DIRECTV and SAMSUNG are dedicated to providing you with quality support and customer service. If you have questions or difficulties, we would like to hear from you.

For questions regarding your DIRECTV® DVR, DIRECTV® programming or your DIRECTV® DVR with TiVo® service, after checking the Troubleshooting chapter of this guide, please contact DIRECTV at 1-800-347-3288.

If your DVR is not working properly even after restarting it, you are having trouble with the remote control or have another technical question, please contact SAMSUNG at 1-800-726-7864.

When you call either SAMSUNG or DIRECTV, you will need to provide the 12 digit number on your DVR's access card, and the make, model number, serial number and 12 digit Receiver ID number of your DVR, located on a label on the back of the DVR and on the System Information screen under Messages & Setup.





DIRECTY DVR User's Guide

WEB SITES

You will find all of the most up-to-date information about DIRECTV products and services at the DIRECTV web site, DIRECTV.com. The SAMSUNG web site at www.samsungusa.com has links to a wide variety of products and information.

SAMSUNG

Hints & Shortcuts

Press the **DIRECTV button** once to go to DIRECTV Central, or twice to go to the Now Playing List.

LIST brings you directly to the Now Playing List.

Press **FWD** (fast forward) and **BACK** (rewind) up to 3 times for 3 speeds. Press them 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 clear things that aren't part of the program you're watching (like the channel banner and status bar).

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

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

Inserting Batteries in 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.

Press **GUIDE** to see the DIRECTV Advanced 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.

EXIT clears all menus and goes to the last channel or recorded program you were watching. If you press it while you are watching a program, it clears things that aren't part of the program (like the channel banner and status bar).

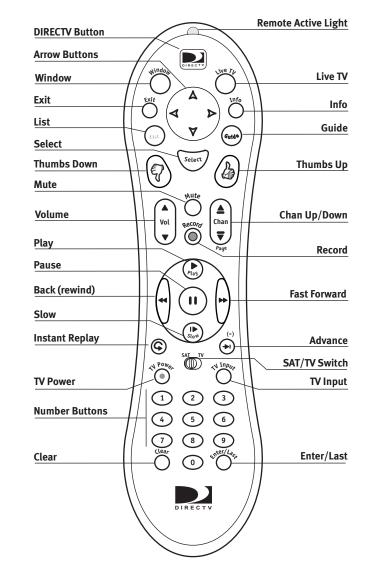
ADVANCE moves you quickly through saved programming. Press it while you are fast forwarding or rewinding to jump to the next tick mark on the status bar.

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 you program your remote control (as explained in chapter seven), the **TV POWER, VOLUME, MUTE**, and **TV INPUT** buttons can control your TV and A/V equipment.

The SAT/TV Switch sets the remote control to send channel changing signals to either the DVR (SAT) or the television (TV). Many of the remote control's buttons are disabled when this switch is set to TV (for example, SLOW, FAST FORWARD and PAUSE), so if your remote control doesn't seem to be working, check to make sure this switch is set to SAT.

The WINDOW button is for future use.



The On-Screen Menus and the Remote Control

Arrow Buttons



To use the DIRECTV[®] 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 a previous screen.

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 Keyword WishList.



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 to more items an entire page at a time.







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Welcome to the DIRECTV family!

DIRECTV offers you more Hollywood hits, classic movies, family programming, news, and a wide range of exciting sports action. Plus access to 36 commercial-free audio channels. And that's only the beginning.

More Choices than ever before.

With access to over 225 channels, it's easy to see why DIRECTV has become the entertainment choice for millions of American families. And it's all digitally delivered, so you get digital-quality sound and razor-sharp picture every time you turn on your TV!

DIRECTV® Pay Per View movies and events.

With DIRECTV service, the main event is at your house! You'll have access to great movies, exclusive special live sports, concerts and special events. DIRECTV offers up to 55 different pay per view choices a day. There's no need to order by phone. Just use your remote control to give all your friends and family a front-row seat! (Phone connection required.)

DIRECTV knows sports.

DIRECTV offers access to more sports than you ever thought possible. So you can follow your favorite team across the country with our pro & college sports subscriptions. DIRECTV will take you to the arena for the best sports has to offer. Tune to Channel 212 for DIRECTV SPORTS THIS WEEK $^{\textcircled{\$}}$.

With DIRECTV you're in control.

Your new DIRECTV® DVR brings you the hottest new entertainment technology, including the DIRECTV Advanced Program GuideTM, with up to 14 days of program listings, and the ability to pause and replay live TV. Plus, with Pick Programs to Record and the other incredibly powerful and easy to use features of your DIRECTV DVR service, you will have a Season PassTM to all your favorite programming.



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>> Using this Guide

This *User's Guide* describes how to connect your new DIRECTV[®] DVR to your television and other audio/video equipment. It also provides valuable information about the features and use of the DVR.

Glossary of Icons. The inside front cover of this guide provides an introduction to the remote control. The inside back cover has a "Glossary of Icons" that explains many of the graphic symbols you will see when using your DVR.

Useful Terms. Many of the technical terms you may encounter in this guide are explained in the "Useful Terms" section beginning on page 5.

Screen Paths. Notes at the bottom of some pages show you how to find the screen being discussed on that page. For example, page 70 describes the "Record by Time or Channel" feature. At the bottom of the page is the note "DIRECTV Central ▶ Pick Programs to Record ▶ Record by Time/Channel" This note means you can find Record by Time/Channel, the screen being discussed, by going to DIRECTV Central (press the DIRECTV button on your remote control) and selecting Pick Programs to Record, then Record by Time/Channel.

DIRECTV[®] DVR with TiVo[®] Service. The recording service provided through the DIRECTV[®] DVR.

