ViewSonic®



CDE4302-H/CDE5502-H/ CDE4803-H Commercial Display

User Guide

IMPORTANT: Please read this User Guide to obtain important information on installing and using your product in a safe manner, as well as registering your product for future service. Warranty information contained in this User Guide will describe your limited coverage from ViewSonic Corporation, which is also found on our web site at http://www.viewsonic.com in English, or in specific languages using the Regional selection box in the upper right corner of our website. “Antes de operar su equipo lea cu idadosamente las instrucciones en este manual”

Model No.: VS16174/VS16175/VS16334

Thank you for choosing ViewSonic

With over 25 years as a world leading provider of visual solutions, ViewSonic is dedicated to exceeding the world's expectations for technological evolution, innovation, and simplicity. At ViewSonic, we believe that our products have the potential to make a positive impact in the world, and we are confident that the ViewSonic product you have chosen will serve you well.

Once again, thank you for choosing ViewSonic !

ViewSonic®

Compliance Information

NOTE: This section addresses all connected requirements and statements regarding regulations. Confirmed corresponding applications shall refer to nameplate labels and relevant markings on unit.

FCC Statement

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

NOTE: This equipment has been tested and found to comply with the limits for a Class A/ Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. 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. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense.

- 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.

Warning: To comply with the limits for the Class A/Class B digital device, pursuant to Part 15 of the FCC Rules, this device must be installed in computer equipment certified to comply with the Class A/Class B limits. All cables used to connect the computer and peripherals must be shielded and grounded. Operation with non-certified computers or non-shielded cables may result in interference to radio or television reception. Changes and modifications not expressly approved by the manufacturer could void the user’s authority to operate this equipment.

For Canada

CAN ICES-3 (A/B)/NMB-3(A/B)

CE Conformity for European Countries

The device complies with the EMC Directive 2004/108/EC and Low Voltage Directive 2006/95/EC.

Following information is only for EU-member states:

The mark shown to the right is in compliance with the Waste Electrical and Electronic Equipment Directive 2012/19/EU (WEEE).



The mark indicates the requirement NOT to dispose of the equipment as unsorted municipal waste, but use the return and collection systems according to local law.

If the batteries, accumulators and button cells included with this equipment, display the chemical symbol Hg, Cd, or Pb, then it means that the battery has a heavy metal content of more than 0.0005% Mercury or more than, 0.002% Cadmium, or more than 0.004% Lead.



Industry Canada Notice

This device complies with Canadian RSS-210.To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmitting antenna) that is installed outdoors is subject to licensing. The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's website www.hc-sc.gc.ca/rpb.

R&TTE Compliance Statement

This device complies with the Essential Requirements of the R&TTE Directive of the European Union (1999/5/EC). This equipment meets the following conformance standards:

ETSI EN 300 328

EN 301 489-01

EN 301 489-17

EN 62311

Notified Countries: Germany, UK, Netherlands, Belgium, Sweden, Denmark, Finland, France, Italy, Spain, Austria, Ireland, Portugal, Greece, Luxembourg, Estonia, Latvia, Lithuania, Czech Republic, Slovakia, Slovenia, Hungary, Poland and Malta.

Declaration of RoHS2 Compliance

This product has been designed and manufactured in compliance with Directive 2011/65/EU of the European Parliament and the Council on restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS2 Directive) and is deemed to comply with the maximum concentration values issued by the European Technical Adaptation Committee (TAC) as shown below:

Substance	Proposed Maximum Concentration	Actual Concentration
Lead (Pb)	0,1%	< 0,1%
Mercury (Hg)	0,1%	< 0,1%
Cadmium (Cd)	0,01%	< 0,01%
Hexavalent Chromium (Cr^{6+})	0,1%	< 0,1%
Polybrominated biphenyls (PBB)	0,1%	< 0,1%
Polybrominated diphenyl ethers (PBDE)	0,1%	< 0,1%

Certain components of products as stated above are exempted under the Annex III of the RoHS2 Directives as noted below:

Examples of exempted components are:

1. Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes not exceeding (per lamp):
   (1) Short length (≦500 mm): maximum 3.5 mg per lamp.
   (2) Medium length (＞500 mm and ≦1,500 mm): maximum 5 mg per lamp.
   (3) Long length (＞1,500 mm): maximum 13 mg per lamp.
2. Lead in glass of cathode ray tubes.
3. Lead in glass of fluorescent tubes not exceeding 0.2% by weight.
4. Lead as an alloying element in aluminium containing up to 0.4% lead by weight.
5. Copper alloy containing up to 4% lead by weight.
6. Lead in high melting temperature type solders (i.e. lead-based alloys containing 85% by weight or more lead).
7. Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound.

Safety Precautions

FOR OPTIMUM PERFORMANCE, PLEASE NOTE THE FOLLOWING WHEN SETTING UP AND USING THE LCD COLOR MONITOR:

- DO NOT REMOVE MONITOR BACK COVER. There are no user serviceable parts inside and opening or removing covers may expose you to dangerous shock hazards or other risks. Refer all servicing to qualified service personnel.
- Do not spill any liquids into the cabinet or use your monitor near water.
- Do not insert objects of any kind into the cabinet slots, as they may touch dangerous voltage points, which can be harmful or fatal or may cause electric shock, fire or equipment failure.
- Do not place any heavy objects on the power cord. Damage to the cord may cause shock or fire.
- Do not place this product on a sloping or unstable cart, stand or table, as the monitor may fall, causing serious damage to the monitor.
- Do not place any objects onto the monitor and do not use the monitor outdoors.
- The inside of the fluorescent tube located within the LCD monitor contains mercury. Please follow the laws or rules of your municipality to dispose of the tube properly.
- Do not bend power cord.
- Do not use monitor in high temperature, humid, dusty, or oily areas.
- If monitor or glass is broken, do not come in contact with the liquid crystal and handle with care.
- Allow adequate ventilation around the monitor, so that heat can properly dissipate. Do not block ventilated openings or place the monitor near a radiator or other heat sources. Do not put anything on top of the monitor.
- The power cable connector is the primary means of detaching the system from the power supply. The monitor should be installed close to a power outlet, which is easily accessible.
- Handle with care when transporting. Save packaging for transporting.
- Please clean the holes of back cabinet to reject dirt and dust at least once a year because of set reliability.
- If using the cooling fan continuously, it’s recommended to wipe holes a minimum of once a month.
- When installing the remote control batteries;
  - Align the batteries according to the (+) and (-) indications inside the case.
  - Align the (-) indication of the battery first inside the case.

WARNING:

Usage of other than specified head- or earphones can result in hearing loss due to excessive sound pressures.

CAUTION:

Immediately unplug your monitor from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- When the power supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the monitor.
- If the monitor has been exposed to rain or water.
- If the monitor has been dropped or the cabinet damaged.
- If the monitor does not operate normally by following operating instructions.

Recommended Use

CAUTION:

- For optimum performance, allow 20 minutes for warm-up.
- Rest your eyes periodically by focusing on an object at least 5 feet away. Blink often.
- Position the monitor at a 90° angle to windows and other light sources to minimize glare and reflections.
- Clean the LCD monitor surface with a lint-free, nonabrasive cloth. Avoid using any cleaning solution or glass cleaner!
- Adjust the monitor’s brightness, contrast and sharpness controls to enhance readability.
- Avoid displaying fixed patterns on the monitor for long periods of time to avoid image persistence (after image effects).
- Get regular eye checkups.

Ergonomics

To realize the maximum ergonomic benefits, we recommend the following:

- Use the preset Size and Position controls with standard signals.
- Use the preset Color Setting.
- Use non-interlaced signals.
- Do not use primary color blue on a dark background, as it is difficult to see and may produce eye fatigue due to insufficient contrast.

Table Of Contents

1. Unpacking and Installation 1
- 1.1. Unpacking 1
- 1.2. Package Contents 1
- 1.3. Installation Notes 1
- 1.4. Mounting on a Wall 2
  - 1.4.1. VESA Grid 2
- 1.5. Using of Remote sensor and power indicator 3

2. Parts and Functions 4
- 2.1. Control Panel 4
- 2.2. Input/Output Terminals 5
- 2.3. Remote Control 6
  - 2.3.1. General functions 6
  - 2.3.2. Inserting the batteries in the remote control 7
  - 2.3.3. Handling the remote control 7
  - 2.3.4. Operating range of the remote control 7

3. Connecting External Equipment 8
- 3.1. Connecting External Equipment (DVD/VCR/VCD) 8
  - 3.1.1. Using HDMI video input 8
- 3.2. Connecting a PC 8
  - 3.2.1. Using VGA input 8
  - 3.2.2. Using HDMI input 8
- 3.3. Control Connection 9
  - 3.3.1. Display control connection .. 9
- 3.4. IR Pass-through Connection 9

4. Operation 10
- 4.1. Change Picture Format 10
- 4.2. Play multimedia files 10
- 4.3. Play options 11
  - 4.3.1. Playing music files 11
  - 4.3.2. Playing movie files 11
  - 4.3.3. Playing photo files 12

5. Change your settings 13
- 5.1. Settings 13
  - 5.1.1. Picture 13
  - 5.1.2. Time 14
  - 5.1.3. Setup 14

6. USB device compatibility 15

7. Input Mode 16

8. Panel Defect Policy 17
- 8.1. MURA 17
- 8.2. Image Sticking 17

9. Cleaning and Troubleshooting 18
- 9.1. Cleaning 18
- 9.2. Troubleshooting 19

10. Technical Specifications 20
- 10.1. CDE4302-H 20
- 10.2. CDE5502-H 22
- 10.3. CDE4803-H 24

11. RS232 Protocol 26
- 11.1. Introduction 26
- 11.2. Description 26
  - 11.2.1. Hardware specification 26
  - 11.2.2. Communication Setting 26
  - 11.2.3. Command Message Reference 26
- 11.3. Protocol 27
  - 11.3.1. Set-Function Listing 27
  - 11.3.2. Get-Function Listing 31
  - 11.3.3. Remote Control Pass-through mode 36

12. Other Information 39
- Customer Support 39
- Limited Warranty 40
- Mexico Limited Warranty 42

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Product Registration

To meet your future needs, and to receive any additional product information as it becomes available, please register your product on the Internet at: www.viewsonic.com.

The ViewSonic® Wizard CD-ROM also provides an opportunity for you to print the registration form, which you may mail or fax to ViewSonic.

For Your Records

Product Name:	CDE4302-H/CDE5502-H/CDE4803-H ViewSonic Commercial Display
Model Number:	VS16174/VS16175/VS16334
Document Number:	CDE4302-H/CDE5502-H/CDE4803-H_UG_ENG Rev. 1A 11-02-15
Serial Number:	_____
Purchase Date:	_____

Product disposal at end of product life

ViewSonic respects the environment and is committed to working and living green. Thank you for being part of Smarter, Greener Computing.

Please visit ViewSonic website to learn more.

USA & Canada: http://www.viewsonic.com/company/green/recycle-program/

Europe: http://www.viewsoniceurope.com/uk/support/recycling-information/

Taiwan: http://recycle.epa.gov.tw/recycle/index2.aspx

1. Unpacking and Installation

1.1. Unpacking

- This product is packed in a carton, together with the standard accessories.
- Any other optional accessories will be packed separately.
- Due to the size and weight of this display it is recommended for two people to move it.
- After opening the carton, ensure that the contents are complete and in good condition.

1.2. Package Contents

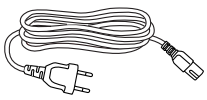
Please verify that you received the following items with your package content:

- LCD display
- CD ROM
- Remote control with AAA batteries
- Power cord (1.8 m)
- VGA cable (1.8 m)
- RS232 cable (1.8 m)
- Quick Start Guide

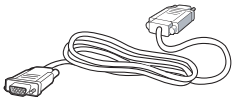




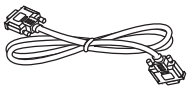
Remote Control
and AAA Batteries



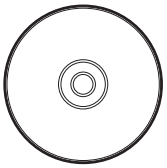
Power Cord



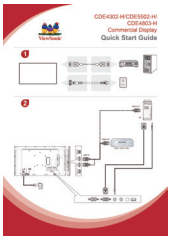
Video Signal Cable
(D-SUB to D-SUB Cable)



RS232 Cable



CD ROM



Quick Start Guide

* The supplied power cord varies depending on destination.

NOTES:

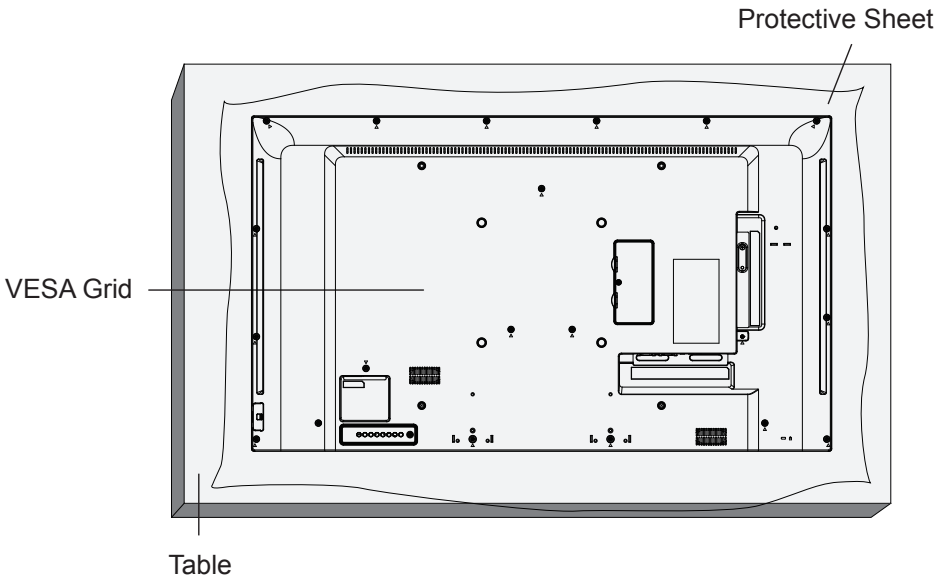
- For all other regions, apply a power cord that conforms to the AC voltage of the power socket and has been approved by and complies with the safety regulations of the particular country.
- You might like to save the package box and packing material for shipping the display.

