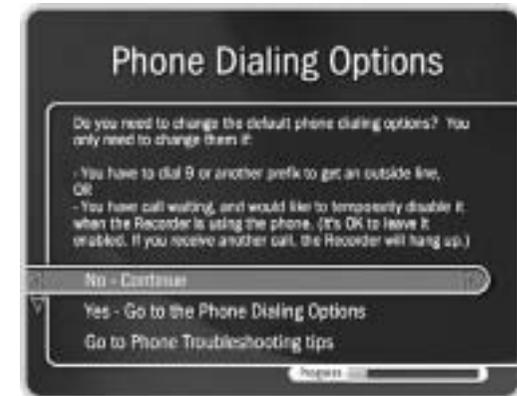
E-mail Address. When you provide your e-mail address, you'll be notified about what's new at TiVo, including new features, tips and tricks, and TiVo exclusives. Your e-mail address will not be sold, rented, loaned, or otherwise disclosed. For information on how TiVo safeguards your privacy, visit www.tivo.com/privacy.

Phone Dialing Options. If your phone system requires special dialing options, choose “Yes.” Most people won't need to change the settings. See page 94 for information about each option.

Setup Call. This toll-free call takes a few minutes to retrieve the dial-in numbers for your area code and the list of cable or satellite providers for your ZIP code. After hanging up, the DVR will take 5 to 15 minutes to organize the information. If the call doesn't succeed, see page 126 for troubleshooting steps.

Dial-In Number. The DVR will use the dial-in number you choose for phone connections to the TiVo service. The list may be too long to fit on one screen. To see more dial-in numbers, press the DOWN arrow or CHAN DOWN to scroll down the list.

After Guided Setup, the DVR uses either a phone line or a broadband Internet connection to connect to the TiVo service, which is a local call in most areas. In some areas, local and long distance toll charges may apply. You are responsible for any telephone charges.



Dialing Format. Choose how you want the DVR to dial the dial-in number. (For example: should the dial-in number be preceded by your area code and should a “1” precede the area code?) In some areas, local numbers must be dialed using the area code.

Satellite Provider. If you subscribe to additional local channels for your city or a nearby city from your satellite provider, choose the appropriate option followed by the city name from which you get your local channels (for example, DIRECTV-Sacramento, CA).

Cable Provider. Cable companies may have entries with very similar names, and it may be difficult to know which is yours. Check your channel lineup card (received during cable installation) or your cable bill. If you aren’t sure, make your best guess. Later in Guided Setup, you can check your guess on the Channels You Receive screen (see page 28). If you still don’t see your provider, go back and verify that you entered the correct ZIP code.

Cable Lineups. A lineup is the type of subscription you purchased from your cable company. Lineups usually have names like “Basic” or “Extended Basic.” Your cable bill may have this information. If you still aren’t sure, make your best guess. Later in Guided Setup, you can check your guess on the Channels You Receive screen (see page 28).

You may also see names like “Rebuild Basic” or “Rebuild Extended Basic.” “Rebuild” is a term used to refer to a revised lineup. Usually you would be informed by your cable company if your lineup has been revised. If your best guess at a lineup choice was not correct, and a rebuild lineup with a similar name is available, try that one instead.

If you have a cable A/B system, you must pick either A or B to watch with your DVR.





 Use the CHAN UP/DOWN button as a shortcut to go up or down a whole screen at a time.

Channels You Receive. First, if you had to make a guess about your provider or lineup, verify that the channel numbers match the networks on this list. (For example, if you had the lineup pictured on the left, is channel 2 actually KTVU?) If you aren't sure, refer to the channel guide or quick-reference card from your cable or satellite company.

Next, add or remove check marks—so that the list reflects the channels you actually subscribe to—by highlighting a channel and pressing SELECT. (Some types of satellite boxes will get stuck on channels you don't receive if those channels are selected here, so be sure to de-select channels you don't receive.)

You can also customize this channel list to reflect your viewing preferences. If you never watch a particular channel, and don't plan to set up recordings or let TiVo search for programs on it, remove the check mark next to that channel.

The TiVo service will search for programs only on channels marked with a yellow check. Also, the CHAN UP/DOWN button skips channels that aren't checked on this list.

Finally, highlight Done Selecting Channels and press SELECT to continue. If you change your mind, you can easily make changes after you finish Guided Setup. (See page 77.)

Channel Changing. If you have a cable or satellite box, your DVR needs to send it a signal to change channels. It can do this through an IR (infrared) or serial connection. Make sure that the connection described on this screen matches what you have used to connect your cable or satellite box to your DVR. For help choosing and setting up a connection, see the *Start Here* poster and Chapter 1 of this guide. After Guided Setup, if your channels don't change, see troubleshooting steps on page 128.

Connection to DVR Screens. These screens ask what type of video cable you used to connect your cable or satellite box to your DVR. Choose your configuration from the three choices described on page 29 (Hint: the first one is the most common).

Satellite only or cable with a box only:



* Use the UP/DOWN arrows until the picture of the DVR matches the cable connection you used to connect your satellite or cable box. When the video status below the picture says “Video OK,” press SELECT to continue. If the video status says “No Video,” double-check that the video cable is firmly connected to the DVR and that you have selected the correct type of video cable.

Satellite & antenna or satellite & cable without a box:



1. Use the UP/DOWN arrows to highlight “Satellite Box” and press SELECT.



2. Follow the directions at the top of this page (marked with *).



3. Use the DOWN arrow to highlight “Accept these input settings” and press SELECT.

Satellite & cable with a box:



1. Highlight “Satellite Box” and press SELECT.



2. Follow the directions at the top of this page (marked with *).



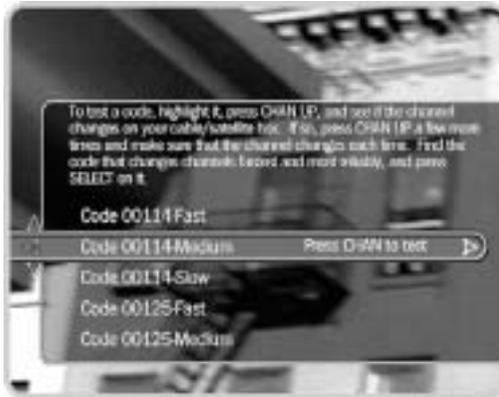
3. Highlight “Cable Box” and press SELECT.



4. Follow the directions at the top of this page (marked with *).



5. Highlight “Accept these input settings” and press SELECT.



IR Code List. If you use an IR connection, the DVR will need to send a code to your cable or satellite box in order to change channels. You will need to test these codes to see which works best with your connection. Each code has a slow, medium, and fast version. First, test the slow codes by highlighting them and pressing the CHAN UP/DOWN button slowly several times. When you find a slow code that changes channels every time, try a faster speed for that code. (Slow may take longer, but fast may be too fast for your cable or satellite box.) You want to find the code with the fastest speed that changes the channel every time. When you find it, press SELECT to choose that code. If channels don't change at all, see page 128 for troubleshooting steps.

Program Call. During this call, the TiVo service downloads all your program information—which includes program titles, times, channels, and descriptions—for up to the next two weeks. If the call doesn't succeed, see page 126 for troubleshooting steps. If you need to use the phone during the program call, pick it up, then hang it up, then wait about 45 seconds. The DVR will hang up and you can make the program call later.

Congratulations! Once you have activated your TiVo service and completed Guided Setup, you'll see the Congratulations! screen. If you have not yet activated your TiVo service, you will be reminded to do so at this time.

You can immediately begin watching live TV and using your DVR's features to control live TV (pause, instant replay, slow motion). The DVR works behind the scenes for about four to eight hours to organize program information for the first time. During this process, you will have to wait to search for programs, set up recordings, and view information in the program guide. A message at the bottom of the Pick Programs to Record screen will warn you if you are not able to search for programs yet. If the message appears, try again after a few hours.

Press the TiVo button on your remote control to go to TiVo Central® to begin enjoying the TiVo service.

▶▶ TiVo Central®

Almost everything you do with the TiVo service starts from TiVo Central. You can schedule recordings, watch live TV or recorded programs, read messages from the TiVo service, and access special Showcases featuring entertaining and informative video clips. To get to TiVo Central, press the TiVo button on your remote control.

Occasionally, you will notice special icons beside some options in TiVo Central.



This icon appears if you have TiVo Messages to read. See page 76 for more about TiVo Messages.



Choose the selection next to this icon to watch a special preview or visit a Showcase. See page 41 for more about Showcases.



This icon appears next to selections that contains special video content. Highlight the selection and press PLAY on the TiVo remote to play the video.



This icon indicates news or special offers from TiVo.

You can find a complete Glossary of Icons in the inside back cover of this guide.

Music & Photos. Connect your DVR to a home network and you'll be able to use your DVR to listen to digital music and view digital photos stored on a home computer. See "Connecting to a Home Network for Home Media Features" on page 101.

Take a Tour. Now you're ready to start enjoying the TiVo service! Check out the five short tours in Chapter 3 to learn more.



Press the TiVo button on your remote to go to TiVo Central.

The Basics in 5 Short Tours

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status bar

▶▶ Tour One: Play with Live TV

In this tour, you'll take a look at how you can control live TV. So turn on your TV and grab your TiVo remote!

- ⏸ First, press the PAUSE button—the program you're watching pauses. Now you can stand up and stretch, or go to the kitchen and get a snack. You can pause live TV for up to 30 minutes!
- ▶ But for now, press PLAY and the program resumes.
- ◀◀ Next, press BACK—the program rewinds. Press BACK a second time—it goes faster! A third time—faster still! Both the FORWARD and BACK buttons have three speeds. Press BACK a fourth time (or press PLAY at any time) to return to normal speed.
- ⏸ + ▶▶ Press PAUSE once more, then immediately press FORWARD to move the picture a small step forward! Press BACK to move the picture a small step back. When your show is paused, FORWARD and BACK move the program forward or back in small steps. Press PLAY to resume watching at normal speed.
- ⏮ Try out the INSTANT REPLAY button. INSTANT REPLAY jumps you back 8 seconds—useful for when you miss a great sports play or a bit of dialog, or for when you fast forward too far.
- ▶ Slow Press INSTANT REPLAY again, then immediately press SLOW. You get your own slow-motion replay!
- ▶➤ Finally, try the ADVANCE button. Presto! You're caught up to live TV.

► **Status Bar**

Press PAUSE to make the status bar visible. It shows a one-hour period. The green segment is the portion of the current hour that has been saved by your DVR.

Look for the white line. It marks the part of the program you are currently watching. If the white line is anywhere back in the green segment you are “behind” real time (which is way better than being behind the times!).

Now press CHAN UP. When you change channels, the saved programming from the old channel is cleared, and the DVR starts to save what is showing on the new channel.



status bar

This white line tells you where you are.

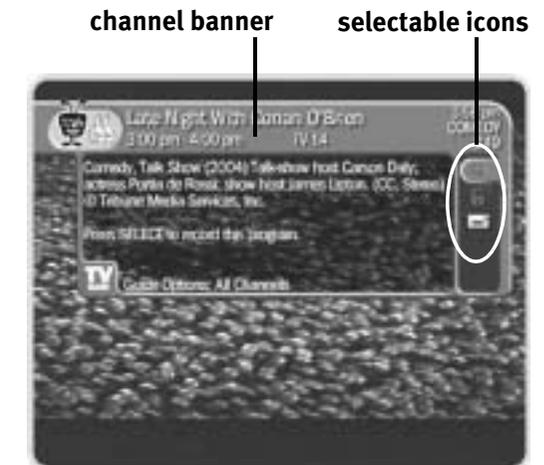
► **Channel Banner**

Press INFO (or DISPLAY if your remote does not have an INFO button) to see the channel banner. (You can also press RIGHT arrow.) It’s only there for a few seconds, but you can bring it back by pressing INFO (or DISPLAY) again. While the banner is visible, press RIGHT arrow to switch from a small, to medium, to large banner. Note that each version has a different amount of information.

Keep pressing RIGHT arrow until you see the largest version of the channel banner. Notice the small icons on the right side. Each symbol represents a useful feature, like recording or Parental Controls. Press the UP and DOWN arrows to highlight different icons. Pressing SELECT while an icon is highlighted will take you to that feature. (For more on using these icons, see page 68.)

Finally, press the CLEAR button—the channel banner disappears. (CLEAR gets rid of things that aren’t part of the program you’re watching.)

Now go have fun playing with live TV, then come back for the next tour!

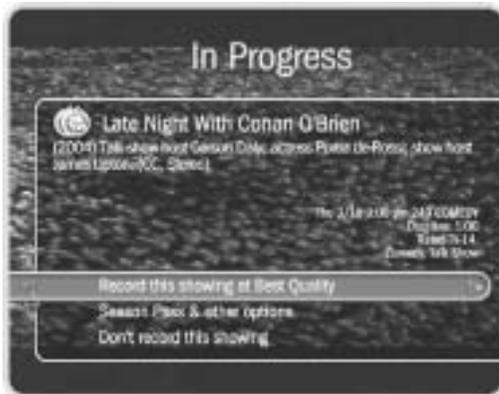


channel banner

selectable icons



When you record from live TV, you can record both the saved portion (up to the last half hour) and the rest of the program. See page 52 for details.



► Tour Two: The Program Guide

Your DVR's program guide lets you see what's on, change channels, schedule recordings, and more—all while you're watching live TV. Press the **GUIDE** button to display the program guide.

► Choose a Program to Watch or Record

See something you'd like to watch? Press the **UP**, **DOWN**, **LEFT**, and **RIGHT** arrows to move the highlight bar over a program title. (Notice that the program description at the top changes.) Then press **SELECT** on the highlighted channel. If the program is on now, the channel changes and the program guide disappears. (Remember, whenever you change channels, programming saved from the old channel is cleared, and the DVR starts to save what is showing on the new channel.)

If the program is upcoming, selecting it brings up a transparent screen with recording options. Choose an option or press **LEFT** arrow to go back to the guide. You can always record the program you're watching by pressing the **RECORD** () button on your remote control. You can also use the guide to record current or future programs. (See page 52 for more on recording from live TV.)

► Looking Ahead

While you're in the guide, press the **FORWARD** () button to move the displayed time ahead. Try it. To go back in time, press **BACK** ().

You can also quickly change the day and time the guide shows by changing the **Guide Options**. To see **Guide Options**, press **GUIDE** to display the guide, then press **ENTER**. To change the day, use **DOWN** arrow to highlight the day, then press **RIGHT** arrow once to choose tomorrow. Press **SELECT**. "Done changing options" becomes highlighted. Press

SELECT again and *voilà!*, the guide appears with tomorrow's program schedule. You know what this means: no more setting the VCR!

► **Filter the Program Guide**

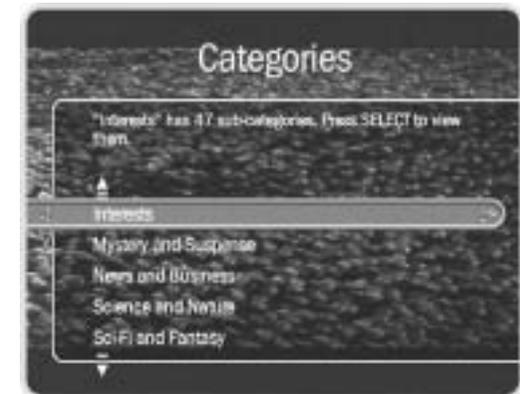
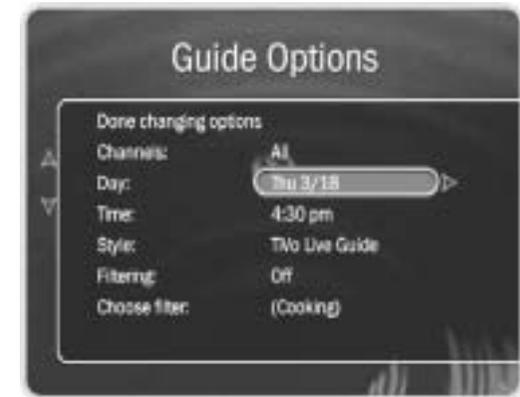
The guide can also find specific kinds of shows for you. Display Guide Options by bringing up the guide and pressing ENTER. Then highlight "Choose Filter." Press SELECT and a list of categories appears. Use the DOWN arrow to move down the list, and select "Interests." Then select "Cooking" from the subcategory list. The Guide Options screen appears again and Filtering is "On." Select "Done changing options."

This time when the guide appears, it only shows you channels airing cooking shows in the next six hours. It has grayed out programs that are not about cooking. To see all the channels again, go to Guide Options (press GUIDE, then ENTER). Highlight "Filtering," and press LEFT arrow to turn it "Off." Then press SELECT.

► **Other Guide Options**

You can also use Guide Options to customize the program guide to your preferences. For example, you can choose the way the guide displays your channels and program information. Press the GUIDE button to display the guide, then press ENTER to display the Guide Options. Highlight "Style" to select one of two different guide styles. See page 69 for more information about program guide styles.

Take some time to play around in the program guide (and set up some recordings, while you're at it). See you in a little bit for the next tour!





 If you just finished Guided Setup and you go to Pick Programs to Record, you will see a message at the bottom of the screen stating that the DVR is still indexing data. The DVR should be done indexing within 4 to 8 hours of finishing Guided Setup.



► Tour Three: Find and Record Your Favorite Programs

You can always record the program you're watching by pressing the RECORD button on your remote control. The TiVo service also provides many ways to quickly search large numbers of TV programs, find your favorites, and schedule recordings in advance. What's more, if a program is part of a series, you can get a Season Pass™ to the series. A Season Pass automatically records every episode of the series that airs on the selected channel, even if the time slot changes.

► Search by Title

In this tour, you'll find a program (*The Simpsons*) by searching for its title. Press the TiVo button to see TiVo Central. Press the DOWN arrow to highlight Pick Programs to Record and press SELECT. The Pick Programs to Record screen appears.

As you can see, TiVo gives you many ways to find programs. Since you know the program's title, highlight "Search by Title" and press SELECT. The next screen is a categories screen. It lets you limit your search to any of several categories—but for now, choose "All Programs," then press SELECT.

The next screen has a grid of letters. Notice the white box around the letter A. Use the RIGHT, LEFT, UP, and DOWN arrows to move the box among the letters. Now move it to S, then press SELECT.

A list of programs that begin with "S" appears on the right side of the screen. Move the white box to the letter I and press SELECT again. The list changes. The TiVo service has searched through all available programs (usually, those airing in the next two weeks) to find those that begin with SI, then listed those programs.

Keep on entering letters until you see “Simpsons, The” in the list on the right. (Notice, the list alphabetizes without “A” or “The.”) If you make a mistake entering text, select DEL on the screen, or press BACK on the remote. To clear all text, use CLR on the screen or press the CLEAR button. Selecting SP on the screen enters a space.

To get to the list of programs, press RIGHT arrow until you move off the grid of letters. Press the UP or DOWN arrow to highlight “Simpsons, The” and press SELECT.

A Program Information screen appears. This kind of screen appears when you select a program title from a list and lets you choose to record the episode, view upcoming episodes, or get a Season Pass.

► **Get a Season Pass**

On the Program Information screen for *The Simpsons*, highlight “Get a Season Pass,” and press SELECT. A confirmation screen appears to make sure the DVR is doing what you want. Press SELECT again—and after a short pause you have a Season Pass to *The Simpsons*! Every episode on the selected channel will be recorded automatically.

You should now be on the Search by Title screen again. Press the LEFT arrow to return to Pick Programs to Record, then select the To Do List. You can see all your scheduled recordings here.

In the To Do List, notice the upcoming episodes of *The Simpsons* are marked with two check marks (☑☑), indicating they are part of a Season Pass. You can cancel the recording of any episode by highlighting the title in the To Do List and pressing CLEAR.

Set up some more Season Pass recordings now, or go on to the next tour to learn how the TiVo service helps you find new shows you might like—sort of like your own “smart” TV assistant.



 **If you schedule a lot of Season Pass recordings, it's a good idea to set priorities for them. You do this with the Season Pass Manager; see page 49 for more information.**



 Your personal TV preferences are just that: personal. See the TiVo Privacy Policy in Chapter 9, and the Federal Trade Commission (FTC) White Paper available at www.tivo.com/privacy for more information.



 The TiVo icon next to the title indicates that it was recorded as a TiVo Suggestion.

► Tour Four: Find New Programs

TiVo makes it easy for you to find what you want to watch by responding to your interests and collecting the best the networks have to offer.

► WishList™ Searches

A WishList search automatically finds programs that match your tastes, passions, and whims on any channel you receive. And it keeps on searching for as long as you keep the WishList. Just enter your favorite actor or director's name, or any keyword, and your DVR will find programs for you. Go to TiVo Central, then Pick Programs to Record, then Search Using a WishList. For more information, see page 58.

► TiVo Suggestions

TiVo Suggestions is a personalized list of shows selected to match your preferences. How is this magic possible? Any time you watch programs, live or recorded, or browse programs with the live guide, or in Showcases or TiVolution Magazine, you can rate them by pressing the THUMBS UP™ and THUMBS DOWN™ buttons ( ). You can give a program up to three Thumbs Up or three Thumbs Down. Also, any time you choose to record a program, it automatically gets one Thumbs Up.

Over time, the more shows you rate, the better TiVo Suggestions will be at finding programs you might like. The suggestions are listed under TiVo Suggestions in order of how closely they match your preferences.

Suggested programs based on your ratings appear in TiVo Suggestions. Go to TiVo Central, then Pick Programs to Record, then TiVo Suggestions. (If you don't see programs yet, come back later—it may take a few hours the first time.) The list of programs is ranked, so shows you are more likely to enjoy are near the top. If you want to record a program, select it and the Program Information screen appears.

Auto-Recording TiVo Suggestions. As an added bonus, when the DVR has available space, it automatically records TiVo Suggestions. (You can turn this feature off if you prefer; see page 84.) You will find recorded TiVo Suggestions on Now Playing, listed below programs you requested. Or, if you have the Groups option turned on (see page 72), TiVo Suggestions recordings will appear in their own group.

It's important to remember these characteristics of TiVo Suggestions recordings:

- TiVo Suggestions never replace shows you request, or prevent your requested shows from being recorded.
- TiVo Suggestions are always the first programs deleted to make room for recordings you request.

Auto-recording TiVo Suggestions is an easy way to find programs you never knew about, or old favorites you may have forgotten.

► Showcases

Showcases is an interactive content area which often includes opportunities to schedule recordings of featured programs, or allows you to watch previews of upcoming movies or TV shows. The programs in Showcases are grouped in theme packages, giving you “one-stop shopping” convenience when browsing for programs to record. Packages may include exclusive content, the inside scoop on hit movies, exciting miniseries, special events, popular series, and shows featuring the biggest stars of the screen and stage.

TiVolution® Magazine is one part of Showcases where you'll always find something fun and different. It's a guide to the best upcoming shows on television. Select a title to see the Program Information screen. If you get the channel the program airs on, you can set up a recording here—it's that easy! Showcases and TiVolution Magazine are updated during your DVR's regular connection to the TiVo service.

 If other members of your household are pressing THUMBS UP on shows you don't care for, and vice versa, you may find that TiVo Suggestions is making some suggestions that you like, and some that are more appropriate for other members of your household.





►► Tour Five: Now Playing

Your DVR can record many hours of programming (enough to fill a slew of video tapes!). Fortunately, it also labels and organizes all those saved programs. Unlike using a VCR, the Now Playing list gives you instant access to all recorded programs—no need to spend time searching for an episode on that tape you thought you used.

To go to Now Playing, just press the TiVo button twice. Your new DVR may already contain some entertaining short programs. A network logo to the right of the show tells you which network brings you the program.

! Icons like this one to the left of the program's title tell you the recording's current status. See the Glossary of Icons on the inside back cover for details.

Programs you request will appear in Now Playing the moment recording begins. You can watch any title in Now Playing—even one that is still being recorded—by highlighting it, then pressing the PLAY button.

Try it. Highlight a program in Now Playing and press PLAY. OK, now for the cool part: Watch the program for at least 5 minutes, then press the LEFT arrow to go back to Now Playing. Select the program again—the Program Information screen will now say “Resume Playing,” instead of “Play.” Select “Resume Playing,” and return to the program from the point you left it!

Feel free to watch some programs from Now Playing—but come back for “Cool Things You Can Do” on page 43.



►► Cool Things You Can Do

Never be late for your favorite programs. Stuck in traffic? Working late? Don't worry! If you've set up an individual or Season Pass™ recording, the program will be waiting for you on the Now Playing list.

Really! Never, ever be late for your favorite programs! Your co-worker just told you about a must-see program that's on tonight, but you won't make it home in time to set up a recording. No problem! If your DVR is connected to a home network with a broadband Internet connection, you can use TiVo Central Online (www.tivo.com/tco) to schedule recordings on your DVR from anywhere you have web access. See page 57 for details.

Connect your DVR to your home network. When you do, your DVR becomes a digital home entertainment center, with access to even more features (see below). Chapter 7 has instructions for connecting your DVR to a home network.

Multi-Room Viewing. Record programs in the living room and watch them in the bedroom—or vice versa. If you have more than one DVR connected to your home network, you can transfer programs between them. If you don't have a home network, you can connect two DVRs to each other for Multi-Room Viewing. This setup is described online at www.tivo.com/support. (Search for “connecting two DVRs without a home network.”)

Enjoy digital Music & Photos—from your sofa! Are you huddling around a computer screen in your home office to share digital photos with your family? Are you listening to digital music through a pair of tiny computer speakers? Connect your DVR to your home network, and you can watch slideshows of your digital photos on your big screen TV, and listen to playlists of your MP3s on your stereo system. And you can control it all with your TiVo DVR remote. Leave the computer in the office, and enjoy your digital media in your living room. See the “Home Media Features Guide” at www.tivo.com/guides for details.



Other DVRs connected to your home network appear at the bottom of the Now Playing list.





Make your television wishes come true with a WishList™ search. Have a favorite actor? A favorite hobby or interest? How about a favorite sports team? If they're on TV, chances are a WishList search will find them. For details see page 58.

Looking for good movies? Kids' shows? Science fiction? With Search by Title, you can browse upcoming programs by category and find shows you didn't know were on. For details see page 53.

See a good preview, record the show. If you're watching live TV and a promotion comes on for an upcoming program, you may see an Ipreview™ icon like this one:  Press THUMBS UP™ while the icon is visible to see options for recording for the program. You don't have to remember when it's on—it will be recorded! (If you accidentally fast-forwarded past the Ipreview icon, rewind until it's visible again.)

Use the Overtime Scheduler™ (and don't miss overtime!). Programs sometimes start before they're supposed to, and often end later than scheduled. You can adjust your recording times to account for variations using the Overtime Scheduler. See page 48.

Use the CLEAR button. The CLEAR button hides the status bar, the program guide, channel banner, and anything else on the screen that is not part of the program. It clears text entered when using the letter grid. In the Now Playing list, press CLEAR to delete a program. In the To Do List, CLEAR cancels a recording.

Pick Programs to Record

Season Pass, Recording Options, To Do List	46
Using the Guide to Find Programs	51
Find Your Favorite Programs	53
Find Programs That Match Your Interests	58

▶▶ Season Pass, Recording Options, To Do List

Your TiVo DVR makes finding and recording programs easy—so easy that you may find more programs you enjoy than you ever expected! Your DVR can help with this too, by giving you simple ways to manage your recordings.



▶ Season Pass and Other Repeating Recordings

There are three types of recordings that repeat automatically:

- **Season Pass™ recordings.** Records every episode of a series that airs on a certain channel—even if the day or time changes! It’s automatic and easy to set up. Just select a program (in the TiVo Live Guide, or search results) and choose “Get a Season Pass.”
- **Manual Repeating Recording.** Records on a specific channel at a specific time, just as you would with a VCR. See page 56 for more information.
- **Auto-recording WishList™ search.** Records all programs found by a WishList search. See page 63.

These three types of repeating recordings also have the following in common:

- **No duplicates within 28 days.** If you watch or delete a particular episode or showing, it will not be recorded automatically again for 28 days. This prevents Now Playing from filling up with shows you probably don’t want. If you want to record duplicates, go to Recording Options, Show Type, and select “All (with duplicates).” You can also schedule a single duplicate recording for a particular program.
- **Parental Controls.** If Parental Controls are on when you schedule a repeating recording, the DVR checks its current program information to see if any upcoming program violates a Parental Control. If it does, the DVR requires the password to continue. See page 79 for more information.

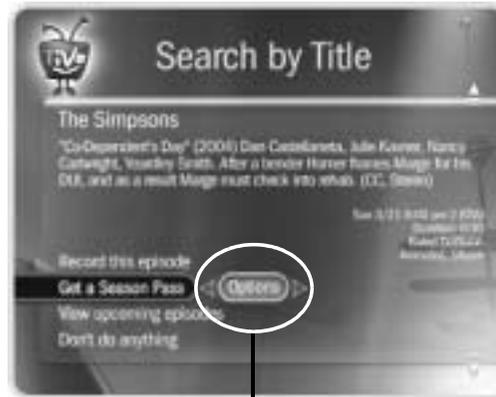
 **An exception to the 28-day rule may occur if the program wasn’t watched but was automatically deleted from Now Playing to make room for another recording you requested—or if the program information describes it incorrectly.**

- **Keep at Most=5.** By default, five episodes of a repeating recording program are kept in Now Playing. You can change this setting; see page 48.
- **Resolving conflicts.** The TiVo service resolves scheduling conflicts between repeating recordings by comparing recording priorities. You can change recording priorities with the Season Pass Manager. (See page 48 for more details).

► **Recording Options**

You can set Recording Options when you set up a recording, or any time later by selecting the program from the To Do List or the Season Pass Manager, and choosing “Options.”

