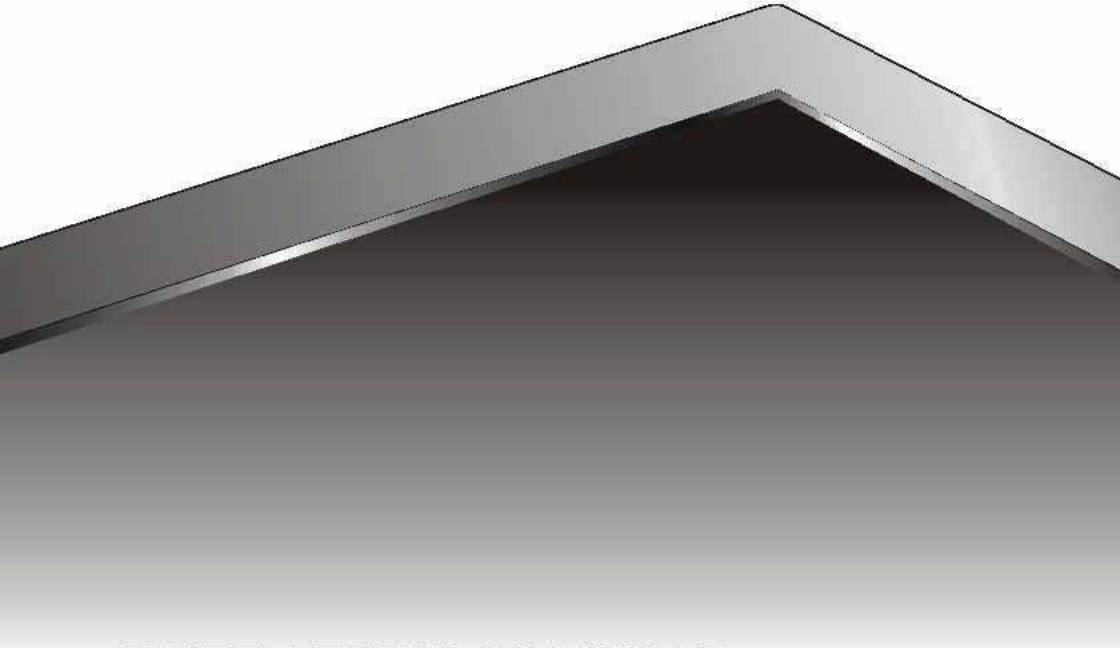
ENGLISH

HITACHI

LCD COLOR TV

C15-LC800SNT
C20-LC800SNT



OPERATION MANUAL

Dear Customers

May we take this opportunity to thank you for purchasing this TFT-LCD TV/monitor.
We strongly recommend that you read the safety and operation instructions thoroughly before operating your TFT-LCD TV/monitor. ***FOLLOW ALL THE INSTRUCTIONS AND WARNINGS*** on your TFT-LCD TV/monitor and in this manual.
Sometimes the LCD TV/monitor may have some tiny red, green, blue, white or black spots. Please note that this is normal and does not affect the performance of the LCD TV/monitor.

Trademark Information

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IMPORTANT SAFETY INSTRUCTIONS

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.

This symbol indicates important instructions accompanying the product.

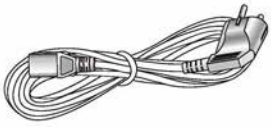
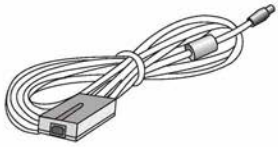
- Before connecting the AC power cord to the DC adapter outlet, make sure the voltage designation of the DC adapter corresponds to the local electrical supply. **If you are unsure of your power supply, ask your local power company.**
- Never insert objects of any kind into the cabinet openings of the liquid crystal display (LCD) TV/monitor; doing so may result in a fire or electric shock.
- To avoid electric shock, never touch the inside of the LCD TV/monitor. Only a qualified technician should open the case of the LCD TV/monitor.
- Never use your LCD TV/monitor if the power cord has been damaged. Do not allow anything to rest on the power cord, and keep the cord away from areas where people can trip over it.
- Be sure to hold the plug, not the cord, when disconnecting the LCD TV/ monitor from an electric socket.
- Openings in the LCD TV/monitor cabinet are provided for ventilation. To prevent overheating, these openings should not be blocked or covered. Also, avoid using the LCD TV/monitor on a bed, sofa, rug, or other soft surface. Doing so may block the ventilation openings in the bottom of the cabinet. If you put the LCD TV /monitor in a bookcase or some other enclosed space, be sure to provide adequate ventilation.
- Do not expose the LCD TV/monitor to extreme temperature conditions or to extreme humidity conditions.