DIRECTY DVR. Refers collectively to the satellite antenna receiver and the DVR hardware.

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



The TiVo Logo. As you use your DIRECTV DVR, you'll see the TiVo logo in places like the Now Playing List and TiVo Suggestions. Your new DVR incorporates the latest DVR (Digital Video Recorder) technology from TiVo. This means you have access to exclusive TiVo features such as WishList^{IM} searches, Season Pass^{IM} recordings, Thumbs Up^{IM} and Thumbs Down^{IM}, TiVo Suggestions, and TiVolution Magazine[®], all in one seamlessly integrated product that will change the way *you* watch television.

Before you install the DVR, mount the satellite dish antenna.

Professional installation is highly recommended. Your dish must be mounted, with cables running to the room where your DVR will be installed, before you can begin the DVR installation as described in this guide. Dual LNB dish antenna connection required for full functionality.

Getting Started

After a satellite dish antenna has been installed, you're ready to start using this guide:

- 1. Connect the DVR according to the proper setup for your Audio/Video equipment. (See chapter 1, "Connecting.")
- 2. Complete Guided Setup to point your satellite dish antenna and activate the DIRECTV® DVR with TiVo® service following the instructions in chapter 2, "Guided Setup."

Start using your DIRECTV DVR. It's easy! Learn the basics by browsing the back of the *Start Here* card. Take the five tours in chapter 3 of this *User's Guide* for an interactive way to learn about the DVR's powerful features. Chapters 4, 5, 6, and 7 describe the DVR service in detail. Read through them to become familiar with the service. Chapter 8 provides a comprehensive troubleshooting guide in case you have questions.

Connecting

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Jacks are places where cables can be connected.



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.

Overview

TV used to be simple: no color, no digital video, no stereo sound, no digital audio, no choices. All you needed was an antenna and a TV. The antenna captured pictures and sounds. A wire connected the antenna to the TV to transfer pictures and sounds.

As televisions have acquired more features, and new devices have been created to work with them, it may seem that everything has become more complex. Fortunately, the fundamentals haven't changed. You may have a VCR, a DVD player and a game system, in addition to a satellite dish antenna. However, one thing has remained the same: what you need to do is get the pictures and sounds from their source (the satellite dish antenna) to your TV.

You use cables to make a path over which the pictures and sounds travel from your satellite dish antenna to your TV.

On the back of your equipment you will find several jacks. Some are labeled IN and some are labeled OUT. The pictures and sound enter a piece of equipment through a cable connected to an IN jack and leave through a cable connected to an OUT jack.

When you connect your DIRECTV[®] DVR to your television and other audio/video equipment, you are simply creating a path that starts at the satellite dish antenna and goes in (through IN jacks) and out (through OUT jacks) of your equipment until it reaches your TV.

▶▶ Before You Begin

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

Connecting to a Phone Line

You will need access to a standard analog phone jack. Your DVR needs to be connected to a phone line to communicate with DIRECTV. The DVR occasionally makes a brief phone call to get updates to the DVR service and Showcases, and for pay per view functionality.

You do not need to install a new telephone jack or phone number for the DVR to work; it can detect when your phone line is in use and will only make calls when the phone line is available. If you don't have a phone jack nearby, you can use the 25 foot phone cord that ships with the DVR. If your phone jack is being used for a phone, you can use the provided splitter to connect both the phone and the DVR to the same phone jack.

Connecting a Dual LNB or a Multi-Satellite Dish Antenna

Your DVR comes equipped with two jacks for satellite input. While the DVR will work if connected to only one satellite input, connecting both allows you to record from two channels at the same time. All of the connection examples in this chapter give instructions for configuring the DVR with connections to both satellite input jacks.

Both a Round Dual LNB dish antenna and an Oval 2 or 3 satellite dish antenna connect to at least two coaxial RF cables. To connect both of your DVR's satellite input jacks, you must have two coaxial RF cables coming from your satellite dish antenna to the room where the DVR will be installed.

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.

Digital PBX phone systems allow many phones to share a single telephone number and are usually used in hotels and office buildings. If you are installing the DVR in your home, it is very unlikely that you are using a digital PBX phone system.

If you have a Single LNB satellite dish antenna, you will need to upgrade to a Dual LNB for full functionality. Contact your satellite dish antenna manufacturer for more information about upgrading.

Your DIRECTV DVR is multi-satellite capable if used with a DIRECTV

Multi-Satellite Dish Antenna,
not included.

For information on how to switch between watching antenna or cable channels and watching DIRECTV channels, see the connection example in Chapter 2 that is most appropriate to your configuration.

The DVR does not have an on/off switch. To turn the DVR on, plug it in. The DVR, like a clock or a refrigerator, is designed for constant use and does not need to be turned off. If you must turn it off—for example, to move it—simply unplug it. (The DVR does have an optional standby mode, explained on page 55.)

Be sure to read the safety instructions on page 148.

If you currently own a Dual LNB satellite dish antenna that is already connected to two TVs, you can purchase a multiswitch (described on page 6) that will allow you to connect two cables to your new DVR as well as one to an existing receiver for your second TV.

■ <u>Using an Antenna or Cable Connection, in Addition to DIRECTV® Programming</u> If you have an antenna or cable connection in addition to your satellite dish antenna, you can watch antenna or cable channels while recording DIRECTV® channels. However, recording and other features (such as parental controls, purchasing pay per view programs, viewing on-screen menus, or pausing live TV), do not work on cable or antenna channels.

► Caring for your DIRECTV DVR

Do not drop. Your new DVR contains a hard disk drive that is constantly in motion; it may be damaged if the DVR falls or is dropped. Place the DVR in a stable location.

