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DR-17G & DR-22G LCD Monitor  
**User Manual**

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# SAFETY INFORMATION

## Federal Communications Commission (FCC) Notice (U.S. Only)



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.



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

Use only an RF shielded cable that was supplied with the display when connecting this display to a computer device.

To prevent damage which may result in fire or shock hazard, do not expose this appliance to rain or excessive moisture.

THIS CLASS B DIGITAL APPARATUS MEETS ALL REQUIREMENTS OF THE CANADIAN INTERFERENCE-CAUSING EQUIPMENT REGULATIONS.

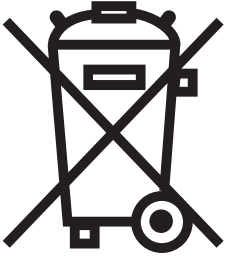


This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

# SAFETY INFORMATION

## 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.

Standard	Test item	Standard
EN60601-1-2:2007	RAD & CON	EN55011(EMI)
	Harmonic	EN61000-3-2
	Flicker	EN61000-3-3
	ESD	IEC 61000-4-2
	RS	IEC 61000-4-3
	EFT	IEC 61000-4-4
	Surge	IEC 61000-4-5
	CS	IEC 61000-4-6
	PFM	IEC 61000-4-8
	DIP	IEC 61000-4-11

# SAFETY INFORMATION

## EMC Information

### CAUTION

The DR-17G and DR-22G requires special precautions regarding EMC and need to be installed, put into service and used according to the following information.

Do not use any cables other than the cables that provided or specified by us. Using other cables may cause the increase of emission or decrease of immunity.

Do not put any portable and mobile RF communications equipment close to the DR-17G and DR-22G. Doing so may affect the DR-17G and DR-22G.

The DR-17G and DR-22G should not be used adjacent to or stacked with other equipment. If adjacent or stacked use is necessary, the equipment or system should be observed to verify normal operation in the configuration in which it will be used.

Anyone who connects additional equipment to the signal input part or signal output parts, configuring a medical system, responsible that the system complies with the requirements of IEC/ EN60601-1-2.

<b>Guidance and manufacturer's declaration – electromagnetic emissions</b>		
The DR-17G and DR-22G is intended for use in the electromagnetic environment specified below. The customer or the user of the DR-17G and DR-22G should assure that it is used in such an environment. Not Life-supporting Medical Equipment.		
<b>Emissions test</b>	<b>Compliance</b>	<b>Electromagnetic environment – guidance</b>
RF emissions CISPR11/EN55011	Group 1	The DR-17G and DR-22G uses RF energy only for its internal function. Therefore, its RF emission are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR11/EN55011	Class B	The DR-17G and DR-22G is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC/EN61000-3-2	Class A	
Voltage fluctuations / flicker emissions IEC/EN61000-3-3	Class A	

# SAFETY INFORMATION

## Guidance and manufacturer's declaration – electromagnetic immunity

The DR-17G and DR-22G is intended for use in the electromagnetic environment specified below. The customer or the user of the DR-17G and DR-22G should assure that it is used in such an environment.  
Not Life-supporting Medical Equipment.

Immunity test	IEC/EN60601 test level	Compliance level	Electromagnetic environment – guidance
Electrostatic discharge (ESD) IEC/EN61000-4-2	±8 kV contact ±15 kV air	±8 kV contact ±15 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient / burst IEC/EN61000-4-4	±2 kV for power supply lines ±1 kV for input/output lines	±2 kV for power supply lines ±1 kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC/EN61000-4-5	For power supply lines: ± 1 kV line(s) to line(s) ± 2 kV line(s) to earth  For outdoor signal lines: ± 2 kV line(s) to earth	For power supply lines: ± 1 kV line(s) to line(s) ± 2 kV line(s) to earth  For outdoor signal lines: ± 2 kV line(s) to earth	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	0% UT; 0,5 cycle 0% UT; 1 cycle 70% UT; 25/30 cycles <5% UT; 250/300 cycles	0% UT; 0,5 cycle 0% UT; 1 cycle 70% UT; 25/30 cycles <5% UT; 250/300 cycles	Mains power quality should be that of a typical commercial or hospital environment. If the user of the DR-17G and DR-22G requires continued operation during power mains interruptions, it is recommended that the DR-17G and DR-22G be powered from an uninterruptible power supply or a battery.
Power frequency (50/60Hz) magnetic field IEC/EN61000-4-8	3A/m	3A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.


**NOTE:** UT is the a.c. mains voltage prior to application of the test level.

Mains power quality should be that of a typical commercial or hospital environment. If the user of the DR-17G and DR-22G requires continued operation during power mains interruptions, it is recommended that the DR-17G and DR-22G be powered from an uninterruptible power supply or a battery.

# SAFETY INFORMATION

## Guidance and manufacturer's declaration – electromagnetic immunity

The DR-17G and DR-22G is intended for use in the electromagnetic environment specified below. The customer or the user of the DR-17G and DR-22G should assure that it is used in such an environment.  
Not Life-supporting Medical Equipment.

Immunity test	IEC/EN60601 test level	Compliance level	Electromagnetic environment – guidance
<p>Conducted RF IEC/EN61000-4-6</p> <p>Radiated RF IEC/EN61000-4-3</p>	<p>3Vrms 150kHz to 80MHz</p> <p>3V/m 80MHz to 2.5GHz</p>	3Vrms 3V/m	<p>Portable and mobile RF communications equipment should be used no closer to any part of the DR-17G and DR-22G, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.</p> <p>Recommended Separation distance  <math>d = 1.2 \sqrt{P}</math> d = 1.2 <math>\sqrt{P}</math>, 80MHz to 800MHz  <math>d = 2.3 \sqrt{P}</math>, 800MHz to 2.5GHz                      Where "P" is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and "d" is the recommended separation distance in meters (m).</p> <p>Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey:</p> <p>a. should be less than the compliance level in each frequency range</p> <p>b. Interference may occur in the vicinity of equipment marked with the following symbol</p> 

**NOTE 1** At 80 MHz and 800 MHz, the higher frequency range applies.

**NOTE 2** These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the DR-17G and DR-22G is used exceeds the applicable RF compliance level above, the DR-17G and DR-22G should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the DR-17G and DR-22G.



# SAFETY INFORMATION

## ESD declaration statement

There was flickered disturbance on the screen during the test, but could self-recover after the test.  
(This permissive loss of performance was met the specification of EUT.)

## DIP declaration statement

The EUT reset during the test, but could self-recover after the test.  
(This permissive loss of performance was met the specification of EUT.)

## Recommended separation distances between portable and mobile RF communications equipment and the DR-17G and DR-22G

The DR-17G and DR-22G is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the DR-17G and DR-22G can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the DR-17G and DR-22G as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter (W)	Separation distance according to frequency of transmitter (m)		
	150kHz to 80MHz $d = 1.2 \sqrt{P}$	80MHz to 800MHz $d = 1.2 \sqrt{P}$	800MHz to 2.5GHz $d = 2.3 \sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance "d" in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where "P" is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

**NOTE 1** At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

**NOTE 2** These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

## Cable length

Power Cord : Accessory	1.8m
------------------------	------









# PRECAUTIONS



**CAUTION**  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN



## Symbols used in this manual

	This icon indicates the existence of a potential hazard that could result in personal injury or damage to the product.		ISO 7010-M002: Follow instructions for use
	This icon indicates important operating and servicing information.		This icon indicates complies with the 93/42/EEC, EN60601-1, EN 60601-1-2 of related European standards.
	IEC 60417-5009 : STAND-BY		IEC 60417-5031 : Direct Current
	IEC 60417-5032: Alternating Current		IEC 60417-5021: Equipotentiality

## Notice

- Read this User Manual carefully before using the LCD display and keep it for future reference.
- The product specifications and other information provided in this User Manual are for reference only. All information is subject to change without notice. Updated content can be downloaded from our web site at [displays.agneovo.com](http://displays.agneovo.com).
- To protect your rights as a consumer, do not remove any stickers from the LCD display. Doing so may affect the determination of the warranty period.

# PRECAUTIONS

## Cautions When Setting Up



Do not place the LCD display near heat sources, such as a heater, exhaust vent, or in direct sunlight.



Do not cover or block the ventilation holes in the housing.



Place the LCD display on a stable area. Do not place the LCD display where it may be subject to vibration or shock.



Place the LCD display in a well-ventilated area.



Do not place the LCD display outdoors.



Do not place the LCD display in a dusty or humid environment.



Do not spill liquid or insert sharp objects into the LCD display through the ventilation holes. Doing so may cause accidental fire, electric shock or damage the LCD display.

# PRECAUTIONS

## Cautions When Using



Use only the power cord supplied with the LCD display.



The power outlet should be installed near the LCD display and be easily accessible.



If an extension cord is used with the LCD display, ensure that the total current consumption plugged into the power outlet does not exceed the ampere rating.



Do not allow anything to rest on the power cord. Do not place the LCD display where the power cord may be stepped on.



If the LCD display will not be used for an indefinite period of time, unplug the power cord from the power outlet.



To disconnect the power cord, grasp and pull by the plug head. Do not tug on the cord; doing so may cause fire or electric shock.

The mains plug or appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable. Always completely disconnect the power cord set from your product whenever you are working or cleaning on it. Do not make connections while the power is on, because a sudden rush of power can damage sensitive electronic components.



Do not unplug or touch the power cord with wet hands.



### Warning:



Unplug the power cord from the power outlet and refer to qualified service personnel under the following conditions:

- ◆ When the power cord is damaged.
- ◆ If the LCD display has been dropped or the housing has been damaged.
- ◆ If the LCD display emits smoke or a distinct odor.



### Warning:



Ceiling mount or mount on any other horizontal surface overhead are not advisable.

Installation in contravention of the instructions may result in undesirable consequences, particularly hurting people and damaging property. Users who have already mounted the display on the ceiling or any other horizontal surface overhead are strongly advised to contact AG Neovo for consultations and solutions to help ensure a most pleasurable and fulfilling display experience.

# PRECAUTIONS

## Cleaning and Maintenance

Disconnect this equipment from any AC outlet before cleaning. Do not use liquid or spray detergents for cleaning. Use a damp cloth. Keeping to clean your monitor by monthly.



The LCD display comes with NeoV™ Optical Glass. Use a soft cloth to clean the glass surface and the housing. The display can be cleaned using a cloth moistened with 95% ethyl alcohol.



Do not rub or tap the surface of the glass with sharp or abrasive items such as a pen or screwdriver. This may result in scratching the surface of the glass.



Do not attempt to service the LCD display yourself, refer to qualified service personnel. Opening or removing the covers may expose you to dangerous voltage or other risks.

## Notice for the LCD Display

In order to maintain the stable luminous performance, it is recommended to use low brightness setting.

Due to the lifespan of the lamp, it is normal that the brightness quality of the LCD display may decrease with time.

When static images are displayed for long periods of time, the image may cause an imprint on the LCD display. This is called image retention or burn-in.

To prevent image retention, do any of the following:

- Set the LCD display to turn off after a few minutes of being idle.
- Use a screen saver that has moving graphics or a blank white image.
- Switch desktop backgrounds regularly.
- Adjust the LCD display to low brightness settings.
- Turn off the LCD display when the system is not in use.

Things to do when the LCD display shows image retention:

- Turn off the LCD display for extended periods of time. It can be several hours or several days.
- Use a screen saver and run it for extended periods of time.
- Use a black and white image and run it for extended periods of time.

When the LCD display is moved from one room to another or there is a sudden change from low to high ambient temperature, dew condensation may form on or inside the glass surface. When this happens, do not turn on the LCD display until the dew disappears.

Due to humid weather conditions, it is normal for mist to form inside the glass surface of the LCD display. The mist will disappear after a few days or as soon as the weather stabilizes.

There are millions of micro transistors inside the LCD display. It is normal for a few transistors to be damaged and to produce spots. This is acceptable and is not considered a failure.

The intended use of the DR-17G, DR-22G is to serve as a LCD monitor for integration with the hospital system. It is designed for general purpose for adults using at hospital environment, continuous operation. For displaying and viewing of images for reference. The use of this device does not require any direct contact with patients. It shall not be used for diagnostic purpose nor for life supporting system.

# PRECAUTIONS

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## Notice for the LCD Display

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Accessory equipment connected to the analog and digital interfaces must be in compliance with the respective nationally harmonized IEC standards (i.e. IEC 60950 for data processing equipment, IEC 60065 for video equipment, IEC 61010-1 for laboratory equipment, and IEC 60601-1 for medical equipment). Furthermore all configurations shall comply with the system standard IEC 60601-1. Everybody who connects additional equipment to the signal input part or signal output part configures a medical system, and is therefore, responsible that the system complies with the requirements of the system standard IEC 60601-1. The unit is for exclusive interconnection with IEC 60601-1 certified equipment in the patient environment and IEC 60XXX certified equipment outside of the patient environment. If in doubt, consult the technical services department or your local representative.

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Grounding reliability can only be achieved when the equipment is connected to an equivalent receptacle marked "Hospital Only" or "Hospital Grade".

---

Use a power cord that matches the voltage of the power outlet, which has been approved and complies with the safety standard of your particular country.

---

The single device output analog signals through ADC element (Analog DigitalConvert) conversion to become a digital signal and the video signal is via Video Decoder conversion. It has become the same digital signal, these signals via Scaler IC as zoom in or out action and digital image processing, then through the cable line transmission LVDS signals to one of the LCD module. The last by the clock controller (Timing Controller, TCON), the clock signal is transmitted to the drive IC on the panel and turn on Backlight for LCD module light source by Scaler control.

---

**WARNING** – No protection against the ingress of water : IPX0

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**WARNING** – Do not modify this equipment without authorization of the manufacturer.

---

Installation and OSD adjusting should only be carried by manufacturer trained and authorized personnel.

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**WARNING** – To avoid risk of electric shock, this equipment must only be connected to a supply mains with protective earth.

---

**CAUTION:** This adapter Manufacturer/model is a forming part of the medical device.

- ◆ Power by class I power supply.
  - ◆ Adapter manufacturer/model:  
ADAPTER TECH: ATM065T-P240  
Input/output: 100-240V~50-60Hz, 24V(==) 2.71A.
- 

**WARNING:** Use suitable mounting apparatus to avoid risk of injury.

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**WARNING:** The equipment not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous: Not AP or APG Category

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**CAUTION:** No applied part.

Make sure the user not to contact SIP/SOPs and the patient at the same time.

---

**CAUTION:** Transport should only be undertaken in a flat surface.

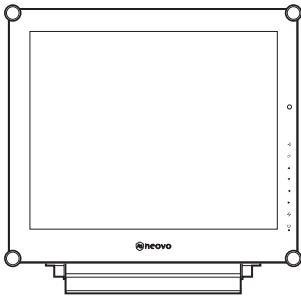
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# CHAPTER 1: PRODUCT DESCRIPTION

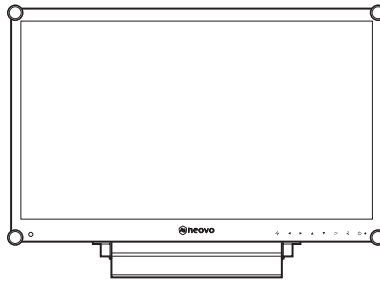
## 1.1 Package Contents

When unpacking, check if the following items are included in the package. If any of them is missing or damaged, contact your dealer.

