

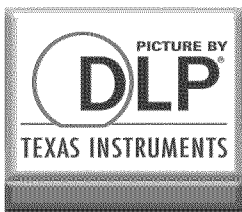


3D DLP® HOME-CINEMA TELEVISION MODELS

642 Series C12 Series

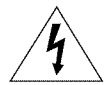
SUPPLEMENTAL OWNER'S GUIDE

- For questions:
 - Visit our website at www.mitsubishi-tv.com.
 - E-mail us at TVsupport@mevsa.com.
 - Call Consumer Relations at 800-332-2119 for operational or connection assistance.
- For information on **System Reset**, please see the back cover.
- To order replacement or additional remote controls or lamps, visit our website at www.mitsuparts.com or call 800-553-7278.
- MEVSA recommends that you use only genuine Replacement Lamp Assemblies purchased directly from Mitsubishi or a Mitsubishi Authorized Dealer or a Mitsubishi Authorized Service Center. See page 28 for complete instructions.



642 Series only





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 of sufficient magnitude to constitute a risk of electric shock to persons.



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 product.

MAINS DISCONNECTION: The mains plug is used as the disconnect device. The mains plug shall remain readily operable.

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

This apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

Cet appareil ne doit pas être exposé à des gouttes ou à des éclaboussures et aucun objet rempli d'un liquide, comme un vase, ne doit être placé sur l'appareil.

WARNING: This product contains chemicals known to the State of California to cause cancer and/or birth defects or other reproductive harm.

TV WEIGHT: This TV is heavy. Exercise extreme care when lifting or moving it. Lift or move the TV with a minimum of two adults. To prevent damage to the TV, avoid jarring or moving it while it is turned on. Always power off your TV, unplug the power cord, and disconnect all cables before moving it.

CAUTION: When selecting a stand, base, or other furniture to support the TV, please make sure it is designed with the appropriate dimensions for stability and to support the TV's weight plus the weight of any additional equipment you plan to store.

Custom cabinet installation must allow for proper air circulation around the television.

TV Software

Do not attempt to update the software of this TV with software not provided by or authorized Mitsubishi Electric Visual Solutions America, Inc. Non-authorized software may damage the TV and will not be covered by the warranty.

FCC Declaration of Conformity

Product: Projection Television Receiver
Models: WD-73642
WD-82642
WD-73C12
WD-82C12
Responsible Party: Mitsubishi Electric Visual Solutions America, Inc.
9351 Jeronimo Road
Irvine, CA 92618-1904
Telephone: 1 (800) 332-2119

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.

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

Children and TV Viewing

The American Academy of Pediatrics discourages media use by children younger than two years. For more information, visit www.aap.org <<http://www.aap.org/>>.

Note: Features and specifications described in this owner's guide are subject to change without notice.

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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.

Mitsubishi Electric Visual Solutions America and the Environment

As part of its ongoing environmental efforts, Mitsubishi Electric Visual Solutions America, Inc. (MEVSA) joined the Electronic Manufacturers Recycling Management Company's (MRM) national recycling initiative. Your MEVSA TV can be recycled at no charge to the consumer through MRM's growing infrastructure of drop-off locations around the United States.

We encourage all of our customers to recycle their used electronics. All waste computer monitors, portable computers, digital picture frames, televisions, portable DVD players, desktop printers, VCRs, and video game consoles should be recycled.

For a listing of MRM recycling drop-off locations, please visit www.MRMrecycling.com. MRM can also be reached toll free at 1-888-769-0149

For more information about Maine's electronic waste law, please visit the Maine Department of Environmental Protection website at www.maine.gov/dep/rwm/ewaste/index.htm.

For other states please check your state or local government web sites for more information about local laws and recycling options.

Lamp Replacement

For lamp-replacement instructions, see Appendix A.

To Order a Replacement Lamp Under Warranty

Visit our website www.mitsuparts.com or call (800) 553-7278. Please have television model number, serial number, and proof of purchase available.

To Order a Replacement Lamp After Warranty

Visit our website at www.mitsuparts.com or call (800) 553-7278. Please have the television model number available. Order new lamp part number **915B455012**.

For assistance call 1(800) 332-2119

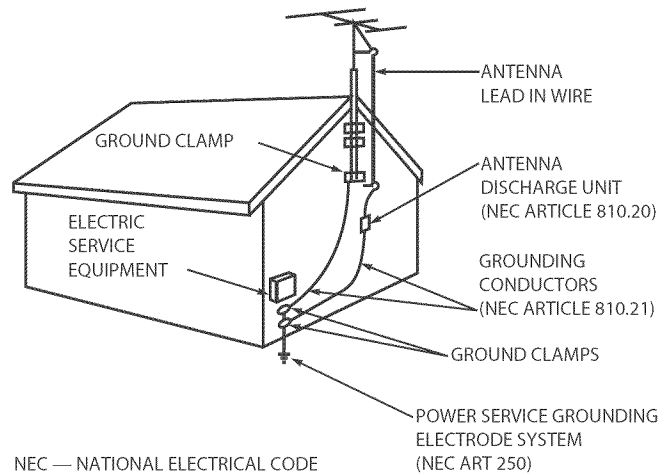
Important Safety Instructions

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

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



EXAMPLE OF ANTENNA GROUNDING



Outdoor Antenna Grounding

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

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.

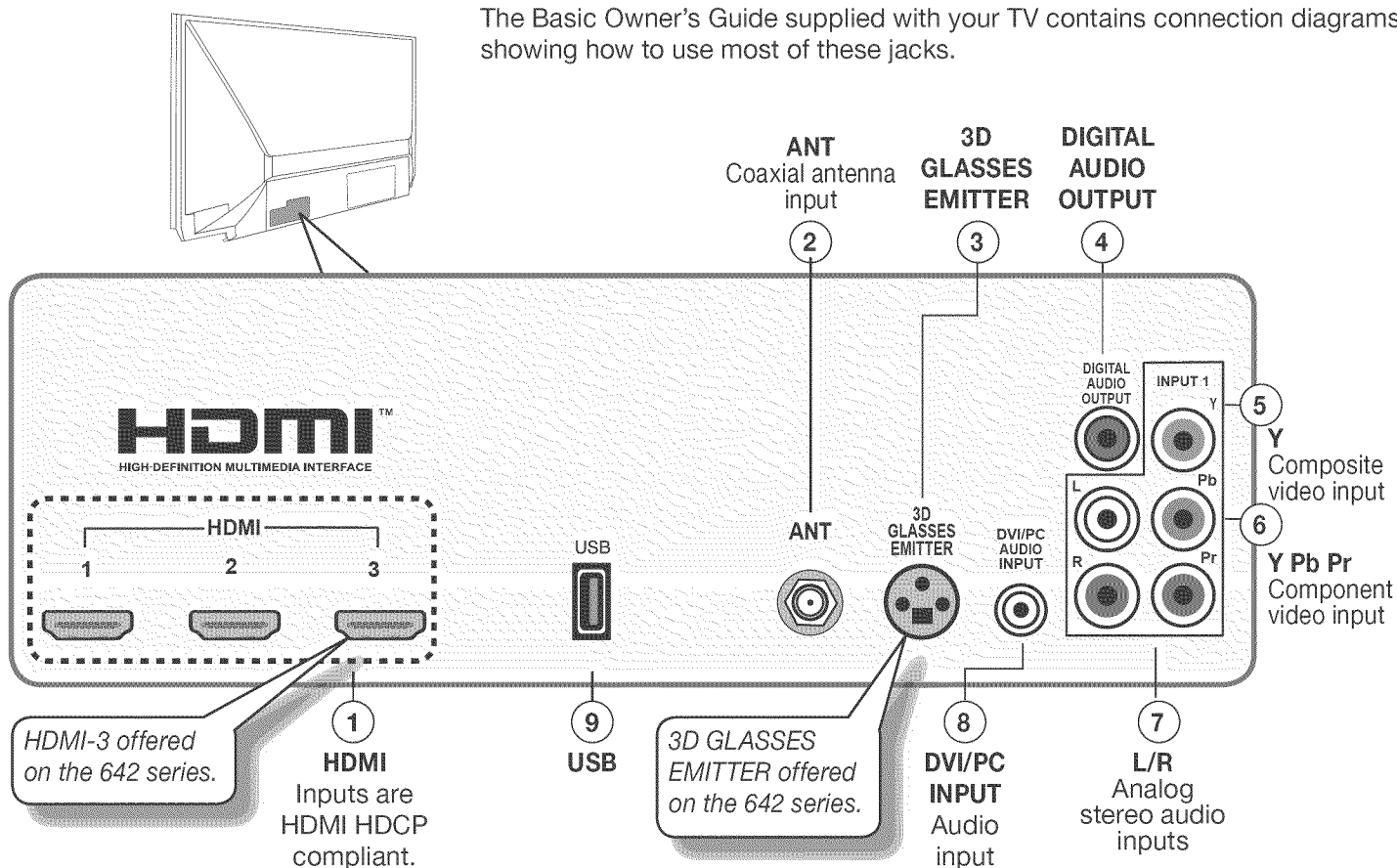
To avoid the risk of injury to the eyes and face, do not look directly into the air vents while the television is operating.

To avoid the risk of fire, do not use flammable solvents (such as benzene or paint solvents) or flammable aerosols (such as polishes, cleaners, or insecticides) near the television while it is operating or cooling.

1 Additional TV Features

Supplemental Information on TV Inputs and Outputs

The Basic Owner's Guide supplied with your TV contains connection diagrams showing how to use most of these jacks.



1. HDMI® Inputs (High-Definition Multimedia Interface)

The HDMI inputs support uncompressed standard and high-definition digital video formats, bitstream Dolby Digital 5.1, and PCM digital stereo audio. These inputs are HDCP (High-Bandwidth Digital Copy Protection) compliant.

Mitsubishi recommends you use high-speed HDMI cables to connect newer source devices incorporating HDMI technology. High-speed cables bring you the full benefits of Deep Color.

These HDMI inputs can also accept digital DVI video signals. To connect a device's DVI output to the TV's HDMI input, use an HDMI-to-DVI adapter or cable plus an analog audio cable. Connect the audio cable to the **DVI/PC AUDIO INPUT** jack on the TV to receive audio from your DVI device.

