

CDE3205-EP 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. VS17182

Thank you for choosing ViewSonic

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 !



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.

CE Conformity for European Countries

The device complies with the EMC Directive 2014/30/EU and Low Voltage Directive 2014/35/EU.

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 (Cr6+)	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. Lead as an alloying element in aluminium containing up to 0.4% lead by weight.
- 2. Copper alloy containing up to 4% lead by weight.
- 3. Lead in high melting temperature type solders (i.e. lead-based alloys containing 85% by weight or more lead).
- 4. 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.

Warning:

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

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.
- 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.

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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:	CDE3205-EP
	ViewSonic Commercial Display
Model Number:	VS17182
Document Number:	CDE3205-EP_UG_ENG Rev. 1A 09-18-17
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/eu/support/call-desk/

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

1. Unpacking and Installation

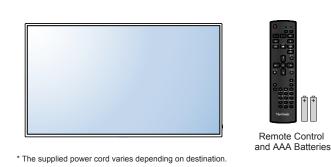
1.1. Unpacking

- 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
- Quick Start Guide
- Power cord (1.8 m)
- VGA cable (1.8 m)
- RS232 cable (1.8 m)
- RS232 daisy chain cable (2.4mm-2.4mm)
- IR sensor cable













IR sensor cable

Video Signal Cable

(D-SUB to D-SUB Cable)

Quick Start Guide

For North America

For UK

For China

RS232 Cable RS

RS232 daisy chain cable

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.
- Keep the package box and packing material for shipping the display.

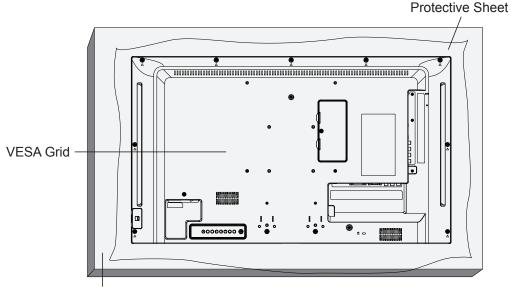
1.3. Installation Notes

- 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 2000 m in altitude. In installations at altitudes above 2000 m, 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.



Table

- 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 M4 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	W (kg)	
CDE3205-EP	5.2	

1.4.1. Using HDMI video input

Model	Vesa Grid
CDE3205-EP	100(H) x 100(V)mm / 200(H) x 200(V)mm

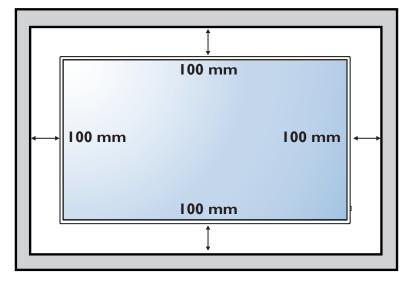
Caution:

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.

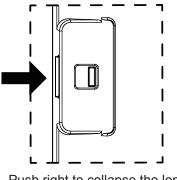
Ventilation Requirements for enclosure locating

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

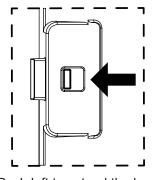


1.5. Using of Remote sensor and power indicator

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



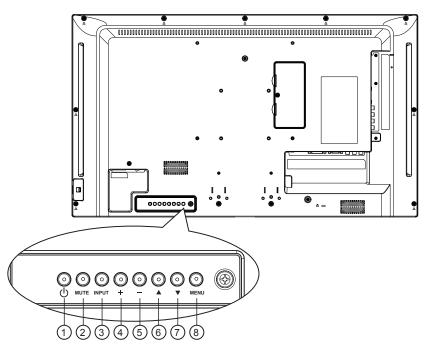
Push right to collapse the lens



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 [A] button

Move the highlight bar up to adjust the selected item while OSD menu is on.

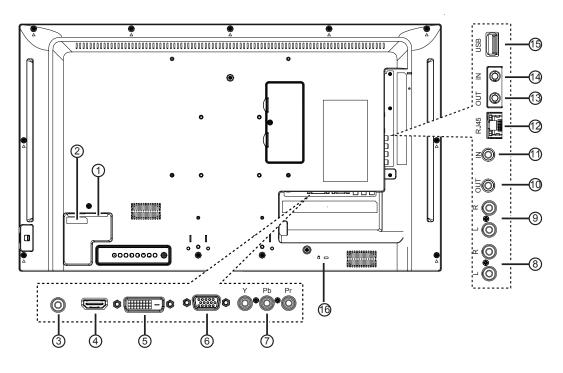
⑦ [▼] button

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.

