

**When I power on my TV, I see the message “Searching for satellite signal....”**

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

- Try changing channels. If you see the same message on every channel, your video cable may have come loose. Check to make sure all the cable connections on the back of your DVR are secure.
- If multiple channel changes do not work, try restarting your DVR. From DIRECTV Central, choose “Messages & Setup,” then “Restart or Reset System,” then “Restart the Recorder.” Follow the instructions on the screen to restart the DVR.
- In unusual circumstances, stormy weather may interfere with your satellite signal. If this is the case, the signal should return when the weather changes.
- Try replacing your video cables to determine if one of your cables is bad.
- The position of your satellite dish antenna may have changed and you may have to reposition it. Professional installers are available in most areas to position satellite dishes. You can also find positioning information by repeating Satellite Dish Guided Setup, available by pressing the DIRECTV button, then selecting “Messages & Setup” and then “Recorder & Phone Setup.”
- There may be an obstruction (for example, trees) between the satellite dish antenna and the sky. If this is the case, you may have to change the position of your satellite dish antenna.

**The channel I want to watch has the message “This program is not available in your area,” and the image is blacked out.**

- Some sports events may be blacked out in areas that are considered local areas for the events.

**The audio and video are out of sync.**

- Try changing channels.
- Press the PAUSE button on the remote control, then press BACK to move back a frame or two, then press PAUSE again to resume play.
- Press the DIRECTV button; then press the LIVE TV button to return to live television.
- Restart your DVR. From Messages & Setup select “Restart or Reset System,” then “Restart the Recorder.” You will see the Welcome screen and the system will restart within about 45 seconds.

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

- First, press PLAY to be sure the video is not paused.
- Try to restart your DVR. From Messages & Setup select “Restart or Reset System,” then “Restart the Recorder.” You will see the Welcome screen and the system will restart within about 45 seconds.

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

- Any time you have a problem with your system, you can run a system test. To run the test, from Messages & Setup, select “System Test.” The system test checks the DVR's signal, tuning, access card and phone connection.
- You may be able to fix the problem yourself. Try restarting the DVR: From Messages & Setup select “Restart or Reset System,” then “Restart the Recorder.” If you cannot fix the problem, call DIRECTV Customer Care at 1-800-DIRECTV (1-800-347-3288).

## ▶▶ Questions About Pick Programs to Record

**There are very few or no shows listed when I press GUIDE or look for programs to record. I can't find my program in the listings, although I know it's on.**

- Your DVR may not have all its program guide data yet. When you first begin to use your DVR, it begins to download guide information from the DIRECTV satellites. It takes a day or two before complete information (up to 14 days) is available for you to use. If you cannot find a specific show that you know is on, information for that show may not have been downloaded and indexed yet. Wait a few hours and then try to find your program again.
- The guide may be using a channel list that does not include the channel you are looking for. You can change the channels in a channel list, and change the channel list that the guide uses. See page 36.

**What do the different icons on the Now Playing List screen mean?**

- For a description of each icon's meaning, see the Glossary of Icons on the inside back cover of this guide.

**Can I record multiple programs simultaneously?**

- It depends on how many satellite Inputs you have connected to your DVR. With one input, you can only record one program at a time. With two inputs, you can utilize the dual tuner and record 2 programs at the same time, or record one program while watching another.

**Can I recover a recorded program that was deleted?****How can I save a program longer?**

- Unfortunately, there is no way to bring back a program that has been deleted from the Now Playing List. You can, however, choose to save programs longer. From the Now Playing List, highlight the program you wish to save longer and press SELECT to display the Program Information screen. Here you can choose “Save until I delete,” or choose “Save Until...” to set the number of days before a program may be deleted.
- Be sure also that you pay attention to conflicts. You may choose not to approve any conflict that says it will delete a program sooner than you want.
- If the program was a Season Pass, you may have too many Season Pass items. In order to accommodate all of your Season Pass requests, programs may occasionally be saved for as little as one day. Try deleting some Season Pass requests.
- You can archive special recordings to a videotape to preserve them longer. From the Program Information screen, choose “Save to VCR.” See page 66.

**How do I check the upcoming programs that I've scheduled to record?**

- From the DIRECTV Central screen, select “Pick Programs to Record.” From there, select the To Do List.

**How do I cancel a recording?**

- If you change the channel while a program is recording, you will be given the option to cancel the recording.
- To cancel a scheduled recording: In the To Do List, highlight the program and press the “Clear” button.

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

- The DVR 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. 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 still being recorded. You can use the Overtime Scheduler with any kind of program, not just sports. For more information, see page 62.

