



INSTRUCTION MANUAL

9.7" LED VIDEO MONITOR

Model **LCM-971**

Rev. R04

LED



Please read this manual thoroughly before use and keep for future reference.

※ Follow this safety instruction to use the monitor properly and prevent the damages.

※ This safety instruction has “Warning” & “Caution” as below



Warning - If the user does not follow this instruction, it may cause the serious damage to the user.



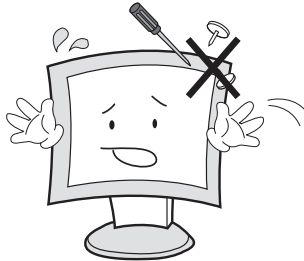
Caution - If the user does not follow this instruction, it may cause the slight damage to the user or cause some damages to the monitor.

※ Keep this user's guide book for later use.



Warning

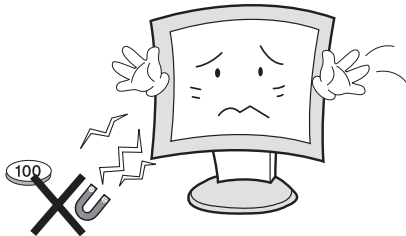
Never remove the back over and touch the inside of the monitor. If you need a service, please contact the service center.



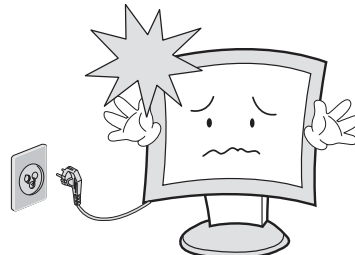
Keep away the monitor from the direct sunlight and a heating appliance.



Never push objects of any kind into this product as they may result in a risk of fire or electric shock.



Connect the power code to the wall outlet tightly. If the power code or plug are defective and the wall outlet is not tight, please do not use them.



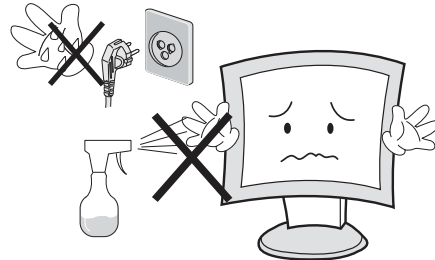


Warning

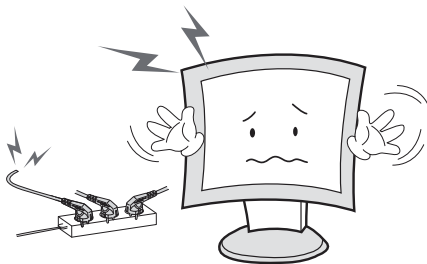
Do not install this monitor on the outside and near water. If may cause damage to the product, electric shock and fire.



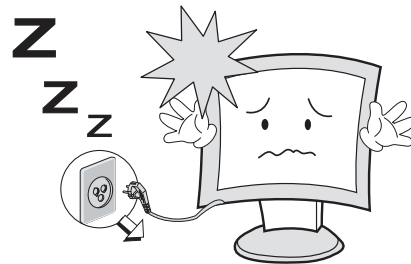
For cleaning do not use liquid cleaners. Never touch the power plug with wet-hands.



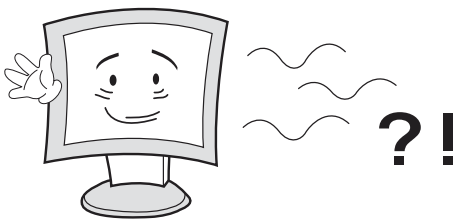
When lightning and thundering, unplug the monitor from the wall outlet and never touch it.



Unplug this product from the wall outlet, when It does not operate for a long time.



When smoking and noising from the monitor, unplug the product from the wall outlet and contact a service center.



WARNING : How to fix

Do not open this product as it contains high voltage inside.

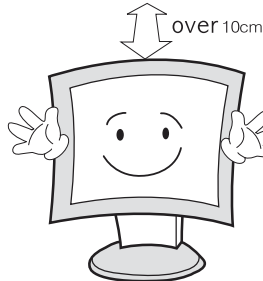
It may create an electric shock.

It the user disassembles and remove the back cover, it does not make sure to make up for the damages and do a service and exchange the monitor.



