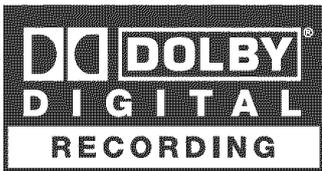
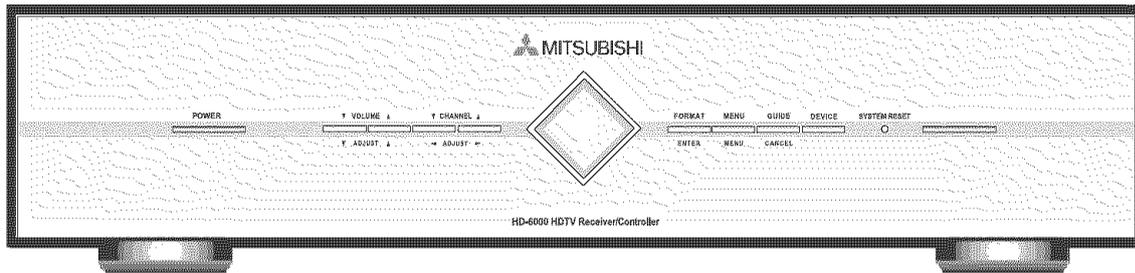




# High Definition Receiver/Controller HD-6000 Owner's Guide

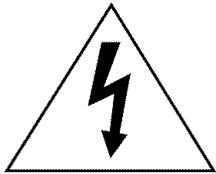


## Owner Information:

Use this space to record the serial number of your HD-6000.  
This information is on the back of your receiver/controller.

Serial number \_\_\_\_\_

visit our website at  
[www.mitsubishi-tv.com](http://www.mitsubishi-tv.com)



**CAUTION**

**RISK OF ELECTRIC SHOCK  
DO NOT OPEN**



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user of the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be sufficient magnitude to constitute a risk of electric shock.



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.

Portions of the advanced circuitry of this Receiver/Controller must continue to operate even when the Receiver/Controller is turned off. Some of these circuits therefore need to be cooled at all times. A low power standby fan may be heard in a quiet environment. This is normal operation.

**Warning:** To avoid permanently imprinting a fixed image onto your projection television or plasma monitor screen, please do not display the same stationary images on the screen for more than 15% of your total TV viewing in one week. Examples of stationary images are letterbox top/bottom bars from DVD disc or other video sources, side bars when showing standard TV pictures on widescreen TV’s, stock market reports, video game patterns, black or bright Closed Caption backgrounds, station logos, web sites or stationary computer images. Such patterns can unevenly age the picture tubes or plasma display panels, causing permanent damage to the display. Please see page 35 for a detailed explanation.

Note that not all high definition television sets are fully compatible with this product and may cause artifacts to be displayed in the picture. In the case of 525 progressive scan picture problems, it is recommended that the user switch the connection to the standard definition output. If there are questions regarding your TV set compatibility with this receiver/controller at 525p, please contact our customer service center.

**WARNING:** TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

**CAUTION:** TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

**NOTE TO CATV SYSTEM INSTALLER:** THIS REMINDER IS PROVIDED TO CALL THE CATV SYSTEM INSTALLER’S ATTENTION TO ARTICLE 820-40 OF THE NEC THAT PROVIDES GUIDELINES FOR THE 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.

## FCC Declaration of Conformity

Product: High Definition Receiver/Controller

Models: HD-6000

Responsible Party: Mitsubishi Digital Electronics America, Inc.  
9351 Jeronimo Road  
Irvine, CA 92618-1904

Telephone: 949-465-6000

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.

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

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

**CAUTION:** To assure continued FCC compliance, the user must use a shielded video interface cable with bonded ferrite cores at both ends, when using the PC or HDMI input.

**Changes or modifications not expressly approved by Mitsubishi could cause harmful interference and would void the user's authority to operate this equipment.**

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# IMPORTANT SAFEGUARDS

Please read the following safeguards for your HDTV receiver/controller and retain for future reference. Always follow all warnings and instructions marked on the television.

## 1. Read, Retain and Follow All Instructions

Read all safety and operating instructions before operating the HDTV receiver/controller. Retain the safety and operating instructions for future reference. Follow all operating and use instructions.

## 2. Heed Warnings

Adhere to all warnings on the appliance and in the operating instructions.

## 3. Cleaning

Unplug the HDTV receiver/controller from the wall outlet before cleaning. Do not use liquid, abrasive or aerosol cleaners. Use a lightly dampened cloth for cleaning.

## 4. Attachments and Equipment

Never add any attachments and/or equipment without approval of the manufacturer as such additions may result in the risk of fire, electric shock or other personal injury.

## 5. Water and Moisture

Do not use the HDTV receiver/controller where contact with or immersion in water is possible. Do not use near bath tubs, wash bowls, kitchen sinks, laundry tubs, swimming pools, etc.

## 6. Accessories



Do not place the HDTV receiver/controller on an unstable cart, stand, tripod, or table. The HDTV receiver/controller may fall, causing serious injury to a child or adult and serious damage to the HDTV receiver/controller. Use only with a cart, stand, tripod, bracket or table recommended by the manufacturer, or sold with the HDTV receiver/controller. Any mounting of the HDTV receiver/controller should follow the manufacturer's instructions, and should use mounting accessories recommended by the manufacturer.

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. Ventilation

Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the HDTV receiver/controller and to protect it from overheating. Do not block these openings or allow them to be obstructed by placing the HDTV receiver/controller on a bed, sofa, rug, or other similar surface. Nor should it be placed over a radiator or heat register. If the HDTV Receiver/controller is to be placed in a rack or bookcase, ensure that there is adequate ventilation and that the manufacturer's instructions have been adhered to.

## 8. Power Source

This HDTV Receiver/controller should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your appliance dealer or local power company.

## 9. Grounding or Polarization

This HDTV Receiver/controller is equipped with a polarized alternating current line plug having one blade wider than the other. This plug will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

## 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 at plugs, convenience receptacles, and the point where they exit from the HDTV Receiver/controller.

## 11. Lightning

For added protection for this HDTV Receiver/controller during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the HDTV Receiver/controller due to lightning and power-line surges.

# IMPORTANT SAFEGUARDS, continued

## 12. Power Lines

An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

## 13. Overloading

Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

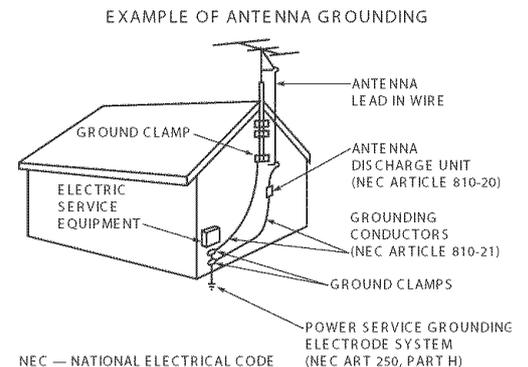
## 14. Object and Liquid Entry

Never push objects of any kind into this HDTV Receiver/Controller through openings as they may touch dangerous voltage points or short-out parts that could result in fire or electric shock. Never spill liquid of any kind on or into the HDTV Receiver/Controller.

## 15. Outdoor Antenna Grounding

If an outside antenna or cable system is connected to the HDTV Receiver/Controller, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges.

Article 810 of the National Electric Code, ANSI/NFPA No. 70-2002, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.



## 16. Servicing

Do not attempt to service this HDTV Receiver/Controller yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

## 17. Damage Requiring Service

Unplug the HDTV Receiver/Controller from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- When the power-supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the HDTV Receiver/Controller.
- If the HDTV Receiver/Controller has been exposed to rain or water.
- If the HDTV Receiver/Controller does not operate normally by following the operating instructions, adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the HDTV Receiver/Controller to its normal operation.
- If the HDTV Receiver/Controller has been dropped or the cabinet has been damaged.
- When the HDTV Receiver/Controller exhibits a distinct change in performance - this indicates a need for service.

## 18. Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

## 19. Safety Check

Upon completion of any service or repair to the HDTV Receiver/Controller, ask the service technician to perform safety checks to determine that the HDTV Receiver/Controller is in safe operating condition.

## 20. Heat

The product should be situated away from heat sources such as radiators, heat registers, stoves or other products (including amplifiers) that produce heat.

## Our Thanks...

*We are honored that you chose Mitsubishi as your path to upgrading your high definition monitor display to a full HDTV. The HD-6000 is designed to become the cornerstone of your home entertainment system, offering the flexibility of using both digital sources and analog sources in an advanced, but simple to use single control system. It provides advanced user interface connections such as CableCARD™, IEEE 1394 and HDMI. You have the ability to record to an internal 120GB TV Disc Internal Digital Video Recorder (DVR). The HD-6000 is ready to provide for your enjoyment for the next several years.*

*Whether this is part of a Mitsubishi LT-4260 HDTV package, an upgrade to your Mitsubishi HD-upgradeable TV or display monitor or the HD-6000 is used to upgrade displays from other manufacturers, we hope this will bring you many hours of enjoyment.*

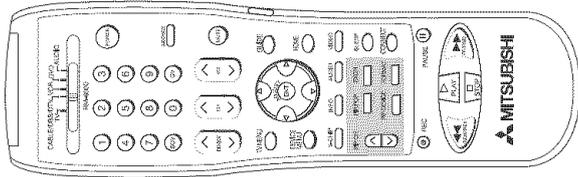
**Mitsubishi Digital Electronics America, Inc.**

## **HD-6000 Receiver/Controller Overview**

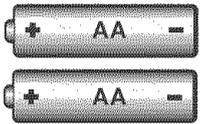
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# HD-6000 Accessories

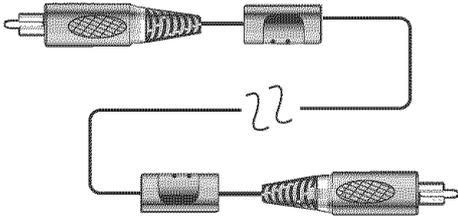
Please take a moment to review the following list of items to ensure that you have received everything including:



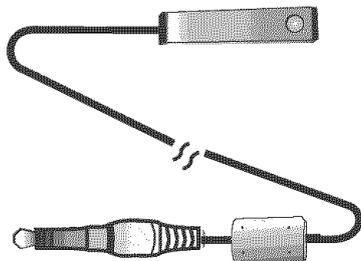
1. Remote Control



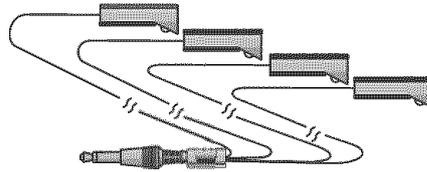
2. Two AA Batteries



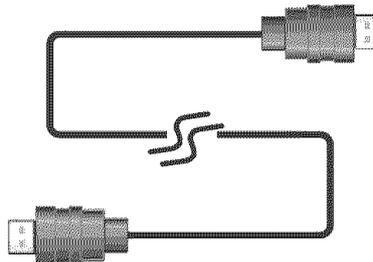
3. One Digital Audio Cable (sends the audio of digital channels to a digital audio video receiver).



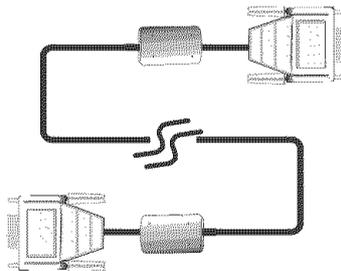
4. One wired IR sensor



5. One Quadruple IR Emitter Cable (allows NetCommand to control other devices)



6. One HDMI to HDMI cable



7. One MonitorLink™ Control/RS-232C Cable

8. Product Registration Card (not pictured)

9. Owner's Guide (not pictured)

10. Quick Reference Card (not pictured)

# Special Features

Your new HD-6000 High Definition television receiver/controller has many special features that turn your high definition display monitor into a fully integrated HDTV. This makes it the perfect control center for your high definition display monitor and home entertainment system. These special features include:

## Multiple Connection Capability

On the compact HD-6000 back panel you will find a full complement of the connections needed for the most sophisticated home theater system. Included are standard Audio/Video/S-Video, wideband component video, FireWire®, IEEE 1394, CableCARD and both an HDMI Input and an HDMI Output.

## TV Disc Internal Digital Video Recorder (DVR)

TV Disc is an internal 120GB high definition hard disk drive recorder (also called a digital video recorder or DVR). This exciting feature may record as much as 12 hours of high definition TV programming and includes live TV pause with instant replay. Please note that some of the disk drive space is used by TV Pause, so not all 120GB is available for recording.

It is able to record digital and analog programs received from CableCARD™ channels, Antenna 1, Antenna 2, devices connected to Input 1, 2 or IEEE 1394 devices. Now you can record a high definition program and watch it later without any picture quality loss and without a VCR. Recordings on the TV Disc can be sent by IEEE 1394 to D-VHS VCRs or to other IEEE 1394 compatible TVs. When recording analog programs, TV Disc will even use Dolby Digital Record to convert the analog stereo to high quality digital stereo compatible with Dolby Digital decoding surround receivers.

## Digital Cable Ready (CableCARD™)

Your widescreen Mitsubishi HDTV receiver/controller is “Plug-and-Play” ready. It can descramble a cable provider’s one-way digital signals with the use of a CableCARD security module. The CableCARD is used in place of a traditional cable box to access digital cable programming (including high definition). Contact your local cable provider for availability information and service details.

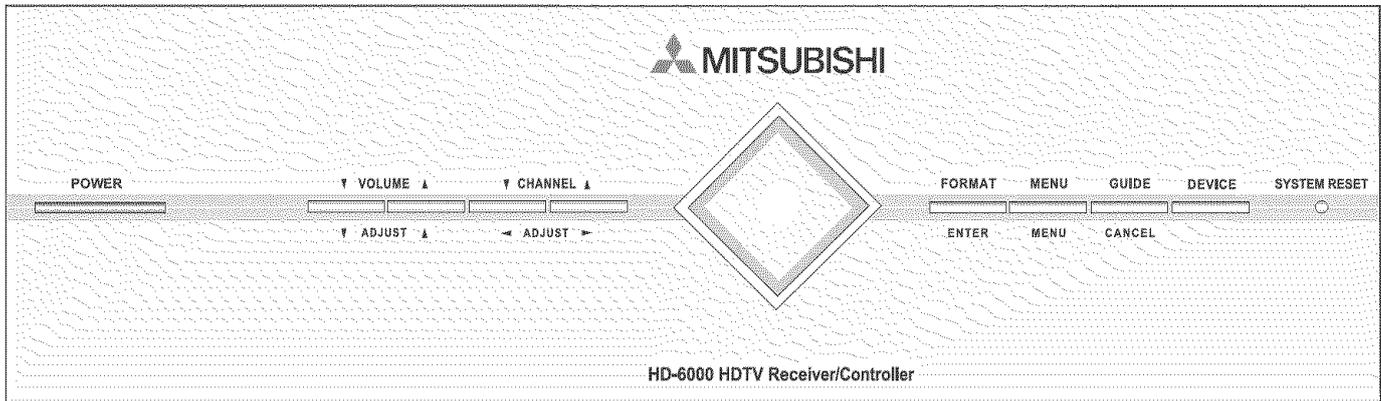
## NetCommand® Home Network Control System

Your Mitsubishi HDTV receiver/controller offers a new level of networking to combine selected older products with new and future digital products. NetCommand supports IEEE 1394 connections, Audio Video Control system (AV/C), 5C copy protection and IR control of selected older products such as VCRs, DVD players, cable boxes or satellite receivers. NetCommand includes the ability to learn remote control signals directly from the remote control of many devices, allowing you to customize the NetCommand system in a way that works best for your viewing.

## LT-4260 Compatibility

The HD-6000 is designed to work with all of the features of the Mitsubishi LT-4260 LCD HDTV display. The HD-6000 has the correction connection to work with the authorized card reader that is in the LT-4260.

# Front Control Panel



Except for SYSTEM RESET, the buttons on the Front Control Panel duplicated on the remote control. The top row of labels show the control functions when there are no TV menus displayed on the screen. The bottom row of labels show the control functions when the TV menus are displayed on the screen or when a special function has been activated. See Remote Control Overview, for further details on the functions of these buttons.

## System Reset

If the HDTV receiver/controller will not respond to either the remote control or the front panel controls and/or will not power Off, press the SYSTEM RESET button with a pointed item like the end point of a paperclip. The HDTV receiver/controller will turn Off and the front panel Power Indicator Light will flash quickly for about one minute. When the light stops flashing, you may again turn on the HDTV receiver/controller. The changes you made the last time the HDTV receiver/controller was on before you used the SYSTEM RESET button may be lost, however, the changes that were previously saved are not lost.

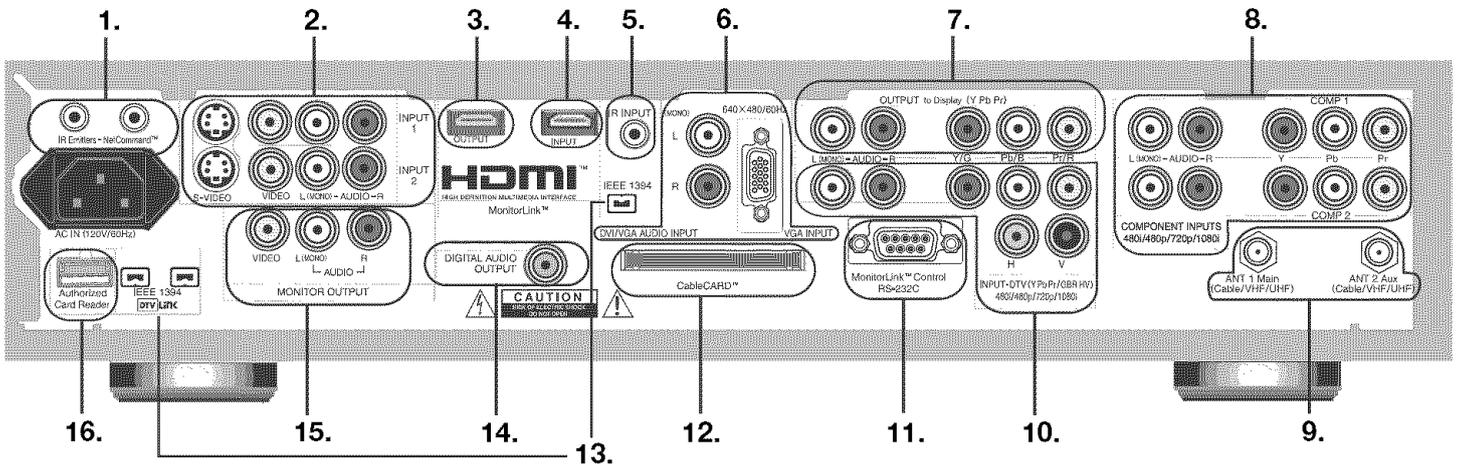
## Power Indicator Light

The diamond shaped indicator in the center of the HD-6000 is multi-functional. Each time the HDTV receiver/controller is plugged into a wall electrical outlet, or when power is restored after a power failure, or after using the SYSTEM RESET button, a blue light will flash rapidly for about one minute. Do not attempt to turn on the HDTV Receiver during this period, wait for the flashing to stop. While the HDTV Receiver is powered on, the blue light illuminates steadily.

## A/V Reset

There may be times when you wish to reset the A/V (Audio and Video) settings back to the factory defaults. To return all of the settings at once, press GUIDE and FORMAT on the front panel at the same time. To reset the defaults for individual devices, use the A/V Memory Reset selection on the AudioVideo menu.

# Back Panel



## 1. IR Emitter-NetCommand®

Two jacks are provided for connecting IR emitters. IR Emitters connected to these jacks are used by the NetCommand system of the HDTV receiver/controller to control external analog devices such as VCRs, DVDs, cable boxes, satellite receivers and audio receivers.

## 2. Input-1, -2

Input 1 and 2 can be used for the connection of a VCR, Super VHS (S-VHS) VCR, DVD player, standard satellite receiver or other A/V device to the HDTV receiver/controller. When connecting the video, you must choose to connect to either S-VIDEO or VIDEO. They cannot both be connected at the same time.

## 3. MonitorLink™/™ HDMI™ Output

The HDMI (High Definition Multimedia Interface) supports uncompressed standard and high definition digital video formats and existing digital multi-channel audio formats. The HDMI output supports both video and audio using a single cable. HDMI is the preferred connection type. If you need to send analog audio to an A/V receiver, see also item 7, "Output to Display."

Use this output to connect to an HDMI monitor such as the LT-4260 flat panel LCD TV.

## 4. HDMI Input

Use this input to connect to EIA/CEA-861 compliant devices such as a high definition cable box, satellite receiver or DVD player. This input supports 480i, 480p, 720p and 1080i video formats. It is not intended for use with personal computers or devices outputting video signals with computer resolutions.

This input can also be used as a DVI connection with separate analog audio inputs (see item 6). An optional

HDMI-to-DVI adaptor or cable will be necessary to make this connection and may be available from your local electronics retailer. When using the optional HDMI-to-DVI adapter, the DVI analog audio inputs on your HDTV receiver/controller allow you to receive left and right audio from your DVI device.

This input is HDCP (High-Bandwidth Digital Copy Protection) compliant.

## 5. IR Input

This HDTV receiver/controller has a remote control IR sensor on the front panel. In some situations it will not be convenient to point the remote control at the HDTV receiver/controller. In this situation, you may place the included wired IR sensor in a more accessible location.

## 6. VGA(PC) Input and Audio/DVI Audio

This input can be used for the connection of a 640 x 480 VGA(PC) computer. Please see Appendix B for signal compatibility. Stereo audio inputs are also provided. Unlike HDMI, DVI does not carry audio information on the same cable. Use these analog stereo audio inputs when using the HDMI input with a device that outputs DVI instead of HDMI. When used with the LT-4260 LCD HDTV display, this PC input is deactivated and the PC input on the display is available instead.

## 7. Output to Display (YPrPb with Audio)

Use the HD-6000 OUTPUT to Display under the following circumstances:

- **No HDMI input available for your display monitor.** These jacks provide a substitute output if an HDMI input is unavailable on your monitor. Use them to send component video to the display monitor and left

## Back Panel, continued

and right audio outputs to speakers that are either built into the monitor or connected to it.

- **HDMI input used in conjunction with an A/V receiver.** If you are using an HDMI input to your display monitor and want to send analog audio to an A/V receiver, connect the OUTPUT to Display left and right audio outputs to the A/V receiver. Note that in addition to these analog audio connections, you must also connect the HD-6000 Digital Audio Output to the A/V receiver digital audio input.

### 8. Component-1, -2 Inputs

#### YPbPr (480i/480p/720p/1080i)

These inputs can be used for the connection of devices with component video outputs, such as a high definition cable box, satellite receiver, DVD player or compatible video game system. Please see Appendix B for signal compatibility.

### 9. Antenna (ANT-1 MAIN, ANT-2 AUX)

ANT-1 MAIN and ANT-2 AUX can each receive both digital and analog over-the-air channels from a VHF/UHF antenna or non-scrambled digital/analog cable channels.

Your primary viewing signal source should be connected to ANT-1 MAIN. ANT-1 MAIN must be used to view premium subscription cable TV service authorized by the CableCARD™ access card. The CableCARD access card is provided by your local cable company. ANT-2 AUX can continue to receive over-the-air or non-scrambled cable signals.

### 10. Input-DTV YPbPr/RGB HV (480i/480p/720p/1080i)

This input is used to connect an external DTV receiver, and can be configured for YPbPr or RGB plus H&V signal types. Please see Appendix B for signal compatibility.

### 11. MonitorLink™/RS-232C Control

When used with a Mitsubishi HD upgradeable TV or flat panel display this digital control interface will work in conjunction with HDMI. While HDMI provides the digital video signal, the RS-232C control provides enhanced functioning such as automatic power ON/OFF and input selection for the compatible Mitsubishi TV or display panel.

### 12. CableCARD™ Slot

The CableCARD access card provided by your cable TV service provider is inserted into this slot. The top of the card should face upwards.

CableCARD is a nationwide standard system that allows your local cable TV provider to supply you with an

access card customized to your account. This card allows the TV to receive, decode and unscramble the premium digital channels included in your cable TV subscription without the use of a cable box. See page 18 for additional CableCARD information and activation instructions.

If your cable company is not currently offering CableCARD access cards, you will need to use a cable box provided and authorized by your local cable company to view scrambled channels.

### 13. IEEE 1394

These jacks allow the HDTV receiver/controller to connect to external IEEE 1394 digital products by means of a single cable. Three jacks are provided for this purpose, which allow for a high degree of flexibility for connecting your NetCommand controlled system. Detailed information regarding IEEE 1394 connection requirements are in Chapter 4.

### 14. Digital Audio Output

This output will automatically send Dolby® Digital audio from digital channels and IEEE 1394 devices to a digital Audio/Video receiver. Connect this output to the A/V receiver's coaxial digital audio input. The output will automatically turn off when viewing an analog channel or device, except when using the TV Disc, which converts analog audio to digital. Use Output to Display to send analog sound to your A/V receiver.

Some digital cable channels send MPEG-1 digital audio instead of Dolby Digital, however, not all A/V receivers can decode MPEG-1 digital audio. This can cause the A/V receivers to produce a loud noise that can damage speakers. For this reason, the HDTV receiver/controller will automatically turn off the digital audio output when tuned to a channel or device that has MPEG-1 digital audio and send it to the A/V receiver as analog left and right audio from Monitor Output.

### 15. Monitor Output

The Monitor Output sends the HDTV receiver/controller's audio and video signals from the antennas or inputs to a VCR. This output is for recording only. Do not connect to an A/V receiver.

### 16. LT-4260 Authorized Card Reader

This port connects to the Mitsubishi LT-4260 flat panel LCD TV, to enable using an authorized media card reader built into the display panel. This reader supports MultiMediaCard™, SD Media Card, SmartMedia™, CompactFlash® and/or MEMORY STICK™. Cards up to 128mb, may have a file format of FAT 16 (block size = 1024 or 2048).

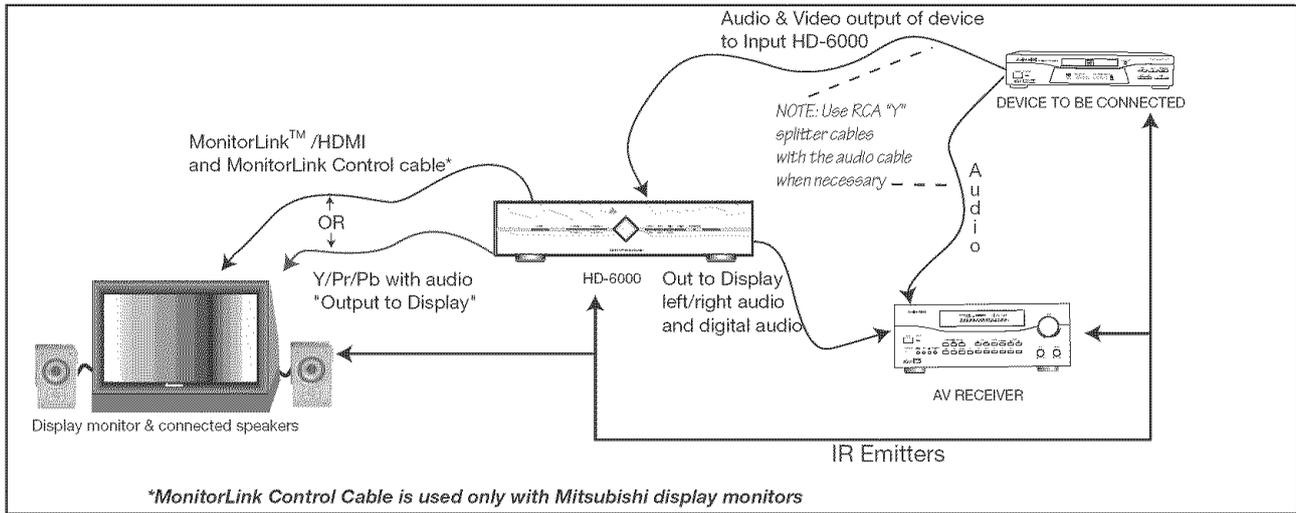
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# Connecting External Devices & NetCommand® Setup

NetCommand is able to control many current audio and video devices by sending remote control signals from the HDTV receiver/controller to each device through IR emitters. Additionally, it is also able to learn the remote control signals used by most audio video devices not already in the HDTV receiver's memory. NetCommand can automatically switch the HDTV receiver and compatible or learned Audio/Video (A/V) Receivers to the correct input used with each device. It is important that the inputs on the HDTV receiver and A/V receiver back panels match the NetCommand setup that is displayed on-screen.

To simplify the installation of NetCommand, there is a step-by-step on-screen NetCommand Setup procedure in this chapter, which details the type and brands of devices you are connecting to the HDTV receiver. The NetCommand Setup also assigns preset HDTV receiver and A/V receiver inputs for each device. You should connect each device to the TV input (both audio and video) and to the A/V receiver (audio) as shown in the figure below.



The following charts show which preset inputs you should use on the HDTV receiver and A/V receiver.

Chart 1 shows HDTV receiver inputs.

Chart 2 shows the A/V receiver inputs used by A/V receiver models already known by NetCommand.

Chart 1	
Device Audio and Video Outputs to HDTV R/C Inputs	
Cable for CableCARD™ Service	ANT-1
Antenna/Cable (digital/analog)	ANT-1 if primary viewing source, ANT-2 if secondary viewing source
Cable box	ANT-2
VCR	Input-1
Satellite Receiver (DBS)	Input-2
DVD Player	Component-1

Chart 2	Mitsubishi 1	Mitsubishi 2	Bose	Denon	Integra	Kenwood	Marantz	Pioneer 1	Pioneer 2	Rotel	Sony	Yamaha 1	Yamaha 2
	Model M-VR800 & M-VR1000	Model M-VR900 & M-VR700	Model Lifestyle @28	Model AVR-2700	Model DTR-9.1	Model VR-2080	Model SR8200	Model VXS-D557	Model VXS-49TX	Model RSX-1065	Model STR-DE825	Model RV-X2095	Model RX-V2200
Device Audio Output to	AV Receiver Inputs by Name												
VCR	VCR 1	VCR	VCR	VCR-1	Video 1	Video 1	VCR1	VCR/Tape	VCR 1/DVR	Video 2	Video 1	VCR 1	VCR 1
Satellite Receiver	Aux	Cable/DBS	AUX	CD	Video 3	Video 3	DSS	CD	SAT	Video 4	TV/DBS	TV/DBS	D-TV/LD
DVD Player	DVD	DVD	(built-in)	DVD/DP	DVD	Video 4	DVD	LD/SAT	DVD/LD	Video 5	TAPE/MD	CD	DVD
TV Monitor Output (& Digital Audio)	TV	TV	TV	TV/DBS	Video 4	Video 4	TV	DVD/TV	TV	Video 1	DVD/LD	DVD/LD	CBL/SAT

After setting up NetCommand, you may go to the NetCommand menu at any time to change the inputs you used for connecting each device, custom name devices, add devices not included in the presets above or delete devices no longer used. See *Helpful Hints*, at the end of this chapter for additional information on device setup.

# Connecting a Wall Outlet Cable or Cable Box

## Wall Outlet Cable

(can be used with a CableCARD™)

Figure 1

It is very important to connect the incoming cable for your primary viewing source to ANT-1, especially for CableCARD™ use.

1. Connect the primary incoming coaxial lead cable to ANT-1 MAIN on the HDTV receiver/controller back panel.
2. For an optional secondary antenna source, connect an antenna (or cable) to ANT-2 AUX.
3. If you have subscribed to a CableCARD™ service, the CableCARD can now be inserted into the CableCARD SLOT. The top of the card should face upwards. Additional CableCARD information is on page 18.

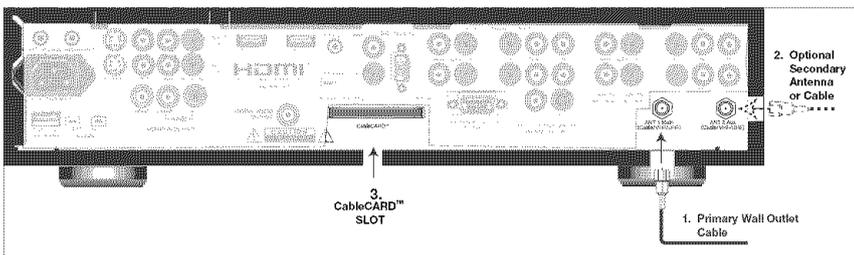


Figure 1. Wall Outlet Cable

## Cable Box

Figure 2

3 coaxial cables and one two-way RF splitter are required. These are not included with the HDTV receiver/controller.

It is very important to connect the incoming cable for your primary viewing source to ANT-1, especially for CableCARD™ use.

1. Connect the incoming cable to IN on an RF splitter.
2. Connect one coaxial cable from OUT on the RF splitter to ANT-1 MAIN on the HDTV receiver/controller back panel.
3. Connect one coaxial cable from OUT on the RF splitter to IN on the cable box.
4. Connect one coaxial cable from OUT on the cable box to ANT-2 AUX on the HDTV receiver/controller back panel.

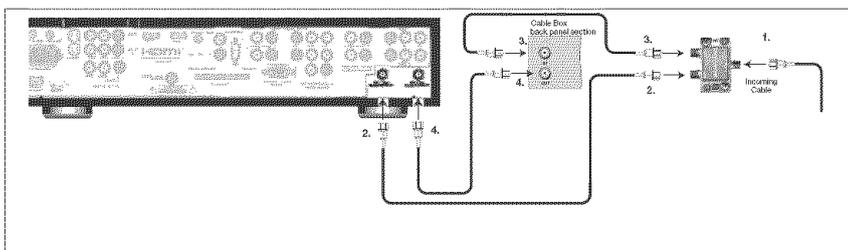


Figure 2. Connecting a Cable Box

**IMPORTANT**  
Additional connection cables are not provided with the HDTV receiver/controller. They are available at most electronic stores.

**Note:** Net Command® will assume that your Cable Box is connected as shown here. Also, that Channel 3 is the default output channel for the cable box. If either the connections or output channel are different, use the Change option of Edit NetCommand to apply the changes.

# CableCARD™ Technology

## CableCARD Technology

CableCARD is a nationwide system standard that allows your local cable TV provider to supply you with an access card customized to your account. This card allows your HDTV receiver/controller to receive, decode and unscramble the premium digital channels included in your cable TV subscription, without the use of a cable box. It also allows your cable provider to automatically update and change your subscription. When you move to a new cable provider's area, you simply return the CableCARD to the original cable provider and get a new card from your new cable provider.

Please note that CableCARD is a new technology and your local cable provider may not currently be offering this service. As time passes, this system will become broadly supported by most cable providers.

The CableCARD system is "unidirectional" which means your cable provider can send updates to the access card and HDTV receiver/controller, however, the HDTV receiver/controller cannot send back signals such as requests for Video-On-Demand or Pay-per-View by remote control.

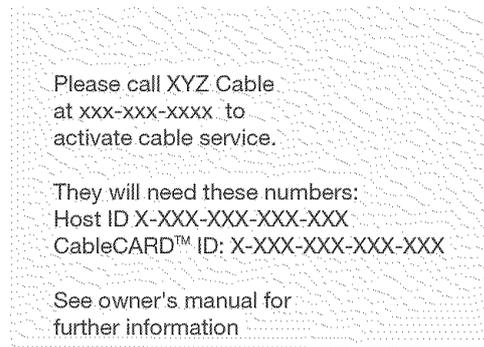
Digital cable channels authorized by the CableCARD will be available on the Firewire® IEEE 1394 network and can be shared by other products on the network. Some digital channels or programs may not be copied or recorded because of copy restriction limits set by the content owners or copyright holders.

The HDTV receiver/controller is capable of receiving analog basic, digital basic and digital premium cable television programming by direct connection to a cable system providing such programming. A security card (CableCARD) provided by your cable operator is required to view encrypted digital programming. Certain advanced and interactive digital cable services such as video-on-demand, a cable operator's enhanced program guide and data-enhanced television services may require the use of a set-top box. For more information call your local cable operator.

Please see *page 17* for instructions on how to insert the CableCARD.

## Using a CableCARD

After inserting a CableCARD into the HDTV receiver/controller back panel CableCARD slot and powering On the HDTV receiver/controller, the initialization process begins. An initial screen will automatically display for a few minutes, with information that your Cable Provider will need in order to start service. Please write down this information before calling your cable provider.



An example of an initial screen is shown here. Your screen will display specific information from your cable provider and may not look like this screen.

If you were unable to record the information, you can press TV MENU on the remote and then enter the number 999 and the screen will re-display. You can also press DEVICE MENU when the CableCARD is the selected source and you will be able to select the startup application.

### **IMPORTANT**

**To use a CableCARD, the primary incoming cable must be connected to ANT-1 MAIN.**

# Connecting a Lead Antenna or Separate UHF and VHF Antenna

## Lead Antenna (not for use with CableCARD™)

Figure 3

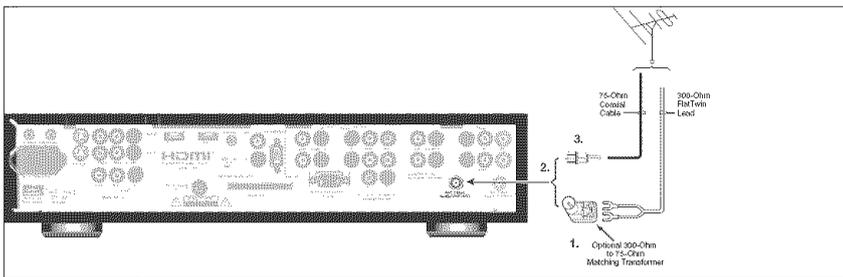
### For antennas with twin flat lead

A 300-Ohm to 75-Ohm transformer is required. This is not included with the HDTV receiver/controller, but is available at most electronics stores.

1. For antenna with twin flat leads, connect the 300-Ohm twin leads to the 300-Ohm to 75-Ohm transformer.
2. Push the 75-Ohm side of the transformer onto ANT-1 MAIN on the HDTV receiver/controller back panel.

### For cable or antenna with coaxial lead

3. Connect the coaxial lead directly to ANT-1 MAIN on the HDTV receiver/controller back panel.



**Mitsubishi strongly recommends against using antennas with twin flat leads. Twin flat lead antenna wires are subject to interference which may adversely affect the performance of the TV. We recommend using coaxial antenna cable.**

Figure 3. Connecting a Single Antenna

## Separate UHF and VHF Antenna

Figure 4

A UHF/VHF combiner is required. This is not included with the HDTV receiver/controller.

1. Connect the UHF and VHF antenna leads to the UHF/VHF combiner.
2. Push the combiner onto ANT-1 MAIN on the HDTV receiver/controller back panel.

