# **User's Guide**

# L1954TQ

Make sure to read the **Important Precautions** before using the product. Keep the User's Guide(CD) in an accessible place for future reference. See the label attached on the product and give the information to your dealer when you ask for service.



This unit has been engineered and manufactured to ensure your personal safety, however improper use may result in potential electrical shock or fire hazards. In order to allow the proper operation of all safeguards incorporated in this display, observe the following basic rules for its installation, use, and servicing.

### **On Safety**

Use only the power cord supplied with the unit. In case you use another power cord, make sure that it is certified by the applicable national standards if not being provided by the supplier. If the power cable is faulty in any way, please contact the manufacturer or the nearest authorized repair service provider for a replacement.

The power supply cord is used as the main disconnection device. Ensure that the socket-outlet is easily accessible after installation.

Operate the display only from a power source indicated in the specifications of this manual or listed on the display. If you are not sure what type of power supply you have in your home, consult with your dealer.

Overloaded AC outlets and extension cords are dangerous. So are frayed power cords and broken plugs. They may result in a shock or fire hazard. Call your service technician for replacement.

Do not Open the Display.

- There are no user serviceable components inside.
- There are Dangerous High Voltages inside, even when the power is OFF.
- Contact your dealer if the display is not operating properly.

To Avoid Personal Injury :

- Do not place the display on a sloping shelf unless properly secured.
- Use only a stand recommended by the manufacturer.

To Prevent Fire or Hazards:

- Always turn the display OFF if you leave the room for more than a short period of time. Never leave the display ON when leaving the house.
- Keep children from dropping or pushing objects into the display's cabinet openings. Some internal parts carry hazardous voltages.
- Do not add accessories that have not been designed for this display.
- During a lightning storm or when the display is to be left unattended for an extended period of time, unplug it from the wall outlet.

### **On Installation**

Do not allow anything to rest upon or roll over the power cord, and do not place the display where the power cord is subject to damage.

Do not use this display near water such as near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool. Displays are provided with ventilation openings in the cabinet to allow the release of heat generated during operation. If these openings are blocked, built-up heat can cause failures which may result in a fire hazard. Therefore, NEVER:

- Block the bottom ventilation slots by placing the display on a bed, sofa, rug, etc.
- Place the display in a built-in enclosure unless proper ventilation is provided.
- Cover the openings with cloth or other material.
- Place the display near or over a radiator or heat source.

Do not rub or strike the Active Matrix LCD with anything hard as this may scratch, mar, or damage the Active Matrix LCD permanently.

Do not press the LCD screen with your finger for a long time as this may cause some afterimages.

Some dot defects may appear as Red, Green or Blue spots on the screen. However, this will have no impact or effect on the display performance.

If possible, use the recommended resolution to obtain the best image quality for your LCD display. If used under any mode except the recommended resolution, some scaled or processed images may appear on the screen. However, this is characteristic of the fixed-resolution LCD panel.

### **On Cleaning**

- Unplug the display before cleaning the face of the display screen.
- Use a slightly damp (not wet) cloth. Do not use an aerosol directly on the display screen because over-spraying may cause electrical shock.

### **On Repacking**

 Do not throw away the carton and packing materials. They make an ideal container in which to transport the unit. When shipping the unit to another location, repack it in its original material.

# On Disposal

- The fluorescent lamp used in this product contains a small amount of mercury.
- Do not dispose of this product with general household waste.
   Disposal of this product must be carried out in accordance to the regulations of your local authority.

#### NOTE

• THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTRERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT.SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

#### NOTE

This epuipment has been tested and found to comply with the 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 interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or 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 the receiver.

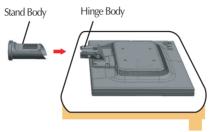
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

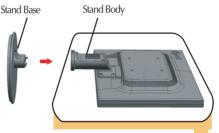
 Before setting up the monitor, ensure that the power to the monitor, the computer system, and other attached devices is turned off.

### Connecting the stand

- 1. Place the monitor with its front facing downward on a soft cloth.
- 2. Assemble the Stand Body into the product in the correct direction as shown in the picture.



