



**MOTOROLA**

## ***DVR530 HD Series***

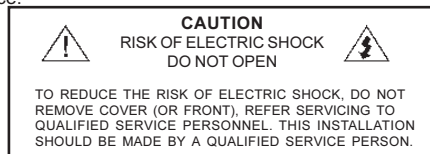


## ***User Guide***

**STAR CHOICE™**

Welcome!

Thank you for purchasing the Motorola Digital Video Recorder (DVR). For optimum performance and safety, read this guide and retain it for future reference.



Graphical symbols and supplemental warning marking locations on bottom of terminal.

**WARNING: "DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE."** To reduce the risk of fire or electric shock, do not expose this unit to rain or moisture. Do not open the unit. Refer servicing to qualified personnel only.

**CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.** To prevent electric shock, do not use this (polarized) plug with an extension cord receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.



#### Lightning Flash Icon

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product's housing that may be strong enough to constitute a risk of electric shock to persons.



#### Exclamation Point Icon

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

This installation should be made by a qualified service person and should conform to all local codes.

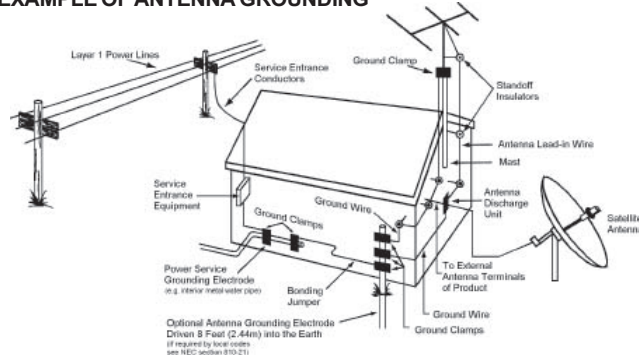
#### REPAIRS:

If you find the unit in need of repair, contact your system provider for repair or replacement.

#### NOTE TO SYSTEM INSTALLER

The purpose of this reminder is to call your attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical. The illustration is an example of antenna grounding according to the National Electrical Code Section 810, "Radio and Television Equipment." Check your local building and electrical codes for other restrictions on antenna grounding.

#### EXAMPLE OF ANTENNA GROUNDING



# IMPORTANT SAFETY INSTRUCTIONS

**Read instructions.** The safety and operating instructions should be read before the appliance is operated.

**Retain instructions.** The safety and operating instructions should be retained for future reference.

**Heed warning.** Pay attention to all warnings on the equipment operating instructions.

**Follow instructions.** All operating and use instructions should be followed.

**Cleaning.** Do not use liquid cleaners or aerosol cleaners. Use a damp cloth to clean the outside of the unit. Do not open the unit for cleaning or any other reason.

**Power Cord Protection.** Place power supply cords so that they are not walked on or pinched by items placed on or against them. Pay particular attention to the cords where they join the plug, near convenience receptacles, and where they exit from the equipment.

**Power Sources/Grounding.** Operate the equipment from the type of power source indicated on the marking label. This product has a polarized alternating-current line plug as a safety feature. This plug fits into the power outlet only one way. If the plug does not fit, contact your electrician to replace your obsolete outlet. Do not try to change the plug or defeat its safety purpose.

**Do Not Operate near Water.** Do not use this product near water, for example, near a bath tub, wash bowl, kitchen sink, swimming pool, laundry tub, in a wet basement, or in similar situations.

**Mounting and Placement.** Do not place this product on an unstable surface such as a cart, stand, tripod, bracket, or table. It may fall,

causing serious injury to a child, adult, or to the unit itself. To mount the unit, follow the manufacturer's instructions, and use a mounting accessory recommended by the manufacturer. Do not place this product directly on wood or simulated wood surfaces because these surfaces may be damaged.

**Heat.** Do not place near heat sources such as radiators, stoves, or other products (including amplifiers) that produce heat.

**Ventilation.** Do not block or cover the slots and openings of the unit. They provide ventilation and protect it from overheating. Never place the unit on carpeting, which it may block ventilation through the bottom slots. Never place the unit near a source of heat or in a built-in installation rack unless there is proper ventilation.

**Objects or Liquid in the Unit.** Never push any object into this unit through any of its openings because they may touch dangerous voltage points or short out the parts. This could cause a fire or any electrical shock. Do not spill liquid of any kind on the unit.

**Overloading.** Do not overload power outlets or extension cords. This can result in a risk of fire or electrical shock.

**Power Lines.** Do not locate the satellite antenna system near overhead power lines, electrical light or power circuits, or where it can fall into power lines or circuits. When installing a satellite antenna system, avoid dangerous contact with power lines or circuits.

**Outdoor Antenna Grounding.** To provide some protection against voltage surges, lightning, and built-up static charges, make sure that the satellite antenna is properly grounded.

**Outdoor Cable Protection.** Protect all outdoor connections from moisture. During installation, treat all of the cable connectors on your LNB with coax seal, even if the connection is installed under a weatherproof cover. Internal

heating can draw moisture or condensation into the covering of the unit and affect its operation. Do not use silicone seal because it has a tendency to form air pockets.

**Lightning.** To protect the product from damage caused by lightning and power line surges, unplug it from the wall outlet and disconnect it from the antenna or cable system before a lightning storm or if the unit will be left unattended or unused for a long period of time. Once a storm passes, reconnect all antenna cables to the correct connectors. If you live in an area that has many lightning storms, buy polarized surge protectors and surge protectors for the power line, telephone line, and RF cable to protect your system from damage. Never attempt to connect or disconnect any wires during a thunderstorm or lightning storm.

**Damage Requiring Service.** Unplug this equipment from the power source, and contact a qualified service provider if any of the following situations occurs:

If the power supply cord or plug is damaged.

If liquid or objects have fallen into the unit.

If the unit became wet from rain or water.

If the unit was dropped or damaged.

If the unit's performance changes.

**Service.** Do not try to service this product yourself. If you open or remove the cover, you may be exposed to dangerous voltage or other hazards and may void the unit's warranty. Contact a qualified service provider for all service.

**Replacement Parts.** If replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitution may result in risk of fire, electric shock, or other hazards.

**Safety Check.** After the unit is serviced or repaired, ask the service technician to perform safety checks to find out if the unit is in proper operating condition.

## Programming Copyright Notice

Use of this device may violate Section 605 of the Communications Act of 1934, as amended, if that use consists of the unauthorized interception and divulgence of radio communications for one's own benefit where there is no entitlement to its receipt.

Changes or modifications to this device not expressly approved by the party responsible for compliance with FCC regulations (the manufacturer) could void the user's authority to operate the equipment.

Resale of signals received from broadcast satellites is explicitly regulated. In any use or application involving resale or distribution, the user should verify compliance with current laws, regulations, and approved procedures for use. Where required, local and federal licensing or franchise authorization is the sole responsibility of the user.

Export of this device requires a valid export license issued by the U.S. Department of Commerce.

## FCC-Required Notification of Service

The Instant Pay-Per-View system is designed to be used on standard device telephone lines. The Instant Pay-Per-View connects to the telephone line by means of a standard jack called the USOC RJ11C. Connection to telephone company-provided coin service (central office implemented systems) is prohibited. Connection to party line service is subject to State tariffs.

## Telephone Company Procedures

In order for your telephone company to provide service to you, it may occasionally be necessary for them to make changes in their equipment, operations, or procedures. If these changes affect your service or the operation of your equipment, the telephone company should give you notice, in writing, to allow you to make any changes necessary to maintain uninterrupted service.

If you have any questions about your telephone line, such as how many pieces of equipment you can connect to it, your telephone company should provide this information upon request.

In certain circumstances, it may be necessary for your telephone company

to request information from you concerning the equipment which you have connected to your telephone line. Upon request of your telephone company, provide the FCC registration number and the Ringer Equivalence Number (REN) of the equipment which is connected to your line; both of these items are listed on the equipment label. The sum of all the REN's on your telephone line should be less than five in order to assure proper service from your telephone company. In some cases, a sum of five may not be usable on a given line. NOTE: The REN for the Digital Entertainment Receiver with Instant Pay-Per-View is 0.3B.

