

COLOR TELEVISION USER'S GUIDE

For models: C-13010 C-13011 C-20010 AV-20020 AV-20021 AV-27015 AV-27020



(Illustration of AV-27020 and RM-C345)

IMPORTANT NOTE TO THE CUSTOMER:

In the spaces below, enter the model and serial number for your television (located on 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



CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: To reduce the risk of electric shock. Do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified service personnel.



The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user 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 TV SET 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.

IMPORTANT SAFEGUARDS

CAUTION:

Please read and retain for your safety.

Electrical energy can perform many useful functions. This TV set has been engineered and manufactured to assure your personal safety. But *improper use can result in potential electrical shock or fire hazards*. In order not to defeat the safeguards incorporated in this TV set, observe the following basic rules for its installation, use and servicing. And also follow all warnings and instructions marked on your TV set.

INSTALLATION

1 Your TV set is equipped with a polarized AC line plug (one blade of the plug is wider than the other).

(POLARIZED-TYPE)



This safety feature allows the plug to fit into the power outlet only one way. Should you be unable to insert the plug fully into the outlet, try reversing the plug. Should it still fail to fit, contact your electrician.

- 2 Operate the TV set only from a power source as indicated on the TV set or refer to the operating instructions for this information. If you are not sure of the type of power supply to your home, consult your TV set dealer or local power company. For battery operation, refer to the operating instructions.
- Overloaded AC outlets and extension cords are dangerous, and so are frayed power cords and broken plugs. They may result in a shock or fire hazard. Call your service technician for replacement.
- **4** Do not allow anything to rest on or roll over the power cord, and do not place the TV set where power cord is subject to traffic or abuse. This may result in a shock or fire hazard.
- 5 Do not use this TV set near water for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near swimming pool, etc.

- 6 If an outside antenna is connected to the TV set, be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection requirements for the grounding electrode.
- 7 An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.



- 8 TV sets are provided with ventilation openings in the cabinet to allow heat generated during operation to be released. Therefore:
 - Never block the bottom ventilation slots of a portable TV set by placing it on a bed, sofa, rug, etc.
 - Never place a TV set in a "built-in" enclosure unless proper ventilation is provided.
 - Never cover the openings with a cloth or other material.
 - Never place the TV set near or over a radiator or heat register.
- 9 To avoid personal injury:
 - Do not place a TV set on a sloping shelf unless properly secured.
 - Use only a cart or stand recommended by the TV set manufacturer.
 - Do not try to roll a cart with small casters across thresholds or deep pile carpets.
 - Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.

USE

- 10 Caution children about dropping or pushing objects into the TV set through cabinet openings. Some internal parts carry hazardous voltages and contact can result in a fire or electrical shock.
- **11** Unplug the TV set from the wall outlet before cleaning. Do not use liquid or an aerosol cleaner.
- **12** Never add accessories to a TV set that has not been designed for this purpose. Such additions may result in a hazard.

- **13** For added protection of the TV set during a lightning storm or when the TV set is to be left unattended for an extended period of time, unplug it from the wall outlet and disconnect the antenna. This will prevent damage to product due to lightning storms or power line surges.
- 14 A TV set and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the TV set and cart combination to overturn.



SERVICE

- **15** Unplug this TV set from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - A. When the power cord or plug is damaged or frayed.
 - B. If liquid has been spilled into the TV set.
 - C. If the TV set has been exposed to rain or water.
 - D. If the TV set does not operate normally by following the operating instructions. Adjust only those controls that are covered in the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the TV set to normal operation.
 - E. If the TV set has been dropped or damaged in any way.
 - F. When the TV set exhibits a distinct change in performance — this indicates a need for service.
- 16 Do not attempt to service this TV set yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
- 17 When replacement parts are required, have the service technician verify in writing that the replacement parts he uses have the same safety characteristics as the original parts. Use of manufacturer's specified replacement parts can prevent fire, shock, or other hazards.
- 18 Upon completion of any service or repairs to this TV set, please ask the service technician to perform the safety check described in the manufacturer's service literature.
- **19** When a TV set reaches the end of its useful life, improper disposal could result in a picture tube implosion. Ask a qualified service technician to dispose of the TV set.

20 Note to CATV system installer.

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

WELCOME!

Congratulations on your new television purchase! We thank you for choosing JVC.

We know you are anxious to start watching your new television, but before you operate it, please read this guide and then keep it handy for future reference. After all, you just bought a great TV with a lot of terrific features, you should know what each feature is and how to use it properly!

Please note as you read through this guide, that there are illustrations of select models for your reference. There are several models in this guide and therefore each illustration will not be of the model you own. Just be sure to look for the similar feature on your TV.

Again, congratulations and thank you for choosing JVC! Enjoy!

TABLE OF CONTENTS

CONNECTIONS

Connections Checklist			5
Front Panel Diagrams			5
Rear Panel Diagrams			6
Cable Box Connection			6
Connecting to a Camcorder			7
Connecting to External Amplifier			7
Connecting to Headphones/Earphones			7

GETTING STARTED

Remote Controls	. 8
Power	. 9
Adjusting Volume	. 9
Changing Channels	. 9
Remote Programming	10
CATV & Satellite Codes	10
VCR Codes	11

MENU FUNCTIONS

Using the Menu							12
Initial Setup							
Auto Tuner Setu	ıp.						13
Channel Summ	nary						13
Set Lock Code							14
Picture Settings							
Tint							15
Color							15
Picture							15
Bright							15
Detail							15
Noise Muting .							15
Set Video Statu	S .						15

Menu Functions Cont...