1.3. Installation Notes

- Due to the high power consumption, always use the plug exclusively designed for this product. If an extended line is required, please consult your service agent.
- The product should be installed on a flat surface to avoid tipping. The distance between the back of the product and the wall should be maintained for proper ventilation. Avoid installing the product in the kitchen, bathroom or any other places with high humidity so as not to shorten the service life of the electronic components.
- The product can normally operate only under 3000m in altitude. In installations at altitudes above 3000m, some abnormalities may be experienced.

1.4. Mounting on a Wall

To mount this display to a wall, you will have to obtain a standard wall-mounting kit. We recommend using a mounting interface that complies with UL1678 standard in North America.



1. Lay a protective sheet on a table, which was wrapped around the display when it was packaged, beneath the screen surface so as not to scratch the screen face.
2. Ensure you have all accessories for mounting this display (wall mount, ceiling mount, table stand, etc).
3. Follow the instructions that come with the base mounting kit. Failure to follow correct mounting procedures could result in damage to the equipment or injury to the user or installer. Product warranty does not cover damage caused by improper installation.
4. For the wall-mounting kit, use M6 mounting screws (having a length 10 mm longer than the thickness of the mounting bracket) and tighten them securely.
5. Unit without base weight = **W** Kg. The equipment and its associated mounting means still remain secure during the test. For use only with UL Listed Wall Mount Bracket with minimum weight/load: **W** Kg.

Model Name	W (kg)	Model Name	W (kg)
CDE4302-H	8.7	CDE5502-H	16.0
CDE4803-H	11.52		

1.4.1. VESA Grid

Model Name	Vesa Grid
CDE4302-H	200(H) x 200(V)mm / 400(H) x 400(V)mm
CDE5502-H	400(H) x 200(V)mm / 400(H) x 400(V)mm
CDE4803-H	200(H) x 200(V)mm / 400(H) x 400(V)mm

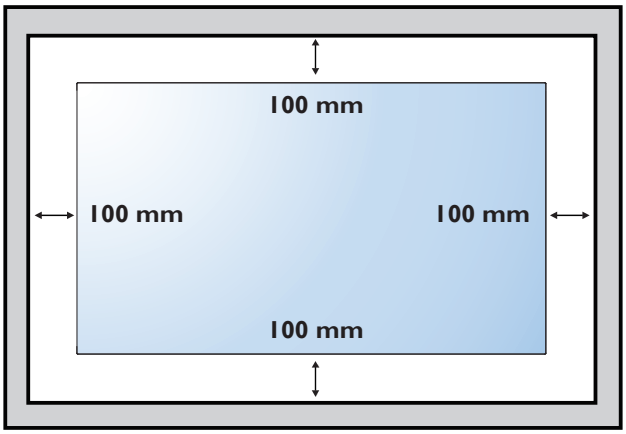
Caution:

To prevent the display from falling:

- For wall or ceiling installation, we recommend installing the display with metal brackets which are commercially available. For detailed installation instructions, refer to the guide received with the respective bracket.
- To lessen the probability of injury and damage resulting from fall of the display in case of earthquake or other natural disaster, be sure to consult the bracket manufacturer for installation location.

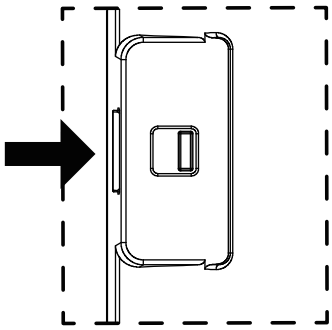
Ventilation Requirements for enclosure locating

To allow heat to disperse, leave space between surrounding objects as shown in the diagram below.

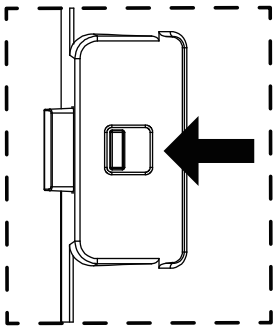


1.5. Using of Remote sensor and power indicator

1. Push left the lens to have better remote control performance and easy to observe the light information of power status.
2. Push right the lens before mounting the display for video wall application.
3. Pull/Push the lens until hearing the click sound.



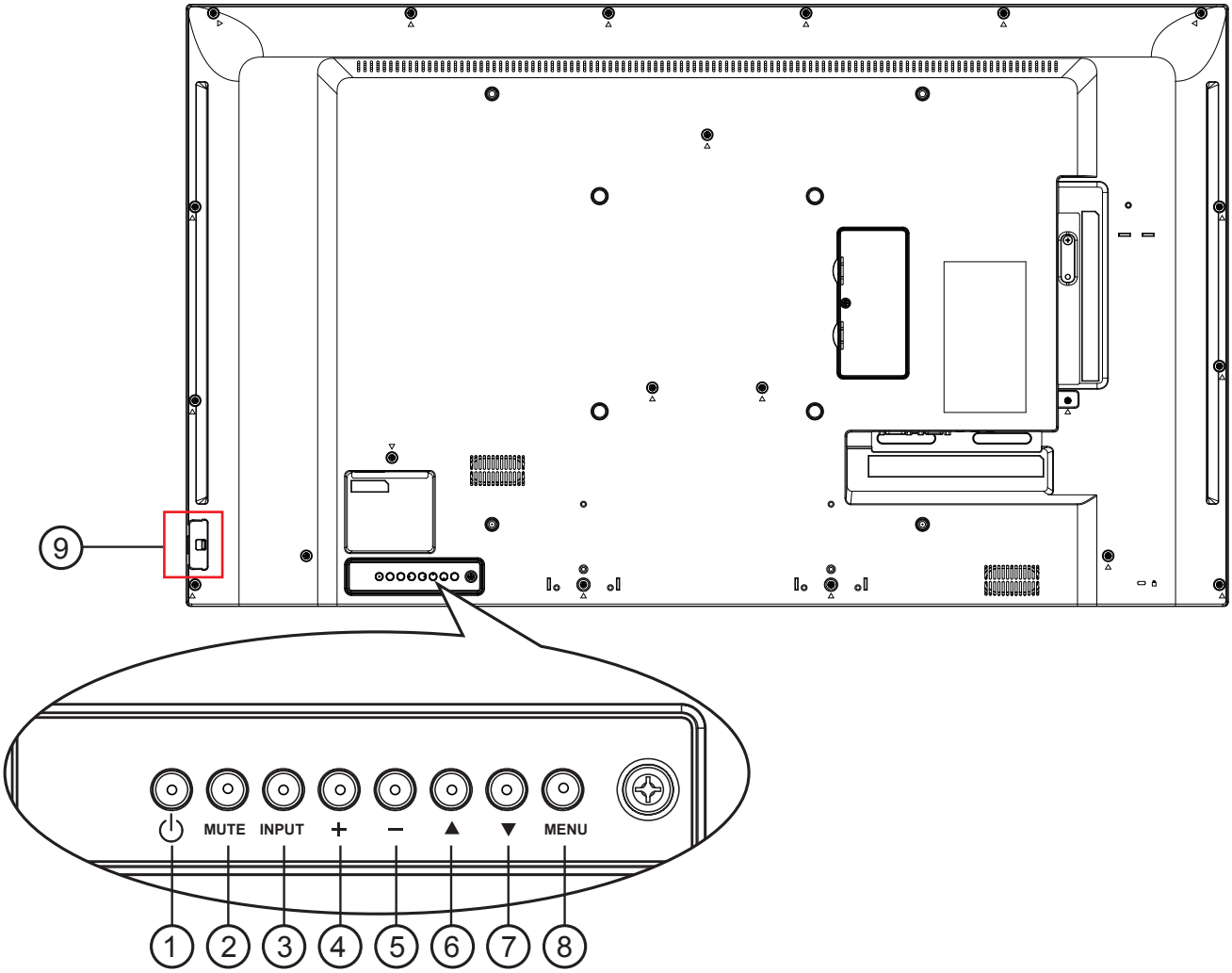
Push right to collapse the lens



Push left to extend the lens

2. Parts and Functions

2.1. Control Panel



① **[⏻] button**
Use this button to turn the display on or put the display to standby.

② **[MUTE] button**
Switch the audio mute ON/OFF.

③ **[INPUT] button**
Choose the input source.
- Used as [**OK**] button in the On-Screen-Display menu.

④ **[+] button**
Move the highlight bar up / Increase the adjustment while OSD menu is on, or increase the audio output level while OSD menu is off.

⑤ **[—] button**
Move the highlight bar down / Decrease the adjustment while OSD menu is on, or decrease the audio output level while OSD menu is off.

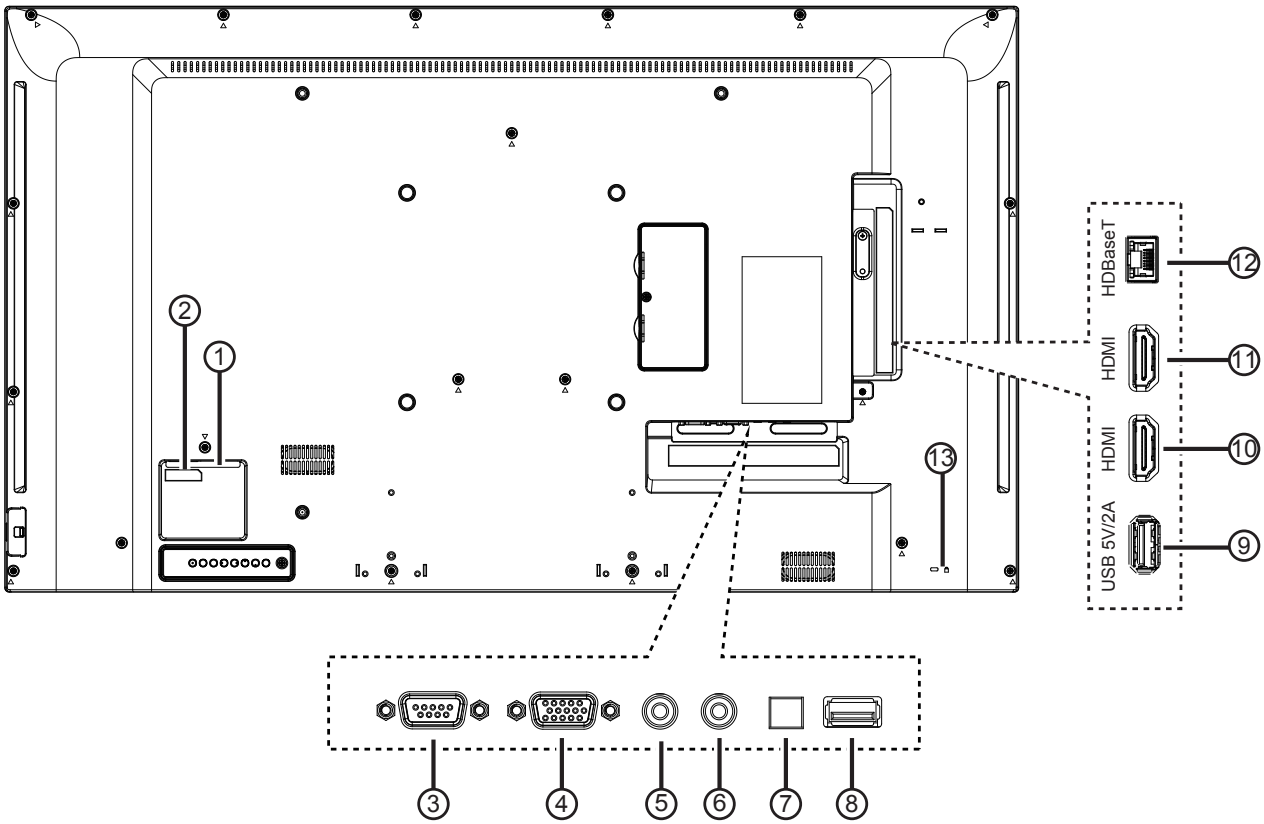
⑥ **[▲] button**
Move the highlight bar up to adjust the selected item while OSD menu is on.

⑦ **[▼] button**
Move the highlight bar down to adjust the selected item while OSD menu is on.

⑧ **[MENU] button**
Return to previous menu while OSD menu is on, or to activate the OSD menu when OSD menu is off.

⑨ **Remote control sensor and power status indicator**
- Receives command signals from the remote control.
- Indicates the operating status of the display:
  - Lights green when the display is turned on
  - Lights red when the display is turned off
  - Lights Amber when the display is in standby mode

2.2. Input/Output Terminals



① **MAIN POWER SWITCH**
Switch the main power on/off.

② **AC IN**
AC power input from the wall outlet.

③ **RS232C IN**
RS232C input.

④ **VGA IN (D-Sub)**
VGA video input

⑤ **PC LINE IN**
Audio input from VGA source (3.5mm stereo phone).

⑥ **IR OUT**
IR signal output for the pass through function.

⑦ **SPDIF OUT**
Digital audio signal output to connect your external AV device.

⑧ **USB PORT**
Connect your USB storage device.

⑨ **USB Power**
USB 5V/2A power supply.