**LCD Display**



**DR-17G**

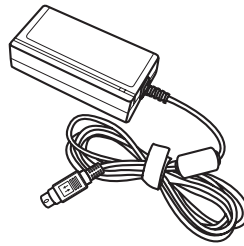


**DR-22G**

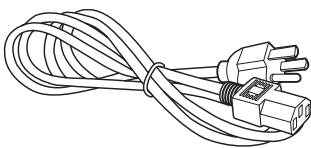
**Quick Start Guide**



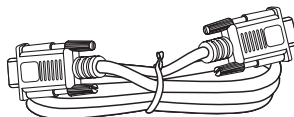
**Power adapter**



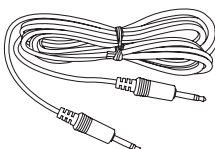
**Power cord**



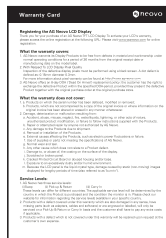
**VGA cable**



**Audio cable**



**Warranty card**



**Note:**

Must use only the supplied power adapter:

- ◆ ADAPTER TECH  
Model no.: ATM065T-P240  
Rating: 24V/2.71A

**Note:**

- ◆ The pictures are for reference only. Actual items may vary upon shipment.

# PRODUCT DESCRIPTION

## 1.2 Wall Mounting Installation Preparation

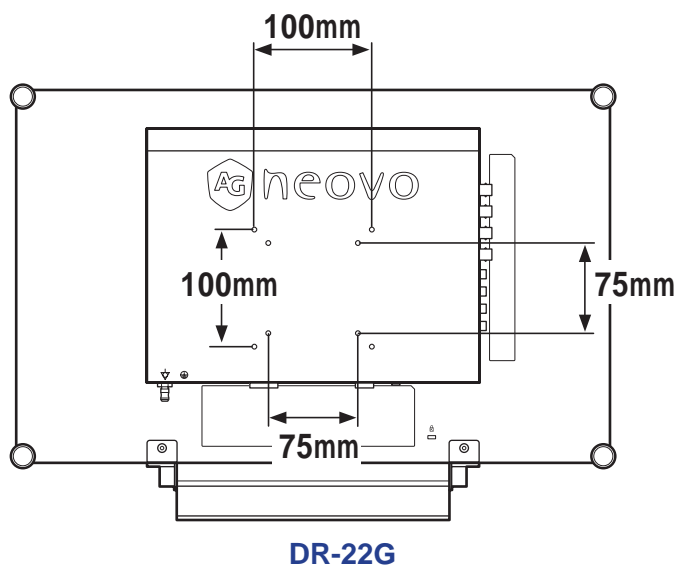
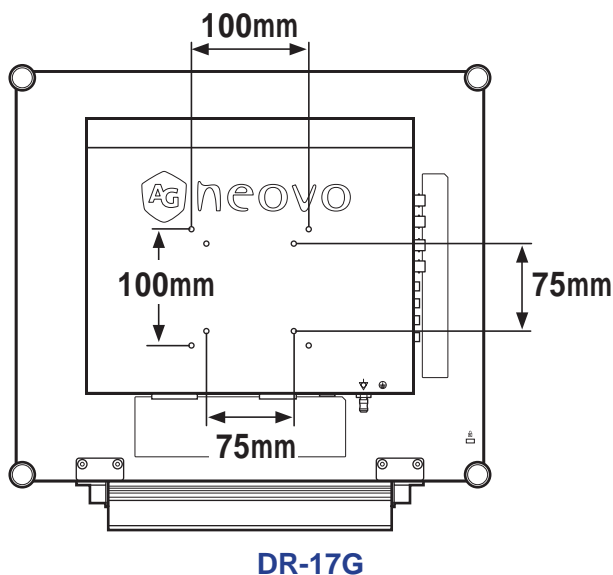
### 1.2.1 Wall Mounting

#### 1 Remove the base stand.

See procedures below.

#### 2 Wall mount the LCD display.

Screw the mounting bracket to the VESA holes at the rear of the LCD display.



#### Note:

To protect the glass panel, place a towel or soft cloth before laying the LCD display down.



#### Warning:



Ceiling mount or mount on any other horizontal surface overhead are not advisable.

Installation in contravention of the instructions may result in undesirable consequences, particularly hurting people and damaging property. Users who have already mounted the display on the ceiling or any other horizontal surface overhead are strongly advised to contact AG Neovo for consultations and solutions to help ensure a most pleasurable and fulfilling display experience.

#### Note:

Take measures to prevent the LCD display from falling down and lessen possible injury and damage to the display in case of earthquakes or other disasters.

- ◆ Use only the 75 x 75 mm and 100 x 100 mm wall mount kit recommended by AG Neovo.
- ◆ Secure the LCD display on a solid wall strong enough to bear its weight.



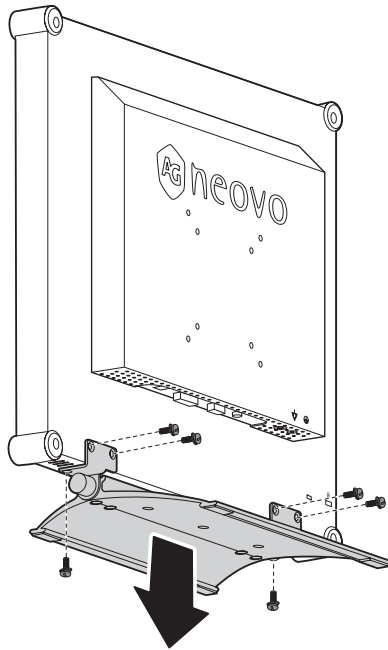
# PRODUCT DESCRIPTION

## 1.2.2 Removing the Base Stand

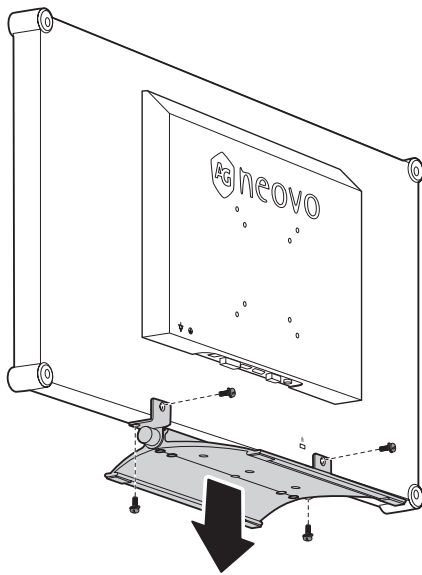
- 1 Lay the LCD display face down on a flat even surface.
- 2 Remove the screws\* securing the base stand from the LCD display.
- 3 Detach the base stand.

**Note:**

(\*) The screw size is M4 x 10mm.



**DR-17G**

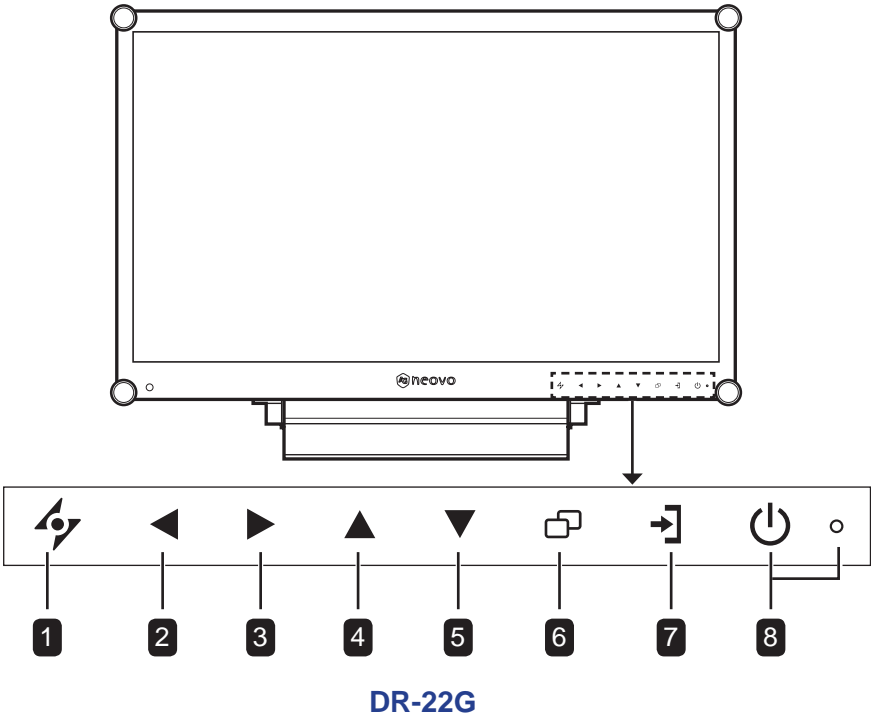
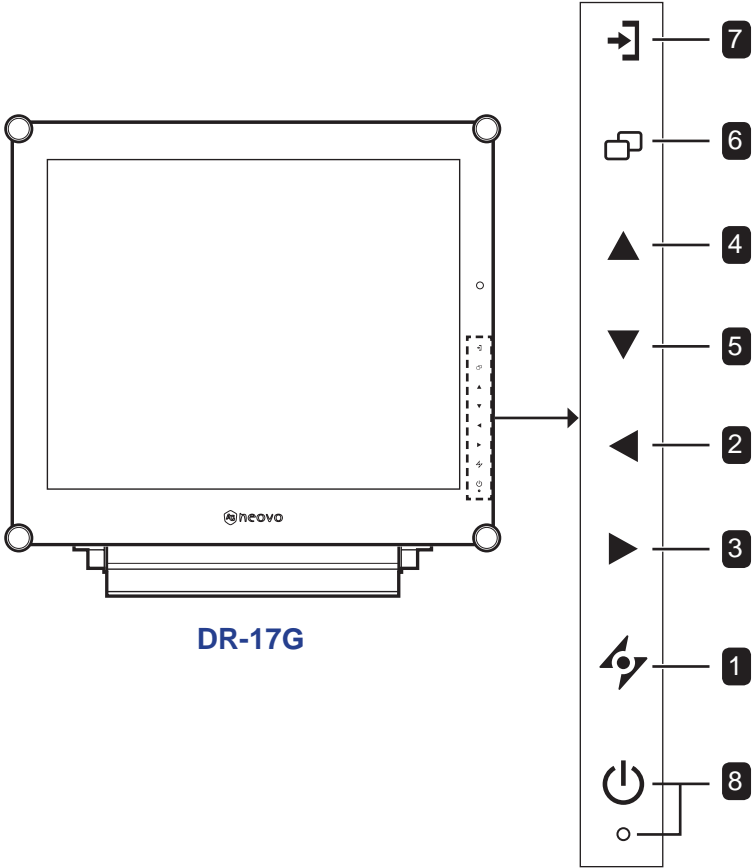


**DR-22G**

# PRODUCT DESCRIPTION

## 1.3 LCD Display Overview

### 1.3.1 Front View and Keypad Buttons



# PRODUCT DESCRIPTION

## 1 AUTO

### **Hot Key: Auto Adjustment/Rotate**

- For VGA input signal source, press to perform auto adjustment.
- Press for 3 seconds to enable the Rotate function.
- When OSD menu is ON, press to close the OSD menu or exit a submenu.

## 2 LEFT

### **Hot Key: Audio Volume Adjustment**

- Press to display the volume bar. Then press the LEFT key to decrease the volume.
- When OSD menu is ON, press to select an option or adjust the settings.

## 3 RIGHT

### **Hot Key: Screen Freeze**

- Press to activate the screen freeze function. To deactivate, press any key except for the Power key.
- When the volume bar appears, press to increase the volume.
- When OSD menu is ON, press to select and option, adjust the settings, or enter the submenu.

## 4 UP

### **Hot Key: PIP/PBP Select**

- Press repeatedly to select PIP/PBP option (PIP → PBP → OFF).
- When OSD menu is ON, press to select an option or adjust the settings.

## 5 DOWN

### **Hot Key: PICTURE MODE Select**

- Press repeatedly to select PICTURE MODE option (STANDARD → VIDEO → sRGB).
- When OSD menu is ON, press to select an option or adjust the settings.
- When PIP is ON, press to swap the PIP main and sub picture.

## 6 MENU

Press to display/hide the OSD menu.

## 7 SOURCE

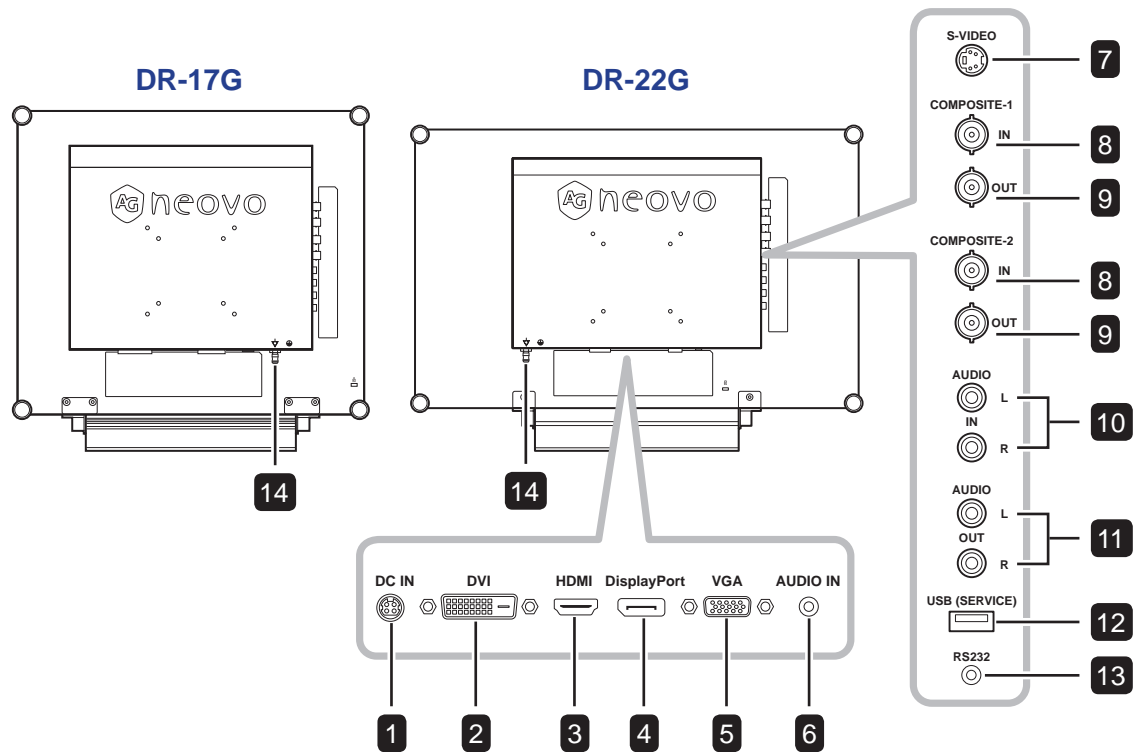
Press to select the input signal source.

## 8 POWER and LED Indicator

- Press to turn the power on or off.
- Indicate the operating status of the LCD display:
  - Lights Green when the LCD display is turned on.
  - Lights Amber when the LCD display is in standby mode.
  - Lights Off when the LCD display is turned off.