Setting Recording Options. The Program Information screen that appears when you select a program includes choices to “Record this episode” and “Get a Season Pass.” When one of these recording actions is highlighted, “Options” appears to its right. To see the current Recording Options, use the arrow buttons to highlight “Options,” then press SELECT.



Recording Options

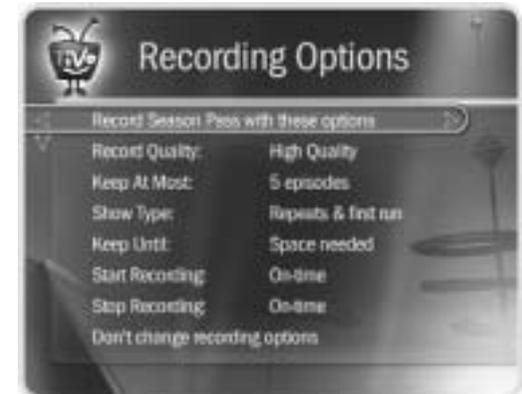
To set your Recording Options:

1. Use the UP/DOWN arrows to highlight an option on the Recording Options screen.
2. Use RIGHT and LEFT arrow to change the setting.
3. When you are done, press SELECT or highlight “Record with these options.”
4. Press SELECT again to schedule the recording with the new options.

To cancel your changes, press LEFT arrow, or highlight “Don’t change recording options” and press SELECT.



Recording Options: one-time recording



Recording Options: repeating recording



Are two of your favorite programs on at the same time? If you use Recording Options, you can create two Season Pass recordings for the same time. Set the first one to record only First Run episodes; set the second to record every episode. Use the Season Pass Manager (described on page 48) to give the first one higher priority than the second. Voilà! As long as the program information is correct, when reruns of the first program air, your DVR will ignore them and record episodes of the second program.

Recording Options include:

Record Quality. The choices for Recording Quality are Basic, Medium, High, and Best. The default setting is High. (Best looks great, but keep in mind that it takes up more space.) These settings are described on page 83. (This option is not available once a recording starts.)

Keep At Most. This option sets the maximum number of episodes to be saved—useful for keeping only the most recent nightly news or only a few of your kids’ daily programs. The default setting is 5. (This option is available only for a repeating recording.)

Show Type. The choices are “Repeats & first run,” “First run only,” and “All (with duplicates).”

Keep Until. You can change this setting from “Space needed” (the default setting) to “Until I delete.” (This option is available only for a repeating recording.)

Keep At Least. You can set the minimum amount of time the DVR keeps a recording. The default setting is “Until Space Needed.”

The Overtime Scheduler consists of these two options:

Start Recording. You can choose to start recording up to ten minutes before a program begins. The default setting is “On-time.” (This option is not available once recording starts.)

Stop Recording. You can set a recording to continue—for a few minutes or up to three hours—after it’s scheduled to end. For example, you can extend a recording of a sports event and be sure to catch the whole game—even if it goes into overtime. You can change this setting when you set up the recording, or while the recording is in progress! The default setting is “On-time.”

► **Season Pass Manager**

Say you have a Season Pass to *ER* and an auto-recording WishList for movies with Julia Roberts. What if a Julia Roberts movie happens to air at the same time as *ER*? The DVR will check the priorities in the Season Pass Manager to decide which program to record. If the Julia Roberts WishList has a higher priority than the *ER* Season Pass, the Julia Roberts movie will be recorded, and *ER* will not.

Changing the priority order. If you don't change priorities in the Season Pass Manager, repeating recordings are prioritized by the order they were set up: the first has highest priority, and so on. To change the priority order:

1. Use the UP/DOWN arrows to highlight one of your repeating recordings.
2. Press RIGHT arrow to highlight the arrows to the right of the title.
3. Use the UP/DOWN arrows to move the selected title up or down in the list.

Priorities and resolving conflicts. If a conflict occurs when you're setting up a new repeating recording, you'll be shown which programs are involved. You'll also be given options to resolve the conflict:

- Record only those programs that do not conflict with others previously scheduled to record. This gives the repeating recording the lowest priority.
- Record all programs requested. This gives the repeating recording the highest priority.

Canceling a Season Pass. To cancel a Season Pass, just highlight the program's title in the Season Pass Manager and press CLEAR. Or, from a Program Information screen, select "Cancel/edit the Season Pass," then "Cancel this Season Pass."





► **To Do List**

The To Do List shows all your scheduled recordings and lets you cancel or edit them. Individual recordings are marked with a single check mark (☑). Season Pass recordings and manual repeating recordings have a double check mark (☑☑), and WishList recordings have a star (★). Press SELECT on any program to see available edit options.

Canceling a recording. To cancel an upcoming recording from the To Do List, highlight the title and press CLEAR.

► **View Recording History**

This is an advanced feature in the To Do List for those who really want all the details. Selecting this option takes you to a list of three types of programs:

Deleted. To find programs that were deleted, press the UP arrow or CHAN UP. (You will find these programs listed above the point where the highlight bar starts off.) Selecting a title will take you to a screen that tells you how and when the program was deleted.

Were not recorded. To find programs that were not recorded, press the UP arrow or CHAN UP. (You will find these programs listed above the point where the highlight bar starts off.) Selecting a title will take you to a screen that tells why it was not recorded.

Will not be recorded. To find programs that will not be recorded, press DOWN arrow or CHAN DOWN. (You will find these programs listed below the point where the highlight bar starts off.) Selecting a title will take you to a screen that tells you why the program will not be recorded. You can then select “More recording options” on this screen, which will display the Program Information screen. You could choose “View upcoming episodes” to find an episode that doesn’t conflict with anything else, or change Recording Options, which may allow the program to be recorded.



►► Using the Guide to Find Programs

The TiVo service provides a program guide that displays up to two weeks of TV programming at the touch of a button. You can use the guide to quickly find programs and set up recordings by customizing the channels and filtering the types of programs shown in the guide. To view the guide, just press the GUIDE button on your TiVo remote.

► Customizing the Guide

The guide has options that let you quickly change what programs and channels it shows. To see Guide Options, press ENTER while the guide is displayed. Available options are:

Channels. Choose which channel list you want the guide to display. For details on how to customize these channel lists, see page 77. The three channel lists are:

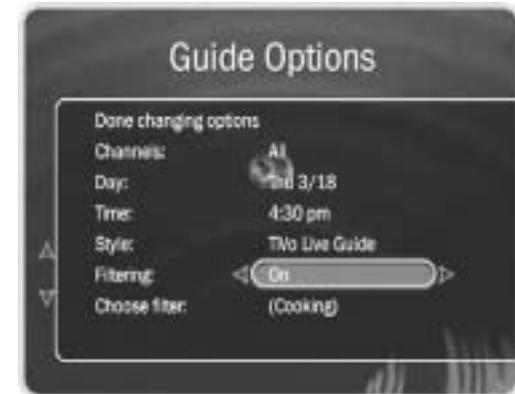
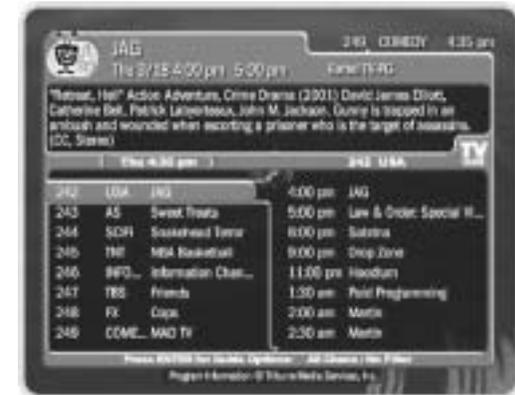
- **You Receive.** This is the default list. It displays only the channels you have chosen in the Channels You Receive channel list.
- **Favorites.** This list shows only your favorite channels when browsing the guide.
- **All.** This list displays all of your cable or satellite provider's channels, even channels you don't subscribe to.

Day and Time. Sets the guide to show what's on at a particular day and time.

Style. Choose between the TiVo Live Guide and Grid Guide styles. (For details about the differences between these two styles, see page 69.)

Filtering. Turns filtering on or off. (Choosing a filter is explained below.) When you want to see all channels and programs in the guide, turn filtering off.

Choose filter. Use the UP and DOWN arrows to highlight a category in the list, then press SELECT. Choose a subcategory. The guide displays only channels with programs in that subcategory.



When filtering is on, the guide will show only channels that have a program in that category within six hours of the day and time selected. Programs that don't fit your category are grayed out.

Changing a guide option. Highlight the option, then press the LEFT or RIGHT arrow to change the selection displayed. Save your changes by pressing SELECT or GUIDE. To cancel your changes, press CLEAR.

► **Recording a Program from the Guide**

To record a program, highlight it in the guide, then press RECORD. On the transparent screen that appears, select “Record this showing (Best Quality)” or “Season Pass & other options” for more choices. (See page 46 for more on Season Pass recordings and page 47 for more on Recording Options.)

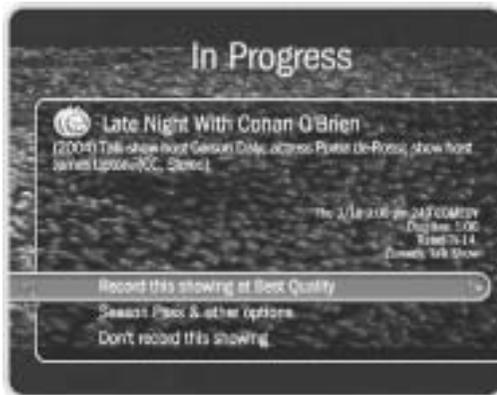
► **Recording the Program You Are Watching**

You can always record the program you are watching: just press the RECORD button. On the transparent screen that appears, select “Record this showing (Best Quality).” Select “Season Pass & other options” for more choices, or to change the recording quality.

Recording the Saved Portion. Up to 30 minutes of the current channel’s broadcast is always being saved, even when you are not recording a program. When you change channels, the DVR clears what it has saved and starts saving again on the new channel. (So, if the saved portion is important to you, either record it or don’t change the channel.)

To record the saved portion—in addition to the rest of the program—you must choose “Record this showing (Best Quality).” If you change the Recording Quality (by selecting “Season Pass & other options”), the saved portion of the program won’t be recorded.

Stopping a recording. You can stop any recording in either of two ways: select the title in Now Playing, then select “Stop Recording;” or, press the RECORD button in live TV, then choose “Stop the current recording.”



►► Find Your Favorite Programs

► Search by Title

If you know the name of the program you're looking for, or even the first part of the name, choose Search By Title from Pick Programs to Record. Then follow these steps:

1. If you wish, you can first narrow the search with a category and subcategory.

2. The next screen has a grid with numbers and letters. Spell out the title using the arrow buttons to move, then pressing SELECT on each letter you want. (Skip "a," "an," or "the.") As you select letters, an alphabetical list of programs appears on the right. Keep selecting letters until you see your program.



You can use the TiVo remote for some functions too. The CLEAR button on the remote erases everything; BACK erases one letter at a time; FORWARD inserts a space.

3. When you see your program, press RIGHT arrow until the highlight is in the list. To move the highlight within the list, press the UP and DOWN arrows. To move quickly up or down the list one screen at a time, press CHAN UP/DOWN.
4. Press SELECT when the title you want is highlighted. The Program Information screen will appear. Then you can view upcoming episodes, set up a Season Pass, or record an individual showing.

Browsing a category. You can browse through programs in any category and subcategory you choose. Numbers come before letters, so to start from the top of the list, enter a zero.



 If you only know one word in the title, use a Title Wishlist to find the program. See page 58 for details.

 Replace hyphens (-), slashes (/) and periods (.) with spaces. For example, use 20 20 to search for the title "20/20." Any other marks, such as apostrophes ('), asterisks (*) and ampersands (&) are ignored. For example, you would use 6 OCLOCK NEWS to search for the title "6 O'Clock News."



► **Record by Time or Channel**

Three options are available under Record by Time/Channel: Browse by Time, Browse by Channel, and Manually Record Time/Channel.

Browse by Time. Browse by Time lets you browse all programs on a particular day and time. With Browse by Time, you can filter the list to see only programs in a particular category. For example, you can browse all the movies airing on Saturday night. To browse by time:

1. Use the arrow buttons to highlight a category (for example, “Movies”) to narrow the list of programs, then press SELECT.
2. Press the UP and DOWN arrows to select the date you want to see, then press RIGHT arrow to move the highlight to the time column.
3. Press the UP and DOWN arrows to select a time.

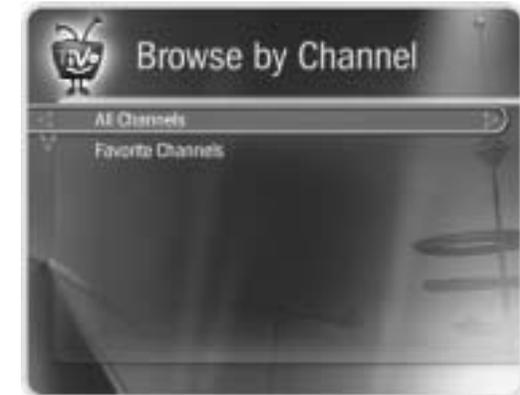


4. Press SELECT to bring up the list of programs without leaving the time selector, or press RIGHT arrow to bring up the list of programs and move to the list at the same time.

5. When you find a program you want to record, highlight it and press SELECT to bring up the Program Information screen. Then you can view upcoming episodes, set up a Season Pass, or record an individual showing.

Browse by Channel. Browse by Channel lets you browse through programs airing on a particular channel. You can start with all channels, or just your favorites. To browse by channel:

1. Highlight and select either “All Channels,” which includes all the channels you receive, or “Favorite Channels,” which includes just the channels you have selected as your favorites. (For information on creating your own list of Favorite Channels, see page 77.)
2. Press the UP and DOWN arrows to select the date you want to browse, then press RIGHT arrow to move the highlight to the channel column.
3. Press the UP and DOWN arrows to select a channel. (You can also use the numbers on the remote to enter a channel, then press ENTER.)
4. Press SELECT to see the list of programs without leaving the channel selector, or press the RIGHT arrow to see the list of programs and move to the list.
5. When you find a program you want to record, highlight it and press SELECT to bring up the Program Information screen. Then you can view upcoming episodes, set up a Season Pass, or record an individual showing.





 **Use a Manual Repeating Recording to record things like just the opening monologue of a late night talk show.**

Manually Record Time/Channel. Manually Record Time/Channel lets you schedule a recording on a specific channel at a specific time (just as you would with a VCR). You can also create a manual repeating recording here by setting the recording to repeat every week, every day, or every weekday. To create a manual recording:

1. Choose the recording type, using the UP and DOWN arrows to select “One Time,” or “Repeating.” Then press RIGHT arrow.
2. Choose the day(s) for the recording, using the UP and DOWN arrows to change the current selection. If you chose “Repeating,” you can choose to repeat the recording on a specified day of the week (for example., “Every Tuesday”) or several times a week (for example, “Every M - F” or “Every Day”). Then press RIGHT arrow.
3. Choose a channel using the UP and DOWN arrows (or by entering a number with the remote, then pressing ENTER). Press RIGHT arrow.
4. Set the hour, minute, and am/pm for the start and stop time, using the UP/DOWN arrows to change the current selection. Press RIGHT arrow to move to the next step, LEFT arrow to move back.
5. Schedule the recording by pressing SELECT. A confirmation screen appears. (The recording will be named with a “best guess” based on program guide listings for that time and channel. This will help you find your program later in the To Do List or in Now Playing.) When you’re ready to schedule the recording, just press SELECT.

► **Using Online Scheduling to Find Programs (TiVo Central Online)**

You can schedule recordings on your DVR at home from any computer with Internet access and a standard web browser. Use TiVo Central Online at www.tivo.com/tco to search for shows by time, title, keyword, or actor/director. You can record a single episode or get a Season Pass, with all the recording options you have on your DVR at home. You can even set the program not to record if it conflicts with a scheduled recording that is already on your DVR.

Using Online Scheduling doesn't require any changes to your current setup. However, if your DVR is connected to a home network (see Chapter 7) that includes a broadband Internet connection, it will check the TiVo service for your recording requests much more often. With a broadband Internet connection, you can schedule a recording within an hour of its air-time from any place that you have access to the Internet!

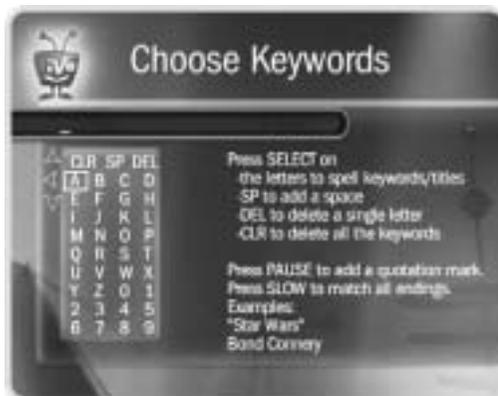
To Use Online Scheduling:

1. Go to www.tivo.com/tco and sign in.
2. On the Welcome page of TiVo Central Online, select the name of the DVR for which you want to schedule recordings.
3. Use the simple or advanced search of your TV listings, or browse by channel.
4. From the list of search results, click the name of a program and choose:
 - Record this episode** — to record the program and specify the priority and quality.
 - Get a Season Pass** — to record this program every time it airs on this channel.

You can choose to receive a confirmation e-mail sent to the e-mail address you provide.



Each time your DVR connects to the TiVo service, it checks TiVo Central Online and schedules any recording requests you've made.



► Find Programs That Match Your Interests

► Try a WishList™ Search

If you know what you like, WishList searches are great! A WishList search automatically finds programs that match your interests, tastes, passions, and whims on any channel you receive. And it keeps on searching for as long as you keep the WishList.

For example, you could create a Category Only WishList for the category “Movies” and subcategory “Comedy.” You could then use it occasionally to look at a list of all comedy movies airing in the next two weeks. The list would be updated each time your DVR connects to the TiVo service.

You could search for something more specific by creating an Actor WishList for Sean Connery, and then include the category “Movies,” and subcategory “Action.” This WishList would only find action movies starring Sean Connery.

With a Keyword WishList, you can look for something very specific. For example, the Keyword WishList *GIANTS* with category “Football” would find Giants football (but not baseball) games for you.

Here’s another example: You could create a Keyword WishList to find the 1986 remake of the science fiction classic *The Fly*, starring Geena Davis. Not only does this WishList find a specific program—it finds the specific version! The keyword entry would look like this: “*GEENA DAVIS*” *FLY*. (Using quotation marks in a Keyword WishList ensures that the search only finds programs that match the exact phrase you entered. This means that you will find *The Fly*, starring Geena Davis and not a documentary about flies narrated by Davis Geena!) You could also find this movie by creating a Keyword WishList for the title and year. In that case, the keyword entry might look like this: “*THE FLY*” 1986.

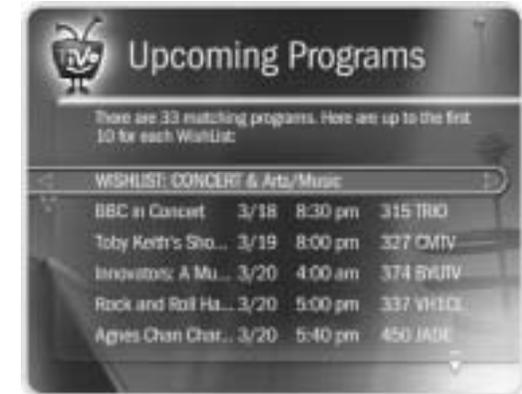
After you create a WishList, you can periodically view what it finds by selecting “View all upcoming WishList programs,” or selecting an individual WishList, then selecting “View upcoming programs.” Then you can schedule recordings for the programs or episodes you want. (See page 63 for more details.)

► **Can a WishList Do More Than Search?**

Yes it can! You can set a WishList to auto-record, and it will record every program the WishList finds, on any channel you receive. For example, with the Sean Connery Actor WishList, you would automatically collect Sean Connery action movies in Now Playing.

Some WishList searches are better suited to browsing than to auto-recording. For example, you could create a Category Only WishList for the category “Documentary.” This WishList would find every upcoming documentary. You might not want to record every documentary, but you could occasionally browse the WishList and choose the ones you do want to record.

The more specific a WishList is, the better suited it is to auto-recording. For example, an auto-recording Keyword WishList with the keywords *LAKERS* and *KINGS*, and category “Sports/Basketball” would only record basketball games with both of these teams—a great way to ensure that you enjoy this season’s rivalry.



 If you set up an auto-recording WishList for sports, consider using the Overtime Scheduler (described on page 48) to make sure you don’t miss the most exciting part of the game!



► **Creating a WishList Search**

From Search Using a WishList, select “Create new WishList.” Next, select the type of WishList: Actor, Director, Category Only, Keyword, or Title. For most WishList searches, you use the grid of letters on the next screen to spell out what you’re looking for.

As the last step, you’ll then be able to select a category and subcategory to narrow your search. For example, if you want movies with Harrison Ford, but not documentaries or talk shows, select “Movies.” To search every category, select “Don’t specify a category.”

Category Only WishList. Use the UP and DOWN buttons to highlight a category, then press SELECT or RIGHT arrow. A subcategories list appears. Highlight a subcategory, then press SELECT or RIGHT arrow. To search all subcategories, you can also select “Don’t specify a subcategory.”

Actor or Director WishList. Spell the person’s last name using the arrow buttons to move the selection box around the grid; press SELECT to enter a highlighted letter. As you select letters, a list of names appears to the right of the grid.



If you see the person’s name, press RIGHT arrow until you move the highlight to a name in the list. Use the UP or DOWN arrow to highlight the name you want and press SELECT.

To search for a name that is not on the list, enter the name in the format: *LAST NAME, FIRST NAME*. You must match the spelling of the name exactly, and you must use a comma (available in the grid under the letter W).

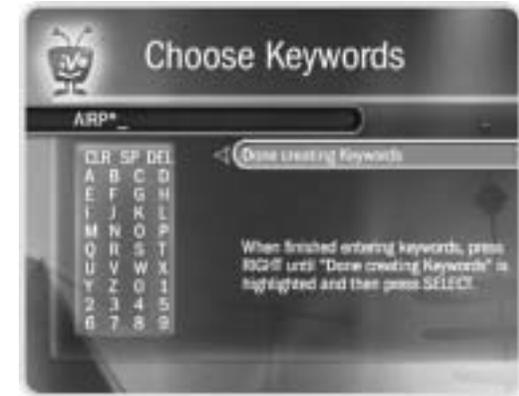
Keyword or Title WishList. You can create a Keyword or Title WishList with one keyword or with several. For a Keyword WishList, the TiVo service checks for your keywords in the program or episode title, description, actor, director, year, and category information. A Title WishList works very similarly, but the TiVo service only searches program and episode titles.

Spell your keyword(s) using the arrow buttons to move around the grid; then press SELECT to enter the highlighted letter. You can enter as many characters as will fit on the screen. When you have finished, use RIGHT arrow to highlight “Done creating keywords,” then press SELECT or RIGHT arrow.

Using * in WishList searches. To search for similar words in a Keyword or Title WishList, use the asterisk (*) as a special symbol that replaces the endings of words. For example, the keyword AIRP* would find shows containing “airport,” “airplane,” “airplanes,” as well as the movie “Airplane!” To enter an asterisk, press the SLOW (⏪) button on the remote.

The asterisk can be helpful when you’re looking for a range of similar words, or if you’re just not sure how something is spelled. Pop quiz: is it “irresistable” or “irresistible?” Use the keyword *IRRESIST** and don’t worry about it! Remember, when using the asterisk:

- It can only be used at the end of a keyword; it cannot be used to omit letters at the beginning or in the middle of a word. (For example, keywords like *AIR*NE* or **PLANE* will not work.)
- When using this symbol, be as specific as possible. For example, do not use keywords like *TH**. There will not be enough room to show all the results of a keyword that is too general.





If you like music performances, try a

keyword WishList for “Concert.”

Choose the category “Arts” and the Sub-Category “Music.”

Tips for entering keywords:

- To specify an exact phrase in a Keyword or Title WishList, surround a set of words with quotation marks (to enter quotation marks, press PAUSE (). For example, the keyword *PAUL SIMON* might also turn up a documentary about Simon Bolivar with a director whose name is Paul. Use “*PAUL SIMON*” to be certain you find only programs that feature Paul Simon.
- If you enter more than one keyword in a Keyword or Title WishList, it finds only programs that match all of your keywords (for example, “*GEENA DAVIS*” *FLY*).
- If you want to include an exact phrase and additional keywords, there should be a space between the final quotation mark and the beginning of the next word. You can enter a space by selecting SP on the grid of letters or by pressing FORWARD ().
- Replace hyphens (-), slashes (/) and periods (.) with spaces. For example, you would use the keyword *20 20* to search for the title “20/20.” For an Actor WishList for Catherine Zeta-Jones, use *ZETA JONES, CATHERINE*. You can enter a space by selecting SP on the grid of letters or by pressing FORWARD ().
- Any other marks, such as apostrophes (’) and ampersands (&), are ignored. For example, you would use the keyword phrase *6 OCLOCK NEWS* to search for the title “6 O’Clock News.” (Note that commas (,) are also ignored, except in an actor or director WishList, where they are essential.)
- For dollar signs (\$) substitute the letter S. For example, to find “\$100,000 Pyramid,” use *S100000*. (In Search by Title, skip the dollar signs to find these titles.)

► **Browsing, Recording, and Editing a WishList**

Browsing all WishList searches. Select “View all upcoming WishList programs.” This selection displays a list of up to 10 upcoming programs from each of your WishList searches—and up to 200 programs total (so it may take a long time to display). To record a program, select its title; you will see the Program Information screen, where you can select “Record this episode” and other actions.

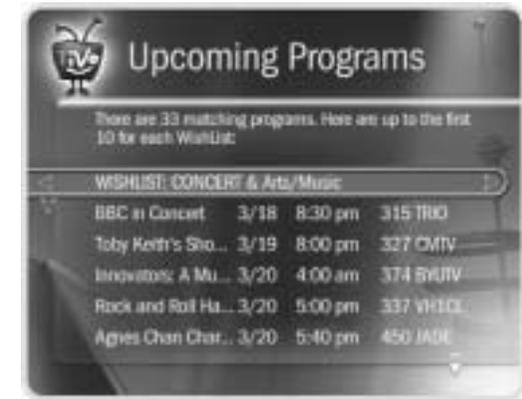
Browsing an individual WishList. Select the WishList you want to browse, then select “View upcoming programs” to see a list of up to 200 unique upcoming programs that match the WishList. To record a program, select its title to see the Program Information screen, then select “Record this episode.”

For a comprehensive list of all upcoming showings of a program, including repeats (multiple showings of the same program), select the title of the program in the “Upcoming Programs” list. On the Program Information screen that appears, select “View upcoming episodes/showings.”

Auto-recording WishList. When you create a WishList or select it, you can choose the action, “Auto-record WishList programs.” This means every program the WishList finds will be automatically recorded.

Each auto-recording WishList and its upcoming recordings are marked with a star (★). If you want to be sure that all the matches your auto-recording WishList finds are recorded, give the auto-recording WishList a high priority in the Season Pass Manager. (See page 48 for details.)

Editing a WishList. You can change a WishList—for example, to correct a misspelling, or to add a category or subcategory to narrow the results. Just select the WishList, then select “Edit WishList.”



 **As you browse the upcoming program titles found by WishList searches, remember that the CHAN UP/DOWN button pages quickly through lists.**



Watching Live TV and Recorded Programs

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▶▶ Using the Control Buttons

Part of the fun of watching programs with TiVo, live or recorded, is using the pause, instant replay, and slow motion features. Here's an overview of the control buttons:

-  **RECORD.** Records a program when you're watching live TV or browsing the program guide.
 -  **PLAY.** Plays a program at normal speed. Shows the Status Bar for three seconds.
 -  **PAUSE.** Pauses a live program for up to 30 minutes and a recorded program for as long as you want. To resume playing, press PAUSE again (or press PLAY).
 -  **BACK.** Rewinds a program. Press BACK once, twice, or three times to go backward fast, faster, or fastest. Press it a fourth time to return to normal speed.
 -  **FORWARD.** Fast forwards a program. Press FORWARD once, twice, or three times to go forward fast, faster, or fastest. Press it a fourth time to return to normal speed.
- Frame Forward or Back.** Press PAUSE, then press the FORWARD or BACK button. The picture moves a small step forward or backward.
-  **INSTANT REPLAY.** Instantly jumps back eight seconds and resumes playing.
 -  **ADVANCE.** In live TV, catches up to the live broadcast. When you are fast forwarding in a recorded program, press ADVANCE to instantly jump ahead to the next tick mark. When you are rewinding, press ADVANCE to jump back to the previous tick mark. In a recorded program, press ADVANCE once to jump to the end of the recording, press again to jump to the beginning.
 -  **SLOW.** Plays the program in slow motion.