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 PC LINE IN

Audio input from VGA source (3.5mm stereo phone).

4 HDMI IN

HDMI video / audio input.

5 DVI-D IN

DVI-D video input.

6 VGA IN (D-Sub)

VGA video input.

⑦ Y/CVBS

Video source input.

8 AUDIO IN

Audio input from external AV device (RCA).

(9) AUDIO OUT

Audio output to external AV device.

10 IR OUT / 11 IR IN

IR signal output /input for the loop-through function.

NOTES:

- This display's remote control sensor will stop working if the jack [IR IN] is connected.
- To remotely control your A/V device via this display, refer to page 11 for IR Pass Through connection.

12 RJ-45

LAN control function for the use of remote control signal from control center.

13 RS232 OUT / 14 RS232 IN

RS232C network output / input for the loop-through function.

(15) USB PORT

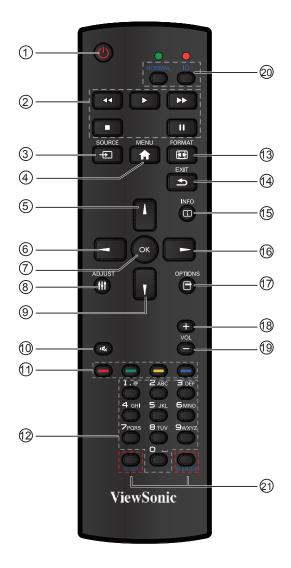
Connect your USB storage device.

16 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 (for Media Input only).

③ [- ► SOURCE] button

Press to toggle Video Source Menu. Press [▲] or [▼] button to select one of the video sources among Displayport, DVI-D, VGA, HDMI1, HDMI2, Media Player, Browser or PDF Player. 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 [**4**] button

Press to decrease the value in OSD menu.

7 [OK] button

Press to activate the setting inside the OSD menu.

(a) [ADJUST] button

Press to run the Auto Adjust function.

- **NOTE:** This button is functional for VGA input only.
- Image: Section (Image: Section Content) (Im
- I MUTE button
 Press to turn the mute function on/off.
- (1) COLOR buttons Choose tasks or options.(for Media Input only).
- (12) [NUMERIC] buttons Enter text for network setting.
- (13) Format button Press to switch screen aspect ratio.
- (1) [EXIT] button Press to turn back to the previous OSD menu.
- (INFO] button
 Press to turn on/off the information OSD displayed on the upper right corner of the screen.
- (b) button Press to increase the value in OSD menu.
- (7) [OPTION] button
 Access currently available options, picture and sound menus (for Media Input only).
- (B) **[+] Volume up button** Press to increase the audio output level.
- (9) [-] Volume down button Press to decrease the audio output level.
- 20 21 [ID SET] button No function.

2.3.2. Inserting 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

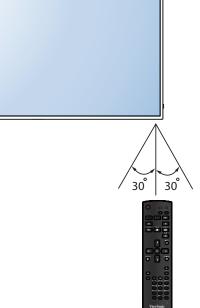
Point the front of the remote control toward this display's remote control sensor when pressing a button.

Use the remote control within a distance of less than 10m/33ft from this display's sensor, and a horizontal and vertical angle of less than 30 degrees.

