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FEDERAL COMMUNICATIONS COMMISSION(F.C.C) STATEMENT

This equipment has been tested and found to comply with the limits of 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:

- 1. Reorient/Relocate the receiving antenna.
- 2. Increase the separation between the equipment and receiver.
- 3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- 4. Consult the dealer or an experienced radio/TV technician for help.

CAUTION:

Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

IMPORTANT SAFEGUARDS

Warnings:

- I. Read all of these instructions.
- Unplug this monitor from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- 3. Do not use this monitor near water. For example near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc...
- 4. Do not place this monitor on an unstable cart, stand, or table. The monitor may fall, causing serious injury to a child or audit, and serious damage to the appliance. Use only with a cart or stand recommended by the manufacturer or sold with monitor. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.
- 5. Slots and openings in the cabinet and the back or bottom are provided for ventilation, and to insure reliable operation of the television receiver and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the monitor on a bed, sofa, rug, or other similar surface. This monitor should not be placed in built-in installation such as a bookcase unless proper ventilation is provided.
- Do not allow anything to rest on the power cord. Do not locate this monitor where the cord will be abused by persons working on it.
- 7. Never push objects of any kind into this monitor through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fore or electric shock. Never spill liquid of any kind on the monitor.
- 8. Do not attempt to service this monitor yourself since opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
- 9. Unplug this monitor from the wall outlet and refer servicing to qualified service personnel under the following:
 - a. When the power cord or plug is damaged or frayed.
 - b. If liquid has been spilled into the monitor.
 - c. If the monitor has been exposed to rain or water.
 - d. If the monitor has been dropped or the cabinet has been damaged.
 - e. When the monitor exhibits a distinct change in performance this indicated a need for service.



Introduction

I.I Features

- Multi-scanning at horizontal frequencies of 30KHz to 80KHz and vertical frequencies of 56Hz to 75Hz.
- ☑ Microprocessor based with OSD (On Screen Display) control.
- Compatible with standard IBM VGA, extended VGA, super VGA, IBM XGA modes, as well as VESA resolution standards.
- ☑ Universal power supply.
- ☑ TCO 99 compliant.
- ☑ Microsoft Windows 9x/2000/XP compatible & VESA Display Data Channel (DDC) 1/2B compatible.

1.2 Checking List

Please make sure the following items are included with your LCD monitor.

- ☑ Your monitor
- ☑ AC Adapter
- ☑ AC power cord
- ☑ Signal cable
- M Audio cable

If any of these items are missing, please contact with your dealer for technical support and custom service.

Note:

Be sure to save original box and all packing material for transport in future if the monitor need,

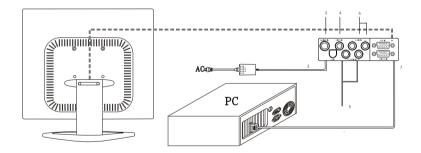
Installation

2.I Connect your monitor to computer

- I Turn off your computer and unplug its power cable.
- 2 Connect the S- VIDEO IN jack to S connector in for DVD or VTR.
- 3 Connect the power cable for your monitor to the DC adapter and connect the adapter the DC power jack on the back of your monitor

You must use the supplied adapter.

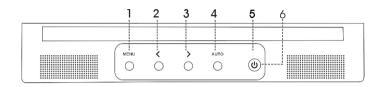
- 4 Connect the VIDEO IN jack to RCA video in for DVD or VTR.
- 5 Connect the PC AUDIO IN jack to audio in for PC.
- 6 Connect the AUDIO IN jack to RCA audio in for DVD or VTR.
- 7 Connect the DVI or D-Sub I5Pin signal cable to the video port on the back of your computer
- 8 Plug the computer and monitor power cables into a nearby outlet.
- 9 Turn your computer and monitor on, if your monitor display an image, you have successfully installed the monitor. If the monitor does not display an image, check all the connections.



Connecting the monitor to the computer and the power supply

Over view of your monitor

3.1 Front panel over view



I.Menu Button (MENU)

4.Auto Button (AUTO)

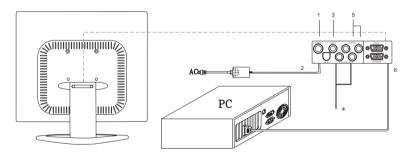
2.Select Button <

5. Power Button

3.Select Button

6. Power indicator

3.2 Rear panel over view



I. S-VIDEO IN

4. PC AUDIO IN

2. DC IN

5. AUDIO IN

3. VIDEO IN

6. DVI/VGA IN



OPERATION Direct – Access Features

4.I Power ON/OFF Switch

This button is used to turn the monitor on and off.