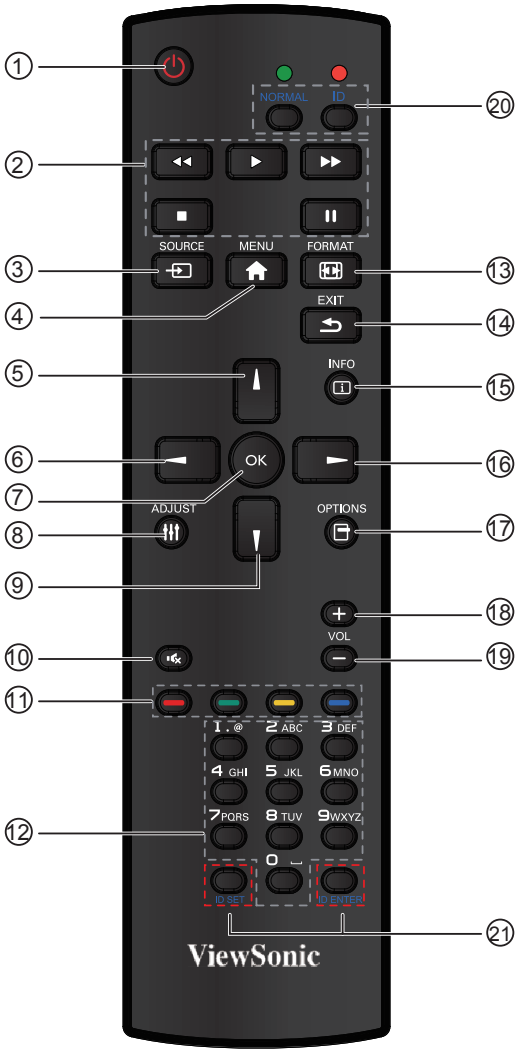
⑩ **HDMI 1 IN** / ⑪ **HDMI 2 IN**
HDMI video / audio input.

⑫ **HDBaseT**
HDBaseT input.

⑬ **SECURITY LOCK**
Used for security and theft prevention.

2.3. Remote Control

2.3.1. General functions



① **[POWER] button**
Press to switch on the display from standby mode. Press again to turn it off and back into standby mode.

② **[PLAY] button**
Control playback of media files.

③ **[SOURCE] button**
Press to toggle Video Source Menu. Press [▲] or [▼] button to select one of the video sources among **VGA**, **HDMI 1** or **HDMI 2**. Press [**OK**] button.

④ **[MENU] button**
Press to turn the OSD menu on/off.

⑤ **[▲] button**
Press to move the selection up in OSD menu.

⑥ **[◀] button**
Press to decrease the value in OSD menu.

⑦ **[OK] button**
Press to activate the setting inside the OSD menu.

⑧ **[ADJUST] button (CDE not Support)**
Press to run the Auto Adjust function.
NOTE: This button is functional for VGA input only.

⑨ **[▼] button**
Press to move the selection down in OSD menu.

⑩ **[ ] MUTE button**
Press to turn the mute function on/off.

⑪ **COLOR buttons (CDE Not Support)**
Select tasks or options.

⑫ **[NUMERIC] buttons (CDE Not Support)**
Enter text for network setting.

⑬ **Format button**
Press to switch screen aspect ratio.
- For PC signal: **NORMAL**, **CUSTOM**, and **REAL**.
- For Video signal: **FULL**, **NORMAL**, **DYNAMIC**, **CUSTOM**, and **REAL**.

⑭ **[EXIT] button**
Press to turn back to the previous OSD menu.

⑮ **[INFO] button**
Press to turn on/off the information OSD displayed on the upper right corner of the screen.

⑯ **[▶] button**
Press to increase the value in OSD menu.

⑰ **[OPTION] button (CDE Not Support)**
Access currently available options, picture and sound menus.

⑱ **[+] Volume up button**
Press to increase the audio output level.

⑲ **[-] Volume down button**
Press to decrease the audio output level.

⑳ ㉑ **[ID SET] button**
If a single large- screen matrix (video wall) is created, set ID key to control each dispaly.

ID Remote Control:

You can set the remote control ID when you want to use this remote control on one of several different displays.
Press [**ID**] button. The red LED blinks twice.

1. Press [**ID SET**] button for more than 1 second to enter the ID ode. The red LED lights up.
   Press the [**ID SET**] button again will exit the ID Mode. The red LED lights off.
   Press the digit number [**0**] ~ [**9**] to select the display you want to control.
   For example: press [**0**] and [**1**] for display No.1, press [**1**] and [**1**] for display No. 11.
   The numbers available are from [**01**] ~[**255**].
2. Not pressing any button within 10 seconds will exit the ID Mode.
3. If an error pressing of buttons other than the digits occurred, wait 1 second after the red LED lights off and then lights up again, then press the correct digits again.
4. Press [**ID ENTER**] button to confirm. The red LED blinks twice and then lights off.

NOTE:

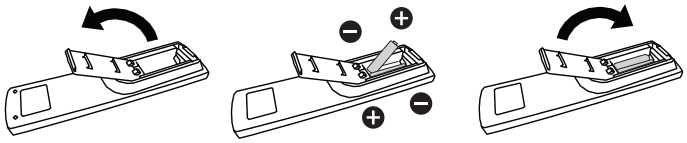
- Press [**NORMAL**] button. The green LED blinks twice, indicating the display is in normal operation.
- It is ncecssary to set up the ID number for each display before selecting its ID number.

2.3.2. Inserting the batteries in the remote control

The remote control is powered by two 1.5V AAA batteries.

To install or replace batteries:

1. Press and then slide the cover to open it.
2. Align the batteries according to the (+) and (–) indications inside the battery compartment.
3. Replace the cover.



Caution:

The incorrect use of batteries can result in leaks or bursting. Be sure to follow these instructions:

- Place “AAA” batteries matching the (+) and (–) signs on each battery to the (+) and (–) signs of the battery compartment.
- Do not mix battery types.
- Do not combine new batteries with used ones. It causes shorter life or leakage of batteries.
- Remove the dead batteries immediately to prevent them from liquid leaking in the battery compartment. Don’t touch exposed battery acid, as it can damage your skin.

NOTE: If you do not intend to use the remote control for a long period, remove the batteries.

2.3.3. Handling the remote control

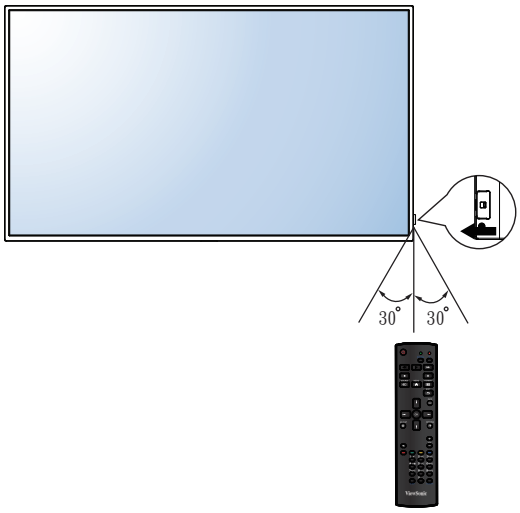
- Do not subject to strong shock.
- Do not allow water or other liquid to splash the remote control. If the remote control gets wet, wipe it dry immediately.
- Avoid exposure to heat and steam.
- Other than to install the batteries, do not open the remote control.

2.3.4. Operating range of the remote control

Point the top of the remote control toward the display’s remote control sensor when pressing a button.

Use the remote control within the range which is shown in the following table.

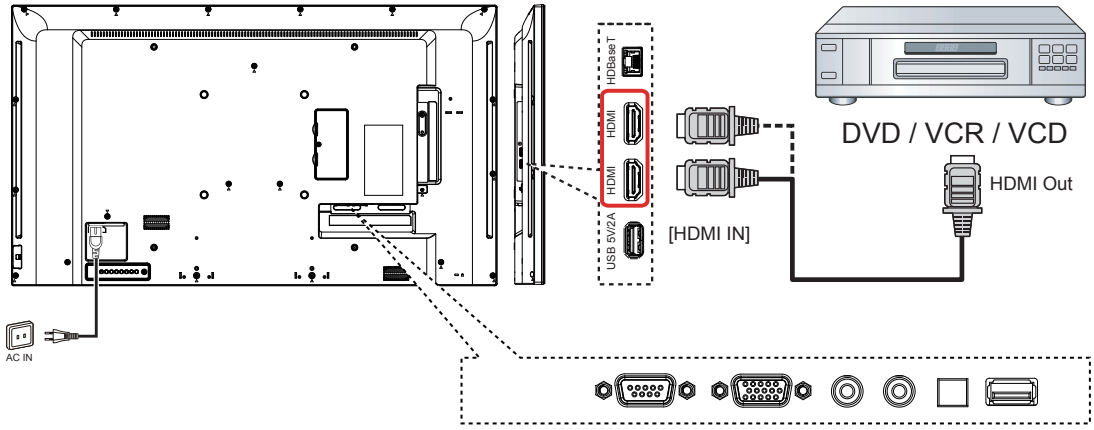
NOTE: The remote control may not function properly when the remote control sensor on the display is under direct sunlight or strong illumination, or when there is an obstacle in the path of signal transmission.



3. Connecting External Equipment

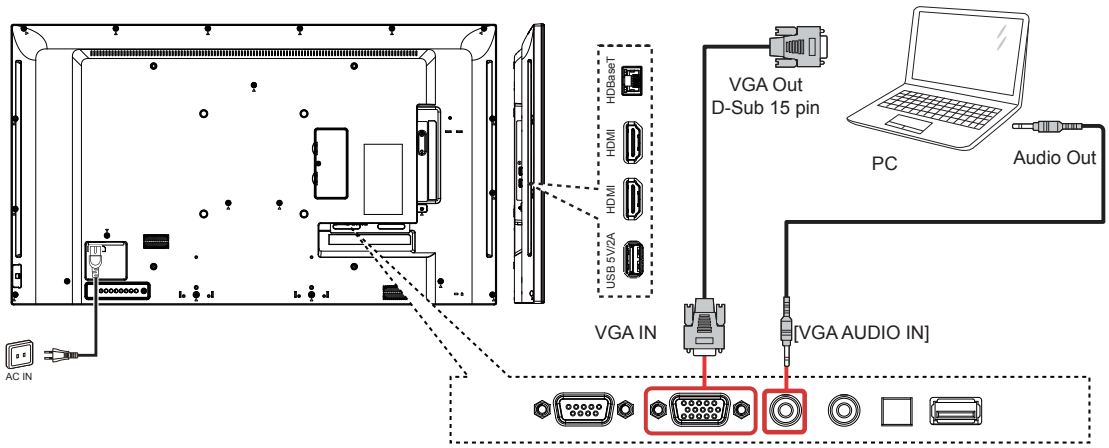
3.1. Connecting External Equipment (DVD/VCR/VCD)

3.1.1. Using HDMI video input

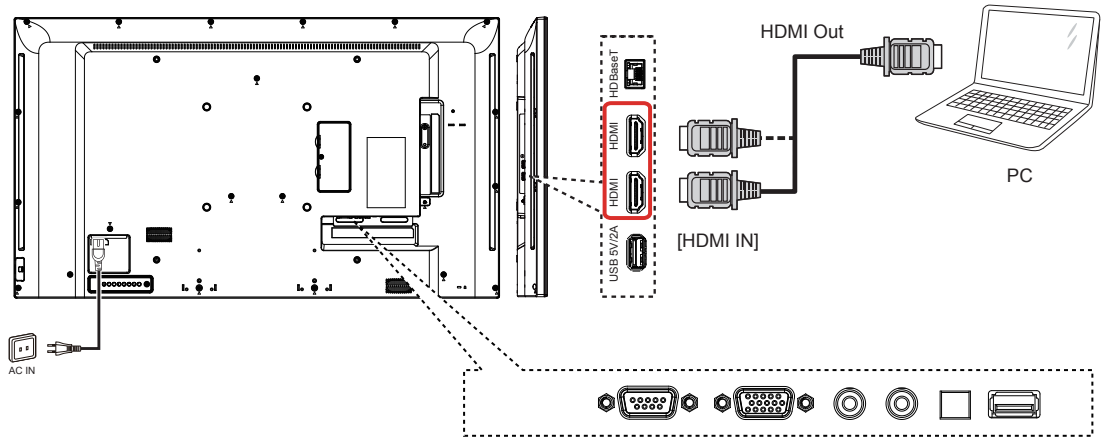


3.2. Connecting a PC

3.2.1. Using VGA input



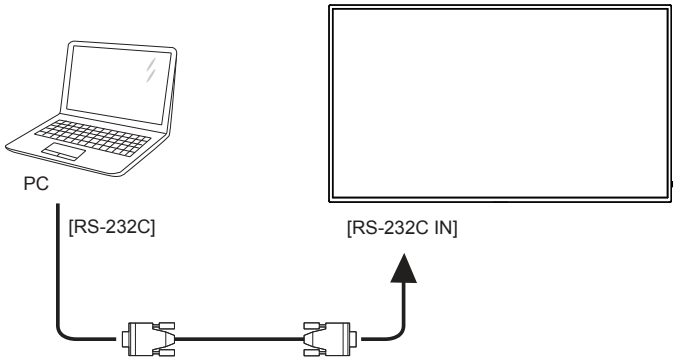
3.2.2. Using HDMI input



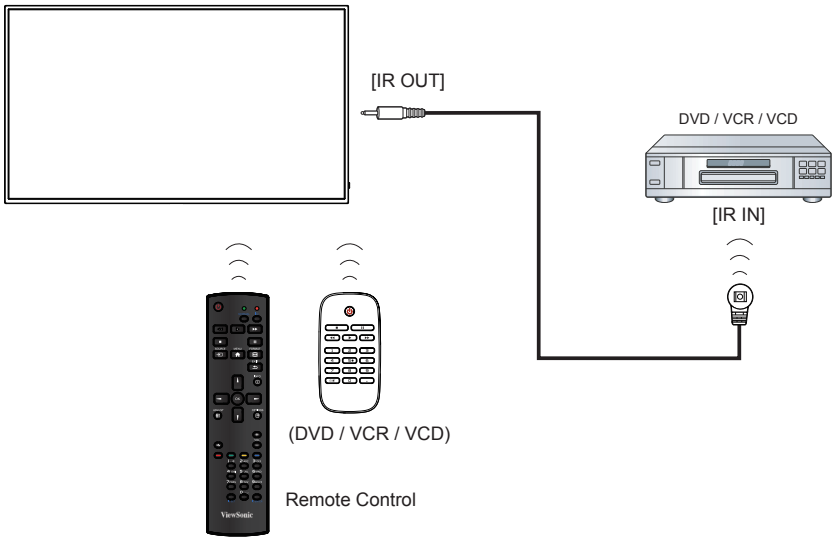
3.3. Control Connection

3.3.1. Display control connection

Connect the [RS232C OUT] connector of PC to the [RS232C IN] connector of DISPLAY.



