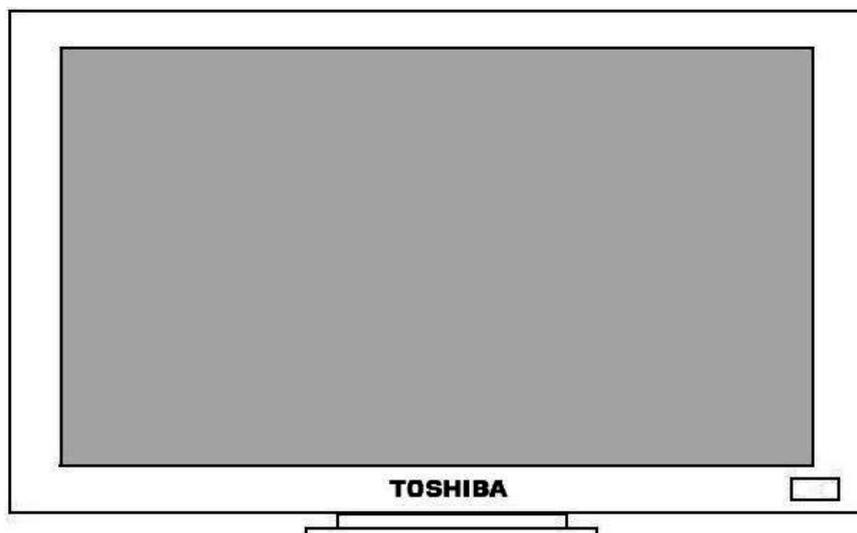


TOSHIBA

OWNER'S MANUAL

LCD Monitor

P32LS1



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Safety Instructions

Before using the unit, please read this manual thoroughly to help protect against damage your own and other people's property your property from potential damage and ensure your own and other people personal safety.
Be sure to observe the following instructions with understanding meaning of signs and figures below.

Meaning of Signs

Sign	Meaning of Sign
 Warning	Disregard may cause death or serious injury*¹.
 Caution	Disregard may cause injury*² or material damage*³.

- *1: "Serious injury" refers to blindness, burns (by both high and low temperature), electric shock, break in bones, poisoning which cause hangover or require hospitalization or a long term treatment.
- *2: "Injury" refers to wounds, burns, electric shock which does not require hospitalization nor a long term treatment.
- *3: "Material damage" refers to damages extended to houses, household effects, livestock, pets.

Example of figure

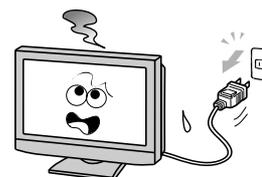
Figure	Meaning of Figure
 Prohibition	“  “ shows prohibited matter. The contents are written or shown by picture at inside or near the figure.
 Instruction	“  “ shows instructed matter. The contents are written or shown by picture at inside or near the figure.
 High-tension current	“  “ shows caution. The contents are written or shown by picture at inside or near the figure. The figure on the left shows caution for High-tension current.



Malfunction or Trouble

If smoke or peculiar smells comes from the unit, remove the power plug from the outlet immediately.

If the unit is still used in this condition, it may cause a fire or an electric shock.
Make sure that the smoke or smell has stopped, then contact your dealer for inspection.



If when there isn't picture or sound, remove the power plug from the outlet immediately.

If the unit is still used in this condition, it may cause a fire or an electric shock.
Contact your dealer for inspection.



If water is spilled or objects are dropped inside the unit, remove the power plug from the outlet immediately.

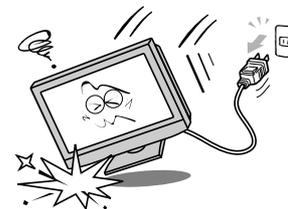
If the unit is still used in this condition, it may cause a fire or an electric shock.

Contact your dealer for inspection.



If the unit is dropped or the cabinet is damaged, remove the power plug from the outlet immediately.

If the unit is still used in this condition, it may cause a fire or an electric shock. Contact your dealer for inspection.

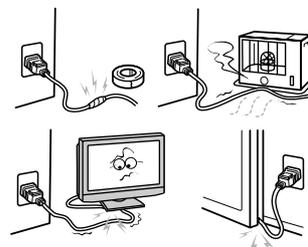


To turn off the power of the unit, press “○” on the main power switch.

- The power standby/on indicator goes off and you cannot turn the unit on/off by using the POWER button on the remote control. (To turn on/off the unit by the remote control, press the main power switch again and light the power standby/on indicator.)
- When you turn off the unit by pressing the POWER button on the remote control, the main power of the unit is not turned off.
- To disconnect the unit completely from power supply, remove the power plug from the outlet.

If the power cord or plug is damaged or becomes hot, turn off the main power switch of the unit, make sure the power plug has cooled and remove the power plug from the outlet.

If the unit is still used in this condition, it may cause a fire or an electric shock. Contact your dealer for replacement.



Installation

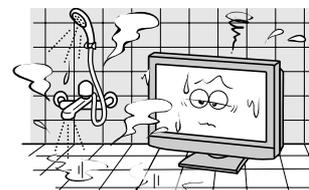
When installing the unit, use the specified stand.

If not, the unit may fall down and cause an injury.



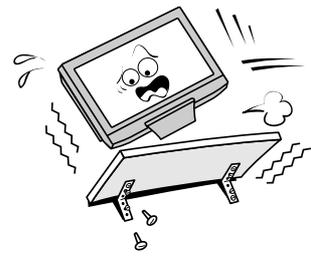
Do not place the unit in locations of high humidity, such as a bathroom or close to a humidifier.

This may cause a fire or an electric shock.



Do not place the unit in an unstable location, such as a shaky table or incline.

The unit may fall down and cause injury or damage.
Install the unit on a horizontal, stable surface.



Do not place the unit in a location subject to vibration.

The unit may fall down because of the vibration and may cause an injury.



Insert the power plug fully into a 100~240 V AC outlet.

- If you use an outlet other than 100~240 V AC, it may cause fire or electric shock.
- Improper insertion of the plug may cause heat and fire.
- Do not use a damaged power plug or worn outlet.



Do not place objects on the unit.

If metal or liquid (when putting vase, glass or cosmetics) get into the unit, it may cause fire or electric shock.
If you put heavy objects on the unit, it may fall down and cause injury.



When installing the unit, have your dealer arrange for professional installations.

If the installation work is not correct, it may cause injury.



Use

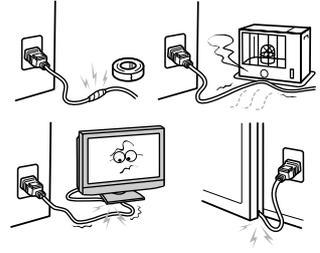
Never repair, modify or disassemble the unit by yourself.

It may cause a fire or an electric shock because dangerous voltages exist in the unit. Consult your dealer for internal inspection and repairs.



Follow these precautions for the power cord and plug.

Do not damage, modify such as by extending, or heat (such as by pressing near heating equipment).
Do not pull, place heavy objects or pinch.
Do not bend, twist or bunch up.
Fire or electric shock may result.



Do not insert objects inside the unit.

If metallic materials or combustibles such as paper get inside the unit from ventilation holes and other places, it may cause a fire or an electric shock.
Be especially careful that children do not insert objects in the unit.



If there is thunder or lightning, do not touch the unit or the power plug.

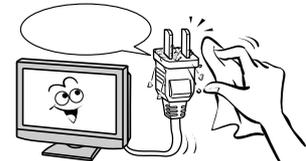
You may suffer an electric shock.



Cleaning

If dust has collected on the power plug connectors, remove the plug from the outlet and clean off the dust.

This dust may cause a fire due to reduced insulation of the plug.



Caution

Installation

Do not install the unit where humidity is high.

If the unit is installed in direct sunlight, a closed car or near a stove, it may cause overheating or electric shock. Also the cabinet or other parts may distort or be damaged, and electric shock may result.



Do not install the unit where it is exposed to humidity, oil, smoke or excessive dust.

If the unit is installed next to a humidistat, a stove or in a location where there is a large quantity of dust, it may cause a fire or electric shock.



Take measures to prevent the unit from falling down.

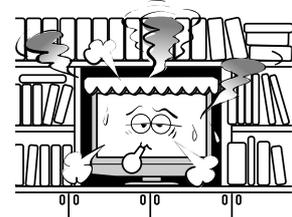
If not, the unit may fall down and cause injury.



Do not block the ventilation holes on the unit.

The inside of the unit will overheat if the ventilation holes are sealed, which may result in a fire.

- When installing the unit near a wall, keep the unit at least 10 cm from the wall.
- Do not place the unit in a closet or bookshelf where ventilation is poor.
- Do not spread a newspaper, tablecloth or curtain over the unit.
- Do not place the unit on an unstable surface, such as a rug, or a cushion, etc.
- Do not place the unit so that it is facing up or down, or on its side.



Precautions for moving the unit:

- When moving the unit, be sure to remove the plug from the wall outlet and disconnect wiring cables between equipment and detach any securing anchors. If not, fire or electric shock may result if the power cord is damaged, injury may occur by the unit falling down.
- When unpacking or carrying the unit, at least two people are needed. Make sure the units upright,
- Do not carry the unit with the screen facing up or down.
- Handle the unit so as not to jolt the unit.



Do not overload outlets or cables beyond their capacity.

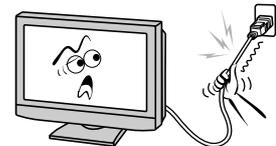
Do not use extension cords.
Electric shock or fire may result.



Use

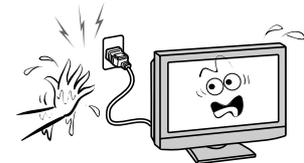
Do not pull the power cord when removing the plug from the wall outlet.

If the power cord is yanked, the cord may become damaged and fire or electric shock may occur. Always hold the plug firmly when removing it.



Never insert or remove the power plug with wet hands.

This may cause electric shock.



Do not climb or stand on the unit.

It may drop, fall down, break or cause an injury.



If the unit will not be used for a long period of time, remove the power plug from the wall outlet for safety.

If not, in the case of malfunction, it may cause fire.



Precautions for the remote control batteries:

Only use the specified battery type.
Be sure to insert batteries by matching the + and -.
Do not recharge, heat, disassemble, short or throw batteries into a fire.
Do not use the batteries beyond their usage period (designated on the batteries) , do not leave worn out batteries in the unit.
Do not mix different types of batteries together.
Do not mix a new battery with a used one.
If these precautions are not observed, it may lead to battery leakage or explosion and cause burn and injury.
If leaked liquid gets into your eyes or gets in touch with your skin, it may hurt your eyes or your skin. If leaked liquid gets into your eyes or mouth or comes in contact with your skin, rinse the contacted area with clean water immediately and consult your doctor. If the leaked liquid comes in contact with your cloth, rinse the contacted area with clean water immediately. If the leaked liquid comes in contact with other equipments, clean them without touching the leaked liquid.



Do not push or jolt the LCD panel.

The glass of the LCD panel may break and cause injury.
If the screen glass breaks, crystalline liquid leakage may occur. Do not touch crystalline liquid (liquid).
If leaked liquid gets into your eyes or comes in contact with your skin, it may hurt your eyes or your skin. If leaked liquid gets into your eyes or mouth or comes in contact with your skin, rinse the contacted area with clean water immediately and consult your doctor. If the leaked liquid comes in contact with your cloth, rinse the contacted area with clean water immediately. Should the leaked liquid comes in contact with other equipment, clean them without touching the leaked liquid.



This product contains chemicals, including lead, known to the State of California to cause birth defects or other reproductive harm.

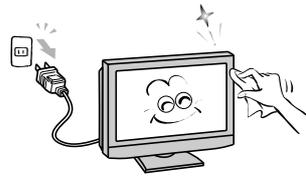
Wash hands after handling.



Cleaning

Remove the power plug before cleaning.

If not, it may cause electric shock.



Consult your dealer for internal cleaning once a year.

If you allow dust to accumulate on the unit, it may cause fire or malfunction when you operate it.

Cleaning is effective especially before the rainy season when humidity is high.

Refer to your dealer about the service charge for internal cleaning.

Notes and cautions for use

■ On usage

- Some parts of the body are hot during operation. Please be careful.
- In case of moving long-distance, wrap the unit with blanket to avoid damages. Be careful not to bump the unit.
- Do not spray on the unit volatile liquid like insecticide. Do not expose long time to rubber or vinyl. It will damage the coating.