			16
			16
			16
			16
			17
			17
			18
			18
			18
			18
· · ·	· · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· ·

BUTTON FUNCTIONS

Display	19
Video Status	19
Sleep Timer	19
Hyper Surround	19
Number Buttons (10 Key Pad)	20
100+	20
Muting	20
Menu Button	20
TV/Video	
Return+	20
VCR Buttons	20

APPENDICES

Troubleshooting						21
Limited Warranty						
Authorized Service Centers						23
Specifications						24

CONNECTIONS



CONNECTIONS CHECKLIST — READ ME FIRST!

The Connections Checklist — Read Me First! section of this guide is a list of ideas to keep in mind when you set out to perform your connections. It is designed to help us not-so-technically-advanced individuals. If you read this section, and can't identify the plugs, connectors, and components you have, do not be afraid to seek help.

- 1) Always refer to the connection instructions in the user's guide for your components first! The manufacturer will provide the most detailed information about their products.
- 2) Know your jacks and plugs most are color coded:
 - Yellow plugs are Video connections
 - Red plugs are Right Audio connections
 - White or black plugs are Left Audio (Mono) connections (if your VCR is mono, it will have a white or black plug, no red)
- **3) Perform one hookup at a time.** If you have many accessories to connect, make sure each connection is correct by checking to see that it works properly before attempting the next connection.
- 4) Unplug the power cord between each connection.
- 5) In and Out Concept. Remember In and Out. The Output jack from one piece will go to the Input jack of the other read the jack panels, they are all labeled.

FRONT PANEL DIAGRAMS



C-13010 • C-13011 Front Panel

A/V input plug







S-Video Plug





REAR PANEL DIAGRAMS



CABLE BOX CONNECTION

If you do not require a cable box to access any or all channels, refer to the Quick Setup Guide. If you use a cable box to access any or all channels, use the diagram below.



- 1) Connect the cable wire *out* from the wall *in* to the cable box RF input.
- 2) Connect an RF cable *out* from the cable box, *in* to VCR RF input.
- 3) Connect an RF cable *out* from VCR RF output, *in* to TV VHF/UHF input.
- 4) Plug the power cord into a nearby AC outlet
- Refer to the VCR and/or cable box instructions.





CONNECTING TO A CAMCORDER

You can connect a camcorder right to your TV. For other video/VCR connections see the Quick Setup Guide.

Illustration of AV-27020



- Connect a white audio cable from the camcorder output into the TV's Left Audio input jack.
- 2) Connect a yellow video cable from the camcorder output into the TV's Video input jack.
- If you have both a stereo model TV and camcorder, connect the red audio cable from the camcorder output into the TV Right audio input jack.
- □ Refer to the camcorder's instructions.

CONNECTING TO AN EXTERNAL AMPLIFIER

AV-20020, AV-20021 & AV-27020 only. If you set the TV Speaker to off (see page 17 for special setup), you can adjust the amplifier's sound with the TV remote's VOLUME -/+ button!



Illustration of AV-27020



- 2) Connect a red audio cable from the TV Right Audio output jack into the Amplifier's Right Audio input.
- Refer to the amplifier's instructions.

CONNECTING TO HEADPHONES/EARPHONES

You can connect headphones to the TV's front panel headphone jack on the AV-20020 and AV-20021. You can connect earphones to the C-13010, C-13011, and the C-20010.



1) Connect the headphones plug to the TV's headphones input jack on the front panel.

Refer to the headphones or earphones instructions.



REMOTE CONTROLS



RM-C345 AV-27020

1



RM-C340 AV-20020 • AV-20021

CHANGING THE BATTERIES

Be sure to use only size AA batteries.

- Push down or raise the latch on the remote's back cover to remove it.
- 2 Insert the two supplied AA batteries, carefully noting the "+" and "-" markings on the batteries and remote control. To avoid a short circuit, insert "-" end first.
- **3** Snap the cover back into place.
- If the remote control acts erratically, replace the batteries. Typical battery life is usually about six months to one year.
- D We recommend alkaline batteries for a longer battery life.

RM-C340/RM-C345 USERS NOTE:

When you change the batteries, try to complete the task within three minutes. If it takes longer than 3 minutes, the remote control codes for your VCR and/or Cable box will have to be reset (page 10).



RM-C241 C-13010 • C-13011 C-20010 • AV-27015





RM-C340 • RM-C345



POWER

- Press the Power button on the remote control or the TV front panel. The power lamp will glow red. (On the AV-27020 and AV-27015 the On Timer lamp will glow red.)
- Make sure that the TV/CATV switch is set to TV (RM-C340 and RM-C345 only). Switch to CATV only if you plan to operate a cable box. If you switch to CATV you will not be able to operate the TV functions with the remote, only the cable box functions!
- □ To turn the power off, press the Power button again. The power lamp will go out.
- □ The On Timer lamp will glow red when the On/Off Timer is set, even when the TV power is off.

ADJUSTING VOLUME

Use the VOLUME -/+ buttons (◀►) on the front panel or remote control. Use the VOLUME - (◀) button to lower the volume. Press the VOLUME + button (►) raise the volume.

VOLUME 13	

2 Press the MUTING button to instantly turn the volume off to zero. To restore the volume to the previous volume level, simply press the MUTING button again.

CHANGING CHANNELS

1 10 key direct access.

Press the numbers on the remote's 10 key pad. For single-digit channel numbers press 0 then the number. For channels above 100, press the 100+ button plus the 2-digit number.



Press the CHANNEL -/+ button, it will scan the channels in order.

□ NOTE: After you operate the Auto Tuner Setup (page 13), all of the blank, or empty, channels will be removed from scanning so that there is no noise or channel snow when you scan, only active channels.

