



TFT LCD Display USER'S MANUAL

Warnings



Warning:

To reduce the risk of electric shock do not remove cover.
No user serviceable parts inside. Refer servicing to qualified service personnel.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of insinuated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying the appliance.

Warning:

"To prevent fire or shock hazard, do not expose the set to rain or moisture". Do not rub or strike the Active Matrix LCD with "anything hard as this may scratch, mar, or damage the Active Matrix LCD permanently".

Caution:

Power:

This set operates on a DC supply provided by the AC-DC adaptor, the voltage is as indicated on the label on the back cover. Use only the AC-DC adaptor supplied with the set and never apply an AC mains to the set directly. The AC-DC adaptor operates on an AC mains supply, the voltage is as indicated on the label of the AC-DC adaptor.

- Connect the DC plug of the AC-DC adaptor to the 15V socket of the set.
- Connect the AC-DC adaptor and its power cord.
- Connect the power cord to an AC mains.

In the event of thunderstorms or power cuts, please pull out the mains plug of the AC-DC adaptor and the aerial plug. Do not allow anything to rest upon or roll over the power cord, and do not place the set where the power cord is subject to damage.

Service

other hazards. If the unit does not operate properly, unplug it and call your dealer.
Antenna Connect the antenna cable to the connection marked Ant. (on the rear). For best reception, use an outdoor antenna.

Location

Position your unit so that no bright light or sunlight will shine directly on the screen. Do not expose the unit to vibration, moisture, dust or heat. Also ensure that the unit is placed in a position that allows a free flow of air. Do not cover the ventilation openings on the back cover. You can install the unit on a wall or place it on a table-top or similar flat surface. Mount the unit securely to eliminate the risk of injury from the unit falling. Contact your dealers to purchase the optional ceiling mount.

Cleaning

Unplug the unit before cleaning the face or the LCD Screen. Dust the unit by wiping the screen and cabinet with a soft, clean cloth. If the screen requires additional cleaning use a clean, damp cloth. Do not use liquid or aerosol cleaners.

Non-active pixels

Occasionally, a few non-active pixels may appear on the screen as a fixed point of blue, green or red. Please note that this does not affect the performance of your product.

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Supplied Accessories

Make sure the following accessories are provided with product.

Installation

Install Options

- * You can install the unit on a wall or place it on a table-like surface.
- * To eliminate any risk of injury from the unit falling, it should be mounted securely.

1. Wall Installation

Caution: Do not install the unit on a weak wall surface, like plaster etc. it is not needed any bracket or installation accessory with the exception of nails or screws.

Distance of holes of back panel is 305mm,

- a. Drive nails or screws on the wall, in the location you want to install the unit.
- b. Hang the unit on the nails or screws.

