SANYO

Instruction Manual

Colour Television

CA21XS2S
CP21XS2S
CA21YS2S
CP21YS2S
CA21KS2
CP21KS2
CA21KS2K
CP21KS2K
CA21SF1
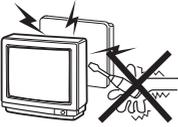**CP21SF1**

Flat Screen
Multi System
CATV Hyper Band
256 Programmes with Automatic Tuning
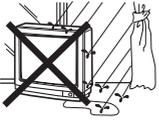*AV Stereo Sound System*
DVD Input with Video Component

⚡ *Warning*

High voltages are used in the operation of this television receiver. Do not remove the cabinet back from your set. Refer servicing to qualified service personnel.

Do not drop or push objects into the television cabinet slots or openings. Never spill any kind of liquid on the television receiver.

To prevent fire or electrical shock hazard, do not expose the television receiver to rain or moisture. The television shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the television.
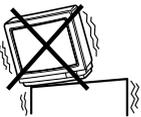
⚠ *Caution*

Never stand on, lean on or push suddenly the television or its stand.
You should pay special attention to children. Serious injury may result if it should fall.
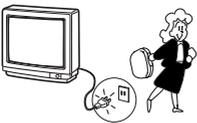
Do not block the ventilation holes in the back cover.
Adequate ventilation is essential to prevent failure of electrical components.

Do not place your television on an unstable cart, stand, shelf or table. Serious injury to an individual, and damage to the television, may result if it should fall.
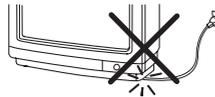
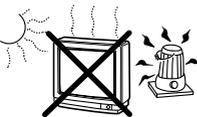Do not squash power supply cord under the television receiver.

At installation of the unit, the plug of power cord shall remain accessible and readily operable to disconnect the unit from the wall outlet.
When the television receiver is not used for an extended period of time, it is advisable to disconnect the AC power cord from the AC outlet.

Minimum distances

10cm   10cm   5cm

20cm
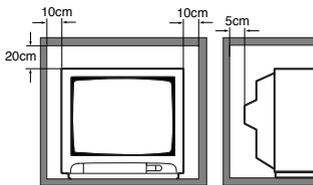
If the television is to be built into a compartment or similarly enclosed, the minimum distances must be maintained.

Avoid exposing the television receiver to direct sunlight and other source of the heat.
Do not stand the television receiver directly on other products which give off heat. E.g. video cassette players, audio amplifiers.

Heat build-up can reduce the service life of your television, and can also be dangerous.

Contents

Plug & Play

❒ *Automatic setting up channels*

This TV set provides a self-automatic tuning and sorting system function called "**Plug & Play**". It automatically begins searching and storing of all available channels when switching-on the TV set for the first time.

❒ *Let's Start !*

1 Connect power cord of the TV set to a wall outlet, and turn on the TV set by pressing the **Mains ON/OFF** button. Self-automatic tuning system will be started as follows;

```
I AM  SEARCHING.
ALL  PROGRAMMES.
PLEASE WAIT.

1
```
→
```
AUTO SET-UP
COMPLETED.
HAPPY  VIEWING !
```
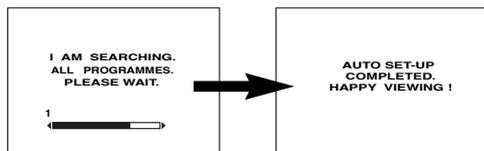
After completing this procedure, the programme position **1** is selected and the ending messages on the screen.

Note: The Plug & Play can be cancelled at any time by pressing the **MENU** button.

2 Press any of the control buttons to make the ending message disappear. Or will automatically return to normal TV display after 10 seconds.

✎ This procedure only appears at the first switch-on time.

■ If no TV stations are found, the display shown below will appear. Please check if the antenna is connected properly.

```
NO STATION.
PLEASE  CONNECT
ANTENNA PLUG.
```

If it isn't connected properly, connect antenna and Automatic Tuning will be reset.

Each button listed in this section has the same function as it's corresponding button on the remote control.

Front Control

Model CA21XS2S, CP21XS2S
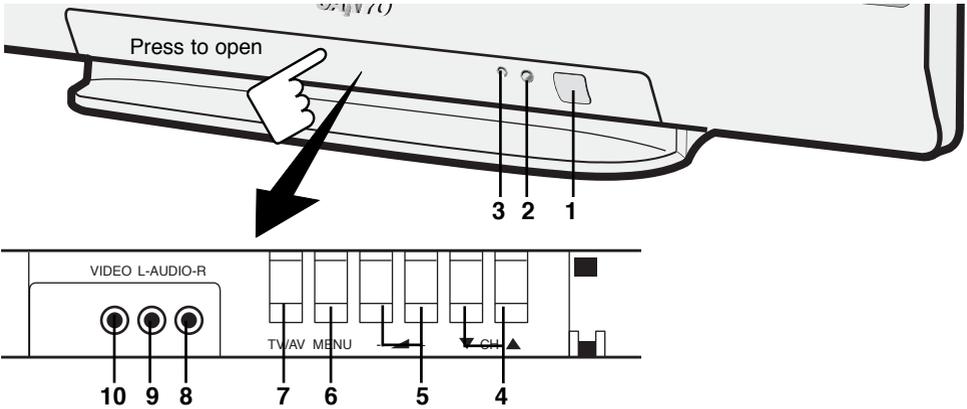
Model CA21YS2S, CP21YS2S
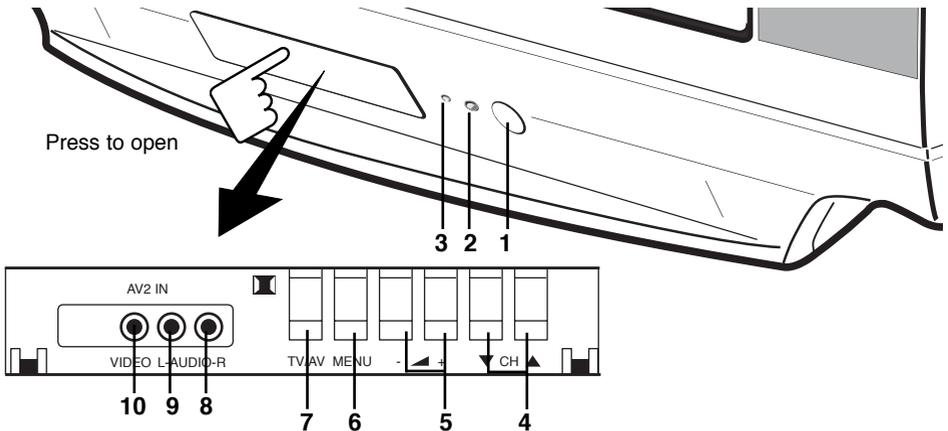
1. Mains ON/OFF Button
2. Remote Control Detector
3. Stand-by and Power Indicator
4. Programme UP/DOWN
5. VOLUME
6. MENU

7. TV/AV Selector
8. Audio Input Jack-Right (AV2)
9. Audio Input Jack-Left (AV2)
10. Video Input Jack (AV2)

Each button listed in this section has the same function as it's corresponding button on the remote control.