■ On disposal or handing over to a new owner

- It is recommended to initialize the unit by resetting "PICTURE" and "SETUP" menu.
- Do not mix with other general waste.
Do not dispose LCD monitor in waste treated by a waste treatment center.
- This unit has a lamp inside which includes mercury. For disposal, please follow regulation of your district.

■ Exemptions

- Toshiba is not liable for any damage caused by natural disaster (such as earthquake, thunder, etc.), fires, acts by third parties, accidents, owner's intentional misuse and fault, or uses in other improper conditions.
- Toshiba is not liable for incidental damages (such as profit loss or interruption in business, modification or erasure of record data, etc.) caused by use or inability to use of this product.
- Toshiba is not liable for any damage caused by neglect of the instructions described in the owner's manual.
- Toshiba is not liable for any damage caused by misuse or malfunction through simultaneous use of this product and the connected equipment or software.
- Toshiba is not liable for any damage caused by neglect of the instructions described about the installation stand in the owner's manual.
- Toshiba is not liable for any damage caused by improper installation.

Features

High-resolution HD panel

You can enjoy extreme fine pictures with a big flat LCD monitor panel of 3,150,000 pixel.

IPS system less-reflection Black TFT LCD panel

IPS system and Black TFT LCD panel offer bright and wide images with clear contrast. Even placed near the window, the unit shows bright and clear images with little reflection. The viewing angles of the monitor are as wide as 170° both horizontally and vertically, enough to enjoy clear images at any view angle.

Variety of Terminals are available

Video system Input: You have 4 choices of terminals for Video system Input.

VIDEO-1	(BNC Terminal)	NTSC/PAL
VIDEO-2	(RCA Terminal)	NTSC/PAL
S-VIDEO	(S Terminal)	NTSC/PAL
YUV	(BNC Terminal × 3)	NTSC/480p/720p/1080i/PAL

RGB: You have 2 choices of terminals for RGB Input.

RGB	ANALOG (Mini D-SUB 15 pins)	RGB	ANALOG
RGB	DIGITAL (DVI-D)	RGB	DIGITAL

You can control the unit by Computer

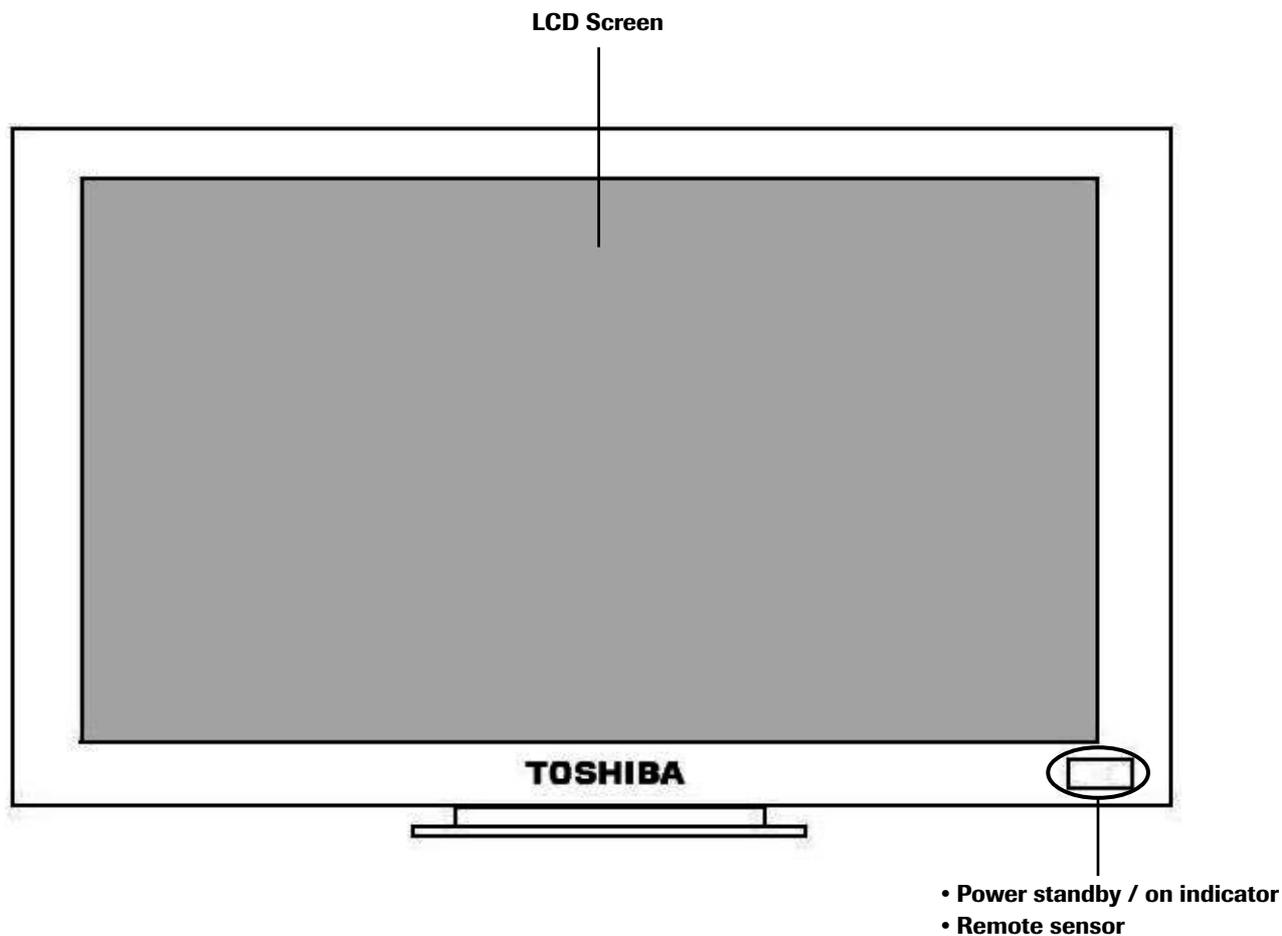
It is possible to control the unit by connecting with RS-232C Cable.

External speakers can be connected

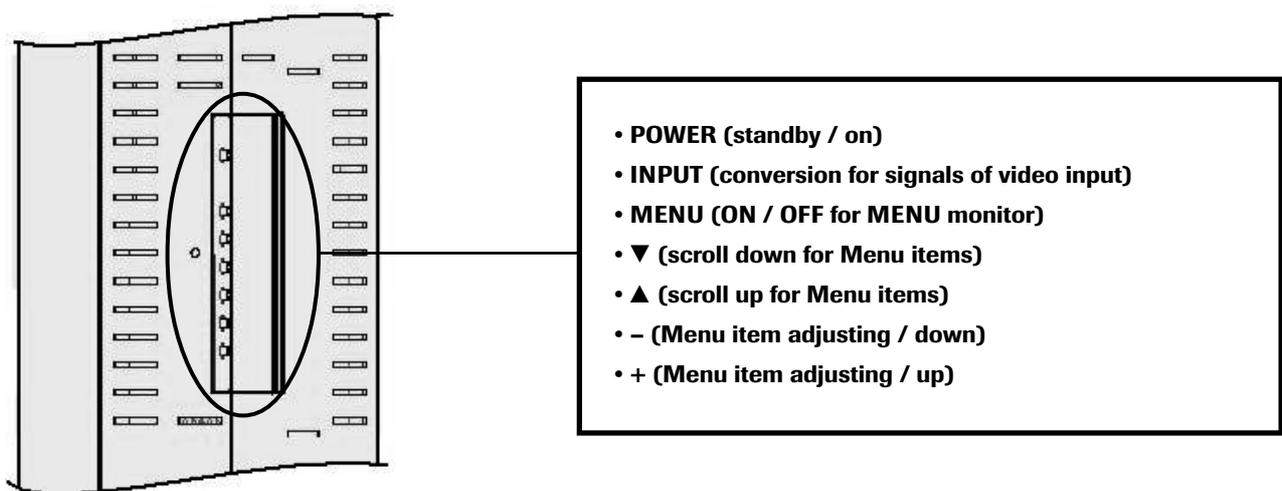
You can connect 10W 8Ω speakers for each side.