**3.** Assemble the Stand Base(Front, Rear) into the Stand Body in the correct direction.



4. Insert the Cable Deco Cover in the Stand Body in the correct direction.



5. Once assembled take the monitor up carefully and face the front side

#### Important

- This illustration depicts the general model of connection. Your monitor may differ from the items shown in the picture.
- Do not carry the product upside down holding only the stand base. The product may fall and get damaged or injure your foot.

### Disassembling the stand

1. Put a cushion or soft cloth on aflat surface.



2. Place the monitor face Down on the cushion or soft cloth.

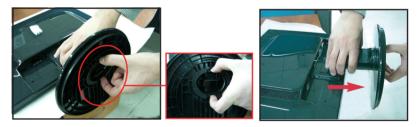


3. Slide the Cable Deco Cover out from the stand body.





4. Nip Latch inside, Take off the stand base from stand body.



5. Please pull the stand body lightly to separate it from the hinge body.



 Before setting up the monitor, ensure that the power to the monitor, the computer system, and other attached devices is turned off.

### Positioning your display

- 1. Adjust the position of the panel in various ways for maximum comfort.
  - Tilt Range: -5°~20°

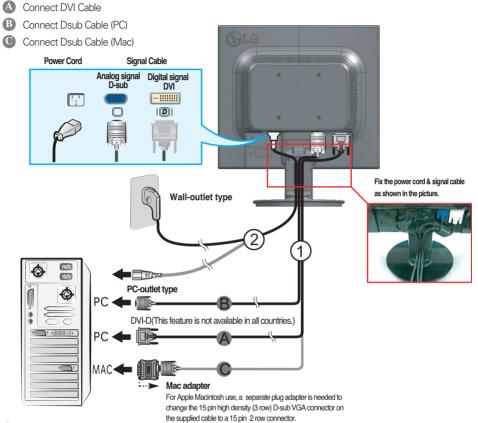


#### Ergonomic

It is recommended that in order to maintain an ergonomic and comfortable viewing position, the forward tilt angle of the monitor should not exceed 5 degrees.

# Using the Computer

1. Make sure to turn off the computer and product. Connect the cable as below sketch map form 1 to 2.



2. Insert the Cable Deco Cover in the Stand Body in the correct direction.





 Press button on the front switch panel to turn the power on. When monitor power is turned on, the 'Self Image Setting Function' is executed automatically. (Only Analog Mode)

PROCESSING SELF

#### NOTE

'Soff Image Setting Function'? This function provides the user with optimal display settings. When the user connects the monitor for the first time, this function automatically adjusts the display to optimal settings for individual input signals. If you want to adjust the monitor while in use, or wish to manually run this function once again, push the 'AUTO/SET' button on the front panel of the monitor. Otherwise, you may execute the 'Factory reset' option on the OSD adjustment menu. However, be aware that this option initializes all the menu items except 'Language'.

## **Front Panel Controls**

EZZOOMING MENU	f-ENGINE SOURCE AUTO/SET	( <sup>1</sup> )	
		$\sim$	
0 2	8 4	56	

	At the current display, Use 'ez Zooming' Key, then the display resolution is transferred to the one step low resolution. Use 'ez Zooming' Key one more, the display is back to the original display.	
	*Only One touch of ez-zoom, you can fine the best resolution you want and it is possible to magnify the size of characters and pictures for the old not having good eye sight, housewives not dealing with computer well and children.	
1280 x 1024, 1024 x	can differ by O/S or video card. In this case, Please ask to the computer of	
MENU Button	Use this button to enter or exit the On Screen Display.	
9	OSD LOCKED/UNLOCKED	
OSD LOCKED OSD UNLOCKED	This function allows you to lock the current control settings, so that they cannot be inadvertently changed. Press and hold the <b>MENU button</b> for several seconds. The message <b>"OSD LOCKED"</b> should appear.	
	You can unlock the OSD controls at any time by pushing the <b>MENU button</b> for several seconds. The message <b>"OSD UNLOCKED"</b> should appear.	

