

## **COLOR TELEVISION**

## AV-21CN14

## **Contents**

Knowing your TV's features2
Remote control buttons and basic functions - 3
TV buttons and functions5
Setting up your TV6
Basic setting for picture 8
Advanced setting for picture9
Original features for picture9
Advanced setting for sound9
Favorite channel and video setting 10
Customized setting 11
TV channel presetting12
Additional preparation13
Troubleshooting13
Specifications 14



Thank you for buying this JVC color television.

To make sure you understand how to use your new TV, please read this manual throughly before you begin.

## **Safety Instructions**

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

APPLIANCE TO RAIN OR MOISTURE.

CAUTION: TO ENSURE PERSONAL SAFETY, OBSERVE THE FOLLOWING RULES REGARDING THE USE OF THIS TV.

1 Operate only from the power source indicated on the rear of the TV.

2 Avoid damaging the power cord and AC plug. When unplugging the TV, grasp the AC plug. Do not pull on the power cord.

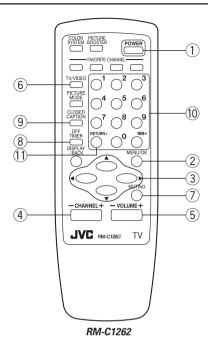
- 3 Never block or cover the cabinet ventilation openings. Never install the TV where good ventilation is unattainable. When installing this TV, leave space for ventilation around the TV more than the minimum distances as shown in the diagram.
- 15 cm + 10 cm + 15 cm
- 4 Do not allow objects or liquid into the cabinet openings.
- 5 In the event of a fault, unplug the unit and call a JVC service technician. Do not attempt to repair it yourself or remove the rear cover.
- 6 The surface of the TV screen is easily damaged. Be very careful with it when handling the TV. Should the TV screen become soiled, wipe it with a soft dry cloth. Never rub it forcefully. Never use any cleaner or detergent on it.
- 7 If you are not going to use this TV for a long period of time, be sure to disconnect the AC plug from the AC socket.
- 8 The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

## **Knowing your TV's functions**

#### Main features

Function	Description	
Closed caption	You can display dialog on the screen from TV broadcasts with Closed caption system. You also may be able to display some information in text form if available.	
Favorite CH (Channel)	You can register up to four favorite channels for quick recall with one press.	
Al Volume	TV adjusts automatically the volume to the same level for all TV channels to avoid sudden change of the volume when selecting different TV channel.	
VNR	You can reduce the picture noise when you viewing noisy TV programs or video sources.	
White balance	You can choose one of three tones of white to match to the video source such as movie, sports, etc. Changing White balance affects the appearance of all other colors on the screen.	
Child lock	To prevent accidental operation by your children, you can disable the control buttons on the TV.	

## **Remote control buttons and basic functions**



No	. Press	То
1	POWER	Turn on or off the TV from standby mode.
2	MENU/OK	Display menu and confirm selected function.
3	<b>▲/▼/◄/</b> ►	Select and adjust menu function.
4	CHANNEL -/+	Select the desired channel number.
(5)	VOLUME -/+	Adjust the volume level.
6	TV/VIDEO	Select TV or VIDEO terminal input.
7	MUTING	Turn off the volume. Press this button again to resume the volume.
8	DISPLAY	Display the program number or video terminal number on the screen.
9	CLOSED CAPTION	Display information in text which are broadcasted by some TV channels.
10	0-9, 100+	Select the program number. For three-digit program numbers, press 100+, then press the number button.
1	RETURN+	<ul> <li>a) Return to the frequently viewed channels with one touch.</li> <li>1 Choose the channel you want to register.</li> <li>2 Press and hold RETURN+ button until "RETURN PLUS PROGRAMMED!" appears.</li> <li>To cancel, press and hold RETURN+ button until "RETURN PLUS CANCELED!" appears.</li> <li>b) Return to the previously viewed channel, if you have not set or have canceled the Return channel as above.</li> </ul>

## Remote control buttons and basic functions

## How to operate menus and menu locations

то	Operation	Note
Display the MENU.	Press the MENU/OK button ②.	To exit the MENU, press the DISPLAY button ® or choose EXIT menu.
Display the top menu.	Press ▲/▼ buttons ③ to choose a menu title. Then press MENU/OK button ②.	Press ▼ button ③ to display the next page for more functions.
Display the 2nd menu.	Press ▲/▼ buttons ③ to choose a menu title. Then press MENU/OK button ②.	
Display the 3rd menu.	Press ▲/▼ buttons ③ to choose a menu title. Then press MENU/OK button ②.	
Return to the previous menu.	Press the DISPLAY button ®.	_
Choose the setting of a function.	Press ▲/▼ buttons ③ to choose a function. Then press the ◄/► buttons ③ to change the setting.	Press the MENU/OK button ② to exit from the menu.
Adjust the effect level of a function.	Press ▲/▼ buttons ③ to choose a function. Then press the ◄/► buttons ③ to adjust the effect level.	
Display the sub menu of a function.	Press ▲/▼ buttons ③ to choose a function. Then press MENU/OK button ② to display the sub menu.	-