Unplug before moving. To prevent damage to sensitive components such as the hard disk drive, always unplug your DVR and then wait a moment for the hard disk to stop spinning before moving it.

Do not stack. Your DVR is NOT designed to carry the weight of other consumer components such as VCRs, DVD players, or A/V receivers.

Flat, hard surface. The DVR should rest on a flat, hard surface only. Do not operate it on a carpet or other padded surface, as this can inhibit proper ventilation and cause the unit to overheat.

Use a surge protector. Like all electronics equipment, your DVR can be damaged by fluctuations in your power supply. Purchasing a surge protector is highly recommended. If you purchase a surge protector that allows you to plug in both your DVR's power and your telephone cord, you may prevent damage to the parts of your DVR that are connected to your phone line as well!

>> Useful Terms

If you're not an audio/video wizard, you may find yourself stumbling over some of the names, features and functions of various pieces of equipment. Here's a quick reference to help you understand some of the terms you may encounter during installation.

► Satellite Dish Antennas—Types and Terms

Round Single Satellite Dish Antenna, Oval 2 Satellite Dish Antenna, and Oval 3 Satellite Dish Antenna: The names Round single, Oval 2, and Oval 3 satellite dish antennas refer to both the most common shape of the dish and the number of satellites from which a dish can receive information. To determine what type of dish you have, look at the arm extending out from the dish. At the end of this arm are one or more "fingers" ending in mushroom shaped parts pointing back at the dish. A single satellite dish antenna has one of these "fingers" pointing back at the dish, a 2 satellite dish antenna has two, and a 3 satellite dish antenna has three. If you own a 2 or 3 satellite dish antenna, your DVR will not work properly unless you have connected a multiswitch with at least four inputs and two outputs. For a definition of a multiswitch, see page 6.

Single LNB and Dual LNB Satellite Dish Antennas: Single LNB and Dual LNB refer to the number of independent signals a dish can send to your audio/video equipment. A Single LNB sends one signal and has one jack, or connector, inside the arm extending from the dish. A Dual LNB sends two signals and hpas two jacks. The easiest way to determine what type of dish you have is to consult the documentation that came with the dish. Disassembling the dish to determine its type is not recommended.

Satellite Receiver: A satellite receiver does what its name suggests and more. It "receives" the signal from your satellite dish antenna, then translates it into a signal your TV can understand, then sends it to the TV. Your DIRECTV[®] DVR has a built-in satellite receiver.



Round Single satellite dish antenna



Oval 2 satellite dish antenna



Oval 3 satellite dish antenna







Dual LNB (Single Satellite)









Dual Tuner: A tuner picks one channel out of all of your available channels. This allows you to view a single channel and to change channels. "Dual tuner" means your DIRECTV DVR has two tuners. It can pick out two channels at once, allowing you to record programs on two channels at the same time.

Multiswitch: A multiswitch lets you use the signal from one satellite dish antenna for more than two TVs. If you currently own a Dual LNB dish that is connected to two televisions, a multiswitch will allow you to connect two cables to your new DVR as well as one to a satellite receiver on your second television. If you own a 2 or 3 satellite dish antenna, your DVR will not work unless you have connected a multiswitch with at least four inputs and two outputs.

Access Card: Your access card contains information about your DIRECTV programming subscription. It must be properly inserted and activated for your DVR to work.

Transponder: A transponder is a piece of radio equipment on a satellite. The DIRECTV transponders receive information from DIRECTV and rebroadcast it to your satellite dish antenna. Each transponder rebroadcasts a different set of channels. If the DVR does not receive a signal for an individual transponder, it will not be able to show that transponder's channels. Each satellite may have a different number of transponders on it.

Cables and Connections

Composite Video and Left/Right (L/R) Audio Cables: Composite Video and Left/Right (L/R) Audio cables may appear to be just one cable, but are actually three separate cables. The yellow composite cable transfers video. The white and red L/R Audio cables, when used together, transfer stereo sound. These three cables can be used together or separately. For example, you could use an S-Video cable to transfer video and use white and red L/R Audio cables to transfer audio. In this case, you would not need to use the yellow Composite Video cable at all.

Coaxial RF Cable: A coaxial RF cable transfers both audio and video on a single cable.

Optical (or Digital) Audio Cable: An optical (or digital) audio cable transfers audio only. This cable transfers audio at the highest possible quality from your DIRECTV DVR to an A/V receiver. If you have a home theater, own an A/V receiver capable of receiving Dolby[®] Digital audio, and wish to use Dolby[®] Digital audio, then you must use this cable. Not all A/V receivers with optical audio inputs are capable of receiving Dolby[®] Digital audio. An optical audio cable is not included with the DVR.

BNC Cable: A BNC Cable is similar to a coaxial RF cable and transfers both audio and video. This type of cable is not included with your DVR. However, you may already be using a BNC cable in an existing connection to your TV. If so, you can purchase an adapter that will allow you to connect BNC cables to the RF In or RF Out jacks on your DVR.

Telephone Line Splitter: The included telephone line splitter allows you to plug both a telephone and your DVR into a single telephone wall jack.

► Video, Audio, and Electronics Equipment and Terms

Switch Box: A switch box is a small box that allows you to connect multiple devices to your TV, even if your TV does not have enough input jacks to connect them all directly. It allows you to switch easily between viewing DIRECTV channels, viewing video from your DVD player, or running your game system. Switch boxes are inexpensive and can be purchased at electronics stores.