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



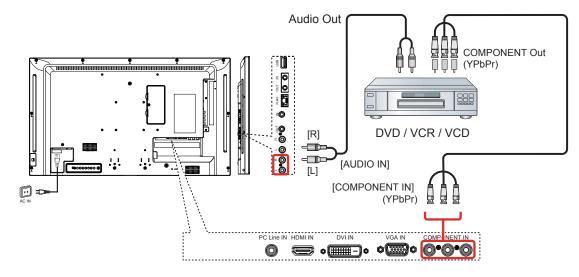




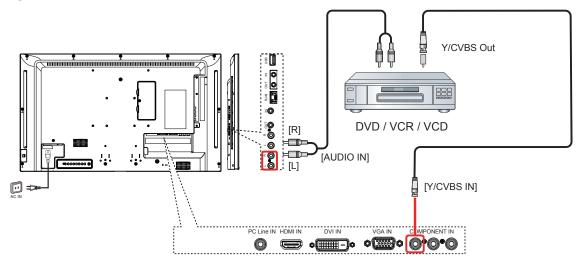
3. Connecting External Equipment

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

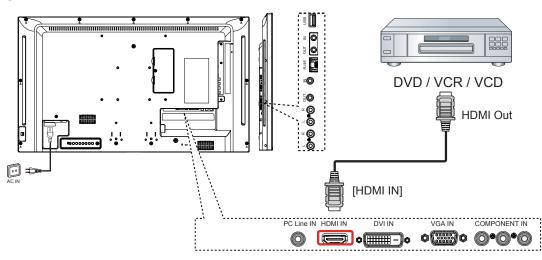
3.1.1. Using HDMI video input



3.1.2. Using Video Source input

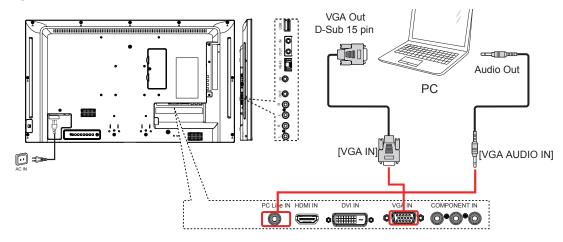


3.1.3. Using HDMI video input

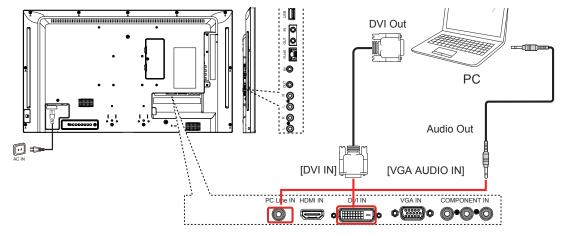


3.2. Connecting a PC

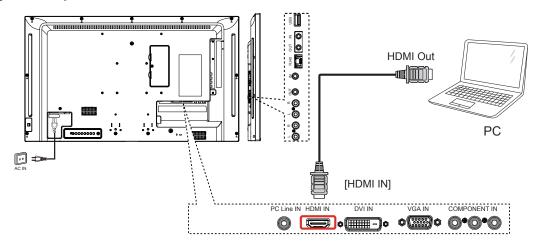
3.2.1. Using VGA input



3.2.2. Using DVI input

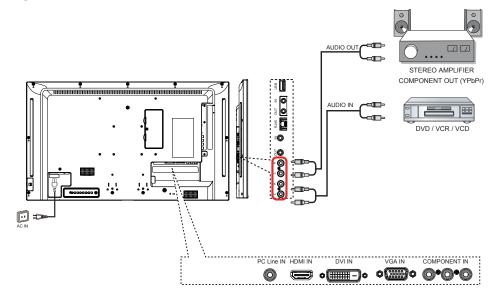


3.2.3. Using HDMI input



3.3. Connecting Audio Equipment

3.3.1. Connecting an external audio device

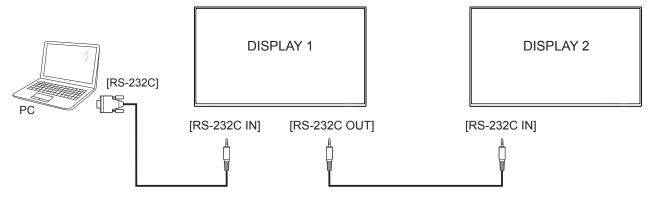


3.4. Connecting Multiple Displays in a Daisy-chain Configuration

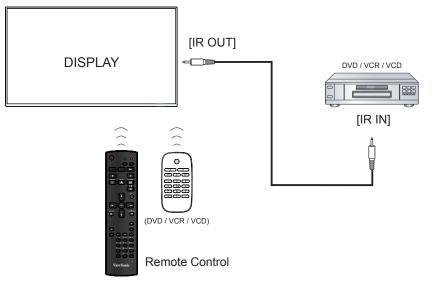
You can interconnect multiple displays to create a daisy-chain configuration for applications such as a video wall.

3.4.1. Display control connection

Connect the [RS232C OUT] connector of DISPLAY 1 to the [RS232C IN] connector of DISPLAY 2.