Front Control

Model CA21KS2, CP21KS2, CA21KS2K, CP21KS2K
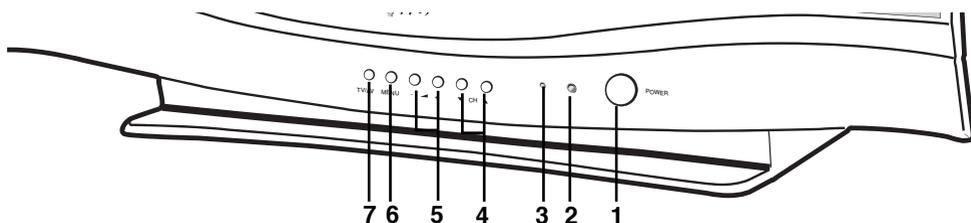
Pull to open

POWER

7 6 5 4 3 2 1

VIDEO — L–AUDIO–R

10 9 8

Model CA21SF1, CP21SF1

POWER

7 6 5 4 3 2 1

1. Mains ON/OFF Button
2. Remote Control Detector
3. Stand-by and Power Indicator
4. Programme UP/DOWN
5. VOLUME
6. MENU

7. TV/AV Selector
8. Audio Input Jack-Right (AV2)
9. Audio Input Jack-Left (AV2)
10. Video Input Jack (AV2)

Remote Control Transmitter

TV / AV Selector button

RECALL/COLOUR SYSTEM button

Programme Selector button

DIGIT button

SWAP button

VOLUME - button

STEREO/MONO button

Programme DOWN button

BASS EXPANDER button

SOUND MODE button

TIMER button

Power ON/OFF button

MUTE button

ALTERNATE button

Programme UP button

CHANNEL SCAN button

VOLUME + button

PICTURE MODE button

MENU button

SURROUND button

SOUND SYSTEM button

TV / AV

TIMER

SWAP   CH▲   CH SCAN

MENU

▽A-B   CH▼   PICTURE

BASS   SOUND   S. SYS   SURROUND

SANYO

JXPSG

❒ *Battery Installation of the Remote Control Transmitter*

1. Open the battery cover.
2. Install two "**AA**" **1.5** volt batteries so that the "+" and "-" marks on the batteries match the "+" and " - " marks inside the unit.
3. Close the battery cover.

Note: Replace the batteries when the TV set is showing the following symptoms:
Operation is unsteady or erratic, sometimes the TV set does not work with transmitter.
Discharged batteries may leak and damage the unit. The normal life of batteries should be from nine to ten months.

General Operation

❒ *Remote Control Operation*

Standby/Power-on

To switch the TV on and off. For shutting off a power supply completely, Press the **Mains ON/OFF** button on the front control of TV set.

Sound mute

To switch the sound from the speakers. The sound changes as follows; **normal → mute** (🔇).

TIMER Timer

To Adjust Timer function **OFF-TIMER→ ON TIMER → ON PROGRAM**

Recall/Colour system selector

To display the programme information on the screen.

It also operates as Colour system selector if the clear picture cannot be obtained even when the broadcasting or AV signal is received.
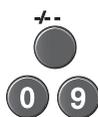
Colour System and Sound System (SIF) could be changed in SEMI-AUTO and MANUAL TUNING operation.

Direct programme selector

For direct access to programmes using the **(0-9) numeric button**. For selection of analogue programme position 10 - 255, Example: for programme position 17, Press the **Digit** button, press "**1**" button. Press "**7**" button. For programme position 125 Press the **Digit** button twice. Press "**2**" button. Press "**5**" button. For programme position 225 Press the **Digit** button 3 times. Press "**2**" button. Press "**5**" button.

P⇄P Alternate

To select the previous position and the present position.

Volume Up/Down

To adjust the sound volume level . Also operates as left (◄) and right (►) cursor.

CH▲ Programme down/up

To select the next programme number or previous programme number. Also operates as up (▲) and down (▼) cursor.

CH▼

SWAP Swap

To swap the channels between two stored programme positions

SOUND Sound Mode

To select Sound mode; PERSONAL, MUSIC, TALK, NORMAL.

Stereo/Mono Button

▽A·B

PICTURE Picture Mode

To select Picture mode; PERSONAL, DYNAMIC, NATURAL, ECO, GAME.

BASS Bass Expander

To activate bass expander function.

S. SYS Sound System

To select optimum sound system (BG → I → DK → M).

SURROUND Surround

To activate Surround function.

MENU Menu

To Call up the TV MENU.

General Operation

❐ *Off Timer*

The OFF TIMER will switch off the TV automatically after 30 minutes, 1 hour, 1 hour and 30 minutes, or 2 hours.

1 Press the **TIMER** button.

OFF 0:00

2 Press the **VOLUME** (**+** or **-**) button to select the time period.

■ Just one minute before switching off the TV, "OFF 0:01" will be display on the screen.
■ To cancel the OFF TIMER, select "OFF 0:00" by pressing the **VOLUME** (**+** or **-**) button.
■ The OFF TIMER cancels when the TV set is turned off or if a power failure occurs.

❐ *On Timer*

When the ON TIMER is set. TV will automatically be switched On to the selected programme position when the specified time has elapsed.

1 Press the **TIMER** button twice.

ON 0:00   2   (ON TIMER setting mode)

Programme position for when TV is switched ON by ON TIMER.