IMPORTANT SAFETY INSTRUCTIONS

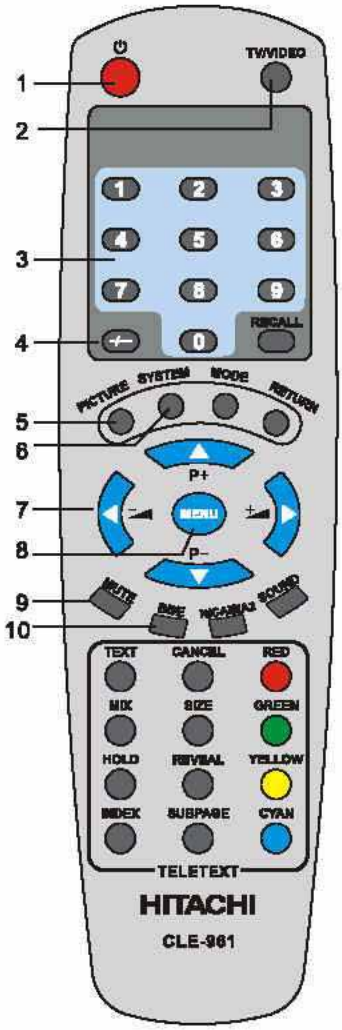
- Do not expose the LCD TV/monitor to dripping or splashing water or use it near water (In kitchens, near swimming pools, etc.). If the LCD TV/monitor accidentally gets wet, unplug it and contact a qualified service personnel immediately.
- Do not place the LCD TV/monitor on an unstable cart, stand, tripod, bracket, table or floor etc. It may be damaged if dropped, hit or scratched. Do not clean the surface with keton-type materials (e.g., Acetone), ethyl alcohol, toluene, ethyl acid, methyl, or chloride etc. as these chemicals may damage the panel.
- Place your LCD TV/monitor near an easily accessible AC outlet. Do not overload wall outlets and extension cords as this may result in fire or electric shock.
- If the LCD TV/monitor has been dropped or damaged, unplug it from the wall outlet and refer servicing to a qualified service personnel.
- In order not to damage the parts in the set, unplug and remove the antenna connection during lightning.
- Avoid any kind of impact to the LCD TV/monitor. Be special careful not to damage the screen face.
- If your LCD TV/monitor does not operate properly, in particular, if there are any unusual sounds or smells coming from it. Unplug it immediately and contact a qualified service personnel.
- High temperature may cause problems to your LCD TV/monitor. Do not place it in direct sunlight, and keep it away from heaters, stoves, fireplaces, and other sources of heat.
- Unplug the LCD TV/monitor when it is going to be left unused for an extended period of time.
- To reduce the risk of fire or electric shock, and annoying interference, use the recommended accessories only.
- If the LCD TV/monitor does not work properly even after you have refer to the **TROUBLESHOOTING** section, unplug the set and contact a qualified service personnel. Do not attempt to repair it yourself.
- Unplug your LCD TV/monitor from the AC outlet before any service.
- Ensure that the qualified service personnel uses authorized replacement parts or their equivalents. Unauthorized parts may cause fire, electrical shock, or other hazards.
- After any service or repair, ensure that the qualified service personnel performs safety checks to certify that your TFT-LCD TV/monitor is in safe operating order.

CHECKING ACCESSORIES

Please check and identify the supplied accessories.

Operational Manual	Remote Controller/ Batteries (AAA X 2)
 Power Cord	 AC-DC Adapter

LOCATION AND FUNCTION OF CONTROLS



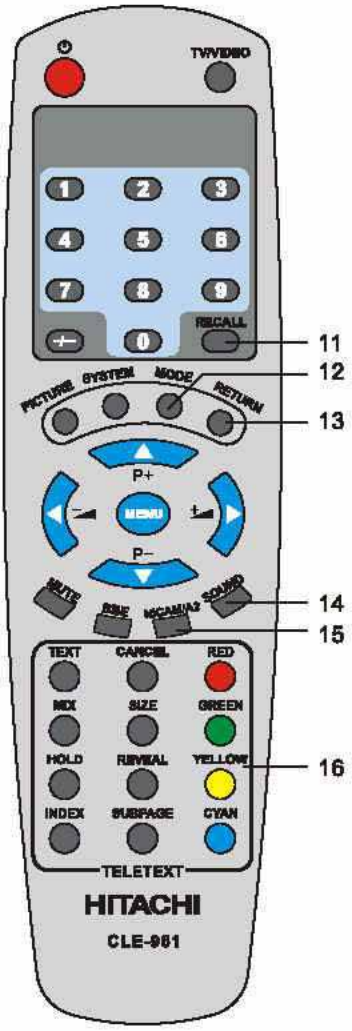
All the functions can be controlled with the remote controller. Some functions can also be adjusted with the buttons on the front panel of the set.

Remote controller

1. ⏻ (STANDBY)
   To switch on the LCD TV/monitor when at standby mode or vice versa.
2. TV/VIDEO
   To select TV, AV (Video/S-Video/YUV) or PC monitor mode.
3. NUMBER BUTTONS
   To directly select program number.
4. ONE/TWO-DIGIT
   To select one or two-digit program number input options.
5. PICTURE
   To adjust picture control (brightness/ contrast/color).
6. SYSTEM
   To adjust color or sound system.
7. ◀/▶ (VOLUME UP/DOWN)
   To increase or decrease the volume.
   To adjust menu settings.

   ▲/▼ (PROGRAM UP/DOWN)
   To select the program in ascending or descending order.
   To select a menu item.
8. MENU
   To enter or exit from the menu(TV/AV mode).
   To accept your selection (PC mode).
9. MUTE
   To switch on or off sound mute.
10. BBE
    To switch BBE on or off.

LOCATION AND FUNCTION OF CONTROLS



11. RECALL

To display setup information of channel.

12. MODE

To select the picture mode (USER/ SOFT/DYNAMIC/STANDARD).

13. RETURN

To return to previously selected program number .

14. SOUND

To select the sound mode (HALL/ CHURCH/STEREO/WIDE)

15. NICAM/A2

To switch between NICAM , A2 and mono sound output.

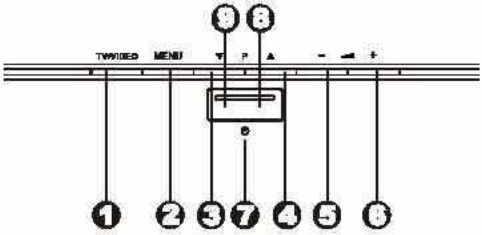
16. TELETEXT BUTTONS (OPTIONAL)

These buttons are used for certain models with Teletext functions only. For further details, refer to the TELETEXT FUNCTION.