HDMI Cable Categories

HDMI cables are available as Standard and High-Speed types.

- **High-Speed HDMI Cables.** Blu-ray players, newer DVD players, video games, 3D content, and set-top boxes require High-Speed HDMI cables, suitable for clock frequencies up to 340 MHz or data rates of up to 10.2 gigabits per second. Use high-speed cables for 1080p HD signals carrying extended color encodings (i.e., 30 or more bits, also called Deep Color). High-Speed HDMI cables are also suitable for standard HDTV signals.
- **Standard HDMI Cables.** Standard HDMI cables may be unmarked. They are suitable for standard HDTV 720p, 1080i, and 1080p signals with 8-bit color depth. Use Standard HDMI cables for clock frequencies up to 74.25 MHz or data rates of up to 2.23 gigabits per second.

For assistance call 1(800) 332-2119

Inputs and Outputs, continued

Use the HDMI inputs to connect to CEA-861 HDMI compliant devices such as a high-definition receiver or DVD player. These inputs support 480i, 480p, 720p, 1080i, and 1080p video formats.

The TV's HDMI inputs are compatible with many DVI-D and HDMI computer video signals.

2. ANT (Antenna)

Connect your main antenna or direct cable service (without a cable box) to **ANT**. The **ANT** input can receive digital and analog over-the-air channels from a VHF/UHF antenna or non-scrambled digital/analog cable source.

3. 3D GLASSES EMITTER (642 Series only)

Use this jack for the special synchronization emitter supplied with some 3D glasses. The emitter sends out a signal that synchronizes your 3D glasses with the screen display.

4. DIGITAL AUDIO OUTPUT

This output sends Dolby Digital or PCM digital audio to your digital A/V surround sound receiver. Incoming analog audio is converted by the TV to PCM digital audio. If you have a digital A/V receiver, this is the only audio connection needed between the TV and your A/V receiver.

5. Y/VIDEO (Composite Video)

Analog standard-definition video inputs. Use the adjacent **R** and **L** inputs if you wish to send audio to the TV speakers.

6. Y/VIDEO Pb Pr (Component Video)

Analog video inputs able to accept high-definition video from a high-definition source device. Use the adjacent **R** and **L** inputs if you wish to send audio to the TV speakers.

7. L/R (INPUT 1 audio)

Analog stereo inputs for use in conjunction with adjacent composite or component video jacks.

8. DVI/PC INPUT

Connect a DVI device to one of the TV's HDMI inputs and use this jack to send analog audio to the TV.

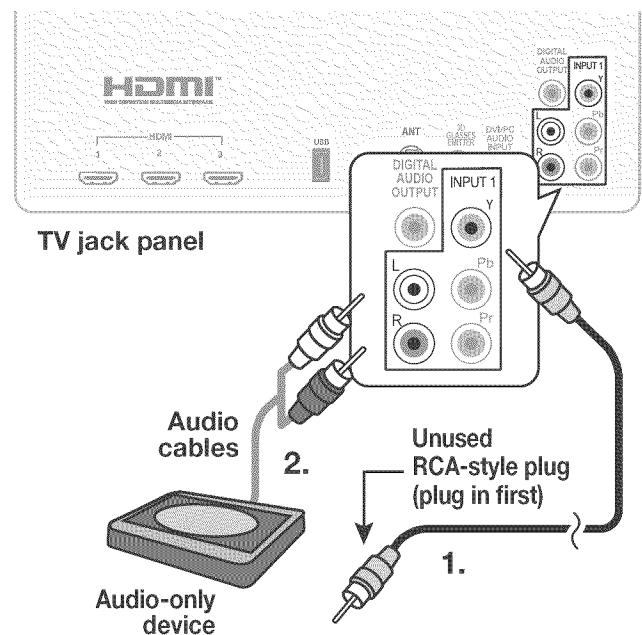
9. USB

For software updates only. To check for updates, visit www.mitsubishi-tv.com and follow the support link.

Using the TV with an Audio-Only Device

To use the TV speakers to listen to an audio device such as an MP3 or CD player with analog output, follow these steps.

1. Insert an unused RCA-style connector into the **Y** composite video jack. The presence of this connector activates the TV's auto-detection.
2. When the TV detects the video connector, it will display the **New Device Found** screen. Name the new input **CD/Audio** or **MP3 Player**.
3. Connect left (white) and right (red) audio cables from **AUDIO OUT** on the device to **L** and **R** on the TV.
4. Keep the connector in the **Y** jack while using the audio-only device.



Picture Shape and Display Formats

Format Definitions

Use the **FORMAT** key to apply the formats described here.

Standard: The full-screen format used by HDTV signals. Use this format to display anamorphic DVDs with a 1.78:1 or 1.85:1 aspect ratio. Anamorphic DVDs with a 2.35:1 aspect ratio are displayed correctly but with top and bottom black bars. Squarish (4:3) images are stretched evenly from side to side. Available for all signals.

Expand: Enlarges the picture to fill the screen by cropping the top and bottom; useful for reducing the letter box top and bottom bars of non-anamorphic DVD images.

Effect of Mitsubishi Formats on Picture Types

Original Signal → TV Display Format ↓	Non-anamorphic or SD 4:3	Anamorphic DVD
Standard	Distorted; Not recommended.	Recommended
Expand	Recommended for letterbox. See Note 1.	Distorted; not recommended. See Note 1.
Zoom	Distorted; Not recommended. See Note 1.	Recommended for anamorphic 2.35:1 images. See Note 1.
Stretch	Recommended for standard broadcasts. See Note 1.	Distorted; not recommended. See Note 1.
Stretch Plus	Recommended for standard broadcasts. See Note 1.	Distorted; not recommended. See Note 1.
Narrow	See Note 1	Distorted; not recommended. See Note 1.

Note 1: Available for 480i and 480p signals only.

Original Signal	Display Formats				
SD 16:9 or HD Digital 720p, 1080i, 1080p Signal	<table border="1"> <tr> <td>Wide Expand</td> <td>Recommended to remove side bars.</td> </tr> <tr> <td>Zoom</td> <td>Recommended to remove bars from the top, bottom, and sides.</td> </tr> </table>	Wide Expand	Recommended to remove side bars.	Zoom	Recommended to remove bars from the top, bottom, and sides.
Wide Expand	Recommended to remove side bars.				
Zoom	Recommended to remove bars from the top, bottom, and sides.				

TV Display Formats. Press the **FORMAT** key repeatedly to see different displays for the current program. Press the **INFO** key to see the name of the format in use.

Zoom: Enlarges the picture to fill the screen by cropping the sides, top, and bottom to eliminate black bars.

- **480i/480p and SD 4:3 signals:** Eliminates top and bottom bars on anamorphic DVDs with a 2.35:1 aspect ratio.
- **720p, 1080i, SD 16:9, and HD signals:** Eliminates bars added to squarish 4:3 images.

Stretch: Stretches a squarish 4:3 image across the screen to display the entire image with less distortion than the Standard format.

Stretch Plus: Similar to Stretch, but minimizes distortion on the sides by expanding the picture to crop off portions of the top and bottom. Use ▲ ▼ to adjust the vertical position of the picture.

Narrow: Displays narrow 4:3 images in their original shape. Adds black side bars to fill the screen.

Wide Expand: Enlarges the picture, cropping the image on both sides. Removes or reduces black side bars added to narrow images converted to 16:9 signals for digital broadcast.

Note: All high-definition channels send widescreen (16:9) signals, but not all programming was created for the widescreen format. The broadcaster may stretch the image or add side bars to fill the widescreen area.

DVD Image Definitions

Image information may be stated on the DVD case. Some DVDs support both formats described below.

Anamorphic (or Enhanced for WideScreen TV)
Indicates DVDs recorded to show widescreen images properly on 16:9 TV sets using the TV's **Standard** format mode (recommended).

Non-Anamorphic (or 4:3, 1.33:1, Letter Box, or Full Screen)

Indicates DVDs recorded for viewing on squarish TV screens. They may be full screen (4:3 or 1.33:1) which crops movies to fit the narrow TV, or letter box, which adds black top and bottom bars.

Using the TV with a Personal Computer

Connecting a Computer to the TV

Use one of the connection methods listed below based on your computer's output.

Computer Graphics Output	Computer Graphics Connection	Audio Connection
Digital DVI	DVI-to-HDMI cable or an HDMI cable with a DVI-to-HDMI adapter	Audio cable with mini-plugs
HDMI	HDMI-to-HDMI cable	No additional audio connection is required.

IMPORTANT

This TV accepts digital computer graphics signals only. This TV is not compatible with VGA (analog) computer signals.



1. Connect the computer's digital video output to one of the TV's HDMI jacks. See the connection diagrams on this page for the method suited to your equipment.
2. Connect the computer's audio output using one of these options:
 - For digital DVI video signals, connect the analog audio output to the TV's **DVI/PC AUDIO INPUT** jack.
 - For HDMI signals, no additional audio connection is required.

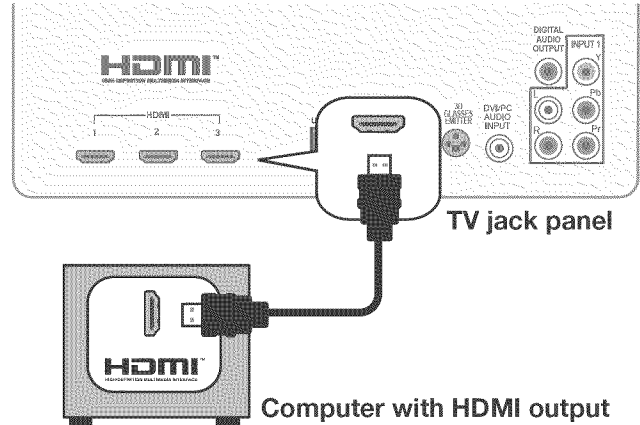
Note: If you are unable to hear audio from the computer, there may be an incompatibility in the computer's hardware, software, or internal settings. Consult a trained computer technician for advice.

3. Power on the TV and computer. The TV will detect the connection and display the **New Device Found** screen.
4. In the **New Device Found** screen, press ▲ ▼ to highlight **PC** in the list of device types. It is important to use the name **PC** so that the TV processes the PC signal correctly.
5. Highlight **EXIT** and press **ENTER** to close the **New Device Found** screen.