3.4. IR Pass-through Connection



4. Operation

NOTE: The control button described in this section is mainly on the remote control unless specified otherwise.

4.1. Change Picture Format

You can change the picture format to suit the video source. Each video source has its available picture formats.

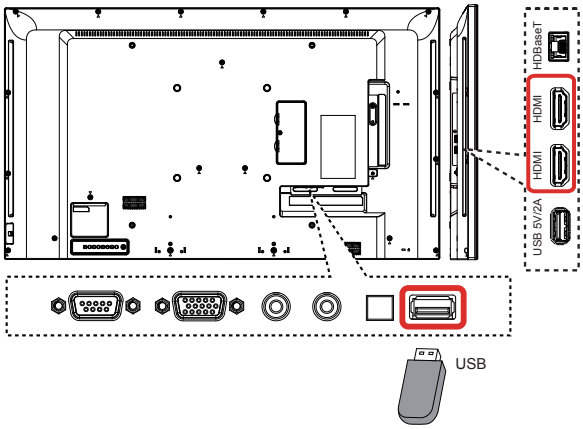
The available picture formats depend on the video source:

1. Press [⊡] **FORMAT** button.
2. Press [∧] or [∨] button to choose a picture format, then press [**OK**] button.
   - {**FULL**}: Enlarge the picture to fill the screen. Recommended for minimal screen distor tion but not for **HD** or **PC**.
   - {**Dynamic**}: Scale 4:3 format to 16:9. Not recommended for **HD** or **PC**.
   - {**Custom**}: Shows wide screen format content unstretched.
   - {**Real**}: Provide maximum detail for **PC**.
   - {**Normal**}: Display the classic 4:3 format.

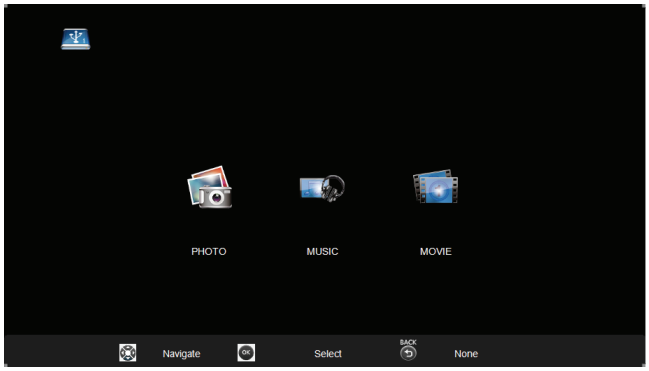
4.2. Play multimedia files

This display can play music, movie, or photo files from your USB device.

1. Connect your USB device to the USB port on this display.



2. Press [⊡] **SOURCE** button, select USB, then press [**OK**] button.
3. The connected USB device is detected automatically for all its playable files, which will be automatically sor ted into 3 types: **Music**, **Movie**, and **Photo**.



4. Press [⮌] BACK button to go up to the top layer in the screen. Press [◄] [►] button to choose the file type. Press [**OK**] button to enter its play list.
5. Select the file you want. Press [**OK**] button to start playing.
6. Follow the on-screen instruction to control the play option.
7. Press the PLAY buttons (■ ❚❚ ◀◀ ▶ ▶▶) to control playing.

Supported file system:

- FAT32.

Supported file format:

- Music: MP3
- Movie: AVI, MP4, MKV, MPG/MPEG
- Photo: JPEG, BMP, PNG

Caution:

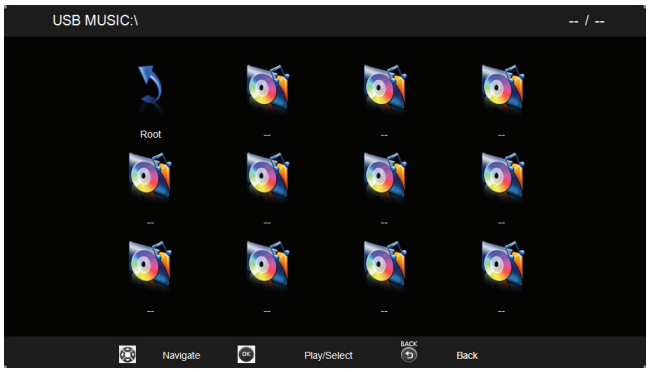
- The manufacturer is not responsible if the USB device is not supported, nor is it responsible for damage to or loss of data in the device.
- Do not overload the USB port. If you connect a USB storage device that consumes more than 500mA power, make sure that it is connected to its own external power supply.

NOTE: When you are playing multimedia files from USB device and turn the display off. It will set input source to the last real input source, such as VGA, HDMI when you turn the display on next time.

4.3. Play options

4.3.1. Playing music files

1. Select **Music** in the USB root menu.
2. Select one music track, then press [**OK**] button.



- To play music in a folder, select one music file, then select [**OK**].
- To skip to the next or previous track, press [⏮] or [⏭] button.
- To pause the track, press [⏸] button. Press [▶] button again to resume playback.
- To search backward or forward, press [◀◀] or [▶▶] button, press repeatedly to toggle between different speeds.
- To stop the music, press [■] button.

Music options

While you play music, press [**OK**] button to select an option:

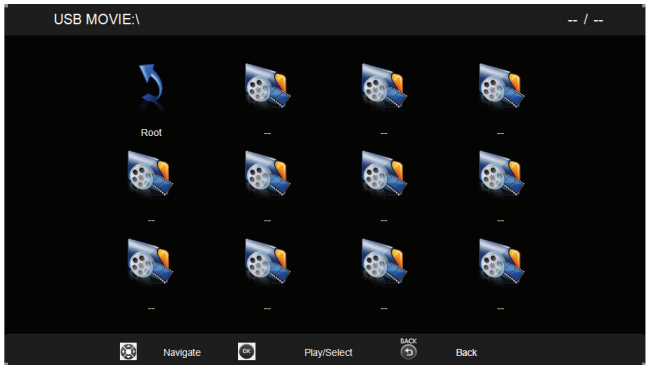


- Pause: To pause the track.
- FB: Backward.
- FF: forward.
- Prev: Go to previous music file.
- Next: Go to next music file.
- Stop: Stop the music file.
- Info: To view information about a song.
- Repeat: Play music file repeatedly

NOTE: To view information about a song (for example, title, artist or duration), select the song, then press [ⓘ] **INFO** button. To hide the information, press [ⓘ] **INFO** button again.

4.3.2. Playing movie files

1. Select **Movie** in the USB root menu.
2. Select a video, then press [**OK**] button.



- To play video in a folder, select one video file, then select [**OK**].
- To skip to the next or previous video, press [⏮] or [⏭] button.
- To pause the video, press [⏸] button. Press [▶] button again to resume playback.
- To search backward or forward, press [◀◀] or [▶▶] button, press repeatedly to toggle between different speeds.
- To stop the video, press [■] button.

Movie options

While playing video, press [**OK**] button to select an option:

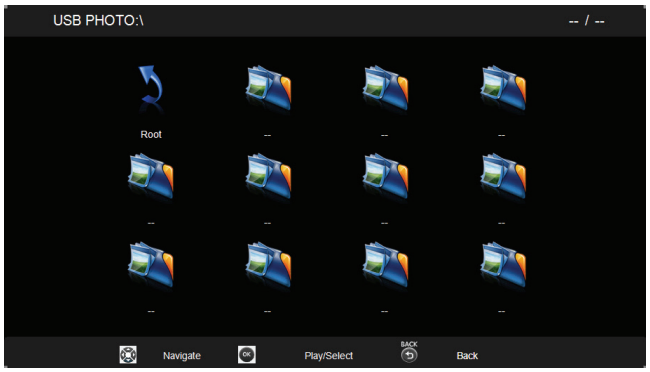


- Pause: To pause the video.
- FB: Backward.
- FF: Forward.
- Prev: Go to previous movie file.
- Next: Go to next movie file.
- Stop: Stop the movie file.
- Info: To view information about a video.
- Repeat: Play video file repeatedly.
- Ratio: Video scaling.

NOTE: To view information about a video (for example, played position, duration, title, or date), select the video, then press [ⓘ] **INFO** button. To hide the information, press [ⓘ] **INFO** button again.

4.3.3. Playing photo files

1. Select **Photo** in the USB root menu.
2. Select a photo thumbnail, then press [**OK**] button.



Start a slideshow

If there are multiple photos in a folder, select a photo, then select [**OK**].

- To skip to the previous or next photo, press [◄] or [►] button, and then press [**OK**] button.
- To stop the slideshow, press [■] button.

Slideshow options

While you play a slideshow, press [🛈] **INFO** button to select an option:



- Pause: To pause the photo slideshow
- FB: Backward.
- FF: forward.
- Prev: Go to previous photo file.
- Next: Go to next photo file.
- Stop: Stop a slideshow.
- Info: To view information about a photo.
- Repeat: Slideshow repeat.

NOTE: To view information about a photo (for example, Resolution, Size, Date or Time), select the photo, then press [🛈] **INFO** button. To hide the information, press [🛈] **INFO** button again.

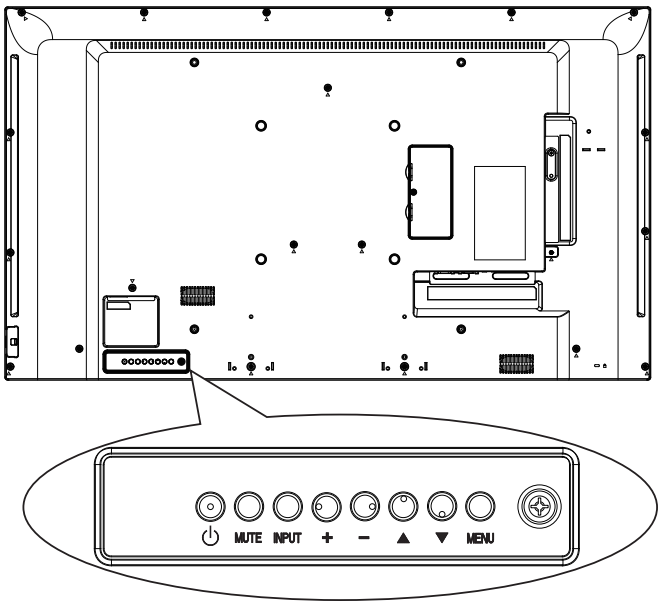
5. Change your settings

Using the remote control:



1. Press [🏠] **MENU** button to display the OSD menu.
2. Press [▲] [▼] [◄] or [►] button to select its menu item or to adjust its value. Press [**OK**] button to confirm.
3. Press [⮌] **EXIT** button to go back to the previous menu layer.
4. Press [🏠] **MENU** button to exit the OSD menu.

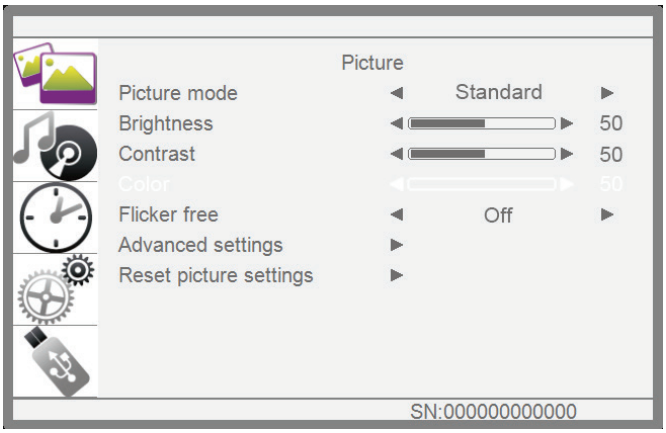
Using the display's control buttons



1. Press [**MENU**] button to display the OSD menu.
2. Press [▲] [▼] [+] or [-] button to choose menu item or adjust its value.
3. Press [**INPUT**] button to confirm menu selection and enter its submenu.
4. Press [**MENU**] button to exit the OSD menu.

5.1. Settings

5.1.1. Picture



Picture Mode

Select a predefined picture setting.

Brightness

Adjust screen brightness.

Contrast

Adjust video contrast.

Color

Adjust the Color saturation of the picture.

Flicker Free

Panel setting to enable/disable flicker free function.

Advanced settings

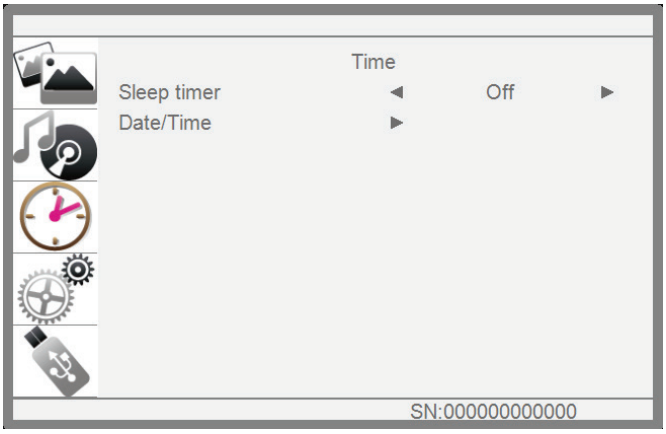
Access advanced settings such as tint settings and video contrast settings.