3 Regular Return.

Press and release the RETURN+ button to return to the previous channel. First, select a channel (game #1). Then, select another channel (game #2) with the 10 key pad and push the RETURN+ button to flip directly back and forth.

4 Return+.

Press and hold down the RETURN+ button for three seconds. The message, "RETURN CHANNEL PROGRAMMED !" will appear and you can scan as you wish with the CHANNEL -/+ button. Press RETURN+ again and you will go back to the Return+ channel you programmed.

To cancel the Return+ channel, press and hold down the RETURN+ button for another three seconds and the message, "RETURN CHANNEL CANCELLED !" appears.

D Pressing any number key or turning the TV off will also cancel a Return+ channel.

REMOTE PROGRAMMING

SETTING THE CATV & VCR CODES

Many CATV & VCR brands have more than one code. If the first code in the list does not work, try the other codes listed. If your CATV box or your VCR do not respond to any of the codes listed for the manufacturer and search code function, use the remote control for that accessory to operate it.

CABLE BOX OR SATELLITE SETUP FOR RM-C340 AND RM-C345

The remote is programmed with the CATV and Satellite codes for power on and off, 10 key, and channel up and down.

1) Determine the correct code from the "CATV & Satellite Codes" chart below.

2) Slide the 2-Way Mode Selector Switch to CATV.

- 3) Press and hold down the DISPLAY button.
- 4) Enter the 3-digit code with the 10 key pad while continuing to hold down the DISPLAY button.
- 5) Release the DISPLAY button.
- 6) Confirm the operation of the cable box.

Note : If your cable box or satellite box does not respond to any code on the chart, use the Search Codes Function below.

CATV & Satellite Codes

CABLE BOXES	CODES	CABLE BOXES	S CODES	DIGITAL	CODES
				SATELLITE	
ABC	024	Puser	032	SYSTEMS	
Archer	032, 025	RCA	061		
Cableview	051, 032	Realistic	032	Echostar	100
Citizen	022, 051	Regal	058, 064, 040, 041, 042, 045,	G.E.	106
Curtis	058, 059		068	Gradiente	112
Diamond	024, 032, 025	Regency	034	Hitachi	104, 111
Eagle	029	Rembrandt	037, 032, 051, 038	HNS(Hughes)	104
Eastern	034	Samsung	051	Panasonic	105
GCBrand	032, 051	Scientific Atlanta	a 057, 058, 059	Philips	102, 103
Gemini	022, 043	SLMark	051, 047	Primestar	108
General Instrument	065,024, 025, 026, 027, 020,	Sprucer	051, 056	RCA	106, 109, 110
	021, 022, 057, 023	Stargate	032, 051	Sony	107
Hamlin	040, 041, 042, 045	Telecaption	067	Toshiba	101
Hitachi	049, 024	Teleview	047, 051	Uniden	102, 103
Jerrold	065, 024, 025, 026, 027, 020,	Texscan	044		
	021, 022, 057, 023	Tocom	035, 036, 066		
Macom	049, 050, 051, 054	Toshiba	050		
Magnavox	033	Unika	032, 025		
Memorex	030	Universal	022, 032		
Movietime	032, 051	Videoway	052		
Oak	039, 037, 048	Viewstar	029, 030		
Panasonic	055, 056, 060	Zenith	063, 046		
Paragon	063	Zenith/Drake	046		
Philips	028, 029, 030, 052, 053, 031,	Satellite			
	069				
Pioneer	047, 062				
Pulsar	051, 032				

Search Codes Function :

- 1) Slide the 2-Way Mode Selector Switch to CATV.
- 2) Press the TV Power and RETURN+ buttons simultaneously for more than three seconds, then release.
- 3) Press TV Power and check if the accessory responds.
- 4) If there was a response, press RETURN+. If there was no response, repeat Step 3 until there is a response. If you repeat Step 3 more than 70 times and there is still no response, use the accessory remote.

REMOTE PROGRAMMING



VCR SETUP FOR RM-C340 AND RM-C345

The remote is pre-programmed with the VCR codes for power on and power off, play, stop, fast-forward, rewind, and channel up and down.

- 1) Determine the correct code from the "VCR Codes" chart (below).
- 2) Slide the 2-Way Mode Selector Switch to TV.
- 3) Press and hold down the DISPLAY button.
- 4) Enter the 3-digit code with the 10 key pad while continuing to hold down the DISPLAY button.
- 5) Release the DISPLAY button.
- 6) Confirm the operation of the VCR.
- D When you record a channel, press the PLAY button while continuing to hold down the REC button.

Note : If your VCR does not respond to any code on the chart, use the Search Codes Function below.