Note: If your computer provides digital audio output you can connect it directly to a digital A/V receiver and bypass the TV.

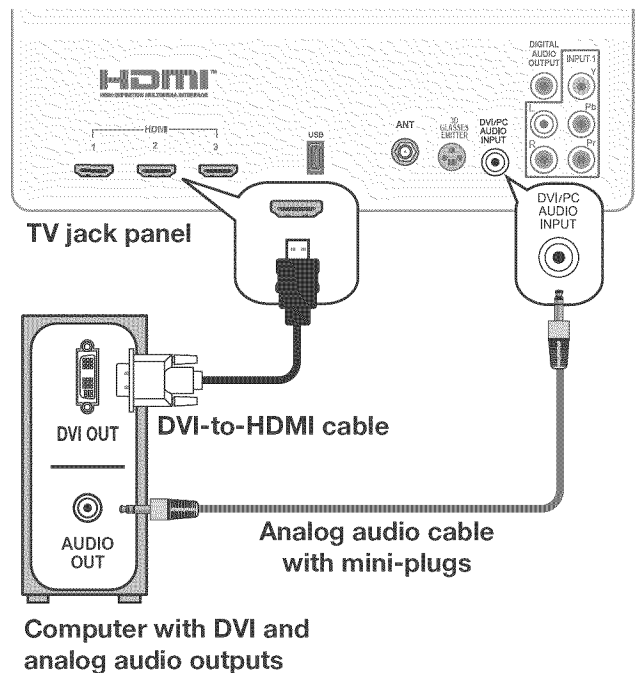
HDMI Connection

Mitsubishi recommends using high-speed HDMI cables to connect newer devices incorporating HDMI technology.



An HDMI-to-HDMI connection carries all video and audio on a single cable.

DVI Video Connection



A DVI connection from a personal computer requires a separate audio connection.

Computer Video Adjustments

1. Power on the computer.
2. Select **PC** from the **Input Selection** menu. To do this, press **INPUT** to open the **Input Selection** menu, move the highlight to the PC icon, and press **ENTER**.
3. Working from the computer, change the resolution of the computer image. View the computer image on the TV and maximize the computer resolution while maintaining a suitable aspect ratio for the image.
4. Perform TV video adjustments. Press **VIDEO** repeatedly to access video-adjustment options.
5. Press **FORMAT** repeatedly to find the picture shape best suited to the image. See the chart on this page showing how different computer resolutions can be displayed on the TV.

Tip

Set the computer's screen saver to display a pattern after several minutes of inactivity. This acts as a reminder that the TV is powered on.

Distortion in Computer Images

Computer images may show distortion when viewed on the TV, e.g., lines that should be straight may appear slightly curved.

Image Resolution

Your Mitsubishi TV can display the resolutions shown in the chart from standard VGA (640 x 480) through 1920 x 1080 signals at a refresh rate of 60 Hz.

In most cases, the computer will select the best resolution match to display on the TV. You can override this setting if you wish. Refer to your computer operating system's instructions for information on changing the screen resolution.

You may need to restart the computer for changes to take effect.

Computer Display Formats

Press **FORMAT** repeatedly to cycle through the TV displays available for your computer's video signal.

Computer Signal	As Displayed on TV Screen			
	Original Format	4 X 3 Standard	16 X 9 Standard	Zoom
VGA 640 X 480				
SVGA 800 X 600				

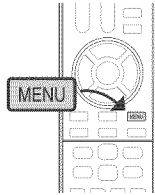
Computer Signal	Original Format	Standard	Zoom
XGA 1024 X 768			
PC 720p 1280 X 720			
WXGA 1360 X 768			
SXGA 1280 X 1024			



Computer Signal	Original Format	Standard	Reduce
PC 1080p 1920 X 1080			





2 TV Menus

Main Menu

Press **MENU** on the remote control to open the main menu.



	Picture	Picture settings	10
	Sound	Sound settings	14

	Captions	Closed captions on/and off; caption displays	15
	Setup	Basic TV setup	16
	Inputs	Name assignments for TV inputs, HDMI Control setup	19
	Lock	Setting a pass code and restrictions on TV use. Disabling the control-panel buttons.	21



Picture

Assign a name to the TV input before making video adjustments (use the **New Device Found** or **Inputs > Name** menu). Adjustments will be reset to the defaults if you rename the input after making adjustments.

Picture Video



Settings in this menu are saved for the current input only. Press ◀ ▶ to make changes and then press **MENU** to return to the menu screen.

To make Video adjustments while watching TV and without using the menu:


1. Press the **VIDEO** key.
2. Press ▲ ▼ to select a video option.
3. Press ◀ ▶ to change the setting.

Picture Mode	Brilliant	For use under bright light; unavailable when the current input is named Game or PC .	Set the Picture Mode first before changing other video settings, as some settings are stored independently for each Picture Mode. Use Picture Modes to get the best image under different viewing conditions.
	Game	Optimizes picture and video processing for gaming consoles. Available only when the name of the input is Game or PC .	
	Bright	For most daytime viewing	
	Natural	For most nighttime viewing	
ADV1, ADV2 (642 Series only)	Advanced Picture Modes. Contact your professional installer for setup. See page 12 for an overview.		

**Picture, continued**

Contrast	<ul style="list-style-type: none"> Low contrast shows a variety of shades in darker images In most home lighting situations, medium contrast looks best. High contrast shows darker images more uniformly black and makes colors appear more vibrant. High contrast is good for brightly lit environments. 	Adjusts the white-to-black level Settings are stored independently for each Picture Mode.	
Brightness	Adjusts overall picture brightness. Settings are stored independently for each Picture Mode.		
Color	Adjusts overall color intensity from monochromatic to fully saturated.		
Tint	Adjusts the red-to-green ratio.		
Sharpness	Adjusts picture detail and clarity.		
Color Temperature	High	Gives white images a cool cast. May provide the most realistic picture under bright lighting.	Adjusts the white balance. Settings are stored independently for each Picture Mode.
	Low	Gives white images a warm cast. Natural/Color Temp at the low setting displays video at approximately the 6500K industry standard for NTSC pictures.	
Video Noise	High, Medium, Low, Off	<ul style="list-style-type: none"> High. For poor-quality signals. Medium. For moderate noise reduction. Low. For good-quality signals. Off. Leaves the picture unaltered. 	Reduces minor noise (graininess) in the picture.

Picture **Picture+** (Picture Plus)

Screensaver	On, Off	Select On to display a screensaver pattern while playing an audio-only input. To use this feature, the input must either <ul style="list-style-type: none"> Be named as an audio source (e.g., CD, MP3 Player) or Be the antenna input tuned to an audio-only signal.
Film Mode	Auto, Off	480i and 1080i signals only. In Auto , the TV automatically detects and applies film-decoding correction to movies filmed at 24 frames per second. Try the Off setting if images show many jagged edges. Setting saved by input.
Test Picture		Press ENTER to display a test picture. Use as a reference picture for high-definition images only.

Picture **Reset**

- Resets sound and picture adjustments for the current input. Highlight the **Reset** icon and press **ENTER** twice to perform reset.
- Reset** has no effect on universal settings (**Balance, Listen To, Language**) or on **Advanced** Picture Mode settings. (642 Series only)



Picture, continued

Picture **Advanced** (642 Series only)



Picture > Advanced allows you to save highly customized picture adjustments for each input. **Mitsubishi recommends these adjustments be made only by a trained professional installer.**

1. Press **MENU**. Under **Picture**, highlight the **Advanced** icon and press **ENTER**.
2. With **Picture Mode** (the first option) highlighted, press **ENTER** to change from blank (undefined) to **ADV1** (daytime settings) or **ADV2** (nighttime settings).
3. Use **▲▼** to highlight an option you wish to change and press **ENTER** to see the adjustment display.
4. Press **◀▶** to change settings.
5. Use **▲▼** to navigate to additional options and press **◀▶** to change settings.
6. Press **MENU** to return to the **Picture > Advanced** menu and save the adjustments for the current input. Press **EXIT** to close the menu.

Saving Custom 3D Settings

This menu can be used to create a custom Picture Mode for viewing 3D content. Mitsubishi recommends using **ADV1** to save 3D settings and **ADV2** to save 2D settings.

To create a custom 3D picture mode:

- The TV must be receiving a 3D signal
- One of the TV's 3D Source Formats must be selected
- You must be wearing matching 3D glasses.

To Use a Custom Picture Mode at a Later Time


- Press **VIDEO** and use **▲▼** to find the Picture Mode option. Press **◀▶** to select **ADV1** or **ADV2**.
- Press **MENU** and go to **Picture > Video > Picture Mode** and select **ADV1** or **ADV2**.

To Return to the Default Values for Advanced

Display the **Picture > Advanced** menu and:

1. Highlight the name of the **Advanced** mode to change.
2. Highlight **RESET Pic Mode** and press **ENTER**. You must perform the reset separately for both **ADV1** and **ADV2**.

**Picture, continued****Picture 3D Mode** (642 Series only)

Source Format	Off	<ul style="list-style-type: none"> Overrides the 3D processing of any HDMI 1.4a-compliant 3D signal and displays the signal in 2D instead. Allows access to some of the 2D picture adjustments that are hidden when the TV's 3D mode is set to Automatic. 	
	Automatic	<ul style="list-style-type: none"> When the TV receives a 3D signal from an HDMI 1.4a-compliant device, forces the TV automatically into 3D mode and selects the correct 3D format. When the TV receives a normal 2D signal, makes the TV automatically exit 3D mode. Not effective with checkerboard 3D signals. Manually select Checkerboard when needed. 	
	Side-by-Side Top/bottom Checkerboard	<ul style="list-style-type: none"> 3D format choices for use with 3D signals that are not HDMI 1.4a compliant. When the TV receives a 3D signal that is not HDMI 1.4a compliant, you must manually select a 3D format here based on the type of 3D signal being received. Return the TV to Automatic or Off at the end of the non-compliant 3D program. If an HDMI 1.4a compliant signal is received, the TV will automatically override any manual 3D selection. 	
	2D+ Depth	When active, generates a simulated 3D image from an ordinary 2D signal.	
Glasses Emitter External	Standard, Reverse	For use with an external emitter connected to the TV's 3D GLASSES EMITTER jack.	Use the Standard or Reverse setting to synchronizes left/right images to work with your 3D glasses.
Depth		<ul style="list-style-type: none"> Available only when Source Format is set to 2D+ Depth. Highlight the icon and press ENTER to display the adjustment screen. Allows adjustment of the 3D effect from a flatter image to one with more depth. 	
DLP Link	Standard, Reverse, Off	<ul style="list-style-type: none"> For use with DLP Link. Select the Off setting if you are not using DLP Link glasses. 	Use the Standard or Reverse setting to synchronizes left/right images to work with your 3D glasses.