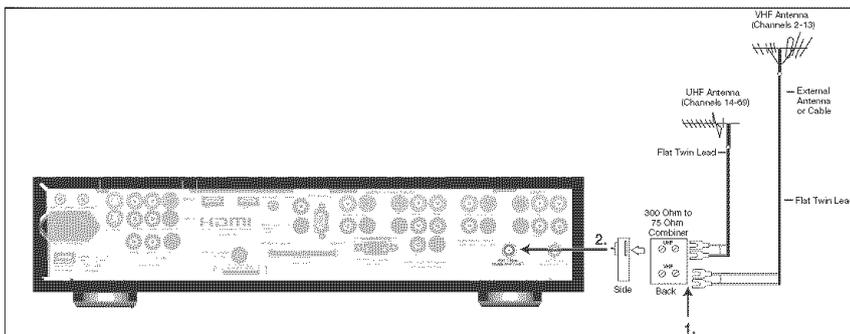


Figure 4. Connecting separate UHF and VHF Antennas

# Connecting an Antenna or Wall Outlet Cable to a VCR (Audio & Video)

## Antenna or Wall Outlet Cable to a VCR (Audio & Video)

Figure 5

A two-way RF splitter, 3 coaxial cables, right and left audio cables and a S-Video or Video cables are required. These are not included with the HDTV receiver/controller.

1. Connect the incoming cable or Antenna to IN on the RF splitter.
2. Connect one coaxial cable from OUT on the RF splitter to ANTENNA IN on the VCR back panel.
3. Connect one coaxial cable from OUT on the RF splitter to ANT-1 MAIN on the HDTV receiver/controller back panel.
4. To use the TV speakers with the VCR, connect a set of audio cables from AUDIO OUT on the VCR back panel to INPUT-1 AUDIO-LEFT (MONO) and AUDIO-RIGHT on the HDTV receiver/controller back panel. The red cable connects to the R (right) channel and the white cable connects to the L (left) channel. If your VCR is mono (non-stereo), connect only the white (left) cable.
5. Connect either an S-Video or Video cable from VIDEO OUT on the VCR back panel to INPUT-1 VIDEO on the HDTV receiver/controller back panel. Only one type of video cable should be connected. S-Video is recommended, if available.
6. For NetCommand® controlled recordings, connect a set of audio cables from AUDIO IN on the VCR back panel to MONITOR OUTPUT AUDIO-LEFT (MONO) and AUDIO-RIGHT on the HDTV receiver/controller back panel. The red cable connects to the R (right) channel and the white cable connects to the L (left) channel.
7. Complete the NetCommand controlled recordings connections by connecting a Video cable from VIDEO IN on the VCR back panel to MONITOR OUTPUT VIDEO on the HDTV receiver/controller back panel.

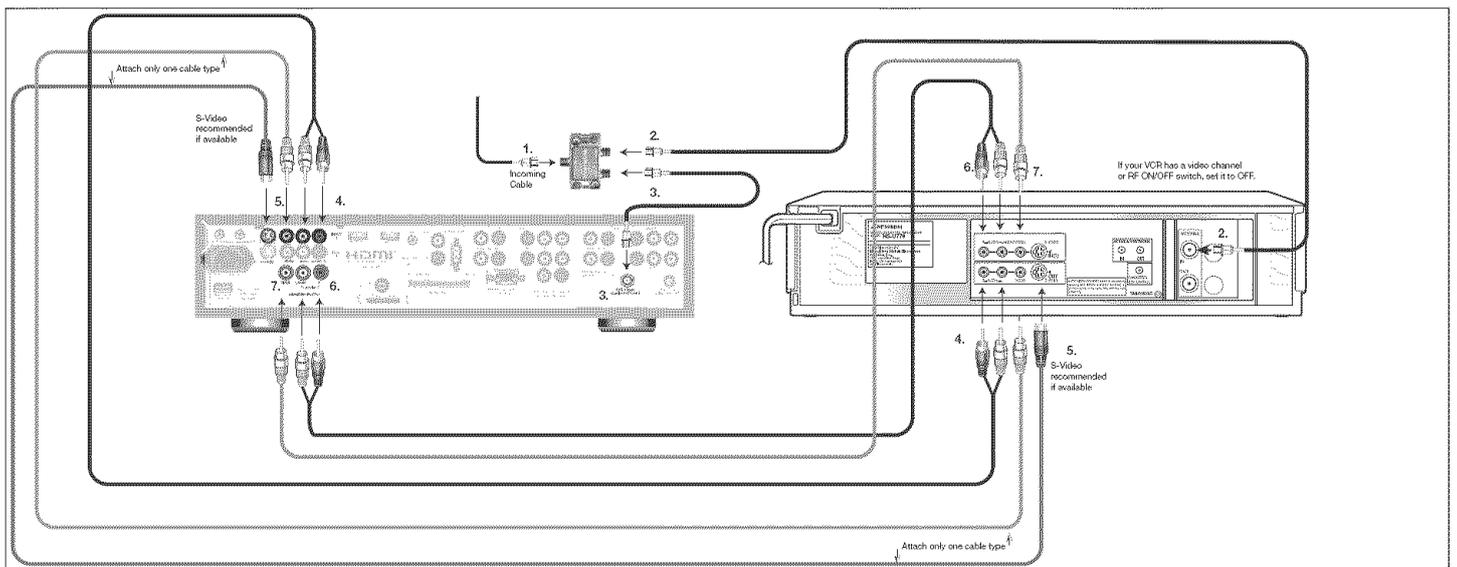


Figure 5. Connecting a VCR to an Antenna or Wall Outlet Cable

**Note:** NetCommand® will assume your VCR is connected to inputs as shown on this page. If you use any other inputs for your VCR or add a second VCR, this change must match in the NetCommand system. See *Edit NetCommand...* in Chapter 3 for more information.

# Connecting a Cable Box to a VCR (Audio & Video)

## Cable Box to a VCR (Audio & Video)

Figure 6

A two-way RF splitter, 4 coaxial cables, right and left audio cables and an S-Video or Video cable are required. These are not included with the HDTV receiver/controller.

1. Connect the incoming cable to IN on the RF splitter.
2. Connect one coaxial cable from OUT on the RF splitter to IN on the cable box back panel.
3. Connect one coaxial cable from OUT on the RF splitter to ANT-1 MAIN on the HDTV receiver/controller back panel.
4. Connect one coaxial cable from OUT on the cable box to ANTENNA IN on the VCR back panel.
5. Connect one coaxial cable from ANTENNA OUT on the VCR back panel to ANT-2 AUX on the HDTV receiver/controller back panel (optional).
6. To use the TV speakers with the VCR, connect a set of audio cables from AUDIO OUT on the VCR back panel to INPUT-1 AUDIO-LEFT (MONO) and AUDIO-RIGHT on the HDTV receiver/controller back panel. The red cable connects to the R (right) channel and the white cable connects to the L (left) channel. If your VCR is mono (non-stereo), connect only the white (left) cable.
7. Connect either an S-Video or Video cable from VIDEO OUT on the VCR back panel to INPUT 1 VIDEO on the HDTV receiver/controller back panel. Only one type of video cable should be connected. S-Video is recommended, if available.
8. For NetCommand® controlled recordings, connect a set of audio cables from AUDIO IN on the VCR back panel to MONITOR OUTPUT AUDIO-LEFT (MONO) and AUDIO-RIGHT on the HDTV receiver/controller back panel. The red cable connects to the R (right) channel and the white cable connects to the L (left) channel.
9. Complete the NetCommand controlled recordings connections by connecting a Video cable from VIDEO IN on the VCR back panel to MONITOR OUTPUT VIDEO on the HDTV receiver/controller back panel.

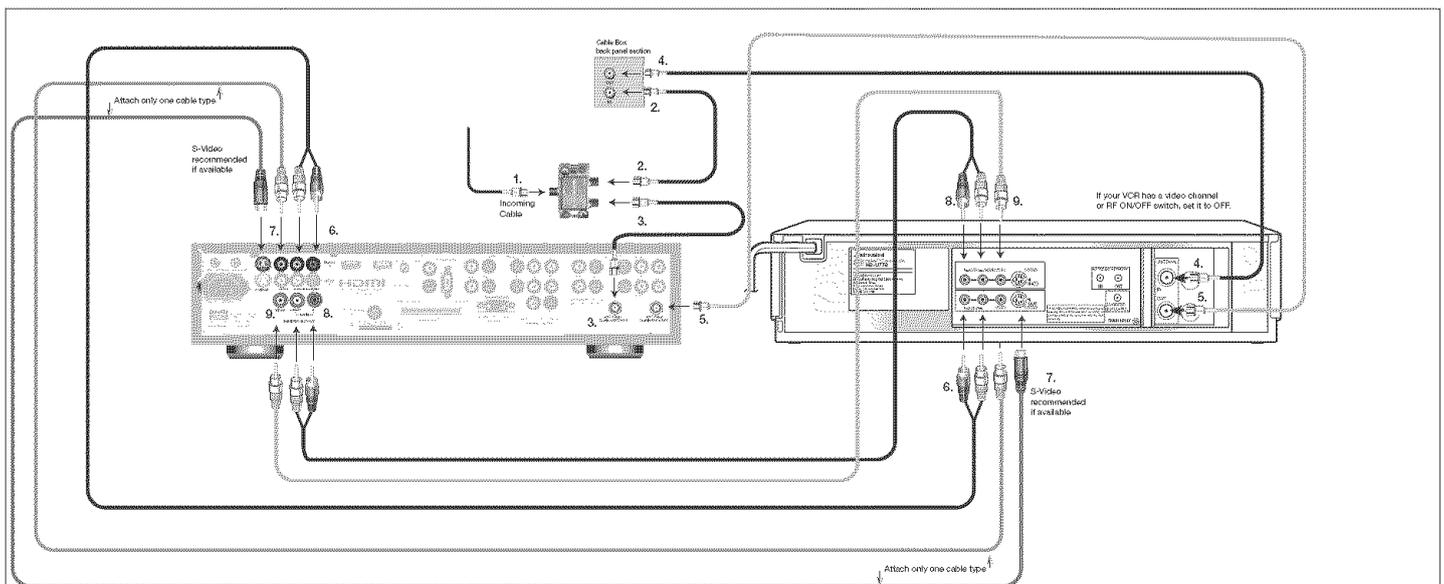


Figure 6. Connecting a VCR to a Cable Box

**Note:** NetCommand® will assume your VCR is connected to inputs as shown on this page. If you use any other inputs for your VCR or add a second VCR, this change must match in the NetCommand system. See *Edit NetCommand... in Chapter 3* for more information.

# Connecting an A/V Receiver or Stereo System or a Satellite Receiver or Other Device with S-Video

## A/V Receiver or Stereo System

Figure 7

A digital audio cable and stereo audio cables are required. The digital audio cable is provided. The stereo audio cables are not included with the HDTV receiver/controller. "Y" splitter cables may also be required.

1. Connect a set of stereo audio cables from OUTPUT to Display on the HDTV receiver/controller back panel to the TV AUDIO INPUT on the back of the A/V receiver. The red cable connects to the R (right) channel and the white cable connects to the L (left) channel.

**Note:** If you use OUTPUT to Display to provide audio signals to the speakers associated with your monitor, then the audio output must be shared with the A/V receiver. Use RCA "Y" splitter cables to send analog audio to both the A/V receiver and the monitor speakers.

### To connect a digital A/V receiver with Dolby® Digital surround sound:

2. Connect one end of the digital audio cable supplied with the HDTV receiver/controller to DIGITAL AUDIO on the back of the HDTV receiver/controller. Connect the other end to the COAXIAL DIGITAL INPUT on the back of the A/V receiver.

Check A/V receiver's Owner's Guide for information concerning the use of the digital input and switching

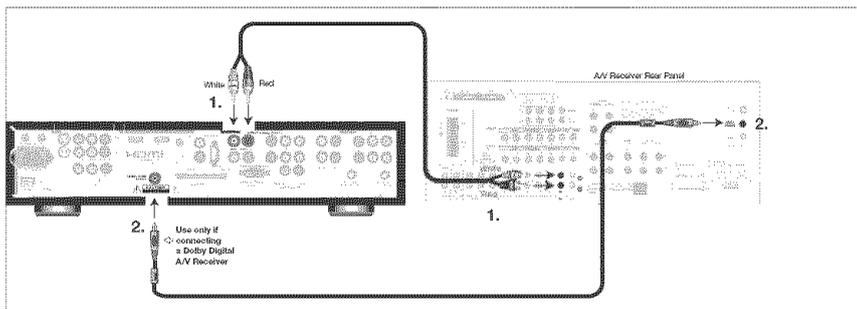


Figure 7. Connecting an A/V receiver

## Satellite Receiver or Other Device with S-Video

Figure 8

An S-Video cable and audio cables are required. These are not included with the TV.

1. Connect an S-Video cable from VIDEO OUT on the satellite receiver back panel to INPUT-2 VIDEO on the HDTV receiver/controller back panel.
2. Connect a set of audio cables from AUDIO OUT on the satellite receiver back panel to INPUT-2 AUDIO, on the HDTV receiver/controller back panel. The red cable connects to the R (right) channel and the white cable connects to the L (left) channel.

**Note:** Refer to the Satellite Receiver Owner's Guide for Dish Antenna connections.

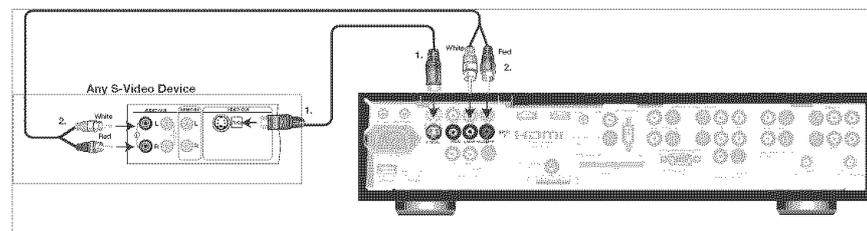


Figure 8. Connecting a Satellite Receiver with S-Video

**Note:** NetCommand® will assume you connected your Satellite Receiver to Input-2. If you add a second Satellite Receiver or use any other inputs for your Satellite Receiver, this change must match in the NetCommand system. See *Editing NetCommand Setup* in Chapter 3 for more information.

# Connecting MonitorLink™ Control or a Computer with a PC Monitor Output

## MonitorLink Control (For Use only with Mitsubishi Display Monitor with MonitorLink Control Connection)

Figure 9

A MonitorLink control cable is required and is provided.

This connection allows the HD-6000 to automatically turn on or off the compatible Mitsubishi display monitor. When used with the Mitsubishi 4260 LCD TV, the connections allow the HD-6000 to use the remote control sensor in front of the TV. Connect the MonitorLink control cable from the MonitorLink control on the HD-6000 back panel to the M-Link control on the TV back panel (MonitorLink is also called MonLink or M-Link, depending on the Mitsubishi display monitor).

You will also want to connect the MonitorLink HDMI Output to the Mitsubishi monitor, as shown on page 27 or 28.

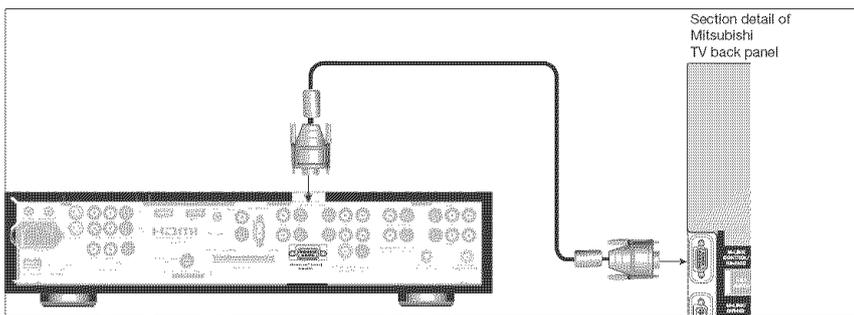


Figure 9. Connecting M-Link Control

## Computer with a PC Monitor Output (Not for use when connected to the LT-4260 LCD TV)

Figure 10

A 15 pin PC monitor cable and an audio video cable is required. These are not included with the TV.

1. Connect PC Monitor Out from the computer to PC Input on the HDTV receiver/controller back panel using a PC compatible monitor cable. See Appendix B for PC signal compatibility.
2. Connect the L (left) and R (right) audio cables from the computer to PC AUDIO on the HDTV receiver/controller back panel. If the computer's audio output is a single mini-jack, a splitter is needed to complete this connection.

**Note:** The HD-6000 PC input is only compatible with VGA resolution (640 x480, 60hz). If your display monitor is capable of a higher resolution then you should connect the PC directly to the monitor.

**Note:** To utilize the benefits of a digital A/V receiver, connect your computer's digital audio out, if available, to a digital input on your digital A/V receiver.

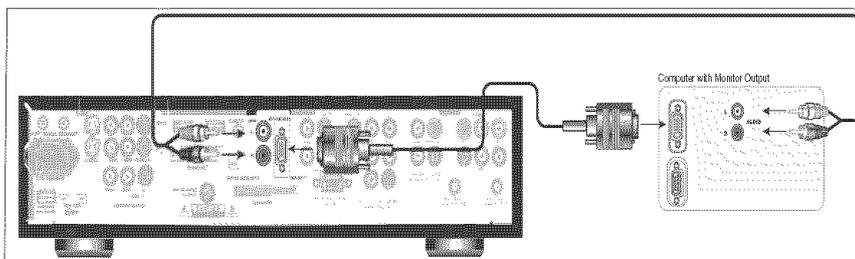


Figure 10. Connecting a Computer with a PC Monitor



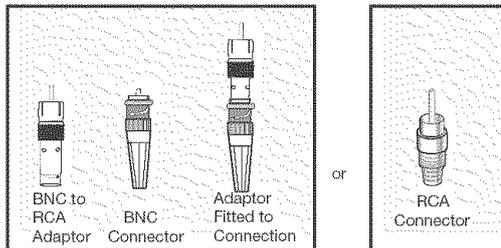
**CAUTION:** To ensure continued FCC compliance, the user must use a shielded video interface cable with bonded ferrite cores at both ends when using the PC input.

# DTV Connectors and Adaptors Connecting a DTV Receiver with Component Video

## DTV Connectors and Adaptors

Figure 11

The HDTV receiver/controller back panel has 5 RCA-type connectors for the Input-DTV. The back panel of your external DTV receiver may use RCA-type connectors or BNC-type connectors. If your DTV receiver comes with BNC type connections, you will need to purchase BNC to RCA adaptors to connect the HDTV receiver/controller to the DTV receiver. These adaptors should be available at most electronic supply stores.



**IMPORTANT**

See Appendix B for component video signal compatibility information.

For digital audio connections, see your DTV Receiver and A/V receiver Owner's Guides.

Figure 11. DTV Connectors and Adaptors

## DTV Receiver with Component Video

Figure 12

A coaxial splitter, RCA component video cables and audio cables are required. These are not included with the HDTV receiver/controller.

1. Connect the outside antenna, cable or satellite to ANT or SATELLITE IN on the DTV receiver (see your DTV receiver's owner's guide for instructions and cable compatibility).
2. Connect the incoming terrestrial antenna or cable (not satellite) to ANT-1 on the HDTV receiver/controller back panel (a coaxial splitter, available at most electronic supply stores, may be required to complete this installation).
3. Connect RCA-type cables from the YPrPb outputs on the DTV receiver to Input-DTV on the HDTV receiver/controller back panel, matching the correct connections:

DTV Receiver to HD-6000 back panel

- Y to Y
- Pr to Pr
- Pb to Pb

4. Connect the L (left) and R (right) audio cables from the DTV receiver to Input-DTV AUDIO on the HDTV receiver/controller back panel.

**Note:** To utilize the benefits of a digital A/V receiver, connect your DTV receiver's digital audio out to a digital input on your digital A/V receiver.

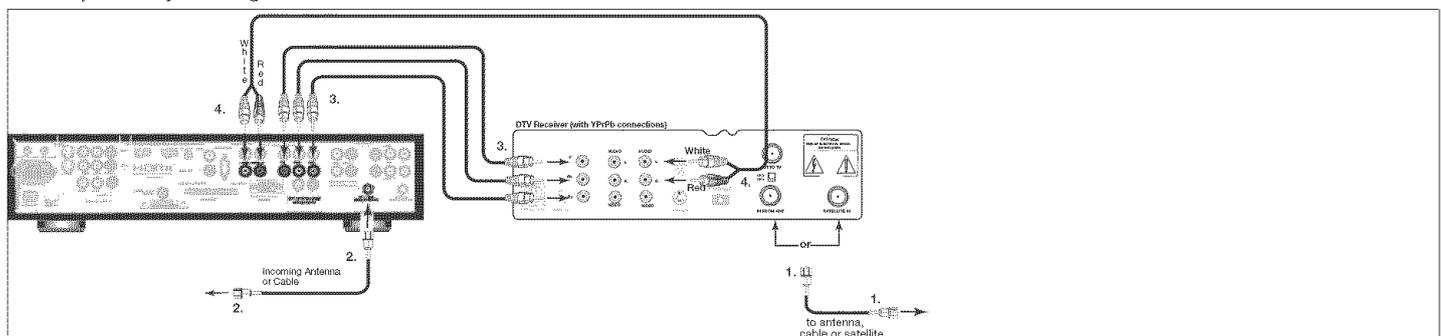


Figure 12. Connecting an External DTV Receiver with Component Video Connections

# Connecting a DTV Receiver with RGB, HV Video

## DTV Receiver with RGB, HV Video

Figure 13

A coaxial splitter, RGB, HV and audio cables are required. These are not included with the HDTV receiver/controller.

1. Connect the outside antenna, cable or satellite to ANT or SATELLITE IN on the DTV receiver (see your DTV receiver owner's guide for instructions and cable compatibility).
2. Connect the incoming terrestrial antenna or cable (not satellite) to ANT-1 on the HDTV receiver/controller back panel (a coaxial splitter, available at most electronic supply stores, may be required to complete this installation).
3. Connect RGB cables from the DTV receiver to Input-DTV on the HDTV receiver/controller back panel.

### DTV Receiver to the HDTV receiver/controller Back Panel

- **G** (green) to Y/G
  - **R** (red) to Pr/R
  - **B** (blue) to Pb/B
4. Connect the H & V sync signals as shown below:
    - **H** (horizontal sync) to H
    - **V** (vertical sync) to V

All 5 cables (G,R,B,H and V) must be connected. 3 cables or Sync on green connections are incomplete or not compatible and will not work.

5. Connect the L (left) and R (right) audio cables from the DTV Receiver to Input-DTV AUDIO on the HDTV receiver/controller back panel.

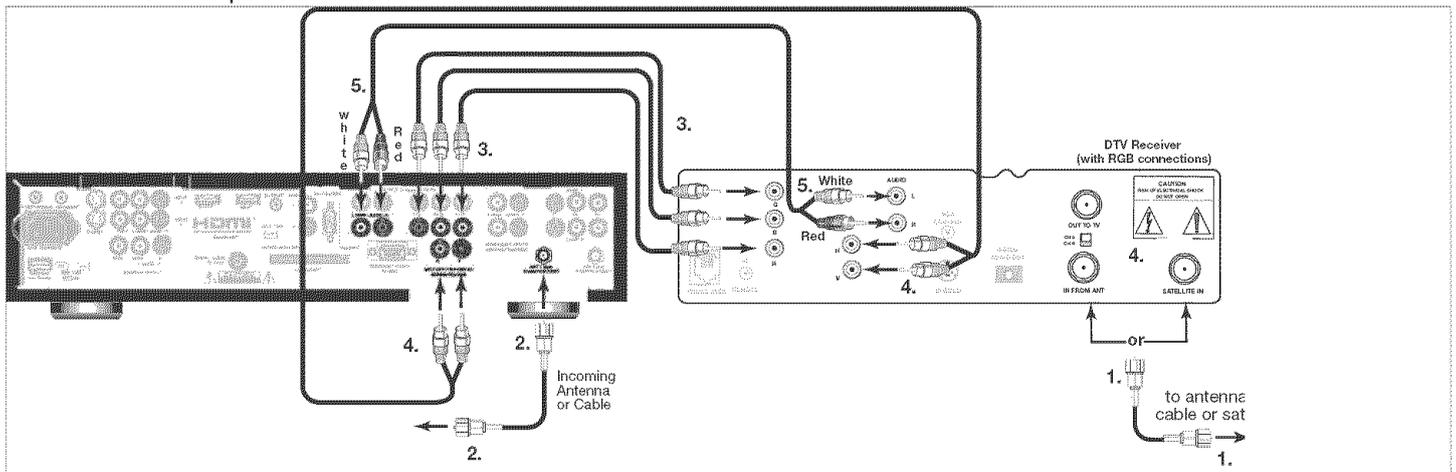


Figure 13. Connecting an External DTV Receiver with RGB Video Connections

It may be necessary to obtain a VGA to RGB, HV adaptor cable. These are available at most computer stores and many electronic stores. Some of the adaptor cables have RCA type connector ends, others have BNC type ends and will require adaptors as shown on page 24.

### IMPORTANT

See Appendix B for RGB, HV video signal compatibility information.

For digital audio connections, see your DTV Receiver and A/V receiver Owner's Guides.

# Connecting a DVD Player with Component Video or a Display Monitor with Component Video

## DVD Player with Component Video

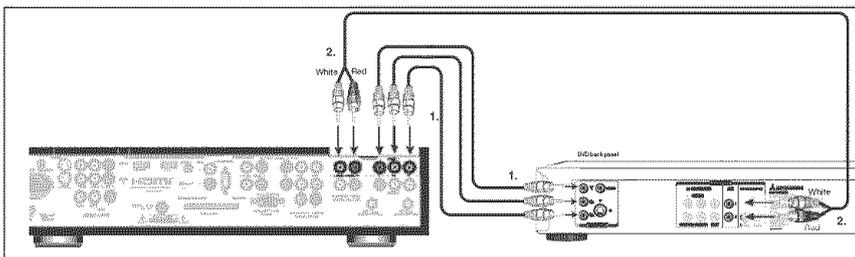
Figure 14

Component video cables and audio cables are required. These are not included with the HDTV receiver/controller.

1. Connect the Component Video cables from Y/Pr/Pb VIDEO OUT on the back of the DVD player to COMPONENT-1 on the HDTV receiver/controller back panel, matching the correct connection:

**Y** to Y (Green), **Pr** to Pr (Red), **Pb** to Pb (Blue)

2. Connect a set of audio cables from AUDIO OUT on the back of the DVD player to COMPONENT-1 AUDIO Input on the HDTV receiver/controller back panel. The red cable connects to the R (right) channel, and the white cable connects to the L (left) channel.



**IMPORTANT**  
See Appendix B for component video signal compatibility information.

For digital audio connections, see your DVD Owner's Guides.

Figure 14. Connecting a DVD Player with Component Video

**Note:** NetCommand® will assume you connected your DVD player to Component-1. If you add a second DVD or use any other inputs for your DVD, this change must match in the NetCommand system. See *Edit NetCommand...* in Chapter 3 for more information.

## Display Monitor with Component Video

Figure 15

Component video cables and audio cables are required. These are not included with the HDTV receiver/controller.

1. Connect the Component Video cables from Y/Pr/Pb VIDEO INPUT on the back of the Display Monitor to OUTPUT to Display (Y/Pb/PR) on the HDTV receiver/controller back panel, matching the correct connection:

**Y** to Y (Green), **Pb** to Pb (Blue), **Pr** to Pr (Red)

2. OPTIONAL: To use the speakers built in or connected to the display monitor, connect a set of audio cables from OUTPUT to Display on the back of the HDTV receiver/controller to AUDIO INPUT on the back of the display monitor. The red cable connects to the R (right) channel, and the white cable connects to the L (left) channel. If you are also using the OUTPUT to Display to connect to your AV Receiver as shown on page 22, then use RCA "Y" splitter cables.

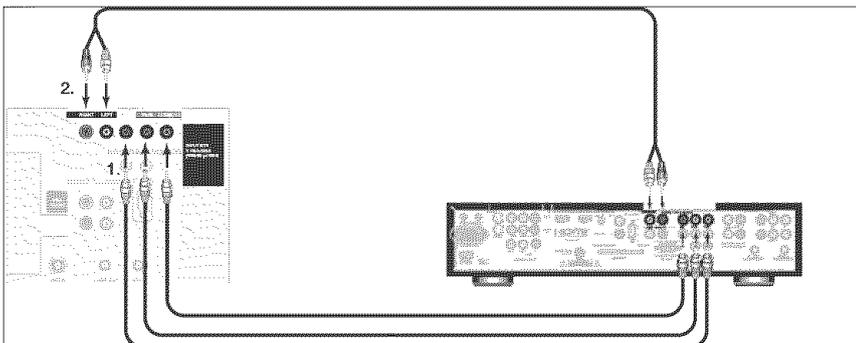


Figure 15. Connecting a Monitor with Component Video

# Connecting HDMI Devices

## Display Monitor with an HDMI or DVI Input

Figure 16

An HDMI to HDMI or HDMI to DVI cable is required. An HDMI to HDMI cable is provided.

1. To connect to an HDMI monitor, connect an HDMI cable from the HDMI output on the HDTV receiver/controller back panel to the HDMI input on the monitor. HDMI devices provide video and audio through this cable.
- 2a. To connect to a DVI monitor, connect the DVI-to-HDMI cable (recommended) (or DVI/HDMI adaptor with an HDMI cable) from the DVI monitor's back panel to the HDTV receiver/controller's back panel.
- b. Connect a set of audio cables from AUDIO OUT on the the DVI device back panel to the DVI Analog Audio input on the HDTV receiver/controller back panel. The red cable connects to the R (right) channel, and the white cable connects to the L (left) channel.

NOTE: If you are using a DVI/HDMI adaptor, it is important to connect the adaptor to the DVI side for best performance.

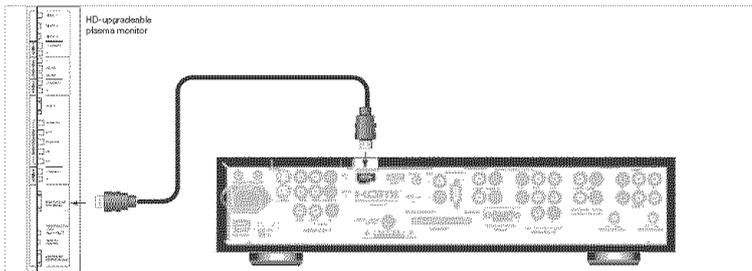


Figure 16. Connecting HD-6000's HDMI Device Output

## HDMI Source Device (Cable Box, Satellite Receiver, DVD Player, Etc.)

Figure 17

An HDMI to HDMI cable is required and one is provided.

Connect an HDMI cable from the HDMI input on the HDTV receiver/controller back panel to the HDMI output on the source device output. HDMI devices provide video and audio through this cable.

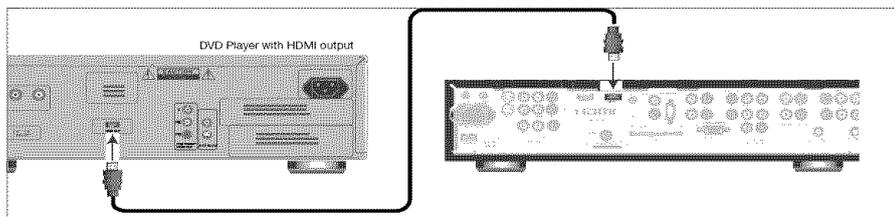


Figure 17. Connecting the HD-6000's HDMI Device Input



**CAUTION:** To ensure continued FCC compliance, the user must use a shielded video interface or HDMI cable with bonded ferrite cores at both ends when using the HDMI input.

# Connecting a DVI Device

## DVI Device

Figure 18

A DVI-to-HDMI cable or DVI/HDMI adaptor and HDMI cable and audio cables are required. These are not included with the HDTV receiver/controller. They may be available at your local electronics retailer.

1. Connect the DVI-to-HDMI cable (recommended) (or DVI/HDMI adaptor with an HDMI cable) from the DVI device's back panel to the HDTV receiver/controller's back panel.

NOTE: If you are using a DVI/HDMI adaptor, it is important to connect the adaptor to the DVI side for best performance.

2. Connect a set of audio cables from AUDIO OUT on the the DVI device back panel to the DVI Analog Audio input on the HDTV receiver/controller back panel. The red cable connects to the R (right) channel, and the white cable connects to the L (left) channel.

NOTE: The HDMI connection supports copy protection (HDCP). Some devices require connecting to an analog input first, in order to view on-screen menus and select DVI as the output. Please review your equipment instructions for DVI connectivity and compatibility.

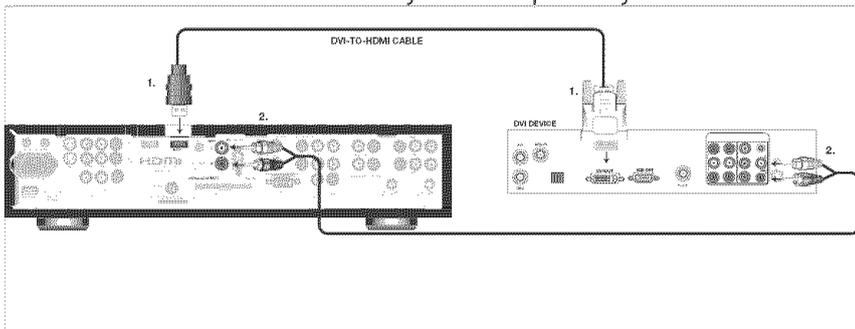


Figure 18. Connecting a DVI Device

### **IMPORTANT**

The HDMI/DVI connection does not support digital audio. For audio, you must connect left and right analog audio cables.

# Connecting to the Mitsubishi LT-4260 LCD TV

## Power Connection

Figure 19

The AC Power cord is provided with the LT-4260.

Connect the AC power cord from the back of the HD-6000 to the back of the LT-4260. Make this connection before connecting any devices. If you connect new devices after the power is connected, you will need to unplug and reconnect the AC power cord.

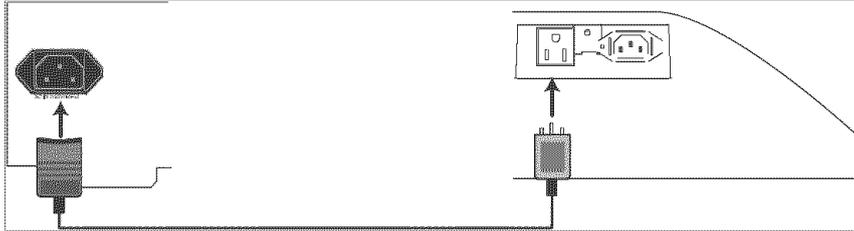


Figure 19. Power Connection to LT-4260

## HDMI Connection

Figure 20

An HDMI to HDMI cable is required and one is provided.

Connect an HDMI cable from the HDMI output on the HDTV receiver/controller back panel to the HDMI/MonitorLink™ Input on the LT-4260. HDMI devices provide video and audio through this cable.

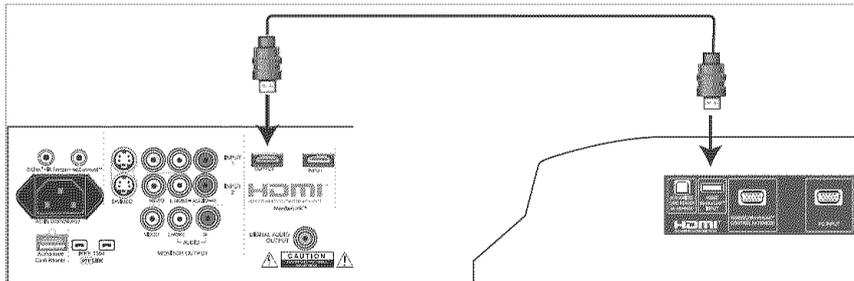


Figure 20. HDMI Connection to LT-4260

**IMPORTANT**  
If connecting to an LT-4260 display, shut off power to both the display and to the HD-6000 HDTV receiver/controller before making any connections.

## Authorized Card Reader Connection

Figure 21

A USB A to USB B cable to connect the authorized card readers is provided with the LT-4260.

The USB A connects to the Authorized Card Reader port on the HD-6000. The USB B connects to the Authorized Card Reader for the HD-6000 port on the LT-4260. You can then use the media card slots on the front of the LT-4260 with authorized media cards.

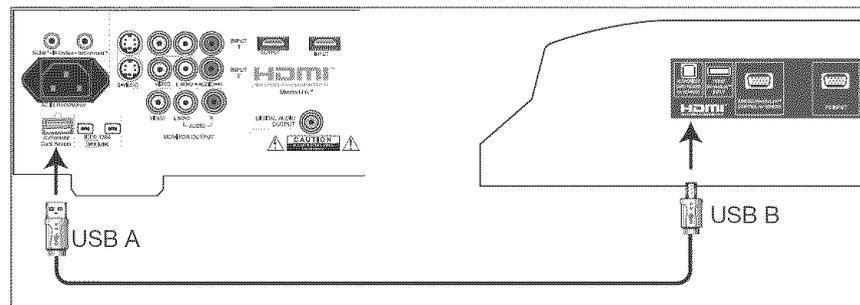


Figure 21. HDMI Connection to LT-4260

# Connecting the IR Emitter NetCommand®

## IR Emitter NetCommand®

Figure 22

A quadruple IR Emitter cable is included with the HDTV receiver/controller.

The emitters connected to these jacks are used by the NetCommand system to control other devices such as VCRs, DVD players, Cable boxes and Satellite receivers.

1. Connect the plug end of the supplied quadruple IR Emitter Cable to one of the IR Output NetCommand jacks on the HDTV receiver/controller back panel.
2. Run the cable for each of the emitter ends under, along side or over the top of each device to be controlled to the area of the front where the remote control sensor is located.
3. Place the emitter end in front of the remote control sensor of the device to be controlled. The emitter bulb should face the remote control sensor. This bulb emits infrared light in a cone shaped pattern. The bulb needs to be placed far enough from the remote control sensor to allow the cone pattern to include the sensor.

The remote control sensor is usually behind the plastic window of the front display panel. It is sometimes visible when you look through the display plastic using a flashlight and is normally a round or square cutout behind the plastic. If you cannot see the sensor and the device's Owner's Guide does not specify the location, you can find it by using the device's remote control. Hold the remote about 1/2 inch from the front of the device. Starting from one end of the display window plastic, press the POWER button.

If the device does not respond, move the remote control 1 inch toward the center and try again. Repeat this until the device responds. Note this location then start over from the other end of the display window plastic, repeating until the device responds again. The remote control sensor will be somewhere between these two positions. This is usually enough accuracy for the placement of the IR emitters.

4. With some devices, the emitter will work better facing downward from the top of the device. Some experimentation may be needed.
5. The emitter end being used can be secured in place using double stick tape.
6. If you are not going to be using all emitter ends, place the unused ends behind the devices so that they cannot send signals to the remote control sensors.