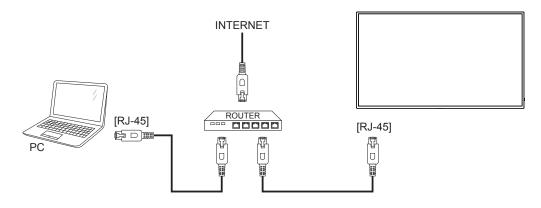


3.5. IR Pass-through Connection



3.6. Wire-connecting to Network

If you connect this display to a home network, you can play photos, music and videos from your computer. See Play multimedia files via Local Area Network (Page 13) for more detail.



To setup the network:

- 1. Switch on the router and switch on its DHCP setting.
- 2. Connect the router to this display with an Ethernet cable.
- 3. Press [] MNEU button to display the OSD menu.
- 4. Press ▲ or ▼ button to select the menu item {Network settings}. Press SET button to enter its submenu.
- 5. Press \blacktriangle , \blacktriangledown , \blacklozenge , \blacklozenge to adjust its value. Press SET button to confirm.

4. Operation

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

4.1. Watch the Connected Video Source

See page 8 for external equipments connection.

- 1. Press SOURCE button.
- 2. Press \blacktriangle or \blacktriangledown button to select a device, then
- 3. press OK button.

4.2. 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 편 FORMAT button
- 2. Press ▲ or ▼ button to select a picture format, then press button.
- {FULL}: Enlarge the picture to fill the screen.
- {NORMAL}: 4:3 format.
- {CUSTOM}: 16:9 format.
- {**REAL**}: This mode displays the image pixelby-pixel on screen without scaling the original image size.
- {DYNAMIC}: Auto format.

4.3. Play Multimedia Files

You can play videos, photos, and music on your display from:

- Your computer and mobile device connected through your network.
- USB Multimedia Player for Scheduled Playback of Videos, Photos and Music.
- A USB device connected to this display.

4.3.1. Play files from computer and mobile device

To play files from computer and mobile device, you will need:

- The CDE3205-EP features a RJ45 port to connect directly with PCs or notebooks via Intranet connection. This provides for the efficient loading of content onto multiple displays through a primary display. DLNA like mobile devices can also utilize a wireless hub to push multimedia content directly to selected displays.
- A wired network, connected with a Universal Plug and Play (uPnP) router.

- Optional: A LAN cable that connects your display to your network.
- A media server running on your computer.
- Appropriate settings on your computer firewall to allow you to run the media server.

Set up the network

- 1. Connect your display and the computer to the same network. See page 9 for connecting your display to a network.
- 2. Switch on your computer and the router.

NOTE: If the apparatus does not return to Network mode due to external electrical disturbances (e.g. electrostatic discharge), user intervention is required.

Set up media sharing

- 1. Install a media server on your computer to share media files. These are some media servers:
- For PC: Windows Media Player 11 (or higher) or TVersity
- For Mac: Twonky
- 2. Switch on media sharing on your computer using the media server. For more information on how to set up the media server, refer to the website of the media server.

Play files

- 1. Press → button.
- 2. Select [Browse network], then press **OK** button.
- 3. Select a file from the content browser, then press **OK** button to statrthepInaying.
- 4. Press the Play buttons on the remote control to control playing.

Tips:

- Select the top bar to filter your files by type.
- Select [Sort] to arrange the files by album name, ar tist, or other fields.
- To clear the list of offline media servers, press
 OPTIONS button, then select [Clear offline servers] and press OK button.

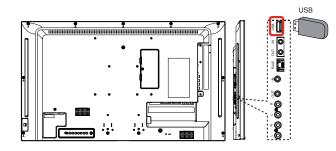
4.3.2. USB Multimedia Player for Scheduled Playback of Videos, Photos and Music

With the handy PC-less USB playback feature, photos, music and 1080p video can be immediately displayed on-screen from a USB drive. A user-friendly on-screen scheduling interface also lets you select time and date, as well as repeat and shuffle settings, or choose specific content to play from the attached USB source. (See page 14 USB scheduling)

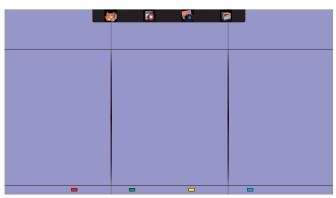
4.3.3. Play multimedia files from USB device

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.
- 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 .