**Can I schedule to record a program that will not be aired for months?**

- You can create a WishList to set up recordings for programs that are not yet listed in the guide. For example, create a keyword WishList that uses the program’s title as the keyword. See page 73.

**Can I save a program from the Now Playing List to my VCR?**

- Yes. You can use the “Save to VCR” function. See page 66 for more information.

**Can I copy or archive programs to a ZIP drive or any other computer storage media?**

- No, the DVR does not copy or archive recordings to any device other than a VCR.

**How do I go back to the beginning of a recording I’m watching?**

- Press the ADVANCE button (⏩) on the remote to go to the end of a recording you’re watching. Press it again to go to the beginning.

**How do I clear all the letters I've entered on the alphanumeric keypad and start over?**

- Use the CLEAR button on the remote, or select “CLR” in the on-screen keypad. To remove one letter, select “DEL” in the keypad or press the BACK button on the remote.

**How can I fit more programs on Now Playing List, and why does it tell me I don't have enough space?**

- Your DVR can save a limited number of programs, and then it runs out of space. Usually, it then begins to delete old programs to make room for new recordings. However, if you have marked too many programs in Now Playing List “Save until I delete,” (programs marked “Save until I delete” have a green circle beside them) your DVR may tell you that you do not have enough space. To make space, delete some of the programs listed in the Now Playing List. You can delete a program by highlighting it in Now Playing List, then pressing CLEAR. On the confirmation screen that appears, press SELECT.

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

- Your DVR's internal clock is updated by the DIRECTV satellites. If you find that the DVR's time is consistently wrong, you can change the Time Zone and Daylight Savings Time settings manually, as described on page 105. If the clock still shows the wrong time, you can call DIRECTV Customer Care at the number on the back of this guide.

**My program didn't get recorded. I set the DVR up to record something, and it's not in Now Playing List.**

- If this happens, you can check Recording History for an explanation why the program did not record. Recording History is the first selection available in the To Do List. Here are some reasons why a program may not be available in the Now Playing List:
  - The program may have been canceled by the network.
  - You may have two season pass requests that were on at the same time this week. Only one can be recorded, unless you have dual tuner, in which case only two can be recorded at once. The DVR records the Season Pass (or Passes with dual tuner) with the highest priority. To change priority settings on Season Pass recordings, go to "Pick Programs to Record" and select "Season Pass Manager."
  - The program may have been deleted from the Now Playing List by someone else.
  - You may have gotten a conflict when requesting another program, and the proposed solution was to delete the missing program earlier than planned.
  - The DVR may have lost power during the time the program was broadcast.

**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.**

- With satellite broadcasts, 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. The space required for each show you record affects the total hours of recording capacity in your DVR.

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

- By default, all programs except pay per view events are kept for at least two days. After that, programs may be deleted to make room for other recordings you request. Recordings of pay per view events are kept until you delete them. The DVR service uses this information to figure out not only what space will be available but when it will become available. If enough space will not be available at the time of recording, the DVR service tells you which programs would be deleted to make more room. However, you always have the final say on how long the DVR keeps recorded programs. You can delete programs at any time and can always change how long a program is saved by changing the “Save Until...” option described on page 60.



## ►► Questions About Parental Controls

### **My Parental Controls are not working.**

- For Parental Controls to work, they must be on (and not temporarily turned off). Whenever you enter a password to bypass Parental Controls, Parental Controls become temporarily turned off. If they are turned off, you can turn them back on at the Parental Controls screen (see page 90), or by putting your DVR in standby mode and then taking it out of standby.

### **Do I have to change Parental Controls settings before I can watch a program that exceeds the current limits?**

- No, you don't. You can enter the current password to temporarily turn off Parental Controls. If they are temporarily turned off, you can turn them back on at the Parental Controls screen (see page 90), or by putting your DVR in standby mode and then taking it out of standby.

### **I've lost my password for Parental Controls. What should I do?**

- If you have lost your password, you can call DIRECTV Customer Care at the phone number provided on the back of this guide.

## ►► Questions About the DVR's Phone Calls

### **How long does the daily call to the DVR service take?**

- It is typically a short call, less than three minutes. When the software is being updated, it may take longer, but this happens rarely (a few times a year).

### **My DVR is not making the daily call to the DVR service.**

- If you use a wireless phone, retry the call using a phone which is connected to a standard wall jack.
- Verify that your phone line is working by connecting a phone to the phone cord and checking for a dial tone. Make sure the phone cord is connected to the DVR and the wall jack.
- Try another local dial-in number from the Phone Dialing Options screen. To get to Phone Dialing Options, from DIRECTV Central, select “Messages & Setup,” then “Recorder & Phone Setup,” then “Phone Connection,” then “Change Dialing Options.”
- You may need to change your Phone Dialing Options from the default. After making changes, make a test call. (Choose Make Test Call from the Phone Connection screen.) If the test call succeeds, choose “Make Daily Call Now.”
- If you have voice mail or use another non-standard dial tone, go to “Messages & Setup,” then “Recorder & Phone Setup,” then “Phone Connection,” then “Change Dialing Options.” Turn off “Dial Tone Detection.”