❐ *On Timer (Continued)*

2 Press the **VOLUME (+** or **-**) button. The set time will be increased or decreased by 10 minutes each time the button is pressed ; the maximum time which can be set is 24 hours.

3 Use Direct Programme Selection to insert programme position for when TV is switched on by ON TIMER. (see page 7.)

■ If no operation is performed after the TV has been switched on by the ON TIMER, such as if you are not at home, the TV will be automatically switched off after approximately 2 hours
■ If the TV is already switched on when the time set for the ON TIMER has been reached, only the programme position will be changed to the set programme position.
■ Cancelling ON TIMER. To cancel the ON TIMER, press the **VOLUME** (**+** or **-**) button to set it to "ON 0:00" while the ON TIMER screen is shown. Switching off the TV by pressing the **Mains ON/OFF** button will also cancel the ON TIMER settings.
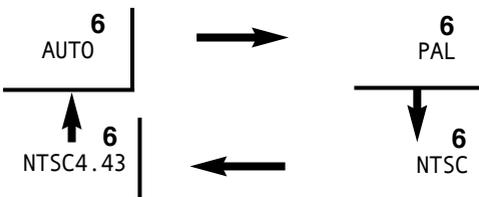
Colour and Sound System

❐ *Setting of the Colour System*

Normally, set the colour system to "AUTO", if the clear picture cannot be obtained even when the broadcasting or AV signal is received, press the **RECALL/COLOUR SYSTEM** button repeatedly until the optimum image can be produced.
(Refer to **Broadcast Transmission System List** indicated by the last of this page in a setup of Colour System.)

Each time the **RECALL/COLOUR SYSTEM** button is pressed, colour system changes as follows;

6
AUTO   →   **6**
PAL

↑   ↓

6
NTSC4.43   ←   **6**
NTSC

Note:Colour system is displayed according as Colour system option.

❐ *Setting of the Sound System*

To set the sound system, make it during Semi-Auto Tuning or Manual Tuning mode.
When the sound is not clear or no sound is produced on a programme number position, select sound system repeatedly until the optimum sound is obtained.
(Refer to **Broadcast Transmission System List** indicated by the last of this page in a setup of Sound System.)

To select sound system:
■ Press the **SOUND SYSTEM** button to select the sound system directly. The sound system will be memorized automatically.
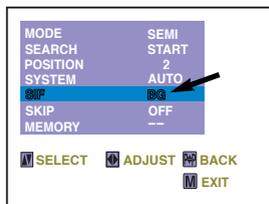
or:

1) Select "SIF" with the **Programme UP** or **DOWN** button in the Semi-auto or Manual Tuning mode. Then press the **VOLUME (+** or **−**) button to select a optimum sound system.
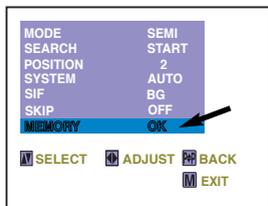
Colour and Sound System

❑ *Setting of the Sound System*

(Semi-Auto or Manual Tuning mode)

MODE	SEMI
SEARCH	START
POSITION	2
SYSTEM	AUTO
SIF	**BG**
SKIP	OFF
MEMORY	– –

SELECT **ADJUST** **BACK**
EXIT

BG ⟷ I ⟷ DK ⟷ M
(5.5MHz) (6.0MHz) (6.5MHz) (4.5MHz)

2) To enter a sound system selection into the memory, select "MEMORY" and press the **VOLUME +** or **–** button.
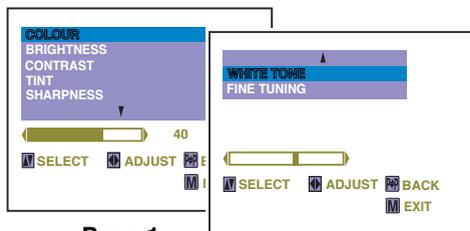
MODE	SEMI
SEARCH	START
POSITION	2
SYSTEM	AUTO
SIF	BG
SKIP	OFF
MEMORY	**OK**

SELECT **ADJUST** **BACK**
EXIT

Broadcast Transmission System List

Area	Country	Colour System	Sound System
Middle East Asia	Union of Arab Emirates, Kuwait, Oman, Qatar, Yemen, Bahrain, etc. Indonesia, Malaysia, Singapore, Thailand,etc.	PAL	B/G
	China, etc.	PAL	D/K
	Hong kong	PAL	I
	Saudi Arabia, Iraq, Iran, Lebanon,etc.	SECAM	B/G
	Russian Federation,etc.	SECAM	D/K
	Myanmar, etc.	NTSC	M
Oceania	Australia, New Zealand, etc.	PAL	B/G

Picture Adjustment

❑ *Picture Adjustment Menu*

| COLOUR |
| BRIGHTNESS |
| CONTRAST |
| TINT |
| SHARPNESS |

40

SELECT **ADJUST** B
I

Page 1

| WHITE TONE |
| FINE TUNING |

SELECT **ADJUST** **BACK**
EXIT

Page 2

The 2nd page is not displayed when there is no TINT adjustment.

Picture Adjustment Item
COLOUR : Adjusts colour intensity.
BRIGHT : Adjusts picture brightness.
CONTRAST : Adjusts picture contrast.
TINT : Adjust colour tints. (Displayed only on NTSC or NTSC4.43 system signal reception.)

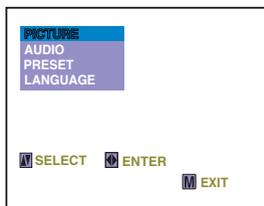**SHARPNESS** : Adjusts picture detail.
WHITE TONE : Adjusts white balance.
FINE TUNING : Fine tuning in case of weak broadcast signal or poor reception. Only displayed in TV mode. Will not be displayed in AV mode.

❑ *Basic Picture Adjustment Operation*

1 Press the **MENU** button for MAIN menu display.

| PICTURE |
| AUDIO |
| PRESET |
| LANGUAGE |

(MAIN MENU)

SELECT **ENTER**
EXIT

Picture Adjustment

❏ *Basic Picture Adjustment Operation (Continued)*

*2* When "PICTURE" is not selected, select "PICTURE" with the **Programme UP** or **DOWN** button.

```
PICTURE
AUDIO
PRESET
LANGUAGE
```

3 Press the **VOLUME +** or **−** button to display Picture Adjustment menu.

```
COLOUR
BRIGHTNESS
CONTRAST
SHARPNESS
WHITE TONE
FINE TUNING
              25
```

■ To return to Main menu, press the **ALTERNATE** button.