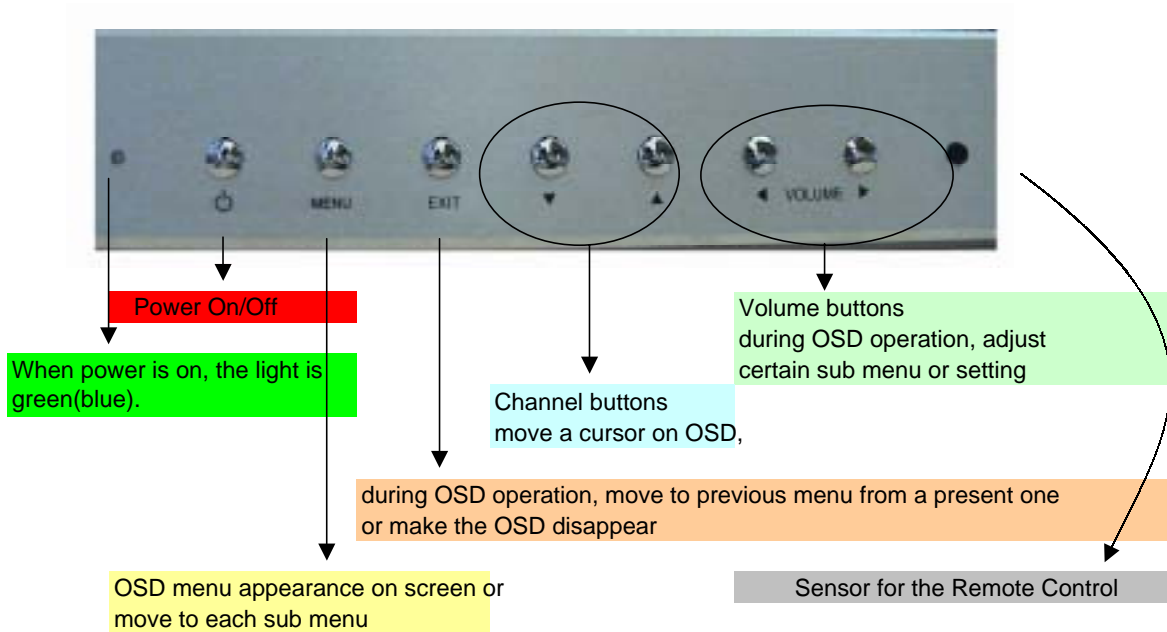
2. Desktop Installation

3. Operation

3.1 OSD(On Screen Display) buttons on the casing

You can basically control OSD menu with OSD buttons on front case, therefore you need to understand overall functions of OSD buttons prior to entering main contents.

** Front Buttons



3.2 Use of OSD(On Screen Display) menu

3.2.1 Basic Instruction of OSD Menu

- Order of OSD Menu

If you want to adjust the displaying, please follow the following procedure.

1. Press the [MENU] button, then OSD Menu will appear on screen.
2. Press [UP/DOWN] button to make a curser move to the item you want to adjust
3. Press [MENU] button while an icon is selected.
4. Sub ITEM or adjusting Menu will appear. If Sub item shows up, repeat two or three times until you can see an adjusting Menu.
5. At the state of adjusting Menu, adjust the condition with [RIGHT/LEFT] buttons
6. Press [EXIT] button, then OSD menu or the present menu disappears from screen.

** If you want to move from low to high category, press [MENU] button.

- Select the Input Mode

- Conversion of source inputs ;

You can select one of source inputs using [MENU] button.

Press [MENU] button, then the following menu will appear.



1. Press [UP/DOWN] and put the cursor on "SOURCE" then press [MENU]



2. In order to convert to TV input, move cursor to [Television], then press [RIGHT] button.

3. There are also " Analog PC, PC Video, S-Video & Scart Video, one of which you can select to fit a input source

- Conversion from TV or VIDEO to PC input mode

Press [MENU] button, then the following menu will appear.



1. Press [UP/DOWN] and , put the cursor on "SOURCE" then press [MENU]



2. In order to convert to PC input, move cursor to [Analog PC], then press [RIGHT] button.

3.2.2 OSD basic form

Two kinds of OSD menu are serviced as OSD structure.
One for TV input, and the other for other source inputs.



(OSD for analog PC input)



(OSD for other source inputs)

At the beginning, the cursor is fixed at [PICTURE],
and the present resolution of PC Monitor appears at the bottom.

If you press [LEFT/RIGHT] with no menu selected, then volume will be adjusted



Increase VOLUME with [RIGHT]
Decrease VOLUME with [LEFT]

Press [EXIT] button, then menu disappears.

3.2.3 Control of OSD menu at PC input mode

Adjustment of PICTURE

- Control of Brightness

To adjust BRIGHTNESS, take the following procedure.

1. Press [MENU], then OSD MENU appears.
Select "PICTURE", then
press [MENU].



2. Select "Brightness" using [UP]/[DOWN]
then press [MENU]



3. Adjust the desired Brightness
using [RIGHT]/[LEFT]
4. Press [EXIT] to move to previous
MENU



Follow the same procedure to control the CONTRAST, PHASE and FREQUENCY

- Control of SHARPNESS

Use to control the distinction of display

1. Press [MENU], then OSD MENU appears.
Select "PICTURE", then
press [MENU].



2. Select "Sharpness" using [UP]/[DOWN]
then press [MENU]



3. Select the distinction you want
by using [RIGHT]/[LEFT] button.
lower number gets stronger distinction,
higher number gets smoother distinction.



- Control of COLOR

Use to adjust the density of color.