- {**Color temp.**}: Change the colour balance.
- {**Blue light filter**}: To reduce the blue light of panel
- {**Noise reduction**}: Select the amount of noise reduction for the picture.
- {**Tint**} Adjust to increase or decrease the flesh tone color.
- {**Sharpness**}: Adjust the sharpness of the picture.
- {**Dynamic contrast**}: Dynamically enhance the details in the dark, medium and light areas of the picture.
- {**Aspect ratio**}: The pictures you receive may be transmitted in 16:9 format (wide screen) or 4:3 format(conventional screen).
- {**Overscan**}: Change the display area of the image.
- {**Backlight**}: Adjust the brightness of this display's backlight.

Reset picture settings

Reset all your customized settings to the factory defaults.

5.1.2. Time



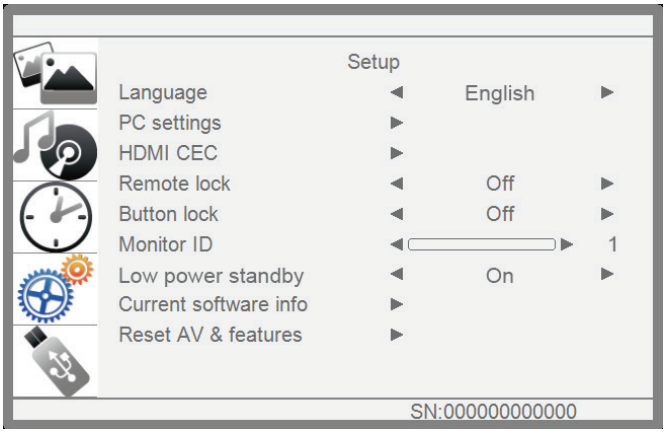
Sleep timer

Switch off this display after a specified time.

Date/Time

Adjust the current date and time for the display's internal clock.

5.1.3. Setup



Language

Select language used for OSD menus.

PC settings

Use this function to optimize the display of VGA input image.

NOTE: This item is functional for VGA input only.

Remote lock

Choose to enable or disable the button function of the remote control.

NOTE: To disable the Remote lock function, Press menu + 1998 + OK on the remote control.

Button lock

Choose to enable or disable the keyboard (control buttons) function of the display.

Monitor id

Set the ID number for controlling this display via the RS232C connection. Each display must have a unique ID number when multiple sets of this display are connected.

Low power standby

Set this display to reduce the power consumption automatically.

Current software info

Displays the information about your display.

Reset AV & features

Reset all your customized settings to the factory defaults.

6. USB device compatibility

USB Video Formats

File Extensions	Container	Video codec	SPEC	Bit Rate	Profile	Remark
mpg, mpeg	MPG, MPEG	MPEG1, 2	1080P@ 30fps	20Mbit/sec	Main Profile	*MPEG4: GMC is not supported
ts, trp, tp	MPEG2 -TS	H.264	1080P@ 30fps	20Mbit/sec	H264: Main Profile and High Profile@Level 4.0 MPEG2: MP@HL	
vob	MPEG2 -PS	MPEG2	1080P@ 30fps	20Mbit/sec	MPEG2: MP@HL	
mp4	MP4	MPEG4 XviD 1.00, XviD 1.01, XviD 1.02, XviD 1.03, XviD 1.10-beta1/2, H.264	1080P@ 30fps	20Mbit/sec	H264: Main Profile and High Profile@Level 4.0 MPEG4: Simple Profile and Advanced Simple Profile @Level5	
mkv	MKV	H.264 MPEG1,2,4	1080P@ 30fps	20Mbit/sec	H264: Main Profile and High Profile@Level 4.0 MPEG4: Simple Profile and Advanced Simple Profile @Level5	
avi	AVI (1.0, 2.0)	MPEG2, MPEG4	1080P@ 30fps	20Mbit/sec	MPEG2: MP@HL MPEG4: Simple	

USB Music Formats

Audio Codec	File Extension	Bit Rate	Remark
MPEG1 Layer2	MP3	32Kbps ~ 448Kbps(Bit rate) 32KHz ~ 48KHz(Sampling rate)	
MPEG1 Layer3	MP3	“32Kbps ~ 320Kbps(Bit rate) 32KHz ~ 48KHz(Sampling rate)”	

USB Photo Formats

Image	Photo	Resolution	“Required DRAM size (Mbytes)”	Remark	Width	Height	Bytes
JPEG	Base-line	“15360x8640 (1920x8 x 1080x8)”	3.96	“Depends on RAM size”	15360	8640	4147200
	Progressive	1024x768	6.00		1024	768	6291456
PNG	Non-interlace	9600x6400	3.66		9600	6400	3840000
	Interlace	1200x800	3.66		1200	800	3840000
BMP		9600x6400	3.66		9600	6400	3840000

NOTES:

- Sound or video may not work if the contents have a standard bit rate/frame rate above the compatible Frame/sec listed in the table above.
- Video content with a Bit rate or Frame rate larger than the rate specified in the table above can cause choppy video during playback.

7. Input Mode

VGA Resolution:

Standard Resolution	Active Resolution		Refresh Rate	Pixel Rate	Aspect Ratio	Stand for Mode
	H Pixels	V Lines				
VGA	640	480	60 Hz	25.175 MHz	4:3	Video Graphic Array
			72 Hz	31.5 MHz		
			75 Hz	31.5 MHz		
WVGA	720	400	70 Hz	33.75 MHz	16:9	Wide Video Graphic Array
SVGA	800	600	60 Hz	40 MHz	4:3	Super VGA
		600	75 Hz	49.5 MHz		
XGA	1024	768	60 Hz	65 MHz	4:3	Extended Graphic Array
		768	75 Hz	78.75 MHz		
WXGA	1280	768	60 Hz	79.5 MHz	5:3	Wide XGA
WXGA	1280	800	60 Hz	79.5 MHz	16:10	Wide XGA
SXGA	1280	960	60 Hz	108 MHz	4:3	Super XGA
SXGA	1280	1024	60 Hz	108 MHz	5:4	Super XGA
WXGA	1360	768	60 Hz	85.5 MHz	16:9	Wide XGA
WXGA	1366	768	60 Hz	85.5 MHz	16:9	Wide XGA
UXGA	1600	1200	60 Hz	162 MHz	4:3	Ultra XGA
HD1080	1920	1080	60 Hz	148.5 MHz	16:9	HD1080

SDTV Resolution:

Standard Resolution	Active Resolution		Refresh Rate	Pixel Rate	Aspect Ratio	Stand for Mode
	H Pixels	V Lines				
480i	720	480	29.97 Hz	13.5 MHz	4:3	Modified NTSC Standard
480p			59.94 Hz	27 MHz		
576i	720	576	25 Hz	13.5 MHz	4:3	Modified PAL Standard
576p			50 Hz	27 MHz		

HDTV Resolution:

Standard Resolution	Active Resolution		Refresh Rate	Pixel Rate	Aspect Ratio	Stand for Mode
	H Pixels	V Lines				
720p	1280	720	50 Hz	74.25 MHz	16:9	Normally DVB Mode
			60 Hz			
1080i	1920	1080	25 Hz	74.25 MHz	16:9	Normally ATSC Mode
			30 Hz			
1080p	1920	1080	50 Hz	148.5 MHz	16:9	Normally ATSC Mode
			60 Hz			

- The PC text quality is optimum in HD 1080 mode (1920 x 1080, 60Hz).
- Your PC display screen might appear different depending on the manufacturer (and your particular version of Windows).
- Check your PC instruction book for information about connecting your PC to a display.
- If a vertical and horizontal frequency-select mode exists, select 60Hz (vertical) and 31.5KHz (horizontal). In some cases, abnormal signals (such as stripes) might appear on the screen when the PC power is turned off (or if the PC is disconnected). If so, press the [**SOURCE**] button to enter the video mode. Also, make sure that the PC is connected.
- When horizontal synchronous signals seem irregular in RGB mode, check PC power saving mode or cable connections.
- The display settings table complies with IBM/VESA standards, and based on the analog input.
- The best vertical frequency timing for each mode is 60Hz.

8. Panel Defect Policy

8.1. MURA

Dark spots or patches may occasionally appear on some liquid crystal display (LCD) panels.This is known within the industr y as Mura, which is a Japanese term for “unevenness.” It is used to describe an irregular pattern or area in which uneven screen uniformity appears under certain conditions. Mura is a result of the deterioration of the liquid crystal alignment layer and is most commonly caused by long-term operation under high ambient temperatures. It is an industry- wide phenomenon and Mura is not repairable. It is also not covered by our warranty terms.

Mura has been around since the introduction of LCD technology and with screens getting bigger and in operation 24/7, many displays are running in low light conditions.This all adds to the possibility of Mura affecting displays.

HOW TO SPOT MURA

There are many symptoms of Mura and also multiple causes. Several of these are listed below:

- Impurities or foreign particles in the crystal matrix
- Uneven distribution of LCD matrix during manufacturing
- Non-uniform luminance distribution of the backlight
- Panel assembly induced stress
- Flaws within the LCD cells
- Thermal induced stress - high temperature operation over long periods of time

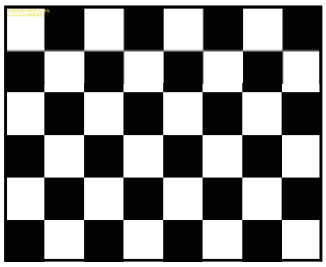
HOW TO AVOID MURA

Although we can not guarantee the complete eradication of Mura every time, in general the appearance of Mura can be minimized by these methods:

- Lower the backlight brightness
- Use a screen saver
- Reduce the ambient temperature around the unit

8.2. Image Sticking

Image sticking judgment standard

Initial Pattern	Time	Judgment PTN	Judgment standard
Mosaic (8×6) 	1Hr		• isappear within 10Min’ • ok level: under 2 leve

9. Cleaning and Troubleshooting

9.1. Cleaning

Caution When Using the Display

- Do not bring your hands, face or objects close to the ventilation holes of the display. The top of the display is usually very hot due to the high temperature of exhaust air being released through the ventilation holes. Burns or personal injuries may occur if any body parts are brought too close. Placing any object near the top of the display could also result in heat related damage to the object as well as the display itself.
- Be sure to disconnect all cables before moving the display. Moving the display with its cables attached may damage the cables and thus cause fire or electric shock.
- Disconnect the power plug from the wall outlet as a safety precaution before carrying out any type of cleaning or maintenance procedure.

Front Panel Cleaning Instructions

- The front of the display has been specially treated. Wipe the surface gently using only a cleaning cloth or a soft, lint-free cloth.
- If the surface becomes dirty, soak a soft, lint-free cloth in a mild detergent solution. Wring the cloth to remove excess liquid. Wipe the surface of the display to remove dirt. Then use a dry cloth of the same type to dry.
- Do not scratch or hit the surface of the panel with fingers or hard objects of any kind.
- Do not use volatile substances such as insert sprays, solvents and thinners.

Cabinet Cleaning Instructions

- If the cabinet becomes dirty, wipe the cabinet with a soft, dry cloth.
- If the cabinet is extremely dirty, soak a lint-free cloth in a mild detergent solution. Wring the cloth to remove as much moisture as possible. Wipe the cabinet. Use another dry cloth to wipe over until the surface is dry.
- Do not allow any water or detergent to come into contact with the surface of the display. If water or moisture gets inside the unit, operating problems, electrical and shock hazards may result.
- Do not scratch or hit the cabinet with fingers or hard objects of any kind.
- Do not use volatile substances such as insert sprays, solvents and thinners on the cabinet.
- Do not place anything made from rubber or PVC near the cabinet for any extended periods of time.

9.2. Troubleshooting

Symptom	Possible Cause	Remedy
No picture is displayed	1. The power cord is disconnected. 2. The main power switch on the back of the display is not switched on. 3. The selected input has no connection. 4. The display is in standby mode.	1. Plug in the power cord. 2. Make sure the power switch is switched on. 3. Connect a signal connection to the display.
Interference displayed on the display or audible noise is heard	Caused by surrounding electrical appliances or fluorescent lights.	Move the display to another location to see is the interference is reduced.
Color is abnormal	The signal cable is not connected properly.	Make sure that the signal cable is attached firmly to the back of the display.
Picture is distorted with abnormal patterns	1. The signal cable is not connected properly. 2. The input signal is beyond the capabilities of the display.	1. Make sure that the signal cable is attached firmly. 2. Check the video signal source to see if it is beyond the range of the display. Please verify its specifications with this display's specification section.
Display image doesn't fill up the full size of the screen	Zoom mode is not correctly set.	Use the Zoom mode or Custom zoom function in the Screen menu to fine tune display geometry and time frequency parameter.
Can hear sound, but no picture	Improperly connected source signal cable.	Make sure that both video inputs and sound inputs are correctly connected.
Can see picture but no sound is heard	1. Improperly connected source signal cable. 2. Volume is turned all the way down. 3. [**MUTE**] is turned on. 4. No external speaker connected.	1. Make sure that both video inputs and sound inputs are correctly connected. 2. Press [**+**] or [**-**] button to hear sound. 3. Switch MUTE off by using the [🔇] button. 4. Connect external speakers and adjust the volume to a suitable level.
Some picture elements do not light up	Some pixels of the display may not turn on.	This display is manufactured using an extremely high level of precision technology: however, sometimes some pixels of the display may not display. This is not a malfunction.
After-Images can still be seen on the display after the display is powered off. (Examples of still pictures include logos, video games, computer images, and images displayed in 4:3 normal mode)	A still picture is displayed for an over extended period of time	Do not allow a still image to be displayed for an extended period of time as this can cause a permanent after-image to remain on the display.

