

## LCD Flat Television Users Guide

For Models: LT-37X688 LT-42X688 LT-42X788 LT-47X788 LT-37XM48 LT-42XM48





Illustration of LT-37X688 and RM-C1450

## **Important Note:**

**Serial Number:** 

In the spaces below, enter the model and serial number of your television (located at the rear of the television cabinet). Staple your sales receipt or invoice to the inside cover of this guide. Keep this user's guide in a convenient place for future reference. Keep the carton and original packaging for future use.

Model	Number:		

## **Important Safety Precautions**



### 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 to 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 appliance.

WARNING: TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS

APPARATUS TO RAIN OR MOISTURE.

CAUTION: TO INSURE PERSONAL SAFETY, OBSERVE THE FOLLOWING RULES

REGARDING THE USE OF THIS UNIT.

- 1. Operate only from the power source specified on the unit.
- 2. Avoid damaging the AC plug and power cord.
- 3. Avoid Improper installation and never position the unit where good ventilation is unattainable.
- 4. Do not allow objects or liquid into the cabinet openings.
- 5. In the event of trouble, unplug the unit and call a service technician. Do not attempt to repair it yourself or remove the rear cover.

Changes or modifications not approved by JVC could void the warranty.

- \* When you don't use this TV set for a long period of time, be sure to disconnect both the power plug from the AC outlet and antenna for your safety.
- \* To prevent electric shock do not use this polarized plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.



· As an "ENERGY STAR®" partner, JVC has determined that this product or product model meets the "ENERGY STAR®" guidelines for energy efficiency.

### IMPORTANT RECYCLING INFORMATION

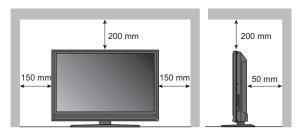
This product has a fluorescent lamp that contains mercury. Disposal of these materials may be regulated in your community due to environmental considerations. For disposal or recycling information, please contact your local authorities or for USA, the Electronic Industries Alliance: http://www.eiae.org

## **IMPORTANT SAFETY INSTRUCTIONS**

- 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.
- 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 a 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.
- **15)** Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
- 16) Avoid improper installation and never position the unit where good ventilation is impossible. When installing this TV, distance recommendations must be maintained between the set and the wall, as well as inside a tightly enclosed area or piece of furniture. Keep to the minimum distance guidelines shown for safe operation.



### 17) Cautions for installation

- Do not tilt the TV towards the left or right, or towards the back.
- Install the TV in a corner on the floor so as to keep cords out of the way.
- The TV will generate a slight amount of heat during operation. Ensure that sufficient space is available around the TV to allow satisfactory cooling.
- **18)** Make enough room for inserting and removing the power plug. Place the TV as close to the outlet as possible. The main power supply for this TV is controlled by inserting or removing the power plug.
- 19) Batteries shall not be exposed to excessive heat such as sunshine, fire or the like.
- 20) When this TV is connected to the wall outlet, it is always on standby even when all the LED lamps are not lit. To shut down the TV, unplug the TV from the wall outlet.

## Warnings

We have an important note for customers who subscribe to basic cable services (do not have a separate cable box) and plan to use their JVC TV remote control to select channels.

Once you run the Auto Tuner Setup (which detects and programs all the channels your TV is receiving through the RF input), every channel number available from your cable company will appear in your television's Channel Summary and they will all be marked as available for scanning. Even though every channel is detected and appears as available, you will only be able to view those that you specifically subscribe to from your cable company. This will likely mean there are blank channels between those channels you wish to scan or "surf".

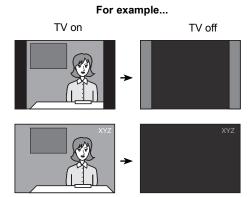
We apologize for any inconvenience this may cause but it is important to note that this is not a malfunction of your television. If you want to sequentially scan those channels you subscribe to without blank ones in between, you can contact your cable company for their cable box and remote.

## **Avoiding Ghost Images**

Displaying fixed images for extended periods of time can leave a subtle but temporary ghost image on your screen. To avoid this, mix your viewing pattern.

### Examples include, but are not limited to the following:

- Stock-market report bars
- Shopping channel logos and pricing displays
- · Video game patterns or scoreboards
- · Bright station logos
- Internet web sites or other computer-style images
- DVD discs, video tapes, laser discs
- Broadcast, cable, satellite channels or digital television tuners/converters



## Warnings

## Caring for the Cabinet

Normally, light dusting with a soft, non-scratching duster will keep your TV clean.

If you wish to wipe down the television, first unplug it. Then wipe gently with a soft cloth, slightly moistened with water. You can add a few drops of mild liquid detergent to the water to help remove spots of oily dirt.

- DO NOT allow liquid to enter the TV through the ventilation slots.
- DO NOT use strong or abrasive cleaners on the TV.
- · DO NOT spray liquids or cleaners directly on the TV's surface.
- · DO NOT rub or scrub the TV harshly. Wipe the set gently with a soft cloth.

### Caring for the Screen

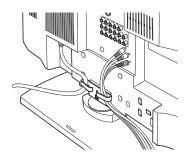
The screen is treated with an electrostatic-proof coating. When it gets dirty, wipe it gently with a soft cloth. If the screen is very dirty, wipe it down with a cloth dipped in a diluted kitchen cleaner and thoroughly wrung-out. Then wipe immediately after with a clean, dry cloth.

Do not apply alcohol, organic solvents (like acetone), acidic or alkaline cleansers to the screen. These will remove the coating layer and cause discolorations.

Do not push or hit the screen. This could cause scratches on the screen surface and image distortions.

### Tidying the cables

A cable holder which keeps your connection cables tidy is attached to the back of the stand.



### Note:

 This illustration is for models LT-37X688, LT-42X688, LT-37XM48 and LT-42XM48. The rear panel for models LT-42X788 and LT-47X788 are slightly different in shape.

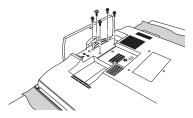
## **Warnings**

## Disconnecting the stand

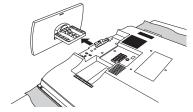
If you disconnect the stand, attach the bottom cover and the screw (supplied) into the hole.

This illustration is for models LT-37X688, LT-42X688, LT-37XM48 and LT-42XM48. You can disconnect the stand for models LT-42X788 and LT-47X788 using the same method.

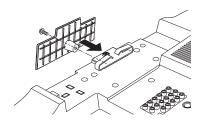
- 1) Place the TV face down on a soft cloth on a table.
- 2) Remove the four screws from the back of the TV.



3) Pull out the stand from the TV.



4) Cover the hole with a bottom cover and tighten the screw.



### Note:

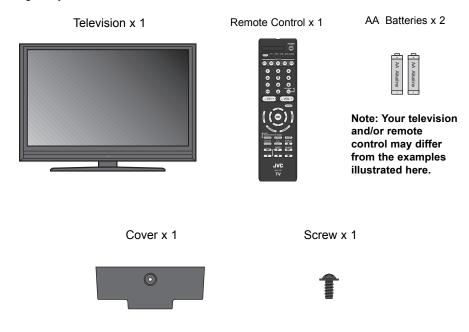
• To re-install the stand, reverse the procedure from 4) to 1).

## **Table of Contents**

Important Safety Precautions .	. 2	Sound Adjust	. 5
Warnings		Sound Settings	
		Turn On Volume	51
Quick Setup	. 9	Volume Limit	52
Unpacking your TV		Reset	52
TV Models		Clock/Timers	
TV Remote Control		Set Clock	53
Getting Started		On/Off Timer	
The Remote Control		Photo Viewer	
Connecting Your Devices		Auto Demo	. 57
Onscreen Menus		Button Functions	
Using the Guide		Power	
Onscreen Menu System		Number Buttons	
Initial Setup		Tune	
Noise Muting		Sub Channel	
Language		Input	59
Front Panel Lock		Channel +/	
V-Chip		Volume +/	
Set Lock Code		Return+/TV	
Closed Caption		Sound	
Auto Shut Off		Muting	
Software Version	. 39	Video Status	
Power Indicator		Sleep Timer	
Optical Out		Display	
Quick Start-up		Menu	
Tuner Setup		OK	
Auto Tuner Setup	. 41	Back	
Channel Summary	. 42	ML/MTS	
Find Channel		C.C	
Digital Antenna Level	. 44	Favorite	
Tuner Diagnostic		Guide	
External Input	. 45	Mode	
HDMI Size	. 45	External device control buttons	
Video-1 Audio			
Video Input Label		Remote Programming	. 67
Picture Adjust		OSD Information	73
Picture Settings			
Color Temperature		Weak Signal	
Color Management		Audio/Data Offig Charmer	. / .
Dynamic Gamma		Troubleshooting	. 74
Smart Picture		Specifications	
Digital VNR	. 49	-	
MPEG NR		Warranty	
Natural Cinema		Authorized Service Center	. 79
Position Adjustment			

## **Unpacking your TV**

Thank you for your purchase of a JVC LCD Flat Television. Before you begin setting up your new television, please check to make sure you have all of the following items. In addition to this guide, your television box should include:

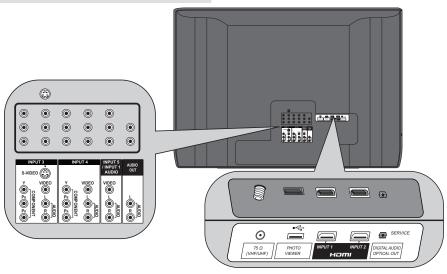


We recommend that before you start using your new television, you read this entire User's Guide so you can learn about your new television's many great features. If you're anxious to start using your television right away, a quick setup guide follows on the next few pages.

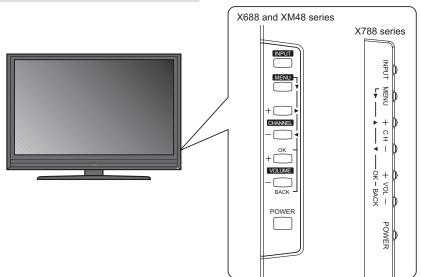
## **TV Models**

Before you connect your television to another device, please refer to the proper diagrams for your specific TV and remote. These will help assist you in understanding how to connect your television to another device, as well as use the remote to set up your television.

## **Rear Panel Diagram**



## **Side Panel Diagram**



## **Remote Control**



RM-C1450

- For information on remote control buttons, see pages 58 66.
- SUB CHANNEL and GUIDE buttons are for digital channels. If your TV is connected to an ATSC antenna or Digital Cable, you can use these buttons.
- This remote control is capable of operating many external device brands. See page 67 72 for how to program the remote control.

### **Getting Started**

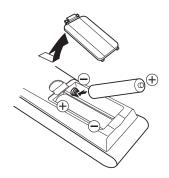
These quick setup pages will provide you, in three easy steps, with the basic information you need to begin using your new television right away. If you have questions, or for more detailed information on any of these steps, please consult other sections of this manual.

### Step 1 – The Remote Control

Before you can operate your remote control, you first need to install the batteries (included).

Raise the latch on the remote's back cover to remove. Insert two batteries, carefully noting the "+" and "-" markings. Place the "-" end in the unit first. Snap the cover back into place.

When you change the batteries, try to complete the task within three minutes. If you take longer than three minutes, the remote control codes (ex. VCR, DVD) may have to be reset. See pages 67 - 72.



## **Basic Operation**

Turn the television on and off by pressing the Power button at the top right corner of the remote. If this is the first time you are turning on the TV, the interactive plug-in menu appears.



- At first, to watch your TV, select the TV mode by pressing the Mode button on the remote control before you turn the TV power on.
- · See page 58 to 66 for details regarding the remote control buttons.

## **Using Menu Buttons**

To use the menu functions, press the Menu button. Next, select a menu using the four arrow keys. The four arrow keys are used only for menu selections.



## Step 2 - Connecting your devices

To make these connections, you will use plugs like the ones illustrated below.

### **Coaxial Cables**



Used to connect an external antenna or cable TV system to your TV.

### S-Video Cable



Used to make video connections with S-Video VCRs, Camcorders and DVD players.

# Component Cables Composite Cables Audio Cables

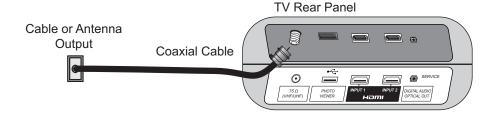


Used to connect audio/video devices like VCRs, DVD players, stereo amplifiers, game consoles, etc.

### Notes:

- · The following connection diagrams are examples.
- After you are finished connecting your devices, plug the power cord into the nearest power outlet and turn on the TV.
- If you follow these diagrams and the television does not work properly, contact your local cable operator.
- To connect a DVD player, see VCR Connection.
- If you have a satellite television system, refer to the satellite TV manual.

### No VCR Connection

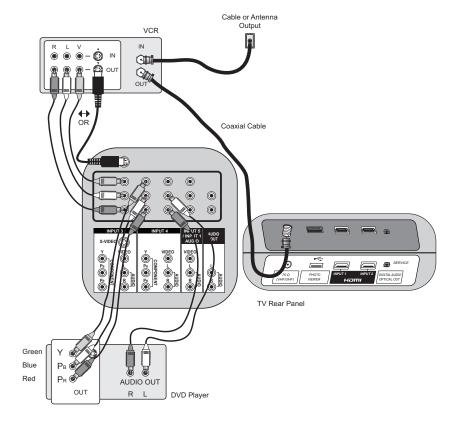


### VCR • DVD Connection

### Notes:

- Green, blue and red are the most common colors for DVD cables. Some models may vary colors. Please consult the user's manual for your DVD player for more information.
- Be careful not to confuse the red DVD cable with the red audio cable. It is best to complete
  one set of connections (DVD or audio output) before starting the other to avoid accidentally
  switching the cables.
- · You may also connect the DVD player to Input 1.

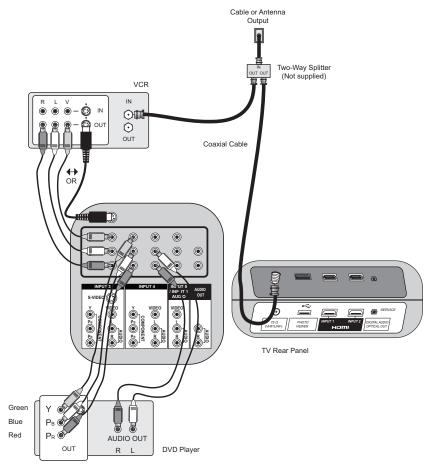
### Diagram #1



### Note:

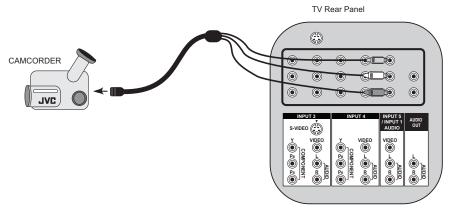
· If this connection setup does not work for you, try the connection setup on page 15.

### Diagram #2



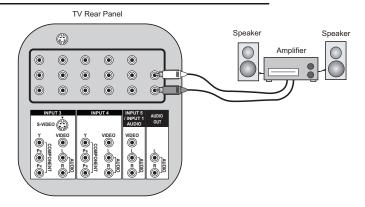
## Connecting to a Camcorder

You can connect a camcorder to your television by using the input jacks located on the back of the TV.



- Connect a yellow composite cable from the camcorder VIDEO OUT to the VIDEO IN on the back of the TV.
- Connect a white cable from the camcorder LEFT AUDIO OUT to the LEFT AUDIO IN on the back of the TV.
- 3) Connect a red cable from the camcorder RIGHT AUDIO OUT to the RIGHT AUDIO IN on the back of the TV.

## Connecting to an External Amplifier

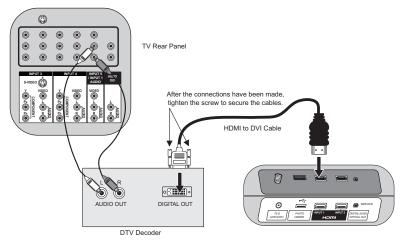


- Connect a white cable from the LEFT AUDIO OUTPUT on the back of the TV to the LEFT AUDIO INPUT on the amplifier.
- Connect a red cable from the RIGHT AUDIO OUTPUT on the back of the TV to the RIGHT AUDIO INPUT on the amplifier.

- · Refer to your amplifier's manual for more information.
- · You can use AUDIO OUTPUT for your home theater system.
- If you have a device connected to INPUT-1 or INPUT-2, you will not be able to hear any audio from the AUDIO OUT on the back of the TV.

## Connecting to a Digital TV Receiver

By connecting a Digital TV Receiver, high definition pictures can be displayed on your TV in their digital form.



TV Rear Panel

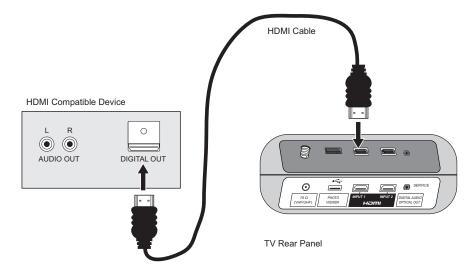
- Connect the HDMI to DVI Cable from the DIGITAL OUT on the back of your DTV decoder to the HDMI INPUT-1 on the back of the TV.
- 2) Connect a red cable from the DTV decoder RIGHT AUDIO OUT to the RIGHT AUDIO INPUT HDMI AUDIO IN "R" on the back of the TV.
- 3) Connect a white cable from the DTV decoder LEFT AUDIO OUT to the LEFT AUDIO INPUT HDMI AUDIO IN "L" on the back of the TV.
- · Personal computer compatibility cannot be guaranteed.
- Use an HDMI to DVI cable (commercially available) in order to digitally connect the television with a DTV decoder.

- If 480p signals (640x480 or 720x480) are displayed on the screen, the horizontal balance may be slightly shifted. Access the "HDMI Size" in the External Input menu to adjust it. (Refer to page 45.)
- When you do the above connection, set "Video-1 Audio" in the External Input menu to "Analog". See "Video-1 Audio", page 45.
- The Analog Audio input can only be used with the HDMI INPUT-1.
- When setting the "Video-1 Audio Analog/Digital" menu setting on the TV, please note that
  this setting only effects the HDMI INPUT-1 jack and that if you use a DVI to HDMI adapter this
  connection must be made to the HDMI INPUT-1 along with analog audio cables.

## Connecting to an HDMI Compatible Device

By connecting an HDMI compatible device, high definition pictures can be displayed on your TV in their digital form. Some HDMI devices can include DVD players, D-VHS or any HDMI compatible device.

HDMI (High Definition Multimedia Interface) is the first industry supported, uncompressed, all digital audio/video interface. HDMI provides an interface between any audio/video source, such as a set-top box, DVD player, A/V receiver or an audio and/or video monitor, such as a digital television (DTV).

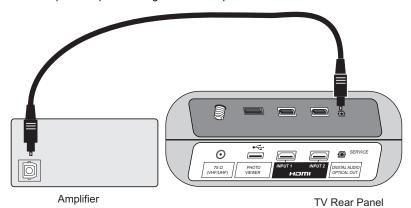


 Connect the HDMI Cable from the DIGITAL OUT on the back of your DTV or HDMI device to the HDMI INPUT-1 on the back of the TV.