- If you have call waiting, go to “Messages & Setup,” then “Recorder & Phone Setup,” then “Phone Connection,” then “Change Dialing Options.” Disable call waiting by entering the correct prefix in Call Waiting Prefix (usually \*70,).
- If you dial a prefix for outside lines, go to “Messages & Setup,” then “Recorder & Phone Setup,” then “Phone Connection,” then “Change Dialing Options.” Set a Dial Prefix—for example, “9,” (nine, followed by a comma for a pause).
- Your phone line may have low voltage. Try setting Phone avail. detection to Off under Dialing Options, described on page 101.
- If you have a caller ID box, try removing it from the line since some models interfere with the DVR modem's ability to make a call.
- If your DVR is having difficulty dialing out, try the following: Press LEFT arrow until you return to the Phone Dialing Options screen. Select Set Dial Prefix, and enter the dialing prefix “,#034” (comma, pound, zero, three, four). Use the PAUSE button to enter a comma, and the ENTER button to enter a pound. This command sets the DVR’s modem to a slower speed, which helps phone calls succeed in some environments. The DVR does not dial the prefix as part of the number.
- If you have a cordless telephone, fax machine, or computer modem connected to the same line, go to “Messages & Setup,” then “Recorder & Phone Setup,” then “Phone Connection,” then “Change Dialing Options.” Turn off “Phone avail. detection.”
- You might have too much line noise to make a connection. The DVR ships with a 25 foot phone cord. Try a shorter cord, or buy a line noise filter at your local electronics store.

**Why does the DVR have to be connected to a phone line? Do I need to keep the phone connected all the time?**

- The DVR should be plugged in to a land-based phone line at all times to receive the DVR service and DIRECTV® sports packages, and to communicate the purchase of pay per view events.

**Does the DVR service phone call each day cost me any money?**

- Calling the DVR service via your local dial-in number is the same as making a local telephone call.

**Does the occasional phone call to DIRECTV cost me any money?**

- No, because your DVR only calls DIRECTV periodically and a toll free number is used to make the call.

**What if I need to make a call while the DVR is using the phone?**

- When you pick up the phone, the DVR will interrupt the download process and free the phone line for your call. Hang up, wait at least 45 seconds, and pick up the line again to make a call. The DVR will attempt its call again later.

**What if my phone line is not operating when the DVR tries to make a service call?**

- The DVR will continue to attempt to call several times a day until it is successful. You can check the status of the phone calls by going to Messages & Setup and looking at the Phone Connection screen.

## ►► Questions About Audio

### **I can't select an alternate audio track.**

- Alternate audio tracks are not available for all programs. If a program has an alternate audio track, you can select it through the channel banner.
- Programs are recorded with only one audio track, either the primary or an alternate audio track, so you cannot select an alternate audio track on a recorded program.
- If you are watching a live program, but are not caught up to live TV (i.e., you could use the FORWARD button to move forward through the program), alternate audio will not be available until you catch up with live TV.

### **Programs are playing in the wrong language.**

- There may be an alternate language selected in My Preferences. To check, press the DIRECTV button; then select “Messages & Setup,” and then “My Preferences.” Select “Audio Options,” then “Audio Language.” Make sure the language selected is the one you want to hear.
- An alternate audio track may be selected. (See page 96.)

## ▶▶ Questions About Pay Per View

### How do I record a pay per view event?

- If it is on now, tune to the channel carrying the program and press RECORD.
- If it is on later, go to live TV, press the GUIDE button to see the guide. Highlight the program and press SELECT.

### How do I cancel a pay per view purchase?

- You can cancel pay per view purchases before the program airs on the Purchases screen. For more information, see page 85.
- Pay per view purchases made by phone must be canceled by phone as well. (There is an additional \$1.50 charge when pay per view events and movies are ordered by phone utilizing the automated ordering system or an additional \$5.00 charge for an operator-assisted order.)

### I can't order a pay per view program.

- It may be too late to purchase the program you want. To quickly see other times the program will be on, do this: In Live TV, tune to the station carrying the pay per view program you want. There should be a notice saying “This showing is no longer available.” Press GUIDE to see the guide. Press the RECORD button to see Program Information for the program. Select “View upcoming showings.” To see live TV again, press GUIDE.
- In general, pay per view events can be ordered through the DVR within 24 hours of their air time. If you see a message that says cost information is not available, you can wait until less than 24 hours before the program airs and try again.