Cautions

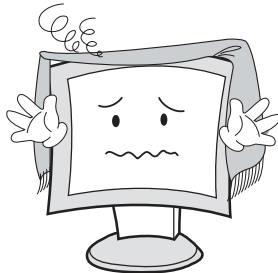
Install this monitor some distance
From the wall and do not install unless
Proper ventilation is provided.



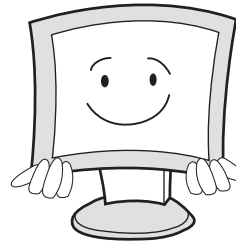
Place this product on a stable place.
If not, it may fall, causing serious
Damages to the monitor and people.



The openings must not be blocked by
curtain, rug or other similar surface.



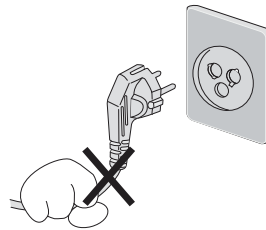
When carrying this monitor, be careful
not to damage the panel and drop it
It may cause some trouble.



Before carrying the monitor, turn it off and
Unplug the signal cables and the power cord
From the wall outlet.



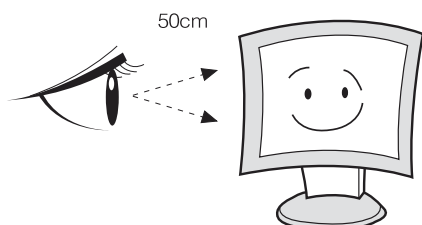
Take the power plug out from the wall
outlet.
Do not pull the cable. It may snap the inner-
wires and cause overheating and fire.



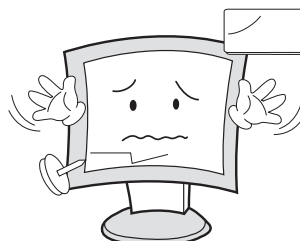


Cautions

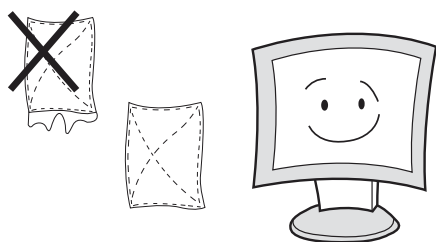
Install this monitor about 50cm far from the eyes and an angle of 0~15 degrees below eyes. Too close installation may cause having weak sight.



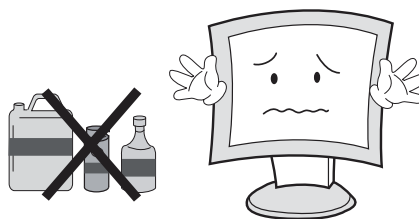
Do not press the LCD panel with hands or the sharpened material hardly.



For cleaning, unplug the monitor from the Wall outlet. Do not use the liquid cloth. Use the soft cloth.



Do not use the chemical liquid for cleaning. It may cause fading and breakage.



FCC RF INTERFERENCE STATEMENT

NOTE

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference 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.
- Only shielded interface cable should be used.

Finally, any changes or modifications to the equipment by the user not expressly approved by the grantee or manufacturer could void the users authority to operate such equipment.

DOC COMPLIANCE NOTICE

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the radio interference regulation of Canadian Department of communications.

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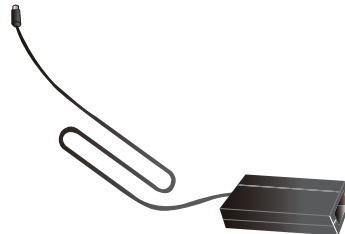
4.1 UNPACKING

Remove the package cover and place the product on a flat and secure surface or in the installation location. This equipment should be unpacked and handled with care. If an item appears to have been damaged in shipment, notify the shipper immediately. Check whether all the following device and accessories are included with the main system. If any items are missing, notify your Sales or Customer Service Representative.

