LCD TV User's Manual

ENGLISH



Safety Instructions



FCC Information

This equipment has been tested and found to comply with limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful

This equipment can generates, uses, and radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful inteference to radio Communications. However, there is no guarantee that interference will not occur in a

If this equipment does cause unacceptable interference to radio and television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

. Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.
- . Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced Radio/TV technician for help.
- Caution : Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Ver 1.00NE

Notes & Descriptions

To reduce the risk of fire, electrical shock and other injuries, keep these safety precautions in mind when installing, using and maintaining your TV.

Warning : If you manipulate against the notice, it may cause serious injury or death to user.

(I) Caution : If you manipulate against the notice, it may cause slight injury to user or appliance.



To preserve the Environment do not rubbish.

A Warning



Disconnect the power cable and signal cable connected to the product in case of thunder or lightning.



Do not attempt to touch its power cord with wet hands. If any electric pin is wet or dusty, remove the moisture or dust first before use.



It is recommended to pull out the power cord unless you use it for a long time.



Damaged power cord, plug or unfitted outlet may be very dangerous.



Do not install the set close to any heating sources.



Do not place heavy articles on it or step on the product.



The product should be installed on a clean and dry place.



When you detect any smog, unusual noise or smell, just disconnect the electric power and refer servicing to qualified service personnel.



Do not place any bowl with water, beverage, can or other liquid products on it.



Do not use or place any combustible sprayer or inflammable substances close to the product.



Do not arrange the power cord close to any heating devices/sources.



Install the outdoor antenna for the set far away from high voltage cables.



When moving it, do not apply any forces on the set.



Do not attempt to disassemble, repair or change the product.

Whenever you need to repair, adjust or check it, refer servicing to qualified service personnel.



Do not directly spray water or rub it with inflammable substances (thinner or benzene) when cleaning it.



Do not wet or penetrate water over/into the set.



When cleaning the LCD surface, disconnect the power and use a piece of smooth cloth against any scratches on it. Never use wet cloth.

(Caution



Make sure to pull out the power cord when cleaning or removing the product.



Ventilation should be always open and the set should be installed in a wellventilated and wide enough place (a minimum distance away from a wall 10cm or more).

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Do not install the set in a place directly exposed to sunlight.

Available Temperature & Humidity

Operating Temperature	0~40°C
Storage Temperature	-10~50°C
Operating Humidity	10~60% RH
Storage Humidity	10~90% RH

For dot defect [dead pixel] of LCD ;

TFT-LCD produced by using high-end semiconductor technology with precision of 99.9% above is used for this TV (2,359,296 pixels).

However the pixels of R.G.B. & White color seem to be right sometimes or some of black pixels could be seen on the LCD. This is not from bad quality or functional problem and you can use it without any problem.

When used as a PC monitor ;

Optimal Resolution: $1024 \times 768 @ 60$ Hz. Max. Resolution: $1024 \times 768 @ 75$ Hz.

Contents

CHAPTER I. Before Use

1-1. Accessories 12)
1-2. Panels	3
1-3. Remote Control	;
1-4. Menu Configuration 18	3
1-5. Jog Shuttle Button)
1-6. Inserting the Batteries in the Remote Control 21	

CHAPTER 2. Connection

2-1. Connecting Power24
2-2. Connecting TV Antenna
2-3. Connecting PC25
2-4. Connecting DTV
2-5. Connecting DVD
2-6. Connecting VIDEO / S-VIDEO
2-7. Connecting Headphone (Speaker) 28

CHAPTER 3. Using TV Menus

3-1. Watching TV	30
3-2. Channel Search	33
3-3. Fine Tune	-34
3-4. Add/Remove Channel	35
3-5. Channel Swap ·····	36
3-6. Change TV Channel Mode	37
3-7. Closed Caption	38
3-8. V-chip Function	39

CHAPTER 4.	Using Menus of Picture, Sound and Others
	4-1. Setting Picture Mode42
	4-2. Setting Sound Mode 44