# PRODUCT DESCRIPTION

## 1.3.2 Rear View

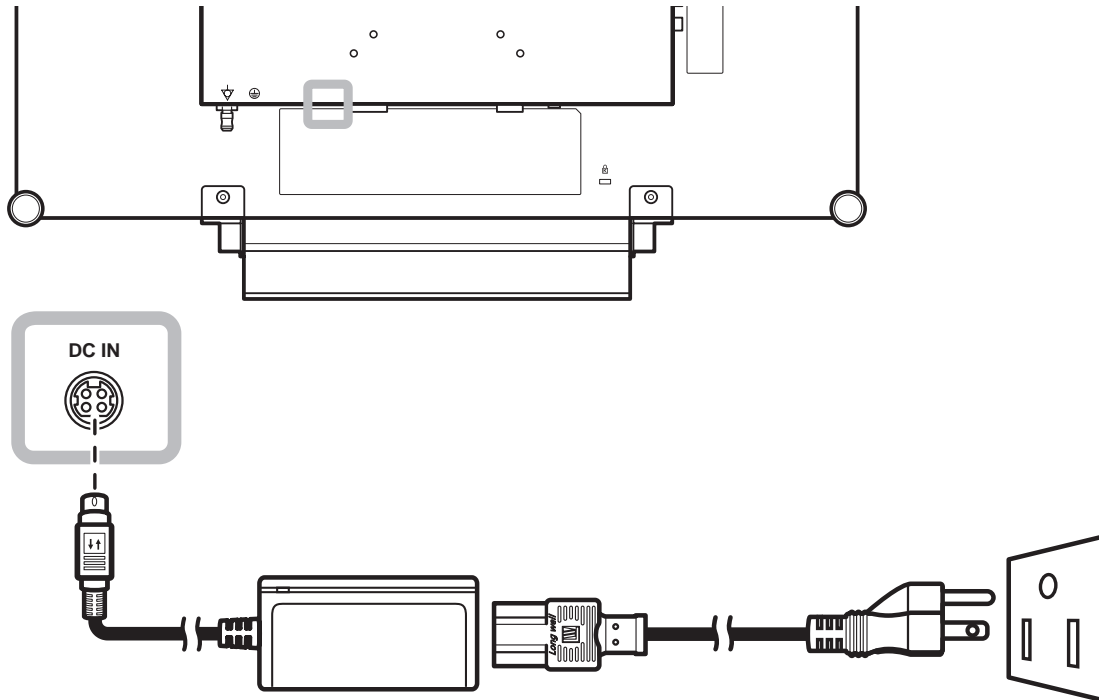


- |  |   |
|--|---|
| <p><b>1 DC IN</b><br/>Connect with the supplied power adaptor.</p> <p><b>2 DVI</b><br/>Connect DVI signals input.</p> <p><b>3 HDMI</b><br/>Connect HDMI signals input.</p> <p><b>4 DisplayPort</b><br/>Connect DisplayPort signals input.</p> <p><b>5 VGA</b><br/>Connect VGA signals input.</p> <p><b>6 AUDIO IN</b><br/>Connect audio signals input (3.5 mm Stereo Audio Jack).</p> <p><b>7 S-VIDEO</b><br/>Connect S-Video signals input.</p> | <p><b>8 COMPOSITE-1/COMPOSITE-2 IN</b><br/>Connect Composite (CVBS) signals input.</p> <p><b>9 COMPOSITE-1/COMPOSITE-2 OUT</b><br/>Connect Composite (CVBS) signals output.</p> <p><b>10 AUDIO IN</b><br/>Connect audio signals input (RCA Stereo Audio Jack).</p> <p><b>11 AUDIO OUT</b><br/>Connect audio signals output (RCA Stereo Audio Jack).</p> <p><b>12 USB (SERVICE)</b><br/>Connect USB 2.0 for service.</p> <p><b>13 RS232</b><br/>Connect RS232 input from external equipment.</p> <p><b>14 GROUNDING STUD</b><br/>Connect to a proper earth ground.</p> |
|--|---|

# CHAPTER 2: MAKING CONNECTIONS

## 2.1 Connecting the Power

- 1 Connect the power cord to the power adapter.
- 2 Connect the power adapter to the DC power input at the rear of the LCD display.
- 3 Connect the power cord plug to a power outlet or a power supply.



### Note:

- ◆ When removing the power supply, please make sure the plug is unlocked.



### Caution:

- ◆ Make sure that the LCD display is not connected to the power outlet before making any connections. Connecting cables while the power is ON may cause electric shock or personal injury.



### Caution:

- ◆ When unplugging the power cord, hold the power cord by the plug head. Never pull by the cord.

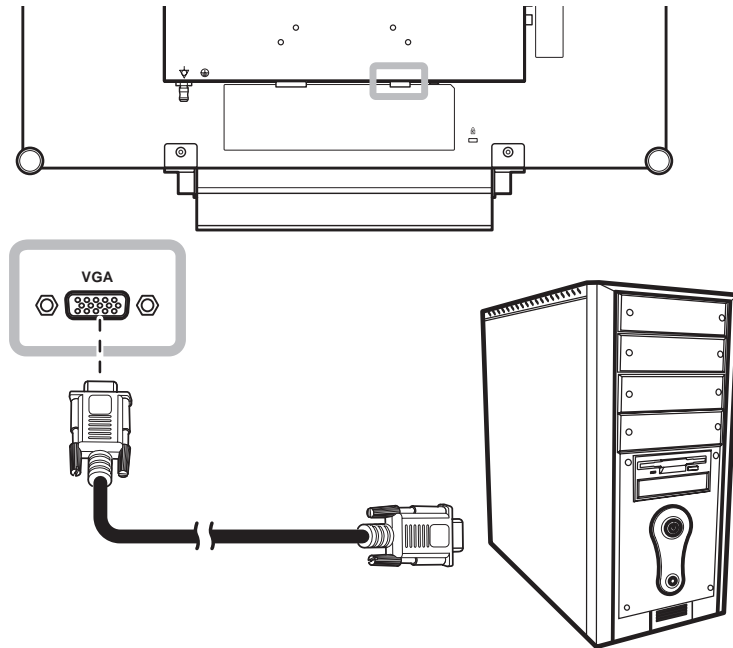
# MAKING CONNECTIONS

## 2.2 Connecting Input Source Signals

### 2.2.1 Connecting a Computer

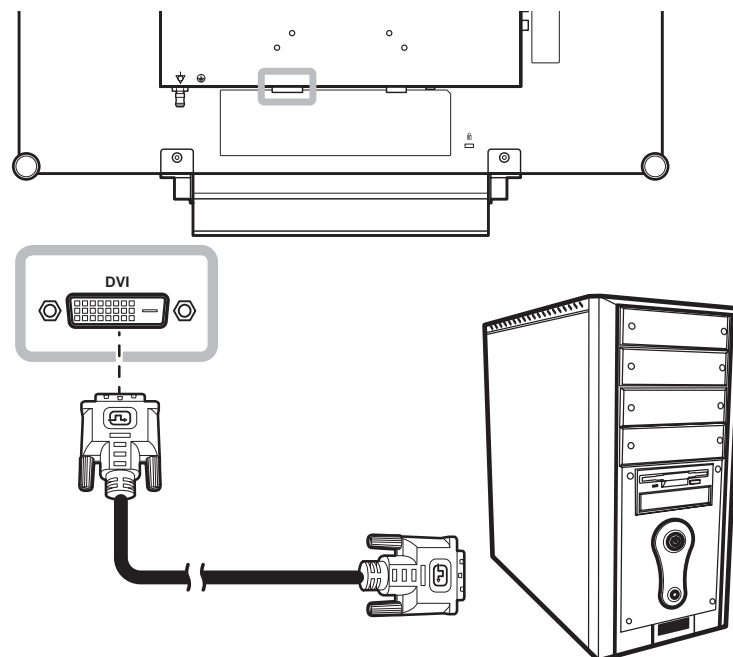
#### Using VGA Cables

Connect one end of a VGA cable to the VGA connector of the LCD display and the other end to the VGA connector of the computer.



#### Using DVI Cables

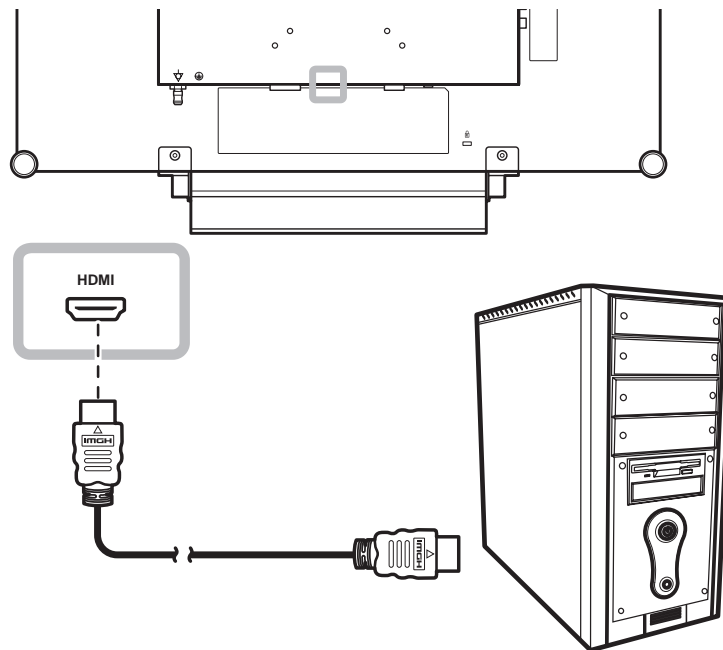
Connect one end of a DVI (DVI-D) cable to the DVI connector of the LCD display and the other end to the DVI connector of the computer.



# MAKING CONNECTIONS

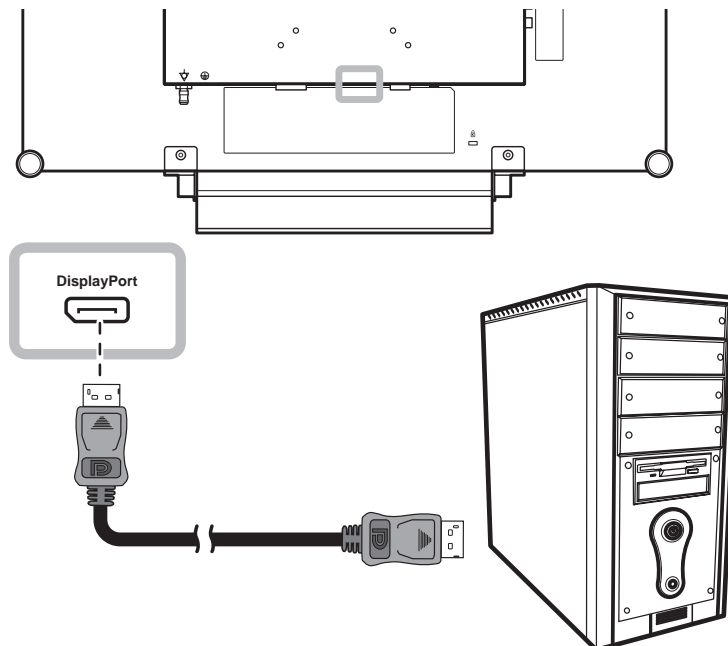
## Using HDMI Cables

Connect one end of an HDMI cable to the HDMI connector of the LCD display and the other end to the HDMI connector of the computer.



## Using DisplayPort Cables

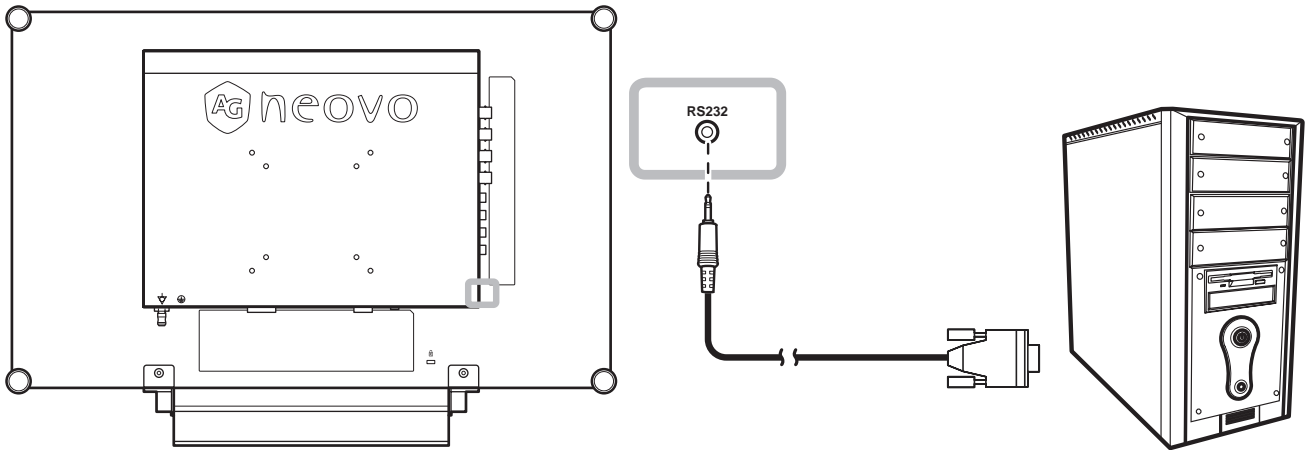
Connect one end of a DisplayPort cable to the DisplayPort connector of the LCD display and the other end to the DisplayPort connector of the computer.



# MAKING CONNECTIONS

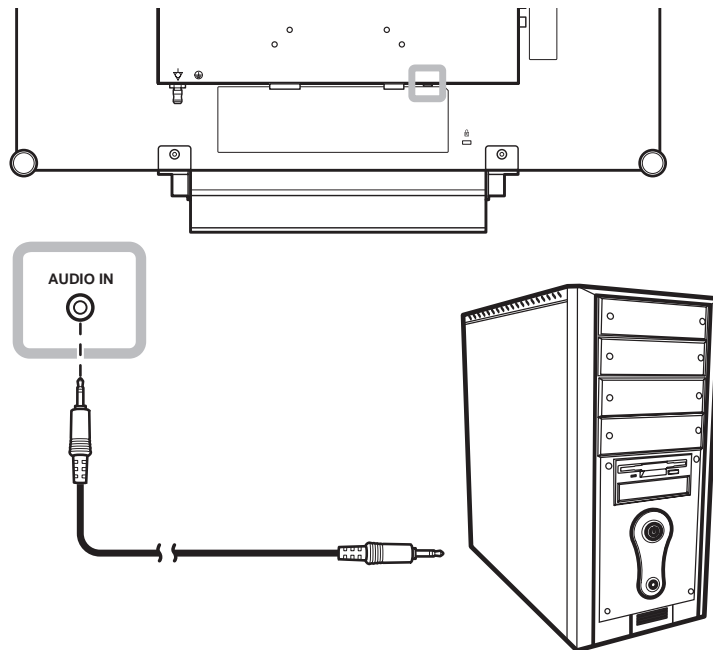
## Using RS232 Cables

Connect one end of an RS232 cable to the RS232 connector of the LCD display and the other end to the RS232 connector of the computer.



## Using Audio Cables

Connect one end of an audio cable to the AUDIO IN connector at the rear of the LCD display and the other end to the audio out connector of the computer.