4.2 PART LIST



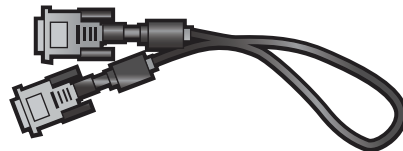
TFT LED Monitor



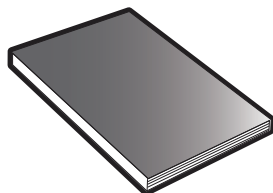
Power Adaptor



Power Cord

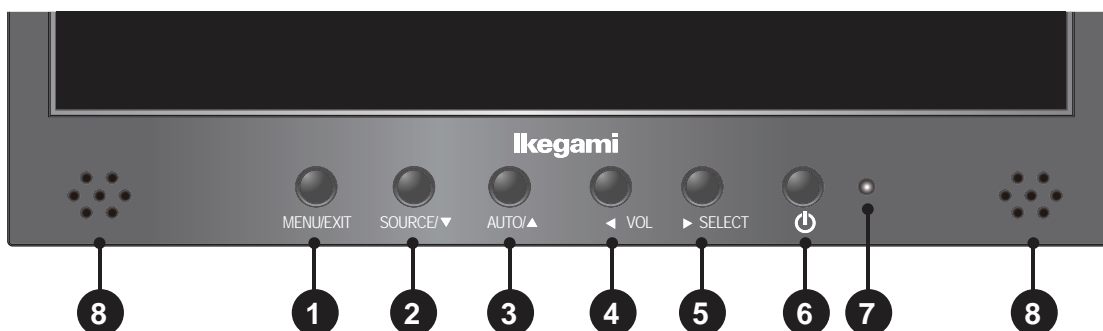


VGA Cable



User's Guide

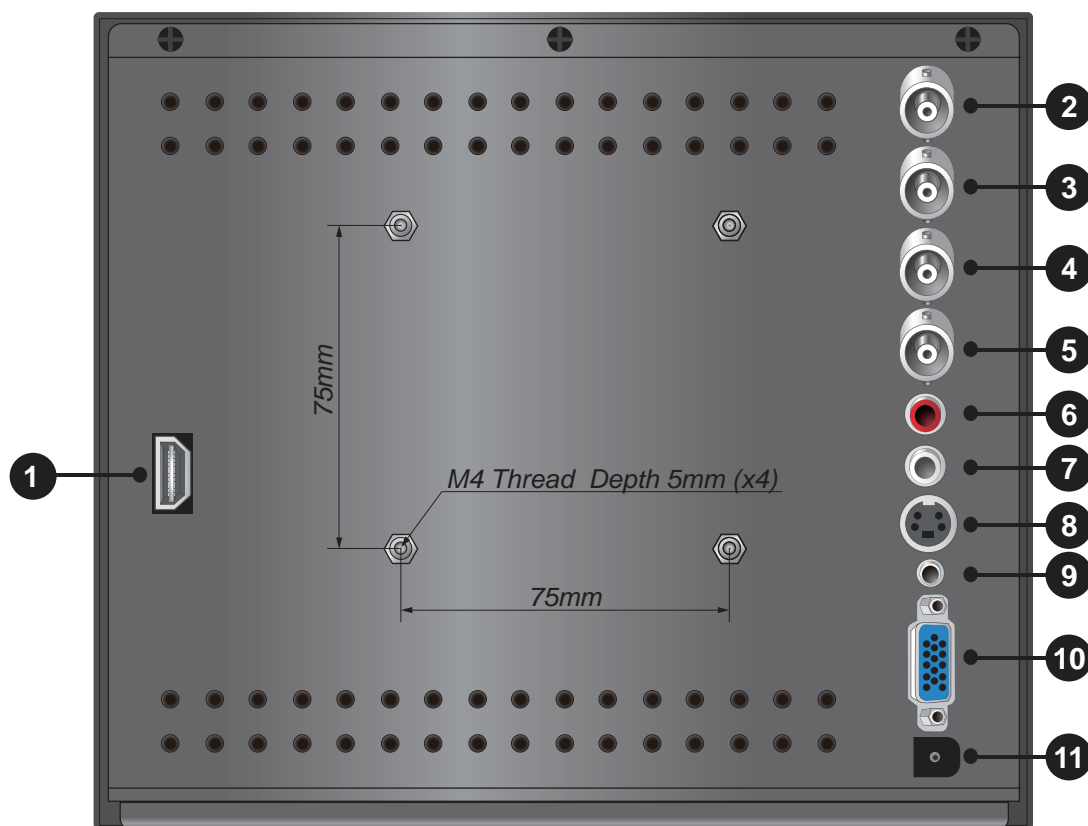
4.3 MAIN BUTTON



◎ SHORT KEY FUNCTION

OSD Key		Function
MENU / EXIT	1	Activates and exits the OSD.
SOURCE / ▼	2	Select input source, and move the OSD menu.
AUTO / ▲	3	Move the OSD menu and auto adjustment of RGB source.
◀ VOL	4	Decrease the level of volume and move the previous menu.
▶ SELECT	5	Increase the level of volume and select the OSD menu.
⏻	6	Turns the power ON or OFF. There will be a few seconds delay before the display appears. The power LED(next to the power switch) lights with green when the power is turned ON. The power is turned off by pressing the power switch again and the power LED goes Red.
LED LAMP	7	Power ON Indicator.
SPEAKERS	8	Two speakers side by side.
▲ + ◀		Adjust the button lock and Release. <i>*Release Lock : Press ▲ and ◀ button on the key pad for 5 seconds.</i>

4.4 INPUT INTERFACE



1. HDMI Input

2. AV1 Input
Composite signal input for AV 1

3. AV1 Output
Video Looping output for AV 1

4. AV2 Input
Composite signal input for AV2

5. AV2 Output
Video Looping output for AV 2

6,7. AUDIO1 IN
Stereo audio signal input.
This input for AV1 and S-VIDEO

8. S-Video Input
Y/C separated signal input

9. PC AUDIO Input

10. RGB Input

11. DC 12V Input

5.1 INPUT Select

Switching over the sources



1. Press the button **SOURCE**. A list of sources is inserted, the source presently selected is marked.
2. Select the source with the button ▼ or ▲.