LOCATION AND FUNCTION OF CONTROLS

Front panel controls

This TFT-LCD TV/monitor allows you to easily adjust the characteristics of the Image being displayed. While you use these buttons to adjust the controls, the OSD (on-screen-display) will show you their numeric values as they change.



1. TV/VIDEO: Select TV, AV (Video/S-Video/YUV) or PC monitor mode.

2. MENU : Enter or exit from the menu

3. CH- : When you watch the TV program, push this button to decrease channel number. In the main-menu, push this button to select the downward menu item.

4. CH+ : When you watch the TV program, push this button to increase channel number. In the main-menu, push this button to select the upward menu item.

5. VOL- : Decrease/adjust the values of the selected menu item, or decrease the level of audio volume.

6. VOL+ : Increase/adjust the values of the selected menu item, or increase the level of audio volume.

7. POWER ⏻ : Switch on the LCD TV/monitor when at standby mode or vice versa.

8. POWER INDICATOR : When LCD TV/monitor is in standby mode, it will light up in green. When LCD TV/monitor is power on, it will not light up.

9. REMOTE SENSOR: Infrared sensor for the remote controller.

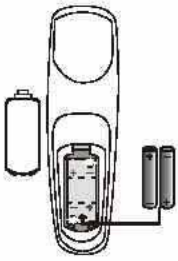
Note:

If there is no signal input from TV/AV and PC for 15 minutes and 20 seconds respectively, the LCD TV/monitor will switch to standby mode automatically. The power indicator will light up in green. If you want to switch on the LCD TV/monitor again, please press the power button on the TV or ⏻ button on the remote controller.

INSTALLATION AND CONNECTION

Battery Installation

Insert the batteries while observing the correct (+) and (-) polarities as illustrated below.



About the batteries

- If the remote control unit fails to work even when it is operated near the LCD TV/monitor, please replace the batteries.
- Use size UM-4(AAA) batteries.

Notes:

- Do not use rechargeable (NI-Cd) batteries.
- Do not attempt to recharge, short circuit, disassemble, heat or throw the batteries into the fire.
- Do not drop, step on or cause any impact to the remote control unit. This may damage it, resulting malfunction.
- Do not mix old and new batteries.
- If the remote control unit is not going to be used for a long time, remove the batteries.

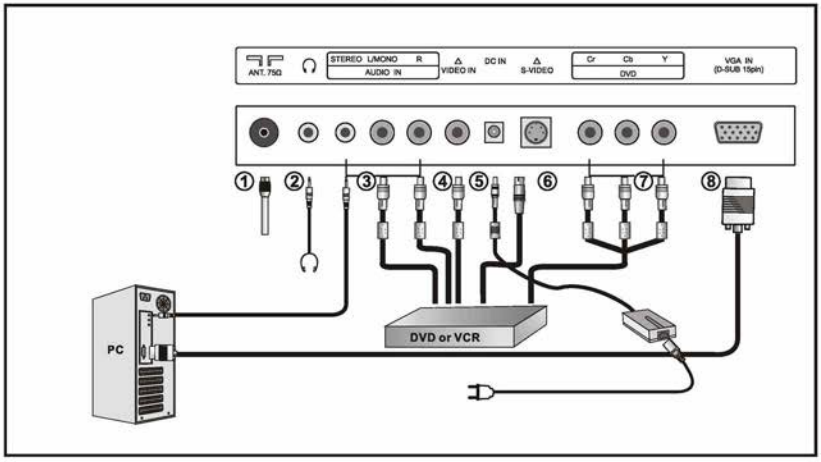
Caution
Keep batteries out of children's reach. If batteries are swallowed, contact a physician immediately.

DC adapter Installation

- Be sure to use the power cord and DC adapter included in the accessories.
- Usage of DC adapters other than specified may cause malfunctions.

INSTALLATION AND CONNECTION

Connecting your LCD TV/monitor



1. Antenna Input Socket (75 Ohm)
2. Headphone Jack
3. AUDIO IN Terminals
4. VIDEO IN Terminals
5. DC IN Terminal
6. S-VIDEO Terminal
7. Y/Cb/Cr (YUV) Terminals
8. VGA IN (D-SUB 15 Pin) Terminal

Note:

1. For Australia only-Install an external aerial conforming to AS 1417.1 for safety purpose.
2. Connect the power cord to DC adapter and the adapter jack to the DC IN terminal on the back of your LCD TV/monitor (15":12V, 20":19V).
3. If any monaural equipment is to be connected to the LCD TV/monitor, connect its audio output cable to the L/MONO terminal.

Precautions when connecting to other equipment

1. When using external equipment with this LCD TV/monitor, please read the instruction manual of the external equipment.
2. Switch off all power supplies to the equipment and LCD TV/monitor before connection.
3. Always ensure that the input and output terminals are correctly connected.

BASIC OPERATIONS

On and standby

1. Press the power button on the front panel of the unit to switch it on or to standby mode.
2. If the unit is in standby mode, press the ⏻ button on the remote controller to switch it on.
3. Press the ⏻ button on the remote controller, the unit will revert to standby mode.

Note:
If, while the unit is switched on, the mains plug is disconnected, the unit will switch to standby when the mains plug is replaced in the mains power socket again.

Mute function

Press the MUTE button. The sound is switched off and the icon 🔇 appears on screen. You can cancel it by pressing the MUTE button again.