# MAKING CONNECTIONS

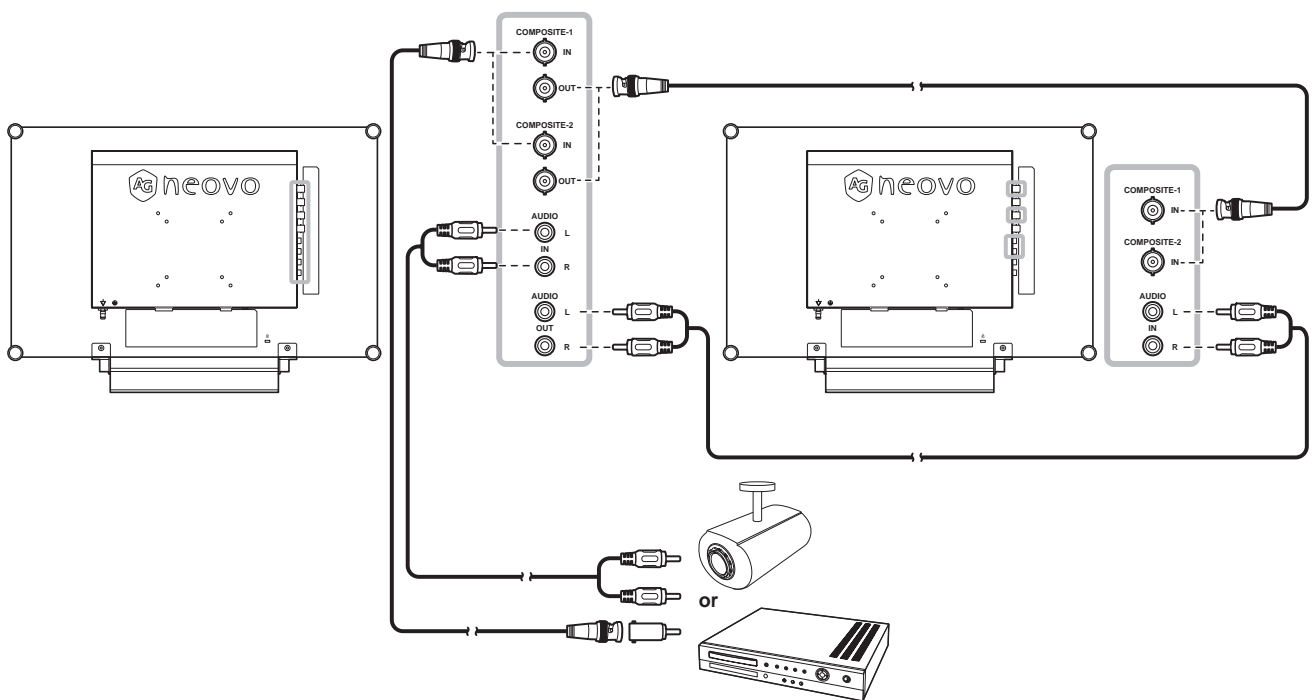
## 2.2.2 Connecting a Video Device

### Using Composite (CVBS) Cables

Connect one end of a Composite (CVBS) cable to the COMPOSITE 1 / COMPOSITE 2 IN connector of the LCD display and the other end to the Composite (CVBS) connectors of your device.

For audio input, connect an RCA cable to the AUDIO IN connectors of the LCD display and the audio out connector of your device.

For video looping, connect one end of a Composite (CVBS) cable to the COMPOSITE 1 / COMPOSITE 2 OUT connector of the LCD display and the other end to the COMPOSITE 1 / COMPOSITE 2 IN connector of the additional display.

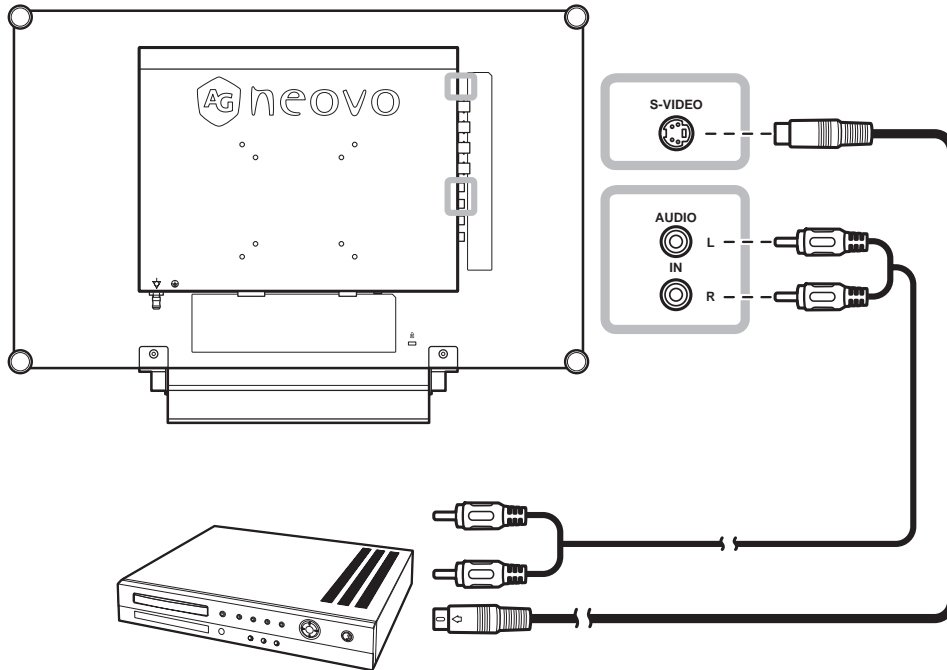


# MAKING CONNECTIONS

## Using S-Video Cables

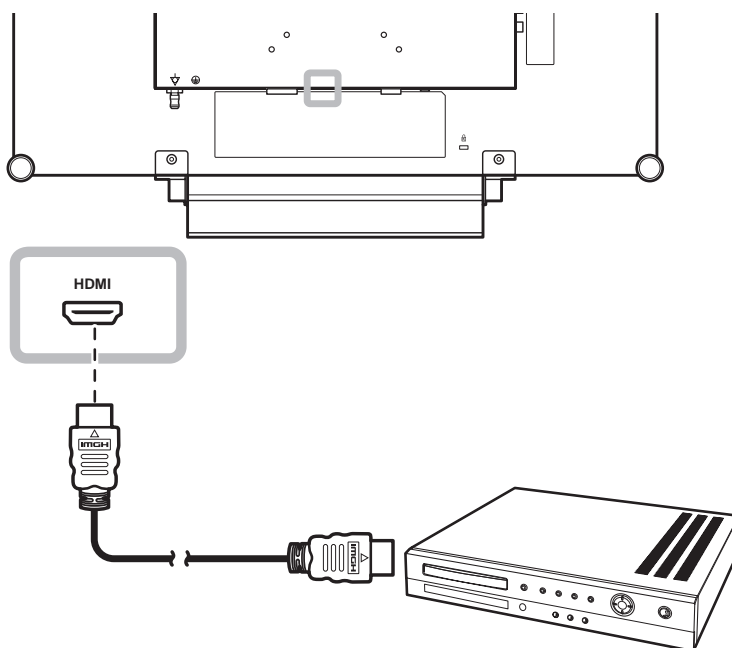
Connect one end of an S-Video cable to the S-VIDEO connector of the LCD display and the other end to the S-VIDEO connector of your device.

For audio input, connect an RCA cable to the AUDIO IN connectors of the LCD display and the audio out connector of your device.



## Using HDMI Cables

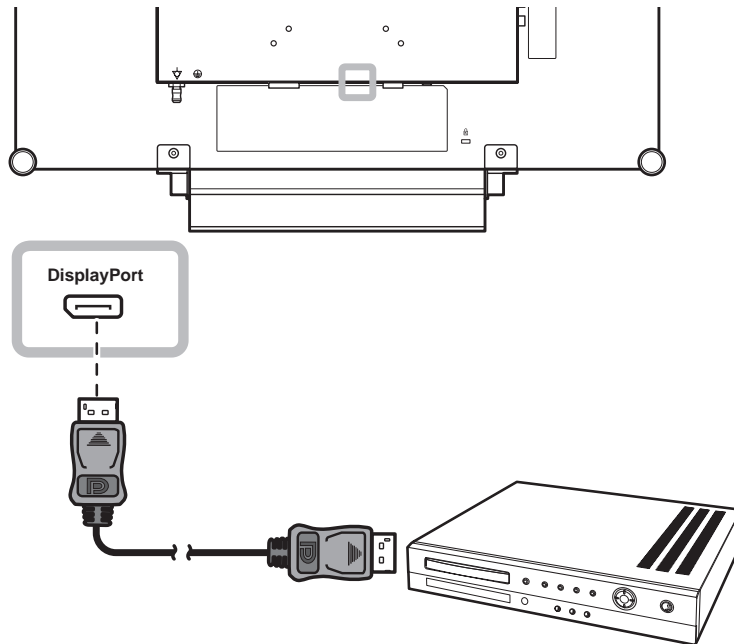
Connect one end of an HDMI cable to the HDMI connector of the LCD display and the other end to the HDMI connector of your device.



# MAKING CONNECTIONS

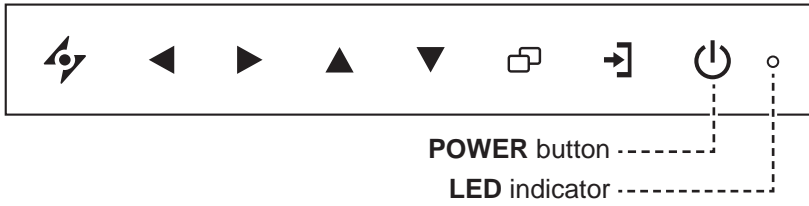
## Using DisplayPort Cables

Connect one end of a DisplayPort cable to the DisplayPort connector of the LCD display and the other end to the DisplayPort connector of your device.



# CHAPTER 3: USING THE LCD DISPLAY

## 3.1 Turning on the Power



- 1 Connect the power cord to the power adapter. Then connect the power adapter to the DC power input at the rear of the LCD display.
- 2 Press the **POWER** button to turn the LCD display on. The LED indicator turns GREEN. When the LCD display is turned on, press the POWER button to turn off the LCD display. The LED indicator turns off.

## 3.2 Selecting the Input Source Signal



- 1 Press the **SOURCE** button to call out the input source menu.



- 2 Press the **▲** or **▼** button to highlight an input source.
- 3 Press the **▶** button to select the input source.

### Note:

- ◆ The LCD display still consumes power as long as the power cord is connected to the power outlet. Disconnect the power cord to completely cut off power.

### Notes:

- ◆ After selecting an input source signal, the input source signal message appears on the screen briefly.

For example, HDMI is selected the following message is displayed.



- ◆ If the selected input source signal is not connected to the LCD display or is turned off, the no signal message is displayed on the screen.



- ◆ If the resolution or the graphics card of the connected computer is set too high, the input out of range message is displayed.



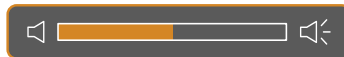
# USING THE LCD DISPLAY

## 3.3 Adjusting the Volume / Illuminator Function Hot Key



Hot Key: **Audio Volume Adjustment**

- 1 Press the ◀ button to call out the volume bar.



- 2 Press the ▶ button to increase volume or the ◀ button to decrease volume.

### 3.3.1 Muting the Audio

Press the ▶ and ◀ buttons simultaneously to mute or unmute the audio.

### 3.3.2 Illuminator Function Hot Key

Press and hold ◀ and ▶ for 5 seconds to turn the screen completely white to enable you to see the light box for the x-ray film. To change the screen back to normal display mode, press and hold ◀ and ▶ for 5 seconds again.

## 3.4 Choosing Your Preferred Picture Settings



Hot Key: **PICTURE MODE Select**

Press the ▼ button repeatedly to toggle between the picture modes.

Options are as follows:

- STANDARD MODE: Default settings that suits most environments and types of video.
- VIDEO MODE: Settings adjusted for video.
- sRGB MODE: Setting displays accurate colours and suitable for viewing images on the Internet.



# USING THE LCD DISPLAY

## 3.5 Using Picture-in-Picture (PIP)

The Picture-in-Picture (PIP) and Picture-by-Picture (PIP) feature allows viewing of more than one input source signal on the LCD display.

### 3.5.1 PIP/PBP Options



----- Hot Key: **PIP/PBP Select**

Press the ▲ button repeatedly to enable and scroll among the PIP/PBP options. Options are as follows:

- PIP On: The sub source signal is displayed within the main source signal.
- PBP (Picture-by-Picture): The main source and the sub source signals are displayed side by side with equal display size.
- PIP Off: PIP function is disabled, only the main source signal is displayed.

PIP On



PBP



PIP Off



#### Note:

- ◆ The main source and sub source signals can be set in PIP Setting, see page 46.
- ◆ Some input source signal combinations do not support PIP. See PIP Compatibility table on page 47.

# USING THE LCD DISPLAY

## 3.5.2 PIP/PBP Swap

The main and the sub source signals set in PIP/PBP Setting can be easily swapped using the keypad.



Press the ▼ button to swap the main source and the sub source signals. See illustration below.



### Note:

- ◆ PIP/PBP Swap can only be executed if PIP is enabled, see page 46.

## 3.6 Using FREEZE Function



Hot Key: **Screen Freeze**

The FREEZE function allows you to freeze the screen image but still continues real-time playback until the image is unfreeze.

Press the ► button to activate screen freeze, the screen freeze message is displayed on the screen.



You can press any button to deactivate except the **POWER** button.


# USING THE LCD DISPLAY

## 3.7 Using Auto Adjustment Function



Hot Key: **Auto Adjustment/Rotate**

Auto Adjustment function automatically tunes the LCD display to its optimal setting, including horizontal position, vertical position, clock, and phase.

Press the  button to perform auto adjustment.

The message auto adjusting is displayed on the screen.




During auto adjustment, the screen will slightly shake for a few seconds.

When the message disappears, auto adjustment is completed.


## 3.8 Using ROTATE Function

The ROTATE function allows you to rotate the screen image at 180°.

Press the  button for 3 seconds to rotate the picture 180°.



After ROTATE image

After executing ROTATE, press the  button for 3 seconds again to rotate the picture back to its normal state.



Original screen image

### Note:

- ◆ Auto Adjustment function is available only during VGA input signals.
- ◆ It is recommended to use the auto adjustment function when using the LCD display for the first time or after a resolution or frequency change.
- ◆ It is recommended to perform the Auto Adjustment function only when the image (non-black) is displayed in full screen.

### Note:

- ◆ ROTATE function can only be executed if PIP is off, see page 46.



# USING THE LCD DISPLAY

## 3.9 Locking the OSD Menu

Lock the OSD menu to protect the LCD display from unauthorised users or from accidentally pressing the keypad.

To lock the OSD, press and hold the keypad buttons listed below for at least 5 seconds or until the



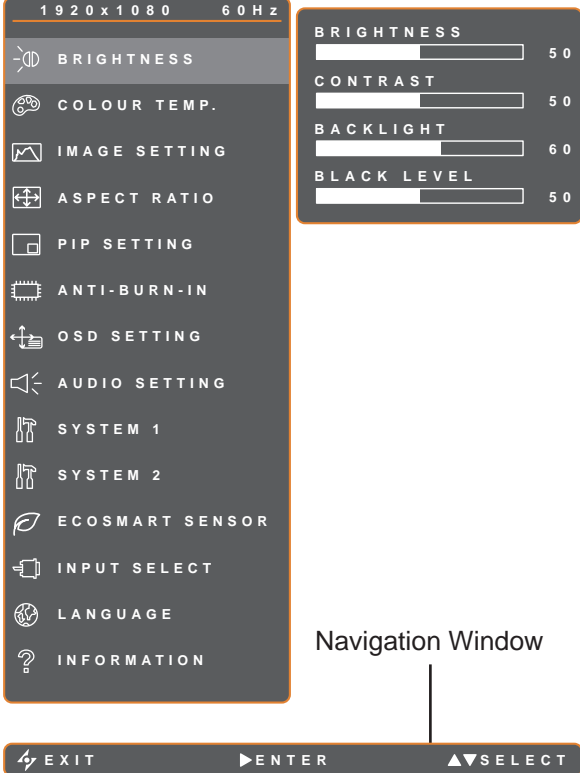

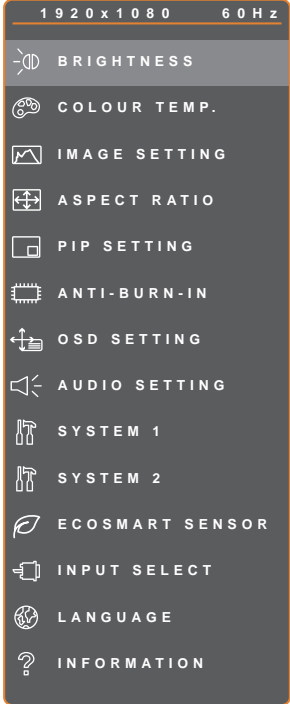
message appears.