## If Problems Arise

If any of your telephone equipment is not operating properly, you should immediately remove it from your telephone line, as it may cause harm to the telephone network. If your telephone company notes a problem, they may temporarily discontinue service. When practical, they will notify you in advance of this disconnection. If advance notice is not feasible, you should be notified as soon as possible. When you are notified, you should be given the opportunity to correct the problem and informed of your right to file a complaint with the FCC.

## FCC Compliance

This equipment has been tested and found to comply 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.

## FCC Part 68

This equipment complies with Part 68 of the FCC rules. Located on the equipment is a label that contains, among other information, the FCC registration number and Ringer Equivalence Number (REN). If requested, this

information must be provided to the telephone company.

The REN is used to determine the quantity of devices which may be connected to the telephone line. Excessive REN's on the 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 REN's should not exceed five (5.0). To be certain of the number of devices that may be connected to the line, as determined by the total REN's contact the telephone company to determine the maximum REN for the calling area.

This equipment cannot be used on the telephone company-provided coin service. Connection to party line service is subject to state tariffs.

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If advance notice isn't practical, the telephone company will notify you 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 operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service.

If trouble is experienced with this equipment, please contact:

Star Choice  
1 888 554-STAR

If the trouble is causing harm to the telephone network, the telephone company may request you to remove the equipment from the network until the problem is resolved.

This equipment uses the following USOC jacks: RJ11C

It is recommended that the customer install an AC surge arrester in the AC outlet to which this device is connected. This is to avoid damaging the equipment caused by local lightning strikes and other electrical surges.

This equipment is Hearing-Aid Compatible (HAC).

The telephone consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device, including fax machines, to send any message unless such message clearly contains in a margin at

the top or bottom of each transmitted page or on the first page of the transmission, the date and time that it is sent and an identification of the business or other entity, or other individual sending the message and the telephone number of the sending machine or such business, other entity, or individual. (The telephone number provided may not be a 900 number or any other number for which charges exceed local or long-distance transmission charges.)

## User Instructions

If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and then on, the user is encouraged to try to correct the interference by one of more of the following measures:

Reorient or relocate the receiving antenna.

Increase the distance between the equipment and receiver.

Connect the equipment into a different outlet so that the equipment and receiver are on different branch circuits.

Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by Motorola could void the user's right to operate the equipment and/or the equipment warranty.

## Equipment Attachment Limitations

Note: This product was FCC approved under test conditions that included the use of shielded I/O cables and connectors between system components. To comply with FCC regulations, the user must use shielded cables and connectors and install them properly.

### CP-01, Part 1, Section 10.1

"NOTICE: The Canadian Department of Communications label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements. The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to

be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of a certified connector assembly (telephone extension cord). The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunication company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines, and internal metallic water

pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

**CAUTION:** Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

**NOTICE:** The Ringer Equivalence Number (REN) of this device is displayed on this product. The REN assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5.

The standard connecting arrangement (telephone jack type) for this equipment is CA11A.

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## ATTENTION

This consumer unit is intended for the decoding of DigiCipher® II television signals for consumer use. Possession of this device does not enable or entitle the possessor to receive DigiCipher II television signals. Contact program providers to obtain appropriate authorization.

## WARNING

The unauthorized modification of any decoder and the sale and use of any such decoder is prohibited by law. Any such modification or alteration of this product or any unauthorized reception of television programming could subject the user and/or seller and/or party modifying the decoder to fines, imprisonment and civil damages.

## DOCUMENTATION NOTICE

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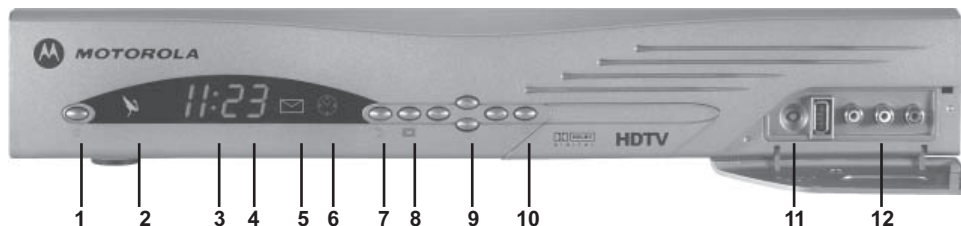
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## DVR Basics

### Front Panel



**1. ON/OFF** Alternates between ON and STANDBY modes.

**2. SIGNAL LED** Green indicates a good satellite signal. Red indicates no signal.

**3. REMOTE LED** Flashes to acknowledge a command from the remote control.

**4. CLOCK** Indicates the current time or channel number.

**5. MAIL LED** Indicates an unread message in the mailbox.

**6. TIMER LED** A steady light indicates a timer is set. A flashing light indicates the DVR is tuned to a timer program or within two minutes of a timer program.

**7. GO BACK** To return to a previous menu or the last channel viewed.

**8. OPTIONS** To display the Main Menu.

**9. NAVIGATION** To navigate within menus or change channels up and down.

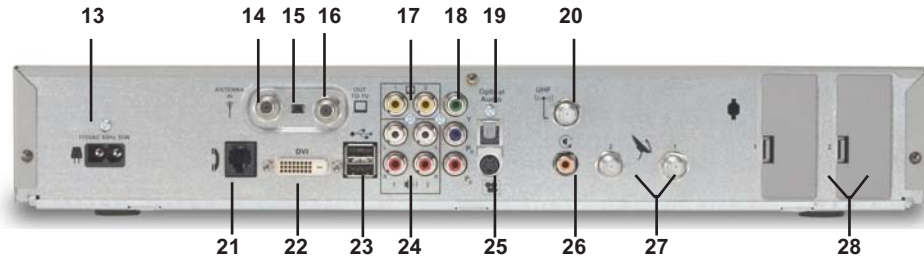
**10. SELECT** To select a highlighted menu option.

**11. HDTV MODE SELECT** Toggles between 1080i, 720p, 480p, 480i and Native modes and is shown on the LED display.

**12. RIGHT/LEFT AUDIO and COMPOSITE VIDEO INPUTS**



## Back Panel



**13. POWER CORD**

**14. ANTENNA INPUT** For analog off-air broadcast antenna.

**15. CH3/4 SWITCH** To set the RF output to channel 3 or 4.

**16. RF OUTPUT**

**17. COMPOSITE VIDEO OUTPUTS**

**18. COMPONENT VIDEO OUTPUT (Y Pb Pr)**

**19. OPTICAL DIGITAL AUDIO OUTPUT**

**20. UHF REMOTE CONTROL ANTENNA PORT**

**21. TELCO PHONE JACK** For Instant Pay-Per-View (IPPV) reportback.

**22. DIGITAL VIDEO INTERFACE (DVI) OUTPUT**

**23. USB PORTS**

**24. STEREO AUDIO OUTPUTS (R/L)**

**25. S-VIDEO OUTPUT**

**26. ELECTRICAL DIGITAL AUDIO OUTPUT**

**27. SATELLITE INPUTS (TUNER 1, TUNER 2)**

**28. 8VSB SLOTS**

## Connecting Your DVR

Make sure that the satellite receiver is not plugged into a power source before you connect any cables to the receiver. First connect the satellite input from your satellite dish to your receiver.

There are several way to connect your DVR to your television or monitor and other home theater components.

**Video:** Utilize the modulated RF output (good), Composite video output (better), S-Video output (best for standard definition), or Component video outputs (best for high definition) to connect the DVR directly to your television, VCR, and home theater A/V receiver.

**Audio:** The modulated RF output also provides audio along with video to televisions or VCRs (good). Utilize the stereo audio output (better) or the electrical or optical Digital audio outputs (best) to connect the DVR directly to your television, VCR, and home theater A/V receiver.

**PPV:** Connect the telco phone jack to a home telephone jack for Instant Pay-Per-View (IPPV) reportback. Star Choice will not permit IPPV unless this remains connected.