TV/VIDEO selection

Press the TV/VIDEO button repeatedly, you can select TV, AV (Video/S-Video/YUV) or PC mode.

Menu selection

Press the MENU button to display each menu.
Note: Different menu will appear for TV, AV (Video/S-Video/YUV) or PC mode.

TV system selection

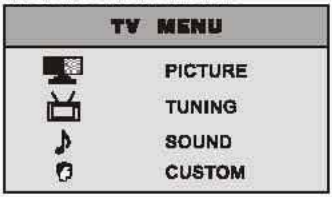
SYSTEM button allows you to select your desired color system and sound system.

1. Repeatedly press SYSTEM button to select system. Press this button once, the color system will display on the screen. Press the button again, the sound system will display on the screen.
2. Press ◀/▶ button to select a system mode you desired.
   In color system mode, you can select PAL, SECAM or NTSC mode according to your signal received. After you selected the color system, you can press SYSTEM button again to select a corresponding sound system. In the sound system, you can select I, BG, DK and M.

SETUP OF TV STATIONS

Menu settings

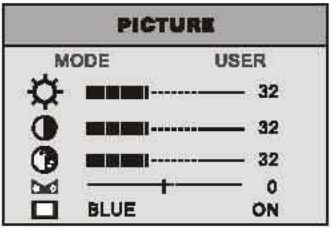
When in TV mode, press the MENU button on the front panel or remote controller to enter the main-menu.



Press ▲ /▼ button to select the item. Press ◀ /▶ button to confirm the selection and enter its sub-menu.

Picture

When you select "PICTURE" and press ◀/▶ button , the following screen will appear:



4 types of picture modes are available - USER, SOFT, DYNAMIC and STANDARD. Use ◀/▶ to select your desired picture mode. Use ▲/▼ button to select the item which you want to adjust and ◀/▶ button to adjust. SOFT, DYNAMIC and STANDARD are factory preset picture modes. If you want to adjust any items (eg. Brightness, Contrast etc.) in any of these modes, it will be store in the USER mode.

Note: You may access these settings directly by pressing the PICTURE or MODE buttons on the remote controller too.

Icon	Name	Description
	Brightness	Adjust the luminance of the display.
	Contrast	Adjust the difference between the light and dark areas.
	Color	Adjust the chrominance saturation.
	Tint	Adjust the tone of color when your system is in NTSC. **Note:** For other system, the icon of TINT will not appear on the menu.
	Blue	Select the blue on or off. If on, the screen background will turn blue at very weak or no signal condition.

SETUP OF TV STATIONS

Tuning

In the main-menu, use ▲/▼ button to select "TUNING", and press ◀/▶ button to enter into the "TUNE MENU".The following screen will appear:

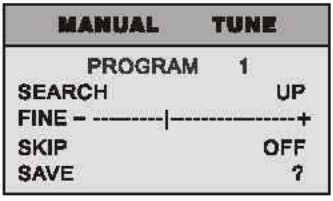
- Press ▲/▼ button to select "AUTO" and press ◀/▶ button to enter into the "AUTO SEARCH" menu.

Press ◀/▶ button to start searching. All the TV stations in your area that can be received by the TV set are automatically preset. Band channel numbers and the searching rate of progress (0% to 100%) will display on the menu.

Note: Before you select "AUTO SEARCH" mode, please select a proper color and sound system according to your local system. (To select color or sound system, please refer to the page that contains TV system selection)

- You can select "MANUAL" in "TUNE MENU" to manually search for your desired broadcast stations or fine tune the channels received.

1 Press ▲/▼ button to select "MANUAL" and press ◀/▶ button to enter into the sub-menu.



2 In the "MANUAL TUNE" sub-menu, you can use the ▲/▼ button to select the item, and press ◀/▶ to change it.

Item	Description
PROGRAM	The program number. You have 100 program numbers (0-99) to select.
SEARCH	You can use the ◀/▶ button to search up or down for your desired broadcast station. When a channel is found, the search will stop. During searching, the ◀/▶ button will be invalid.
FINE	Due to weak signals or a wrong antenna configuration, some of the channels may not be tuned to the best reception condition. Select "FINE" and use the ◀/▶ button to fine tune the selected channel.
SKIP	Set the skip function by pressing the ◀/▶ button. When set to "ON", the program number will be skipped when you select channels with the ▲/▼ button. But you can select the skipped channel by pressing the number buttons directly. The channel number will be displayed in red.
SAVE	After complete all the settings for "MANUAL TUNE", select "SAVE" and use the ◀/▶ button to change the "?" to "✓" to save your settings. If you want to cancel the setting, you can press the MENU button to return to last menu.

"SORT" menu allows you to arrange the channel numbers by exchanging between 2 preset channels. Press ▲/▼ button to select "SORT" and press ◀/▶ button to enter into the "SORT" sub-menu. The following screen will appear:

SORT	
FROM	1
TO	1
STORE	?
DELETE	

Press ▲/▼ button to select the available items, and use ◀/▶ button to adjust.

SETUP OF TV STATIONS

Item	Description
FROM	Use the ◀/▶ button to select the channel number that you want to exchange from.
TO	Use the ◀/▶ button to select the channel number that you want to exchange to.
STORE	Use the ◀/▶ button to change "?" to "✓" to save the setting. Press MENU button to exit the setting and return to previous menu.
DELETE	Select this item, the current program will be deleted.

Sound

Regarding the "SOUND" menu, please refer to the page that contains **SOUND ADJUSTMENT**.

Custom

The "CUSTOM" menu allows you to select the OSD (on-screen-display) language and set the timer.
In the main-menu, press ▲/▼ button to select "CUSTOM" and press ◀/▶ button to enter into the "SETUP" menu.