3. Confirm the selection with the button **SELECT**.
After switching over to the source, the identification of the source and short information are briefly inserted.
If the selection of a source is not confirmed, the list is automatically deactivated when the insertion time adjusted in the menu has elapsed after the last button has been pressed. The list can also be deactivated with the button **EXIT**.

5.2 MENU Selection

Adjustments in the on-screen menu

1. To call the menu, press the button **MENU**, the first menu page is inserted.

In the toolbar at the top the menu pages are marked as follows:

- 1st page **PICTURE** (depending on the video signal)



or



picture adjustment

- 2nd page **SYSTEM**



basic adjustment

- 3rd page **FUNCTION** (only available for the source PC)



manual picture adjustment

2. To select a menu page, go to the respective icon with the button ◀ or ▶.
3. To select menu items on one page, use the button ▼ or ▲.
4. If a menu item has been selected, change its value with the button ◀ / ▶ or select an adjusting option.
If only an arrow is shown behind a menu item, call a submenu or activate the function of the menu item with the button ▶.
5. To exit a menu page and to return to the selection of the menu pages, press the button **EXIT**.
6. To deactivate the menu, press the button **EXIT**.

5.3 VOLUME MENU on OSD

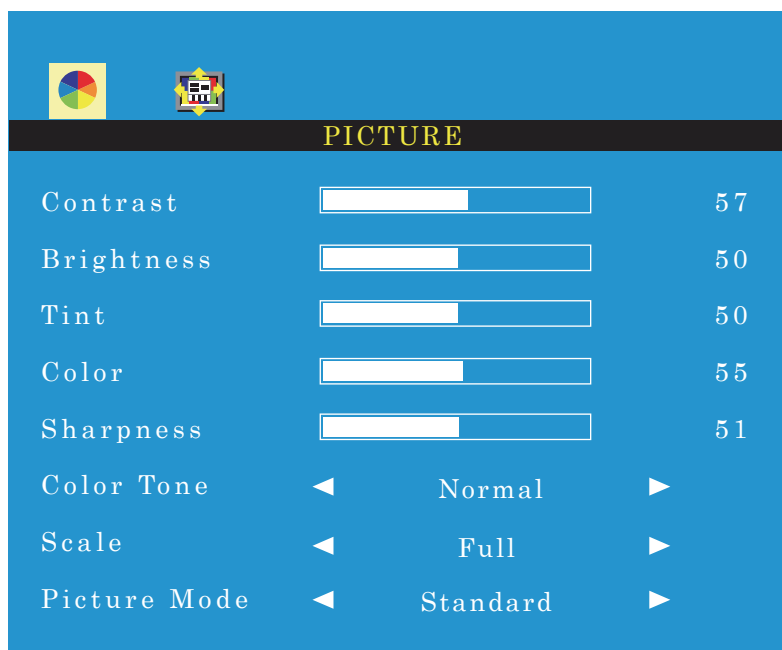
Adjusting the speaker volume



Press one of the buttons VOL, ◀ or ▶, to insert the adjusting scale for the volume. Then reduce the value for the volume with the button ◀ or increase it with the button ▶.