When the OSD is locked, all keypad buttons are inactivated.

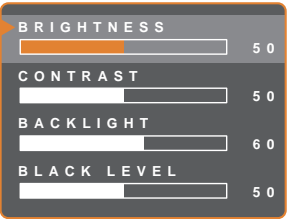
Type of OSD Lock	Lock Operation	Unlock Operation
Lock all buttons	Press and hold the ►, ▲, and ▼ buttons simultaneously for 5 seconds.	Do one of the following to unlock: <ul style="list-style-type: none"><li>• Press and hold the ►, ▲, and ▼ buttons simultaneously for 5 seconds or until the OSD menu appears.</li><li>• Press and hold the ◀, ▲, and ▼ buttons simultaneously for 5 seconds or until the OSD menu appears.</li></ul>
Lock all buttons except the <b>POWER</b> button.	Press and hold the ◀, ▲, and ▼ buttons simultaneously for 5 seconds.	

# CHAPTER 4: ON SCREEN DISPLAY MENU

## 4.1 Using the OSD Menu

		Operation
<b>1</b>	<p>Display the main menu screen.</p>  <p>Navigation Window</p>	<p>Press the  button.</p>
<b>2</b>	<p>Select the menu.</p> 	<ol style="list-style-type: none"><li>1 Press the ▲ or ▼ button.</li><li>2 Press the ► button to enter the submenu.</li></ol>

# ON SCREEN DISPLAY MENU

		Operation
<p><b>3</b> Select the submenu item.</p>  <p>The highlighted item with an orange arrow indicates the active submenu.</p>	<p>Press the ▲ or ▼ button.</p>	
<p><b>4</b> Adjust the settings.</p>	<p>Press the ◀ or ▶ button.</p>	
<p><b>5</b> Exit the submenu.</p>	<p>Press the ⚡ or ◻ button to return to the previous menu.</p>	
<p><b>6</b> Close the OSD window.</p>	<p>Press the ⚡ or ◻ button again.</p>	

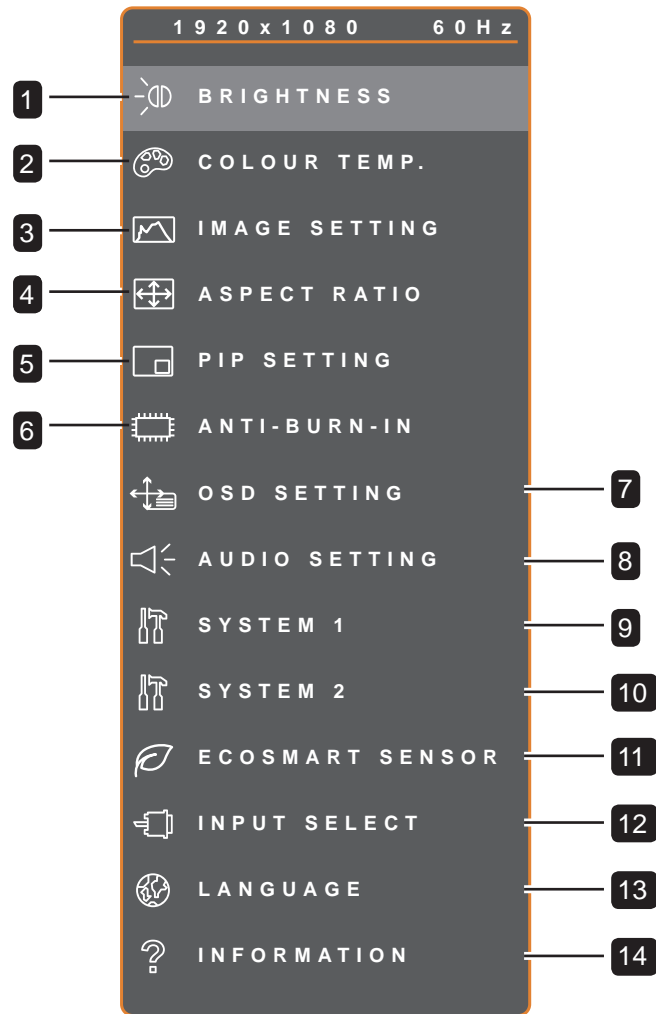
When settings are modified, all changes are saved when the user does the following:

- Proceeds to the another menu.
- Exits the OSD menu.
- Waits for the OSD menu to disappear.

**Note:** Availability of some menu items depend on the input source signal. If the menu is not available, it is disabled and grayed out.

# ON SCREEN DISPLAY MENU

## 4.2 OSD Menu Tree



Main Menu	Submenu	Remarks
1. BRIGHTNESS	<ul style="list-style-type: none"> <li>• BRIGHTNESS</li> <li>• CONTRAST</li> <li>• BACKLIGHT</li> <li>• BLACK LEVEL</li> </ul>	See page 39.
2. COLOUR TEMP.	<ul style="list-style-type: none"> <li>• NEUTRAL</li> <li>• WARM</li> <li>• COOL</li> <li>• USER</li> <li>• AUTO COLOUR</li> </ul>	See page 41.

# ON SCREEN DISPLAY MENU

Main Menu	Submenu	Remarks
3. IMAGE SETTING	<ul style="list-style-type: none"> <li>• SHARPNESS</li> <li>• SATURATION</li> <li>• TINT</li> <li>• GAMMA</li> <li>• COLOUR RANGE</li> <li>• NOISE REDUCTION</li> <li>• PICTURE MODE</li> <li>• H. POSITION</li> <li>• V. POSITION</li> <li>• PHASE</li> <li>• CLOCK</li> </ul>	See page 42.
4. ASPECT RATIO	<ul style="list-style-type: none"> <li>• FULL</li> <li>• REAL</li> <li>• NATIVE</li> </ul>	See page 45.
5. PIP SETTING	<ul style="list-style-type: none"> <li>• PIP</li> <li>• MAIN SOURCE</li> <li>• SUB SOURCE</li> <li>• SUB PICTURE SIZE</li> <li>• SUB PIC. POS.</li> <li>• SWAP</li> </ul>	See page 46.
6. ANTI-BURN-IN	<ul style="list-style-type: none"> <li>• ENABLE</li> <li>• INTERVAL (HOURS)</li> <li>• MODE</li> </ul>	See page 48.
7. OSD SETTING	<ul style="list-style-type: none"> <li>• TRANSPARENCY</li> <li>• OSD H. POSITION</li> <li>• OSD V. POSITION</li> <li>• OSD TIMER</li> </ul>	See page 49.
8. AUDIO SETTING	<ul style="list-style-type: none"> <li>• VOLUME</li> <li>• AUDIO</li> <li>• SOURCE</li> </ul>	See page 50.
9. SYSTEM 1	<ul style="list-style-type: none"> <li>• POWER SAVING</li> <li>• SOURCE DETECT</li> <li>• DDC/CI</li> <li>• BLUE SCREEN</li> <li>• SIGNAL INFO</li> <li>• Alink</li> <li>• LOGO</li> <li>• LED</li> <li>• RESET</li> </ul>	See page 51.





# ON SCREEN DISPLAY MENU

Main Menu	Submenu	Remarks
10. SYSTEM 2	<ul style="list-style-type: none"> <li>• SUPER RESOLUTION</li> <li>• OVERDRIVE</li> <li>• MODE</li> <li>• DCR</li> <li>• MONITOR ID</li> </ul>	See page 53.
11. ECOSMART SENSOR	<ul style="list-style-type: none"> <li>• ENABLE</li> <li>• MODE</li> <li>• LEVEL</li> </ul>	See page 55.
12. INPUT SELECT	<ul style="list-style-type: none"> <li>• VGA</li> <li>• DVI</li> <li>• HDMI</li> <li>• DISPLAYPORT</li> <li>• COMPOSITE 1</li> <li>• COMPOSITE 2</li> <li>• S-VIDEO</li> </ul>	See page 57.
13. LANGUAGE	Select the OSD language: EN / FR / DE / ES / IT / PY / RO / PL / CS / NL / 简中 / 繁中	
14. INFORMATION	Displays settings information such as Input, Resolution, Horizontal Frequency, Vertical Frequency, Timing Mode, and Firmware Version.	

# CHAPTER 5: ADJUSTING THE LCD DISPLAY

## 5.1 Brightness



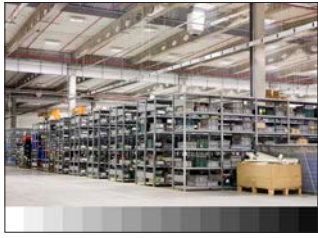

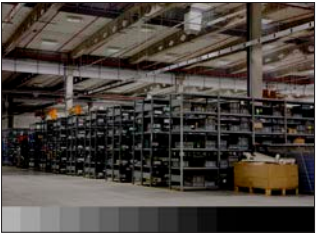
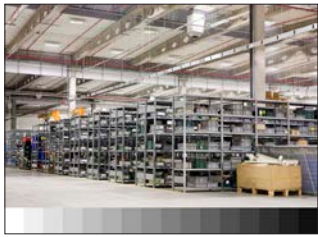


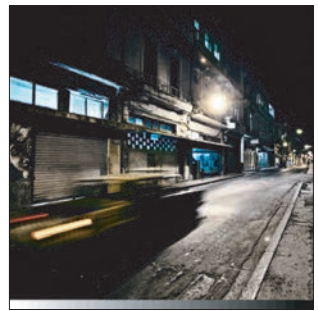


1. Press the  button to call out the OSD window.
2. Select **BRIGHTNESS** menu, then press the  button.
3. Press the  or  button to select an option.



Item	Function	Operation	Range
BRIGHTNESS	Adjusts the luminance of the screen image.	Press the ◀ or ▶ button to adjust the value.	0 to 100
CONTRAST	Adjusts the difference between the black level and the white level.		
BACKLIGHT	Adjusts the luminance of the screen image. <b>Note:</b> This menu option is not available if the ECOSMART SENSOR function is enabled.		
BLACK LEVEL	Adjusts the black level of the screen image. Low brightness setting makes black colour darker.		

See comparison illustrations on page 40.

# ADJUSTING THE LCD DISPLAY

	Original Setting	High Setting	Low Setting
BRIGHTNESS			
CONTRAST			
BLACK LEVEL			



# ADJUSTING THE LCD DISPLAY

## 5.2 Colour Temp.



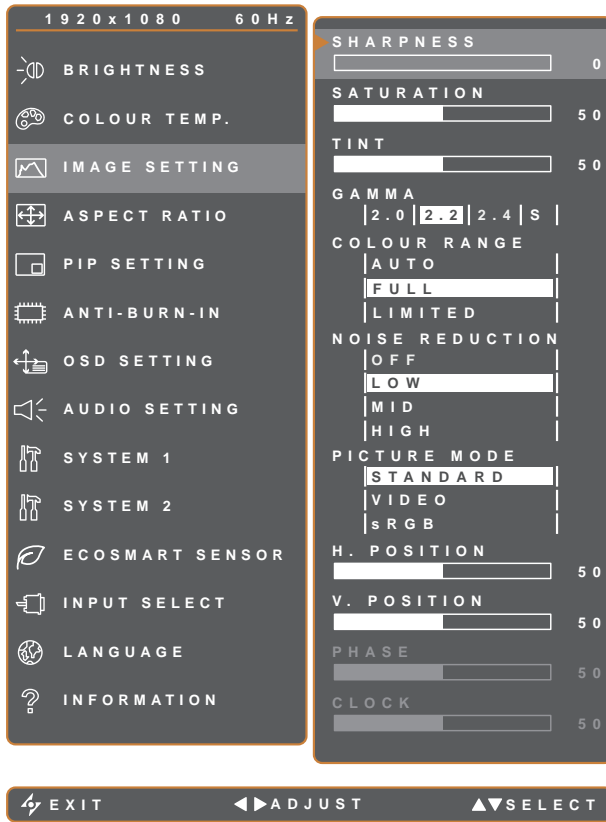
1. Press the button to call out the OSD window.
2. Select **COLOUR TEMP.** menu, then press the button.
3. Press the or button to select an option.



Item	Function	Operation	Range
COLOUR TEMP.	Provides several colour settings.	Press the  or  button to select the setting.	NEUTRAL WARM COOL USER AUTO COLOUR
	Colour setting can be set to: <ul style="list-style-type: none"> <li>• <b>NEUTRAL</b> - commonly used for normal lighting conditions.</li> <li>• <b>WARM</b> - Applies a reddish tint for warmer colours.</li> <li>• <b>COOL</b> - Applies a bluish tint for cooler colours.</li> <li>• <b>USER</b> - This allows users to set the colour temperature by adjusting the R, G, B settings according to one's preference.               <ol style="list-style-type: none"> <li>1 Select <b>USER</b>, and press the  button.</li> <li>2 Press the  or  button to select the colour you want to adjust.</li> <li>3 Press the  or  button to adjust the values between 0 ~ 255.</li> </ol> </li> <li>• <b>AUTO COLOUR</b> - Operates the white balance and automatically adjusts the colour settings.               <ol style="list-style-type: none"> <li>1 Select <b>AUTO COLOUR</b>.</li> <li>2 Press the  button to activate auto colour.</li> </ol> </li> </ul> <p><b>Note:</b> This menu option is only available if the input source is VGA.</p> <p><b>Note:</b> Activate <b>RESET</b> to return the colour to its default setting.</p>		

# ADJUSTING THE LCD DISPLAY

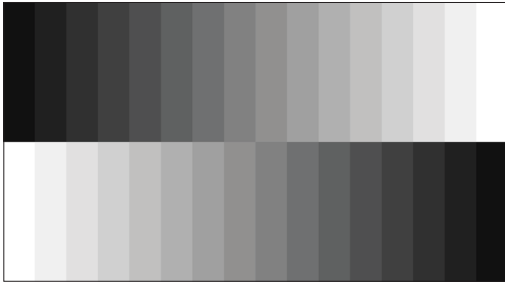
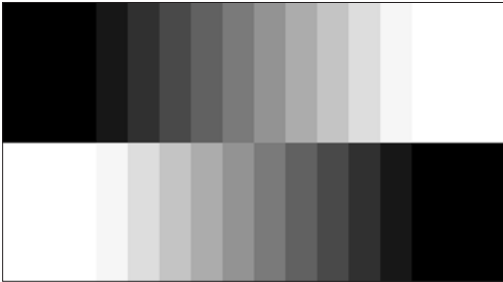
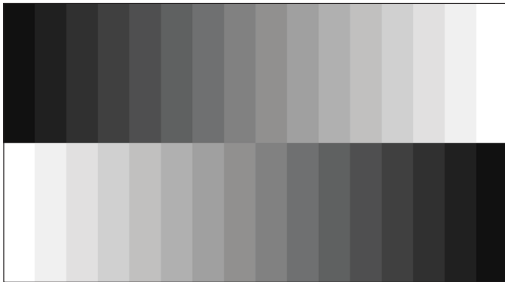
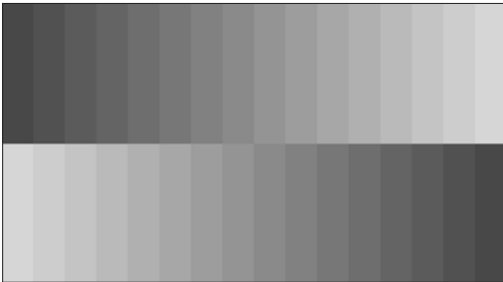


## 5.3 Image Setting



1. Press the button to call out the OSD window.
2. Select **IMAGE SETTING** menu, then press the button.
3. Press the or button to select an option.

