

FOR A GOOD REASON
GRUNDIG

User Guide
LED Monitors
English



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This User Guide applies to the following GRUNDIG Models:

GD-ML-AP1031SD
GD-ML-AP2231HD
GD-ML-AP2431HD

1. Important Safety Instructions

Make sure that you only use the power adapter that is specified in the specifications sheet of the product. If you use any other adapter or connect the power supply incorrectly, this may cause explosion, fire, electric shocks or damage the product. Do not connect several devices to one power adapter as this may cause an adapter overload and can lead to over-heating and fire. Make sure that the plug of the power adapter is firmly connected to the power socket.

Do not place containers with liquids on the product. Do not place conducting items like tools, screws, coins or other metal items on the product. These may fall from the product or can cause fire or electric shocks or other physical injuries.

Do not push or insert any sharp items or any objects into the device as this may cause damage to the product, fire, electric shocks and/or physical injuries.

Do not block any ventilation openings, if there are any. Ensure that the product is well ventilated to prevent any over-heating.

Do not subject the device to physical shock or drop the product. If the product uses batteries, please use a battery type that is recommended by the manufacturer. Improper use or replacement of the battery may result in the hazard of explosion.

Do not use any accessories that are not recommended by GRUNDIG. Do not modify the product in any way.

If the product starts to smell or smoke comes out of the device, immediately stop using the product and disconnect it from the power supply to prevent fire or electric shocks. Then contact your dealer or the nearest service center.

If the product does not work correctly, contact your dealer or nearest service center. Never open, disassemble or alter the product yourself. GRUNDIG cannot accept any liability or responsibility for problems caused by attempted and unauthorized repair and maintenance.

2. Installation Instructions

It is necessary to fix the device firmly if the product is installed on a wall or ceiling.

Do not install the product near radiation sources. Do not install the product near heat sources, like radiators or other equipment that produces some heat.

Do not install the product in very cold or hot temperatures (please refer to the working temperature specified in the specification sheet of the product), dusty, dirty or damp environment.

Never touch the screen directly with your fingers. The acidic sweat of the fingers may be difficult to remove and you may damage the screen.

Do not touch the surface of the screen with sharp or abrasive items (like pens or screwdrivers), as this could scratch the display.

The monitor is only for indoor use. Please do not install it in an environment where it is exposed to oil, vapor, steam, moisture and dust, but in a clean environment with low humidity.

Do not apply any pressure to the monitor screen as the screen may break.

Do not install the monitor in a location that is exposed to direct sunlight, dust, mechanical vibration or shock.

Always place the monitor on a flat surface.

Connect the power supply to the socket and plug the video cable or HDMI/VGA cable to the desired signal source.

Disconnect the power plug from the power outlet under following conditions:

- If you will not use it for an indefinite period of 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, this indicates a need for service.

To clean the monitor's plastic case and display, a soft, lint-free cloth can be used. Do not use any cleaning materials with abrasive surfaces like scrub pads to clean your monitor.

To clean the display, a slightly damp cloth may be used to clean off fingerprints or smudges. Please unplug the monitor first before attempting cleaning with a damp cloth.

To clean the plastic case, a mild detergent may be used to clean the surface. But please do not use too much detergent or water as this

could leak into the interior of the monitor. Please unplug the monitor first before attempting cleaning with a detergent or water.

Do NOT use any liquid cleaners based on alcohol, methylated spirit or ammonia or aerosol cleaners, as this may damage any coating present on the glass surface of the monitor. Use only mild soap or detergent with water or special cleaners for cleaning glass panels.

2.1. Special Instructions for Installing a Wall Mount

Caution: Any wall mount must bear a minimum of 5x the monitor's net weight to mount safely. The stand must be removed first before mounting this way.

1. Place the monitor face down on a surface that is soft, yet strong enough to hold the monitor.
2. Use a screwdriver to remove the screws from the four holes on each side of the bottom of the monitor's base.
3. Make sure all cables are already connected to the monitor.
4. Follow the directions included with the wall mount to fix the monitor to the wall.