A/V Receiver: An A/V receiver is similar to a switch box but is more sophisticated. It may offer additional features such as remote control or Dolby Digital audio capabilities. An A/V receiver allows you to connect multiple devices to your TV, even if your TV does not have enough input jacks to connect them all directly. It allows you to switch easily









between viewing DIRECTV channels, viewing video from your DVD player, or running your game system by changing the input source.

Dolby[®] **Digital Audio**: Dolby[®] Digital audio is recorded on six separate channels, each of which can be heard on one of six separate speakers. To use Dolby[®] Digital audio, you must use an optical audio cable to connect your DIRECTV DVR to an A/V receiver capable of supporting Dolby[®] Digital audio. Not all A/V receivers with optical audio inputs are capable of receiving Dolby[®] Digital audio. You must also set your DVR to record using Dolby[®] Digital audio. For more information, see page 96.

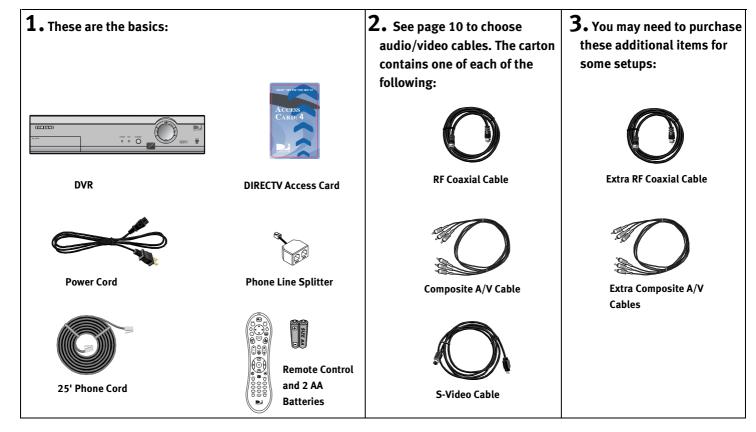
Dolby[®] **Surround Sound**: Dolby[®] Surround Sound audio is recorded on two channels, which can be heard on two or more (usually five) speakers. To use Dolby[®] Surround Sound audio, you must have an A/V receiver capable of supporting Dolby[®] Surround Sound audio connected to your DVR using either L/R Audio cables or an optical audio cable.

Digital PBX Phone System: Digital PBX phone systems allow many phones to share a single telephone number and are usually used in hotels and office buildings. If you are installing the DVR in your home, it is very unlikely that you are using a digital PBX phone system. Do not connect your DVR to a digital PBX phone system. Doing so may permanently damage your DVR's modem and will void your warranty.

Surge Protector: Surge protectors are devices that protect electronic equipment from power fluctuations. Like all electronics equipment, your DVR can be damaged by fluctuations in your line voltage. Purchasing a surge protector is highly recommended. If you purchase a surge protector that allows you to plug in both your DVR's power and your telephone cord, you may prevent damage to the parts of your DVR that are connected to your phone line as well! Surge protectors can be purchased at hardware, electronics, or general merchandise stores.

>> Cables and Accessories

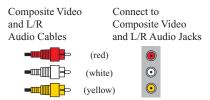
In addition to your television and the equipment that shipped with this DIRECTV DVR (shown below), you'll need a satellite dish antenna—which should be properly mounted before you connect the DVR—and a standard, analog phone line (see page 3 for details).



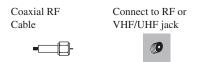
>> Setup Examples

Audio and Video Cables

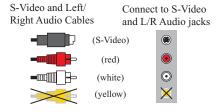
Composite. Many TVs and VCRs have connectors for Composite A/V cables. If your equipment has them, you can use the Composite A/V cables for both audio and video.



RF Coaxial. Some TVs only have connectors for RF Coaxial cable. If your TV only has an RF connector, use the RF Coaxial cable for both audio and video and see Example 4 on page 18 (or see Example 1 on see page 12 if you also have a VCR):



S-Video. If you have S-Video connectors on your equipment, and want the highest quality video, use the included S-Video cable. The S-Video cable carries a video signal. You can connect the red and white ends of a Composite A/V cable to carry the audio signal.



If your TV has only one audio connector, connect just the white and yellow ends of the Composite A/V cable (don't connect the red end).

Ordinarily, your DVR produces tones to indicate when certain buttons on the remote control are pressed or to indicate signal strength when you are positioning your dish. If you use Digital Audio Out, you will not hear these tones.

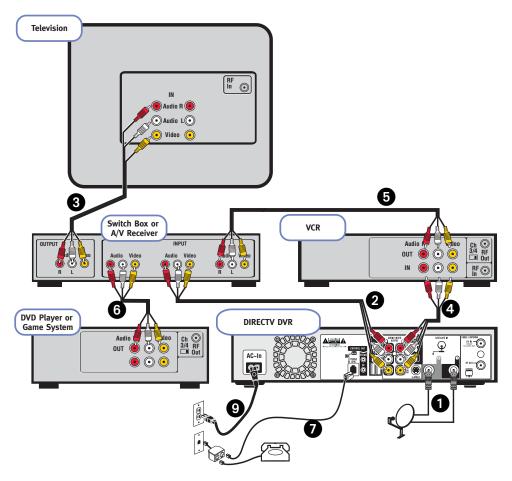
Setup Examples

This chapter provides detailed examples showing how to connect the DIRECTV DVR to your existing audio/video system. Choose the example closest to your configuration and follow the steps in that section.

- Example 1: DVR with VCR, DVD and/or game system, and switch box or A/V receiver (see page 12)
- **Example 2:** DVR with VCR (see page 14)
- **Example 3:** DVR only (see page 16)
- Example 4: DVR with VCR, antenna or cable, multiple input TV (see page 18)
- **Example 5:** DVR with VCR, antenna or cable, single input TV (see page 20)

If you have trouble or if your configuration isn't covered by one of these examples, see the "Back Panel Reference" on page 152.