NOTE: The ON/OFF switch does not disconnect the device from the main voltage.

To completely disconnect the mains voltage, please remove the power plug from the socket.

4.2 Power indicator

This indicator lights up blue when the monitor operates normally. If the monitor is in power saving mode, this indicator change to amber when monitor is turn off this indicator change to dark.

4.3 Auto

Function I. Press AUTO button and release the auto adjust display mode will tune to the utmost perform ance according to VGA setting.,

Function 2. Press AUTO button 2 seconds to enter signal search mode. You could choose among signals by pressing AUTO button 2 seconds.

4.4 Volume

This feature adjust the < button to decrease the volume and adjust > button to increase the volume.

4.5 Menu Features

The following features can all be accessed using your monitor on screen menu system. Once are finished. Making adjustments to a feature, pushing the exit button to turn off the menu.

Please follow the procedure of selection and adjust an item using the OSD system as below steps for main functions adjustment.

- **Step I.** Press MENU Button to activate the OSD menu.
- **Step 2.** Press Select Button < or Select Button > to scroll the highlight through the main function list.
- Step 3. When the desired function is highlight, press MENU Button a second time, the highlight will change to sub-menu nearby main menu.
- **Step 4.** Press Menu Button and release again, the highlight of adjusted items and scroll bar will change the color from gray to blue.
- **Step 5.** To make your adjustment, press < counterclockwise to decrease or press > clockwise to increase the setting.
- **Step 6.** Press and release Menu Button again to store the change, and scroll bar will change the color from blue togray. You can select other function to make adjustment by < or >.

 Also you can select exit icon and press MENU Button again to go back main menu.

4.6 OSD menu

Main menu

OSD main menu of controls gives you an overview of the selection of controls available. When you want to make adjustment of the screen image, press and release button Menu



Analog RGB / Digital RGB

picture 🔼

I. auto adjust

Press > button, auto adjust the display mode to its utmost performance according to VGA setting.

2. brightness 🗅

Adjust the overall image and background screen brightness.

3. contrast

Adjust the image brightness in relation to the background.

4. h position

To move the picture image horizontally left or right.

5. v position

To move the picture image vertically up or down.

6. phase 📰

To improve focus clarity an image stability.

7. clock []]]

To increase or decrease the horizontal size of image.

8. exit

To exit the menu.

advanced 💿

I. sharpness A

Adjusts the picture sharpness.

2. color 🔔



You have 4 kinds of options.

cool

This control adjusts the color temperature of the screen image, this item are preset by factory, you can not adjust these setting. The performance is bluer and brighter.

natural

This performance is reddish and closer to paper white.

The performance is yellowish and closer to paper white

user

You can adjust the individual color intensity by yourself. Increase or decrease red, green or blue depending upon which is selected.

user red 🕹

Increase or decrease red.

user green 🔔

Increase or decrease green.

user blue

Increase or decrease blue.

exit 🔠

To exit the main menu.

audio 🎵

I. volume

This features adjusts < to decrease volume and > to increase volume.

2. base 115

This features adjusts < to decrease base and > to increase base.

This features adjusts < to decrease treble and > to increase treble.

4. ATTL

This features adjusts < to decrease left speaker volume and > to increase left speaker volume.

5. ATTR 🗆 🕻

This features adjusts < to decrease right speaker volume and > to increase right speaker volume.

6. loudness

This features choose on or off to get loudness.

7. mute 🕮

This features choose on or off to mute the sound.

8. exit

To exit the main menu.

options 🧇

I. osd

To move the OSD image.

2. osd h position

To move the OSD image horizontally left or right.

3. osd v position

To move the OSD image vertically up or down.

4. language 🧌

920

You can choose one of the nine languages you need.

5. exit 🔠

To exit the main menu.

utilities **9**

I. osd timeout 🕑

You can select how long the monitor waits after the last adjust of the key to shut off the OSD menu. The time setting choices are from 5 to 60 seconds.

2. osd background

You can select **opaque** or **translucent** to change OSD background.

3. source icon

You can select on or off to display OSD icon.