Notice Concerning Format Compatibility

The Mitsubishi TVs will support the mandatory HDMI 1.4a 3D signals intended for the United States. Specifically, the TVs will support the 3D signals known as Frame Packing 1080p@24 Hz and 720p@60 Hz (primarily from Blu-ray players and gaming consoles), Side-by-Side(Half) 1080p@24/30/60 Hz, 1080i@60 Hz, and 720p@60 Hz, Top-and-Bottom 1080p@24/30/60 Hz

and 720p@60 Hz, and Checkerboard 1080p@60 Hz. However, there may be some 3D sources that are not compatible with the TVs. In all cases: (1) 3D sources must connect to the TVs using the HDMI inputs, and (2) Active Shutter 3D glasses with matching synchronization emitter or DLP Link Active Shutter 3D glasses are required in order to view 3D content.

 **Sound**
Sound **Audio**


Settings in this menu are saved for the current input only with the exception of **Balance** and **TV Speakers**, which applies to all inputs. Press ◀ ▶ to make changes and then press **MENU** to return to the menu screen.

To make Audio adjustments while watching TV and without using the menu:

1. Press the **AUDIO** key.
2. Press ▲ ▼ to select an audio option.
3. Press ◀ ▶ to change the setting.

TV Speakers	On	Turns on the internal TV speakers.
	Off	Turns off the internal TV speakers so you hear sound only from a connected A/V receiver. Note: When you disconnect an A/V receiver, be sure to change the Sound setting to TV to hear sound from the TV speakers.
Bass	Controls volume of low-pitched sound from the TV speakers.	
Treble	Controls volume of high-pitched sound from the TV speakers.	
Balance	Controls audio balance between the right and left TV speakers	
Sound Mode	Stereo	No special audio effects from the TV speakers
	Surround	Modifies audio from the TV speakers. <ul style="list-style-type: none"> • For monaural (non-stereo) programs, creates a simulated stereo effect. • For stereo programs, creates a simulated surround sound effect.
Level Sound	On, Off	Reduces differences in sound volume between programming segments, such as the difference between regular broadcast programs and commercial segments.
Listen To (applies only to analog channels from the ANT input)	Mono	Reduces background noise. Use when receiving a weak stereo audio signal. All audio is played as mono.
	Stereo	The TV plays stereo broadcasts in stereo and mono broadcasts in mono. The word Stereo is displayed when you tune to a channel broadcasting in stereo.
	SAP (Second Audio Program)	Selects an additional monaural sound track not audible during normal TV viewing. The SAP signal might be related to the program (such as a sound track in a foreign language), or it might be unrelated (such as a weather report). If an SAP signal is broadcast, the letters SAP are displayed when you tune to the channel.

 **Captions**

Captions on Digital Channels

The TV can decode captions from the **ANT** input only. Broadcasters can send up to six different captioning selections or can send analog captions for a program that originated in analog format. A TV station may broadcast only one or two types of captions or none at all.

Captions on Analog Channels

The TV can decode captions from the **ANT** input and the composite **VIDEO** jacks. Broadcasters can send either standard closed captions or text service. Standard closed captions follow the dialogue of the program and display in a small section of the screen. Text-service closed captions often contain information such as weather or news and cover a large portion of the screen.

IMPORTANT

- Analog text-service options display a large black or gray box on the screen when no caption signal is being broadcast.
- The content of captions is determined by the broadcaster. If captions show strange characters, misspellings, or odd grammar, it is not a malfunction of the TV.
- Closed-caption signals are not available through HDMI or component jacks. See the menus for devices connected to these inputs for closed-caption decoding.

Captions Services



Service	On if Mute, On, Off	On if Mute: Displays digital closed-caption signal Caption 1 (digital) or CC1 (analog) when audio from the TV speakers is muted. While watching TV, press MUTE to turn closed captions on/off.
Digital	Caption 1–Caption 6	Caption signals sent by the broadcaster.
Analog	CC 1–CC 4 Text 1–Text 4	<ul style="list-style-type: none"> • CC 1–CC 4. Standard closed-caption signals • Text 1–Text 4. Text-service signals

Captions Font



These choices apply to digital captions only.

Style	As Broadcast or choice of font styles (digital captions only)	As Broadcast changes settings to those selected by the captions provider, or, if none, to the TV's own caption defaults. Use one of the font styles to give digital captions a custom appearance.
Size	Large, Standard, Small	Large is recommended.

Captions Color



Font	White, Black, Magenta, etc.	Recommendations for digital captions: <ul style="list-style-type: none"> • A white font on a black translucent background makes an easy-to-read combination. • Use contrasting colors for captions and background.
Opacity	Translucent, Opaque, Flashing, Transparent	
Background Color	White, Black, Magenta, etc.	
Background Opacity	Translucent, Opaque, Flashing, Transparent	

 **Setup**
Setup **Language**


Menu	English Spanish	Displays on-screen menus in either English or Spanish.
Antenna Digital Audio	Selects the current language for a digital program from the ANT input. A digital program may include as many as seven language choices or no language choice.	

Setup **Clock**


Set the TV clock to:

- Use the TV Timer to power on the TV automatically at a time you specify
- Lock the TV by time

Note:

- When the Daylight Saving Time change occurs, you must open this menu and set the TV's clock ahead or back.
- You must reset the TV's clock after an interruption of power such as unplugging the TV's power cord.

Time	Highlight the Clock icon and press ENTER or ▼ to highlight the time. To edit time and date: <ul style="list-style-type: none"> • Press ENTER to select the item to change. • Press ▲ ▼ to change values. Press ENTER to confirm entries. • Press ◀ ▶ to move to another column. 	
Date		
Time Zone	Eastern, Central, Mountain, Pacific, etc.	
Daylight Savings	Off, On	Select the setting for your area

Setup **Timer**


The Timer tells the TV to power on automatically at a time you set. Use this menu to set a day, time, input, and channel for the Timer. If the TV is already on at the set time, the TV will automatically change to the designated channel or input.

- The TV clock must be set before you can use the Timer feature.
- As a reminder that the TV Timer is set, the TV **POWER** indicator flashes slowly while the TV is powered off.
- When the Timer turns on the TV, press any key on the remote control to keep it from turning off after five minutes.

Timer	On, Off	Select On to enable the Timer.
Day	Daily, Mon-Fri, (every) Sunday, (every) Monday, (every) Tuesday, etc.	Select the day or days of the week for the Timer to turn on the TV.
Time	To set the time for the TV to come on: <ol style="list-style-type: none"> 1. Highlighted the time and press ENTER. 2. Press ▲ ▼ to change values. Press ENTER to confirm entries. 	
Input	Ant, DVD, VCR, etc. Select the input you want displayed when the TV comes on. Choose from the defined and enabled inputs that appear in the Input Selection menu.	
Channel	If the source is the ANT input, press ▲ ▼ to select a channel number or press and hold to scroll quickly.	



Setup, continued

Setup Channel



Ant Air,
Ant Cable

All Channels,
Add only new
channels

Scan

You must perform a channel scan to receive digital channels. The scan searches for broadcast channels and adds them to TV memory. To start channel scan:

1. Highlight one of the input selections based on your connection to the **ANT input**:
 - **Air** when connected to an indoor or outdoor antenna.
 - **Cable** when connected to direct cable (no cable box)
2. Select the scan type.
 - Select **All Channels** for an initial scan or after moving the TV to an new area with a different channel line-up.
 - Select **Add only new channels** to search for channels newly broadcasting since the previous scan.
3. Press **▶** to highlight **SCAN**.
4. Press **ENTER** to start channel memorization.

See below for additional notes on Scan.

Edit

After channel scan, **Edit** lets you add and delete memorized channels. Memorized channels are those you can tune using the **CH** key. Edit the channel list to limit tuning to channels you watch.

- Press **CH/PAGE** to jump to the next or previous page of channel numbers.
- Press **▲ ▼ ◀ ▶** to move through all channel numbers, one at a time.

Adding/Deleting Channels Using the Channel Edit Menu

- Channels marked with a check are in memory.
 - To add or delete a channel from memory, highlight the channel number and press **ENTER**.
 - To add a single digital channel not in the list, see the notes under **Scan** on this page.
 - Digital channels are listed by virtual channel number with the physical channel number shown in small gray text.
- **Virtual Channel Number** (digital channels only). A channel number sent by a local broadcaster.
 - **Physical Digital Channel Number**. The channel number officially assigned to the actual broadcast frequency; shown on screen in gray text.

Notes on Scan and Channel Memorization

- Channel memorization may take up to 15 minutes to complete.
- To stop channel memorization before completion, press **CANCEL**. Channels already added are retained.
- When watching TV, press **CH** to move through memorized channels. Press and hold **CH** to speed through channels.
- To add a digital channel that does not appear in the **Edit** menu without performing channel memorization:
 1. Look up the physical channel number for the new digital channel. See the website www.antennaweb.org for help.
 2. Press **INPUT** and select the **ANT** input.
 3. Use the number and **CANCEL** keys to enter the physical channel number followed by “-1” and **ENTER**. For example, for physical channel 36,

3 6 CANCEL 1 **ENTER**.

 The TV will search for a digital channel on the channel 36 frequency. When it finds the channel, it will:
 - a. Add the channel to memory.
 - b. Change the channel number to the virtual channel number sent by the broadcaster.
 - c. Add to memory any associated sub-channels.
- Rememorize channels if you move the TV to a different geographic area with a different channel line-up.



Setup, continued

Setup

Energy



Lamp
Energy

Standard,
Bright

Standard is for most viewing conditions. Use **Bright** in brightly lit rooms. You may notice increased fan noise when using the **Bright** setting.