4-3. Setting Option 45

CHAPTER 5. Using PC MENU

5-1. Auto Adjustment	48
5-2. Setting Picture	49
5-3. Setting Sound	50
5-4. Setting Option	51
5-5. Setting Color Temperature	52

CHAPTER 6. Specifications

6-1. Dimensions	
6-2. Specifications	

CHAPTER 7. Services & Others

7-1. Troubleshooting	58
7-2. Concerning Services	60

CHAPTER 1

Before use

1-1. Accessories

1-2. Panels

1-3. Remote Control

1-4. Menu Configuration

1-5. Jog Shuttle Button

1-6. Inserting the Batteries in the Remote Control

I-I. Accessories

Please make sure the following items are included with your LCD TV. If any items are missing, contact your dealer.





DC Adaptor

-ENF



Power Cord

Remote Control

I-2. Panels

I) Front Panels



1) Power/ivienu	()- (a) Power-On/Oli
② Channel Button	1- (b) AUTO / Move above Menu
③ Sound Cont. / Menu Set	1- © SOURCE / Move under Menu
④ Remote Control Sensor	1- @ Exit Menu
(5) LED	 ● Load Menu

- * AUTO button searches automatically TV channels if set as TV, and it adjusts automatically for PC mode.
- * Power button is jog shuttle type button and it operates different functions by pushing it to Up/Down/Left/Right.



Power Input
 DTV Input (Pb Y Pr)
 Audio (PC Input/Headphone Output)

@ PC input
@ DTV Audio Input (L, R)
⑥ TV Antenna Input

3) Side Panels



DVD Audio Input (L R)
 DVD Input (Pb Y Pr)
 Audio Input (L, R)
 S-Video Input
 Video Input

I-3. Remote Control



① MENU Control Button
Channel & Volume Control Button
(2) TV Input Button

③ PC Input Button

(4) Numeric Buttons

(5) Display Mode Control Button

Functions by remote control buttons

Button	Function	Button	Function
POWER	Power On/Off	MUTE	Sound off Temporarily
CH + / -	Move TV channels / Move M	ENU up and down	
VOL + / -	Control Volume / Move Menu	/ MENU settings	
MENU	Enter Main MENU	TV	TV Input
PC	PC Input	0~9	Numberic Buttons
ENT	Input selected channels		
PRE	Previous Channel	PICTURE	Control Picture Mode
SCALE	Control Picture Scale	MEMORY	Add/Remove a TV CH
AUTO	TV : Channel search / PC : A	uto Adjustment	
DISPLAY	Display screen status	SLEEP	Sleeping Timer setting
◀ / ►	Control Brightness	DTV	DTV Input
DVD	DVD Input		
VIDEO/S-VIDEO	VIDEO/S-VIDEO Input		

* The remote control provided is available up to 7m from the optical receive part within Left/Right 30 degrees.

I-4. MENU Configuration

Most functions of the TV set can be controlled by MENU and selection buttons on the remote control, so learning how to operate them would be convenient for you.

I) Menu Configuration



2) Using Remote Control



I-5. JOG Shuttle Button



① Push MENU button right to display main menu.



② Push it right again to display sub menu.



③ Push MENU button left to return to main menu.



④ Push it left again to clear menu.

(5) Push the button up and down to move among menus.

- If pushing it upward when menu is not displayed, it controls TV channel search or automatic PC settings.

- If pushing it downward when menu is not display, it changes input signals.

I-6. Inserting the Batteries in the Remote Control

Remove the cover of the remote control.
 Check the polarity of batteries and insert them in right directions.
 Replace the cover.
 Available batteries : 2 DC 1.5V AA-type batteries

Since incorrect insertion of batteries may cause breakage, leakage or injuries, check the polarities before the insertion. Separate and collect used batteries for the protection of environment. Do not use alkaline and manganese batteries together.

CHAPTER 2

Connection

- 2-1. Connecting Power
- 2-2. Connecting TV Antenna
- 2-3. Connecting PC
- 2-4. Connecting DTV
- 2-5. Connecting DVD
- 2-6. Connecting VIDEO / S-VIDEO
- 2-7. Connecting Headphone (Speaker)

2-1. Connecting Power

① The product automatically adjusts voltage.