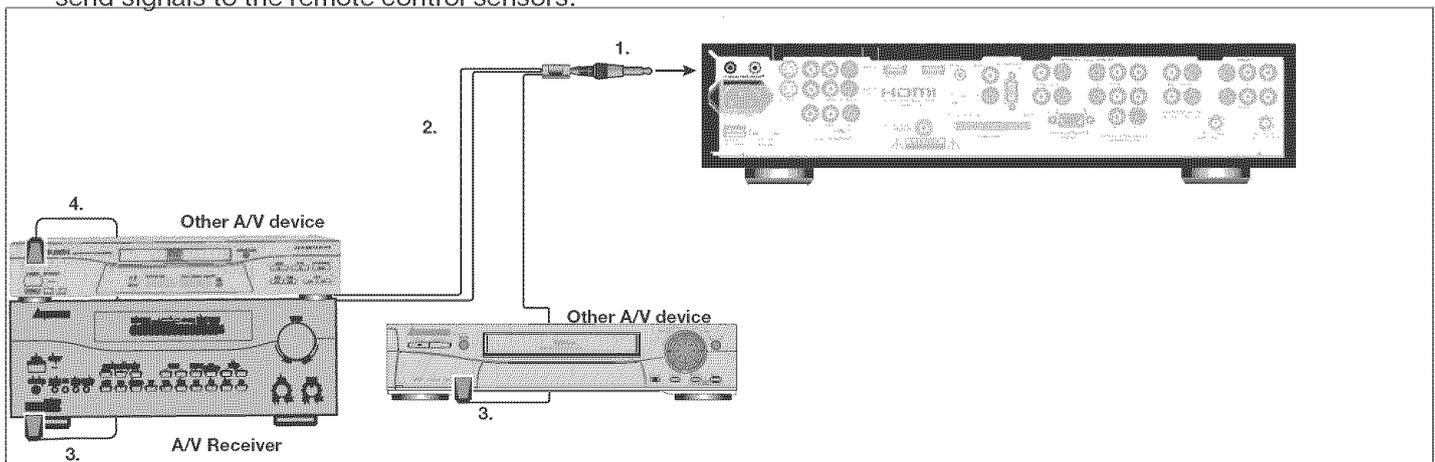


Figure 22. Connecting IR Emitter NetCommand

### IMPORTANT

If a single emitter end can be placed in a position that will operate more than one device, do not use a separate emitter end for the additional device. A single device receiving remote control signals from too many emitters or remote controls may not respond at all.

# Connecting the IR Sensor Input Connection

## IR Emitter Placement

Figure 23

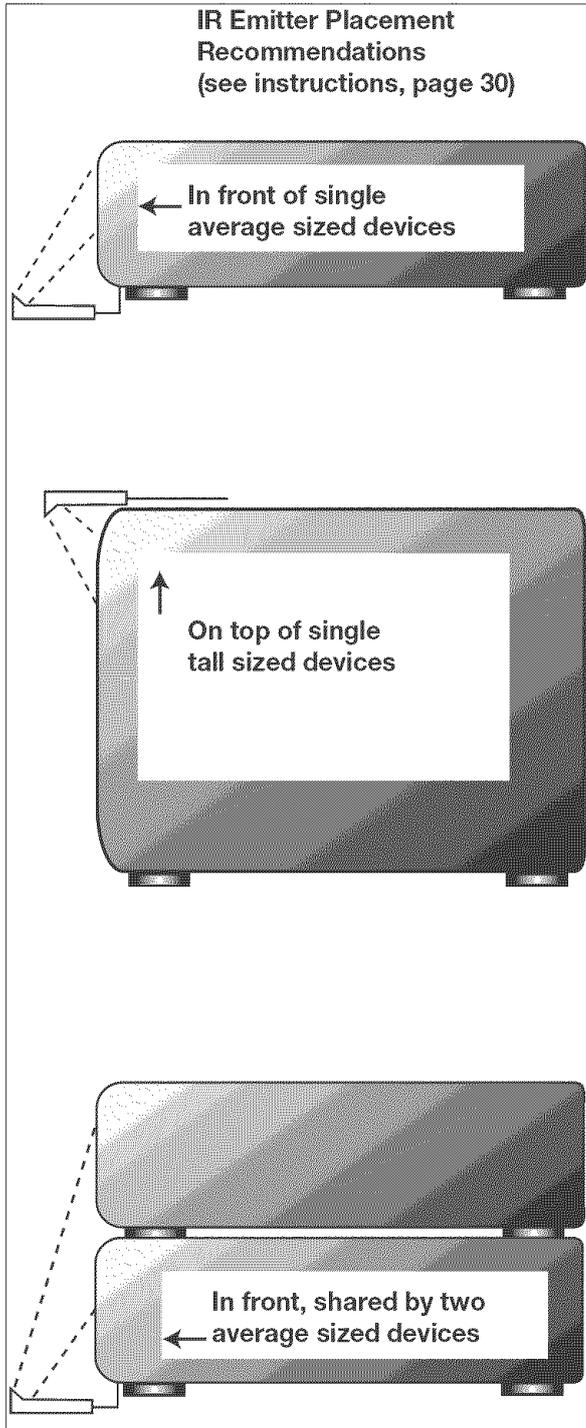


Figure 23. IR Emitter Placement Recommendations

## IR Sensor Input Connection

(Figures 24, 25)

This connection allows you to place the IR sensor in another part of the room, in situations where it is inconvenient to point the HD-6000 remote control at the HD-6000.

1. Connect the IR sensor into the IR Sensor Input on the back panel of the HD-6000.
2. Place the IR sensor end in a convenient place. The sensor can be secured in place using doublestick place.

**Note:** When the IR sensor Input is connected the IR sensor on the front panel will not function. This connection is not required when the HD-6000 is connected to the Mitsubishi LT-4260 LCD TV.

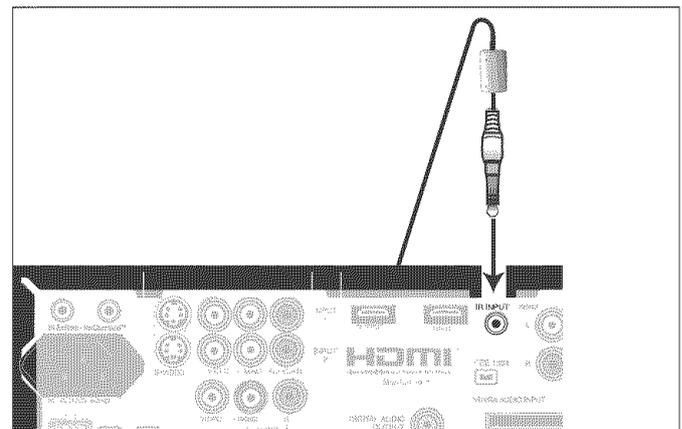


Figure 24. Connecting the IR Sensor

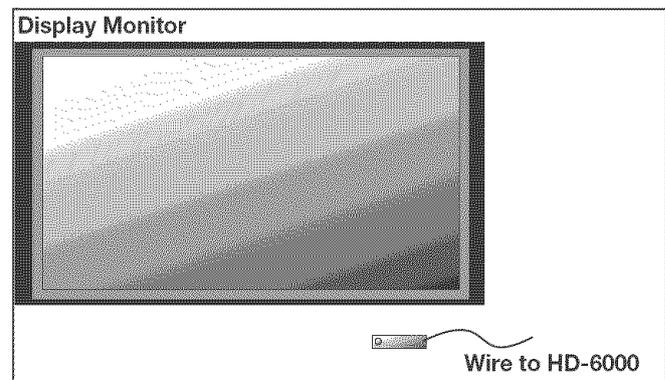


Figure 25. IR Sensor Placement Recommendation

# Connecting Compatible IEEE 1394 Devices

## Compatible IEEE 1394 Devices

It is possible to connect devices to the HDTV receiver that have IEEE 1394 connectors but are not compatible with the HDTV receiver or with the NetCommand® control system. Areas of compatibility to consider are:

### 1. Digital Video Signals

The HDTV receiver is able to decode MPEG2 video. Other types of digital video, such as DV video provided by some camcorders, must be decoded by the source device and sent to the HDTV receiver as analog video or S-Video. If the camcorder uses a compatible digital control system, the IEEE 1394 cable can still provide control for the camcorder while the TV is viewing the analog video or S-Video signals.

### 2. Digital Audio Signals

When received with video signals, the HDTV receiver is able to decode Dolby Digital signals and MPEG audio signals. Other types of digital audio as provided by some digital recording devices, such as MP3 audio and DTS audio, cannot be decoded by the HDTV receiver when received over IEEE 1394.

The HDTV receiver may not be able to pass incompatible digital audio signals on the coaxial digital audio output, however these signals may pass on the IEEE 1394 cable to other devices.

### 3. Digital Control Signal

The HDTV receiver is able to act as the control center for IEEE 1394 audio/video devices, such as VCRs, A/V Discs, tuners, cable boxes and amplifiers that are compatible with the following IEEE 1394 control standards.

- **EIA-775** is designed for tuning devices such as cable boxes allowing the device to send simple graphics. However, this standard does not allow the HDTV receiver to control the cable box by IEEE 1394.
- **AV/C (Audio Video Control)** is designed to provide basic controls such as play, stop, channel selection and volume, as appropriate for the device.

Some devices may be a combination of two or more types of devices. For example, there may be a recording device that is also a tuning device. Each portion of the device is called a sub-unit. When you select a device on the Device Selection menu that has sub-units, a pop-up menu will appear so you can select which sub-unit section you wish to use.

## When Connecting IEEE 1394 Devices

- Do not place an IEEE 1394 device between the HDTV receiver/controller and the TV or display monitor.
- Do not make a loop with the last device in the chain. When the device chain is looped, the HDTV receiver/controller may not be able to work with the other devices.
- Place devices that have only a mechanical (two-position) power switch at the end of the chain or leave the power switch in the On position. When turned Off, IEEE 1394 signals may not be able to pass through the device to other devices.
- Place devices with the slowest communication speed at the end of the chain. Sometimes the communication speed will be marked near the IEEE 1394 connector with an "S" number. The higher the number, the faster the communication speed. This HDTV receiver has a communication speed of S400. Devices with slow communication speed can interfere with IEEE 1394 signals from faster devices. When using NetCommand to set up a digital recording between a faster and slower device, the slower device should be the source and the faster device should be the recorder.
- Do not use an IEEE 1394 cable longer than 15 feet between each device.
- This HDTV receiver is an IEEE 1394a Device. IEEE 1394b is currently under development. This system will provide for longer distances and multi-room applications. Included in the IEEE 1394b systems are IEEE 1394a to IEEE 1394b converters to maintain compatibility with this HDTV receiver and other IEEE 1394a devices.

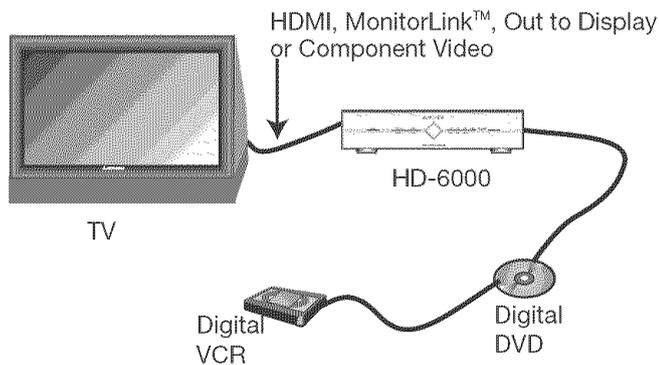
# Connecting Compatible IEEE 1394 Devices, continued

## Connection Styles

There are two different connection styles that can be used when connecting IEEE 1394 devices. Use the style that fits your network of audio/video products.

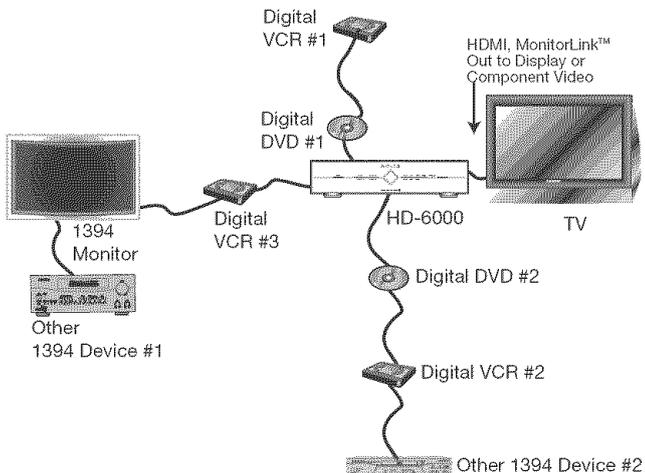
### Direct Device-To-Device Style

The IEEE 1394 offers you the capability to chain devices, unlike previous audio and video connections where you had to individually connect each device directly to the HDTV receiver/controller. For example, you can connect a D-VHS to a 1394 DVD Player and then to the HD-6000. The resulting IEEE 1394 chain will allow you to add more devices to the chain. You will be able to see each video device on the HDTV receivers Device Selection Menu and send information from any IEEE 1394 device to other compatible devices.



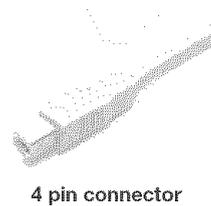
### Hub Connection Style

The IEEE 1394 also offers you the capability to connect your devices using the HD-6000 as a hub within the audio/video network. Each device can send information, which may include audio and video, to any other device in the network.



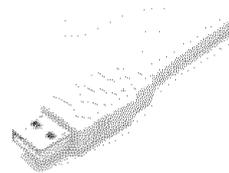
## 4-Pin Style vs. 6-Pin Style Connectors

There are two different types of connectors used for IEEE 1394 terminals and cables, a 4-pin and a 6-pin style.



4 pin connector

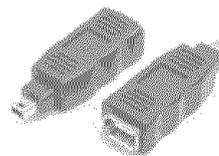
The 4-pin connector sends digital audio signals, digital video signals and digital control signals back and forth between devices. Your HDTV receiver has three 4-pin type connection jacks available on the back panel.



6 pin connector

The 6-pin connector is capable of sending the same digital audio, video and control signals as the 4-pin connector, but the 6-pin connector is also able to send low voltage electrical power. This HDTV receiver does not have 6 pin connectors.

The purpose of this low voltage electrical power is to provide the needed operating power to a device that is not connected directly to the household AC power such as a camcorder. A device with a 6-pin connector can send this electrical power to another device, or receive electrical power from another device, or simply use a 6-pin connector without using the two additional pins.



6 pin to 4 pin adaptor

A 6-pin connector cannot be connected directly to a 4-pin jack, and vice versa. To connect a 6-pin device to a 4-pin device, you will need to obtain a 6-pin to 4-pin adaptor or adaptor cable. These cables are available from electronic and computer stores.

When connecting a 6-pin device (such as a camcorder) to the HDTV, (if it is designed to receive electrical power from another 6-pin device) you will need to connect the camcorder directly to the household AC, or use the camcorder's battery for power. If this is not possible, then the camcorder will need to be connected directly to another 6-pin device in the network that can provide the electrical power.

## Connecting: Helpful Hints

**Q My VCR (or other device) does not have two sets of stereo audio outputs. How can I connect this device's audio to both the HDTV receiver and the A/V Receiver?**

A. There are two solutions:

1. Connect the single set of stereo audio outputs to the HDTV receiver only. Use Edit NetCommand® to change the setup of this device. In the Connection screen of "Change" make sure both audio and video for the HDTV receiver input are check marked and neither the audio or the video for the AVR input are check marked. This will allow the NetCommand system to use the HDTV receiver outputs to transfer the device's audio to the A/V Receiver. See Edit NetCommand in the next chapter for details.
2. Use RCA type "Y" splitter cables to split the device's audio output to be connected to both the TV and the A/V Receiver.

**Q. I have both the HDTV receiver/OUT To Display stereo audio output and HDTV receiver digital audio output connected to the same input designation on my A/V Receiver. How do I switch between analog audio and digital audio?**

A. This depends on the individual A/V Receiver. Some A/V Receivers will switch automatically to digital when a digital audio signal is supplied. Other A/V Receivers can be manually switched by remote control. For these types of A/V Receivers, see Edit NetCommand in the next chapter for NetCommand control of these features. Some A/V Receivers will require that you make this change on the front panel of the A/V Receiver.

**Q. The front panel of my A/V Receiver is too tall or too convex for the IR emitter signal to reach the remote control sensor of the A/V Receiver. What can I do?**

A. There are several possible solutions.

1. Mount the IR Emitter on the top, front edge of the A/V Receiver over the remote control sensor. Use tape to secure it in place.
2. Mount the IR Emitter on the underside of the shelf above the A/V Receiver (if the A/V Receiver is in a cabinet). Use double sided tape to secure it in place.
3. Some small stick-on emitters from other manufacturers may be compatible with this HDTV receiver's IR Emitter jacks. These may be used instead of the supplied IR Emitters.

**Q. I occasionally need to see the menu from my A/V Receiver. How can I connect it to the HDTV receiver for this purpose?**

A. You can connect the video output of the A/V Receiver to an unused input on the HDTV receiver. Then use Edit NetCommand to "Add" this as an "Other" device, not an A/V Receiver. On the "Connection" screen, indicate which HDTV receiver input was used and check mark the video box. Make sure the HDTV receiver input audio box and both the audio and video boxes for the AVR input are not check marked. You should also name this device so you can easily identify it on the Device Selection Menu. You can also use Input 3 (Camcorder) on the front panel.

**Q. I have a separate high definition receiver I would like to connect and it also has an S-video output and would like to be able use it as well. Is there any way to connect this receiver both ways?**

A. Yes, this item will appear twice in the Device Selection Menu. Just add this unit once using the Input-DTV receiver and once using one of the S-video inputs. Make sure you learn the remote control twice, on for each input. We suggest that you connect stereo audio outputs with the S-video to the HDTV receiver so that you do not need to use two inputs on the A/V Receiver. If this is a NetCommand compatible HDTV receiver that HD or SD outputs can be switched by remote control, see *Edit NetCommand* in the next chapter for NetCommand control of this feature.



# IMPORTANT NOTES



## FOR PLASMA DISPLAY MONITORS AND PICTURE TUBE REAR PROJECTION DISPLAY MONITORS:

**When using the VGA input, do not leave stationary, toolbar, or partial images on-screen for extended periods of time. Mix the types of pictures shown. Uneven plasma display or picture tube aging is NOT covered by your warranty.**

The normal use of a TV or plasma display monitor should include a mixture of TV picture types. The most frequently used picture types should fill the screen with constantly moving images rather than stationary images or patterns. Displaying the same stationary patterns over extended periods of time, or displaying the same stationary pattern frequently can leave a subtle but permanent ghost image. To avoid this, mix your viewing pattern. Do not show the same stationary image for more than 15% of your total viewing in any one week. Display constantly moving and changing images that fill the screen whenever possible.

Most plasma display monitors and rear projection TV's are not meant to be used as a work station or to view static or odd-shaped images for an extended period of time. Any device connected to your system via the VGA port, including, but not limited to, personal computer, game system, or digital set-top box, must have its screen saver function activated to prevent damage to the television. We **DO NOT** recommend the use of any external device that does not have a screen saver function with a television.

**We recommend that screen saver activation time be set to less than five minutes when using a device through the VGA port. You should also use lower brightness and contrast settings. If your computer programs allow, toolbars should be set to hidden mode.**

Please remember most computer programs and video game systems display static images, such as boxes, buttons, tool bars, and game scores that can damage the television if used for extended periods of time, repeatedly, or frequently.

CRT TV's and plasma display monitors use phosphors or phosphor picture tubes to create the image on the screen. **All phosphor picture tubes or plasma display monitors age with use.** As they age, their light output is gradually reduced. Normal pictures fill the screen with constantly changing images. Under these conditions, picture tubes or plasma display monitors age at an even rate across the entire screen. This maintains a TV picture that is evenly bright over

the whole screen. Stationary images or images that only partially fill the screen (leaving black or colored bars to fill the screen), when used over extended periods of time or when viewed repeatedly, can cause uneven aging of the phosphors and leave subtle ghosts of the stationary images in the picture.

Setting the video setting of contrast to a medium position can help slow phosphor aging.

Still or stationary images may be received from broadcasters, cable channels, satellite channels, DVD discs, video tapes, laser discs, on-line services, web/internet searching devices, video games, and digital TV tuner/converter boxes. Examples of these types of images can be, but are not limited to the following:

- **Letterbox top/bottom black bars:** shown at the top and bottom of the TV screen when you watch a widescreen (16:9) movie on a standard (4:3) TV.
- **Side bar images:** solid bars shown on each side of an image when watching a standard (4:3) program on a widescreen (16:9) TV.
- **Stock-market report bars:** ticker running at the bottom of the TV screen.
- **Shopping channel logos & pricing displays:** bright graphics that are shown constantly or repeatedly in the same location.
- **Video game patterns and scoreboards**
- **Bright station logos:** moving or low-contrast graphics are less likely to cause uneven aging.
- **On-line (Internet) web sites:** or any other stationary or repetitive computer style images.
- **Closed Caption Backgrounds:** When set to black or bright color, if Close Caption will be used frequently, Mitsubishi suggests the use of the gray or translucent background.



## **NetCommand® Setup and Editing**

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<b>Remote Control Functions: Overview</b> .....	<b>39</b>
<b>Remote Control Functions:</b>	
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<b>Change</b> .....	<b>52</b>
<b>Delete Devices</b> .....	<b>52</b>
<b>Finish Screen</b> .....	<b>52</b>

# Using the Remote Control with NetCommand®

Below is a list of several manufacturers devices tested and shown to be compatible with NetCommand. These devices can be controlled without changing the setting of the remote control from the HDTV receiver to another product. NetCommand may be able to operate additional models since many manufacturers use the same control signals to operate some or all of the models they offer. This chart lists only the models that have been tested with NetCommand. The NetCommand Learning feature is able to learn the remote control signals of most Audio Video devices. For devices not listed in the table, or if your device does not operate using the same remote control as the models listed below, use the learning feature by selecting "Other" as the Manufacturer at the [Device] screen. See the *Edit NetCommand* section of this Guide.

**NOTE:** There are many different types of remotes and not all of them may be compatible with the learning feature. Bright light near the front of the HDTV receiver/controller can also adversely affect the learning feature. If it is not possible to learn a device, you will need to use the original remote control of the device, or program the HDTV receiver remote to operate these devices in the traditional manner.

## NetCommand Pre-Memorized Devices

		DEVICE				
		A/V receiver	Cable Box	DBS Satellite Receiver	DVD Player	VCR
<b>M A N U F A C T U R E R</b>	Mitsubishi	M-VR800, M-VR900		SR-HD5	DD-6000, DD-8020	HS-U795, HS-U778
	Bose	Lifestyle® 28			Lifestyle® 28	
	Denon	AVR-2700				
	Echostar			6000		
	Funai					F260LA
	General Instruments		CFT2200			
	Hitachi				DV-P415U	VT-FX665A
	Hughes			HIRD-E45, HIRD-E86		
	Integra	DTR-9.1			DPS-9.1	
	JVC				XV-S65GD	HR-VP 650U
	Kenwood	VR2080				
	Marantz	SR8200				
	Microsoft				XBox™ (requires the DVD kit from Microsoft)	
	Motorola		DCT2244			
	Panasonic			TU-HDS20	DVD-A310	PV-8662
	Philips					VR620CAT
	Pioneer	VSX-D557, VSX-49TX			DV-414	
	RCA			DRD480RE, DTC-100		
	Rotel	RSX-1065				
	Scientific Atlanta		8600			
Sharp					VC-H810U	
Sony	STR-DE825		SAT-A55	DVP-S500D, PlayStation® 2 (Playstation® 2 requires the DVD Remote Controller kit from Sony; DVD Player software disc version 2.10)	SLV-778HF	
Toshiba			DTS-3000	SD-9200, SD-5109	W-717	
Yamaha	RX-V2095, RX-V2200			DVD-S520, DVD-C996		
Zenith			DTV1080			

# Remote Control Functions: Overview

## Overview

Figure 1, following page

- 1. Slide Switch:** Selects A/V product to be controlled by the remote control. When in the TV position, will operate Mitsubishi TVs and plasma display monitors. Select Cable/DBS/DTV for NetCommand® device control. Media card functions are available only when the HD-6000 is connected to the LT-4260 LCD TV.  
  
IMPORTANT: To program the remote control to operate the HD-6000, slide to the Cable/DBS/DTV position then press and hold the POWER while entering the numbers 1,9,7 in sequence, then release the POWER key.
- 2. Numbers:** Individually selects channels or enters information into menus.
- 3. POWER:** Turns power on and off for HDTV receiver and other A/V products.
- 4. SQV (SuperQuickView™):** Scans through memorized lists of favorite channels.
- 5. QV (QuickView™):** Switches between the current channel and last channel viewed.
- 6. SUB/CANCEL:** Clears SQV and some menu entries and cancels recordings. For digital channels, adds separator between major and sub channel numbers.
- 7. DEVICE:** Displays the Device Selection menu to select the device to view (Ant-1 and Ant-2, TV Disc or devices connected to the HDTV receiver's inputs including IEEE 1394 devices).
- 8. CHANNEL:** Scan up or down through memorized channels. Performs chapter skip function for NetCommand® controlled DVD's.
- 9. VOLUME:** Changes sound level.
- 10. MUTE:** Turns sound on or off.
- 11. TV MENU:** Displays  on-screen menu system.
- 12. ADJUST:** Press , ,  and  to navigate menus, change settings, and move the PIP on-screen location. Operates many NetCommand® functions. Performs skip forward and backwards function of TV Pause.
- 13. ENTER:** Selects a channel number or menu item.
- 14. GUIDE:** Displays ChannelView™ for Ant-1 and 2. Displays Track List for TV Disc and IEEE 1394 A/V Discs. Displays program guide for satellite receiver, some cable boxes or DVD Disc menu. Displays thumbnails or playlists for media card files.
- 15. Light:** Located on the right side of the remote control, this feature illuminates buttons or labels.
- 16. DEVICE MENU:** Displays menus for devices connected to the HDTV receiver, including CableCARD™.
- 17. HOME:** Exits the HDTV receiver's on-screen menus and returns to TV viewing.
- 18. V-CHIP:** Turns On or Off the V-Chip Lock.
- 19. INFO:** Displays on-screen summary of the current device used and any broadcast information available (including current V-Chip information). See Appendix D for details.
- 20. AUDIO:** Selects and adjusts individual audio settings.
- 21. VIDEO:** Selects and adjusts individual video settings.
- 22. PIP CH:** Scrolls up or down through memorized channels for PIP.
- 23. PIP/POP:** Cycles through PIP and POP choices.
- 24. EXCH:** Exchanges PIP or POP and main TV picture.
- 25. SLEEP:** Sets the HD-6000 to turn off within 2 hours. See next page for setup instructions.
- 26. PIP DEVICE:** Displays PIP Selection menu to select the PIP or POP image source device
- 27. FORMAT:** Changes the shape and size of the main TV picture.
- 28. CONNECT:** Initiates IEEE 1394 peer-to-peer connections.
- 29. REC (Record):** Records with a VCR, sets up recordings for DVCR or while in ChannelView.
- 30. PAUSE:** Pause a live TV picture when no PIP or POP image is displayed (when TV Pause is set to Always or On Request). When PIP or POP image is visible, pauses that image (default TV Pause set to Off or On Request). Pauses a VCR, DVD or A/V Disc, media card file. Returns to TV viewing from TV Pause.
- 31. REW/REV:** Rewinds or reverses search in TV Pause, while watching the TV Disc or with a VCR. Reverses scan with a DVD, A/V Disc or media card file.
- 32. PLAY:** Plays the TV Disc or VCR, DVD, A/V Disc or media card file.
- 33. STOP:** Stops the TV Disc, VCR, DVD, A/V Disc or media card file.
- 34. FF/FWD:** Fast forward or forward search in TV Pause, while watching the TV Disc, with a VCR or media card file, or fast play a DVD.

# Remote Control Functions: Operation and Care, Sleep Timer

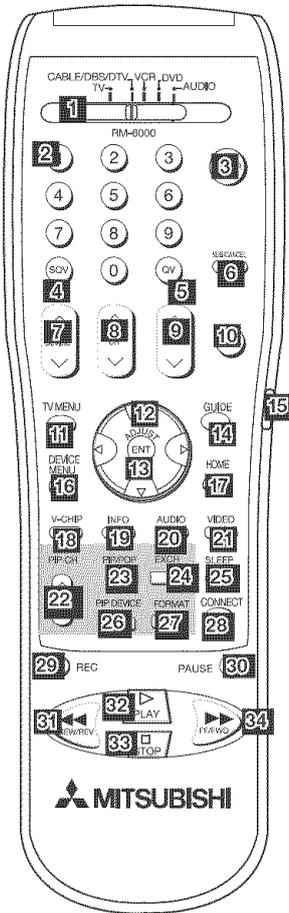


Figure 1. Remote Control Overview

## Battery Installation

Figure 2

### Installing the Batteries:

1. Remove the remote control's back cover by gently pressing the ribbed tab in the direction of the arrow and sliding off the cover.
2. Load the batteries, making sure the polarities (+) and (-) are correct. For best results, insert the negative (-) side first.

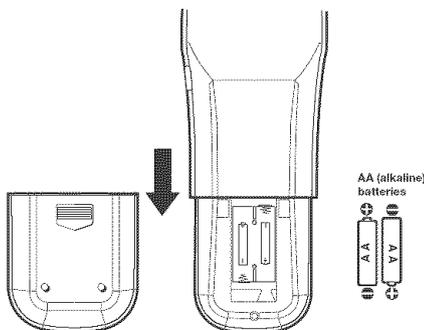


Figure 2. Operation: Installing the Batteries

## Care

### For Best Results from the Remote Control:

- Be within 20 feet of the equipment.
- Do not press two or more buttons at the same time unless instructed.
- Do not allow unit to get wet or become heated.
- Avoid dropping on hard surfaces.
- Do not use harsh chemicals to clean. Use only a soft, lightly moistened cloth.
- Do not mix new and old batteries.
- Do not heat, take apart or throw batteries into fire.
- Use only AA alkaline batteries.

*Hint: If the remote is in the Cable/DBS/DTV layer and will not operate the HD-6000, press and hold POWER and enter 1,9,7 to reset the remote.*

## Sleep Timer

### Setting the Sleep Timer:

1. Press SLEEP on the remote control.
2. Each press of SLEEP increases the time displayed by 30 minutes, until the maximum value of 120 minutes is reached.
3. After 5 seconds of inactivity, the message will disappear.
4. Press SLEEP to view the remaining time before the timer turns the TV off.

### Canceling the Sleep Timer:

1. Press SLEEP to display the on-screen message.
2. Press SLEEP repeatedly until OFF is displayed.

**Note:** After 5 seconds of inactivity, the message box disappears.

# NetCommand® On Screen Buttons

To use the HDTV receiver's NetCommand feature, you need to provide some detailed information during the setup. You must define the manufacturer of the devices that are connected to the HDTV receiver, or learn the IR code remote control signals for the device connected. For each device, the input to the HDTV receiver and A/V receiver, and the names for the device are pre-set during Initial NetCommand setup. You may change those inputs or names using the Edit NetCommand or Learn screens. The buttons described below will help you navigate the screens.

On your remote control, the ADJUST ◀ and ▶ buttons allow you to navigate left and right to different selections on the screen. The ADJUST ▲ and ▼ buttons allow you to:

- Change the radio button
- Change current text box selection
- Navigate up and down on the screen

The ENTER button allows you to:

- Confirm the selected character when naming a device
- Add or delete check marks in check boxes
- Select on-screen buttons to change screens

## Text Box



Press ADJUST ▲ or ▼ to make a selection.

## Check Box



Check marks indicate the item or input is added or turned On. Press ENTER when the check box is highlighted to add or delete a check mark. When viewing the Review screen, a check box reflects which devices are turned On or Off, or connected to the HDTV receiver.

## Radio Buttons



The setting changes when one of the choices is highlighted.

## Control Buttons

Much like the software on your computer, you will use graphic buttons to navigate through the NetCommand Setup screen. Highlight the button and press ENTER to select the function.

### <Back Button



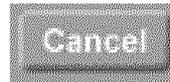
Use the <Back button to navigate back to the previous screen.

### Next> Button



Use the Next> button to navigate forward to the next screen.

### Cancel Button



The Cancel button will cancel out any changes you are currently making without saving them into memory. When you select the Cancel key, NetCommand will prompt you to confirm that you want to cancel the changes you are currently making. If you select Cancel during Initial Setup, you can setup NetCommand later by selecting the NetCommand menu, then choosing Initial.

# 3D Graphical ▶ViewPoint™ Menu System

Your HDTV receiver also has Mitsubishi's exclusive 3D Graphical ▶ViewPoint™ on-screen operating system, which provides on-screen information for menu choices and changes, using the HDTV receiver's remote control.

## ▶ViewPoint™ Menu Screens



A picture (icon) will be highlighted on the menu screen when selected with the ADJUST arrows. You may then make changes within the menu or access sub-menus, if available.



You can also access sub-menus from a button. Sometimes when you select a button, an automatic function begins.

The ▶ViewPoint™ system includes the following special features:

- The currently selected icon or button is highlighted with a yellow outline; the text color is yellow.
- On-screen instructions, shown in the message line at the bottom of the menu, provide feature selection and adjustment information.
- Some on-screen menu options must be set before other options are available.

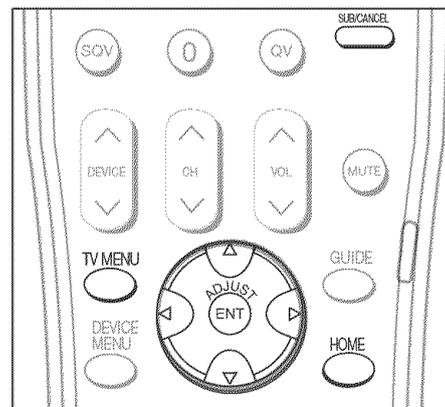


*Main Menu: This screen will always be the first screen that appears when you press the remote's TV MENU button.*

## ▶ViewPoint™ Remote Control Buttons

The following buttons on your remote control help you navigate within the ▶ViewPoint™ system :

1. ADJUST ◀ or ▶ to select the menu item you want to change.
2. ADJUST ▲ or ▼ to change the settings.
3. ENTER to enter into a menu, start an automatic function or select a checkbox.
4. CANCEL to clear a setting or stop an automatic function.
5. TV MENU to display the TV's main menu or move back one menu screen at a time.
6. HOME to exit all menus and return to TV viewing.



Press ADJUST ▲ or ▼ to change text boxes. Some text boxes have preset labels. Other boxes allow you to select letters, numbers or characters to customize names.

# NetCommand® Initial Setup

## IMPORTANT

You may use your HDTV receiver without setting up NetCommand. You may also set up NetCommand at a later time by choosing the NetCommand menu from the Main menu, then selecting Initial.

When you first power On your new Mitsubishi HDTV receiver, the initial setup screens appear. Most IR remote control signal formats can be learned by NetCommand.

**IMPORTANT:** To program the remote control to operate the HD-6000, slide to the Cable/DBS/DTV position then press and hold the POWER while entering the numbers 1,9,7 in sequence, then release the POWER key.

## Welcome Screen

Figure 1

When you first turn on your HDTV receiver, the Welcome screen displays and asks you to select either English or Spanish as the language for the on-screen menus. The default language is English. To change Language later, select Setup in the Main Menu. Selecting **Cancel** at this screen will cause the default language (English) to be selected.

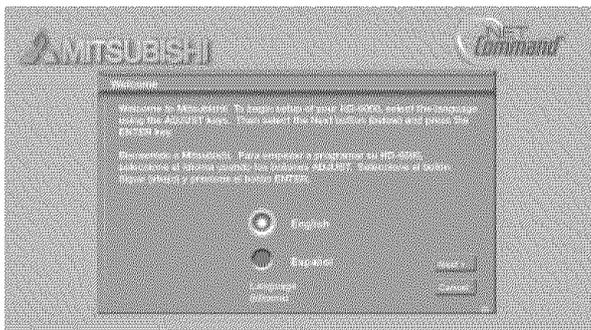


Figure 1. Welcome screen

## NetCommand (Information) Screen

Figure 2

The NetCommand (Information) Screen describes how to start or delay the initial NetCommand Setup. This screen displays automatically the first time you power On your new HDTV receiver, after the Welcome screen. To setup NetCommand, select **Next>** and press ENTER.

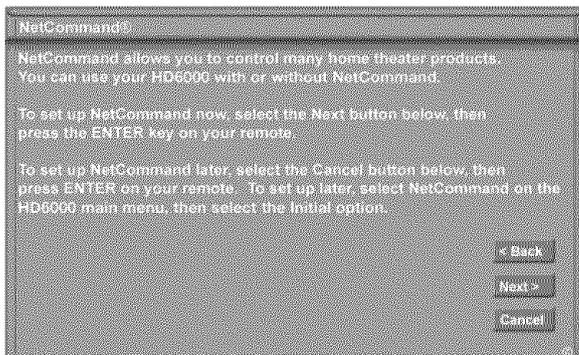


Figure 2. Information screen

If the NetCommand Setup is cancelled before it's completed, you can restart the NetCommand setup by:

1. A press of TV MENU on the remote control to display the TV Main menu.
2. Select NetCommand. The available options will be: Add, Review and Initial. Change and Delete will be grayed out.
3. Press ADJUST ▲, ▼, ◀ or ▶ to select Initial.
4. Press ENTER. The Device Setup screen displays.

## Device Setup Screen

Figure 3

If the devices connected to the HDTV receiver/controller are already in NetCommand memory, you can quickly select them at this screen. Press ADJUST ◀ or ▶ to move to each device type. Press ADJUST ▲ or ▼ to select the manufacturer. Select "Other" if the manufacturer is not listed. Later, you can use the Change setting in the Edit NetCommand menu to learn the remote control signals for this device. Select "None" for device types that are not connected.

For the A/V Receiver, if the manufacturer is not listed, you cannot select "Other". Instead, select "None". Later, you can use the "Add" feature in the NetCommand menu to have the HDTV receiver add and learn the remote control signals for this device. After completing your choices, select **Next>** and press ENTER.

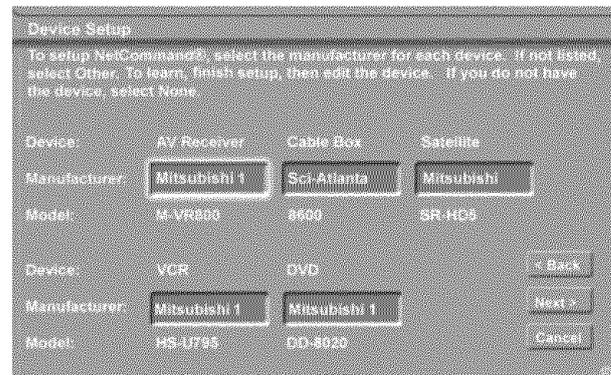


Figure 3. Device Setup screen

# NetCommand® Initial Setup, continued

**Note:** If you selected “Other” for any of the device names, the HDTV receiver/controller can “Learn” the connected device by following the Edit NetCommand instructions. For many device types, non-listed models will operate in the same way as the listed models and you can still use the pre-loaded setting.

## Review Screen

Figure 4

After you have made your device choices the Review Screen will display. It is important to review the settings to ensure that they are correct. If necessary, you can use **<Back** to return to the Device Setup screen to make changes.

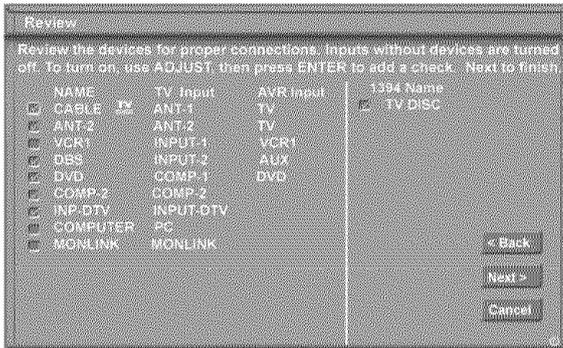


Figure 4. Review screen

**Note:** The Review screen lists the HDTV receiver/controller input and A/V receiver input used with each device. You must correctly identify the inputs you used when you connected the devices. If you have not connected your devices, write down these inputs as a guide. If you cannot use these inputs, or if you would like to change the name of a device, use the instructions in *Edit NetCommand* to make necessary changes.