Connect the external antenna input if applicable for local off-air TV broadcast.

Plug the DVR power cord into a standard power outlet. Wait one minute, and then press the ON key located on the left side of the satellite receiver's front panel.

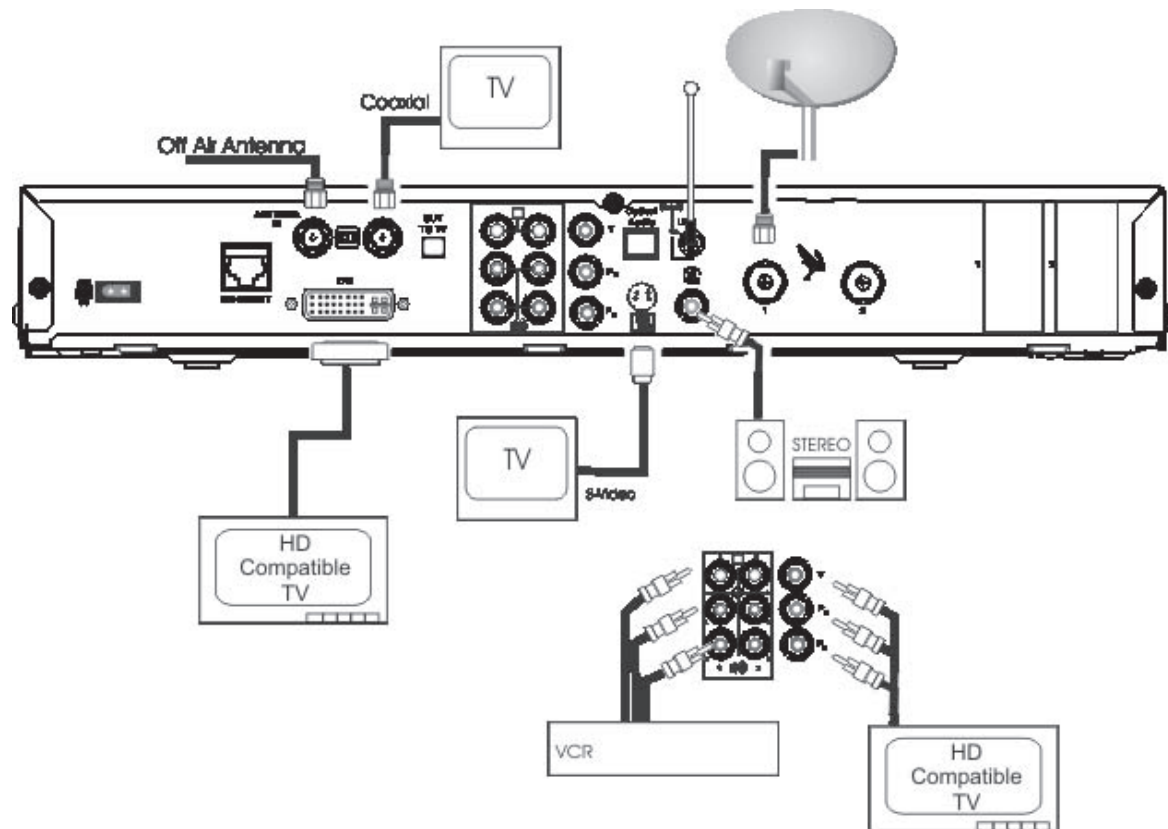
### Notes:

Video and audio quality should be best when the DVR is connected directly to the primary output component, such as the television or monitor (for video), and the television or home theater A/V receiver (for audio). Use quality cables designed for these applications.

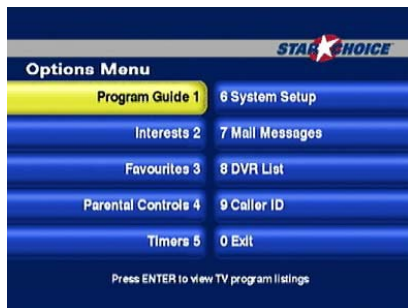
If you are using the component video outputs, you may have to toggle the HDTV mode select button behind the flip-down door on the front panel. This toggles the HDTV output between 1080i, 720p, 480p, 480i, and native modes. Native mode (0000) is the original transmitted signal. You should leave this on native mode unless your TV or monitor requires a specific mode such as 1080i.

If you are using the RF output tune your TV to channel 3 or 4 to match the position of the channel 3/4 switch on the back panel of the satellite receiver.

Home theater A/V receivers can provide a method to connect multiple input sources if your television does not have enough input connectors. Some home theater A/V receivers may also provide very good or enhanced quality. Refer to your home theater A/V receiver instructions for further information.



## Menu Navigation





### Using the Menus

You will be making various adjustments to your receiver using menus displayed on your TV.

If you use the remote control, use the **OPTIONS** key to display the Main Menu screen. There are two ways to select a menu option:

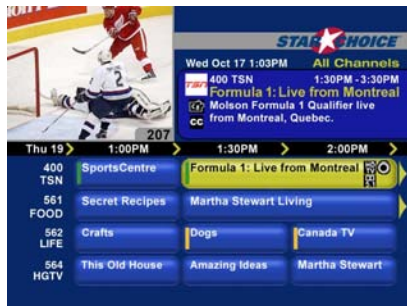
Press the **◀ ▶** keys or the **▲ ▼** keys to highlight the option you wish to select. Then press the **ENTER** key to select it.

If the options are numbered, simply press the number key to select.

To use the keys on the front panel of the receiver, press the **MENU**  key to first display the Main Menu screen. Then press the **◀ ▶** keys or the **▲ ▼** keys to highlight an option. Then press the **SELECT**  key to select the highlighted option.

The remainder of this section provides instructions for various installation settings using the remote control, however you can also use the front panel keys if necessary.

For step by step instructions on user screens including Interests, Favourites, Parental Controls, Timers, Mail Messages and DVR, consult the Quick Reference Guide.



### Program Guide

The Guide has two modes: Picture-in Guide and Full Screen Guide.

Press **Guide** key once to display the Guide. Press **Guide** again to enable the other Guide mode. (Use the Options menu to set Guide mode to Picture-in Guide or Full Screen – cycling between the two is the default setting.)

Scroll up or down through a page of listings by using the **Ch +**, **Ch –** keys.

Scroll ahead in 6 hr. increments by pressing >> (Fast Forward), or back by pressing << (Rewind) on the remote.

View program information by pressing the Info key.



### Interests

Press Interests on the remote or select it from the Options screen to display the Interests menu.

Select a category such as Network Series, Sports, Pay Per View, Movies, etc. to display all available programs during the current viewing time.

Select the show you wish to view from the programs available.



### Favourites

Select Favourites from the Options menu to configure favourite channel listings.

Select a list name and scroll through the channel line-up, marking your favourite channels. Personalize list names using the soft keypad. Customize up to 3 independant channel listings.

Save time by navigating through your own personal favourite channel listings.



## Parental Controls

Press the Locks key on the remote or select it from the Options menu.

Enhanced parental controls allows you to lock-out programs by either TV, movie or content ratings as well as individual channels. Password protected.

Lock-out PPV channels to avoid surprise charges for movies someone else has ordered.



## Timers

Create event timers to program your viewing schedule and never miss your favourite shows. You can also set timers to record shows. See page 22 for details.

Select Timers from the Options menu. Next select Type, Frequency, Time and Channel. Once finished, press Save to activate a timer(s) or Cancel to remove a Timer.



### **System Setup**

Customer can select System Setup to: view Purchase history, edit Guide display settings, edit Music channel settings, to see System settings for your satellite receiver.