- When you do the above connection, set "Video-1 Audio" in the External Input menu to Digital.
   See "Video-1 Audio", page 45.
- · Some decoders may not respond depending on the equipment that is connected to the HDMI.
- If the HDMI output device signal is changed (for example, 480i/60Hz is changed to 480p/60Hz), the screen may turn green and there may be some distortion for a short time until the signal becomes stable.
- This TV can accept 480i, 480p, 720p, 1080i and 1080p signals via HDMI.

## Connecting to an amplifier using your optical output

You can connect an amplifier that has an optical digital input terminal by using an optical digital cable from the optical output. The signal that is output can be PCM or DOLBY DIGITAL.

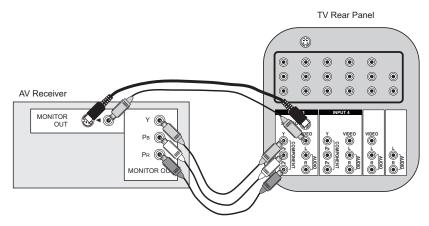


1) Connect the optical cable from underneath the television to the back of the amplifier.

- · This terminal can only output digital audio.
- In order to use the optical output connection, select PCM or DOLBY DIGITAL on Optical Out in the Initial Setup Menu. See page 40.
- · Refer to your owners manual on using your amplifier.
- You cannot output sound from your Optical Output connection if the audio source is from your HDMI device.

# Connecting to an AV Receiver using your television's V3 Smart Input

By connecting your AV Receiver to your television's V3 Smart Input, you can watch picture sources from many different devices, without having to change or use the other input connections on your TV. This allows you to free up the other input connections so you can connect more devices to your television.



- Connect an S-Video Cable from the AV Receiver's MONITOR OUT, to the S-Video INPUT-3 on the back of the TV.
- Connect a Yellow Composite Cable from the AV Receiver's MONITOR OUT, into the VIDEO INPUT-3 on the back of the TV.
- Connect a Green Component Cable from the AV Receiver's Y MONITOR OUT, into the Y VIDEO INPUT-3 on the back of the TV.
- Connect a Blue Component Cable from the AV Receiver's PB MONITOR OUT, into the PB VIDEO INPUT-3 on the back of the TV.
- Connect a Red Component Cable from the AV Receiver's PR MONITOR OUT, into the PR VIDEO INPUT-3 on the back of the TV.

- Please refer to your AV Receiver instruction manual for more information on connecting your speakers and other devices like a DVD player.
- Use your AV Receiver's remote to switch to the different devices you have connected.
- · Some AV Receivers may not respond when the V3 Smart Input function is turned on.
- If you have video connections for each input device connected to your AV Receiver, you should not connect them using both S-Video and Composite connection at the same time when you are using V3 Input as the V3 Smart Input. In this case we recommend using the S-Video connection

## Step 3 - The Interactive Plug-in Menu

When you turn your television on for the first time the interactive plug-in menu will appear. The plug-in menu helps you to get your TV ready to use by letting you set your preferences for:

- The language in which you want the onscreen menus to appear.
- Setting the TV's clock to the correct time so your timer functions will work properly. You can choose "Auto" or "Manual" for setting the clock.
- · The auto tuner setup of which channels you wish to receive.

We recommend you complete the interactive plug-in items before you start using your television. After the first time you turn on your TV, you can access the Interactive Plug-In Menu from the main menu. See page 28.

#### Note:

· If you press the Menu button while setting up the interactive plug-in menu, it will skip over it.

## Language

After the "JVC Interactive Plug-in Menu" has been displayed, the TV automatically switches to the "Language" settings. You can choose to view your onscreen menus in three languages: English, French or Spanish.



To choose a language: (English, Français or Español.)

To "Set"

Press the Ok button

Once you press Ok, you will move to the "Set Clock" Plug-in Menu automatically.

(Continued...)

### Auto Clock Set

You may set your clock using the time data sent via broadcasting.



To choose "Auto (Analog)" or "Auto (Digital)"
To "Channel" when you selected "Auto (Digital)"

To select a receiving digital channel To "Time Zone"

To select your time zone: (Atlantic, Eastern, Central, Mountain, Pacific, Alaska or Hawaii)

To move to "D.S.T." (Daylight Savings Time)
To turn "On or Off"

To "set"

Press the OK button

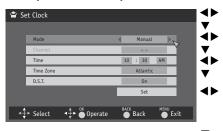
Once you press OK, you will move to the "Auto Tuner Setup" Plug-in Menu automatically.

### Notes:

- "Channel" can be selected only when Mode is "Auto (Digital)". However, only when you are using "Auto (Digital)" for the first time, you cannot select "Channel".
- D.S.T. can be used when it is set to "On" in the "Set Clock" menu.
- Only when the Mode is set to "Auto", the Daylight Saving Time feature automatically adjusts your TV's clock for Daylight Saving.
- The real time and D.S.T. may not be set correctly depending on the broadcasting signal and receiving conditions. In this case, set your clock manually.
- You will have to reset the clock after a power interruption. You must set the clock before operating
  any timer functions.

### Manual Clock Set

To set your clock manually, choose "Manual". If you choose "Auto", see auto clock set above.



To choose "Manual"

To "Time"

To set the hour

To minute

To set the minute

To "Time Zone"

To select your time zone: (Atlantic, Eastern, Central, Mountain, Pacific, Alaska or Hawaii)

To move to "D.S.T." (Daylight Savings Time)
To turn "On or Off"

To "Set"

Press the OK button

Once you press OK, you will move to the "Auto Tuner Setup" Plug-in Menu automatically.

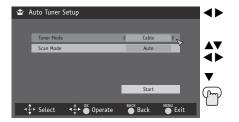
#### Note:

You will have to reset the clock after a power interruption. You must set the clock before operating
any timer functions.

(Continued...)

## **Auto Tuner Setup**

In auto tuner setup, the TV automatically scans through all available channels, memorizing the active ones and skipping over blank ones or channels with weak signals. This means when you scan (using the Channel +/- buttons) you will receive only clear, active channels.



To choose "Cable or "Air" (or "Skip" when you skip "Auto Tuner Setup")

To Scan Mode To choose Auto, STD, HRC or IRC

Press the Ok button

To "Start"



When the setup is finished, "Thank you! Setup is now complete." is displayed. Your quick setup is now complete. You can now begin watching your television, or you can continue on in this guide for more information on programming your remote control, or using the JVC onscreen menu system to customize your television viewing experience.

#### Notes:

- You can choose Scan Mode only when Tuner Mode is Cable.
- If you want to cancel the Auto Tuner Setup, press the Menu button.
- · Noise muting will not work during Auto Tuner Setup.
- · If you choose "Skip", it finished without doing the Auto Tuner Setup.

**Cable Users:** After your auto tuner setup is complete, you may, (depending on the type of hookup), have only 1 channel, usually 3 or 4 in the auto tuner memory. This is normal.

## **Using the Guide**

Certain symbols are used throughout this guide to help you learn about the features of your new television. The ones you will see most frequently are:

- ▲▼ Up and Down arrows mean:
  - · Move vertically in a main menu screen
  - · Move through a submenu screen
  - · Move to the next letter, number, or other choice in a submenu
- Left and right arrows mean:
  - · Select a highlighted menu item
  - · Select an item in a submenu
  - · Select numbers in certain menu options



The "press button" icon means you should press the button named on your remote control. (Button names appear in SMALL CAPITAL LETTERS.)



The "helping arrow" icon points to the highlighted or selected item in a menu.

**To bring up the onscreen menu**, press the Menu button on the remote control. The following (left) main menu will appear. The item that appears in orange is the one currently selected. If you use the Menu button on the TV's side panel instead of the remote, Front Menu screen showing "Video Status", "Aspect", "Auto Tuner Setup" and "Menu" will appear (following right screen).





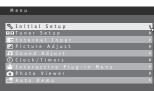
### Note:

 Menus shown in this book are illustrations, not exact replications of the television's onscreen displays.

### The Onscreen Menu System

Your television comes with JVC's onscreen menu system. The onscreen menus let you make adjustments to your television's operation simply and quickly. All menus are navigated from the Main Menu at first. Detailed explanations on using each menu follow later in this guide. For information about the Interactive Plug-in Menu, see pages 22 - 24.

 To open the onscreen menu system, press the MENU button on the remote control. The main menu will appear.



To select a menu from the main menu, use the ▲▼ arrows and enter by using the ◀►
arrows or Oκ button.

The selected feature and option on a menu screen are highlighted in a different color. To move to a different feature, use the ▲▼ arrows to move up and down the list.

- There are two methods to select an option in a menu, after selecting a menu using the ▲▼ arrows.
  - Use the ◀▶ arrows to select an option from the highlighted feature. (In this guide, we discuss this method).
  - Press the Ok button. The right onscreen will appear. Use the ▲▼ arrows to select an option from the box and press the Ok button.
  - To go back to the previous screen, press the BACK button.
- Pressing Menu on the remote control will close the onscreen menu system and return you to normal television viewing.



Each menu and its features will be discussed in the following pages of this guide.

- If you do not press any buttons for a few seconds, the onscreen menu will automatically shut off.
- · Button names in this guide are shown in SMALL CAPITAL LETTERS.
- Some menu items may not appear in menu screens when certain aspect ratios or inputs are selected.





Press the Menu button

The left main menu will appear

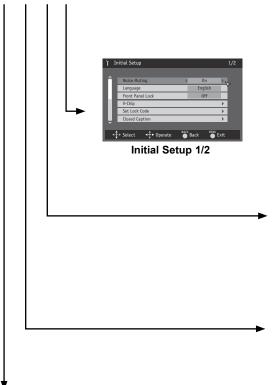


To select a menu from the main menu
To enter

The following menu you selected will appear



Press the BACK button to return to the previous menu screen





Initial Setup 2/2



**Tuner Setup** 



**External Input** 





Picture Adjust 1/3

Picture Adjust 2/3

Picture Adjust 3/3

### Note:

 The HDMI Size menu can only be displayed when a 480p picture signal is input to the HDMI terminal and the picture is being displayed on the screen.





Press the MENU button

The left main menu will appear

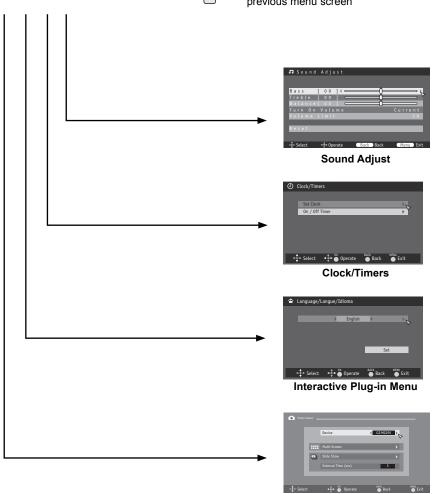


To select a menu from the main menu To enter

The following menu you selected will appear



Press the BACK button to return to the previous menu screen



**Photo Viewer** 

### Note:

· For Auto Demo, see page 57.

Þ

Initial Setup

Noise Muting

Set Lock Code

Language Front Panel Lock

## **Noise Muting**

This feature inserts a blank black screen over channels which are not broadcasting or are too weak to be received clearly.



Press the MENU button

To "Initial Setup"

To enter

To "Noise Muting"

**4** Þ

To turn "On" or "Off" Press the Menu button when finished



Note: · Noise muting will not work when you operate channel summary.

### Language

The language function is described on page 22 as the interactive plug-in menu. If you need to choose the language again, follow the steps below.



Press the Menu button

To "Initial Setup"

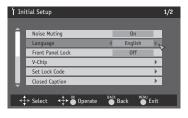
To enter To "Language"

lacktriangled

To choose a language: English, Français or Español



Press the Menu button when finished



### **Front Panel Lock**

This allows you to lock the keys on the side of the TV, so that a child may not accidentally change your viewing preferences.



Press the MENU button



To "Initial Setup"



To enter



To "Front Panel Lock"



To turn "On" or "Off" Press the MENU button when finished



You can turn off this feature in the following ways:

- Unplug the power cord, and plug it back in. Do this if your batteries die, or you lose your remote control
- Use the remote control
- Press the Menu button on the side of the TV for more than 3 seconds. In this case, the OSD for "Front Panel Lock" will appear.

### Note:

 To turn On/Off the TV, press the Power button on the side of the TV for more than 3 seconds. This feature will remain On

### **V-Chip**

Your TV is equipped with V-Chip technology which enables you to block channels or content that you feel to be inappropriate for children, based on US and Canada rating guidelines. V-Chip has no effect on video signals from a DVD discs, VCR tapes or Camcorder connection.

**Note:** Some programs, and movies are broadcast without a ratings signal. Even if you set up V-Chip ratings limits, these programs will not be blocked. See page 35 for information on how to block unrated programs.

**Note (for Canadian viewers):** The V-Chip function is based on specifications designed for the United States and therefore may not work properly in Canada.

You can customize the V-Chip settings of your television to match your personal tastes. The V-Chip menu below is the starting point for your V-Chip settings.

You can use US V-Chip settings (for programming broadcast from the United States), Canadian V-Chip settings (for programming broadcast from Canada), and movie ratings. You may use any or all of the settings (US V-Chip, Canada V-Chip, Movie ratings). Descriptions for setting each of the three V-Chip formats appear in the next six pages along with descriptions of the rating categories.

To access the rating categories:



Press the MENU button



To "Initial Setup"



To enter



To "V-Chip"



To operate (Password input screen will appear)



Enter the password by using the 10 keypad



Initial Setup > V-Chip

The V-Chip main screen will appear when the password is correct.

- To turn V-Chip "On" or "Off" (V-Chip must be turned "On" for rating settings to operate)
- To move to V-Chip menu (see following pages for descriptions of each item)

- · If you input the wrong password, go back to the Initial Setup Menu.
- · To set the password, see "Set Lock Code", page 36.
- "Advanced V-Chip Rating" and "Advanced Canadian Rating" menus may be displayed sometimes between "Set Canadian Ratings French" and "Unrated". It depends on the broadcasting if they will be displayed or not.

## **US V-Chip Ratings**

### U.S. PARENTAL RATING SYSTEMS

Programs with the following ratings are appropriate for children.

### □ TV Y is Appropriate for All Children

Programs are created for very young viewers and should be suitable for all ages, including children ages 2 - 6.

### □ TV Y7 is for Older Children

Most parents would find such programs suitable for children 7 and above. These programs may contain some mild fantasy violence or comedic violence, which children should be able to discern from reality.

### Programs with the following ratings are designed for the entire audience.

### □ TV G stands for General Audience

Most parents would find these programs suitable for all age groups. They contain little or no violence, no strong language, and little or no sexual dialog or situations.

### □ TV PG Parental Guidance Suggested

Programs may contain some, but not much, strong language, limited violence, and some suggestive sexual dialog or situations. It is recommended that parents watch these programs first, or with their children.

### □ TV 14 Parents Strongly Cautioned

Programs contain some material that may be unsuitable for children under the age of 14 including possible intense violence, sexual situations, strong coarse language, or intensely suggestive dialog. Parents are cautioned against unattended viewing by children under 14.

### ☐ TV MA Mature Audiences Only

These programs are specifically for adults and may be unsuitable for anyone under 17 years of age. TV MA programs may have extensive V, S, L, or D.

### Viewing Guidelines

In addition to the ratings categories explained above, information on specific kinds of content are also supplied with the V-Chip rating. These types of content may also be blocked. The content types are:

- V/FV is for VIOLENCE/FANTASY VIOLENCE
- · S stands for SEXUAL CONTENT
- L stands for strong LANGUAGE
- D stands for suggestive DIALOG

## **Setting US V-Chip Ratings**



Press the Menu button



To "Initial Setup"
To enter



To "V-Chip"



To operate (Password input screen will appear)



Enter the password by using the 10 keypad

The V-Chip main screen will appear



To turn V-Chip "On" or "Off"



To move to "Set US TV Ratings"



To enter



## **Directions to set US V-Chip Ratings**

Line up the cursor in the column (TV PG, TV G, etc.) with the content row (V/FV, S, etc.) and press the ▲▼ or ◀► to move the cursor to the correct location. Press Oκ to turn the locking feature on or off. An item is locked if the discontinuous instead of a "—".

**For example.** To block viewing of all TV 14 shows, move the cursor to the top row of that column and add a lock icon. Once you've put a lock on the top row, everything in that column is automatically locked.



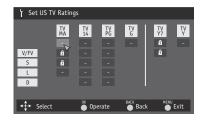
To the TV 14 Column



Press the Ok button to lock



Press the Menu button when finished



### **Movies Ratings**

#### □ NR – Not Rated

This is a film which has no rating. In many cases these films were imported from countries which do not use the MPAA ratings system. Other NR films may be from amateur producers who didn't intend to have their film widely released.

NR (Not Rated) Programming may contain all types of programming including children's programming, foreign programs, or adult material.

#### □ G - General Audience

In the opinion of the review board, these films contain nothing in the way of sexual content, violence, or language that would be unsuitable for audiences of any age.

### □ PG - Parental Guidance

Parental Guidance means the movie may contain some contents such as mild violence, some brief nudity, and strong language. The contents are not deemed intense.

### □ PG-13 - Parents Strongly Cautioned

Parents with children under 13 are cautioned that the content of movies with this rating may include more explicit sexual, language, and violence content than movies rated PG.

### ☐ R - Restricted

These films contain material that is explicit in nature and is not recommended for unsupervised children under the age of 17.

### ☐ NC-17 - No One Under 17

These movies contain content which most parents would feel is too adult for their children to view. Content can consist of strong language, nudity, violence, and suggestive or explicit subject matter.

### ☐ X – No One under 18

Inappropriate material for anyone under 18.

## Directions to set Movie (MPAA) Ratings



Press the Menu button



To "Initial Setup"



To enter



To "V-Chip"

**4** 

To operate (Password input screen will appear)



Enter the password by using the 10 keypad

The V-Chip main screen will appear

**▼▶** To turn V-Chip "On" or "Off"

▲▼ To "Set Movie Ratings"

▼ To enter movies menu

### For example:

To block viewing of X and NC-17 rated from shows:



To the X Column



Press the O<sub>K</sub> button to lock



To the NC-17 Column



Press the Ok button to lock
Press the Menu button to finish



## Canadian V-Chip Ratings

### □ E – Exempt

Exempt programming includes: news, sports, documentaries and other information programming, talk shows, music videos, and variety programming.

### ☐ C - Programming Intended for Children

Violence Guidelines: There will be no realistic scenes of violence. Depictions of aggressive behavior will be infrequent and limited to portrayals that are clearly imaginary, comedic or unrealistic in nature.

### ☐ C8+ - Programming Intended for Children 8 and Over

Violence Guidelines: Any realistic depictions of violence will be infrequent, discreet, of low intensity and will show the consequences of the acts. There will be no offensive language, nudity or sexual content.

### ☐ G - General Audience

Programming will contain little violence and will be sensitive to themes which could affect younger children.

### □ PG - Parental Guidance

Programming intended for a general audience, but which may not be suitable for younger children. Parents may consider some content not appropriate for children aged 8-13.

### ☐ 14+ – 14 Years and Older

Parents are strongly cautioned to exercise discretion in permitting viewing by pre-teens and early teens. Programming may contain mature themes and scenes of intense violence.

#### □ 18+ – Adult

Material intended for mature audiences only.