VCRs	CODES	VCRs	CODES	VCRs	CODES
Admiral	035	Magnavox	031, 023, 024, 086	Samsung	037, 060, 062, 033, 089
Aiwa	027,032	Marantz	003, 004, 005	Sansui	003, 026, 020, 052
Akai	029, 072, 073, 074	Marta	064,	Sanyo	063, 067, 091, 071
Audio Dynamic	003, 005	Memorex	024, 067	Scott	059, 060, 062, 067, 038, 040,
Bell & Howell	063, 071	MGA	038, 040, 047, 048, 041, 042		047, 048, 026, 020
Broksonic	020, 026	Minolta	058, 045	Sears	063, 064, 065, 066, 058
Canon	023, 025	Mitsubishi	038, 040, 047, 048, 041, 042,	Shintom	075
CCE	043		078, 090	Sharp	035, 036, 080, 088
Citizen	064	Multitech	047, 027, 062	Signature 2000	027, 035
Craig	063, 029, 064	NEC	003, 004, 005, 000	Singer	075
Curtis Mathes	045, 024, 027	Olympic	024, 023	Sony	028, 029, 030, 053, 054, 055
Daewoo	043, 059, 024	Optimus	028, 021, 035, 064	SV2000	027
DBX	003, 004, 005	Orion	026, 020	Sylvania	031, 023, 024, 027
Dimensia	045	Panasonic	023, 024, 021, 022	Symphonic	027, 081
Emerson	043, 026, 077, 061, 025, 042,	Penney	024, 058, 045, 063, 003, 004,	Tashiro	064
	020, 076	-	005	Tatung	003, 004, 005
Fisher	063, 066, 067, 065, 071	Pentax	058, 005, 045	Teac	003, 004, 027, 005
Funai	027, 026, 020, 000	Philco	031, 024, 027, 023, 026, 020,	Technics	021, 022, 023, 024
GE	033, 045, 024		043	Teknika	024, 027, 070
Go Video	037, 051, 049, 050, 089	Philips	031, 023, 024, 086	Toshiba	059, 046, 079
Goldstar	064	Pioneer	023	Vector Research	005
Gradiente	083, 084, 081, 000, 001	Proscan	045, 058, 023,024, 031, 046,	Wards	035, 036, 067, 044, 064
Hitachi	023, 045, 058, 027, 081		059, 060, 033, 087	Yamaha	063, 003, 004, 005
Instant Replay	024, 023	Quasar	021, 022, 023, 024	Zenith	044, 082, 064
Jensen	003	Radio Shack	033, 024, 063, 036, 067, 040,		
JVC	000, 001, 002, 003, 004, 005		027		
Kenwood	003, 004, 064, 005	RCA	033, 045, 058, 023, 024, 031,		
LXI	027, 064, 058, 065, 066, 063,		046, 059, 060, 083, 085, 087		
	067	Realistic	024, 063, 036, 067, 040, 027		

VCR Codes

Search Codes Function :

- 1) Slide the 2-Way Mode Selector Switch to TV.
- 2) Press the VCR Power and Return+ buttons simultaneously for more than three seconds, then release.
- 3) Press VCR Power and check if the accessory responds.
- 4) If there was a response, press RETURN+. If there was no response, repeat Step 3 until there is a response. If you repeat Step 3 more than 80 times and there is still no response, use the accessory remote.



USING THIS GUIDE:

Throughout this guide there are certain symbols we use as shorthand to show you what to do. When you see them, keep these factors in mind:



▲▼ Up and down arrows mean press the MENU UP or MENU DOWN buttons. Pressing the up or down buttons allows you to:

- Move vertically in the main menu screen
- · Move through a submenu, or
- · Move to the next letter, number, or other choice in a submenu, or
- Back up to correct an error
- Channel Up and Down
- Left and right arrows mean press the MENU LEFT or MENU RIGHT button to:
 - Select the highlighted item, or
 - Select the options in a submenu
 - Volume Up and Down

ምሳ

The "Press Button" means you should press that button on the remote control

Important information, or a note, about a feature follows a cube like this one.

> SMALL CAPITAL LETTERS are used when we refer to buttons ... this is important because some menu functions have the same name.

THE ONSCREEN MENUS:

To bring up the onscreen menu, press the MENU button on the remote, and the menu will appear on the screen. The item that appears yellow is the selected item.

When you first turn on the TV, the "Picture Settings" menu will appear. However, "Initial Setup" is so important, that this guide begins here.

INITIAL SETUP ITEMS



PICTURE SETTINGS



*AV-27015 does not have TV Speaker.

INITIAL SETUP



AUTO TUNER SETUP

During Auto Tuner Setup, the TV will automatically scan through all available channels and memorize the active ones so that when you scan, you do not pick up weak or noisy channels.

P

◀

Press the MENU button

To AUTO TUNER SETUP

● To operate

TUNER MODE : CABLE AIR START To choose CABLE or AIR

- ▲▼ To move to START
- ◀► To start Auto Tuner Setup

NOW PROGRAMMING!

The Programming takes approximately 1 to 2 minutes

PROGRAMMING OVER!

Note: Noise Muting will not work while Auto Tuner Setup is working.

CHANNEL SUMMARY

You can add or delete channels from the channel scanning. You can also lock out any "unauthorized" viewers from one or up to all 181 channels.



- Press the MENU button
- To CHANNEL SUMMARY
- To operate

ADD

You can manually set channels to scan that were too weak to be picked up during Auto Tuner Setup. (If you have not performed the Auto Tuner Setup, in previous column, do so now.) Conversely, if a channel was too weak to receive a good picture but was picked up anyway, delete it by removing the X.

Œ	ADD	â	:	CH	ADD	A
01	-	_	:	06	Х	_
02	Х	-	:	07	-	-
03	Х	-	:	08	-	-
04	Х	-	:	09	Х	-
05	Х	-	:	10	Х	-
05	Λ	_	•	10	Λ	_

- ▲▼ 7
 - To the ADD column



To include or delete from scan

Exit when finished

Note: Channels set to scan will be marked with an X.

Note: Some cable systems experience interference from radio frequencies on Cable Channel 95. You can delete this channel from scanning by removing the X.



During Initial Setup, the TV will be programmed to only receive active channels. Once the channels are activated by the Auto Tuner Setup they will be included in Scan.

Some weak channels may be included or omitted during this procedure. You can add or delete any channels for scanning in the Channel Summary.

Noise Muting will not work while you operate the Channel Summary.



INITIAL SETUP

Continued ...

