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Precautions

Warning on installation

- Do not cover or block the ventilation holes in the case.
- Do not install the monitor near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Optional video adaptor installation
  - Turn off the power switch and unplug the monitor before installation to avoid electric shock or damage.
  - Install the optional video adaptor on a stable surface. The monitor may cause injury or damage if it falls or is dropped.

Warning on power connection

- Use an appropriate power cord for your local power supply.
- The outlet should be installed near the monitor and be easily accessible.
- Do not allow anything to rest on the power cord.
- Disconnect the power plug from the power outlet under following conditions:
  - If you will not use it for an indefinite period time.
  - When the power cord or plug is damaged or frayed.
  - If the product has been dropped or the cabinet has been damaged.
  - If the product exhibits a distinct change in performance, indicate a need for service.
Warning on tilt

Use the monitor's tilt capability to adjust its vertical orientation to an appropriate position. Grasp the top corners of the monitor with both hands and tilt to the desired angle.

Warning on Maintenance

- Clean the cabinet, glass, and controls with a soft cloth lightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent, such as alcohol or benzene.

- Do not rub, touch, or tap the surface of the screen with sharp or abrasive items such as a pen or screwdriver. This type of contact may result in a scratched glass.

- Do not insert sharp objects or spill liquid into the monitor through ventilation holes. They may cause accident fire, electric shock or failure.

- Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage potentials or other risks.

Warning on transportation

- When you transport this monitor for repair or shipment, use the original carton and packing materials.
Package Contents

Before using this monitor, check the following items are included in your carton box:

- Monitor (*1)

- Power adapter (*1)

- Power cord (*1)

- D-sub 15-pin signal cable (*1)

- Digital DVI signal cable (*1) *(Optional)*

- S- Video cable (*1,) *(Optional)*

- CVBS cable (*1) *(Optional)*

- CD-ROM (containing Windows information file and user’s manual)

- Quick Guide
Identify the Parts and Controls

- **DC +12V Power inlet**
  Provides +12V DC power to the monitor.

- **VGA-In**
  D-sub 15-pin connector for VGA signal.

- **S-VIDEO-In (Optional)**
  Connector for S-Video signal.

- **CVBS-In (Optional)**
  Connector for CVBS signal.

- **Digital (Optional)**
  DVI-D connector for digital signal input
Up Button
1. Activate the On-Screen Display menu.
2. While the On-Screen Display menu appears, press ▲ to move the selected item clockwise or onward.

INPUT / Down Button
1. While the On-Screen Display menu appears, press ▼ to move the selected item counterclockwise or backward.

Hot Key Input Select Hot key
Pressing ▲ and ▼ buttons at the same time for 5 seconds can switch between auto and manual input select.
When the input select is under manual mode, press ▼ to choose the desired input signal: D-sub, DVI, CVBS or S-Video. The option will toggle on the top right hand corner of the display.

Increase Button
1. When the On-Screen Display menu is activated, press ‡ to confirm/ enter the selected items.
2. When the On-Screen Display menu is activated, press ‡ to increase the adjustable value of the selected item.

Decrease Button
1. When the On-Screen Display menu is activated, press ⁻ to confirm/ enter the selected item.
2. When the On-Screen Display menu is activated, press ⁻ to decrease the adjustable value of the selected item.
Auto Button / Video Mode

1. Press 🔄 to select the preferred video mode: User, Text, Movie, Game or Graphic. The option will toggle on the top right hand corner of the display.
2. Press 🔄 for 3 seconds to adjust the picture position and performance automatically for optimal settings. You are recommended to press the button the first time you use the monitor or every time you change the resolution and/or refresh rate of the input signal.
3. When the On-Screen Display menu is activated, press 🔄 to exit the menu at any time.

Power Switch

Turns the monitor on or off.

LED Indicator

Indicates the monitor’s operational mode; green for regular operation, and amber for power saving mode.
Setup

Please follow the following instructions to setup monitor.