3	- + Buttons	Use these buttons to select or adjust functions in the On Screen Display.	
	- <i>f</i> -engine	For more information, refer to page A14.	
		FLATRON J'ENGINE IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	
		Use this button to make D-Sub or DVI connector active. This feature is used when two computers are connected to the display. The default setting is D-Sub.	
4	AUTO/SET Button	Use this button to enter a selection in the On Screen Display.	
	PROCESSING AUTO IMAGE ADJUSTMENT	AUTO IMAGE ADJUSTMENT When adjusting your display settings, always press the AUTO/SET button before entering the On Screen Display(OSD). This will automatically adjust your display image to the ideal settings for the current screen resolution size (display mode). The best display mode is: 1280 x 1024	
5	Power Button	Use this button to turn the display on or off.	
6	Power Indicator	This Indicator lights up blue when the display operates normally(On Mode). If the display is in Sleep Mode (Energy Saving), this indicator color changes to amber.	

A8

#### Screen Adjustment

Making adjustments to the image size, position and operating parameters of the display is quick and easy with the On Screen Display Control system. A short example is given below to familiarize you with the use of the controls. The following section is an outline of the available adjustments and selections you can make using the OSD.

#### NOTE

Allow the display to stabilize for at least 30 minutes before making image adjustments.

To make adjustments in the On Screen Display, follow these steps:



- Press the **MENU Button**, then the main menu of the OSD appears.
- 2 To access a control, use the **or + Buttons**. When the icon you want becomes highlighted, press the **AUTO/SET Button**.
- Use the /+ Buttons to adjust the image to the desired level. Use the AUTO/SET Button to select other sub-menu items.
- Push the **MENU Button** once to return to the main menu to select another function. Push the **MENU Button** twice to exit from the OSD.

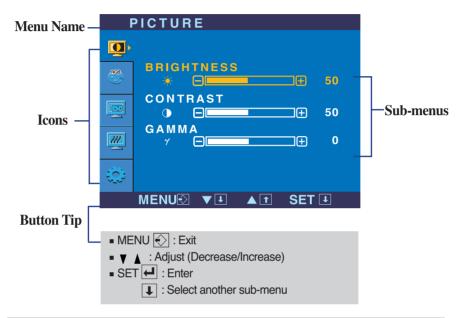
The following table indicates all the On Screen Display control, adjustment, and setting menus.

Main menu	Sub-menu		Α	D	Reference	
PICTURE	BRIGHTNESS				To adjust the brightness,	
	CONTRAS	т			contrast and gamma of the	
	GAMMA				screen	
COLOR		sRGB			To customize the color of	
COLOR	PRESET	6500K			the screen	
		9300K				
	RED					
	GREEN					
	BLUE					
	HORIZON	TAL			To adjust the position of the	
POSITION	VERTICAL				screen	
	CLOCK				To improve the clarity and	
TRACKING	PHASE				stability of the screen	
	SHARPNESS					
SETUP	LANGUAGE				To constant the concern	
SEIUI	OSD I	HORIZONTAL			To customize the screen status for a user's operating	
	POSITION	VERTICAL			environment	
	WHITE BA	LANCE				
	POWER IN	DICATOR				
	FACTORY RESET					
FLATRON					To select or customize	
F-ENGINE					desired image settings	
	NORMAL					
			<b>A</b> :		stable g Input l Input	

#### NOTE

• The order of icons may differ depending on the model (A10~A14 ).

You were introduced to the procedure of selecting and adjusting an item using the OSD system. Listed below are the icons, icon names, and icon descriptions of the all items shown on the Menu.