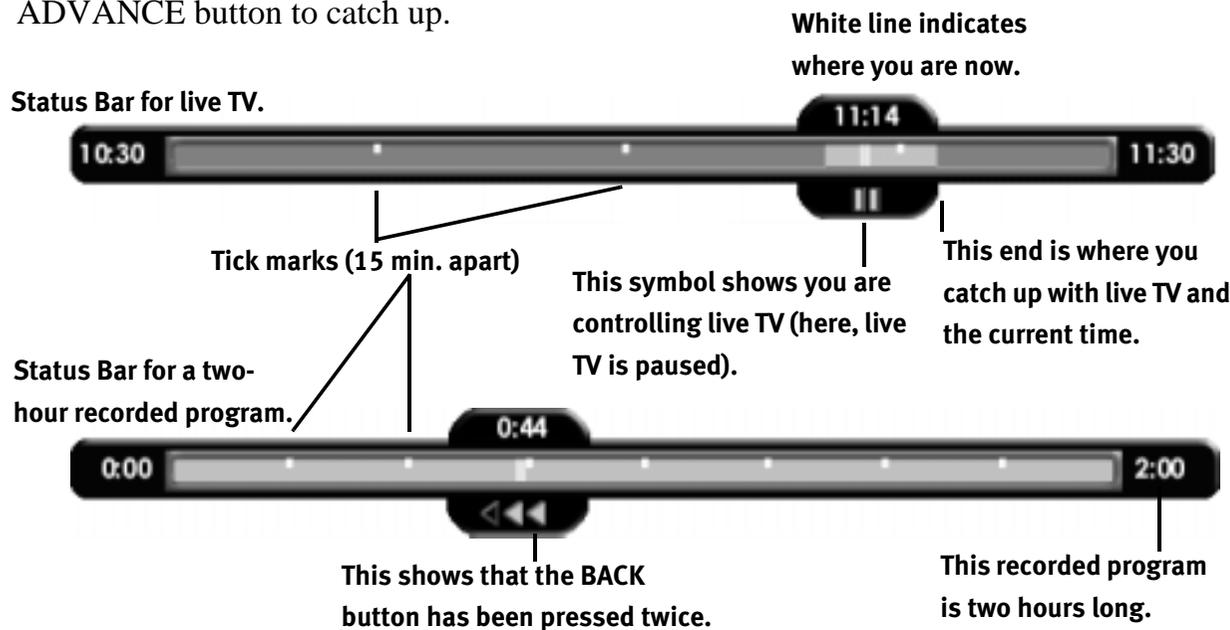
When you fast forward too far, press **INSTANT REPLAY** to jump back eight seconds. Press it again if you really missed the mark.

►► The Status Bar

When you press PLAY, PAUSE, FORWARD, or BACK, the status bar appears at the bottom of the screen. In live TV, the status bar represents one hour and the white tick marks are 15 minutes apart. In recorded programs, the bar shows the program's length. The tick marks are 15, 30, or 60 minutes apart, depending on the length of the program.

The green segment represents the part of the program saved by the DVR. The DVR automatically saves up to 30 minutes of live TV. You can move backward and forward through the saved portion of a program. (For more information, see page 66.)

In live TV, the right edge of the green segment represents the current time. A white vertical line shows where you are in the recording. If the white line is anywhere back in the green segment, you are behind live TV. If you are behind live live TV, you can press the ADVANCE button to catch up.



 The CLEAR button hides the status bar, the program guide, the channel banner, and anything else that is not part of the program.

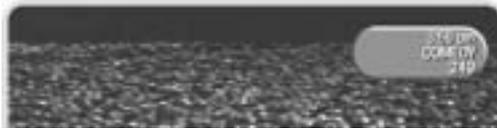


 You can only rewind live TV up to 30 minutes, or to the point where you last changed the channel (whichever is less). When you change the channel, you skip ahead to the current time on the new channel and start saving on that channel. If you are behind live TV and watching something you still want to see, you should not change the channel.



Pressing RIGHT arrow switches among channel banner styles, from

small...



...to medium



...to large.



▶▶ The Channel Banner

The channel banner appears at the top of the screen when you change channels or press the INFO button or RIGHT arrow on your remote while watching live TV. (If you don't have an INFO button, you can press DISPLAY.) This also works when you're watching a recorded program from Now Playing. The channel banner will disappear after a few seconds. You can also hide the channel banner by pressing CLEAR or LEFT arrow.

There are three versions of the channel banner in live TV: small (with the current time and channel), medium (adds the title, running time and ratings), and large (adds a program description and icons). Press RIGHT arrow to switch among them. In recorded programs, only the medium and large versions are available.

Channel banner icons. The large channel banner has three selectable icons on the right side. Each icon controls a different feature. To use an icon, use the UP/DOWN arrows to highlight it, then press SELECT. (See the inside back cover for a glossary of icons.)



Record a program (or stop a current recording). If a recording is in progress, the icon appears bright.



Go to Parental Controls.

If Parental Controls are off, the lock appears unlocked and dim.

If they are on, it appears locked and bright (pictured here).

If they have been turned off temporarily, it appears unlocked and bright.



Read TiVo Messages. If the symbol is bright, you have new messages from the TiVo service.

▶▶ Watching Live TV

When you're watching a program as it's broadcast, you're watching live TV. To go to live TV from any TiVo screen, press the LIVE TV button on your remote control. You can also select "Watch Live TV" from TiVo Central. If you've used the pause, rewind, slow, or instant replay features and are "behind" live TV, press ADVANCE to catch up.



▶ Changing Channels

There are several ways to change channels:

- **Use the Guide.** Tired of channel surfing? Choose something to watch with the program guide. To see the guide, press the GUIDE button. Then use the arrow buttons to highlight a program. To change the channel, press SELECT.
- **Use the Number Pad.** To go to a specific channel, use the numbers on your remote control, then press ENTER. (If you don't press ENTER, the channel changes automatically after a few seconds.) To clear the number before the channel changes, press CLEAR.
- **Use ENTER/LAST.** To jump back to the previous channel, press ENTER/LAST.
- **Use CHAN UP/DOWN.** Of course, you can also still use the CHAN UP/DOWN button on your remote control. (CHAN UP/DOWN skips channels that are not on the channel list selected in Guide Options. For more information on channel lists, see page 77.)



You can use your DVR's remote to control the power, volume, mute, and TV input settings on your TV. For information on setting this up, see "Remote Control & DVR Front Lights" on page 85.

▶ Choosing a Guide Style

You can choose between two guide styles that display your channels and program information in different ways. Press the GUIDE button to display the guide, then press ENTER to see the Guide Options. Highlight "Style" to see the available options.

▶ **The TiVo Live Guide**

The TiVo Live Guide displays program information in two side-by-side lists:

Left side. On its left side, the guide has a list of channels and the programs that are currently airing on them. If you want to watch a program in the list, highlight it, then press SELECT. This changes the channel.

Right side. The right side has a list of upcoming programs on the highlighted channel.

Moving Around the TiVo Live Guide:

- Press the UP and DOWN arrows to highlight channels or programs.
- Use the LEFT and RIGHT arrows to move between the left and right sides.
- Press CHAN UP/DOWN to quickly move up or down one page at a time.
- Press FORWARD and BACK to change the time displayed in half-hour increments.

▶ **The Grid Guide**

The Grid Guide displays program information in a channel grid similar to what you might see in your local newspaper. Channels are listed on the left side, and program titles for a 90-minute time period are shown on the right.

Moving Around the Grid Guide:

- Use the FORWARD and BACK buttons to jump through program information 90 minutes at a time.
- Press the UP, DOWN, LEFT, and RIGHT arrows to highlight channels or programs.
- Press CHAN UP/DOWN to quickly move up or down one page at a time.

TiVo Live Guide

Title, date, time the program airs, and rating

Day and time

Guide options (Press ENTER to set)



Program description

Selected channel

Channel list and category filter currently in use

Programs during this time period

Upcoming programs on the selected channel



TiVo Live Guide: While the highlight is on the left side, you can press the FORWARD and BACK buttons to change the time in half-hour increments.

While the highlight is on the right side, you can press the FORWARD and BACK buttons to change the selected channel. Use CHAN UP/DOWN to page through the program listings.

5

Grid Guide

Title, date, time the program airs, and rating

Channel number and channel call letters

Guide options (Press ENTER to set)



Program description

Time slots

Program listings

Channel list and category filter currently in use



Grid Guide: Use the FORWARD and BACK buttons to change the time in 90-minute increments.

Use CHAN UP/DOWN to page through the program listings.



A colored icon to the left of each title in Now Playing tells you how long the recording will be saved. See the **Glossary of Icons on the inside back cover for details.**



On a Program Information screen, press **INFO** (or **DISPLAY** if your remote doesn't have an **INFO** button) to see the Program Details, which often has more about the program, such as actors, writers, producers, etc.



▶▶ Watching Programs from Now Playing

All the programs saved on your DVR are listed in Now Playing (no more searching through unlabeled videotapes!). To go to Now Playing, press the TiVo button twice.

As soon as a recording starts, the program's title appears in Now Playing. You can watch any program in Now Playing, even one that is still recording. Just highlight it and press **PLAY**. If you have watched part of the program already, it resumes from the point you stopped watching. When a program ends, you have the option to delete it. If you don't delete it, the program is available to watch again from the beginning in Now Playing.

Highlight a program title and press **SELECT** to see the Program Information screen, which offers these options:

- **Play or Resume playing.**
- **Keep until...** See page 73 for details.
- **Delete Now or Stop Recording** (if recording is in progress)
- **Save to VCR.** See page 74 for information on using this feature.

▶ Sorting and Grouping Programs

When you are in Now Playing, press **ENTER** on your TiVo remote to see Now Playing Options. You can also Press 1 on the remote to change the sort order of Now Playing programs; or press 2 to turn groups on or off.

Sorting Programs. Choose how you want the programs in Now Playing to be listed:

- **Alphabetically.** Programs are listed alphabetically by title (from A to Z).
- **By date recorded.** Programs are listed by the date they were recorded, with the most recent at the top and the oldest at the bottom.

Grouping Programs. The Groups option lets you group like programs together to “tidy up” the screen. When you turn on Groups, a folder appears in Now Playing for:

- Each television series with more than one recorded episode;
- Each auto-recording WishList™ with a recorded program;
- TiVo Suggestions (if you have auto-recording of TiVo Suggestions turned on).

A program may fit in any or all of these categories, so it may appear in more than one group, even though only one copy of the program is actually recorded. For example, say you have an auto-recording WishList for an actor who also appears in a series, and you have a Season Pass™ for that series. Each episode of the series that records will appear in two folders—one for the WishList and one for the Season Pass. If you delete the program from one folder, it also disappears from the other.

A number in parentheses to the right of each folder shows how many programs it contains. If you delete a program from one folder, it will disappear from all folders.

► **Keep Until...**

By default, programs you record are saved until space is needed for new recordings you request (this usually means for about two days). The oldest ones may be deleted to make room for new recordings you’ve scheduled. However, you always have the option to keep a program for as long as you want.

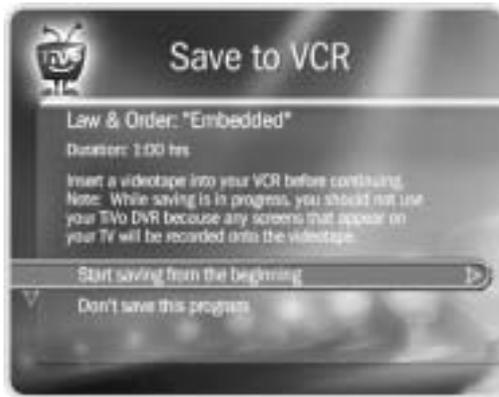
To change how long a program will be saved, highlight it and press SELECT. The Program Information screen appears. Select “Keep Until...” On the next screen you can choose “Keep until I delete” or use the arrow buttons to highlight and change the date displayed. When you are done, press SELECT.



A note at the bottom of Now Playing tells you which sorting option you are using and whether groups are on.



When you set up recordings, you can also specify how long you want to keep them by setting the “Keep Until...” Recording Option. See page 48.



 You can use the “Save to VCR” feature with a DVD recorder. Just connect a DVD recorder to your DVR (see page 20), and follow the same steps listed here. (See your DVD recorder’s instructions for details on how to record a DVD.)

►► Save to VCR

If you have a VCR, you can save a program from Now Playing to a videotape. Transfers to a VCR happen in real time. For example, if a program is two hours long, it will take two hours to save it. You will not be able to watch live TV or recordings while saving.

Most of the buttons on your remote that control live TV work as usual during Save to VCR—you can fast forward through the boring parts! The VCR will record the video exactly as it appears, including the status bar, channel banner, and any icons on the screen.

Using Save to VCR:

1. Be sure your TiVo DVR is connected to your VCR (see Chapter 1 for details), and the VCR is set to record input from your TiVo DVR. (See your VCR’s instructions for how to set its input.)
2. Insert a videotape into your VCR.
3. Go to Now Playing, highlight the show you want to save, then press SELECT.
4. Highlight “Save to VCR,” then press SELECT.
5. Select “Start saving from the beginning.”
6. A title screen appears for ten seconds. When you see it, press your VCR’s record button. When the program is over, press stop on your VCR.



You can cancel saving to VCR by pressing the LIVE TV or TiVo button on your remote. A videotape icon appears as a warning. Press the same button again and a confirmation screen appears giving you the option to resume saving at a later time, or cancel saving to VCR. If you choose to cancel saving, be sure to press stop on your VCR as well.

Messages & Setup

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▶▶ Messages

Select Messages to read any messages from the TiVo service or internal alerts from your DVR. When you receive a new message, TiVo Central will show the option, “Read New Messages & Setup.”

To read the messages:

1. Go to TiVo Central, then select Read New Messages & Setup.
2. Select Read New Messages. A list of all of your messages appears. Messages you have not yet read are marked with an envelope icon: 
3. Use the UP/DOWN arrows to highlight a message, then press SELECT to read it. CHAN UP/DOWN lets you page through a message if it doesn't fit on the screen.

▶▶ Settings

With the options in Settings, you can make the DVR work more to your liking. Use these screens to set your default preferences for recording quality, Parental Controls, and more.

▶ Audio Settings

Sound Effects Volume. You can change the volume or turn off the DVR's sound effects (the tones played when you press buttons on the remote control). The default is Medium.

Television Audio. This option lets you select the DVR's default audio output option. You can choose to have the default audio in stereo or mono, or have a secondary audio program (SAP) recorded when one is available.

Secondary audio programs are generally audio broadcasts in a language other than English. If you choose to record SAP and there is a secondary audio program, it will be recorded. The SAP may be in Spanish, French, Japanese or some other language.

▶ Channel Settings

Channel Banner. Normally, when you change channels, the channel banner is displayed for a few seconds. Use this setting to control how the channel banner is displayed. If you want the channel banner to disappear quickly, select "Clear banner quickly."

Channel Changing. Use this setting to make changes to the way your DVR changes channels on your cable or satellite box. You should do this if:

- you change the type of control cable (IR or Serial) used to change channels on your cable or satellite box (see "Choosing a Channel Changing Cable" on page 5),
- your cable or satellite box is replaced by a new make or model,
- or if you are having trouble with channel changing (see page 128 for troubleshooting.)



 In the event that there is a change to your cable or satellite subscription package, a TiVo message will let you know what the change is. You must then use Channel Settings to ensure that the Channels You Receive list reflects the change to your lineup.



Channel Lists. The DVR uses channel lists to determine which channels to display in the guide, and which channels are available for recording programs. Features such as Search by Title, Search Using a WishList, and Browse By Channel only search for programs on channels you select in the Channels You Receive list.

Channels You Receive. The Channels You Receive list starts with all the channels included in your service package. You can customize it to include only channels you actually subscribe to and to reflect your viewing preferences. For example, if you never watch a channel and don't plan to set up any recordings on it, or search for programs on it, you can de-select it here.

Favorite Channels. The Favorite Channels list is for channels you watch frequently. Include only a few channels in this list, so that you can quickly look at what's coming up on them using the guide. See "Customizing the Guide" on page 51.

To set up a custom channel list:

1. Select the Channels You Receive or Favorite Channels list. A check mark appears to the left of channels that are part of the selected list.
2. To remove or add a channel, highlight it and press SELECT. You can speed through the list with the CHAN UP/DOWN. To go directly to a specific channel, use the number buttons, then press ENTER. Your changes are saved automatically.

Cable Lineup. (You won't see the "Cable Lineup" option if your program source is not cable.) Select this if you have changed your cable subscription, or if your channel lineup looks wrong in "Channels You Receive." On the next screen you'll be able to choose among available cable channel lineups based on your ZIP code.

► **Parental Controls**

Parental Controls allow you to set limits on movie and television ratings, to lock specific channels, and to prevent viewing of recorded programs that violate Parental Controls. The padlock icon shows the current state of Parental Controls:

 **Off.** No password or controls set. Padlock appears unlocked and dark.

 **On.** Password and controls set. Padlock appears locked and bright.

 **Temporarily off.** Controls set, but password was entered to temporarily turn off. Padlock appears unlocked and bright.

While Parental Controls are on, you can watch a locked program or channel by pressing SELECT, then entering the password. This temporarily turns off Parental Controls.

To turn on Parental Controls and define a password (): Select “Turn on Parental Controls.” Use the number buttons on the remote control to enter a four-digit password, then enter the same password again for confirmation.

To turn off Parental Controls (): Select “Turn off Parental Controls,” enter the password, and press SELECT. When Parental Controls are turned off, the password is deleted and anyone can view any programs or watch any channels.

To temporarily turn off Parental Controls (): Just enter the password to watch a program or channel. Or, select “Temporarily turn off Parental Controls” on the Parental Controls screen. When Parental Controls are temporarily turned off, any program or channel can be viewed, but the password is still required to change Parental Controls settings. To re-enable Parental Controls, select “Re-enable Parental Controls.” Or, you can put the DVR into Standby mode, then take it out. To do this, select Messages & Setup, then Standby. Then press the TiVo or LIVE TV button.

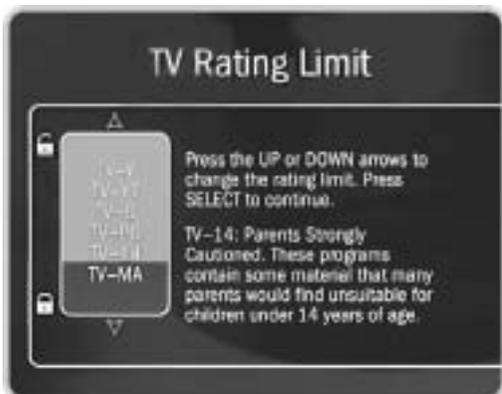


The large version of the channel banner has a shortcut to Parental

Controls; see page 68 for details.



When you turn Parental Controls off, your password is deleted. You may prefer to temporarily turn off Parental Controls, so that another person in your household does not choose a new password.



To change the Password (🔒): To change the password for Parental Controls, Parental Controls must be on. Select “Change Password” on the Parental Controls screen. Enter a new password, then re-enter the new password to confirm.

Auto Re-lock Option. When Parental Controls are temporarily turned off, they re-lock automatically after four hours if you don’t use your remote. Parental Controls won’t re-lock in the middle of a show. By default, the Auto Re-lock option is on. To turn off Auto Re-lock, go to Messages & Setup, then Settings, then Parental Controls. Press the DOWN arrow to highlight “Auto Re-lock,” then press SELECT. Enter your password, then highlight and select “Auto Re-lock off.”

Rating Settings for TV and Movies (🔒). Movies originally meant for release to theaters have a different rating system from programs made for TV. You can use Parental Controls to set limits for both rating systems (see page 82). You can also set limits for specific types of TV content that may be objectionable—such as sexual content or violence.

To set Rating Limits for TV and Movies: From Parental Controls, select “Rating Settings.” Enter the password and select the kind of limit you want to change.

The next screen contains a box listing all potential ratings. Ratings shaded in green are not locked; those in red are locked. Use the UP and DOWN arrows to move the red shading and adjust which ratings are locked. Your changes are saved automatically. When you are done, press RIGHT or LEFT arrow to return to Parental Controls.

To set Rating Limits for Specific TV Content: From Parental Controls, select “Rating Settings,” then enter the password and press SELECT. Select “Block by TV Content.” A list of categories appears on the next screen. Select a category (for example, V-Violence).

A box containing all the possible ratings appears. Ratings in green are not locked; ratings in red are locked. (Ratings in gray do not apply to the category. For example, a TV-Y program would not have *V-Violence* content so there is nothing to block.)

Use the UP and DOWN arrows to adjust which ratings are locked or unlocked. The display to the right of the box will change to tell you exactly what ratings level you are allowing. Your changes are saved automatically. To return to the Parental Controls screen, press SELECT or RIGHT arrow.

Broadcasters are not required to provide ratings for specific types of content. If you want to be sure to block programs that do not include ratings for specific types of content, you will have to use age-based ratings to block content. See “Rating Limits for TV and Movies,” above.

Movies and TV Programs with No Rating Information. If a movie has no rating information, it is treated as if it has the highest movie rating, ‘X.’ If you require a password for X-rated movies, then movies without rating information also require a password. If a television program has no rating information, it is treated as if it has the lowest TV rating, ‘TV-Y.’ A password is required to view it only if you set Parental Controls to require a password for programs rated ‘TV-Y’.

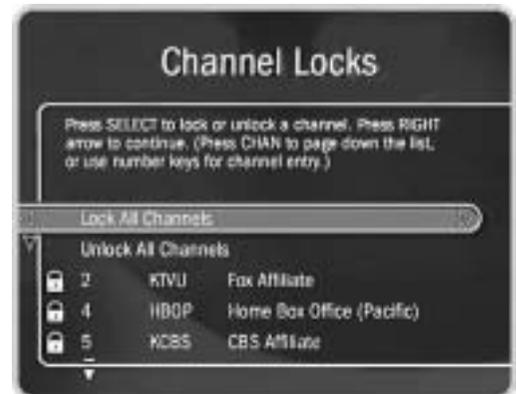
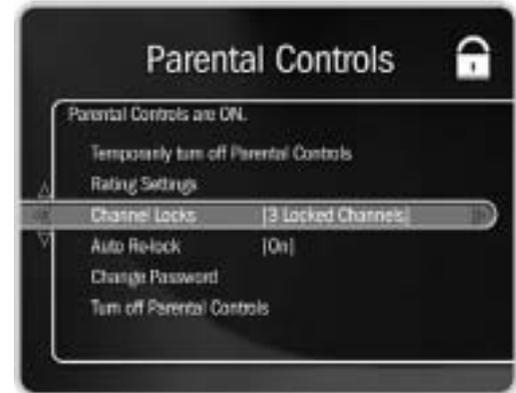
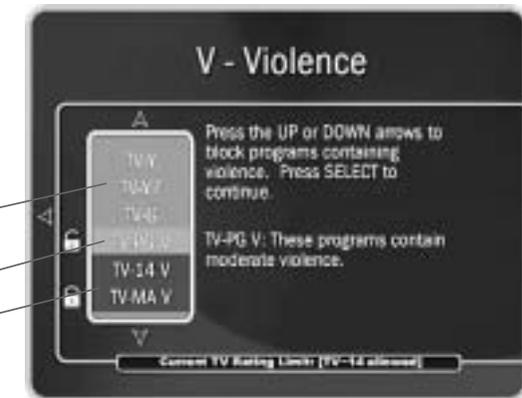
Channel Lock for Live TV (🔒). You can lock individual channels so that a password is required to view any program on those channels. To lock or unlock channels:

1. From the Parental Controls screen, select “Channel Lock,” and enter the password.
2. A channel list appears with a padlock icon to the left of any locked channels. Highlight a channel and press SELECT to add or remove a padlock icon. Use CHAN UP/DOWN to move through the list quickly. You can highlight a specific channel by entering its channel number with the number buttons on the remote.
3. When you are done, press RIGHT or LEFT to return to Parental Controls. Your changes are saved automatically.

gray = does not apply
to the category

green = not locked

red = locked



► **Motion Picture Association of America ratings for movies**

G: General Audiences. Most parents would find this material suitable for all ages.

PG: Parental Guidance Suggested. Parents may find portions of this material unsuitable for younger children.

PG-13: Parents Strongly Cautioned. This material contains portions many parents would find unsuitable for children under 13 years of age.

R: Restricted. This material is specifically designed to be viewed by adults and therefore may be unsuitable for children under 17.

NC-17: Adult Content. This material contains intense, disturbing, or graphically portrayed themes or content that are not suitable for viewing by children under 17.

AO: Explicit Sexual Content. This material contains explicit sexual content and is intended to be viewed by adults ONLY.

► **Ratings for television movies and programs (including content ratings)**

TV-Y. All children. This program is designed to be appropriate for all children. Whether animated or live action, the themes and elements in this program are specifically designed for a very young audience, including children from ages 2-6. This program is not expected to frighten younger children.

TV-Y7. Directed to older children. This program is designed for children age 7 and above. Themes and elements in this program may include mild fantasy or comedic violence, or may frighten children under the age of 7. Programs where fantasy violence that may be more intense or more combative than other programs in the TV-Y7 category are designated TV-Y7-FV.

TV-G. General audience. Most parents would find this program appropriate for all ages. Although this rating does not signify a program designed specifically for children, most parents may let younger children watch this program unattended. It contains little or no violence, sexual dialogue, or situations; and no strong language.

TV-PG. Parental guidance suggested. This program contains material that parents may find unsuitable for younger children. Many parents may want to watch it with their younger children. The theme itself may call for parental guidance and/or the program contains one or more of the following: moderate violence (V), some sexual situations (S), infrequent coarse language (L), or some suggestive dialogue (D).

TV-14. Parents strongly cautioned. This program contains some material that parents would find unsuitable for children under 14 years of age. Parents are strongly urged to exercise greater care in monitoring this program and are cautioned against letting children under the age of 14 watch unattended. This program contains one or more of the following: intense violence (V), intense sexual situations (S), strong coarse language (L), or intensely suggestive dialogue (D).

TV-MA. Mature audiences only. This program is specifically designed to be viewed by adults and therefore may be unsuitable for children under 17. This program contains one or more of the following: graphic violence (V), explicit sexual activity (S), or crude, indecent language (L).

► Recording Settings

Recording Quality. You can increase the available recording time on your DVR by selecting a recording quality appropriate for the type of program you are recording. The DVR offers four levels of recording quality; set your default on this screen. The choice you make here will be used for all recordings unless you change it, using Recording Options, when you schedule a recording (for details, see page 47). Two different recording qualities cannot be used on one recording.

The recording quality choices available are Best, High, Medium, and Basic. The factory default is High. Basic quality takes up about one-third the space of Best quality, so it gives you about three times the amount of space for programs. You may wish to experiment with different levels and then reset your default. Some quality settings are better suited for certain kinds of programs, but you should choose what looks best to you.

Recording Quality	Suggested use
Basic	News
Medium	Daytime Talk Shows, Animation
High	Dramas, Films
Best	Sports, Action Movies

The DVR automatically uses Best Quality when displaying live TV. However, when it records a program, the DVR uses the Video Recording Quality you specified for that program. If that quality is not Best, you may notice the difference when recording starts.



 **One hour of Best Quality equals about 3 hours of Basic Quality, 2 hours of Medium Quality, and 1.5 hours of High Quality.**



If you change video sources, for example, by changing from cable to satellite service, you should repeat Guided Setup (go to Messages & Setup, then Restart or Reset System, then Repeat Guided Setup).

TiVo Suggestions. Use this screen to turn automatic recording of TiVo Suggestions on or off. When automatic recording is on (the default), TiVo Suggestions may be recorded onto available space. Programs you have recorded or scheduled to record will never be deleted to make room for suggestions. Also, if space is needed to save programs you have scheduled to record, suggestions are the first things to be deleted. (For more information on TiVo Suggestions, see page 40.)

▶ **Video Settings**

Connection to DVR. If you change the cable you use to connect video from your cable or satellite box to the DVR, use this screen to inform the DVR of the change. The next screen you see depends on whether you have one or two video sources. For details on navigating the Connection to DVR screens, see page 28.

RF Video. If you use a Coaxial RF cable as the video input to your DVR, this option is available. You can use the RF Video screen to smooth the video, which will decrease the static and improve the picture on these channels. However, it will cause images on all channels carried to your DVR on a Coaxial RF cable to lose some sharpness.

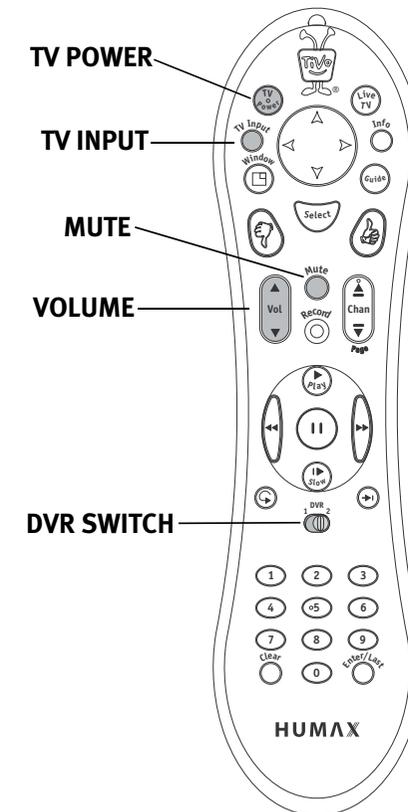
▶▶ Remote Control & DVR Front Lights

To change the settings of the lights on the TiVo® DVR's front panel, see page 91.

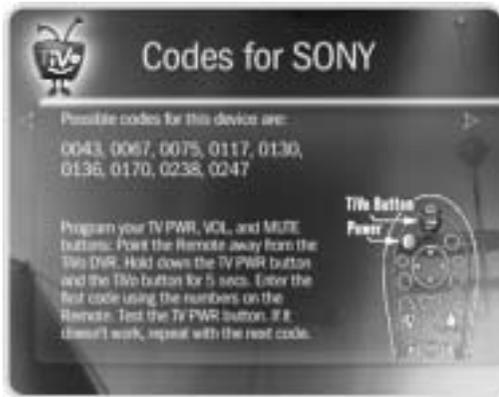
For information about the individual buttons on the TiVo remote control, please refer to the Remote Control Tips on the inside front cover of this guide. Before programming the remote control, you must first insert the batteries and complete Guided Setup.