**Note:** If you select **Next>** on the Review screen, all selections made are finalized.

On the Review screen, adding or deleting check marks will turn the adjacent devices, media cards or inputs On or Off. 1394 device names only appear on the Review screen when the devices are connected to the TV.

**Note:** If TV Disc is not checked, TV Pause will not be available.

## Finish Screen

Figure 5

To complete the NetCommand setup, select **Finish** from the Finish screen.

If you wish to change any of the pre-configured inputs or names for the devices, or add devices not in the pre-configured setup, select **Edit** to display Edit NetCommand menu.

If your A/V receiver was not listed, select **Edit** to add the AVR and then assign all devices to new AVR inputs.

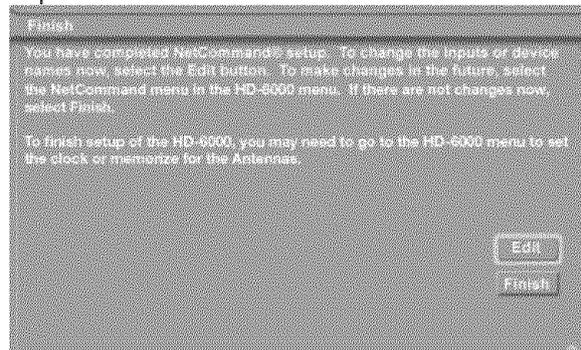


Figure 5. Finish screen

It is still necessary to memorize the available channels for Antenna-1 (and Antenna-2, if used). You may do that by going to the TV Main menu and selecting Antenna. Instructions to memorize channels are found in the *Antenna* menu section.

# Edit NetCommand®, Add an A/V Receiver

## A/V Receiver Screen

Figure 6

If your A/V Receiver manufacturer was not listed, and you selected “None” during the initial NetCommand Setup you may add the A/V Receiver and have NetCommand learn its remote controls functions. Either select Edit from the Finish screen or if you have finished the initial setup, go to the Main menu, select NetCommand, then press ENTER. The Edit NetCommand screen will display, select Add.

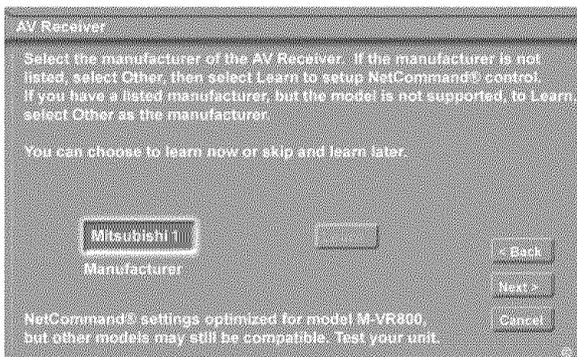


Figure 6. A/V receiver screen

Choose ONE of these options:

- Select a recognized manufacturer. The model number optimized for NetCommand will display at the bottom of the screen. If a number follows the manufacturer’s name, (example: Mitsubishi 1), this indicates additional models are optimized for that manufacturer. For many device types, non-listed models will operate in the same way as the listed models and you can still use the pre-loaded setting.

After selecting **Next>**, the screens that follow are: the Name Screen (Figure 10), Monitor Out to AVR screen (Figure 11), ending with the Finish screen (Figure 12).

- Select “Other”, then highlight “Learn” and press ENTER. This will allow you to have NetCommand learn the remote control signals of this new device.

After selecting “Learn” and pressing ENTER, the screens that follow are: the A/V receiver Inputs screen (Figure 7), A/V Receiver Input Learn screen (Figure 8), A/V Receiver Learn screen (Figure 9), Name screen (Figure 10), Monitor Out to AVR screen (Figure 11), ending with the Finish screen (Figure 12).

- Select “Other”, skip Learn and select **Next>**. This will allow the device to appear and will allow

NetCommand to switch inputs to use this device. However, NetCommand will not be able to control this device. Later you may use the “Change” option in the NetCommand menu to learn the remote control signals.

After selecting **Next>**, the screens that follow are: the A/V Receiver Input screen (Figure 7), Name screen (Figure 10), Monitor Out to AVR screen (Figure 11), ending with the Finish screen (Figure 12).

## A/V Receiver Inputs

Figure 7

If you select “Other” as the manufacturer, you will see the A/V Receiver Input screen after selecting “Learn” and pressing ENTER. After selecting the number of inputs, this screen will not appear again.

Depending on your A/V Receiver’s capability, you may connect up to to seven (7) A/V inputs. Select the number of inputs by pressing ADJUST ▲ or ▼.

If the number of connected inputs changes, you will need to delete the A/V receiver through Edit NetCommand and add it again, as described above.

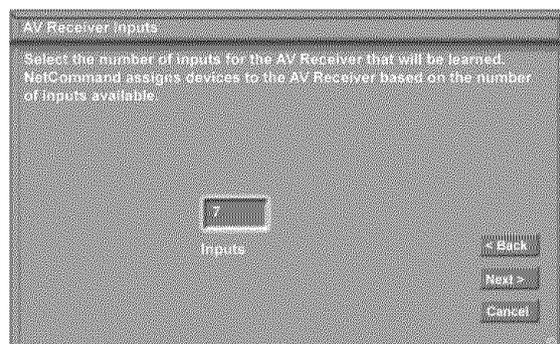


Figure 7. A/V receiver Input screen

# Edit NetCommand®, Add an A/V Receiver, continued

## A/V Receiver Input Learn Screen

Figure 8

NetCommand can now learn the remote control signals used to select each input on the A/V receiver.

1. Press ADJUST ◀ or ▶ on the HDTV receiver/controller remote to select the check box for each function to be learned.
2. Press ENTER and the function name will begin to flash to confirm the ready-to-learn status.
3. Point the A/V receiver's remote control at the TV screen. Press the button on the remote control that corresponds to the selected function. A check mark will appear and the function name will stop flashing. This confirms the signal learned status.
4. To test the learned command, while the function is selected, press ENTER on the HDTV receiver/controller remote. The A/V receiver will perform the selected function. The A/V receiver needs to be turned on and the IR emitters properly placed for the test to be successful (see page 30 for IR emitter placement).
5. To customize the input names, press ADJUST ▶ to move to the Input Name text box and then press ADJUST ▲ or ▼ and ENTER to select each letter of the name. These names will appear on the Review screen as the A/V receiver's input names.
6. To erase the learned input signal, highlight the check box for that input and press CANCEL.
7. Repeat for each connected input.
8. When the input selection signals have been learned and the inputs named, press ADJUST ▶ to select **Next>** and move to the A/V receiver Learn screen.

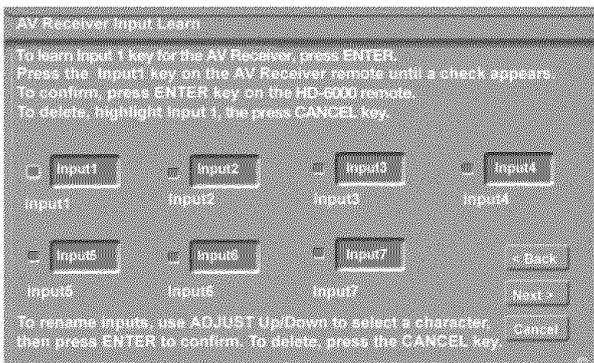


Figure 8. A/V receiver Input Learn screen

## A/V Receiver Learn Screen

Figure 9

1. Press ADJUST ◀ or ▶ on the HDTV receiver/controller remote to select the check box for each function to be learned.
2. Press ENTER and the function name will begin to flash to confirm the ready-to-learn status.
3. Press the button on the A/V receiver's remote control that corresponds to the selected function, A check mark will appear and the function name will stop flashing. This confirms the signal learned status.
4. To test the learned command, press ENTER on the HDTV receiver/controller remote. The A/V receiver will perform the selected function. The A/V receiver needs to be turned on and the IR emitters properly placed for the test to be successful (see page 30 for IR emitter placement).
5. Repeat for each function to be learned.
6. To erase a learned function, highlight the check box for that function and press CANCEL.
7. When the function signals have been learned, press ADJUST ▶ to select **Next>** and move to the Name screen.

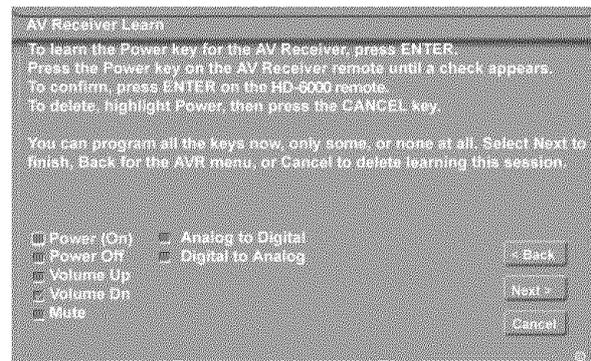


Figure 9. A/V receiver Learn screen

**Hint:** If your A/V receiver remote control uses a single button for both Power On and Power Off, don't learn the Power Off function. If your A/V receiver uses a single button to toggle between digital and analog sound, then learn only Analog to Digital. If your A/V receiver automatically switches between analog and digital audio, then you don't need to learn either Analog to Digital or Digital to Analog functions.

# Edit NetCommand®, Add an A/V Receiver, continued

## Name Screen

Figure 10

The Name screen allows you to change the default name for the A/V receiver to a custom name of up to eight characters (including a blank space), selecting from letters, numbers, and nine different characters. Using the HDTV receiver/controller's remote, press ADJUST ▲ or ▼ to select each letter, then press ENTER to move to the next position. Press CANCEL to delete the current letter and move back one character position. When in the first position, the CANCEL button will return the name to the default name.

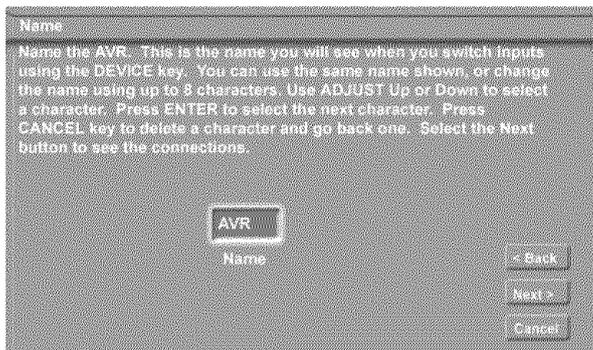


Figure 10. Name screen

## Finish Screen

Figure 12

To finalize your selections and complete the A/V receiver setup, select **Finish** from the Finish screen.

**Note:** If you connected the audio output of any device directly to the A/V Receiver, you must use the "Change" function of the Edit NetCommand menu and select the device to assign the correct A/V Receiver input to be used with each device.

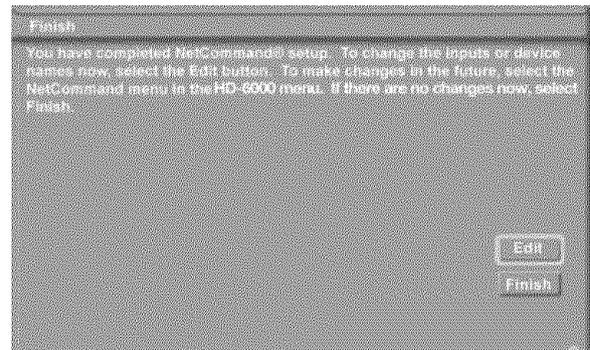


Figure 12. Finish screen

## Audio Output to AVR Screen

Figure 11

If you connected the HD-6000 Output to Display to an A/V receiver, use this screen to select the name of the analog input you're using on the A/V receiver.

If the A/V receiver also has a digital audio input, then connect the HD-6000 Digital Audio Output to the A/V receiver digital audio input.

Note that the HD-6000 Monitor Output connection is only for VCR recording and is not synchronized with the video display.

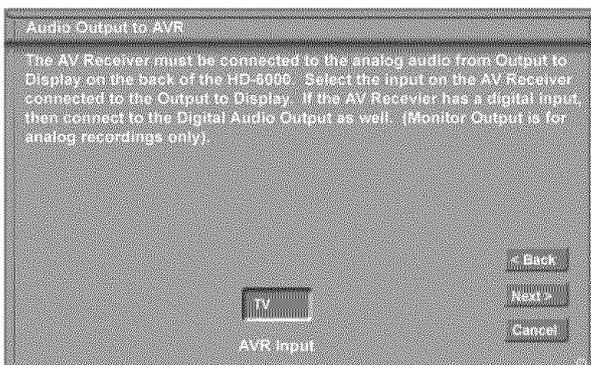


Figure 11. Audio Output to AVR screen

# Edit NetCommand®, Add Devices

Mitsubishi's NetCommand allows you to edit your home theater configuration. You can add new devices, change device settings and connections, delete devices and learn remote control IR signals not already in NetCommand memory.

## Edit NetCommand Screen

Figure 13

If you selected Edit when you were at the Finish screen, the Edit NetCommand screen displays. The choices are:

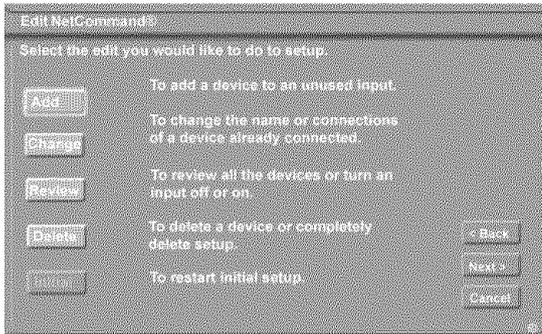


Figure 13. NetCommand Menu, Edit NetCommand Option

### **Add:**

Add a new device to the NetCommand setup. See Figure 14 for more information.

### **Change:**

Change the brand/model or input connections of a device already listed in the configuration. Learn the remote control signals of devices listed as "Other" brands. See Figure 23 for more information.

### **Review:**

View a list of all devices and input connections in the NetCommand home theater configuration. This is also where you can turn On or Off unused HDTV receiver/controller inputs or devices. See Figure 4 for more information.

### **Delete:**

Remove a device or erase the complete NetCommand home theater configuration. The learned remote control signals are erased when the associated device is deleted. See Figure 25 for more information.

### **Initial:**

Start the setup at the beginning. This button only becomes available after deleting the entire configuration, or if NetCommand was not set up when the HDTV receiver/controller was first powered On. If you select Initial, the first screen that will display is the Device Setup Screen. See Figure 3 for more information.

**Note:** If you have completed the NetCommand setup, you can access the Edit menu at any

time by pressing TV MENU, then selecting NetCommand. See page 69 for details.

Use these settings to change the NetCommand setup to reflect a change in your home theater system. To learn the remote control IR signals of a device that is not already in the NetCommand memory, add this device as manufacturer of "Other". The learning screens will then automatically be included in the series of screens used for adding the device.

## Add Screen

Figure 14

Select "Add" from the Edit NetCommand screen, and the New Device screen will display. Select the Device type that you would like to add. You may add your A/V receiver (if not added in Initial setup) Cable Box, Camcorder, DBS, DVD, Laser Disc, PC and VCR.

At the next screen, choose the manufacturer. If you choose "Other" for the manufacturer, the device (A/V receiver, Cable, DBS, DVD or VCR) can be learned. For device types Laser Disc, Camcorder, Game and PC, the "Learn" screen is skipped. There is no NetCommand support or learning for these devices.

At the next screen, you can keep the default Name or select a custom Name for the device, using ADJUST ▲ or ▼ to select letters A-Z, numbers 0-9, and/or symbols (!.&/'/\*- and blank) for each character of the name you would like for the selected channel.

The next screen displays the Connection screen (RF Connection for Cable, Figure 21). Select the HDTV receiver/controller and A/V receiver inputs that the device is connected to. Only audio can be connected to the A/V receiver. The A/V receiver may need configuring for digital audio.

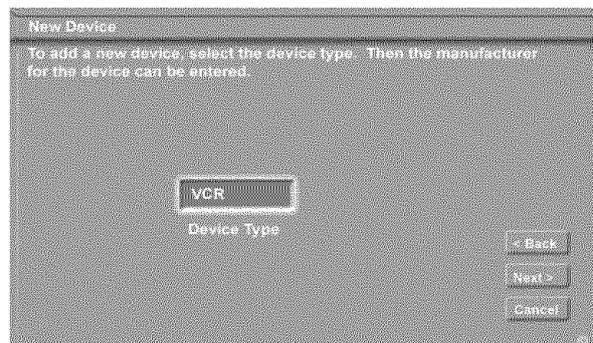


Figure 14. Add screen

# Edit NetCommand® Add Devices, continued

## [Device] Screen

Figure 15

If you selected “None”, during initial setup, then you can add a device. If you have added a new device, use this screen to start learning.

Our examples show the choices for adding a VCR, however, the same type of screens will appear for any DBS (Direct Broadcast Satellite), DVD player or Cable Box.

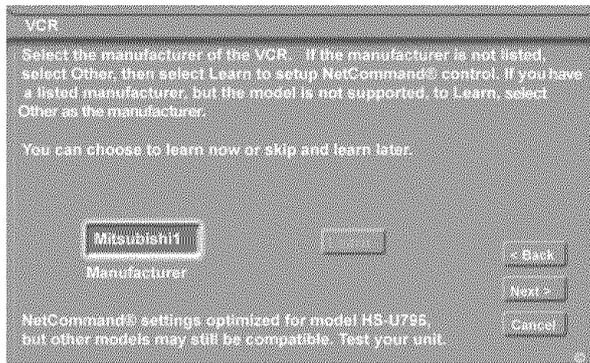


Figure 15. [Device] screen

Choose ONE of these options:

- Select a recognized manufacturer. The model number optimized for NetCommand will display at the bottom of the screen. If a number follows the manufacturer’s name, (example: Mitsubishi 1), this indicates additional models are optimized for that manufacturer. For many device types, non-listed models will operate in the same way as the listed models and you can still use the pre-loaded setting.

After selecting **Next>**, the screens that follow are: the Name Screen (Figure 18), Connection screen (Figure 19) and specialized device screens (Figures 20-23), ending with the Finish screen (Figure 26).

- Select “Other”, then highlight “Learn” and press ENTER. This will allow you to have NetCommand learn the remote control signals of this new device.

After selecting “Learn” and pressing ENTER, the screens that follow are: [Device] Learn screen (Figure 16), [Device] Advanced Learn screen (Figure 17), Name screen (Figure 18), Connection screen, (Figure 19) and specialized device screens (Figures 20-23), ending with the Finish screen (Figure 26).

- Select “Other”, skip Learn and select **Next>**. This will allow the device to appear and will allow NetCommand to switch inputs to use this device. However, NetCommand will not be able to control

this device. Later you may use the “Change” option in the Setup menu to learn the remote control signals.

After selecting **Next>**, the screens that follow are: the Name Screen (Figure 18), Connection screen (Figure 19) and specialized device screens (Figures 20-23), ending with the Finish screen (Figure 26).

## [Device] Learn Screen

Figure 16

Shown only if “Learn” was selected

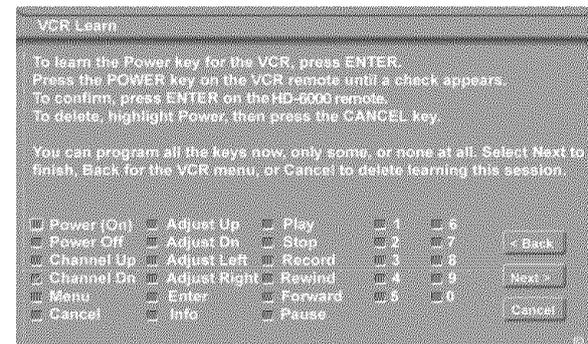


Figure 16. [Device] Learn screen

1. Press ADJUST ▲, ▼, ◀ or ▶ to select the check box for each function to be learned.
2. Press ENTER and the function name will begin to flash to confirm the ready-to-learn status.
3. Press the button on the device’s remote control that corresponds to the selected function. A check mark will appear and the function name will stop flashing. This confirms the signal learned status.
4. To test the learned command, press the ENTER button on the HDTV receiver/controller remote while the learned function is still highlighted. The device should perform the selected function. The device needs to be turned on and the IR emitters properly placed for the test to be successful (see page 30 for IR emitter placement). If the functions are not learned the first time, try Learn again.
5. Repeat for each function to be learned.

# Edit NetCommand®, Add Devices, continued

- To erase a learned function, highlight the check box for that function and press CANCEL.
- When the function signals have been learned, press ADJUST ► to select **Next>** and move to the [Device] Advanced Learn screen. NOTE: When learning the device's remote control signals, point the device's remote control at the HD-6000.

**Hint:** If the device's remote control uses a single button for both Power On and Power Off, don't learn the Power Off function.

## [Device] Advanced Learn Screen

Figure 17

After learning the basic device keys, the [Device] Advanced Learn screen allows you to learn any special keys for your device. Most common IR remote control signal formats can be learned by NetCommand.

A table of specialized device keys is shown in Appendix E. You only need to learn the functions your devices respond to and can ignore the functions that do not apply to your device.

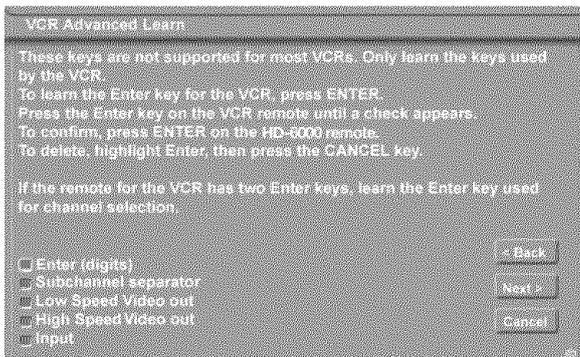


Figure 17 [Device] Advanced Learn screen

## Name Screen

Figure 18

The Name screen allows you to change the default name for each device to a custom name of up to eight characters (including a blank space), selecting from letters, numbers and nine different characters. Press ADJUST ▲ or ▼ to select each letter, then press ENTER to move to the next position. Press CANCEL on the remote to delete the current letter and move back one character position. When in the first position, the CANCEL button will return the name to the default name.

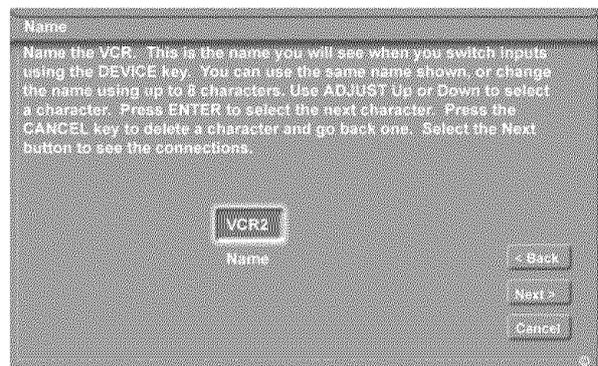


Figure 18. Name screen

## Connection for [Device] Screen

Figure 19

This screen allows the HDTV receiver/controller to learn the connection between device(s) and input(s). Inputs 1 & 2, Components 1 & 2, Input-DTV, VGA and/or the inputs for the A/V Receiver all need to be checked, if connected. Add or remove check marks to indicate what type of connections (Audio, Video or both) are used with each HDTV receiver/controller and A/V Receiver input.

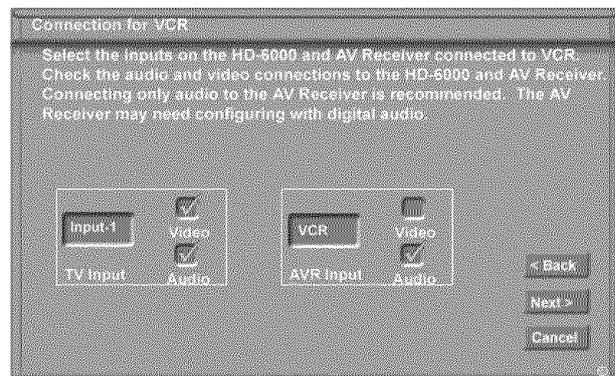


Figure 19. Connection for [Device] screen

# Edit NetCommand®, Add Devices, continued

The screens described below may not be necessary for your device setup. If they do not display automatically on-screen, they are not required.

## VCR for Recordings Screen

Figure 20

If more than one analog VCR is connected to the HDTV receiver/controller, you need to select the one to be used for recording. You may also select whether you want the recorded 16:9 signals from digital channels or IEEE-1394 devices to be cropped (sides are cut off) or Anamorphic (full screen). If Anamorphic is selected for viewing, choose the Standard format for the best quality playback.

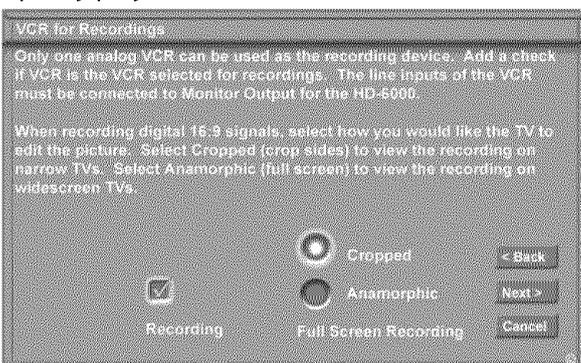


Figure 20. VCR for Recordings screen

## RF Connection for Cable Screen

Figure 21

The RF Connection screen displays only when adding or changing a Cable Box. If your Cable Box is connected to a HDTV receiver/controller antenna input, check the RF checkbox. Select the antenna input that is used with the Cable Box. Select the channel number used for output by your cable box. The default channel is 003. If the Cable Box is also connected to a VCR for recording, select that VCR.

If your Cable box is connected using Audio/Video cables, make sure the RF checkbox is unchecked. Then the next screen will be Connection (Figure 19), to allow the selection of the HDTV receiver/controller input used with the Cable Box.

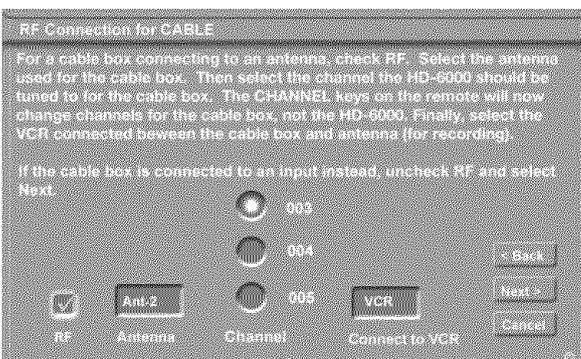


Figure 21. RF Connection for Cable screen

## Input-DTV Connection Screen

Figure 22

This screen displays only if the device selected in the Connection screen (Figure 19) is connected to Input-DTV. This is usually DBS, but can be Cable Box. The Input-DTV Connection screen allows you to select the connection type, RGB (HV) or Component YPbPr you are using to connect your cable box or DBS.

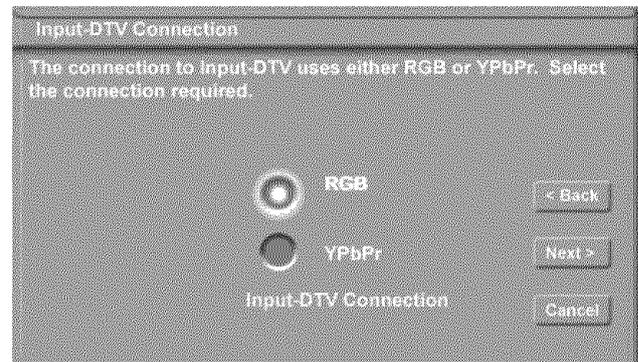


Figure 22. Input-DTV Connection screen

## IR Code for [Device] Screen

Figure 23

This screen only displays if an added device has the same IR code as a previously added device of the same type and manufacturer. You can specify the IR setting for the new device. For example, for the second Mitsubishi VCR you can specify the IR Code setting to VCR-B, if the primary Mitsubishi VCR is using the VCR-A IR code.

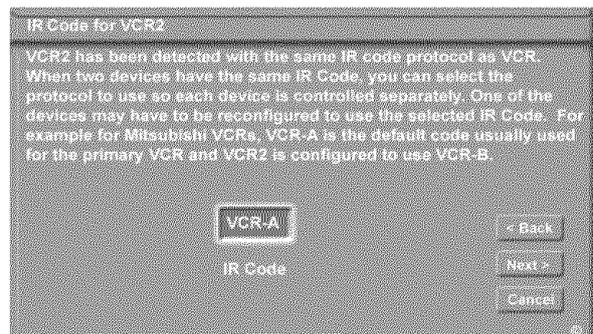


Figure 23. IR Code for [Device] screen

# Edit NetCommand®, Change or Delete Devices, Finish Screen

## Change Device Screen

Figure 24

Selecting Change from the Setup menu screen, displays the Change screen. To change a device, select the device by name, not type. You can change the name or input connections to the HDTV receiver/controller and A/V receiver. If “Other” is selected for the manufacturer then you can also “Learn”. The rest of the screens that follow are the same as when you Add a device.

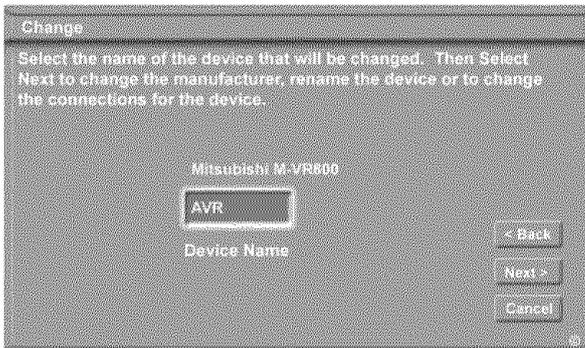


Figure 24. Change screen

## Delete Device Screen

Figure 25

Selecting Delete from the Setup menu, displays the Delete screen. You can choose to delete a single device by selecting the device you would like to delete, or you can delete the entire NetCommand configuration. After you have chosen the device, or the entire configuration, you will be prompted to confirm your choice to delete. If you select the Entire Configuration, the Initial button becomes available on the Edit NetCommand screen. If you delete a device that you learned the remote control signals for the learned signals are erased.

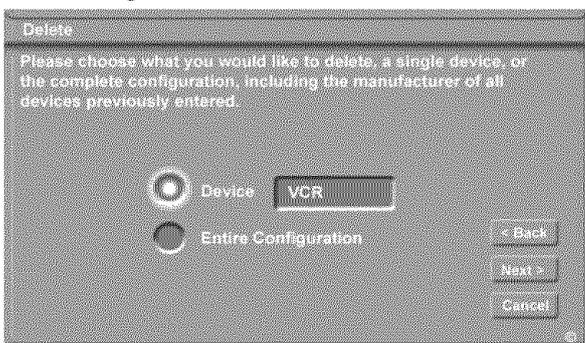


Figure 25. Delete screen

## Finish Screen

Figure 26

To finalize your selections and complete the NetCommand setup, select **Finish** from the Finish screen.

**Note:** To change any of the inputs or names for the devices, or add devices not included in the initial settings, select Edit to display the Edit NetCommand menu.

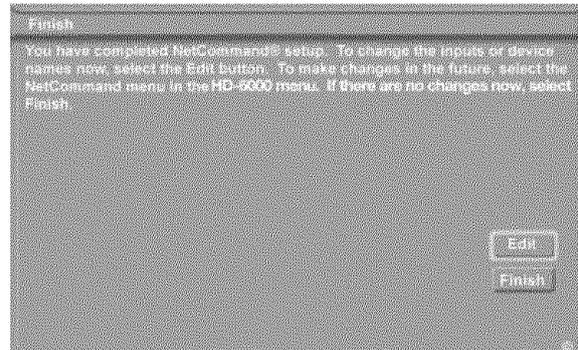


Figure 26. Finish screen

### IMPORTANT

NetCommand does not allow you to delete a device or change the connections for a device (like a VCR or a DVD player) if the device (input) is currently being displayed by the TV.

Switch the HD-6000 to a different device from the one you are changing or deleting. To change the A/V receiver, you need to be listening to the TV speakers.

## **IEEE 1394 Devices and NetCommand® Controlled Recordings**

<b>IEEE 1394 Devices and NetCommand® Control .....</b>	<b>54</b>
<b>Adding IEEE 1394 Devices Automatically.....</b>	<b>55</b>
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# IEEE 1394 Devices and NetCommand® Control

See pages 31-32 for information regarding compatible IEEE 1394 devices and connection styles. The HDTV receiver/controller is not able to control IEEE 1394 devices that use other types of control protocols. Incompatible digital audio, video and/or control information will still be able to pass from one device through the HDTV receiver/controller to another device on the network. These incompatible devices may not appear on the Device Selection menu or in the Review screen of the Edit NetCommand menu.

## NetCommand Control of Digital Devices Using the “Learn” Feature.

Some IEEE 1394 devices such as cable boxes or satellite receivers will not have compatible digital control signals or require the use of the device’s own remote control. Some of these IEEE 1394 devices will not display on-screen information through the IEEE 1394 connection and will require using an analog connection for on-screen displays. In many cases, to control these digital devices, the Learning feature of NetCommand can be used.

1. Place an IR Emitter for NetCommand in front of the device’s remote control sensor (see IR Emitters, page 30 ,31).
2. On the Name for 1394 Device screen (Figure 2, page 55) use ADJUST and ENTER to check mark the Analog Connection box.
3. Select the device type on the IEEE 1394 Device Type screen (Figure 3, page 56) of DBS or similar tuning device.
4. If desired, using the ADJUST buttons enter a custom Name on the Name screen (Figure 18, page 50).
5. At the Device Screen, Select “Other” as a manufacturer and then highlight “Learn” and press ENTER (Figure 4, page 56).
6. Follow the device learning instructions found on the screen(s) or in the Edit NetCommand section of Chapter 3.
7. The Connection screen (Figure 5, page 56) follows the learning screens. If analog connections are used, select the correct inputs.
8. Proceed with the Finish screen.

This will allow NetCommand to use the learned remote control signal to control these IEEE 1394 devices.

**Note:** When using the NetCommand learning feature for IEEE 1394 devices that do not have analog connections, the GUIDE function will require pressing GUIDE twice. The first press of GUIDE will display the HDTV receiver/controller’s digital channel guide. The second press will display the program guide for the device if an IEEE 1394 Guide is available.

# Adding IEEE 1394 Devices Automatically

## Adding IEEE 1394 Devices Automatically

When an IEEE 1394 device is connected into the HDTV receiver/controller network and is powered On, the new device will automatically announce its presence. This process is called device discovery and can take up to 1 minute. Some non-audio/video or non-compatible IEEE 1394 devices, such as Personal Computers (PCs), may not announce their presence to the HDTV receiver/controller. The HDTV receiver/controller will not be able to show these devices in the Device Selection menu, however, they can coexist and will still be available to other devices on the IEEE 1394 network that are compatible with these non-audio/video devices.

IEEE 1394 cable boxes and satellite receivers may require that you use the remote control that came with those devices. For some compatible devices, the other slide switch positions of the HDTV receiver/controller remote control may be able to control operation.

## Name for 1394 Device Screen

Figure 2

If you choose to add the discovered IEEE 1394 device, the Name for 1394 Device screen will appear. Name the device or use the default name that appears automatically.

Some IEEE 1394 digital devices, such as some DVCRs, can also operate as analog devices. For example, some DVCRs can record and play as VHS or S-VHS, in addition to D-VHS. This allows you to play analog rental tapes or analog tapes from your established library or make analog recordings from antenna or cable systems. To use the analog capability, check the Analog Connection box.

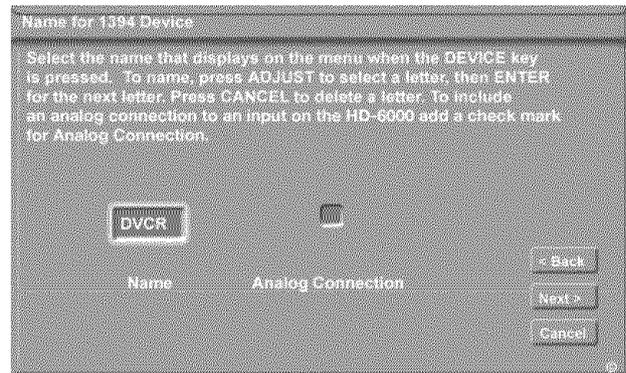


Figure 2. Name for 1394 Device screen

## New 1394 Device Screen

Figure 1

When your HDTV receiver/controller discovers a new IEEE 1394 device, the New 1394 Device screen will appear. Selecting "Add" will include the device in the Device Selection menu. Selecting "Do Not Add" will not add the device to the Device Selection menu. If the IEEE 1394 device does not provide audio and video, you may not want to add that device to the HDTV receiver/controller's Device Selection menu. Devices that were discovered but not added to the Device Selection menu will still be listed in the Review screen of the Edit NetCommand® menu.

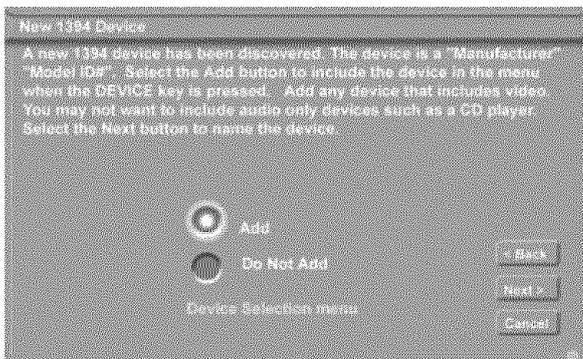


Figure 1. New 1394 Device screen

# Adding IEEE 1394 Devices Automatically, continued

## IEEE 1394 Device Type Screen

Figures 3 and 4

If the new IEEE 1394 device is also connected using analog inputs, you will need to define the device type. Select the type of device, such as a VCR.

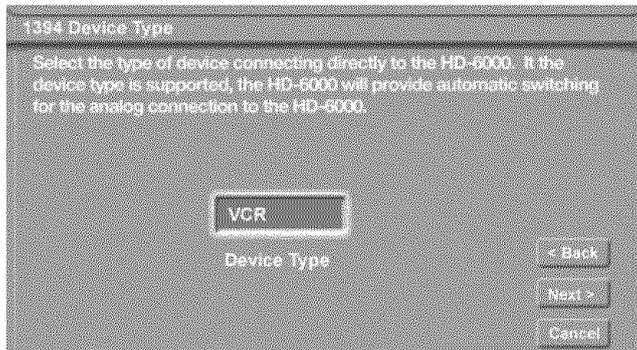


Figure 3. IEEE 1394 Device Type screen

Once the device type is selected, then the Device screen is displayed so the manufacturer can be selected. If the manufacturer is listed, then you may be able to control this device while it is operating as an analog VCR. For example, if the IEEE 1394 device you have added is a Mitsubishi DVCR, and you have selected an analog connection as a second connection, then you will select Mitsubishi for the manufacturer. If the manufacturer is not listed, select "Other" and use the Learn screens.

Be sure to place an IR Emitter in front of the remote control sensor, just as you have done for other NetCommand® devices. It is necessary to use the IR Emitter only when the DVCR is being used as an S-VHS or VHS VCR. When the DVCR is playing or recording digital signals in D-VHS, the HDTV receiver/controller will control the VCR through the IEEE 1394 cable.