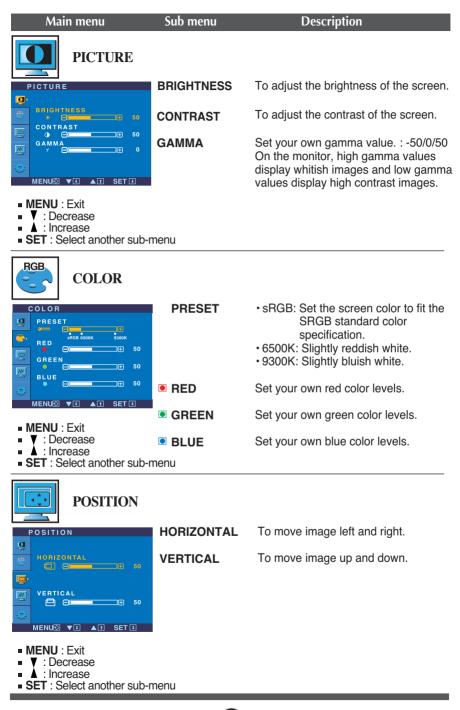
Press the MENU Button, then the main menu of the OSD appears.

#### NOTE

OSD (On Screen Display) menu languages on the monitor may differ from the manual.



#### On Screen Display(OSD) Selection and Adjustment

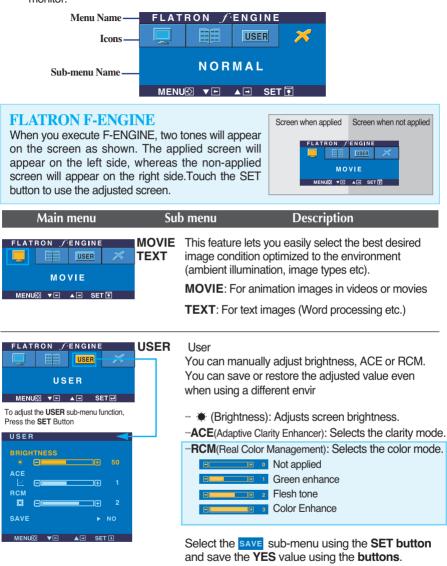


### On Screen Display(OSD) Selection and Adjustment

Main menu	Sub menu	Description	
TRACKING CLOCK PHASE PHASE	CLOCK	To minimize any vertical bars or stripes visible on the screen background. The horizontal screen size will also change.	
SHARPNESS           A           Image: Second state           MENUX           Image: Second state           Image: Second state	PHASE	To adjust the focus of the display. This item allows you to remove any horizontal noise and clear or sharpen the image of characters.	
<ul> <li>V: Decrease</li> <li>A: Increase</li> <li>SET: Select another sub-matrix</li> </ul>	SHARPNESS nenu	To adjust the clearness of the screen.	
SETUP	LANGUAGE	To choose the language in which the control names are displayed.	
SETUP LANGUAGE → ENGLISH OSD POSITION HORIZONTAL 050	OSD POSITION	To adjust position of the OSD window on the screen.	
WERTICAL       50         ANALOG       50         ANALOG       1280 x 1024 60HZ         MENU②       ▼I       ▲ I         SETUP       ▲       SET         WHITE BALANCE       ►NO         POWER INDICATOR       ►ON         FACTORY RESET       ►NO         ANALOG       ANALOG	WHITE BALANCE	If the output of the video card is different the required specifications, the color level may deteriorate due to video signal distortion. Using this function, the signal level is adjusted to fit into the standard output level of the video card in order to provide the optimal image. Activate this function when white and black colors are present in the screen.	
<ul> <li>► MENU : Exit</li> <li>► MENU : Exit</li> <li>► Adjust</li> <li>► Adjust</li> <li>► SET : Select another sub-n</li> </ul>	POWER INDICATOR	Use this function to set the power indicator on the front side of the monitor to <b>ON</b> or <b>OFF</b> . If you set <b>OFF</b> , it will go off. If you set <b>ON</b> at any time, the power indicator will automatically be turned on.	
	FACTORY RESET	Restore all factory default settings except "LANGUAGE." Press the -, + button to reset immediately.	
If this does not improve the screen image, restore the factory default settings,			

If this does not improve the screen image, restore the factory default settings. If necessary, perform the white balance function again. This function will be enabled only when the input signal is an analog signal.

The OSD screen will appear when you touch the *f*ENGINE button at the bottom of the monitor.