The following chart shows locations of functions in menus. In this manual, location of a function is described as follows:

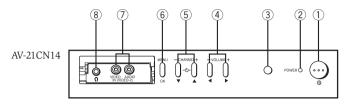
**Note:** Some functions have the 4th menus as the sub-menus.

	Top menu	2nd menu	Location	3rd menu	Location
MENU	INPUT	EXT. INPUT	P.11	-	-
		DISPLAY	P.11	-	-
		CLOSED CAPTION	P.9	-	-
	PICTURE	PICTURE MODE	P.8	-	-
	* If you want to	PICTURE SETTING	P.8	-	-
	adjust PICTURE	WHITE BALANCE	P.8	-	-
	SETTING	PICTURE FEATURES	-	VNR	P.11
	menu, you must set PICTURE			FAVORITE CH SETTING	P.10
	MODE menu to USER.			VIDEO SETTING	P.10
				COLOR SYSTEM	P.8
	SOUND	AI VOLUME	P.9	-	-
	FEATURES	OFF TIMER	P.11	-	-
		CHILD LOCK	P.11	-	-
	INSTALL	AUTO PROGRAM	P.12	-	-
		CHANNEL SUMMARY	P.12	-	-
		BLUE BACK	P.9	-	-
		AUTO SHUTOFF	P.11	-	-
	EXIT	-	-	-	-

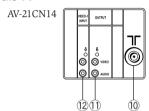
## **TV** buttons and functions

The following illustrations are for AV-21CN14 only, which are used for explanation purposes. Your TV may not look exactly like the illustration.

#### Front of the TV



#### Rear of the TV



No	. Button/terminal	Description
1	① (main power)	Press to turn on or turn off the TV's main power.
2	Power lamp	Indicate the TV is being turned on or off.
		No color: TV's main power is being turned off.
		Red: TV's main power is being turned on.
3	Remote control sensor	
4	VOLUME -/+	Press to adjust the volume level.
(5)	CHANNEL-/+	Press to select the desired channel.
6	MENU	Press to display the menu.
7	IN (VIDEO-2)	Video and audio input jacks for VIDEO-2 mode.
8	Ω	Headphone jack.
9	٦٢	Antenna socket.
10	OUTPUT	Video and audio output jacks.
11)	VIDEO-1 INPUT	Video and audio input jacks for VIDEO-1 mode.

## How to operate the menus with the TV button

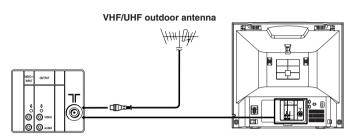
TV button	Work as same as the button on the remote control unit	Note
MENU	MENU/OK button	To display main menu and exit menu after finish setting.
CHANNEL -/+	▼/▲ button	To select menu function.
VOLUME -/+	✓/► button	To adjust the desired function.

## Setting up your TV

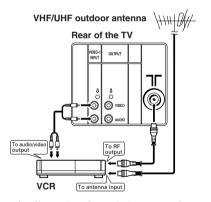
#### CAUTION

• Turn off the equipment including the TV before connecting.

### 1 Connecting the antenna



If you connect a VCR, connect the antenna output jack of your VCR and the antenna jack on the TV with the antenna cable. Then connect the output jacks of your VCR and the VIDEO-1 input jacks of the TV with the video cable and audio cables. For details, see the manual of your VCR.



The illustration shown is just a sample. It may not be same as your TV.

# 2 Connecting the compatible AC plug to the AC outlet.

## 3 Inserting batteries into the remote control.

Insert two batteries by following the  $\bigoplus$  and  $\bigoplus$  polarities and inserting the  $\bigoplus$  end first.

#### CAUTION

Follow the cautions printed on the batteries.

#### Notes:

- Use AA/R6/UM-3 dry cell batteries.
- If the remote control does not work properly, install new batteries. The supplied batteries are for testing, not regular use.