■ To return to the normal TV mode, press the **MENU** button. (Or will automatically return to the normal TV mode after 20 seconds.)
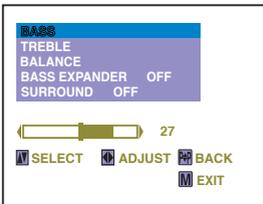
4 Select desired control by pressing the **Programme UP** or **DOWN** button

```
COLOUR
BRIGHTNESS
CONTRAST
SHARPNESS
WHITE TONE
FINE TUNING
              30
```
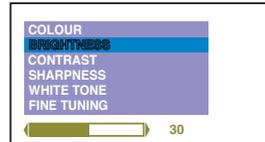
5 Press the **VOLUME +** or **−** button to alter settings.

Audio Adjustment

❏ *Audio Adjustment Menu*

```
BASS
TREBLE
BALANCE
BASS EXPANDER   OFF
SURROUND    OFF

              27
⬆ SELECT   ⬌ ADJUST  BACK
                   M EXIT
```

Audio Adjustment Item
BASS : Bass Adjustment

TREBLE : Treble Adjustment

BALANCE : Left/right speaker volume balance adjustment

BASS EXPANDER : Operates BASS EXPANDER on and off

SURROUND :Operates SURROUND on and off.
Note: When the stereo signal is inputted from the right and left audio input terminals in the AV mode, surround mode is changed as follows; "**SURROUND" ON** and "**SURROUND OFF"**.
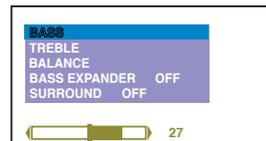
❏ *Audio Adjustment Operation*

1 Press the **MENU** button for MAIN menu diplay.

2 Select "AUDIO " by pressing the **Programme UP** or **DOWN** button.

```
PICTURE
AUDIO
PRESET
LANGUAGE
```

3 Press the **VOLUME +** or **−** button for Audio Adjustment menu display.

```
BASS
TREBLE
BALANCE
BASS EXPANDER   OFF
SURROUND    OFF
              27
```

■ To return to Main menu, press the **ALTERNATE** button.
■ To return to normal TV mode, press the **MENU** button. (Or will automatically return to normal TV mode after 20 seconds.)

Tuning of the Channels

Up to 256 broadcast stations in your reception area can be stored in the electronic memory.

There are three ways of tuning as follows;

1. Automatic Tuning (the basic way):
All receivable channels are automatically tuned in and memorized in consecutive programme position.

2. Semi-Auto Tuning:
Use to preset a receivable channel in any desired programme position, e.g. the position with the same number as the channel.

3. Manual Tuning:
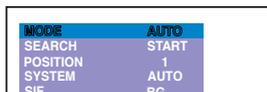Manually tune a channel if it cannot be automatically tuned, such as when the signal is poor.

❒ *Automatic Tuning*

1 Press the **MENU** button for MAIN menu display.

2 Select "PRESET" by pressing the **Programme UP** or **DOWN** button.

```
PICTURE
AUDIO
PRESET
LANGUAGE
```

3 Press the **VOLUME +** or **–** button for PRESET menu display. On entering PRESET display, Automatic Tuning will be selected initially.

```
MODE        AUTO
SEARCH      START
POSITION    1
SYSTEM      AUTO
SIF         BG
```

4 Select "SEARCH" by pressing the **Programme UP** or **DOWN** button.

```
MODE        AUTO
SEARCH      START
POSITION    1
SYSTEM      AUTO
SIF         BG
```

5 Press the **VOLUME (+)** button to start channel tuning.

After all receivable channels have been found and stored, the TV set automatically returns to programme position "1".

■ The Automatic Tuning operation can be cancelled at any time by pressing the **Programme UP** or **DOWN** button.

❒ *Semi-Auto Tuning and Manual Tuning*
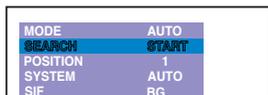
1 Press the **MENU** button for MAIN menu display.

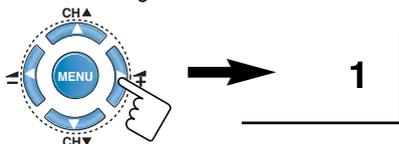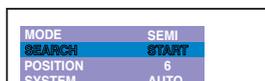**2** Select "PRESET" by pressing the **Programme UP** or **DOWN** button.

3 Press the **VOLUME +** or **–** button for PRESET menu display. On entering PRESET display, Automatic Tuning will be selected initially.

4 Select "SEMI" or "MANUAL" by pressing the **VOLUME +** or **–** button.

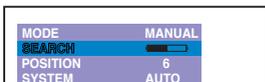**5** Select "SEARCH" by pressing the **Programme UP** or **DOWN** button.

```
MODE        SEMI
SEARCH      START
POSITION    6
SYSTEM      AUTO
```

Semi-Auto Tuning:
Press and release the **VOLUME +** or **–** button to search for required TV station. Once a station is located, tuning will automatically stop. Continue till desired channel is located.

```
MODE        SEMI
SEARCH      ▬▬▬
POSITION    6
SYSTEM      AUTO
```
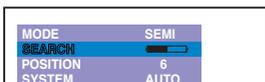
Manual Tuning :
Press and hold the **VOLUME +** or **–** button to search for required TV station.

```
MODE        MANUAL
SEARCH      ▬▬▬
POSITION    6
SYSTEM      AUTO
```

The **VOLUME +** button will move tuning toward the higher frequencies, and the **VOLUME –** button will move tuning toward the lower frequencies.

6 Once desired channel is located, select "MEMORY" by pressing the **Programme UP** or **DOWN** button.

7 Press the **VOLUME +** or **–** button to enter the desired channel into memory.

```
SKIP        OFF
MEMORY      OK

SELECT   ADJUST   BACK
                  EXIT
```

To preset other Programme Positions, repeat steps 5–7.

8 Press the **MENU** button to return to normal TV display.

❒ *Channel Copy*

This function can be utilized after Automatic Tuning.