Item	Function	Operation	Range
SHARPNESS	Adjusts the clarity and focus of the screen image.	Press the  or  button to adjust the value.	0 to 100
SATURATION	Adjusts the colour saturation.		
TINT	Adjusts the colour tint.		
GAMMA	Adjusts the non-linear setting for picture luminance and contrast.	Press the  or  button to select the setting.	2.0 2.2 2.4 S
	<div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <p>Display Gamma 2.0</p> </div> <div style="text-align: center;"> <p>Display Gamma 2.2</p> </div> <div style="text-align: center;"> <p>Display Gamma 2.4</p> </div> <div style="text-align: center;"> <p>Display Gamma S</p> </div> </div>		

# ADJUSTING THE LCD DISPLAY

Item	Function	Operation	Range	
COLOUR RANGE	Adjusts black and white levels for video. <b>Note:</b> This menu option is only available if the input source is HDMI.	Press the ◀ or ▶ button to select the setting.	AUTO FULL LIMITED	
	Signal source from PC - PC signal at a full range (Grayscale 0-255) state:			
				
	Monitor OSD colour range: Full <i>*Please select</i>	Monitor OSD colour range: Limited		
NOISE REDUCTION	Adjusts the noise reduction to help remove noise from images. This helps produce clearer and crisper images.	Press the ◀ or ▶ button to select the setting.	OFF LOW MID HIGH	
	Signal source from Video - Video signal at a limited range (Grayscale 16~235) state:			
				
	Monitor OSD colour range: Limited <i>*Please select</i>	Monitor OSD colour range: Full		
NOISE REDUCTION				
	Noise Reduction Off	Noise Reduction On		





# ADJUSTING THE LCD DISPLAY







Item	Function	Operation	Range
PICTURE MODE	<p>Selects a predefined picture mode setting.</p> <p><b>Note:</b> When the setting is set to <b>sRGB</b>, the BRIGHTNESS, CONTRAST, BLACK LEVEL, COLOR TEMP., and SATURATION functions will be disabled.</p>	Press the ◀ or ▶ button to select the setting.	STANDARD VIDEO sRGB
H. POSITION (Horizontal Position)	Moves the screen image to the left or right.	Press the ◀ or ▶ button to adjust the value.	0 to 100
V. POSITION (Vertical Position)	Moves the screen image up or down.		
PHASE	<p>Adjusts the phase timing to synchronise with the video signal.</p> <p><b>Note:</b> This menu option is only available if the input source is VGA.</p>		
CLOCK	<p>Adjusts the frequency timing to synchronise with the video signal.</p> <p><b>Note:</b> This menu option is only available if the input source is VGA.</p>		

# ADJUSTING THE LCD DISPLAY

## 5.4 Aspect Ratio

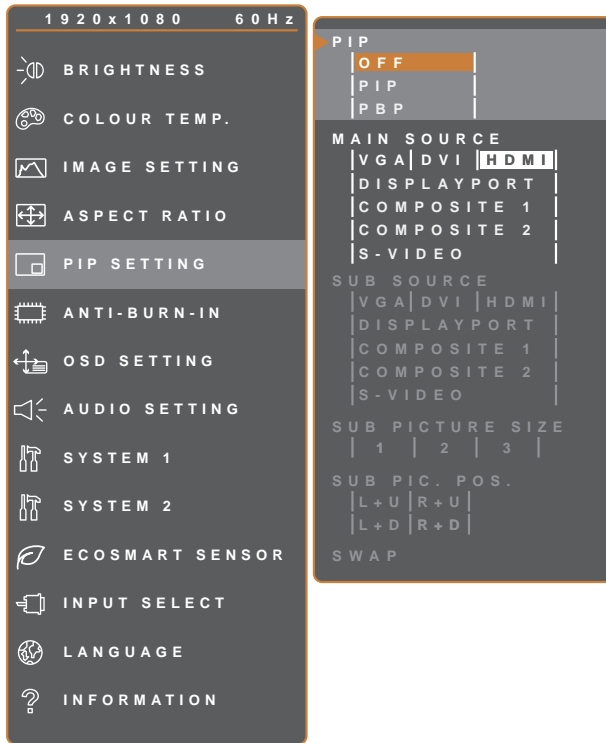






1. Press the  button to call out the OSD window.
2. Select **ASPECT RATIO** menu, then press the  button.
3. Press the  or  button to select an option.





Item	Function	Operation	Range
ASPECT RATIO	Adjusts the aspect ratio of the screen image.	Press the  or  button to select the setting.	FULL REAL NATIVE
	<p>The aspect ratio setting can be set to:</p> <ul style="list-style-type: none"> <li>• <b>FULL</b> - Enlarges the picture to fill the screen.</li> <li>• <b>REAL</b> - Displays the picture at its original size.</li> <li>• <b>NATIVE</b> - Enlarges the picture but retain its original aspect ratio.</li> </ul> <p>Each aspect ratio can set its custom aspect ratio settings (horizontal zoom(H. ZOOM) and /or vertical zoom(V. ZOOM)) or adjust the overscan setting to fix the cut-off screen edges.</p> <p>1 Press the  or  button to select <b>H. ZOOM</b>, <b>V. ZOOM</b>, or <b>OVERSCAN</b>.</p> <p>2 Press the  or  button to adjust the values between 0 ~ 100.</p>		

# ADJUSTING THE LCD DISPLAY

## 5.5 PIP Setting



1. Press the  button to call out the OSD window.
2. Select **PIP SETTING** menu, then press the  button.
3. Press the  or  button to select an option.

Item	Function	Operation	Range
PIP	Allows you to select the PIP setting or disable PIP.	Press the  or  button to select the value.	OFF PIP PBP
	PIP can be set to: <ul style="list-style-type: none"> <li>• <b>OFF</b> - Disables PIP.</li> <li>• <b>PIP</b> - The sub source image is within the main source image.</li> <li>• <b>PBP</b> - The main source and sub source images are displayed side by side.</li> </ul>		
MAIN SOURCE	Allows you to select the main source signal.	Press the  or  button to select the setting.	VGA DVI HDMI
SUB SOURCE	Allows you to select the sub source signal.		DISPLAYPORT COMPOSITE 1 COMPOSITE 2 S-VIDEO

# ADJUSTING THE LCD DISPLAY

**Note:** Any input signal may be set as the main or the sub source signal. However, some input signals are not supported to be paired together as the main and the sub source signals.

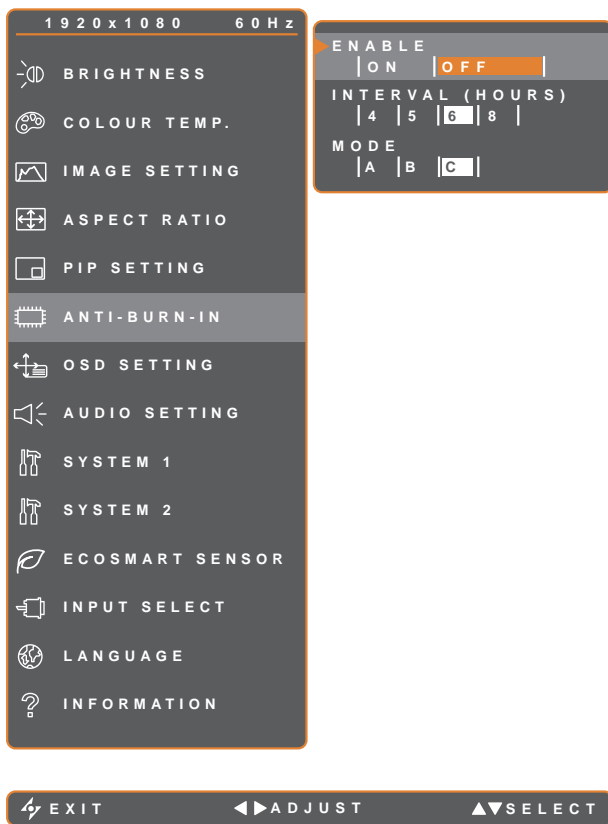
Refer to the following table for compatibility options:

Input Source		Main Source						
		VGA	DVI	HDMI	DISPLAYPORT	COMPOSITE 1	COMPOSITE 2	S-VIDEO
Sub Source	VGA	X	O	O	O	O	O	O
	DVI	O	X	O	O	O	O	O
	HDMI	O	O	X	O	O	O	O
	DISPLAYPORT	O	O	O	X	O	O	O
	COMPOSITE 1	O	O	O	O	X	X	X
	COMPOSITE 2	O	O	O	O	X	X	X
	S-VIDEO	O	O	O	O	X	X	X

Item	Function	Operation	Range
SUB PICTURE SIZE (Sub Picture Size)	Allows you to select the size of the sub source image. <b>Note:</b> This menu option is only available if the <b>PIP</b> setting is to <b>PIP</b> .	Press the ◀ or ▶ button to select the setting.	1 2 3
	The size of the sub source image can be set to: <ul style="list-style-type: none"> <li>• 1 - Small image size.</li> <li>• 2 - Medium image size.</li> <li>• 3 - Large image size.</li> </ul>		
SUB PIC. POS. (Sub Picture Position)	Allows you to select the position of the sub source image. <b>Note:</b> This menu option is only available if the <b>PIP</b> setting is to <b>PIP</b> .	Press the ◀ or ▶ button to select the setting.	L+U R+U L+D R+D
	The position of the sub source image can be set to: <ul style="list-style-type: none"> <li>• <b>L+U</b> - Sets the image on the upper left corner of the screen.</li> <li>• <b>R+U</b> - Sets the image on the upper right corner of the screen.</li> <li>• <b>L+D</b> - Sets the image on the lower left corner of the screen.</li> <li>• <b>R+D</b> - Sets the image on the lower right corner of the screen.</li> </ul>		
SWAP	Swaps the main source and sub source signals.	Press the ▶ button to execute the function.	-

# ADJUSTING THE LCD DISPLAY

## 5.6 Anti-Burn-in



1. Press the button to call out the OSD window.
2. Select **ANTI-BURN-IN** menu, then press the button.
3. Press the or button to select an option.





Item	Function	Operation	Range
ENABLE	Enables or disables Anti-Burn-In function.	Press the  or  button to select the setting.	ON OFF
INTERVAL (HOURS)	Sets the interval time (hour) between activating the Anti-Burn-In function.	Press the  or  button to adjust the value.	4 5 6 8
MODE	Selects the Anti-Burn-In mode.	Press the  or  button to select the setting.	A B C
	Anti-Burn-In mode can be set to: <ul style="list-style-type: none"> <li>• <b>A</b> - Executes fast.</li> <li>• <b>B</b> - Slower but more precise than mode A.</li> <li>• <b>C</b> - Slowest but the most precise anti-burn-in mode.</li> </ul>		





# ADJUSTING THE LCD DISPLAY

## 5.7 OSD Setting

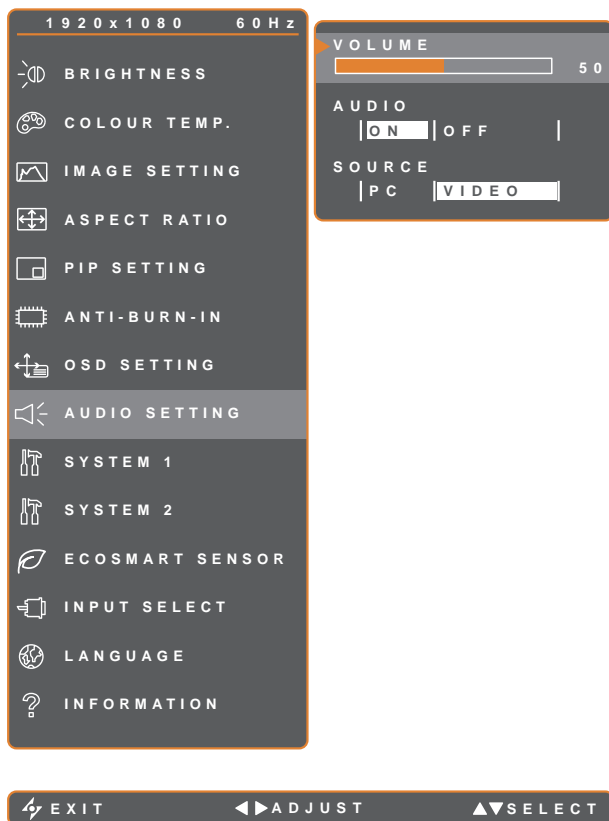






1. Press the  button to call out the OSD window.
2. Select **OSD SETTING** menu, then press the  button.
3. Press the  or  button to select an option.





Item	Function	Operation	Range
TRANSPARENCY	Adjusts the transparency level of the OSD screen.	Press the  or  button to adjust the value.	0 to 100
OSD H. POSITION (Horizontal Position)	Moves the OSD window to the left or right of the screen.		
OSD V. POSITION (Vertical Position)	Moves the OSD window up or down the screen.		
OSD TIMER	Sets the length of time (in seconds) the OSD screen is displayed. When the time elapses, the OSD screen is automatically inactivated.		5 to 100

# ADJUSTING THE LCD DISPLAY

## 5.8 Audio Setting

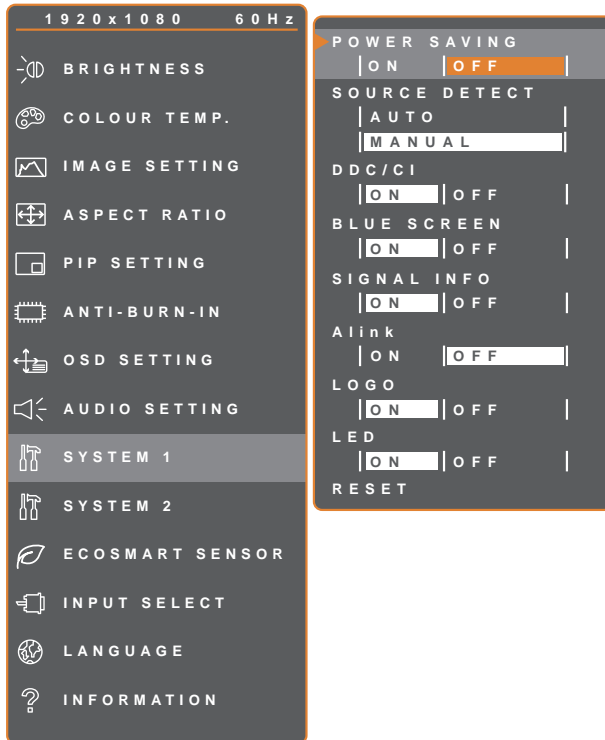






1. Press the  button to call out the OSD window.
2. Select **AUDIO SETTING** menu, then press the  button.
3. Press the  or  button to select an option.



Item	Function	Operation	Range
VOLUME	Adjusts the volume level of the built-in speaker.	Press the  or  button to adjust the value.	0 to 100
AUDIO	Turns the audio ON or OFF.	Press the  or  button to select the setting.	ON OFF
SOURCE	Selects the audio source for the PC or Video input signal. <b>Note:</b> This menu option is only available if the input source is HDMI or DisplayPort.		PC VIDEO

# ADJUSTING THE LCD DISPLAY

## 5.9 System 1



1. Press the  button to call out the OSD window.
2. Select **SYSTEM 1** menu, then press the  button.
3. Press the  or  button to select an option.