- Press the ▲ button to go up to the top layer in the screen. Press ◀ ► button to select 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, WMA, M4A, AAC, AC3
- Movie: AVI, MP4, MOV, MPG/MPEG
- Photo: JPEG, BMP, GIF

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 CVBS,YPbPr,VGA, HDMI and DVI-D when you turn the display on next time.

4.4. Play options

4.4.1. Playing music files

- 1. Select **Music** in the top bar.
- 2. Select one music track, then press **OK** button.

Album	2		
	1. Music	05:05	
5			
🗉 Info 🗖 Play All	Sort	USB device	Options

- To play all the tracks in a folder, select one music file, then select {Play All}.
- To skip to the next or previous track, press ▲ or
 ▼ button.
- To pause the track, press **OK** button. Press **OK** button again to resume playback.
- To skip backward or forward 10 seconds, press
 ◄ or ► button.
- To search backward or forward, press ◄< or
 ▶ button, press repeatedly to toggle between different speeds.
- To stop the music, press 🗖 button.

Music options

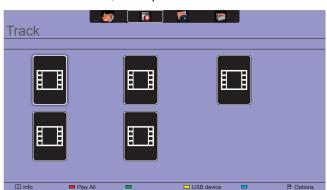
While you play music, press button, then press **OPTIONS** button to select an option:

- {Repeat}: Select {Repeat} to play a track or an album repeatedly, or select {Play once} to play a track once.
- {Media Server}: When you play content from a media server, you can select another media server.
- {Shuffle On} / {Shuffle Off}: Enable or disable random play of tracks.

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

4.4.2. Playing movie files

- 1. Select **Movie o** in the top bar.
- 2. Select a video, then press **OK** button.



- To play all the videos in a folder, select one video file, then select {Play All}.
- To skip to the next or previous video, press ▲ or ▼ button.
- To pause the video, press **OK** button. Press **OK** button again to resume playback.
- To skip backward or forward 10 seconds, press
 ✓ or ► button.
- To search backward or forward, press ◄◄ or
 ▶ button, press repeatedly to toggle between different speeds.
- To stop the video, press **b**utton.

Movie options

While playing video, press **OPTIONS** button, then press **OK** button to select an option:

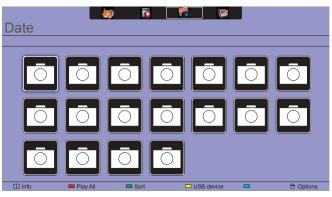
- {Subtitles}: Select the available subtitle settings.
- {Subtitle Language}: Select the language for subtitles if available.
- {Character Set}: Select the correct character set for the subtitles.
- {Audio Language}: Select an audio language.

- {Repeat}: Select {Repeat} to play the video file repeatedly or {Play once} to play the video file once.
- {Media server}: When you play content from a media server, you can select another media server.
- {Shuffle On} / {Shuffle Off}: Enable or disable random play of video files.

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

4.4.3. Playing photo files

- 1. Select **Photo** in the top bar.
- 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 {Play All}.

- 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 **OPTIONS** button, then press **OK** button to select an option:

- {Shuffle Off} / {Shuffle On}: Enable or disable random display of pictures in the slideshow.
- {Repeat}: Select {Repeat} to watch a slideshow repeatedly or {Play once} to watch once.
- {Slideshow Time}: Select the displaying time for each photo in the slideshow.
- {Slideshow Transitions}: Select the transition from one photo to the next.
- {Media Server}: When you play content from a media server, you can select another media server.

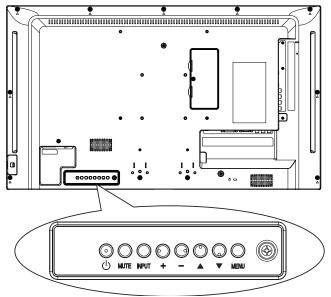
5. Change your settings

Using the remote control:



- Press the [A] MENU button to display the OSD menu.
- 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 **EXIT** button to exit the OSD menu.

Using this display's control buttons:



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

5.1. Settings

5.1.1. Picture menu

Picture	Picture style
Sound	Restore style
General settings	Brightness
Network settings	Contrast
	Black level
	Hue
	Colour
	Sharpness
	Advanced
	Video or PC
	Foramat and edges

Picture style

Select a predefined picture setting.