In case 110V is used, connect 110V Conversion adaptor before use.

② Power Cable should be firmly connected to an outlet or DC adaptor in order not to be pulled out or shake.

2-2. Connecting TV Antenna

(1) When round cable (75 Ω coaxial cable) is used, copper part of the cable should not be bent.



Cautions

1. When an outdoor antenna is used, it is recommended for a skilled technician to install it.

It may be helpful to better display to purchase additional installing amplifier if there is any problem with weak radio wave.

2-3. Connecting PC



1 Connect D-Sub Cable to D-Sub port on the TV and PC.

② Connect Audio Cable (not included) to Audio output of a PC (stereo jack) and PC Audio Input Port of the TV (stereo jack).



 Connect Component Cable (not included) to DTV Connection ports of TV (Pb Y Pr) and DTV Receiver.

2 Connect Audio Cable (not included) to Audio ports (L/R) of TV and DTV Receiver.

(3) Cables should be connected to ports of same colors.

2-5. Connecting DVD (Pb Y Pr)



2-6. Connecting VIDEO/S-VIDEO Input



 Connect Component Cable (not included) to Component ports of TV and DVD player. VCR, Set-Top box or camcorder. Connect Video/Audio Cable (not included) and S-VIDEO Cable to Video port of TV and camcorder, game machines, VCR, DVD player or Set-Top box.
 Cables should be connected to ports of same colors.

③ Audio signals of S-VIDEO should be used with external audio signal cables.

④ S-VIDEO signal secures better quality than composite video signal.

2-7. Connecting Headphone(speaker)



- ① Connect Headphone (not included) to the Headphone output port of the TV.
- ② If possible, use the headphones of which impedance is 8Ω. Other headphones may output too weakly or strongly.
- (3) In case of connecting to speakers, connect speakers with amps. If connected with speakers without amps, it may sound weakly.

CHAPTER 3

Using TV Menus

- 3-1. Watching TV
- 3-2. Channel Search
- 3-3. Fine Tune
- 3-4. Add/Remove Channel
- 3-5. Channel Swap
- 3-6. Change TV Channel Mode
- 3-7. Closed Caption
- 3-8. V-chip Function

3-1. Watching TV

I) Precautions in the initial installation

① Check whether TV antenna cable is properly connected.

 ② After checking whether the voltage is 100V or 220V, supply the electric power and connect the adaptor to the TV.
 At the moment, TV is in standby.

2) Turning on TV

① Turn on the Power button directly on the set or by remote control.② Each pressing the button turns on or off the set.



Power Button on Remote Control

Power Button on the TV Set

3) Channel Selection

① Press CH button on the remote control to change channels.

(2) Press numeric buttons (0~9) to go to a channel directly.

(3) Press $\[CH \]$ buttons (\land / \lor) on the TV set to increase or decrease TV channels.





Channel button on the remote control

Channel button on the TV set

4) Move to Previous Channel



① Every time pressing the PRE button on the remote control, it moves to a previous channel.

Previous Channel Button

5) Volume Control

① Increase/decrease volume by pressing VOL button on the remote control.
② Press VOL button (< / >) on the TV set to control the volume.





Volume Button on the remote control

6) Mute



① Press MUTE button on the remote control to sound off temporarily. (2) Press it again to turn the sound back on or press volume buttons.

MUTE button on the remote control

7) Checking the present broadcasting information



1) Press DISPLAY button on the remote control to

display the information on the screen.

(2) Press it again to remove the information except

Broadcasting Info Button

input source automatically. (3) Press it again to remove all information.

3-2. Channel Search

When using the TV first after purchase, reconnecting it due to power failure or other reasons, channels should be searched and registered again.

Since Channel Search function searches channels currently broadcasted, you should execute it when most channels are broadcasted.



- Press AUTO button on the remote control.
- Once you move to Start by using VOL button on the remote control, it starts channel search.
- To stop channel search, repress MENU button on the remote control.
- If you stop it during channel search, it stores the currently searched channels only.
- Also, it can be set in OSD menu if JOG button is used.