- If the program exceeds a limit set with Parental Controls, and Parental Controls are on, you will need a password to view it.
- If you are attempting to order a pay per view selection with your remote control and cannot, call DIRECTV Customer Care at the number provided on the back of this guide.

**I can't find the station of a pay per view program I ordered.**

- Information about pay per view programs you have purchased using your remote control is available by selecting Messages & Setup from DIRECTV Central, and then selecting Purchases.

**I can't cancel a pay per view purchase on the Purchases screen.**

- You cannot cancel pay per view orders that you have watched, recorded, or tuned to.

## ▶▶ Questions About the Remote Control

### **My remote control doesn't work with my television.**

- You need to program the DVR's remote control to control some functions of your television or audio/visual equipment. See page 109.

### **My remote control doesn't work with my DVR.**

- Your remote control's batteries may be weak. If its batteries are weak, the red light on the end of the remote control will not flash when you press buttons.



## ►► Questions About the DIRECTV® DVR with TiVo® Service

### How do I prevent TiVo Suggestions from being automatically recorded and listed on Now Playing List?

- Press the DIRECTV Button, then select “Messages & Setup,” then “My Preferences,” then “TiVo Suggestions,” then “No.”

### Will my DVR still work without the DVR service?

- Without the DVR service, your DIRECTV® DVR will have no recording functionality. The DVR uses the DVR service to record shows you request, provide Season Pass recordings, allow you to search for programs by name, and so on. The DVR service also provides you with new Showcases. Lastly, the service keeps your DVR updated to make sure you have the most current functionality available for your DIRECTV® DVR.

### Will the DVR service collect information about my viewing habits?

- At DIRECTV, we absolutely respect and guard your right to privacy. We have a privacy policy that maintains complete viewer confidentiality. DIRECTV has created a very sophisticated system with both protection and customization for our viewers in mind. It is DIRECTV’s promise to you that you will always maintain control over your personal information. For more information, see the DIRECTV Privacy Promise, included in your first monthly statement.

**How does my TiVo Suggestions list get generated? How does it know what I like?**

- Your personal TV preferences are based on programs you have rated with THUMBS UP and THUMBS DOWN. Also, any program you record that does not already have a Thumb rating is automatically given one THUMB UP.

**TiVo Suggestions isn't making accurate suggestions for me.**

- If you haven't had your DVR for very long, give it time. It may take a week or two of use before your personal preference profile has enough data to make interesting suggestions. The more you press THUMBS UP and THUMBS DOWN and the more programs you record, the better TiVo Suggestions will be.

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

**Will I lose my personal preferences and my programs if I lose power temporarily?**

- No, everything is saved—your personal preferences, your To Do List, and your Now Playing List programs—regardless of the length of time you have lost power. The only thing you might miss is a recording that was scheduled to occur during the time the power was out.

# Warranty and Specifications

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## ▶▶ Limited Warranty

Limited Warranty

SAMSUNG Manufactured DIRECTV® DVR

90 Days Free Labor/One Year Parts Exchange

### WHO IS COVERED?

You must have proof of purchase to receive warranty service. A sales receipt or other document showing that you purchased the product is considered proof of purchase.

### WHAT IS COVERED?

Warranty coverage begins the day you purchase the product. For 90 days from the purchase date, the DVR will be replaced with a new, repaired, renewed or comparable product (whichever is deemed necessary) if it becomes defective or inoperative. This exchange is done without charge to you for parts and labor. You will be responsible for the cost of shipping. From 90 days to 1 year from the date of purchase, your DVR will be replaced with a new, repaired, renewed, or comparable product (whichever is deemed necessary) if it becomes defective or inoperative. You will be responsible for all labor and shipping costs. Contact Customer Support at the phone number found on the back of this *User's Guide* to obtain your cost (labor costs) for exchange.

All products, including replacement products, are covered only for the original warranty period. When the warranty on the original product

expires, the warranty on the replacement product also expires. After one year from the date of purchase, you pay for the replacement of all parts, and for all labor charges.

### WHAT IS EXCLUDED?

Your warranty does not cover:

- Labor charges for installation or setup of the product.
- Installation, performance of, or repair of: audio/video cabling, telephone line, or accessory attachments used with the product.
- Product replacement because of misuse, accident, lightning damage, unauthorized repair, or other cause not within the control of TiVo Inc.
- Incidental or consequential damages resulting from the product. (Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you.)
- Reception transmission problems caused by signal conditions, telephone line, or cable or antenna systems outside the unit.
- A product that has been modified or adapted to enable it to operate in any country other than the country for which it was designed, manufactured, approved and/or authorized, or repair of products damaged by these modifications.
- A product used for commercial or institutional purposes.
- TiVo Inc. makes no warranty that the access connection will be a local (not long distance) phone call.