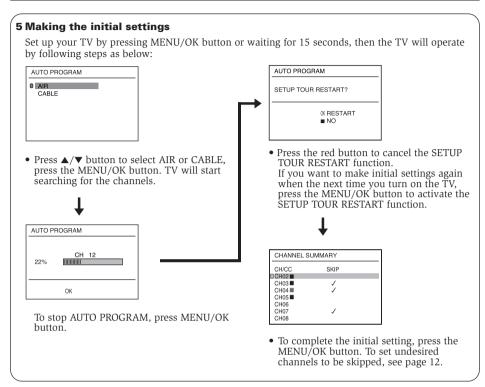


# 4 Turn on the TV by pressing the main power button.

JVC logo appears on the screen.



## Setting up your TV (continued)



- If the JVC logo does not appear, use AUTO PROGRAM function to make the initial settings. This function is located in the INSTALL menu.
- If the JVC logo appears, although you had made the initial settings, press the TV/VIDEO button to exit from initial settings.

## **Basic setting for picture**

#### **COLOR SYSTEM**

You can select the appropriate color system when the picture is not clear or no color appears.

Press the COLOR SYSTEM button to select a setting.

In TV mode: NTSC 3.58 MHz (Fixed)

In VIDEO mode:

To operate this function with a menu:

For the color system in each country or region, see the table below:

Area	Country or Region	System
Asia, Middle	Bahrain, Kuwait, Oman, Qatar, United Arab Emirates, Yemen, etc. Indonesia, Malaysia, Singapore, Thailand, India, etc.	PAL
East	China, Vietnam, etc.	PAL
	Hong Kong, etc.	PAL
	Islamic Republic of Iran, Lebanon, Saudi Arabia, etc.	SECAM
Philippines, Taiwan, Myanmar, etc.		NTSC
	Russia, etc.	SECAM
Europo	Czech Republic, Poland, etc.	PAL
Europe	Germany, Holland, Belgium, etc.	PAL
	UK, etc.	PAL
Oceania Australia, New Zealand, etc.		PAL
	Republic of South Africa, etc.	PAL
Africa	Nigeria, etc.	PAL
	Egypt, Morocco, etc.	SECAM

#### PICTURE MODE

You can choose the desired picture setting with one touch.

Press the PICTURE MODE button to select a setting.

SOFT	Softens contrast and sharpness.
BRIGHT	Heightens contrast and sharpness.
STANDARD	Standard picture setting.
USER	You can change this picture setting as you like. Select USER and adjust following items in the PICTURE SETTING menu. (PICTURE, BRIGHT, DETAIL, COLOR, TINT*)

<sup>\*</sup>TINT can only be adjusted in NTSC system.

To operate this function with a menu:

To return the USER setting to the default, press the blue button when the PICTURE SETTING menu appears.

## Adjusting the picture - USER

You can adjust the desired picture setting when selecting USER in PICTURE MODE.

1 Select the USER in PICTURE MODE under PICTURE menu.

2 Select the PICTURE SETTING in PICTURE menu, then adjust the setting.

* MEI	NU→PICTURE	PICTURE SETTING
PICTURE	<b>◄</b> : Lower	► : Higher
BRIGHT	<b>◄</b> : Darker	► : Brighter
DETAIL	<b>◄</b> : Softer	► : Higher
COLOR	<b>.</b> Lighter	► : Deeper
TINT*	<b>◄</b> : Reddish	➤ : Greenish

<sup>\*</sup>TINT can only be adjusted in NTSC system.

## WHITE BALANCE

You can change the white balance of the picture to better match the type of video being viewed. Select the WHITE BALANCE in the PICTURE menu, then choose the desired setting.

\* MENU PICTURE WHITE BALANCE

NORMAL Normal white balance.

NORMAL	Normal white balance.
COOL	Bluish white.
WARM	Reddish white.

\*About the basic operations of the menu, please see the "How to operate menus and menus locations" on page 4.

## **Advance setting for picture**

## **BLUE BACK**

You can set the TV to automatically change to a blue screen and mute the sound if the signal is weak or absent, or when there is no input from an antenna.

Select the BLUE BACK in the INSTALL menu, then choose ON or OFF.

\* MENU INSTALL BLUE BACK

If you wish to continue viewing the poor picture, cancel the BLUE BACK function.

## **Original features for picture**

#### **CLOSED CAPTION**

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

Press the CLOSED CAPTION button to select a setting.

To operate this function with a menu:

- 1 Select the CLOSED CAPTION in INPUT menu, then choose "CAPTION" or "TEXT".
- \* MENU INPUT CLOSED CAPTION
- 2 Press the 
  √> button to select the desired caption or text channel.

## **Advanced setting for sound**

#### AI VOLUME

You can adjust the volume of all the channels and video inputs to the same level automatically. Select the AI VOLUME in SOUND menu, then choose ON or OFF.