## **Directions to set Canadian V-Chip Ratings**

Press the Menu button

To "Initial Setup"

To enter

To "V-Chip"

**4** To operate (Password input screen will appear)

Enter the password by using the 10 keypad

The V-Chip main screen will appear

**4** To turn V-Chip "On" or "Off"

To "Set Canadian Ratings English"  $\blacksquare$ 

**4** > To enter ratings menu

#### For example:

To block viewing of programming rated 18+ and 14+:



To the 18+ Column



Press the Ok button to lock



To the 14+ Column



Press the Ok button to lock



Press the Menu button to finish

 For instructions on "Set Canadian Ratings French", please see page 34 in the French user's guide.



### **Unrated Programs**

Unrated programming refers to any programming which does not contain a rating signal. Programming on television stations which do not broadcast rating signals will be placed in the "Unrated Programming" category.

Examples of Unrated programs:

- · Emergency Bulletins
- News
- Public Service Announcements
- Sports
- · Some Commercials

- · Locally Originated Programming
- · Political Programs
- · Religious Programs
- · Weather

#### Note:

 TV programs or movies that do not have rating signals will be blocked if the unrated category is set to "Block".

## **Directions to Block Unrated Programs**

You can block programs that are not rated.



Press the MENU button



To "Initial Setup"



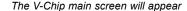
To enter
To "V-Chip"



To operate (Password input screen will appear)



Enter the password by using the 10 keypad





To turn V-Chip "On" or "Off"



To "Unrated"



To select "View" or "Block"



Press Menu when done



### **Set Lock Code**

Channel guard and V-Chip settings are protected by a four-digit lock code. Your TV comes preset with a lock code of "0000". You may change the code to any four-digit number you wish. To change the lock code, follow the steps below.



Press the MENU button



To "Initial Setup"
To enter



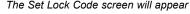
To "Set Lock Code"



To operate (Password input screen will appear)



Enter the password by using the 10 keypad





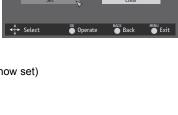
To set the password, use the 10 keypad



Press the Ok button to finish (your lock code is now set)

When a viewer attempts to watch a blocked channel, this message appears:

The channel will remain blocked until the correct lock code is entered (see above for information on setting your lock code).



0 1 2 3

Y Initial Setup > Set Lock Code

Lock Code

This programming exceeds your rating limits. Please enter lock code by 10 key pad to unlock it.

No. - - - -

#### Notes:

- · After a power interruption you must reset the lock code.
- Write your lock code number down and keep it hidden from potential viewers.

## **Channel Guard Message**

When a viewer attempts to watch a guarded channel, the following message appears:

To watch a channel that you have locked, enter the Lock Code using the 10 key pad.

If the wrong code is entered, the message "Invalid Lock Code!" will appear on the screen.

The channel cannot be accessed until the correct code is entered.

This channel is locked by channel guard.
Please enter lock code by 10 key pad to unlock it.
No. - - - -

- · Once a channel has been unlocked, it will remain unlocked until the television is turned off.
- · See also "Set Lock Code".

### **Closed Caption**

Many broadcasts now include an onscreen display of dialog called closed captions. Some broadcasts may also include displays of additional information in text form. Your television can access and display this information using the closed caption feature. To activate the closed caption feature, follow the steps below.

### **Auto Setting**

Press the MENU button

▲▼ To "Initial Setup"◀▶ To enter

▲▼ To "Closed Caption"

◆► To enter

▲▼ To "Type"

◆ To select Auto, Advanced or Basic

Auto: Shows closed caption a priority for

digital channels over analog channels. It is set automatically.

**Advanced:** Shows only the digital closed caption. **Basic:** Shows only the analog closed caption.

▲▼ To "Analog Service"

**▼▶** To select a caption (CC1 to CC4) or text channel (Text1 to Text4)

▲▼ To "Digital Service"

▼ To select 1, 2, 3, 4, 5 or 6

▲▼ To "Appearance"

◆► To enter

To select "Auto" ("Manual", see page 38)

Press the Menu button when finished

- If you want to reset your settings to the default settings, select "Reset" and press the Ok button.
- · If you select "Advanced" for Type, you cannot select "Analog Service".
- If you select "Basic" for Type, you cannot select "Digital Service" and "Appearance".
- "Type", "Digital Service" and "Appearance" are for digital broadcasting. It has no effect for analog broadcasting.



### **Manual Setting**

**◄▶** To select "Manual" for Appearance Mode

▲▼ To "Font Size", "Font Style", "Text/Edge Opacity", "Background Opacity", "Text Color", "Edge Color" or "Backgrond Color"

◆ To select the setting you like

Font Size: Auto, Standard, Large or Small

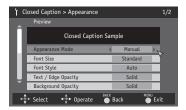
Font Style: Auto, SerifMono, Serif, SanSerifMono, SanSerif, Casual, Cursive or Small Capital

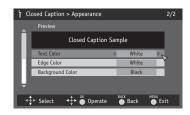
**Text/Edge Opacity, Background Opacity:** Auto, Transparent, Translucent, Solid or Flashing

**Text Color, Edge Color, Background Color:** Auto, White, Black, Red, Green, Blue, Yellow, Magenta, or Cyan



Press the Menu button when finished





All fonts are licensed from Monotype Imaging Inc.

- Closed caption subtitles are usually found on closed caption channel CC1. Some programs
  may include additional text information which is usually found on text channel Text1. The
  other channels are available for future use.
- Closed captioning may not work correctly if the signal being received is weak or if you are playing a video tape.
- · Most broadcasts containing closed captioning will display a notice at the start of the program.
- To select the mode, press the C.C. button. See page 64.

### **Auto Shut Off**

This function automatically shuts off your TV when there is no signal from the channel and no operation if the TV is on for 10 minutes.



Press the Menu button

 $\blacktriangle lacktriangledown$ 

To "Initial Setup"

To enter

**▼**▶

To "Auto Shut Off"

**4**▶

To turn "On" or "Off"



Press the Menu button when finished

 If the channel that you have on does not receive a signal for more than one minute, the blinking text "No

Program or Weak Signal Auto shut off in 9 min." appears on the screen, and starts the countdown. If no signal is being received within 10 minutes, the TV shuts itself off.



### Software Version

You can confirm the Software Version



Press the MENU button



To "Initial Setup"



To enter To "Software Version"



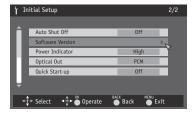
To enter



Press the Ok button to close



Press the Menu button when finished



### **Power Indicator**

Power indicator allows you to adjust the brightness of the power indicator.



Press the MENU button



To "Initial Setup"



To enter



To "Power Indicator"

**Z**i.

To turn "High", "Low" or "Off"



Press the Menu button when finished



· When Off is selected :

The LED disappears if you have a TV signal.

The LED is lit as "Low" when there is no TV signal.

- When the On Timer turns On, the LED is lit as "Low" when you turn the power off.
- If you set a timer on the TV, the power indicator will light even if the TV is on stand by.



### **Optical Out**

You can select the optical digital sound output, either PCM or DOLBY DIGITAL when your TV is connected to an amplifier that has DOLBY DIGITAL decoder. If you select DOLBY DIGITAL, you can enjoy listening in 5.1ch sound when watching digital broadcasts. This only effects digital channels.



Press the Menu button

To "Initial Setup"



To "Optical Out"

To enter



To select "PCM" or "DOLBY DIGITAL"



Press the Menu button when finished



#### Notes:

- · If your amplifier does not have DOLBY DIGITAL decoder, select PCM. If you don't select PCM, it cannot output the sound from the speakers.
- · For connecting an amplifier using the optical output, see page 20.
- · You cannot output sound from your Optical Output connection if the audio source is from your HDMI device.



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### **Quick Start-up**

Quick Start-up allows you to lessen the time for the TV to turn on and ready for viewing.



Press the MENU button



To "Initial Setup"



To enter



To "Quick Start-up" To turn "On" or "Off"



Press the Menu button when finished



 Standby power consumption is higher when you have this feature turned on.



# **Auto Tuner Setup**

The auto tuner setup function is described on page 24 as the interactive plug-in menu. If you need to run the auto tuner setup again, follow the steps below.



Press the Menu button



To "Tuner Setup" To enter



To "Auto Tuner Setup"



To enter



To choose "Cable" or "Air"

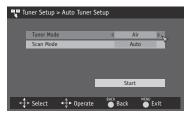


To "Scan Mode"



To choose "Auto", "STD", "HRC" or "IRC" To "Start"

Press the Ok button (Programming will take serveral minutes)



The auto tuner is finished when the message "Programming Over!" appears onscreen.

- · When the Tuner Mode is set to "Cable", it is possible to select "Scan Mode"
- If no channels were found using Auto Tuner Setup, check your antenna cable and the settings for Tuner Mode/Scan Mode.
- · You can also access the "Front Menu" screen by using the Menu button on the side of the TV instead of the remote control. Choose "Auto Tuner Setup" by pressing Menu ▼ on the side panel and enter by using the CHANNEL +/- (◀▶) buttons.

### **Channel Summary**

Channel summary allows you to customize the line-up of channels received by your TV. You can add or delete channels from the line-up or prevent any unauthorized viewers from watching any or all channels.



Press the Menu button



To "Tuner Setup" To enter



To "Channel Summary"



A channel having the Scan mark "√" can be selected by using CH+/- (channel +/-) button. You can delete channels from the scan by removing the " $\sqrt{}$ ".



▲▼ ◀► To the "Scan" column



Press the Ok button to include or delete from scan



Press the Menu button when finished



#### Note:

 The number of a digital channel may change, depending on the time of some broadcastings. If this channel existed and now has disappeared, the lock channel or scanned channel mark by the channel summary for that channel will be cancelled.

How to set the channel station.



Press the MENU button



To "Tuner Setup"



To enter



To "Channel Summary"



To enter To "Station"



Press the Ok button to enter





To select the character you want



To move to the next space

...continue to follow these directions for all seven spaces



To "Set"



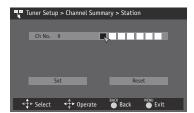
Press the Ok button



Your characters are now set



Press the Menu button when finished



### **Channel Summary (Continued)**

If you want to reset the characters you set:

Press the MENU button

To "Tuner Setup"

**₹** 

To enter

To "Channel Summary"

**▲▼** 

To enter

To "Station"

[m] ▲▼

Press the Ok button to enter

To select "Reset"

Press the Ok button to finish

Your characters are now reset

Press the Menu button when finished

#### Notes:

You can use characters for: Alphabet, numbers, marks and spaces.

It is possible to set the maximum of 500 channel labels.

If you try to set more than the 500 maximum, the message "Memory Overflow" will appear.

You can block access to a channel by activating the channel lock.

Press the Menu button

To "Tuner Setup"

To enter

To "Channel Summary"

₹

To enter

To the Lock Column ( 1 )

Press the Ok button (Password input screen will appear)

Enter the password by using the 10 keypad

Press the Ok button to lock or unlock that channel

Press the Menu button when finished

### **Find Channel**

Add a digital channel that does not exist in the channel map.



Press the MENU button

**▲▼** 10

To "Tuner Setup"
To enter

▲▼ To "Find Channel"

**▼** To enter

(Fm)

Add a channel using 0 to 9

(m)

Press the Ok button to finish



### **Digital Antenna Level**

Confirms the present antenna level.



Press the Menu button

▲▼ To "Tuner Setup"

◆ To enter

▲▼ To "Digital Antenna Level"

◆► To enter



#### Note:

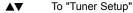
• If you are watching an analog channel, antenna level will not appear.

# **Tuner Diagnostic (Service Use Only)**

Tuner Diagnostic menu is for service use only. It is used to diagnose your TV if there is a problem.



Press the Menu button



◆ To enter

▲▼ To "Tuner Diagnostic (Service Use Only)"

◆ To enter



#### Note:

• If you are watching an analog channel, Tuner Diagnostic will not appear.

# **External Input**

### **HDMI Size**

The HDMI Size option can only be selected in the External Input menu when an HDMI 480p picture signal is being input to the HDMI terminal. This option adjusts the position when an HDMI or DVI 480p picture signal is being displayed on the screen. There are two types of HDMI 480p picture signals: 640x480 and 720x480. If the displayed picture is slightly shifted, the position can be adjusted by selecting Auto, Size1 or Size2.



Press the Menu button

**4**1

To "External Input"

7.5

To enter To "HDMI Size"

**₹**}

To enter

 $\blacksquare lacktriangle$ 

To select "Auto", "Size1" or "Size2"



Press the MENU button to finish



#### Notes:

- The HDMI Size menu can only be selected when an HDMI or DVI 480p picture signal is input to the HDMI terminal and the picture is being displayed on the screen.
- You can select "Auto" only when the signal is 480p for HDMI. When you select "Auto", the television will select "Size1" or "Size2" automatically.

### Video-1 Audio

This feature is used if you have a DVI or HDMI compatible component connected to your TV.



Press the Menu button

 $\blacksquare lacktriangle$ 

To "External Input"

**◆▶** 

To enter

 $\Delta \nabla$ 

To "Video-1 Audio"



To select "Analog", "Digital" or "Auto" Press the Menu button when finished

# 

- If your DVI or HDMI component is capable of digital audio and video, choose "Digital". If your DVI or HDMI component is capable of analog audio and digital video, choose "Analog".
- · Refer to your DVI or HDMI component's instruction manual for more information.
- When you select "Auto", the television will select "Analog" or "Digital" automatically, depending on the audio input from the HDMI.

# **External Input**

# Video Input Label

This function is used to label video input connections for the onscreen displays.



Press the Menu button



To "External Input"



To enter



To "Video Input Label"



To enter



To select the desired video input



To select the desired preset input label (see chart below)



Press the MENU button when finished





Preset Labels	Select when
VCR	You have a VCR connected to the video input
DVD	You have a DVD connected to the video input
PVR	You have a Personal Video recorder connected to the video input
D-VHS	You have a Digital VCR connected to the video input
STB	You have a Set-top Box connected to the video input
SAT	You have a Satellite Receiver connected to the video input
AMP	You have an Amplifier connected to the video input
GAME	You have a Video Game connected to the video input
CAM	You have a Video Camera connected to the video input
DISC	You have a Video Disc player connected to the video input

### Note:

To reset to the default setting, ▲▼ to select "Reset", then press the OK button.

### **Picture Settings**

These settings allow you to change and adjust the way the picture appears on your television.

#### Tint

Tint allows you to adjust the levels of red and green in your TV picture.

#### Color

The color function lets you make all the colors in the TV picture appear either more vivid or subtle.

#### **Picture**

Picture allows you to adjust the levels of black and white on the TV screen, giving you a darker or brighter picture overall.

### **Bright**

You can adjust the overall brightness of the TV picture with the Bright control.

#### Detail

The Detail feature adjusts the level of fine detail displayed in the picture.

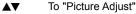
#### **Energy Saver Mode**

The energy saver mode adjusts the level of back light brightness on the TV screen.

### **Adjust the Picture Settings**



Press the Menu button



◆► To enter

To "Tint", "Color", "Picture", "Bright", "Detail" or "Energy Saver Mode"

◆ To enter



▼ To adjust the setting

▲▼ To move to the next setting



Press the Menu button when finished

# **Color Temperature**

You can decide how strong or dull the colors appear on the TV screen.



Press the Menu button



◆ To enter

▲▼ To "Color Temperature"

◆ To enter

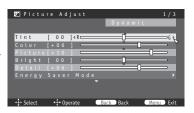
▲▼ To set "Low" or "High"



Press the Menu button when finished

### Note:

 If you are receiving a 1080i or 720p digital channel in it's original format, you can adjust the Picture Settings and Color Temperature independently from all the other channels.



### **Color Management**

This TV supports the Color Management function to ensure dull colors are compensated to produce natural hues.



Press the MENU button



To "Picture Adjust" To enter



To "Color Management"





To set "On" or "Off"



Press the Menu button when finished



### **Dynamic Gamma**

JVC's Dynamic Gamma Circuitry (DGC) makes it easier to see dark areas when a picture has many dark areas, and makes it easier to see the bright areas when a picture has many bright

areas. DGC is turned on, DGC analyzes and adjusts the total level of picture brightness balance, especially in dark areas where the level of grayscale is often lost, turning completely to black DGC automatically enhances the detail in these dark areas providing a more dynamic image with finer detail, so the optimum picture settings are automatically set for each picture. Normally use with DGC on.



0 n



Press the Menu button

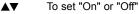


To "Picture Adjust"



To "Dynamic Gamma"







Press the Menu button when finished

### **Smart Picture**

Smart Picture detects the APL (Average Picture Level) and adjusts the contrast suitable for what you are watching.



Press the MENU button



To "Picture Adjust"



To enter



To "Smart Picture"



To enter To set "On" or "Off"



Press the Menu button when finished

### Note:

When you have "Dynamic" selected in the "Video Status", Smart Picture is not selected.



# **Digital VNR**

This function can be selected to change the effect of Digital VNR.



Press the MENU button

AV

To "Picture Adjust"

**▼**▶

To "Digital VNR"

To enter

**3**}

To enter

 $\blacktriangle \blacktriangledown$ 

To select the effect you like.

Auto: adjusts the effect of VNR automatically.

Min: adjusts the effect of VNR to minimum.

Max: adjusts the effect of VNR to maximum.

Off: turns the effect of VNR off.



Press the Menu button when finished



### **MPEG NR**

This function blocks noise removal and mosquito NR simultaneously.



Press the Menu button



To "Picture Adjust"



To enter



To "MPEG NR"
To enter



To select "On" or "Off"



Press the Menu button when finished



### **Natural Cinema**

Natural cinema corrects the problem of blurred edges which may occur when viewing a program originally shot on film (such as motion pictures) or animation. If you notice blurring at the edges of these programs, choose "Natural Cinema" and set it to "Auto". Natural Cinema helps correct conversion errors that occur when film, which is shot at 24 frames-per-second, is broadcast at the television rate of 30 frames-per-second.



Press the MENU button



To "Picture Adjust"



To "Natural Cinema"



To enter
To "Natu
To enter



To select the mode "Auto" or "Off"



Press the Menu button when finished

#### Note:

Natural Cinema is only applied for SD 480i and HD 1080i signals.



### **Position Adjustment**

Position adjustment allows you to adjust the position of the picture.



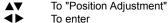
Press the MENU button



To "Picture Adjust"



To enter

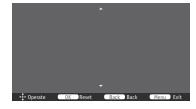




To adjust the position



Press the Menu button to finish



#### Notes:

- To reset the adjustment to the center, press the Ok button.
- When the arrow disappears, while you are adjusting the position, the position is at it's maximum limit.
- · If you select Regular, Slim, Full or Full Native size with aspect, position adjustment option is not selectable.
- When you change the screen size, perform the position adjustment again.
- · Position adjustment allows you to adjust the screen position horizontally when the aspect is set Panorama Zoom or Cinema Zoom for 1080i and 720p signals.
- When you are receiving a 1080p signal, Position Adjustment can not be selected.

### Reset

Reset resets all picture adjustments at once to the default settings.



Press the Menu button



To "Picture Adjust"



To enter



To "Reset"



Press the Ok button



The onscreen menu disappears for a moment, and then the settings are reset to the default setting for all the picture adjustments except for Natural Cinema and Position Adjustment.