**MAKE SURE YOU KEEP...**

Please keep your sales receipt or other document showing proof of purchase. Attach it to this *User Guide* and keep both nearby. Also keep the original box and packing material in case you need to return your product.

**BEFORE REQUESTING SERVICE...**

Please check the troubleshooting section of this guide. This may save you a call to Customer Care.

**TO GET WARRANTY SERVICE...**

Warranty service will be provided by SAMSUNG. If you believe you need service for your DVR, contact the SAMSUNG customer care center at 1-800-726-7864. A representative will go through a diagnostic checklist with you. If it is determined that the product needs to be exchanged, you will receive a return authorization number. The representative will give you complete shipping details.

**TO GET OUT-OF-WARRANTY SERVICE...**

Out-of-warranty service can be obtained at a nominal cost for replacement and handling. To obtain out-of-warranty service contact the

SAMSUNG customer care center at 1-800-726-7864 to obtain the cost of out-of-warranty exchange for your product.

**REMEMBER...**

Record the model and serial numbers found on the product below. Also, fill out and mail your registration card promptly. The return of the warranty card is not a condition for warranty coverage, but it will be easier for us to notify you if necessary.

**MODEL #** \_\_\_\_\_

**SERIAL #** \_\_\_\_\_

All implied warranties, including implied warranties of merchantability and fitness for a particular purpose, are limited in duration to the duration of this express warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This warranty gives you specific legal rights. You may have other rights which vary from state to state.

Samsung Electronics America, Inc. 400 Valley Road, Suite 201, Mount Arlington, NJ 07856

## ►► FCC Information

Declaration of Conformity—Standards to which Conformity is declared:  
FCC Part 15

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Responsible Party:

Samsung Electronics America, Inc. 400 Valley Road, Suite 201, Mount  
Arlington, NJ07856 1-800-726-7864

- Trade Name: SAMSUNG
- Type of Equipment: DIRECTV® DVR
- Model Number: SIR-S4120R with the Remote Control

Federal Communications Commission (FCC): This equipment complies with both Part 15 and Part 68 of the FCC rules.

Your DIRECTV® DVR complies with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by removing and applying power to the equipment, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving satellite dish antenna.
- Increase the separation between the equipment and the DIRECTV Receiver.
- Connect the equipment into an outlet on a circuit different from that to which the DIRECTV Receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The user may find the following booklet, prepared by the Federal Communications Commission, helpful: “How to Identify and Resolve Radio and TV Interference Problems.” This booklet is available from the U.S. Government Printing Office, Washington, DC. To meet FCC requirement, only peripherals (computer input/output devices, terminals, printers, etc.) certified to comply with Class B limits may be attached to this device. Operation with noncertified peripherals is likely to result in interference to radio and TV reception. To meet FCC requirements, shielded cables are required to connect the device to a personal computer, peripheral, or other Class B certified device.

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 this DIRECTV® DVR 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 care at the address and phone number 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.

Samsung Electronics America, Inc. 400 Valley Road, Suite 201, Mount Arlington, NJ07856 1-800-726-7864

**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.

## ►► Specifications



**CAUTION:** To prevent electrical shock, match wide blade of plug to wide slot, and fully insert.



**Recording capacity depends on signal quality and type of programming being recorded.**

Satellite In:	F-Type Connector Female (2)
Video Out:	S-Video 4-Pin Mini DIN Composite Video RCA (2)
Audio Out:	Stereo L/R RCA (2 pairs) Optical SPDIF Digital
RF In:	F-Type Connector Female
RF Out:	F-Type Connector Female Channel 3 or 4 switchable
Telephone:	RJ-11 Female, 2-Wire
Control Out:	3.5mm Mini Jack Sockets (2)
Card Slot:	Access Card Connector
Expansion Port	USB (2)
Power:	120VAC, 60Hz, 40W
Ambient (external) Operating Temperature:	15° C to 35° C
Operating Humidity:	5% to 80%
Dimensions:	15" w X 12" d X 3" h
Remote Control:	36 Button with AA Batteries (2)
Modem	v.34 capable



## MACROVISION COPYRIGHT PROTECTION

The DVR incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited pay per view uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited. U.S. patent Nos. 4,631,603, 4,577,216, 4,819,098 and 4,907,093 licensed for limited pay per view uses only.

## LINUX SOURCE NOTICE

The DIRECTV<sup>®</sup> DVR is powered by the Linux operating system. The machine-readable copy of the corresponding source code is available for the cost of distribution. Please visit [www.tivo.com/linux](http://www.tivo.com/linux) for more information. To read the Linux software license, see Appendix B, “GNU General Public License” on page 155.