Names and Functions of Controls <Unit>

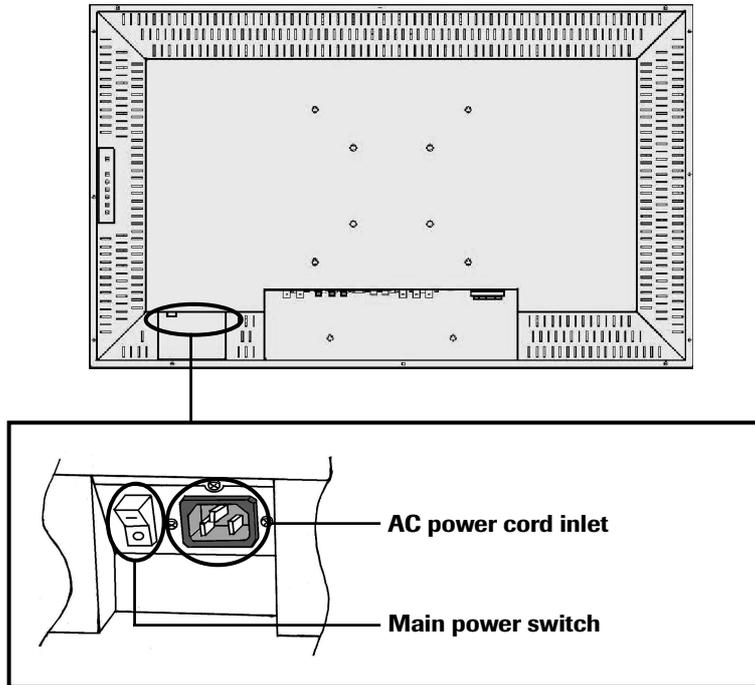
Front



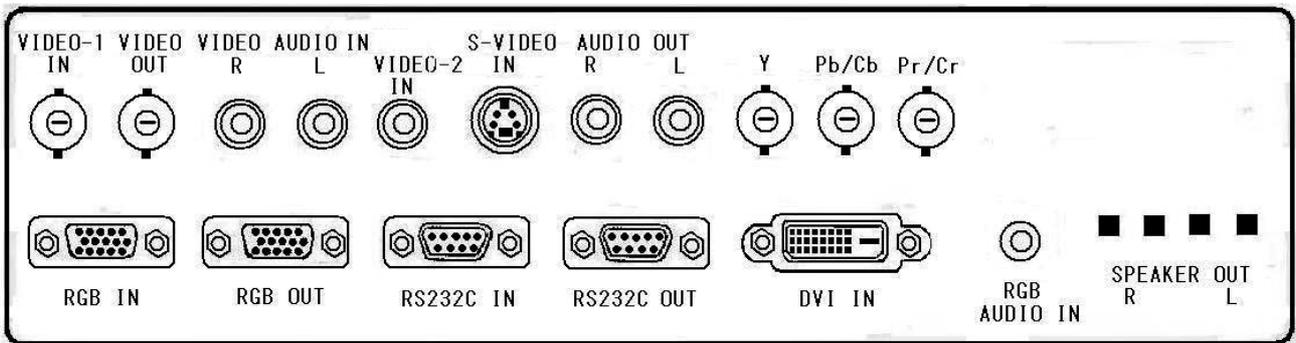
Side Controls



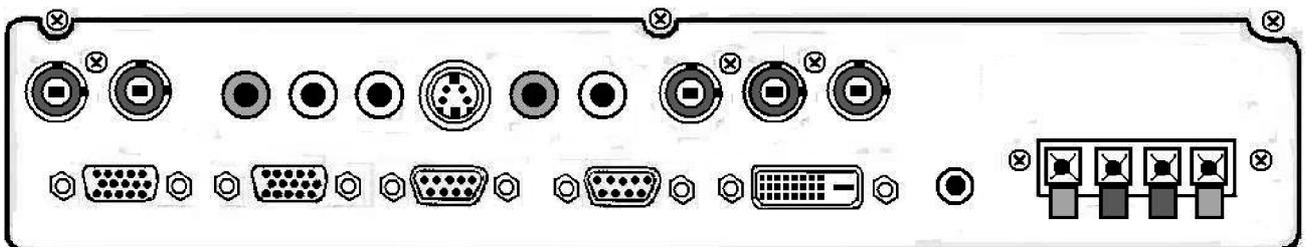
Back



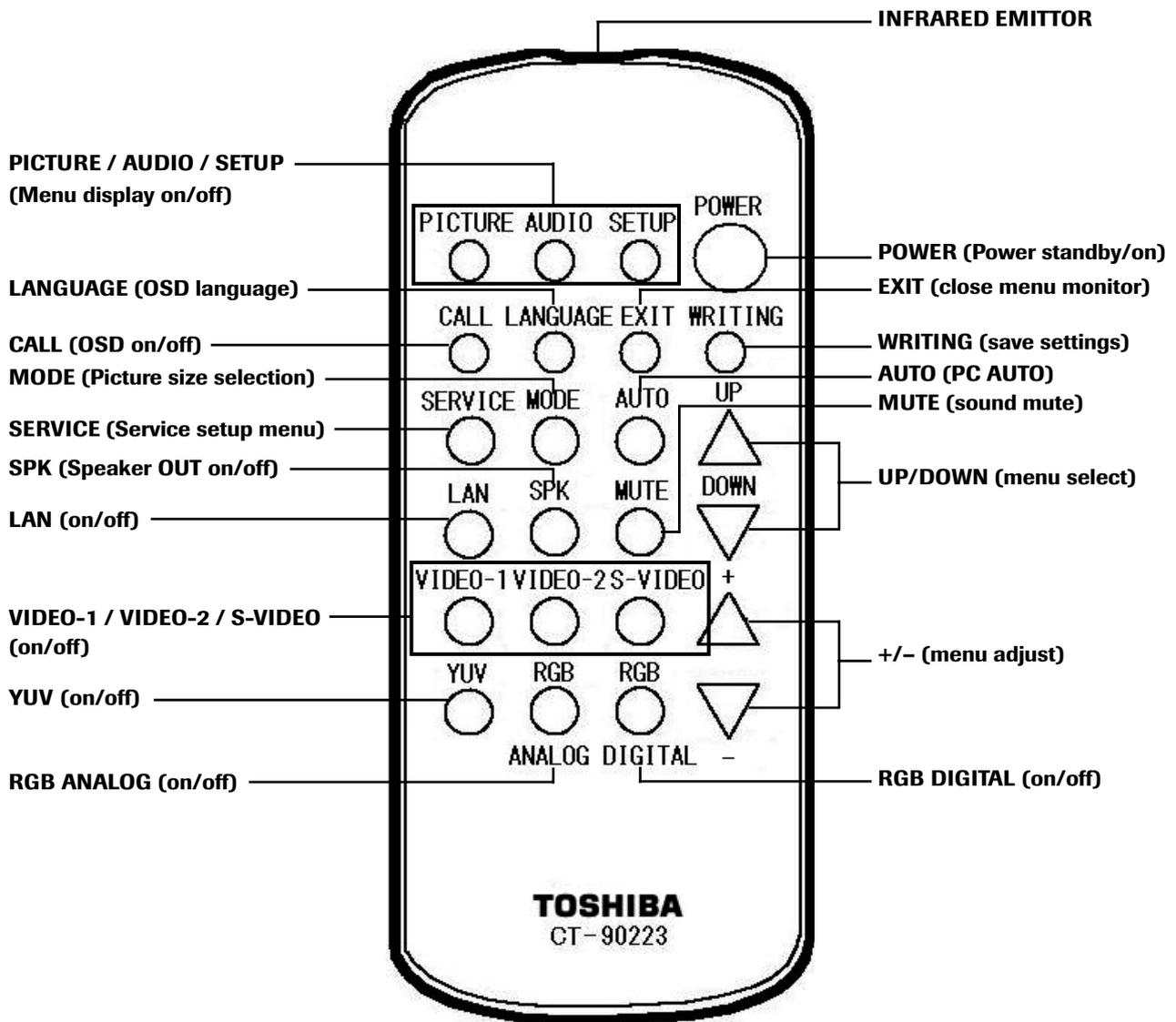
Connection Labels



Terminals



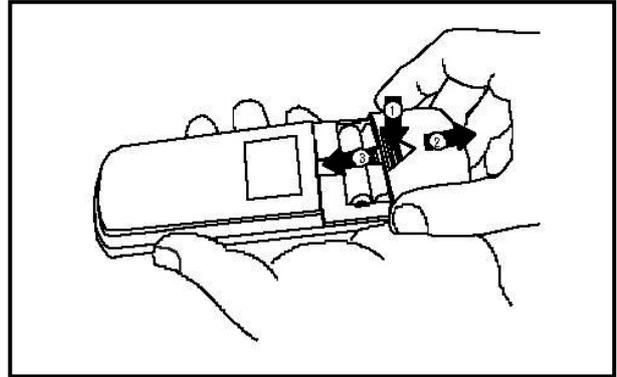
Names and Functions of Controls <Remote control>



Battery installation

Remove the battery cover, and insert batteries.

- To remove the battery cover, press the frictional part to the direction of ①, hold and slide it to the direction of ②.
- Insert batteries matching the + and the -.
- To return the battery cover, insert to the direction of ③. Be careful not to pinch your finger.



About batteries

- Please use two R03 (AAA) batteries.
- Please use manganese dry batteries.
- The batteries last about 1 years (depend on usage). If the remote control does not operate correctly, or if the operating range becomes reduced, replace both batteries with new ones.

CAUTION

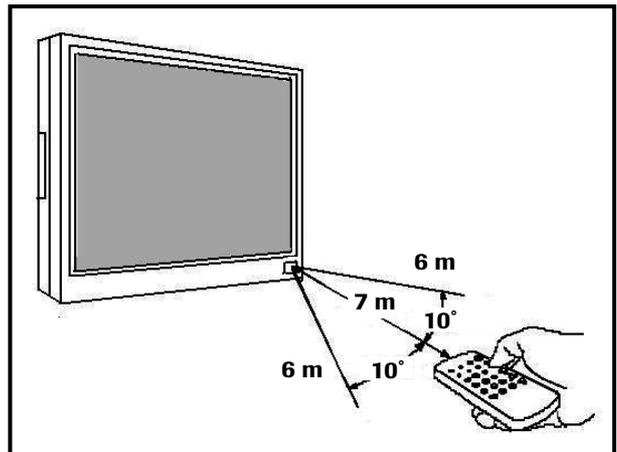
Risk of explosion if battery is replaced by an incorrect type.
Dispose of used batteries according to the instructions.

Effective range

- Point the remote control at remote sensor on LCD monitor.

About the remote control

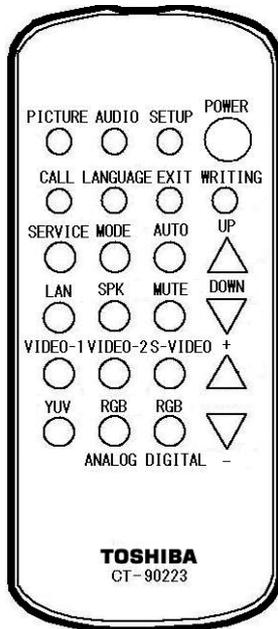
- Do not drop, shake or bump.
- Do not wet, do not place on wet materials.
- Do not dismantle.
- Do not place in locations exposed to high temperature or high humidity levels.



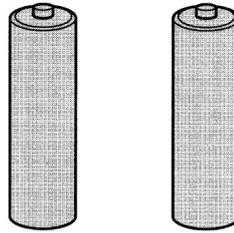
Supplied accessories

Please check all are supplied.

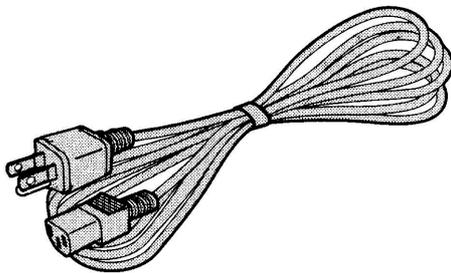
Remote control × 1



R03 (AAA) batteries × 2



Power cord (2m) × 1

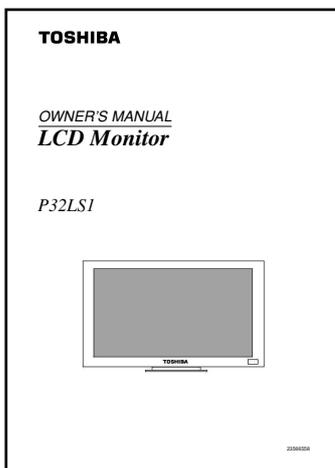


RGB Cable (Mini D-sub 15 pin) × 1

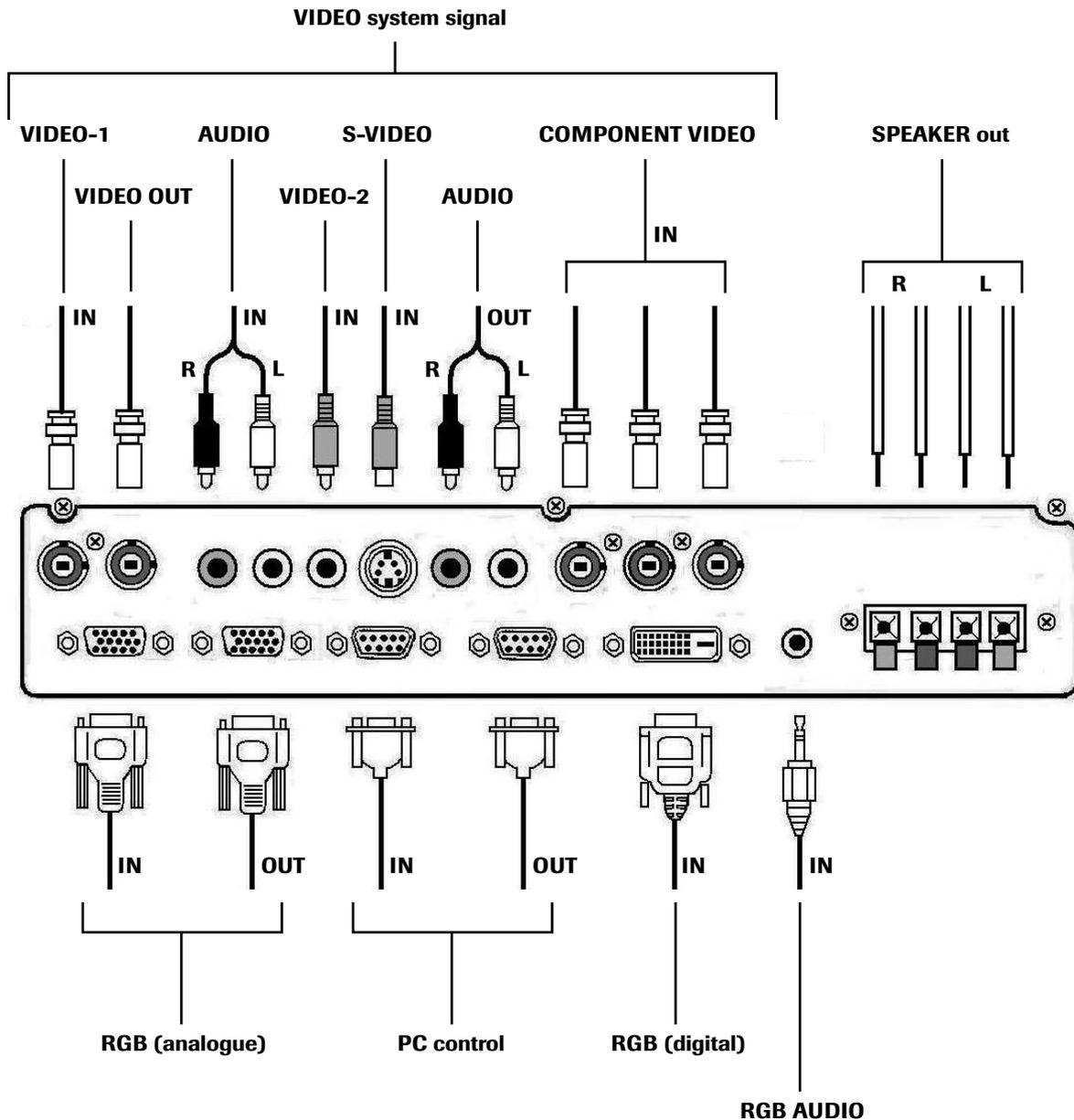
Part code : 23368803



Owner's Manual × 1



Connection



■ VIDEO SYSTEM INPUT

You can select VIDEO input from 4 terminals below;

	Terminal Type	Suitable signals
VIDEO-1	BNC	NTSC/PAL
VIDEO-2	RCA	NTSC/PAL
S-VIDEO	S-terminal	NTSC/PAL
YUV (Y Pb/Cb Pr/Cr)	BNC × 3	NTSC/480p/720p/1080i/PAL

- AUDIO input follows the connection at any suitable signals.
- Suitable signal is automatically selected.