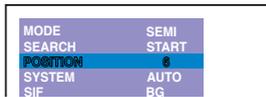**For example, to copy a TV channel on programme position "2" onto programme position "6";**

1 Select programme position "**2**"

2

2 Enter to SEMI-AUTO or MANUAL tuning mode. (Refer to page 11.)

3 Select "POSITION" with the **Programme UP** or **DOWN** button.

4 Select position "6" with the **VOLUME +** or **−** button.

MODE	SEMI
SEARCH	START
POSITION	6
SYSTEM	AUTO
SIF	BG

*5* Select "MEMORY" by pressing the **Programme UP** or **DOWN** button.

6 Press the **VOLUME +** or **−** button to memorize.

7 Press the **MENU** button to return to normal TV display.

❒ *Channel Swapping*

Use this channel swapping feature to swap the channels between two stored programme position. This feature is particularly useful after automatic tuning.

For example, to swap the channel between programme position "6" and programme position "12".
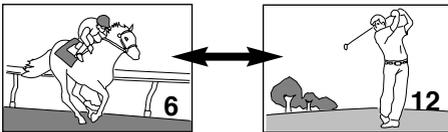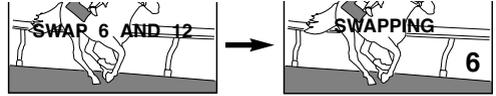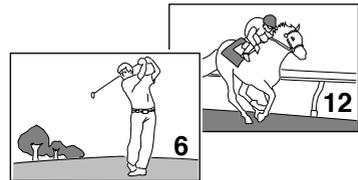

1 Select programme position "**6**".

2 Press the **SWAP** button.

SWAP 6 AND –

3 Press the **DIGIT** button, " **1** " button and then " **2** " button on the remote control to enter programme number 12. (For example, to enter programme number " 3 ", press " **3** " button only.)

The two TV channels will now have changed places.

❒ *Skip Channel Set and cancel*

When there is a position you do not use, Position 4 for example, by setting the SKIP Channel function it is possible to jump over this position, when you are selecting a channel using the **Programme UP/DOWN** or **CHANNEL SCAN** button.

Skip

For example, to set programme position "4" as Skip channel ;

1 Enter to SEMI-AUTO or MANUAL tuning mode. (Refer to page 11.)

2 Select "POSITION" with the **Programme UP** or **DOWN** button.

3 Press remote control "**4**" button to select programme position 4. Use the **DIGIT** button and **Programme Selector** (Number buttons) to enter programme number. Do not use the **VOLUME +** or **−** button to enter programme position in this settings.

MODE	SEMI
SEARCH	START
POSITION	4
SYSTEM	AUTO
SIF	BG
SKIP	OFF
MEMORY	––
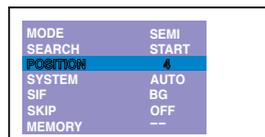
❐ *Skip Channel Set and cancel (Continued)*

4 Select "SKIP" by pressing the **Programme UP** or **DOWN** button,then press the **VOLUME +** or **–** button to set SKIP to ON. To cancel Skip Channel function, set to OFF.
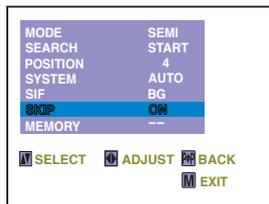
MODE	SEMI
SEARCH	START
POSITION	4
SYSTEM	AUTO
SIF	BG
SKIP	ON
MEMORY	– –

▲▼ SELECT ◄► ADJUST ⧉ BACK
M EXIT

5 Select "MEMORY" by pressing the **Programme UP** or **DOWN** button, then press the **VOLUME +** or **–** button for memory.

MODE	SEMI
SEARCH	START
POSITION	4
SYSTEM	AUTO
SIF	BG
SKIP	ON
MEMORY	OK

Any number of channels maybe set as Skip Channels.

6 Press the **MENU** button to return to normal TV display.

Setting of the Private Posistion

Private position is used to restrict of programme positions that you do not want others to watch. Any position can be set as the Private position.

❐ *How To Set the Private Position*

For example, to set the programme position "15" as the private position.

1 Select programme position "15".

15

2 Press and hold the **RECALL/COLOUR SYSTEM** button for more than 2 seconds

15
15
BG   AUTO

The programme number "15" will shift to centre of the screen.

3 Press the **MENU** button.

🔒 **15**
B G   AUTO
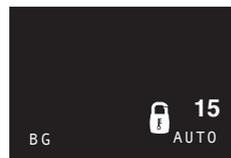
The picture will disappear, and " 🔒 15" will be display on the screen.

The private position setting is now completed.

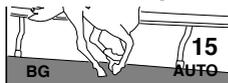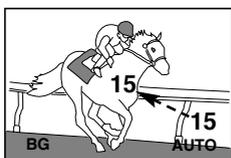### ❐ *To View a Programme on Private Position*

1 Select private position (In this case position "15").

🔒 **15**

2 Press and hold the **RECALL/COLOUR SYSTEM** button for more than 2 seconds.

🔒 **15**

3 Press the **RECALL/COLOUR SYSTEM** button for watching a TV programme.

15
BG   AUTO

Note: The position "15" is still in the private position.

❐ *Cancelling of the Private Position*

1 Select private position (position "15").

🔒 **15**

2 Press and hold the **RECALL/COLOUR SYSTEM** button for more than 2 seconds.

🔒 **15**

3 Press the **MENU** button.

15
BG   AUTO

The private position is now cancelled.

Setting of the OSD Language

1 Press the **MENU** button for MAIN menu display.

```
PICTURE
AUDIO
PRESET
LANGUAGE
```

2 Select "LANGUAGE " by pressing the **programme UP** or **DOWN** button.

```
PICTURE
AUDIO
PRESET
LANGUAGE
```

3 Press the **VOLUME +** or **–** button for Language menu display.

```
ENGLISH
हिन्दी
فارسی
РУССКИЙ
FRANCAIS
PORTUGUES
```

Select "**ENGLISH**", " **हिन्दी** ", " **فارسی** ", " **РУССКИЙ** ", "**FRANÇAIS**", "**PORTUGUES"** by pressing the **Programme UP** or **DOWN** button. To return to the normal TV mode, press the **MENU** button.
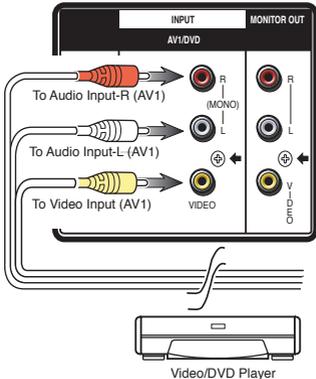
4 Press the **MENU** button to return to normal TV display.