5.4 PICTURE MENU on OSD

5.4.1 INPUT SOURCE AV1, AV2, S-VIDEO, HDMI



Contrast

Brightness

Tint (for NTSC sources only)

Color (Saturation)

Sharpness

Reduce or increase the value for the respective picture parameter with the button ◀ or ▶. When changing the value, the menu is deactivated and only the scale is inserted at the bottom of the picture. After adjusting the value, press the button EXIT to return to the menu.

Color Tone (Color presentation)

Select Normal (standard adjustment for the monitor), Warm (warmer Color presentation) or Cool (cooler Color presentation) with the button ◀ or ▶.

Scale (Picture format)

Select Full (format 4:3) or 16:9, Under or Over with the button ◀ or ▶ .

Picture Mode

Select Standard, Dynamic, Mild or User with the button ◀ or ▶ . For User, individual values for the picture parameters can be adjusted. The values are fixed for the other modes.

5.4.2 INPUT SOURCE PC

If the source is digitally connected via the HDMI input, the menu items Auto and Color Auto can-not be selected.

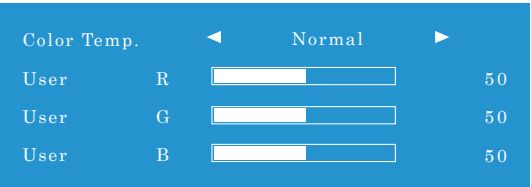


Contrast

Brightness

Color Tone (Color presentation)

Call the submenu for the menu item with the button ▶ .



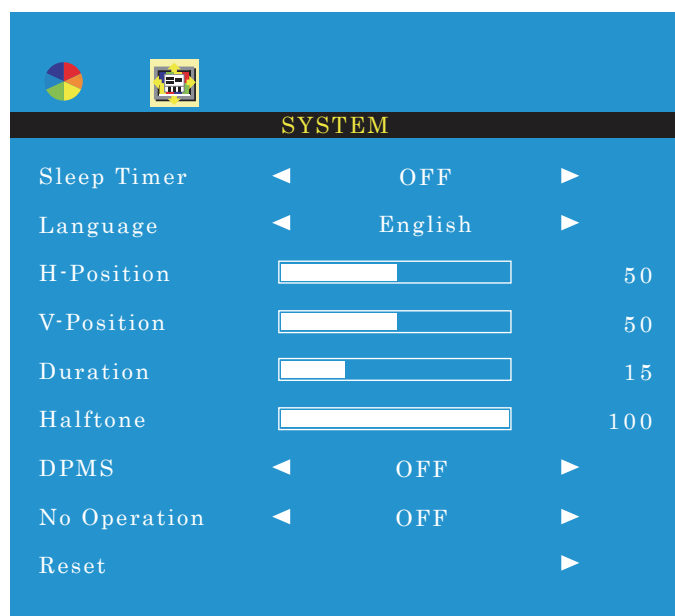
- Normal** Standard adjustment for the monitor
- Warm** Warmer Color presentation
- Cool** Cooler Color presentation
- sRGB** Usual standard for computer applications
- User** Individual adjustment
If User has been selected, select the lines R (red component), G (green component) and B (blue component) successively with the button ▼ or ▲ and adjust the value with the button ◀ or ▶ .

Auto

Automatic adjustment of the picture position. After activating the menu item with the button ▶ , an automatic adjustment of the picture position is made. Then values adjusted manually for H-Position and V-Position on the menu page **FUNCTION** are corrected.

Color Auto (Without function for this model)

5.5 SYSTEM MENU on OSD



Sleep Timer (Timer-controlled change to stand-by)

Via this menu item a duration can be defined. After it has elapsed, the monitor will automatically go to stand-by mode. Select the duration or OFF with the button ◀ or ▶. One minute before changing to stand-by, the time is counted down (display Sleep Time Left). It is not possible to call the on-screen menu, the source list and the volume scale during this countdown.