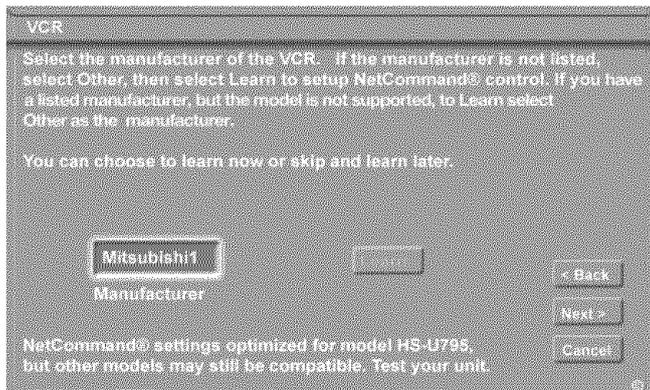


Figure 4. Device screen

## Connection Screen

Figure 5

Select the HDTV receiver/controller input that you used when you connected the video or S-Video cables. You may also select the HDTV receiver/controller or A/V receiver input you used when you connected the stereo audio cables. The HDTV receiver/controller will learn the input names for the HDTV receiver/controller Input and A/V Receiver Input selections. If your A/V receiver has other inputs than those listed in the menu, those other inputs are not available for NetCommand.

The playback and record control of some DV camcorders may still operate by the IEEE 1394 cable automatically, even though you must use the video or S-video cable for the picture. In this case, when you select the Camcorder, be sure to select analog (not digital) from the pop up when a camcorder is selected from the Device Selection menu. Then the picture is shown via the analog connection but control is from IEEE 1394.

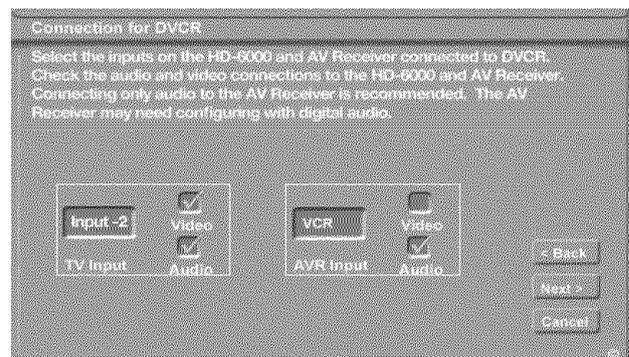


Figure 5. Connection screen

## Finish Screen

Figure 6

To finalize your selections and complete the NetCommand setup, select **Finish** from the Finish screen.

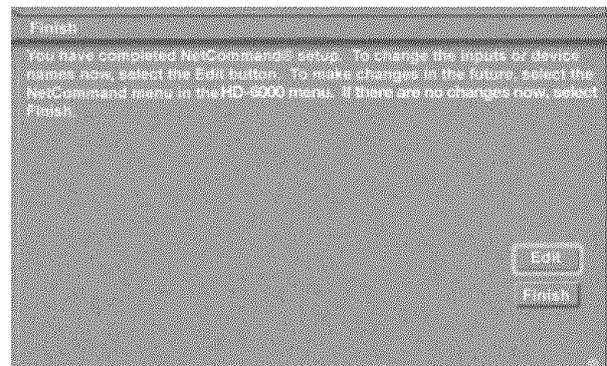


Figure 6. Finish screen

# Device Selection Menu

When you press **DEVICE** on the HDTV receiver/controller's remote control, the Device Selection menu (Figure 7) displays. If NetCommand® has not been set up, the Device Selection menu allows you to select an input for viewing. If NetCommand is set up, the Device Selection menu allows you to select the device for viewing, select audio from the TV speakers or A/V receiver, power compatible devices On or Off, and verify the destination of signals. On the Device Selection menu, the device or input currently displayed appears as a gold-colored icon.

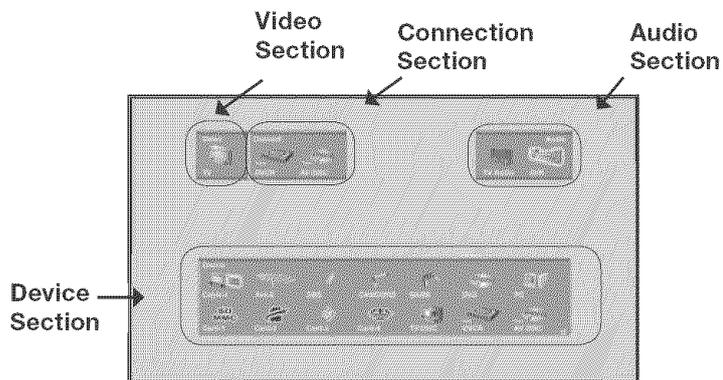


Figure 7. Device Selection Menu with NetCommand

## Power On/Off Devices

Devices that have separate On and Off remote control buttons will power On automatically when you select the device and will power Off when you turn off the HDTV receiver/controller. For devices that do not power On or Off automatically, display the Device Selection menu, press **ADJUST** ◀ or ▶ to highlight the device icon and press **POWER** on the remote control. For the A/V receiver, press **AUDIO** to move the navigation to the Audio Section. Highlight the A/V receiver icon and press **POWER**. If you press **POWER** on the remote control when the Device Selection menu is not displayed, the HDTV receiver/controller will turn Off.

## Device Section

To select another device or input, press **ADJUST** ◀, ▶, ▲ or ▼ on the HD-6000's remote to move the highlight. Press **ENTER** to select the device to view and hear. The HDTV receiver/controller inputs are automatically changed. If NetCommand is set up, the inputs on compatible A/V receivers are automatically changed at the same time.

## Video Section

The TV icon shows the destination for the device highlighted in the Device Section.

## Connection Section

The Connection Section shows the other devices currently connected to the device highlighted in the Device Section. For example, if the Digital VCR (D-VCR) is currently recording, when you move the highlight to the Ant-1 icon, the D-VCR icon will appear in the Connection Section. This icon will disappear when you move the highlight to another icon. Press **CANCEL** to stop recording.

## Audio Section

When a NetCommand pre-memorized or learned IR controlled A/V receiver has been connected to the HDTV receiver/controller and added to NetCommand Setup, an AVR icon will appear in the audio section. Press **AUDIO** to change navigation to the audio section. Then press **ADJUST** ◀, ▶, ▲ or ▼ to select the TV speakers icon or the A/V receiver icon. Press **ENTER** to change the audio selection. Press **DEVICE** to return the navigation to the Device Section.

If you're using a display with built-in or connected speakers, use the display's remote control to mute sound from the display's speakers. If you're using the HD-6000 with the LT-4260 display, muting occurs automatically when the A/V receiver is selected through NetCommand.

## PIP Device Selection Menu

Figure 8

The PIP Selection menu displays when you press the PIP **DEVICE** button on the remote control. This menu has the same general format as the Device Selection menu. The source for the Video Section is the sub picture and the Audio and Connection Sections are not available.

Use **ADJUST** ◀, ▶, ▲ or ▼ to move the highlight to the device to show in the PIP or POP screen, then press **ENTER**. Device icons that are grayed out are not available for use as PIP/POP sources or with the current source.

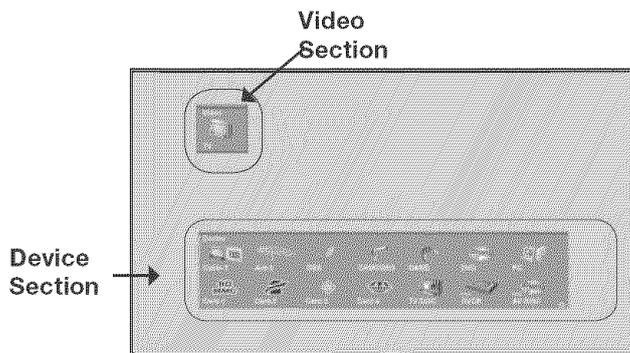


Figure 8. PIP Device Selection Menu

## IMPORTANT

If a device does not respond to separate On or Off remote control signals, the manufacturer has not provided that ability for the device.

# Using the Device Menu Button to Display Menus

## Device Menu

If NetCommand is setup, pressing the remote control's DEVICE MENU button displays the transport menu if the input is a VCR or DVD. Another press of the DEVICE MENU button will display menu for the current device source, if available.

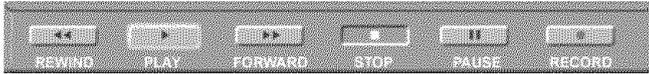


Figure 9. Transport menu

## IR Controlled Devices

For a NetCommand compatible traditional IR controlled device, pressing DEVICE MENU once or twice will display the menu for that device. While the menu for the device is displayed, press ADJUST ◀, ▶, ▲ or ▼ and ENTER to navigate the screen. For some NetCommand traditional devices you will also be able to use the number buttons and other additional buttons on the HDTV receiver/controller remote.

For traditional DVD players, DEVICE MENU is also known as the setup menu.

## CableCARD™ Menu

Figure 10

When using a CableCARD, pressing DEVICE MENU will display a list of up to 8 links to applications that contain basic CableCARD information made available from your cable provider. Press ADJUST ▲ or ▼ to move through the application links. To select a link (blue text) to an application, press ADJUST ▲ or ▼ to highlight the link, then press ENTER to access the linked page. Pressing DEVICE MENU will return to the CableCARD menu screen and pressing HOME will return to TV viewing.

If there are technical problems with the CableCARD, an error screen will automatically display with information that may be needed by your Cable provider when you call them for assistance. The screen shown below is an example of the type of screen that may display. Specific screen menus are sent by your cable provider.

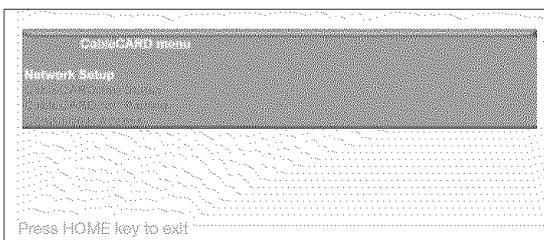


Figure 10. Possible Device Menu for CableCARD

## Moving Through Other CableCARD Screens

In addition to CableCARD menus, other CableCARD application screens may display and require you to make additional selections. While CableCARD application screens are customized in each area, some general rules apply in using these screens with your Mitsubishi HDTV receiver/controller.

1. Blue text denotes a link to another screen. Press ENTER to move to the next application. When screens do not have blue text, there are no more links.
2. You cannot move backward through the links. If you want to exit the CableCARD system, press HOME to exit and return to TV viewing. CANCEL may not apply to some CableCARD screens.

All information on these application screens is provided by your local cable company. Please contact your cable provider if you have any problems with the application screen displays.

### **IMPORTANT**

**Most CableCARD screens are status or diagnostic in nature and do not allow you to make changes. These screens are meaningful only to your local cable provider.**

# Using the GUIDE Button to Display ChannelView™ and Menus

## GUIDE and Devices (1394 or IR Controlled)

For NetCommand compatible satellite receivers and some cable boxes, GUIDE will display the on-screen programming guide for the receiver or cable box. Press ADJUST ◀, ▶, ▲ or ▼ and ENTER to navigate the displayed Guide. For NetCommand compatible satellite receivers, you may also be able to use the number or other additional buttons.

For NetCommand compatible DVD players, GUIDE will display the DVD disc “top” menu (not the setup menu). For A/V Discs, pressing GUIDE will display the Track List screen. For IEEE 1394 devices with digital connections, press GUIDE twice to display the device’s Guide.

## GUIDE and the Device Selection Menu

For compatible traditional VCRs, pressing GUIDE when the VCR is highlighted on the Device Selection menu will change the VCR’s input.

When the A/V Receiver icon is highlighted in the Audio Section, pressing GUIDE switches the A/V Receiver from analog audio to digital audio and vice versa.

## GUIDE and the Record To Menu

When in the Record To menu, pressing GUIDE will display the current list of programmed recordings. Please see Record List, *page 61* for more information.

## GUIDE and ChannelView

*Figures 11 and 12*

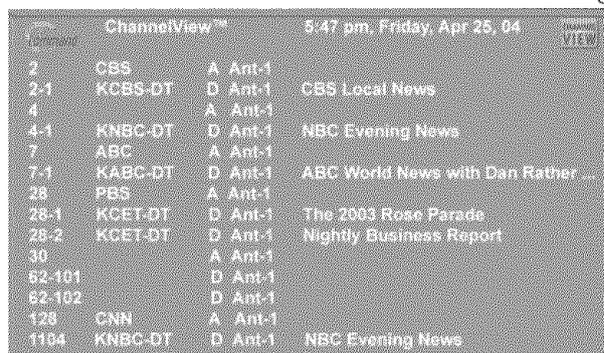
Press GUIDE while viewing Ant-1 or Ant-2 to display a list of available memorized digital channels (D) and analog (A) channel information (if available from the broadcaster). This list is called ChannelView™.

ChannelView for digital channels will show the major and sub-channels (or bitstreams). Analog channel information will display as sent. Press ADJUST ▲ or ▼ to scan through the all the channels in memory one by one. To cycle through the choices quickly, press CH ▲ or ▼.

For detailed program information, press ADJUST ▶, to return to basic information press ADJUST ◀. This information is sent by the broadcaster. If limited data is shown or no program data appears, it is because the broadcaster is not sending the information. *This is not a defect of your HDTV receiver/controller.*

## Recording a Current Program

To record a current program, press REC (record) when your program choice is highlighted on the program list in ChannelView. A red “R” will be added after the input name. The HD receiver/controller will immediately switch to the selected channel and start recording.

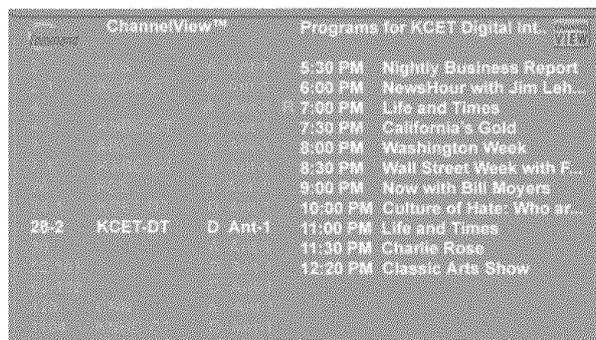


Channel	Channel Name	Antenna	Program
2	CBS	A Ant-1	
2-1	KCBS-DT	D Ant-1	CBS Local News
4		A Ant-1	
4-1	KNBC-DT	D Ant-1	NBC Evening News
7	ABC	A Ant-1	
7-1	KABC-DT	D Ant-1	ABC World News with Dan Rather ...
28	PBS	A Ant-1	
28-1	KCET-DT	D Ant-1	The 2003 Rose Parade
28-2	KCET-DT	D Ant-1	Nightly Business Report
30		A Ant-1	
62-101		D Ant-1	
62-102		D Ant-1	
128	CNN	A Ant-1	
1104	KNBC-DT	D Ant-1	NBC Evening News

*Figure 11. ChannelView screen, current programs*

## Recording Future Programs

To record a future program, press ADJUST ▲ or ▼ to select the channel you want to record from. For detailed program information, press ADJUST ▶, to return to basic information press ADJUST ◀. Press REC (record) when your choice is highlighted. A red “R” will be added after the input name. The message, *The recording has been added to the Record List* will display. To view, change or cancel a recording, use the Record List (*page 61*). If a program title was not sent by the broadcaster, you will be unable to set up a recording and a message will display.



Channel	Channel Name	Antenna	Time	Program
			5:30 PM	Nightly Business Report
			6:00 PM	NewsHour with Jim Leh...
			7:00 PM	Life and Times
			7:30 PM	California's Gold
			8:00 PM	Washington Week
			8:30 PM	Wall Street Week with F...
			9:00 PM	Now with Bill Moyers
			10:00 PM	Culture of Hate: Who ar...
28-2	KCET-DT	D Ant-1	11:00 PM	Life and Times
			11:30 PM	Charlie Rose
			12:20 PM	Classic Arts Show

*Figure 12. ChannelView screen, future programs*

## IMPORTANT

For complete ChannelView information to be refreshed daily, the HDTV receiver/controller must be powered Off between 5 to 15 minutes a day, depending on the number of channels in memory. If the HDTV receiver/controller loses power, the program listings will be temporarily lost.

# NetCommand® Controlled Recordings

## Setting up Recordings

Figure 13

Through NetCommand, you can automatically start and stop recordings and send signals from one playback device to a recording device. Recordings can be made on recordable devices connected to the HDTV receiver/controller or to the internal TV Disc. The TV Disc is an IEEE 1394 hard disk drive, with 120 GB of memory and is available for CableCARD™, Ant 1, Ant 2, IEEE 1394 or tuning devices (cable boxes or satellite receivers) connected to inputs 1 or 2 when a PIP or POP is not displayed.

The HDTV receiver/controller can convert digital channels and IEEE 1394 device signals to analog signals that can be recorded on NetCommand compatible analog VHS and S-VHS VCRs.

You can schedule the recording to take place at a later time and program the recording duration for a minimum of 30 minutes and a maximum of 6 hours (in 30 minute increments). The default is 1 hour. During the recording, the HDTV receiver/controller can be powered Off. If the HDTV receiver/controller is powered On, it must be tuned to the source that is being recorded.

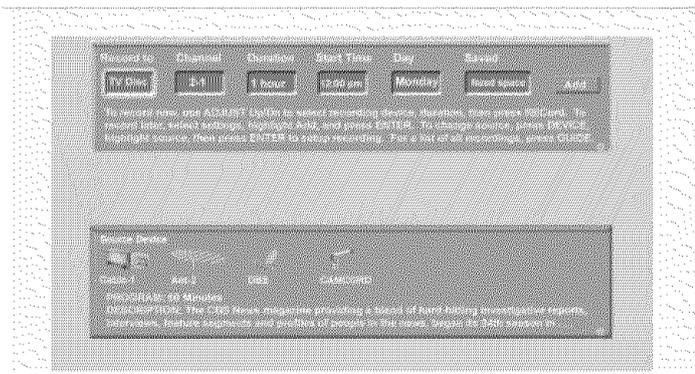


Figure 13 Record to screen

## Recording Now

Can be used when viewing Antenna 1 or 2, an IEEE 1394 device including TV Disc, or a non-recording traditional device.

To initiate recording now:

1. Press REC (record) on the HDTV receiver/controller remote.
2. Press DEVICE on the remote control to move to the Source Device section.
3. Press ADJUST ◀ or ▶ to select the source device you will record from. If a source is not displayed, it is not available as a recording source.
4. Press ENTER to confirm selection and return to the "Record to" section.
5. In the "Record to" section, review the destination device and duration. Use ADJUST ▲ or ▼ to change if necessary.
6. Press REC a second time to initiate recording.

## Time-Delayed Recording

To initiate a time-delayed recording:

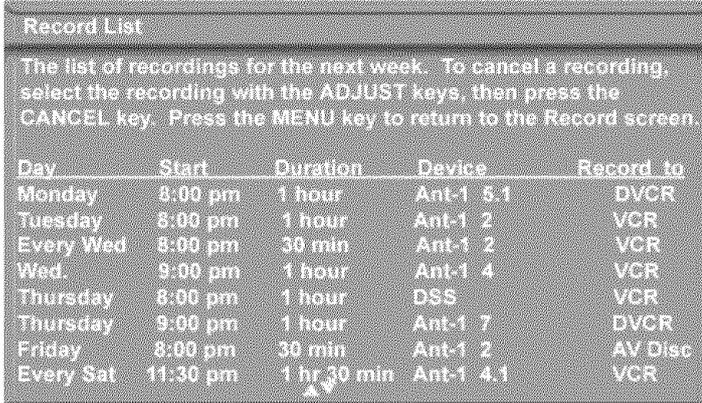
1. Press REC (record) on the HDTV receiver/controller remote.
2. Press DEVICE on the remote control to move to the Source Device section.
3. Press ADJUST ▲, ▼, ◀ or ▶ to select the source device you will record from.
4. Press ENTER to confirm your source device selection and move to the Record to section.
5. Press ADJUST ◀ or ▶ to select the Record to device, duration time, start time (press ENTER after selecting hour, minutes and AM or PM to set the time) and day. For devices that can select channels, select the channel.
6. Select Add and press ENTER to add the recording to the record list. If your selection is successful, a confirmation message will be displayed. If you pick overlapping times, day(s), or destination devices, you will see a message stating there is a conflict.
7. To exit, press HOME on the HDTV receiver/controller remote after all recordings have been added.

# Record List, Peer-to-Peer Connections

## Record List

Figure 14

Press GUIDE while viewing the Record To screen to see a list of all currently programmed recordings. A maximum of 32 recordings can be scheduled.



The list of recordings for the next week. To cancel a recording, select the recording with the ADJUST keys, then press the CANCEL key. Press the MENU key to return to the Record screen.

Day	Start	Duration	Device	Record to
Monday	8:00 pm	1 hour	Ant-1 5.1	DVCR
Tuesday	8:00 pm	1 hour	Ant-1 2	VCR
Every Wed	8:00 pm	30 min	Ant-1 2	VCR
Wed.	9:00 pm	1 hour	Ant-1 4	VCR
Thursday	8:00 pm	1 hour	DSS	VCR
Thursday	9:00 pm	1 hour	Ant-1 7	DVCR
Friday	8:00 pm	30 min	Ant-1 2	AV Disc
Every Sat	11:30 pm	1 hr 30 min	Ant-1 4.1	VCR

Figure 14. Record List screen

## Cancel Current Recordings

To cancel a recording in progress, press DEVICE to display the Device Selection menu and highlight the source of the recording. Confirm that the icon for VCR (or recording device) is in the Connection Section next to the TV icon. Press the CANCEL button. The icon for the VCR (or recording device) will disappear from the Connection Section to confirm the cancellation.

To cancel a recording on the Record List, press ADJUST ▲ or ▼ to select the recording, then press CANCEL. To page through the list, press CH ▲ or ▼.

## Peer-to-Peer Connections

A peer-to-peer connection allows the IEEE 1394 devices in your HDTV receiver/controller network to talk to each other without the further need of HDTV receiver/controller intervention once the peer-to-peer connection is established. For example, the HDTV receiver/controller can set up a connection for an A/V Disc or DVCR that sends a recorded program to an IEEE 1394 monitor in another room. NetCommand will establish the connection between the two devices. Once the connection has been established, the HD-6000 can be turned off or be used to display another device on the monitor. Recording from digital channels to a DVCR is also a peer-to-peer connection. In this case, the HD-6000 is one of the devices in the peer-to-peer connection.

**NOTE:** Multiple peer-to-peer connections can occur simultaneously, sometimes with the same source device.

## Setting up a Peer-to-Peer Connection

To establish a peer-to-peer connection:

1. Press CONNECT on the HDTV receiver/controller remote.
2. Press DEVICE on the remote control to move to the Source Device section.
3. Press ADJUST ◀ or ▶ to select the source device you will record from.
4. Press ENTER to confirm selection and return to the "Record to" section.
5. In the "Record to" section, review the destination device (example: DVCR) and duration. Change if necessary.
6. Press CONNECT a second time to initiate recording.

## Canceling a Peer-to-Peer Connection

After a peer-to-peer connection has been established, you can cancel it by highlighting the source device in the Device Selection menu. Confirm that the on-screen icon for the peer-to-peer connection is in the Connection Section next to the TV icon, then press CANCEL. The connection will end and the destination icon will be removed. If there is more than one peer-to-peer connection for the same device, all of the connections will all be canceled.

# Using TV Disc & A/V Discs

## TV Disc & A/V Disc Track List Screen

Figure 15

When viewing the TV Disc or an A/V Disc, press GUIDE to display its Track List. The Channel, Station, Date, Time, Program name and whether it has been Watched (Y=yes, N=no) will be displayed. Tracks will be listed in date and time order and will vary in size.

Press ADJUST ▲ or ▼ to navigate through the Track List. Press INFO to see the recording's length and the amount of memory it will use. Free disc space is displayed in the upper right. If the broadcaster has sent detailed information regarding the program, it will also display when you press INFO. To play a track, select it on the list, then press ENTER. To change pages, press CH ▲ or ▼. To delete a track, select it on the list and press CANCEL. Press CANCEL again to confirm.

Channel	Station	Date	Time	Program	Watched
62	KNBC-DT	Su 7/25	8:00 pm	West Wing	N
With the country at a heightened state of alert because suspected terrorists have disappeared, the President wrestles with what message to give his youngest daughter's graduating class at Georgetown.					
45 min	6G	COPY NO MORE			
Chicago Hope					
02.01	KCBS-DT	Su 8/08	5:30 pm	CBS Local News	N
04.01	KNBC-DT	M 8/09	5:30 pm	NBC Evening News	Y
7		M 8/09	8:00 pm		N
1104	KNBC-DT	W 8/11	8:30 pm	NBC Evening News	N

Select a program with the ADJUST keys. Press ENTER to watch the program. Press CANCEL to delete.

Figure 15. Track List screen for TV Disc

## TV Disc or A/V Disc Search

NetCommand is able to search to a specific time in a recording on the TV Disc or an IEEE 1394 A/V Disc.

1. Start the desired track's playback on the A/V disc.
2. Use the number buttons to enter the time code position of hours followed by minutes. For example, to enter one hour and twenty-two minutes (1:22) into the track, enter 1, 2, 2.
3. Press ENTER to skip to the time code position.
4. To cancel the request or to start over, press CANCEL instead of ENTER.

## Archiving TV Disc Digital Recordings

To permanently store a COPY FREE digital recording from the TV Disc on D-VHS or other IEEE 1394 device:

1. Press DEVICE on the remote control and select TV Disc by pressing ADJUST ◀, ▶, ▲ or ▼ and then ENTER.

2. Press ADJUST ▲ or ▼ to select a track. Then press ENTER to start playing.
3. Press PAUSE to pause the playback.
4. Press REC (record) on the HD-6000 remote. The Record To screen will display.
5. In the "Record to" section, review the destination device (DVCR, VCR). Change if necessary.
6. Press REC a second time to initiate recording.
7. The TV Disc and destination device cannot be viewed or used while recording. To view a different device, press DEVICE and select.

### IMPORTANT

Analog programs cannot be transferred from the TV Disc and the TV Disc is not intended to act as permanent storage of digital recordings. Mitsubishi recommends you transfer important digital recordings to an external device such as a D-VHS VCR. Recordings stored on TV Disc are lost and cannot be recovered if the TV Disc requires replacement or repair. Mitsubishi is not liable for lost recordings.

## Using the Remote Control with TV Disc or A/V Disc after selecting from the Device Selection menu:

GUIDE:	displays the Track List of recorded programs.
PLAY:	resumes playback of paused program.
PAUSE:	pauses or resumes playback of program.
FF/FWD:	forward picture search, multiple presses increase the speed.
REW/REV:	reverse picture search, multiple presses increase the speed.
ADJUST ◀:	skip backward 12 seconds per press.
ADJUST ▶:	skip forward 30 seconds per press.
ADJUST ▲:	skip to the end of the track.
ADJUST ▼:	skip to the beginning of the track.
REC:	Display the Record Menu to schedule recordings

If the TV Disc is the default digital record device (NetCommand menu), you can also schedule recordings from ChannelView.

# Direct VCR Recording from an Antenna or Cable Source, Copy-Protected Material and Restrictions for Traditional VCRs

## Direct VCR Recording from an Antenna or Cable Source:

Pressing REC (record) on the HDTV receiver/controller's remote control will function the same way as pressing the record button on the VCR's remote control or front panel.

To record directly from antenna or cable:

1. Press DEVICE on the HDTV receiver/controller's remote to display the Device Selection menu. Highlight the traditional VCR and press POWER to turn on the VCR. If necessary, press GUIDE to select the input the VCR is on, such as Antenna input (or line input).
2. Press ENTER to switch the HDTV receiver/controller to the VCR.
3. Select the correct channel for recording on the VCR and then press REC to start recording. You will need to manually stop the recording at the end of the program.

OR...

4. Press the DEVICE MENU button to display the VCR's menu to schedule a delayed recording directly from antenna or cable.

To record from Ant-1, Ant-2 or other devices, see NetCommand Controlled Recordings.

## Copy-Protected Material

When attempting to record copy-protected material, the Record functions of the NetCommand and IEEE 1394 systems may be prevented or stopped. If you have a recording that is tagged "Record Once", NetCommand will not allow the recording to be moved.

## Restrictions for Traditional VCRs

If turned On, the HDTV receiver/controller must be tuned to the source device.

- Your VCR should be connected directly to Monitor Audio Video Output.
- The VCR must be set manually to "Line Input". Display the Device Selection menu, highlight the VCR and press GUIDE to change VCR inputs.
- The HDTV receiver/controller can select channels on compatible cable boxes for recordings. Leave the cable box turned on.
- If the source device or recording device does not have separate power On and Off features, then leave that device powered On.

# PC Viewing

## PC Input

Figure 16

### Display

1. Connect the PC to the HDTV receiver/controller's back panel as shown in the connection chapter of this guide. If you are connecting to a LT-4260 LCD TV, follow those specific instructions.

2. Add the device in the NetCommand menu.

3. Select the PC through the Device Selection menu.

### Resolution

For the correct screen resolution (pixels), while the PC is displayed on-screen, use the PC's Control Panel settings, as shown below (for most PC's). Your TV can display only standard VGA (640 x 480) 60Hz refresh rates only.

1. In the PC's "Start" menu, select "Settings".

2. Select "Control Panel".

3. Select "Display".

4. Choose the "Settings" tab.

5. Depending on your PC, either:

Use the screen area slider or use the Screen Resolution slider to adjust the resolution.

You may need to restart the PC for this change to take effect.

**IMPORTANT**

If you are using the HD-6000 with the LT-4260 LCD HDTV display, you cannot use the PC input on the HD-6000. Use the PC input on the TV's display panel.

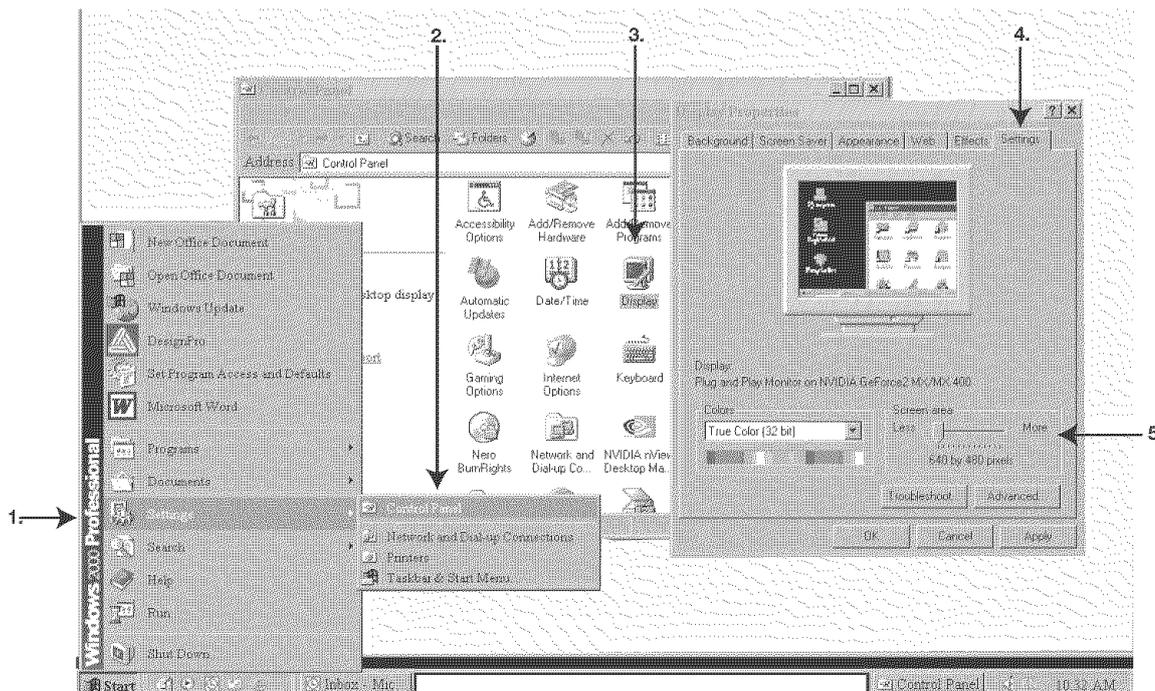


Figure 16. Selecting VGA resolution for a PC

# MediaCommand™ and Media Card Playback with the Mitsubishi LT-4260 LCD TV Display Only

**Warning:** Some media cards available on the market are not properly certified to follow the card type specifications noted below and cannot be used by the Card Reader. If you experience problems with the reading of your file, please transfer your files to a properly certified card.

## Media Card Slots

### Inserting a media card

1. Insert a card into a matching card slot on the frame of the LT-4260. Be sure to use the correct card slot. Card 1 will accept MultiMediaCard™ and SD Media Card. Card 2 will accept SmartMedia™. Card 3 will accept CompactFlash®. Card 4 will accept MEMORY STICK™. Cards up to 128mb, with a file format of FAT 16 (block size = 1024 or 2048) are supported.

Normally the label side should be up, but if the card does not fit, try turning the card over and insert again. When properly inserted, the light next to the slot will light up.

2. Press DEVICE on the remote control to display the Device Selection Menu and then select the correct card slot from the list, using ADJUST ◀, ▶, ▲ or ▼.
3. The Media Dialog box (figure 17) will automatically display. Use the AUDIO button to switch from JPEG Picture Slideshow setup to MP3 or WMA7 Audio Playlist setup or use the VIDEO button on the remote to switch from the MP3 or WMA Audio Playlist setup to JPEG Picture Slideshow setup.

**Don't pull the media card out while it is playing.**



Figure 17. Media Dialog Box

4. On the remote control, press:

**PLAY:** to start the slideshow or play audio.

**GUIDE:** to display the JPEG Thumbnail menu (Figure 18) or Audio track playlist (Figure 19)

**DEVICE**

**MENU:** to display the Media Setup menu (Figure 20).

## Remote Control Buttons for Controlling the Playback

### For JPEG Pictures Slideshow:

- PLAY:** begins or resumes slideshow playback  
**PAUSE:** pauses or resumes playback while in the automatic advance mode.  
**FF:** skips to the next slide.  
**REW:** returns to the previous slide.  
**FORMAT:** single press rotates the slide 90°. Multiple press continues to rotate the slide.  
**STOP:** Stop slideshow, return to media card screen.

### For MP3 or WMA Audio Playback

- PLAY:** begins or resumes playlist playback.  
**PAUSE:** pauses or resumes playback.  
**FF:** skips to the next track/song.  
**REW:** skips to the previous track/song.  
**STOP:** Stop playback and returns to media card screen.

## Using the Picture Thumbnail Menu or Audio Playlist Menu

### For JPEG Picture Thumbnail Menu:

Figure 18

1. Press GUIDE on the remote to display the JPEG picture Thumbnail menu.
2. Press ADJUST ◀, ▶, ▲ or ▼ to move the highlight to different images (CH up/down will change pages of the Thumbnail menu). Use REW to go to the first slide and FF to go to the last slide on the page.
3. Press FORMAT to rotate the selected image 90° (pressing FORMAT four times will rotate the image completely around to the original position).
4. Press PLAY to begin playback of the Slideshow from the selected image. The Thumbnail menu will be taken down.

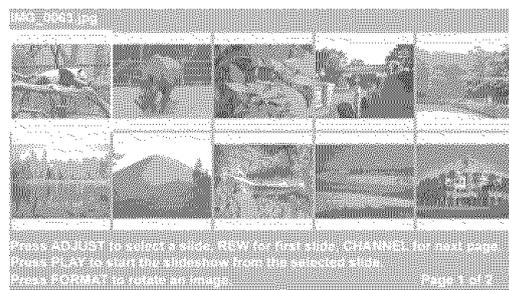


Figure 18. JPEG Thumbnails

# MediaCommand™ and Media Card Playback with the Mitsubishi LT-4260 LCD TV Display Only, continued

## For MP3 or WMA7 Playlist Menu:

Figure 19

1. Press GUIDE to display the Playlist menu.
2. Using ADJUST ▲ or ▼ to move the highlight to different tracks (CH up/down will change pages of the Playlist).
3. Press PLAY to begin playback. The Playlist menu will be taken down. An asterisk (\*) will be next to the song currently playing.



Figure 19. Audio Playlist

## COMPATIBLE PICTURE OR AUDIO FILES: For JPEG Pictures up to 128MB:

1. Still images recorded on digital cameras using the Exchangable Image File Format, version 2.1 (EXIF 2.1) standard for digital still cameras and Design Rules for Camera File Systems version 1.0 (DCF 1.0).

Some images opened and resaved on a computer may not playback or may not be able to display a picture in the thumbnail list because the computer program that opened and resaved the images changed the file to an incompatible format.

2. Standard digital images with a maximum size of 5-megapixels for each image, or 2560 x 1920 pixels. Pictures will be scaled to the TV display. Some pictures may be cropped to fit.
3. Full path file names can be no longer than 50 characters and must end in a .jpg extension. Not all 50 characters will display.

## For MP3 or WMA7 Audio files:

1. Files recorded with sampling rates of 32 kHz, 44.1 kHz or 48 kHz.
2. Files recorded with fixed bit rates
3. File names with .mp3 or .wma extensions

**NOTE:** During MP3 or WMA7 audio playback, audio from the cards will be sent to the A/V receiver as analog audio. Digital out is not available.

## Media Setup Menu

Figure 20

Press DEVICE MENU at any time to display the Media Setup screen, where you can adjust the Slideshow Display, Frequency, Interval or Playlist Frequency.

## For JPEG Picture Slideshow Setup

- For JPEG picture Slideshow playback, select Automatic or Manual advance. For manual operation, press PLAY or ENTER on the remote control to advance each slide.
- For automatic advance, select the frequency or number of times to show the complete slide show, Once, Twice or Continuously.
- For automatic advance, select the interval time each slide is shown, for example, 5 seconds, or 30 seconds.

## For MP3 or WMA7 Audio Playlist Setup

- Select the frequency or number of times to play the complete playlist. Once, Twice or Continuously.

To exit, press DEVICE MENU on the remote control to redisplay the media card screen or press HOME to return to TV viewing.

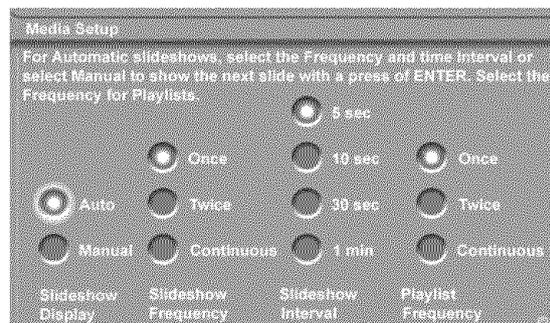


Figure 20. Media Setup Menu

## IMPORTANT

JPEG images cannot be edited through the TV or the HD-6000. Only name changes should be made on your PC to avoid file incompatibility problems.

MP3's must have at least 32 kHz sampling rate.

## TV Menu Screen Operations

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# Main Menu Choices

## Setup Menu

Figure 1

Use the Setup menu to select English or Spanish as the language for the menus and on-screen displays.