### **Mail Messages**

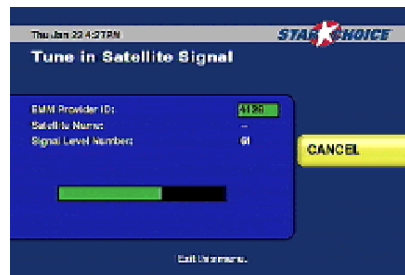
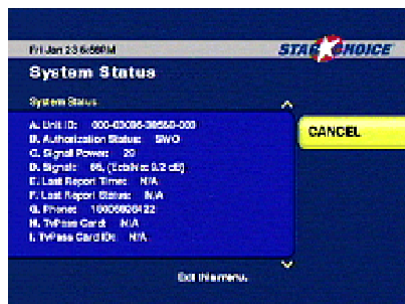
Select this option to view receiver Mail Messages.

### **Caller ID**

Select this option to view Call Logs, and to edit Caller Names

### **DVR List**

Select this option to view the list of programs recorded on their DVR530. See page 27 for details.



## Authorizing Your Receiver

*Press the EXIT key on the remote control. Then press the number keys to select the authorization channel. This number is obtained from your provider.*

Press the OPTIONS key on the remote control, System Setup (option 6), and System Settings (option 4), then System Status (option 7) and the menu will appear. Line A shows your Unit ID number, which you or your installer will need to provide to authorize your unit.

Once this unit ID number is provided, press GO BACK to return to the System Settings menu. Select Installation Settings (option 3) then select Reportback (option 3) to view the Trip Count.

When your receiver has received the authorization message the Trip Counter will advance.

Press EXIT to exit the menus or GO BACK to return to the Installation Settings menu.



## Menu Navigation



### Overview

**System Settings.** The System Settings menu provides access to menus that allow you to adjust the operation of your system. These include the following:

#### Systems Settings: Option 1. User Settings

**Audio Language.** The Audio Language option allows you to select the audio language for your programs. The choices are English or French. The default is English.

**On Screen Language.** This option allows you to select the language of the on-screen menus for your programs. The choices are English or French. The default setting is English.

**Clock Format.** Enabling this option will allow a clock to appear on the segmented front panel display. The choices are AM/PM or 24 Hour. The default setting is AM/PM.

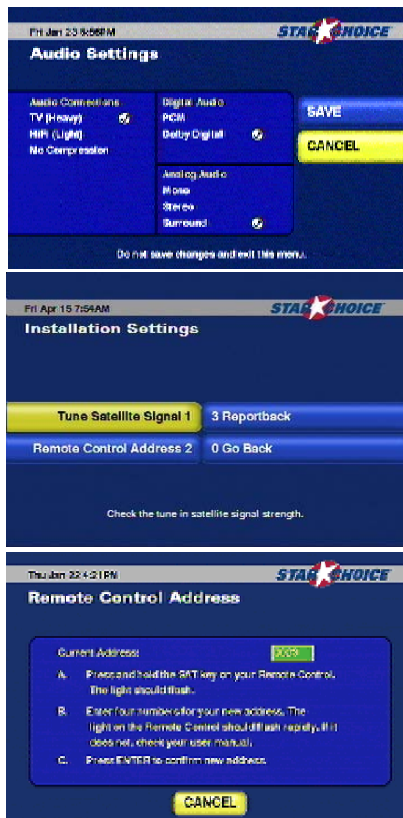
**Clock on During Standby.** Enabling this option will allow a clock to appear on the segmented front panel display when the receiver is placed into Standby mode (i.e. Off). If disabled, a clock will not appear.

**Caller ID.** This option will allow you to receive information regarding incoming telephone calls.

**Display Intensity.** Select "Dim" or "Bright" to set the brightness of the blue bar lights on the front panel of the receiver.

Use the ◀ ▶ ▲ ▼ keys to scroll through the selections. Press ENTER to select your language choice.

Save your choices, then press the GO BACK key to return to the System Settings menu or press the EXIT key to exit and return to watching programs.



## System Settings: Option 2. Audio Settings

From the System Settings menu select Audio Settings (option 2). If you are in SAT mode (digital) broadcast, three options appear on the Audio Settings menu.

**AudioConnections.** Select Audio Connections, and you will be able to select either TV, HiFi, or No Compression (the default is HiFi). Select TV if the receiver's AUDIO OUT port is connected to your TV. Select HiFi if it is connected to your stereo system. Select No Compression if connected to a home theater system.

**Analog Audio.** The Analog Audio option allows you to set the output of your stereo audio jacks. The options are Mono, Stereo, or Surround. The default is Surround.

**Digital Audio.** The Digital Audio option allows you to set the output of the digital audio jacks. The options are PCM and Dolby Digital. The default is Dolby Digital.

## Systems Settings: Option 3. Installation Settings

The Installation Settings menu allows you to tune in the satellite signal, change the remote control address and initiate a manual reportback.

**1. Tune Satellite Signal.** This option is for the installer use only.

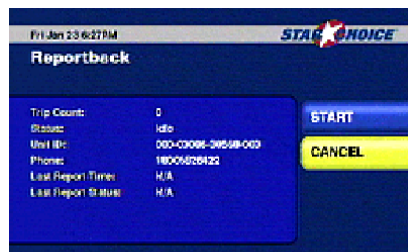
**2. Remote Control Address.** This option allows you to set the remote control address of the satellite receiver. You can set up to eight separate addresses (0000 through 0007). The default address is 0000.

From the Main Menu choose System Settings, and Installation Settings (option 3).

- On the Installation Settings menu, choose Remote Control Address (option 2). Follow the instructions on the Remote Control Address screen.

To program a remote control for each receiver, hold down the SAT key on the remote control until the light flashes then enter the four digit address that matches the receiver.

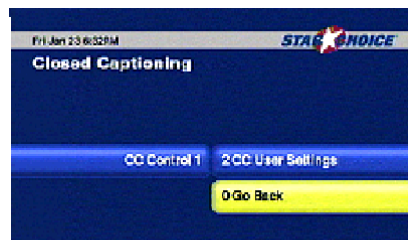
## Menu Navigation



### 3. Reportback

If your receiver has been authorized to receive Instant Pay Per View (IPPV) events this menu allows you to initiate a manual reportback. This screen shows the Trip Count and the Reportback Status. The Trip Counter displays the message activity from your service provider.

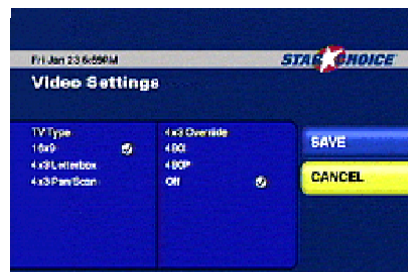
Select START to begin the reportback or press GO BACK to return to Installation Settings Menu.



### System Settings: Option 4. Closed Caption

This menu allows the receiver to configure the appearance of high definition closed captions. Select Enable to turn on closed captions on the high definition video output. If closed captions are present, they will be seen on the television. Select Disable to prevent closed captions from appearing. Your receiver automatically formats closed captions if available.

Select user settings to manually format how closed captions are displayed. Utilize the user setting sub-menus to modify the color opacity, background, and font attributes of the available hi-def closed captions.



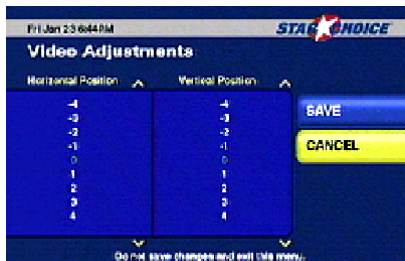
### System Settings: Option 5. Video Settings

This menu allows you to set the TV output aspect ratio and select a method of conversion when the original aspect ratio does not match your TV.

**TV Type.** Select one of three 4x3 options if your TV screen is a typical screen with a 4:3 ratio of width to height. Select 16x9 if your TV screen is a wide screen with a 16:9 ratio (as in HDTV's or digital TV's). The default setting is 16x9.

**4:3 Override.** By selecting 480i or 480p the receiver will send standard definition video to your TV in its original broadcast format. Select Off and the receiver will default to the resolution selected by the front panel button.

After you make your selections press SAVE to your changes or press GO BACK to return to the System Settings menu without making any changes.



### System Settings Option 6: Video Adjustments

This menu allows you to re-position your picture horizontally and vertically.