Step 1: Remove all packing materials and wrapping from the monitor and then tear down the plastic dust cover from the screen surface.

Step 2: With the computer or video equipment turned off, connect the enclosed VGA signal cable.

- Connecting to an IBM or IBM compatible computer

- Connecting to a video equipment with digital source *(Optional)*

- Connecting to a video equipment with S-Video connector *(Optional)*
• Connecting to a video equipment with CVBS jack (Optional)

Step 3: With the monitor turned off, connect the monitor end power plug of adaptor to the power jack of the monitor. Then connect the power cord to the adapter and the power plug to the power source.

Step 4: Turn on your computer or video equipment. Press power switch to turn on monitor.

Step 5: For best performance. (If the monitor is connected to a video equipment such as DVD or VCR player, please skip this step.)

For X-19 / X-17 LCD monitor, it will have the best performance at resolution 1280 x 1024. Ensure that your computer display is set at 1280 x 1024 pixels and 60Hz. Press the AUTO button. The monitor will optimize the display automatically.

For X-15 LCD monitor, it will have the best performance at resolution 1024 x 768. Ensure that your computer display is set at 1024 x 768 pixels and 60Hz. Press the AUTO button. The monitor will optimizes the display automatically.

**Software Configuration**

Installing the Microsoft Windows data file

You can find the Microsoft Windows data file (also called the driver program) on the included AG Neovo CD. To ensure smooth operation after initial installation, you can refer to the installation guide, which can also be found on the CD.
Customizing Your Monitor

Adjusting Your LCD Panel
In the OSD menu, you will find all kinds of features to help you adjust your LCD panel to the optimal performance.

User Mode:
To allow preferable viewing images for different tasks, users are able to adjust each setting manually in User mode.

Text/ Movie/ Game/ Graphic Mode:
The four specialised modes have their own pre-arranged settings for optimal viewing within each application. To better suit users' needs and environments, Brightness Adjustment and Contrast Adjustment are available for further adjustment (Color temperature is also adjustable in Text mode).

Important! Though manual adjustment of the LCD panel is available, we strongly recommend you to use the auto adjustment function of the panel. It will automatically tune your LCD panel to the optimal performance. Simply push the AUTO button for 3 seconds to enable the auto adjustment function. Additionally, we recommend you to use the auto adjustment function every time after you have changed the resolution or frequency of your display.

Selecting OSD Features
Step 1. Call Out the On-Screen Display Menu
Press ▲ to activate On-Screen Display menu.

Step 2. Adjust the Settings
Press ▲ to move the selected item clockwise or onward
Press ▼ to move the selected item counterclockwise or backward.
Press + , - to confirm/ enter the selected items.
Press + to increase the adjustable value of the selected item.
Press - to decrease the adjustable value of the selected item.
Step 3. Exit the On-Screen Display Menu

Press \( \) to exit the On-Screen Display menu at any time.

**OSD Menus**

### VGA-Input

#### Brightness Adjustment

![Brightness Adjustment Menu](image)

#### Contrast Adjustment

![Contrast Adjustment Menu](image)

#### Horizontal Position Adjustment

![Horizontal Position Adjustment Menu](image)

#### Vertical Position Adjustment

![Vertical Position Adjustment Menu](image)

#### Sharpness Adjustment

![Sharpness Adjustment Menu](image)

#### OSD Transparency Adjustment

![OSD Transparency Adjustment Menu](image)

**Important!** Sharpness adjustment is not available when:

1. the resolution is set as 1280*1024 (for X-19/X-17) or 1024*768 (for X-15); or

2. the application is in Text, Movie, Game, or Graphic mode.
**DVI-Input**

**Important!** When DVI-Input is selected, the following adjustments are not available: horizontal position adjustment, vertical position adjustment, sharpness, phase adjustment and clock adjustment.