## TELEPHONE LINE INTERRUPTION

Periodically, the DIRECTV<sup>®</sup> DVR dials in to the DVR 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 at least 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.

## DIRECTV UPGRADES

Your DVR is able to receive upgrades or modifications to some of its features and functions. These modifications will occur automatically, usually at times when the DVR would not be in use. If your DVR is in use when an upgrade or modification is sent, you may experience a disruption in reception for a minute or two. Your reception should return

to normal after the modification is complete. Your DVR must be plugged in to receive the upgrade. Do not unplug your receiver while an upgrade is in progress.

## LOCAL CHANNELS FROM DIRECTV

With this DVR and the proper satellite dish antenna, you may be able to subscribe to local channels from DIRECTV in certain areas. Additional equipment may be required in some markets. Check with your retailer or visit [DIRECTV.com](http://DIRECTV.com) for information on availability of local channels from DIRECTV in your area.

## DIRECTV DISCLAIMERS

DIRECTV programming and DIRECTV DVR service subscriptions required and sold separately.

Activation of programming may be subject to credit approval and requires valid service address, social security number and/or major credit card. Deposit or prepayment may be required. Programming subject to change. You must be physically located in the U.S. to be an authorized DIRECTV customer. DIRECTV services not provided outside the U.S. DIRECTV programming is sold separately and independently of DIRECTV System hardware. A valid programming subscription is required to operate DIRECTV System hardware. Activate your DIRECTV programming today at 1-800-DIRECTV (1-800-347-3288).

Receipt of DIRECTV programming is subject to the terms of the DIRECTV Customer Agreement; a copy is provided in your first billing statement. DIRECTV service not available outside the U.S. Signal theft is subject to civil and criminal penalties.

For full functionality, this recorder requires connection of two (2) satellite inputs from a dual-LNB DIRECTV System dish antenna; the second satellite input must be connected into the recorder's Satellite 2 In jack. Professional installation required.

## ▶▶ 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.

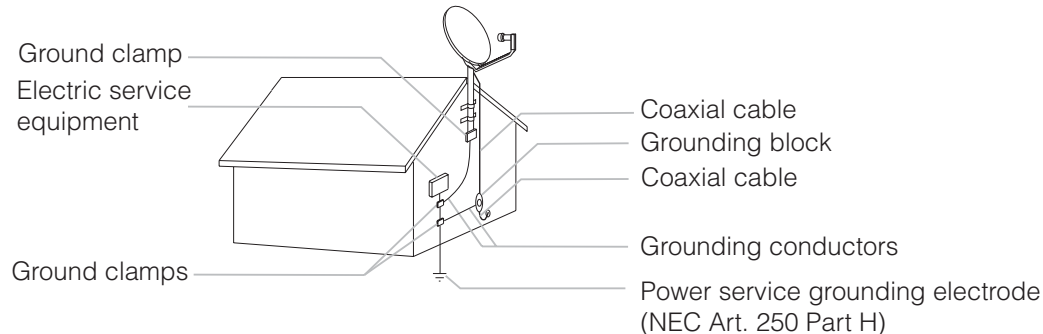
1. **Read Instructions**—All the safety and operating instructions should be read and understood before the appliance is operated.
2. **Retain Instructions**—The safety and operating instructions should be retained for future reference.
3. **Heed Warnings**—All warnings on the appliance and in the operating 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**—This appliance should be situated so that its location or position does not interfere with its proper ventilation. The openings should never be blocked by placing the product on a bed, sofa, rug, or similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided.
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. **Battery 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.

12. 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.
13. Damage Requiring Service—The appliance should be serviced by qualified service personnel when:
- The power supply cord or plug is damaged or frayed;
  - Liquid has spilled into the product;
  - The product has been exposed to rain or water;
  - The product does not operate normally when you follow the operating instructions (adjust only those controls that are discussed in the User's 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);
  - The product has been dropped or the cabinet damaged;
  - The product exhibits a distinct change in performance.
14. 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.
15. 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.
16. Power Source—This product should be operated only from the type of power source indicated on the marking label or in the User's Guide. If you are not sure of the type of power supply to your home, consult your dealer or local power company.
17. Overloaded Power Outlets—do not overload wall outlets and extension cords, as this can result in the risk of fire or electric shock.
18. Electric Shock—To reduce the risk of electric shock, do not disassemble this product. Take it to a qualified serviceperson 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.
19. 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.
20. Movement—Avoid moving the unit while it is plugged in to avoid accumulative shock and vibration damage to the internal hard disk drive.