Connecting Other Equipment

❐ *Connecting To the Rear AV1 Input Jacks*

Connecting to a Monophonic Video Recorder (AV1)

You may connect the audio and video output terminals of the DVD player or VIDEO recorder to the input terminals of the TV set to enjoy the DVD and VIDEO programs.

```
INPUT          MONITOR OUT
       AV1/DVD
                    R                R
To Audio Input-R (AV1)   (MONO)
                    L                L
To Audio Input-L (AV1)
                  VIDEO            VIDEO
To Video Input (AV1)
```

AV1

Video/DVD Player

■ To watch video input picture, select AV1 position by pressing the **TV/AV Selector**.

■ When a monophonic video recorder is connected to this product, connect the audio output terminal of the video recorder to the L(left) audio input terminal of the TV set.

■ To make sure the colour system of the TV set is consistent with the signal of your video recorder, if necessary, select a matching system. The colour system set in AV mode can be stored automatically.

■ When the audio signal from the VCR is stereo, be sure to connect the right and left channels to the respective right and left AUDIO IN terminals. Then select "STEREO" channel of the audio channel in the TV set with the remote control ▽**A·B** button.Each time the ▽**A·B** button is pressed, the AV Stereo mode is changed as follow,

```
STEREO  ──→  MONO
   ↑_____|
```
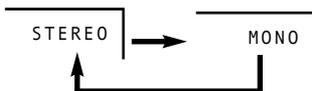
■ When the stereo signal is inputted from the right and left audio input terminals, each time the **SURROUND** button is pressed (or selection of On-screen Menu), surround mode is changed as follows; " **SURROUND ON"** and "**SURROUND OFF"**.

```
                          SURROUND   ON
SURROUND   OFF
```

Note: The effect of surround is not obtained although the switching of surround is displayed in this monaural connection.

❒ *Connecting To the Rear AV1 Input Jacks (Continued)*

■ When watching a video program input from the AV1 terminal, press the TV/AV button to select AV1. Whenever the TV/AV button is pressed, the mode will change as follows:

28 ➡️ AV1 ➡️ AV1(DVD) ➡️ AV2

TV mode (Optional model)
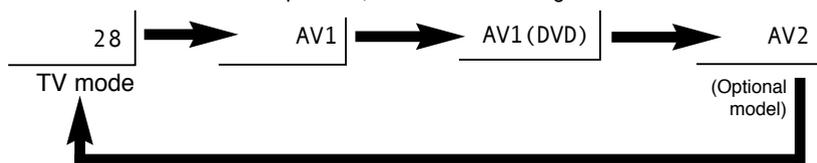
■ **You can select a TV programme while watching a playback from a VCR**

For example:

● To select programme position "9" while watching a playback from external VCR, press "**9**" button of the remote control. The TV set returns to the TV mode and programme "9" will be selected.
● To select the programme position "26", press **Digit** (--/-) button, "**2**" then "**6**" button. Then TV set returns to the TV mode and programme position "26" will be selected.

Note: Pressing either of the **PROGRAMME UP** or **DOWN** buttons of the remote control or the TV will return the TV to the TV mode.

❒ *Selecting the Colour System in AV Mode*

Depending on the type of video tape or connected AV equipment being used, it may be necessary to select colour system. In this case, press the **RECALL/COLOUR SYSTEM** button and select a suitable colour system.

Each time the **RECALL/COLOUR SYSTEM** button is pressed, colour system is changed as follow;

AV1 AUTO ➡️ AV1 PAL ➡️ AV1 NTSC ➡️ AV1 NTSC 4.43

Colour system setting for AV position is automatically stored in the memory.

❒ *Connecting To a DVD Player with AV1(DVD) Video Component Input Terminal (Y, Cb or Cr)*

Connect the component output terminal on your DVD player to the component video input terminal of this product. (NOTE: When a signal of Y,Cb,Cr/Y,Pb,Pr is received, the output signal from monitor output terminal will be corresponding but without colour (black and white image).)

■ To watch a program in this connection status, select AV1(DVD).

28 ➡️ **AV1** ➡️ **AV1(DVD)** ➡️ **AV2**

(TV mode) (Optional model)
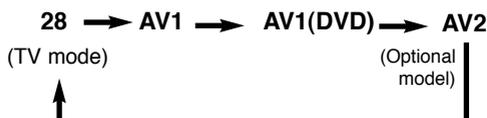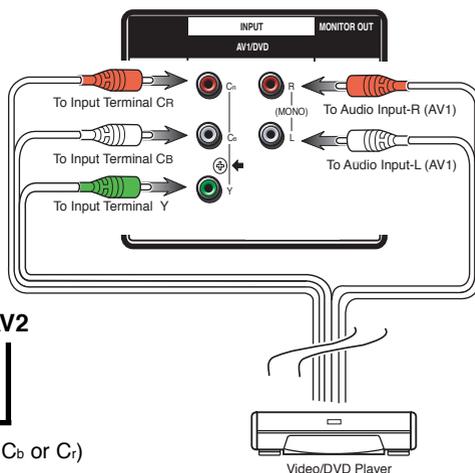
■ Make sure the component video terminal (Y, Cb or Cr) is connected correctly.