After you make your selections press SAVE to your changes or press GO BACK to return to the System Settings menu without making any changes.

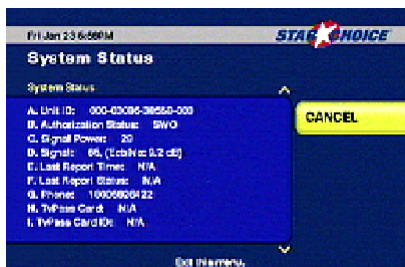
### System Settings Option 7: System Status

This is a view-only screen that displays information about the status of the receiver.

#### Authorization Screens

Sometimes when you tune to a program, an Authorization screen will appear. It will fade to black after a short time, it will reappear when:

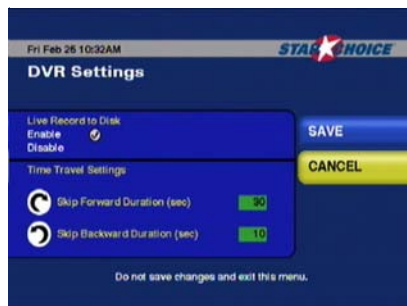
- The channel or program is locked out because of your parental control setting, which requires you to enter a password. (If you have not set a password, just press the ENTER key.)
- The receiver is not authorized.
- A subscription is required to receive the program.
- There is a program blackout in your area.
- There is a technical problem.



### System Settings Option 8: DVR (Digital Video Recorder)

These menus allow you to change your DVR settings, delete recorded programs and reset your DVR settings.

## Introduction to Digital Video Recorder (DVR)



### DVR Overview



#### Setting DVR Options

The DVR530 is the first satellite receiver from Star Choice to feature Digital Video Recording (DVR) technology. Similar to a personal computer, the DVR530 has an internal hard disk onto which video and audio are recorded. The recordings are 100% digital, maintaining the superb quality of the original broadcast.

There are several ways to customize how your DVR530 will record and playback programs.

Press the **OPTIONS** key on the remote control, and then select System Setup (option 6), then System Settings (option 4), then DVR (option 8), then DVR Settings (option 1) and the menu will appear.

**Live Record to Disk.** This option has two settings: Enable and Disable. **Enable** allows the DVR to record a buffer of any live TV you are viewing for use in pausing and reversing programs. This buffer recording is temporary, and is erased and re-started each time the receiver is set to standby mode or a new channel is tuned-in. The maximum length of the buffer recording is 90 minutes. **Disable** will prevent the recording of the buffer and also prevent the use of pause and reverse features while viewing live programming, but will not prevent the DVR from recording programs using a Scheduled Timer Event or Impulse Recording.

**Time Travel Settings.** These settings control the function of the Skip-Forward  and Skip-Backward  buttons on your remote control, which allow you to immediately fast-forward or reverse playback by a pre-set number of seconds while viewing a recorded program (or when available during live programming). The default values are 30 seconds forward and 10 seconds backward.

You may change either value by selecting the box with the current value pressing the left arrow button on the remote control to erase the pre-existing values. Then enter your preferred number of seconds using the remote control.



Once you are satisfied with the settings in the DVR Options screen, select "SAVE" to return to the OPTIONS menu.



### Resetting Default DVR Settings

If you would like to revert any changes you have made to the DVR setup, Press the OPTIONS key on the remote control, and then select System Setup (option 6), then System Settings (option 4), then DVR (option 8), then Reset DVR Settings (option 3) and a warning message will appear. Select "CONFIRM" to complete the reset and return to the OPTIONS menu. Once reset, your custom settings cannot be retrieved.

### Timers

Timers, also called Scheduled Events, are created to instruct the DVR530 to perform certain tasks at pre-determined times. There are three types of Timers to help you view or record programs: **Auto-Tune**, **Reminder** and **DVR**. An **Auto-Tune** Timer will cause the receiver to automatically tune to a specified program when it begins. A **Reminder** Timer will display an on-screen reminder when a specified program is about to start. Both the Auto-Tune and Reminder Timer will display their on-screen reminders whether you are watching live programming or recorded programming. A **DVR** Timer will allow the automatic recording of program(s) you specify. The **DVR** Timer is a new feature unique to the DVR530, and is the primary means of recording programs.

### Creating Timers from the IPG

To schedule any type of Timer from within the Interactive Program Guide, highlight the program you would like to create a Timer around and select it by pressing ENTER on the remote control. From the Program Information screen that appears, select the type of Timer you wish to create. The IPG will re-appear with a clock icon  (for an Auto-Tune or Reminder Timer) or a recording icon  (for a DVR Timer) below the program title.

## Scheduled Events (Timers)

### Creating Timers from the IPG (cont)

DVR Timers can be set by a special short-cut: highlight the program you wish to record and press the record button on the remote control to instantly create a DVR Timer for the program. The recording icon will appear below the program title. You can also cancel a pre-existing DVR timer by highlighting the program and pressing the record button on the remote control again.

### Manually Creating and Modifying Timers from the Options Menu.

To create Timers with advanced options or to modify and cancel existing Timers, access the Timers menu. Press the OPTIONS key on the remote control, then select Timers (option 5) and the menu will appear. You will see any existing timers listed followed by a line reading "Press Enter to create event timer". To create a new Timer, highlight this line and press ENTER on the remote control. To modify or delete an existing Timer, highlight the appropriate line instead. The Event Timer screen will appear.

The following options are set when creating or modifying a Timer:

**Timer Type:** Select Auto-Tune, Reminder or DVR.

**Frequency:** Select Once for a one-time recording; Weekly for a Timer that recurs at the same day, time and channel each week; Daily for a Timer that recurs at the same time and channel each day; Or Mon-Fri for a "daily"-style Timer that skips Saturday and Sunday. The Mon-Fri Timer can be created or modified on any day of the week.

**Start Time:** Set to the time at which your program begins or the time you would like the Auto-Tune or Reminder Timer to alert you.

**End Time:** For a DVR Timer, the end time should be the time when recording should stop, for Auto-Tune and Reminder Timers, any time after the Start Time will suffice.

**Date.** Set to the date on which you would like the Timer to activate. For Mon-Fri Timers, the current date or any weekday date thereafter will suffice.

**Channel:** The channel of the program you wish to record, auto-tune to or be reminded of.

Once each parameter is correct, select **SAVE** to create the Timer and return to the Timers Menu. To remove a Timer, select **DELETE** to erase the Timer and return to the Timers Menu.

Only DVR Timers can be modified or deleted after their Start Time. Any Timer controlling a recording in progress will be marked with a record icon in the Timers Menu. Modifying the End Time of a DVR Timer while the recording is in progress will extend the recording to the new End Time that is entered, and deleting a DVR Timer while the recording is in progress will stop the recording, but preserve the partial recording for viewing.

### Timer Conflicts

The DVR530 is capable of handling one DVR Timer and one Auto-Tune OR Reminder Timer that begin at the exact same time, but cannot support two DVR Timers or two Auto-Tune/Reminder Timers with the same Start Time. If you attempt to create a new Event Timers that conflicts with a pre-existing Timer, a warning message will be displayed, followed by a screen allowing you to delete or modify either the pre-existing Timer, listed as “Timer 1” or the Timer being created, listed as “Timer 2”. Follow the on-screen instructions to resolve your Timer Conflict. A common technique to maintain two or more Timers for the same programming time-slot is to set the Timers one minute apart.





### Recording Programs

The DVR530 uses an internal hard disk with 160 gigabytes of storage capacity, able to store over 130 hours of Standard Definition programming or more than 25 hours in High Definition programming. The DVR will automatically record each program in the proper format, and is capable of storing programs in both formats simultaneously. There are several methods of recording programs using the DVR.

**When any Event Timer is scheduled, including DVR Recordings, a red clock icon will appear on the front panel of the DVR530 receiver.**

**While the DVR530 is recording a program, the four blue bar lights on the front panel of the receiver will cycle continuously.**




### Impulse Recording

While viewing any program, press the record ● button on the remote control to begin recording that program. You will be prompted to choose between recording the program until the scheduled end time or to select different parameters by opening the Event Timers screen.