Language (Menu language)

Select English, French, Spanish, Italian or German with the button ◀ or ▶.

H-Position (Horizontal position of the menu)

Move the menu to the left with the button ◀ or to the right with the button ▶.

V-Position (Vertical position of the menu)

Move the menu upwards with the button ◀ or downwards with the button ▶.

Duration (Time of insertion)

This menu item defines the time the menu remains inserted after the last button has been pressed. The adjusted duration also applies to the insertion of the source list and the volume scale. Reduce the duration with the button ◀ or increase it with the button ▶. (adjusting range 5– 60 seconds)

Halftone (Transparency of the menu)

Via this menu item the transparency of the menu and the source list and volume scale inserted can be adjusted. Increase the transparency with the button ◀ or reduce it with the button ▶.

DPMS (Power saving mode for the use as a computer monitor, not for the sources AV1, AV2, SVIDEO)

The function can be activated (ON) or deactivated (OFF) with the button ◀ or ▶. If the graphics card of the computer supports the VESA power saving standard DPMS (Display PowerManagement Signaling), it is possible to define the time in the computer adjustments after which, in case of inactivity, the system will send a signal to the monitor to go to the power saving mode. If the monitor receives the corresponding signal from the computer, it goes to the power saving mode after approx.

No Operation (Change to stand-by in case of inactivity)

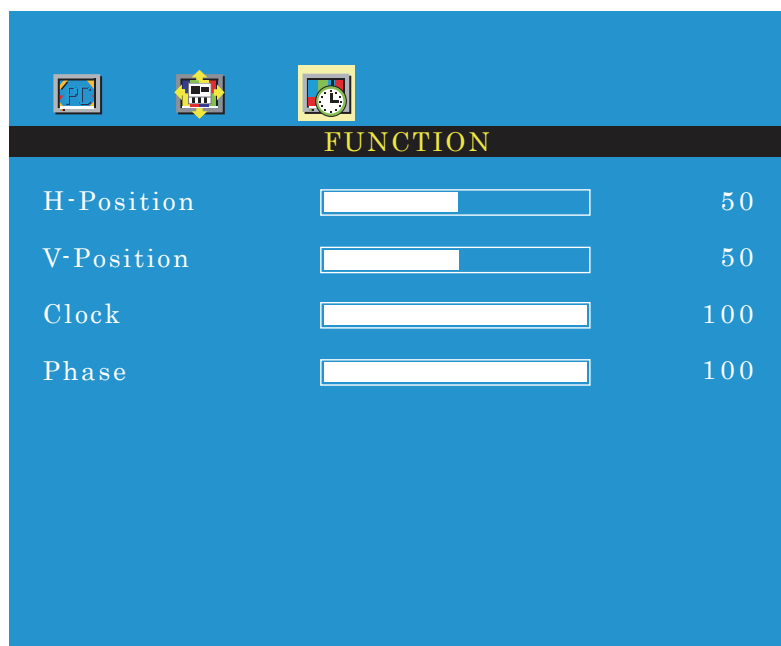
The monitor can be adjusted so that it is automatically switched to stand-by mode when no button has been actuated for a defined time. Select the duration or OFF (function deactivated) with the button ◀ or ▶. One minute before going to stand-by the time is counted down (indication Power Time Left). Switching over to stand-by can still be stopped if you press one of the buttons during the countdown.

Reset (Reset to the factory settings)

After activating the menu item with the button ▶, after a few seconds all settings of the on-screen menu are reset to the factory settings. After a reset the source HDMI is selected and the volume is adjusted to the value 50.

5.6 FUNCTION MENU on OSD

For the source PC only. If the automatic picture adjustment should not provide the desired result, the picture can manually be adjusted via the menu items of this page.



H-Position (Horizontal position of the picture)

Move the picture to the left with the button ◀ or to the right with the button ▶.

V-Position (Vertical position of the picture)

Move the picture downwards with the button ◀ or upwards with the button ▶.

Clock (Pixel clock)

For fine adjustment of the picture width. If vertical lines appear in the picture, reduce (◀) or increase (▶) the picture width.