The TiVo remote will already work with your DVR. You can also program some buttons on the remote to control your TV and/or A/V receiver (your stereo system).

- **Control TV power, volume, mute, and input settings.** Complete the instructions starting on on page 86 using the first column in each of the tables (TV power, volume, and mute). Then repeat the instructions using the second column (TV input).
- **Control TV and A/V receiver power & A/V receiver volume and mute.** Complete the instructions starting on on page 86 using the first column in each of the tables. Then repeat the instructions using the third column (A/V receiver power, volume, and mute). In this case, the TV POWER button turns on/off the TV and the A/V receiver at the same time. The VOL and MUTE buttons control only the A/V receiver.
- **Control TV power and A/V receiver volume and mute.** Complete the instructions starting on on page 86 using the first column in each of the tables. Then repeat the instructions using the fourth column (A/V receiver volume and mute). The VOL and MUTE buttons control only the A/V receiver.
- **Using the DVR Switch to Control Two DVRs.** If you have two DVRs in the same room, setting up the DVR SWITCH will prevent the remote control from changing channels on both DVRs, and prevent you from accidentally deleting programs you want to keep. See page 89 for instructions.



 The TV INPUT button can control the video signal—or “input”—your TV displays. Changing the input will change the source of the video displayed on your TV. TV inputs can include video from a VCR, DVD player, DVR, or a video camera.



► **Programming the TV POWER, VOLUME, and TV INPUT Buttons**

- Go to the Remote Control screen.** Press the TiVo button to go to TiVo Central®. Select Messages & Setup, then Settings, then Remote Control & DVR Front Lights. Choose which device and/or functions you want to control:

To Control:	TV power, volume, and mute	TV input	A/V receiver power, volume, and mute	A/V receiver volume and mute only
Choose:	Remote Control-TV (power, volume, mute)	Remote Control-TV (TV Input)	Remote Control-A/V Stereo System	Remote Control-A/V Stereo System

- Select the brand of your device.** Using the UP/DOWN arrows, highlight the brand of the device you wish to control, then press SELECT. (If you have been using a universal TV remote control, select your TV or A/V receiver’s brand, not the brand of the universal remote.) Next you’ll see a screen with four-digit codes.
- Prepare the remote control.** Point the remote away from your DVR and cover the front end with your hand. Refer to the table below and determine which two buttons to press to prepare the remote. Press and hold the buttons simultaneously for about 5 seconds (until the red light at the end of the remote control lights up and stays on when you release the buttons).

To Control:	TV power, volume, and mute	TV input	A/V receiver power, volume, and mute	A/V receiver volume and mute only
Press the:	TV POWER and TiVo buttons	TV INPUT and TiVo buttons	TV POWER and TiVo buttons	MUTE and TiVo buttons

4. Enter a code. Use the number buttons on the remote control to enter a four-digit code (starting with the first code in the list on the screen). After you press the fourth digit of the code, the red light on the end of the remote control should flash. If it doesn't, try the next code.

5. Test the code. Point the remote towards the TV and test the button:

To Test the:	TV power, volume, and mute	TV input	A/V receiver power, volume, and mute	A/V receiver volume and mute only
Press the:	TV POWER button	TV INPUT button	TV POWER button	MUTE button

If pressing the button works (e.g., turns the TV or A/V receiver off, or changes the TV input), the code is correct. If it does not work, repeat steps 3 and 4 using the next code on the list. If none of the codes works, perform a code search (see below).

► **Performing a Code Search**

If none of the codes listed allows you to control your device, a code search may detect the correct code. Performing a code search can take up to 20 minutes.

1. Prepare the remote control. Point the remote away from your DVR and cover the front end with your hand.

Refer to the table below and determine which two buttons to press to prepare the remote. Press and hold the buttons simultaneously for about 5 seconds (until the red light at the end of the remote lights up and stays lit when you release the buttons).

To Control:	TV power, volume, and mute	TV input	A/V receiver power, volume, and mute	A/V receiver volume and mute only
Press the:	TV POWER and TiVo buttons	TV INPUT and TiVo buttons	TV POWER and TiVo buttons	MUTE and TiVo buttons

- 2. Enter the search code.** Refer to the table below and use the number keys on your remote control to enter the appropriate code.

To Test:	TV power, volume, and mute	TV input	A/V receiver power, volume, and mute	A/V receiver volume and mute only
Enter:	0999	0999	1999	1999

After you press the fourth digit of the code, the red light on the end of the remote control will flash twice, then remain on.

- 3. Test the remote control.** Point the remote control at the TV or A/V receiver. Press CHAN UP to test the first code. The test is successful if the TV or A/V receiver responds (by powering off, changing input, or muting, depending on the function you are trying to program). If there is no response, wait two or three seconds, then press CHAN UP again. Continue doing this until the TV or A/V receiver responds.

When the TV or A/V receiver does respond, press ENTER to select the current code. The red light at the end of the remote control will flash three times to indicate that the remote control is properly coded to control your device.

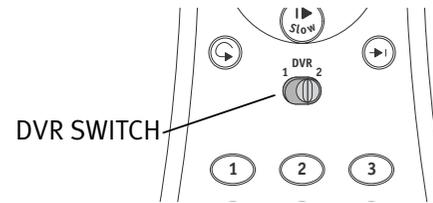
When the red light on the end of the remote control turns off, you have reached the end of the available codes.

Unfortunately, due to the great variety of TVs and A/V receivers, some makes and models are not compatible with your DVR's remote control. If you reach the end of the available codes without finding a code that works with your device, you will need to use your TV or A/V receiver's remote to turn it on and off, and control the volume.

► **Setting the DVR Switch**

If you have two DVRs, you can set up the remote so that it will only send signals to one of them at a time. If you don't, when you delete programs on one DVR, you may accidentally delete programs on the other DVR. Or you may change channels on both DVRs, when you want to change the channel on only one.

To avoid sending commands to both DVRs, you can set up each side of the DVR SWITCH to send signals to only one DVR.



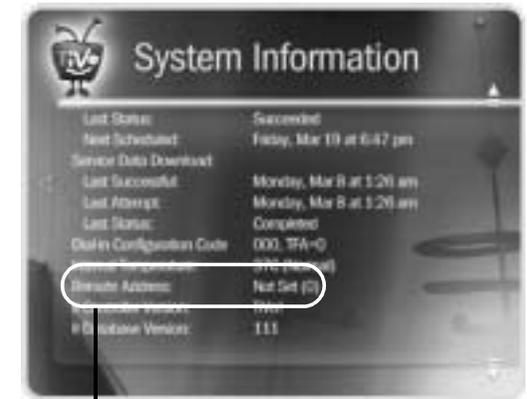
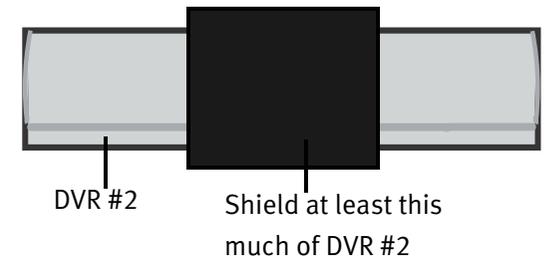
1. Prepare the DVRs. Cover the area around the shiny, dark plastic window on the front of either DVR (call this one DVR #2). You can use a dark piece of cloth or a magazine—or anything else thick and opaque. This prevents DVR #2 from receiving signals.

Point the remote control at the other DVR (DVR #1) and go to TiVo Central by pressing the TiVo button. Select Messages & Setup, then System Information. Press the DOWN arrow until you see the item “Remote Address.”

2. Prepare the remote control. Move the DVR SWITCH to 1, then point the remote away from DVR #1 and cover the front end of the remote with your hand.

Press and hold the PAUSE and TiVo buttons simultaneously (for about 5 seconds) until the red light at the end of the remote comes on, remains steady, then stays on when you release the buttons.

 DVRs from some manufacturers don't respond to other manufacturers' remotes. If you have two DVRs from different manufacturers, their remotes may not conflict—and you may not need to set up the DVR SWITCH.



- 3. Assign side 1 on the DVR SWITCH to DVR #1.** Point the remote control at DVR #1. Use the number buttons on the remote control to enter a number “1.” Press the RIGHT arrow. On the screen, the “Remote Address” updates from “0” to “1.”

Press the TiVo button and go to TiVo Central. Side 1 now controls DVR #1 only. Continue to the next step and set up side 2 of the DVR SWITCH. If you don't, side 2 will still control both DVRs.

- 4. Prepare the DVRs again.** Press the input, source, or TV/Video button you normally use, until your TV displays DVR #2. Then remove the cover from the plastic window of DVR #2 and cover the plastic window of DVR #1. Finally, go to the System Information screen of DVR #2, and press DOWN arrow until you see “Remote Address” displayed.

- 5. Assign side 2 on the DVR SWITCH to DVR #2.** Move the DVR SWITCH to 2. Repeat steps 2 and 3, above. Assign the number “2” to DVR #2, then press the TiVo button to go to TiVo Central.

Now when you set the DVR SWITCH to 1, it will only control DVR #1—and when you set it to 2, it will only control DVR #2.

► **Resetting the DVR SWITCH**

1. Move the DVR SWITCH to 1.
2. Press and hold the PAUSE and TiVo buttons simultaneously for about three seconds, until the red light at the end of the remote control comes on and remains steady.
3. Using the number buttons on the remote control, enter 0. The red light at the end of the remote control will flash to indicate that the DVR SWITCH (either 1 or 2) is reset.
4. To complete the reset, move the DVR SWITCH to 2 and repeat steps 2 and 3.



By default, all DVRs and remote controls have a Remote Address of “0” (zero). A remote control with a Remote Address of “0” will control any DVR, even one with an assigned code. A DVR set to “0” will respond to any remote control, even one with an assigned code. This prevents you from becoming accidentally “locked out” of controlling your DVRs.

► **Resetting the Programmable Buttons**

If you make a mistake, or are having difficulty, you can reset the programmable buttons (TV POWER, VOLUME, MUTE, TV INPUT, and the DVR SWITCH). All the remote's buttons will return to the unprogrammed state of a new remote.

1. Prepare the remote control. Point the remote away from your DVR and cover the front end with your hand.

Press and hold the TV POWER button and TiVo button simultaneously until the red light at the end of the remote control comes on, remains steady, then stays on when you release the buttons.

2. Press THUMBS DOWN™ three times, then press ENTER. (To cancel, press CLEAR before you press ENTER.)

► **Front Panel Lights**

You can change the settings of the lights on the DVR's front panel.

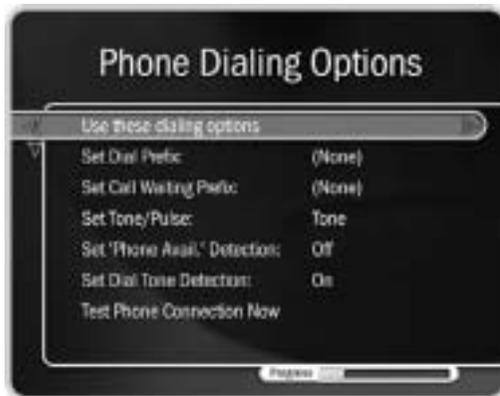
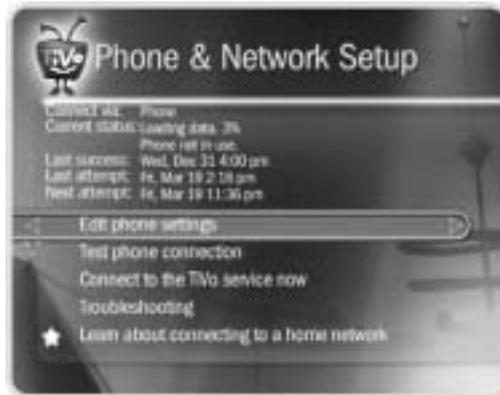
DVR Front - LED Lights. The DVR has LED (light emitting diode) lights on its front panel to indicate when it is receiving power and when it is recording a program. You can choose to turn off these lights.

Even if you choose to turn off the front panel lights, one of the LEDs on the front panel will flash briefly when a button on the remote is pressed. This indicates that the DVR is receiving a signal from the remote.





Your DVR should NOT be used with a digital PBX phone system. Doing so may permanently damage your DVR's modem and will void your warranty. See Chapter 9 for warranty information.



►► Phone & Network Setup

The DVR makes regular connections to the TiVo service to get updates to the TiVo service, program information for the program guide, Search by Title, WishList™ searches, and updates to Showcases and TiVolution® Magazine. The connection usually lasts less than five minutes. You may receive service updates to your DVR from time to time. In such cases, it may last longer, but this happens rarely (a few times a year).

A phone connection is required for Guided Setup, but after you complete Guided Setup, you'll be able to connect your DVR to a home network and use a shared Internet connection instead of a phone line to make connections to the TiVo service.

On the Phone & Network Setup screen, you can see details, including the time of the last successful connection to the TiVo service and last connection attempt, as well as the status of the last connection.

The Phone & Network Setup screen has different selections depending on whether you have connected a network adapter to your DVR. If you haven't connected a network adapter, you will see these selections:

- **Edit phone settings.** This selection takes you to the Phone Dialing Options screen. Selections on this screen are explained in detail on page 94.
- **Test phone connection.** When you select this, a test connection to the TiVo service will start automatically. You may wish to use this option for troubleshooting or other unusual circumstances. Test connections usually only take a couple of minutes. When the connection has finished, press SELECT to continue.

- **Connect to the TiVo service now.** Normally, you do not need to connect to the TiVo service manually. However, for troubleshooting or other unusual circumstances, you may wish to use this option. After you start the connection, the status indicator reads “Starting Up” and will change as it goes through several stages. You can watch live TV, set up recordings, and search for programs while the connection is in progress.
- **Troubleshooting.** This selection takes you to the Troubleshooting screen, where you will find Phone Troubleshooting and Network Troubleshooting steps among other troubleshooting selections.
- **Learn about connecting to a home network.** Before you connect a network adapter to your DVR, the Phone & Network Setup screen will display this selection with a yellow star. See Chapter 7 for more information about connecting your DVR to a home network.

After you connect a network adapter to your DVR, you will no longer see “Learn about connecting to a home network.” You will have two new selections available:

- **Change connection type.** This allows you to change how the DVR connects to the TiVo service, by phone or using your home network’s shared Internet connection.
- **Edit phone or network settings.** The Phone & Network Settings screen has selections for Phone Dialing Options (see below for details), TCP/IP Settings, and Wireless Settings. See Chapter 7 for more information about TCP/IP Settings and Wireless Settings.





In some areas, local and long distance toll charges may apply.

You are responsible for any telephone charges.

► **Phone Dialing Options**

Change Dialing Options. You can change the following settings (if you make a mistake while entering a change, use the BACK button to backspace):

Set Dial-In Number. Use this to change the number the DVR uses to make test calls and daily calls. To change it:

1. Select “Set Dial-In Number.” The Area Code screen appears.
2. Use the number keypad on the remote to set the area code, then press SELECT. If you change the area code, or if the DVR has not made a daily call in the last twenty-four hours, the Update Numbers screen appears and the DVR calls the TiVo service to retrieve a list of local dial-in numbers. After the phone call, press SELECT. The Dial-In Number screen appears.
3. Use the UP/DOWN arrow to choose one of the listed phone numbers. The DVR will use this number to connect to the TiVo service. Then press SELECT.

If your area code has no access numbers, press LEFT arrow to return to the Area Code screen and try a nearby area code.
4. The Dialing Format screen appears after you have chosen a dial-in number. You should use this screen to tell the DVR which dialing format to use. For example: should the dial-in number be preceded by your area code and should a “1” precede the area code? In some areas, even local numbers must be dialed using the area code. Press SELECT to return to the Phone Dialing Options screen.

To test your new dial-in number, select “Test Phone Connection Now.” The Test Phone Connection screen appears and a test phone call begins. When the call

completes, you should see the message “Test Succeeded!” Press SELECT to return to Phone Dialing Options.

Set Dial Prefix. Use this option if you normally dial a prefix before making a phone call (for example, if you need to dial “9” to get an outside line). Use the number keys on the remote control to enter the prefix. Press the PAUSE button after you have entered the prefix. This will insert a comma, which will create a two second pause after the prefix is dialed.

Set Call Waiting Prefix. If you have call waiting, you may choose to disable it while the DVR is making a call, so that the DVR’s phone call is not interrupted. If you do not disable it, the DVR may drop its call and allow the incoming call to ring through, depending on your phone system. The DVR will then try its call again later. The most common code that phone companies use to disable call waiting is *70 (check with your phone company to find out how to disable call waiting in your area). Press CLEAR to enter a star (*). Press the PAUSE button after you have entered the prefix to insert a comma, which creates a two second pause after the prefix is dialed.

Set Tone/Pulse. If your phone system uses pulse dialing, rather than tone dialing, you can change the setting to pulse here. (Today, most phone systems are tone.)

Set “Phone Avail.” Detection. When Set ‘Phone Avail.’ Detection is on, the DVR can determine whether the phone line is in use by detecting voltage on the line. This allows it to avoid disrupting a call in progress (such as another modem call).

This setting is off by default. With ‘Phone Avail.’ Detection turned off, if you are on the phone when the DVR tries to call, you may hear a click on the line. If you have another modem call in progress (on your computer or other device), that call may be disrupted if the DVR attempts to call the TiVo service. If you have a standard dial tone, and ‘Phone Avail.’ Detection is off, turn on Dial Tone Detection (below).



With Dial Tone Detection and 'Phone Avail.' Detection both turned off, if you happen to be talking on the phone when the DVR tries to call you will hear the modem dial and try to connect to the TiVo service.

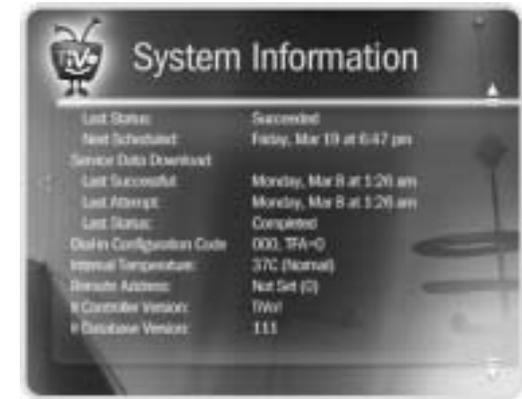
If you are experiencing “Failed, Line unavailable” errors, or if the DVR is not making daily calls, you may have a low-voltage phone system that the DVR cannot detect. In this case, it’s best to have ‘Phone Avail.’ Detection off.

Set Dial Tone Detection. This setting is on by default. If you leave it on, the DVR will check for a dial tone before it starts dialing. However, if you have a non-standard dial tone, or a stuttering dial tone (as some voice messaging systems have), the DVR will be unable to detect the dial tone and will not make its call.

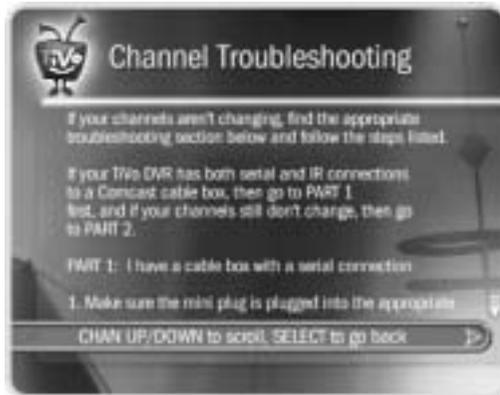
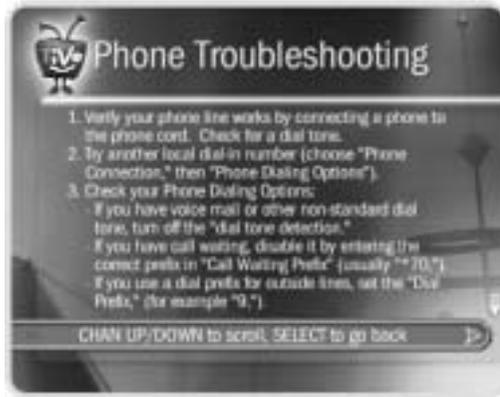
Restore previous options. The DVR must make a successful test phone call before it will accept changes to Phone Dialing Options. If you want to restore your previous dialing options and continue past this screen without making a test phone call, select “Restore previous options.”

▶▶ System Information

The System Information screen provides general information about your DVR, including its service number, manufacturer, model number, software version used, storage capacity, and information about recent connections to the TiVo® service. You'll need some of this information if you contact Customer Support. You can use the CHAN UP/DOWN button to see the rest of the information on the screen.



▶▶ Troubleshooting



If you're having trouble, or have any questions about your TiVo® DVR, consult the troubleshooting steps available in Chapter 8 of this guide.

The Troubleshooting screens provide tips that may help you troubleshoot various problems. Use CHAN UP/DOWN to see all of the text on the screens.

Parental Controls Troubleshooting provides instructions for using Parental Controls.

Phone Troubleshooting can help if your DVR's phone connection is unsuccessful.

Channel Troubleshooting provides channel changing help if you are using a satellite or cable box. The tips at the top of the screen are for cable or satellite boxes that attach to the DVR through a serial connection. Use CHAN UP/DOWN to see the second set of tips, which deal with cable or satellite boxes using IR (infrared) connections to the DVR. You can also find tips in Chapter 8 and at www.tivo.com/support.

Network Troubleshooting provides tips to help you with your DVR's network connection. See Chapter 7 for more information.

Transfer Troubleshooting helps if you are having trouble with Multi-Room Viewing. For more information about Multi-Room Viewing, refer to the "Home Media Features Guide" available at www.tivo.com/guides.

▶▶ Restart or Reset System

You may need to restart the DVR as a routine troubleshooting step. Other options on this screen erase information or restore original factory settings. Selecting any of these options displays a warning. To continue, press THUMBS DOWN™ three times, then ENTER.

Restart the TiVo DVR. Shuts down the DVR and starts it up again. It will not affect recorded programs, Season Pass™ recordings, WishList™ searches, or TiVo Suggestions.

Repeat Guided Setup. You will have to repeat Guided Setup if you move or if you change your cable or satellite provider. Repeating Guided Setup will reset the Channels You Receive and Favorites channel lists to the factory settings. It will not affect recorded programs, Season Pass recordings, WishList searches, or TiVo Suggestions.

Clear Thumb Ratings and Suggestions. Removes all Thumbs Up™ and Thumbs Down™ ratings and deletes the list of TiVo Suggestions. It does not delete TiVo Suggestions that have been recorded and are in the Now Playing List.

Clear program information & To Do List. Clears all program information, cancels all Season Pass recordings and everything in the To Do List, and removes all Thumbs Up and Thumbs Down ratings. It does not delete programs in the Now Playing List. The DVR acquires new program information during the next connection to the TiVo service. Completing this process may take over an hour.

Clear & delete everything. Clears all Season Pass recordings, WishList searches, Thumbs Up and Thumbs Down ratings, TiVo Suggestions, Now Playing List recordings, program information, the To Do List and setup information, including the Channels You Receive and Favorite Channels lists. It also clears the current password and resets Parental Controls to the factory specified default. Completing this process may take over an hour.





If you used only RF coaxial cables to connect your program source (antenna or cable) to the DVR, and also to connect the DVR to your TV, Standby mode allows RF signal pass-through. This means you can watch channels on your RF program source using your TV's tuner instead of the DVR's tuner—and that means you can watch one channel while recording another! Keep in mind, you won't have DVR functionality in live TV (pause, rewind, etc.) while the DVR is in Standby.

▶▶ Standby

You can put your DVR in Standby mode by selecting Standby in Messages & Setup. To return to normal mode from Standby, press either the TiVo button or the LIVE TV button. (On some remotes, there is a POWER button that puts the DVR in Standby mode and takes it back out.)

In Standby mode:

- Your TV shows a black screen and the lights on the front of the DVR go out.
- Programs that are being recorded or are scheduled to record will still be recorded. (If a program is being recorded, the red light will turn on.)
- The DVR will still connect to the TiVo® service. (If the DVR is connecting, the yellow light will turn on.)
- If you temporarily turned off Parental Controls, Standby mode re-enables them. (See page 79 for more on Parental Controls.)
- The DVR will continue to save a portion of live TV—up to 30 minutes of programming.
- If live TV was paused when Standby was selected, the DVR will remain paused for up to 30 minutes.
- If the TiVo Live Guide was set to display a category filter, filtering will be turned off.

Connecting to a Home Network for Home Media Features

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Connecting to a Home Network Using a Wireless Network Adapter	108
Connecting to a Home Network Using Wired (Ethernet)	110
Completing the DVR's Network Settings	112



If you do not already have a home network and you want to learn how to create one, Linksys — a leading manufacturer of wireless and always-on Internet connection networking equipment — provides valuable information on its web site at: www.linksys.com/edu/.

Other online resources also describe the steps and types of equipment used to set up a home network. You can try going to a popular search engine like Google (www.google.com) or Yahoo (www.yahoo.com) and typing the phrase, “setting up a home network,” in the search field. You will obtain a number of search results (links) that supply guidance to help you set up your home network.

►► Introduction to Home Media Features

This chapter shows you how to connect your TiVo® DVR to a home network. Doing so gives you brand new ways to use your DVR as a digital home entertainment center. Connect it to a home network and enjoy:

- **Multi-Room Viewing** – Record programs in the living room and watch them in the bedroom—or vice versa. See page 103.
If you don’t have a home network, you can connect two DVRs to each other for Multi-Room Viewing. This setup is described online at www.tivo.com/support. (Search for “connecting two DVRs without a home network.”)
- **Digital Music Player** – Use the home entertainment center in your living room to listen to the digital MP3 music collection stored on your computer. See page 104.
- **Digital Photo Viewer** – View slideshows of digital photos stored on your computer without huddling around a small computer monitor. See page 104.

These Home Media Features are included with the TiVo® service. Connecting your DVR to a home network allows you to take advantage of them. For more information about using these features, download the Home Media Features Guide at www.tivo.com/guides.

Connect to the TiVo service via broadband. If your home network includes a broadband Internet connection (for example, DSL or a cable modem), your DVR can use that connection, instead of a phone line, for regular connections to the TiVo service. (The DVR will still need a standard phone line connection for Guided Setup.)

In addition, with an always-on Internet connection, you can use Online Scheduling (see page 57) for any program airing more than an hour after you request it. (If your DVR is using a phone line, processing an Online Scheduling request can take up to 36 hours.)

▶▶ Multi-Room Viewing

Multi-Room Viewing lets you transfer programs from one TiVo® DVR in your home to another DVR. To use Multi-Room Viewing, you need at least two DVRs, and:

- The DVRs must be on the same TiVo service account. (The TiVo service subscription for each DVR must be owned by the same person.)
- The DVRs must be connected to the same home network. For more information, see “Home Networks” on page 106.
- Each DVR must have active TiVo service, and Multi-Room Viewing enabled at www.tivo.com/manage.

After you have connected the DVRs to your home network, the Now Playing list of each DVR will show the names of the others.



▶ How to Transfer a Program

Using Multi-Room Viewing couldn't be easier. To transfer a program from one DVR within your home to another DVR:

1. In Now Playing on the receiving DVR, select the DVR containing the program you want to transfer. This will be the sending DVR.
2. Press SELECT on the name of a program you want to transfer. (You cannot transfer a program while it is recording on the sending DVR.) Then select “Watch on this TV.”
3. On the Getting Program screen, you can choose to watch the program as it is transferring, or continue browsing Now Playing on the sending DVR. If you watch the program as it is transferring, you might experience intermittent delays in the transfer. You may want to complete the transfer before viewing the program.

▶▶ Digital Music & Photos

The Digital Music Player and Digital Photo Viewer let you use your DVR to play MP3 music files and playlists, and view photos that are stored on a computer. Now you can enjoy your digital music collection on the best sound system in the house, or watch slideshows of digital photos in the comfort of your living room.

To use the Digital Music Player or Digital Photo Viewer, you need:

- A DVR with a subscription to the TiVo service.
- A computer connected to the DVR via a home network (see page 106).
- The TiVo Desktop application that makes music and photos on the computer available to a DVR.

▶ TiVo Desktop

The TiVo Desktop application is a small, easy-to-use program for your computer that you can download from www.tivo.com/desktop. TiVo Desktop is available for the following operating systems:

- Windows 98, ME, 2000, XP
- Macintosh OS X v10.2 or later

Music File Types. TiVo Desktop plays music in the MP3 format, and supports playlists in the following formats used by common music players: M3U, PLS, ASX, and B4S. On a Mac, TiVo Desktop works with music organized by iTunes 3.0 or later.

Photo File Types. TiVo Desktop for Windows works with digital photos in these formats: BMP, DIB, GIF, JPG, PNG. TiVo Desktop for Mac works with digital photos organized by iPhoto 2.0 in these formats: JPG, GIF, BMP, TIFF, and PNG.

► **Playing Your Music and Viewing Your Photos**

Using the Digital Music Player and Digital Photo Viewer is easy. You can find Music & Photos on TiVo Central®.

Listening to music on the DVR. On your computer, use the TiVo Desktop application to “publish” music that you want to access through your DVR. (Publishing is a process that makes digital music and photos available to your DVR. It is usually as simple as selecting music and clicking a Publish button.)

On your DVR, go to TiVo Central and select Music & Photos, then select the music option for your computer.

You should see a list of music you published with TiVo Desktop. Select the music you want to listen to and press the PLAY () button. In a few seconds, the music plays.

Viewing photos on the DVR. On your computer, use the TiVo Desktop application to “publish” photos that you want to access through your DVR. (Publishing is a process that makes digital music and photos available to your DVR. It is usually as simple as selecting photos and clicking a Publish button.)

