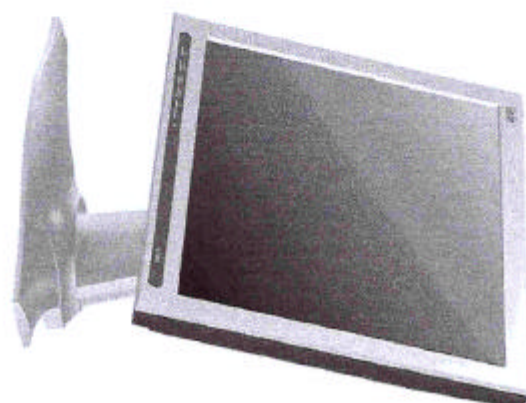




Appendix G. Users Manual

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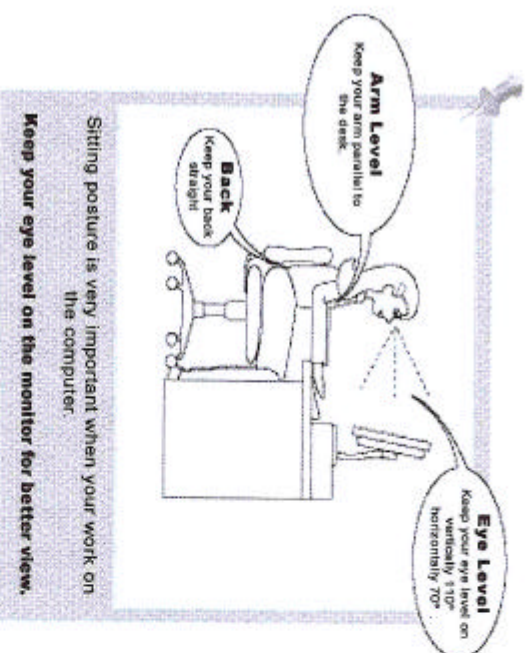
Instruction Manual



ETL Inc.
#584 Sangwhal-ri, Kanam-m
Yaju-kun, Kyounggi-do,
469-880, Korea

E-REA Electronics Industry Co., Ltd.
LCD Monitor
Model : ELM-1900BA

Sitting Posture



Package Contents

* Make sure the following items are included. If any items are missing, please contact dealer.



* The items may look different from the pictures

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* This product, certified of EMS, can be used any places including housing area.

SAFETY INSTRUCTION

Do not use LCD monitor if the power cord or outlet has been damaged.

Make sure to hold the plug, not the cord.
Do not hold the plug with your hands wet.

Do not force to bend the cord or put any heavy materials on the cord.



Do not put over load the outlet.

Unplug the monitor and clean the front panel with dry cloth. Do not use keton-type materials, ethyl alcohol, acid, toluene, ethyl acid, methyl or chemicals.

Unplug the monitor when not in use or lightning strikes.



Clean the plug with dry cloth.

Do not open the case of the monitor.
Only a qualified technician must service the monitor.
Contact service center for help.

If there are any unusual sounds or smells coming from the monitor, please contact service center immediately.