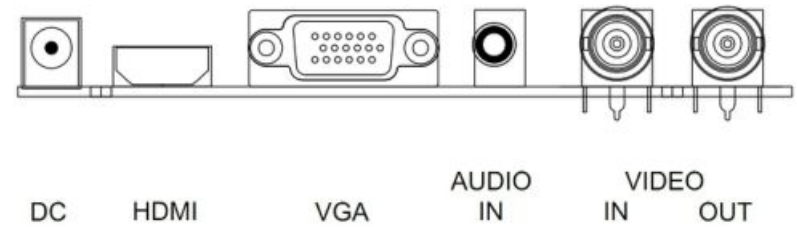
3. Package Content

The package contains the following content:

1x Monitor, 1x User manual, 1x HDMI Cable, 1x Power Cable, 1x Power Adapter

4. Connections

View of the Rear Interface:



DC: Only use the 12V DC power supply included with the monitor.

HDMI: (High-Definition Multimedia Interface) Support of digital video and audio connections.

VGA: 15 pin D-sub cable for standard VGA connection.

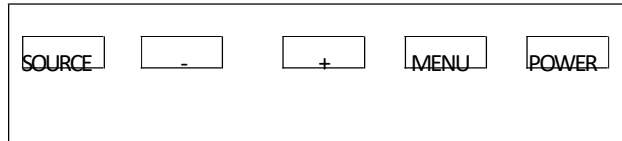
Audio IN: 3.5 mm stereo jack connection for audio input when using VGA /AV connector.

VIDEO/AV IN: BNC connections supporting composite video inputs from equipment such as Cameras or DVR's.

VIDEO/AV OUT: Composite video loop through output – connect a second monitor.

5. Control Buttons

The control buttons are located on the right hand rear side of the monitor.



SOURCE: Selects the input mode – AV, HDMI, VGA.

MENU: Access to the On Screen Display (OSD) menu.

+ and –: Volume control by up/down, confirms the input source selection and navigates in the OSD.

POWER: Turns the monitor on or off.

6. How To Connect Your Monitor

Ensure all cable connections are secure - tighten all cable screws. Movement and vibration may dislodge cables that are improperly connected. Route all wiring and cabling away from any heat sources and sharp metal edges to avoid damage.

6.1. Connecting using AV - Composite Video

Connect your video cable with BNC connector to the AV connector on the rear of the monitor, and the other end to your DVR/Camera etc.

If audio input is required, connect the 3.5 mm stereo audio cable to the AUDIO INPUT on the rear of the monitor and to the Audio Output connector on the DVR/Camera etc.

Connect power to the monitor and video source, and switch on. Using the SOURCE button, press repeatedly until either "AV" (depending on the connection used) is highlighted on the display at the top of the monitor's screen, and press "+" to select.

6.2. Connecting using HDMI

Connect one end of a HDMI cable (optional) to the HDMI connector on the rear of the monitor, and the other to the HDMI out connector on the PC/DVR. This connection will support both video and audio transmission.

Connect power to the monitor and video source, and switch on. Using the SOURCE button, press repeatedly until "HDMI" is highlighted on the display at the top of the monitor's screen, and press "+" to select.

6.3. Connecting using VGA

Connect one end of a 15-pin monitor cable to the VGA connector on the monitor and the other end to the PC/DVR.

Note: If your PC/DVR connector is not 15-pin D-sub you may need an adapter to connect with this cable.

If audio is required, connect one end of the 3.5 mm stereo audio cable (sometimes referred to as 1/8" stereo jack) to the PC Audio IN

connector on the back of the monitor and the other end to the audio output on the PC/DVR.

Connect power to the monitor and video source, and switch on.

Using the SOURCE button, press repeatedly until "VGA" is highlighted on the display at the top of the monitor's screen, and press "+" to select it.

7. OSD Menu Configuration

- Press the "MENU" button to access the OSD menu.
- Press "+ / -" to switch between the five menus.
- After having selected a menu, press "SOURCE" to select a menu item. Press "+ / -" to adjust the settings of this item.
- To go to another menu, press the "MENU" button again to return to the previous menu and go with the "+ / -" button to the desired menu. Press "SOURCE" again to select a menu item and press "+ / -" to adjust the settings of this item.
- Press the "MENU" button to exit the OSD Menu.