■ RGB INPUT

You can select RGB input from 2 terminals below;

	Terminal Type	Suitable signals
RGB ANALOG	Mini D-sub 15 pin	RGB ANALOG
RGB DIGITAL	DVI-D	RGB DIGITAL

- AUDIO input follows the connection at both signals.

■ VIDEO OUTPUT

VIDEO-1 has priority.

Only when VIDEO-2 is selected, output follows VIDEO-2

■ RGB OUTPUT

Output follows RGB (ANALOG).

■ AUDIO OUTPUT

When VIDEO system INPUT is selected, output follows VIDEO AUDIO

When RGB INPUT is selected, output follows RBG AUDIO.

■ RS-232C INPUT

RS-232C INPUT is used to control the unit by a computer.

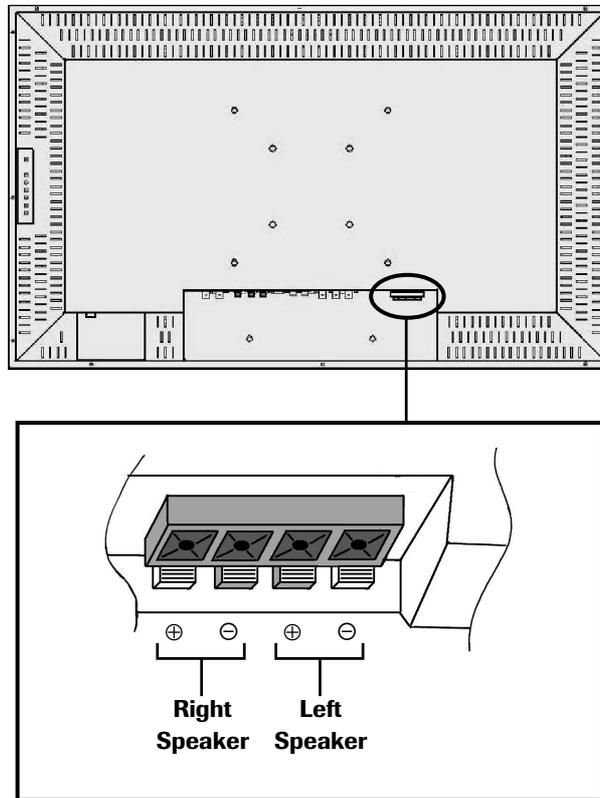
Connect a computer to RS-232C INPUT.

Connecting external speakers

About external speakers

- Please use external speakers with 8Ω impedance and more than 10 W audio power.

[Back side]



To connect speakers

- Press the knob and hold.
- Insert the top of the cable into hole.
- Return the knob.

Please make sure the cables match the \oplus and \ominus signs on the terminal.

Speaker terminals have the \oplus and \ominus signs. The \oplus sign is red, and the \ominus sign is black.

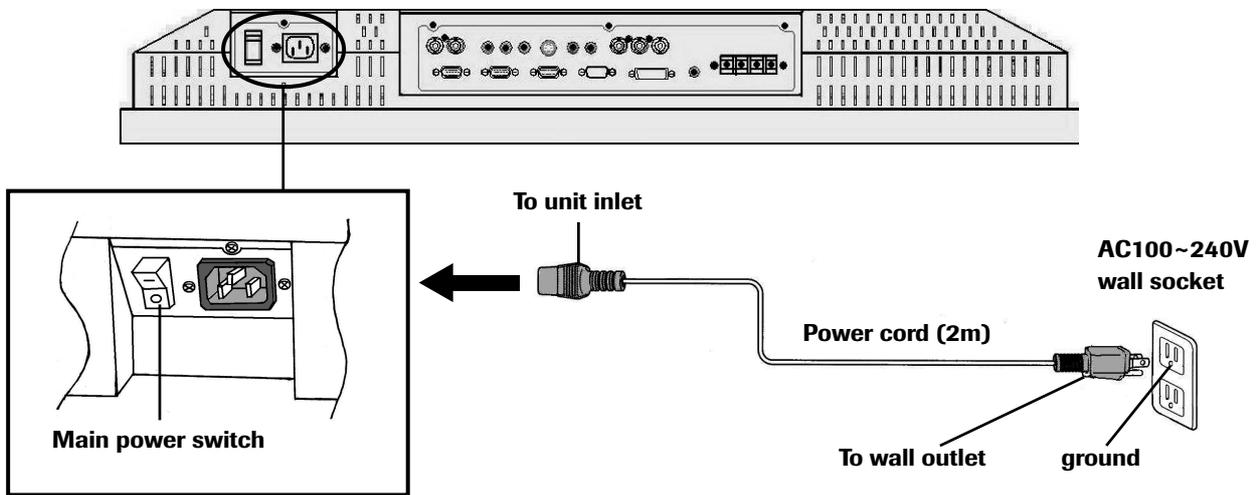
One cable is for the \oplus , another is for the \ominus .

Please match the \oplus and \ominus signs for both right speaker and left speaker.

Connecting the power cord

Caution: Please turn off the main power switch before connecting.

[Back]

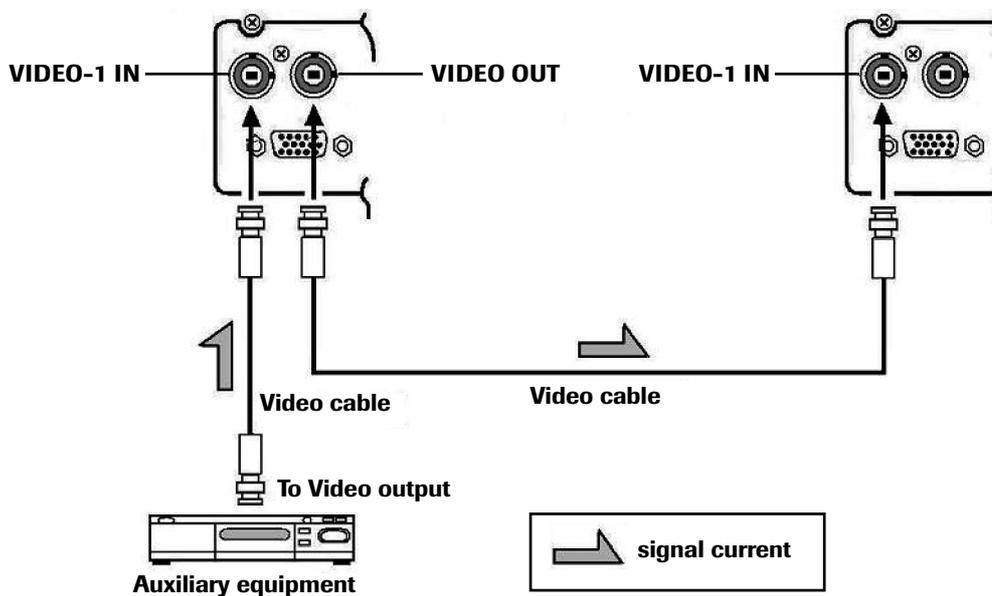


To connect equipments

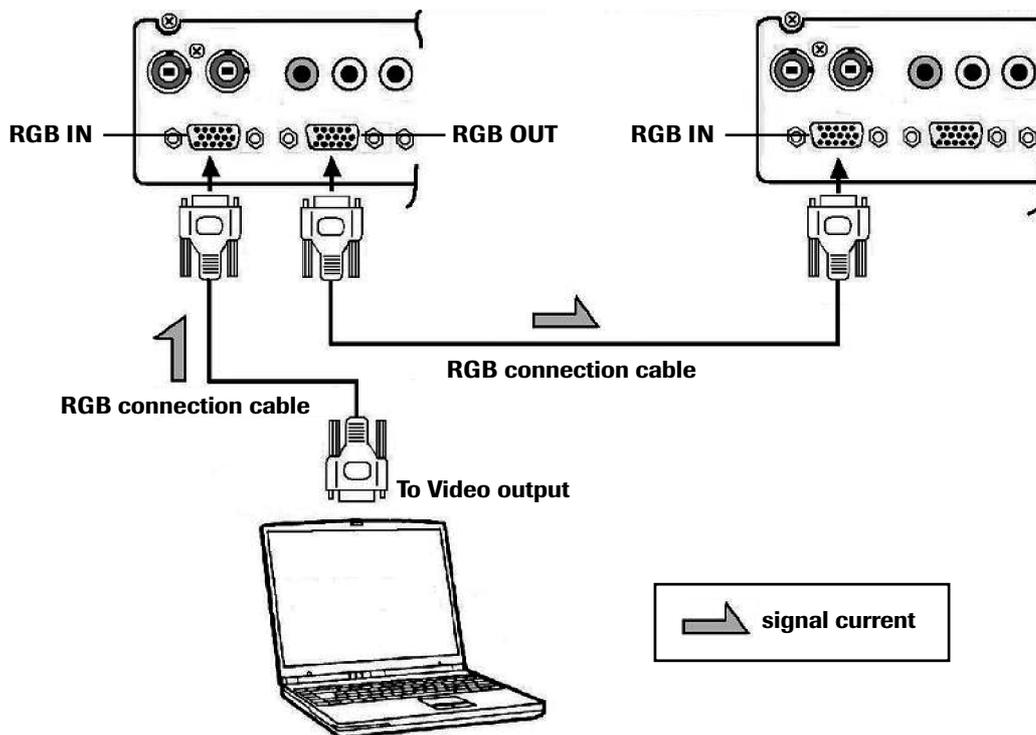
You can connect a variety of auxiliary equipment via the video/audio terminals.