4. exit

To exit the main menu.

reset 4

I. memory recall 📵

Reset the currently highlight control to the factory setting. User must be using factory preset video mode to use this function.

2. exit 🔠

To exit the main menu.

exit 🔠

To exit the OSD menu.

Composite Video / S-Video

picture 🔼

I. brightness 🔘

Adjust the overall image and background screen brightness.

2. contrast

Adjust the image brightness in relation to the background.

3. saturation

Adjusts the color saturation of the screen image.

4. hue 🔚

Adjusts the color hue of the screen image.

5. sharpness A

Adjusts the picture sharpness.

6. scaling □<□

Adjusts the picture size full screen or 16:9 screen.

7. exit

To exit the main menu.

advanced 💿

I. sharpness A

Adjusts the picture sharpness.

2. color 😃

You have 4 kinds of options.

cool

This control adjusts the color temperature of the screen image, this item are preset by factory, you can not adjust these setting. The performance is bluer and brighter.

natural

This performance is reddish and closer to paper white.

The performance is yellowish and closer to paper white

user

You can adjust the individual color intensity by yourself. Increase or decrease red, green or blue depending upon which is selected.

user red 🔓

Increase or decrease red.

user green 🔔



Increase or decrease green.

user blue 🗘



Increase or decrease blue.

exit 🔠



To exit the main menu.

audio 🎝

I. volume 🗆

This features adjusts < to decrease volume and > to increase volume.

2. base 115

This features adjusts < to decrease base and > to increase base.

3. treble

This features adjusts < to decrease treble and > to increase treble.

4. ATTL

This features adjusts < to decrease left speaker volume and > to increase left speaker volume.

5. ATTR

This features adjusts < to decrease right speaker volume and > to increase right speaker volume.

6. loudness

This features choose on or off to get loudness.

7. mute 🕮

This features choose on or off to mute the sound.

8. exit

To exit the main menu.

options 🤏

I. osd 🔼

To move the OSD image.

2. OSD h position

To move the OSD image horizontally left or right.

3. OSD v position

To move the OSD image vertically up or down.

4. language 🌎

You can choose one of the nine languages you need.

5. exit 🔡

To exit the main menu.

utilities 🙎

I. osd timeout

You can select how long the monitor waits after the last adjust of the key to shut off the OSD menu. The time setting choices are from OFF to 60 seconds.

2. osd background

You can select **opaque** or **translucent** to change OSD background.

3. source icon

You can select on or off to display OSD icon.

4. exit 🖽

To exit the main menu.

reset 4

I. memory recall

Reset the currently highlight control to the factory setting. User must be using factory preset video mode to use this function.

2. exit 🔠

To exit the main menu.

exit 🔠

To exit the OSD menu.

4.7 Self test pattern

When the computer's video signal is not reaching the monitor, the monitor will display a self test pattern.



4.8 Safety protection

When frequency of video signal from computer's was out of range, the monitor will protect by itself and a warning message of OSD will appear on the screen.



4.9 Preset Modes Timing Chart

| Resolution | Horizontal | Vertical |
|-------------|------------|----------|
| 720 × 400 | 31.47 kHz | 70 Hz |
| 640 × 480 | 31.47 kHz | 60 Hz |
| 640 × 480 | 37.86 kHz | 72.8 Hz |
| 640 × 480 | 37.5 kHz | 75 Hz |
| 800 × 600 | 37.88 kHz | 60.3 Hz |
| 800 × 600 | 48.08 kHz | 72.2 Hz |
| 800 × 600 | 46.87 kHz | 75 Hz |
| 1024 × 768 | 48.36 kHz | 60 Hz |
| 1024 × 768 | 56.48 kHz | 70.1 Hz |
| 1024 × 768 | 60.02 kHz | 75 Hz |
| 1280 × 1024 | 63.98 kHz | 60.02 Hz |