Introduction

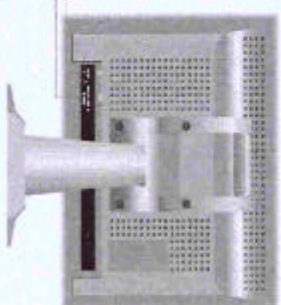
ELM-1900BA FRONT

- LED
- 4+
- 3 Auto
- 3 Select

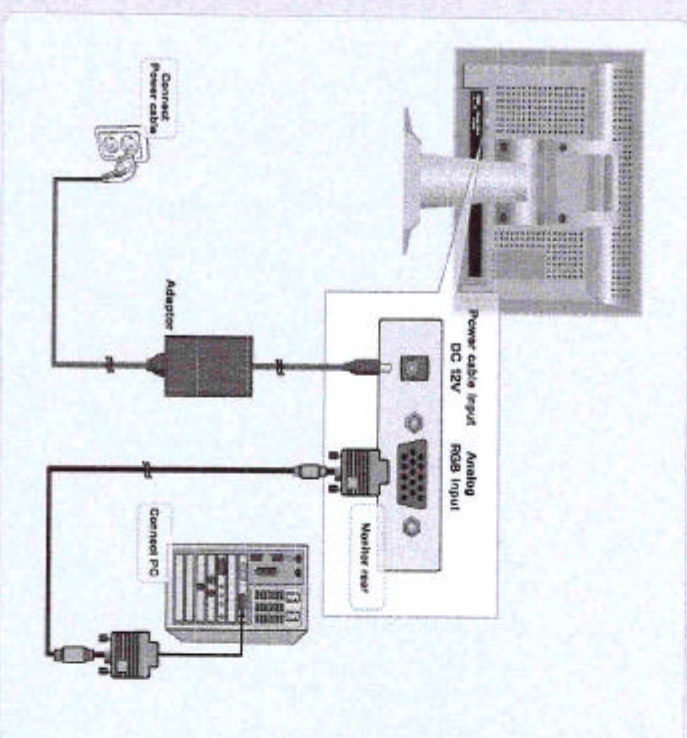


ELM-1900BA REAR

- Power Cable Input DC 5V
- Audio IN/OUT



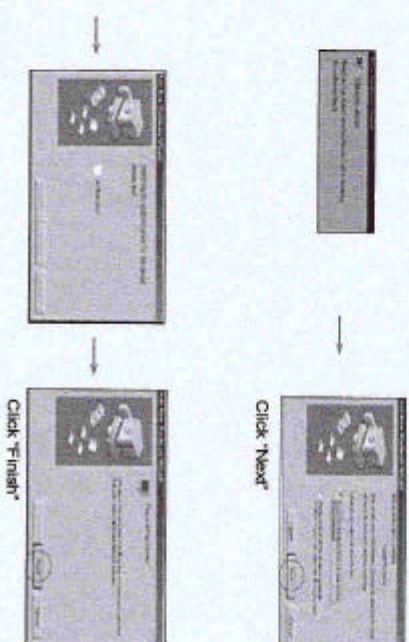
Cable connection



Monitor Driver Installation

Automatic installation

1. On Windows 95/ 98/ ME, this monitor can identify and configure itself automatically by Plug & Play function.
2. Install as follows (refer to Plug & Play)



* When you install the driver, you can work on a better view because the resolution and frequency sets suitable for the monitor.

Installation

Monitor Driver Installation

For [Windows 95/98/ME]

1. Insert the installation disk into the floppy drive.
2. Double click on "Install.exe"



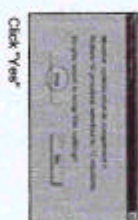
Click "OK"



Click "OK"



Click "Yes"



Click "Yes"

Windows has finished installing the "15inch LCD Monitor" Driver

Installation

Monitor Driver Installation

For [Windows 2000]

1. Insert the installation disk into the floppy drive.
2. Double click on "Install.exe"



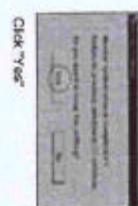
Click "OK"



Click "OK"



Click "Yes"



Click "Yes"

Windows has finished installing the "15inch LCD Monitor" Driver

Installation

Monitor Driver Installation

For [Windows XP]

1. Insert the installation disk into the floppy drive.
2. Double click on "Install.exe"



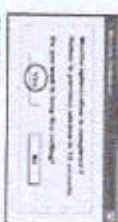
Click "OK"



Click "OK"



Click "Yes"



Click "Yes"

Windows has finished installing the "15inch LCD Monitor" Driver

Screen Control

Screen Control

Main OSD



OSD(On Screen Display) control sequence

1. Press "MENU" button to display the main OSD menu.
2. Press ◀/▶ button to select icon.
3. Press "Select" button when the selected icon is highlighted for sub menu.
4. When sub-menu is displayed, Press ◀/▶ button to select desired menu.
5. Press "Select" button when the selected icon is highlighted.
6. Press ◀/▶ button to make necessary adjustment.
7. Press "MENU" button to return to the previous MENU.

Press "MENU" button for previous menu.

Contrast/Brightness

Contrast/Brightness (Brightness/Contrast/Exit)

1. Brightness - Control brightness of the screen

- ◀ : Decrease brightness
- ▶ : Increase brightness



2. Contrast - Control contrast of the screen

- ◀ : Decrease contrast
- ▶ : Increase contrast



3. Exit

Save and Exit MENU.



Language

Change the language on the menu by ◀/▶ buttons.

Color

Color (Color auto adjustment/User/Color temp)

1. Color auto adjustment

The color will be automatically adjusted to the most suitable condition.



2. User

User can control the color.



3. Color temp-Change the color by color temperature.

[6500K] reddish
[7500K] light reddish
[9300K] light bluish



Screen Control

Image



Image (Auto adjustment/Phase/H position/V position)

1. Auto adjustment
All conditions will be automatically adjusted to the most suitable condition.



2. Phase - Control minute control value

- ▶ : Lower phase value
- ▶ : Higher phase value



3. H position - Move screen left or right

- ▶ : Move left
- ▶ : Move right



4. V position - Move screen up or down

- ▶ : Move down
- ▶ : Move up



5. Exit

Save and Exit MENU.