1. Press [MENU], then OSD MENU appears.
Select "PICTURE", then
press [MENU].



2. Select "Color" using [UP]/[DOWN]
then press [MENU]



3. Select "Red" using [UP]/[DOWN]
then press [MENU]



4. Adjust the level with using [RIGHT]/[LEFT]
5. Press [EXIT] to move to previous MENU



* To adjust the density of Green, Blue, take the same procedure as above.

Control of the position of entire screen

- Control of H-POSITION

Use to move the position of entire screen.

1. Press [MENU], then OSD MENU appears.
Select "SCREEN CONTROL", then press [MENU].



2. Select "H-Position" using [UP]/[DOWN]
then press [MENU]
(H-Position for horizontal movement,
V-Position for vertical movement)



3. Adjust the level by using [RIGHT]/[LEFT]
4. Press [EXIT] to move to previous MENU



- SCALING Function

Controlling magnification of the screen.

1. Press [MENU], then OSD MENU appears. Select "SCREEN CONTROL", then press [MENU].



2. Select "Scaling" using [UP]/[DOWN] then press [MENU]



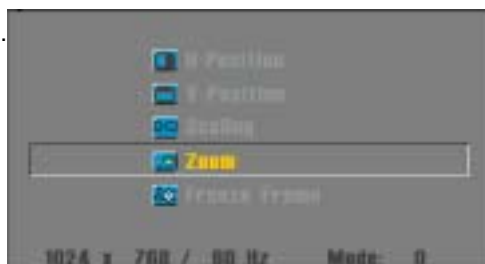
3. Select the function by using [RIGHT]/[LEFT]
(FULL for entire screen,
Aspect 16:9 for wide vision,
One To One for fitting into a running
program resolution)



- ZOOM Function

Use to zoom in/out on the screen.

1. Press [MENU], then OSD MENU appears.
Select "SCREEN CONTROL", then press [MENU].
2. Select "Zoom" using [UP]/[DOWN]
then press [MENU]



3. Select the level with using
[RIGHT]/[LEFT]



- FREEZE FRAME Function

Use to pause the favorite shot of pictures.

1. Press [MENU], then OSD MENU appears.
Select "SCREEN CONTROL", then press [MENU].



2. Select "Freeze Frame" using [UP]/[DOWN]
then press [MENU]



3. Select the On/Off with using
[RIGHT]/[LEFT]
(On : Pause, Off : Relieve)



Control of MISCELLANY

- SYSTEM RESET

In case that user makes improper setting, it sets back to factory default

1. Press [MENU], then OSD MENU appears.

2. Select "MISCELLANY"
using [UP]/[DOWN], then
press [MENU].



3. Select "System Reset"
using [UP]/[DOWN],
then press [MENU]



4. Select [RIGHT]/[LEFT], then
factory-defaulting will start .
Select [EXIT] before pressing [RIGHT]/
[LEFT] to return to previous menu



- OSD TIMEOUT Function

Use to adjust the stand-by time of OSD MENU, while no command is conducted by buttons.

1. Press [MENU], then OSD MENU appears.

2. Select "MISCELLANY"
using [UP]/[DOWN], then
press [MENU].

3. Select "OSD Timeout"
using [UP]/[DOWN], then
press [MENU]



4. Select the time as you like by using [RIGHT]/[LEFT],
You can set up the time 5 to 60 sec.
in a multiple of 5 sec.



- OSD TRANSPARENCY Function

1. Press [MENU], then OSD MENU appears.
2. Select "MISCELLANY" using [UP]/[DOWN], then press [MENU].
3. Select "OSD Transparency" using [UP]/[DOWN], then press [MENU]



4. Select the level you like with using [RIGHT]/[LEFT],
On : OSD Background gets more transparent.
Off : OSD Background gets less transparent.



- OSD POSITION Function

This function is for adjusting the position of OSD MENU on screen.

1. Press [MENU], then OSD MENU appears.
2. Select "MISCELLANY" using [UP]/[DOWN], then press [MENU].
3. Select "OSD Position" using [UP]/[DOWN], then press [MENU]



4. Select the position as you like by using [RIGHT]/[LEFT],

From the far left, left-top, mid-top, right-top, left-mid, center, mid-right, left-bottom, mid-bottom, right-bottom



- Using PIP(Picture in Picture)

This function will work on Video / S-Video / Television / Scart signals as inputs to sub-screen on main screen PC mode. When watching PIP, the main screen and the sub-screen menu have differences in the quality of screen color.