❐ *Connecting To the Front AV2 Input Jacks (Optional Model)*

To Video Input (AV2)
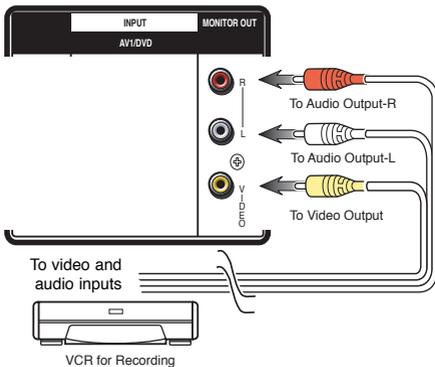
To Audio Input-L (AV2)

To Audio Input-R (AV2)
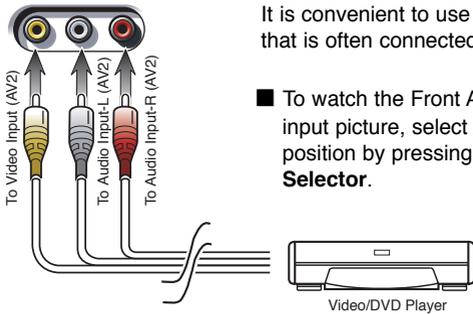
It is convenient to use the AV input jack on the front panel for equipment that is often connected and disconnected.

■ To watch the Front AV2 video input picture, select AV2 position by pressing the **TV/AV Selector**.

AV2

Video/DVD Player

* Model CA21SF1, CP21SF1 are not equipped with Front AV2 input terminal.

❐ *Connecting To the Monitor Output Jacks*

INPUT   MONITOR OUT

AV1/DVD

R — To Audio Output-R

L — To Audio Output-L

⊕

VIDEO — To Video Output

To video and audio inputs

VCR for Recording

The picture signal being displayed on the TV screen is output through the Monitor Output Jacks. Use these terminals to record TV broadcasts and for video dubbing from AV1 or AV2 input terminals.

■ To record TV programme, select TV mode by pressing the **TV/AV Selector** and record the desired programme.

15 | TV mode

■ To dub video from the AV1 terminal input, select AV1 position and by pressing the **TV/AV Selector**.

AV1

❐ *AV Connection To the Aerial Socket*

The AV apparatus can also be connected to the aerial socket of your TV receiver.

Presetting to watch the video input

1. Playback the VCR .
2. Tune a VCR playback in programme position that you want. (See Semi-Auto Tuning and Manual Tuning on pages 11.)

PLAYBACK

VCR for playback

Aerial Socket

ANT.75Ω
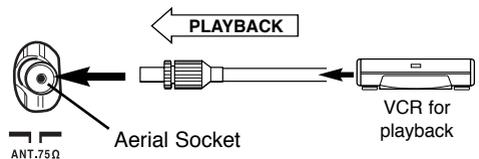
For further details concerning this connection and adjustment, refer to the operating instructions for the AV equipment.
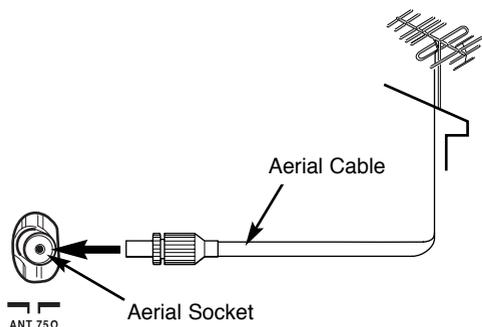
❏ *Connecting Outdoor Aerial*

Connect the cable with a plug from a UHF (or VHF) aerial to the aerial socket on the cabinet back.

Outdoor Aerial

Aerial Cable

Aerial Socket

ANT.75Ω

For all aerial circuit problems please consult your local dealer.

Care and Cleaning

The surface of the cabinet can be damaged if not properly maintained. Many common household aerosol sprays, cleaning agents, solvents and polishes will cause permanent damage to the fine surface.

1. Unplug the power cord before cleaning the Television.

2. Clean the screen with a soft cloth dampened with glass cleaner or warm water.

3. Clean the cabinet with a soft cloth dampened with a mild household detergent and warm water. Dry thoroughly.

Note: *NEVER spray liquids on the screen because they can run down and drip onto the chassis. This may cause component failure not covered under Warranty.*

Specifications

Power Source   AC 127-240 Volts, 50/60Hz

Colour System   PAL/NTSC4.43/NTSC/PAL-60Hz

Sound System   B/G, I, D/KK', M/M

Channel Coverage
   VHF: E2-E12, A2-A13, R1-R12, J1-J12, K1-K9
   UHF: 21-69, A14-A69, J13-J62,
   CATV: S1–S41, X, Y, Z, Z+1, Z+2

Aerial input impedance   75 Ω

Audio output (RMS)   Model: CA21YS2S, CP21YS2S, CA21KS2, CP21KS2, CA21SF1,
               CP21SF1, CA21KS2K, CP21KS2K: 5W + 5W
            Model: CA21XS2S, CP21XS2S: 10W + 10W

Speakers   Model: CA21YS2S, CP21YS2S, CA21KS2, CP21KS2, CA21SF1,
            CP21SF1, CA21KS2K, CP21KS2K: 5 cmx 9 cm x 2 pcs
            Model: CA21XS2S, CP21XS2S: 6 cm x 12 cm x 2 pcs

Ext. terminals
   DVD Video Component: Composite/Component Y, CB,CR input
   Video Inputs: Phone Jack x 2 (1.0Vp-p, impedance 75 Ω) **
   Audio Inputs: Phone Jack (L/R) x 2 (436mVrms, impedance more than 40KΩ) **
   Video monitor outputs: Phone Jack x 1 (1.0Vp-p, impedance 75 Ω)
   Audio monitor outputs: Phone Jack (L/R) x 1 (436mVrms, impedance less than 600Ω)

* Model CA21SF1, CP21SF1 are not equipped with Front AV2 input terminal.

Dimension: Model CA21SF1, CP21SF1: 580(W) x 465(H) x 381(D) mm
         Model CA21KS2, CP21KS2, CA21KS2K, CP21KS2K: 580(W) x 465(H) x 326(D) mm
         Model CA21YS2S, CP21YS2S: 598(W) x 465(H) x 396(D) mm
         Model CA21XS2S, CP21XS2S: 654(W) x 467(H) x 385(D) mm

Weight: Model CA21SF1, CP21SF1: approx. 20.0 Kg
        Model CA21KS2, CP21KS2, CA21KS2K, CP21KS2K: approx. 19.7 Kg
        Model CA21YS2S, CP21YS2S: approx. 20.1 Kg
        Model CA21XS2S, CP21XSS: approx. 19.6 Kg

Specifications subject to change without notice.

Helpful Hints - Problems/Solutions

Before requesting service check the following chart.