Note: To lock or unlock the OSD settings after set up, press and hold the "MENU" button for 5 seconds.

Note: The layout of the OSD will change depending on the input that is selected.

8. OSD Menu (AV – Input)

8.1. Picture



CONTRAST: Set here the contrast of the image (difference between the light and dark areas of the picture) (0–100).

BRIGHTNESS: Set here the brightness of the display (0–100).

HUE: Set the value according to your needs (-50 to +50 / only available if set on NTSC).

SATURATION: Set the value according to your needs (0-100).

SHARPNESS: Set the value according to your needs (0-100).

COLOR TEMP: Select here the color temperature (Normal/Warm/Cool).

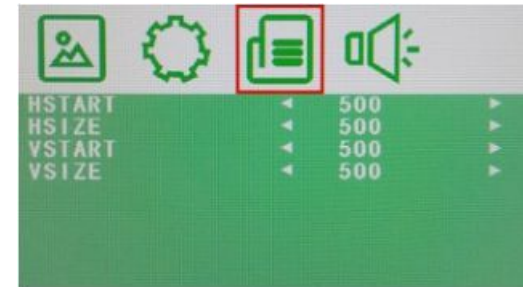
PICTURE MODE: Select the default settings or save the user setting (User/Standard/ Soft/Vivid).

8.2. OSD



- LANGUAGE: Select here the preferred language for the OSD Menu (En/Ch/Ger/Fr/Sp/It/Pt/Pl/Ru).
- H-POSITION: Sets the horizontal position of the OSD menu (0-100).
- V-POSITION: Sets the vertical position of the OSD menu (0-100).
- DURATION: Sets the time after which the OSD menu will automatically switch off and the screen will return to normal view mode (5-60).
- BACKLIGHT: Set here the power use by selecting the backlight level (HIGH/MID/LOW).
- MEM-RECALL: Restores all factory default settings.

8.3. Function



- HSTART: Sets the left alignment point of image. HSIZE: Sets the horizontal size of the image. VSTART: Sets the lower alignment point of the image. VSIZE: Sets the vertical size of the image.

8.4. Audio



- BASS: Set here the value according to your needs (0-100). TREBLE: Set here the value according to your needs (0-100). BALANCE: Set here the value according to your needs (-50 to +50). SOUND MODE: Set here the user or preset audio configurations (User/Standard/Movie/Music).

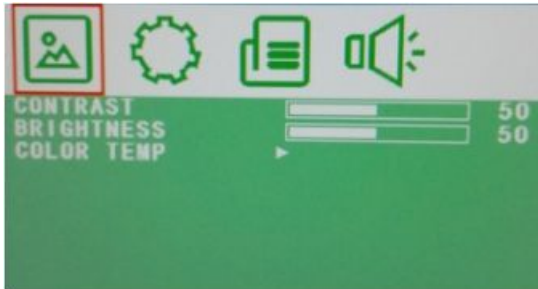
AVC: Automatic Volume Control (ON/OFF).

USER - B: Sets the BLUE color level.

9. OSD Menu (HDMI – Input)

9.2. OSD

9.1. Picture



CONTRAST: Sets the contrast of the image (difference between the light and dark areas of the picture) (0–100).

BRIGHTNESS: Sets the brightness of the display (0–100).

COLOR TEMP: Select here the color temperature.



COLOR TEMP: Select here the color temperature preset.

USER - R: Sets the RED color level. USER

- G: Sets the GREEN color level.



LANGUAGE: Select here the preferred language for the OSD Menu (En/Ch/Ger/Fr/Sp/It/Pt/Pl/Ru).

H-POSITION: Sets the horizontal position of the OSD menu (0-100).

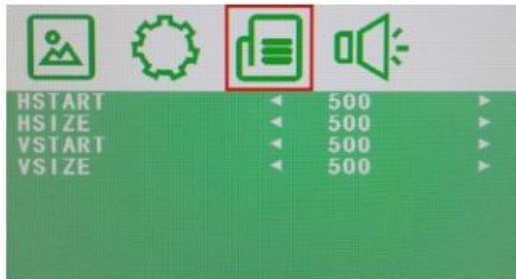
V-POSITION: Sets the vertical position of the OSD menu (0-100).