SETUP	
	ENGLISH
	MIN

Select OSD (on-screen-display) language
Press ▲/▼ button to select language icon, and use ◀/▶ button to select the desired language.

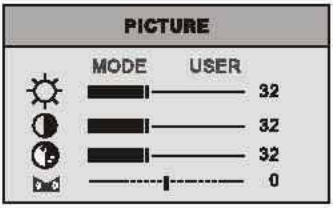
Timer setting
"TIMER" function allows you to set the timer to switch the TV from on to stand-by mode after a preset time.
Press ▲/▼ button to select the timer icon and press ◀/▶ button to select the time intervals: 00, 30, 60, 90 and 120 minutes. When your selection is completed, please press the MENU button to exit.
Note: At the last minute, "1 MIN OFF" will appear on the screen.

CONNECTION OF EXTERNAL EQUIPMENT

You can connect additional equipment, such as DVD, camcorders etc. to your LCD TV/monitor with the Video, S-Video or YUV terminals available. In the AV mode (Video/S-video/YUV), you can press the MENU button to enter the main-menu.

Picture

In the main-menu, press ▲/▼ button to select "PICTURE" and press ◀/▶ button to enter into "PICTURE" sub-menu. You can use the ◀/▶ button on the front panel or remote controller to select your desired picture mode - USER, SOFT, DYNAMIC and STANDARD. If you want to adjust any items (eg. Brightness, Contrast etc.) in any of these modes, it will be store in the USER mode.
In the AV mode, there are 5 types of color system for selection: AUTO, PAL, NTSC (N3.58/N4.43) and SECAM. The TINT adjustment item is only available in NTSC color system.



Sound

Regarding the "SOUND" menu, please refer to the page that contains **SOUND ADJUSTMENT**.

Custom

In main-menu, press ▲/▼ button to select "CUSTOM ", and press ◀/▶ button to enter into this sub-menu, use ◀/▶ button to select the desired language.

Note: If there are no signal input from the AV terminals (Video/S-Video/YUV), the screen on your TV/monitor will display "VIDEO NO SIGNAL" , "S-VIDEO NO SIGNAL" or " YUV NO SIGNAL" respectively.

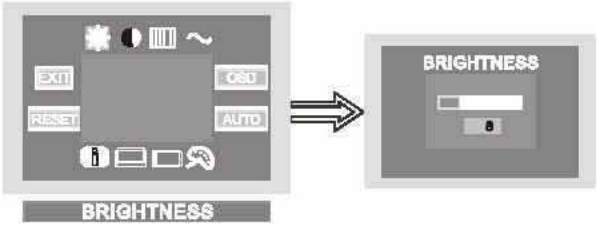
CONNECTION OF PC

If the LCD TV/monitor is in PC mode, you will have the following adjustable functions. If your LCD TV/monitor is not connected to a computer, the screen will display "PC NO SIGNAL".

In PC mode, press MENU button to enter into the main-menu. Press ▲/▼ button to select one of these items, and then press the MENU key to enter into the selected sub-menu. The selected item will be highlighted.

☼ BRIGHTNESS

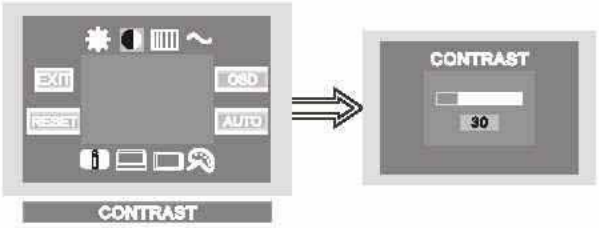
1. In the main-menu, press the ▲/▼ button to select the Brightness icon.
2. Press the MENU button to enter to the sub-menu.



3. Use the ◀/▶ button to adjust the brightness level.
4. Press MENU button to exit from this sub-menu .

CONTRAST

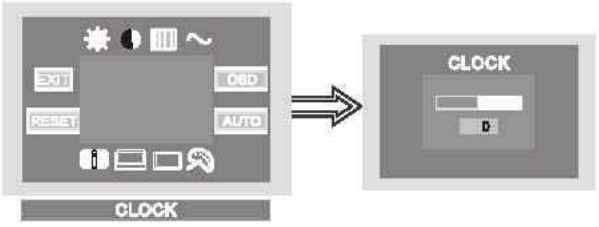
1. In the main-menu, press the ▲/▼ button to select the Contrast icon.
2. Press the MENU button to enter to the sub-menu.



3. Use the ◀/▶ button to adjust the contrast level.
4. Press MENU button to exit from this sub-menu .

CLOCK

1. In the main-menu, press the ▲/▼ button to select the Clock Icon.
2. Press the MENU button to enter to the sub-menu.

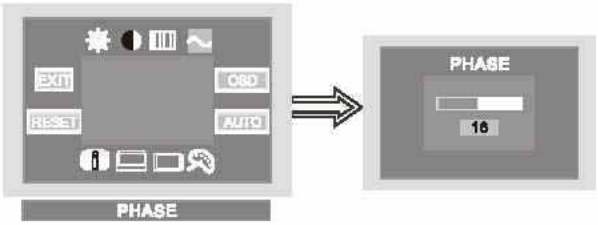


3. Use the ◀/▶ button to remove any vertical interference.
4. Press MENU button to exit from this sub-menu.

CONNECTION OF PC

PHASE

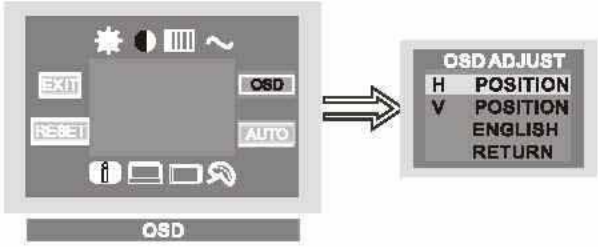
1. In the main-menu, press the ▲/▼ button to select the Phase icon.
2. Press the MENU button to enter to the sub-menu.