 **Inputs**
Inputs Name

INPUT and HDMI jacks:

Cable box, Cam(corder), CD, DVD (DVD, DVD2, Blu-ray), DVR, Game (Game, PS, Xbox, Wii), Media Box, PC, Satellite, AVR, On/Off (ANT only)

INPUT jacks only:

CD/Audio, MP3 Player, VCR

HDMI jacks only:

PC, AVR, Delete

- Lets you assign or change the names of inputs appearing in the **Input Selection** menu. Highlight an input and press **ENTER** multiple times to cycle through the name choices.
- Lets you turn the **Ant** input **On/Off** to display or hide them in the **Input Selection** menu; highlight the input and press **ENTER** to switch between **On** and **Off**.
- Lets you delete unused HDMI inputs from the **Input Selection** menu.
- A CEC-enabled tuner can be named either **Cable Box** or **Satellite**.
- A CEC-enabled DVD player can be named **DVD, DVD2, or Blu-ray**.

General Notes for the Inputs > Name Menu

When you change an input name and then exit the **Name** menu:

- The name is changed
- The icon in the **Input Selection** menu is changed
- Audio and video settings are changed to the defaults for the new device type.

Notes for HDMI devices

- **Disconnecting an HDMI device:** When you disconnect an HDMI device, the icon remains in the **Input Selection** menu until you remove it. Select **Delete** in the **Inputs > Name** menu to remove an unwanted icon for an HDMI input.
- **HDMI Control and CEC-Enabled Devices:** See “HDMI Control of CEC Devices” on page 25.

- **In case of CEC conflicts:** Turn off CEC signals in one of these ways:
 - Turn off the TV’s HDMI Control signals to the device (**Inputs > HDMI Control** menu).
 - Turn off each device’s internal CEC capability.
 See “HDMI Control of CEC Devices” on page 25 for the TV’s HDMI Control or, to turn on/off a specific device’s response to CEC signals, see the device owner’s manual.
- If the **New Device Found** screen does not display as expected when you connect an HDMI device:
 - a. Power off the device.
 - b. Disconnect the HDMI cable.
 - c. Press **MENU** on the TV remote control to enter the TV main menu.
 - d. Go to **Inputs > Name**.
 - e. Highlight the HDMI input name and press **ENTER** to select **Delete**.
 - f. Press **EXIT** to clear the menus.
 - g. Connect the new device and the **New Device Found** screen will display.

 **Inputs, continued****Inputs** **HDMI Control**

Select **On** or **Off** to enable or disable the TV's control of a CEC-enabled device. See "Enabling HDMI Control of CEC Devices" on page 25 for use of this feature.

Note: When **HDMI Control** is set to **Off** the TV may still respond to CEC commands sent by another device. To prevent this, turn off the HDMI Control in the device using the device's own menus.

Inputs **Order**

Lets you rearrange icons in the **Input Selection** menu.

1. Press ▲▼◀▶ to highlight an input icon.
2. Press ENTER to confirm the selection.
3. Press ▲▼◀▶ to drag the icon to the desired position.
4. Press ENTER to confirm the new position.






Inputs **Update**

Provides instructions for updating TV software.



Lock

TV Locks

	Parental <i>Lock by Program Ratings</i> Restricts access using U.S.-based ratings sent by broadcasters.
	Time <i>Lock by Time</i> Restricts TV use by time of day.
	Channel <i>Lock by Channel</i> Blocks access to the channels you specify.
	Panel <i>Lock Control Panel</i> Disables the buttons on the TV's control panel. Use this feature if small children in the home try to press buttons on the control panel.
	Other <i>Lock by Other Program Ratings</i> Restricts access using possible future ratings sent by broadcasters.

Pass Code

Setting a Pass Code

You are prompted to enter a pass code whenever you select **Lock** on the main menu. To set a pass code for the first time:

1. Press **MENU** and highlight **Lock**. A screen prompting you for a pass code will display.
2. Input a four-digit pass code using the number keys on the remote control.
 - Press **CANCEL** to delete a number and move back one space.
 - Press **MENU** or **EXIT** to close the menu without setting a pass code.
3. Enter the code a second time to confirm.

Resetting a Pass Code

See the procedure in "Bypassing TV Locks" on page 22.

Parental Menu

The TV comes from the factory with the rating locks turned off and with pre-set U.S. ratings TV-PG and movie rating PG. You must turn on blocking for U.S. ratings to activate these rating restrictions. Use the **Lock > Parental** menu to change the level of blocking with U.S. ratings.

Any time you change the channel or device, it may take up to five seconds for the rating restrictions to take effect.

Other Menu (Alternate Rating System)

This TV can recognize new rating systems that may come into effect in the future. The **Other** menu allows you to block digital programming when such systems come into effect. The **Start Time** and **Stop Time** options in the **Parental** menu apply to U.S.-based ratings only and do not affect alternate rating systems.

The first time you tune to a channel broadcasting an alternate rating system, the TV defaults to the most restrictive setting if the **Lock** menu > **Other Lock** option is set to **On**. Use this menu to change the allowed rating if you are unable to watch a program rated with an alternate system.

Important Notes on Rating Locks

- **Parental** menu rating locks apply only to channels and signals received on the **ANT** and composite **VIDEO** jacks.
- **Other** menu rating locks apply only to digital channels received on **ANT**.
- When viewing a cable box, satellite receiver, or other device connected to the component **Y Pb Pr** or **HDMI** inputs, check the device's owner's guide for parental locks.



Lock, continued

Using TV Locks

After you set the lock, you must use your pass code to:

- View a locked program
- View a locked channel
- View the locked TV
- Cancel the lock
- Open the **Lock** menus

Tips for Using the Lock Menu

When entering the **Lock** menu, you will be prompted to enter a pass code.

- To change the pass code, press **9** and **LAST** at the same time. Either enter a new pass code to open the **Lock** menu and make changes or press **EXIT** to close the menu.
- If any of the locks are turned on and you exit the menus when prompted for a new code, the old code and all lock settings will be retained.

- If all locks are turned off and you exit the menus when prompted for a new code, then the previous code will be erased.

Bypassing TV Locks

- If you try to watch a blocked program or channel or the TV is locked by time, a notice will appear prompting you for a pass code. To use the TV, input your four-digit pass code and press **ENTER**.
- If a program is blocked, you can still use the TV without entering a pass code. Change to a channel airing an allowed program or change to another device.
- If you forget your pass code, you can view the locked TV without entering your pass code. When prompted for the pass code, press the number **9** and **LAST** keys on the TV remote control at the same time. This process temporarily unlocks the TV.

IMPORTANT

When changing or deleting your pass code, you must use the remote control included with this TV. You cannot use a Mitsubishi remote control from another component or a "universal" remote.



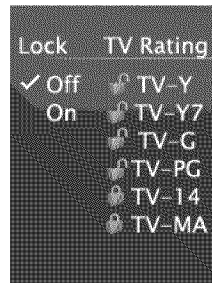
Lock, continued

Lock Parental



Lock Disables or enables blocking based on V-Chip signals and the U.S. rating system.

TV Rating Highlight the rating level you wish to change and press **ENTER** to block it (🔒) or allow it (🔓). You can apply supplemental content blocking to the age-based ratings by using the TV content categories. (**FV, D, L, S, V**)



Movie Rating Highlight the rating level you wish to change and press **ENTER** to block it (🔒) or allow it (🔓).

Start Time/Stop Time Sets the time of day for enforcement of rating restrictions chosen in the **Parental** menu. The TV clock must be set in the **Setup > Clock** menu before you can use **Start Time/Stop Time**. To make rating restrictions active 24 hours a day, set **Start Time** and **Stop Time** the same.

1. Highlight the start time or stop time.
2. Press **ENTER** to start editing.
3. Press **▲▼** to make changes.
4. Press **ENTER** to confirm changes.

TV Program Ratings

TV Program Ratings	
TV Age-Based Ratings	TV-Y Youth. For children under 7.
	TV-Y7 Youth 7 and older.
	TV-G General Audience. For the entire family.
	TV-PG Parental Guidance. Parental Guidance recommended; may not be suitable for some children.
	TV-14 Adolescent 14 and older. Not recommended for children under 14.
TV-MA Mature Audience. For adults only.	
TV Content Categories	FV Fantasy Violence. Applies to TV-Y7 only.
	D Sexual Dialog. Applies in differing degrees to TV-PG and TV-14.
	L Adult Language. Applies in differing degrees to TV-PG, TV-14, and TV-MA.
	S Sexual Situations. Applies in differing degrees to TV-PG, TV-14, and TV-MA.
	V Violence (graphic or realistic). Applies in differing degrees to TV-PG, TV-14, and TV-MA.

Movie Ratings

G	General Audience. Designed for the entire family.
PG	Parental Guidance. Parental Guidance recommended; may not be suitable for some children.
PG-13	Parental Guidance, 13 and Older. Not recommended for children under 13.
R	Restricted. Restricted in theaters to 17 years old and older unless accompanied by an adult.
NC-17	No Children 17 or Under. Restricted in theaters to 18 years old and older.
X	Adult. Designed for and restricted in theaters to adult audiences only.
Not Rated	No MPAA rating assigned



Lock, continued

Lock



Time



Prevents all use of the TV during the time block period you specify. You must enter a pass code to use the TV when the time lock is in effect. After releasing the lock with the pass code, the lock does not go back into effect until the next time the TV is powered on.

Lock by Time Enables/disables **Lock by Time**.

Lock Time, Unlock Time To set the lock and unlock times:

1. Highlight the lock or unlock time.
2. Press **ENTER** to start editing.
3. Press **▲▼** to make changes.
4. Press **ENTER** to confirm changes.

Note: To make Lock by Time active 24 hours a day, set **Start Time** and **Stop Time** the same.

Lock



Channel



The **Channel Lock** menu lists channels currently in memory (see page 17). Highlight a channel and press **ENTER** to lock (🔒) or allow (🔓) the channel. Channels locks will be cleared the next time you perform a channel scan.

Lock



Panel



Off, On **On** locks and **Off** unlocks the buttons on the TV's control panel. Use this option if small children try to press TV buttons.

- To release the Panel Lock from the TV's control panel, press and hold the **INPUT** button for ten seconds. If the TV is powered off, press **POWER** after the lock releases to power on the TV.
- To reactivate the lock, return to this menu and change the setting to **On**.