Press the Menu button when finished

# **Sound Adjust**

### **Sound Settings**

These settings allow you to change and adjust the sound on your television.

Bass - You can increase or decrease the level of low-frequency sound in the TV's audio with the bass adjustment.

**Treble –** Use treble to adjust the level of high-frequency sound in your TV's audio.

Balance - Adjust the level of sound between the TV's left and right speakers with the balance setting.

### Adjust the Sound Settings



Press the Menu button

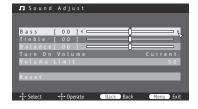
To "Sound Adjust"

To enter To "Bass", "Treble" or "Balance"

To adjust the setting To move to the next setting



Press the MENU button when finished



#### Note:

· You can reset all sound adjustments you set at once as the default setting when you select reset. See page 52.

### **Turn On Volume**

Turn On Volume allows you to set the volume level when you turn the TV on.



Press the MENU button



To "Sound Adjust"



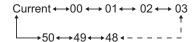
To enter



To "Turn On Volume"

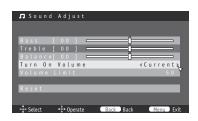


To set the volume level





Press the Menu button to finish



# **Sound Adjust**

# **Volume Limit**

Volume Limit allows you to set the maximum volume level.



Press the MENU button



To "Sound Adjust"



To enter To "Volume Limit"

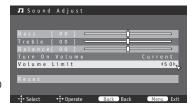


To set the maximum volume level

$$00 \longleftrightarrow 01 \longleftrightarrow 02 \longleftarrow ---- \to 48 \longleftrightarrow 49 \longleftrightarrow 50$$



Press the Menu button to finish



### Reset

Reset resets all sound adjustments at once to the default settings.



Press the MENU button



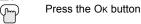
To "Sound Adjust"



To enter



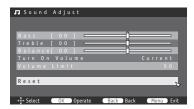
To "Reset"



The onscreen menu disappears for a moment, and then the settings are reset to the default setting for all the sound adjustments.



Press the Menu button when finished



# **Clock/Timers**

Time Zone D.S.T.

### **Set Clock**

The set clock function is described on page 23 as the Interactive Plug-in Menu. You can choose to set the clock automatically, or manually. If you need to set the clock again, follow the steps below



lacktriangled

Press the MENU button

To "Clock/Timers"

**4** Þ To enter

To "Set Clock"

4> To enter

When you set the clock automatically, choose "Auto (Digital)" or "Auto (Analog)" by pressing the ◀ or ▶ arrows. Clock/Timers > Set Clock

To "Channel" when you selected "Auto (Digital)"

4 To select a receiving digital channel

To "Time Zone" lacktriangled

◂ To select your time zone



To "D.S.T." (daylight savings time) **4** To turn D.S.T. "On" or "Off"

To "Start Clock"

Press the Ok button

Press the Menu button when finished

When you set the clock manually, choose "Manual" by pressing the ◀ or ▶ arrows.

To move to the hour ◂ To set the hour

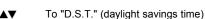
AV To move to minutes

**∢**▶ To set the minutes To "Time Zone"

 $\blacksquare \blacktriangledown$ ◂ To select your time zone:







To turn D.S.T. "On" or "Off"

To "Start Clock" Press the Ok button

"Thank you !" will be displayed.

Press the MENU button when finished

- "Channel" can be selected only when Mode is "Auto (Digital)".
- D.S.T. can be used only for US and Canada when it is set to "On" in the "Set Clock" menu.
- Only when the Mode is set to Auto, the Daylight Saving Time feature automatically adjusts your TV's clock for Daylight Saving.
- · The real time and D.S.T. may not be set correctly depending on the broadcasting signal and receiving conditions. In this case, set your clock manually.
- · You will have to reset the clock after a power interruption. You must set the clock before operating any timer functions.



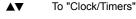
# Clock/Timers

### **On/Off Timer**

The on/off timer lets you program your television to turn itself on or off. You can use it as an alarm to wake up, to help you remember important programs, or as a decoy when you're not home.



Press the Menu button



◆ To enter

▲▼ To "On/Off Timer"

◆ To enter (begins with "Mode")

◆ To choose "Once", "Everyday" or "No"

▲▼ To "On Time"

◆ To set the hour (AM/PM) you want the TV to turn on

▲▼ To move to minutes

◆ To set the minutes

To accept "On Time" and move to "Off Time" (the time the TV will turn off). Set the "Off Time" the same way as "On Time"

**▲▼** To accept "Off Time" and move to "Channel"

▼ To select channel

▲▼ To "On Volume"

◆ To set the volume level

▲▼ To "Set"

 $(frac{1}{2})$ 

Press the Ok button



Press the Menu button to exit the menu

- The on/off time cannot be set to locked channels in the channel summary menu.
- · In order for the on/off timer to work, the clock must be set.
- · After a power interruption, the timer settings must be reset.
- If your clock is not set, "Please set clock first!" will appear on the screen. Please see Manual Set Clock on page 53 to set the clock.

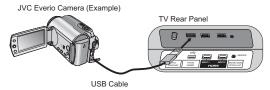


# **Photo Viewer**

Photo Viewer allows you to enjoy your digital pictures stored on your USB Mass Storage Class devices. You are able to view them on this TV as high quality images.

### How to start the Photo Viewer

- 1) Turn the power off on the device containing your photos.
- 2) Switch to "PHOTO" mode if your device has a mode switch (VIDEO/PHOTO).
- 3) Turn on your device containing your photos and switch to play mode to view the photos.
- 4) Connect your device to the Photo Viewer Terminal on this TV by using a USB cable.



5) The TV screen will display a "hourglass" icon and then display the Photo Viewer Screen. For "Multi Screen" and "Slide Show", see page 56 and 57.



6) Select a camcorder's device from "Device" by using the ◀▶ buttons.

### How to finish the Photo Viewer



Press the Menu button when finished



Press the Power button on remote control to turn the power off Disconnect the USB cable

- Use the supplied USB cable that came with your device. Do not use HUB or USB extension cable.
- Photo Viewer cannot be guaranteed to work with all USB Mass Storage Devices. In this
  case, the message, "There is no photo to be displayed" will appear when you start the "How
  to start the Photo Viewer". It may take some time to display or it may not display correctly.
- When your device that you are connecting to the TV is composed of two or more Mass Storage devices, you can select from two Mass Storage devices. Selected Mass Storage device depends on the model.
- Please refer to the Customer Support website at <a href="www.jvc.com/support">www.jvc.com/support</a> for information and notes regarding your devices you wish to connect.
- Compatible file format is "Exif version 2.1, based on DCF version 1.0".
- · Supported file formats are ".jpg" or ".JPG".
- · Maximum number of files that can be displayed is 9999.
- Photos with less than 120 x 120 pixels and more than 16383 x 16383 pixels cannot be displayed.
- · All your stored data should be backed up first as a precaution before connecting to the TV.
- · Depending on your stored file size, it can take extra time to display "Photo Viewer" page.
- It may take extra time to display the photo full screen, depending on the file size.
- "Device" can only be selected when you have two or more devices connected to the TV.

# **Photo Viewer**

### Multi Screen

Multi Screen allows you to display JPEG images that are in your digital still camera or external USB Mass Storage Class memory as "thumbnails".

▲▼ To "Multi Screen"

◆ To enter

The thumbnail appears

◆ ▲ ▼ To select an image

Press Oκ if you want to display a single

image

Press the DISPLAY Button

The following image appears. You can look at the pictures by using your remote control buttons.



▲ button: Zooms in the image

When the image is zoomed in, you can move the image in all directions using the 10-key pad on your remote. To reset the position, press the 5 button.

▼ button: Zooms out the image◆ button: To previous image▶ button: To next image

VOL+: Rotates the image 90° clockwise VOL-: Rotates the image 90° counterclockwise

DISPLAY: Displays information. With each press of the DISPLAY button, you can

display the picture's information.

BACK: Returns to the thumbnail screen

MENU: Exit

- When Multi Screen has more than one screen, if you press the page number using the 10key pad on your remote, you will skip to that specific page.
- · Although the image has been rotated, this change is not saved to the USB memory.



# **Photo Viewer**

### Slide Show

Slide Show allows you to display the images in order.

To "Slide Show"

**4** 

To enter

The C

The Slide Show starts



Press the BACK button to stop the Slide Show

#### Notes:

- To pause the Slide Show, press the Oκ button. To unpause, press the Oκ button again.
- When you set the Interval Time (seconds), the image will change automatically to the next image. By default, it is 5 seconds.
- Slide Show may take extra time more than setting the Interval Time, depending on the file size.
- If the USB cable is disconnected or your USB device is turned off while the Photo Viewer is working, your device may not be recognized. In this case, turn Quick Start-up Off, turn the TV off and turn the TV back on.

#### Interval Time

You can set the time to change to the next image for the Slide Show. When you set the time using the ◀▶ button, the image change to the next image automatically. When you have set it to "Manual", you can change the image to the next image by using the ◀▶ buttons.

#### Note:

 It may take some extra time to move to the next image depending on the size of your JPEG images.

# **Auto Demo**

### **Auto Demo**

Auto Demo explains this TV's features to you. This Auto Demo mode is set to be On by default until you turn it Off.

- Please complete the Interactive Plug-in Menu first. The Auto Demo mode will start automatically when the Interactive Plug-in Menu is completed.
- If you press any button on the television or remote, with the exception of Power or Menu, the Auto Demo mode will stop for 30 seconds. After 30 seconds have passed with no operation, the Auto Demo mode will start again.

### **Power**

Turns the TV on or off.



Press the Power button

# **Number Buttons - 10Key Pad**

Use the number buttons on the remote control to move directly to a specific channel. For example, to move to channel 12:



1 (ONE)



2 (Two)

### **Tune**

Lets you decide the input channel and select it. After you press the number buttons on the remote, press the Tune button. For example, to move to channel 12:



1 (ONE)



2 (Two)



Press the TUNE button

### **Sub Channel**

The main channel sometimes has minor channels (Sub Channels). By using the Sub Ch button, you can select a sub channel easily.

### To watch sub channels



Press the Mode button to select TV

For example, to move to sub channel 123-45:



Press 1, 2 and 3 in order



Press the Sub Ch button



Press 4 and 5 in order



Press the Tune button

### Input

Selects the signal input source for the television: VIDEO-1, 2, 3, 4 or 5 for video devices like VCRs, DVD players, or camcorders.



Press the V1, V2, V3, V4 or V5 button

#### Notes:

- When you return to TV mode, press the RETURN+/TV button or direct 10 key pad or CHANNEL +/- button.
- You can also access by pressing the INPUT button on the side of the TV instead of the remote.

### Channel +/-

Use these buttons to move up or down all the available channels your TV is able to receive. To move rapidly through the channels using JVC's **Hyperscan** feature, press and hold CH+ or CH–.

### Volume +/-

Use these buttons to raise or lower the TV's volume level. The maximum is the level you set in Volume Limit. See page 52.

### Return +/TV

The Return+/TV button has three functions:

Return - Returns to the channel viewed just before the channel currently onscreen.

**Return+** - Lets you program a specific channel to return to while scanning through the channels using the CH+ and CH– buttons.

TV - Returns to the TV mode.



Press the Return+/TV and hold for three seconds

Return Channel (123-456) Programmed!

The channel currently active has been programmed as your return+ channel. Now scan through the channels using the CHANNEL+/- buttons.



Press the RETURN+/TV

You will return to your programmed channel.

To cancel your return+ channel, press and hold the RETURN+/TV button for three seconds.
 The message "Return Channel Cancelled!" will appear.

### Sound

By pressing the Sound button, you can change the A.H.S. (Advanced Hyper Surround) and Smart Sound on or off.

A.H.S. - Adds a more spacious surround sound. Music gives basic effect and movie for more effect.

Smart Sound - Decreases high sound levels, giving a regulated sound level.



Press the Sound button



To select "A.H.S." or "Smart Sound" To choose the setting



Press the Menu when finished



#### Note:

· Smart Sound may become an unnatural effect, depending on the signal source.

### Muting

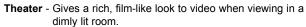
The Muting button instantly turns the volume down completely when you press it. Press Muting and the volume level will instantly go to zero. To restore the volume to its previous level, press Muting again.

### Video Status

The Video Status button gives you a choice of four TV picture display settings, including a display of your own preferences.

Standard - Resets the picture display to the factory settings.

**Dynamic** - Gives a vivid picture with better contrast when viewing in a brightly lit room.



Game - Used for when you are playing video games connected to your TV.





Press the Video Status button

By every press of the VIDEO STATUS button, you change the mode.

- You can also change the mode by pressing the ▲▼ buttons.
- Each mode is memorized for each input connected to the TV.
- You can also access the "Front Menu" screen by using the Menu button on the side of the
  TV instead of the remote control. Choose "Video Status" by pressing Menu ▼ on the side
  panel and enter by using the Channel +/- (◀▶) buttons. Next, select a mode by pressing
  the Menu ▼ button.

0 min.

### Sleep Timer

The Sleep Timer can turn the TV off for you after you fall asleep. Program it to work for a total time of up to 180 minutes. When you press the SLEEP button once, the rest of the time will be displayed.



Press the Mode button to select TV



Press the SLEEP button twice

By every press of the SLEEP button, you select the time for the timer to shut off

This message will appear 60 seconds before the automatic shutoff occurs:



You then have 60 seconds to press the SLEEP button to delay the shut off.

#### Note:

You can also select the timer by pressing the ▲▼ buttons.

### Display

The display screen shows the current information as follows.



Press the Mode button to select TV



Press the Display button



 Detailed Mode - Shows the channel, channel name, signal, rating information, current time, digital antenna level and scramble information, as well as the current time below.



- Clock Mode Shows the current time.
- 10:15PM
- Simple Mode Shows the current channel and channel name or AV input.
- Off Turns the display off.



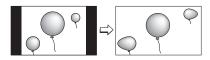
- You may also turn off the display at any step by pressing MENU.
- · If the clock is not set, "Clock not set" will be displayed.
- A signal being shown in Detailed Mode, will only show the kind of input and video signal you are receiving. However, the actual signal type you see will be different.

# **Aspect**

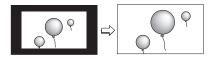
This feature will help you adjust the picture you are watching to give you the best possible picture quality.

### **Aspect Ratios**

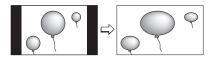
**Panorama** - With this ratio a normal 4:3 aspect picture is stretched to fit the dimensions of the 16:9 aspect screen.



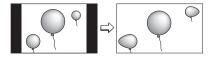
**Cinema** - This ratio "zooms in" on the center part of a 4:3 aspect picture, blowing it up to fill the 16:9 screen.



**Full** - This is the ratio to use when watching 16:9 High-Definition broadcasts.



Panorama Zoom - This ratio stretches the High-Definition 16:9 aspect image to eliminate the black side bars.



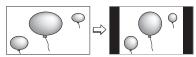
**Cinema Zoom** - This ratio stretches the High-Definition 16:9 aspect image to eliminate the black surrounding bars.



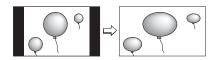
Regular - The regular ratio is used when you want to watch a 4:3 broadcast or recorded program without modifying the original picture to fit the dimensions of your 16:9 screen. The 4:3 picture will fill the screen from top to bottom, while black bars will appear to fill up the remaining space along the picture's sides. The 4:3 picture will be centered within the boundaries of the 16:9 screen.



Slim - This aspect mode shrinks the screen of 16:9 to 4:3. There are some programming that is already stretched by mistake at broadcasting companies, so this mode corrects it. Black side bars will appear.



**Full Native** - This ratio displays 100% of the ratio. Normally, all aspects except for Full Native display about 95%.



### **Aspect Ratios (Continued)**

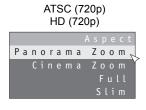


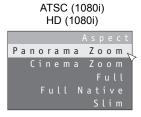
Press the Aspect button

By pressing the Aspect button, you can change the size.

When you change the aspect ratios, it is different from their broadcast or recorded program.







#### Notes:

- You can also choose the size by pressing the ▲▼ buttons.
- When you change the aspect ratio or signal, reset the picture position to center.
- You can also access the "Front Menu" screen by using the Menu button on the side of the TV instead of the remote control. Choose "Aspect" by pressing Menu ▼ on the side panel and enter by using the Channel +/- (◀►) buttons. Next, select an aspect ratio by pressing the Menu ▼ button.
- If the television receives a 16:9 signal from your HDMI device, the aspect mode will turn to "Full" automatically. If the television receives a 4:3 signal from your HDMI device when you are in "Full" aspect mode, it will return to "Regular" aspect mode. If you change the aspect mode after the television changed it to "Full" automatically, the television will change to the aspect mode you choosed. It also turns to "Full" automatically when the TV receives an HD (1080i or 720p) signal.
- When you are receiving a 1080p signal in "Full Native" mode, you are unable to change the aspect mode.

### Menu

The Menu button allows you to access JVC's onscreen menu system. Press Menu to activate the onscreen menu system. When a menu is displayed, press the Menu button to exit the menu system.

• See individual topics like "Sound Adjust" for specific information on using menus.

#### OK

This button confirms your selection when you are in one of the onscreen menus.

### **Back**

This button allows you to go back in the menu to change a selection or correct a mistake.

### ML/MTS

ML/MTS technology allows several audio signals to be broadcast in analog at once, giving you a choice in what you wish to hear with a TV program. In addition to mono or stereo sound, an MTS broadcast may also include a second audio program (SAP). When you are receiving a digital broadcast, it is possible to choose a language that you wish to receive.

### When receiving analog broadcast

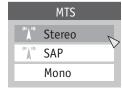


Press the Mode button to select TV



Press the ML/MTS button

By every press of the ML/MTS button, you change the mode



#### Notes:

- Keep the TV in stereo mode to get the best sound quality. The sound will work in stereo
  mode even if a certain broadcast is in mono sound only.
- Choose the mono setting to reduce excessive noise on a certain channel or broadcast.
- Selecting SAP will allow you to hear an alternative soundtrack, if one is available.
- MTS unavailable if your television's Input source is in Video-1, 2, 3, 4 or 5 mode, as described on page 59.
- You can also change the mode by pressing the ▲▼ buttons.

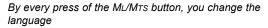
### When receiving digital broadcast



Press the Mode button to select TV



Press the ML/MTS button



Multi Language

English

Spanish

ML/MTS will not work when you are using the HDMI.

### C.C. (Closed Caption)

Use the C.C. (Closed Caption) button to select the mode of closed caption.

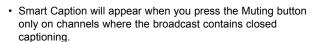


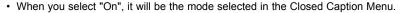
Press the Mode button to select TV



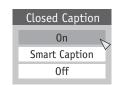
Press the C.C. button







- · See page 37 when you set the caption/text mode.
- You can also change the mode by pressing the ▲▼ buttons.





Favorite

∢≟► Remove

CBSXXXX

**FOXXXX** 

PBSXXXX

MEWEWEW HBOXXXX ABCABC

NHKNHK

MBSMBS

101

123-456

### **Favorite**

The Favorite button allows you to select your favorite channels easily. First, you must register the channels that you like. See how to register below.



Press the Favorite button

The favorite channel list will appear.



To select the channel you want to watch



Press the Ok button

It will change to the channel you have selected.

# Register the favorite channel



Press the channel number you want to register The channel program will change.