3-3. Fine Tune

If a searched channel is unclear or sounds abnormally, use Fine Tune function.

- Press MENU button and move to <CH Fine Tune> menu.
- Set the best status with CH button on the remote control.
- To stop channel search, repress MENU button on the remote control.
- Once the setting is complete, exit from menu.



3-4. Add/Remove Channel

You may add or remove a channel as your need.

- Move to a channel to add or remove by pressing numeric buttons(0~9) or CH button.



- Press MEMORY button on the remote control.
- MEMORY In case of adding a channel by using CH button on the remote control, move to Add.
 - Once the setting is complete, press MEMORY button again.
 - Also, it can be set in OSD menu if JOG button is used.



3-5. Channel Swap

In case of channels frequently watch, you can switch it to other channel numbers and store them.

- Move to a channel to change.
- Press MENU button on the remote control and move to <CH Swap> menu.
- Set both channels that you are watching and want to swap.
- Change the default and escape the menu.



3-6. Change TV Channel Mode

Please set your broadcast type between Air and Cable. If its mode is set as Air, some Cable broadcasts are not able to watch.

- Press MENU button on the remote control and move to <CH Mode> menu.
- Set the CH Mode between Air & Cable by using CH button on the remote control.
- Once the setting is complete, press MENU button.
- Also, it can be set in OSD menu if JOG button is used.



3-7. Closed Caption

This function works only Caption broadcast or other CC marked video tape and DVD title.

Set the function in the SETUP menu.

Caption can be set only by using the remote control.

- Move to a channel to change.
- Press MENU button on the remote control and move to <Closed Caption> menu.
- Set Caption broadcast type by using CH button on the remote control.
- Also, it can be set in OSD menu if JOG button is used.



3-8. V-Chip Function

It makes MPAA rating of TV broadcast and other media. It works only with V-Chip function broadcast and media.

Press MENU button on the remote control and move to <V-Chip> menu.
Move to V-Chip menu by using CH button on the remote control.



- Press VOL button and enter Password.

- Press pin number using a remote control.

- A number can be deleted with left volume button when using it.



- Set V-Chip function by usin VOL button on the remote control.

	V-chip
V-chip	Enable
Chang	e Pin NO .
TV Gu	ideline
MPAA	Rating
EXIT	

- Move to TV Guideline or MPAA Rating by using CH button on the remote control.

V-chip
V-chip Enable
Change Pin NO.
TV Guideline
MPAA Rating
EXIT

- Move to the position which you want to make channel blocking and press MENU button for setting.
- Press it again for cancellation.



- Escape the menu pressing EXIT.

- Only a remote control allowed to set up V-chip function.

Using Menus of Picture, Sound and Others

4-1. Setting Picture Mode4-2. Setting Sound Mode4-3. Setting Option

ENGLISH

4-1. Setting Picture Mode

By setting a picture mode suitable for broadcasting/video signals, you may enjoy better quality picture.

I) Image Scale : Full - Wide

You can set the screen's suitable image scale of TV or Video input signals and view them accordingly.



- Press SCALE button on the remote control.

- Control the scale(s) in desirable size(s) by using Volume button on the remote control.

① Full : Show a screen in the full LCD Panel.

(2) Wide : Show a screen in the 16:9 Wide screen size.

- Also, it can be set in OSD menu if JOG button is used.



2) Mode : Standard - Soft - Dynamic - User

By setting a picture mode suitable for broadcasting/video signals, you may enjoy better quality picture.



- Press PICTURE button on the remote control.

- Set a picture mode by using PICTURE button on the remote control.

① Standard : Standard picture mode.

② Soft : It displays a picture softly as a whole and is better for watching a film or TV series.

③ Dynamic : The mode is suitable for watching sports, which changes pictures fast.

- ④ User : It is a picture mode customized by a user.
- Also, it can be set in OSD menu if JOG button is used.



3) Brightness : Adjust screen brightness



- Also, it can be set in OSD menu if JOG button is used.