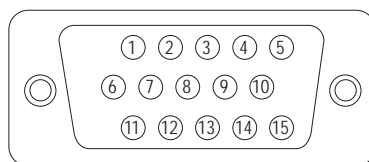
Phase

Adjust the phase with the button ◀ or ▶ so that a perfect sharpness (e. g. of the display of letters) is reached and there is no horizontal interference.

Display	
Screen Size	9.7 Inch
Panel Type	LED BLU
Max. Resolution	1024 x 768 pixels
Pixel Pitch	0.192 x 0.192 mm
Brightness	300 cd/m ²
Contrast Ratio	800 : 1
Aspect Ratio	4 : 3
Viewing Angle (H/V)	170°(L/R), 170°(U/D)
Display Color	262,144 Colors (6 bit)
Response Time	T on 10 ms, T off 15 ms(Typ)
Video System	NTSC / PAL
Interface	
Video In / Out (BNC Type)	2 / 2
HDMI In	1
S-Video In / Out	1 / 0
VGA In (15 Pin D-Sub)	1
Audio In (RCA Type)	1 (L / R)
PC Stereo In	1
Audio	
Built-In Speaker	Yes
Dimension / Weight	
Dimension	8.50" x 7.44" x 2.21"
Net. Weight	2.0 Kg (4.5 lbs)
VESA Mount	75 x 75 mm (M4 Thread, Depth 5 mm)
Power	
Consumption: < On	Max. 12W
Electrical Ratings	AC100 ~ 240V (50/60Hz)
	DC12V / 1.5A

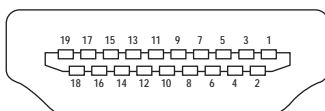
**Design and specifications are subject to change without notice*

7.1 D-SUB Connector PIN Assignment



PIN No.	PIN Name	PIN No.	PIN Name
1	RED VIDEO	9	NC
2	GREEN VIDEO	10	SIGNAL CABLE DETECT
3	BLUE VIDEO	11	GROUND
4	GROUND	12	SDA (for DDC)
5	GROUND	13	H-SYNC
6	RED GROUND	14	V-SYNC
7	GREEN GROUND	15	SCL (for DDC)
8	BLUE GROUND		

7.2 HDMI Type A PIN Assignment



PIN No.	PIN Name	PIN No.	PIN Name
1	TMDS Data2+	11	TMDS Clock Shield
2	TMDS Data2 Shield	12	TMDS Clock-
3	TMDS Data2-	13	CEC
4	TMDS Data1+	14	Reserved (HDMI 1.0-1.3c), HEC Data -
5	TMDS Data1 Shield	15	SCL (PC serial Clock for DDC)
6	TMDS Data1-	16	SDA (PC serial Clock for DDC)
7	TMDS Data0+	17	DDC/CEC/HEC Ground
8	TMDS Data0 Shield	18	+5V Power (max 50 mA)
9	TMDS Data0-	19	Hot Plug Detect (All Versions) and HEC Data +(Optional, HDMI 1.4+ with Ethernet)
10	TMDS Clock+		

8

TROUBLESHOOTING

When the following troubles are occurred, follow the trouble shooting. Before contacting a service center.

Troubleshooting	Troubleshooting Tip
The screen doesn't show up	1. Make sure if the power supply is connected property
	2. Turn on the power.
	3. Select the input signal right for the connected port.
The screen is too light or to dark	Control the BRIGHTNESS
The screen size is not fit for the PC signal	Press the AUTO key among keys in the front. (It is used only in the PC signal)
The screen color shows strange in the PC signal	In the FUNCTION menu of OSD menu, perform the AUTOADJUST.
The key pad does not work	Press ▲ and ◀ button on the key pad for 5 seconds.



LIMITED WARRANTY

All products carry a limited warranty from ship date against defects in materials and workmanship. We are not liable for improper installation that results in damage to mounts, adapters, display equipment or personal injury.

Contact Ikegami Electronics (U.S.A.), Inc.

In the event of missing and/or damage equipment, or technical questions, the following information can help in the completion of the installation.

Address: 300E State Route 17S, Mahwah, NJ 07430

Tel: +1-201-368-9171 / Fax: +1-201-569-1626

Website: <http://www.ikegami.com>

e-mail: CCTV@Ikegami.com



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