Video connection example

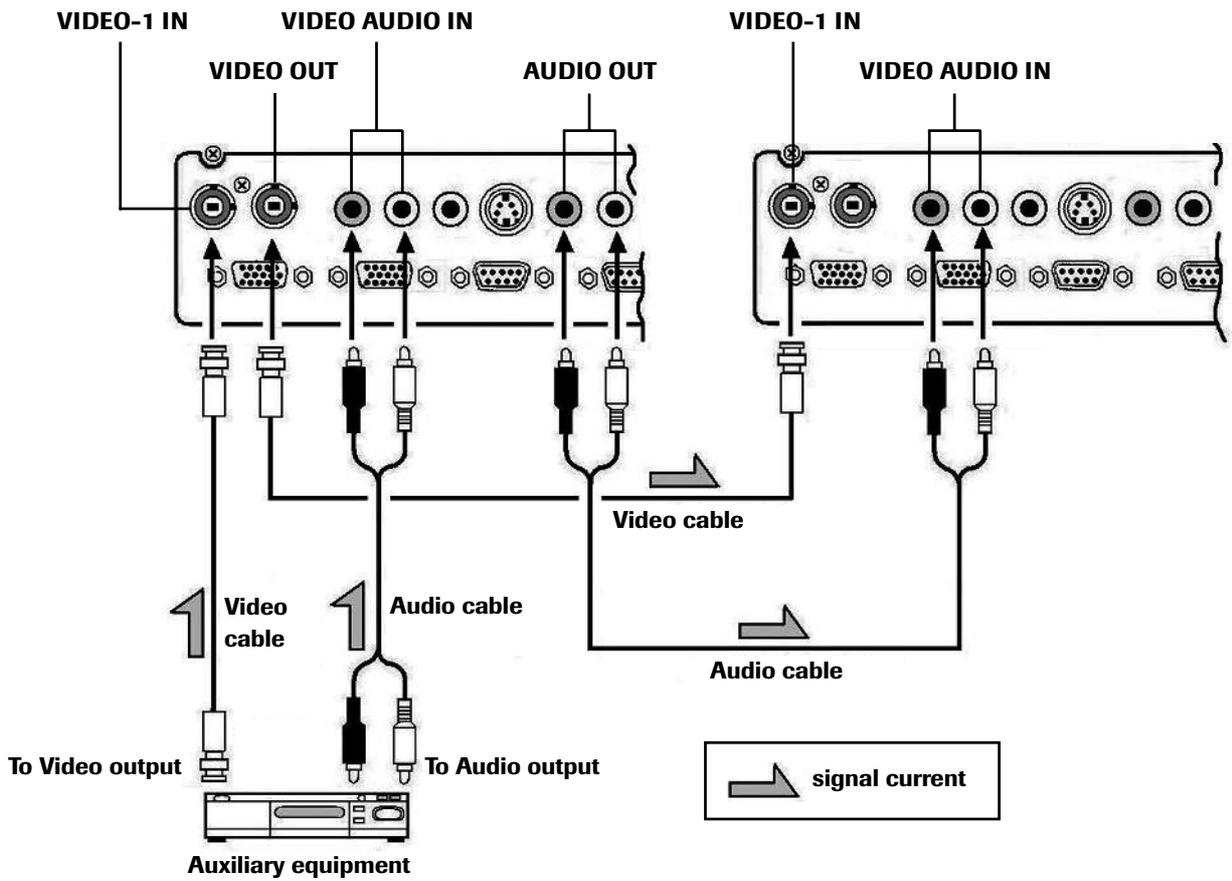
Example 1



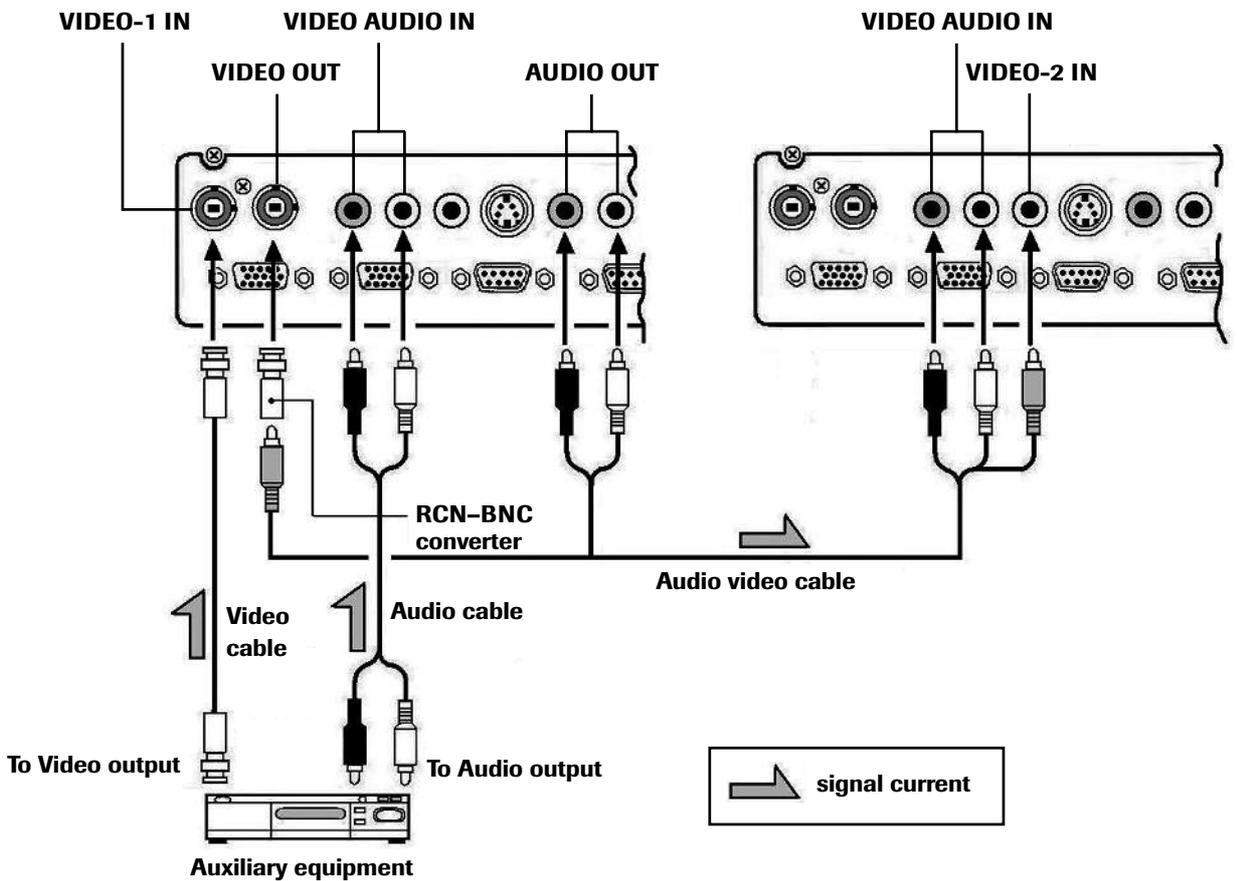
Example 2



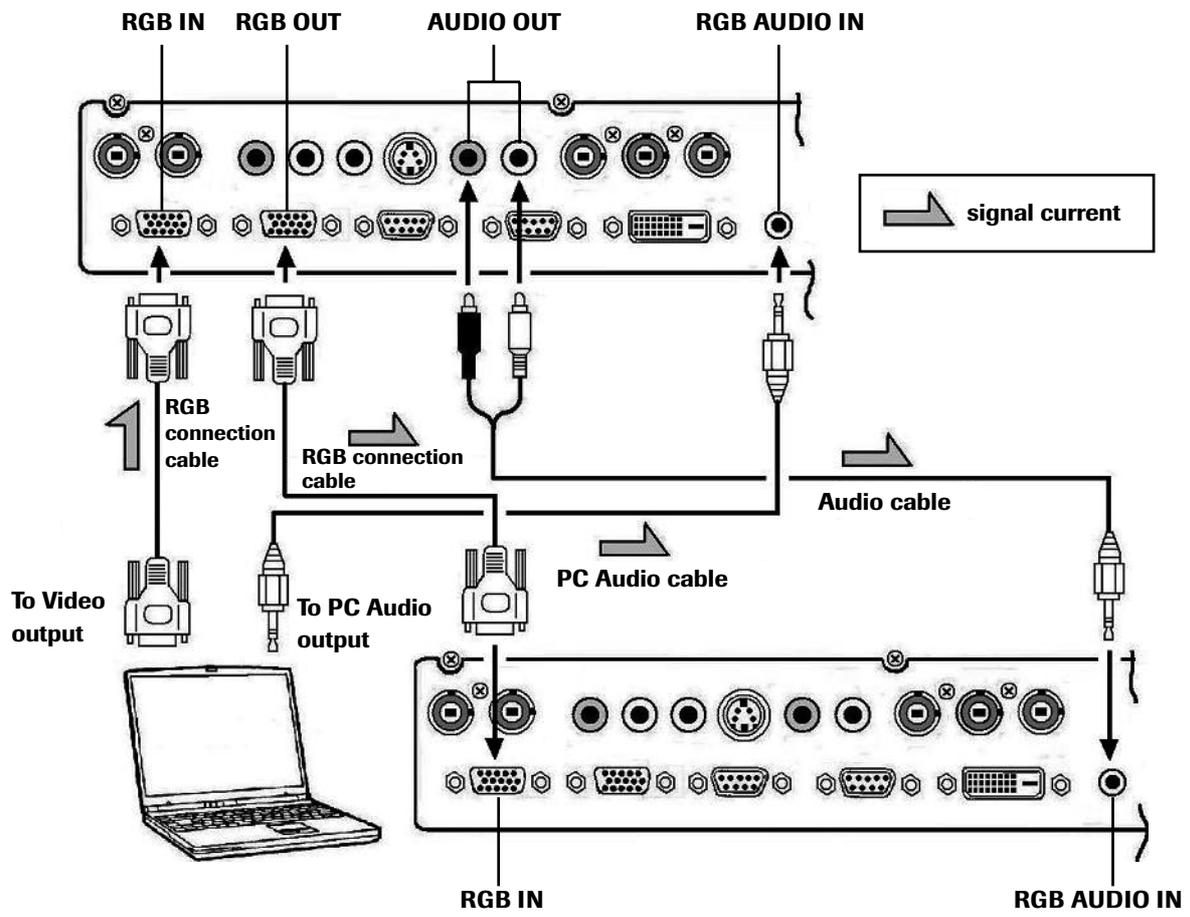
Example 1



Example 2



Example 3



Installation

Wall hanging accessory is available when you hang the monitor on the wall.

Please follow the process mentioned on page 25 - 27.

When you install the monitor on the ceiling or on the floor, please follow the process on page 28.



Caution

Call a service technician for installation.

To a service technician

- For safety, make sure the place has enough strength to hold the whole weight of the monitor and the frames (*1). If necessary, reinforce the place before installation.
- At least two people are needed for installation.
- Be careful not to lose removed screws or parts.
- Before starting installation, discuss well with customers about the position to install, and get their agreement.
- After installation, check the installation is correct and safe.

*1: About the material and the structure of the wall, ceiling and floor to install LCD monitor

Where to install the LCD monitor

If the wall is made of thin plywood or plastered board, it cannot hold the weight.

The chart below shows adaptable anchors for each material. Please check well the structure and strength of the place to install, and choose the best method for safety.

Adaptable anchors / screws for each material

Material	Anchor
Plastered board	Impossible to install in Plastered board or Plywood board. Install in the tie beam instead of the wall.
plywood board	
Concrete	Whole anchor or Bolt
Block	Tie lock anchor
ALC	
Mortar	
Brick	
Wooden pillar	Coach bolt (diameter: 6 mm × length: 60mm)

For assembly, a Philips screwdriver with more than 300 mm shaft is needed.

How to install the monitor on the wall

1. Remove the stand of the LCD monitor

- To avoid damage, spread blanket on the table to put the LCD monitor on.
- To remove the stand of the LCD monitor, put the LCD monitor on the edge of the table, and remove the screws on the stand.
- Described below is one example of how to install the unit on the wall. The wall hanging accessory will need to be manufactured according to the installation, so consult your dealer before the installation work.

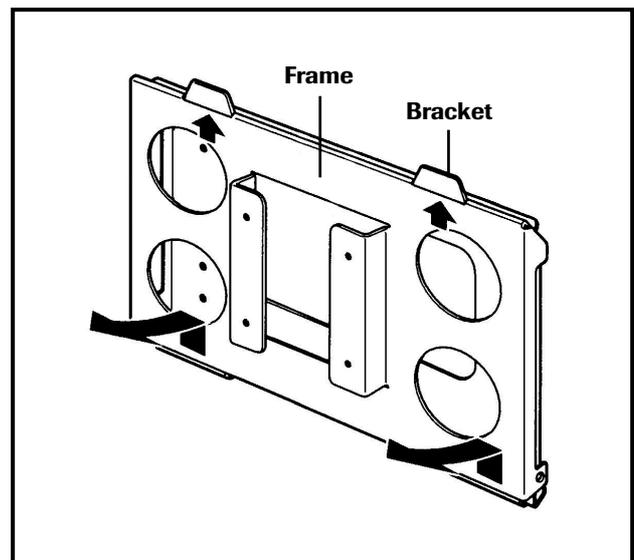
2. Wall hanging accessory

Wall hanging accessory is available at the shop.

- *: In the package, the bracket and the frame of wall hanging accessory are assembled. Please separate the bracket and the frame at first. After the bracket is fixed on the wall, fix the frame on the LCD monitor.

3. Remove the frame from the bracket.

Hold the lower part of the frame and raise it up to remove from the bracket.

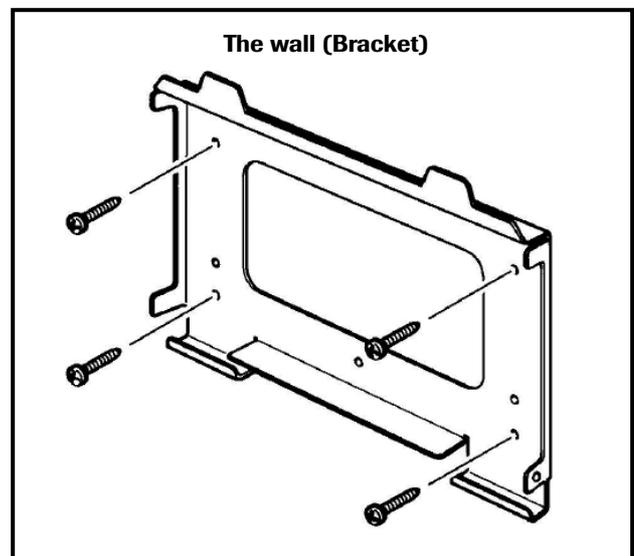


4. Fix the bracket on the wall

- Fix the bracket on the wall firmly with anchors or screws (not supplied).