Lock



Other



Other Menu Options (alternate rating system)

This TV can recognize new rating systems that may come into effect in the future. Such alternate rating systems will apply only to digital programming received on the **ANT** input.

Lock On, Off Enables/disables program blocking.

System The rating system available for the channel

Group Rating groups available in the rating system shown on the screen. Rating groups are defined by the rating system in effect.

Rating Rating restrictions available in the selected rating system and group. Highlight the rating and press **ENTER** to check (block) or uncheck (allow) rated content.

3

HDMI Control of CEC Devices

Many newer HDMI devices have a feature called Consumer Electronics Control (CEC) or HDMI Control. HDMI Control allows one device, such as the TV, to control other devices, such as an A/V receiver or disc player. Use of CEC is optional.

Each manufacturer chooses which CEC functions to support so it is difficult to predict which devices and features are compatible with Mitsubishi's HDMI Control. You may find that CEC functions for a specific device are limited.

To use HDMI Control, you must enable it both in the TV and in the device.

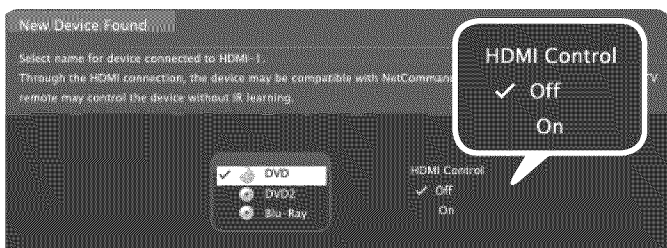
- **In the TV.** Enable HDMI control from the **New Device Found** screen or from the **Inputs > HDMI Control** menu.
- **In the Device.** Most devices with HDMI CEC compatibility let you turn it on or off in the device menus, where it is typically listed as "HDMI Control."

Enabling HDMI Control of CEC Devices

To ensure proper detection

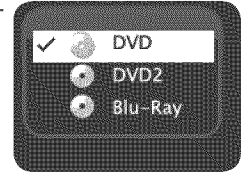
- Power on HDMI devices before connecting them to the TV.
 - Connect and set up HDMI devices one at a time.
1. Power on the device and allow it to complete the power-on sequence (boot up). Stop any playback.
 2. Connect the device to one of the TV's HDMI inputs.
 3. When the TV detects the connection, the **New Device Found** screen will appear.

Note: See "If the New Device Found Screen Has No HDMI Control Option" on this page if an HDMI Control option is not offered.



New Device Found screen with HDMI Control option. This screen displays only if the device's HDMI Control is enabled.

4. If prompted for a name, highlight a name for the device and press **ENTER** to add a check. The device itself may later override the name you assign.



5. Highlight **On** and press **ENTER** to add a check.



6. Highlight **EXIT** and press **ENTER** to close the **New Device Found** screen.

Note: At any time after completing Auto Input Sensing, you can set the TV's HDMI control on or off in the **Inputs > HDMI Control** menu.

If the New Device Found Screen Has No HDMI Control Option

If the **New Device Found** screen shows no option for HDMI Control, one of these conditions applies:

- **HDMI Control is turned off in the menus of the new device**
Action:
 - a. Highlight **EXIT** and press **ENTER** to close the **New Device Found** screen.
 - b. Display the device's setup menus and enable the device's CEC capabilities.
 - c. Wait for the TV's **New Device Found** screen to appear again.
 - d. If the **New Device Found** screen does not appear, power off the device. Power on the device and wait for the **New Device Found** screen to display with the HDMI Control option.
- **The HDMI cable cannot support CEC**
Action: Upgrade your HDMI cable to one that supports CEC.
- **The device does not have CEC compatibility**
Action: Control the device with its own remote control or program the TV's remote control to operate the device.

For assistance call 1(800) 332-2119

HDMI Control of an HDMI A/V Receiver and Connected Devices

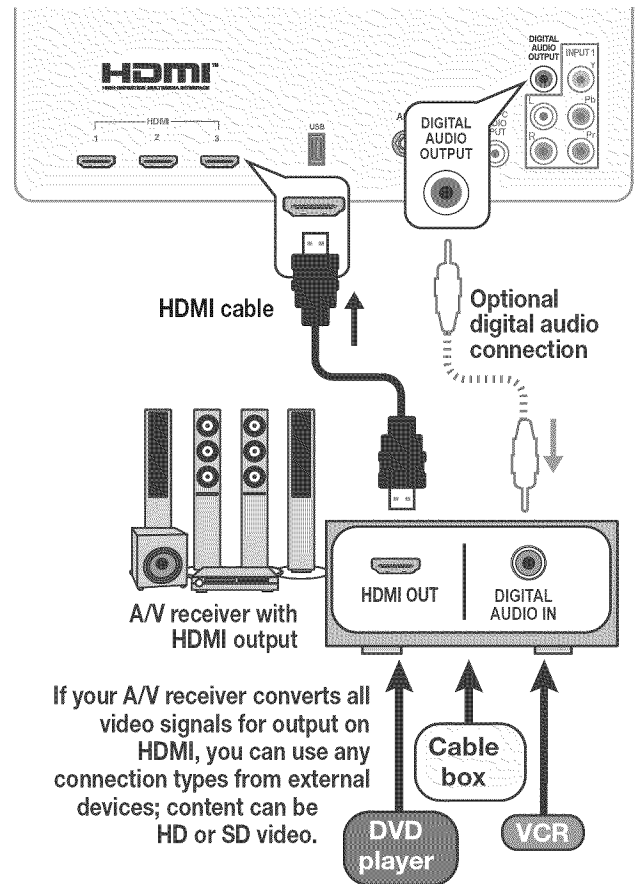
1. Enable HDMI Control for the A/V receiver as described in “Enabling HDMI Control of CEC Devices” on the previous page.
2. Power on the HDMI device you wish to connect to the A/V receiver (such as a disc player, cable box, or satellite receiver). Allow the device to complete the power-on sequence (boot up). Stop playback if the device starts playing.
3. Select the device’s HDMI input on the A/V receiver’s front panel controls or remote control.
4. Connect the device to the A/V receiver with an HDMI cable.
5. When the TV detects the connection, the **New Device Found** screen will appear.

Note: If the TV is unable to detect the device, either the device’s CEC capability is not enabled or the device is not CEC compatible. Enable HDMI control through the device’s menus before continuing. You may need to temporarily connect the device directly to the TV to view device menus.

6. Highlight **On** and press **ENTER** to add a check.



7. Highlight **EXIT** and press **ENTER** to close the **New Device Found** screen.
8. Optional: Connect the TV’s **DIGITAL AUDIO OUTPUT** to an input on the A/V receiver. Use this additional connection if:
 - You want the ability to switch between the A/V receiver speakers and the TV speakers.
 - You want to use the A/V receiver to listen to devices connected to the TV only, e.g., an antenna input or camcorder.



Connecting HDMI devices. The optional digital audio connection allows you to hear audio through the A/V receiver from devices connected to the TV only.

To hear audio from a device without HDMI Control, you must manually select the correct A/V receiver input for the device.

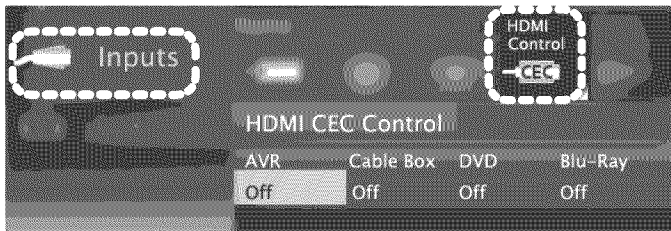
Resolving CEC Conflicts

Because each manufacturer selects which CEC functions to support, some devices may conflict with other devices. If control conflicts arise, you can:

- Turn off TV control of an individual CEC-enabled device (see below).
- Turn off CEC in the device itself. Refer to the device's Owner's Guide for instructions.

Turning Off the TV's HDMI Control of a CEC Device

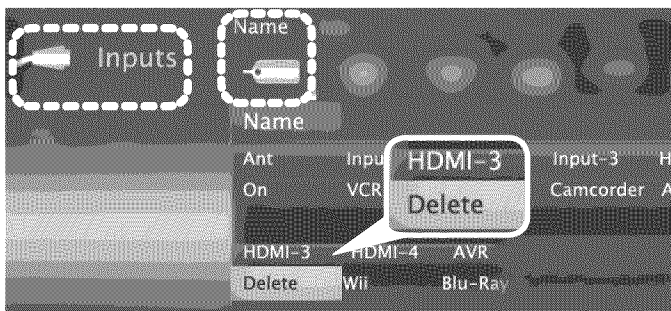
1. Press **MENU** on the TV remote control.
2. Highlight **Inputs > HDMI Control**.
3. Move to the device name and press **ENTER** to select **Off** to turn off the TV's ability to control the device.
4. Press **EXIT** to clear the menu.



Inputs > HDMI Control menu

Removing an HDMI Device

1. Power off the device.
2. Disconnect the HDMI cable.
3. Press **MENU** on the TV remote control to enter the TV main menu.
4. Go to **Inputs > Name**.
5. Highlight the HDMI input name and press **ENTER** to select **Delete**.
6. Press **EXIT** to clear the menus.



Inputs > Name menu with Delete selected for HDMI-3.

Using HDMI Control

As an example of using HDMI Control, press **PLAY** on the device itself to:

- Power on the TV
- Switch to the device (no need to display the **Input Selection** menu)
- Begin play of the device

Direct Keys

Test your equipment with the TV's remote control to find additional supported commands. See the table below for commands that may be available, depending on the individual device.

CEC-enabled VCR, DVD, and DVR functions that may be available:

Menu Navigation	Channel Tuning
◀ ▶ ▲ ▼	CH
ENTER	Digits 0-9, CANCEL
CANCEL (to cancel)	ENTER

If you have a CEC-enabled A/V receiver, CEC-enabled devices connected to the A/V receiver with an HDMI cable may also be controllable. They can be selected from the TV's **Input Selection** menu.

CEC-enabled A/V receiver functions. Try the **VOL**, **MUTE**, and menu-navigation keys.