\* MENU SOUND AI VOLUME

<sup>\*</sup>About the basic operations of the menu, please see the "How to operate menus and menus locations" on page 4.

## Favorite channel and video setting

## To register the favorite channel

You can register and recall 4 favorite channels by using the color buttons (red, green, yellow, blue).

- **1** In TV mode, select a TV channel (CH02-CH69, CC01-CC125) you desired to register.
- 2 Press and hold a color button for 3 seconds or more.
  - "FAVORITE CHANNEL PROGRAMMED!" appears on the screen and current channel is registered.
- **3** To register other favorite channels, repeat Step 1 to 2.

To recall the favorite channel, press the color button

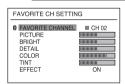
When the TV is in menu mode, favorite channel function is not available.

# To adjust favorite channel setting (FAVORITE CH SETTING)

You can adjust the picture settings for the favorite channels.

- 1 Display the PICTURE menu and select FAVORITE CH SETTING in PICTURE FEATURES menu.
  - ★ MENU → PICTURE → PICTURE FEATURES
     → FAVORITE CH SETTING
- 2 Select FAVORITE CHANNEL in FAVORITE CH SETTING menu, then choose the desired favorite channel.
  - \* FAVORITE CH SETTING

    FAVORITE CHANNEL



- 3 Select EFFECT, then press 
  ✓/➤ button to choose ON.
  - To cancel the settings, choose OFF.
- **4** Select the desired item that you wish to adjust.



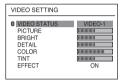
5 Press the MENU/OK button to exit the menu.

# To adjust the video setting (VIDEO SETTING)

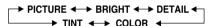
You can adjust the picture settings for video inputs.

- 1 Display the PICTURE menu and select VIDEO SETTING in PICTURE FEATURES menu.
  - ★ MENU → PICTURE → PICTURE FEATURES

    → VIDEO SETTING
- 2 Select VIDEO STATUS in VIDEO SETTING menu, then choose the desired video input.
  - ★ VIDEO SETTING → VIDEO STATUS



- 3 Select EFFECT, then press 
  √> button to choose ON. To cancel the settings, choose OFF.
- **4** Select the desired item that you wish to adjust.



5 Press the MENU/OK button to exit the menu.

\*About the basic operations of the menu, please see the "How to operate menus and menus locations" on page 4.

## **Customized setting**

#### **VNR**

You can reduce the noise

Select the VNR in the PICTURE FEATURES menu under PICTURE menu, then choose a setting of VNR function.

OFF	VNR is turned off.
AUTO	Effect of VNR is automatically controlled.
MIN	Effect of VNR becomes minimum level.
MAX	Effect of VNR becomes maximum level.

If you select MAX, the picture becomes softer even if the original picture is sharp.

#### **CHILD LOCK**

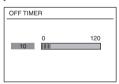
You can disable the front control buttons of the TV

Select the CHILD LOCK in the FEATURES menu. then choose ON or OFF.

#### **OFF TIMER**

You can set the TV to turn off automatically to standby mode after a set time.

Press the OFF TIMER button to select a desired period of time.



You can set the period of time to a maximum of 120 minutes in 10-minute steps.

To operate this function with a menu:

When the elapsed of time left one minute, "GOOD NIGHT!" appears on the screen. You can display the OFF TIMER menu again to confirm or change the remaining time.

#### **AUTO SHUTOFF**

You can set the TV to turn off automatically when no signal is received for about 15 minutes or longer after the end of a broadcast. Select AUTO SHUTOFF in INSTALL menu, then

choose ON or OFF.

The AUTO SHUTOFF function does not turn off the TV's main power.

The AUTO SHUTOFF function is not available in video mode

#### **EXT. INPUT (TV/ VIDEO)**

You can select TV or video terminal input with

Press the TV/VIDEO button to select an input.

To operate this function with a menu:

#### **DISPLAY**

You can display the program number, video terminal number on the screen.

Press the DISPLAY button to display the information on screen.

To operate this function with a menu:

\* About the basic operations of the menu, please see the "How to operate menus and menus locations" on page 4.

## TV channel presetting

# To register the TV channels automatically

You can register the TV channels into the TV's channel list automatically.

- 1 Display the INSTALL menu.
- 2 Choose AUTO PROGRAM, then press the MENU/OK button.
- 3 Press the ▲/▼ button to select AIR or CABLE, then press the MENU/OK button. AUTO PROGRAM function starts, and the channels received are registered automatically.
- 4 "SETUP TOUR RESTART?" appears.