Restore style

Restore the last-selected predefined picture setting.

Brightness

Adjust the brightness of this display's backlight.

Contrast

Adjust video contrast.

Black level

Adjust screen brightness.

Hue

Adjust screen hue.

Colour

Adjust the colour saturation of the picture.

Sharpness

Adjust the sharpness of the picture.

Advanced

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

- {Noise reduction}: Select the amount of noise reduction for the picture.
- {Gamma}: Adjust the non-linear setting for picture luminance and contrast.
- {Color temp.}: Change the colour balance.
- {Custom color temp.}: Customise colour balance setting.
- {Advanced sharpness}: Enable superior sharpness, especially on lines and contours in the picture.
- {Dynamic contrast}: Dynamically enhance the details in the dark, medium and light areas of the picture.

- {Dynamic backlight}: Select a backlight level to optimise dynamic power consumption and picture contrast.
- {Colour enhancement}: Dynamically enhance the vividness and details of colours.

Video or PC

When viewing content from a connected video console, select {Video} to apply video settings. When a computer is connected through HDMI, select {PC}.

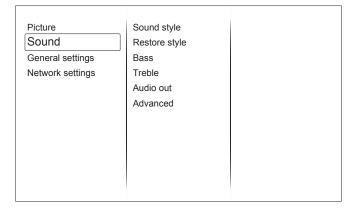
Make sure that {Format and edges} \rightarrow {Picture format} \rightarrow {Unscaled} is selected so as to view maximum detail.

Format and edges

Access advanced settings to control the displaying format of the picture.

- {Picture format}: Change the picture format.
- {Picture shift}: If available, move the position of the picture

5.1.2. Screen menu



Sound style

Access predefined sound settings.

Restore style

Restore the last-selected predefined sound setting.

Bass

Adjust the bass level of the speaker and headphones.

Treble

Adjust the treble level of the speaker and headphones.

Audio out

Adjust audio output volume.

Advanced

Access advanced settings to enhance your audio experience.

- {Auto volume leveling}: Enable the reduction of sudden volume changes.
- {Speaker}:Turn on or off the internal speakers.
- {Clear sound}: Enhance sound quality.

5.1.3. General settings menu

Picture	Menu language
Sound	Monitor id
General settings	Eco mode
Network settings	Auto search
	Clock
	Scheduling
	Sleep timer
	Auto switch off
	Auto adjust
	Pixel shift
	Control settings
	Factory settings

Menu language

Select language used for OSD menus.

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.

Eco mode

Set this display to reduce the power consumption automatically.

Auto search

Choose to let this display detect and display available signal sources automatically.

Clock

Adjust clock settings

Scheduling

This function allows you to program up to 3 different scheduled time intervals for this display to activate.

You can set:

- Which input source the display will use for each scheduled activation period.
- The time for the display to turn on and turn off.
- The days in a week for the display to activate.

NOTES:

- We recommend you to set up current date and time in the {Clock} menu before using this function.
- After changing the {Clock} option in the {General settings} menu, you need to set this {Scheduling} again.

Sleep timer

Switch off this display after a specified time.

Auto switch off

Set the time for this display to be switched off after a period of no activity. Press any key on the remote control to disable this function.

Auto adjust

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

Note: This item is functional for VGA input only.

Pixel shift

For video input sources, you may choose {On} to move the screen

image automatically to protect the display from "burn-in" or "after-image"

symptoms 30 seconds after not operating the display.

Control settings

- {Local KB lock}: Choose to enable or disable the keyboard (control buttons) function of this display.
 - {Unlock}: Enable the keyboard function.
 - {Lock all}: Lock all keyboard function.
 - {Lock but volume}: Disable all the keyboard function except the VOL+ and VOL- button.
 - {Lock but power}: Disable all the keyboard function except the () POWER button.
- {RC lock}: Choose to enable or disable the button function of the remote control.
 - {Unlock}: Enable the button function.
 - {Lock all}: Lock all button function.
 - {Lock but volume}: Disable all the button function except **VOL+** and **VOL-** button.

NOTE:

To disable the lock function from [Local KB lock] or [RC lock] item, press buttons 🛖 1 9 9 8 on the remote control.

Factory settings

Reset all your customized settings to the factory defaults.