► Example 1: VCR, DVD and/or Game System, and Switch Box or A/V Receiver



Note: Audio/Video cables shown are examples only. Use the best connections available on your equipment.

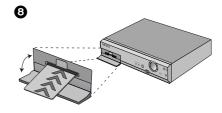
Example 1: VCR, DVD and/or Game System, and Switch Box or A/V Receiver

- Connect the coaxial RF cables from your satellite dish antenna to the DIRECTV DVR. Connect one coaxial RF cable that comes from your satellite dish antenna to the jack labeled "Satellite In 1" on the DVR. If you have a second coaxial RF cable from your satellite dish antenna, connect it to the jack labeled "Satellite In 2."
- 2 Connect the DVR's output to the switch box or A/V receiver's input.
- **3** Connect your switch box or A/V receiver's output to your TV's input.
- **4** Connect the DVR's output to your VCR's input. This will allow you to save programs recorded on your DIRECTV DVR to videotape.
- **6** Connect your VCR's output to your switch box or A/V receiver's input.
- **6** Connect your DVD player and/or game system's output to your switch box or A/V receiver's input.
- **7** Connect the phone line. (For more about the phone connection, see page 3.)
- (3) Insert the Access Card that came with your DVR. Open the card door on the DVR's front panel. Insert the card into the slot in the direction indicated on the card. Stop when the card makes contact with the back of the slot, then you can completely close the card door. To watch DIRECTV channels, you must insert the card correctly and activate it (activation is covered in the next chapter).
- **9** Plug in all power cords. After you see the Welcome screen, skip to "Guided Setup" on page 23. If you do not see the Welcome screen, see page 119.

To switch between watching
DIRECTV programming and
watching video from your VCR, DVD or
game system:

- With a switch box, press the buttons on your switch box
- With an A/V receiver, use the "Input," or "Source" button on the receiver or its remote control.

If you are having trouble changing the video source, refer to the instructions that came with the A/V receiver or switch box.

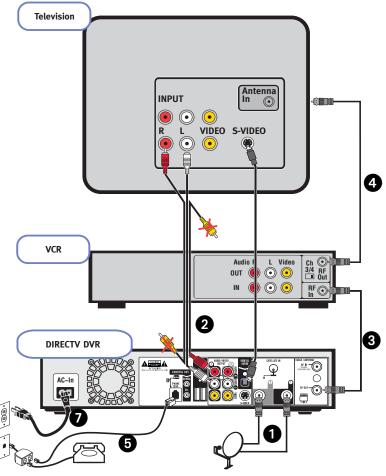


Chapter 1

To switch between watching your VCR and watching video from your DVR, you will need to use the "Input," "Source," or "TV/Video" button on your TV or TV's remote control to change the video source. Some TVs also have a "Menu" button that allows you to change the video source using an on-screen menu.

If you have trouble changing the video source refer to the instructions that came with your TV.

Example 2: DVR with VCR



Note: Audio/Video cables shown are examples only. Use the best connections available on your equipment.

Example 2: DVR with VCR

• Connect the coaxial RF cables from your satellite dish antenna to the DIRECTV DVR. Connect one coaxial RF cable that comes from your satellite dish antenna to the jack labeled "Satellite In 1" on the DVR. If you have a second coaxial RF cable from your satellite dish antenna, connect it to the jack labeled "Satellite In 2."

② Connect the DVR to your TV. Look at the back of your TV and see what types of jacks are available. Connect the DVR's output to the TV's input using the best connection available. The example in the diagram shows a composite cable connected for audio and an S-Video cable connected for video. The connection can also be made using only a RF coaxial cable, or using only a composite cable.

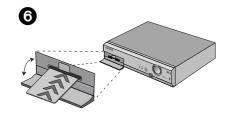
3 Connect the DVR to your VCR. Connecting the DVR to your VCR will allow you to save programs recorded on your DIRECTV DVR to videotape. The example in the diagram shows an RF cable running from the DVR's output to the VCR's input.

4 Connect your VCR's output to your TV's input. This will allow you to watch videotapes. The example in the diagram shows an RF cable running from the VCR's output to the TV's input.

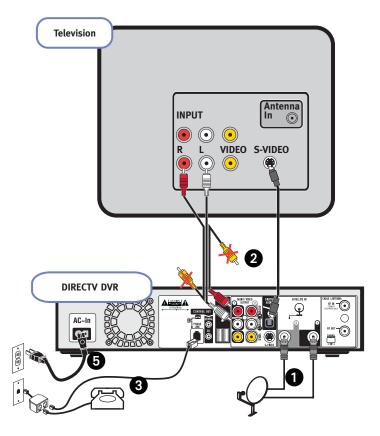
6 Connect the phone line. (For more about the phone connection, see page 3.)

6 Insert the Access Card that came with your DVR. Open the card door on the DVR's front panel. Insert the card into the slot in the direction indicated on the card. Stop when the card makes contact with the back of the slot, then you can completely close the card door. To watch DIRECTV channels, you must insert the card correctly and activate it (activation is covered in the next chapter).

Plug in all power cords. After you see the Welcome screen, skip to "Guided Setup" on page 23. If you do not see the Welcome screen, see page 119.