10. Technical Specifications

10.1. CDE4302-H

Display:

Item	Specifications
Screen Size (Active Area)	940.9 (H) x 529.25 (V)
Aspect Ratio	16:9
Number of pixels	1920 (H) x 1080 (V)
Pixel pitch	0.49(H) x 0.49(V)
Displayable colors	16.7M
Brightness (typical)	350 cd/m^2
Contrast ratio (typical)	3000:1
Viewing angle	178 degrees

In/Out Terminals:

Item		Specifications
Audio Input	3.5mm phone jack x 1	0.5V [rms] (Normal) / 2 Channel (L+R)
RS232C	D-Sub Jack x 1 (9 pin)	TXD + RXD (1:1)
HDMI Input	HDMI Jack x 2 (Type A) (19 pin)	Digital RGB: TMDS (Video + Audio) MAX: Video - 720p, 1080p, 1920 x 1080/60 Hz (WUXGA) Audio - 48 KHz/ 2 Channel (L+R) Supports LPCM only
VGA Input	D-Sub Jack x 1 (15 pin)	Analog RGB: 0.7V [p-p] (75Ω), H/CS/V: TTL (2.2kΩ), SOG: 1V [p-p] (75Ω) MAX: 720p, 1080p, 1920 x 1080/60 Hz (WUXGA)
IR Output	3.5 mm jack x 1	IR signal output
HDBaseT	RJ-45 Jack x 1 (8 pin)	HDBaseT video/Audio input

General:

Item	Specifications
Power Supply	AC 100 ~ 240V, 50 ~ 60Hz
Power Consumption (Max)	125 W
Power Consumption (typ.)	105 W
Power Consumption (Standby & Off)	<0.5W (RS232 in active)
Dimensions (With Stand) [W x H x D]	968.2 (W) x 599.1 (H) x 329.6 (D)
Dimensions (Without Stand) [W x H x D]	968.2 (W) x 559.4 (H) x 59.9 (D@Rear Cover)/ 60.9 (D@Wall Mount)
Weight (With Stand)	10.57 Kg
Weight (Without Stand)	8.7 Kg
Gross Weight (Without Stand)	12.2 Kg

Environmental Condition:

Item		Specifications
Temperature	Operational	0°C to 40°C (Landscape)
	Storage	-20°C to 60°C
Humidity	Operational	20 ~ 80% RH (No condensation)
	Storage	10 ~ 90% RH (No condensation)
Altitude	Operational	0 ~ 3,000 m
	Storage / Shipment	0 ~ 9,000 m

10.2. CDE5502-H

Display:

Item	Specifications
Screen Size (Active Area)	1209.6 (H) x 680.4 (V)
Aspect Ratio	16:9
Number of pixels	1920 (H) x 1080 (V)
Pixel pitch	0.63 (H) x 0.63 (V)
Displayable colors	16.7M
Brightness (typical)	350 cd/m^2
Contrast ratio (typical)	1200:1
Viewing angle	178 degrees

In/Out Terminals:

Item		Specifications
Audio Input	3.5mm phone jack x 1	0.5V [rms] (Normal) / 2 Channel (L+R)
RS232C	D-Sub Jack x 1 (9 pin)	TXD + RXD (1:1)
HDMI Input	HDMI Jack x 2 (Type A) (19 pin)	Digital RGB: TMDS (Video + Audio) MAX: Video - 720p, 1080p, 1920 x 1080/60 Hz (WUXGA) Audio - 48 KHz/ 2 Channel (L+R) Supports LPCM only
VGA Input	D-Sub Jack x 1 (15 pin)	Analog RGB: 0.7V [p-p] (75Ω), H/CS/V: TTL (2.2kΩ), SOG: 1V [p-p] (75Ω) MAX: 720p, 1080p, 1920 x 1080/60 Hz (WUXGA)
IR Output	3.5 mm jack x 1	IR signal output
HDBaseT	RJ-45 Jack x 1 (8 pin)	HDBaseT video/Audio input

General:

Item	Specifications
Power Supply	AC 100 ~ 240V, 50 ~ 60Hz
Power Consumption (Max)	160 W
Power Consumption (typ.)	140 W
Power Consumption (Standby & Off)	<0.5W (RS232 in active)
Dimensions (With Stand) [W x H x D]	1238.6 (W) x 751.7 (H) x 329.6 (D)
Dimensions (Without Stand) [W x H x D]	1238.6 (W) x 711.1 (H) x 59.9 (Rear Cover)/61.7 (Wall Mount)
Weight (With Stand)	17.87 Kg
Weight (Without Stand)	16.0 Kg
Gross Weight (Without Stand)	23.0 Kg

Environmental Condition:

Item		Specifications
Temperature	Operational	0°C to 40°C (Landscape)
	Storage	-20°C to 60°C
Humidity	Operational	20 ~ 80% RH (No condensation)
	Storage	10 ~ 90% RH (No condensation)
Altitude	Operational	0 ~ 3,000 m
	Storage / Shipment	0 ~ 9,000 m

10.3. CDE4803-H

Display:

Item	Specifications
Screen Size (Active Area)	1054.08(H) x 592.92(V)
Aspect Ratio	16:9
Number of pixels	1920 (H) x 1080 (V)
Pixel pitch	0.549 (H) x 0.549 (V)
Displayable colors	1073.7M colors
Brightness (typical)	350 cd/m^2
Contrast ratio (typical)	4000:1
Viewing angle	178 degrees

In/Out Terminals:

Item		Specifications
Audio Input	3.5mm phone jack x 1	0.5V [rms] (Normal) / 2 Channel (L+R)
RS232C	D-Sub Jack x 1 (9 pin)	TXD + RXD (1:1)
HDMI Input	HDMI Jack x 2 (Type A) (19 pin)	Digital RGB: TMDS (Video + Audio) MAX: Video - 720p, 1080p, 1920 x 1080/60 Hz (WUXGA) Audio - 48 KHz/ 2 Channel (L+R) Supports LPCM only
VGA Input	D-Sub Jack x 1 (15 pin)	Analog RGB: 0.7V [p-p] (75Ω), H/CS/V: TTL (2.2kΩ), SOG: 1V [p-p] (75Ω) MAX: 720p, 1080p, 1920 x 1080/60 Hz (WUXGA)
IR Output	3.5 mm jack x 1	IR signal output
HDBaseT	RJ-45 Jack x 1 (8 pin)	HDBaseT video/Audio input

General:

Item	Specifications
Power Supply	AC 100 ~ 240V, 50 ~ 60Hz
Power Consumption (Max)	149 W
Power Consumption (typ.)	115 W
Power Consumption (Standby & Off)	<0.5W (RS232 in active)
Dimensions (With Stand) [W x H x D]	1081.8 (W) x 663.1 (H) x 329.6 (D)
Dimensions (Without Stand) [W x H x D]	1081.8 (W) x 623.4 (H) x 59.9 (Rear Cover)/61.1 (Wall Mount)
Weight (With Stand)	13.39 Kg
Weight (Without Stand)	11.52 Kg
Gross Weight (Without Stand)	16.4 Kg

Environmental Condition:

Item		Specifications
Temperature	Operational	0°C to 40°C (Landscape)
	Storage	-20°C to 60°C
Humidity	Operational	20 ~ 80% RH (No condensation)
	Storage	5 ~ 95% RH (No condensation)
Altitude	Operational	0 ~ 3,000 m
	Storage / Shipment	0 ~ 9,000 m

11. RS232 Protocol

11.1. Introduction

This document describes the hardware interface spec and software protocols of RS232 interface communication between ViewSonic Commercial TV / Digital Signage and PC or other control unit with RS232 protocol.

The protocol contains three sections command:

- Set-Function
- Get-Function
- Remote control pass-through mode

※ In the document below, “PC” represents all the control units that can send or receive the RS232 protocol command.

11.2. Description

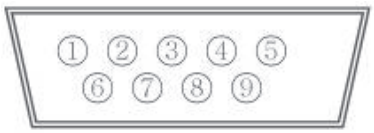
11.2.1. Hardware specification

Viewsonic TV communication port on the rear side:

(1) Connector type: DSUB 9-Pin Male

(2) Pin Assignment

Male DSUB 9-Pin
(outside view)



Pin #	Signal	Remark
1	NC	
2	RXD	Input to Commercial TV or DS
3	TXD	Output from Commercial TV or DS
4	NC	
5	GND	
6	NC	
7	NC	
8	NC	
9	NC	
frame	GND	

* Use of crossover (null modem) cable required for use with PC

[Special case]3.5mm barrel connector

Pin #	Signal	Remark
Tip	TXD	Output from Commercial TV or DS
Ring	RXD	Input to Commercial TV or DS
Sleeve	GND	

11.2.2. Communication Setting

- Baud Rate Select: 9600bps (fixed)
- Data bits: 8 bits (fixed)
- Parity: None (fixed)
- Stop Bits: 1 (fixed)

11.2.3. Command Message Reference

PC sends to Monitor command packet followed by “CR”. Every time PC sends control command to the Monitor, the Monitor shall respond as follows:

1. If the message is received correctly it will send “+” (02Bh) followed by “CR” (00Dh)
2. If the message is received incorrectly it will send “-” (02Dh) followed by “CR” (00Dh)

11.3. Protocol

11.3.1. Set-Function Listing

The PC can control the TV/DS for specific actions. The Set-Function command allows you to control the TV/DS behavior in a remote site through the RS232 port. The Set-Function packet format consists of 9 bytes.

Set-Function description:

Length: Total Byte of Message excluding “CR”.

TV/DS ID Identification for each of TV/DS (01~98; default is 01)
ID “99” means to apply the set command for all connected displays. Under such circumstances, only ID#1 display has to reply.
The TV/DS ID can be set via the OSD menu for each TV/DS set.

Command Type Identify command type,
“s” (0x73h) : Set Command
“+” (0x2Bh) : Valid command Reply
“-“ (0x2Dh) : Invalid command Reply

Command: Function command code: One byte ASCII code.

Value[1~3]: Three bytes ASCII that defines the value.

CR 0x0D

Set-Function format

Send: (Command Type=”s”)

Name	Length	ID	Command Type	Command	Value1	Value2	Value3	CR
Byte Count	1 Byte	2 Byte	1 Byte	1 Byte	1 Byte	1 Byte	1 Byte	1 Byte
Bytes order	1	2~3	4	5	6	7	8	9

NOTE: For VT2405LED-1 and VT3205LED, the set “Power on” command is the exception

Reply: (Command Type=”+” or “-”)

Name	Length	ID	Command Type	CR
Byte Count	1 Byte	2 Byte	1 Byte	1 Byte
Bytes order	1	2~3	4	5

NOTE:

1. The reply for “Power on” command is the exception for VT2405LED-1 and VT3205LED.
   It’s 0x322B0D (2+<CR>).
2. When PC applies command to all displays (ID=99), only the #1 set needs to reply by the name of ID=1.

Example1: Set Brightness as 76 for TV-02 and this command is valid

Send (Hex Format)

Name	Length	ID	Command Type	Command	Value1	Value2	Value3	CR
Hex	0x38	0x30 0x32	0x73	0x24	0x30	0x37	0x36	0x0D

Reply (Hex Format)

Name	Length	ID	Command Type	CR
Hex	0x34	0x30 0x32	0x2B	0x0D

Example2: Set Brightness as 176 for TV-02 and this command is NOT valid Send (Hex Format)

Name	Length	ID	Command Type	Command	Value1	Value2	Value3	CR
Hex	0x38	0x30 0x32	0x73	0x24	0x31	0x37	0x36	0x0D

Reply (Hex Format)

Name	Length	ID	Command Type	CR
Hex	0x34	0x30 0x32	0x2D	0x0D

Set function table:

Set Function	Length	ID	Command Type	Command		Value Range	Comments
				Code (ASCII)	Code (Hex)	(Three ASCII bytes)	
Power on/off (standby)	8		s	!	21	000: STBY 001: ON	Controlled power status: ON or Standby
Input Select	8		s	“	22	000 : TV 001 : AV 002 : S-Video 003 : YPbPr 004 : HDMI 014 : HDMI2 024 : HDMI3 005 : DVI 006 : VGA1(PC) 016 : VGA2 007 : OPS/HDBaseT 008 : Internal Mem 009 : DP	1. No need for USB 2. For the case of two more same sources, the 2nd digital is used to indicate the extension.
Contrast	8		s	#	23	000 ~ 100	
Brightness	8		s	$	24	000 ~ 100	
Sharpness	8		s	%	25	000 ~ 100	
Color	8		s	&	26	000 ~ 100	
Tint	8		s	‘	27	000 ~ 100	
Color Mode	8		s	)	29	000 : Normal 001 : Warm 002 : Cold 003 : Personal	
Bass	8		s	.	2E	000 ~ 100	Sets Bass value
Treble	8		s	/	2F	000 ~ 100	Sets Treble value
Balance	8		s	0	30	000 ~ 100	Sets Balance position
Picture Size	8		s	1	31	000 : FULL 001 : NORMAL 002 : CUSTOM 003 : DYNAMIC 004 : REAL	
OSD Language	8		s	2	32	000 : English 001 : French 002 : Spanish	
Power Lock	8		s	4	34	000 : Unlock 001 : Lock	

Volume	8		s	5	35	000 ~ 100 900 : Volume down (-1) 901 : Volume up (+1)	
Mute	8		s	6	36	000: OFF 001: ON (mute)	
Button Lock	8		s	8	38	000 : Unlock 001 : Lock	
Menu Lock	8		s	>	3E	000 : Unlock 001 : Lock	
Key Pad	8		s	A	41	000 : UP 001 : DOWN 002 : LEFT 003 : RIGHT 004 : ENTER 005 : INPUT 006 : MENU/EXIT	
Remote Control	8		s	B	42	000: Disable	**Disable:** RCU has no effect on Monotor.
						001: Enable	**Enabled:** RCU controls the Monitor. This is the power up default on the Monitor.
						002: Pass through	**Pass through:** RCU has no effect on Monitor and all RCU command codes are transmitted to PC via the RS232 port.
Date	8		s	V	56	0xx: Year 1xx: Month+Day (See example in Note)	For specific models only
Time	8		s	W	57	0xx: Hour+Min 10x: Sec (See example in Note)	For specific models only
Factory reset	8		s	~	7E	0	Rests Monitor to factory setting

NOTE:

1. Behavior at lock modes

Lock Mode	Behavior
Button Lock	1. Lock all buttons on the front panel and RCU, except for “Power” 2. All the SET functions should be workable via RS32, even the ones with according hot key in RCU like Mute,…etc.
MENU Lock	1. Lock “MENU’ key of front panel and RCU 2. The Factory and Hospitality modes should not be blocked for the model using MENU-combined key to enter these two modes. Alternative approach will be indicated separately if any limitation by model.
POWER Lock	1. Lock “POWER” key on the front and RCU. 2. The SET_POWER on/off should be workable via RS232, but does not mean the POWER lock will be released under this case. 3. Can not be unlocked by reset in OSD setting 4. Will auto AC power-on in power-lock 5. Under power-lock, the set will not enter power saving when no PC signal and neither not turn off when no other video signals after 15min.
Remote control disable	Lock the RCU keys, but keep the front panel buttons workable.