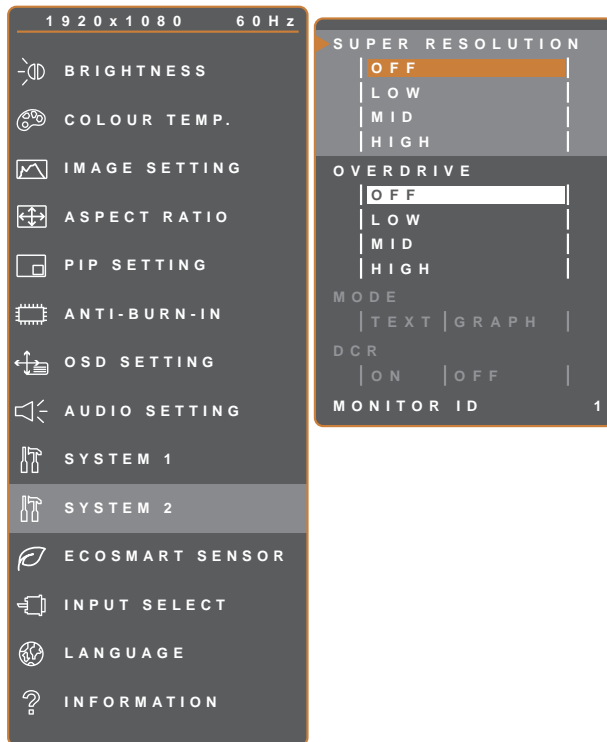
Item	Function	Operation	Range
POWER SAVING	<p>Enables or disables power saving mode.</p> <p>When the LCD display turns into power saving mode, the screen turns black and the LED indicator lights AMBER.</p> <p><b>Note:</b> The amount of time for the display to enter power saving varies depending on the SOURCE DETECT setting. If the SOURCE DETECT is set to AUTO, the display checks all input source signals before entering power saving mode if no signal is detected; this takes up more time. If the SOURCE DETECT is set to MANUAL, the display enters power saving mode right away.</p>	Press the  or  button to select the setting.	ON OFF
SOURCE DETECT	Sets the display to automatically or manually detect the input source signal.		AUTO MANUAL





# ADJUSTING THE LCD DISPLAY

Item	Function	Operation	Range
DDC/CI	Activates the DDC/CI protocol to allow users to configure the monitor by a software using two wires on the VGA, HDMI, DisplayPort, or DVI cables.		
BLUE SCREEN	Enables or disables the blue screen feature. If the setting is set to <b>ON</b> , it displays a blue screen when no signal is available.		
SIGNAL INFO	Enables or disables the signal information to be displayed on the screen.		
Alink	Enables or disables HDMI Consumer Electronics Control control. If the setting is set to <b>On</b> , you can control the connected HDMI-CEC compatible device on the same power on or power off status. <b>Note:</b> This menu option is only available if the input source is HDMI.	Press the ◀ or ▶ button to select the setting.	ON OFF
LOGO	Enables or disables the logo feature. If the setting is set to <b>ON</b> , the AG Neovo logo is briefly displayed after the display is powered on.		
LED	Sets the display LED indicator on or off.		
RESET	Use to reset all to default settings, except Language, and the input source.	Press the ▶ button to execute the function.	-

# ADJUSTING THE LCD DISPLAY

## 5.10 System 2



1. Press the  button to call out the OSD window.
2. Select **SYSTEM 2** menu, then press the  button.
3. Press the  or  button to select an option.

Item	Function	Operation	Range
SUPER RESOLUTION	Upscales images at a higher and more detailed resolution for better clearness.	Press the ◀ or ▶ button to select the setting.	OFF LOW MID HIGH
OVERDRIVE	Enhances the display response time.		
MODE	Sets the current mode for better image display.	Press the ◀ or ▶ button to select the setting.	TEXT GRAPH
	Available only during computer input signal, when the resolution is either of the following: 640 x 350, 640 x 400, 720 x 350, or 720 x 400. For optimal performance, select: <ul style="list-style-type: none"> <li>• <b>TEXT</b> - This mode is suitable for viewing text documents when the resolution is 720 x 400 or 720 x 350.</li> <li>• <b>GRAPH</b> - This mode is suitable for viewing images when the resolution is 640 x 350 or 640 x 400.</li> </ul>		

# ADJUSTING THE LCD DISPLAY

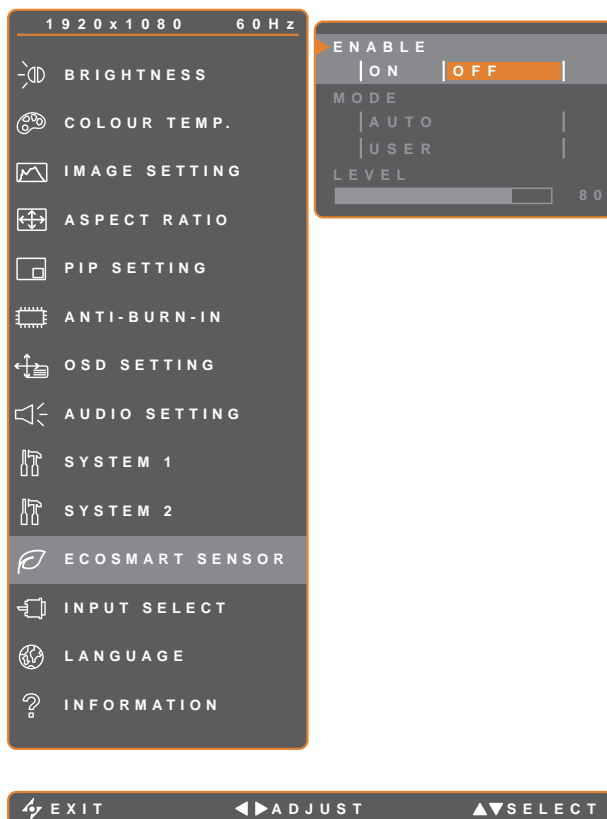
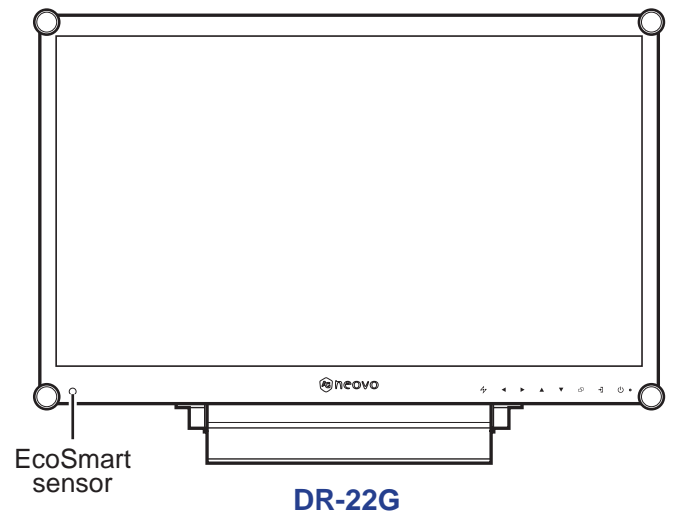
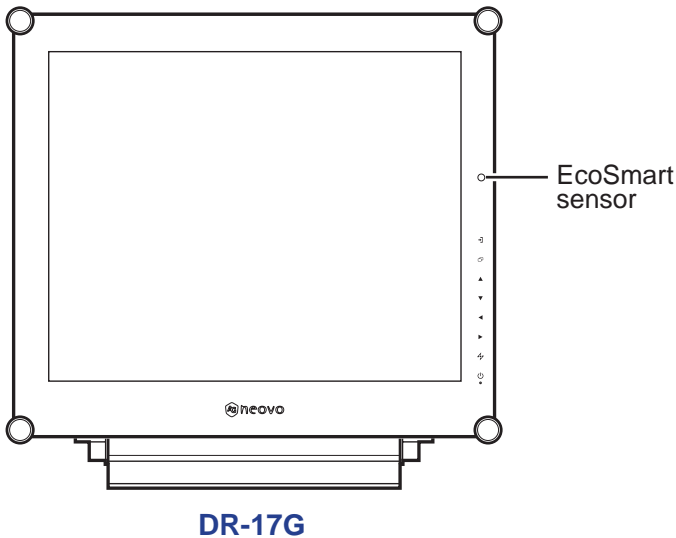
Item	Function	Operation	Range
DCR (Dynamic Contrast Ratio)	<p>Activates DCR. This feature provides automatic adjustment of picture brightness and contrast at high speed and dynamic contrast range, such as when watching movies. DCR is suitable for indoor viewing.</p> <p><b>Note:</b> When the DCR function is activated, the BACKLIGHT and ECOSMART SENSOR functions will be disabled.</p>	Press the ◀ or ▶ button to select the setting.	ON OFF
MONITOR ID	<p>Sets the ID number for controlling the display via the RS232 connection. Each display must have a unique ID number when multiple sets of this display are connected.</p>	Press the ◀ or ▶ button to set the ID.	1~255





# ADJUSTING THE LCD DISPLAY

## 5.11 EcoSmart Sensor

With the built-in EcoSmart sensor, users can enable the Eco Smart feature to automatically adjust the LCD screen brightness according to the ambient light. This feature comforts the eyes and helps optimise energy efficiency.

**Note:** Please make sure the EcoSmart sensor is not covered when enabling this function.



1. Press the  button to call out the OSD window.
2. Select **ECOSMART SENSOR** menu, then press the  button.
3. Press the  or  button to select an option.

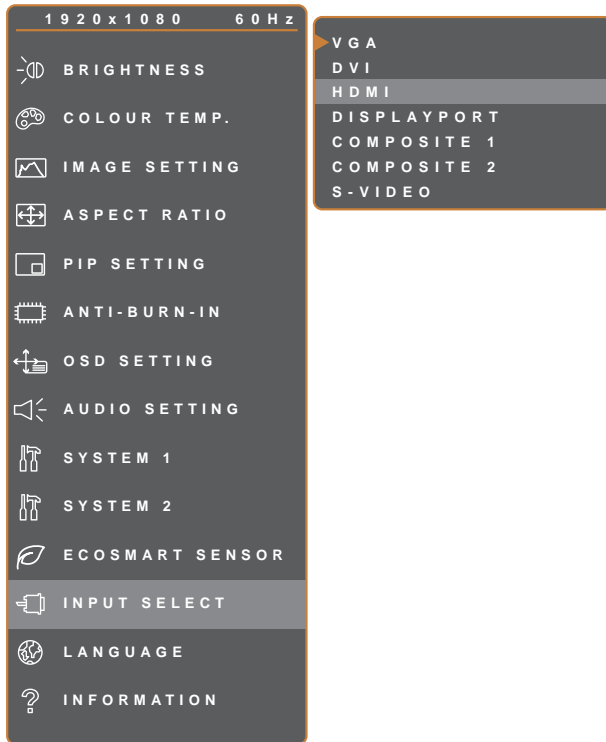
# ADJUSTING THE LCD DISPLAY





Item	Function	Operation	Value
ENABLE	Enables or disables the Eco Smart feature.	Press the ◀ or ▶ button to select the setting.	ON OFF
MODE	Sets the auto brightness mode.	Press the ◀ or ▶ button to select the setting.	AUTO USER
	The mode can be set to: <ul style="list-style-type: none"> <li>• <b>AUTO</b> - This mode is the default mode. The LCD brightness automatically adjusts to the ambient brightness.</li> <li>• <b>USER</b> - Allows you to manually adjust the LCD brightness.</li> </ul>		
LEVEL	Allows you to set the level of LCD brightness. <b>Note:</b> This menu option is only available if the <b>MODE</b> setting is to <b>USER</b> .	Press the ◀ or ▶ button to adjust the value.	0 to 100




# ADJUSTING THE LCD DISPLAY

## 5.12 Input Select








1. Press the  button to call out the OSD window.
2. Select **INPUT SELECT** menu, then press the  button.
3. Press the  or  button to select an option.



Item	Function	Operation	Value
VGA	Sets VGA as the input source signal.	Press the  button to switch to the selected input source.	-
DVI	Sets DVI as the input source signal.		
HDMI	Sets HDMI as the input source signal.		
DISPLAYPORT	Sets DisplayPort as the input source signal.		
COMPOSITE 1	Sets COMPOSITE 1 as the input source signal.		
COMPOSITE 2	Sets COMPOSITE 2 as the input source signal.		
S-VIDEO	Sets S-VIDEO as the input source signal.		

# CHAPTER 6: APPENDIX

## 6.1 Warning Messages

Warning Messages	Cause	Solution
 <p>INPUT SIGNAL OUT OF RANGE</p>	<p>The resolution or the refresh rate of the graphics card of the computer is set too high.</p>	<ul style="list-style-type: none"> <li>• Change the resolution or the refresh rate of the graphics card.</li> </ul>
 <p>NO SIGNAL</p>	<p>The LCD display cannot detect the input source signal.</p>	<ul style="list-style-type: none"> <li>• Check if the input source is turned ON.</li> <li>• Check if the signal cable is properly connected.</li> <li>• Check if any pin inside the cable connector is twisted or broken.</li> </ul>
 <p>OSD LOCK OUT</p>	<p>The OSD has been locked by the user.</p>	<ul style="list-style-type: none"> <li>• Unlock the OSD. Refer to page 33.</li> </ul>
 <p>ANTI-BURN-IN ON</p>	<p>The Anti-Burn-In function has been enabled by the user.</p>	<ul style="list-style-type: none"> <li>• Disable the Anti-Burn-In function. Refer to page 48.</li> </ul>
 <p>ANTI-BURN-IN OFF</p>	<p>The Anti-Burn-In function has been disabled by the user.</p>	<ul style="list-style-type: none"> <li>• Enable the Anti-Burn-In function. Refer to page 48.</li> </ul>

# APPENDIX

## 6.2 Supported Resolutions


PC Mode	Resolution		Refresh Rate
	Horizontal	Vertical	
IBM VGA	720	400	70
IBM VGA	640	480	60
Apple Mac II	640	480	67
VESA	640	480	72
VESA	640	480	75
VESA	800	600	56
VESA	800	600	60
VESA	800	600	72
VESA	800	600	75
Apple Mac II	832	624	75
VESA	1024	768	60
VESA	1024	768	70
VESA	1024	768	75
VESA	1280	1024	60
VESA	1280	1024	75
Apple Mac II	1152	870	75
VESA	1152	864	75
VESA	1280	800	60
VESA	1280	800	75
VESA	1280	960	60
VESA	1440	900	60
VESA	1680	1050	60
VESA	1920	1080	60

Video Mode	Resolution		Refresh Rate
	Horizontal	Vertical	
EDTV	720	480	60i
EDTV	720	480	60
EDTV	720	576	50i
EDTV	720	576	50
HDTV	1280	720	50
EDTV	1280	720	60
HDTV	1920	1080	50i
HDTV	1920	1080	50
HDTV	1920	1080	60i

# APPENDIX

Video Mode	Resolution		Refresh Rate
	Horizontal	Vertical	
HDTV	1920	1080	60
HDTV	1920	1080	24
HDTV	1920	1080	25
HDTV	1920	1080	30