Technical Information

5.1 Poducts Specifications

| Inch Size | 17" | | | | |
|--------------------------------|---|--|--|--|--|
| Max. Resolution | <u>1280*1024@75 Hz</u> | | | | |
| Recommend Resolution | <u>1024*768@60 Hz</u> | | | | |
| Horizontal Freq. | 30-80 KHz | | | | |
| Vertical Freq. | 56-75 Hz | | | | |
| Active Display Area | 337*270 mm | | | | |
| Dot pitch | 0,264*0,264 mm | | | | |
| Display Color | 16,7 M | | | | |
| Contrast Ratio (Typical) | 400 | | | | |
| Luminance of white | 250 cd/m² | | | | |
| Bandwidth | 135 MHz | | | | |
| User Control | 4 Key Sw | | | | |
| OSD Functions | Brightness, contrast, H-position, V-position, H-Size, phase, Color, auto, Reset, language, OSD, Exit, | | | | |
| View Angle Horizontal Vertical | 160 degree 140 degree | | | | |
| Adapter power input | AC 100V to 240 V | | | | |
| Power Consumption (under) | 48 W | | | | |
| Connector Signal | D-Sub 15Pin / DVI 24Pin | | | | |
| Safety & EMI | UL/CUL, TÜV/GS, CE, FCC/DOC CB, VCCI, TCO99, BSMI, C-Tick B Mark, PSB, CCC, 13406-2 | | | | |
| Dimension (Packing) | 454 (W) x 460(H) x 135 (D) mm | | | | |
| Weight Gross/Net | 6.5 kg/4.8 kg | | | | |
| | | | | | |
| Multimedia Feature | 2.5W +2.5W (8Ω) | | | | |

5.2 Signal connector pin assignment

DVI Signal connector pin assignment

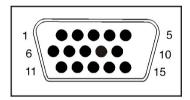
| PIN | Signal (DVI) | PIN | Signal (DVI) | | |
|-----|----------------------------|-----|----------------------|--|--|
| 1 | TMDS Data 2- | 16 | Hot Plug Detect | | |
| 2 | TMDS Data 2+ | 17 | TMDS Data 0- | | |
| 3 | TMDS Data 2/4 shield | 18 | TMDS Data 0+ | | |
| 4 | TMDS Data 4- | 19 | TMDS Data 0/5 shield | | |
| 5 | TMDS Data 4+ | 20 | TMDS Data 5- | | |
| 6 | DDC Clock | 21 | TMDS Data 5+ | | |
| 7 | DDC Data | 22 | Clock shield | | |
| 8 | Analog Vertical Synchronal | 23 | Clock- | | |
| 9 | TMDS Data 1- | 24 | Analog B video Out | | |
| 10 | TMDS Data 1+ | | | | |
| 11 | TMDS Data 1/3 shield | | | | |
| 12 | TMDS Data 3- | | | | |
| 13 | TMDS Data 3+ | | | | |
| 14 | +5V Power | | | | |
| 15 | Ground | | | | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
|-----|----|----|----|----|----|----|----|--|
| 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | |
| 1 7 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | |

Signal connector

D-Sub 15 Pin Signal connector pin assignment

| PIN | Signal (D-sub) | PIN | Signal (D-sub) |
|-----|----------------|-----|----------------|
| 1 | Red | 9 | 5 VDC |
| 2 | Green | 10 | Ground |
| 3 | Blue | 11 | Ground |
| 4 | Ground | 12 | SDA (For DDC) |
| 5 | Self Test | 13 | H. Sync. |
| 6 | Red Ground | 14 | V. Sync. |
| 7 | Green Ground | 15 | SCL (For DDC) |
| 8 | Blue Ground | | |



Signal connector

5.3 Troubleshooting

Before calling for service, check the information in this section to see if you can remedy any problems by yourself. If you need assistance, please call the dealer where you purchased the LCD monitor.

There is no SCREEN image

- ◆ The power cord is securely connected the monitor, the adapter, and the wall outlet.
- ◆ Check the signal cable connection between the monitor and the computer.
- Adjust the brightness and contrast controls.
- Monitor in power saving mode.

Display image is too large or small

◆ Use the OSD controls to adjust Auto SETup.

The color are distorted

- ◆ Signal cable properly connected.
- ◆ Use OSD controls to adjust the color control setting.

The image is too light or too dark

◆ Use OSD controls to adjust the brightness and contrast.

There is no sound or sound is low

- ◆ Check the sound cable connection.
- ◆ Make sure the computer sound program is working.
- ◆ Adjust the volume on sound setting. Adjust your sound card or computer volume setting.
- ◆ Adjust the volume control keys on the monitor.

There is no AV image

- ◆ The power cord is securely connected the monitor, the adapter, and the wall outlet.
- ◆ Check the signal cable connection between the monitor and AV system.
- ◆ Adjust the brightness and contrast controls.