- 4) Contrast : Adjust screen contrast
- 5) Color : Adjust screen color
- 6) Tint : Adjust screen tint
- 7) Sharpness : Adjust screen sharpness

4-2. Setting Sound Mode

You can set sound suitable for TV broadcasting or Video.

1 Volume : Adjust volume

- ② Bass : Adjust bass
- ③ Treble : Adjust treble
- ④ Balance : Adjust balance of left & right speaker



4-3. Setting Option

Press MENU button on the remote control to move to Main Menu.
Change the settings by using VOL / CH button on the remote control.



1 Sleep Timer



Press SLEP button on the remote control.Sleep timer can be set from Off to 180 minutes.

- (2) Menu Timeout : It can be adjusted to display OSD Menu between 5 ~ 60 seconds.
- ③ Menu Language : Change a language to display OSD.

④ Factory Reset : Reset all the OSD control settings back to the factory setting status.

5 Version : It shows the product version.

CHAPTER 5

Using PC MENU

- 5-1. Auto Adjustment
- 5-2. Setting Picture
- 5-3. Setting Sound
- 5-4. Setting Option
- 5-5. Setting Color Temperature

5-1. Auto Adjustment

In case of using it as a PC monitor, it is automatically set. When the set is connected to a PC, the MODE should be set as PC RGB Mode.



- Press AUTO button on the remote control to automatically set the product's screen status.

- When it is used as PC monitor Optimal Resolution : 1024 x 768 @ 60Hz Max. Resolution : 1024 x 768 @ 75Hz

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3 . 33		
	Auto Adjustment	Start 🕨

- It may not normally display picture in any resolution out of the optimal resolution range.

- Even though it is automatically adjusted, it may not normally display picture depending on signals from a PC and in this case, it is recommended to execute Auto Adjustment for several times.
- Also, it can be set in OSD menu if JOG button is used.

5-2. Setting Picture

In case it is not optimally set even though automatically adjusting it, use Picture menu as below.

- Brightness : Adjust screen brightness
- Contrast : Adjust screen contrast
- Phase : In case it is not optimally set even though automatically adjusting it, use Phase function.
- H. Size : Adjust the Size of the PC Monitor.
- H. Position : Adjust the position of the PC Monitor.
- V. Position : Adjust the position of the PC Monitor.
- Auto Adjustment : In case of using it as a PC monitor, it is automatically set.



5-3. Setting Sound

You can set sound suitable on PC mode.

- Volume : Adjust volume
- Bass : Adjust bass
- Treble : Adjust treble
- Balance : Adjust the Size of the PC Monitor.



5-4. Setting Option

- Press MENU button on the remote control to move to Main Menu.

- Change the settings by using VOL / CH button on the remote control.

Sleep Timer

- Press SLEEP button on the remote control.

- leep timer can be set from Off to 180 minutes.

Menu Timeout : It can be adjusted to display OSD Menu between 5 ~ 60 seconds.

Menu Language : Change a language to display OSD.

Factory Reset : Reset all the OSD control settings back to the factory setting status. Version : It shows the product version.



5-5. Setting Color Temperature

You can set screen color temperature on PC mode.

- Press MENU button on the remote control and move to <Color Temp> menu .

- Set the value between 5500, 7300, 9300 or you can set as your preference in USER.



Specifications

6-1. Dimensions

6-2. Specifications

6-I.Dimentions





* Weight : approx. 4.5kg (before packing) / approx. 5.9kg (after packing)

6-2. Specifications

Dimensions, apparent design and specifications are subject to change without any prior notice for the performance improvement.