CHANNEL GUARD - LOCK

	To CHANNEL	SUMMARY
--	------------	---------

- ▲► To operate
- ▲▼ To the Lock column

The access code zero (0) to lock or unlock that channel

Œ	ADD	A	:	CH	ADD	A
01	Х	_	:	06	Х	-
02	Х	-	:	07	-	â
03	Х	-	:	08	-	8
04	Х	-	:	09	Х	-
05	Х	-	:	10	Х	_



Exit when finished

CHANNEL GUARD MESSAGE:

This message appears when a viewer attempts to watch a guarded channel:

PLEASE ENTER LOCK CODE BY 10 KEY PAD TO UNLOCK IT.

NO. ----

To watch a channel you have locked, enter the lock code using the 10 key pad.

If the wrong lock code is entered, this message will flash on the screen:

INVALID LOCK CODE !

SET LOCK CODE

The Lock Code locks and unlocks Channel Guard settings. Write this four digit number down and keep it safe from potential viewers!



can set another one this same way.

Note: After a power interruption you must reset the lock code.

PICTURE SETTINGS



TINT

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



Press the MENU button

- ▲▼ To TINT
- To accentuate green
- To accentuate red
- ▲▼ To move to the next or previous

COLOR

Color allows you to adjust both the vividness and subtlety of the color.

Press the MENU button



- To COLOR
- To make colors more vivid
- To subdue colors
- $\bullet \mathbf{\nabla} \quad \text{To move to the next or previous}$

PICTURE

Picture allows you to adjust the range between black and white in the picture.

Press the MENU button

- To PICTURE
- To increase contrast
- To decrease contrast
- \mathbf{A} To move to the next or previous

BRIGHT

Adjust the degree of light and dark in the picture.



Press the MENU button

- To BRIGHT
- To lighten the picture
- To darken the picture
- \blacksquare To move to the next or previous

DETAIL

Detail allows you to adjust the level of detail within the picture.

- Press the MENU button
 - To DETAIL
 - To make the picture sharper
 - To make the picture smoother
- \blacksquare To move to the next or previous

NOISE MUTING

Eliminates noise from channels that are not broadcasting or are too weak.



Press the MENU button To NOISE MUTING

■ To turn ON/OFF

Note: Noise Muting will not work when you operate Auto Tuner Setup or Channel Summary.

SET VIDEO STATUS

Save Picture Settings as "Choice".



- Press the MENU button
- To SET VIDEO STATUS
- To operate

TINT	
COLOR	
PICTURE	
BRIGHT	
DETAIL	
	SAVE AS CHOICE

- ◀► To operate the TINT option
 - \checkmark To move to the next option

Repeat the above steps for each setting



To SAVE AS CHOICE



To save settings and exit

Note: Access your "Choice" settings by pressing the VIDEO STATUS button on the remote control.

NOTES:

If you do not move to the next setting with the up and down arrows, in approximately three seconds the screen will disappear and your preferences will be stored.

You can exit the Picture Settings menu at any time by pressing the Exit button on the remote control.



SOUND SETTINGS

NOTES:

STEREO SETS ONLY!!

Bass, Treble, Balance, and MTS are available on:

- AV-20020
- AV-20021
- AV-27015
- AV-27020

MTS has no effect on normal sound broadcasts.

You can exit the Sound Settinas menu at any time by pressing the Exit button.

BASS

The Bass level adjustment feature allows you to raise or lower the level of lower frequencies in the TV's sound.



- To emphasize bass
- To reduce bass
- ▲▼ To move to next

TREBLE

The Treble level adjustment feature allows you to raise or lower the level of higher frequencies in the TV's sound.



- To TREBLE
- To increase treble
- To decrease treble
- To move to next \mathbf{AV}

BALANCE

The Balance adjustment feature allows you to center the TV's sound to your needs.



Press the MENU button

- TO BALANCE
- To shift the speaker balance to the right
- To shift the speaker balance to the left
- To move to next

MTS (Multi-Channel **Television Sound**)

MTS technology gives you a choice among stereo, mono, and Second Audio Programs (SAP).



Press the MENU button To MTS

MIS	STEREO	SAP	MONO

ON AIR _____

Select the mode

(The ON AIR arrow tells you if the current signal contains Stereo or SAP)

Note: Keep the TV in STEREO mode to get the fullest sound quality.

Note: SAP will allow you to hear an alternative soundtrack, if available.

Note: Choose MONO to reduce excess noise in a program or channel.

Some Sound Advice

You can tell if a program is broadcast in stereo by the position of the ON AIR arrow in the MTS menu. Unfortunately, it is common for some cable companies to squash the transmission of stereo programs to mono because they only have mono equipment. If connected to a cable system, the sound is at the mercy of that cable company — if they broadcast in mono, you receive mono sound regardless of the original stereo programming.

Fortunately, most programs that are broadcast in stereo are aired on the major television networks. If you connect your TV to an antenna instead of cable, and set the tuner mode in the Auto Tuner Setup to "Air" instead of "Cable," you will be able to pick up stereo broadcasts in stereo.







TV SPEAKER

You can listen to the TV speakers, or if your set is connected to a stereo, turn them off to listen to the stereo speakers.



Press the Menu button To TV SPEAKER

TV SPEAKER	ON	OFF



To turn the speaker ON or OFF



Exit when finished

Note: TV Speaker settings will be cancelled after a power interruption.

Note: Before you set TV Speaker from Off to On, **make sure that the TV volume level is low!** If the volume is set too high, the sound will be extremely loud.

SET CLOCK

The Clock is the heart of all timer functions. You must set the clock before any timer functions will work.



Press the MENU button To SET CLOCK

To operate

TIME --:-- -

START CLOCK

- ► To set the hour (AM/PM)
 - To move to minutes



To start the clock

THANK YOU !!

If you want to synchronize the TV clock with another clock or time signal, press Left or Right Menu arrow at the appropriate time, and the clock will start at that moment.