5.2. Network Settings

Picture	View network settings
Sound	Network configuration
General settings	Static IP configuration
Network settings	Digital Media Render
	Wake On LAN
	Network name

View network settings

View connected network status.

Network settings

Select how this display should assign addresses to the network resources.

Static IP Configuration

Assign {IP address}, {Netmask}, {Gateway}, {DNS1}, and {DNS2} for this display.

Digital Media Renderer - DMR

Receive multimedia files from Smar t Phones or Tablets connected to your network.

Wake on lan

Choose On and you can turn on the display by network.

Network name

Rename this display for easy identification if you have more than one display connected to your network.

6. USB device compatibility

File Extensions	Container	Video codec	Maximum resolution	Max.Frame Rate (fps)	Max.Bit Rate (Mbps)	Audio codec	
.mpg		MPEG-1	1920x1080	25p,30p,50i,60i	30	MPEG-1	
		MPEG-2	1920x1080	25p,30p,50i,60i	30	(L1&L2), MPEG-1, 2, 2.5	
mpeg .vob	PS	MPEG-4 ASP	1920x1080	25p,30p,50i,60i	30	L3, AAC/HE-	
		H.264	1920x1080	25p,30p,50p,60p,60i	30	AAC (v1&v2), DVD-PCM, AC3	
		MPEG-2	1920x1080	25p,30p,50i,60i	30		
		MPEG-4 ASP	1920x1080	25p,30p,50i,60i	30	MPEG-1	
		H.264	1920x1080	25p,30p,50p,60p,60i	30	(L1&L2), MPEG-1,2,2.5	
.ts	TS	MVC	1920x1080i@field rate=50, 60Hz 1920x1080p@frame rate=24, 25,30Hz 1280x720p@frame rate=50, 60Hz	-	30	L3, AAC/HE- AAC (v1&v2), AC3, E-AC3, Dolby Pulse	
		MPEG-2	1920x1080	25p,30p,50i,60i	30		
		MPEG-4 ASP	1920x1080	25p,30p,50i,60i	30	MPEG-	
.ts		H.264	1920x1080	25p,30p,50p,60p,60i	30	1(L1&L2),	
.m2ts .mts .mt2	MaTS TTS	MVC	1920x1080i @ field rate=50, 60Hz 1920x1080p @ frame rate=24, 25,30Hz 1280x720p @ frame rate=50, 60Hz	-	30	MPEG-1,2,2.5 L3, AAC/HE- AAC (v1&v2), AC3,E-AC3, Dolby Pulse	
	AVCHD	MPEG-2	1920x1080	25p,30p,50i,60i	30	MPEG-1 (L1&L2), MPEG-1,2,2.5	
.ts		MPEG-4 ASP	1920x1080	25p,30p,50i,60i	30		
.m2ts .mts		H.264	1920x1080	25p,30p,50p,60p,60i	30	L3, AAC/HE- AAC (v1&v2), AC3,E-AC3, Dolby Pulse	
.ts .m2ts .mts	AVCHD	MVC	1920x1080i@field rate=50, 60Hz 1920x1080p@frame rate=24, 25,30Hz 1280x720p @ frame rate=50, 60Hz	-	30	MPEG-1 (L1&L2), MPEG-1,2,2.5 L3, AAC/HE- AAC (v1&v2), AC3,E-AC3, Dolby Pulse	
.m4v	M4V	H.264	1920x1080	25p,30p,50p,60p,60i	30	AAC	
		H.264	1920x1080	25p,30p,50p,60p,60i	30		
.ism/ Manifest .mpd	frag MP4	MVC	1920x1080i@field rate=50, 60Hz 1920x1080p@frame rate=24, 25,30Hz 1280x720p @ frame rate=50, 60Hz	-	30	AAC/ HE-AAC (v1&v2), AC3, E-AC3,WMA, WMA-PRO	
.mp4		MPEG-4 ASP	1920x1080	25p,30p,50i,60i	30		
	MP4	H.264	1920x1080		30		
		MVC	1920x1080i@field rate=50, 60Hz 1920x1080p@frame rate=24, 25,30Hz 1280x720p @ frame rate=50, 60Hz	-	30	AAC/ HE-AAC (v1&v2), AC3 E-AC3,WMA, WMA-PRO	
		WMV9/VC1	1920x1080	30p, 60i	30	1	