### Scheduled Recording

You may schedule the recording of programs using a DVR Timer (See section on Timers). All recorded programs are accessed using the DVR List, but the way the DVR Timer is created can affect the way the programs are displayed within the DVR List:

**Recording by Program VS. Recording by Time:** When programs are recorded one-by-one, by setting individual DVR Timers, each program will have its own entry in the DVR List, even if multiple successive programs are recorded from the same channel. This means that you will be able to view, protect and delete each program independently of all others.



When a DVR Timer is manually created to record a specific channel across a particular range of time, the DVR treats the entire time period as a single recording, regardless of how many different programs were recorded during the period. In the DVR List, the recording will be listed under the title of the first program recorded within the period, marked with a (+) symbol. The titles of other programs recorded within that time period will be displayed when the listing is selected. These multi-program recordings will NOT allow each program to be viewed, deleted or protected individually. While viewing such a recording, you will need to start viewing at the beginning of the first program and then advance or reverse within the recording to reach the different programs. Deleting the recording will erase all the programs within it as a group.

### **Canceling or Modifying a Recording**

To cancel a scheduled recording, or to cancel or extend a recording in-progress, access the Timers Menu to edit the Timer for the recording as described in the Timers section.

### **Viewing and Recording Simultaneously**


The DVR530 can tune into two separate channels simultaneously, allowing you to record one program while you view another.

If you have scheduled a recording event, the specified program(s) will be recorded no matter what you are viewing during the scheduled time. While the DVR records your program, you will still have complete control of the DVR530 to view live programming and previously recorded programs, with all the same control to pause, reverse and advance, as well as to use the IPG, Options Menu and DVR List. Only Impulse Recording will be unavailable while another program is being recorded.

While your program is being recorded, all other features of the DVR530 are still available, so you may view any live or recorded programs, with the full control to pause, reverse or advance you would have while not recording.

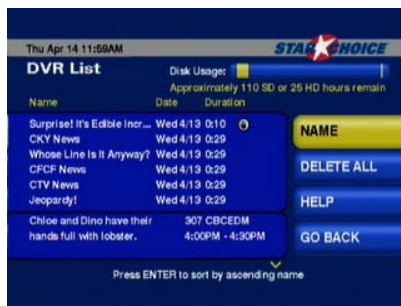
# Managing Recordings

## Recording Problems

If your DVR530 experiences an interruption in satellite reception or AC power during a recording event, the resulting recording may be incomplete, and the video and audio could be partially distorted during playback. In extreme cases, a problem of this sort could result in total loss of the program being recorded. Within the DVR List, 'broken' recordings which are incomplete or have been corrupted in this way are marked with a special icon. 

## The DVR List

The DVR List is the menu screen from which you may access your recorded programs to view, manage or delete them. Press the DVR LIST button on the remote control, or press the OPTIONS key on the remote control, and then select DVR List (option 9) and the list of your recorded programs will appear. Highlight any program title from the DVR List and press ENTER on the remote control to view the Recording Details screen and play or modify the recording.



## DVR Icons

Within the DVR List or IPG, programs may be marked with any of several icons:



Indicates a "Protected" recording. Seen in the DVR list next to a recorded program.



Indicates a broken recording, a recording that did not finish or is otherwise corrupted. Seen in the DVR list next to a recorded program.



When the center of this icon is red, it means a program is scheduled to be recorded or is in the process of recording. When the center of this icon is grey, it indicates the recording has completed. Seen below the program title in the IPG or in the DVR List next to a recorded program.



Indicates an Auto-Tune or Reminder Timer has been set. Seen below the program title in the IPG.

### Viewing Recorded Programs

Select the recording you wish to view from within the DVR List to display the Recording Details screen. Select "PLAY" to view the recording. You may begin playback of a program before the recording has completed, and the recording will continue as you view the program from the beginning. If you have already viewed a portion of a recorded program, a confirmation screen will appear when you play the recording again, prompting you to restart the program from the beginning or to resume from the point at which the playback was stopped.



**Controlling/Stopping Playback:** Your remote control offers enhanced VCR-style buttons for controlling the playback of your recorded programs:



**PLAY/PAUSE.** Use either button to pause or resume playback



**FAST FORWARD.** Use to accelerate the playback at increasing speeds. Multiple presses causes faster playback.



**FAST REVERSE.** Use to reverse playback at increasing speeds. Multiple presses causes faster reversal.



**STOP.** Use to cease playback of recorded program and return to DVR List.



**SKIP-FORWARD/SKIP-BACKWARD.** Use these buttons to skip a pre-set number of seconds forward or backward. Defaults are 30 seconds forward and 10 seconds backward.

## Live Programming Controls



### Protecting and Deleting Recorded Programs

Recorded programs remain stored on the DVR530 until you choose to delete them.

After a recording has completed you can prevent accidental deletion of the program by protecting it. Within the Recording Details screen for a recorded program, select "PROTECT" and an icon will appear next to the program's entry in the DVR List. The program cannot be deleted individually or via the "DELETE ALL" option until you disable the protection. To do so, access the Recording Details screen again and select "UNPROTECT".

To erase your recorded programs, access the DVR List and select "DELETE ALL" to erase all unprotected programs. To erase programs individually, the Recording Details screen for any unprotected program and select "DELETE" to immediately erase the program. **Once a program is deleted, it cannot be recovered.**

### Enhanced Live TV Viewing

While full playback control is only possible on pre-recorded programs, the DVR530 offers several enhanced options for use while viewing live broadcasts. **NOTE: These features require the "Live Record to Disk" feature to be enabled. This feature is enabled by default, see page 18 for details.**

### Pausing Live Programs

Press the pause **||** button on the remote control at any time to pause the program you are viewing. The image will freeze and a pause icon will appear in the lower right corner of the screen. A timer next to the pause icon will display the time elapsed since the program was paused. Press the play button on the remote control to resume playback at any time within 90 minutes of pausing.

After resuming playback you will be viewing a delayed recording of the program you paused, and the timer will display the time difference between the recording and the live broadcast. While in this delayed mode, you may pause again, fast forward, fast reverse, skip-forward or skip-backward until you return to live programming. You can return to the live broadcast either by advancing the recording until it "catches up" to the live program, or by pressing the stop ■ button on the remote control.

You may view the IPG, Options Menu and DVR List while a live program is paused, but tuning to a different channel, playing a previously recorded program or putting the DVR530 into standby mode will erase the delayed recording and you will be unable to resume your paused program.

### **'Instant Replay'**

While viewing any program, use the fast reverse ◀◀ or skip-backward ⏮ buttons on the remote control to reverse to any point you have viewed within the past 90 minutes or since you tuned to the current channel. It is not possible to reverse to programming you viewed on a previous channel. To return to live programming after reversing, press the stop button on the remote control or advance the playback (using the Skip-Forward or Fast Forward controls) until the playback "catches up" to the live programming.

**TIP:** You may use the Pause and Replay features together: If you reverse a live program after pausing it, you will be able to reverse to the moment when you last tuned to that channel, not only to the moment when the program was paused.

### On-Screen Displays During Viewing

While viewing recorded programs or using live TV features like pause, the DVR530 helps you control the playback with on-screen icons and indicators.

On-screen displays usually disappear to give you an unobstructed view of your programs, but when the remote control is used to control playback, a banner will appear along the bottom on the screen containing details of the program being viewed as well as indicators for the controls being used. Press ENTER on the remote at any time to view this banner without affecting playback. The banner will always disappear after several seconds of inactivity.

At the right of the banner, you will see the channel number and original broadcast time of the recorded program underneath the current date and time. Midway across the banner the title of the recorded program is displayed below a yellow progress indicator. This blue bar will fill from left to right with yellow until the end of the recording is reached. At the left of the banner, you will see a timer that counts either the progress of the recording or the time difference between live programming and your paused or reversed program. Beside this timer you will see a circular space inside of which the control icons appear.