* PiP Adjustment

1. Press [MENU], then OSD MENU appears.

2. Select "MISCELLANY" using [UP]/[DOWN] then press [MENU]



3. Select "PiP" using [UP]/[DOWN], then press [MENU]



4. Adjust the desired PiP Size, PiP Source, PiP Position using [UP]/[DOWN]. then Select the desired Size, Source, Position using [Left]/[Right]



-Teletext Language

1. Press [MENU], then OSD MENU appears.

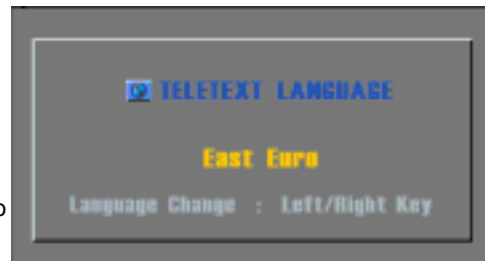
2. Select "MISCELLANY" using [UP]/[DOWN], the press [MENU].



3. Select "Redetect language" using [UP/DOWN], the press [menu].



4. Select User's area using [Left]/[Right]



** Area

East Euro -> West Euro -> East Cyrillic ->
West Cyrillic -> East Greek -> West Greek
-> East Arabic -> West Arabic -> East Euro

AUDIO SETUP

- Control of BALANCE

Use to adjust right or left balance of VOLUME.

1. Press [MENU], then OSD MENU appears.

2. Select "AUDIO SETUP"
using [UP/DOWN], then
press [MENU].



3. Select "Balance"
using [UP/DOWN]
then press [MENU]



4. Adjust the balance of VOLUME
using [RIGHT/LEFT]
L : left speaker
R : right speaker



- Control of SURROUND

1. Press [MENU], then OSD MENU appears.

2. Select "AUDIO SETUP"
using [UP/DOWN], then
press [MENU].

3. Select "Surround"
using [UP/DOWN]
then press [MENU]



4. Adjust the On/Off of Surround using [RIGHT/LEFT]



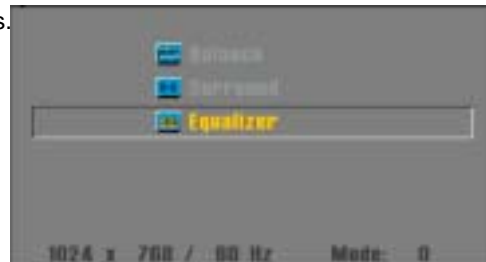
- Control of EQUALIZER

Use to adjust certain frequency to make it fit user's desire

1. Press [MENU], then OSD MENU appears.

2. Select "AUDIO SETUP" using [UP/DOWN], then press [MENU].

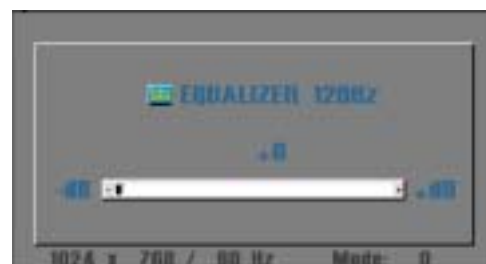
3. Select "Equalizer" using [UP/DOWN] then press [MENU]



4. Adjust to adjust certain frequency using [UP/DOWN], then press [MENU]



5. Adjust the value using [RIGHT/LEFT]



** Follow the same procedure to control Equalizer 500Hz, 1.5KHz, 5KHz, 10KHz

- AUTO CONFIG

Adjust position of display and picture quality automatically.