Make sure anchors or screws are stable.

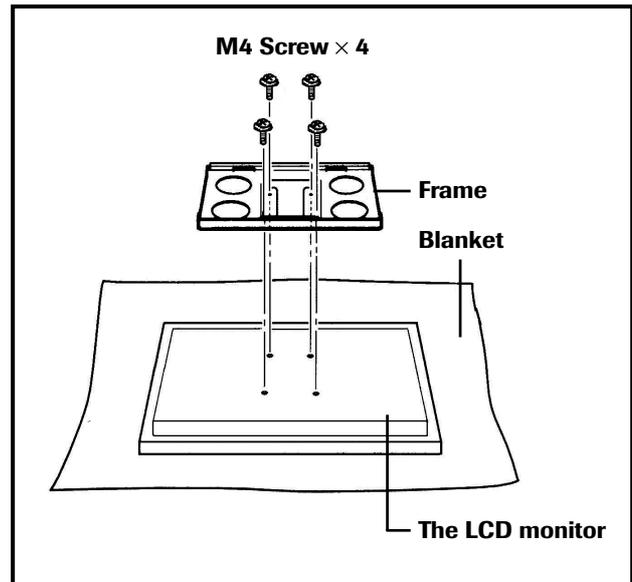
(Choose appropriate anchors or screws depending on the structure and material of the wall.)



- Refer to the chart on page 24 to check the condition of the wall, and choose the safe and appropriate way for installation.

5. Using supplied screws, fix the frame on the LCD monitor

- To avoid damaging, spread blanket on the flat space, and place the LCD monitor with its panel down.
- Refer to the illustration, and mount the frame on the LCD monitor with four M4 screws.

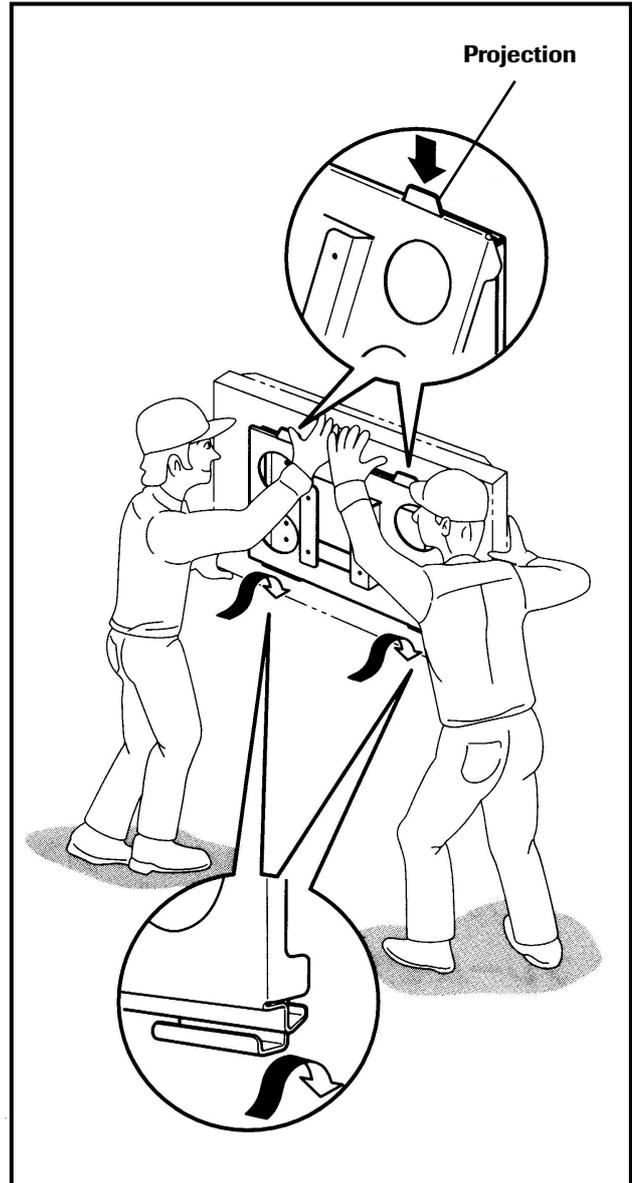


6. Wire before hanging on the wall

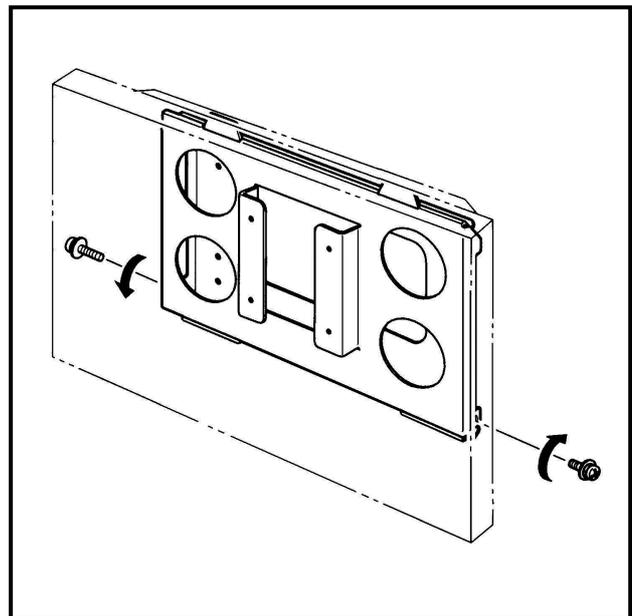
- On wiring, refer to page 20 - 23.
- Pay attention to the positions of auxiliary equipment or bracket on the wall, when you decide the route to wire.

7. Mount the LCD monitor on the bracket.

- *: When mounting, at least two people are needed.
- Raise the LCD monitor, and insert the projection of the bracket.
- Hold the lower part of the LCD monitor and raise a little, push into the lower part of the bracket.



- Fasten with supplied screws.



How to install the LCD monitor on the floor

1. Remove the stand of the LCD monitor

- To avoid damage, spread blanket on the table to put the LCD monitor on.
- To remove the stand of the LCD monitor, put the LCD monitor on the edge of the table, and remove the screws on the stand.

2. Floor installation brace for LCD monitor

The floor installation brace will be manufactured according to the installation.

Before the installation work, please consult your dealer for the floor installation brace.

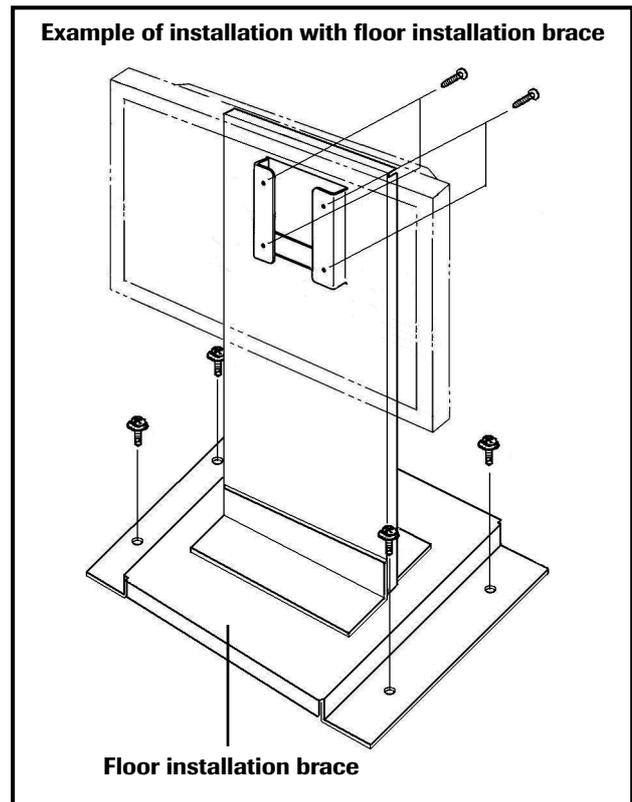
3. Fixing the floor installation brace to the floor

- Fix the brace to the floor firmly with anchors or screws (not supplied).
- Refer to the chart on page 24 to check the installation conditions, and choose a safe and appropriate way to install.

4. Wiring and mounting of the LCD monitor

- For wiring details, refer to pages 20-23.
- Raise the LCD monitor and fix it to the floor installation brace with screws.

At least two people are needed for this work.



How to install the LCD monitor to the ceiling

1. Remove the stand of the LCD monitor

- To avoid damage, spread blanket on the table to put the LCD monitor on.
- To remove the stand of the LCD monitor, put the LCD monitor on the edge of the table, and remove the screws on the stand.

2. Ceiling installing bracket for LCD monitor

The ceiling installing bracket will be manufactured according to the installation.

Before the installation work, please consult your dealer for the ceiling installing bracket.

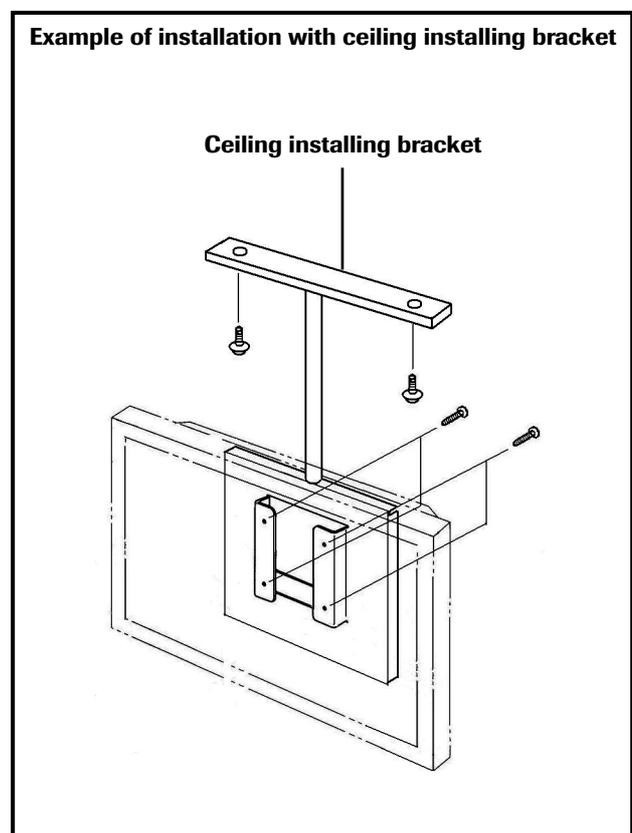
3. Fixing the ceiling installing bracket on the ceiling

- Fix the bracket on the ceiling firmly with anchors or screws (not supplied).
- Refer to the chart on page 24 to check the installation conditions, and choose a safe and appropriate way to install.