Adjust Color Balance Automatically or manually (PerfectColor™). Color Balance uses six colors, Magenta, Red, Yellow, Green, Cyan and Blue to obtain color balance. Reset the Color Balance to the factory default settings.

Select the setting for the TV Pause feature. Choose Side Bar Color of black or gray. View the HD-6000's software version on this screen.

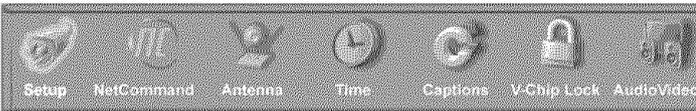


Figure 1. Main menu, Setup selected

## NetCommand® Menu

Figure 2

Add, change, review or delete NetCommand® settings and devices. If you have more than one digital recording device connected, use this menu to change the default digital Record To device. Turn the transport menu off and change the order of the icons in the Device Selection menu.

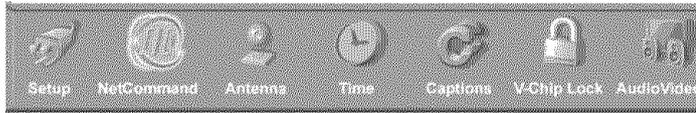


Figure 2. Main menu, NetCommand selected

## Antenna Menu

Figure 3

Memorize available analog and digital channels for both Ant-1 and Ant-2. After memorization, if a channel displays as digital and analog, you can choose to see the channel digitally every time it is selected. Manually add or delete channels from memory, name channels or add your favorite channels to a SQV (SuperQuickView™) list.

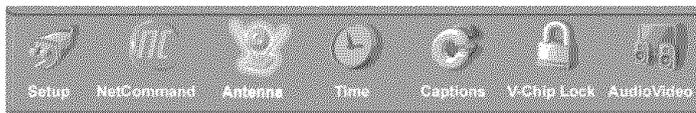


Figure 3. Main menu, Antenna selected

## Time Menu

Figure 4

Manually set the time for the HD-6000, or select Auto and the HD-6000 will automatically set the time based upon Extended Data Service (XDS) time data. This time data is usually broadcast by your local PBS station. This menu is also used to set the TV timer.

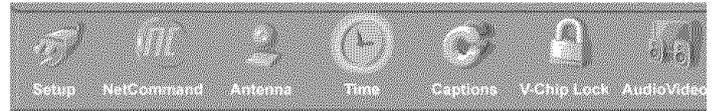


Figure 4. Main menu, Time selected

## Captions Menu

Figure 5

Display Closed Captions if sent by the broadcaster, select settings for analog or digital captions.

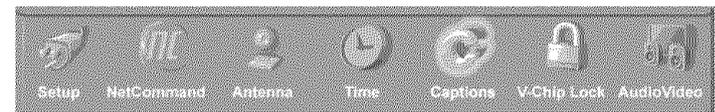


Figure 5. Main menu, Captions selected

## V-Chip Lock Menu

Figure 6

Block or allow programming based upon rating signals sent by the broadcast station or lock by time.

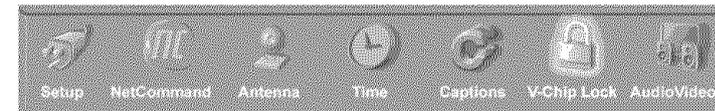


Figure 6. Main menu, V-Chip Lock selected

## AudioVideo Menu

Figure 7

Reset the A/V Memory to return to the original factory A/V settings for a selected device. Customize the individual audio and video settings. Display a blue screen when viewing a device with no signal, enhance the darker parts of bright pictures or adjust the analog audio output.

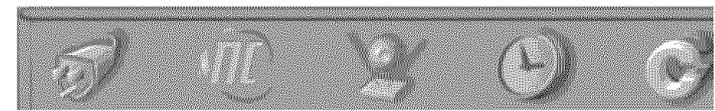


Figure 7. Main menu, Audio/Video selected

# Setup Menu

## Setup Menu

Figure 8

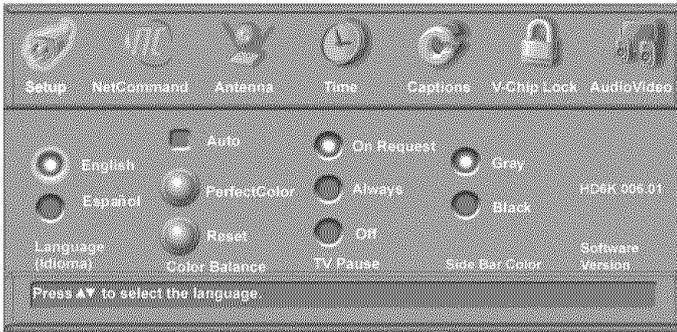


Figure 8. Setup Menu, NetCommand Option

## Language

Display the on-screen menus in either English or Spanish (Español). The first time you powered On your HDTV receiver/controller, you were requested to select an on-screen menu language. If you choose to change the selection, all menu text will immediately switch to the language of your choice.

Program titles and other information sent by a broadcaster will be shown in the original language.

## Color Balance

Your HD-6000 uses six colors (Magenta, Red, Yellow, Green, Cyan and Blue) to create color balance. You may adjust the intensity of the colors automatically or manually (PerfectColor™) or reset them to the default settings. Each input or device has a memory for PerfectColor.

## Auto (Color Balance)

If the Auto box is checked, your HD-6000 will optimize color automatically and continuously. Both PerfectColor and Reset options for Color Balance are grayed out and unavailable.

## PerfectColor™ (Manual Color Balance)

Figure 9

The PerfectColor (manual) option is only available when Auto (Color Balance) is not checked. Select PerfectColor and press ENTER to display the menu. Individual sliders for Magenta, Red, Yellow, Green, Cyan and Blue will be displayed. The sliders have a numeric value, where 63 is the maximum. The default setting for each color is 31 (center). Highlighted text will show which slider you are adjusting. Each active input can be individually adjusted.

Press ADJUST ▲ or ▼ to navigate between colors and ADJUST ◀ or ▶ to change the color slider settings.

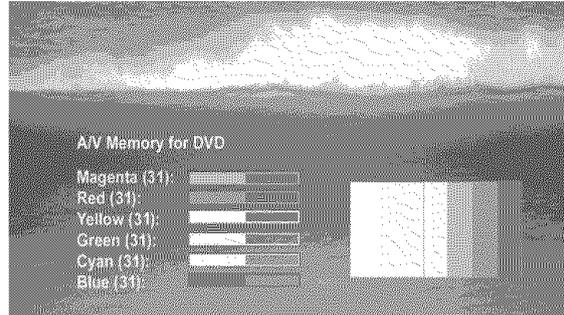


Figure 9. PerfectColor Menu, Manual Color Correction

## Reset

Select to reset the Color Balance settings. Each active input can be individually reset, if Auto is not checked.

## TV Pause

TV Pause is a special feature of the internal TV Disc digital video recorder (DVR). TV Pause is available for CableCARD™, Ant-1, Ant-2, IEEE 1394 input and tuning devices (cable boxes or satellite receivers connected to Inputs 1 or 2).

This feature allows you to press PAUSE to “pause” live TV. You can then search backwards or forwards through the current TV program. When you pause the TV program, an on-screen slider will show approximately how far and in which direction(s) you can search.

TV Pause has three settings:

- **On Request:** This is the default setting. TV Pause is in the standby mode until you press PAUSE for the first time after turning on the TV, or after a channel or device change. There will be a few seconds delay before a paused picture appears. During this pause, you will not be able to scan or skip backwards in the TV Program. Later uses of TV Pause while in the same program, will allow reverse scan or skip of the available TV program as shown on the slider. The TV Pause will return to the standby mode automatically when you change the channel or device. The PIP/POP features are available only when TV Pause is in the standby mode and not enabled.
- **Always:** Press PAUSE, REW, FF or any ADJUST button to pause the program and scan or skip within the program. You can also scan or skip

## Setup Menu, continued

forward to catch up to the live broadcast. In the Always setting, the PIP/POP features are not available and channel changing will be slower. To use the PIP/POP features, select the Off or On Request setting for TV Pause.

- **Off:** This mode prevents the TV Pause function, however, full screen picture freeze is available. If you do not expect to use the TV Pause features, we recommend the Off or On Request mode. This mode allows PIP/POP features to be used.



Figure 10. TV Pause slider

### Controlling the TV Pause Features:

NOTE: You cannot reverse search further back than the beginning of the filled space as shown on the slider. You cannot forward search past the live broadcast point.

- Press PAUSE to pause the current TV program.
- Press PLAY to resume watching the TV program from the pause point.
- Press FF to forward picture scan. Press up to 4 times to increase the scan speed. If pressed when TV is paused, then will forward scan, not fast forward.
- Press REW to reverse picture scan. Press up to 4 times to increase the scan speed. pressed when TV is paused, then will reverse at half speed.
- Press ADJUST ◀ to skip backwards 12 seconds (for each press).
- Press ADJUST ▶ to skip forward 30 seconds (for each press).
- Press ADJUST ▲ to skip all the way to live broadcast.
- Press ADJUST ▼ to skip back to the earliest available part of the TV program as shown on the slider.

If you wish to save this program press REC to display the record menu and begin a formal recording. You can use ChannelView to setup a formal recording by pressing GUIDE.

### Side Bar Color

For some TV formats sidebars are visible (see TV Display Formats, pages 85-86). You can choose to display these sidebars in gray or black. When used with an LCD, DLP or LCOS TV, black is recommended. When used with a CRT or plasma display, gray is recommended to avoid burn in.

### Software Version

For some service related issues, it may be necessary to know which software version is in your TV. This information is displayed on the Setup menu screen.

# NetCommand® Menu

## NetCommand Menu

Figure 11

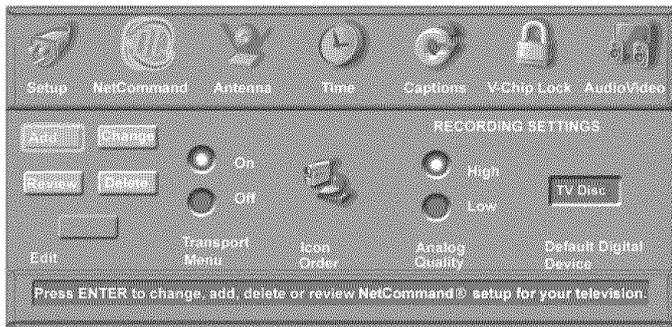


Figure 11. NetCommand Menu

## NetCommand

Detailed information regarding setting up and editing the NetCommand menu is found in *Chapter 3*. The Edit NetCommand screens allow you to add new devices, change or edit traditional and IEEE 1394 devices, turn devices and unused inputs On or Off, delete a single device or delete the entire setup configuration. If you choose to delete the entire configuration, or if the NetCommand setup was cancelled, deleted or not completed, you can start at the Initial NetCommand screen. The Review screen shows all devices connected to the HDTV receiver/controller.

## Transport Menu

Figure 12

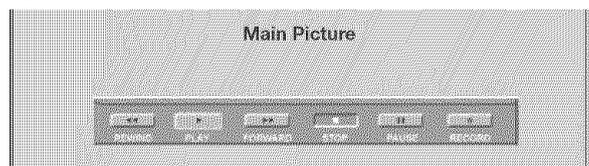


Figure 12. Transport Menu

NetCommand uses the Transport menu to control the TV Disc, VCRs, DVDs, IEEE 1394 AV Discs, digital VCRs, and similar devices. If you choose to turn off this menu when viewing the devices, the transport buttons (rewind, play forward, stop, pause and record) on the HDTV receiver/controller's remote control will continue to operate these devices. In the Device Selection menu selecting a VCR or DVD Player will automatically display the Transport menu. You can re-display this menu by pressing DEVICE MENU.

Select Transport menu functions by pressing ADJUST ◀ or ▶ and then ENTER. For example, to pause playback, press ADJUST ◀ or ▶ to move to PAUSE, then press ENTER. If a function is not possible, such as record for a DVD Player, the Transport menu button will be grayed out.

Note: Transport buttons (rewind, play forward, stop, pause and record) on the remote control are located in the bottom section of the remote control.

## Default Digital Record Device

If multiple digital recording devices are available in NetCommand, this setting allows you to choose the device to use when recording digital programs. A digital recording can be made on either a digital or analog device although the quality will not be as good if recorded on an analog device. For best playback quality, record digital programs on a digital recording device.

If multiple devices were not connected and then added in the NetCommand setup, this setting will be unavailable (grayed out). Analog recordings can only be made on the one analog device connected to Monitor Out (usually a VCR) and are not affected by this setting. This feature is most useful when recording from ChannelView™ (page 59).

## Icon Order

Figure 13

The Icon Order screen allows you to arrange the device icon order on the Device Selection menu to a different sequence, for ease of selection and operation. To change the order, press ADJUST ▲, ▼, ◀, or ▶ to highlight the icon to be moved and then press ENTER. Press ADJUST ▲, ▼, ◀ or ▶ to move the icon to the desired position and then press ENTER to release the icon.

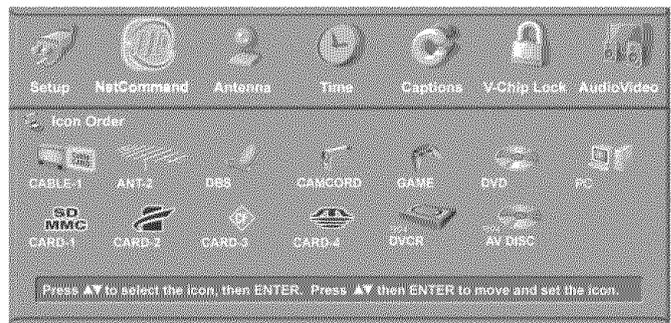


Figure 13 Icon Order Menu

# Antenna Menu

## Antenna Menu

Figure 14

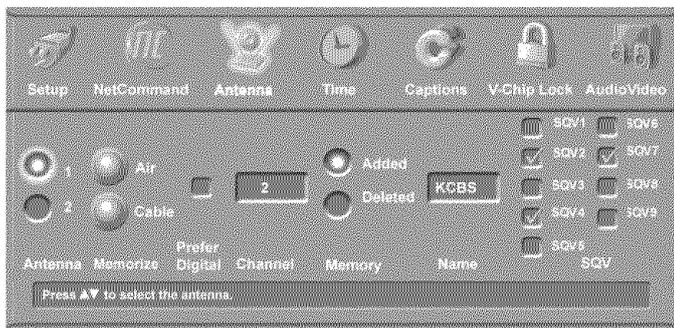


Figure 14. Antenna Menu

The Antenna Menu options are available for use with analog and digital channels on Antenna-1 and Antenna-2. You can memorize channels, add or delete channels, name channels and add channels to an SQV (Super Quick View™) bank.

## Memorize

### For Antenna 1 (Main) or Antenna 2 (Aux)

Select either Air (when used with an indoor/outdoor antenna) or Cable (when used with direct cable) then press ENTER to start the automatic channel memorization process. If a CableCARD™ is being used, memorized channels are provided by your cable provider through the CableCARD.

To stop the automatic channel memorization process, press CANCEL. Channels memorized before you pressed CANCEL are retained in memory.

After memorizing channels, the channels in the memory can be accessed in ascending or descending order by pressing CH ▲ or ▼.

The memorization will occur twice, as the HDTV receiver/controller memorizes analog and digital channels separately.

## Prefer Digital

When a memorized channel is available as both analog and digital, a check mark in the Prefer Digital box will allow digital channels to display and analog channels to be hidden (when using CH). Removing the checkmark will show both analog and digital choices.

## Channel

Channels can be changed in 3 ways:

1. By pressing ADJUST ▲ or ▼ to select the channel.
2. By pressing CH ▲ or ▼ for channels already in memory.
3. Directly entering the number. With so many current and potential channels, the number range is greatly expanded. Channels can be one part, analog or digital (up to the number 16383) or two part, for digital channels (these use a separator). For a two part digital channel, you may press SUB/CANCEL on the remote to enter a separator after the first, second or third number, depending on the broadcaster's channel information.

For digital channels, when the broadcaster has sent a virtual channel number, the virtual channel number is shown in the text box and as a reference, the original digital channel is shown below the text box.

## Memory

After the available channels have been memorized with Memorize, weaker channels can be added. Unwanted channels can also be deleted. Press CH ▲ or ▼ on the remote control to see the channels in memory. Press ADJUST ▲ or ▼ to select Added or Deleted for the channel shown in the Channel number box.

## Name

Analog channels shown on Antenna-1 or Antenna-2 can be named (up to four characters). After you enter a name, it will appear on the TV screen, next to the channel number.

1. Press ADJUST ▲ or ▼ to select each letter.
2. Press ENTER to set the letter and move to the next letter position.
3. Press CANCEL to move back one position.

Digital channels are automatically named if the broadcaster sends the information.

# Antenna Menu, continued: SuperQuickView™ (SQV)

## SQV (SuperQuickView™)

### Using The Menu Screen

Figure 15

SQV (*SuperQuickView™*) allows you to put together banks of your favorite channels from Antenna 1 and Antenna 2. You can store channels in any of the 9 different SQV memory banks. You can also store the same channel in multiple memory banks. Once you have added a channel to an SQV memory, “SQV” and the memory bank number will appear under the tuned channel number on the TV screen.

### Adding SQV Channels

1. Select the channel using the “Channel” option box or press CH ▲ or ▼.
2. Highlight the bank (SQV1-SQV9).
3. Press ENTER to check mark the selected SQV memory bank.
4. Repeat for additional channels or banks.

### Removing SQV Channels

1. Highlight the box for the SQV bank number.
2. Press ENTER to remove the check mark.

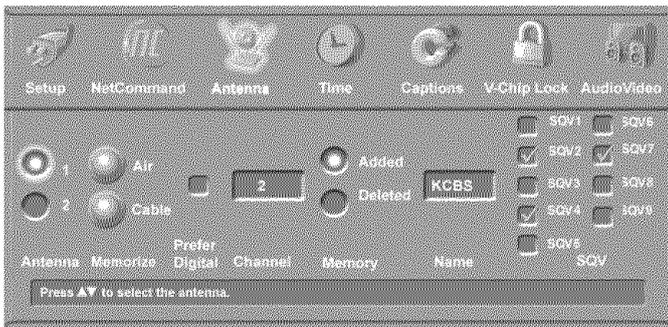


Figure 15. Antenna Menu, SQV (*SuperQuickView*)

## SQV (SuperQuickView™)

### Using The Remote Control

#### Viewing and changing SQV banks using the remote control:

1. Press the SQV button.
2. To change memory banks, press a number button within 5 seconds of pressing the SQV button.
3. Press the SQV button repeatedly to cycle through the channels available in that bank.

#### Adding SQV channels using the remote control:

1. Press CH ▲, ▼ or number buttons to select the channel you want to add to the current SQV memory bank.
2. Press and hold the SQV button for about 2 seconds. When “SQV” and the memory bank number appear under the channel number, the channel has successfully been added.

#### Removing SQV channels using the remote control:

1. Press the SQV button and then the memory bank number.
2. Press the SQV button repeatedly until you see the desired channel.
3. While the channel number and SQV indicator (with correct bank number) are still displayed on the screen, press the CANCEL button. If the CANCEL button is not pressed before the SQV indicator disappears automatically, the channel will not be removed.
4. When the SQV indicator disappears, the channel has successfully been removed only from that bank. “Other” banks remain unchanged.

# Time Menu

## Setting the Clock

You may choose to manually or automatically set the clock that your HDTV receiver/controller will use for recording or timer functions. You cannot schedule recordings if the clock is not properly set.

### Manual

Figure 16

To manually set the clock, you need to select the current time, including AM or PM, current date, time zone for your area and the Daylight Savings time setting.

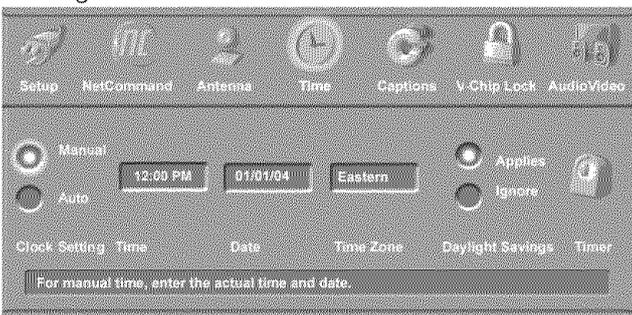


Figure 16. Time Menu, Manual Clock Setting

### Set Time

Press ADJUST ▲ or ▼ repeatedly to slowly select the hour or press and hold to quickly select the hour. Press ENTER to move to the minutes options. Press ADJUST ▲ or ▼ to select minutes, then press ENTER to select AM or PM.

### Set Date

Press ADJUST ▲ or ▼ to select the correct date.

### Time Zone

Select your correct time zone. Press ADJUST ▲ or ▼ to select the time zone (Atlantic, Eastern, Central, Mountain, Pacific, Alaska or Hawaii) for your area. Then press ADJUST ► to move to the Daylight Savings time option.

### Daylight Savings Time

Select the Daylight Savings time (DST) option that your state uses. Press ADJUST ▲ or ▼ to select Applies if your state or area uses DST, or Ignore if DST does not apply.

### Auto

Select the Time Zone and Daylight Savings time setting, as noted above. You may then tune to a channel (on Ant-1 or Ant-2) that uses Extended Data Service (XDS) time data, typically a PBS channel. The Auto selection will automatically retrieve the correct time and date information from this channel. Be aware that

if a channel displays incorrect time information, it is because of information sent from the broadcaster and is not a defect of the HDTV receiver/controller.

## Timer On/Off

Figure 16

The timer can be turned to On or Off. When On, you need to select the time and day to turn the TV On and the device and channel to display. At your preselected time, the timer will turn the HDTV receiver/controller On, and this message will be displayed: "Press a button for the HD-6000 to stay on". Press any button on the remote control within 5 minutes or the HD-6000 will turn itself Off.

### Set Time

Press ADJUST ▲ or ▼ repeatedly to slowly select the hour or press and hold to quickly select the hour. Press ENTER to move to the minutes options. Press ADJUST ▲ or ▼ to select minutes, then press ENTER to select AM or PM.

### Set Day

Select the day or days that the HDTV receiver/controller will turn on automatically. Press ADJUST ▲ or ▼ to select Everyday, Mon-Fri (Monday through Friday), or the individual days of the week.



Figure 17. Timer Menu (Timer On/Off)

### Device

Press ADJUST ▲ or ▼ to select the device to use when the timer turns on the HD-6000. If the HD-6000 is already on, the timer will turn the TV to this selected device.

### Channel

When an antenna is the selected device, you may select any memorized channel. Press ADJUST ▲ or ▼ to select the channel and the HDTV receiver/controller will tune to this channel in memory when the timer turns it on. This includes sub-channels for digital choices.

# Captions Menu: Analog and Digital Captions

## Captions Menu

Figure 18

For analog channels broadcasters can send either Standard or Text closed captioning. Standard Closed Captions follows the dialogue of the characters on-screen and displays in a small section of the screen. Text Closed Captions often contain information such as weather or news and covers a large portion of the screen. On digital channels, broadcasters can send up to 6 different captioning selections. Each TV station may broadcast only one or two types of captions or none at all. The HDTV receiver/controller cannot decode Closed Captions received on Component 1, 2 or Input-DTV.

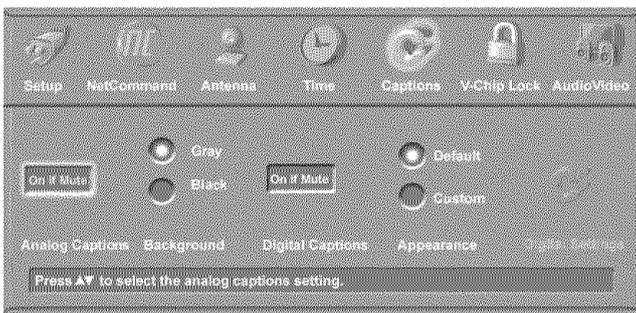


Figure 18. Captions Menu

## Analog Captions

The HDTV receiver/controller can display one of the following captions for Analog sources:

- **CC1, CC2, CC3, or CC4.** (Standard closed captioning signals).
- **Text1, Text2, Text3, or Text4.** (Text closed captioning signals).
- **On if mute. Closed captions when mute.** When selected, the standard closed captioning signal (CC1) will turn on/off by pressing MUTE on the HD-6000 remote control.
- **Off.** No closed captions.

### IMPORTANT

When analog text closed captioning is selected, a large black or gray box appears on your TV screen if no text is being sent.

## Background

To make the analog closed captions easier to read, you can choose to display the background color as either black or gray behind the captions.

## Digital Captions

The HDTV receiver/controller can display one of the following Captions for Digital sources:

- **Captions 1-6.** Sent by broadcaster.
- **On if Mute.** Closed captions when mute. When selected, the captioning signal (Caption 1) will turn on/off by pressing MUTE on the HDTV receiver/controller remote control.
- **Off.** No closed captions.

**Note:** If the broadcaster is only sending analog captions converted to digital, then the analog captions settings apply.

## Appearance

The Default options shows what the closed caption provider intended to send. You may select the Custom option to override and customize Closed Captions appearance. These settings do not apply to analog Closed Captioning converted to digital.

## Digital Settings

Figures 18 and 19

Digital Settings are available only when Custom was selected from Appearance (Figure 17) and do not apply to analog closed captions converted to digital. Select Digital Settings by moving the ADJUST buttons and pressing ENTER. You can select Font, Size, Color, Background, Opacity (Font) and Background Opacity.

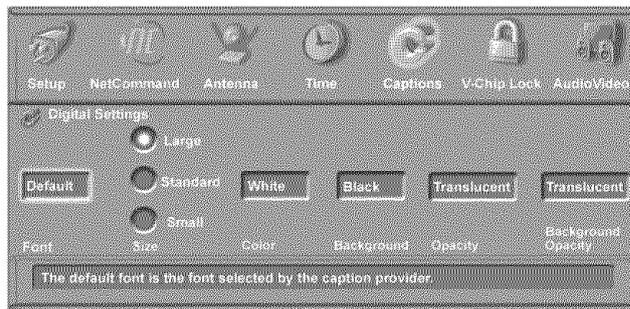


Figure 19. Closed Captions Menu Digital Settings

# Captions Menu, continued: Customizing Digital Settings

## Fonts

You can customize the text of digital captions by selecting the font of your choice. The available Font options are as follows:

- Default - Selected by the Closed Captions provider
- Font 1 - Monospaced font with Serifs
- Font 2 - Proportional spaced font with Serifs
- Font 3 - Monospaced font without Serifs
- Font 4 - Proportionally spaced without Serif
- Font 5 - Casual font
- Font 6 - Cursive font
- Font 7 - Small Capitals font

## Size

You can also customize the text of digital captions by selecting your desired size of font. Large is the recommended font size.

## Color

You can customize the text of digital captions by selecting the color of font. The available font colors are as follows:

- White
- Black
- Magenta
- Red
- Yellow
- Green
- Cyan
- Blue

## Background

To make the digital closed captions easier to read, you can choose the background color. The available background colors are as follows:

- White
- Black
- Magenta
- Red
- Yellow
- Green
- Cyan
- Blue

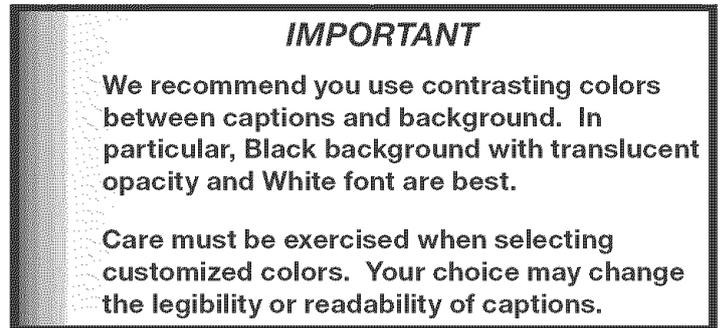
**NOTE:** If you choose the same color for the fonts and background, Closed Captions will not be visible.

## Opacity (Font)

You can customize the visibility of your fonts using the following categories:

- Transparent - See-through text to the TV program
- Translucent - TV program is visible behind the text

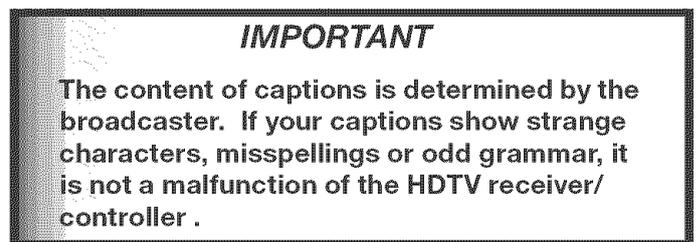
- Opaque - Solid color text; blocks the TV program
- Flashing - Text flashes in intervals



## Background Opacity

You can customize the background for digital captions using the following categories:

- Transparent - See-through background to the TV program
- Translucent - TV program is visible behind the background
- Opaque - Solid background; blocks TV program
- Flashing - Background flashing in intervals



# V-Chip Rating Guidelines

## V-Chip Signal Information

When provided by the broadcaster, V-Chip ratings can be used to control which programs can be viewed or will be blocked. When V-Chip ratings are sent, you will see the ratings when you change the channel or when you press the INFO button on the remote control. Both TV and Movie ratings will display. TV ratings apply to programs and movies developed for TV and may have supplemental blocking by content categories. Movie ratings use MPAA ratings for movies released in theaters.

### **V-CHIP EXCEPTIONS:**

- 1. V-Chip is not effective for programs viewed on devices connected to Component input or HDMI.**
- 2. Videotapes, laser discs and DVDs may not contain V-Chip rating signals. If they don't contain the V-Chip signal, V-Chip cannot block the program or movie.**
- 3. Broadcasters are not currently required to include V-Chip rating signals at this time. If the broadcaster does not include the V-Chip rating signal, V-Chip cannot block the program.**

### **TV Ratings:**

Used with TV programs and Made-for-TV movies.

- TV-Y** Youth, for children under the age of 7.
- TV-Y7** Youth, 7 years old and older. For children 7 years old and older.
- TV-G** General Audience. For the entire family to view.
- TV-PG** Parental Guidance. Parental Guidance is recommended, may not be suitable for some children.
- TV-14** Adolescent 14 years old and older. Not recommended for children under the age of 14.
- TV-MA** Mature Audience. For adults only.

TV Rating	FV	D	L	S	V
TV-Y					
TV-Y7	X				
TV-PG		X	X	X	X
TV-14		X	X	X	X
TV-MA			X	X	X

### **Content Categories:**

Used in association with the TV ratings above.

- FV** Fantasy Violence- applies to TV-Y7 only.
- D** Sexual Dialog- applies in different degrees to TV-PG and TV-14.
- L** Adult Language-applies in different degrees to TV-PG, TV-14, and TV-MA.
- S** Sexual Situations- applies in different degrees to TV-PG, TV-14, and TV-MA
- V** Violence (graphic or realistic)- applies in different degrees to TV-PG, TV-14, and TV-MA.

**When you select a TV rating, you are selecting the least-restricted program level that can be viewed. As an example, if you select TV-PG, you are allowing programs rated TV-Y, TV-Y7, TV-G and TV-PG to be seen and blocking programs rated TV-14 and TV-MA. When you select a TV Content category, you will block all TV programs that have the same content category listing. As an example, if you select to block V (Violence) at the TV-14 level, you will also block any program that has the V category listing at the TV-PG rating level as well.**

### **Movie Ratings:**

Used with theater released movies and direct-to-video movies.

- G** General Audience- Designed for the entire family to view.
- PG** Parental Guidance- Parental Guidance is recommended, may not be suitable for some children.
- PG-13** Parental Guidance 13 years old and older- Not recommended for children under the age of 13.
- R** Restricted- Restricted in the theater to 17 years old and older unless accompanied by an adult.
- NC-17** No Children- Restricted in the theater to 18 years old and older.
- X** Adult- Designed for and restricted in the theater to adult audiences only.

**When you select a Movie rating, you are selecting the least restricted program level that can be viewed. As an example, if you select a movie rating of PG-13, you are allowing movies rated G, PG and PG-13 to be seen and blocking movies rated R, NC-17, and X.**

**Programs Not Rated:** Used for programs that are not rated like news, sports, weather, emergency bulletins, or movies such as those prior to or without MPAA Ratings.  
This does not include programs without V-Chip signals.

### **IMPORTANT**

If you select to block programs that carry the V-Chip rating "Programs Not Rated," you may block News or Emergency Bulletins, when "None" or "NR" Not Rated V-Chip rating is included. Care should be used when blocking programming that is not rated.

# V-Chip Lock Menu

## V-Chip Lock Menu Overview

The V-Chip Lock menu allows you to block or allow programs based upon rating signals sent by the broadcaster, or block TV viewing during specific times. You can turn the V-Chip Lock On or Off using the V-Chip menu or the V-CHIP button on the remote control. The TV comes from the factory with the V-Chip Lock in the Off setting.

When On, the factory preset is TV-PG for TV ratings or PG for movie ratings, allowing only programs rated TV-PG/PG or lower. Use the V-Chip Menu to change the allowable rating levels. After changing channels or devices, there may be up to a 5 second delay before the V-Chip lock takes effect.

**IMPORTANT**

If you forget your four-digit Passcode, see Appendix A.

## Selecting a Passcode from the V-Chip Lock Menu

Figure 20

The V-CHIP PARENT LOCK screen shown below displays when you select the V-Chip Lock menu from the Main menu. To access the V-Chip Lock menu, input a four-digit passcode with the number buttons on the remote control, then press ENTER. You can delete a number and move back one space by pressing CANCEL or you can exit without inputting a passcode by pressing MENU or HOME before pressing ENTER. The next time you select V-Chip Lock you will see “...enter **your** passcode” instead of “...enter a **new** passcode”.

V-CHIP PARENT LOCK

To go to the menu, enter a new passcode.  
----

Use the NUMBER buttons and press ENTER.

## V-Chip Lock Menu

Figure 21

The V-Chip Lock menu can be used in several ways. If you want to lock the HD-6000 during specific hours, select Lock by Time from the V-Chip Lock menu. To set the lock, press ADJUST ▲ or ▼ to select On or Off for Lock by Time. If you select On, then press ADJUST ► to move to the Lock Time box. Press ADJUST ▲ or ▼ to select Lock Time.

Press ADJUST ▲ or ▼ repeatedly to slowly select the hour or press and hold to quickly select the hour. Press ENTER to move to the minutes options. Press ADJUST ▲ or ▼ to select minutes, then press ENTER to select AM or PM. Repeat these choices to select the Unlock Time.

Setting the Lock Time and Unlock Time to the same time will make the Lock by Time active 24 hours a day.

During the Lock Time, you must use your passcode to view the TV.

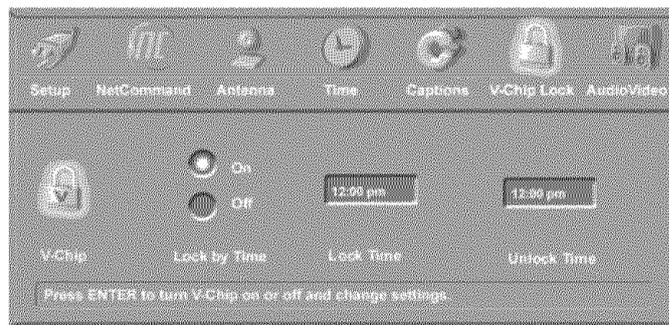


Figure 21. V-Chip Lock Menu

Figure 20. V-Chip Entry screen from Menu

# V-Chip Lock Menu, continued

## Using V-Chip with Program Ratings

Figure 22

You can choose the program ratings that you want to allow during specific times of the day by using the ADJUST buttons to highlight V-Chip from the V-Chip Lock menu and press ENTER. When you select V-Chip the screen in Figure 22 will display.

Press ADJUST ▲ or ▼ to select On or Off. If you selected On then press ADJUST ► to move to the TV Rating box. Press ADJUST ▲ or ▼ to select the TV Rating level you want to allow. Press ADJUST ► to move to the TV Content Categories and press ADJUST ▲ or ▼ to select. Press ENTER to add a check mark to the TV Content Categories you want to block.

Press ADJUST ► to move to the Programs Not rated box and press ADJUST ▲ or ▼ to select a program. Press ENTER to add a check mark to programs that are not allowed.

NOTE: If you select to block programs that carry the V-Chip rating Programs Not rated, you may block News or Emergency Bulletins, when “None” or “NR” Not Rated V-Chip rating is included. Care should be used when blocking programming that is not rated.

Press ADJUST ► to move to the Movie Rating box. Press ADJUST ▲ or ▼ to select the Movie Rating level you want to allow. See the next page for detailed information on rating guidelines.

To set the times when these guidelines will be active, press ADJUST ▲ or ▼ to slowly select the time, starting with the hours. Press and hold ADJUST ▲ or ▼ to quickly select the hours, press ADJUST ► to select the minutes.

By setting the V-Chip Start Time and V-Chip Stop Time to the same time, the V-Chip will be active 24 hours a day.

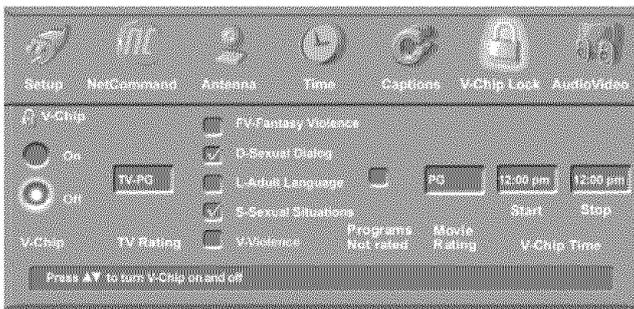


Figure 22. V-Chip Menu

## Using the Passcode from the V-Chip Lock Menu

When a channel or the HD-6000 is locked, figure 23 will display. To view a V-Chip blocked program or to watch the program during a scheduled lock time, you must enter your 4-digit passcode or change to an unlocked channel or allowed program. Once you have entered the passcode, the V-Chip Lock or Lock by Time will remain released until the HD-6000 is powered Off and then On again.

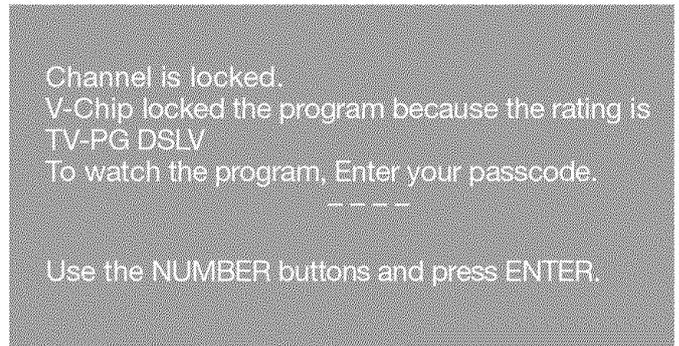


Figure 23. V-Chip Passcode screen

## Using the V-Chip from the Remote Control

Figure 24

You will see the screen shown below when you first press V-CHIP on the remote control. To quickly turn on or off the V-Chip Lock, input a four-digit passcode with the number buttons on the remote control, then press ENTER. To change any V-Chip settings, you must use the V-Chip Lock Menu.