 FLATRON
 FENGINE

 Image: Set ima

#### Check the following before calling for service.

No image appears	
Is the power cord of the display connected?	<ul> <li>Check and see if the power cord is connected properly to the power outlet.</li> </ul>
Is the power indicator light on?	Press the Power button.
Is the power on and the power indicator blue or green?	<ul> <li>Adjust the brightness and the contrast.</li> </ul>
Is the power indicator amber?	<ul> <li>If the display is in power saving mode, try moving the mouse or pressing any key on the keyboard to bring up the screen.</li> <li>Try to turn on the PC.</li> </ul>
Do you see an "OUT OF RANGE" message on the screen?	• This message appears when the signal from the PC (video card) is out of horizontal or vertical frequency range of the display. See the 'Specifications' section of this manual and configure your display again.
Do you see a "CHECK SIGNAL CABLE" message on the screen?	<ul> <li>This message appears when the signal cable between your PC and your display is not connected. Check the signal cable and try again.</li> </ul>

Do you see a "OSD LOCKED" message on the screen?				
Do you see "OSD LOCKED" when you push MENU button?	• You can secure the current control settings, so that they cannot be inadvertently changed. You can unlock the OSD controls at any time by pushing the <b>MENU</b> button for several seconds: the message <b>"OSD UNLOCKED</b> " will appear.			

Display image is inco	Display image is incorrect				
<ul> <li>Display Position is incorrect.</li> </ul>	<ul> <li>Press the AUTO/SET button to automatically adjust your display image to the ideal setting. If the results are unsatisfactory, adjust the image position using the H position and V position icon in the on screen display.</li> <li>Check Control Panel&gt; Display&gt; Settings and see if the frequency or the resolution were changed. If yes, readjust the video card to the recommend resolution.</li> </ul>				
<ul> <li>On the screen background, vertical bars or stripes are visible.</li> </ul>	• Press the <b>AUTO/SET</b> button to automatically adjust your display image to the ideal setting. If the results are unsatisfactory, decrease the vertical bars or stripes using the <b>CLOCK</b> icon in the on screen display.				
Any horizontal noise appearing in any image or characters are not clearly portrayed.	<ul> <li>Press the AUTO/SET button to automatically adjust your display image to the ideal setting. If the results are unsatisfactory, decrease the horizontal bars using the PHASE icon in the on screen display.</li> <li>Check Control Panel&gt; Display&gt; Settings and adjust the display to the recommended resolution or adjust the display image to the ideal setting. Set the color setting higher than 24 bits (true color).</li> </ul>				
The screen color is mono or abnormal.	<ul> <li>Check if the signal cable is properly connected and use a screwdriver to fasten if necessary.</li> <li>Make sure the video card is properly inserted in the slot.</li> <li>Set the color setting higher than 24 bits (true color) at Control Panel - Settings.</li> </ul>				
• The screen blinks.	<ul> <li>Check if the screen is set to interlace mode and if yes, change it to the recommend resolution.</li> </ul>				



Have you installed the display driver?		
Have you installed the display driver?	• Be sure to install the display driver from the display driver CD (or diskette) that comes with your display. Or, you can also download the driver from our web site: http://www.lge.com.	
<ul> <li>Do you see an "Unrecognized monitor, Plug&amp;Play (VESA DDC) monitor found" message?</li> </ul>	<ul> <li>Make sure to check if the video card supports Plug&amp;Play function.</li> </ul>	