21. Polarization—The DIRECTV® DVR is equipped with a plug that will fit into the power outlet only one way. Do not modify the plug. If the plug does not fit, contact your electrician to replace your outlet. To prevent electric shock, do not use this plug with an extension cord or outlet unless you can fully insert the blades without blade exposure.

22. Satellite Dish Antenna Grounding—The outdoor satellite dish antenna and the cable which connects the satellite dish antenna to the DVR must comply with local installation codes and the appropriate sections of the National Electric Code (NEC). In particular they must comply with Article 810-15, which covers proper installation and grounding of television receiving equipment. They must also comply with Article 820-33, which specifies that the satellite dish antenna cable ground shall be connected to the grounding system of the building as close to the point of cable entry as is practical. These codes require proper grounding of the metal structure of the outdoor satellite dish antenna and grounding of the connecting cable at a point where it enters the house (or other building). If a professional installs the Satellite Dish Antenna, be sure that the installer observes installation codes. If additional local installation codes apply, contact local inspection authorities. It is important to comply with these codes for proper operation of the DVR.

### Example of Proper Antenna Grounding

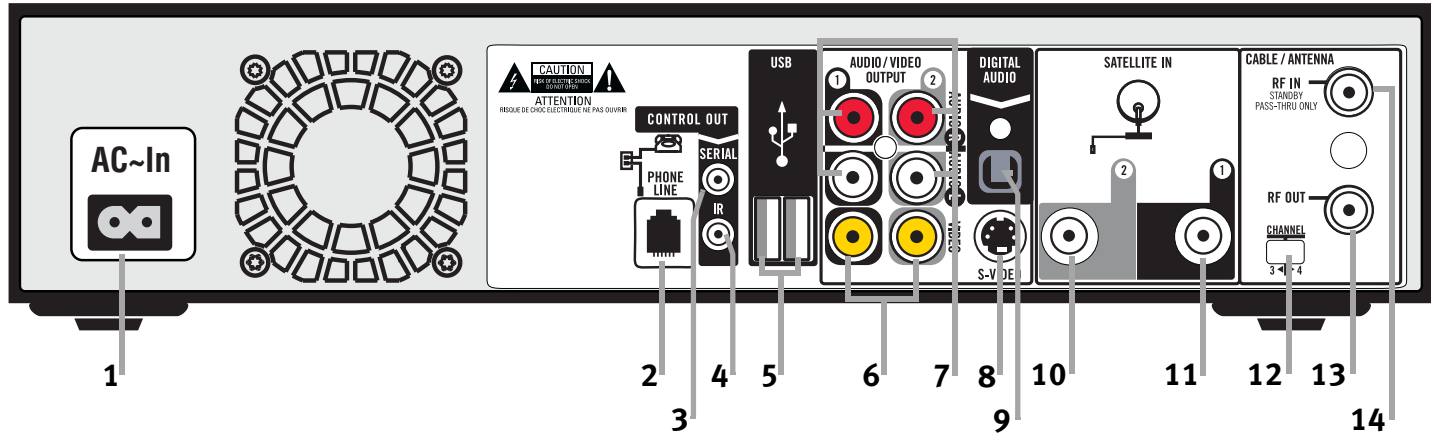


Note: If the Satellite/Antenna cable is grounded correctly (as specified above), connecting it to the DIRECTV® DVR will properly ground the DVR. The DVR must be properly grounded before you connect it to a telephone line, and it must remain grounded thereafter.

# Back Panel Reference

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## ▶▶ Back Panel Reference



This section describes the use of the connection jacks and switch on the back panel of the DIRECTV® DVR. If your setup doesn't match any of the examples, you can use this information for general reference as you set up your equipment.

1. AC ~ In: When you've finished making all of the other connections, plug the AC power cord (supplied) into this opening to turn on the DVR. The DVR does not use a separate on/off switch; plugging it in switches it on.
2. Phone Line: Connect the DVR to your phone line using the telephone cord (supplied) and optional telephone line splitter (supplied). Your DVR needs to be connected to a phone line to receive updates from DIRECTV. The DVR occasionally makes a brief phone call to get updates to the DVR service and Showcases, and for pay per view

functionality. Do not connect the DVR to digital PBX systems. Doing so may permanently damage your DVR's modem and will void your warranty.