**Navigation Compass.** Indicates that the browsing buttons on the remote can be or are being used. Typically seen during live programming when no recording or playback features are being used.



**Play/Pause.** Indicates that the program is playing normally or paused.



**Stop.** Indicates the program playback or recording has been stopped.



**Record.** Indicates the program is being recorded.



**Time Travel.** Indicates the Skip-Forward or Skip-Backward buttons are in use.



**Fast Forward.** Indicates that the playback is being advanced. There are three speeds for advancing playback, marked by increasing numbers of arrows pointing to the right. One, two or three presses of the fast forward button on the remote will determine speed of advance.



**Fast Reverse.** Indicates that the playback is being reversed. There are three speeds for reversing playback, marked by increasing numbers of arrows pointing to the left. One, two or three presses of the fast reverse button on the remote will determine speed of reverse.



**Slow Forward.** Indicates that the playback is being advanced during pause. Using the fast forward control while paused allows 2 speeds of very slow advance.

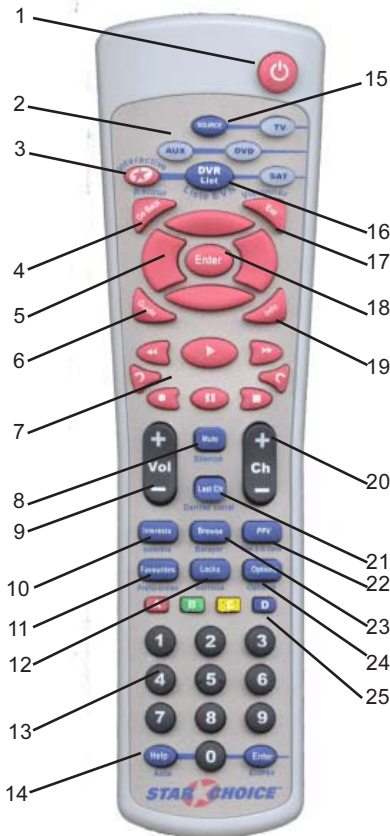


**Slow Reverse.** Indicates that the playback is being advanced during pause. Using the fast reverse control while paused allows 2 speeds of very slow advance.



## Remote Control

★ These buttons will support possible upgrades to DVR530 functionality. They are not functional at present.



The remote control provided with your DVR may be used to operate and access all features of your DVR. Additionally, the remote control may also be used to operate your TV, DVD, VCR, A/V receiver, and other home theater components.

The remote control utilizes two AA batteries which were provided with your equipment packaging. To add batteries to the remote control, remove the cover on the center back of the remote control by pressing down the latch and pulling outward. Position each battery in the compartment so that the flat base of the battery (-) is against the spring and the raised contact of the battery (+) is against the flat terminal. Make sure the batteries are securely seated and replace the panel.

The remote control will operate the DVR while in the SAT mode. TV, DVD, and other modes may need to be programmed (see page 20) before the remote control will operate your specific home theater components.

### 1. Power.

**2. Mode keys (SAT, TV, VCR, AUX).** Press once to set the mode of the remote control functions. Press and hold to program the mode for specific component models.

### ★ 3. Interactive. Displays Interactive menus.

**4. Go Back.** To return to the previous menu.

**5. Navigation Keys.** To navigate within menus or change channel up and down.

**6. Guide.** To display the Interactive Program Guide.

**7. DVR/DVD/VCR Keys.** Press to rewind, play, fast-forward, skip back, skip ahead, record, pause or stop your DVR, DVD or VCR functions.

**8. Mute.** To mute the TV sound.

**9. Vol (+ and -).** To raise or lower the volume level.

**10. Interests.** To display the Interests menu.

**11. Favourites.** Changes the channel using only your favourite (pre-selected) channels.

**12. Locks.** Displays the parental controls menu.

**13. Number Keys.** Enter the three-digit channel number, or the number followed by "Enter" for channels below 100.

**14. Help.** To display the main help screen menu.

**15. Source.** To control the input source to your components.

**16. DVR List.** To view a list of recorded programs.

**17. Exit.** To exit all menus or to view the current channel, program title, and time.

**18. Enter.** Press ENTER to select a highlighted menu option, or press ENTER to tune in the channel whose numbers you have already pressed.

**19. Info.** To display detailed information about the current program or a highlighted program in the Guide.

**20. Ch (+ and -).** To channel up or down. These keys also function as page (screen) up and down when you are viewing the guide.

**21. Last Ch.** To return to the last channel viewed.

**22. PPV.** To display the current Pay-Per-View programs.

**23. Browse.** To display the current program title at the bottom of the screen, and activate the browser to preview program title on other channels or at a later time.

**24. Options.** To display the Main Menu.

★ **25. Interactive.** Press to make Interactive selections.

## Programming

Your DVR remote control can be programmed to operate your TV and auxiliary components. Follow these instructions to program the remote control.

- Turn on the TV or component you wish to program.
- Use the table in this section to find the brand of the desired component. After the manufacturer's brand name is one or more four-digit codes.
- Press and hold the TV, DVD or AUX key on the remote control until the mode keys on the remote flash. (Note: the DVD key is labeled DVD for convenience. It may be programmed with any usable component code such as VCR.).
- While the mode keys are flashing, key in the first of the four-digit codes listed in the table for your brand.
- If it is a usable code the mode key will flash rapidly to indicate that it has accepted the code. Press the POWER key on the remote control to make sure the remote control is able to turn your TV or component off and back on.
- If it is not a usable code use the next four-digit code from the list until the remote control is programmed correctly.

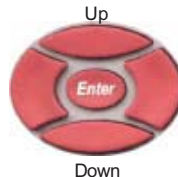
Components may respond to more than one code. If your component does not respond to the remote as it should then an alternate code may be more functional or you can try scanning for an alternate code by using the

following procedure.

### If Your Four-Digit Code is not in the Tables (Scan)

If you try to program your remote control using the four-digit codes, and the remote control does not work correctly, you may be able to find a code that works by using the "scan" process.

- Turn on the TV.
- Press and hold the TV mode key on the remote control until the mode keys on the remote begin to flash.
- While pointing the remote control at your TV, press the UP navigation key to scan upward to the next code. (Use the DOWN key to return to the previous code.)
- If a transmitted code is the correct one, your TV will turn off, responding as if its POWER key were pressed. The mode key will remain lighted. Press ENTER and the mode key will blink rapidly indicating acceptance.
- If your TV does not respond, press the UP navigation key to try the next code. When your component turns off you will know that you have found the correct code. Press ENTER to confirm.
- The DVD and AUX keys may be programmed to operate a variety of components but you must first program the selected mode with a valid code or program it using the following starting points: press "1000" if scanning TV codes; "2000" if scanning VCR codes; "3000" if scanning CD or DVD codes; "4000" if scanning audio receiver codes; "5000" if scanning TV/VCR combinations or "6000" if scanning for cable boxes. The mode key will flash rapidly indicating acceptance. Then press and hold the AUX or VCR key until all the mode keys flash. Press the UP navigation key until your component turns off. Press ENTER and the mode key will flash to indicate acceptance.



# Remote Control

## Verifying Your Component Codes

To verify the accepted programming codes follow these steps.

- Press the SAT, TV, DVD or AUX key for at least three seconds or until the LED blinks.
- Press the "INFO" key. The LED will blink, indicating the code of your component in the following sequence. For example, if your TV code is for a Tandy brand TV (code 1005) the blink pattern will be:

Pause>long blink "1;" Pause>short blink "0;" Pause>short blink "0;"  
Pause>long blink, long blink, long blink, long blink, long blink "5."

A zero in the code will always be represented by a short blink.

## Programming the Master Power Feature

You can control the power on/off function of your satellite receiver and all connected equipment with a single press of the POWER key on your remote control. Enable the remote control's Master Power feature by following these steps:

- Press the SAT key on the remote control for at least three seconds or until the light on the key blinks.
- Press the POWER key on the remote. The light will remain on steady. Press the power key a second time, and the light on the remote will blink on and off briefly, which indicates that the remote has accepted the Master Power command.