DURATION: Sets the time after which the OSD menu will automatically switch off and the screen will return to normal view mode (5-60).

BACKLIGHT: Set here the power use by selecting the backlight level (HIGH/MID/LOW).

MEM-RECALL: Restores all factory default settings.

9.3. Function



HSTART: Sets the left alignment point of the image.
HSIZE: Sets the horizontal size of the image. VSTART:
Sets the lower alignment point of the image. VSIZE:
Sets the vertical size of the image.

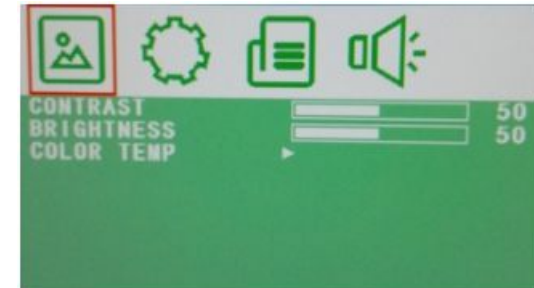
9.4. Audio



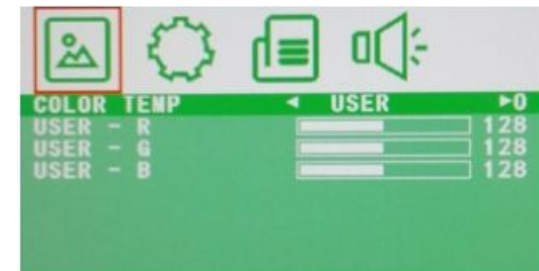
BASS: Set here the value according to your needs (0-100). TREBLE:
Set here the value according to your needs (0-100). BALANCE: Set
here the value according to your needs (-50 to +50). SOUND MODE:
Set here the user or preset audio configurations (User/Standard/
Movie/Music).
AVC: Automatic Volume Control (ON/OFF).

10. OSD Menu (VGA – Input)

10.1. Picture



CONTRAST: Set here the contrast of the image (difference between
the light and dark areas of the picture) (0–100).
BRIGHTNESS: Set here the brightness of the display (0–100).
COLOR TEMP: Select here the color temperature (0–100).



COLOR TEMP: Select here the color temperature preset.
USER - R: Sets the RED color level. USER
- G: Sets the GREEN color level. USER - B:
Sets the BLUE color level.

10.2. OSD



LANGUAGE: Select here the preferred language for the OSD Menu (En/Ch/Ger/Fr/Sp/It/Pt/Pl/Ru).

H-POSITION: Sets the horizontal position of the OSD menu (0-100).

V-POSITION: Sets the vertical position of the OSD menu (0-100).

DURATION: Sets the time after which the OSD menu will automatically switch off and the screen will return to normal view mode (5-60).

BACKLIGHT: Set here the power use by selecting the backlight level (HIGH/MID/LOW).

MEM-RECALL: Restores all factory default settings.

10.3. Geometry



H-POSITION: Sets the horizontal position of the OSD menu (0-100).

V-POSITION: Sets the vertical position of the OSD menu (0-100).

CLOCK: Manually adjust the clock synchronisation. (If the clock setting of your image is not fine-tuned, you may observe periodic vertical bars of video noise on your image. These bars of noise usually disappear when an Auto Adjust setting is performed. If the bars of noise are still present, use this setting to remove them.)

PHASE: If the phase of your monitor is not fine-tuned, you may observe that the image is unstable in the horizontal axis. Use this setting to manually correct it.

AUTO ADJUST: Performs an automatic configuration of Phase, Clock, and the vertical and horizontal position.

10.4. Audio



BASS: Set here the value according to your needs (0-100).

TREBLE: Set here the value according to your needs (0-100).

BALANCE: Set here the value according to your needs (-50 to +50).

SOUND MODE: Set here the user or preset audio configurations

(User/Standard/Movie/Music).

AVC: Automatic Volume Control (ON/OFF).

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