1. Press [MENU], then OSD MENU appears.

2. Select "AUTO CONFIG"
using [UP/DOWN], then
press [MENU].



3. Select [RIGHT/LEFT], then
Start "AUTO CONFIG".
before pressing [RIGHT/LEFT],
to escape to previous menu,
select [EXIT]



3.2.4 Control of OSD menu while in use of VIDEO or TV Input

AUDIO SETUP

- Auto Volume

Use to put the different level of volumes as per broadcast stations in a similar level

1. Press [MENU], then OSD MENU appears.

2. Select "AUDIO SETUP"
using [UP/DOWN], then
press [MENU].



3. Select "Auto Volume"
using [UP/DOWN]
then press [MENU]



4. Adjust the On/Off of AUTO VOLUME
using [RIGHT/LEFT]
Press [EXIT]
to return to previous menu



- Control of Stereo/Mono/SAP

According to the signal transmitted by broadcast station, select among Stereo/Mono/SAP

(There is a possibility of noise or bad sound at the areas of receiving poor signals,
in that case, select "Mono")

1. Press [MENU], then OSD MENU appears.

2. Select "AUDIO SETUP"
using [UP/DOWN], then
press [MENU].

3. Select "Stereo/Mono/SAP"
using [UP/DOWN]
then press [MENU]



4. Adjust according to channel programs using [RIGHT/LEFT]
At Auto selection, sound system automatically adjusted



- Control of SOUND SYSTEM
Use to fit each country's stereo system.

1. Press [MENU], then OSD MENU appears.
2. Select "AUDIO SETUP" using [UP/DOWN], then press [MENU].
3. Select "Sound System" using [UP/DOWN] then press [MENU]



4. Adjust to fit in user country's sound system using [UP/DOWN]
(French L/L' for France's neighboring countries, D/K for East European)



Control of TV SETUP

- Adjusting AUTO SEARCH

Automatically search and store currently broadcasting channels in memory.

1. Press [MENU], then OSD MENU appears.

2. Select "TV SETUP"
using [UP/DOWN], then
press [MENU].



3. Select "Auto Search"
using [UP/DOWN]
then press [MENU]



4. Select "AUTO SEARCHING",
by pressing [RIGHT/LEFT].
Press [EXIT],
to return to previous menu



5. Automatically search/store channels
in memory.
While searching/storing continues,
all buttons do not work



6. Completing the searching, there appears
"FINISHED".
To escape, press [EXIT].
The program stored at CH 1 will appear
on screen



- PROGRAM EDIT

After completing Auto Searching, use to delete the undesired of stored channels or input your favorite channels manually.

1. Press [MENU], then OSD MENU appears.



2. Select "TV SETUP" using [UP/DOWN], then press [MENU].

3. Select "Program Edit", using [UP/DOWN] then press [MENU]

4. Use [UP/DOWN] to move to the intended channel and pressing [RIGHT], then you can watch by that channel.
Use [LEFT] to delete a channel



To return previous menu, press [EXIT].

- Control of COLOR SYSTEM

"Auto Searching" allows to adjust to a suitable Color System(PAL/SECAM) for each country, but exceptionally in case of a wrong adoption, user can select manually.

1. Press [MENU], then OSD MENU appears.



2. Select "TV SETUP" using [UP/DOWN], then press [MENU].

3. Select "Color System", using [UP/DOWN] then press [MENU]

4. Use [RIGHT/LEFT] to select "SECAM L/L" for France, select "Others" for the other countries.



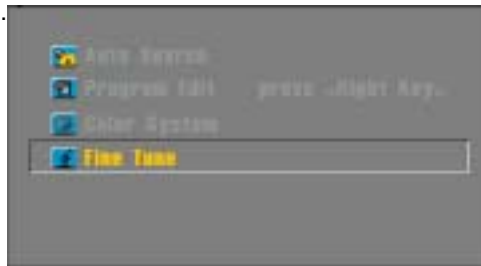
- FINE TUNE

Use to make minute adjustment when unsecured, poor colored display or lined picture appears.

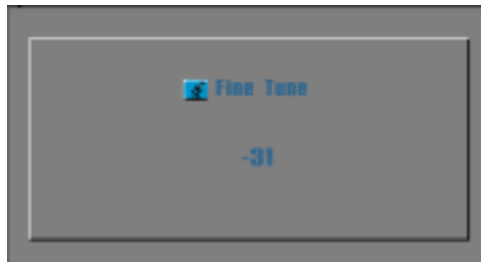
1. Press [MENU], then OSD MENU appears.