To cancel the Master Power feature, just repeat the steps above.

## Volume Control Crossover

Your remote control is programmed from the factory to control the volume of your television set when you re using the remote control in the TV mode. You can choose to have the SAT mode control the volume of your television directly, instead. The AUX mode can also be programmed to control the audio. To program your remote control for this feature:

- Press the SAT for at least three seconds or until the LED blinks then press the TV or AUX key to allow the TV or AUX device to control the volume.
- If another device (TV or AUX) is currently controlling the volume and you wish to transfer it to the satellite receiver press the device mode key until the mode keys blink then press the SAT mode key again.

## If You Have More Than One Satellite Receiver

If you have more than one satellite receiver, you may want to prevent the remote controls from affecting the other receivers. To prevent this interference, you must "pair" each remote control and receiver and assign a new "address" to each pair. If you have multiple receivers, see page 16 for the procedure to assign addresses.

If you have programmed the receiver for volume control crossover and change the address, volume control crossover must be reprogrammed.

## TV Codes

AOC .....	1005, 1006, 1019, 1020, 1023	Curtis Mathes .....	1006, 1016, 1018, 1023	Infinity .....	1010, 1066, 1151	Memorex .....	1018, 1032, 1034, 1072, 1090
.....	1024, 1120, 1140, 1163, 1173	.....	1026, 1041, 1059, 1090, 1125, 1131	JBL .....	1010, 1066, 1151	.....	1149, 1172
Admiral .....	1003, 1018, 1034, 1041	.....	1151, 1163, 1172, 1192, 1194, 1224	JC Penney .....	1003, 1005, 1006, 1014, 1016	Midland .....	1001, 1003, 1165
.....	1069, 1090, 1125, 1129, 1176	Daewoo .....	1005, 1023, 1024, 1026, 1029	.....	1026, 1043, 1044, 1096, 1125, 1131, 1134	Mitsubishi .	1004, 1005, 1023, 1034, 1070, 1071
Aiko .....	1024	.....	1030, 1032, 1130, 1146, 1170-1172, 1224	JVC .....	1149, 1163, 1165, 1172, 1194, 1207, 1224	.....	1072, 1122, 1123, 1129
Aiwa .....	1090	Daytron .....	1024, 1026, 1192, 1194, 1224	.....	1057-1061, 1185	.....	1149, 1172, 1173, 1188, 1192, 1194
Akai .....	1000, 1032, 1070, 1074, 1075, 1077	Dimensia .....	1125	Jensen .....	1056	Multitech .....	1041
.....	1081-1085, 1094-1116, 1133-1140, 1163, 1172	Dixi .....	1120, 1146	KEC .....	1041	NAD .....	1002, 1117, 1131, 1166, 1172
Alaron .....	1034	Dumont .....	1001	KMC .....	1224, 1225	NEC .....	1005-1009, 1023, 1028, 1036, 1090
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Amstrad .....	1033, 1132	Emerson ..	1017, 1023, 1026, 1028, 1033, 1034	Kenwood .....	1006, 1163	National .....	1008, 1011, 1151, 1190, 1196, 1211
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Denon	3032
Fisher	3034
Genexxa	3035-3037
Hamon	3038-3040
JVC	3042, 3043
Jensen	3041
Kenwood	3044-3046
Linn	3047
Magnavox	3048
Mission	3047
Nikko	3036, 3050
Onkyo	3051, 3052
Optimus	3053
Panasonic	3054-3056
Polk Audio	3057
QED	3047
Quasar	3058
RCA	3059
Sansui	3060
Sears	3061
Sharp	3062
Sony	3063
Tascam	3028
Teac	3064, 3065
Yamaha	3067-3069



# Specifications

## INPUT

### L-Band Input

Input frequency	950 to 2150 MHz
Input impedance	75 ohm
Input level	-65 dBm to -25 dBm
Return loss	8 dB minimum
Demodulator	QPSK demodulator

## OUTPUTS

### Component Video

#### S-Video

Output Level	
Luminance (Y)	1.0 V pp $\pm 15\%$ into 75 ohm
Chrominance (C)	286 mV pp $\pm 15\%$ into 75 ohm
Connector	4-contact Mini-DIN, Black
Freq Response Y	$\pm 1.0$ dB, 1 kHz to 4.2 MHz
Freq Response C	+ 1.25 to -4.25 dB (relative to 0 dB at 3.58 MHz)
S/N (Y)	57 dB minimum (unified weighting 100 kHz HPF, MHz LPF)

### Composite Video

Output level	1.0 V p-p $\pm 10\%$ into 75 ohm
Connector	Yellow phono, marked Video out
Frequency response	$\pm 1.0$ dB, 1 kHz to 4.2 MHz
Differential gain	5.0% p-p maximum
Differential phase	5.0 deg. p-p maximum
S/N	57 dB minimum (unified weighting 100 kHz HPF, 5 MHz LPF)

## Optical Digital Audio

Optical power output	0.032mw max
Wave length	660nm typ $\pm 30$ nm
Cable length	3 meter max (not provided)

## Electrical Digital Audio

### Stereo Audio

Modes	Digital baseband stereo Fixed volume output, volume control is from TV only
Frequency response	$\pm 1.0$ dB, maximum, 20 Hz to 20 kHz

### RF Output (Channel 3/4)

Connector	"F" type receptacle, "Out to TV" NTSC & IEC
Impedance	75 ohm
Channel	Ch. 3 or 4 (NTSC, North America)
Audio	Mono

## REMOTE CONTROL

Transmitter	IR/UHF
Batteries	2 x AA type
Range	Up to a maximum of 150 ft.
Angle	$\pm 22$ deg. (IR)

## PHYSICAL/ENVIRONMENTAL

Temperature	0 deg. to 40 deg. C ambient
Humidity	95% relative
Dimensions	17" W x 2.5" H x 13" D
Weight	5.85 lbs
Power input	115V $\pm 10\%$ AC; 60 Hz nominal; 50W maximum
UL	Listed
CSA	Certified

## Warranty Coverage

### RECEIVER WARRANTY COVERAGE

Within 1-365 days from date of purchase.

- Call our Customer Care Centre (1 888 554-STAR) to see if we can help you troubleshoot the problem on the spot.
- If it can't be fixed over the phone, you'll be given a **Return Tracking Code # (RTC)** needed to return the receiver for warranty coverage.
- We'll have a replacement delivered to you.
- Your new receiver package will include instructions for returning the defective receiver. When doing so, you must **enclose a proof of purchase** (i.e. sales receipt) and your **RTC # and fail code** (provided by Star Choice). Shipping fees may apply.
- We must get your defective receiver within 30 days of you getting the replacement. Otherwise, a charge for the receiver will be applied to your account.

**366 days or more – not covered under warranty.**

### REMOTE CONTROL WARRANTY COVERAGE

Within 1-365 days from date of purchase.

- Call our Customer Care Centre (1-888-554-STAR) to see if we can help you troubleshoot the problem on the spot.
- If it can't be fixed over the phone, you'll be given a **Return Tracking Code # (RTC)** and fail code needed to return the remote for warranty coverage. Shipping fees may apply.
- We'll have a replacement delivered to you.

### RECEIVER / REMOTE CONTROL WARRANTY ENTITLEMENT WILL NOT APPLY IN THE FOLLOWING CASES

**Improper Handling** – if the unit appears to have been dropped or otherwise damaged as a result of accident or neglect

**Opened Case** – if the receiver cover has been opened, tampered with or altered in any way

**Liquid Spills** – includes any foreign matter found in receiver (e.g., soft drinks, coffee, animal hair, etc.)

**Lightning/Power Surge** – if equipment is separately connected to a proper surge protector, refer to the warranty detail provided by the manufacturer of the surge protector. Star Choice is not responsible for covering 3<sup>rd</sup> party extended warranties.

**Unit Resold** – if a unit has been resold from its original owner to another consumer