Problem:	Check these Conditions / Try these solutions:
No picture, no sound	● Check if TV is plugged in. ● Try a different channel, if OK, probably station trouble.
Poor picture, sound OK	● Adjust Brightness or Contrast control. ● Adjust Fine Tuning. (See page 9.) ● Check aerial connection.
No colour, Picture OK	● Adjust Colour or Tint control. ● Adjust Fine Tuning. (See page 9.) ● Check aerial connection. ● Is the programme in colour ? Try a different channel. ● Select other colour system. (See Setting of the Colour System on page 8.)
Weak picture	● Check aerial connection on back of TV set. ● Check aerial for broken wires. ● Re-orient aerial.
No sound or poor sound.	● Sound Mute may be on. Press the **SOUND MUTE** button on the remote control. ● Adjust Volume. ● May be station trouble. Try a different channel. ● Select other sound system. (See Setting of the Sound System on page 8-9.)
Remote Control will not work.	● Check batteries. Replace batteries. ● Check if TV set is plugged in. Aim remote control towards front of TV.
Cannot select or scan some channels.	● Channel may be removed from memory. Add channel to memory manually. (See "Skip Channel Set and Cancel" on page 12-13.)● Check aerial connection.
Blue screen with AV1 or AV1(DVD) or AV2 is displayed.	● Check AV connection. Press the TV/AV Selection button. ● Check external equipment. Switch on external equipment.
Black screen with 🔒 and programme position displayed.	● Check to see if channel is set as the Private Position. See "Setting of the Private Position" on page 13.
Cabinet makes popping sound.	● This is a normal condition during warm-up and cool down of the plastic cabinet parts.
Colour Spot On The CRT	● Keep away your TV set from magnetic source, then turn-off your TV set and disconnect TV's power cord from AC outlet, keep this condition about 30-60 minutes and turn-on again your TV set if time is reach. If colour spot is not disappear after this solution have done, please contact your local dealer.

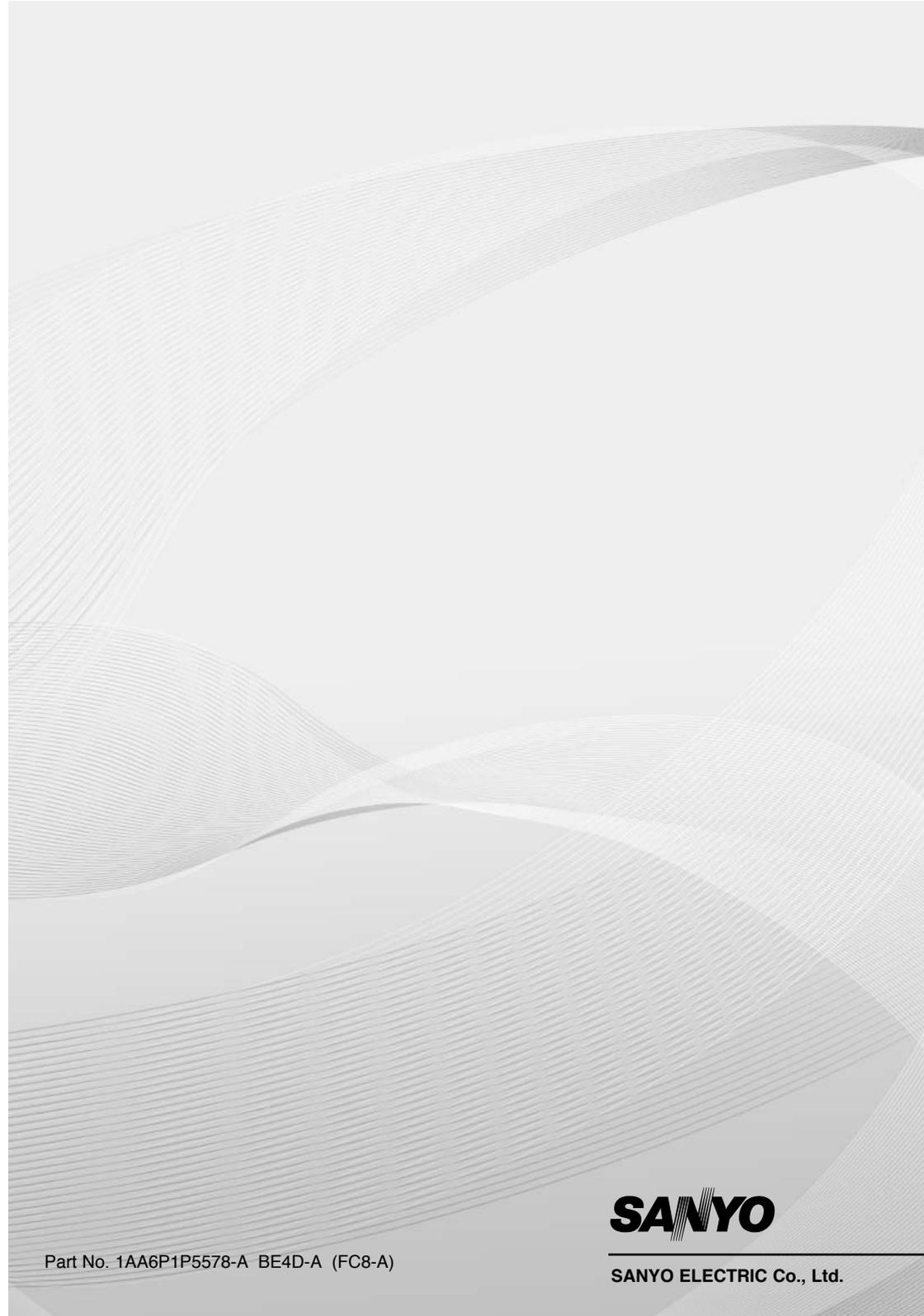**The following faults are not caused by the receiver:**

"GHOSTS"

Reflections of signals from mountains or high buildings will cause multiple images, called "Ghosts".
These abnormal conditions can be reduced to minimum by repositioning aerial or by installing new one
suited for your area.

"INTERFERENCE"

Interference may be caused by electrical appliances, car ignition systems, etc. This should normally be
a temporary condition, but should this interference persist, contact your dealer.

"SLANT"

If the picture of TV set is not properly horizontal (slant), try to change face direction of your TV set. This
case may be caused by geo-magnetic on your place where you live.

SANYO