Appendix A: Lamp Cartridge Replacement

Lamp-Cartridge Replacement

CAUTION: If the television is on, press **POWER** to turn it off. Unplug the television and allow it to cool for at least one hour before attempting to replace the lamp cartridge.

Lamp

The light source for this television is a lamp, which is part of a lamp cartridge assembly. The life of the lamp can vary, based on the lamp itself, the air temperature around the TV while it is operating, the selected lamp mode, and your viewing patterns. Warmer air or poor ventilation shorten the lamp life, as does setting **Lamp Energy** to **Bright** and turning the television on and off frequently.

Mitsubishi warrants the lamp for one (1) year from the date of original TV purchase at retail.

The lamp cartridge assembly is designed to be replaced by the TV owner. The cost of labor for a service technician to replace the lamp is not covered by the warranty.

To Order a New Lamp

To Receive a Replacement Lamp Cartridge Assembly Under Warranty

- Visit our website at www.mitsuparts.com.
- Call (800) 553-7278. Please have model number, serial number, and TV purchase date available.

To Purchase a Replacement Lamp Cartridge Assembly After Warranty

Visit our website at www.mitsuparts.com or call (800) 553-7278. Order the following:

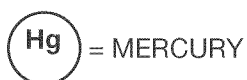
Lamp Part Number 915B455012

Lamp-Substitution Alert

MEVSA recommends that you use only genuine Replacement Lamp Assemblies purchased directly from Mitsubishi or a Mitsubishi Authorized Dealer or Mitsubishi Authorized Service Center. MEVSA advises that replacement lamps obtained separately from the Lamp Cartridge and/or Lamp Assemblies obtained from unauthorized sellers may be incorrect for your television, may not fit or perform properly and may even damage your television. MEVSA can not be responsible for the performance, reliability or safety of any replacement lamps that are obtained from unauthorized sources.

WARNING

- Do not remove the lamp cartridge immediately after turning off the television. You may get burned because the lamp is very hot. Allow the television to cool for at least one hour before replacing the lamp cartridge.
- Do not remove the lamp cartridge except when replacing it. Careless treatment can result in injury or fire.
- Do not touch the lamp glass element. It may be very hot and break, causing injuries or burns.
- Be sure not to insert any metal or flammable object into the lamp cartridge opening, as it may cause fire or electrical shock. If a foreign object is inserted into the opening, unplug the AC cord of the TV and contact your dealer for service.
- Install the lamp cartridge securely. Failure to do so may cause a fire.
- Do not touch the lamp glass elements. Oils from your fingers may cause premature lamp failure.



THE LAMP INSIDE THIS PRODUCT CONTAINS MERCURY AND MUST BE RECYCLED OR DISPOSED OF ACCORDING TO LOCAL, STATE OR FEDERAL LAWS. For disposal or recycling information, please contact your local authorities or the Electronic Industries Alliance at www.eiae.org

For assistance call 1(800) 332-2119



CAUTION



BURN DANGER! HOT SURFACES INSIDE!

Touch lamp cartridge handle only. Do not touch lamp or lamp cartridge housing. Keep lamp cartridge horizontal during removal. Do not tilt as glass may come out and cause injury. Replace lamp cartridge only with the same part number 915B455012.

WARNING

THE ACCESS PANEL IS PROVIDED WITH AN INTERLOCK TO REDUCE THE RISK OF EXCESSIVE ULTRAVIOLET RADIATION. DO NOT DEFEAT ITS PURPOSE OR ATTEMPT TO SERVICE WITHOUT REMOVING PANEL COMPLETELY.

Appendix A: Lamp Cartridge Replacement, continued

Replacement Procedure

Removing the Old Lamp Cartridge

1. Turn off TV power and unplug the TV. Allow the lamp to cool for at least one hour before proceeding.
2. After the lamp has cooled, remove the cover of the lamp compartment, located on the back of the TV. Refer to figures 1 and 2. Use a #2 medium Phillips screwdriver to loosen the screws securing the cover.
Keep the screws and cover for re-installation
3. With a medium Phillips screwdriver, loosen the screw securing the lamp cartridge until it disengage from the mating threads. This is a captive screw and cannot be separated from the lamp cartridge.
4. Fully open the bag supplied with the replacement lamp and set the opened bag aside.
5. Gently grasp the handle of the lamp cartridge and pull the old cartridge straight out. See figure 3.

CAUTION: Do not tilt or rotate the cartridge, as small glass fragments may fall out.

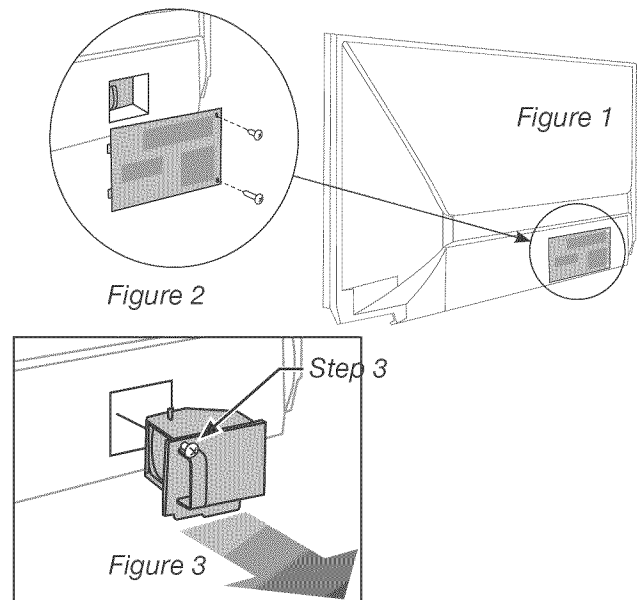
6. Without tilting or putting down the lamp cartridge, insert it into the opened bag. Close the bag while being careful not to let any glass particles fall out.

Installing the New Lamp Cartridge

1. **Do not touch** the glass parts of the new lamp cartridge. Insert the new cartridge into the TV in the same orientation as the old cartridge. Push on the cartridge housing until it is fully seated.
2. Gently tighten the lamp screw with the screwdriver. **AVOID OVERTIGHTENING!**
3. Replace the plastic cover and retaining screws.
4. **WASH YOUR HANDS THOROUGHLY, AS THIS LAMP CONTAINS MERCURY.**

Disposal of the Old Lamp Cartridge

Contact your local authorities or the Electronic Industries Alliance at www.eiae.org for lamp-disposal or recycling instructions. Do not dispose of the old lamp with common trash.



Use only replacement lamp part number 915B455012.

Appendix B: Troubleshooting

General TV Operation		
	Symptom	Remarks
1.	The TV remote control does not work.	<ul style="list-style-type: none"> • Check that the batteries are fresh and installed correctly. • Be no more than 20 feet from the TV when using the remote control. • If using an external 3D emitter, try pointing the emitter in a different direction or disconnect the emitter.
2.	When I try to use the remote control, the POWER key blinks five times.	Replace the batteries.
3.	TV does not respond to the remote control or to control-panel buttons and TV will not power on or off.	<ul style="list-style-type: none"> • Unplug the AC power cord for 10 seconds. • Press and hold the POWER button on the control panel for 10 seconds to perform system reset.
4.	When a device is selected from the Input Selection menu, the screen is blue or black (no signal source).	<ul style="list-style-type: none"> • Make sure the selected device is turned on. • Check connections to the device. • Begin play of the device.
5.	You have forgotten your Lock menu pass code.	See "Bypassing TV Locks" on page 22.
6.	Rating restrictions are not working.	Open the Lock > Parental menu and: <ul style="list-style-type: none"> • Verify that the ratings locks are active. • Check the Lock Time/Unlock Time to check if rating restrictions are disabled. • Rating restrictions apply only to content on the ANT input and composite Y/VIDEO inputs.
7.	On-screen displays appear each time you change a function.	Normal TV operation.
8.	A warning message appeared on screen stating, "TV will shut down in a few seconds. Please check if the air flow is blocked."	<ul style="list-style-type: none"> • Internal TV temperature has exceeded proper levels. Cool the room. • The TV has overheated. Clear blocked air vents and ensure at least four inches of clearance on all sides of the TV.
9.	I have turned on CEC for my HDMI devices but control is erratic and I wish to disable it.	<ul style="list-style-type: none"> • First turn off the TV's HDMI control for the specific device. Open the Inputs > HDMI Control menu, select the device, select Off. • Disable CEC on the device itself. See the device's instructions. • If the problem persists, do the following: <ol style="list-style-type: none"> 1. Disconnect the device from the TV. 2. Open the Inputs > Name menu and select Delete for the device. 3. Reconnect the device to the TV and Auto Input Sensing will recognize the device with CEC disabled.

Service and Customer Support

Service

If you are unable to correct a problem with your TV, consult Mitsubishi Consumer Relations at 1 (800) 332-2119.

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

Customer Support

- To order replacement or additional remote controls, visit our website at www.mitsuparts.com or call 1 (800) 553-7278.
- For questions:
 - Call Consumer Relations at 1 (800) 332-2119.
 - E-mail: TVsupport@mevsa.com
 - Website: www.mitsubishi-tv.com

For assistance call 1(800) 332-2119

Appendix B: Troubleshooting, continued

TV Channels		
	Symptom	Remarks
1.	The TV takes several seconds to respond to channel changes.	<ul style="list-style-type: none"> • It is normal for digital channels to take longer to tune in. • Press ENTER after entering a channel number to minimize delays. • Use a 4-digit number for an over-the-air digital channel. • Use a 6-digit number for digital cable channels if your cable service is able to recognize 6-digit channel numbers.
2.	You cannot access a channel.	<ul style="list-style-type: none"> • Use number keys instead of CH. • Be sure the channel you want to view is in memory. • Check that the TV is switched to the correct device or antenna for that channel by pressing the INPUT key. • Make sure the channel is not locked in the Locks menu. • If you cannot tune to a virtual digital channel even though the TV has already memorized digital channels, tune to the physical channel number used by the broadcaster. The virtual channel will then be automatically added to memory. • You may be trying to tune to an analog channel that is no longer broadcasting.