Note: If the TV is unplugged or you experience a power outage, you must reset the clock in order for any of your timer functions to work.

CLOCK SET MESSAGE

If you do not set the clock but attempt to use a timer function anyway, you will get the following message:

> PLEASE SET CLOCK FIRST !! TIME --:---START CLOCK

NOTES:

TV Speaker is only available on:

• AV-20020

- AV-20021
- AV-27020

Set Clock is available on all models.



NOTES:

Closed Caption Note: Captions are usually found on CC1 and text on T1. The other caption and text channels are workable but are for future purposes. If you want to view captions or text, most likely you should choose CC1 for Captions and T1 for Text.

General Note:You can exit the menu at any time by pressing the Exit button.

ON/OFF TIMER

Use the On/Off Timer as an alarm to wake up, as a program reminder, or as a decoy when you're out of the house.



To operate

ON TIME		7:00 PM	
OFF TIME		10:00 PM	
CHANNEL		02	
MODE	ONCE	EVERYDAY	
ON/OFF TIMER		YES NO	

FINISH

- 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 to move to OFF TIME (set time for TV to turn off)
- ▼ To move to CHANNEL
- To select channel
- To move to MODE
- ♦► Choose ONCE or EVERYDAY
- ▼ To YES NO
- Choose YES for on, NO for off
- ▼ To FINISH
- ◀► To save settings

THANK YOU !!

Note: In order for ON/OFF Timer to work, the clock must be set. After a power interruption it will be cancelled.

Note: ON/OFF Timer cannot be set to locked or guarded channels.

LANGUAGE

Choose from English, French, or Spanish on-screen menus and displays.



Press the MENU button To LANGUAGE





To choose a language



Exit when finished

CLOSED CAPTION

If they are included in a program, you can view closed captions or text information.



- Press the MENU button
- To CLOSED CAPTION

◀► To operate

MODE : CAPTION CAPTION: CC1 CC2 CC3 CC4 TEXT : T1 T2 T3 T4 FINISH

- ▲► To select CAPTION, TEXT or OFF
- ▲▼ To CAPTION or TEXT
- ▲► To select a caption or text channel
- ▲▼ To FINISH
- ▲► To save settings and exit

Note: If you wish to view captions or text you must set mode to CAPTION for captions, and TEXT for text.

Note: If a black box covers half of the screen, Text Mode is on. Press CC to turn it off.

Note: Closed captioning may not correctly operate when the signal received is weak or when you are playing a video tape.

BACKGROUND

Choose a black or clear menu background.



Press the MENU button

To BACKGROUND

BACKGROUND BLACK CLEAR



To operate Exit when finished

BUTTON FUNCTIONS



DISPLAY

The Display screen shows the current status of timers and inputs.



DISPLAY

07 NOW **SLEEP TIMER ON/OFF TIMER** ON TIME **OFF TIME**

12:20 PM OFF **EVERYDAY** 7:00 PM 10:00 PM

- □ The channel or AV input (Channel 07)
- □ Current time (12:20 PM)
- □ Sleep Timer status minutes remaining (Off)
- On/Off Timer status (Everyday, on at 7:00 PM, off at 10:00 PM)
- Each press of the DISPLAY button changes the display mode:

$$\rightarrow$$
 display \rightarrow time \rightarrow channel \rightarrow off \rightarrow

VIDEO STATUS

The VIDEO STATUS button lets you select the "Choice" settings of the Set Video Status menu, or raise the level of detail with "Game", or reset to factory settings.

"Standard" resets the picture settings to factory standard levels.

"Choice" consists of the settings that you saved in the Set Video Status menu, page 14.

"Game" enhances video graphics.



VIDEO STATUS

ightarrow Choice ightarrow Game ightarrow Standard ightarrow

SLEEP TIMER

Sleep Timer turns off the TV for you in case you fall asleep. Program it to work in intervals of 15 minutes up to 180 minutes.



SLEEP TIMER

- 0 15 30 45 60 75 90 105 120 135 150 165 180- \leftarrow

SLEEP TIMER MESSAGE

20 seconds prior to the automatic shut-off, this message will appear:

> GOOD NIGHT !! PUSH SLEEP TIMER BUTTON TO EXTEND.

You then have 20 seconds to press the SLEEP TIMER button to delay turn off for another 15 minutes.

HYPER SURROUND

RM-C345 ONLY. Creates a deep, 3-dimensional sound effect by channeling the sound through the TV's front firing speakers. Press the Hyper SURROUND button to turn it on and off.



Please note that if the clock, SleepTimer, or On/Off Timer are not set, the initial Display screen will state "Clock Not Set," "Sleep Timer Off," and "On/Off Timer Off," respectively.



BUTTON FUNCTIONS

NOTES :

RM-C241 does not have VCR buttons.

NUMBER BUTTONS 10 KEY PAD

Press two of the number buttons to move to single and double digit channels.

To move to Channel 7:



0 (zero)

7 (seven)

100 + BUTTON

The 100+ button accesses all channels above Channel 99.

To move to Channel 124:



MUTING

The MUTING button turns the sound off completely when you press it.

Muting

The sound will turn off completely.

Note: To return the the original volume press MUTING again.

MENU BUTTON

The MENU buttons allow you to access the onscreen menu system. You then use the CHANNEL -/+ and VOLUME -/+ buttons to move throughout the menu.

TV / VIDEO

TV/VIDEO selects the input mode.



TV/Video



RETURN+

There are two kinds of Return...

Return+ — Set a "Return Channel" to return to after scanning with CHANNEL -/+.



RETURN+ and hold for 3 seconds

RETURN CHANNEL PROGRAMMED !