Product Name	15" TFT-LCD TV	
LCD Panel	Туре	Amorphos Silicon TFT-LCD
	Size	15" (diagonal length)
	Pixel Pitch	0.297 mm x 0.297 mm
	Contrast Ratio	350 : 1 (Typ.)
	Brightness	Max.300 cd / m ²
	Actual Display Size	304.1mm (H) x 228.1mm (V)
	Viewing Angle	L/R:120° U/D:100°
	Interface	LVDS
TV Broadcasting System		NTSC-M Type
Audio Output		MAX 3W x 2 / Stereo
PC Monitor	Horizontal Frequency	30 ~ 61 KHz
	Vertical Frequency	60~ 75 Hz
	Colors	16M colors (6bit with FRC)
	Max. Resolution	XGA : 1024 (H) x 768 (V)
Power	Adaptor Input	AC 100V~240V, 50~60Hz
	Adaptor Output	DC 12 V / 3.3A
Power Consumption	In-Operation	< 40W
	Power-Saving Mode/OFF	< 5W
Energy Saving Mode		VESA DPMS

CHAPTER 7

Service & Others

7-1. Troubleshooting

7-2. Concerning Services

7-1. Troubleshooting

Before contacting service to service personnel, please check the followings first. If you still have the same symptoms even after taking the following actions, contact your local dealer or qualified service personnel.

I) TV-related Troubles

Unclear display or noisy sound

- Check whether TV antenna is correctly connected.
- Broadcasting may not be good in an area with bad reception or far away from a station/network.

No image

 \bullet Check whether you connect the power cord properly. And press the \fboxtime{POWER} button.

Black background only

• Check whether the mode is set as PC monitor or Video/S-Video Input, not TV mode.

Strips and shaking display

- It may be interrupted by neighboring radio waves (please check any wireless phone, hair drier, electric drilling machine and etc)
- Execute fine tuning for manual adjustment.

Can't catch a specific channel

- Check whether Channel Setting is normally set.
- Try to rotate an antenna's direction.

Picture plays without sound

- Try to press MUTE button.
- Volume up by using VOL button.

2) PC Monitor-related Troubles

No image on the monitor

- Check whether the D-Sub cable is firmly connected to the TV and a PC.
- Check whether a graphic card is correctly inserted into the slot.
- Check whether the Power of a PC and the TV is on.
- Checck whether a graphic card or mode is set appropriately on a PC.
- Referring to the Standard Signal Mode for PC Monitor in the previous chapter, change graphic mode.
- Check whether D-Sub cable pins are not inserted or bent.

No Power

- Check whether the power cord is normally inserted and reconnect it.
- Pull out the power cord from wall outlet and reconnect it in 10~20 minutes.

LED Lamp turns off in red and it shows no image

- Check whether the graphic cable is connected to theTV and a PC.
- Check whether a computer is in power-saving mode and attempt to operate keyboard and mouse.

Unstable or unfocused image or trembling

- Check whether the D-Sub cable is connected to the TV and a PC.
- If a PC's display mode is changed, the screen needs readjusting, so you need to use Auto Adjustment or Picture Adjustment.
- Check whether the TV and your graphic card are compatible each other and whether it is set as an appropriate refresh rate. If letters look distorted, change the refresh rate to 60Hz.

Abnormal image scale

- By using vertical/horizontal position in Picture Adjustment Menus, adjust the position.
- Try to execute Auto Adjustment function.

The places of nails to install the unit on the wall

7-2. Concerning Services

We guarantee free of charge After-sales service for a full year if any troubles are found when you are using our product. However, any natural disasters or careless use cause the trouble, it may cost even within a valid warranty period.

Responsibility of Chargeable After Sales Service (Customer's Charge)

In one of the following cases, it may cost even in the valid warranty period.

- 1) In case of any troubles resulting from inserting of foreign substances (water, beverage, coffee and etc)
- Dropping or applying force cause a trouble to damage on the product or induce malfunction.
- Appearance damage or transformation by use of organic solutions such as thinner, benzene and etc.
- 4) When it gets troubled due to your disassemble.
- 5) When other parts/consumption accessories (including adaptor) that are not supplied by the company may directly cause any troubles.
- 6) Supplying wrong voltage may cause a trouble
- Any personnel not from qualified service personnel repairs or modifies the product, resulting in troubles.
- Natural disasters (lightning, fire, flood, gas, damage from sea wind, earthquake and etc) directly cause troubles
- 9) Violation against the directions in the manual cause any troubles
- 10) Customer's mishandling cause a trouble
- 11) In case the date of purchase may be vague, the valid warranty period is counted after 2 months since the product is manufactured.



Cut Line