4. Wiring and mounting of the LCD monitor

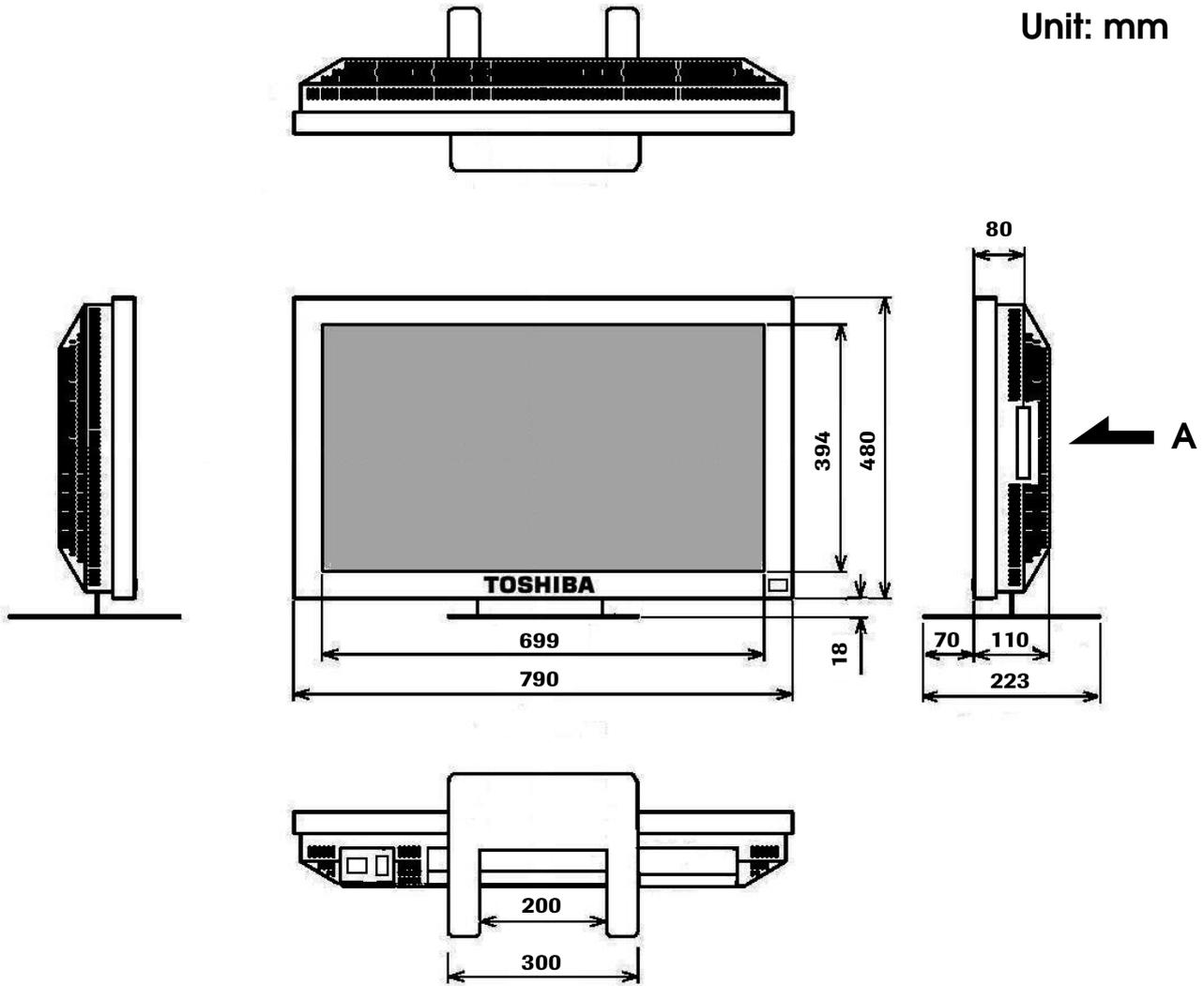
- For wiring details, refer to pages 20-23.
- Raise the LCD monitor and fix it on the ceiling installing bracket with screws.

At least two people are needed for this work.

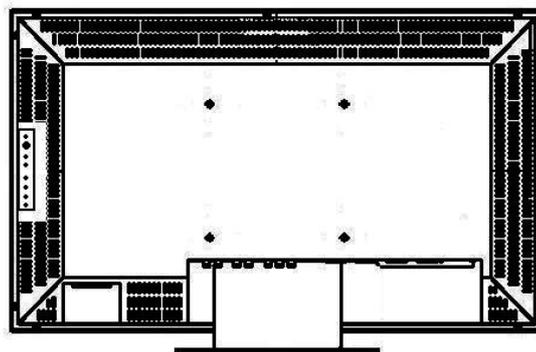


Dimension

Unit: mm



Back view (A-angle)



Specifications

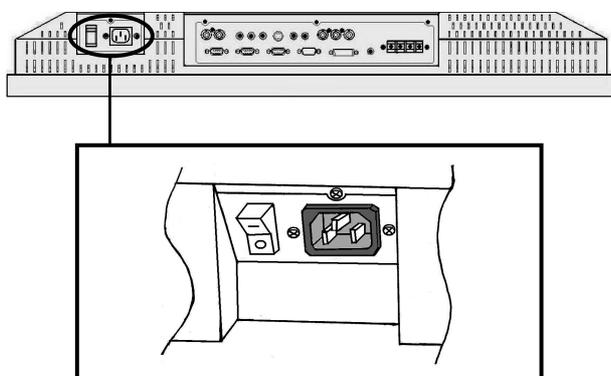
Power Consumption	100 – 240V AC, 50/60Hz, 135W
Standby Power Consumption	12.5W
Mass	19.5kg
Operating Temperature	5 – 40°C (41 – 104°F)
Operating Humidity	20%~80% (No moisture condensation)

Power on/off

Before turn on, wire all the cable connecting to auxiliary equipment, external speakers, power cord, etc.
There are two controls for power, Main power switch and POWER (standby / on) button.

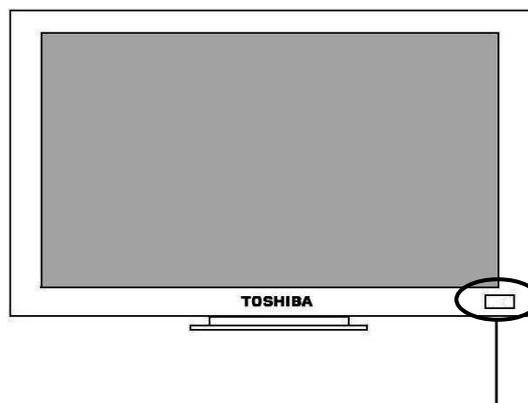
■ Main power switch

Bottom



Connect power cord and press “-” side of the switch, then Power Standby / On indicator lights on green.

Front



Power Standby / On indicator

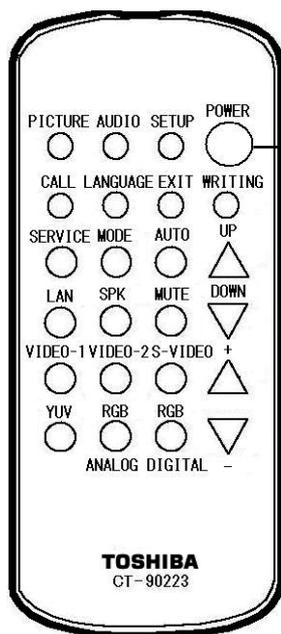
When the power is on, the Power Standby / On indicator lights on green.

When the power is in the standby mode, the Power Standby / On indicator lights on red.

If Main power switch is not On, you cannot turn on the unit by the POWER (Standby / On) button.

■ POWER button on the Remote control

About the control by the POWER button on the unit side on, refer to page 12.



POWER button on the Remote control

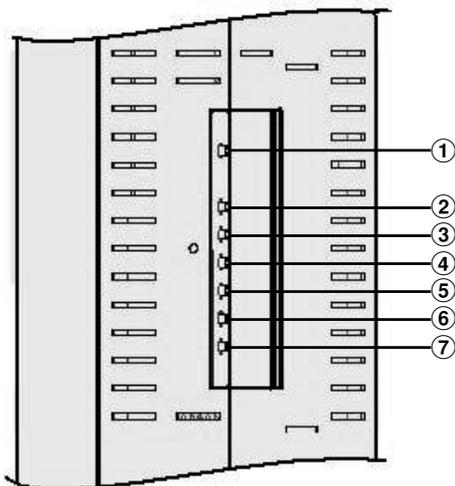
You can switch Power standby to On by pressing this button.

Menu Function

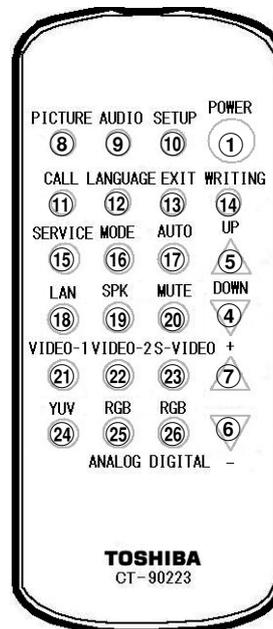
Displaying Menu, you can adjust pictures and sound or set various functions with the buttons on the remote control. The following are summary of Menu Function. For details, please see to referred pages.

Function of each button

Side of the unit



Remote control



name	Description
① POWER (side of the unit, the remote control)	To Power standby / On
② INPUT (side of the unit)	To convert the input line for video below. VIDEO-1→VIDEO-2→S-VIDEO→YUV→RGB ANALOG →RGB DIGITAL
③ MENU (side of the unit)	To display Home Menu
④ ▼ / DOWN (side of the unit, the remote control)	To scroll down Menu display
⑤ ▲ / UP (side of the unit, the remote control)	To scroll up Menu display
⑥ - (side of the unit, the remote control)	To scroll down Menu display, to reduce adjusting levels
⑦ + (side of the unit, the remote control)	To scroll up Menu display, to increase adjusting levels
⑧ PICTURE (the remote control)	To display PICTURE Menu
⑨ AUDIO (the remote control)	To display AUDIO Menu
⑩ SETUP (the remote control)	To display SETUP Menu
⑪ CALL (the remote control)	To display on-screen information
⑫ LANGUAGE (the remote control)	To select a language for display (Only English)
⑬ EXIT (the remote control)	To close Menu without saving the adjustment
⑭ WRITING (the remote control)	To close Menu saving the adjustment
⑮ SERVICE (the remote control)	Exclusively for a service technician use. Don't touch for ordinary use.
⑯ MODE (the remote control)	To change the size of the monitored image (16:9 - 4:3)
⑰ AUTO (the remote control)	To perform PC AUTO SETUP
⑱ LAN (the remote control)	For future use. This function is not available now.
⑲ SPK (the remote control)	To turn on / off output for speakers
⑳ MUTE	To mute the sound
㉑ VIDEO-1	To select VIDEO-1 input
㉒ VIDEO-2	To select VIDEO-2 input
㉓ S-VIDEO	To select S-VIDEO input
㉔ YUV	To select YUV input
㉕ RGB ANALOG	To select RGB ANALOG input
㉖ RGB DIGITAL	To select RGB DIGITAL input

■ Menu setting chart

			Adjustment range	Initial setting
HOME MENU This display is only for the MENU button on the side of the unit.	PICTURE	BRIGHT	-10 - +10	0
		CONTRAST	-10 - +10	0
		SHARPNESS	-10 - +10	0
		COLOR* ¹	-10 - +10	0
		TINT* ²	-10 - +10	0
		OSD	ON/OFF	ON
		WRITING	—	
		EXIT	—	
		RESET	—	
		AUDIO	VOLUME	
BASS			-50 - +50	0
TREBLE			-50 - +50	0
BALANCE			-50 - +50	0
MUTE			OFF/ON	OFF
SPK OUT			OFF/ON	ON
SETUP (PAGE 1)	SIZE* ¹		H. SIZE	-10 - +10
		V. SIZE	-10 - +10	0
	POSI	H. POSI	-10 - +10	0
		V. POSI	-10 - +10	0
	W/B	COLOR MODE	A/B	A
		R-DRIVE	-50 - +50	0
		G-DRIVE	-50 - +50	0
		B-DRIVE	-50 - +50	0
		R-CUTOFF	-50 - +50	0
		G-CUTOFF	-50 - +50	0
		B-CUTOFF	-50 - +50	0
		MODE	16:9/4:3	16:9
	CLOCK* ³	-32 - +32	0	
	PHASE* ³	-32 - +32	0	
	NR MODE* ³	OFF/1/2	OFF	
	(PAGE 2)* ⁴	SHRAPNESS MODE* ¹	1 - 4	1
		M ADAPTIVE	ON/OFF	ON
		LANGUAGE	ENGLISH (only)	
		CINEMA	ON/OFF	ON
V. FILTER		ON/OFF	ON	
WRITING		—		
EXIT		—		
RESET		—		
(PAGE 2)		LANGUAGE	ENGLISH (only)	
(For RGB ANALOG/ RGB DIGITAL input)		PC WIDE	OFF/ON	OFF
	PC AUTO SETUP	—		
	WRITING	—		
	EXIT	—		
	RESET	—		

*¹: Not available for RGB ANALOG, RGB DIGITAL input setting

*²: Not available for PAL, RGB ANALOG, RGB DIGITAL input setting

*³: Exclusive for YUV, RGB ANALOG, RGB DIGITAL input setting

*⁴: Page 2 of RGB ANALOG, RGB DIGITAL menu is different

<Terms of functions>

BRIGHT	Adjust darkness of the picture
CONTRAST	Adjust contrast of the picture
SHARPNESS	Adjust sharpness of the picture
COLOR	Adjust color depth of the picture
TINT	Adjust tint of the picture
OSD	Display on-screen information
VOLUME	Adjust volume
BASS	Adjust strength of bass sound
TREBLE	Adjust strength of treble sound
BALANCE	Adjust volume balance of right and left speakers
MUTE	Mute the sound
SPK OUT	Turn on / off output for speakers
H. / V. SIZE	Adjust horizontal / vertical size of the picture
H. / V. POSI	Adjust horizontal / vertical position of the picture
COLOR MODE	Color temperature A: 7200K B: 6000K
R / G / B -DRIVE	Adjust of the brightness of each colour of RGB
R / G / B -CUTOFF	Adjust of the darkness of each colour of RGB
MODE	Change the size of the displayed image (16:9 / 4:3)
CLOCK	Correct wavy pictures
PHASE	Correct trembling pictures
NR MODE	Reduce noise
SHARPNESS MODE	Select Sharpness Mode
M ADAPTIVE	Turn on / off subordinate scanning line for moving picture
LANGUAGE	Select a language for the on-screen display (only English)
CINEMA	Turn on / off IP converter for cinema mode
V. FILTER	Turn on / off vertical filter
PC WIDE	Turn on / off real sampling for WVGA / WSVGA / WXGA input
PC AUTO SETUP	Adjust and save best performance of RGB ANALOG automatically

■ Menu display chart

[HOME MENU display]

HOME MENU
PICTURE
AUDIO
SETUP

common

This display is only for MENU button.