Scan with CHANNEL -/+



Return+

Note: To cancel a Return channel, press and hold Return+ for another 3 seconds until "RETURN CHANNEL CANCELLED!" appears.

Return — Return to the last channel viewed after moving to another channel via the 10 key pad.



Return+

Move to another channel with the 10 key pad.



Return+

VCR BUTTONS

RM-C340 and RM-C345 Only. This remote will control your VCR. You can play, rewind and fast-forward, record, pause, stop, channel scan, and power on and off.

Note: The remote is preset with the code 000 to control a JVC VCR. For any other brand, you must set up the manufacturer's code (page 11).

TROUBLESHOOTING



PROBLEMS	CHECK
There is no power	See if the power cord became unplugged.Perhaps you have experienced a blown circuit breaker or fuse or a power outage.
There is no picture or no sound	 The antenna could be disconnected. The input mode (TV or Video) could not be set properly, refer to page 20. The tuner mode (in the Auto Tuner Setup) could be set improperly, refer to page 13. The station may be having difficulties, check to see if other channels are operating normally.
Remote control is not operating or operating properly	 Check that the batteries are still working and properly installed. Make sure there are no objects blocking a clear path from the remote to the TV. Check that the TV/CATV switch is in the proper position (RM-C340 and RM-C345) — set to TV to view television.
You cannot select a certain channel	 Maybe you are too far from the TV, you must be within 23 feet (or 7 meters). Make sure the channels are programmed. See Channel Summary, page 13. Perhaps the channel is locked, select it with the 10 key pad and follow instructions.
The power turns off by itself	 Perhaps the On/Off Timer is set, press the power button, check page 18. The power was interrupted or the power cord unplugged. Reset the clock, check page 17. The Sleep Timer may be set.
The clock is wrong	The power was interrupted and the clock not reset. Reset the clock, check page 17.
On Timer is blinking PICTURE	There is a problem with the TV. Unplug the set and call for service. CHECK
The picture color quality is poor	Tint and color may be improperly adjusted. Check page 15.Video Status mode may be set to an inappropriate setting. Check page 15.
There are lines across the picture	 There could be interference from another energy consuming appliance, such as a computer, another TV or VCR. Move any other such appliances farther away from the TV.
The picture is spotted	 There could be interference from a running high wattage appliance such as a hair-dryer, vacuum cleaner, or neon sign. You will have to move the antenna away from the source of the interference or change it to a coaxial cable which is less prone to interference.
Double picture (Ghosts)	• A building or airplane can reflect the original signal producing a second, delayed one. Adjust the antenna position.
Snowy picture/ Image noise	 The antenna may be damaged, disconnected or turned. Check the antenna connection, page 6, and your Quick Setup Guide. If it is damaged, you will have to replace it.
Screen is 80% black	Closed Caption Text Mode is on. Turn it off in the Closed Caption Menu (page 18).
SOUND	CHECK
Bilingual or stereo programs cant be heard	• Make sure the MTS mode is properly set. Refer to page 16 for details on setting MTS Modes.
There is no sound from the TV speakers	• TV Speakers may be turned off in the menu, see page 17.
NOT A PROBLEM	DON'T WORRY ABOUT THIS, IT'S NORMAL
Static electricity	• It is normal to feel a surge of static electricity if you brush over or touch the screen.
You hear occasional crackling sounds	 It is normal for the TV to emit crackling sounds when turned on or off. Unless the sound or picture become abnormal, this is fine.



For Canadian model televisions, see separate sheets for Warranty/Garantie and JVC Authorized Service Centers in Canada.

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

	Model No.	Serial No.	Parts	Labor
1 YEAR 1 YEAI			1 YFA	

This limited warranty is valid only in the fifty (50) United States, The District of Columbia and the Commonwealth of Puerto Rico.

JVC WILL:

If this product is found to be defective, repair or replace defective parts at no charge to the original owner. Such repairs will be made during regular business hours only at JVC authorized service centers. All parts repaired or replaced are warrantied for the remainder of this Warranty Period only. All products and parts should be brought to an authorized service center on a carry-in basis except for those models with a screen size larger than 25 inches which are covered on an in-home basis.

YOU MUST:

• Return your products to a JVC authorized service center with a copy of your bill of sale. For the authorized JVC service center nearest you, call toll free (800) 537-5722.

• If service is not locally available, box the product carefully, preferably in its original container, and ship it, insured, to the nearest authorized service center with a copy of the bill of sale and a letter of explanation as to the problem. Call the toll free number above for the address.

WHAT IS NOT COVERED:

1) 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 connected to any attachment not provided with the products, or if the model or serial number has been altered, tampered with, or removed;

2) Initial installation, removal for repair, and reinstallation after repair is not covered;

3) Operational adjustments covered in the Owner's manual, normal maintenance, video and audio head cleaning;

4) Damage that occurs during shipment, due to an act of God, or of consequence to cosmetic changes;

5) Signal reception problems and failures due to line power surges;

6) Video Pick-up Tubes/CCD Image Sensor, Cartridge, Stylus (Needle) are covered for 90 days from the date of purchase;7) Accessories, and;

8) Batteries (except for rechargeable batteries which are covered for 90 days from date of purchase.)

There are no express warranties except as listed above.

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

JVC SHALL NOT BE LIABLE FOR THE LOSS OF USE OF THIS PRODUCT, INCONVENIENCE, LOSS OR ANY OTHER DAMAGES, WHETHER DIRECT, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, WITHOUT LIMITATION, DAMAGE TO TAPES, RECORDS OR DISCS) RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE WARRANTY PERIOD SET FORTH ABOVE.