Appendix B: Troubleshooting, continued

TV Power On/Off		
	Symptom	Remarks
1.	TV takes an excessively long time to power on.	When powered on, the TV needs time to boot up, just as a computer does.
2.	You cannot program the TV to turn on automatically (Timer function)	<ul style="list-style-type: none"> The TV may be locked. The clock may not be set.
3.	TV turned itself off and the light on the front panel started to blink.	<ul style="list-style-type: none"> Momentary power fluctuation can cause the TV to turn off to prevent damage. Wait for the green light to stop flashing and turn the TV on again. If the TV does not stay on, press the POWER button on the control panel for ten seconds to perform System Reset. If this happens frequently, obtain an AC line power conditioner/surge protector. An unusual digital signal may have been received, triggering a protection circuit. Wait for the light to stop flashing and turn TV on.
4.	TV will not power off.	Press the POWER key on the control panel for ten seconds to perform System Reset.

Picture		
	Symptom	Remarks
1.	The picture does not look like a high-definition picture.	Not all signals are high-definition signals. To receive high-definition programming from your cable or satellite provider, you must subscribe to the provider's high-definition service. Some over-the-air broadcasts are in high-definition and can be received with a high-quality antenna suited to your location.
2.	TV has sound but no picture.	<ul style="list-style-type: none"> Press MENU on the remote control. If the menu displays, then there is a problem with the incoming signal. Check that all video inputs are plugged in firmly. Press and hold the POWER button on the control panel for ten seconds to perform System Reset.
3.	You cannot view a picture when playing a VHS tape.	Check your VCR's owner's guide for further troubleshooting.
4.	VCR or DVD player's on-screen menus jitter up and down.	Stop playback. Possible cause: Many VCRs and DVD players provide on-screen menus at only half-resolution that may appear to jitter up and down.
5.	When viewing a stopped VCR, white lines are rolling on the screen.	<ul style="list-style-type: none"> Turn off video mute for the VCR. Begin playing the tape. Change the VCR input from Line 1 to the VCR antenna input.
6.	Picture from an HDMI input is noisy (poor quality).	Upgrade a standard (unmarked) HDMI cable to a high-speed HDMI cable.
7.	The image from a computer appears distorted when viewed on the TV.	<ul style="list-style-type: none"> Normal TV operation. The TV does not correct distortion in the picture from a computer because the correction process may cut off the edges of the image. The aspect ratio may be wrong for the image. Press FORMAT to change.

Appendix B: Troubleshooting, continued

Sound	
Symptom	Remarks
1. There is no sound even when the volume is turned up.	<ul style="list-style-type: none"> • Check if the MUTE key is on. • The TV's analog Listen to setting may be set to SAP (analog program from the ANT input) but no SAP is being broadcast. • Check that the Sound > Audio > TV Speakers option is set to On to hear sound from the TV speakers. Possibly the TV Speakers option is Off. • If using an A/V receiver, check that the Sound > Audio > TV Speakers option is set to Off to hear sound from the A/V receiver speakers. • The language selected in the Setup > Antenna Digital Audio menu is not being broadcast for the current program. • Press and hold the POWER button on the control panel for 10 seconds to perform System Reset.
2. The sound does not match the screen picture.	The TV's analog Listen to setting may be set to SAP (analog program from the ANT input).
3. The sound from my A/V receiver does not match the screen picture (I should hear the correct audio from my A/V receiver).	<ul style="list-style-type: none"> • Check that DIGITAL AUDIO OUTPUT on the TV's connection panel is connected to the A/V receiver. Without this connection, devices connected only to the TV (and not the A/V receiver) can be heard only from the TV speakers. Note that this includes the ANT input, a device (such as a camcorder) connected to the TV, and any other device sending audio to the TV only. • Make sure the A/V receiver is set to the correct input.
4. Cannot select an audio-only device; it does not appear in the Input Selection menu.	Plug an unused video plug into the Y/VIDEO jack to activate Auto Input Sensing. Assign the name CD/Audio or MP3 to make the audio device selectable in the Input Selection menu.
5. Sound is coming from the TV speakers instead of the A/V receiver.	<ul style="list-style-type: none"> • Connect the TV's audio output to the A/V receiver. • Change TV Speakers setting to Off.

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Version 3, 29 June 2007

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We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library.

A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

- This product includes software developed by Independent JPEG Group.
- This product includes software developed by the FreeType Project.
The FreeType Project is copyright (C) 1996-2000 by David Turner, Robert Wilhelm, and Werner Lemberg. All rights reserved.

Mitsubishi Home-Cinema Television Limited Warranty (U.S.A. only)

MITSUBISHI ELECTRIC VISUAL SOLUTIONS AMERICA, INC. ("MEVSA") warrants as follows to the original purchaser of this television from an authorized MITSUBISHI Audio/Video Dealer, should it prove defective by reason arising from improper workmanship and/or material:

a. Parts. The lenticular (i.e. front picture) screen is warranted against defects in materials and workmanship for a period of thirty (30) days from the date of the original purchase at retail. The lamp and all other parts (except any software incorporated into this television) are warranted for a period of one (1) year from the date of the original purchase at retail. We will repair or replace, at our option, any defective part without charge for the part. Parts used for replacement may be replaced with those of like kind and quality and may be new or remanufactured. Parts used for replacement are warranted for the remainder of the original warranty period.

b. Embedded Software. MEVSA warrants that all software developed by MEVSA and incorporated into this television set (the "Embedded Software") will perform in accordance with the functional description of Embedded Software in all material respects, but MEVSA does not warrant that the Embedded Software is error-free. The limited warranty contained in this section shall continue for a period of one (1) year from the date of the original purchase at retail. If, after prompt notice within the warranty period, MEVSA determines that the Embedded Software has failed to perform in accordance with such functional description in all material respects and if such failure is not due to accident, misuse, modification or misapplication of the Embedded Software, then MEVSA shall modify the nonconforming Embedded Software and make available the modified Embedded Software at no charge to you, which at MEVSA's sole discretion may be fulfilled by means of modification or replacement software contained on a replacement memory card or made available through download via the Internet or email for Customer installation. The foregoing shall be MEVSA's sole obligation to you under this limited warranty. All rights under this limited warranty on the Embedded Software also subject to your acceptance of and compliance with the terms of the Software License Agreement applicable to this television, and this limited warranty on the Embedded Software shall be null and void if the Embedded Software is modified or changed in any manner except as specifically authorized by MEVSA.

c. Labor. For thirty (30) days after the original purchase at retail, we will repair or replace, at our option, the lenticular screen if it proves defective. For certain items that are designed to be replaced by the consumer, including (but not limited to) some Embedded Software and Lamps, the consumer is solely responsible for any replacement labor. For all other parts, we will provide the labor for a warranty repair by an authorized MITSUBISHI service center without charge for one (1) year from the original date of purchase at retail.

d. Notice. To obtain warranty service, you must notify an authorized MITSUBISHI service center of any defect within the applicable warranty time period.

e. This DLP Projection Television uses a single DLP chip to create the screen image. This technology creates the image using small dots, or picture elements (pixels). Your DLP Projection TV is manufactured to a high level of performance and quality, in fact, 99.99% perfect in the number of properly functioning pixels. As in other display technology, sometimes a pixel is continuously active, inactive or the incorrect color. Our standard is clear; MEVSA warrants only that the percentage of properly functioning pixels will be not less than 99.99% of all pixels.

BEFORE REQUESTING SERVICE, please review the instruction booklet to insure proper installation and correct customer control adjustment. If the problem persists please arrange for warranty service.

1. TO OBTAIN WARRANTY SERVICE:

a. Contact 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 MEVSA at the 800-332-2119, or by using the support feature of our website at www.Mitsubishi-tv.com.

b. Warranty service will be provided in your home or, if required, at an authorized service shop, provided that your television is located within the geographic territory customarily covered by an authorized MITSUBISHI service center. If not, you must either deliver your television to an authorized service location at your own expense, or pay for any travel and/or transportation costs the service center may charge to and from your home. Actual service labor will be provided without charge.

c. 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 COVERAGE UNDER THIS LIMITED WARRANTY.** However, please return the Owner Registration Card so that we can contact you should a question of safety arise which could affect you.

For assistance call 1(800) 332-2119

d. To obtain a replacement lamp, order the lamp directly from the MEVSA Parts Department at (800) 553-7278.

2. THIS LIMITED WARRANTY DOES NOT COVER:

- a. Up to .01% pixel outages (small dot picture elements that are dark or incorrectly illuminated).
- b. Damage to the lenticular screen or Fresnel lens, screen frame, cosmetic damage or to any other damage 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 including air vent cleaning 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; freight damage; or any damage caused by acts of God or other factors beyond the reasonable control of MEVSA, such as power surge damage caused by electrical system or lightning. This limited warranty also excludes service calls where no defect in the product covered under this warranty is found, service calls related to unsatisfactory audio or visual reception or signal unless caused by a defect in the product that is covered under this limited 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 OF FITNESS FOR ANY PARTICULAR PURPOSE ARE EXPRESSLY LIMITED TO A TERM OF ONE YEAR.

4. UNDER NO CIRCUMSTANCES SHALL MEVSA 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 limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

7. In the event of any dispute under this limited warranty, jurisdiction and venue for resolving that dispute will be in the state where the television was purchased and the laws of such state will govern.



MITSUBISHI ELECTRIC VISUAL SOLUTIONS AMERICA, INC.

9351 Jeronimo Road
Irvine, CA 92618-1904

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Website:
www.mitsubishi-tv.com

E-mail:
TVsupport@mevsa.com

**For questions, call Consumer Relations at
1 (800) 332-2119**

**To order replacement or additional
remote controls,**

Visit our website www.mitsuparts.com

or call

1 (800)-553-7278

Lamp-Substitution Alert

MEVSA recommends that you use only genuine Replacement Lamp Assemblies purchased directly from Mitsubishi or a Mitsubishi Authorized Dealer or Mitsubishi Authorized Service Center. MEVSA advises that replacement lamps obtained separately from the Lamp Cartridge and/or Lamp Assemblies obtained from unauthorized sellers may be incorrect for your television, may not fit or perform properly and may even damage your television. MEVSA can not be responsible for the performance, reliability or safety of any replacement lamps that are obtained from unauthorized sources.

SYSTEM RESET

If the TV does not respond to the remote control, control-panel buttons, or will not power on/off, press and hold the **POWER** button on the control panel for ten seconds.

The TV will turn off. Power on the TV and the green LED will flash quickly for about one minute. Recent settings changes may be lost.