3. Use the ◀/▶ button to remove any horizontal interference.
4. Press MENU button to exit from this sub-menu .

OSD (on-screen-display position)

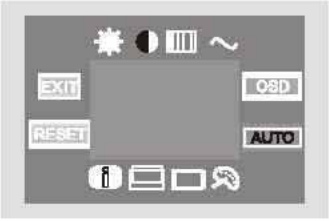
1. In the main-menu, press the ▲/▼ button to select the OSD item.
2. Press the MENU button to enter to the sub-menu.
3. Use the ▲/▼ button to select the OSD item which you want to adjust and ◀/▶ button to adjust.



Item	Description
H (horizontal) POSITION	Adjust OSD horizontal position
V (vertical) POSITION	Adjust OSD vertical position
ENGLISH (or other language)	To select the desired language
RETURN	Exit from the sub-menu

AUTO (auto adjustment)

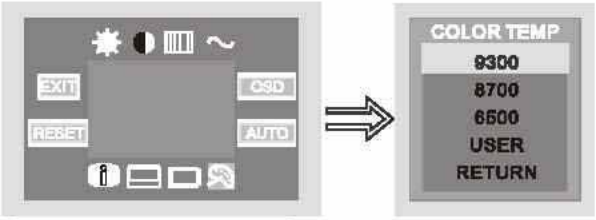
1. In the main-menu, press the ▲/▼ button to select the AUTO item.
2. Press the MENU button to activate auto adjustment for clock, phase, horizontal and vertical position.



AUTO SET

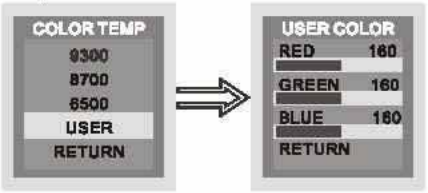
COLOR TEMP(temperature)

1. In the main-menu, press the ▲/▼ button to select the COLOR TEMP Icon.
2. Press the MENU button to enter to the sub-menu.
3. There are three color temperature: 9300, 8700, 6500. After you have selected one of this value, you can press the MENU button to activate it.



COLOR TEMP

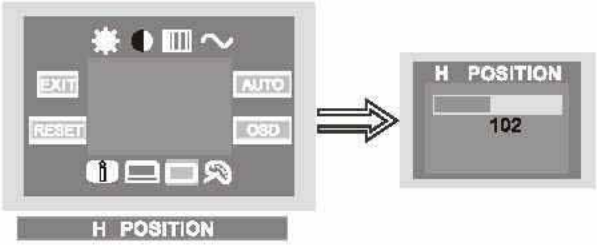
4. To select a new Color TEMP value, press ▲/▼ button to select "USER". Press MENU button to enter "USER" sub-menu to make adjustment. After adjustment, select "RETURN" to exit .



CONNECTION OF PC

HORIZONTAL POSITION

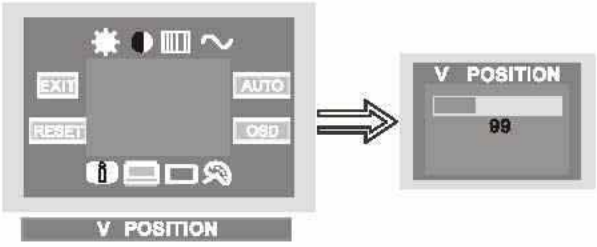
1. In the main-menu, press the ▲/▼ button to select the Horizontal position icon.
2. Press the MENU button to enter to the sub-menu.



3. Press the ◀/▶ button to adjust the horizontal position.
4. Press MENU button to exit from this sub-menu.

VERTICAL POSITION

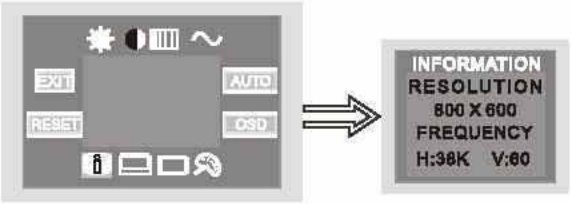
1. In the main-menu, press the ▲/▼ button to select the vertical position icon.
2. Press MENU button to enter to the sub-menu.



3. Press ◀/▶ button to adjust the vertical position.
4. Press MENU button to exit from this sub-menu.

INFORMATION

1. In the main-menu, press the ▲/▼ button to select the information icon.
2. Press the MENU button to activate this function.
3. The screen will display the information of the resolution, horizontal frequency and vertical frequency.

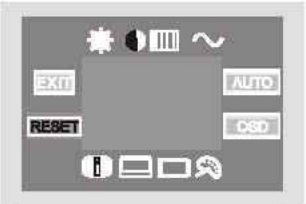


INFORMATION

RESET

Reset function allows you to return all the settings to the factory default values.

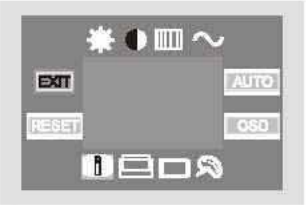
1. Press the ▲/▼ button to select this item.
2. Press the MENU button to reset all the current settings to factory default values.