Press the Favorite button for three seconds

The channel will be registered in the favorite channel list.

### Notes:

- The maximum number of channels you can register is 24.
- If you have registered the maximum number of channels, and try to register more channels, the oldest channel you registered will be deleted.

### Delete the favorite channel



Press the FAVORITE button

The favorite channel list will appear.



To select the channel you want to delete To enter

io enter

The screen to the right will appear.



To "Yes"

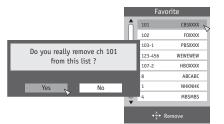


Press the Ok button

The channel was deleted.



Press the FAVORITE button when finished



### Guide

You can view the program information from the GUIDE.

- · The GUIDE function will work when you are receiving digital program only.
- The GUIDE will not show the correct time and date if you have not performed the set clock function on your television. See page 53.
- When the program information is not being broadcasted, it will not show the correct information.

### Mode

Your remote control can be used to operate some basic functions of your external devices. To use your device, select the proper mode.

MODE	Device		
TV	TV		
STB	STB/DVR (Cable Satellite)		
VCR	VCR/DVR		
DVD	DVD Player (DVD Recorder)		
AUDIO	Amplifier/Home Theater in Box		



Press the Mode button

By every press of the Mode button, you can select the mode.

 The mode LED indicator on the remote control lights for 3 seconds each time the remote control is operated.

### **External device control buttons**

You can use this remote control to operate the basic functions of your external devices. See page 67 on how to program the remote control to operate your other devices.

#### Note:

· The remote is preset to control JVC-brand devices.

### Remote programming

You can program your remote control to operate your external devices, using the instructions and codes on pages 68 - 72. The following external devices can be operated using your remote control.

Device	Mode	Applied for these functions	Page
Cable Set Top Box Cable/PVR Combination Satellite Set Top Box DBS/PVR Combination	STB	Power on/off, Channel up/down, Volume up/down, Number 0 - 9, Tune, Return+/ TV, Muting, Favorite Channel, Menu on/off, Arrow buttons, OK/Enter, Back, DVR (JVC Only)*, Guide (EPG), Sub Channel, Closed Caption, Display (Recall), Rewind (♣), Playback (♣), Forward (♣), Record (♠), Stop (▮), Pause (▮).	68
VCR, DBS/PVR Combination PVR, DVD/PVR Combination	VCR	Power on/off, Channel up/down, Menu on/off, Arrow buttons, OK/Enter, Back, Guide (EPG), TV/VCR, Closed Caption, Eject (♠), Rewind (♣), Playback (▶), Forward (♣), Record (♠), Stop (■), Pause (Ⅱ).	69, 70
DVD Player, DVD Recorder Home Theater in Box	DVD	Power on/off, Channel up/down, Menu on/off, Arrow buttons, OK/Enter, Back, Guide (EPG), TV/DVD (TV/VCR button), Sub Title (Sub T.), Open/Close (♠), Rewind (♣), Playback (▶), Forward (♣), Record (♠), Stop (▮), Still (▮).	71
Amplifier, Home Theater in Box, Receiver	AUDIO	Power on/off, Audio Input Selection (V1 button), Volume up/down, Muting, DVD operation buttons: Menu on/off, Arrow buttons, OK/Enter, Back, Sub Title (Sub T.), Open/Close (♠), Rewind (♣), Playback (▶), Forward (▶), Stop (■), Still (■).	72

\* DVR button only applies to JVC DVR (Dish Satellite STB).

#### Notes:

- To record to your VCR or DVD, hold the record ( ) button on the remote control and press play
- If the code you programmed doesn't work, try the next one. If no codes work, refer to "Search Code Function" on page 67. If your remote does not work after using the "Search Code Function", use the remote that came with your device. Your TV remote can not be guaranteed to work with all models, brands or operations.
- When the television remote control does not operate, for a model that allows you to switch the remote control code on the device side, you can try switching the setting to default or something else on the device side.

#### How to set the codes

- 1) Find your device and device's brand from the code list. See page 68 72.
- Select the mode of your device by pressing the MODE button. Then confirm the mode LED on the remote control.
- 3) Press and hold the TUNE button, then enter the first four digit code number listed using the number buttons. When the code is set, the mode LED goes out for a second, then it lights.
- 4) After confirming the proper mode LED, release the TUNE button, and confirm the operation of your device.
- 5) If your device does not respond, try and enter the next code.

### **Search Code Function**

- 1) Select a mode of your device by pressing the Mode button.
- Press the Power and Return+/TV buttons. Hold for at least 3 seconds and release. Then confirm the mode LED blinks.
- 3) Press any button\* on the remote, and see if the selected device responds. \*Use the applied buttons except for ◀ ► cursors, Return+/TV and Rec ( ) on the above chart.
- If there was a response, press RETURN+/TV. The codes are now set. Then confirm the mode LED goes out.
- 5) If there was no response, try to select the previous code or the next code by using ◀ or ▶ . If you repeat a total of 65 times for the STB (90 times for the VCR, 120 times for the DVD and 132 times for the AUDIO) without a response, use the remote control that came with your equipment. Press RETURN+/TV to exit. Then confirm the mode LED goes out.

# **Programming Codes**

Americast         085           Bell South         085           Digeo         118           Director         047           General Instrument         047           General Instrument         047           GoldStar         014           Hamilin         000           Memorex         000           Motorola         137           Pace         187           Panasonic         000           Paragon         000           Philips         133           Pioneer         187           Pulsar         000           Quasar         000           Regal         027           Regal         000           Scientific Atlanta         187           Sony         100           Starcom         000           Toshiba         000	999 87 776 776, 0810, 0276, 003 44 4099, 0273 766, 0810, 0276, 003 1000 176, 0476, 0810, 0276, 007 1777, 0237, 0008 1000, 0008, 0107 1000 105, 0317, 0025 1777, 08377, 0144, 333 1000 1000 1000 1000 1000 1000 1000	AlphaStar Chaparral Coolsat Crossdigital DirecTV  Dish Network System Dishpro Echostar  Expressvu GE General Instrument GOI Hisense Hitlachi HTS	0772 0216 1806 1109 1377, 0392, 0566, 0639, 1639, 1142, 0247, 0749, 1749, 0724, 0819, 1856, 1076, 1108, 0099, 1109, 1414, 1442, 1609, 1392, 1640 1505, 1005, 0775, 1775 1505, 1005, 0775, 1775 0775, 1775 0566 0869 0775, 1775 1535 0819 0775, 1775	Samsung  SKY Sony Star Choice Tivo Toshiba UltimateTV Ultrasat Uniden US Digital USDTV Voom Zenith  DBS/PVR Com DirecTV  Dish Network System Dishpro Echostar	0856 0639, 1639, 1640 0869 1142, 1442 0749, 1749, 0790 1285 1392, 1640 1806 0724, 0722 1535 1535 0856, 1856 <b>Ibination</b> 1377, 0392, 0638 1142, 1076, 0099 1392, 1442, 1640, 1505, 0775
Bell South	999 87 776 776, 0810, 0276, 003 44 4099, 0273 766, 0810, 0276, 003 1000 176, 0476, 0810, 0276, 007 1777, 0237, 0008 1000, 0008, 0107 1000 105, 0317, 0025 1777, 08377, 0144, 333 1000 1000 1000 1000 1000 1000 1000	Coolsat Crossdigital DirecTV  Dish Network System Dishpro Echostar  Expressvu GE General Instrument GOI Hilsense Hitachi	1806 1109 1377, 0392, 0566, 0639, 1639, 1142, 0247, 0749, 1749, 0724, 0819, 1856, 1076, 1108, 0099, 1109, 1414, 1442, 1609, 1392, 1640 1505, 1005, 0775, 1170, 1775 1505, 1005, 0775, 1770, 1775 1505, 1005, 0775, 1770, 1775 0566 0869 0775, 1775	Sony Star Choice Tivo Toshiba UltimateTV Ultrasat Uniden US Digital USDTV Voom Zenith  DirecTV  Dish Network System Dishpro	0639, 1639, 1640 0869 1142, 1442 0749, 1749, 0790 1285 1392, 1640 1806 0724, 0722 1535 1535 0869 0856, 1856  Abination 1377, 0392, 0638 1142, 1076, 0099 1392, 1442, 1640 1505, 0775
Digeo	87 76 76 776 776 776 776 776 776 7810 776 7810 777 777 777 777 777 777 777 777 777 7	Crossdigital DirecTV  Dish Network System Dishpro  Echostar  Expressvu GE General Instrument GOI Hilsense Hitachi	1109 1377, 0392, 0566, 0639, 1639, 1142, 0247, 0749, 1749, 1749, 1709, 1109, 1414, 1442, 1609, 1392, 1640 1505, 1005, 0775, 1170, 1775 1505, 1005, 0775, 1776, 1775 1505, 1775 1505, 1775 1506, 1775 1506, 1775 1507, 1775 1508, 1775 1508, 1775 1508, 1775 1775 1508, 1775 1508, 1775 1508, 1775 1508, 1775 1535 1535 0819	Sony Star Choice Tivo Toshiba UltimateTV Ultrasat Uniden US Digital USDTV Voom Zenith  DirecTV  Dish Network System Dishpro	0639, 1639, 1640 0869 1142, 1442 0749, 1749, 0790 1285 1392, 1640 1806 0724, 0722 1535 1535 0869 0856, 1856  bination 1377, 0392, 0638 1142, 1076, 0098 1392, 1442, 1640 1505, 0775
Director	176, 0810, 0276, 103, 104, 105, 105, 105, 105, 105, 105, 105, 105	DirecTV  Dish Network System  Dishpro  Echostar  Expressvu  GE  General Instrument  GOI  Hilsense  Hitachi	1377, 0392, 0566, 0639, 1432, 0247, 0749, 1749, 0724, 0819, 1856, 1076, 1108, 0099, 1109, 1414, 1442, 1609, 1392, 1640 1505, 1005, 0775, 1170, 1775 1505, 1005, 0775, 1170, 1775 1505, 1005, 0775, 1170, 1775 0775, 1775 0775, 1775 0775, 1775 0775, 1775 0775, 1775 07869 0869 0775, 1775 1535 0819	Star Choice Tivo Toshiba  UltimateTV Ultrasat Uniden Us Digital USDTV Voom Zenith  DBS/PVR Com DirecTV  Dish Network System Dishpro	0869 1142, 1442 0749, 1749, 0790 1285 1392, 1640 1806 0724, 0722 1535 1635 0869 0856, 1856  bination 1377, 0392, 0638 1142, 1076, 0098 1392, 1442, 1640 1505, 0775 1505, 0775
General Instrument         047           000         0014           Hamilin         000           Jerrold         047           Memorex         000           Motorola         133           Pace         187           Panassonic         000           Paragon         000           Philips         133           Pioneer         187           95         95           Pulsar         000           Quasar         000           Regal         027           Runco         000           Samsung         000           Scientific Atlanta         187           Sony         100           Starcom         000           Topic cable         027           Torx         000           Toshiba         000	176, 0810, 0276, 103 44 44 109, 0273 176, 0810, 0276, 103 100 176, 0476, 0810, 177, 1027, 103 100, 1008, 0107 100, 1008, 0107 100, 1008, 0107 100, 1008, 0107 100, 1008, 1008 100, 1008, 1008 100, 1008, 1008 100, 1008 100, 1008 1008 1009 1009 1009 1009 1009 1009	Dish Network System Dishpro Echostar  Expressvu GE General Instrument GOI Hilsense Hitachi	0639, 1639, 1142, 0247, 0749, 1749, 0724, 0819, 1856, 1076, 1108, 0099, 1109, 1414, 1442, 1609, 1392, 1640 1505, 1005, 0775, 1170, 1775 1505, 1005, 0775, 1170, 1775 0775, 1775 0775, 1775 0775, 1775 0775, 1775 0775, 1775 0775, 1775 07869 0775, 1775	Tivo Toshiba  UltimateTV  Ultrasat Uniden US Digital USDTV Voom Zenith  DBS/PVR Com  DirecTV  Dish Network System Dishpro	1142, 1442 0749, 1749, 0790 1285 1392, 1640 1806 0724, 0722 1535 1535 0869 0856, 1856 1377, 0392, 0633 1142, 1076, 0098 1392, 1442, 1640 1305, 0775
O00   GoldStar	103 44 40 40 40 40 40 40 40 40 40 40 40 40	Dishpro  Echostar  Expressvu  GE  General Instrument  GOI  Hisense  Hitachi	0247, 0749, 1749, 0724, 0819, 1856, 1076, 1108, 0099, 1109, 1414, 1442, 1609, 1392, 1640, 1505, 1005, 0775, 1770, 1775, 1005, 0005, 0775, 1775, 1701, 1775,	Toshiba  UltimateTV Ultrasat Uniden US Digital USDTV Voom Zenith  DBS/PVR Com DirecTV  Dish Network System Dishpro	0749, 1749, 0790 1285 1392, 1640 1806 0724, 0722 1535 1535 0856, 1856  abination 1377, 0392, 0630 1142, 1076, 0099 1392, 1442, 1640 1505, 0775 1505, 0775
GoldStar	444 109, 0273 176, 0810, 0276, 003 100 176, 0476, 0810, 776, 1187 1777, 0237, 0008 100, 0008, 0107 100, 0008, 0107 101, 0333 100 101, 0333 100 1079, 0273 100 1079, 0273	Dishpro  Echostar  Expressvu  GE  General Instrument  GOI  Hisense  Hitachi	0724, 0819, 1856, 1076, 1108, 0099, 1109, 1414, 1442, 1609, 1392, 1640 1505, 1005, 0775, 1170, 1775 1505, 1005, 0775, 1170, 1775 1505, 1005, 0775, 1170, 1775 0566 0869 0775, 1775 1535 0819	UltimateTV Ultrasat Uniden US Digital USDTV Voom Zenith  DISS/PVR Com DirecTV  Dish Network System Dishpro	1285 1392, 1640 1806 0724, 0722 1535 1535 0869 0856, 1856 <b>Ibination</b> 1377, 0392, 0638 1142, 1076, 0098 1392, 1442, 1640 1505, 0775
Hamilin         000           Jerrold         047           000         047           Memorex         000           Motorola         137           Pace         187           Panasonic         000           Paragon         000           Philips         130           Pioneer         187           Sulsar         000           Quasar         000           Samsung         000           Scientific Atlanta         187           Sony         100           Starcom         000           Supercable         027           Torx         000           Toshiba         000	109, 0273 176, 0810, 0276, 1030 1000 1076, 0476, 0810, 776, 1187 1777, 0237, 0008 100, 0008, 0107 100 105, 0317, 0025 1777, 0877, 0144, 133 100 100 1079, 0273 100	Dishpro  Echostar  Expressvu  GE  General Instrument  GOI  Hisense  Hitachi	1076, 1108, 0099, 1109, 1414, 1442, 1609, 1392, 1640 1505, 1005, 0775, 1170, 1775 1505, 1005, 0775, 1775 1505, 1005, 0775, 1170, 1775 0775, 1775 0775, 1775 0775, 1775 07666 0869 0775, 1775 1535 0819	Ultrasat Uniden US Digital USDTV Voom Zenith  DIRECTV  DirecTV  Dish Network System Dishpro	1392, 1640 1806 0724, 0722 1535 1535 0869 0856, 1856 <b>abination</b> 1377, 0392, 0633 1142, 1076, 0098 1392, 1442, 1640 1505, 0775 1505, 0775
Jerrold         047           000         000           Memorex         000           Motorola         137           Pace         187           Panasonic         000           Paragon         000           Philips         133           Pioneer         187           955         95           Pulsar         000           Quasar         000           Regal         027           Runco         000           Samsung         000           Scientific Atlanta         187           Sony         100           Starcom         000           Supercable         027           Torx         000           Toshiba         000	176, 0810, 0276, 103   100   176, 0476, 0810, 176, 1487   177, 0237, 0008   100, 0008, 0107   100   105, 0317, 0025   177, 0877, 0144, 133   100   107, 0973   100   107, 0973   100   107, 0973   100   107, 0973   100   100   107, 0973   100	Dishpro  Echostar  Expressvu  GE  General Instrument  GOI  Hisense  Hitachi	1109, 1414, 1442, 1609, 1392, 1640 1505, 1005, 1005, 1075, 1770, 1775 1505, 1005, 0775, 1775 1505, 1005, 0775, 1775 0775, 1775 0566 0869 0775, 1775 0581 0819	Ultrasat Uniden US Digital USDTV Voom Zenith  DIRECTV  DirecTV  Dish Network System Dishpro	1806 0724, 0722 1535 1535 0869 0856, 1856 <b>abination</b> 1377, 0392, 0638 1142, 1076, 0099 1392, 1442, 164 1505, 0775
Memorex	1003 1000 176, 0476, 0810, 1776, 1187 177, 0237, 0008 1000, 0008, 0107 1000 1005, 0317, 0025 1777, 0877, 0144, 333 1000 1000 1779, 0273	Dishpro  Echostar  Expressvu  GE  General Instrument  GOI  Hisense  Hitachi	1609, 1392, 1640 1505, 1005, 0775, 1170, 1775 1505, 1005, 0775, 1775 1505, 1005, 0775, 1170, 1775 0566 0869 0775, 1775 1535 0819	Uniden US Digital USDTV Voom Zenith  DISS/PVR Com DirecTV  Dish Network System Dishpro	0724, 0722 1535 1535 0869 0856, 1856 0bination 1377, 0392, 063 1142, 1076, 0099 1392, 1442, 164 1505, 0775 1505, 0775
Memorex         000           Motorola         137           Pace         188           Panasonic         000           Paragon         000           Philips         130           Pioneer         188           Pulsar         000           Quasar         000           Regal         027           Runco         000           Samsung         000           Scientific Atlanta         187           Sony         100           Starcom         000           Supercable         027           Torx         000           Toshiba         000	000 176, 0476, 0810, 176, 1487 1777, 0237, 0008 100, 0008, 0107 100 100, 0317, 0025 1777, 0877, 0144, 133 100 100 179, 0273 100	Dishpro  Echostar  Expressvu  GE  General Instrument  GOI  Hisense  Hitachi	1505, 1005, 0775, 1170, 1775 1505, 1005, 0705, 1775 1505, 1005, 0775, 1775 1505, 1005, 0775, 1170, 1775 0775, 1775 0869 0869 0775, 1775 1535 0819	US Digital USDTV Voom Zenith  DBS/PVR Com DirecTV  Dish Network System Dishpro	1535 1535 0869 0856, 1856 <b>Ibination</b> 1377, 0392, 0638 1142, 1076, 0098 1392, 1442, 1640 1505, 0775 1505, 0775
Motorola         137           O27         027           Pace         187           Panasonic         000           Paragon         000           Philips         130           Pioneer         187           O55         95           Pulsar         000           Quasar         000           Segal         027           Runco         000           Samsung         000           Scientific Atlanta         187           Sony         100           Starcom         000           Supercable         027           Torx         000           Toshiba         000	176, 0476, 0810, 176, 1187 177, 0237, 0008 1000, 0008, 0107 1000 1005, 0317, 0025 177, 0877, 0144, 333 1000 1000 1779, 0273	Dishpro  Echostar  Expressvu  GE  General Instrument  GOI  Hisense  Hitachi	1170, 1775 1505, 1005, 0775, 1775 1505, 1005, 0775, 1775, 1775 0775, 1775 0566 0869 0775, 1775 1535 0819	USDTV Voom Zenith  DBS/PVR Com DirecTV  Dish Network System Dishpro	1535 0869 0856, 1856 <b>abination</b> 1377, 0392, 063: 1142, 1076, 009: 1392, 1442, 164! 1505, 0775 1505, 0775
Pace	276, 1187 177, 0237, 0008 100, 0008, 0107 100 105, 0317, 0025 177, 0877, 0144, 133 100 100 179, 0273 100	Echostar  Expressvu  GE General Instrument  GOI Hisense Hitachi	1505, 1005, 0775, 1775 1505, 1005, 0775, 1700, 1775 0775, 1775 0566 0869 0775, 1775 1535 0819	Voom Zenith  DBS/PVR Com DirecTV  Dish Network System Dishpro	0869 0856, 1856 <b>Ibination</b> 1377, 0392, 0639 1142, 1076, 0099 1392, 1442, 1640 1505, 0775 1505, 0775
Pace	276, 1187 177, 0237, 0008 100, 0008, 0107 100 105, 0317, 0025 177, 0877, 0144, 133 100 100 179, 0273 100	Echostar  Expressvu  GE General Instrument  GOI Hisense Hitachi	1775 1505, 1005, 0775, 1170, 1775 0775, 1775 0566 0869 0775, 1775 1535 0819	DirecTV  Dish Network System Dishpro	0856, 1856 <b>abination</b> 1377, 0392, 0638 1142, 1076, 0099 1392, 1442, 1640 1505, 0775 1505, 0775
Panasonic         000           Paragon         000           Philips         130           Pioneer         187           Pulsar         000           Quasar         000           Regal         027           Runco         000           Samsung         000           Scientific Atlanta         187           Sony         100           Starcom         000           Supercable         027           Torx         000           Toshiba         000	000, 0008, 0107 000 005, 0317, 0025 677, 0877, 0144, 633 000 000 679, 0273	Expressvu GE General Instrument GOI Hisense Hitachi	1505, 1005, 0775, 1170, 1775 0775, 1775 0566 0869 0775, 1775 1535 0819	DBS/PVR Com DirecTV Dish Network System Dishpro	1377, 0392, 0638 1142, 1076, 0098 1392, 1442, 1644 1505, 0775 1505, 0775
Panasonic         000           Paragon         000           Philips         130           Pioneer         187           Pulsar         000           Quasar         000           Regal         027           Runco         000           Samsung         000           Scientific Atlanta         187           Sony         100           Starcom         000           Supercable         027           Torx         000           Toshiba         000	000, 0008, 0107 000 005, 0317, 0025 677, 0877, 0144, 633 000 000 679, 0273	Expressvu GE General Instrument GOI Hisense Hitachi	1505, 1005, 0775, 1170, 1775 0775, 1775 0566 0869 0775, 1775 1535 0819	Dish Network System Dishpro	1377, 0392, 0638 1142, 1076, 0098 1392, 1442, 1644 1505, 0775 1505, 0775
Paragon         000           Philips         133           Pioneer         187           95         05           Pulsar         000           Quasar         000           Regal         027           Runco         000           Samsung         000           Scientific Atlanta         187           Sony         100           Starcom         000           Supercable         027           Torx         000           Toshiba         000	000 055, 0317, 0025 677, 0877, 0144, 633 000 000 679, 0273	GE General Instrument GOI Hisense Hitachi	1170, 1775 0775, 1775 0566 0869 0775, 1775 1535 0819	Dish Network System Dishpro	1377, 0392, 063; 1142, 1076, 009; 1392, 1442, 164; 1505, 0775 1505, 0775
Philips         130           Pioneer         187           Pulsar         000           Quasar         000           Regal         027           Runco         000           Samsung         000           Scientific Atlanta         187           Sony         100           Starcom         000           Supercable         027           Torx         000           Toshiba         000	05, 0317, 0025 077, 0877, 0144, 033 000 000 079, 0273	GE General Instrument GOI Hisense Hitachi	0775, 1775 0566 0869 0775, 1775 1535 0819	Dish Network System Dishpro	1377, 0392, 0638 1142, 1076, 0098 1392, 1442, 1640 1505, 0775 1505, 0775
Pioneer         187           055         055           Pulsar         000           Quasar         000           Regal         027           Runco         000           Samsung         000           Scientific Atlanta         187           Sony         100           Starcom         000           Supercable         027           Torx         000           Toshiba         000	677, 0877, 0144, 633 000 000 679, 0273	GE General Instrument GOI Hisense Hitachi	0566 0869 0775, 1775 1535 0819	Dish Network System Dishpro	1142, 1076, 0099 1392, 1442, 1640 1505, 0775 1505, 0775
Pulsar         005           Quasar         000           Regal         027           Runco         000           Samsung         000           Scientific Atlanta         187           Sony         100           Starcom         000           Supercable         027           Torx         000           Toshiba         000	333 300 300 379, 0273	General Instrument GOI Hisense Hitachi	0869 0775, 1775 1535 0819	Dish Network System Dishpro	1142, 1076, 0099 1392, 1442, 1640 1505, 0775 1505, 0775
Pulsar         000           Quasar         000           Regal         027           Runco         000           Samsung         000           Scientific Atlanta         187           Sony         100           Starcom         000           Supercable         027           Torx         000           Toshiba         000	000 000 279, 0273	GOI Hisense Hitachi	0775, 1775 1535 0819	Dishpro	1392, 1442, 1649 1505, 0775 1505, 0775
Quasar         000           Regal         027           Runco         000           Samsung         000           Scientific Atlanta         187           000         50ny           Starcom         000           Supercable         027           Torx         000           Toshiba         000	000 279, 0273	Hisense Hitachi	1535 0819	Dishpro	1505, 0775 1505, 0775
Regal         027           Runco         000           Samsung         000           Scientific Atlanta         187           500y         100           Starcom         000           Supercable         027           Torx         000           Toshiba         000	279, 0273 000	Hitachi	0819	Dishpro	1505, 0775
Runco         000           Samsung         000           Scientific Atlanta         187           500         000           Sony         100           Starcom         000           Supercable         027           Torx         000           Toshiba         000	000			'	
Samsung         000           Scientific Atlanta         187           500         100           Sony         100           Starcom         000           Supercable         027           Torx         000           Toshiba         000		1110			
Scientific Atlanta         187           000         000           Sony         100           Starcom         000           Supercable         027           Torx         000           Toshiba         000	000, 0144	Hughes Network Systems	1142, 0749, 1749,	Expressvu	0775
Sony         100           Starcom         000           Supercable         027           Torx         000           Toshiba         000	377, 0877, 0477,	riugiles Network Systems	1442	Hughes Network Systems	1142, 1442
Sony         100           Starcom         000           Supercable         027           Torx         000           Toshiba         000		Humax	1790	JVC	1170
Starcom         000           Supercable         027           Torx         000           Toshiba         000		iLo	1535	Motorola	0869
Supercable         027           Torx         000           Toshiba         000		JVC	0775, 1170, 1775	Philips	1142, 0099, 1442
Torx 000 Toshiba 000		LG	1414	Proscan	0392
Toshiba 000		Magnavox	0724, 0722	RCA	1392
		Memorex	0724, 0722	Samsung	1442
Zenitri 000	000, 0525, 0899	Mitsubishi	0724	Sony	0639, 1640
	100, 0525, 0699	Motorola	0869	Star Choice	0869
		Next Level		Star Choice	0009
Cable/PVR Combin	nation		0869		
		Panasonic	0247, 0701		
Americast 089		Pansat	1807		
Digeo 118		Paysat	0724		
General Instrument 081		Philips	1142, 0749, 1749,		
Jerrold 081			0724, 1076, 0722,		
	376, 0810, 1187	_	0099, 1442		
	377, 0237	Proscan	0392, 0566		
	377, 0877	Proton	1535		
	377, 0877	RadioShack	0869		
Sony 100		RCA	0566, 0855, 0143,		
Supercable 027 Zenith 089	76		1392		