To start the SETUP TOUR	Press the MENU/OK button. Then proceed to step 5 of "Setting up your TV" on page 7.
To skip the SETUP TOUR	Press the Red button.

**5** The CHANNEL SUMMARY menu appears.

For details of "SETUP TOUR", see page 7.

## **CHANNEL SUMMARY**

You can set undesired channels to be skipped. Channels set to be skipped cannot be selected by the CHANNEL **-/+** button.

- 1 Display the INSTALL menu.
  - ★ MENU → INSTALL
- 2 Choose CHANNEL SUMMARY, then press the MENU/OK button. CHANNEL SUM-MARY menu appears.

CHANNEL SUMMARY		
CH/CC	SKIP	
□CH02 ■		
CH03 ■	/	
CH04 ■	/	
CH05 ■		
CH06		
CH07	/	
CH08		

- 3 Choose the channel which you want to skip. The skip can be set to all channels of AIR (CH02-CH69) and CABLE (CC01-CC125).
- **4** Press the yellow button to skip the channel. To cancel the skip, press the blue button.
- 5 Press the MENU/OK button to exit the menu.

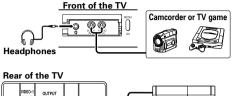
\*About the basic operations of the menu, please see the "How to operate menus and menus locations" on page 4.

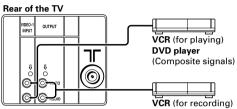
## **Additional preparation**

The illustrations shown in this section are for AV-21CN14 only, which are used for explanation purposes. Your TV may not look exactly the same as the illustration.

#### Before connecting

- Read the manuals provided with the devices for the proper connection.
- Turn off all the devices including the TV.
- Note that connecting cables are not supplied.





## **Troubleshooting**

If a problem occurs when you are using the TV, check the following troubleshooting guide before calling for repair.

No picture, no sound	• Deactivate the BLUE BACK function if it is turned on.
Snowy picture	Check the antenna cable and its connection with the TV.
Stripes appear on the picture	<ul> <li>Interference occurs caused by other devices such as an amplifier, personal computer, or a hair drier. Move such devices away from your TV.</li> </ul>
Double-pictures (ghosting) occur	• Interference occurs caused by signal reflecting from mountains or building. Try to adjust the antenna direction or use a better directionality antenna.
Poor picture	Choose the appropriate color system. Refer to "COLOR SYSTEM" on page 8. Adjust the COLOR or BRIGHT setting. Refer to "Adjusting the picture - USER" on page 8.
White and bright still image look as if it were colored	• Inevitable phenomenon due to the nature of the picture tube. This is not a malfunction.
Top of the image from software products or video tape is distorted	<ul> <li>This is due to the condition of the video signal whereby the image was not recorded properly.</li> <li>This is not a malfunction.</li> </ul>

remote control	• The batteries may be exhausted. Replace with new batteries (see page 6). Ensure that you are operating the remote less than seven meters from the front of your TV.
Cannot operate the menus	<ul> <li>Press TV/VIDEO button to return to TV mode and try operating the menus.</li> </ul>
Cannot operate the front control buttons	Deactivate the CHILD LOCK function if it is turned on (see page 11).
TV turns off suddenly	This may due to the AUTO SHUT OFF function is activated. Press the POWER button to turn on the TV.
Color patches appear at the corner of the screen	• This may due to a magnetized device such as a speaker near to your TV. Keep the device apart from your TV. Alternately, you can also use the magnetically shielded speaker.
Image takes a short period to be displayed	• A short periode of time is required to stabilize the image.  This is not a malfunction.
TV emits a crackling sound	• This is due to a sudden change in temperature and it is not a malfunction. If the crackling sound is too frequent, request your service technician for inspection.
Feel a slight electric shock when touching the TV screen	This is due to the static electricity of the picture tube and it will not harm the human body. This is not a malfunction.

## **Specifications**

### TV RF systems

M

## Color systems

TV mode: NTSC 3.58 MHz

VIDEO mode: PAL, SECAM, NTSC 3.58 MHz, NTSC 4.43 MHz

#### Receiving channels

VHF low channel (VL), VHF high channel (VH), UHF channel (U) Receives cable channels in mid band, super band and hyper band.

#### **Power requirements**

AC 110 to 240 V, 50/60 Hz

#### External input / output

VIDEO-1: VIDEO input, AUDIO input
VIDEO-2: VIDEO input, AUDIO input,
OUTPUT: VIDEO output, AUDIO output
Headphone jack: stereo mini jack (3.5 mm diameter,

sound is monaural)

Power consumption: 85 W

Screen size (Visible area): 505.0 mm

Design and specifications are subject to change without notice.

## **MEMO**