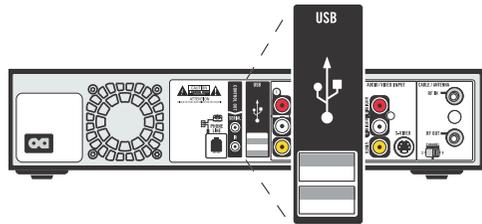
On your DVR, go to TiVo Central and select Music & Photos, then select the photos option for your computer.

You should see a list of the photos you published with TiVo Desktop. Select the photos you want to view and press the PLAY () button. In a few seconds, the photos start to appear on your television screen.



▶▶ Home Networks

When we refer to a “home network,” we mean two or more devices (probably computers), connected to a router. Connecting DVRs to a home network is the best way to take full advantage of your DVR’s home media features. (For details about these features, download the Home Media Features Guide at www.tivo.com/guides.)



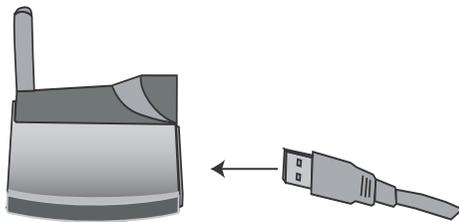
The USB ports on the back of a TiVo DVR

▶ USB Ports, Wireless and Wired Network Adapters

On the back of your DVR, you will see two *USB ports* that can be used to connect either a wireless or a wired (Ethernet) USB network adapter. Although you can use either of these ports, only one network adapter can be connected at a time.

USB network adapters let a DVR use a USB port to communicate with other networked devices. Whether you choose wireless or wired (Ethernet), you will need a network adapter for each DVR you wish to connect.

TiVo has recommendations for compatible models of wireless and wired (Ethernet) network adapters. Be sure to check TiVo online support at www.tivo.com/adapters for the latest information.



A USB Wireless network adapter
(yours may look different)



An Ethernet USB network adapter
(yours may look different)

Choosing Wireless or Wired (Ethernet)

You can connect your DVR to your home network using either a wireless or wired (Ethernet) connection. Here are some notes to help you choose which approach you want to use.

- **Wired (Ethernet).** Ethernet connections are generally faster, less expensive, more reliable and less susceptible to interference than wireless networks. Using Multi-Room Viewing to transfer a program is quicker over wired (Ethernet) than it would be over a wireless connection.

To connect a DVR to a wired (Ethernet) network, see “Connecting to a Home Network Using Wired (Ethernet)” on page 110

- **Wireless.** Connecting your DVR wirelessly may be more convenient because you do not have to run a cable from your DVR to another device. However, wireless networks are typically more expensive and slower than Ethernet networks, and may be subject to interference from appliances such as microwaves and 2.4 GHz cordless phones. To connect wirelessly, you must have a wireless access point or wireless router on your home network. On most home networks, the wireless access point is part of an integrated hub/router and home gateway.

To connect a DVR to a home network wirelessly, see “Connecting to a Home Network Using a Wireless Network Adapter” on page 108.



Do not use the CDs that are included with your network adapters to set up your DVRs. These CDs are intended to load drivers and network adapter software on your personal computer.



If you are connecting two DVRs to a home network to use Multi-Room Viewing, using a wired (Ethernet) connection for one of them may speed up program transfers.

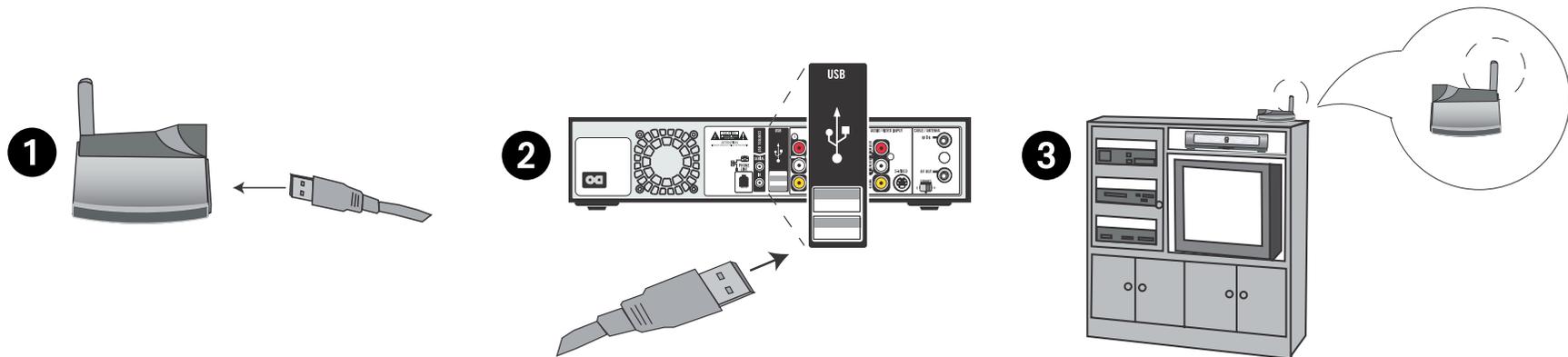


Check TiVo online support at www.tivo.com/adapters for the latest adapter recommendations.

▶▶ Connecting to a Home Network Using a Wireless Network Adapter

Use this example if you have a home network that includes a wireless access point (WAP) or wireless router, or for each DVR in a wireless peer-to-peer network. You can leave your DVR plugged in while you connect a network adapter.

To connect a wireless network adapter to your DVR:



The cable may already be attached to your wireless network adapter.

1. **Connect to the adapter.** If it is not already attached, connect one end of the USB cable that came with your wireless network adapter to the port located on the back of the adapter.
2. **Connect to the DVR.** Connect the other end of the USB cable to the USB port on the DVR. The power light on the wireless adapter may come on before the cable is completely inserted into the USB slot. Make sure you push the cable all the way into the USB slot.

3. **Position the adapter.** Position the adapter in an open location so that the signal is easily transmitted. For example, you might place the adapter on top of your entertainment center. Do not place the wireless adapter near the DVR's power supply or on a power strip or surge protector. Doing so can cause signal interference or reduce signal strength.
4. **Firmware update.** When you first connect a wireless network adapter to your DVR, you may see a screen that says "Firmware Update Required." This means your DVR has a software update for the wireless network adapter you have connected. Select the option to update. This should not take more than a minute or two.

During the update, do not disconnect the network adapter wires or the power to the DVR. Either action might damage the adapter.

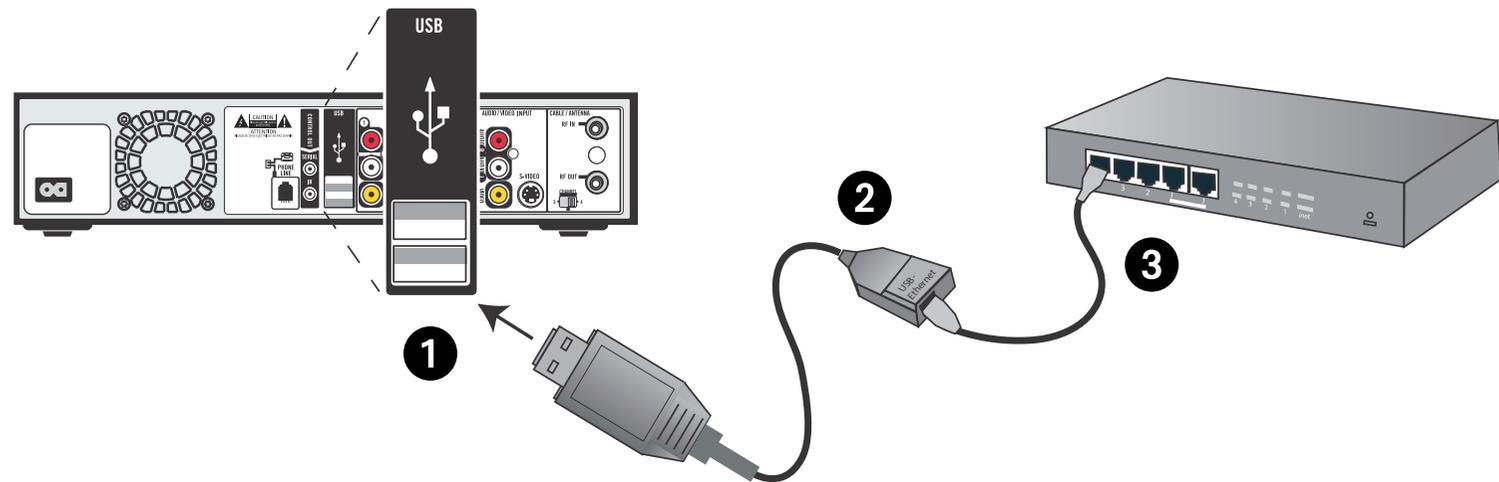
5. **Important message.** The first time you press the TiVo button after connecting a network adapter, you will see an Important Message. Review it, then press SELECT on the remote control to go to TiVo Central.
6. **Next Step.** Go to "Completing the DVR's Network Settings" on page 112.



▶▶ Connecting to a Home Network Using Wired (Ethernet)

This example shows you how to connect a DVR to a network hub using a wired (Ethernet) network adapter. You can leave your DVR plugged in while you connect a network adapter.

To connect a wired (Ethernet) network adapter to your DVR and your network hub, follow these steps:



1. **Connect to the DVR.** Connect the USB end of the Ethernet adapter to the USB port on the DVR.
2. **Connect Ethernet to the adapter.** Plug one end of an Ethernet cable into the Ethernet adapter.

3. **Connect Ethernet to the hub or router.** Plug the other end of the Ethernet cable into your home network's hub or router.
4. **Important message.** The first time you press the TiVo button after connecting a network adapter, you will see an Important Message. Review it, then press SELECT on the remote control to go to TiVo Central.
5. **Next Step.** If your home network has DHCP, wait for a few minutes for your DVR to automatically complete its network settings, and then you're done! If your network does not have DHCP, or you are having trouble establishing a network connection, go to "Completing the DVR's Network Settings" on page 112. (DHCP is described in "Basic TCP/IP Concepts" on page 116.)

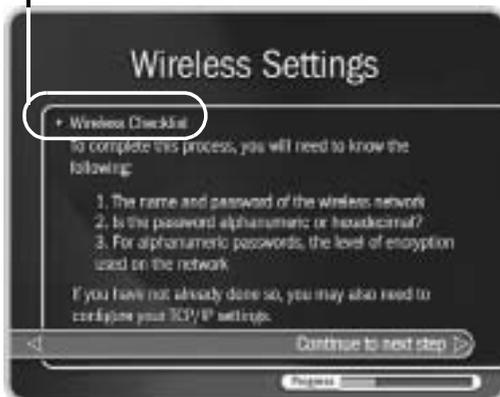


Many of the screens you use to complete **Wireless Settings** or

TCP/IP Settings have the same title.

However, they have different subtitles. In this section, each screen is identified by its subtitle.

Screen subtitle



▶▶ Completing the DVR's Network Settings

If your DVR is connected to a wired (Ethernet) network adapter, skip to “TCP/IP Settings for a Home Network” on page 116.

▶ Wireless Settings for a Home Network

If you have a wireless home network, and have connected a wireless network adapter to your DVR, as described on page 108, you are ready to complete Wireless Settings for a home network.

To get to Wireless Settings: press the TiVo button on the remote control to go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network Setup, then “Edit phone or network settings,” then Wireless Settings.

Wireless Checklist

This is the first Wireless Settings screen you will see. It lists information you need to complete wireless settings. You can find all this information in the configuration settings of your network's wireless access point or router.

If your wireless network does not use encryption (WEP), then you only need to provide a wireless network name; you do not need to provide a password format or password.

When you are ready to continue, press SELECT on your remote control.

Wireless Connection and Wireless Network Name

You must now provide the name of your wireless network. Wireless networks have a network name (sometimes called an SSID for *service set identifier*). A wireless network may be *open* or *closed*. Open wireless networks broadcast their network names, allowing

devices in their vicinity to identify them automatically. Closed wireless networks do not broadcast their network names, so they cannot be identified automatically.

This screen lists the names of nearby wireless networks that your DVR has been able to identify. If you have a wireless router (or wireless access point) and you did not set a network name, your network is probably using a name supplied by the router's manufacturer.

If your network's name is listed, select it. (You may be able to see more names by pressing **CHAN DOWN** to scroll down the screen.)

Otherwise, select "Connect to a closed wireless network":

On the Wireless Network Name screen, enter the name of your network using the arrow buttons on your remote to highlight a character. Then press **SELECT**.

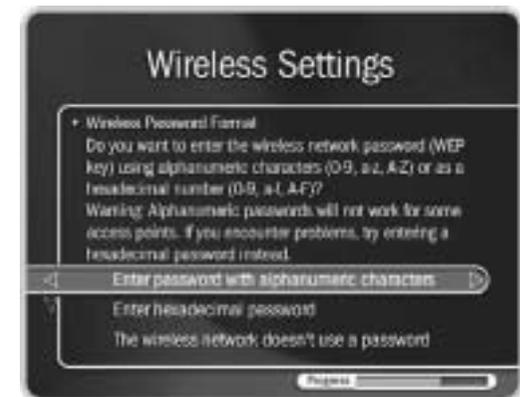
You must use capital and lowercase letters appropriately. For example, to find a network named "My Network" you must capitalize the "M" and "N"; entering "my network" would not work. Use **THUMBS UP** and **THUMBS DOWN** to change to uppercase or lowercase. Select "Done entering text" when you are finished.

If the DVR detects that your wireless network does not use encryption (WEP) you will see the Confirm Settings screen, described on page 115.

Wireless Password Format

You see the Wireless Password Format screen if there is a chance that your wireless network uses *WEP encryption*.

WEP. WEP is a kind of encryption used by wireless networks to improve their security. There are different levels of WEP encryption, typically called 40-, 64-, 104-, 128-, or 256-bit encryption. Encryption at higher levels offers better security. At the highest levels



(104-bit or above), WEP encryption may slow down the transfer of programs from one DVR to another by a small amount. WEP is usually turned on or off through the configuration settings of a wireless access point or router. If your network uses WEP, then it has a password or “key.”

To connect a DVR to a network that uses encryption, you need to provide:

- **A wireless password format.** WEP passwords may be hexadecimal (a combination of letters from A-F and numbers from 0-9), or alphanumeric (a combination of letters from A-Z and numbers from 0-9). If your network has both an alphanumeric and a hexadecimal password, we strongly recommend you use the hexadecimal password.
- **A wireless password.** It does not matter whether the letters of a hexadecimal password are uppercase or lowercase, but for alphanumeric passwords, capitalization is important. For example, if the password is “MyPassword,” then entering “mypassword” will not work. Some hexadecimal passwords have only numbers.
- **A level of wireless encryption.** If you specify an alphanumeric password, you must also specify a level of wireless encryption. DVRs are compatible with 40, 64, 104, and 128-bit encryption; they are not currently compatible with 256-bit encryption.

Choose a format or select “The wireless network doesn’t use a password.” If you select “The wireless network doesn’t use a password,” you will see the Confirm Settings screen, described on page 115.

Wireless Password — Alphanumeric or Hexadecimal

- **Hexadecimal (preferred).** Enter a hexadecimal password using the arrow buttons on the remote to highlight a character. Then press SELECT. It does not matter if a letter is uppercase or lowercase. Some hexadecimal passwords contain only numbers.
- **Alphanumeric.** Enter an alphanumeric password using the arrow buttons on your remote to highlight a character. Then press SELECT. You must use capital and lowercase letters appropriately. For example, if your password is “MyPassword”, entering “mypassword” will not work. Use THUMBS UP and THUMBS DOWN to change to uppercase or lowercase. Select “Done entering text” when you are finished.

Wireless Encryption

If you entered an alphanumeric password, you will see this screen. Select the level of encryption used by your wireless network. If your network uses 104-bit encryption, select 128-bit encryption. DVRs are not currently compatible with 256-bit encryption.

Confirm Settings

Select “Accept these settings” if they are correct. For steps you can take to troubleshoot issues with your wireless connection, see “Questions About Networking” on page 141.

Change Connection Type?

You see this screen if you are not using a shared Internet connection to connect to the TiVo service. If your network has access to an always-on broadband connection, select “Yes” to use it to connect to the TiVo service instead of a phone line.



Next Step

You have completed wireless settings. If your home network has DHCP, and you do not have a DHCP Client ID, the DVR will automatically complete network setup. We recommend that you confirm the DHCP settings of your network by continuing with “TCP/IP Settings for a Home Network,” below.

If your home network does not have DHCP, or if you have a DHCP client ID, continue with “TCP/IP Settings for a Home Network.”

► TCP/IP Settings for a Home Network

You are ready to complete TCP/IP settings if:

- You are connecting your DVR to your home network wirelessly and have already completed “Wireless Settings for a Home Network” on page 112, or
- You have a wired (Ethernet) adapter connecting your DVR to your home network.

► Basic TCP/IP Concepts

This section describes a few basic TCP/IP concepts. If you are familiar with home networking, you can skip to “Begin TCP/IP Settings” on page 117.

- **IP Address.** TCP/IP settings are used to manage IP addresses on a network. An IP address is a number that identifies a single device on a network (in much the same way that a home address identifies a single home in a town). IP addresses use four numbers separated by periods. Each number can be from 0 to 255. Some example IP addresses are: ‘192.168.0.1’ and ‘10.8.3.25’.
- **DHCP and Static IP Addresses.** DHCP automatically assigns IP addresses to devices on a network. Most home networks include a router or home gateway that has DHCP. If your network has DHCP, or you are creating a peer-to-peer network, your DVR can obtain its IP address automatically. An IP address assigned by DHCP is called a

dynamic IP address because it may change automatically as devices are added to or removed from the network.

If your network does not have DHCP, you must specify an IP address for your DVR. An IP address you specify is considered a *static IP address*, because it will not change until you specify a new one.

If you assign a static IP address to your DVR, remember that:

- The first three sets of numbers in the IP address usually must match the first sets of numbers in the IP address used by another device on the network (for example, a computer). The first three sets of numbers for IP addresses on a home network are usually: '192.168.0' or '192.168.1'.
- If the first three numbers match those of another IP address, the last number has to be unique.

For example, two IP addresses for devices on the same network might be '192.168.1.5' and '192.168.1.6'.

► **Begin TCP/IP Settings**

To get to TCP/IP Settings: press the TiVo button on the remote control to go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network Setup, then "Edit phone or network settings," then TCP/IP Settings.

TCP/IP Connection

On the first screen in TCP/IP Settings you specify how your DVR gets an IP address. On this screen you can choose to:

- Obtain the IP address automatically. Use this option if your router or gateway has DHCP. Continue with "DHCP Client ID," below.



- Specify a static IP address if you don't have a DHCP server. Continue with “**Static IP Address Checklist**” on page 119.

If you are not sure what to select, you can try “Obtain IP address automatically.” This selection will work for most people. If it does not work, you can return to TCP/IP Settings later and make other selections. (A brief description of IP addresses is provided in “Basic TCP/IP Concepts” on page 116.)

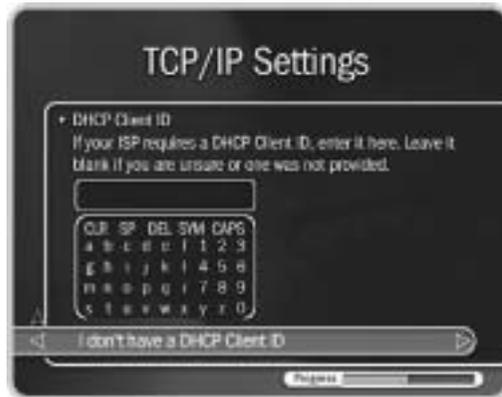
DHCP Client ID

Unless you received a DHCP Client ID from your Internet service provider (ISP), you can select “I don't have a DHCP Client ID.” This selection will work for most people.

If your ISP provided you with a DHCP Client ID, enter it using the arrow buttons on your remote to a highlight a character. Then press SELECT.

You must use capital and lowercase letters appropriately. For example, if your DHCP Client ID is “ID7343”, entering “id7343” will not work. Use THUMBS UP and THUMBS DOWN to change to uppercase or lowercase. Select “Done entering text” when you are finished.

Skip to “**Confirm Settings**” on page 121.



Static IP Address Checklist

If you do not have a DHCP server, you need to provide all of the following:

- An IP address for your DVR.
- A Subnet Mask for your home network.
- An IP address for your home gateway or router.
- An IP address for a DNS (Domain Name Server).

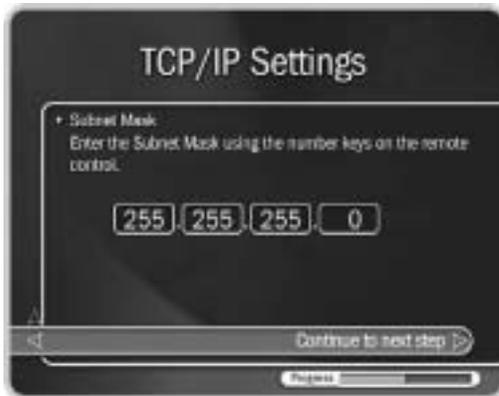
You will create a unique IP address for your DVR. The Subnet Mask, gateway or router IP address, and DNS IP address are usually provided by your Internet service provider (ISP). They are also usually available on the configuration screens of your home gateway or router.

If you have a computer on your home network, you may be able find the Subnet Mask, home gateway, or router IP address, and DNS IP address in the computer's TCP/IP settings. (If you are having trouble getting this information, contact your Internet service provider.) In addition, you can use your computer's IP address to help create an IP address for your DVR. For example, if your computer's IP address is '192.168.1.2' then your DVR's IP address should probably also start with '192.168.1' and end with a number other than 2.

IP Address

The first three sets of numbers in the IP address are usually the same as other devices on your home network. The final number is usually unique to a device on your home network. For example, with the IP address '192.168.1.12', the first part, '192.168.1', would be common to all devices on the network. The last part, '12', would be unique to a device on the network.





Subnet Mask

A subnet mask allows communication between a large network (such as the Internet) and a smaller sub-network (such as your home network). It uses the same format as an IP address and is usually provided by your Internet service provider (ISP). The subnet mask for a home network is usually '255.255.255.0'.

You may also be able to find the subnet mask by inspecting the IP settings of a computer on the same home network, or by contacting your Internet service provider.

Gateway (Router) Address

Enter the IP address of your home gateway or router. The IP address is usually available in the configuration screens for your gateway or router. Some common values for the gateway or router IP address on a home network are '192.168.0.1' and '192.168.1.1'. If you use a router supplied by your Internet service provider (ISP), your ISP should also have supplied the router's IP address.

You may also be able to find the home gateway or router IP address by inspecting the IP settings of a computer on the same home network.

DNS (Domain Name Server) Address

If your home network includes a broadband connection to the Internet, your Internet service provider (ISP) will have given you a DNS address. You may also be able to find the DNS address by inspecting the IP settings of a computer on the same home network.

Confirm Settings

Review the settings and select “Accept these settings” if they are correct.

Congratulations, your DVR should now be connected to your home network!

For steps you can take to troubleshoot issues with your TCP/IP Settings, see “Questions About Networking” on page 141.

Change Connection Type?

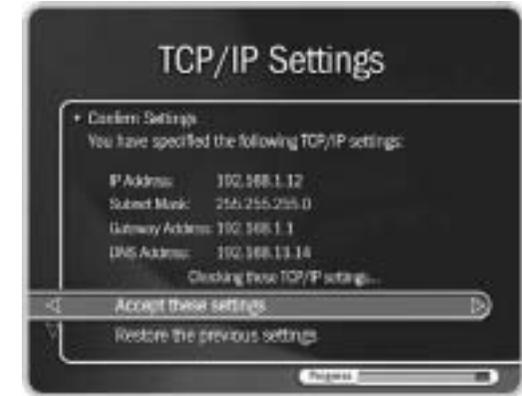
If your DVR connects to the TiVo service over a phone line, you will see this screen anytime you complete Wireless Settings or TCP/IP Settings. Only select “Yes,” if your DVR is connected to a network that includes an always-on Internet connection.

Advantages of connecting to the TiVo service over the Internet are:

- You may disconnect your phone line from the DVR. You only need to reconnect your phone line if you repeat Guided Setup.
- You can use Remote Scheduling to schedule a program to record an hour before it begins using TiVo Central Online (www.tivo.com/tco).

After you select “Yes” or “No,” you see the Phone & Network Settings screen. Press LEFT arrow to see the Phone & Network Setup screen. The first line of Phone & Network Setup should read: “Connect Via: Network” if you selected “Yes.”

To test the new connection, select Test Connection. On the next screen, press SELECT.



For steps you can take to troubleshoot issues with your connection to the TiVo service, see “Questions About the DVR’s Connection to the TiVo Service” on page 126.

Troubleshooting

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▶▶ Customer Support

TiVo and HUMAX are dedicated to providing you with quality support and customer service. When you have a question:

1. **Use this chapter.** It contains troubleshooting for questions about:

- Getting Started..... 125
- The DVR’s Connection to the TiVo® Service 126
- Channels..... 128
- Live TV..... 131
- Recording Programs..... 132
- Recording Conflicts 135
- Now Playing 135
- Parental Controls 137
- Audio and Video..... 137
- The TiVo Service..... 140
- Networking..... 141

2. **Use the troubleshooting screens on your DVR.** Go to TiVo Central and select Messages & Setup, then Troubleshooting. You will find troubleshooting screens for Parental Controls, your phone connection, your channels, and networking.

3. **Contact Customer Support.** Go online or give us a call. Refer to the contact information below.

HUMAX Customer Support	TiVo Customer Support
<ul style="list-style-type: none"> • Connecting your DVR to your TV & other equipment • Phone calls and connecting to the TiVo service • Channel changing and the remote control • Audio and video 	<ul style="list-style-type: none"> • Using TiVo service features (finding & recording programs) • Your channel lineup and channel lists • Your TiVo service account and billing issues • Online scheduling and Home Media Features
<p>www.humaxusa.com/support 1-866-486-2987</p>	<p>www.tivo.com/support 1-877-367-8486</p>

►► Questions About Getting Started

I don't see the Welcome Screen when I plug in my DVR for the first time.

- Make sure cables are connected from the OUT jack of one device to the IN jack of another. Never connect OUT to OUT or IN to IN.
- If you used an RF Coaxial cable to connect your DVR, make sure your TV (and VCR, if the DVR's signal passes through the VCR) is tuned to the same channel (3 or 4) that you selected on the back of your DVR (using the channel 3/4 switch). You may also need to press the Input, Source, or TV/Video button on your TV's remote to change the input (i.e., the video signal your TV is displaying).
- If you're using Composite A/V cables or S-Video cables, make sure your TV is displaying the appropriate video source. You may need to use the Input, Source, or TV/Video button on your TV's remote to change video sources. If you are having trouble changing the video source, refer to your TV's owner's manual.
- If you are passing the signal through your VCR (as in Setup 4 in this guide), tune your TV the way you would to watch your VCR. Also, try turning your VCR on or off. If your VCR has multiple inputs, you may need to select the correct input on the VCR as well.
- If your DVR is connected to an A/V receiver, and you are having trouble finding the correct input, try connecting it directly to the TV instead.
- The cables you are using to connect your DVR to your TV or other equipment may be damaged or defective. Try exchanging the cables connected to the DVR with other cables that you know are working properly.

My phone jack isn't near the DVR.

- The DVR comes with a 25 foot phone cord. Phone cords longer than 25 feet are available at most hardware or electronics stores.
- After you complete Guided Setup, you can connect your DVR to a home network and use a broadband Internet connection instead of a phone line to connect to the TiVo service. See "Connecting to a Home Network for Home Media Features" on page 101 for details.

My TiVo DVR remote control doesn't control my TV's power, volume, etc.

- You can program the DVR's remote control to turn your TV on and off, and control its volume and mute functions. You can also program it to control volume and mute on an A/V receiver or stereo. See "Remote Control & DVR Front Lights" on page 85.

My TiVo DVR remote control doesn't work with my DVR.

- Be sure you are using the DVR's remote, and that you hold it so that the TiVo button points toward the DVR.
- Try changing the position of the DVR SWITCH on the remote control.
- Press any button on the remote. Does the red light above the TiVo button on the remote flash?

If the red light does not flash, make sure the batteries are positioned correctly in the remote. If they are correctly positioned, try a new set of batteries. See the inside front cover of this guide for instructions on installing batteries.

If the red light on the remote does flash, watch the lights on the front of the DVR. Do the lights seem to respond (i.e., blink or flash) when you press any button on the remote? If lights on the front of the DVR do not respond to the remote, restart your DVR by unplugging it, waiting 15 seconds, then plugging it back in.

- You may not have the correct input selected on your TV. Use the Input, Source, or TV/Video button on your TV's remote to change the input. If you are passing the signal through your VCR, you may need to select the correct input on the VCR as well.

►► **Questions About the DVR's Connection to the TiVo Service**

Why does the DVR have to be connected to a phone line or the Internet?

- The DVR needs to be connected to the phone line or the Internet so that it can make periodic connections to the TiVo service. This connection downloads program information, which tells the DVR when programs are scheduled to air and on what channel. The connection may also retrieve additional information such as updates to the TiVo service, Showcases, and TiVo Evolution Magazine.

In addition, the connection sends anonymous viewing information back to TiVo—that is, anonymous information about viewing choices, which do not identify you as an individual or household. TiVo has no way to access any of your personally identifiable viewing information from your DVR without your prior consent. Without your consent, the TiVo service has no way of knowing what shows you—as an individual or household—have watched or recorded. For more information, read the TiVo Privacy Policy on page 147.

Do I need to keep the phone connected all the time?