3. Cntrl Out (Serial): For future use.
4. Cntrl Out (IR): For future use.
5. USB (Universal Serial Bus) (2): For future use.
6. Composite Video Outputs (2): If your TV or VCR has a Composite Video jack you can connect the DVR to your TV or VCR's Video In using the yellow video connector on the Composite Video cable (supplied). If you have both a TV and a VCR, you might use one cable for the TV and another cable (not supplied) for the VCR.
7. L/R Audio Outputs (2 each): If your TV or stereo features Composite Input jacks, connect the Left (white) and Right (red) Audio Output jacks from the DVR to your TV or stereo using the L/R Audio cables (supplied). If you have both a TV and a VCR, you might use one set of L/R Audio cables for the TV and another set (not supplied) for the VCR; see chapter 1 of this guide for examples. If you are using an S-Video cable to connect to your TV or VCR, you must use it with the L/R Audio outputs. Ignore the L/R Audio jacks if you're using RF Out or Digital Audio Out.
8. S-Video Output: If your TV or VCR features an S-Video input jack, you can connect it to the DVR using an S-Video cable. S-Video provides a higher quality picture than composite. If you use the S-Video Output, you must also connect the supplied L/R Audio outputs (red and white cable ends). When connecting S-Video and the red and white L/R Audio outputs, do not plug in the yellow Composite Video cable.
9. Digital Audio Out: You can use the Digital Audio Out to connect your DVR to an A/V receiver with a digital audio input. To do so, you will need an optical audio cable (not supplied). 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.

10. Satellite In 2: If you have a Dual LNB satellite dish, you can connect the second satellite cable from your wall to the Satellite In 2 jack. Connecting both Satellite In 1 and Satellite In 2, and completing the required steps in Satellite Setup, allows you to record two programs at the same time (dual tuner).
11. Satellite In 1: Connect the satellite cable from your wall to the Satellite In 1 jack. You will not be able to watch DIRECTV<sup>®</sup> channels if you do not make this connection.
12. Channel 3/4 Switch: If you use RF Out, set the output to channel 3 or 4 using this switch. To get the best picture, select the channel that is not occupied by a local broadcast channel. For example, if there is a local broadcast station on channel 4, select channel 3 for the output on the DVR. You need to set your television to this channel (3 or 4) in order to view programs through the DVR.
13. RF Out: If your TV only has RF In, connect the DVR to your TV's RF In using the coaxial RF cable (supplied). The RF In jack on your TV may not be labeled "RF In;" it may be labeled "VHF/UHF In" or "Antenna/Cable In" instead. If your TV has multiple inputs and you can use the DVR's S-Video Output or Composite Video Output, don't use this jack.
14. RF In: If you use an antenna, and your TV has only one input, connect your antenna to the DVR using your existing coaxial RF cable (the one coming out of the wall). If your TV has multiple inputs, you can ignore this jack and connect your antenna directly to your TV instead. You will NOT be able to you to use DIRECTV and DVR functions while watching antenna or cable channels, even if you connect your antenna or cable directly to your DVR.



# GNU General Public License

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## ▶▶ GNU General Public License

Version 2, June 1991

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<one line to give the program’s name and a brief idea of what it does.>

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Also add information on how to contact you by electronic and paper mail.

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Gnomovision version 69, Copyright (C) year name of author

Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type ‘show w’.

This is free software, and you are welcome to redistribute it under certain conditions; type ‘show c’ for details.

The hypothetical commands ‘show w’ and ‘show c’ should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than ‘show w’ and ‘show c’; they could even be mouse-clicks or menu items—whatever suits your program.

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Yoyodyne, Inc., hereby disclaims all copyright interest in the program ‘Gnomovision’ (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989

Ty Coon, President of Vice

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# Glossary of Icons

 These appear when you press the THUMBS UP or THUMBS DOWN button. You can give a program up to three Thumbs Up™ or three Thumbs Down™.




 **Press THUMBS UP**  
 **To Record**  
 **For more...**

These 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.



## 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 programs 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, but only if space is needed.
-  (Red with black border) This program is currently being recorded.
-  This program is a TiVo® Suggestion. TiVo Suggestions are recorded on empty space and are the first programs to be deleted.







## To Do List and View Upcoming Episodes

-  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.




## DIRECTV Central and Showcases

-  Appears on DIRECTV Central beside an option that changes. Select it to record a program, watch a preview, or visit a Showcase.
-  Indicates a selection in DIRECTV Central or Showcases that has some special video content.

## Channel Banner

-  Select to start or stop a recording.
-  Select to display or turn on Parental Controls.
-  Select to view Messages.
-  Select to choose an alternate audio track, if an alternate audio track is available.
-  Select to turn Dolby Digital audio on or off, if Dolby Digital audio is available.
-  Highlight to see what's on the other tuner. This icon becomes bright if the other tuner is recording a program.

## DIRECTV Advanced Program Guide™

-  This appears beside pay per view events that are All Day Tickets.
-  This appears beside programs that are broadcast with Dolby Digital audio.
-  This icon appears beside programs that are broadcast in Letterbox format.