Display	19 inches (48.19 cm) Flat Panel Active matrix-TFT LCD Anti-Glare coating 19 inches viewable			
	0.294 mm pixel pitch			
Sync Input	Ű	) - 71 kHz (Auto	matic)	
	Vertical Freq.	56 - 75 Hz (Automatic)		
	Input Form	Separate TTL, SOG (Sync Or Digital	Positive/Negative Green)	
Video Input	Signal Input	15 pin D-Sub ( DVI - D connec		
	Input Form	RGB Analog (0.7 Vp-p/ 75 ohm), Di		
Resolution	Max	Analog : VESA 1280 x 1024 @75 Hz Digital : VESA 1280 x 1024 @60 Hz		
	Recommend	VESA 1280 x 1	1024 @60 Hz	
Plug&Play	DDC 2B			
Power Consumption	On Mode         :         33 W(Typ.)           Sleep Mode         ≤         1 W           Off Mode         ≤         1 W			
Dimensions	With S	Stand	Without Stand	
&Weight	Height 42.00 cm Depth 23.00 cm	/ 15.91 inches / 16.54 inches / 9.06 inches	40.40 cm / 15.91 inches 37.00 cm / 14.57 inches 7.70 cm / 3.03 inches	
T'll Dana	Net	3.7 kg (8.16 lbs	S)	
Tilt Range	Tilt	-5°~20°		
Power Input	AC 100-240V~ 50/60Hz 0.8A			
Environmental Conditions	Operating Condition Temperature Humidity	10°C to 35 °C 10 % to 80 % r	non-Condensing	
	Storage Conditions Temperature Humidity	-20°C to 60 °C	on-Condensing	
Stand Base	Attached( ), Detached ( O )			
Power cord	Wall-outlet type or	PC-outlet type		

#### NOTE

Information in this document is subject to change without notice.

D	isplay Mode	s (Resolution)	Horizontal Freq. (kHz)	Vertical Freq. (Hz)
1	VGA	640 x 350	31.469	70
2	VGA	720 x 400	31.468	70
3	VGA	640 x 480	31.469	60
4	VESA	640 x 480	37.500	75
5	VESA	800 x 600	37.879	60
6	VESA	800 x 600	46.875	75
7	MAC	832 x 624	49.725	75
8	VESA	1024 x 768	48.363	60
9	VESA	1024 x 768	60.023	75
10	MAC	1152 x 870	68.681	75
11	VESA	1152 x 900	61.805	65
*12	VESA	1280 x 1024	63.981	60
**13	VESA	1280 x 1024	79.976	75

### **Preset Modes (Resolution)**

\* Recommend Mode

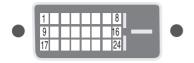
\*\* Only Analog Mode

#### Indicator

MODE	LED Color
On Mode	blue
Sleep Mode	amber
Off Mode	Off



### Signal Connector Pin Assignment



#### DVI-D Connector

Pin	Signal(DVI-D)
1	T. M. D. S. Data2-
2	T. M. D. S. Data2+
3	T. M. D. S. Data2/4 Shield
4	T. M. D. S. Data4-
5	T. M. D. S. Data4+
6	DDC Clock
7	DDC Data
8	Analog Vertical Sync.
9	T. M. D. S. Data1-
10	T. M. D. S. Data1+
11	T. M. D. S. Data1/3 Shield
12	T. M. D. S. Data3-
13	T. M. D. S. Data3+
14	+5V Power
15	Ground (return for +5V, H. Sync. and V. Sync.)

Pin	Signal(DVI-D)
16	Hot Plug Detect
17	T. M. D. S. Data0-
18	T. M. D. S. Data0+
19	T. M. D. S. Data0/5 Shield
20	T. M. D. S. Data5-
21	T. M. D. S. Data5+
22	T. M. D. S. Clock Shield
23	T. M. D. S. Clock+
24	T. M. D. S. Clock-

T. M. D. S. (Transition Minimized Differential Signaling)



This monitor satisfies the specifications of the Wall mount plate or the interchange device.

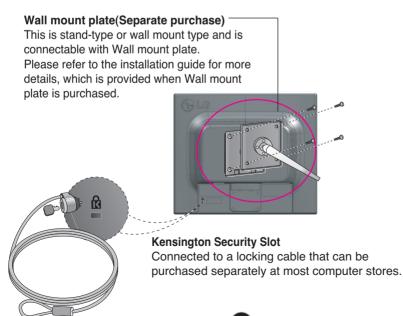
1. Place the monitor with its front facing downward on a soft cloth.



2. Separate the stand using a screwdriver as shown in the picture.



3. Install the Wall mount plate.



# Digitally yours