- We recommend you leave the DVR connected to the phone line all the time. The TiVo service will not interfere with other needs for the phone line, and periodic connections will keep the DVR's program information fully up to date.
- You can also use a broadband Internet connection to connect to the TiVo service instead of a phone line. See "Connecting to a Home Network for Home Media Features" on page 101 for details.

My DVR's phone connection to the TiVo service is failing.

- First, verify that your phone line is working by connecting a phone to it, then listening for a dial tone. Make sure the phone cord is connected to both the DVR and the phone jack. If the phone line is working, continue with the troubleshooting here. If it is not working, contact your telephone service provider.
- The following tips require changing your Phone Dialing Options. To change Phone Dialing Options, go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network Setup, then "Edit phone or network settings," then Phone Dialing Options. After you change a Phone Dialing Option, the DVR will make a test connection to verify whether or not your problem was solved.

Phone Connection Troubleshooting Tips:

- Try another local dial-in number. Select "Set Dial-In Number." Confirm your area code, then select a new number from the list of available numbers for your area.
- If you have voice mail on this phone line or use another non-standard dial tone, turn off "Dial Tone Detection." (Select "Set Dial Tone Detection," then select "Off.")
- If you dial a prefix for outside lines, be sure it is entered on the Phone Dialing Options screen. To enter or change a prefix, select "Set Dial Prefix," then follow instructions on the screen. For example, if you must dial 9 to reach an outside line, select "Set Dial Prefix," then press "9" then the PAUSE () button. (This enters a 9, followed by a comma. The comma represents a pause.)
- If you have call waiting, be sure it is disabled during the daily phone call. (Select "Set Call Waiting Prefix," then enter the correct prefix, usually "*70,". You would enter "*70," by pressing CLEAR then "7" then "0" then the PAUSE () button.)
- Your phone line may have low voltage. Set 'Phone Avail.' Detection to "Off." (Select "Set Phone Avail. Detection," then select "Off.") If you have a cordless telephone, fax machine, or computer modem connected to the same line, try turning 'Phone Avail.'

Detection off, as well. When ‘Phone Avail.’ Detection is off, you may hear a click on the line when the DVR tries to call. This is the sound of the DVR picking up the line to see if it is free.

- If you use a wireless modem jack, try connecting the DVR directly to a standard wall jack.
- If you have a caller ID box, try removing it from the line, since some models interfere with the DVR’s ability to make a call.
- If you have DSL, try installing a DSL filter on your phone line.
- It could be that you have too much line noise due to the length of the phone cord. Try a shorter cord, or you can buy a line noise filter at your local electronics store.

What if I need to use the phone while the DVR is connecting to the TiVo service?

- You can interrupt the connection. To do this, pick up the phone, then hang it up. Wait about 45 seconds. When you pick it up again, there should be a dial tone. Repeat this process if necessary.

What if my phone line is busy when the DVR tries to connect to the TiVo service?

- The DVR will continue to attempt to connect several times a day until it is successful. You can check the status of the connection on the Phone & Network Setup screen (from TiVo Central, select Messages & Setup, then Settings, then Phone & Network Setup). The status of the most recent connection is displayed near the top of the screen.

Am I charged for connections to the TiVo service?

- TiVo uses either a standard phone line or a broadband Internet connection to provide the TiVo service, and is available as a local call in most areas. In some areas, however, local and long distance toll charges may apply. You are responsible for any phone charges.

►► **Questions About Channels**

Can I watch one channel while recording from another?

- Yes. If you have cable with no cable box or an antenna, you can split the signal with an RF splitter. See “Watching One Channel & Recording Another” on page 18. (You will not have TiVo functionality on the channels you watch using an RF cable that goes directly to your TV.) You can always watch any program from the Now Playing list while the DVR is recording a program.

I can't get the channel to change.

If you use cable with no cable box:

- Be sure that you are using the TiVo remote and that you hold it so the TiVo button points toward the DVR.
- Press any button on the remote. Does the red light above the TiVo button flash? If not, make sure the batteries are positioned correctly in the remote. If they are, try a new set of batteries. If the red light on the remote does flash, do the lights on the front of the DVR seem to respond when you press any button on the remote? If they do not, restart your DVR by unplugging it, waiting 15 seconds, then plugging it back in.

If you have a cable or satellite box and used the IR Control cable:

- Make sure the cable or satellite box is turned on.
- Make sure you are using the DVR's remote control, and that you hold it so the TiVo button points toward the DVR, not at the cable or satellite box.
- Refer to page 6 to verify that the IR Control cable is positioned correctly in front of the IR sensor. Also, make sure the purple end of the cable is plugged into the **Control Out-IR** jack on the back of the DVR.
- You may consider optimizing the IR Control connection as described on page 9.
- Press the TiVo button to go to TiVo Central, then select Messages & Setup, then Cable/Satellite Box, then Control Cable Setup. Verify the IR code you chose during Guided Setup. See page 6 for more on choosing an IR code.
- Try using the cable or satellite box's remote to change the channel. If it doesn't work, contact the manufacturer or service provider.

If you have a Motorola/General Instruments DCT2000 series cable box or a DIRECTV® satellite box and used the Serial Control cable:

- Make sure the cable or satellite box is turned on.
- Verify that the Serial Control cable is plugged into the data connector on the cable or satellite box and into the **Control Out-Serial** jack on the back of the DVR.
- Unplug the cable or satellite box's power cord, then plug it back in. Then try changing channels with the TiVo remote again.

- Try using the cable or satellite box's remote to change the channel. If it doesn't work, contact the manufacturer or service provider.
- Serial control of a Motorola/General Instruments DCT2000 series cable box may not be available for all customers. Check with your cable provider to find out if your cable box is enabled for serial control.
- **Satellite Box Only:** You may have incorrectly specified the type of program guide for your DIRECTV satellite box. There are two types of program guides: MPG (Master Program Guide) and APG (Advanced Program Guide).

To change this option: First, unplug the power cord for the satellite box, wait a few seconds, then plug it back in. Next, go to TiVo Central, then Message & Setup, then Settings, the TiVo DVR Setup, then Cable/Satellite Box, then Satellite Channel Changing and select "Satellite Box." On the Connection to Satellite screen, if you originally selected Serial-MPG, change your selection to Serial-APG. (If you originally selected Serial-APG, change it to Serial-MPG.) You can also check the manual for your satellite box (as well as the satellite box's system setup screen) for information on the type of program guide it uses.

I can't go to one of my channels.

- You may be using a channel list that does not include the channel you want. Use the numbers on the remote control to enter the channel number, then press ENTER. For more information on using a channel list, see page 77.
- The channel you want may be showing a program that exceeds a limit set with Parental Controls. In this case, you will see only a black screen with a notice that a limit has been exceeded. You will be able to tune to the channel if you use the Parental Controls password. (For more information on Parental Controls, see page 79.) If your cable or satellite box has a feature like Parental Controls, you may have to use the satellite or cable box's remote to disable it as well.

I can't find all the channels I receive in the Channels You Receive list.

- Have you changed your satellite or cable provider, or changed your subscription package? If you have, you should repeat Guided Setup to specify your current satellite or cable provider and lineup. From TiVo Central, select Messages & Setup, then Restart or Reset System, then Repeat Guided Setup. Press THUMBS DOWN three times, and then press ENTER. You may need to check all of the available selections to find the right one since cable providers often change their lineups. For complete instructions on Guided Setup, see Chapter 2 of this guide.

- If you have cable, and have not changed your cable provider, go to Messages & Setup, then Settings, then Channels, then Cable Lineup. Look at your cable or satellite bill, then check the Channels You Receive list. If the channels are incorrect, try another Cable Lineup. If that does not work, go to *www.tivo.com/support*.

►► Questions About Live TV

Can I watch a program while it is being recorded?

- Yes, you can watch a program as it is being recorded; you can even start watching from the beginning while the rest of the program is recorded! You can also watch any program stored in Now Playing while another program is being recorded.

The Channel Banner always says “To be announced.”

- Your DVR probably does not have full program information. For details, see the question “I can’t find my program in Search by Title or Search Using a WishList, even though I know it’s on,” on page 132.

There aren’t any shows listed in the program guide.

- Your DVR may not have program information. See “I can’t find my program in Search by Title or Search Using a WishList, even though I know it’s on,” on page 132.
- If category filtering of the guide is turned on, but no upcoming programs in the next six hours match both your filter and your Favorite Channels list, no programs will appear in the guide. To view programs in the guide again, use the Guide Options to turn off filtering. (See page 51.)

I can’t find my program in the guide, even though I know it’s on.

- You can choose a channel list or filter to use with the guide. Not all programs or channels will be displayed if you have chosen to use a filter or the “Favorites” channel list. Press GUIDE to display the live guide, then ENTER to choose “Channels You Receive” or to turn off filters. You can also add and remove channels on the “Channels You Receive” and “Favorites” channel lists. (See page 77.)
- Occasionally the program information provided by the networks includes errors. We would like to hear of any inaccuracies you discover so that we can work with our providers to correct them. See the Customer Support contact information at the beginning of this chapter.

►► Questions About Recording Programs

I can't find my program in Search by Title or Search Using a WishList, etc., even though I know it's on.

- The DVR uses the Channels You Receive list to search for programs in all the features under Pick Programs to Record. To check if you've selected the program's channel, go to Messages & Setup, then Settings, then Channels, then Channels You Receive. Does the channel have a check mark next to it? To give it one, highlight the channel and press SELECT. (For instructions on personalizing this list, see page 77.)
- Look on the Phone & Network Setup screen (from TiVo Central, select Messages & Setup, then Settings, then Phone & Network Setup) for the time of the last successful connection to the TiVo service. If it was more than 36 hours ago, your DVR may be having trouble connecting to the TiVo service. Select "Test connection" to test the current settings. If the test connection does not succeed, see page 126 for connection troubleshooting. Once you have made a successful test connection, start a regular connection by selecting "Connect to the TiVo service now." If your connection is successful, new program information will be downloaded and organized, and become available to search in about 1 to 5 hours.
- Is your TiVo service account up to date? Check your account status on the System Information screen (from TiVo Central, select Messages & Setup, then System Information). If your account is suspended or closed and you wish to re-activate it, go to www.tivo.com/manage, or refer to page 124 for Customer Support contact information and give us a call.
- Occasionally the program information provided by the networks includes errors. We would like to hear of any inaccuracies you discover so that we can work with our providers to correct them.

I cannot use features in Pick Programs to Record. The DVR says it is organizing program information.

- Your DVR may not have all its program information yet. The first time you go through Guided Setup, the DVR downloads program information from the TiVo service. The DVR then indexes this information in the background over the next 4-8 hours. As the program information gets indexed, more of it becomes available. After 8 hours, full information (for up to 2 weeks from the time of the last successful connection to the TiVo service) is available for you to use. Wait a few hours, then try to find your program again.
- If the DVR loses power while it is indexing program information, the indexing process will stop until the DVR makes a successful connection to the TiVo service, and then will start again. If your DVR lost power while it was indexing program information, you

can get it to start indexing again by plugging it in and then starting a connection to the TiVo service. To do this, go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network Setup, then “Connect to the TiVo service now.”

What happens if a sports event I have scheduled to record goes into overtime?

- The TiVo service cannot predict whether a sporting event might go into overtime, but we provide a feature that lets you add from one extra minute to three hours at the end of a recording just in case. We call the feature the Overtime Scheduler. The Overtime Scheduler has two options: “Start Recording” and “Stop Recording.” Both are available on the Recording Options screen. You can even use the Overtime Scheduler to change the scheduled end of a recording while the program is being recorded. You can use the Overtime Scheduler with any kind of program, not just sports. For more information on Recording Options, see page 47.

If you are watching a program while it’s being recorded, you can record an overtime segment in a couple of ways. One way is to go into Now Playing, select the recording, then select “Change recording options.” On the Recording Options screen that appears, select “Stop recording.” Use RIGHT arrow to increase the length of the recording by anywhere from one minute to 3 hours. Alternatively, you could choose to press the RECORD button after the regularly scheduled part of the program has finished.

Is there a way to record a program that will not be aired for weeks or months?

- Create an auto-recording WishList for programs that are not yet listed in the guide. See page 58 for details on WishList searches.
- If you know the date, time, and channel on which the program will air, you can create a manual recording to record it. You can create manual recordings by going to TiVo Central, then selecting Pick Programs to Record, then Record by Time or Channel, then Manually Record Time/Channel. (See page 54 for details.)

How do I set the clock so that my shows are recorded on time?

- If you are missing the beginning or end of a show, it usually means that the broadcaster is not starting or stopping the show on time. You can use the Overtime Scheduler, described on page 48, to compensate for this.
- The TiVo service sets your DVR’s clock during every service connection. If you set your time zone and Daylight Savings Time correctly in Guided Setup, you never have to worry! If you move to a new time zone, change your DVR’s time settings by repeating Guided Setup. To connect to the TiVo service at any time, go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network Setup, then “Connect to the TiVo service now.”

How do I record a Pay Per View event?

- From live TV, catch up to the present broadcast by pressing the ADVANCE button. Then, order the program from your cable or satellite provider as you normally would—by using your satellite or cable box remote, or by calling your cable/satellite provider. (If the program violates a Parental Control limit—or a feature like Parental Controls on your cable or satellite box—make sure to disable both TiVo Parental Controls and your satellite or cable box’s Parental Controls.) To record the program, search for it in Browse by Time. If there are no listings for Pay Per View events, record the showing with the Manually Record Time/Channel option under TiVo Central, then Pick Programs to Record, then Record Time/Channel.

Why wasn’t my program recorded?

- Check Recording History for an explanation of why the program did not record. Recording History is the first selection in the To Do List (from TiVo Central, select Pick Programs to Record, then To Do List, then View Recording History). Here are some reasons why a program may not be available in Now Playing:
 - The program may have been canceled by the network.
 - If you had two Season Pass recordings that were on at the same time, only the Season Pass with the higher priority would be recorded. Priorities and the Season Pass Manager are described on page 49.
 - The program may have been deleted from Now Playing by someone else in your household.
 - There may have been a conflict when requesting another program, and the proposed resolution was to delete the missing program earlier than planned. If you accepted that resolution, the program would have been deleted.
 - There may have been a channel changing problem. See “Questions About Channels” on page 128.

▶▶ Questions About Recording Conflicts

Can I record multiple programs simultaneously?

- No. You can watch any program in Now Playing while another is recording. However, you can only record one program at a time on your DVR, because it does not contain the necessary hardware to record two programs at once. The DIRECTV DVR with TiVo has two tuners and can record two programs at the same time.

How can I record a program (or programs) when there is a conflict?

- The DVR gives each repeating recording a priority. You can resolve some conflicts in favor of preferred programs using the Season Pass Manager to change priorities (see page 49.)
- If you encounter a conflict for a single episode, use “View upcoming episodes” to see if the program or episode you want will air at a different time.
- You can sometimes resolve recording conflicts by changing the “Stop Time” or “Start Time” Recording Options. (See page 47 for more about Recording Options.) If you set a program to start recording one minute early, it may conflict with a recording that airs right before it. To resolve such a conflict, change the “Start Time” back to “On Time” on the Recording Options screen.
- If a single episode of a repeating recording conflicts with another program, you can select that episode in the To Do List and change it independently of the rest of the repeating recording.

▶▶ Questions About Now Playing

Can I recover a recorded program that was deleted?

- No. There is no way to bring back a program that has been deleted from Now Playing. You can choose to keep programs as long as you want (see page 73) or save programs to video tapes or recordable DVDs (see page 74).

Can I copy or archive programs to a Zip drive, or any other computer storage media?

- The TiVo Series2 DVR does not copy or archive recordings to any device other than a VCR or DVD recorder. See page 74.

I haven't scheduled enough programs to fill my DVR, but when I try to schedule more programs, the DVR says there isn't room.

- The TiVo service includes smart scheduling features that track not only how much space you currently have on your DVR, but also how much space will be needed in the future to record all of the programs you have scheduled. If your DVR will be full at some point in the future, the TiVo service informs you and suggests options—such as allowing some programs to be deleted early—that will allow you to schedule additional recordings. With the TiVo service, you always have the final say over what gets recorded and how long it is kept.
- In addition, the amount of recording space the DVR needs varies from channel to channel and from show to show. In general, the more action you see on your screen, such as in fast-moving sports or action movies, the more recording space is required. Weaker video signals may also require more space. The amount of space required for each show you record affects the total hours of recording capacity in your DVR.

How can I fit more programs in Now Playing?

- To make space, delete some programs in Now Playing. You delete a program by highlighting its title, then pressing CLEAR.
- Lowering the default recording quality will allow you to fit more programs in Now Playing. See page 83 for details.
- Set up Season Pass recordings with the Recording Option “First-run only.” You’ll collect only new episodes. You’ll also be less likely to run out of space in Now Playing and less likely to encounter conflicts.

What does it mean when my DVR says programs will be deleted earlier than planned?

- By default, all programs are kept until space is needed. After that, programs you have not set to save longer may be deleted to make room for other recordings you request. The TiVo service includes smart scheduling features that keep track of when programs become available to be deleted, and of how much free space will be available at any given time in the future. If space will not be available to record a program you request, the TiVo service gives you the option of deleting some programs early to make more room. However, you always have the final say on how long the DVR keeps programs. You can delete a program at any time, and you can always change how long it is saved. Just select the program in Now Playing, then select “Keep until...”

▶▶ Questions About Parental Controls

My Parental Controls are not working.

- For Parental Controls to work, they must be on (and must not be temporarily turned off). When you enter your password to watch a program that violates Parental Controls, they are temporarily turned off. You can re-enable them on the Parental Controls screen (from TiVo Central, select Messages & Setup, then Settings, then Parental Controls), or by putting your DVR in Standby mode and then taking it out of Standby. You can put your DVR in Standby mode by going to TiVo Central and selecting Messages & Setup, then Standby. To return to normal mode from Standby, press either the TiVo button the or LIVE TV button. (On some remotes, there is a POWER button that puts the DVR in Standby mode and takes it back out.)

I disabled Parental Controls, but I still can't tune to the channel I want.

- If your cable or satellite box has a feature like Parental Controls, make sure you have disabled them with the satellite or cable box's remote. See your cable or satellite box's owner's manual for instructions.
- You may be using a channel list that does not include the channel you want. Use the number buttons on the remote control to enter the channel number, then press ENTER. For more information on using a channel list see page 77.

▶▶ Questions About Audio and Video

The audio and video are out of sync.

- The audio and video may re-sync if you change channels.
- You may be able to re-sync audio and video by pressing the INSTANT REPLAY button on the remote control.
- Press the TiVo button to go to TiVo Central, then press the LIVE TV button to return to live TV.
- You can also try restarting your DVR. From TiVo Central, select Messages & Setup, then Restart or Reset System, then Restart the DVR. On the Restart the DVR screen, press the THUMBS DOWN button three times, then press ENTER. You will see the Welcome screen and the system will restart within a few minutes.

My DVR was working, but now the picture does not move

- Try restarting your DVR. From TiVo Central, select Messages & Setup, then Restart or Reset System, then Restart the DVR. On the Restart the DVR screen, press the THUMBS DOWN button three times, then press ENTER. You will see the Welcome screen and the system will restart within a few minutes. You can also restart the DVR by unplugging it, waiting at least 15 seconds, then plugging it back in.

I don't get a picture now, even though I have been able to get one in the past.

- Someone in your household may have placed the DVR in Standby mode. To return to normal mode from Standby, press either the TiVo button or the LIVE TV button. (On some remotes, there is a POWER button that puts the DVR in Standby mode and takes it back out.)
- Your TV may not be set to the correct input. Most TVs have an input button that says either "TV/Video," "Input," or "Source." It may be on the TV or on the TV remote control. Look at your TV and TV remote and try changing the input for your TV.
- If you have your DVR connected to a VCR, the VCR may not be set to the correct input. Most VCRs have an input button that says either "TV/Video," "Input," or "Source." It may be on the VCR or on the VCR remote control. Look at your VCR and VCR remote and try changing the input for your VCR.
- Check to make sure all of the appropriate cables are firmly connected to your DVR, television and other audio/video equipment. For help with your cable connections, see the *Start Here* booklet and Chapter 1 of this guide.

My audio system is set up to play in stereo, but it is only playing mono.

- Make sure that "Main Audio Program (stereo)" is selected on the Television Audio screen (TiVo Central and select Messages & Setup, then Settings, then Audio, then Television Audio). And be sure you connected audio using the DVR's L/R Audio Out jacks.

I can't select an alternate audio track.

- Secondary audio programs (SAP) are not available for all programs. If you set the SAP as the default audio, programs that have SAP will use it. Only one audio track is saved with recorded programs. If SAP is the default audio and a program you are recording has an SAP, the SAP will be the recorded program's only audio. You can set the default audio on the Television Audio screen (from TiVo Central, select Messages & Setup, then Settings, then Audio, then Television Audio).

- Recorded programs, such as those in Now Playing, always have only one audio track, the one they were recorded with.
- You cannot change the audio track if you are watching a live program, but are not caught up to live TV. Catch up to live TV by pressing the ADVANCE button. Changing the audio program will clear the saved part of the program you are watching, so you will only be able to rewind live TV to the point where you changed the audio program.

Programs are playing in the wrong language.

- You may have selected the secondary audio program (SAP) as the default audio on the Television Audio screen. Most programs with SAP use it to broadcast in an alternate language. To turn off the SAP, change the main audio program on the Television Audio screen (from TiVo Central, select Messages & Setup, then Settings, then Audio, then Television Audio).

When I turn on my TV, I see a blue screen with a TiVo logo.

Your DVR is having trouble tuning to the channel you are on. Follow these steps to restore the video:

- Try changing channels. If the blue screen appears on just a few channels, you may be tuned to a channel to which you do not subscribe, or you may be experiencing a weak signal on a channel to which you do subscribe. If you do not subscribe to the channel, you should take it off the “Channels You Receive” list. (For more information, see page 77.) If you do subscribe to the channel, wait 24 hours to see if the signal improves, or call your cable or satellite provider.
- If you have a satellite or cable box, go to Messages & Setup, Cable/Satellite Box, Connection to DVR. Verify that you chose the same cable on this screen that you used to connect your satellite or cable box to the DVR.
- If the blue screen appears on every channel, and you have a cable or satellite box, make sure it is turned on.
- You may be experiencing a temporary cable or satellite outage; check with your cable or satellite provider.
- Your video cable may have come loose. Make sure all the cable connections on the back of your DVR are secure.
- Verify that you are receiving a video signal by temporarily connecting the video source directly to the TV. If you still do not see any video, there may be a problem with your cable, satellite or antenna equipment.
- The cables you are using to connect your DVR to your TV or other equipment may be damaged or defective. Try exchanging the cables connected to the DVR with other cables that you know are working properly.

- Restart your DVR. (From TiVo Central, select Messages & Setup, then Restart or Reset System, then Restart the DVR. Press THUMBS DOWN three times, then press ENTER. You will see the Welcome screen, and the system will restart within about 45 seconds. You can also restart the DVR by unplugging it, waiting 15 seconds, then plugging it back in.

►► Questions About the TiVo® Service

Will my DVR still work without the TiVo service?

- Without the TiVo service, your DVR will have extremely limited functionality. The DVR was designed to be used exclusively with the TiVo service. The TiVo service is required for proper operation of the DVR. No functionality is represented, warranted or should be expected without a subscription to the TiVo service. The DVR uses the program information provided by the TiVo service to record the programs you request, to provide Season Pass functionality, to power the program guide, to allow you to search for programs by name, etc. The TiVo service may also provide you with new Showcases, TiVolution Magazine, and service updates.

What happens if my DVR loses power temporarily?

- Everything is saved—including your Now Playing programs—regardless of the length of time the DVR is without power. The only thing you will miss is a recording that was scheduled to occur during the time the power was out.

Will the TiVo service collect information about my viewing habits?

- TiVo has designed its system and instituted policies to ensure that TiVo is unable to access any of your personally identifiable viewing information without your prior consent. TiVo does collect anonymous viewing information; that is, information about viewing choices made while using your DVR, which does not identify you as an individual or household. In other words, there is no contact information associated with the viewing information that could identify the viewing information as coming from you or your household. If you don't want even your anonymous viewing information used in any way, you may simply call and tell us, and we will stop collecting it. (See page 124 for our phone number.) For more information, see Chapter 9 or go to www.tivo.com/privacy.

How is information from the TiVo service delivered to my DVR?

- The DVR automatically makes regular connections to the TiVo service to download program information and other data. Information may also be delivered by a special TiVo program that is recorded late at night (when it does not conflict with any of your requested recordings).

►► Questions About Networking

I can't find "Edit phone or network settings."

- The menu item "Edit phone settings" will change to "Edit phone or network settings" after you connect a network adapter that the DVR recognizes to the DVR's USB port. To see the Phone & Network Setup screen, press the TiVo button to go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network Setup.

If you have attached an adapter and still see "Edit phone settings:"

- Make sure the USB cable between the adapter and the DVR is plugged firmly into both devices.
- Confirm that you are using a recommended adapter. Check the list online at www.tivo.com/adapters. You may need to use a different adapter.

My DVR is not connecting to the TiVo service.

- You can make the DVR connect to the TiVo service at any time. Press the TiVo button to go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network Setup, then "Connect to the TiVo service now."
- Your DVR can connect to the TiVo service via a home network's always-on broadband Internet connection, or via a phone line. To change the type of connection your DVR uses to connect to the TiVo service, press the TiVo button to go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network Setup, then "Change connection type."
- If your DVR is having trouble connecting via a broadband Internet connection:
 - **Check that the Internet connection is available, then troubleshoot.** There are two links in the chain between your DVR and the Internet: your DVR's connection to your home network, and your home network's connection to the Internet. First, confirm that the connection between your home network and the Internet is working. Try to go online and browse a web site from a computer on the same network as your DVR. If you cannot browse the Internet, you must fix the connection from your network to the Internet. After you have fixed this connection, try again to make your DVR connect to the TiVo service. (Press the TiVo button to go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network Setup, then "Connect to the TiVo service now.") If you can browse the web, then see "My DVR is not connecting to my home network," below.

- **Use a phone line.** Use a regular phone line to connect to the TiVo service.
- If your DVR is having trouble connecting over a regular phone line:
 - **Use broadband.** If you have a home network with a broadband Internet connection, try allowing your DVR to use it to connect to the TiVo service over the Internet. Doing this eliminates the DVR's need to use a phone line. See Chapter 7 for more details.

My DVR is not connecting to my home network.

Any of the steps below may fix a network connection; you probably will not have to complete each one. For additional steps for wireless networks, see “My DVR is not connecting to my wireless home network.” on page 143.

1. Check network adapter.

- The network adapter or cables could be defective. If you have another adapter or USB cable available, try that adapter or cable.
 - The network adapter that you attached may not be supported. If your network adapter is compatible with your DVR, and functioning properly, a MAC address—an identifier unique to the network adapter you purchased—is visible on the Phone & Network Setup screen. To check, from TiVo Central, select Messages & Setup, then Settings, then Phone & Network Setup. The MAC address should be on the top right-hand side of the Phone & Network Setup screen. If you do not see a MAC address listed, your DVR is not recognizing the network adapter you installed. The adapter is either not compatible, not functioning properly, or not properly connected. If you do see a MAC address, the adapter you are using may or may not be compatible. For more information, see “USB Ports, Wireless and Wired Network Adapters” on page 106.
2. **Check connection to the network adapter.** Unplug the USB cable from the back panel of your DVR and then plug it back in. Make sure the cable is pushed all the way in; sometimes lights on the adapter turn on before the USB cable is pushed all the way in. Unplug the side of the USB cable connected to the adapter and then plug it back in.
 3. **Restart the DVR.** Press the TiVo button on the remote control to go to TiVo Central, then select Messages & Setup, then Restart or Reset System, then Restart the DVR. Press THUMBS DOWN three times, then press ENTER.
 4. **Check physical connections.** Ensure that all network equipment is receiving power and all cable connections for routers, hubs, access points, and computers are working. Verify that the “connection” light is lit on devices connected to the network.

5. **Powercycle network devices.** If you have a router or wireless access point, unplug it, wait a moment, and then plug it back in. This will temporarily halt your network's Internet connection. It may take a minute for your equipment to "restart" after you plug it in.
6. **Check your Network Settings.** Verify that your Network Settings are correct. Complete TCP/IP Settings, even if you did not when you first connected your DVR. For more information, see "Completing the DVR's Network Settings" on page 112.
7. **Update router or home gateway firmware.** If your home network includes using a router, home gateway, or wireless access point, it may need a firmware update. Firmware is a software program that is loaded onto a hardware device. You can usually find any updated firmware at the Customer Support web site for the manufacturer of your hardware. (For example, if you have a Linksys device, check <http://www.linksys.com/download/>.) Older firmware may cause unpredictable results. It may be necessary to power-cycle your device before and after you reinstall the firmware.
8. **Check Static IP Address.** If you assigned an IP address to your DVR, check that its IP address is unique on your network. Also, confirm that the first three sets of numbers of the DVR's IP address are the same as those of other devices on the network. (For example, if you computer's IP address starts with "192.168.1" then your DVR's IP address must also start with "192.168.1".)
 - You may have assigned a static IP address on a network with a DHCP server. If your network includes a DHCP server (for example, as part of your router), you should not assign static IP addresses to devices on the network. Go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network Setup, then Edit phone or network settings, then TCP/IP Settings, then select "Obtain IP address automatically."

If you have a wireless network, also try the steps below.

My DVR is not connecting to my wireless home network.

Connecting to the network access point may take several minutes once the problem is resolved. Be certain the Phone & Network Setup screen has had time to update to display the true network status before making any additional changes. To refresh the Phone & Network Setup screen using the remote control, press the LEFT arrow to go to the previous screen, and then press the RIGHT arrow to return to the Phone & Network Setup screen.