2. Example for value setting of SET_TV channel DTV

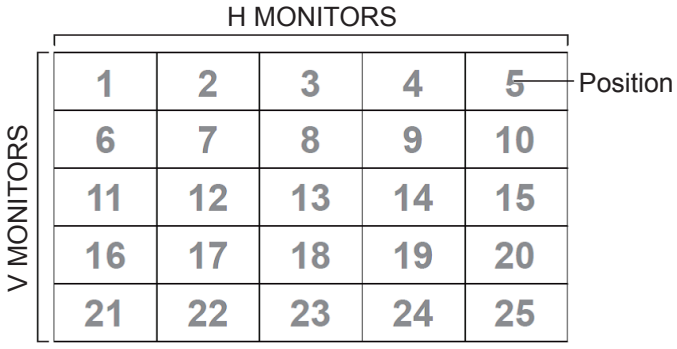
012-0: 0x 30 31 32

012-1: 0x 30 31 42

1012-2: 0x 41 31 52

1512-3: 0x 46 31 62

3. Tiling definition of H Monitors/ V Monitors/ and Position



4. Date & Time format definition

	Value 1	Value 2	Value 3
Date	0: Year	Year code of the first 2 digis	Year code of the last 2 digis
	1: Month+Day	Month code	Day code
Time	0: Hour(24-hr format)+Min	Hour code	Minute code
	1: Sec	0	Second code

Hex code (in hex) = Original data (in dec) + 20

Date & Time	Code (ASCII)	Code (Hex)	Date & Time	Code (ASCII)	Code (Hex)	Date & Time	Code (ASCII)	Code (Hex)	Date & Time	Code (ASCII)	Code (Hex)
0	space	20	16	6	36	32	R	52	48	h	68
1	!	21	17	7	37	33	S	53	49	i	69
2	“	22	18	8	38	34	T	54	50	p	70
3	#	23	19	9	39	35	U	55	51	q	71
4	$	24	20	@	40	36	V	56	52	r	72
5	%	25	21	A	41	37	W	57	53	s	73
6	&	26	22	B	42	38	X	58	54	t	74
7	’	27	23	C	43	39	Y	59	55	u	75
8	(	28	24	D	44	40	`	60	56	v	76
9	)	29	25	E	45	41	a	61	57	w	77
10	0	30	26	F	46	42	b	62	58	x	78
11	1	31	27	G	47	43	c	63	59	y	79
12	2	32	28	H	48	44	d	64			
13	3	33	29	I	49	45	e	65			
14	4	34	30	P	50	46	f	66			
15	5	35	31	Q	51	47	g	67			

Month: 1~12
Day: 1~31
Hour: 00~23
Min:: 00~59
Sec: 00~59

5. Set Date & Time example

Date: 2015-1/31
Time: 16:27:59

Send: 0x 38 30 31 73 56 30 40 35 0D (Year “20” “15”)
Send: 0x 38 30 31 73 56 31 21 51 0D (Month “1”, Day ”31”)
Send: 0x 38 30 31 73 57 30 36 47 0D (Hour “16”, Min “27”)
Send: 0x 38 30 31 73 57 31 30 79 0D (“0”, Sec “59”)

11.3.2. Get-Function Listing

The PC can interrogate the TV/DS for specific information. The Get-Function packet format consists of 9 bytes which is similar to the Set-Function packet structure. Note that the “Value” byte is always = 000

Get-Function description:

Length: Total Byte of Message excluding “CR”.

TV/DS ID Identification for each of TV/DS (01~98; default is 01).

Command Type Identify command type,
“g” (0x67h) : Get Command
“r” (0x72h) : Valid command Reply
“-“ (0x2Dh) : Invalid command Reply

Command: Function command code: One byte ASCII code.

Value[1~3]: Three bytes ASCII that defines the value.

CR 0x0D

Get-Function format

Send: (Command Type=”g”)

Name	Length	ID	Command Type	Command	Value1	Value2	Value3	CR
Byte Count	1 Byte	2 Byte	1 Byte	1 Byte	1 Byte	1 Byte	1 Byte	1 Byte
Bytes order	1	2~3	4	5	6	7	8	9

NOTE: “Power STBY status” is the exception for VT2405LED-1 and VT3205LED.

Reply: (Command Type=”r” or “-”)

If the Command is valid, Command Type =”r”

Name	Length	ID	Command Type	Command	Value1	Value2	Value3	CR
Byte Count	1 Byte	2 Byte	1 Byte	1 Byte	1 Byte	1 Byte	1 Byte	1 Byte
Bytes order	1	2~3	4	5	6	7	8	9

NOTE: The reply for “Power STBY status” command is the exception for VT2405LED-1 and V3205LED. It’s 0x36 72 6C 30 30 30 0D (6rl000<CR>).

If the Command is Not valid, Command Type=”-“

Name	Length	ID	Command Type	CR
Byte Count	1 Byte	2 Byte	1 Byte	1 Byte
Bytes order	1	2~3	4	5

Example1: Get Brightness from TV-05 and this comm and is valid. The Brightness value is 67.

Send (Hex Format)

Name	Length	ID	Command Type	Command	Value1	Value2	Value3	CR
Hex	0x38	0x30 0x35	0x67	0x62	0x30	0x30	0x30	0x0D

Reply (Hex Format)

Name	Length	ID	Command Type	Command	Value1	Value2	Value3	CR
Hex	0x38	0x30 0x35	0x72	0x62	0x30	0x36	0x37	0x0D

Example2: Get Brightness from TV-05, but the Brightness command ID is error and it is NOT in the command table.

Send (Hex Format)

Name	Length	ID	Command Type	Command	Value1	Value2	Value3	CR
Hex	0x38	0x30 0x35	0x67	0XD3	0x30	0x30	0x30	0x0D

Reply (Hex Format)

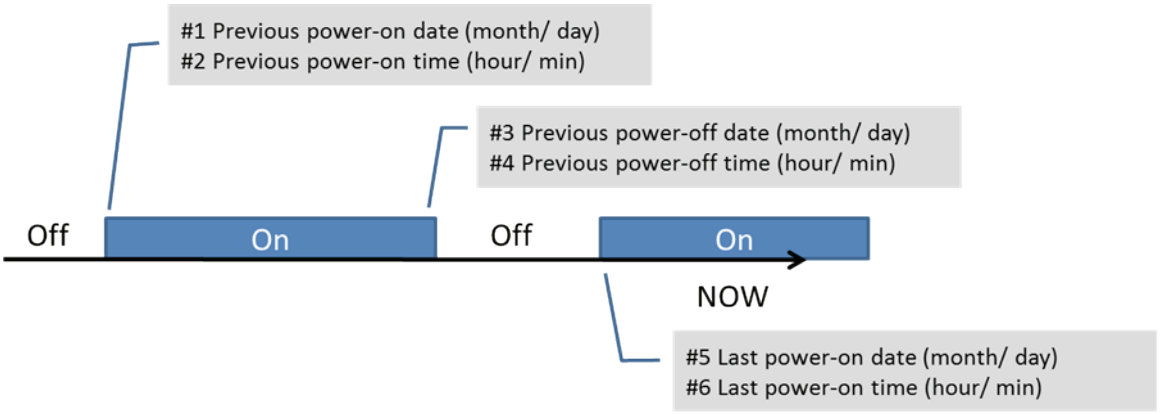
Name	Length	ID	Command Type	CR
Hex	0x34	0x30 0x35	0x2D	0x0D

Get function table:

Get Function	Length	ID	Command Type	Command		Value Range	Comments
				Code (ASCII)	Code (Hex)	(Three ASCII bytes)	
Get-Contrast	8		g	a	61	000 ~ 100	Gets Contrast value
Get-Brightness	8		g	b	62	000 ~ 100	Gets Brightness value
Get-Sharpness	8		g	c	63	000 ~ 100	Gets Sharpness value
Get-Color	8		g	d	64	000 ~ 100	Gets Color value
Get-Tint	8		g	e	65	000 ~ 100	Gets Tint value
Get-Volume	8		g	f	66	000 ~ 100	Gets Volume value
Get-Mute	8		g	g	67	000: OFF (unmuted) 001: ON (muted)	Gets Mute ON/OFF status
Get-Input select	8		g	j	6A	000~	See Set-function table
Get-Power status : ON/ STBY	8		g	l	6C	000: STBY 001: ON	
Get-Remote control	8		g	n	6E	000 : Disable 001 : Enable 002 : Pass through	
Get-Power Lock	8		g	o	6F	000 : Unlock 001 : Lock	
Get-Button Lock	8		g	p	70	000 : Unlock 001 : Lock	
Get-Menu Lock	8		g	q	71	000 : Unlock 001 : Lock	
Get-ACK	8		g	z	7A	000	This command is used to test the communication link.
Get-Thermal	8		g	0	30	000~100: 0~+100 deg C -01~-99: -1~-99 deg C	For specific models only
Get-Power on/ off log	8		g	1	31	000 (See below note)	For specific models only
Get-Date	8		g	2	32	000 (See the Set-Date command)	For specific models only
Get- Time	8		g	3	33	000 (See the Set-Time command)	For specific models only

NOTE:

1. Power on/off log data is replied as 6 sequential strings in following order.



2. Time log data definition

Value 1	Value 2	Value 3
On/ Off indicator 0: Off 1: On	Month code	Day code
	Hour code	Minute code

Hex code (in hex) = Original data (in dec) + 20

Date & Time	Code (ASCII)	Code (Hex)	Date & Time	Code (ASCII)	Code (Hex)	Date & Time	Code (ASCII)	Code (Hex)	Date & Time	Code (ASCII)	Code (Hex)
0	space	20	16	6	36	32	R	52	48	h	68
1	!	21	17	7	37	33	S	53	49	i	69
2	“	22	18	8	38	34	T	54	50	p	70
3	#	23	19	9	39	35	U	55	51	q	71
4	$	24	20	@	40	36	V	56	52	r	72
5	%	25	21	A	41	37	W	57	53	s	73
6	&	26	22	B	42	38	X	58	54	t	74
7	’	27	23	C	43	39	Y	59	55	u	75
8	(	28	24	D	44	40	`	60	56	v	76
9	)	29	25	E	45	41	a	61	57	w	77
10	0	30	26	F	46	42	b	62	58	x	78
11	1	31	27	G	47	43	c	63	59	y	79
12	2	32	28	H	48	44	d	64			
13	3	33	29	I	49	45	e	65			
14	4	34	30	P	50	46	f	66			
15	5	35	31	Q	51	47	g	67			

Month: 1~12
Day: 1~31
Hour: 00~23
Min:: 00~59

3. Get Time log data example

Assumed the power-on/off record of display#01 as below
2014-8/31 08:00 On
2014-8/31 22:00 Off
2014-9/1 10:30 On
2014-9/1 11:00 To send “GET-Time log” command

Send: 0x 38 30 31 67 31 30 30 30 0D
Reply:
#1 0x 38 30 31 72 31 31 28 51 0D (On 8/31)
#2 0x 38 30 31 72 31 31 28 20 0D (On 08:00)
#3 0x 38 30 31 72 31 30 28 51 0D (Off 8/31)
#4 0x 38 30 31 72 31 30 42 20 0D (Off 22:00)
#5 0x 38 30 31 72 31 31 29 21 0D (On 9/1)
#6 0x 38 30 31 72 31 31 30 50 0D (On 10:30)

4. Get Date & Time example

Assumed the current date/time of display#01 as below

Date: 2015-1/31

Time: 16:27:59

Send: 0x 38 30 31 67 32 30 30 30 0D (Get Date)

Reply:

#1 0x 38 30 31 72 32 30 40 35 0D (Year “20” “15”)

#2 0x 38 30 31 72 32 31 21 51 0D (Month “1”, Day ”31”)

Send: 0x 38 30 31 67 33 30 30 30 0D (Get Time)

Reply:

#1 0x 38 30 31 72 33 30 36 47 0D (Hour “16”, Min “27”)

#2 0x 38 30 31 72 33 31 30 79 0D (“0”, Sec “59”)

11.3.3. Remote Control Pass-through mode

When the PC sets the TV/DS to Remote Control Pass through mode, the TV/DS will send a 7-byte packet (followed by “CR”) in response to RCU button activation. Note, that in this mode the RCU shall have no effect on the TV/DS function. For example: “Volume+” will not change the volume in the LCD but only sends “Volume+” code to PC over the RS232 port.