Figure 24. V-Chip Entry screen from Remote Control

# AudioVideo Menu

## AudioVideo

Figure 25

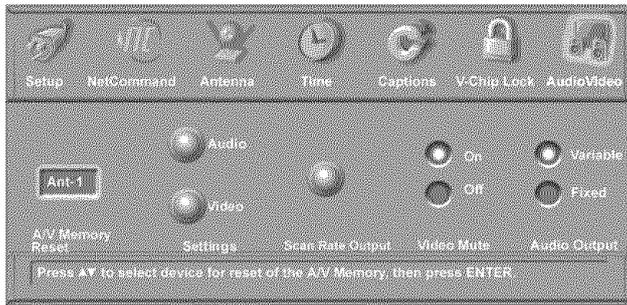


Figure 25. Audio/Video Menu, Settings

## A/V Memory Reset

A/V Memory Reset allows you to select the device which will have the A/V Settings returned to the original factory settings. To return a device's memory to the original factory settings, select the device and then press ENTER.

## Settings

Each device has its own A/V memory. Select the device in A/V Memory Reset, then select Audio or Video to adjust the device's individual settings. Press ENTER, the menu is removed, and the individual settings are displayed.

If using the HDTV receiver/controller with the LT-4260 display, use the AUDIO and VIDEO buttons on the remote control to change settings, as these options are not accessible from this screen.

Use ADJUST ▲ or ▼ to select the individual settings for adjustment. Use ADJUST ◀ or ▶ to adjust. For descriptions of the individual A/V settings see A/V Setting Descriptions, pages 81 and 82.

## Scan Rate Output

Figures 26 and 27

Allows you to adjust the scan rate output from the HD-6000 to the TV, display, or LCD. If you choose Automatic, the HD-6000 will select the scan rate, or you can select 1080i, 720p or 480p for the output format. When you select Test, the main screen will change to the selected Output Format and a small screen will display, allowing you to select OK to make

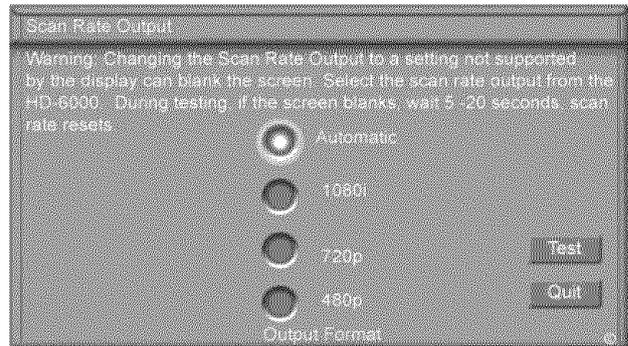


Figure 26. Scan Rate Output

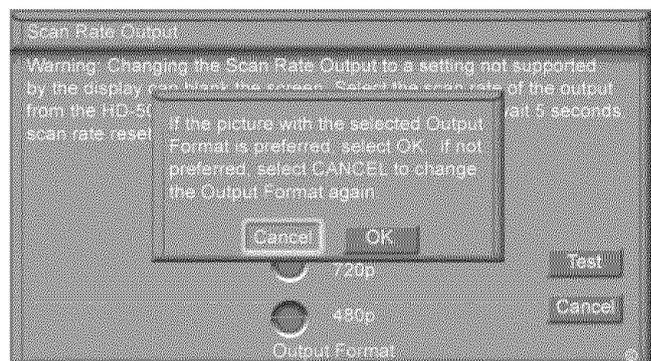


Figure 27. Scan Rate Confirmation screen

## Video Mute

Video Mute lets you display a blue background when no signal is being received on Inputs 1-3, MonLink, PC, Components 1-2 and Input DTV.

## Analog Audio Output

If speakers are connected to the TV or monitor or you are using the internal TV speakers, select Variable. This allows you to control the volume with the HD-6000 remote control. If speakers are connected to the A/V receiver, select Fixed. When NetCommand® is enabled, selecting the A/V receiver icon from the Device Selection menu automatically turns Off the TV speakers.

**Note:** To prevent damage from a sudden increase in volume, make sure the volume is set to low before setting speakers to ON.

# A/V Setting Descriptions: Audio

**NOTE:** The effects of the Audio Settings of Bass, Treble, Balance and Surround affect the sound heard through the TV speakers only.

## Using the AUDIO Button on the Remote Control

To adjust individual Audio settings directly with the remote control:

1. Press AUDIO to cycle through the available settings.
2. Press ADJUST ◀ or ▶ to adjust the setting. After 5 seconds of inactivity, the setting display will disappear.

## Analog and Digital Audio Setting

A slider will display on-screen for most settings. When the slider is displayed it has a numeric value, where 63 is the maximum, 31 is the mid-point and 0 is the minimum.

### ◊ Bass

Enhances or reduces low-pitch sound.

### ◊ Treble

Enhances or reduces high-pitch sound.

### ◊ Balance

Adjusts the level of sound between the left and right speakers.

### ◊ Surround

Creates simulated stereo and surround effects through the TV speakers. Your choices are:

- Off: No surround effects.
- Surround Sound: Will create a simulated surround effect when watching a stereo program.
- Simulated Stereo: Will create a simulated stereo effect when watching a non-stereo program.

## Analog-Only Audio Settings

### ◊ Listen to

Determines how your HD-6000 will receive a broadcast audio signal and play back the sound you hear.

Your choices are:

- Stereo: Default setting. Will play stereo broadcasts in stereo and mono broadcasts in mono. The word "Stereo" will be displayed when you tune to a channel broadcasting stereo.

- SAP (Second Audio Program): Additional monaural soundtrack that you cannot hear during normal TV viewing. The SAP signal might be related to the program you are watching, such as a soundtrack in a foreign language, or unrelated to the program you are watching, such as a weather report. If an SAP signal is broadcast, the letters "SAP" will be displayed when you tune to the channel.
- Mono: Reduces background noise and should be used when receiving a weak stereo audio signal. All audio will be played mono with this setting.

Listen to is not available for devices connected to the video inputs, component inputs or 1394 devices.

### ◊ Level Sound

Turn On or Off to automatically equalize the volume level of programs containing significant level differences from one segment to another (for example, regular programming to commercials). To receive the best fidelity with music programs, you can turn this setting to Off.

## Digital-Only Audio Settings

### ◊ Language

Determines what possible language you will hear. Your choices are:

- English
- French
- German
- Italian
- Portuguese
- Spanish
- "Other"

### ◊ Level Sound

Automatically reduces loud passages and boosts soft passages to a more uniform loudness. When connecting to an A/V receiver, set level sound to OFF and turn the TV speakers off to send full dynamics to the A/V receiver.

This feature only works with Dolby Digital sources. Other digital audio formats do not offer this dynamic range control. In these cases, no effect will be heard when changing the level sound setting.

# A/V Setting Descriptions: Video

## Using the VIDEO Button on the Remote Control

To adjust individual Video settings directly with the remote control:

1. Press VIDEO to cycle through the available settings.
2. Press ADJUST ◀ or ▶ to adjust the setting. After 5 seconds of inactivity, the setting display will disappear.

Film Mode is not effective for progressive scan (480p) devices, and high definition signals.

**NOTE:** A slider will display on-screen for most settings. When the slider is displayed it has a numeric value, where 63 is the maximum, 31 is the mid-point and 0 is the minimum.

## Video Settings

### ◊ Contrast

Provides a slider to adjust the white-to-black level. Low contrast shows a variety of shades in darker images, while high contrast shows darker images more uniformly black and makes colors appear more vibrant. In most home lighting situations, a medium contrast looks best. High contrast is good for brightly lit environments.

### ◊ Brightness

Provides a slider to adjust the overall brightness of the picture.

### ◊ Sharpness

Provides a slider to adjust the detail and clarity.

### ◊ Color

Provides a slider to adjust the color intensity.

### ◊ Tint

Provides a slider to adjust the proportion of red to green.

### ◊ Video Noise

Use to reduce minor noise (graininess) in the broadcast received on Ant-1 and Ant-2, Inputs 1 and 2, Component 1 and 2, and Input-DTV. Use standard with good quality signals.

### ◊ Film Mode (Auto) - On or Off

On is the automatic setting and will automatically detect and apply film decoding correction for signals that originated on 24 frames per second film cameras and then were converted for broadcast to 30 frames per second video.

When the original signals originated on 30 frames per second video cameras, the On setting will automatically apply video decoding, the same as used with the Off setting. Try the Off setting when the TV seems to have difficulties and adds too many jagged edges to the images.

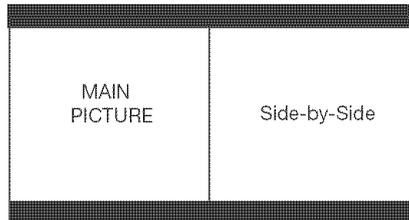
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Warranty .....	110

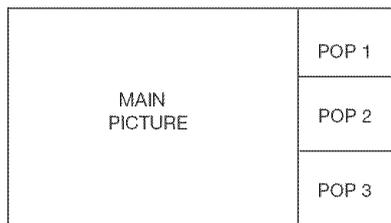
# Operation of PIP and POP

You can display programs from analog channels, analog inputs or devices as Picture-In-Picture (PIP) and Picture-Outside-Picture (POP). The HDTV receiver/controller has a second analog tuner for non-scrambled analog channels received on Ant-1 and will display them as the PIP/POP sub-pictures. Digital channels and devices can be shown as the main picture but cannot be the sub-picture. PC screens can be viewed in the side-by-side mode.

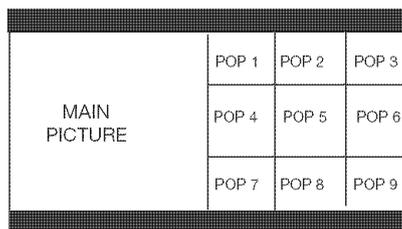
Press PIP/POP to activate the PIP/POP option. With each press of the PIP/POP button on the HD-6000 remote control (within seconds of each other), the PIP/POP will cycle through the following display options:



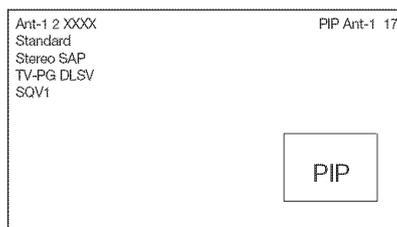
- **POP**  
side-by-side pictures



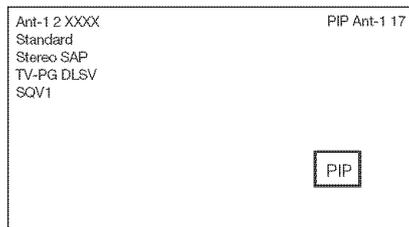
- **3 POP**



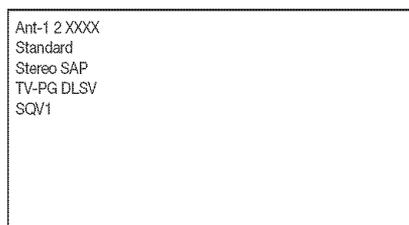
- **9 POP**



- **PIP large**



- **PIP small**



- **PIP/POP off**

To turn PIP/POP off, wait at least 10 seconds, and press PIP/POP. The next time you activate PIP/POP, the last used PIP/POP option will be displayed

## Changing PIP/POP Device

Press PIP DEVICE to change the PIP or POP picture source device. A menu similar to the Device Selection menu will be displayed.

## Changing PIP/Side-by-Side Channels

Press PIP CH to scroll up and down through memorized channels on Ant-1 and Ant-2.

## Exchanging Program Images

Press EXCH to exchange the main picture and the PIP/POP picture. Pictures from digital channels can only be shown as the main picture.

## Moving PIP Image

If no menus are onscreen, press ADJUST ▲, ▼, ◀ or ▶ to move the PIP display anywhere on the main screen.

## Automatic POP Switching

When automatic POP switching is active, the TV will cycle through memorized analog channels on Ant-1 or Ant-2 or strobe pictures from other A/V components in the POP display. Press PAUSE to pause or restart automatic POP switching.

## Selecting POP "Live" Image

Press ADJUST ▲, ▼, ◀ or ▶ to select a different POP "live" image (automatic POP switching must be paused.)

## Freezing the PIP and Side-By-Side Picture

Press PAUSE to freeze the PIP and side-by-side images. Press PAUSE again to return to a "live" image.

### **IMPORTANT**

**Side-by-Side cannot show the same channel or device on both sides.**

**If Ant-1 or Ant-2 is the main picture, Ant-2 is not available as a PIP, POP or Side-by-Side.**

**PIP/POP is not compatible with signals from media cards.**

**If TV Pause is set to "Always" PIP/POP and Side-by-Side are not available.**

# Display Formats

The HD-6000 is designed to work with widescreen TVs (also known as a 16:9 TVs). This shape reflects the new types of images available from HDTV and many DVDs. There are still many older style narrow screen images (called 4:3 aspect ratio) you will encounter. While there will never be a perfect solution for displaying a narrow image on a wide screen, Mitsubishi offers several display formats to choose from.

Press **FORMAT** on the HDTV receiver/controller remote control to cycle through the available display formats. The last used format for each device will be used when you return to that device.

**Note: Not all formats are available for PIP/POP. Side-by-Side, 3 POP and 9 POP are only available in Standard and Expand formats. PC formats vary depending on PC signal.**

## Signals and Formats Definitions:

**480i Signals:** Traditional analog interlaced signals from or through Ant-1 & 2, Inputs 1 & 2, Component 1 & 2, Input-DTV and HDMI.

**480p Signals:** Progressive scan analog DVD signals on Ant-1 & 2, Component-1 & 2, Input-DTV and HDMI.

**720p & 1080i Signals:** High definition analog signals received through Component-1 & 2, Input-DTV and HDMI. These signals are always 16:9 (widescreen).

**SD 4:3:** Standard definition narrow screen format signals from digital channels and IEEE 1394 devices.

**SD 16:9:** Standard definition wide screen format signals from digital channels and IEEE 1394 devices.

**HD:** High definition wide screen format signals from digital channels and IEEE-1394 devices. These signals are always 16:9 (widescreen).

**Standard:** This is the full screen format. HDTV signals use this format. This format is useful to display Anamorphic DVDs that have 1.78:1 or 1.85:1 aspect ratios. Anamorphic DVDs that have a 2.35:1 aspect ratio will still display black bars at the top and bottom, but will show the entire image correctly. Narrow (4:3) images will be stretched evenly from side to side. Available for all signals.

**Expand:** This will enlarge the picture to fill the screen, cropping off some of the image at the top and bottom. This is useful to reduce the letterbox top and bottom bars of non-anamorphic DVD. Available for analog 480i, 480p and digital SD 4:3 signals only.

**Zoom:** This will enlarge the picture, cropping off some of the image at each side and top and bottom. This is useful to remove or reduce the black top and bottom bars on anamorphic DVDs with a 2.35:1 aspect ratio. Available for analog 480i and 480p and SD 4:3 signals only.

**Stretch:** This format will stretch a narrow (4:3) image across the screen, however, there is less stretch in the center than the sides. This will allow the entire narrow image to be displayed across the screen with less distortion than seen in the Standard format. Available for analog 480i and 480p and SD 4:3 signals only.

**Stretch Plus:** Similar to stretch mode, however to minimize distortions on the side, the picture is expanded to crop off portions of the top and bottom. Useful when no important information is shown at the top and/or bottom of the screen. Available for analog 480i and 480p and SD 4:3 signals only.

**Narrow:** This format will display narrow (4:3) images in their original shape, and add stationary black or gray side bars to fill the screen. Available for 480i, 480p and digital SD 4:3 signals only.

**Wide Expand:** Enlarges the picture, cropping some of the image on both sides. This Expand format is useful to remove or reduce black side bars added to narrow images that are converted to 16:9 signals for digital broadcast. Available for analog 1080i, 720p, digital SD 16:9 and digital HD signals.

## DVD Definitions:

**Anamorphic (or Enhanced for Widescreen TV's):** These DVDs are recorded in a special way to properly show widescreen images on 16:9 TV sets in the Standard format mode. This is the recommended choice.

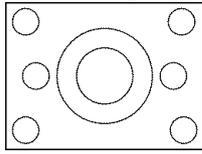
**Non-Anamorphic (or 4:3, 1:33:1, Letterbox or Full Screen):**

These DVDs are recorded for use with traditional shaped TVs. They may be full screen (4:3 or 1:33:1) which crops movies to fit the narrow TV, or Letterboxed which adds black top and bottom bars.

This information may or may not be listed on the DVD case. Some DVDs support both types of recordings.

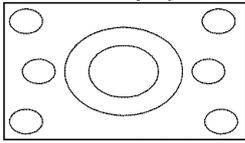
# TV Display Formats

## ORIGINAL SIGNAL Non-anamorphic or SD 4:3



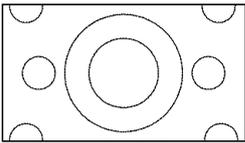
### TV Display

Standard



(not recommended, distorted)

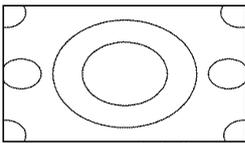
Expand



(recommended for letterboxed)

not available for  
HD, SD 16:9 or  
analog 720p, 1080i

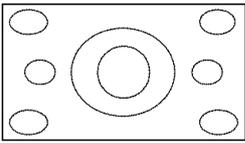
Zoom



(not recommended, distorted)

not available for  
HD, SD 16:9 or  
analog 720p, 1080i

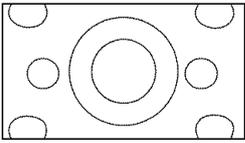
Stretch



(recommended for standard broadcast)

not available for  
HD, SD 16:9 or  
analog 720p, 1080i

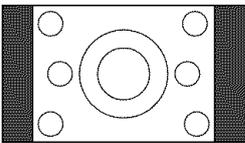
Stretch Plus



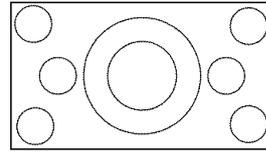
(recommended for standard broadcast)

not available for  
HD, SD 16:9 or  
analog 720p, 1080i

Narrow

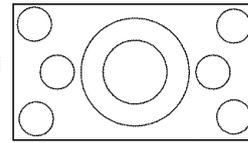


## ORIGINAL SIGNAL Anamorphic DVD



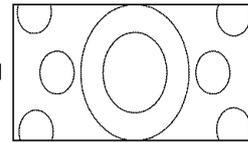
### TV Display

Standard



(recommended)

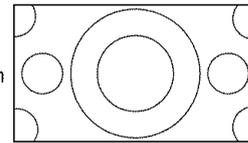
Expand



(not recommended, distorted)

not available for  
HD, SD 16:9 or  
analog 720p, 1080i

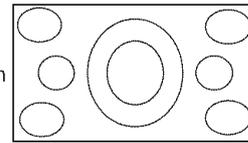
Zoom



(recommended for anamorphic 2.35:1)

not available for  
HD, SD 16:9 or  
analog 720p, 1080i

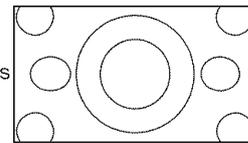
Stretch



(not recommended, distorted)

not available for  
HD, SD 16:9 or  
analog 720p, 1080i

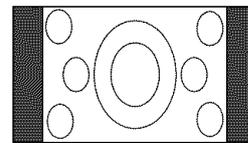
Stretch Plus



(not recommended, distorted)

not available for  
HD, SD 16:9 or  
analog 720p, 1080i

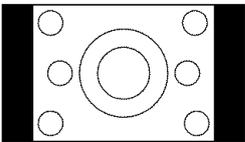
Narrow



(not recommended, distorted)

not available for  
HD, SD 16:9 or  
analog 720p, 1080i

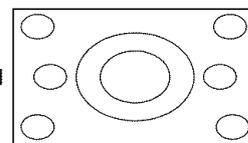
H  
D  
D  
I  
G  
I  
T  
A  
L



(with side bars in broadcast)

Original HD or SD  
16:9, 720p or 1080i

Wide Expand



(recommended to remove side bars)

available only for  
digital SD 16:9, HD,  
analog 1080i or 720p

# Device Control with Net Command®

NetCommand Compatible Traditional Devices (Analog)				
When Device Selection Menu is Displayed and the Device is Highlighted (Yellow Outline)				
Device Remote Control Button	A/V RECEIVER	VCR	DVD	CABLE BOX/DBS
<b>POWER</b>	Power On/Off (toggle)	Power On/Off (toggle)	Power On/Off (toggle)	Power On/Off (toggle)
<b>GUIDE</b>	Changes between digital and analog audio	Changes VCR inputs	n/a	Changes antenna inputs (RCA model DTC-100 only)
<b>FORMAT</b>	n/a	n/a	Changes output between interlaced and progressive	Changes output between HD and SD select models

When Net Command® Compatible Traditional Device is Viewed or Played				
Device Remote Control Button	A/V RECEIVER	VCR	DVD	CABLE/DBS
<b>CH up/down</b>		Channel up/down	Skip Forward/Backwards Chapter or Track	Channel up/down Page up/down when guide showing
<b>VOL up/down</b>	Volume Up/Down			
<b>MUTE</b>	Mute On/Off			
<b>0-9 (digits)</b>		number functions	number functions	number functions
<b>QV</b>				Last Channel Recall
<b>DEVICE Menu</b>		1st press Transport Menu, 2nd press Setup Menu display	1st press Transport Menu, 2nd press Setup Menu display	Setup menu display or Action function
<b>HOME</b>				
<b>ENTER</b>			Enter or select	Enter or select
<b>CANCEL</b>		Counter Reset	Exit or return	Exit or return
<b>GUIDE</b>			Disc menu display	Channel Guide
<b>ADJUST</b>			up/down left/right	up/down left/right
<b>PLAY</b>		Play	Play	
<b>STOP</b>		Stop	Stop	
<b>RECORD</b>		Record		
<b>REW/REV</b>		Rewind/Reverse	Reverse	
<b>FF/FWD</b>		Fast Forward or Fast Play	Fast Play	

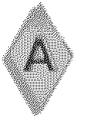
# Device Control with Net Command<sup>®</sup>, continued

IEEE 1394 Devices				
When Device Selection Menu is Displayed and the Device is Highlighted (Yellow Outline)				
Device Remote Control Button	TUNER/ CABLE BOX/ DBS	A/V DISC	DVCR	AMPLIFIER
<b>POWER</b>	Power On/Off (toggle)	Power On/Off (toggle)	Power On/Off (toggle)	Power On/Off (toggle)
<b>GUIDE</b>	n/a	n/a	n/a	n/a
<b>FORMAT</b>	n/a	n/a	n/a	n/a

When an IEEE 1394 Device is Viewed or Played				
Device Remote Control Button	CABLE/DBS	TV Disc or A/V DISC	DVCR	AMPLIFIER
<b>CH up/down</b>	Channel up/down	Page up/down (when track list is displayed)	Index search forward/reverse (if supported by DVCR)	
<b>VOL up/down</b>				Volume Up/Down
<b>MUTE</b>				Mute On/Off
<b>0-9 (digits)</b>	number functions	Search by time (when followed by ENTER)		
<b>QV</b>	Last Channel Recall			
<b>DEVICE Menu</b>	n/a	Transport Menu redisplay	Transport Menu redisplay	Device Menu
<b>HOME</b>	Exit menus/displays	Exit menus/displays	Exit menus/displays	Exit menus/displays
<b>ENTER</b>	Enter or select	Enter or select	Enter or select	Enter or select
<b>CANCEL</b>	Cancel function	Cancel function	Cancel function or Counter Reset	Cancel function
<b>GUIDE</b>	Digital Channel Guide	Track or program list display	Digital Channel Guide	
<b>ADJUST</b>	up/down left/right	Skip Forward 30 seconds (during playback) Skip Backwards 12 seconds (during playback) Skip to end or beginning of program Page up/down in track list	up/down left/right	up/down left/right
<b>PLAY</b>		Play	Play	
<b>STOP</b>		Stop	Stop	
<b>RECORD</b>		Record	Record	
<b>REW/REV</b>		Reverse picture scan or Slow Play	Reverse or Slow Play	
<b>FF/FWD</b>		Fast picture scan or Fast Play	Fast Play	

# Appendix A: Bypassing the V-Chip Lock:

Lock Bypass Instructions Have Been Filed for  
Future Reference



## Bypassing the V-Chip Lock

After you set the lock, you need your passcode to view a V-Chip locked program, view the locked TV, cancel the lock, or enter the V-Chip Lock menus.

If you forget your passcode, you can view the locked HD-6000 without entering your passcode. This is done by pressing the number 9 and QV buttons on the HDTV receiver/controller remote control at the same time, when your passcode is requested. This process temporarily unlocks the HDTV receiver/controller.

When entering the V-Chip Lock menu, this process deletes your old passcode and prompts you to enter a new passcode. Press HOME to exit the menu.

## Bypassing Front Button Lock

If you have misplaced the remote control, you can bypass the front button lock by pressing and holding the MENU button on the front panel for more than 8 seconds.

### **IMPORTANT**

Cut along the dotted line and file bypass instructions in a safe place for future reference.

### **IMPORTANT**

When changing or deleting your passcode, you must use the remote control included with this HDTV receiver/controller. You cannot use a Mitsubishi remote control from another component or a "universal" remote.

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# Appendix B: Input Connection Compatibility



## Component-1 and Component 2 Inputs

These inputs are compatible with component video signals from standard DVD players and other equipment sending a standard NTSC component video signal (480i). These inputs are also compatible with newer DVD players sending a progressive NTSC component video signal (480p). These inputs are also compatible with most standard DTV and satellite receivers with component video outputs (YPbPr). Compatible DTV signals are SDTV 480i, 480p, 720p and HDTV 1080i.

## VGA Input

This input will accommodate most computers capable of supporting a VGA monitor. The only compatible display resolution is 640x480. The sync rate is 60 Hz. SVGA and higher resolutions are not supported.

## NetCommand® IEEE 1394 System Compatibility

This HDTV Receiver is designed to conform to IEEE 1394 AV/C software standards in effect at the time of development. This exciting new networking and control technology is designed to provide high-performance digital connections and product control, making products easier to use.

As other manufacturers produce products that use IEEE 1394 AV/C, they will be responsible for the development of their products to meet the standards of the technology, as well as compatibility testing with other products. Mitsubishi cannot be responsible for their efforts, and therefore cannot promise compatibility with these other products. Any compatibility problems with other manufacturers products should be brought to the attention of those manufacturers.

## DTV YPbPr RGBHV Input

This input is compatible with most standard DTV and satellite receivers with component video outputs (YPbPr). Compatible DTV signals are SDTV 480i, 480p, 720p and HDTV 1080i. This input is also compatible with some DTV receivers using RGB with "sync on green" or with "separate H and V sync." Compatible DTV signals are SDTV 480i, 480p, 720p and HDTV 1080i. All other DTV signals need to be converted by the DTV receiver to one of the compatible signal types. Industry standards for DTV RGB signals (systems, synchronization, timing, and signal strengths) are not currently established. These inputs will not be compatible with all DTV receivers that offer RGB.

If your DTV receiver offers both DTV component video signals and DTV RGB signals, Mitsubishi suggests you use the DTV component video signals. Please check the DTV receiver specifications before connecting.

### Input Levels and Timing with Component 1 and 2 Video

#### **EIA - 770.1 and EIA - 770.2 Standard Levels & Timing**

- Y = 1.0Vp-p (includes sync) 75ohm
- Pb = 700mVp-p, 75ohm (can also receive signals from outputs labeled B-Y and Cb)
- Pr = 700mVp-p, 75ohm (can also receive signals from outputs labeled R-Y and Cr)

### DTV Input Levels Used With HD Component Video Signals

#### **EIA - 770.3 Standard Levels & Timing**

- Y = 1.0Vp-p (includes sync) 75ohm
- Pb = 700mVp-p, 75ohm
- Pr = 700mVp-p, 75ohm
- H = Not Used
- V = Not Used

### DTV Input Levels when Used With HD-RGB Video Signals

- G = 700mVp-p (no sync), 1Vp-p (with sync) 75ohm
- B = 700mVp-p, 75ohm
- R = 700mVp-p, 75ohm
- H = 4Vp-p+/-1.0v, 75ohm (when using separate H and V sync)
- V = 4Vp-p+/-1.0v, 75ohm (when using separate H and V sync)

### HDMI Input Levels

#### **NTSC 480i only**

- Y = 1.0Vp-p (includes sync) 75ohm
- C = 0.286 Vp-p (burst signal), 75 ohm

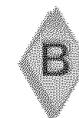


## Appendix B: Specifications

From time to time, Mitsubishi may offer software updates to expand the features or operation of this HDTV receiver/controller. When these updates are available they will be announced on our web site, Mitsubishi-tv.com. If you return your Owner's registration card, with your model and serial number, you may receive written notification of available software updates.

<b>HD-6000 HDTV Receiver/Controller Specifications</b>	
Channel Frequency Reception	Over-the-Air: VHF 2 - 13, UHF 14 - 69 Analog Cable: 1 - 125 Digital Cable: 1 - 135
Channel Type	Over the Air: Analog NTSC, Digital ATSC with sub-channels (all 18 video formats) Cable: Analog NTSC (non-scrambled) Digital QAM 64 and 256 with sub-channels (non-scrambled) CableCARD™: Authorized scrambled and non-scrambled digital channels
<p>Note for Digital Channels: The channel numbers displayed on-screen are determined by the broadcaster or cable company and can vary from the standard frequency number. If there is no channel number information included from the broadcaster or cable company, then the TV will create a channel number based on the frequency number as the main channel number and the program number as the sub-channel number. When using an authorized CableCARD, the channel numbers are determined by the cable company.</p>	
<b>Inputs</b>	
Antenna/Cable input Qty 2	F connector, 75ohm
HDMI (digital video/audio), Qty 1 Signal Type	HDMI standard connector HDMI standards for digital audio and video. Not intended for use with personal computers
Video/S-Video, Qty 2 each  Signal Type	Video: RCA Pin Plug, 1.0 V p-p, 75 ohm S-Video: Four Pin Din Plug Y: 1.0 Vp-p 75 ohm C: 0.286 Vp-p (burst signal), 75 ohm NTSC 480i only
Component Video (Y/Pr/Pb) Qty 2 sets  Signal Type	RCA Pin Plug (EIA-770.3 Standard Levels and Timing) Y: 1.0 Vp-p (includes sync), 75 ohm Pr: 700 mVp-p, 75 ohm Pb: 700 mVp-p, 75 ohm EIA-770.1 & EIA 770.2 480i, 480p, EIA 770.3 720p and 1080i (video standards)
Input-DTV (Y/Pr/Pb or RGBH&V) Qty 1 set  Signal Type	RCA Pin Plug, When used as Y/Pr/Pb same as component inputs shown above When used as RGBH&V: R (red): 700 mVp-p, 75 ohm G (green - no sync): 700 mVp-p 75 ohm B (blue): 700 mVp-p, 75 ohm H (horizontal sync): 3 Vp-p +/-1.0v, 2.2k-ohm V (vertical sync): 3 Vp-p, +/- 1.0v, 2.2k-ohm EIA-770.1 & EIA 770.2 480i, 480p, EIA 770.3 720p and 1080i (video standards)
PC Input (RGB) Qty 1 Signal Type	Mini-D Sub, 15 pin VGA (640 x 480), 60Hz
Audio Inputs: Qty 6 pair	RCA Pin Plug 500mV (full scale), 43kohm

## Appendix B: Specifications, continued



<b>Outputs</b>	
<b>Video</b>	
Video Monitor Output, Qty 1 Signal Type	Video: RCA Pin Plug 1.0 Vp-p, 75 ohm NTSC 480i only for recording only
Component Video (Y/Pr/Pb) Qty 1 set "OUTPUT to Display" Signal Type	RCA Pin Plug (EIA-770.3 Standard Levels and Timing) Y: 1.0 Vp-p (includes sync), 75 ohm Pr: 700 mVp-p, 75 ohm Pb: 700 mVp-p, 75 ohm EIA-770.1 & EIA 770.2, 480p, EIA 770.3 720p and 1080i (video standards)
<b>Audio</b>	
Monitor Output, Qty 1 pair	RCA Pin Plug, 500 mV rms $\pm$ 200 mV (full scale) for analog sources. 1.5 V $\pm$ 0.5 V (full scale) for digital sources.
OUTPUT to Display Qty 2 pair	RCA Pin Plug, 500 mV rms $\pm$ 200 mV (full scale) for analog sources. 1.5 V $\pm$ 0.5 V (full scale) for digital sources. Fixed audio output when connected to A/V Receiver. Variable audio output when connected to monitor.
<b>Video and Audio</b>	
HDMI (digital video/audio), Qty 1 Signal Type	HDMI standard connector HDMI standards for digital audio and video. Not intended for use with personal computers
<b>Digital Interfaces</b>	
Digital Audio Output, Qty 1	RCA Pin Plug, Signal Type, Dolby Digital
IEEE 1394, Qty 3	IEEE 1394 Four Pin type Terminal, S400
Dimensions	H 3.4" x W 17' x D 16.8", 27 lbs.
Power Consumption	82 watts
<p><b>Net command® IEEE 1394 System Compatibility:</b> This television is designed to conform to IEEE 1394 AV/C Software standards in effect at the time of development. This exciting new networking and control technology is designed to provide high-performance digital connections and product control, making the product easier to use.</p> <p>Mitsubishi D-VHS VCRs are fully compatible with this HDTV receiver/controller in audio, video and control. Many DV camcorders that have IEEE 1394 connections will be compatible with the control features of this HDTV receiver/controller, but not compatible with the audio or video decoder.</p> <p>As other manufacturers distribute products that use the IEEE 1394 AV/C standards, they will be responsible for developing products that meet the standards of the technology, as well as compatibility testing with other products. Mitsubishi cannot be responsible for their efforts, and therefore cannot promise compatibility with these other products. Any compatibility problems with other manufacturers products should be brought to the attention of those manufacturers.</p> <p>The HDMI input is compliant with EIA-861B standards for standard, extended and high definition video, digital audio and HDCP copy protection. However, this input is not intended for use with personal computers or devices outputting video signals with computer resolutions.</p>	



# Appendix C: Remote Control Programming Codes, continued



## Cable Boxes, continued

SCIENTIFIC ATLANTA	112, 113, 194
SIGNATURE	119,124,125,126,127,120,121,122
SLMARK	105,101
SPRUCER	105
STARCOM	119,124,125,126,127,120,121,122
STARGATE	105
TELEVIEW	101,105
TOCOM	135,136
TOSHIBA	104
UNIKA	125
UNITED CABLE	119,124,125,126,127,120,121,122
UNIVERSAL	122
VIDEOWAY	106
VIEWSTAR	129,130
ZENITH	117,100

## DVD Players

DVD Brand	Code
mitsubishi	003
AIWA	261, 274
APEX	266, 283
BOSE	286
DENON	250, 273
FERGUSON	251
HARMAN KARDON	282, 288
HITACHI	270
JVC	257
KENWOOD	271, 289
MINTEK	285
NORDMENDE	251
ONKYO	267, 280
ORITRON	263, 268
PANASONIC	250
PHILIPS/MAGNAVOX	258, 253, 272, 290
PIONEER	252
RCA/GE/PROSCAN	251, 256
ROTEL	292
SABA	251
SAMSUNG	261
SAMPO	263
SHARP	260
SYLVANIA	264
SONY	254, 278, 279
THOMSON	251
TOSHIBA	253
V INC. (BRAVO D1)	291
YAMAHA	250, 272, 276, 287
ZENITH	259

## Satellite Receivers/DBS/DTV

DBS Brand	Code
MITSUBISHI	006 (same as 173)
ECHOSTAR/DISH NETWORK	175, 182, 183, 188
EXPRESS VU	175
G.E.	176
HITACHI	173, 181, 184
HNS(Hughes)	173
JVC (ECHOSTAR)	175
MAGNAVOX	171, 172
PANASONIC	174
PHILIPS	171, 172
PROSCAN	176, 179, 180, 185
RCA	176, 179, 180, 185
SAMSUNG - TERRESTRIAL	192
SONY	177
STAR CHOICE	173
TOSHIBA	170, 189, 190, 191
UNIDEN	171, 172
WEBTV	187
ZENITH/LG	193

## VCRs

VCR Brand	Code
MITSUBISHI	001, 060, 067, 068, 061, 062, 002
AKAI	049, 034, 035, 036
AUDIO DYNAMIC	031
BELL&HOWELL	025,
BROKSONIC	040, 046
CANON	043, 045
CITIZEN	026
CRAIG	025, 049, 026
CURTIS MATHES	065, 044, 047
DAEWOO	063, 021, 044, 078
DBX	030, 031
DIMENSIA	065
EMERSON	063, 046, 038, 039, 023, 045, 062, 040
FISHER	025, 028, 029, 027
FUNAI	047, 046, 040
GE	053, 065, 044, 079
GO VIDEO	057, 069, 070, 071
GOLDSTAR	026
HITACHI	043, 065, 020, 047
INSTANT REPLAY	044, 043
JVC	030, 031, 076, 077
KENWOOD	030, 026, 031
LXI	047, 026, 020, 027, 028, 025, 029
MAGNAVOX	051, 043, 044
MARANTZ	030, 031
MARTA	026
MEMOREX	044, 029
MGA	060, 067, 068, 061, 062
MINOLTA	020, 065
MULTITECH	067, 047
NEC	030, 031
OLYMPIC	044, 043
OPTIMUS	048, 041, 055, 026
ORION	046, 040
PANASONIC	043, 044, 041, 042
PENNEY	044, 020, 065, 025, 030, 031
PENTAX	020, 031, 065
PHILCO	051, 044, 047, 043, 046, 040, 063
PHILIPS	051, 043, 044
PIONEER	043
PROSCAN	065, 020, 043, 044, 051, 066, 021, 022, 053
QUASAR	041, 042, 043, 044
RADIO SHACK	053, 044, 025, 056, 029, 060, 047
RCA	020, 021, 022, 043, 044, 049, 051, 053, 065, 066
REALISTIC	044, 025, 056, 029, 060, 047
SAMSUNG	057, 022, 053
SANSUI	046, 040
SANYO	025, 029
SCOTT	021, 022, 029, 060, 067, 068, 046, 040
SEARS	025, 026, 027, 028, 020
SHARP	055, 056
SIGNATURE 2000	047, 055
SONY	048, 049, 050, 073, 074, 075
SV2000	047
SYLVANIA	051, 043, 044, 047
SYMPHONIC	047
TASHIRO	026
TATUNG	030, 031
TEAC	030, 047, 031
TECHNICS	041, 042, 043, 044
TEKNIKA	044, 047
TOSHIBA	021, 066
TOTEVISION	026
VECTOR RESEARCH	031
WARDS	055, 056, 029, 064, 026
YAMAHA	025, 030, 031
ZENITH	064, 026



# Appendix C: Remote Control Programming Codes, continued

### IMPORTANT

Some manufacturers may change their products, or they may use more than one remote control system. If this is the case, the HDTV receiver/controller remote control may not be able to operate your VCR, DVD, cable box, satellite receiver, or A/V receiver.

After entering the correct codes in each position of the remote control, use the slide switch to select which product will respond when an operational button is pressed. Only one of the below devices is allowed for each slide switch position.