1. **Check power at wireless access point.** Ensure the wireless access point or wireless router is receiving power and that the "connection" light is on.

2. **Change password format.** If you used an alphanumeric password for your wireless network, try using a hexadecimal password instead. You can find a hexadecimal password (sometimes referred to as a “Key” or “WEP Key”) in the configuration settings for your wireless access point or wireless router. If more than one hexadecimal password is listed, always use the first one. To change the password format, follow the instructions for completing Wireless Settings at “Wireless Settings for a Home Network” on page 112.
3. **Check signal strength.** On the Phone & Network Setup screen (press the TiVo button to go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network Setup), check the wireless signal strength.

The following may improve wireless signal strength:

- Make sure the wireless adapter is placed well away from the DVR’s power supply, or power strips, or surge protectors. Any of these may cause interference and reduce signal strength. Some household appliances, such as microwave ovens and 2.4 GHz cordless phones, may also reduce signal strength when they are in use.
 - Verify that the wireless network adapter’s antenna is fully extended.
 - Move the wireless network adaptor to a higher position, or give it a better line of sight to your wireless gateway (router).
 - Reduce the distance between the wireless network adapter and the wireless access point. Wireless networks typically have a range of 100 - 300 feet, but distances can vary based on walls, floors, and other obstructions. It may be necessary to adjust the location adapter of your wireless access point or router to be closer to the network adapter attached to your DVR(s).
 - Consider adding a signal booster to your network (available from some wireless equipment manufacturers).
4. **Check network name.** On the Wireless Settings screen (press the TiVo button to go to TiVo Central, then select Messages & Setup, then Settings, then Phone & Network Setup, then Edit phone or network settings, then Wireless Settings), check that the network name (SSID) for your network access point is listed correctly. To change the network name, follow the instructions for completing Wireless Settings at “Wireless Settings for a Home Network” on page 112.

If you haven’t already done so, you should also try the steps in “My DVR is not connecting to my home network.” on page 142.

Privacy, Service, Warranty, and Licenses

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INTRODUCTION

TiVo Inc. (“TiVo”) is committed to protecting the privacy of your personal information. The TiVo Privacy Policy is published on the World Wide Web at www.tivo.com/privacy. We have printed it here for your convenience, but we encourage you to check the web site or call us for a copy of the current Privacy Policy. This Privacy Policy applies to your use of the TiVo service.

Use of your TiVo® Digital Video Recorder (referred to in this Privacy Policy as your “TiVo DVR”) with the TiVo service will signify your acceptance of this Privacy Policy. Thank you for using the TiVo service!

SUMMARY OF THE TIVO PRIVACY POLICY

TiVo knows how important personal privacy is to you, so we have designed our system and established strict policies to help protect the privacy of your Personally Identifiable Viewing Information. In summary, we want you to know that:

- The TiVo DVR collects certain types of information from its users, including Anonymous Viewing Information, Diagnostic Information, Commerce Information, and Service Information (each as defined below).
- TiVo has no way to access any of your Personally Identifiable Viewing Information (as defined below) from your TiVo DVR without your prior consent. Absent your consent, TiVo has no way of knowing what shows you-as an individual or household- have watched, recorded, or rated with “Thumbs Up” or “Thumbs Down.”
- TiVo does collect Anonymous Viewing Information; that is, information about viewing choices made while using your TiVo DVR, but that does not identify you as an individual or household. In other words, there is no personally identifiable information associated with your Anonymous Viewing Information that could

identify the Anonymous Viewing Information as coming from you or your household.

- TiVo also collects Diagnostic Information from a small number of randomly sampled TiVo DVRs for quality control purposes. If you don't want your Anonymous Viewing Information and Diagnostic Information used in any way, simply tell us by writing to us or calling us at 1-877-367-8486.
- If you affirmatively elect to engage in a commercial transaction such as by responding to an advertisement or promotion, TiVo will collect and disclose your Commerce Information (as defined below) to the commerce partner fulfilling the transaction.
- If you affirmatively elect to use the Remote Scheduling feature of TiVo's Home Media Option™ package, TiVo will collect the Personally Identifiable Viewing Information associated with fulfillment of your individual request(s). Use of the Remote Scheduling feature, however, does not change your privacy preferences with respect to viewing choices made in the privacy of your household.
- TiVo intends to make available new services in the future. These services will be governed by the privacy policies of the respective service providers.
- **NOTE TO CUSTOMERS WITH MORE THAN ONE TIVO DVR:** Generally, TiVo will cause all of the TiVo DVRs on your account receiving the TiVo service to have the same “opt” status. See Sec. 2.8 of the Privacy Policy for further details.

▶▶ TiVo Privacy Policy

Please read this Privacy Policy carefully. It provides important information on how your privacy is protected when using the TiVo service.

In order to provide you with a better, more satisfying television experience, TiVo Inc. (“TiVo”) collects and uses certain types of information, as described in this Privacy Policy. The Subscriber Information (defined below) you provide to the TiVo[®] Digital Video Recorder (referred to in this Privacy Policy as your “TiVo DVR”) in your house and to us at TiVo enables your TiVo DVR to select programs you want it to record and to suggest programs you might enjoy.

By using your TiVo DVR and the TiVo service, you consent to the provisions of this Privacy Policy including the privacy preferences set forth in Section 4.1. This Privacy Policy explains our commitment to your privacy in the following areas:

1 Our Subscriber Information Definitions. In discussing the kind of information TiVo collects, it is important to distinguish between anonymous information and other information that specifically identifies you or your household. Too often, people refer to “personal information” or “personally identifiable information” without really making clear what they mean. TiVo has developed the following definitions to help clarify this important issue. We use “Subscriber Information” as a general term that refers to any information relating to you or your use of the TiVo service. The following are more specific types of Subscriber Information.

1.1 “Account Information” means information about you and your TiVo DVR, including your Contact Information (defined below) and other information linked to your Contact Information such as the model and Service Number of your TiVo DVR, your ZIP code,

software version used, your TV programming source (cable, satellite or an antenna), the type of cable hook-up (digital or analog) and level of TiVo service, privacy preferences, and the cable or satellite box model that you use. You provide us with this information when you set up your TiVo DVR and when you register as a subscriber to the TiVo service. This Service Information (defined below) is sent to TiVo on an ongoing basis to enable TiVo to provide the TiVo service to your TiVo DVR. Account Information also includes information we may receive about you in a communication from you or a third party. Account Information does not include any Personally Identifiable Viewing Information, or Anonymous Viewing Information, as defined below.

- a “Contact Information”** means information that allows someone to identify or contact you, including, for example: your name, address, telephone number, and e-mail address. Contact Information is a subset of Account Information and is thus linked to your TiVo DVR’s Service Number. Your ZIP code by itself, while part of your address, is not Contact Information because your ZIP code alone does not allow someone to identify or contact you.
- b “Service Information”** means information necessary for TiVo to provide service to your TiVo DVR. Examples of Service Information include your software version number, your TV programming source, level of service, and the success status of the last attempted service connection (e.g., periodic call). This information is always transmitted to TiVo when your TiVo DVR is connected to the TiVo servers.

1.2 “Personally Identifiable Viewing Information” means information about the viewing choices that you and those in your household make while using your TiVo DVR, if that information is linked to or associated with your Account Information. Your TiVo DVR stores your viewing information so that it may recommend viewing choices and personalize your viewing experience. We have worked very hard to design our system to ensure that no Personally Identifiable Viewing Information may be sent to TiVo without your express consent. You may choose to consent to TiVo’s collection of Personally Identifiable Viewing Information by changing your privacy preferences as provided in Section 4.1.

1.3 “Anonymous Viewing Information” means information about viewing choices that you and those in your household make while using your TiVo DVR, but is not associated with or linked to any Contact Information. Your TiVo DVR sends Anonymous Viewing Information to TiVo on an ongoing basis. This information allows TiVo to know that a TiVo service subscriber from a particular ZIP code watched certain programming but we are unable to associate those viewing choices with you. You may request that TiVo block the collection of Anonymous Viewing Information from your TiVo DVR as described in Section 4.1.

1.4 “Diagnostic Information” means a log file containing detailed information about the operation of your TiVo DVR, such as memory consumption, user interface response time, disk space, enclosure temperature, and enclosure fan speed. Diagnostic Information logs contain your TiVo DVR’s Service Number and are thus associated with your Account Information. You may request that TiVo block the collection of Diagnostic Information logs from your TiVo DVR as described in Section 4.1.

1.5 “Commerce Information” means personally identifiable information that enables a commerce partner to fulfill your request to

participate in a promotion or transaction. From time to time, TiVo may present special offers and/or enable you to purchase goods and services from TiVo, or third party advertisers or promoters. You would be informed of such offers on screen while using the TiVo service. Should you decide to take advantage of such an offer or engage in a transaction, TiVo will collect and communicate your relevant Contact Information and your interest in a specific offer or transaction to the commerce partner sponsoring the promotion or transaction. In addition to fulfilling your request, that commerce partner may also use your Commerce Information to send you other information in which you might be interested consistent with its own privacy policies. This information is collected and disclosed by TiVo only upon your affirmative response to an offer. NOTE: Depending on your level of TiVo service and the model of your TiVo DVR, such features may not be available to you.

1.6 “Feature-Generated Request Information” means personally identifiable information about television programming that you request your TiVo DVR to record or identify using a feature offered by TiVo, such as Remote Scheduling. Should you decide to use such a feature, TiVo will collect the Personally Identifiable Viewing Information associated with the fulfillment of your recording (or scheduling conflict) request. TiVo may use this Personally Identifiable Viewing Information as described in Section 2.2. TiVo collects this information only upon your affirmative choice to use a particular feature. NOTE: Depending on your level of TiVo service and the model of your TiVo DVR, such features may not be available to you.

2 Use of Subscriber Information

2.1 Account Information. We use your Account Information to establish and provide you with your TiVo service, provide the

necessary resources to your TiVo DVR, offer you new services when they are available, and for other legitimate business purposes. For example, we use your e-mail address to communicate with you regarding new services, and to exclude you from offers for services you may already have. We also use such information to create your account with TiVo and to bill you for the TiVo service. Knowing your ZIP code, programming source, and information about your cable or satellite box model allows us to determine which programming information (e.g., times and channels of programs) to send to your TiVo DVR.

We use your Account Information to communicate with you about upcoming features in the TiVo service or promotions that might interest you. You may opt not to receive communications in the future as explained in Section 4.1. We also use your Account Information in aggregate form (i.e., excluding any Contact Information) to generate demographic profiles of our users as a whole to assist us to, for example, identify future users of the TiVo service or other services.

2.2 Personally Identifiable Viewing Information. Your TiVo DVR uses your viewing information to tune, schedule, and record programs. Your TiVo DVR also uses your viewing information to recommend programs for you. Your TiVo DVR may also use this viewing information to select advertisements or other promotions for you that you may be interested in. TiVo does not receive the Personally Identifiable Viewing Information stored on your TiVo DVR without your consent. Absent your consent, no “tag” is added to the Anonymous Viewing Information transmitted from your TiVo DVR to TiVo that would enable TiVo to identify the TiVo DVR from which it came.

If you expressly choose to allow TiVo to collect your Personally Identifiable Viewing Information, TiVo may use this information for

surveys, audience measurement, and other legitimate business purposes.

2.3 Anonymous Viewing Information. We use Anonymous Viewing Information to develop reports and analyses about what programs, advertisements, and types of programming our users (as a whole or in subgroups) watch or skip, for other programming or advertising research, and for any other legitimate business purpose. For example, we use Anonymous Viewing Information to develop inferences that people who watch show X also watch show Y. We also use Anonymous Viewing Information to help with the investigation of technical issues with our systems.

2.4 Diagnostic Information. TiVo collects Diagnostic Information logs from a small number of randomly sampled TiVo DVRs for quality control and technical troubleshooting purposes.

2.5 Commerce Information. TiVo uses Commerce Information as described in Section 1.5.

2.6 Feature Generated Requests Information. TiVo uses Feature Generated Request Information for the purposes described in Section 1.6.

2.7 Activating the TiVo Service. When you activate a TiVo DVR to receive the TiVo service, and it is the only TiVo DVR on your account receiving the TiVo service, your TiVo DVR will provide Anonymous Viewing Information and Diagnostic Information to TiVo. You may opt in to the collection of Personally Identifiable Viewing Information or opt out of TiVo’s collection of Anonymous Viewing Information and Diagnostic Information pursuant to the terms and conditions of this Privacy Policy.

2.8 TiVo Customers with Multiple TiVo DVRs. TiVo will cause all of the TiVo DVRs on your account to have the same “opt” status.

This means that if you opt out of our collection of Anonymous Viewing Information and Diagnostic Information from one TiVo DVR, we will not collect Anonymous Viewing Information and Diagnostic Information from any of the TiVo DVRs on your account. If you request that TiVo collect your Personally Identifiable Viewing Information from one TiVo DVR, TiVo will collect Personally Identifiable Viewing Information from all of the TiVo DVRs on your account.

3 Disclosure of Subscriber Information

3.1 Generally. We disclose aggregated Account Information and aggregated Anonymous Viewing Information and any reports or analyses derived therefrom, to third parties including advertisers, broadcasters, consumer and market research companies and other organizations.

3.2 Manufacturing and Service Provider Partners. In certain instances we will disclose to our hardware manufacturing partners and service provider partners (for example DIRECTV) the Account Information of users who have a DVR made by that manufacturing partner or receive a service from that service provider partner. However, TiVo contractually binds our manufacturing and service provider partners to comply with the provisions of this Privacy Policy. Our manufacturing and service provider partners are legally liable for misuse of Subscriber Information.

3.3 Contractors and Third Party Service Providers. We use contractors to help with some of our operations. Some of these contractors will have access to our databases of Subscriber Information on a temporary basis for specific tasks. TiVo also uses third parties to help with certain aspects of its operations, which may require disclosure of your Subscriber Information to them. For example, TiVo may use a third party to communicate with you (via

telephone, e-mail, or letter) about your TiVo service or upcoming features or services, to mail rebate checks, to generate demographic profiles based on Subscriber Information of current TiVo service users, and to perform other work that we may need to outsource. TiVo may additionally use a third party to process and collect payment for your TiVo service via your credit card. TiVo contractually binds these contractors and third parties to use your Subscriber Information only as necessary to perform the services they are asked to perform. Such contractors and third parties are legally liable for misuse of Subscriber Information.

3.4 The “Corporate Family.” Although TiVo currently does not have a parent company, any subsidiaries (other than TiVo International, Inc. and TiVo UK Ltd., which provides TiVo service in the United Kingdom), joint ventures, or other companies under a common control (collectively, “affiliates”), it may in the future. TiVo may share some or all of your Subscriber Information with these affiliates, in which case TiVo will require its affiliates to honor this Privacy Policy. If another company acquires TiVo, or acquires assets of TiVo that comprise or include your Subscriber Information, that company will possess the Subscriber Information collected by TiVo and it will assume the rights and obligations regarding your Subscriber Information as described in this Privacy Policy.

3.5 Commerce Partners. When you elect to participate in a special offer or engage in a transaction with TiVo or a third party advertiser or promoter, TiVo will collect and disclose your Commerce Information to the commerce partner sponsoring and/or fulfilling the promotion. In addition to fulfilling your request, that commerce partner may also use your Commerce Information to send you other information in which you might be interested consistent with its own privacy policies. This information is disclosed only upon your affirmative response to an offer.

3.6 Factors Beyond Our Control. Your privacy is very important to us. Due to factors beyond our control, however, we cannot fully ensure that your Subscriber Information will not be disclosed to third parties. For example, we may be legally obligated to disclose Subscriber Information to local, state or federal governmental agencies or third parties under certain circumstances (including in response to a subpoena), or third parties may circumvent our security measures to unlawfully intercept or access your Subscriber Information.

4 Your Choices Regarding Subscriber Information

4.1 Limits on TiVo’s Collection, Use, and Disclosure of Subscriber Information. The default privacy preferences, to which you hereby consent, do not allow TiVo to collect Personally Identifiable Viewing Information, but do allow TiVo to collect, use, and disclose Anonymous Viewing Information and Diagnostic Information logs, in addition to Account Information, in manners consistent with this Privacy Policy. Commerce Information is collected, used, and disclosed only upon your affirmative response to an offer. Feature-Generated Request Information is collected, used, and disclosed only upon your affirmative choice to use a particular feature.

Even though Anonymous Viewing Information and Diagnostic Information do not include any Contact Information, you may request that TiVo block the collection of Anonymous Viewing Information and Diagnostic Information from your TiVo DVR. You may further opt not to receive communications that we send to you based on your Account Information; provided, however, that we will still send you communications TiVo deems important regarding your TiVo service. If you make this choice, you understand that we will not be able to inform you about any upcoming features, improvements, or promotions regarding your TiVo service. In all cases, however, we

will collect and use your Account Information (including Service Information) to enable us to provide your TiVo DVR with the TiVo service. You may choose to change your privacy preferences to allow TiVo to collect Personally Identifiable Viewing Information from your TiVo DVR.

If you would like to change your privacy preferences, you must either (a) send TiVo a signed written request at the address set forth in Section 8.3, or (b) call us at 1-877-367-8486 to request a change. NOTE: Please see Section 2.8 above for important provisions if you have multiple TiVo DVRs.

4.2 Review and Update of Account Information. We believe you have a right to know your Contact Information, billing information, and privacy preferences collected and stored by TiVo and to update or change such information you believe is incorrect. You may make a request by telephone, mail, or via the web (if and when available) to review such information and we will mail you a printout of such information. If you request that certain parts of such information be changed, we will make the changes to the extent commercially practicable. In addition, we will take commercially reasonable steps to propagate those changes to third parties with whom we may have shared such information pursuant to this Privacy Policy.

4.3 How to Delete Information. Should you decide to discontinue your TiVo service, you may make that request by telephone or mail and we will suspend billing for the TiVo service. After you discontinue the TiVo service, TiVo will maintain your Account Information only as long as necessary for business purposes. In addition, although we delete your Account Information from our “live” database, your Account Information may remain in our archives and records until they are destroyed.

5 Comment Regarding Children. TiVo feels strongly about protecting the privacy of children and encourages parents to be

involved in the television viewing of their minor children by, for example, limiting the types of content minor children can watch.

- 6 Separate Rules for the TiVo Web Site.** We have a separate privacy policy that covers activities on our web site. However, if you register for TiVo service on the Web, or log in to your account preferences page (when available) to make changes to your account or request services, this Privacy Policy will apply to the Subscriber Information you provide to us in those instances. If you use the TiVo web site to access certain features or services such as Remote Scheduling, we may institute amendments and modifications to this Privacy Policy addressing the handling of your information in providing you such features or services to which you must agree if you wish to use such features or services.
- 7 Security of Subscriber Information.** When you contact us by e-mail or phone regarding your TiVo service, we ask you for certain Account Information in order to verify your identity before accepting requests to make changes to your TiVo service. We take these steps to ensure that only you or a household member who knows your Account Information will be able to access or change your Subscriber Information.

TiVo uses industry-standard methods such as encryption to secure the communication of viewing information from your TiVo DVR to TiVo. In addition, TiVo uses industry-standard methods of securing its databases of Subscriber Information, including the use of firewalls. Except as provided elsewhere in this Privacy Policy, TiVo limits access to Subscriber Information databases to those persons in the TiVo organization who have a business need for such access, including servicing your account, informing you of service news and special TiVo offers, or aggregating Account Information or Anonymous Viewing Information for the purpose of conducting research, and targeting new users. However, you should know that no

company, including TiVo, can fully eliminate security risks associated with Subscriber Information.

8 General

8.1 Future Features, Services, and Amendments to this Privacy Policy.

We may add to or upgrade the TiVo service to provide you with new features on an ongoing basis. We may also make available new services in the future. New services will be governed by the privacy policies of the respective service provider. To the extent that any new features or services may require amendments to this Privacy Policy to describe the treatment of Subscriber Information, these amendments are effective upon notice to you. In the event that we make a substantial and material change to our treatment of Subscriber Information, such as a change in the way that we collect, use, or disclose Personally Identifiable Viewing Information, we will notify you of such planned change and offer you the opportunity to alter your privacy preferences.

8.2 Technical Problems. Even though TiVo has taken significant steps to ensure that your Subscriber Information is never collected, used, or disclosed by TiVo except as set forth by this Privacy Policy, technical mistakes are possible. If such a mistake takes place, we will take commercially reasonable steps to correct it.

8.3 Contact TiVo. Our intention is to be diligent in protecting your privacy by strictly following our Privacy Policy. If you would like to make suggestions or find out more about our privacy practices, please call us at 1-877-367-8486 or send us a letter.

Our mailing address is TiVo Inc., ATTN: Privacy Policy, 2160 Gold Street, P.O. Box 2160, Alviso, CA 95002-2160.

8.4 Entire Agreement. The term “including” in this Privacy Policy shall mean “including without limitation.” This Privacy Policy supplements and is incorporated into the TiVo Service Agreement.

This Privacy Policy constitutes the entire agreement, and replaces and supersedes all prior agreements, between you and TiVo concerning the subject matter discussed in this Privacy Policy. Use of your TiVo DVR with TiVo service will signify your acceptance of this Privacy Policy.

BY USING THE TIVO SERVICE, I REPRESENT THAT I HAVE READ AND UNDERSTOOD THIS ENTIRE PRIVACY POLICY AND I AGREE TO ALL THE TERMS OF THIS PRIVACY POLICY AS STATED ABOVE. TiVo Service Privacy Policy v20030725A

▶▶ TiVo Service Agreement

Welcome to TiVo and the TiVo service! This agreement explains the terms and conditions that will apply to your use of the TiVo service, and constitutes a legally binding agreement between you and TiVo Inc. (“TiVo”). By using the TiVo service, you agree to all the terms and conditions in this agreement (“Agreement”).

THE TIVO SERVICE AND THE PRIVACY POLICY

- 1 Terms of Service.** The TiVo logo on your TiVo® Digital Video Recorder (your “TiVo DVR”) means that it can receive the TiVo service offered and provided by TiVo for personal, non-commercial use on a subscription basis. Your activation and continued use of the TiVo service is subject to the terms and conditions of this Agreement. TiVo may at its discretion change the terms of this Agreement. Such changes shall be effective upon notification by TiVo. We encourage you to check www.tivo.com/privacy or call us for a copy of the current TiVo service agreement. If you are dissatisfied with any changes to this Agreement, you may cancel your use of the TiVo service as provided in Section 15 (“Termination of Service”).
- 2 The TiVo Service.** The TiVo service consists of program guide information and the following features: (a) Season Pass™ - automatically finds and records every episode of a series all season long; (b) WishList™ - finds and records programs that feature your

favorite actor, director, team or even topic; (c) Smart Recording - automatically detects program line-up changes for your cable/satellite provider and adjusts recording times so you don't have to worry about the details; (d) TiVo Suggestions - TiVo can be programmed to suggest and auto-record programs that may match your interests; and (e) Parental Controls-lock channels or set ratings limits based on content. Each of these features is part of the “TiVo service.” The “TiVo service” means these features and any additional features and functionality that TiVo may, at its discretion and from time to time, offer.

- 3 Changes to Your TiVo Service.** TiVo may at its discretion and from time to time change, add, or remove features and functionality of the TiVo service or the TiVo DVR without notice. If you are dissatisfied with any such changes to the TiVo service, you may immediately cancel your use of the TiVo service as provided in Section 15 (“Termination of Service”). TiVo reserves the right to discontinue one, some, or all of the features of the TiVo service you receive at any time at its discretion. TiVo may at its discretion discontinue the provision of software updates to certain TiVo DVRs. This means that while other TiVo DVRs may receive continued software updates and functionality; TiVo is not required to provide such updates to your TiVo DVR. Additionally, the level of service TiVo provides may not be the same on each TiVo DVR; a given TiVo

DVR may support different features and functionality, and TiVo is under no obligation to provide all features and functionality to your TiVo DVR.

- 4 TiVo's Privacy Policy.** You must provide us with accurate and complete information when you activate your TiVo service. TiVo reserves the right to terminate your account if you give TiVo inaccurate or incomplete information. TiVo respects the privacy of your Subscriber Information (as defined in TiVo's Privacy Policy) and will not disclose any of your Subscriber Information except as permitted in TiVo's Privacy Policy. A copy of TiVo's Privacy Policy is included in the product manual and the latest version can always be found via our web site at www.tivo.com/privacy. Please read it carefully before using the TiVo service. By using the TiVo service, you agree to the terms and conditions of our Privacy Policy and affirm that you understand the options TiVo provides to you with regard to your Subscriber Information. TiVo will notify you of any substantial and material changes to the Privacy Policy and the latest Privacy Policy can always be accessed through our web site at www.tivo.com/privacy.
- 5 We Don't Control the Nature of Television!** The TiVo service gives you the ability to see and record televised programs over which TiVo exercises no editorial or programming control ("Third Party Content"). You understand that (a) TiVo does not guarantee the access to, recording, or viewing of any particular program, (b) programming is not under TiVo's control, (c) cable/satellite providers may make program line-up changes too quickly for your TiVo DVR to adjust recording times and this means shows affected by such changes will not be recorded properly or at all, (c) TiVo is not responsible for and has no editorial control over any Third Party Content, and (d) TiVo has no control over the distribution of programs. You agree that TiVo will have no liability to you, or

anyone else who uses your account, with regard to any Third Party Content.

- 6 Television Shows Are Copyrighted.** You also understand that the Third Party Content is the copyrighted material of the third party that supplies it, is protected by U.S. copyright law and other applicable laws, and may not be reproduced, used to prepare derivative works, distributed, performed publicly or displayed publicly without the written permission of the third party that supplied it, except to the extent allowed under the "fair use" provisions of the U.S. copyright laws, other limitations on exclusive copyrights in the U.S. copyright laws, or comparable provisions of foreign laws.
- 7 Copy Protection of Television Shows.** Third Party Content may be transmitted with a variety of copy protection mechanisms. These copy protection mechanisms are designed to protect the copyright interests of the relevant third party. These copy protection mechanisms may limit or prevent the ability of your TiVo DVR to display the Third Party Content or to record such Third Party Content for later viewing. You understand that TiVo does not control the decision of a third party to institute such copy protection mechanisms. You agree that TiVo will have no liability to you, or anyone else who uses your account, with regard to the failure of your TiVo DVR to display or record for later viewing any Third Party Content implementing a copy protection mechanism.

ACTIVATING AND USING THE TIVO SERVICE

- 8 Eligible Subscribers.** You must be at least 18 years of age to assume the responsibilities of this Agreement. Minors may use the TiVo service only if one of their parents or legal guardians assumes the responsibilities of this Agreement and thereby assumes full responsibility for the minor's use of the TiVo service.

9 Subscription Fees. You agree to pay your subscription fee in advance. Your subscription fee will cover the TiVo service received via a TiVo DVR authorized by TiVo to enable the TiVo service. You have a choice of subscription payment options that may change over time. You may switch payment options at the end of each period. If for any reason you need to reactivate your subscription, you may be charged a reactivation fee. If you are signing up for the TiVo service under a promotional subscription fee, some additional restrictions may apply. Whatever your subscription payment option, your subscription fee does not include any services, features or functionality other than the TiVo service.

10 Telephone Access and Possible Charges. The TiVo service is accessed through a standard telephone line and is available as a local call in most areas. In some areas, local and long- distance toll charges may apply. The TiVo service may also be available through the Internet with a broadband connection. However, TiVo does not make any assurances about the availability or functionality of the TiVo service over a broadband connection. Firewall protection is strongly advised for any broadband Internet connections to protect your TiVo DVR from viruses and other harmful things. You are responsible for any telephone or broadband service charges incurred as a result of using or accessing the TiVo service and acknowledge and agree that you shall be solely responsible for all disputes with any telephone company or Internet service provider related to the same.

11 Payment Authorization. If you choose a subscription option with recurring payments, you agree that TiVo may automatically charge the subscription fee to your credit or charge card at the beginning of each period. Your TiVo service access will not be established until TiVo has verified that the credit card information you provide us for payment is accurate and that your credit card account is in good standing. TiVo may, as necessary, extend the expiration date of your

credit card in order to ensure continued service. TiVo may, at its discretion, change the TiVo service fees from time to time, and charge fees (which TiVo may also change) for features and functionalities that are not a part of the TiVo service. TiVo will notify you 30 days in advance of any fee changes or new fees; you may obtain the fees currently in effect at any time by contacting TiVo Customer Support at 1-877-367-8486. TiVo reserves the right to suspend or terminate your TiVo service without notice upon rejection of any credit card charges or if your card issuer (or its agent or affiliate) seeks return of payments previously made to TiVo when TiVo believes you are liable for the charges. You agree to pay a late charge on all amounts due which remain unpaid for 30 days. The late charge will equal 1.5% of the past due amount, or the highest rate allowed by law, per month until paid. Such rights are in addition to and not in lieu of any other legal right or remedies available to TiVo. TiVo reserves the right to refer your account to a third party for collection in the event of an ongoing default.

12 Using the TiVo Service. You may access and use the TiVo service only with a TiVo DVR that is authorized to receive the TiVo service and you agree not to tamper with or otherwise modify your TiVo DVR. The TiVo service is provided for your personal, non-commercial use, and may not be resold, in whole or in part. Except as expressly provided in this Agreement, you may not transfer the TiVo service. By using the TiVo service, you agree to receive all software updates and upgrades that TiVo sends to your TiVo DVR. If your TiVo DVR accesses the TiVo service (regardless of your payment or subscription status), you acknowledge and agree that you are a user of the TiVo service and are bound by the terms of this Agreement.