RESET

EXIT

If you want to exit from the main-menu, please press the ▲/▼ button to select this item , and press the MENU button to confirm the selection.



EXIT

SOUND ADJUSTMENT

SOUND menu

The "SOUND" menu allows you to adjust the BALANCE, BASS, TREBLE or BBE LEVEL in the SOUND menu.
In TV/AV mode (except PC mode), press MENU button to display the main-menu. Press ▲/▼ button to select "SOUND", and press ◀/▶ button to enter to the sub-menu.

SOUND	
BALANCE	0
BASS	0
TREBLE	0
BBE LEVEL	0
BBE	OFF

Use the ▲/▼ button to select the item that you want to adjust and press ◀/▶ button to adjust.

BALANCE: Adjust the ratio of the left and right speaker sound level.

BASS: Increase/decrease the level of the lower-pitched sounds.

TREBLE: Increase/decrease the level of the higher-pitched sounds.

BBE LEVEL: Adjust the level of the BBE sound effect.

BBE: Turn the BBE sound effect on or off. This function can be set by pressing BBE button on remote controller too.

Note:

- BBE button on the remote controller can be use in all TV, AV and PC modes.

BBE sound technology enhances speech intelligibility and restores the dynamic range of musical passages to provide outstanding natural sound.

SOUND ADJUSTMENT

Sound modes

In all modes (TV/AV/PC), you can repeatedly press SOUND button to change the sound mode. 4 types of sound modes are available- HALL, CHURCH, STEREO and WIDE. You can select the type of sound effect which you desire.

NICAM/A2 Stereo reception (optional)

If you are able to receive program with NICAM/A2 STEREO signal, you should be able to receive NICAM/A2 STEREO sound.

1. When NICAM/A2 STEREO is received, you can select NICAM/A2 STEREO or FM MONO by using the NICAM/A2 button on the remote controller. If the stereo signal is weak, it will be switched to FM MONO automatically. (When NICAM/A2 STEREO is received, the Icon ∞ will appear on the screen.)
2. When NICAM/A2 STEREO DUAL is received, you can select NICAM DUAL I, NICAM DUAL II or A2 STEREO DUAL I, DUAL II or MONO by using the NICAM/A2 button on the remote controller. When FM MONO is selected the icon ▽ will appear on the screen. (When NICAM/A2 STEREO DUAL is received, the icon I/II will appear on the screen.)

Note:

1. The NICAM/A2 STEREO function can only be set in TV mode.
2. In the event of a poor NICAM transmission or a missing input signal, the device will automatically switch to the reserve FM (BG, I,D/K) Mono sound signal.

TELETEXT FUNCTION (OPTIONAL)

Teletext is an optional function, therefore only certain models can receive the teletext broadcast.
Teletext is a free broadcast service by most TV stations which gives up-to-the-minute information on news, weather, television program, share prices and many other topics.

Displaying Teletext

1. Select a TV station with teletext signal.
2. Press the TEXT button to enter Teletext mode.
3. Press the TEXT button again to return to the normal TV mode.

Page selection

1. Enter the desired page number (three digit) using the number buttons. If you press a wrong number during input, you must complete the three digit number and then re-enter the correct page number.
2. The ▲/▼ button can be used to select the preceding or following page.

Mix mode

This function enables you to superimpose the Teletext page over the TV program.
1. When a page is displayed, press the MIX button. The TV picture will appear with the TEXT page.
2. Press the MIX button again to return to the normal Text mode.

HOLD

You can press the HOLD button to hold a page, and press this button again to release the page.

INDEX

Press the INDEX button to go to the main index page directly.
You may enter the main index page number directly using the number buttons.

TELETEXT FUNCTION (OPTIONAL)

CANCEL

If you want to watch TV, but not cancel the TELETEXT mode completely, press the CANCEL button. When the last selected page is updated, the page number will appear at the top of the TV screen. Press the TEXT or CANCEL button to reveal the page.

Enlarging text

When a page is displayed, you can double the size of the text to make it easier to read.

1. Press the SIZE button to enlarge the top half of the page.
2. Press the SIZE button again to enlarge the bottom half of the page.
3. Press this button once more to return to the normal display.

Reveal mode

You can display concealed teletext information (eg. answer to puzzles or riddles etc.) by pressing this button. Press this button again to remove the information from the display.

SUBPAGE (optional)

Some Teletext pages may contain several subpages which are automatically paged in a certain cycle by the TV station.

1. You can go directly to a certain subpage by pressing the SUBPAGE button and select the page number with the number buttons. Enter the subpage number (eg.0003) for the third subpage.
2. Press SUBPAGE button again to exit the subpage mode.
3. Press the TEXT button to return to the normal TV mode.

COLOR buttons (Red, Green, Yellow, Cyan)

Press these buttons to access directly to the corresponding color pages displayed at the lower part of the Teletext screen.

TROUBLESHOOTING

Before calling the service personnel, please check the following troubleshooting guide . If any problem still persists, unplug the TV set and call for servicing.