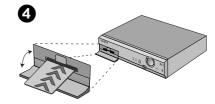


Example 3: DVR Only



► Example 3: DVR Only

- Connect the coaxial RF cables from your satellite dish antenna to the DIRECTV DVR. Connect one coaxial RF cable that comes from your satellite dish antenna to the jack labeled "Satellite In 1" on the DVR. If you have a second coaxial RF cable from your satellite dish antenna, connect it to the jack labeled "Satellite In 2."
- ② Connect the DVR to your TV. Look at the back of your TV and see what types of jacks are available. Connect the DVR's output to the TV's input using the best connection available. The example in the diagram shows a composite cable connected for audio and an S-Video cable connected for video. The connection can also be made using only a RF coaxial cable, or using only a composite cable.
- 3 Connect the phone line. (For more about the phone connection, see page 3.)
- 4 Insert the Access Card that came with your DVR. Open the card door on the DVR's front panel. Insert the card into the slot in the direction indicated on the card. Stop when the card makes contact with the back of the slot, then you can completely close the card door. To watch DIRECTV channels, you must insert the card correctly and activate it (activation is covered in the next chapter).
- **6** Plug in all power cords. After you see the Welcome screen, skip to "Guided Setup" on page 23. If you do not see the Welcome screen, see page 119.

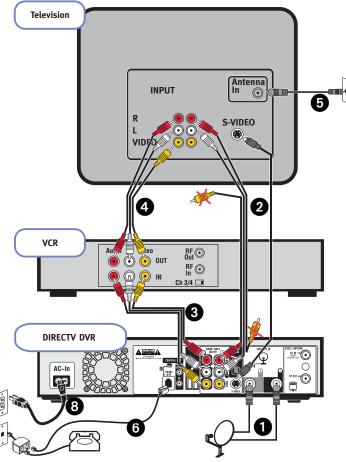


To switch between watching
DIRECTV channels and antenna/
cable channels, or tapes on your VCR, use
the "Input," "Source," or "TV/Video"
button on your TV's remote to change the
video source. Some TVs have a "Menu"
button and an on-screen menu that lets
you change the video source.

You can watch an antenna or cable channel while recording a DIRECTV channel. You will NOT be able use DVR functions on antenna or cable channels. You will also need to use your TV's remote control to change antenna/cable channels.

If you are having trouble changing the video source, refer to the instructions that came with your TV.

Example 4: DVR, VCR, Antenna or Cable, and Multiple Input TV



Note: Audio/Video cables shown are examples only. Use the best connections available on your equipment.

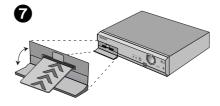
Example 4: DVR, VCR, Antenna or Cable, and Multiple Input TV

If your TV has both coaxial RF and composite video inputs, follow this connection example to connect your antenna or cable to your TV. You will NOT be able to use DIRECTV DVR functions while watching antenna or cable channels, even if you connect your antenna or cable directly to your DVR.

- Connect the coaxial RF cables from your satellite dish antenna to the DVR. Connect one coaxial RF cable that comes from your satellite dish antenna to the jack labeled "Satellite In 1" on the DVR. If you have a second coaxial RF cable from your satellite dish antenna, connect it to the jack labeled "Satellite In 2."
- 2 Connect the DVR to your TV.
- **3** Connect the DVR to your VCR. Connecting the DVR to your VCR will allow you to save programs recorded on your DIRECTV DVR to videotape.
- **4** Connect your VCR's output to your TV's input. This allows you to watch videotapes.
- **6** Connect your antenna or cable to the CABLE/ANTENNA RF In jack on your TV.
- **6** Connect the phone line. (For more about the phone connection, see page 3.)
- nsert the Access Card that came with your DVR. Open the card door on the DVR's front panel. Insert the card into the slot in the direction indicated on the card. Stop when the card makes contact with the back of the slot, then you can completely close the card door. To watch DIRECTV® channels, you must insert the card correctly and activate it (activation is covered in the next chapter).
- **3** Plug in all power cords. After you see the Welcome screen, skip to "Guided Setup" on page 23. If you do not see the Welcome screen, see page 119.

"Multiple input" means the TV has multiple input plugs for A/V connectors.

Steps ②, ③, and ④ are shown using composite and s-video cables. You can make these connections with other cables, as explained on page 10. Your DIRECTV DVR comes with one composite and one s-video cable. To complete the setup example as shown, you will need to use cables that came with your VCR, or purchase additional cables.

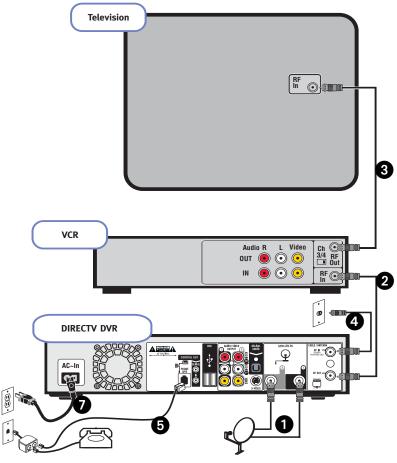


To switch between watching
DIRECTV channels and watching
antenna/cable channels, or watching
tapes on your VCR, use the "Input,"
"Source," or "TV/Video" button on your
TV's remote control to change the video
source. Some TVs have a "Menu" button
that allows you to change the video
source with an on-screen menu.

You can watch an antenna or cable channel while recording a DIRECTV channel. You will NOT be able use DVR functions on antenna or cable channels. You will also need to use your TV's remote control to change antenna/cable channels.

If you are having trouble changing the video source, refer to the instructions that came with your TV.

► Example 5: DVR with VCR, Antenna or Cable, and Single Input TV



Note: Audio/Video cables shown are examples only. Use the best connections available on your equipment.

Example 5: DVR with VCR, Antenna or Cable, and Single Input TV

If your TV has composite video inputs, use the example on page 18. You will NOT be able to use DIRECTV Receiver functions while watching antenna or cable channels.