VC	R	VCR		VCF	₹
ABS	1972	Fisher	0047, 0104, 0046	Marta	0037
Admiral	0048, 0209	Fuji	0035, 0033	Matsushita	0035, 0162, 0227
Adventura	0000	Funai	0000, 0593, 1593		1162
Aiko	0278	Garrard	0000	Media Center PC	1972
Aiwa	0037, 0000, 0307,	Gateway	1972	MEI	0035
	0479	GE	0060, 0035, 0240,	Memorex	0035, 0162, 003
Akai	0041, 0061, 0106		0202, 0760, 0761,		0048, 0039, 004
Alienware	1972		0807, 1035, 1060		0240, 0000, 010
America Action	0278	Go Video	0432, 0526		0209, 0046, 030
American High	0035	GoldStar	0037, 0209, 0038,		0479, 1037, 104
Asha	0240		0225, 1237		1162, 1237, 126
Audiovox	0037, 0278	Gradiente	0000	MGA	0240, 0043, 006
Beaumark	0240	Harley Davidson	0000	MGN Technology	0240
Bell & Howell	0104	Harman/Kardon	0081, 0038	Microsoft	1972
Broksonic	0184, 0121, 0209,	Harwood	0072	Mind	1972
	0002, 0479, 1479	Headquarter	0046	Minolta	0042, 0105
Calix	0037	Hewlett Packard	1972	Mitsubishi	0081, 0067, 004
Canon	0035	HI-Q	0047	· · · · · · · · · · · · · · · · · · ·	0041, 0061, 017
Capehart	0020	Hitachi	0037, 0240, 0000,		0807
Carver	0081	Titadiii	0042, 0041, 0105,	Motorola	0035, 0048
CCE	0072, 0278		1037	MTC	0240, 0000
Citizen	0037, 0278, 1278	Howard Computers	1972	Multitech	0000, 0072
Colt	0072	HP	1972	NEC	0035, 0037, 004
Craig	0037, 0047, 0240,	Hughes Network Systems	0042, 0739	I IVEO	0104, 0067, 004
Ordig	0072, 0271	Humax	0739		0038, 0008
Curtis Mathes	0060, 0035, 0162,	Hush	1972	Nikko	0037
Curus Matries	0041, 0760, 1035	iBUYPOWER	1972	Niveus Media	1972
Cybernex	0240	Jensen	0041	Noblex	0240
CyberPower	1972	JVC	0045, 0067, 0041,	Northgate	1972
Daewoo	0045, 0104, 0278,	300	0008, 0366, 1707,	Olympus	0035
Daewoo	0020, 0046, 0561,		1945, 1774, 1775,	Optimus	1062, 0162, 003
	1278		1776, 1777	Optimus	0048, 0104, 043
Daytron	0020	KEC	0037, 0278		0593, 1048, 116
Daytron	1972	Kenwood	0067, 0278		1262
Denon	0042	KLH	0007, 0041, 0038	Orion	0184, 0121, 020
DirecTV	0739	Kodak	0072	Orion	0002, 0208, 047
Durabrand	0039, 0038	LG	0035, 0037		1479
Dynatech	0000	10	0209, 0038, 1037	Panasonic	1062, 0035, 016
Electrohome	0000	Linksys	1972	i andsumu	0225, 0227, 061
	0037	Lloyd's			
Electrophonic			0000, 0208	Danner	1035, 1162, 126
Emerex	0032	Logik	0240, 0072	Penney	0035, 0037, 024
Emerson	0035, 0037, 0184,	LXI	0037		0042, 0038, 103
	0240, 0045, 0000,	Magnasonic	0593, 1278	Dentey	1237
	0121, 0043, 0209,	Magnavox	0035, 0039, 0081,	Pentax	0042, 0105
	0002, 0278, 1593,		0000, 0149, 0563,	Philco	0035, 0000, 003
	1479, 1278, 0593,		0593, 1593, 1781		
	0561, 0479, 0208,	Magnin	0240	]	

VCR mode					
\	/CR	VCR		PVR	
Philips	0035, 0081, 0000,	Symphonic	0000, 0593, 1593	Howard Computers	1972
	0563, 0593, 0618,	Systemax	1972	HP	1972
	0739, 1081, 1181,	Tagar Systems	1972	Hughes Network Systems	0739
	1266	Tatung	0081, 0045, 0000,	Humax	0739
Pilot	0037		0067, 0041, 0008,	Hush	1972
Pioneer	0081, 0042, 0067		0366	iBUYPOWER	1972
Polk Audio	0081	Teac	0000, 0041	JVC	1945
Portland	0020	Technics	0035, 0162	Linksys	1972
Presidian	1593	Teknika	0035, 0037, 0000	Media Center PC	1972
Profitronic	0240	Thomas	0000	Microsoft	1972
Proscan	0060, 0202, 0760,	Tivo	0618, 0636, 0739,	Mind	1972
	0761, 1060	T1 117	1996	Niveus Media	1972
Protec	0072	TMK	0240, 0208	Northgate	1972
Pulsar	0039	Toshiba	0081, 0045, 0042,	Panasonic	0616, 1777
Quarter	0046		0067, 0043, 0041,	Philips	0618, 0739
Quartz	0046		0008, 0057, 0366,	RCA	0880
Quasar	0035, 0162, 1035,		0845, 1008, 1145,	ReplayTV	0614, 0616
	1162		1972, 1996	Samsung	0739
RadioShack	0000, 1037	Totevision	0037, 0240	Sonic Blue	0614, 0616
Radix	0037	Touch	1972	Sony	0636, 1972
Randex	0037	Unitech	0240	Stack 9	1972
RCA	0060, 0035, 0240,	Vector	0045	Systemax	1972
	0000, 0042, 0149,	Vector Research	0038	Tagar Systems	1972
	0105, 0106, 0202,	Video Concepts	0045, 0061	Tivo	0618, 0636, 0739
	0760, 0761, 0807,	Videomagic	0037	Toshiba	1008, 1972, 1996
	0880, 1035, 1060	Videosonic	0240	Touch	1972
Realistic	0035, 0037, 0048,	Viewsonic	1972	Viewsonic	1972
	0047, 0000, 0104,	Villain	0000	Voodoo	1972
	0046	Voodoo	1972	ZT Group	1972
ReplayTV	0614, 0616	Wards	0060, 0035, 0048,		
Ricavision	1972		0047, 0081, 0240,	DVD/PVR Com	bination
Runco	0039		0000, 0042, 0072,		
Samsung	0240, 0045, 0432,		0149, 0760	Emerson	0000
	0739, 0760, 1014	White Westinghouse	0209, 0072		
Sanky	0048, 0039	XR-1000	0035, 0000, 0072		
Sansui	0000, 0067, 0209,	Yamaha	0041, 0038		
	0041, 0271, 0479,	Zenith	0039, 0033, 0000,		
	1479		0209, 0034, 0479,		
Sanyo	0047, 0240, 0104,		1139, 1479		
	0046	ZT Group	1972		
Scott					
	0184, 0045, 0121,				
	0184, 0045, 0121, 0043	DBS/PVR Com	bination		
Sears		DBS/PVR Com			
Sears	0043 0035, 0037, 0047, 0000, 0042, 0104,	Echostar	1945		
Sears	0043 0035, 0037, 0047,				
Sears	0043 0035, 0037, 0047, 0000, 0042, 0104, 0046, 0057, 0105, 1237	Echostar Hughes Network Systems JVC	1945 0739 1945		
Sears	0043 0035, 0037, 0047, 0000, 0042, 0104, 0046, 0057, 0105,	Echostar Hughes Network Systems	1945 0739		
	0043 0035, 0037, 0047, 0000, 0042, 0104, 0046, 0057, 0105, 1237	Echostar Hughes Network Systems JVC	1945 0739 1945		
	0043 0035, 0037, 0047, 0000, 0042, 0104, 0046, 0057, 0105, 1237 0048, 0209, 0807, 0848, 1048 0104, 0072	Echostar Hughes Network Systems JVC Philips	1945 0739 1945 0739		
Sharp	0043 0035, 0037, 0047, 0000, 0042, 0104, 0046, 0057, 0105, 1237 0048, 0209, 0807, 0848, 1048	Echostar Hughes Network Systems JVC Philips	1945 0739 1945 0739		
Sharp Shintom Shogun Singer	0043 0035, 0037, 0047, 0000, 0042, 0104, 0046, 0057, 0105, 1237 0048, 0209, 0807, 0848, 1048 0104, 0072	Echostar Hughes Network Systems JVC Philips Samsung PVR	1945 0739 1945 0739 0739		
Sharp Shintom Shogun	0043 0035, 0037, 0047, 0000, 0042, 0104, 0046, 0057, 0105, 1237 0048, 0209, 0807, 0848, 1048 0104, 0072 0240	Echostar Hughes Network Systems JVC Phillips Samsung	1945 0739 1945 0739		
Sharp Shintom Shogun Singer	0043 0035, 0037, 0047, 0000, 0042, 0104, 0046, 0057, 0105, 1237 0048, 0209, 0807, 0848, 1048 0104, 0072 0240 0045, 0072	Echostar Hughes Network Systems JVC Philips Samsung PVR ABS Alienware	1945 0739 1945 0739 0739 0739		
Sharp Shintom Shogun Singer Sonic Blue	0043 0035, 0037, 0047, 0000, 0042, 0104, 0046, 0057, 0105, 1237 0048, 0209, 0807, 0848, 1048 0104, 0072 0240 0045, 0072 0614, 0616	Echostar Hughes Network Systems JVC Phillips Samsung PVR ABS	1945 0739 1945 0739 0739		
Sharp Shintom Shogun Singer Sonic Blue	0043 0035, 0037, 0047, 0000, 0042, 0104, 0046, 0057, 0105, 1237 0048, 0209, 0807, 0848, 1048 0104, 0072 0240 0045, 0072 0614, 0616 0035, 0032, 0033,	Echostar Hughes Network Systems JVC Philips Samsung PVR ABS Alienware	1945 0739 1945 0739 0739 0739		
Sharp Shintom Shogun Singer Sonic Blue	0043 0035, 0037, 0047, 0000, 0042, 0104, 0046, 0057, 0105, 1237 0048, 0209, 0807, 0848, 1048 0104, 0072 0240 0045, 0072 0614, 0616 0035, 0032, 0033, 0000, 0034, 0636,	Echostar Hughes Network Systems JVC Philips Samsung  PVR  ABS Alienware CyberPower	1945 0739 1945 0739 0739 0739		
Sharp Shintom Shogun Singer Sonic Blue	0043 0035, 0037, 0047, 0000, 0042, 0104, 0046, 0057, 0105, 1237 0048, 0209, 0807, 0848, 1048 0104, 0072 0240 0045, 0072 0614, 0616 0035, 0032, 0033, 0000, 0034, 0636, 0639, 0640, 1032,	Echostar Hughes Network Systems JVC Philips Samsung  PVR  ABS Alienware CyberPower Dell	1945 0739 1945 0739 0739 0739		
Sharp Shintom Shogun Singer Sonic Blue Sony	0043 0035, 0037, 0047, 0000, 0042, 0104, 0046, 0057, 0105, 1237 0048, 0209, 0807, 0848, 1048 0104, 0072 0240 0045, 0072 0614, 0616 0035, 0032, 0033, 0000, 0034, 0636, 0639, 0640, 1032, 1232, 1972	Echostar Hughes Network Systems JVC Phillips Samsung  PVR  ABS Alienware CyberPower Dell DirecTV	1945 0739 1945 0739 0739 0739 1972 1972 1972 1972 1972 0739		
Sharp Shintom Shogun Singer Sonic Blue Sony Stack 9	0043 0035, 0037, 0047, 0000, 0042, 0104, 0046, 0057, 0105, 1237 0048, 0209, 0807, 0848, 1048 0104, 0072 0240 0045, 0072 0614, 0616 0035, 0032, 0033, 0000, 0034, 0636, 0639, 0640, 1032, 1232, 1972	Echostar Hughes Network Systems JVC Philips Samsung  PVR  ABS Alienware CyberPower Dell DirecTV Dish Network System	1945 0739 1945 0739 0739 0739 1972 1972 1972 1972 1972 1972 1972 197		
Sharp Shintom Shogun Singer Sonic Blue Sony Stack 9 STS	0043 0035, 0037, 0047, 0000, 0042, 0104, 0046, 0057, 0105, 1237 0048, 0209, 0807, 0848, 1048 0104, 0072 0240 0045, 0072 0614, 0616 0035, 0032, 0033, 0000, 0034, 0636, 0639, 0640, 1032, 1232, 1972 1972 0042	Echostar Hughes Network Systems JVC Philips Samsung  PVR  ABS Alienware CyberPower Dell DirecTV Dish Network System Echostar	1945 0739 1945 0739 0739 0739 1972 1972 1972 1972 0739 1945		