## 6.3 Troubleshooting

Problem	Possible Cause and Solution
No picture. <ul style="list-style-type: none"> <li>LED indicator is OFF.</li> </ul>	<ul style="list-style-type: none"> <li>Check if the LCD display is turned ON.</li> <li>Check if the power cord is properly connected to the LCD display.</li> <li>Check if the power cord is plugged into the power outlet.</li> </ul>
<ul style="list-style-type: none"> <li>LED indicator is AMBER.</li> </ul>	<ul style="list-style-type: none"> <li>Check if the computer is turned ON.</li> <li>Check if the computer is in standby mode, move the mouse or press any key to wake up the computer.</li> </ul>
Image position is incorrect.	<ul style="list-style-type: none"> <li>Adjust the H. POSITION and V. POSITION values. See IMAGE SETTING on page 42.</li> </ul>
The displayed texts are blurry.	<ul style="list-style-type: none"> <li>For VGA input, press the  button on the keypad to auto-adjust the display.</li> <li>Adjust the IMAGE SETTING (see page 42).</li> </ul>
The OSD menu can't be called out.	<ul style="list-style-type: none"> <li>The OSD is locked. To unlock the OSD, see page 33.</li> </ul>
Red, blue, green, white dots appear on screen.	<ul style="list-style-type: none"> <li>There are millions of micro transistors inside the LCD display. It is normal for a few transistors to be damaged and to produce spots. This is acceptable and is not considered a failure.</li> </ul>
No audio output.	<ul style="list-style-type: none"> <li>Check if the volume is set to 0 (see page 29 or 50).</li> <li>Check if the <b>AUDIO SETTING &gt; AUDIO</b> setting is set to <b>OFF</b> (see page 50).</li> <li>For VGA or DVI input, check the audio setting of the computer.</li> <li>For HDMI or DisplayPort input, select the correct audio input source (see page 50).</li> </ul>
PIP mode does not work.	<ul style="list-style-type: none"> <li>The main and sub input source signals are not compatible to be displayed together in PIP mode. Check the PIP Compatibility Table for details (see page 47).</li> </ul>

# APPENDIX

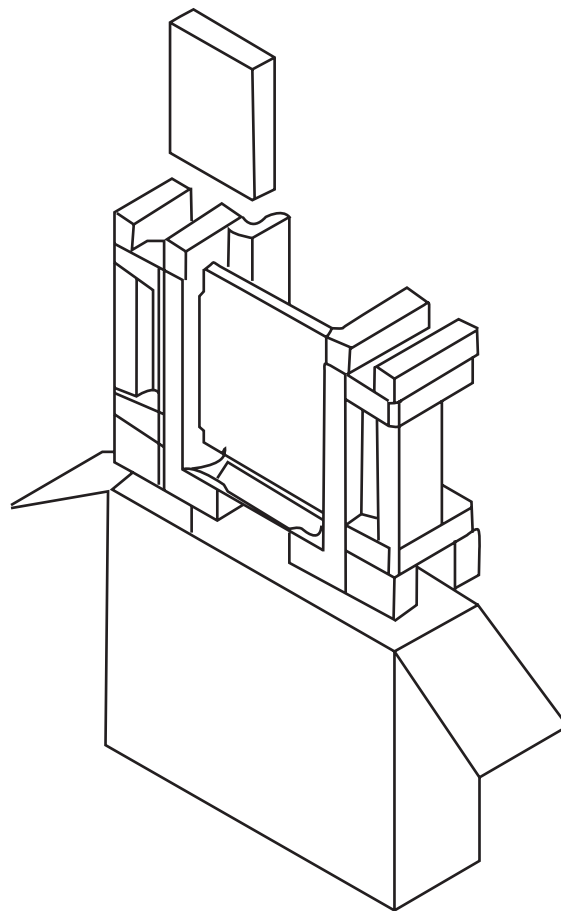
Problem	Possible Cause and Solution
Cannot adjust the backlight setting.	<ul style="list-style-type: none"> <li>The Eco Smart feature is enabled. Set the <b>ECOSMART SENSOR &gt; ENABLE</b> setting to <b>OFF</b> to disable the Eco Smart feature (see page 55).</li> </ul>
The displayed picture looks distorted.	<ul style="list-style-type: none"> <li>Adjust the aspect ratio (see page 45).</li> </ul>
Dew formed on or inside the LCD display.	<ul style="list-style-type: none"> <li>This normally happens when the LCD display is moved a cold room to a hot room temperature. Do not turn ON the LCD display, wait for the dew condensation to disappear.</li> </ul>
Mist formed inside the glass surface.	<ul style="list-style-type: none"> <li>This happens due to humid weather conditions. This is a normal occurrence. The mist will disappear after a few days or as soon as the weather stabilizes.</li> </ul>
Faint shadows from a static image appear on the screen.	<ul style="list-style-type: none"> <li>Turn off the LCD display for extended periods of time.</li> <li>Use a screen saver or a black and white image and run it for extended periods of time.</li> </ul>

# APPENDIX

## 6.4 Transporting the LCD Display

To transport the LCD display for repair or shipment, place the display in its original packaging carton.

- 1 Place the two foam cushions on each side of the LCD display for protection.**
- 2 Place the LCD display down in the box.**
- 3 Place the accessories box on the designated area (if necessary).**
- 4 Close and tape the box.**



# CHAPTER 7: SPECIFICATIONS

## 7.1 Display Specifications

		DR-17G	DR-22G
Panel	Panel Type	LED-Backlit TFT LCD (TN Technology)	LED-Backlit TFT LCD (TN Technology)
	Panel Size	17.0"	21.5"
	Max. Resolution	SXGA 1280 x 1024	FHD 1920 x 1080
	Pixel Pitch	0.264 mm	0.248 mm
	Brightness	250 cd/m <sup>2</sup>	250 cd/m <sup>2</sup>
	Contrast Ratio	20,000,000:1 (DCR)	20,000,000:1 (DCR)
	Viewing Angle (H/V)	170°/160°	170°/160°
	Display Colour	16.7M	16.7M
	Response Time	3 ms	3 ms
Frequency (H/V)	H Freq.	24 kHz-83 kHz	24 kHz-83 kHz
	V Freq.	50 Hz-75 Hz	50 Hz-75 Hz
Input	DisplayPort	x 1	x 1
	HDMI	1.4 x 1	1.4 x 1
	DVI	24-Pin DVI-D x 1	24-Pin DVI-D x 1
	VGA	15-Pin D-Sub x 1	15-Pin D-Sub x 1
	Composite (CVBS)	BNC x 2	BNC x 2
	S-Video	4-Pin mini DIN x 1	4-Pin mini DIN x 1
Output	Composite (CVBS)	BNC x 2	BNC x 2
External Control	RS232 In	2.5 mm Phone Jack	2.5 mm Phone Jack
Other Connectivity	USB	2.0 x1 (Service Port)	2.0 x1 (Service Port)
Audio	Audio In	Stereo Audio Jack (3.5 mm) Stereo Audio Jack (RCA)	Stereo Audio Jack (3.5 mm) Stereo Audio Jack (RCA)
	Audio Out	Stereo Audio Jack (RCA)	Stereo Audio Jack (RCA)
	Internal Speakers	2W x 2	2W x 2
Power	Power Supply	External	External
	Power Requirements	DC 24V, 2.71A	DC 24V, 2.71A
	On Mode	17W (On)	21W (On)
	Stand-by Mode	< 0.7 W	< 0.7 W
	Off Mode	< 0.7 W	< 0.7 W
Glass	Thickness	3.0 mm (0.12")	3.0 mm (0.12")
	Reflection Rate	< 1%	< 1%
	Transmission Rate	> 97%	> 97%
	Hardness	> 9H	> 9H
Operating Conditions	Temperature	0°C-40°C (32°F-104°F)	0°C-40°C (32°F-104°F)
	Humidity	10%-90% (non-condensing)	10%-90% (non-condensing)
	Altitude	< 12,000 feet (3,658 m)	< 12,000 feet (3,658 m)
Transport/ Storage Conditions	Temperature	-20°C-60°C (-4°F-140°F)	-20°C-60°C (-4°F-140°F)
	Humidity	5%-95% (non-condensing)	5%-95% (non-condensing)
	Altitude	< 40,000 feet (12,192 m)	< 40,000 feet (12,192 m)
Mounting	VESA FPMPI	Yes (100 x 100 mm & 75 x 75 mm)	Yes (100 x 100 mm & 75 x 75 mm)
Stand	Tilt	0° to 22°	0° to 17°
Security	Kensington Security Slot	Yes	Yes
Dimensions	w/Base (W x H x D)	409.4 x 398.2 x 175.0 mm (16.1" x 15.7" x 6.9")	513.2 x 368.5 x 155.0 mm (20.2" x 14.5" x 6.1")
	Packaging (W x H x D)	506.0 x 506.0 x 225.0 mm (19.9" x 19.9" x 8.9")	614.0 x 477.0 x 204.0 mm (24.2" x 18.8" x 8.0")
Weight	w/Base	6.1 kg (13.4 lb)	6.8 kg (15.0 lb)
	Packaging	8.1 kg (17.9 lb)	9.3 kg (21.0 lb)

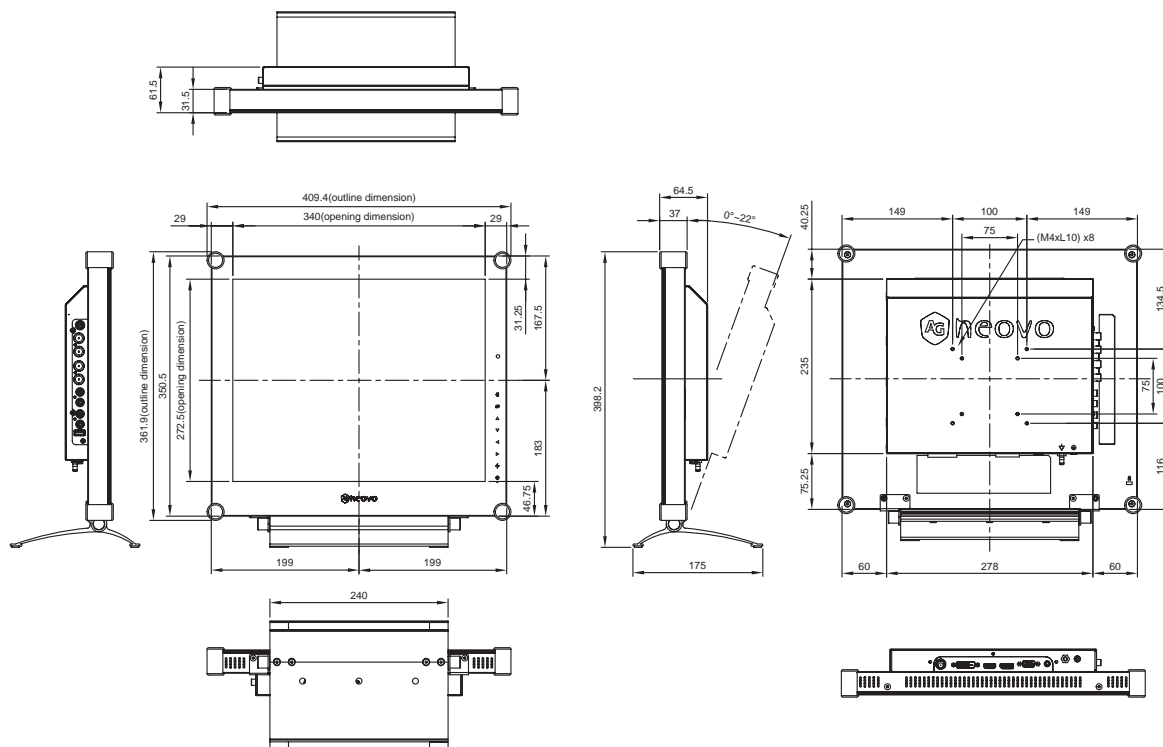
### Note:

- ◆ All specifications are subject to change without prior notice.

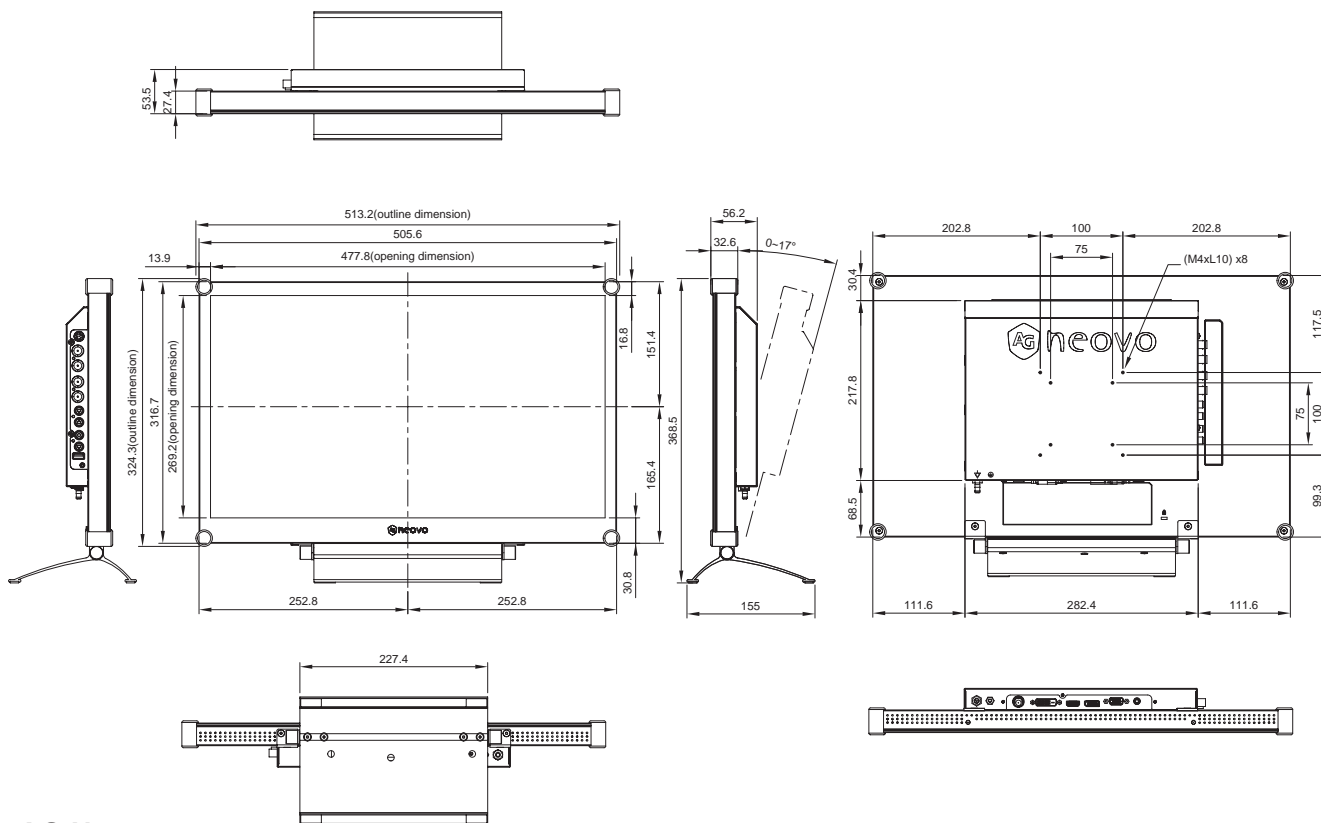
# SPECIFICATIONS

## 7.2 Display Dimensions

### 7.2.1 DR-17G Dimensions



### 7.2.2 DR-22G Dimensions



## AG Neovo

Company Address: 5F-1, No. 3-1, Park Street, Nangang District, Taipei, 11503, Taiwan.

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DR2G00/DR7G00\_UM\_V012