**Brightness Adjustment**

**Contrast Adjustment**

**OSD Transparency Adjustment**

**Color Temperature Selection**
CVBS Input / S-VIDEO Input

Brightness Adjustment

Contrast Adjustment

Color Adjustment

Hue Adjustment

Sharpness Adjustment

OSD Transparency Adjustment

Color Temperature Selection

Horizontal Position Adjustment
# Warning Messages and Troubleshooting

## Warning Messages

<table>
<thead>
<tr>
<th>If the message appears on the screen</th>
<th>Check the items</th>
</tr>
</thead>
</table>
| CAN NOT DISPLAY THIS INPUT SIGNAL    | The input signal is not acceptable by the monitor.  
• Please check the video resolution and frequency range is within that specified for the monitor.  
• Please refer to the “Technical Specifications” section of this user manual for details. |
| NO SIGNAL INPUT                     | No signal inputs are detected from any one of the input connectors.  
Check that the power switch of your computer or video source is in the “ON” position.  
• Check that the signal cable is connected properly.  
• Ensure that no pins are bent or pushed in the connectors of signal cable. |
| WAIT FOR AUTOMATIC ADJUSTMENT       | The monitor is detecting the input signal and then adjusting automatically the monitor parameters accordantly.  
• It takes around 5 seconds to finish the whole process.  
• You are recommended to run auto adjustment by pressing button for 3 seconds every time you changed the resolution or refresh rate. |
## Troubleshooting

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Check Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>No picture</td>
<td>Check that the power switch of monitor is turned on.</td>
</tr>
<tr>
<td>Power LED is off.</td>
<td>Check that the power adapter is properly connected to the monitor.</td>
</tr>
<tr>
<td></td>
<td>Check that the power cord is properly connected to the power adapter.</td>
</tr>
<tr>
<td></td>
<td>Check that the power cord is properly connected to power outlet.</td>
</tr>
<tr>
<td></td>
<td>Check there is electrical power coming from the power outlet. Use another device to check for power.</td>
</tr>
<tr>
<td>No display</td>
<td>Check if your PC is in standby mode (move the mouse or push any key will wake up your PC).</td>
</tr>
<tr>
<td>Power LED is Amber</td>
<td>Check if your PC or video source is ON.</td>
</tr>
<tr>
<td></td>
<td>Check if the signal cable is correctly connected.</td>
</tr>
<tr>
<td>The texts are not solid</td>
<td>Change the resolution of the video signal to 1280<em>1024 (for X-19/X-17) or 1024</em>768 (for X-15).</td>
</tr>
<tr>
<td></td>
<td>Press ( \text{button}) for 3 seconds to run the automatic adjustment.</td>
</tr>
<tr>
<td></td>
<td>Adjust Clock and Phase in the OSD menu to fine tune. (Please refer to the “Customizing Your Monitor” section of this user manual for details.)</td>
</tr>
<tr>
<td>Screen image is not centered</td>
<td>Press ( \text{button}) for 3 seconds to run the automatic adjustment.</td>
</tr>
<tr>
<td>properly.</td>
<td>Adjust H. Position and V. Position to fine tune. (Please refer to the “Customizing Your Monitor” section of this user manual for details.)</td>
</tr>
<tr>
<td>Some lines are missing</td>
<td></td>
</tr>
<tr>
<td>There are red, green, blue or</td>
<td>The TFT LCD panel is made of millions of small transistors. And each defect transistor will cause a missing red, green, or blue dot.</td>
</tr>
<tr>
<td>black tiny dots on the screen.</td>
<td>It’s guarantees maximum 3 missing dots in every single monitor. It’s around the industrial standard.</td>
</tr>
</tbody>
</table>
# Technical Specifications