2. Select "TV SETUP"
using [UP/DOWN], then
press [MENU].

3. Select "Fine Tune",
using [UP/DOWN]
then press [MENU]



4. Use [RIGHT/LEFT] to adjust -31 ~ 31
to optimize the picture



3.2.5 Using TELETEXT with a remote control

- TELETEXT

When the present TV program is broadcasted with text information, it shows TV mode and Text mode in a toggle form by Text button, recognizing its signal.

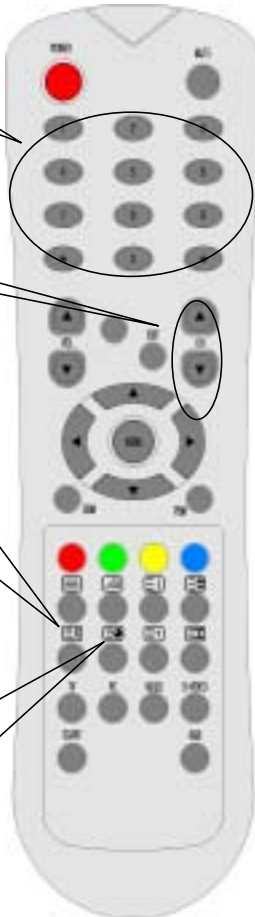
* The remote control has not been fixed yet. This is subject to change without notice.

DIGIT 0~9 buttons - In TEXT Mode, it is possible to move to the selected page directly

UP/DOWN buttons - In TEXT Mode, page nbr shall be Up/Down.

TEXT buttons - In case of channels with TEXT information, pressing the Text button will convert TV mode to Text mode, then Text information will appear. At this time, Menu buttons shall not work. Only Teletext related buttons shall work.

MIX button - In TEXT Mode, the background of TEXT screen converts to TV screen and so you can see both Text and TV screen simultaneously.

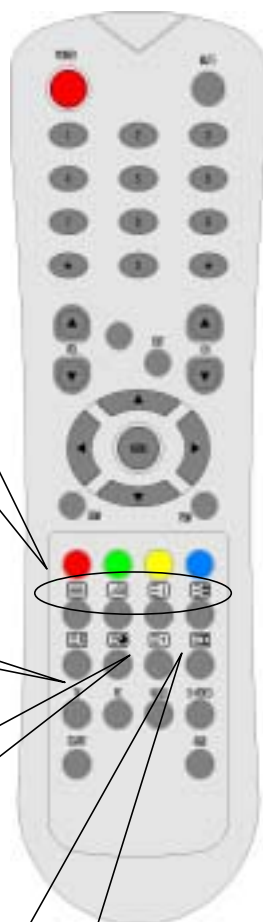


R/G/Y/C COLOR buttons - In TEXT Mode, there are four different colors at the bottom of the screen. One of them can be chosen with these buttons.

CANCEL button - In TEXT Mode, it is used to cancel the searching of pages or other working functions.

INDEX button - In TEXT Mode, it is used to connect directly to the index page of text screen. Normally Page No.100 is appointed as the index page.

SIZE button - In TEXT Mode, it is used to enlarge the size of current page.
Press once : 1/2 upper part enlarged.
Press twice : 1/2 lower part enlarged.
Press three times : ordinary screen converted.