Screen Control

Setup



Setup (OSD/Factory reset/Sharpness/Exit)

1. OSD

- ▶ : OSD window moves to the left direction.
- ▶ : OSD window moves to the right direction.



OSD Reset

- Adjust the OSD position.
- ▶ : Shrink the OSD window.
- ▶ : Expand the OSD window.



OSD H Position

- Move the OSD window to the horizontal direction.
- ▶ : OSD window moves to the left.
- ▶ : OSD window moves to the right.



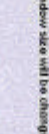
OSD V Position

- Control the OSD window to the vertical direction.
- ▶ : OSD window moves to the bottom.
- ▶ : OSD window moves to the top.



OSD Size

- Press select button and then OSD window size will be changed.



2. Factory reset

Reset the condition of the monitor to the factory default values. (◀/▶ button for reset.)



3. Sharpness

Adjust the sharpness of the display. Higher number indicates sharper image. (controlled by ◀/▶ button.)



4. Exit

Save and Exit MENU.



Exit



Exit Save and Exit MENU.

Troubleshooting

Problems	Solutions
Power indicator is off. Blank screen.	Make sure the power cord is properly connected.
No signal. Check cable* message.	Make sure the signal cable is connected to the PC or monitor. Make sure the power is on. Set the maximum resolution and frequency suitable for the monitor.
Video mode is not supported.	Check the signal cable and reconnect it. Try auto adjustment.
The image seems rolling down.	Try auto adjustment.
The image is not clear and blurry.	Check the display resolution and frequency from your PC or video board is an available mode for your monitor.
Image is not stable and appears to vibrate.	Check the display resolution and frequency from your PC or video board is an available mode for your monitor.
Shadow image lingers.	Adjust the brightness and contrast.
The image is too dark or too light	Adjust the color temperature.
The image color is not stable and irregular.	Adjust the color temperature.
The image color does not look like a dark shadow.	Adjust the color temperature.
White color does not look like white color.	Adjust the color temperature.
Power LED is blinking in orange color.	Monitor is on sleep mode.
Can't control buttons from the front panel.	Contact service center.
Other problems.	Contact service center.

Specification

Model	ELM-1900BA
Display Size	376.32(H) × 301.056(V) 19.0inch
Pixel Pitch	0.294(H) × 0.294(V)
Viewing angle	85° / 85° / 85° (up/down/left/right)
Display color	16.7M
Response Time	25msec
Brightness	250cd/m ²
Contrast	500:1
Resolution	1280 × 1024 (60Hz)
H frequency	31KHz~78.56KHz
V frequency	56Hz~75Hz
AC (Adaptor)	110V ~ 240V, 50Hz / 60Hz
DC (Monitor)	12V, 3.5A
Power Consumption	max 37W, standby 2W
Monitor Size	431.2 × 364 × 55.8 (without stand) 431.2 × 443.8 × 190 (with stand)
Weight	6.4Kg
Tilt Angle	up 30° down 5°
Features	graphic OSD, Auto Adjustment

* Specifications are subject to change without notice

Other

Supported Video Mode

Resolution	H frequency (kHz)	V frequency (Hz)
640 × 480	31.47 37.86 37.50 31.47	60 72 75 70
720 × 400	31.47 35.16 37.88	56 60 60
800 × 600	48.08 48.88 48.36	72 75 60
1024 × 768	56.48 60.02 63.98	70 75 60
1280 × 1024	79.98	75

Power-saving mode

- This monitor saves energy by switching your monitor into a low-power mode when it has not been used for a certain period of time.
- Power LED indicates the current power-saving condition of the monitor.
- This monitor automatically returns to normal operation when you move the computer's mouse or press any key on the keyboard because the power is not off.
- NOTE: Power-saving mode operates only on the computer that has power-saving mode.

Power-saving state	Normal	Operation Standby Mode
Power indicator	Green	orange
Power consumption	37W	Less than 2W

User information

This equipment has been tested and found to comply with the limit 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, it 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 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.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that:

- This device comply with part 15 of the FCC Rules. Operation is subject to the following two conditions:
- (1) This device may not cause harmful interference, and
 - (2) This device must accept any interference that may cause undesired operation.

This is a Class B product Based on the standard of the Voluntary control council for interference from Information Technology Equipment (VCCI). If this is used near a radio or television receiver in a domestic environment, it may cause radio interference.

Install and use the equipment according to the instruction manual.