① Connect the coaxial RF cables from your satellite dish antenna to the DVR. Connect one coaxial RF cable that comes from your satellite dish antenna to the jack labeled "Satellite In 1" on the DVR. If you have a second coaxial RF cable from your satellite dish antenna, connect it to the jack labeled "Satellite In 2."

2 Use coaxial RF cable to connect the DVR's output to your VCR's input. Be sure to select an output of channel 3 or 4 using the small switch on the back of the DVR. You will then need to set your VCR's output to the same channel (3 or 4), and tune your TV to that same channel (3 or 4), to receive a signal.

3 Use coaxial RF cable to connect your VCR's output to your TV's input. If your VCR is already connected to your TV, continue to Step D. Be sure to set your VCR's output to the same channel (3 or 4) that you set on your DVR.

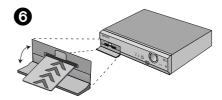
4 Connect your antenna or cable to the RF In jack on the back of the DVR.

6 Connect the phone line. (For more about the phone connection, see page 3.)

6 Insert the Access Card that came with your DVR. Open the card door on the DVR's front panel. Insert the card into the slot in the direction indicated on the card. Stop when the card makes contact with the back of the slot, then you can completely close the card door. To watch DIRECTV channels, you must insert the card correctly and activate it (activation is covered in the next chapter).

Plug in all power cords. After you see the Welcome screen, skip to "Guided Setup" on page 23. If you do not see the Welcome screen, see page 119.

If you have a DVD player or game system in addition to your TV, VCR and DIRECTV DVR, you may need to use a switch box or an A/V receiver. A switch box or A/V receiver will allow you to connect all of your devices to your TV, even if your TV does not have enough input jacks to connect them all directly. For more information about these devices, see "Useful Terms," on page 5.



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Guided Setup

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Satellite Dish Guided Setup is used to test signal strength, position the satellite dish antenna and configure the DVR for use with a multiswitch or new multi-satellite dish antenna.

If you have connected your television or audio/visual equipment only to the DVR's digital audio output, you will not hear any audio during Setup, or at any time while you are navigating through on-screen menus.



→ Overview

Now that you have finished connecting your DIRECTV[®] DVR, you are ready to begin Guided Setup. When you first plug in the DVR, screens appear which display its progress as it starts up. After a few minutes, you will see the Welcome screen, indicating that you are ready to begin Guided Setup.

During Guided Setup, you will point your satellite dish antenna (if you haven't already), activate your DIRECTV[®] programming and DVR service, and set up your DVR to access service updates by phone. Guided Setup includes on-screen instructions. If you need additional assistance, this chapter contains detailed directions.

Guided Setup includes three steps. They are described on pages 25-32.

- 1. Satellite Dish Guided Setup
- 2. Activating services
- 3. Phone Setup

Using the Remote Control

To complete Guided Setup, you use the remote control to move through screens and select menu items that are on your television's display. For an introduction to the remote control, see "Introducing the Remote Control" on the inside front cover of this guide.

Welcome. When you first turn on your DIRECTV DVR, you will see a gray screen that says "Welcome. Powering up," followed by the Welcome screen (shown to the side). Read the screen then press SELECT to move to the next screen.

If you do not see the Welcome screen, see page 119.

Satellite Dish Guided Setup

Satellite Dish Guided Setup tells the DIRECTV DVR what type of satellite dish antenna you are using, so you must go through it at least once, even if you are only replacing a DVR that was already working. Satellite Dish Guided Setup usually takes about five minutes, plus whatever time you may need to position your dish.

Connect Cables. After you press SELECT on the Welcome screen, you'll see a reminder to make sure all cables are properly connected to the DVR and to your TV. Press SELECT when you are ready to continue.

Satellite Dish Type. Choose the type of satellite dish antenna you have installed. If the manual for your satellite dish antenna is available, you can find its type there. Most people should select "Round dish (Single or Dual LNB)." The most important feature of this type of dish is that it receives a signal from one satellite in the sky. Some manufacturers produce a dish that receives a signal from one satellite but is slightly oval in shape. If you have such a dish, choose "Round dish (Single or Dual LNB)."

An oval 2 satellite dish antenna can receive signals from two satellites. An oval 3 satellite dish antenna receives its signal from three satellites. 2 and 3 satellite dish antennas are always Dual LNB. To see the next screen, highlight the type of satellite dish antenna you are using, then press SELECT.



Round dish antenna (Single or Dual LNB)



Oval 2 satellite dish antenna



Oval 3 satellite dish antenna

Notice the progress bar at the bottom of the screen. It can help you keep track of how far along you are in Guided Setup.



Most new satellite dish antennas are Dual LNB. One cable extends from a single LNB dish to a home; two cables extend from a Dual LNB dish to a home (or to a multiswitch).

A transponder is a piece of radio equipment on a satellite. The DIRECTV transponders receive information from DIRECTV and rebroadcast it to your satellite dish antenna. Each transponder rebroadcasts a different set of channels. If the DVR does not receive a signal for an individual transponder, it will not be able to show that transponder's channels. Satellites may have different numbers of transponders.

Satellite Connections. If you connected an RF coaxial cable to each of the DIRECTV DVR "Satellite In" jacks, select "Two cables." If you connected only one RF coaxial cable (to the "Satellite In 1" jack), select "One cable." To be able to record two programs at the same time, you must connect an RF coaxial cable from the satellite dish antenna (or a multiswitch) to both of the "Satellite In" jacks and then choose "Two cables" on this screen.

ZIP Code. Use the number keys on your remote control to enter your ZIP code. The DVR uses your ZIP code to determine the direction your satellite dish antenna should point. If you make a mistake, press LEFT arrow to correct it.