	le				
	DVD	DVD			Recorder
Accurian	1416	Magnavox	0503, 0539, 0646,	Accurian	1416
Advent	1016		0675, 0821, 1268	Apex Digital	1056
Aiwa	0641	Marantz	0539	Aspire Digital	1168
Akai	0695, 0770, 0899	Memorex	0695, 0831, 1270	CyberHome	1129
Alco	0790	Microsoft	0522, 1708	Denon	0490
Allegro	0869	Mintek	0839, 0717	Funai	0675, 1334
Apex Digital	0672, 0717, 0755,	Mitsubishi	1521, 0521	Gateway	1158
	0830, 1056, 1061	NAD	0741	Go Video	0741, 1158, 1304,
Arrgo	1023	NEC	0785		1730
Aspire Digital	1168	Nesa	0717	iLo	1348
Audiovox	0790	NexxTech	1402	JVC	1164
Blaupunkt	0717	Norcent	1003, 1107	LG	0741
Blue Parade	0571	Onkyo	0503, 0627	LiteOn	1158, 1416, 1440
Broksonic	0695	Oritron	0651	Magnavox	0646, 0675
Cinea	0831	Panasonic	0490, 0703, 1362,	Panasonic	0490
Cine Vision	0876, 0833, 0869		1462, 1490, 1762	Philips	0646, 1158
Citizen	1277	Philips	0503, 0539, 0646,	Pioneer	0631
Coby	0778, 1107		0675, 0854, 1158,	RCA	0522
Craig	0831		1260, 1267, 1354	Samsung	0490, 1470
Curtis Mathes	1087	Pioneer	0525, 0571, 0631	Sensory Science	1158
CyberHome	0816, 0874, 1023,	Polaroid	1061	Sharp	0630, 0675
	1024, 1117, 1129	Polk Audio	0539	Sony	1033, 1431
Daewoo	0784, 0705, 0770,	Portland	0770	Sylvania	0675
	0833, 0869, 1169,	Presidian	0675	Zenith	0741
	1172	Prima	1016		
Denon	0490, 0634	Proscan	0522	Home Th	eater in Box
Disney	0675, 1270	Pro Vision	0778	Tionic III	cutor iii box
Durabrand	1127	Qwestar	0651	Aiwa	0641
DVD2000	0521	RCA	0522, 0571, 0717,	Audiovox	0790
Emerson	0591, 0675, 0821,		0790, 0822, 1022,	JVC	1770, 1771, 1772,
	1268		1132		1773
Enterprise	0591	Rio	0869	KLH	0790
ESA	0821, 1268	Rotel	0623	Koss	0651
Fisher	0670	Sampo	0752	Oritron	0651
Funai	0675, 1268, 1334	Samsung	0490, 0573, 0744,	Polk Audio	0539
Gateway	1158		0820, 0899, 1044,	RCA	0790
GE	0522, 0815, 0717		1075, 1470	Rio	0869
Go Video	0744, 0715, 0741,	Sansui	0695	Sonic Blue	0869
	0783, 0833, 0869,	Sanyo	0670, 0695, 0873	Teac	0790
		Sensory Science		Venturer	0790
	1044, 1075, 1099,		1158		
	1044, 1075, 1099, 1158, 1304, 1730		1158 0630 0675 0752	venturer	0790
GoldStar	1158, 1304, 1730	Sharp	0630, 0675, 0752,	venturer	0790
GoldStar	1158, 1304, 1730 0741	Sharp	0630, 0675, 0752, 1256	venturer	0730
Greenhill	1158, 1304, 1730 0741 0717	Sharp Sharper Image	0630, 0675, 0752, 1256 1117	venturer	0730
Greenhill Harman/Kardon	1158, 1304, 1730 0741 0717 0582, 0702	Sharp Sharper Image Sherwood	0630, 0675, 0752, 1256 1117 0770	venturer	0730
Greenhill Harman/Kardon Hitachi	1158, 1304, 1730 0741 0717 0582, 0702 0573, 0664, 1247	Sharper Image Sherwood Shinsonic	0630, 0675, 0752, 1256 1117 0770 0533, 0839	venturei	0790
Greenhill Harman/Kardon Hitachi Hiteker	1158, 1304, 1730 0741 0717 0582, 0702 0573, 0664, 1247 0672	Sharper Image Sherwood Shinsonic Sonic Blue	0630, 0675, 0752, 1256 1117 0770 0533, 0839 0869, 1099	venturei	0750
Greenhill Harman/Kardon Hitachi Hiteker Humax	1158, 1304, 1730 0741 0717 0582, 0702 0573, 0664, 1247 0672 1500, 1588	Sharper Image Sherwood Shinsonic	0630, 0675, 0752, 1256 1117 0770 0533, 0839 0869, 1099 0533, 1533, 0864,	venuei	0750
Greenhill Harman/Kardon Hitachi Hiteker Humax iLo	1158, 1304, 1730 07741 07717 0582, 0702 0573, 0664, 1247 0672 1500, 1588 1348	Sharp Sharper Image Sherwood Shinsonic Sonic Blue Sony	0630, 0675, 0752, 1256 1117 0770 0533, 0839 0869, 1099 0533, 1533, 0864, 1033, 1431, 1536	venuei	0730
Greenhill Harman/Kardon Hitachi Hiteker Humax iLo Initial	1158, 1304, 1730 0741 0717 0582, 0702 0573, 0664, 1247 0672 1500, 1588 1348 0717	Sharp Sharper Image Sherwood Shinsonic Sonic Blue Sony Superscan	0630, 0675, 0752, 1256 1117 0770 0533, 0839 0869, 1099 0533, 1533, 0864, 1033, 1431, 1536	venuei	0730
Greenhill Harman/Kardon Hitachi Hiteker Humax iLo Initial Insignia	1158, 1304, 1730 0741 0717 0582, 0702 0573, 0664, 1247 0672 1500, 1588 1348 0717 1268	Sharp Sharper Image Sherwood Shinsonic Sonic Blue Sony Superscan Sylvania	0630, 0675, 0752, 1256 1117 0770 0533, 0839 0869, 1099 0533, 1533, 0864, 1033, 1431, 1536 0821 0675, 0821, 1268	Venturer	0730
Greenhill Harman/Kardon Hitachi Hiteker Humax iLo Initial Insignia Integra	1158, 1304, 1730 0741 0717 0582, 0702 0573, 0664, 1247 0672 1500, 1588 1348 0717 1268 0627	Sharp Sharper Image Shenwood Shinsonic Sonic Blue Sony Superscan Sylvania Symphonic	0630, 0675, 0752, 1256 11117 0770 0533, 0839 0869, 1099 0533, 1533, 0864, 1033, 1431, 1536 0821 0675, 0821, 1268	venturer	0730
Greenhill Harman/Kardon Hitachi Hiteker Humax iLo Initial Insignia Integra JBL	1158, 1304, 1730 0741 0717 0582, 0702 0573, 0664, 1247 0672 1500, 1588 1348 0717 1268 0627 0702	Sharp  Sharper Image Sherwood Shinsonic Sonic Blue Sony  Superscan Sylvania Symphonic Teac	0630, 0675, 0752, 1256 1117 0770 0533, 0839 0869, 1099 0533, 1533, 0864, 1033, 1431, 1536 0821 0675, 0821, 1268 0675, 0821 0717, 0790	Venturen	0730
Greenhill Harman/Kardon Hitachi Hiteker Humax iLo Initial Insignia Integra JBL Jensen	1158, 1304, 1730 0741 0717 0582, 0702 0573, 0664, 1247 0672 1500, 1588 1348 0717 1268 0627 0702 1016	Sharp Sharper Image Sherwood Shinsonic Sonic Blue Sony Superscan Sylvania Symphonic Teac Technics	0630, 0675, 0752, 1256 1117 0770 0533, 0839 0869, 1099 0533, 1533, 0864, 1033, 1431, 1536 0821 0675, 0821, 1268 0675, 0821, 1268 0675, 0821, 0717, 0790	Venturer	0730
Greenhill Harman/Kardon Hitachi Hiteker Humax iLo Initial Insignia Integra JBL	1158, 1304, 1730 0741 0717 0582, 0702 0573, 0664, 1247 0672 1500, 1588 1348 0717 1268 0627 0702 1016 0558, 0623, 0867,	Sharp Sharper Image Shenwood Shinsonic Sonic Blue Sony Superscan Sylvania Symphonic Teac Technics Theta Digital	0630, 0675, 0752, 1256 1117 0770 0533, 0839 0869, 1099 0533, 1533, 0864, 1033, 1431, 1536 0821 0675, 0821, 1268 0675, 0821 0717, 0790 0490, 0703	Venturen	0730
Greenhill Harman/Kardon Hitachi Hiteker Humax iLo Initial Insignia Integra JBL Jensen	1158, 1304, 1730 0741 07717 0582, 0702 0573, 0664, 1247 0672 1500, 1588 1348 0717 1268 0627 0702 1016 0558, 0623, 0867, 1164, 1602, 1770,	Sharp  Sharper Image Sherwood Shinsonic Sonic Blue Sony Superscan Sylvania Symphonic Teac Technics Theta Digital Tivo	0630, 0675, 0752, 1256 1117 0770 0533, 0839 0869, 1099 0533, 1533, 0864, 1033, 1431, 1536 0821 0675, 0821, 1268 0675, 0821, 1269 0717, 0790 0490, 0703 0571 1503	Ventures	0730
Greenhill Harman/Kardon Hitachi Hiteker Humax iLo Initial Insignia Integra JBL Jensen JVC	1158, 1304, 1730 0741 0717 0582, 0702 0573, 0664, 1247 0672 1500, 1588 1348 0717 1268 0627 0702 1016 0558, 0623, 0867, 1164, 1602, 1770, 1771, 1772, 1773	Sharp Sharper Image Shenwood Shinsonic Sonic Blue Sony Superscan Sylvania Symphonic Teac Technics Theta Digital	0630, 0675, 0752, 1256 1117 0770 0533, 0839 0869, 1099 0533, 1533, 0864, 1033, 1431, 1536 0821 0675, 0821, 1268 0675, 0821, 17090 0490, 0703 0571 1503 0503, 0695, 1045,	Ventures	0730
Greenhill Harman/Kardon Hitachi Hitieker Humax iLo Initial Insignia Integra JBL Jensen JVC Kawasaki	1158, 1304, 1730 0741 0771 0582, 0702 0573, 0664, 1247 0672 1500, 1588 1348 0717 1268 0627 0702 1016 0558, 0623, 0867, 1164, 1602, 1770, 1771, 1772, 1773 0790	Sharp  Sharper Image Sherwood Shinsonic Sonic Blue Sony Superscan Sylvania Symphonic Teac Technics Theta Digital Tivo	0630, 0675, 0752, 1256 1117 0770 0533, 0839 0869, 1099 0533, 1533, 0864, 1033, 1431, 1536 0821 0675, 0821, 1268 0675, 0821 0717, 0790 0490, 0703 0571 1503 0503, 0695, 1045, 1154, 1503, 1515,	Venturer	0730
Greenhill Harman/Kardon Hitachi Hitiachi Hitieker Humax iLo Initial Insignia Integra JBL Jensen JVC  Kawasaki Kenwood	1158, 1304, 1730 0741 0717 0582, 0702 0573, 0664, 1247 0672 1500, 1588 1348 0717 1268 0627 0702 1016 0558, 0623, 0867, 1164, 1602, 1770, 1771, 1772, 1773 0790 0490, 0534	Sharp  Sharper Image Sherwood Shinsonic Sonic Blue Sony Superscan Sylvania Symphonic Teac Technics Theta Digital Tivo Toshiba	0630, 0675, 0752, 1256 1117 0770 0533, 0839 0869, 1099 0533, 1533, 0864, 1033, 1431, 1536 0821 0675, 0821, 1268 0675, 0821, 1268 0675, 0821 0717, 0790 0490, 0703 0571 1503 0503, 0695, 1045, 1154, 1503, 1515, 1588	Ventures	0730
Greenhill Harman/Kardon Hitachi Hiteker Humax iLo Initial Insignia Integra JBL Jensen JVC  Kawasaki Kenwood KLH	1158, 1304, 1730 0741 07717 0582, 0702 0573, 0664, 1247 0672 1500, 1588 1348 0717 1268 0627 0702 1016 0558, 0623, 0867, 1164, 1602, 1770, 1771, 1772, 1773 0790 0490, 0534 0717, 0790, 1149	Sharp  Sharper Image Sherwood Shinsonic Sonic Blue Sony  Superscan Sylvania Symphonic Teac Technics Theta Digital Tivo Toshiba  Urban Concepts	0630, 0675, 0752, 1256 1117 0770 0533, 0839 0869, 1099 0533, 1533, 0864, 1033, 1431, 1536 0821 0675, 0821, 1268 0675, 0821, 1268 0675, 0821, 1268 0675, 0821, 1503, 0711, 0790 0490, 0703 0571 1503 0503, 0695, 1045, 1154, 1503, 1515, 1588	Ventures	0730
Greenhill Harman/Kardon Hitachi Hitiaker Humax iLo Initial Insignia Integra JBL Jensen JVC  Kawasaki Kenwood KLH Koss	1158, 1304, 1730 0741 0774 07582, 0702 0573, 0664, 1247 0672 1500, 1588 1348 0717 1268 0627 0702 1016 0558, 0623, 0867, 1164, 1602, 1770, 1771, 1772, 1773 0790 0490, 0534 0717, 0790, 1149	Sharp  Sharper Image Sherwood Shinsonic Sonic Blue Sony  Superscan Sylvania Symphonic Teac Teachrics Theta Digital Tivo Toshiba  Urban Concepts US Logic	0630, 0675, 0752, 1256 1117 0770 0533, 0839 0869, 1099 0533, 1533, 0864, 1033, 1431, 1536 0821 0675, 0821, 1268 0675, 0821 0717, 0790 0490, 0703 0571 1503 0503, 0695, 1045, 1154, 1503, 1515, 1588 0503 0839	Ventures	0730
Greenhill Harman/Kardon Hitachi Hitieker Humax iLo Initial Insignia Integra JBL Jensen JVC  Kawasaki Kenwood KLH Koss Lasonic	1158, 1304, 1730 0741 0717 0582, 0702 0573, 0664, 1247 0672 1500, 1588 1348 0717 1268 0627 0702 1016 0558, 0623, 0867, 1164, 1602, 1770, 1771, 1772, 1773 0790 0490, 0534 0717, 0790, 1149 0661 0798	Sharp Sharper Image Sherwood Shinsonic Sonic Blue Sony Superscan Sylvania Symphonic Teac Technics Theta Digital Tivo Toshiba Urban Concepts US Logic Venturer	0630, 0675, 0752, 1256 1117 0770 0533, 0839 0869, 1099 0533, 1533, 0864, 1033, 1431, 1536 0821 0675, 0821, 1268 0675, 0821, 1268 0675, 0821 0717, 0790 0490, 0703 0571 1503 0503, 0695, 1045, 1154, 1503, 1515, 1588 0503	Ventures	0730
Greenhill Harman/Kardon Hitachi Hitiachi Hitiacker Humax iLo Initial Insignia Integra JBL Jensen JVC  Kawasaki Kenwood KLH Koss Lasonic Lenoxx	1158, 1304, 1730 0741 07717 0582, 0702 0573, 0664, 1247 0672 1500, 1588 1348 0717 1268 0627 0702 1016 0558, 0623, 0867, 1164, 1602, 1770, 1771, 1772, 1773 0790 0490, 0534 0717, 0790, 1149 0651 0798	Sharp  Sharper Image Sherwood Shinsonic Sonic Blue Sony Superscan Sylvania Symphonic Teac Technics Theta Digital Tivo Toshiba  Urban Concepts US Logic Venturer Xbox	0630, 0675, 0752, 1256 1117 0770 0533, 0839 0869, 1099 0533, 1533, 0864, 1033, 1431, 1536 0821 0675, 0821, 1268 0675, 0821, 1268 0675, 0821, 1503 0571 1503 0503, 0695, 1045, 1154, 1503, 1515, 1588 0503 0839 0790 0522, 1708	Ventures	0730
Greenhill Harman/Kardon Hitachi Hitiker Humax iLo Initial Insignia Integra JBL Jensen JVC  Kawasaki Kenwood KLH Koss Lasonic Lenoxx LG	1158, 1304, 1730 07741 07747 0582, 0702 0573, 0664, 1247 0672 1500, 1588 1348 0717 1268 0627 0702 1016 0558, 0623, 0867, 1164, 1602, 1770, 1771, 1772, 1773 0790 0490, 0534 0717, 0790, 1149 0651 0798 1127 0591, 0741, 0869	Sharp Sharper Image Sherwood Shinsonic Sonic Blue Sony Superscan Sylvania Symphonic Teac Technics Theta Digital Tivo Toshiba Urban Concepts US Logic Venturer	0630, 0675, 0752, 1256 1117 0770 0533, 0839 0869, 1099 0533, 1533, 0864, 1033, 1431, 1536 0821 0675, 0821, 1268 0675, 0821, 1268 0675, 0821, 1503 0503, 0695, 1045, 1154, 1503, 1515, 1588 0503 0839 0790 0522, 1708	Ventures	0730
Greenhill Harman/Kardon Hitachi Hitiachi Hitiacker Humax iLo Initial Insignia Integra JBL Jensen JVC  Kawasaki Kenwood KLH Koss Lasonic Lenoxx	1158, 1304, 1730 0741 07717 0582, 0702 0573, 0664, 1247 0672 1500, 1588 1348 0717 1268 0627 0702 1016 0558, 0623, 0867, 1164, 1602, 1770, 1771, 1772, 1773 0790 0490, 0534 0717, 0790, 1149 0651 0798	Sharp  Sharper Image Sherwood Shinsonic Sonic Blue Sony Superscan Sylvania Symphonic Teac Technics Theta Digital Tivo Toshiba  Urban Concepts US Logic Venturer Xbox	0630, 0675, 0752, 1256 1117 0770 0533, 0839 0869, 1099 0533, 1533, 0864, 1033, 1431, 1536 0821 0675, 0821, 1268 0675, 0821, 1268 0675, 0821, 1503 0571 1503 0503, 0695, 1045, 1154, 1503, 1515, 1588 0503 0839 0790 0522, 1708	Ventures	0730