1. Troubleshooting -- Image

Problem	Suggested Actions
Screen is black and power indicator is off	■ Ensure that the power cord is firmly connected and the LCD TV/monitor is on.
"No signal" message	■ Ensure that the signal cable is firmly connected to the PC or video sources. ■ Ensure that the PC or video sources are switched on.
For PC mode, image is not stable and may appear to vibrate	■ Check that the display resolution and frequency from your PC or video board is a valid mode for your LCD TV/monitor. These information can be obtained from the PC: Control Panel→ Display→ Settings.
	■ If the setting is not correct, use your computer utility program to change the display settings.
	NOTE: Your monitor supports multiscan display function within the following frequency domain:
	■ Horizontal frequency: 30 KHz~70 KHz ■ Vertical frequency: 56 Hz~75 Hz ■ Maximum refresh rate: 1024X768 @ 75Hz (15") 800X600 @ 75Hz (20")

2. Troubleshooting -- Audio and TV

Problem	Suggested Actions
The TV/monitor does not turn on	■ Be sure the power cord is plugged in.
No sound	■ Ensure that the audio cable is firmly connected to both the audio-in port on your monitor and the audio-out port on your sound card.
	■ Check the volume level.
Sound level is too low	■ Check the volume level
	■ If the volume is still too low after setting the volume level to its maximum, check the volume control on the computer sound card or software program.
Snowy picture	■ The aerial antenna may be broken or disconnected.
Remote controller does not work	■ The battery in the remote controller may be exhausted. ■ The battery may be improperly installed. ■ Check that there is no obstruction between the remote controller and the remote (infrared) sensor. ■ Ensure that there is no strong light shining on the remote controller's infrared sensor.

SPECIFICATIONS

Panel	Size	15" Diagonal (15") 20.1" Diagonal (20")
	Display Size	304.1(H)X228.1(V)mm (15") 408 (H) X 306 (V) mm (20")
	Type	TFT color
	Pixel pitch	0.297(H)X0.297(V)mm(15") 0.51 (H) X 0.51 (V) mm (20")
	Viewing Angle	80 / 80 / 80 / 80 (Depending on the panel manufacturer, the viewing angle may be different from this spec.)
Frequency	Horizontal	30~70KHz
	Vertical	56~75Hz
	Display color	262, 144
Display Resolution	Optimum Mode	1024 X 768 @ 70Hz (15") 800 X 600 @ 70Hz (20")
	Maximum Mode	1024 X 768 @75Hz (15") 800 X 600 @ 75Hz (20")
Input Signal	Sync.	H/V Separate, TTL, P. or N. H/V Composite, TTL, P. or N. Sync-on-green 0.3 Vp-p, N.
	Video signal	1 Vp-p @ 75 ohm
	RGB signal	0.7Vp-p @ 75ohm
TV, Video	Color system	PAL /SECAM/NTSC
	Sound system	DK, I, BGH, M
	Video format	CVBS, S-VHS or Y/Cr/Cb
Power Supply	Input	AC 100~240 Vrms (50Hz / 60Hz)
	Output (Adapter)	DC 12V/4A (15") DC 19V/4.74A (20")
Power consumption	Typical	36W (15") 60W (20")
	Power Saving	<3W
Dimensions (WxHxD) [mm]		395 X 402 X 210 (15") 552 X 448.5 X 210 (20")
Weight (Kg)		5.7(15") 9 (20")
Environmental Considerations	Operating Temperature	50°F to 104°F (10°C to 40°C)
	Operating Humidity	10% to 80%
	Storage Temperature	13°F to 113°F (-25°C to 45°C)
	Storage Humidity	5% to 95%
Audio Characteristics	Audio Input	RCA Jack RED(R) White(L), 0.5 ± 0.3Vrms
	Frequency Response	RF: 100Hz~12KHz (at ± 3dB) AV: 100Hz~13KHz (at ± 3dB)

DISPLAY MODES

15" Incoming display mode (Input)				
Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Pixel Frequency (MHz)	Comment
640×350	31.47 (P)	70.08 (N)	25.17	DOS
720×400	31.47 (N)	70.08 (P)	28.32	DOS
640×480	31.47 (N)	60.00 (N)	25.18	DOS
640×480	37.86 (N)	72.08 (N)	31.50	VESA
640×480	37.50 (N)	75.00 (N)	31.50	VESA
800×600	35.16 (P)	56.25 (P)	36.00	VESA
800×600	37.88 (P)	60.32(P)	40.00	VESA
800×600	48.08 (P)	72.19 (P)	50.00	VESA
800×600	46.87 (P)	75.00 (P)	49.50	VESA
1024×768	48.36(N)	60.00(N)	65.00	VESA
1024×768	56.48 (N)	70.10 (N)	75.00	VESA
1024×768	60.02 (P)	75.00 (P)	78.75	VESA

20" Incoming display mode (Input)				
Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Pixel Frequency (MHz)	Comment
640×350	31.47 (P)	70.08 (N)	25.17	DOS
720×400	31.47 (N)	70.08 (P)	28.32	DOS
640×480	31.47 (N)	60.00 (N)	25.18	DOS
640×480	37.86 (N)	72.08 (N)	31.50	VESA
640×480	37.50 (N)	75.00 (N)	31.50	VESA
800×600	35.16 (P)	56.25 (P)	36.00	VESA
800×600	37.88 (P)	60.32(P)	40.00	VESA
800×600	48.08 (P)	72.19 (P)	50.00	VESA
800×600	46.87 (P)	75.00 (P)	49.50	VESA

- Modes, which are not listed in the above table, may not be supported. For an optimal picture it is recommended to choose a mode listed in the table.
- For 15" model, there are 12 types of incoming display modes compatible with Windows as shown in the table above.
- For 20" model, there are 9 types of incoming display modes compatible with Windows as shown in the table above.
- Sometimes, the image may be disrupted due to the frequency standard from the VGA card. However, this is not an error. You may improve this situation by activating the automatic adjustment or by manually changing the phase and the clock settings in the menu.
- If you switch off the TV/monitor, interference lines may occur on your screen. Please note that this is normal.
- To extend the service life of the product, we recommend that you use your computer's power management function.

Note:

- Design and specifications are subject to change without notice.
- Weight and dimensions shown are approximate values only.