Satellite Dish Direction. Based on your ZIP code and dish type, this screen shows roughly how to position your satellite dish antenna. You will fine tune the position later on during Satellite Dish Guided Setup at the Test Signal Strength screen. Before positioning the dish, be sure the mast (the pole on which the dish is mounted) is straight up and down. For 2 or 3 satellite dish antennas, the screen provides a required tilt in addition to side-to-side (azimuth) and up-down (elevation) information available for round dishes. Professional satellite installers are available in most areas to ensure correct installation. If your satellite system was installed by a professional, the satellite dish antenna direction should be correct. To see the next screen, press SELECT.

Satellite Checklist. The items on this list help ensure you receive a clear satellite signal. To see the next screen, press SELECT when you are satisfied that each item is complete.

Test Signal Strength. You use this screen to check the strength of the signal received by your satellite dish antenna. If you have two cables connected to the Satellite In jacks, it shows you the signal strength for each connection. It lets you see the signal strength from individual transponders one at a time. To be sure you receive all your channels, you should check signal strength on all transponders.

Note: You can check signal strength while you adjust the position of your satellite dish antenna. The signal strength meter on this screen provides audio feedback—a tone that becomes higher pitched as the signal gets stronger. You may be able to turn the volume on your TV up so you can hear the tone while you adjust your satellite dish antenna. Alternatively, you might have someone watching the signal strength meter and then reporting through a cell phone or walkie-talkie to the person who is adjusting the satellite dish antenna.

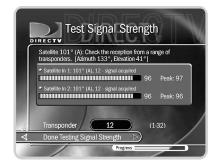
- To change the currently selected transponder, use the UP arrow to highlight the transponder number. Press the RIGHT or LEFT arrow to change the transponder. It is best if each transponder has a signal strength above 60.
- If you have connected both Satellite In jacks, the signal strength for each connection is shown. You should have a good signal on all transponders for both connections.

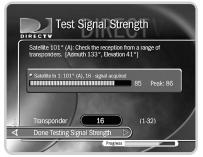
If you have a 2 or 3 satellite dish antenna, you should check the signal strength from transponders on each satellite.

• To change the selected satellite, press the UP arrow until the satellite number is highlighted. Press the RIGHT or LEFT arrow to change the satellite.

When you have finished, select "Done Testing Signal Strength." If you cannot acquire a good satellite signal, see Satellite Signal Troubleshooting on the next page.

Confirming Setup, Satellite Info. At each of the next two screens there is a short wait while the DVR confirms your set-up then gathers a list of channels from the satellite.









If the DVR is low on Program Guide Data, this message at the bottom of the screen tells you how much Program Guide Data it has.



Program Guide Data. Over the first 1 to 2 days, the DIRECTV DVR will gather and process up to two weeks of program data from the DIRECTV satellites. Program data includes program titles, times, channels, program descriptions, and more.

Many of the DVR's features use program data. Although you may be able to use such features immediately, you may not be able to find all the programs you are looking for right away. If programs you are looking for do not appear in the program information, check on them again after the DVR has been set up for a while.

Steps to Activate. This screen explains the next steps of Guided Setup, activation of DIRECTV services. When it appears, press the LIVE TV button on your remote control and go to the next page of this manual.

Satellite Signal Troubleshooting. If you encounter problems during Satellite Dish Guided Setup, you will see an error screen with some suggestions. For example, you may have made a mistake entering your ZIP code or your type of satellite dish antenna.

If you are trying to set up the DVR, choose one of the options that return to part of Satellite Dish Guided Setup. For example, if you received the "Satellite Info Error," choose "Try Again to Acquire Information." You can also repeat Satellite Dish Guided Setup. This allows you to check that your ZIP code and satellite dish antenna type are correct. If you repeat Guided Setup and still receive error notifications, it is possible that your satellite dish antenna is not pointed correctly or the dish or multiswitch is miswired. Check the cabling, or consult a professional satellite system installer.

If you are trying to bypass Satellite Dish Guided Setup—for example, if you are setting up the DVR in a place without a satellite signal—the bottom choice on the error screens allows you to continue without resolving potential problems. While you may receive fewer or no TV channels, you can still watch previously recorded programs.

➤ Activate

Now it's time to activate services for your DIRECTV DVR. Before you make the phone call:

- The DVR should be on, tuned to channel 100, and receiving a signal from the satellite dish antenna. (Channel 100 shows preview programming from DIRECTV.)
- You will need: a valid service address, social security number, and a major credit card (deposit or prepayment may be required). You will also need the 12 digit number on your DIRECTV access card and the make, model, serial number, and 12 digit Receiver ID number of your DVR, found on a label on the back of the DVR and on the System Information screen. (Press the DIRECTV button, then select "Messages & Setup" then "System Information.")
- Important! The access card that came with your DIRECTV DVR must be inserted in the appropriate slot in front of the DVR before you call. Also, be sure to tell your customer care agent that you have a "DIRECTV DVR" and that you also want to activate the DIRECTV® DVR with TiVo® service. Without the DVR service, your DVR will not be able to record programs.

When you are ready, call 1-800-DIRECTV. After you have activated, you can begin Phone Setup, the last step of Guided Setup, by pressing the DIRECTV button.

▶ What does DIRECTY® DVR with TiVo® service provide?

The DVR service provides you with the ability to record programs, create Season Pass recordings and WishList™ searches. It also gives you access to Showcases, TiVo Suggestions, and several convenient ways to find programs to you want to record. Without the DVR service, the unit functions only as a DIRECTV Receiver, without recording capability.

Remember to place the access card in the appropriate slot in front of the DVR. See the setup examples in chapter two for details.