[AUDIO MENU display]

AUDIO MENU	
VOLUME	30
BASS	0
TREBLE	0
BALANCE	0
MUTE	OFF
SPK OUT	ON

common

[PICTURE MENU display]

PICTURE MENU	
BRIGHT	0
CONTRAST	0
SHARPNESS	0
COLOR	0
TINT	0
OSD	ON
WRITING	
EXIT	
RESET	

For VIDEO-1 / VIDEO-2 /
S-VIDEO (NTSC input) /
YUV (NTSC / 480P / 1080i / 720p input)

PICTURE MENU	
BRIGHT	0
CONTRAST	0
SHARPNESS	0
COLOR	0
OSD	ON
WRITING	
EXIT	
RESET	

For VIDEO-1 / VIDEO-2 /
S-VIDEO (PAL input)

PICTURE MENU	
BRIGHT	0
CONTRAST	0
SHARPNESS	0
COLOR	ON
OSD	
WRITING	
EXIT	
RESET	

For RGB ANALOG / RGB DIGITAL

[SETUP MENU P1 display]

SETUP MENU P1	
SIZE	
POST	
W/B	
MODE	16:9
NR MOOD	OFF
SHARPNESS MODE	1

For VIDEO-1 / VIDEO-2 /
S-VIDEO (NTSC / PAL input)

SETUP MENU P1	
SIZE	
POST	
W/B	
MODE	16:9
CLOCK	0
PHASE	0
NR MOOD	OFF
SHARPNESS MODE	1

For YUV
(NTSC / 480p / 720p / 1080i / PAL input)

SETUP MENU P1	
POST	
W/B	
MODE	16:9
CLOCK	0
PHASE	0

For RGB ANALOG / RGB DIGITAL

[SETUP MENU P2 display]

SETUP MENU P2	
M ADAPTIVE	ON
LANGUAGE	ENGLISH
CINEMA	ON
V. FILTER	ON
WRITING	
EXIT	
RESET	

For VIDEO-1 / VIDEO-2 / S-VIDEO / YUV

SETUP MENU P2	
LANGUAGE	ENGLISH
PC WIDE	OFF
PC AUTO SETUP	
WRITING	
EXIT	
RESET	

For RGB ANALOG / RGB DIGITAL

[SETUP SUB MENU display]

SIZE	
H.SIZE	0
V.SIZE	0

Sub menu : SIZE

POSI	
H.POSI	0
V.POSI	0

Sub menu : POSI

W/B	
COLOR	A
R-DRIVE	0
G-DRIVE	0
B-DRIVE	0
R-CUTOFF	0
G-CUTOFF	0
B-CUTOFF	0

Sub menu : W / B

[Other displays]

BRIGHT	0
--------	---

common
Setting selected items /
Adjustment (Example: BRIGHT)

SELECT WRITING OR EXIT

common
Writing E²PROM / EXIT

AUTO IN PROGRESS

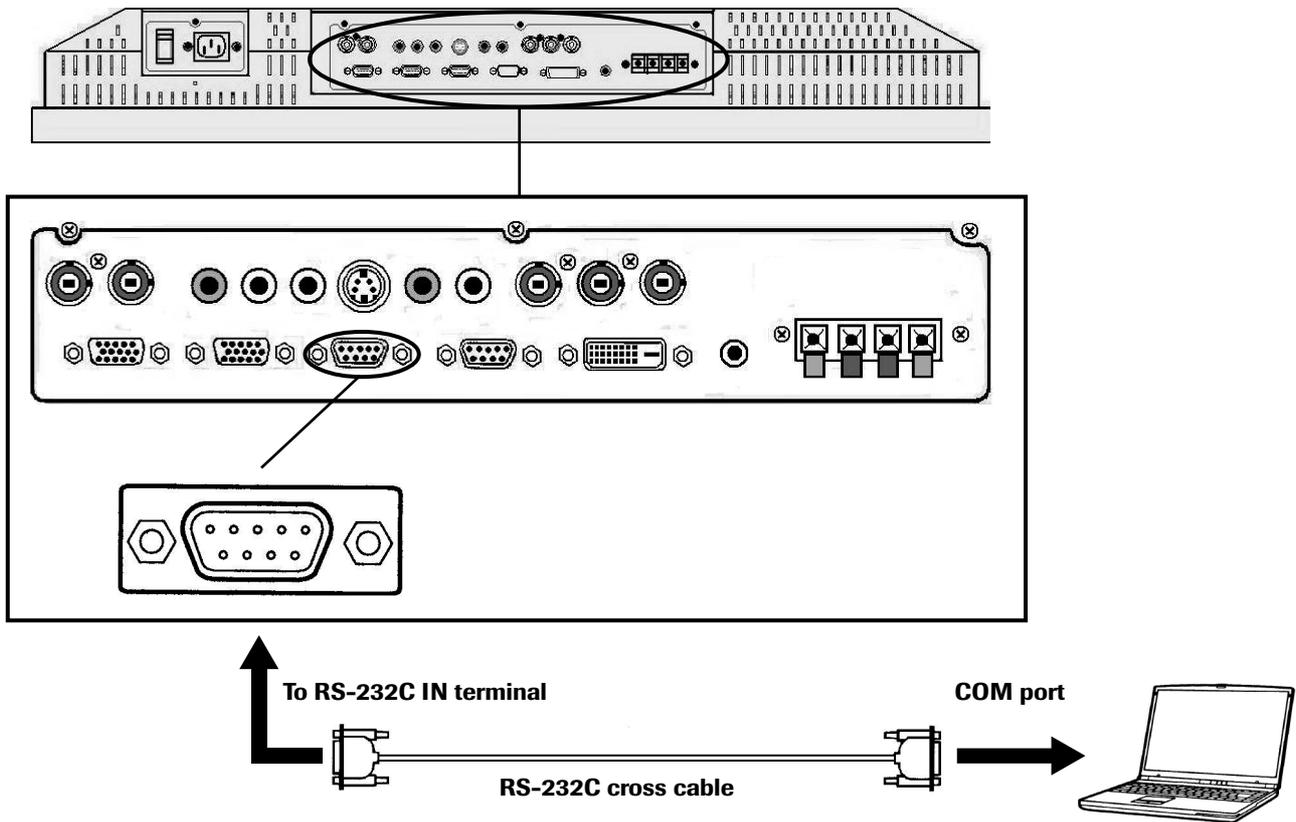
For RGB ANALOG / RGB DIGITAL /
PC AUTO SETUP

Control by Computer

■ Connection

To connect in series

You can connect COM port (RS-232C connector) of the PC to RS-232C IN terminal on the unit using RS-232C cross cable.



■ Transfer

Transfer of RS-232C on the PC

Baud rate	9600 bps
Data bus	8 bit
Parity	None
Stop bit	1 bit
Flow control	None

■ Input signal

Format for RGB•DVI input signal (Timing)

No.	Name of input signal	Horizontal frequency [kHz]	Vertical frequency [Hz]	Dot clock frequency [MHz]	Sampling frequency [MHz]	Note
1	CEA (640 × 400)	24.82	56.42	21.05	21.05	inapplicable to DVI input
2		31.48	70.10	25.18	25.18	
3		37.86	85.08	31.50	31.50	
4	(700 × 400)	31.47	70.08	28.32	25.18	
5		37.93	85.04	31.50	31.50	
6	VGA (640 × 480)	31.48	59.95	25.18	25.18	
7		37.86	72.81	31.50	31.50	
8		37.50	75.00	31.50	31.50	
9		43.27	85.01	36.00	36.00	
10	13" mode (MAC) (640 × 480)	35.00	66.67	30.24	30.24	
11	SVGA (800 × 600)	35.16	56.25	36.00	36.00	
12		37.88	60.32	40.00	40.00	
13		48.08	72.19	50.00	50.00	
14		46.88	75.00	49.50	49.50	
15		53.67	85.06	56.25	56.25	
16	16" mode (MAC) (832 × 624)	49.72	74.55	57.28	57.28	
17	XGA (1024 × 768)	48.36	60.00	65.00	65.00	
18		56.48	70.07	75.00	75.00	
19		60.02	75.03	78.75	78.75	
20		68.68	85.00	94.50	94.50	
21	19" mode (MAC) (1024 × 768)	60.24	74.93	80.00	80.00	
22	W-XGA (1280 × 768)	48.13	60.017	81.25	81.25	
23		47.99	59.833	81.00	81.00	
24		48.21	60.571	81.00	81.00	
25	21" mode (MAC) (1152 × 870)	68.68	75.06	100.00	100.00	
26	SXGA (1280 × 1024)	63.98	60.02	108.00	92.00	Down sampling

A Guide to Simple Problem Solving

Before calling service personnel, please check the following chart for a possible cause to the trouble you are experiencing.

Symptom	Check these things	Page
No picture, no sound	• Make sure the power cord is plugged in.	20
	• May be the power is Off or Standby.	30
	• Check whether the auxiliary equipment is connected.	17 - 18
	• Check the input setting is correct.	31 - 35
	• Make sure the auxiliary equipment is turned on.	—
No picture, sound OK	• The video input setting may not correspond to a connected terminal.	31
	• Signal may not be suitable.	
The remote control does not operate	<ul style="list-style-type: none"> • Make sure the batteries are inserted matching the + and – marks of the battery compartment. • The batteries may be exhausted. • Use the remote control aiming at the remote control sensor. 	15
The right speaker and the left speaker sound reverse. Only one speaker of the pair sounds.	• Make sure the audio cables are correctly connected.	17
	• Cables on external speakers may be connected reverse for the right and the left speakers.	19
	• Check both cables of the right and the left speakers are connected.	
No sound, picture OK	• The volume level may be minimum.	34
	• The sound may be muted.	
	• The SPK OUT control may be Off.	
	• VIDEO -1, S-VIDEO, COMPONENT VIDEO, RGB and DVI are terminals for video. When you use these terminals, connect audio terminals also.	17
	• Make sure the audio terminals correspond to the selected video terminals.	17
The picture color is pale, or not clear	• Check the picture quality adjustment.	32 - 33
	• If you are using YUV terminals, make sure cables are correctly connected.	17
RS232C cannot control the unit	• Check the setting for the PC, baud rate and so on.	36

■ For inquiries and repair

Please refer to the shop you bought the unit for repair and inquiries.

Note

USER-INSTALLER CAUTION

YOUR AUTHORITY TO OPERATE THIS FCC CERTIFIED EQUIPMENT COULD BE VOIDED IF YOU MAKE CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THIS PARTY RESPONSIBLE FOR COMPLIANCE TO PART 15 OF THE FCC RULES.

NOTE:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



Caution

It may be against copyright regulation to broadcast commercial video software or unit programs for commercial purpose using this product, or to rewrite such software or programs with wipe-mirror function. Please refer to a entitled party for approval in advance.



Warning

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Annex

Suggested text for the notice indicating compliance with this Standard:

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

About trademarks

VGA, SVGA, XGA and SXGA are trademarks or registered trademarks of International Business Machines Corporation.