Some states do not allow the exclusion of incidental or consequential damages or limitations on how long the warranty lasts, so these may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary state to state.

If you have questions concerning your JVC product, please contact our Customer Relations Department:

JVC COMPANY OF AMERICA DIVISION OF JVC AMERICAS CORP.

1700 Valley Road CORP. Wayne, New Jersey 07470

Refurbished products carry a separate warranty. This warranty does not apply for details of refurbished product warranty. Please refer to the refurbished product warranty information packaged with each refurbished product.





HOW TO LOCATE YOUR JVC SERVICE CENTER

TOLL FREE: 1 (800) 537-5722 http://www.jvcservice.com

Dear Customer;

In order to receive the most satisfaction from your purchase, read the instruction booklet before operating the unit. In the event that repair is necessary, or for the address nearest your location, please refer to the factory service center list below or within the Continental United States, call 1-800-537-5722 for your authorized servicer. Remember to retain your Bill of Sale for Warranty Service.

— JVC

JVC SERVICE & ENGINEERING COMPANY OF AMERICA

DIVISION OF JVC AMERICAS CORP.

FACTORY SERVICE CENTER LOCATIONS

Dear customer;

In order to receive the most satisfaction from your purchase, read this guide before operating the unit, and before calling for service make sure you check the Troubleshooting pages at the end of this book. In the event that repair is necessary, or for the address nearest you, please refer to the factory service center list below, or within the continental United States, call the toll free number above for an authorized service center. Remember to retain your bill of sale for warranty service.

107 Little Falls Road Fairfield, NJ 07004-2105 (973) 808-9279

5665 Corporate Avenue Cypress, CA 90630-0024 (714) 229-8011

13 Cummings Park Woburn, MA 01801 (781) 376-9100 1500 Lakes Parkway Lawrenceville, GA 30243-5857 (404) 339-2522

2969 Mapunapuna Place Honolulu, HA 96819-2040 (808) 833-5828

8192 State Road 84 Davie, FL 33324 (954) 472-1960 705 Enterprise Street Aurora, IL 60504-8149 (630) 851-7855

10700 Hammerly Suite 110 Houston, TX 77043 (713) 935-9331

890 Dubuque Avenue South San Francisco, CA 94080-1804 (650) 871-2666

Sophisticated electronic products may require occasional service. Just as quality is a keyword in the engineering and production of the wide array of JVC products, service is key to maintaining the high level of performance for which JVC is world famous. The JVC service and engineering organization stands behind our products.

NATIONAL HEADQUARTERS JVC SERVICE & ENGINEERING COMPANY OF AMERICA DIVISION OF JVC AMERICAS CORP. 1700 Valley Road Wayne, New Jersey 07470

- IF YOU SHIP THE PRODUCT -

Pack your JVC unit in the original carton or one of equivalent size and strength. Enclose, with the unit, a letter stating the problem or symptom that exists and also a copy of the receipt or bill of sale you received when you purchased your JVC unit. Print your home return address on the outside and inside of the carton, Send to the appropriate JVC Factory Service Center as listed above.

Don't service it yourself.

CAUTION

To prevent electrical shock, do not open the cabinet. No user serviceable parts inside. Refer to qualified service personnel.

ACCESSORIES

To purchase accessories for your JVC product, you may contact your local JVC Dealer. Or from the 48 Continental United States call toll free : 1 (800) 882-2345

SPECIFICATIONS

MODEL	C-13010 C-13011	C-20010	AV-20020 AV-20021	AV-27015 AV-27020	
Reception format	NTSCSystem		NTSC, BTSC System (Multi Channel Sound)		
Reception range	VHF 2 to 13. UHF 14 to 69 Sub Mid, Super, Hyper and Ultra bands (181 channel frequency synthesizer system)				
Power consumption	60W / 1.1A	87W / 1.4A	87W / 1.4A 87W / 1.4A 113W / 1.8A		
Screen size	13 inch / 34 cm measured diagonally	20 inch / 51 cm27 inch / 68 cmmeasured diagonallymeasured diagonallyfull squarefull square		measured diagonally	
Audio output	1W	1W	1W x 2	1.2W x 2	
Speakers	$3{}^{\prime}\!/_{16}/8$ cm round x 1	2 x 3½ /5x9cm oval x 1	2 x 3½ / 5 x 9cm oval x 2	2 x 3 ½ / 5 x 9 cm oval x 2	
Antenna terminal	75 ohms (VHF/UHF) (F-type Connector)				
External input jacks	Video: 1 Vp-p, 75 ohms Audio: 500mVrms (-4dBs) high impedance				
Variable audio output	More than 0 to 1550mVrms (+6dBs) Low impedance (400 Hz when modulated 100%)				
Headphone Jack	Ø7 mm x 1		_		
Dimensions (inches) WxHxD (cm)	14 ³ / ₈ x 13 ¹ / ₈ x 14 ³ / ₄ 36.4 x 33.4 x 37.4	19 ⁷ / ₈ x 17 ⁷ / ₈ x 19 ¹ / ₂ 50.3 x 45.2 x 49.3		25 ³ / ₄ x 23 ³ / ₈ x 19 ¹ / ₂ 65.4 x 59.3 x 49.4	
Weight (lbs. / kg.)	19.8 / 9.0	43.2 / 19.6	43.8 / 19.9	68.5 / 31.1	
Accessories	Remote control unit x 1 / AAbatteries x 2				

Specifications subject to change without notice.

JVC°

JVC COMPANY OF AMERICA DIVISION OF JVC AMERICAS CORP. 1700 Valley Road Wayne, New Jersey 07470

JVC CANADA, INC.

21 Finchdene Square Scarborough, Ontario Canada M1X 1A7