## Specifications

### X-19

<table>
<thead>
<tr>
<th>Electrical characteristics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen size</td>
<td>19.0” (48.2 cm) diagonal</td>
</tr>
<tr>
<td>Pixel format</td>
<td>1280 x 1024 vertical stripe</td>
</tr>
<tr>
<td>Horizontal frequency</td>
<td>30kHz – 80kHz</td>
</tr>
<tr>
<td>Vertical frequency</td>
<td>50Hz – 75Hz</td>
</tr>
<tr>
<td>Maximum pixel clock</td>
<td>135MHz</td>
</tr>
<tr>
<td>Connections</td>
<td>Power: 3-Pin AC Plug</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>&lt; 50W (On),</td>
</tr>
<tr>
<td></td>
<td>&lt; 4W (sleep),</td>
</tr>
<tr>
<td></td>
<td>&lt; 2W (Off)</td>
</tr>
</tbody>
</table>

#### Physical characteristics

| Weight                  | Net: 7.4Kg (16.3 lb) |
| Tilt angle              | 0° - 15° |

### X-17

<table>
<thead>
<tr>
<th>Electrical characteristics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen size</td>
<td>17.0” (43.1 cm) diagonal</td>
</tr>
<tr>
<td>Pixel format</td>
<td>1280 x 1024 vertical stripe</td>
</tr>
<tr>
<td>Horizontal frequency</td>
<td>30kHz – 80kHz</td>
</tr>
<tr>
<td>Vertical frequency</td>
<td>50Hz – 75Hz</td>
</tr>
<tr>
<td>Maximum pixel clock</td>
<td>135MHz</td>
</tr>
<tr>
<td>Connections</td>
<td>Power: 3-Pin AC Plug</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>&lt; 48W (On),</td>
</tr>
<tr>
<td></td>
<td>&lt; 4W (sleep),</td>
</tr>
<tr>
<td></td>
<td>&lt; 2W (Off)</td>
</tr>
</tbody>
</table>

#### Physical characteristics

| Weight                  | Net: 6.4Kg (14.1 lb) |
| Tilt angle              | 0° - 15° |
## X-15

### Electrical characteristics

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen size</td>
<td>15.0” (38.1 cm) diagonal</td>
</tr>
<tr>
<td>Pixel format</td>
<td>1024 x 768 vertical stripe</td>
</tr>
<tr>
<td>Horizontal frequency</td>
<td>30kHz – 60kHz</td>
</tr>
<tr>
<td>Vertical frequency</td>
<td>50Hz – 75Hz</td>
</tr>
<tr>
<td>Maximum pixel clock</td>
<td>80MHz</td>
</tr>
<tr>
<td>Connections</td>
<td>Power: 3-Pin AC Plug</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>&lt; 40W (On),</td>
</tr>
<tr>
<td></td>
<td>&lt; 4W (sleep)</td>
</tr>
<tr>
<td></td>
<td>&lt; 2W (Off)</td>
</tr>
</tbody>
</table>

### Physical characteristics

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>Net: 4.8 Kg (10.6 lb)</td>
</tr>
<tr>
<td>Tilt angle</td>
<td>0° - 20°</td>
</tr>
</tbody>
</table>
FCC compliance

This device complies 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 received, including interference that may cause undesired operation.

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 to 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: Any unauthorized modification to this equipment could result in the revocation of the authorization to operate the equipment and void the product warranty.
WEEE
Information for users applicable in European Union countries

The symbol on the product or its packaging signifies that this product has to be disposed separately from ordinary household wastes at its end of life. Please kindly be aware that this is your responsibility to dispose electronic equipment at recycling centers so as to help conserve natural resources. Each country in the European Union should have its collection centers for electrical and electronic equipment recycling. For information about your recycling drop off area, please contact your local related electrical and electronic equipment waste management authority or the retailer where you bought the product.

Hg
Lamp Disposal
LAMP(S) inside this product contain mercury and must be recycled or disposed of according to local, state or federal laws. For more information, contact the electronic industries alliance at www.eiae.org for lamp specific disposal information check www.lamprecycle.org.

Vermont Hg directive
Title 10: Conservation and Development
Chapter 164: COMPREHENSIVE MERCURY MANAGEMENT
§ 7106. Labeling of mercury-added products

Contains Mercury, Dispose of Properly