13 Advertising and Promotions. The TiVo service is advertiser supported. The hard disk drive of your TiVo DVR contains reserved space in addition to the advertised recording capacity. TiVo reserves

the right to send content (including advertising and promotional material) to such reserved portions of your TiVo DVR's hard disk drive as part of the TiVo service. In order to send such content, you agree that TiVo may tune your TiVo DVR to a particular channel at a particular time.

14 Definition of Product Lifetime Subscription. A “Product Lifetime Subscription” to the TiVo service covers the life of the TiVo DVR you buy—not the life of the subscriber. The Product Lifetime Subscription accompanies the TiVo DVR in case of ownership transfer. The subscription remains in effect if the TiVo DVR needs to be repaired or replaced due to a malfunction (see manufacturer or retailer warranty details) or even if you upgrade your TiVo DVR to increase storage capacity (though such upgrades, if not performed by a TiVo-authorized third party, will void the warranty on your TiVo DVR and constitute a breach of this Agreement). Because a Product Lifetime Subscription is linked to a particular TiVo DVR, you may not transfer it to any other TiVo DVR unless all the following conditions apply: (a) the TiVo DVR is being replaced pursuant to the manufacturer's or retailer's warranty; and (b) the TiVo DVR being replaced is of the same make and model as the replacement TiVo DVR; and (c) you provide us with a proof of replacement by the manufacturer or retailer. TiVo reserves the right to charge you a fee to transfer Product Lifetime Service from a TiVo DVR being replaced to a replacement TiVo DVR. Each TiVo DVR purchased requires its own TiVo service subscription and activation. Of course, hardware products don't last forever and their lifespan will vary. TiVo makes no warranties or representations as to the expected lifetime of the TiVo DVR (aside from the manufacturer's or retailer's warranty).

15 Termination of Service. You may terminate your account, this Agreement, and your right to use the TiVo service, at any time and for any reason or no reason, by contacting TiVo Customer Support at

1-877-367-8486. The TiVo service will be terminated within 24 hours after your call and unused subscription fees are nonrefundable. Notwithstanding anything to the contrary in this Agreement, TiVo retains the absolute right to immediately suspend or terminate your account, and terminate this Agreement, if the charges to your credit card for the fees described in Section 9 (“Subscription Fees”) and Section 11 (“Payment Authorization”) are refused for any reason, if you breach any provision in this Agreement, if you misuse the TiVo service, and/or if you alter your TiVo DVR or use the TiVo service in such a manner as to infringe upon the intellectual property rights of TiVo or any third party. In addition, TiVo reserves the right to terminate your account and this Agreement for any other reason or no reason if TiVo gives you at least 30 days advance notice of such termination. Upon any such termination of your account, you will remain obligated to pay all outstanding fees and charges relating to your use of the TiVo service before termination.

OWNERSHIP, OPEN SOURCE SOFTWARE, DISCLAIMERS AND LIABILITY LIMITATIONS

16 Title to Software and Intellectual Property. You may need to use certain software programs to use or have full access to certain features of the TiVo service. You received certain software with the purchase of the TiVo DVR and other software programs may be provided to you by TiVo from time to time, which you are obligated to accept. Your use of such software is subject to the terms of this Agreement. TiVo retains title to and ownership of all the TiVo software and certain intellectual property rights in the TiVo DVR. TiVo also retains ownership of all TiVo copyrights and trademarks. In the case of third party software delivered by TiVo to the TiVo DVR, the applicable third party retains title to and ownership of its software, copyrights and trademarks. Any attempt to disassemble, decompile, create derivative works of, reverse engineer, modify,

sublicense, distribute or use for other purposes either the TiVo DVR or software of this system is strictly prohibited, except as expressly set forth in Section 17 (“Open Source Software”).

17 Open Source Software. Certain components of the TiVo software are subject to the GNU General Public License or other so-called open source licenses (“Open-Source Software”). Open Source Software is not subject to the restrictions in the last sentence of Section 16 (“Title to Software and Intellectual Property”), and is subject to the GNU General Public License (“GPL”) or other license terms, as applicable. In compliance with the terms of the GPL, TiVo makes its modifications to Open Source Software that TiVo uses, modifies and distributes pursuant to the GPL available to the public in source code form at www.tivo.com/source. You are free to use, modify and distribute Open Source Software that is subject to the GPL so long as you comply with the terms of the GPL (available in the product manual or at www.gnu.org/copyleft/gpl.html).

18 Indemnity. YOU AGREE TO DEFEND, INDEMNIFY AND HOLD HARMLESS TIVO FROM AND AGAINST ANY AND ALL CLAIMS, PROCEEDINGS, INJURIES, LIABILITIES, LOSSES, COSTS AND EXPENSES (INCLUDING REASONABLE ATTORNEYS’ FEES), INCLUDING, BUT NOT LIMITED TO, CLAIMS ALLEGING NEGLIGENCE, COPYRIGHT INFRINGEMENT AND/OR TRADEMARK INFRINGEMENT AGAINST TIVO OR THE TIVO SERVICE, RELATING TO OR ARISING OUT OF YOUR BREACH OF ANY TERM OF THIS AGREEMENT, YOUR MISUSE OF THE TIVO SERVICE, OR YOUR UNAUTHORIZED MODIFICATION OR ALTERATION OF THE TIVO DVR OR RELATED SOFTWARE (OTHER THAN AS EXPRESSLY SET FORTH IN SECTION 17 (“OPEN SOURCE SOFTWARE”)).

19 Warranty Disclaimer. YOU UNDERSTAND AND AGREE THAT THE TIVO SERVICE IS PROVIDED ON AN “AS IS” AND “AS AVAILABLE” BASIS. TIVO MAKES NO WARRANTY THAT THE TIVO SERVICE WILL MEET YOUR REQUIREMENTS, ALLOW YOU TO RECORD OR VIEW ANY PARTICULAR PROGRAMMING, OR THAT USE OF THE TIVO SERVICE WILL BE UNINTERRUPTED, TIMELY, SECURE, OR ERROR-FREE; NOR DOES TIVO MAKE ANY WARRANTY AS TO THE ACCURACY OR RELIABILITY OF ANY INFORMATION OBTAINED THROUGH THE TIVO SERVICE (INCLUDING THIRD PARTY CONTENT), THAT ANY DEFECTS IN THE TIVO SERVICE WILL BE CORRECTED OR THAT THE TIVO DVR OR TIVO SERVICE WILL BE COMPATIBLE WITH ANY OTHER SPECIFIC HARDWARE OR SERVICE. FURTHER, TIVO DOES NOT WARRANT THAT THE TIVO SERVICE OR THE TIVO SERVERS THAT PROVIDE YOU WITH DATA AND CONTENT ARE FREE OF VIRUSES OR OTHER HARMFUL COMPONENTS. YOU (AND NOT TIVO) ASSUME THE ENTIRE COST OF ALL NECESSARY MAINTENANCE, REPAIR OR CORRECTION. TIVO ALSO ASSUMES NO RESPONSIBILITY, AND SHALL NOT BE LIABLE FOR ANY DAMAGES TO, OR VIRUSES THAT MAY INFECT YOUR TIVO DVR, TIVO SOFTWARE, OR OTHER HARDWARE. TIVO AND ITS SUPPLIERS DISCLAIM ALL WARRANTIES OF ANY KIND, WHETHER EXPRESS, IMPLIED, OR STATUTORY, REGARDING THE TIVO SERVICE OR TIVO SOFTWARE, INCLUDING ANY IMPLIED WARRANTY OF TITLE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON- INFRINGEMENT OF THIRD PARTY RIGHTS. Because some jurisdictions do not permit the exclusion of implied warranties, the last sentence of this section may not apply to you.

20 Limitations of TiVo's Liability. IN NO EVENT WILL TIVO OR ITS SUPPLIERS BE LIABLE TO YOU OR ANY THIRD PARTY FOR ANY LOST PROFITS, USE OF USER INFORMATION, LOSS OF DATA, BUSINESS INTERRUPTION, OR OTHER INDIRECT, CONSEQUENTIAL, SPECIAL, OR INCIDENTAL DAMAGES OF ANY NATURE ARISING FROM OR RELATING TO YOUR USE OF THE TIVO SERVICE OR USE OF THE TIVO SERVICE THROUGH YOUR ACCOUNT BY ANYONE ELSE, EVEN IF TIVO HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO CASE WILL TIVO'S TOTAL CUMULATIVE LIABILITY TO YOU AND ANYONE WHO USES THE TIVO SERVICE THROUGH YOUR ACCOUNT, FOR ANY AND ALL CLAIMS UNDER ANY THEORY OF LAW, EXCEED THE AGGREGATE AMOUNT YOU PAID TO TIVO IN THE PRECEDING TWELVE MONTHS. YOU UNDERSTAND THAT THESE LIMITATIONS OF TIVO'S AND TIVO'S SUPPLIERS' LIABILITY ARE A FUNDAMENTAL PART OF THIS AGREEMENT. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Additionally, this provision is not intended to limit TiVo's liability in the event of TiVo's willful or intentional misconduct. Moreover, if TiVo mistakenly or wrongfully overcharges your account, this section does not limit TiVo's obligation to refund such mistakenly or wrongfully overcharged amounts.

GENERAL

21 Miscellaneous. This Agreement will be governed by the laws of the State of California as such laws apply to agreements between California residents performed entirely within California. The United Nations Convention on Contracts for the International Sale of Goods

does not apply to this Agreement. You and TiVo agree to submit to the exclusive personal jurisdiction of the courts located within the county of Santa Clara, California. If any provision of this Agreement is invalid or unenforceable under applicable law, such provision will be deemed modified to the extent necessary to render such provision valid and enforceable and the other provisions of this Agreement will remain in full force and effect. The official text of this Agreement or notice submitted hereunder shall be in English. In the event of any dispute concerning the construction or meaning of this Agreement, reference shall be made only to this Agreement as written in English and not to any translation into another language. This document represents the entire agreement governing your use of the TiVo service and supersedes any prior or contemporaneous written or oral statements by TiVo or its representatives or resellers. TiVo's failure to enforce any of the terms of this Agreement shall not constitute a waiver or relinquishment of TiVo's right to do so at any time. Sections 9 ("Subscription Fees"), 10 ("Telephone Access and Possible Charges"), 11 ("Payment Authorization"), 12 ("Using the TiVo Service"), 16 ("Title to Software and Intellectual Property"), 17 ("Open Source Software"), 18 ("Indemnity"), 19 ("Warranty Disclaimer"), 20 ("Limitations of TiVo's Liability"), and 21 ("Miscellaneous") shall survive any termination or expiration of this Agreement.

BY USING THE TIVO SERVICE, I REPRESENT THAT I HAVE READ AND UNDERSTOOD THIS ENTIRE AGREEMENT AND I AGREE TO ALL THE TERMS OF THIS AGREEMENT AS STATED ABOVE. TiVo Service Agreement v20030725A

▶▶ HUMAX DVR Limited Warranty

We thank you for having bought this Humax product and hope you will enjoy it for many years. In order to avoid any unnecessary inconvenience on your part, we suggest reading the instruction manual carefully before contacting our customer care department. Also keep the original box and packing material in case you need to return or repair your product.

LIMITED 90 DAYS WARRANTY

Humax warrant the product to be free from defects in materials and workmanship, Humax warrant this product against defects in materials or workmanship for a period of ninety (90) days after the date of original retail purchase. During this period Humax will repair or replace a defective product or part, at its discretion, with a new or refurbished product or part without charge to you. You are responsible for all shipping and insurance charges for the unit to the Authorized Service Center. Upon receipt we will at our option exchange the unit with a new or refurbished unit.

LIMITED ONE (1) YEAR WARRANTY

Humax warrants the product to be free from defects in materials and workmanship, Humax warrants this product against defects in materials or workmanship for a period of one (1) year after the date of original retail purchase. During this period Humax will repair or replace a defective product or part without charge to you, except that if a defective part is replaced after ninety (90) days from the date of the original retail purchase you shall pay labor charges involved in the replacement. You are responsible for all shipping and insurance charges for the unit to the Authorized Service Center. Upon receipt we will at our option exchange the unit with a new or refurbished unit.

CONDITIONS

1. This warranty will be granted only when the original invoice or sales receipt (indicating the date of purchase, product type and dealer's name) is presented together with the defective product. Humax reserves the right to refuse free-of-charge warranty service if the above document cannot be presented or if the information contained in it is incomplete or illegible.
2. This warranty will not reimburse nor cover the damage resulting from adaptations or adjustments which may be made to the product, without the prior written consent of Humax, in order to conform to the national or local technical or safety standards in force in any country other than the ones for which the product was originally designed and manufactured.
3. This warranty will not apply if the type or serial number on the product has been altered, deleted, removed or made illegible.
4. This warranty covers none of the following:
 - Periodic maintenance and repair or replacement of parts due to normal wear and tear;
 - Any adaptation or changes to upgrade the product from its normal purpose as described in the instruction manual, without the prior written consent of Humax;
 - Transport costs, home service transport cost and all risks of transport relating directly or indirectly to the guarantee of the product;
 - Damage resulting from: (i) misuse, including but not limited to (a) failure to use the product for its normal purpose or in accordance with Humax' instructions on the proper use and maintenance, and (b) installation or use of the product in a manner inconsistent with the technical or safety standards in force in the country where it is used and (c) improper or incorrect installation of software; (ii) repair done

by non-authorized service stations or dealers, or the customer himself; (iii) accidents, lightning, water, fire, improper ventilation or any cause beyond the control of Humax; (iv) defects of the system into which this product is incorporated.

5. This warranty does not affect the consumer's statutory rights under applicable national laws in force, nor the consumer's rights against the dealer arising from their sales/purchase contract.

6. THERE ARE NO EXPRESS WARRANTIES OTHER THOSE LISTED AND DESCRIBED ABOVE. AND NO WARRANTIES WHETHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, SHALL APPLY AFTER THE EXPRESS WARRANTY GIVEN BY ANY PERSON, FIRM, OR CORPORATION WITH RESPECT TO THIS PRODUCT SHALL BE BINDING ON Humax.

7. Humax shall not be liable for loss of revenue or profits, failure to realize saving or other benefits, or any other special, incidental or consequential damages caused by the use, misuse or inability to use this product, regardless of the legal theory on which the claim based, and even if Humax has been advised of the possibility of such damages. Nor shall recovery of any kind against Humax be greater in amount than the purchase price of the product sold by Humax and causing the alleged damage. Without limiting the foregoing, purchaser assumes all risk and liability for loss, damage to purchaser and purchaser's property and to others and their property arising out of the use, misuse or inability to use this product sold by Humax not caused directly by the negligence of Humax. This limited warranty shall not extend to anyone other than the original purchaser of this product, is nontransferable and states your exclusive remedy.

Where states do not allow limitation on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, the above limitations or exclusions may not apply to you. In this case this warranty gives specific legal rights and you may also have other rights which vary from state to state.

To obtain warranty service, please contact HUMAX at:

HUMAX USA, Inc.

3601 West Garry Ave
Santa Ana, CA 92704

Tel: (866) 486. 2987

E-mail: Support@HumaxUSA.com

▶▶ FCC Information

This equipment complies with Part 68 of the FCC Rules and the requirements adopted by ACTA. On the back of this equipment is a label that contains a product identifier in the format US:AAAEQ##TXXXX. If requested, this information must be provided to your telephone company.

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.

The REN is used to determine the number of devices that may connect to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of the RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact your local telephone company. For product approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US:AAAEQ##TXXXX. The digits represented by ## are the REN without the decimal point (e.g., 03 is a REN of 0.3). For earlier products, the REN is separately shown on the label.

If your TiVo DIGITAL VIDEO RECORDER causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the proper functioning of your equipment. If they do, you will be notified in advance in order for you to make necessary modifications to maintain uninterrupted service.

If trouble is experienced with this unit, for repair or warranty information, please contact customer service at the address and phone listed below. If the equipment is causing harm to the network, the telephone company may request that you disconnect the equipment until the problem is resolved.

DO NOT DISASSEMBLE THIS EQUIPMENT. It does not contain any user serviceable components.

We recommend the installation of an AC surge arrester in the AC outlet to which this equipment is connected. Telephone companies report that electrical surges, typically lightning transients, are very destructive to customer terminal equipment connected to AC power sources.

HUMAX Co., Ltd.

Humax Building 212-1, Yubang-Dong,
Yongin-Si, Gyeonggi-Do, 449-080

KOREA

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▶▶ Safety Instructions

This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions of which you should be particularly aware. Please read these instructions before operating the equipment and save them for future reference.

1. **Read Instructions**—All the safety and operating instructions should be read and understood before the appliance is operated.
2. **Retain Instructions**—The safety and operating instructions should be retained for future reference.
3. **Heed Warnings**—All warnings on the appliance and in the operating instructions should be followed.
4. **Follow Instructions**—All operating and use instructions should be followed.
5. **Water and Moisture**—The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement or near a swimming pool, etc.
6. **An appliance and cart combination should be moved with care.** Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
7. **Tilt/Stability**—All televisions must comply with recommended international global safety standards for tilt and stability properties of their cabinet design. Do not compromise these design standards by applying excessive pull force to the front, or top, of the cabinet, which could ultimately overturn the product. Also, do not endanger yourself, or children, by placing electronic equipment/toys on top of the cabinet. Such items could unexpectedly fall from the top of the set and cause product damage and/or personal injury.
8. **Ventilation**—The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
9. **Heat**—The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
10. **Power Cord Protection**—Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.
11. **Object and Liquid Entry**—Never push objects of any kind into this product through cabinet slots, as they may touch dangerous voltage points or short the parts, resulting in the risk of fire or electric shock. Never spill liquid of any kind on this product.
12. **Damage Requiring Service**—The appliance should be serviced by qualified service personnel when:
 - A. THE POWER SUPPLY CORD OR PLUG IS DAMAGED OR FRAYED;
 - B. LIQUID HAS SPILLED INTO THE PRODUCT;
 - C. THE PRODUCT HAS BEEN EXPOSED TO RAIN OR WATER;
 - D. THE PRODUCT DOES NOT OPERATE NORMALLY WHEN YOU FOLLOW THE OPERATING INSTRUCTIONS (ADJUST ONLY THOSE CONTROLS THAT ARE DISCUSSED IN THIS GUIDE, AS IMPROPER ADJUSTMENT OF OTHER CONTROLS MAY RESULT IN DAMAGE,

OFTEN REQUIRING EXTENSIVE WORK BY A QUALIFIED TECHNICIAN TO RESTORE THE PRODUCT TO NORMAL PERFORMANCE);

- E. THE PRODUCT HAS BEEN DROPPED OR THE CABINET DAMAGED;
- F. THE PRODUCT EXHIBITS A DISTINCT CHANGE IN PERFORMANCE.

13. Servicing—The user should not attempt service to the appliance beyond that described in the Troubleshooting section of this guide. All other servicing should be referred to qualified service personnel.

14. Cleaning—Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners; use a damp cloth for cleaning. If the product comes in contact with any liquid, unplug the phone line and the power adapter and let the unit dry thoroughly before plugging it back in.

15. Power Source—This product should be operated only from the type of power source indicated on the marking label or in this guide. If you are not sure of the type of power supply to your home, consult your dealer or local power company.

16. Overloaded Power Outlets—do not overload wall outlets and extension cords, as this can result in the risk of fire or electric shock.

17. Electric Shock—To reduce the risk of electric shock, do not disassemble this product. Take it to a qualified service person when service or repair work is required. Opening or removing covers may expose you to dangerous voltage or other risks. Incorrect reassembly can cause electric shock when this product is subsequently used.

18. Telephone Usage—When using your telephone equipment, basic safety precautions should be always followed to reduce the risk of fire, electric shock and injury to persons. To reduce the risk of fire, use only No. 26 AWG or larger telecommunication line cord.

19. Moving—Avoid moving the unit while it is plugged in to avoid accumulative shock and vibration damage to the internal hard disk drive.

20. CAUTION—Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

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Version 2, June 1991

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Gnomovision version 69, Copyright (C) year name of author

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TELEPHONE LINE INTERRUPTION

Periodically, the TiVo Digital Video Recorder dials in to the TiVo service via your telephone line. If you pick up your telephone during the time information is being transferred, you will hear static noise. If you would like to use your telephone while the information is being transferred, you can hang up, wait about 45 seconds, and pick up your telephone again. The DVR will disconnect, and allow you to place your call. You can also interrupt the transfer at any time by temporarily unplugging the phone line from the DVR. If the transfer is interrupted, it will resume at a later time.

INTERACTIVE PROGRAM GUIDE

The interactive program guide (“IPG”) features of this device are covered by the following United States patents: 4,706,121.

MPEG LA

Any use of this product other than consumer personal use in any manner that complies with the MPEG-2 standard for encoding video information for packaged media is expressly prohibited without a license under applicable patents in the MPEG-2 patent portfolio, which license is available from MPEG LA, L.L.C., 250 Steele Street, Suite 300, Denver, Colorado 80206.

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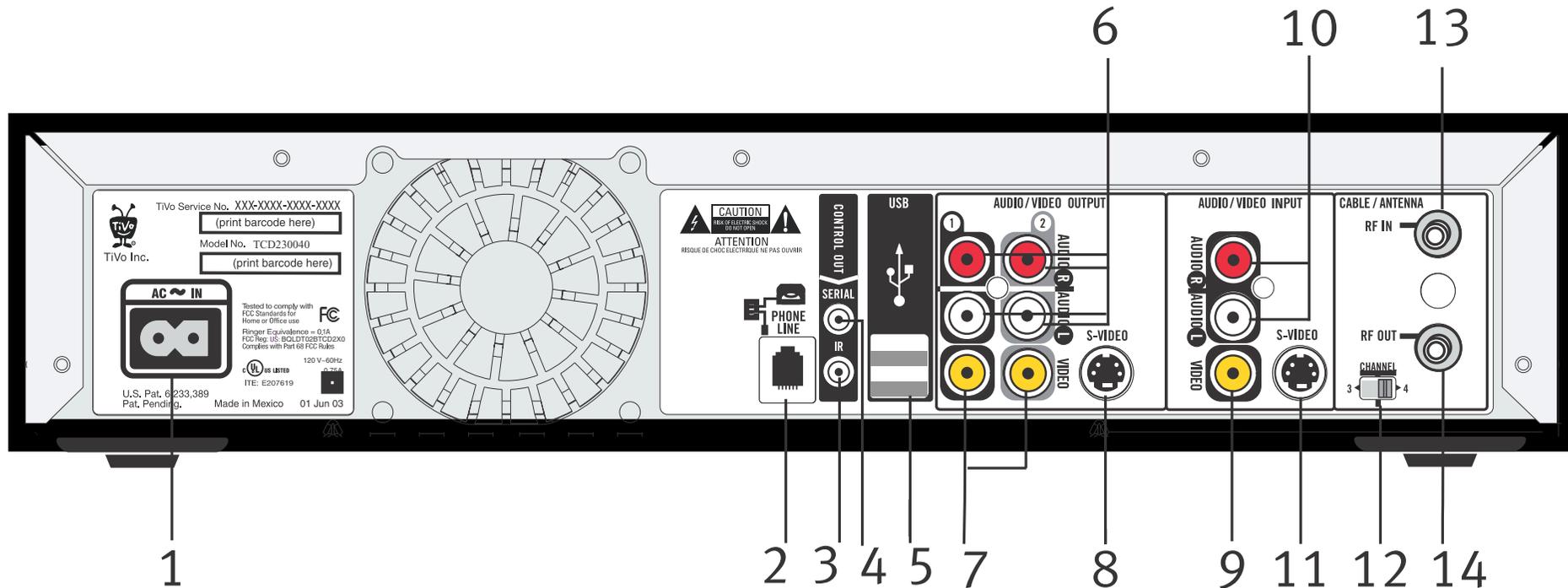
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APPENDIX

A

Back Panel Reference and Specifications

▶▶ Back Panel Reference



1 - AC ~ In. (Connects to A/C power.) The DVR does not use a separate on and off switch; plugging it into the wall socket switches it on.

2 - Phone Jack. (Connects to phone cord.) The DVR uses the phone line to get program information and other data from the TiVo service. If you already have a phone line connected to your cable box, use the provided splitter.

3 - Control Out/IR. (Connects to cable or satellite box; IR stands for *infrared*.) This connection allows the DVR to change channels on your cable or satellite box. The purple end of the IR Control cable plugs into the DVR. The two emitters on the other end of the cable are placed in front of the IR sensor on the cable and/or satellite box.

4 - Control Out/Serial. (Connects to cable or satellite box; not available on all cable or satellite boxes.) This allows the DVR to change channels on a cable or satellite box.

5- USB. (Universal Serial Bus.) For connecting a USB network adapter. See page 101.

6 - Left/Right Audio Outputs. (Connects to TV.) Connect the Left/Right Audio cables (the white and red ones) to these jacks.

7 - Composite Video Outputs. (Connects to TV.) Composite Video provides very good picture quality. It is used with the Left/Right Audio cables (the white and red ones).

8 - S-Video Output. (Connects to TV.) S-Video provides the highest quality picture. For audio with S-Video, use the Left/Right Audio cables (the white and red plugs on the Composite A/V cables) and just ignore the yellow end of the Composite A/V cable.

9 - Composite Video Input. (Connects to cable or satellite box.) Composite Video provides very good picture quality. It is used with the Left/Right Audio cables.

10 - Left/Right Audio Input. (Connects to cable or satellite box.) Connect the Left/Right Audio cables (the white and red ones) to these jacks.

11- S-Video Input. (Connects to cable or satellite box.) For audio with S-Video, use the Left/Right Audio cables (the white and red plugs on the Composite A/V cables) and just ignore the yellow end of the Composite A/V cable.

12 - Channel 3/4 Switch. If you use a Coaxial RF cable to connect the DVR to your TV, you need to set this switch. Check which channel the TV is set to when it receives cable TV. Then set this switch to the same channel (either 3 or 4).

13 - RF In. (Connects to cable box, cable from wall, or antenna.) Connect a Coaxial RF cable from your antenna, cable box, or cable from the wall, to this jack.

14 - RF Out. (Connects to TV.) Use this jack if you are using a Coaxial RF cable to connect the DVR to the TV.



CAUTION: TO PREVENT ELECTRICAL SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, AND FULLY INSERT.

►► Specifications

Video In:	S-Video 4-pin mini DIN Composite Video RCA
Video Out:	S-Video 4-pin mini DIN Composite Video RCA (2)
Audio Line In:	Stereo L/R RCA (1 pair)
Audio Line Out:	Stereo L/R RCA (2 pairs)
RF In:	F-Connector Female
RF Out:	F-Connector Female Channel 3 or 4 switchable
Expansion Port:	USB (2)
Telephone:	RJ-11 female, 2-wire
Control Out:	3.5mm mini jack sockets (2)
Power:	120VAC, 60Hz, 40W
Ambient (external) Operating Temperature:	15C to 35C
Operating Humidity:	5% to 80%
Dimensions:	15" w X 12" d X 3.375" h
Remote Control:	34 Buttons
Storage:	ATA/IDE Hard Drive



Actual recording capacity depends on signal quality and the type of programming being recorded.

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Glossary of Icons



These appear when you press THUMBS UP™ or THUMBS DOWN™. You can give a program up to three THUMBS UP or three THUMBS DOWN.



Ipreview™ icons appear when an option—such as automatically scheduling an upcoming program or watching an additional program segment—is available. Press SELECT or THUMBS UP to choose the option.

TiVo Central, Showcases, or TiVolution Magazine



Indicates a selection that has some special video content.



Select to watch a special preview or visit a Showcase.



Indicates news or a special promotional offer from TiVo.

Save to VCR



Appears as a warning if a remote button is pressed during “Save to VCR.”

To Do List and View Upcoming Episodes

(These icons appear beside programs scheduled to be recorded.)



Program is an individual recording (not part of a Season Pass™ or WishList™). In other places, it means an item has been selected.



Program will be recorded as part of a Season Pass.



Program will be recorded as part of a WishList.

Channel Banner

(These icons appear in the large channel banner.)



(Red with black border) Select to start or stop a recording.



Select to display or turn on Parental Controls.



Select to read new messages.

Now Playing

-  (*Green*) This program will be saved until you delete it.
-  (*Yellow*) In less than one day, this program may be deleted to make room for other recordings you have requested, but only if space is needed.
-  (*Yellow with exclamation mark*) At any time, this program may be deleted to make room for other programs you have requested.
-  (*Red with black border*) This program is currently being recorded or transferred.
-  This program is a TiVo® Suggestion. TiVo Suggestions are recorded only if space is available, and are the first to be deleted



“Plain” folder – contains more than one episode of the same series.



Folder with red dot – for any group that includes a program that is currently recording or transferring.



Folder with blue star – contains one or more programs recorded by a WishList™ search.



Folder with Thumbs Up™ – contains all programs recorded as TiVo Suggestions.



DVR – for a DVR on your network.

TiVo and HUMAX are dedicated to providing you with quality support and customer service. If you have questions or difficulties, we would like to hear from you.

Troubleshooting

Check the Troubleshooting chapter of this guide. It has detailed answers to the most common questions, and solutions for typical troubleshooting issues.

Contact Customer Support

You can find complete Customer Support contact information in the Troubleshooting chapter of this guide.

Online Customer Support

Check the HUMAX support site or the TiVo support site:

HUMAX Customer Support

- Connecting your DVR to your TV & other equipment
- Phone calls and connecting to the TiVo service
- Channel changing and the remote control
- Audio and video

www.humaxusa.com/support

TiVo Customer Support

- Using TiVo service features (finding & recording programs)
- Your channel lineup and channel lists
- Your TiVo service account and billing issues
- Online scheduling and home media features

www.tivo.com/support