TV position:

- Mitsubishi TVs

Cable/DBS/DTV position:

- HD-6000 HDTV receiver/controller
- NetCommand® controlled devices

DVD position:

- DVD player
- LD player

VCR position:

- VCR
- 

Audio position:

- A/V receiver
- DVD player
- Cable box

If you have a Mitsubishi A/V receiver, the audio position may be used in conjunction with select Mitsubishi CD players. Your audio position must be programmed to 010.

When your remote control has been programmed to operate another manufacturer's product, the function performed on each layer can vary. The most common functions are:

<p><b>VCR</b></p> <ul style="list-style-type: none"> <li>• POWER</li> <li>• CHANNEL up/down</li> <li>• PLAY</li> <li>• REC</li> <li>• PAUSE</li> <li>• STOP</li> <li>• FF/FWD</li> <li>• REW/REV</li> </ul> <p>Mitsubishi VCRs will be compatible with some additional buttons</p>
<p><b>Cable Boxes and Satellite Receivers</b></p> <ul style="list-style-type: none"> <li>• POWER</li> <li>• CHANNEL up/down</li> <li>• 0-9 number buttons (on some models)</li> <li>• ENTER (on some models)</li> <li>• CANCEL (on some models)</li> <li>• ADJUST up/down/ left/right (on some models)</li> <li>• GUIDE (on some models)</li> </ul>
<p><b>A/V Receivers</b></p> <ul style="list-style-type: none"> <li>• POWER</li> <li>• VOLUME</li> <li>• MUTE</li> </ul>
<p><b>Mitsubishi A/V Receivers</b></p> <ul style="list-style-type: none"> <li>• Direct Input Selection buttons: numbers, SQV and QV (on some models)</li> </ul>
<p><b>Mitsubishi CD Players</b> (not all functions for all models)</p> <ul style="list-style-type: none"> <li>• PLAY</li> <li>• FF/FWD</li> <li>• REW/REV</li> <li>• PAUSE</li> <li>• STOP</li> </ul>
<p><b>DVD and Laser Disc Players</b> (not all functions for all models)</p> <ul style="list-style-type: none"> <li>• POWER</li> <li>• MENU</li> <li>• 0-9 number buttons (on some models)</li> <li>• PLAY</li> <li>• STOP</li> <li>• ARROW up/down/left/right (on some models)</li> <li>• FF/FWD</li> <li>• REW/REV</li> <li>• PAUSE</li> <li>• CANCEL (on some models)</li> <li>• ENTER</li> <li>• CHANNEL (on some models)</li> </ul>

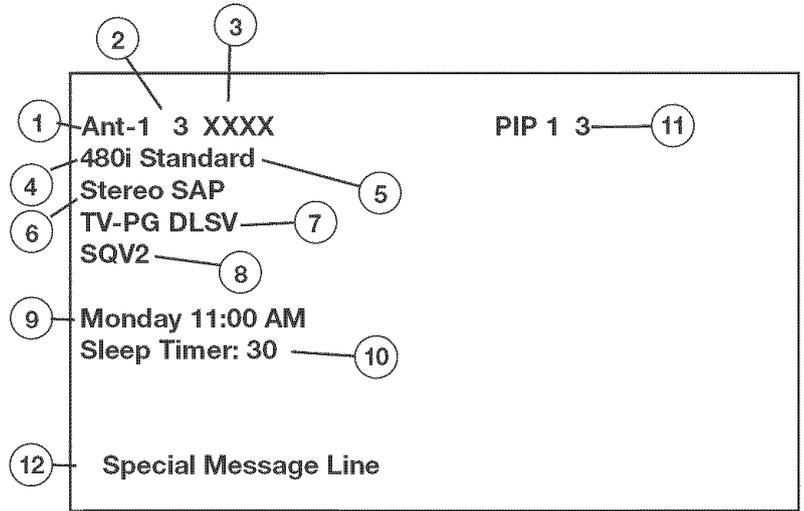
# Appendix D: On Screen Information Displays



When you turn on the HD-6000, change Devices, change Channels or when you press the INFO button on the remote control the HD-6000 will display the current status. Below are the most common displays; please note that seldom or never do all of the different status indicators appear at the same time.

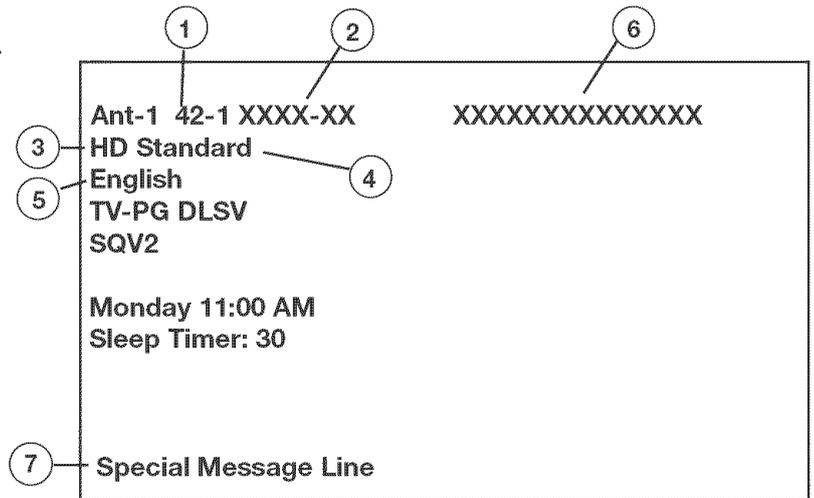
## Analog Program

1. Antenna or Device being viewed
2. Analog channel being received: If antenna being viewed
3. Channel name (if manually programmed)
4. Signal Type being received  
**Possible:**  
Ant-1, Ant-2 or Input 1, 2 – 480i  
Component 1, 2 – 480i, 480p, 720p or 1080i  
Inp-DTV – 480i, 480p, 720p or 1080i
5. Screen format being used  
**Possible:**  
Analog 480i/480p signals – Standard, Expand, Zoom, Stretch, Stretch Plus, Narrow  
720p/1080i signals - Standard, Wide Expand
6. Stereo and/or SAP being broadcast
7. V-Chip Ratings
8. Channel in SuperQuickView bank 2
9. Day and Time
10. Sleep Timer remaining time
11. PIP source and channel
12. Special Message Line  
(shows only when a special message is needed)



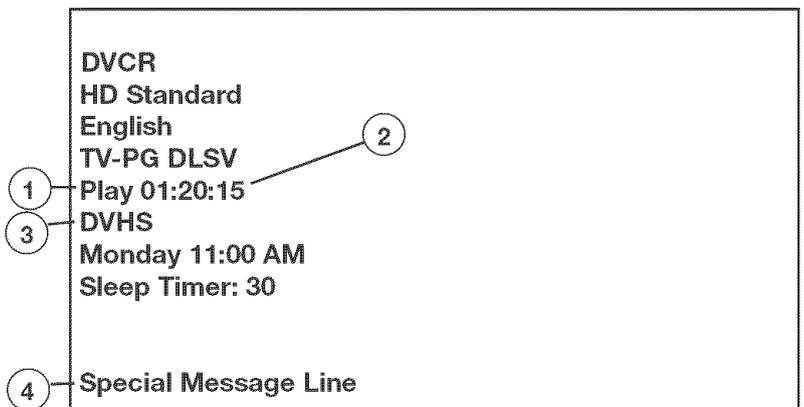
## Digital Program

1. Digital Major and Sub channel number
2. Digital Channel Name (only if broadcast)
3. Signal Type being broadcast/received  
**Possible:** SD 4:3, SD 16:9 or HD
4. Screen format being used  
**Possible:**  
SD 4:3 - Standard, Expand, Zoom, Stretch, Stretch Plus, Narrow  
SD 16:9 or HD - Standard, Wide Expand
5. Language(s) being broadcast
6. Program Name (if broadcast)
7. Special Message Line  
(shows only when a special message is needed)



## Digital IEEE 1394 Device

1. Status of D-VHS VCR or IEEE 1394 device
2. Counter of D-VHS VCR
3. Media type in D-VHS VCR
4. Special message line  
(shows only when a special message is needed; may be seen with Analog signals)





## Appendix E: NetCommand® Specialized Device Keys

A/V RECEIVER	CABLE or DBS	VCR	DVD	LEARNING SCREEN CHECKBOX NAME	FUNCTION	NAME ON TV REMOTE
X	X	X	X	Power*	Power On or Power On/Off	POWER**
X	X	X	X	Power (Off)*	Power Off	POWER**
X				Volume Up	Volume Up	VOL ▲
X				Volume Down	Volume Down	VOL ▼
X				Mute	Mute	MUTE
X				Analog to Digital*	Analog/Digital Switch	GUIDE**
X				Digital to Analog*	Digital/Analog Switch	GUIDE**
X				Input (1-7)	AVR Input Select	Automatic (when device is selected)
	X	X		Channel Up	Channel Scan Up	CHAN ▲
	X	X		Channel Down	Channel Scan Down	CHAN ▼
	X			Recall	Last Channel Recall	QV
	X		X	Guide	Guide	GUIDE
	X	X	X	Adjust Up	Arrow/ move Up	ADJUST ▲
	X	X	X	Adjust Down	Arrow/ move Down	ADJUST ▼
	X	X	X	Adjust Left	Arrow/ move Left	ADJUST ◀
	X	X	X	Adjust Right	Arrow/move Right	ADJUST ▶
	X	X	X	Enter	Enter/Select	ENT
	X	X	X	Menu	Device Menu or Setup Menu	DEVICE MENU
	X	X	X	Cancel	Cancel or Exit	CANCEL
	X	X	X	Info	Status Information Display	INFO
	X			Page Up	Guide Page Up	CHAN ▲ ***
	X			Page Down	Guide Page Down	CHAN ▼ ***
	X	X	X	Play	Play	PLAY
	X	X	X	Stop	Stop	STOP
	X	X	X	Forward	Fast Forward/Fwd Search	FF
	X	X	X	Rewind	Rewind/Reverse Search	REW
	X	X	X	Pause	Pause	PAUSE
	X	X	X	Record	Record	REC
	X	X	X	Enter (digits)†	Enter for channel numbers	ENT
	X	X	X	Low Speed Out*	LowSpeed 480i out	FORMAT**
	X	X	X	High Speed Out*	Hi Speed 480p/1080i out	FORMAT**
	X	X	X	1,2,3,4,5,6,7,8,9,0	1,2,3,4,5,6,7,8,9,0	1,2,3,4,5,6,7,8,9,0
	X	X		Input	Input Change	GUIDE**
		X		Sub channel separator‡	Digital Sub channel	CANCEL
			X	Chapter +	Chapter Skip Forward	CHAN ▲
			X	Chapter -	Chapter Skip Reverse	CHAN ▼

\* These are paired functions (e.g. Power and Power Off). When the original remote control uses a single button for both functions, learn only the first of the paired functions.

† If there are two Enter keys, learn the Enter key used for channel selection here. The ENT button on the remote sends the correct IR code when digits are entered.

‡ Learn the subchannel separator if a special key is used to add a separator (dash or dot) in a digital channel. Press the CANCEL button on the remote to add the separator

\*\* This function is performed only when the Device Selection Menu is displayed and the device icon is highlighted.

\*\*\* Channel Up/Down as Guide Page Up/Down happens only after pressing GUIDE and returns to channel functions after pressing ENTER or CANCEL.



## Cleaning

Normally, light dusting with a dry, non-scratching duster will keep your HDTV Receiver clean. If cleaning beyond this is needed, please use the following guidelines:

**First, turn off the HDTV Receiver and unplug the power cord from the power outlet.**

### Front, Top and Sides of the HDTV Receiver:

- Gently wipe down your HDTV Receiver with a soft, non-abrasive cloth such as cotton flannel or a clean cloth diaper, lightly moistened with water. Dry with a second dry, soft, non-abrasive cloth.
- For oily dirt, add a few drops of mild liquid detergent, such as dishwashing detergent to the water used to moisten the cloth. Rinse with a second cloth moistened only with water. Dry with a third dry, soft, non-abrasive cloth.

### General Cleaning Warnings:

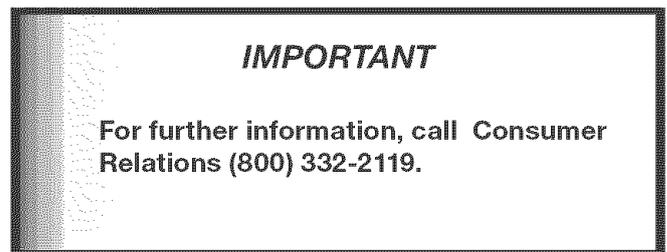
- DO NOT allow liquid to enter the HDTV Receiver through the ventilation slots or any crevice.
- DO NOT use any strong or abrasive cleaners as these can scratch the surfaces.
- DO NOT use any cleaners with ammonia, bleach, alcohol, benzine, or thinners as these can dull the surfaces.
- DO NOT spray liquids or cleaners directly on the HDTV Receiver's surfaces.
- DO NOT scrub or rub the HDTV Receiver harshly. Wipe it gently.

## Service

If you are unable to correct a problem with your HDTV Receiver, consult your Mitsubishi dealer or a Mitsubishi Authorized Warranty Service Center.

- DO NOT adjust any controls other than those described in this Owner's Guide.
- DO NOT remove the protective cover of your HDTV Receiver.

**Menus not described and shown in this owner's guide are designed for Factory use and for Authorized Service Personnel. Damage caused to the HDTV Receiver by non-authorized changes or changes to these menus made by non-authorized persons are not covered under warranty.**





# Appendix G: Input Sources and Scan Rates

## HDMI/DVI Monitor Output Scan Rate

Input Signal Source	Copy Protection	HDCP 1080i Monitor	Non-HDCP 1080i Monitor	HDCP 720p Monitor	Non-HDCP 720p Monitor	HDCP 480p Monitor	Non-HDCP 480p Monitor
<b>ANALOG</b>							
480i signals from Ant-1, Ant-2, Input- 1, 2	none	1080i	1080i	720p	720p	480p	480p
480i signals from Ant-1, Ant-2, Input- 1, 2	yes	1080i	none	720p	none	480p	none
480i, 480p signals from Component 1 & 2	none	1080i	1080i	720p	720p	480p	480p
480i, 480p signals from Component 1 & 2	yes	1080i	none	720p	none	480p	none
480i, 1080p component signals from Input DTV	none	1080i	1080i	720p	720p	480p	480p
480i , 480p component signals from Input DTV	yes	1080i	none	720p	none	480p	none
480i, 480p, 1080i, 720p RGBHV signals from Input DTV	none	1080i	1080i	720p	720p	480p	480p
1080i, 720p component signals from Input DTV or Component 1, 2	does not apply	1080i	1080i	720p	720p	480p	480p
<b>DIGITAL</b>							
480i or 480p signals from Ant-1 or IEEE 1394	none	1080i	1080i	720p	720p	480p	480p
480i or 480p signals from Ant-1, Ant-2 or IEEE 1394	yes	1080i	none	720p	none	480p	none
720p signals from Ant-1, Ant-2 or IEEE 1394	none	1080i	1080i	720p	720p	480p	480p
720p signals from Ant-1, Ant-2 or IEEE 1394	yes	1080i	none	720p	none	480p	none
1080i signals from Ant-1, Ant-2 or IEEE 1394	none	1080i	1080i	720p	720p	480p	480p
1080i signals from Ant-1, Ant-2 or IEEE 1394	yes	1080i	none	720p	none	480p	none
HDMI input	yes or none	1080i	none	720p	none	480p	none

## YPbPR or HD Monitor Output Scan Rate

Input Scan Rate	Input Signal Source	Copy Protection	1080i Monitor	720p Monitor	480p Monitor
<b>ANALOG</b>					
	480i signals from Ant-1, Ant-2, Input- 1, 2	none	1080i	720p	480p
	480i signals from Ant-1, Ant-2, Input- 1, 2	yes	none	none	480p
	480i, 480p signals from Component 1 & 2	none	1080i	720p	480p
	480i, 480p signals from Component 1 & 2	yes	none	none	480p
	480i, 1080p component signals from Input DTV	none	1080i	720p	480p
	480i , 480p component signals from Input DTV	yes	none	none	480p
	480i, 480p, 1080i, 720p RGBHV signals from Input DTV	none	1080i	720p	480p
	1080i, 720p component signals from Input DTV or Component 1, 2	does not apply	1080i	720p	480p
<b>DIGITAL</b>					
	480i or 480p signals from Ant-1 or IEEE 1394	none	1080i	720p	480p
	480i or 480p signals from Ant-1, Ant-2 or IEEE 1394	yes	none	none	480p
	720p signals from Ant-1, Ant-2 or IEEE 1394	none	1080i	720p	480p
	720p signals from Ant-1, Ant-2 or IEEE 1394	yes	none	none	480p
	1080i signals from Ant-1, Ant-2 or IEEE 1394	none	1080i	720p	480p
	1080i signals from Ant-1, Ant-2 or IEEE 1394	yes	none	none	480p
	HDMI input	yes or none	480p	480p	480p

## Video Output VCR or Non-HD Monitor Output Scan Rate

Input Scan Rate	Input Signal Source	Copy Protection	Video Output VCR or Non-HD Monitor
<b>ANALOG</b>			
	480i signals from Ant-1, Ant-2, Input- 1, 2	yes or none	480i
	480p signals from Component 1 & 2	yes or none	none
	480i or 480p RGBHV signals from Input DTV	yes or none	none
	1080i component signals from Input DTV	does not apply	none
	1080i RGBHV signals from Input DTV	does not apply	none
<b>DIGITAL</b>			
	480i or 480p signals from Ant-1, Ant 2 or IEEE 1394	none	480i
	480i or 480p signals from Ant-1, Ant 2 or IEEE 1394	yes	480i
	720p signals from Ant-1, Ant 2 or IEEE 1394	none	480i
	720p signals from Ant-1, Ant 2 or IEEE 1394	yes	480i
	1080i signals from Ant-1, Ant 2 or IEEE 1394	none	480i
	1080i signals from Ant-1, Ant 2 or IEEE 1394	yes	480i

# Troubleshooting

	Problem	Possible Solution
1.	The HD-6000 remote control does not work.	<ul style="list-style-type: none"> <li>• Check that the batteries are installed correctly.</li> <li>• Check that the selected switch is set to CABLE/DBS/DTV.</li> <li>• Be within 20 feet of the HD-6000 when using the remote control.</li> <li>• Program the remote control to operate the HD-6000 (Appendix C).</li> </ul>
2.	The HD-6000 takes several seconds to respond.	<ul style="list-style-type: none"> <li>• It is normal for digital channels to take longer to tune in.</li> <li>• Press ENTER after a channel number to avoid delays.</li> <li>• Use a 4 digit number for an over-the-air digital channel</li> <li>• Use a 6 digit number for cable digital channels</li> </ul>
3.	Cable provider needs information to start CableCARD™ service.	<ul style="list-style-type: none"> <li>• On the remote control, press TV MENU and then enter the numbers 999 to display the Host ID and CableCARD™ ID information.</li> </ul>
4.	You cannot access a channel.	<ul style="list-style-type: none"> <li>• Use number keys instead of CHANNEL up/down.</li> <li>• Be sure the channel you want to view is in memory. See page 72.</li> <li>• Check that the HD-6000 is turned to the correct device or antenna for that channel, by pressing the DEVICE button.</li> <li>• Make sure the V-Chip lock is off.</li> <li>• If tuned to digital channels, have physical channel in memory.</li> </ul>
5.	On-screen displays appear each time you change a function.	<ul style="list-style-type: none"> <li>• This is part of normal the HD-6000's operation.</li> </ul>
6.	You cannot program the HD-6000 to turn on automatically (timer function)	<ul style="list-style-type: none"> <li>• The HD-6000 may be locked.</li> <li>• The clock may not be set.</li> </ul>
7.	There is no sound even when the volume is turned up.	<ul style="list-style-type: none"> <li>• Check audio source in Device Menu.</li> <li>• Check to see if the MUTE button is on.</li> <li>• The HD-6000's "Listen to:" setting may be set to SAP.</li> <li>• If you are listening through a DVI device, check that the analog audio has been connected to the HD-6000 and your DVI device.</li> </ul>
8.	NetCommand unable to learn specific device keys.	<ul style="list-style-type: none"> <li>• Device does not use IR format for remote control signal. ITT and RF formats cannot be learned.</li> <li>• Room lighting may affect the signal. Have the remotes very close (6 inches or less) to the HD-6000 during Learning.</li> <li>• If using a Mitsubishi remote control, make sure the slide switch is not set to the CABLE/DBS/DTV position.</li> <li>• Some but not all device key functions can be learned by NetCommand. For example, POWER and PLAY may be learned, but other functions may not.</li> <li>• The signal from the remote control may not be strong enough. Insert fresh batteries and try Learning again.</li> </ul>
9.	You have forgotten your V-Chip passcode.	<ul style="list-style-type: none"> <li>• See Appendix A, Bypassing the V-Chip Lock.</li> </ul>
10.	PIP does not display a picture.	<ul style="list-style-type: none"> <li>• Make sure the V-Chip lock is off.</li> <li>• Not all inputs can be displayed as a PIP.</li> </ul>
11.	Digital channels do not appear in PIP.	<ul style="list-style-type: none"> <li>• Normal PIP operation.</li> </ul>
12.	Not all channels appear in multiple PIP/POP.	<ul style="list-style-type: none"> <li>• Digital channels do not display in PIP/POP.</li> </ul>
13.	The sound does not match the screen picture.	<ul style="list-style-type: none"> <li>• NetCommand® is setup incorrectly.</li> <li>• The HD-6000's "Listen to:" setting may be set to SAP.</li> <li>• If using stereo or A/V receiver speakers, check their input selection.</li> <li>• If using stereo or A/V receiver, check that AUDIO 2 of MONITOR OUTPUT on HD-6000's back panel is connected to the A/V receiver.</li> </ul>
14.	There is a large black or gray rectangle on the screen.	<ul style="list-style-type: none"> <li>• The HD-6000's analog closed captioning has been set to "text" mode in the Captions menu. Turn off because there is no text information being broadcast.</li> </ul>
15.	You cannot see a picture when playing a VHS tape.	<ul style="list-style-type: none"> <li>• Display the Device Selection menu and select the correct VCR.</li> <li>• Check your VCRs owner's guide for further trouble shooting.</li> </ul>
16.	V-Chip is not working.	<ul style="list-style-type: none"> <li>• Make sure that V-Chip is On.</li> <li>• If V-Chip Hours are currently set to disable the V-Chip lock, the V-Chip will not block programming.</li> </ul>
17.	The HD-6000 will not turn on after being plugged in.	<ul style="list-style-type: none"> <li>• If blue light on front panel is blinking, wait for at least one minute for the light to turn off, then press Power again.</li> </ul>

## Troubleshooting, continued

Problem	Possible Solution
18. HD-6000 functions do not respond to the remote control or to front panel control and will not Power Off.	<ul style="list-style-type: none"> <li>• Use the System Reset button as explained at the end of this section.</li> </ul>
19. Name options not available for some channels	<ul style="list-style-type: none"> <li>• Only memorized analog channels can be named.</li> </ul>
20. When viewing a stopped VCR, white lines are rolling on the screen.	<ul style="list-style-type: none"> <li>• Turn off video mute for the VCR.</li> <li>• Begin playing the tape.</li> <li>• Change the VCR input to the antenna input.</li> </ul>
21. HD-6000 turned itself Off and the light on the front panel started to blink.	<ul style="list-style-type: none"> <li>• Momentary power fluctuation caused the HD-6000 to turn off to prevent damage. Wait for the blue light to stop flashing and turn On again.</li> <li>• If the HD-6000 does not stay turned On, use the System Reset button. If this happens frequently, obtain an AC line power conditioner/surge protector.</li> </ul>
22. When a Device is selected from the Device Selection menu, the screen is blue (no signal source).	<ul style="list-style-type: none"> <li>• Make sure the selected device is turned on.</li> <li>• From the Edit NetCommand® menu select Review. Verify that the inputs are actually connected to the HD-6000 . If they are not, either change the physical connections on the back panel, or select the Change on the Edit NetCommand menu to change the HD-6000 NetCommand's settings for the connection or connection screen for each device.</li> </ul>
23. The Device does not respond to button presses from the remote.	<ul style="list-style-type: none"> <li>• Remote has not been setup for NetCommand® use.</li> <li>• The incorrect manufacturer was selected during setup. Select the Change setting from the Setup menu and then the device to display the manufacturer selection. Change if necessary.</li> <li>• The device is not supported and keys have not been learned.</li> <li>• The requested function is not supported by NetCommand. Verify that the function is supported or keys are learned.</li> <li>• The IR emitter is incorrectly placed. Make sure the IR emitter is facing the IR sensor in the device.</li> <li>• The IR emitter is not plugged into the IR emitter Output NetCommand.</li> <li>• The IR emitter is facing the HD-6000, causing double signals. Be sure that the IR emitter cannot send to the HD-6000.</li> </ul>
24. The A/V Receiver is the selected audio source but there is no sound.	<ul style="list-style-type: none"> <li>• Check to see if the A/V Receiver power is turned on. After the power is turned on, redisplay the Device Selection menu and press ENTER to allow NetCommand to correctly select the A/V Receiver input.</li> <li>• From the NetCommand Menu select Review. Check the Review screen to see if the A/V Receiver inputs and device correspond to the actual connections on the A/V Receiver. If they do not match, either change the actual connections, or select Change on the Edit NetCommand menu to change the input on the Connection screen.</li> </ul>
25. The TV Speaker icon or A/V Receiver icon is grayed out and not selectable.	<ul style="list-style-type: none"> <li>• Select the Change setting from the Edit NetCommand menu, and then select the device (for example VCR). Once the Connection screen is displayed, check if the audio checkbox is selected for the TV input and/or AVR input.</li> </ul>
26. Devices are grayed out in the Device Selection menu or the PIP Selection menu.	<ul style="list-style-type: none"> <li>• A recording is in progress requiring the use of Monitor Out. Cancel the recording to select the device.</li> <li>• Digital channels and media cards cannot display in the PIP or POP.</li> </ul>
27. Cannot see the A/V Receiver menu.	<ul style="list-style-type: none"> <li>• The A/V Receiver is not connected to any input of the HD-6000. To check the A/V Receiver menu temporarily plug into an unused input of the HD-6000. Then select Review from the NetCommand Menu, turn the input On to view the A/V Receiver menu.</li> </ul>
28. Screen is black when trying to view digital channels or IEEE 1394 device.	<ul style="list-style-type: none"> <li>• The PerfectColor™ color balance has been incorrectly set. Use the Setup menu to reset the color balance.</li> </ul>

# Troubleshooting, continued

	Problem	Possible Solution
29.	The REC button is not working, or, on the Transport menu the record key is grayed out and not available.	<ul style="list-style-type: none"> <li>• The device does not support recording, such as a DVD player.</li> <li>• Recordings can not be initiated from the Transport menu when using an IEEE 1394 device. Press REC instead. The Record menu displays allowing setup of a recording.</li> </ul>
30.	A program recorded on your HD-6000 is distorted when played on a 4:3 TV.	<ul style="list-style-type: none"> <li>• HD-6000 was set to Anamorphic when program was recorded. Record programs in Cropped mode if playing back on a 4:3 TV.</li> </ul>
31.	Excessive digital artifacts.	<ul style="list-style-type: none"> <li>• The IEEE 1394 cable is too long (15 feet between devices is the maximum length).</li> <li>• There may be a slow device in the middle of the IEEE 1394 network. Move the slow devices to the end so that connections for faster devices do not pass through them.</li> </ul>
32.	DVCR analog/digital problems.	<ul style="list-style-type: none"> <li>• If the tape is currently playing but no picture displays, there may be a mismatch of the media with the display. Press DEVICE to display the Device Selection menu. Press ENTER for the DVCR device. If digital is selected, try analog, or if analog is selected, try digital.</li> </ul>
33.	D-VHS recordings for digital cable have drop-outs (loss of picture or sound), or no playback.	<ul style="list-style-type: none"> <li>• Digital cable signals on IEEE 1394 can exceed the data rate standards supported by DVCR.</li> </ul>
34.	There is no audio and video from the IEEE 1394 device.	<ul style="list-style-type: none"> <li>• The device is not turned on - turn the device power on.</li> <li>• No media (tape or disc) is inserted into the device.</li> <li>• The media is blank (has no recording).</li> <li>• The play command failed - Try pressing play again on the device's remote control or front panel.</li> <li>• The device is already in use (for example: the device is currently recording).</li> <li>• The source is copy-protected or violates copy protection.</li> <li>• The device's digital video signal is not supported by the TV, such as DV video, common with camcorders. Use analog connections instead, if available.</li> <li>• The device is not an audio/video device.</li> <li>• Too many other devices are already communicating over IEEE 1394. Remove or stop some devices and try again.</li> </ul>
35.	The IEEE 1394 Device is not listed in the Device Selection menu.	<ul style="list-style-type: none"> <li>• The device is unchecked in the Review screen. Select the NetCommand menu. Through Review, verify the device is checked.</li> <li>• The IEEE 1394 plug is disconnected or loose.</li> <li>• The IEEE 1394 Device has not been powered On. Turn on.</li> <li>• The device has not been discovered.</li> <li>• The device is not an Audio/Video device</li> </ul>
36.	The IEEE 1394 device cannot be selected.	<ul style="list-style-type: none"> <li>• The device may be busy, either recording or a peer-to-peer connection has been established. Cancel the recording or peer-to-peer connection.</li> </ul>
37.	DEVICE MENU button does not display a menu.	<ul style="list-style-type: none"> <li>• The IEEE 1394 device does not provide a menu.</li> <li>• The TV cannot support IEEE 1394 menus. See page 46.</li> </ul>
38.	All IEEE 1394 devices disappear.	<ul style="list-style-type: none"> <li>• The connected devices must not be in a loop that returns to the HD-6000. Make sure a device is connected at the end.</li> <li>• Disconnect all the cables and devices from the TV. Replace them one by one to locate the problem device or cable.</li> <li>• Use System Reset (front control panel).</li> </ul>
39.	Cannot rediscover a deleted IEEE 1394 device	<ul style="list-style-type: none"> <li>• The device has been disconnected. Plug it in.</li> <li>• The device is unchecked in the Review screen. Select NetCommand from the Main menu, then select Review. Check the device.</li> <li>• Remove IEEE 1394 plug. Go to the Edit NetCommand menu. Delete the IEEE 1394 device. Plug the device in again so it can be discovered again.</li> </ul>

# Troubleshooting, continued

	Problem	Possible Solution
40.	An IEEE 1394 device has been plugged in but does not appear in the Device Selection menu (not discovered).	<ul style="list-style-type: none"> <li>• The IEEE 1394 connection to the HD-6000 or another device is not secure or is loose.</li> <li>• The IEEE 1394 device is not powered on.</li> <li>• A device in the IEEE 1394 chain is not powered on - turn on all the devices.</li> <li>• The device discovery can take as long as a minute to initiate.</li> <li>• IEEE 1394 cable is too long (maximum of 15 feet between devices).</li> <li>• The IEEE 1394 device uses an incompatible protocol and will not be discovered</li> </ul>
41.	Cannot record to or from the IEEE 1394 device, including Dub recordings.	<ul style="list-style-type: none"> <li>• To initiate a recording to IEEE 1394 device press the REC key. The Record menu displays allowing setup of the recording.</li> <li>• The source device for the recording is not powered on.</li> <li>• When dubbing, the destination device for the recording is not powered on.</li> <li>• The wrong media, (analog tape for digital recording, or digital tape for the analog recording) is in the device.</li> <li>• Either the program is copy protected, or if there are multiple subchannels and one of the programs (not necessarily the program requested) is copy protected.</li> <li>• The program has already been recorded once and the copy protection only allows one recording.</li> <li>• Unapproved source device for copy protected material.</li> <li>• The recording device can not decode the copyright signal included in the signal source (try another device if available).</li> <li>• The playing device (for dubbing) does not support copyrighted material.</li> <li>• Source for recording is copyrighted.</li> <li>• Too many IEEE 1394 devices in network. Insufficient bandwidth available. Disconnect unused devices.</li> <li>• Source Device has higher speed (S 400) than record device. If possible, reverse devices, play in the slower device and record in the faster device.</li> </ul>
42.	Cannot control the IEEE 1394 device from the Transport Menu.	<ul style="list-style-type: none"> <li>• Device may not support the command.</li> <li>• Selected function is gray (such as Record for a DVD, which does not support the Record function).</li> </ul>
43.	When ChannelView™ list is displayed, information appears incomplete	<ul style="list-style-type: none"> <li>• Available information is sent from the broadcaster or cable provider. No other data is available.</li> </ul>
44.	Program to be recorded was correctly selected from ChannelView, however, incorrect program was recorded.	<ul style="list-style-type: none"> <li>• The broadcaster supplied program information that was incorrect and/or was changed after a recording was added to the Record List.</li> </ul>
45.	Incomplete ChannelView program recorded.	<ul style="list-style-type: none"> <li>• Recording device may have lack of space availability and there is not enough blank space to make a full recording.</li> </ul>
46.	ChannelView program recording failed.	<ul style="list-style-type: none"> <li>• Connection and compatibility issues with IEEE 1394 (FireWire®) digital devices. This may include too many Firewire devices in use at one time, or the recording device not understanding the record command.</li> <li>• HD-6000 lost power long enough to lose current clock time.</li> <li>• Analog VCR power was left Off.</li> </ul>
47.	HD-6000 is not responding, after pulling out a Memory card during playback with the LT-4260.	<ul style="list-style-type: none"> <li>• Press STOP or wait until playback is complete before removing media card.</li> </ul>
48.	Can't see a thumbnail picture in the JPEG menu, or can't see a track/song name in the Playlist menu.	<ul style="list-style-type: none"> <li>• File does not meet file standards for playback.</li> </ul>
49.	See on screen message "TV Disc is full..."	<ul style="list-style-type: none"> <li>• Some recording(s) on the Track List need to be deleted. Press DEVICE to display the Device Selection menu, then select TV Disc. Press GUIDE to display the track list. Highlight program(s) to delete and press CANCEL twice to confirm.</li> </ul>

## Troubleshooting, continued

Problem	Possible Solution
50. TV PAUSE does not start when the PAUSE key is pressed.	<ul style="list-style-type: none"><li>• If there is a full screen pause without a slider appearing, then TV Pause is off. Go to the Setup menu and change the TV Pause setting from Off to Always or On Request. Press Pause.</li><li>• TV Pause needs to be restarted. Press DEVICE to display the Device Selection menu and press ENTER. Press Pause.</li><li>• Power the HD-6000 off and then on. Press Pause.</li><li>• Can't use TV Pause while recording an analog program.</li><li>• See Reset Menu instructions at the end of the Troubleshooting guide.</li><li>• TV Pause is not available when PIP/POP is displayed.</li></ul>
51. When viewing a PC screen on the LT-4260 with PC Power Saver turned On, the LT-4260 and HD-6000 turn off.	<ul style="list-style-type: none"><li>• Turn the PC Power Saver to Off, to prevent the LT-4260 and HD-6000 turning off.</li></ul>

### Using The System Reset Button

If the HD-6000 doesn't respond to either the remote control or the front panel controls or will not power off, press the SYSTEM RESET button on the front panel with a pointed item such as the point of a ball point pen or end tip of a paperclip.

The HD-6000 will turn off and the blue led will flash quickly for about one minute. When the blue led stops flashing, you may turn on the HD-6000 again. The changes you made while the HD-6000 was most recently on, before you used the SYSTEM RESET button may be lost, however, the changes you made previously are not lost. Only those changes since the last power On may be lost when the system reset button is pressed. All other settings are retained.

### Using the Reset Menu for Reset of the HD-6000 or TV Disc

Press TV menu followed by 1,2,3 to see the RESET SERVICE MENU to reset the HD-6000 or TV Disc. Select a device other than TV Disc before using this menu.

#### Read on-screen warnings before proceeding, as some user data or settings may be erased.

Your choices are:

1. Reset System Defaults (**CAUTION:** All settings, except V-Chip, will be reset to the original factory defaults).
- or
2. Erase TV Disc (**CAUTION:** Track List will be cleared).
3. Reformat TV Disc (**CAUTION:** Track List will be cleared).
4. Reset TV Disc (Track List will not be affected).

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### 1. TO OBTAIN WARRANTY SERVICE:

a. Return your HDTV receiver/controller to your nearest authorized MITSUBISHI service center whose name and address can be obtained from your MITSUBISHI dealer, by writing at the address provided below, calling MDEA at the 800-332-2119, or by using the support feature of our website at [www.mitsubishi-tv.com](http://www.mitsubishi-tv.com).

b. Proof of purchase date from an authorized MITSUBISHI dealer is required when requesting warranty service. Present your sales receipt or other document which establishes proof and date of purchase. THE RETURN OF THE OWNER REGISTRATION CARD IS NOT A CONDITION OF WARRANTY COVERAGE. However, please return the Owner Registration Card so that we can contact you should a question of safety arise which could affect you.

2. THIS WARRANTY DOES NOT COVER cosmetic damage or damage to any other product where such damage is caused by unauthorized modification, alteration, repairs to or service of the product by anyone other than an authorized MITSUBISHI service center; physical abuse to or misuse of the product (including any failure to carry out any maintenance as described in the Owner's Guide or any product damaged by excessive physical or electrical stress); any products that have had a serial number or any part thereof altered, defaced or removed; product use in any manner contrary to the Owner's Guide (including uneven picture tube aging and imprinted images on the viewing screen of connected display monitors); freight damage; or any damage caused by acts of God or other factors beyond the reasonable control of MDEA, such as power surge damage caused by electrical system or lightning. This warranty also excludes service where no defect in the product covered under this warranty is found, service related to unsatisfactory audio or visual reception or signal unless caused a defect in the product that is covered under this warranty, all costs, expenses or any other damages arising from product installation, or set-ups, any adjustments of user controls (including contrast, brightness, color, tint, fine tuning, sharpness), other adjustment necessary to prepare the unit for display or use, connection with any external audio receiver, antenna, cable or satellite systems, or service of products purchased or serviced outside the U.S.A. Please consult the operating instructions contained in the Owner's Guide furnished with the product for information regarding user controls.

3. ANY EXPRESS WARRANTY NOT PROVIDED HEREIN, AND ANY REMEDY WHICH, BUT FOR THIS PROVISION, MIGHT ARISE BY IMPLICATION OR OPERATION OF LAW, IS HEREBY EXCLUDED AND DISCLAIMED. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE ARE EXPRESSLY LIMITED TO A TERM OF ONE YEAR.

4. UNDER NO CIRCUMSTANCES SHALL MDEA BE LIABLE TO PURCHASER OR ANY OTHER PERSON FOR ANY INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES, WHETHER ARISING OUT OF BREACH OF WARRANTY, BREACH OF CONTRACT, OR OTHERWISE.

5. Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental, special or consequential damages, so the above limitations or exclusions may not apply to you.

6. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

In no event shall Mitsubishi have any liability, including without limitation, for general, consequential, incidental, or special damages for loss, destruction, damage or corruption of recorded data, media or software resulting from use of this television, or cost of recovery of lost data, media or software therefore.



**Website:**

[www.mitsubishi-tv.com](http://www.mitsubishi-tv.com)

**Email:**

[MDEAservice@mdea.com](mailto:MDEAservice@mdea.com)

**To order replacement or  
additional remote controls or  
Owner's Guides, call  
800-553-7278**

**For questions, call Consumer  
Relations at  
800-332-2119**