4. Product Spec.

Specification

MODEL	LT27A02	
Panel:TFT-LCD		
Panel Type	LVDS	
Size	27 inch	
Panel Pitch	0.1555(H) x 0.4665(V)	
Maximum Color	16.7M(8bit)	
Brightness	550cd	
Contrast Ratio	600:1	
Viewing Angle	85"	
Resolution	WXGA(1280*720)	
	@75Hz	
Scanning Frequency:		
Horizontal	30~80.0KHz	55~75Hz
Vertical		
Program Channels	99Programs(EU).	
TV:		
Color System	"PAL, SECAM, Multi(PAL/SECAM), Tri-mode (NTSC/PAL)"-option	
Tuner System	B/G, D/K, I, L/L	
OSD/Direct Control	"TV, Composite & S-VHS Mode-"	
	Display: Brightness; Contrast; Color; Hue; Sharpness; Scale; Zoom; Freeze Frame; Full Screen/Wide, PIP	
	Control: System Reset; OSD Time Out; OSD Background; OSD H-Position; OSD V-Position;	
	Audio Control: Volume; Balance; Equalizer; Auto Volume; Surround; Mono/Stereo/SAP/Auto;	
	Channel Control: CH Auto Search Program; CH Fine Tune; CH Manual Search Program; CH Manual	
	CH Manual Color Select; etc	
	Text(for EU only): Teletext; index; Mix; Size; Hold; Sub-page; Cancel; Reveal; Red; Green; Yellow;	
	Page Numeric 0~9; etc.	
	PC Mode-	
	Display: Brightness; Contrast; Phase; Frequency; Sharpness; R/G/B Color Control;	
	Position & Scaling; H/V Position; Scaling; Zoom; Freeze Frame;	
	Control: System Reset; OSD Time Out; OSD Background; OSD H-Position; OSD V-Position;	
	Audio Control: Volume; Balance; Equalizer; Auto Volume; Surround; Auto Config; etc.	
Video Input:		
Color System	NTSC/PAL/SECAM/NT4.43	
Level (at 75 ohm)	1.0+/- 0.2Vp-p	
Connectors (Rear)		
1. Input		
S-VHS	4-Pin Mini Din	
Video	RCA	
Audio	RCA(R/L)	
PC Audio(Stereo)	3.5mm Jack	
PC(analog RGB)	15-Pin D-Sub	
RGB A/V	21-Pin Euro Scart(for EU only)	
TV Antenna	IEC-Type(EU)"	
2. Output		
A/V	21Pin Euro Scart(for EU only)	
Audio(Stereo)	3.5mm Jack	
Headphone(Stereo)	3.5mm Jack	
Plug & Play	DDC 1/28	
Wall Mount	VESA	
Dimensions (mm):		
W x H x D	696*436*82.5	
Power Consumption	150W	
Weight (Net) .kg		
Included Items	AC Adaptor, Power Cable, 15-Pin D-Sub PC Signal Cable, 3.5mm A/V cable, PC Audio Cable(option), Remote Controller (45keys), User's Manual	

5. Troubleshooting

Troubleshooting

In case a problem occurs with your LCD, please take the following steps first.

If you still have the problem, turn the power off and contact your dealer or an authorized service center.

TROUBLESHOOTING	CHECK ITEM
The screen does not appear.	Is the power plug pulled out? Insert the power plug, Turn the main power button on and then press the power button of the remote control.
Screen is too bright or too dark.	Perform brightness adjustment or contrast adjustment.
Screen is too large or too small	Adjust the screen size.
Stripes appears on the screen and it shakes	Stop using wireless telephones, hair driers, and electrical drills.
Screen appears in black and white	Adjust color temp.
Simultaneous Screen does not appear	Check that LCD and external equipment are connected. Check the inputs of simultaneous screen by pressing sub-screen selection.
Screen appears, but there is no sound	Increase the sound by pressing volume adjustment button. Check if voice terminal of external input is connected properly. Check if speaker cables are connected properly Select and check the other input. If the sound still does not work and the other channels are the same after you have done as the above, contact your dealer or an authorized service center.
Remote control does not work	Check if main power is On. Check that the batteries of the remote control were loaded properly. Check to see if any obstacle exists between the LCD and the remote control and remove it, if any. If the batteries have no power, replace them with two new batteries.
LCD makes strange noise	It is the noise when the mechanism expands or contracts from changes to the environment due to factors such as humidity, temperature, etc. it is not a failure
LCD indication lamp is On.	The red means the Stand-by power is ON. It will take a few seconds to turn off as the main power is off.
The picture is spotted	—There may be interference from automobiles trains, high voltage lines neon lights, etc.
There are stripes on the screen or colors fade	—Is the unit receiving interference from other devices? Transmission antennas of radio broadcasting stations and transmission antennas of amateur radios and cellular —Use the unit as far apart as possible from devices that may cause possible interference Dimensional Drawings
Computer input Screen is abnormal	Execute automatic adjustment by pressing Auto config button. If the screen is still abnormal after Auto config, perform fine adjustment.

FCC Compliance Statements

Note: This equipment 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 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.

Warning : Your are cautioned that any change or modifications to the equipment not expressly approved by the party responsible for compliance could void your authority to operate such equipment.