IR Pass Through-Function format

Reply: (Command Type=”p”)

Name	Length	ID	Command Type	RCU Code1 (MSB)	RCU Code2 (LSB)	CR
Byte Count	1 Byte	2 Byte	1 Byte	1 Byte	1 Byte	1 Byte
Bytes order	1	2~3	4	5	6	7

Example1: Remote Control pass-through when “VOL+” key is pressed for TV-05 Send (Hex Format)

Name	Length	ID	Command Type	Command	Value1	CR
Hex	0x36	0x30 0x35	0x70	0x31	0x30	0x0D

Key	Code (HEX)
1	01
2	02
3	03
4	04
5	05
6	06
7	07
8	08
9	09
0	0A
-	0B
RECALL (LAST)	0C
INFO (DISPLAY)	0D
	0E
ASPECT (ZOOM, SIZE)	0F
VOLUME UP (+)	10
VOLUME DOWN (-)	11
MUTE	12
CHANNEL/PAGE UP (+)/ BRIGHTNESS+	13
CHANNEL/PAGE DOWN (-)/ BRIGHTNESS-	14
POWER	15
SOURCES (INPUTS)	16
	17
	18
SLEEP	19
MENU	1A
UP	1B
DOWN	1C
LEFT (-)	1D
RIGHT (+)	1E
OK (ENTER, SET)	1F
EXIT	20
	21
	22
	23
	24
	25
	26
	27
	28
	29
	2A
	2B
RED ■ (F1)	2C
GREEN ■ (F2)	2D
YELLOW ■ (F3)	2E
BLUE ■ (F4)	2F

NOTE:

1. This IR-pass-through code is different from the RCU key code.
2. Special control sequence for POWER key under IR-pass through mode.
   - 2-1. When TV/DS is OFF and receives the IR POWER code: TV/DS will turn itself on, then forward the POWER code to the host via RS232.
   - 2-2. When TV/DS is ON and receives the IR POWER code: TV/DS will forward the POWER code to the host via RS232, then turn off itself.
   - 2-3. When SET-POWER LOCK is enabled, the TV/DS will not respond to POWER key pressing.
3. The VOLUME UP and VOLUME DOWN code will repeatedly output when you press and hold the keys.

12. Other Information

Customer Support

For technical support or product service, see the table below or contact your reseller.

NOTE: You will need the product serial number.

Country/Region	Website	T = Telephone C = CHAT ONLINE	Email
Australia New Zealand	www.viewsonic.com.au	AUS= 1800 880 818 NZ= 0800 008 822	service@au.viewsonic.com
Canada	www.viewsonic.com	T (Toll-Free)= 1-866-463-4775 T (Toll)= 1-424-233-2533	service.ca@viewsonic.com
Europe	www.viewsoniceurope.com	www.viewsoniceurope.com/uk/support/call-desk/	
Hong Kong	www.hk.viewsonic.com	T= 852 3102 2900	service@hk.viewsonic.com
India	www.in.viewsonic.com	T= 1800 419 0959	service@in.viewsonic.com
Korea	ap.viewsonic.com/kr/	T= 080 333 2131	service@kr.viewsonic.com
Latin America (Argentina)	www.viewsonic.com/la/	C= http://www.viewsonic.com/la/soporte/servicio-tecnico	soporte@viewsonic.com
Latin America (Chile)	www.viewsonic.com/la/	C= http://www.viewsonic.com/la/soporte/servicio-tecnico	soporte@viewsonic.com
Latin America (Columbia)	www.viewsonic.com/la/	C= http://www.viewsonic.com/la/soporte/servicio-tecnico	soporte@viewsonic.com
Latin America (Mexico)	www.viewsonic.com/la/	C= http://www.viewsonic.com/la/soporte/servicio-tecnico	soporte@viewsonic.com
Nexus Hightech Solutions, Cincinnati #40 Desp. 1 Col. De los Deportes Mexico D.F. Tel: 55) 6547-6454 55) 6547-6484 Other places please refer to http://www.viewsonic.com/la/soporte/servicio-tecnico#mexico			
Latin America (Peru)	www.viewsonic.com/la/	C= http://www.viewsonic.com/la/soporte/servicio-tecnico	soporte@viewsonic.com
Macau	www.hk.viewsonic.com	T= 853 2870 0303	service@hk.viewsonic.com
Middle East	ap.viewsonic.com/me/	Contact your reseller	service@ap.viewsonic.com
Puerto Rico & Virgin Islands	www.viewsonic.com	T= 1-800-688-6688 (English) C= http://www.viewsonic.com/la/soporte/servicio-tecnico	service.us@viewsonic.com soporte@viewsonic.com
Singapore/ Malaysia/ Thailand	www.viewsonic.com.sg	T= 65 6461 6044	service@sg.viewsonic.com
South Africa	ap.viewsonic.com/za/	Contact your reseller	service@ap.viewsonic.com
United States	www.viewsonic.com	T (Toll-Free)= 1-800-688-6688 T (Toll)= 1-424-233-2530	service.us@viewsonic.com

Limited Warranty

ViewSonic® LCD Commercial Display

What the warranty covers:
ViewSonic warrants its products to be free from defects in material and workmanship, under normal use, during the warranty period. If a product proves to be defective in material or workmanship during the warranty period, ViewSonic will, at its sole option, repair or replace the product with a like product. Replacement product or parts may include remanufactured or refurbished parts or components.

Who the warranty protects:
This warranty is valid only for the first consumer purchaser.

What the warranty does not cover:
1. Any product on which the serial number has been defaced, modified or removed.
2. Damage, deterioration or malfunction resulting from:
   a. Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
   b. Any damage of the product due to shipment.
   c. Removal or installation of the product.
   d. Causes external to the product, such as electrical power fluctuations or failure.
   e. Use of supplies or parts not meeting ViewSonic's specifications.
   f. Normal wear and tear.
   g. Any other cause which does not relate to a product defect.
3. Any product exhibiting a condition commonly known as "image burn-in" which results when a static image is displayed on the product for an extended period of time.
4. Removal, installation, one way transportation, insurance, and set-up service charges.

How to get service:
1. For information about receiving service under warranty, contact ViewSonic Customer Support (Please refer to Customer Support page). You will need to provide your product's serial number.
2. To obtain warranty service, you will be required to provide (a) the original dated sales slip, (b) your name, (c) your address, (d) a description of the problem, and (e) the serial number of the product.
3. Take or ship the product freight prepaid in the original container to an authorized ViewSonic service center or ViewSonic.
4. For additional information or the name of the nearest ViewSonic service center, contact ViewSonic.

Limitation of implied warranties:
There are no warranties, express or implied, which extend beyond the description contained herein including the implied warranty of merchantability and fitness for a particular purpose.

Exclusion of damages:
ViewSonic's liability is limited to the cost of repair or replacement of the product. ViewSonic shall not be liable for:

1. Damage to other property caused by any defects in the product, damages based upon inconvenience, loss of use of the product, loss of time, loss of profits, loss of business opportunity, loss of goodwill, interference with business relationships, or other commercial loss, even if advised of the possibility of such damages.
2. Any other damages, whether incidental, consequential or otherwise.
3. Any claim against the customer by any other party.
4. Repair or attempted repair by anyone not authorized by ViewSonic.

Effect of state law:
This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow limitations on implied warranties and/or do not allow the exclusion of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

Sales outside the U.S.A. and Canada:
For warranty information and service on ViewSonic products sold outside of the U.S.A. and Canada, contact ViewSonic or your local ViewSonic dealer.
The warranty period for this product in mainland China (Hong Kong, Macao and Taiwan Excluded) is subject to the terms and conditions of the Maintenance Guarantee Card.
For users in Europe and Russia, full details of warranty provided can be found in www.viewsoniceurope.com under Support/Warranty Information.

Mexico Limited Warranty

ViewSonic® LCD Commercial Display

What the warranty covers:
ViewSonic warrants its products to be free from defects in material and workmanship, under normal use, during the warranty period. If a product proves to be defective in material or workmanship during the warranty period, ViewSonic will, at its sole option, repair or replace the product with a like product. Replacement product or parts may include re-manufactured or refurbished parts or components.

Who the warranty protects:
This warranty is valid only for the first consumer purchaser.

What the warranty does not cover:
1. Any product on which the serial number has been defaced, modified or removed.
2. Damage, deterioration or malfunction resulting from:
   a. Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
   b. Any damage of the product due to shipment.
   c. Removal or installation of the product.
   d. Causes external to the product, such as electrical power fluctuations or failure.
   e. Use of supplies or parts not meeting ViewSonic's specifications.
   f. Normal wear and tear.
   g. Any other cause which does not relate to a product defect.
3. Any product exhibiting a condition commonly known as "image burn-in" which results when a static image is displayed on the product for an extended period of time.
4. Removal, installation, one way transportation, insurance, and set-up service charges.

How to get service:
For information about receiving service under warranty, contact ViewSonic Customer Support (Please refer to the attached Customer Support page). You will need to provide your product's serial number, so please record the product information in the space provided below on your purchase for your future use. Please retain your receipt of proof of purchase to support your warranty claim.

For Your Records
Product Name: _____
Document Number: _____
Purchase Date: _____
Model Number: _____
Serial Number: _____
Extended Warranty Purchase? _____(Y/N)
If so, what date does warranty expire? _____

1. To obtain warranty service, you will be required to provide (a) the original dated sales slip, (b) your name, (c) your address, (d) a description of the problem, and (e) the serial number of the product.
2. Take or ship the product in the original container packaging to an authorized ViewSonic service center.
3. Round trip transportation costs for in-warranty products will be paid by ViewSonic.

Limitation of implied warranties:
There are no warranties, express or implied, which extend beyond the description contained herein including the implied warranty of merchantability and fitness for a particular purpose.

Exclusion of damages:
ViewSonic's liability is limited to the cost of repair or replacement of the product. ViewSonic shall not be liable for:
1. Damage to other property caused by any defects in the product, damages based upon inconvenience, loss of use of the product, loss of time, loss of profits, loss of business opportunity, loss of goodwill, interference with business relationships, or other commercial loss, even if advised of the possibility of such damages.
2. Any other damages, whether incidental, consequential or otherwise.
3. Any claim against the customer by any other party.
4. Repair or attempted repair by anyone not authorized by ViewSonic.

Contact Information for Sales & Authorized Service (Centro Autorizado de Servicio) within Mexico:	
Name, address, of manufacturer and importers: México, Av. de la Palma #8 Piso 2 Despacho 203, Corporativo Interpalmas, Col. San Fernando Huixquilucan, Estado de México Tel: (55) 3605-1099 http://www.viewsonic.com/la/soporte/index.htm	
NÚMERO GRATIS DE ASISTENCIA TÉCNICA PARA TODO MÉXICO: 001.866.823.2004	
Hermosillo: Distribuciones y Servicios Computacionales SA de CV. Calle Juarez 284 local 2 Col. Bugambilias C.P: 83140 Tel: 01-66-22-14-9005 E-Mail: disc2@hmo.megared.net.mx	***Villahermosa:*** Compumantenimietnos Garantizados, S.A. de C.V. AV. GREGORIO MENDEZ #1504 COL, FLORIDA C.P. 86040 Tel: 01 (993) 3 52 00 47 / 3522074 / 3 52 20 09 E-Mail: compumantenimientos@prodigy.net.mx
Puebla, Pue. (Matriz): RENTA Y DATOS, S.A. DE C.V. Domicilio: 29 SUR 721 COL. LA PAZ 72160 PUEBLA, PUE. Tel: 01(52).222.891.55.77 CON 10 LINEAS E-Mail: datos@puebla.megared.net.mx	***Veracruz, Ver.:*** CONEXION Y DESARROLLO, S.A DE C.V. Av. Americas # 419 ENTRE PINZÓN Y ALVARADO Fracc. Reforma C.P. 91919 Tel: 01-22-91-00-31-67 E-Mail: gacosta@qplus.com.mx
Chihuahua Soluciones Globales en Computación C. Magisterio # 3321 Col. Magisterial Chihuahua, Chih. Tel: 4136954 E-Mail: Cefeo@soluglobales.com	***Cuernavaca*** Compusupport de Cuernavaca SA de CV Francisco Leyva # 178 Col. Miguel Hidalgo C.P. 62040, Cuernavaca Morelos Tel: 01 777 3180579 / 01 777 3124014 E-Mail: aquevedo@compusupportcva.com
Distrito Federal: QPLUS, S.A. de C.V. Av. Coyoacán 931 Col. Del Valle 03100, México, D.F. Tel: 01(52)55-50-00-27-35 E-Mail : gacosta@qplus.com.mx	***Guadalajara, Jal.:*** SERVICRECE, S.A. de C.V. Av. Niños Héroes # 2281 Col. Arcos Sur, Sector Juárez 44170, Guadalajara, Jalisco Tel: 01(52)33-36-15-15-43 E-Mail: mmiranda@servicrece.com
Guerrero Acapulco GS Computación (Grupo Sesicomp) Progreso #6-A, Colo Centro 39300 Acapulco, Guerrero Tel: 744-48-32627	***Monterrey:*** Global Product Services Mar Caribe # 1987, Esquina con Golfo Pérsico Fracc. Bernardo Reyes, CP 64280 Monterrey N.L. México Tel: 8129-5103 E-Mail: aydeem@gps1.com.mx
MERIDA: ELECTROSER Av Reforma No. 403Gx39 y 41 Mérida, Yucatán, México CP97000 Tel: (52) 999-925-1916 E-Mail: rrrb@sureste.com	***Oaxaca, Oax.:*** CENTRO DE DISTRIBUCION Y SERVICIO, S.A. de C.V. Murguía # 708 P.A., Col. Centro, 68000, Oaxaca Tel: 01(52)95-15-15-22-22 Fax: 01(52)95-15-13-67-00 E-Mail. gpotai2001@hotmail.com
Tijuana: STD Av Ferrocarril Sonora #3780 L-C Col 20 de Noviembre Tijuana, Mexico	***FOR USA SUPPORT:*** ViewSonic Corporation 14035 Pipeline Ave. Chino, CA 91710, USA Tel: 800-688-6688 (English); 866-323-8056 (Spanish); E-Mail: http://www.viewsonic.com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