Audio mode					in Dani
Amplifier	•	Receive	r	Home Theater	
Amstrad	0078	Koss	1366, 1497	Aiwa	1388, 1641
Bose	0674	Lasonic	1798	Amphion Media Works	1563, 1615
Curtis Mathes	0300	Lenoxx	1437	AMW	1563, 1615
Durabrand	1561	LG	1293, 1869	Anam	1609
GE	0078	Liquid Video	1497	Apex Digital	1257, 1430
Harman/Kardon	0892	Magnavox	1189, 1269, 0531,	Audiovox	1390
JVC	0331		1514	Bose	1229, 1933
Left Coast	0892	Marantz	1189, 1269, 0891,	Cambridge Soundworks	1370
Lenoxx	1561		1289 1393	Classic	1352
Linn	0269, 0282, 0829	Mitsubishi		Coby	1389
Marantz NEC	0892, 0269 0264	NexxTech	1751 1389, 1751	Criterion Daewoo	1420 1250
Optimus	0300, 0823	Norcent Nova	1389	Denon	2832
	0892, 0269	Onkyo	0135, 0842, 1298,	Durabrand	1561
Philips Pioneer	0013, 0300, 0823	Olikyo	1320, 1531	Gateway	1517
Polk Audio	0892, 0269	Optimus	1023, 0531, 1074	Galeway Go Video	1532
RCA RCA	0300, 0823	Oritron	1366, 1497	Initial	1426
Shure	0264	Panasonic	1308, 1518, 0367,	Insignia	1751
Sony	0689, 0815, 1126	Fallasoffic	1288, 1316, 1548,	Integra	1298
Soundesign	0078		1633, 1763, 1764	JBL	1306
Victor	0331	Philips	1189, 1269, 0891,	JVC	1374, 1495, 167
Wards	0078, 0013	1 miles	1266, 1289, 1673	000	1871
Yamaha	0354, 0133	Pioneer	1023, 0014, 0150,	KLH	1390, 1412
ramana	0004, 0100	1 loncer	0531, 0630, 1123,	Koss	1366, 1497
Receive			1384, 1823	Lasonic	1798
Receive	ег	Polaroid	1508	Lenoxx	1561
ADC	0531	Polk Audio	1289, 1414	LG	1293, 1869
Aiwa	1405, 0121, 1243,	Proscan	1254	Liquid Video	1497
	1388, 1641	RCA	1023, 1609, 1254,	Magnavox	1514
Akai	1512		0531, 1074, 1123,	NexxTech	1751
Alco	1390		1390, 1511	Norcent	1389, 1751
Amphion Media Works	1563, 1615	Regent	1437	Nova	1389
AMW	1563, 1615	Rio	1869	Onkyo	1298, 1531
Anam	1609, 1074	Saba	0531, 1519	Oritron	1366, 1497
Apex Digital	1257, 1430	Samsung	1295, 1500	Panasonic	1288, 1316, 154
Audiotronic	1189	Sansui	1764		1633, 1763, 176
Audiovox	1390	Sanyo	1251, 1469	Philips	1266, 1673
Bose	1229, 0639, 1841,	Sharp	0771, 1286	Pioneer	1384
	1933	Sharper Image	1556	Polaroid	1508
Brix	1602	Sherwood	1517, 1653	Polk Audio	1289
Cambridge Soundworks	1370	Shinsonic	1426	RCA	1609, 1390, 151
Capetronic	0531	Sirius	1602	Regent	1437
Carver	1189	Sonic Blue	1532, 1869	Rio	1869
Classic	1352	Sony	1058, 1441, 1258,	Saba	1519
Coby	1389		1759, 1622, 0474,	Samsung	1295, 1500
Criterion	1420		1406, 1558, 1658,	Sanyo	1469
Daewoo	1250		1758, 1858, 1958	Sharper Image	1556
Delphi	1414	Stereophonics	1023	Sherwood	1517
Denon	1360, 0771, 1142,	Sunfire	1313	Shinsonic	1426
	1660, 2832	Teac	0463, 1074, 1390,	Sonic Blue	1532, 1869
Garrard	0463		1528	Sony	0689, 1622, 155
Gateway	1517	Technics	1308, 1518, 1384		1658, 1758, 185
Go Video	1532	Thorens	1189		1958
Harman/Kardon	0110, 0891, 1304,	Toshiba	1788	Teac	1390, 1528
	1306	Venturer	1390	Toshiba	1788
Initial	1426	Wards	0014	Venturer	1390
Insignia	1751	XM	1406, 1414	Yamaha	1331, 1375
Integra	0135, 1298, 1320	Yamaha	0176, 1176, 1276,	Zenith	1293
JBL	0110, 1306		1331, 1375, 1476		
JVC	0531, 1374, 1495,	Zenith	0857, 1293		
	1560, 1676, 1871,				
		I		I	
	1894				
Kenwood	1894 1313, 1570, 1569				

# **OSD Information**

### Weak Signal

This OSD appears when the digital channel that you have selected is too weak to receive or no signal is being detected for that channel. It also appears when Noise Muting is On and no signal is being received from an external source.

No Program or Weak Signal

### **Audio / Data Only Channel**

This OSD appears when the selected channel is not broadcasting any picture or sound, or is only broadcasting data information.

Audio / Data Only Channel

# **Troubleshooting**

Refer to the table below to check the condition. If you think that there is a problem, contact the JVC Service Center where you purchased the television.

PROBLEMS	CHECK
There is no power	See if the power cord became unplugged.     Check for a blown fuse or circuit breaker or a power outage.
There is no picture or sound	The antenna could be disconnected. The input mode could be set improperly. See page 59. The tuner (Auto Tuner Setup) could be set improperly. See page 41. The TV station may be having difficulties. Check to see if other stations are working. Use the HDMI cable with HDMI logo HDMI. See page 19. If you have a device connected to INPUT-1 or INPUT-2, you will not be able to hear any audio from the AUDIO OUT on the back of the TV. You cannot output audio using the OPTICAL OUTPUT when you have digital sound from an HDMI device connected to the INPUT-1 or INPUT-2 connection on the back of the TV. (See page 18). This TV can accept 480i (Composite / S / HDMI / Component), 480p, 720p and 1080i signals. Please check your settings.
Remote control is not operating properly or at all	Check to see that the batteries are still working and properly installed. Make sure the remote has a clear sight path to the TV. You may be too far from the TV. You must be within 23 feet (7 meters).
You cannot select a certain channel	Make sure the channels have been programmed. See "Channel Summary", page 42.     Check to see if the channel is locked. See "Channel Summary - Lock" page 43.
The power turns off by itself	Make sure the set did not become unplugged.     Perhaps the On/Off Timer is set. See page 54.     Check to see if the Sleep Timer was set. See page 61.
It does not operate correctly	This television is operated by a microprocessor. It is possible that external noise or interference is causing the problem. If the television does not function correctly, remove the electrical plug from the wall outlet and wait a while before inserting it into the wall outlet again and operating the television.
The clock is wrong	• The power was interrupted and the clock was not reset. See page 53.
The color quality is poor	Tint and Color may be improperly adjusted. See page 47. The Video Status mode may be turned to the wrong setting. See page 60.
There are lines across the picture	There could be interference from another electrical appliance, such as a computer, another TV or VCR. Move any such appliances further away from the TV.
The picture is spotted	There could be interference from a high-wattage appliance, like a hairdryer or vacuum, operating nearby. Move the antenna away from the appliance or change to a coaxial cable connection which is less prone to interference.
There are double pictures (ghosts)	A building or passing airplane can reflect the original signal and produce a second, slightly delayed one. Adjust your antenna position.
Picture is snowy (image noise)	Your antenna may be damaged, disconnected or turned. Check the antenna connection. If the antenna is damaged, replace it.
Screen is 80% black	The Closed Caption Text mode is on. Turn it off in the Closed Caption Menu, page 37.
Stereo or bilingual programs can't be heard	Make sure the MTS settings are correct. See page 64.

# **Troubleshooting**

PROBLEMS	CHECK
Static electricity	It is normal to feel static electricity if you brush or touch the screen.
You hear occasional crackling sounds	It is normal for the TV to make crackling sounds when first turned on or off. Unless the sound or picture become abnormal, this is fine.
It does not operate correctly	Press the CHANNEL- and VOLUME- buttons on the side panel of the TV simultaneously for a few seconds. The Digital Tuner will be reset. If this does not reset it correctly, unplug the power cord and plug it back in.
The picture is slightly cut off when you use 1080p format only	Change the picture format setting on your external device to 1080i or other resolution.
The screen disappears except for the menu screen	This occurs when you select a digital menu when your input source is from the HDMI connection. Press the menu button.

### The following are not malfunctions.

- The television may make a creaking sound if the temperature of the room or the temperature of the inside of the television changes. If there is no problem with the screen or sound, then there is no need to worry.
- Although the picture may be temporarily disturbed and noise may be seen on the screen if the power is turned on immediately after it has been turned off, this is not a malfunction.

# **Specifications**

Model	LT-37X688 LT-37XM48	LT-42X688 LT-42XM48			
Туре	LCD Flat Television				
Reception Format	NTSC, BTSC System (Multi-Channel Sound) ATSC Terrestrial, Digital Cable				
Reception Range	VHF 2 to 13, UHF 14 to 69 at ATSC, CATV 135 Sub, Mid, Super, Hyper and Ultra bands at Digital Cable				
	VHF 2 to 13, UHF 14 to 69 CATV 135 Sub, Mid, Super, Hyper and Ultra bands (191 channel frequency synthesizer system) at Analog • Reception of channel A-5 ("95" of the TV set's on-screen cable channel				
	numbers) is not recommended for your TV set.				
Power Source		DV, 60 Hz			
Power Consumption	210W	250W			
Screen Size	37 inch / 94 cm measured diagonally, 16:9 ratio	42 inch / 106.7 cm measured diagonally, 16:9 ratio			
Audio Output	10W	+ 10W			
Speakers	4 x 16cm Twin	Oblique Cone x 2			
Antenna Terminal (VHF/UHF, ATSC/DIGITAL CABLE IN)	75 ohms (VHF/UHF)(F-type connector)				
Input 3, 4, 5 Terminal	480i S (Input 3) Y: 1 Vp-p positive, 75 ohms (negative sync provided) C: 0,286 Vp-p (burst signal), 75 ohms Video: 1 Vp-p, 75 ohms Audio: 500 mVrms (-4dBs) high impedance				
Input 3, 4 Terminal (Component Terminal)	1080i / 720p / 480p / 480i Y: 1 Vp-p positive, 75 ohms (negative sync provided) Pa/Pr: 0.7 Vp-p 75 ohms				
Input 1, 2 Terminal (HDMI Input Terminal)	Video: 1080p / 1080i / 720p / 480p / 480i Audio: 2ch PCM, 32 / 44.1 / 48 KHz 16 / 20 / 24 bit • Personal computer compatibility cannot be guaranteed.				
Audio Output Jacks (FIX)	FIX : 500mVrms (-4dBs), Low Impedance				
Optical Output Digital Audio	Digital Out (optical) x 1				
Dimensions (inch/cm) W X H X D	36 1/4 x 25 3/4 x 9 1/8 (with stand) 91.9 x 65.2 x 23 (with stand)	40 5/8 x 28 3/8 x 11 3/4 (with stand) 103 x 72 x 29.6 (with stand)			
	36 1/4 x 23 7/8 x 4 3/8 (without stand) 91.9 x 60.4 x 10.8 (without stand)	40 5/8 x 26 1/2 x 4 3/8 (without stand) 103 x 67.2 x 10.8 (without stand)			
Weight (lbs / kg)	42.9 / 19.5 (with stand)	57.2 / 26 (with stand)			
	40.3 / 18.3 (without stand)	53 / 24.1 (without stand)			
Accessories	Refer to "unpacking your TV", page 9				

### Specifications subject to change without notice.

- The open source software is embedded in this product. For more information, please go to: http://software.jvc.com/opensource/lnx/DP/07\_AtscQam/download.html
- This product uses the software of the Independent JPEG Group.

# **Specifications**

Model	LT-42X788	LT-47X788			
Туре	LCD Flat	Television			
Reception Format	NTSC, BTSC System (Multi-Channel Sound) ATSC Terrestrial, Digital Cable				
Reception Range		VHF 2 to 13, UHF 14 to 69 at ATSC, CATV 135 Sub, Mid, Super, Hyper and Ultra bands at Digital Cable			
	and Ultra bands (191 channel freque • Reception of channel A-5 ("95" of the	VHF 2 to 13, UHF 14 to 69 CATV 135 Sub, Mid, Super, Hyper and Ultra bands (191 channel frequency synthesizer system) at Analog • Reception of channel A-5 ("95" of the TV set's on-screen cable channel numbers) is not recommended for your TV set.			
Power Source	AC 120	OV, 60 Hz			
Power Consumption	250W	275W			
Screen Size	42 inch / 106.7 cm measured diagonally, 16:9 ratio	47 inch / 119.3 cm measured diagonally, 16:9 ratio			
Audio Output	10W	+ 10W			
Speakers	4.5 x 16 cm Twir	Oblique Cone x 2			
Antenna Terminal (VHF/UHF, ATSC/DIGITAL CABLE IN)	75 ohms (VHF/UHF)(F-type connector)				
Input 3, 4, 5 Terminal	480i S (Input 3) Y: 1 Vp-p positive, 75 ohms (negative sync provided) C: 0.286 Vp-p (burst signal), 75 ohms Video: 1 Vp-p, 75 ohms Audio: 500 mVrms (-4dBs) high impedance				
Input 3, 4 Terminal (Component Terminal)	1080i / 720p / 480p / 480i Y: 1 Vp-p positive, 75 ohms (negative sync provided) Ps/Ps: 0.7 Vp-p 75 ohms				
Input 1, 2 Terminal (HDMI Input Terminal)	Video: 1080p / 1080i / 720p / 480p / 480i Audio: 2ch PCM, 32 / 44.1 / 48 KHz 16 / 20 / 24 bit • Personal computer compatibility cannot be guaranteed.				
Audio Output Jacks (FIX)	FIX : 500mVrms (-4	dBs), Low Impedance			
Optical Output Digital Audio	Digital Out (optical) x 1				
Dimensions (inch/cm) W X H X D	39 3/4 x 28 1/8 x 11 3/4 (with stand) 100.7 x 71.2 x 29.6 (with stand)	44 1/8 x 30 5/8 x 11 3/4 (with stand) 112 x 77.7 x 29.6 (with stand)			
	39 3/4 x 26 x 5 1/8 (without stand) 100.7 x 66 x 13 (without stand)	44 1/8 x 28 5/8 x 5 1/8 (without stand) 112 x 72.6 x 13 (without stand)			
Weight (lbs / kg)	61.6 / 28 (with stand)	69.3 / 31.5 (with stand)			
	58.1 / 26.4 (without stand)	65.8 / 29.9 (without stand)			
Accessories	Refer to "unpacki	Refer to "unpacking your TV", page 9			

### Specifications subject to change without notice.

- The open source software is embedded in this product. For more information, please go to: http://software.jvc.com/opensource/lnx/DP/07\_AtscQam/download.html
- This product uses the software of the Independent JPEG Group.



### LIMITED WARRANTY

COLOR TV 1-1

For Canadian model televisions, see separate sheets for Canadian Warranty information.

\*

JVC COMPANY OF AMERICA (JVC) warrants this product and all parts thereof, except as set forth below ONLY TO THE ORIGINAL RETAIL PURCHASER to be FREE FROM DEFECTIVE MATERIALS AND WORKMANSHIP from the date of original purchase for the period shown below. ("The Warranty Period")

FOR DIRECT-VIEW COLOR TELEVISION, PICTURE TUBE is covered for Two(2) years.

Parts Labor 1 YEAR

THIS LIMITED WARRANTY IS VALID ONLY IN THE FIFTY (50) UNITED STATES, THE DISTRICT OF COLUMBIA AND IN THE COMMONWEALTH OF PUERTO RICO.

#### WHAT WE WILL DO:

If this product is found to be defective within the warranty period, JVC will repair or replace defective parts with new or rebuilt equivalents at no charge to the original owner. Such repair and replacement services shall be rendered by JVC during normal business hours at JVC authorized service centers. Parts used for replacement are warranted only for the remainder of the Warranty Period. All products may be brought to a JVC authorized service center on a carry-in basis. Color televisions with a screen size of 27" or greater qualify for in-home service. In such cases, a technician will come to your home and either repair the TV there or remove and return it if it cannot be repaired in your home.

#### WHAT YOU MUST DO FOR WARRANTY SERVICE:

Please do not return your product to the retailer

Instead, return your product to the JVC authorized service center nearest you. If shipping the product to the service center, please be sure to package it carefully, preferably in the original packaging, and include a brief description of the problem(s). Please call 1-800-252-5722 to locate the nearest JVC authorized service center. Service locations can also be obtained from our website <a href="http://www.jvc.com">http://www.jvc.com</a>. If your product qualifies for in-home service, the service representative will require clear access to the product.

If you have any questions concerning your JVC Product, please contact our Customer Care Center at 800-252-5722

#### WHAT IS NOT COVERED:

This limited warranty provided by JVC does not cover:

- Products which have been subject to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty
  installation, lack of reasonable care, or if repaired or serviced by anyone other than a service facility authorized by
  JVC to render such service, or if affixed to any attachment not provided with the products, or if the model or serial
  number has been altered, tampered with, defaced or removed;
- 2. Initial installation, installation and removal from cabinets or mounting systems.
- 3. Operational adjustments covered in the Owner's Manual, normal maintenance, video and audio head cleaning;
- Damage that occurs in shipment, due to act of God, and cosmetic damage;
- 5. Signal reception problems and failures due to line power surge;
- 6. Video Pick-up Tubes/CCD Image Sensors are covered for 90 days from the date of purchase;
- 7. Accessories;
- 8. Batteries (except that Rechargeable Batteries are covered for 90 days from the date of purchase);
- 9. Products used for commercial purposes, including, but not limited to rental.

There are no express warranties except as listed above.

THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY, IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN.

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\*

either on the rear, bottom or side of the cabinet.
Serial No. :
Name of dealer :

# TO OUR VALUED CUSTOMER -

THANK YOU FOR PURCHASING THIS JVC PRODUCT.
WE WANT TO HELP YOU ACHIEVE A PERFECT EXPERIENCE.

NEED HELP ON HOW TO HOOK UP?
NEED ASSISTANCE ON HOW TO OPERATE?
NEED TO LOCATE A JVC SERVICE CENTER?
LIKE TO PURCHASE ACCESSORIES?

# JVC IS HERE TO HELP! TOLL FREE: 1(800)252-5722 http://www.jvc.com

——— Do not attempt to service the product yourself

### Caution

To prevent electrical shock, do not open the cabinet.

There are no user serviceable parts inside.

Remember to retain your Bill of Sale for Warranty Service.

Please refer to qualified service personnel for repairs.