		MPEG-4 ASP	1920x1080	25p,30p,50i,60i	30	MPEG-1
.mkv .mk3d	MKV	H.264	1920x1080		30	(L1&L2), MPEG-1,2,2.5 L3, AAC/ HE-AAC (v1&v2), AC3,E-AC3, WMA, WMA- PRO

USB Multimedia Formats

File Extensions	Container	Video codec	Maximum resolution	Max.Frame Rate (fps)	Max.Bit Rate (Mbps)	Audio codec
.mp3	MP3	-	-	48	384	MPEG-1, 2, 2.5 L3
.wma .asf	WMA (V2 up to V9.2)	-	-	48	192	WMA
.wma	WMA Pro	-	-	96	768	WMA,WMA Pro
.wav(PC)	LPCM	-	-	192	768	LPCM
.aif(mac) .aiff(mac)	LPCM	-	-	192	768	LPCM
.aac .mp4 .m4a	AAC	-	-	48	1024	AAC,HE-AAC (v1&v2)
.pls .m3u	Playlists	-	-	-	-	-
.m4a	M4A	-	-	48	1024	AAC, HE-AAC (v1&v2)

USB Photo Formats

File Extensions	Container	Video codec	Maximum resolution	Max.Frame Rate (fps)	Max.Bit Rate (Mbps)	Audio codec
jpg/jpeg	JPEG		baseline: color mode = 444, size <=32768x16128 color mode = 422v, size <= 16384x16128 color mode = other, not support	-	-	-
bmp	BMP		4096x3072_4bit, 2730x2500_8bit, 2048x1536_16bit, 1500x1200_32bit	-	-	-
png	PNG		4096x3072_4bit, 2730x2500_8bit, 2048x1536_16bit, 1500x1200_32bit	-	-	-
gif	GIF		4096x3072_4bit, 2730x2500_8bit, 2048x1536_16bit, 1500x1200_32bit	-	-	-

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	Active Resolution		Defrech Dete	Refresh Rate Pixel Rate	Acrest Datio	Stand for Mode
Resolution	H Pixels	V Lines	- Refresh Rate	Pixel Rale	Aspect Ratio	Stand for Mode
			60 Hz	25.175 MHz		
VGA	640	480	72 Hz	31.5 MHz	4:3	Video Graphic Array
			75 Hz	31.5 MHz		
WVGA	720	400	70 Hz	33.75 MHz	16:9	Wide Video Graphic Array
	000	600	60 Hz	40 MHz	4.0	CuparVCA
SVGA	800	600	75 Hz	49.5 MHz	4:3	Super VGA
XGA	1024	768	60 Hz	65 MHz	4:3	Extended Graphic
AGA	1024	700	75 Hz	78.75 MHz		Array
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	Active Resolution		Refresh Rate	Dival Data	Acrest Datia	Stand for Mode
Resolution	H Pixels	V Lines	Refresh Rate	Pixel Rate	Aspect Ratio	Stand for Mode
480i	720	480	29.97 Hz	13.5 MHz	4:3	Modified NTSC
480p	720	400	59.94 Hz	27 MHz	4.5	Standard
576i	720	480	25 Hz	13.5 MHz	4.2	Modified PAL
576p	720	400	50 Hz	27 MHz	4:3	Standard

HDTV Resolution:

Standard	Active Resolution		Refresh Rate	Pixel Rate	Acrest Datia	Stand for Mode		
Resolution	H Pixels	V Lines	Refresti Rate	FIXEI Rale	Aspect Ratio	Stand for wode		
700-	4000	720	50 Hz	74.25 MHz	16:9	Normally DVB Mode		
720p	1280		60 Hz					
1080i	1020	1920 1080	25 Hz	74.25 MHz	16:9	Normally ATSC Mode		
10001	1920	1080	30 Hz	74.25 10112	10.9	Normally ATSC Mode		
1080p	1020	1020	1920	1080	50 Hz	148.5 MHz	16:9	Normally ATSC Mode
1080p	1920	1000	60 Hz		10.9	Normally ATSC MODE		

• 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 ver tical and horizontal frequency-select mode exists, select 60Hz (ver tical) 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 [-D 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 to the IBM/VESA standards, and based on the analog input.
- The DVI support mode is regarded as same to the PC support mode.
- The best timing for the ver tical frequency to each mode is 60Hz.

8. Cleaning and Troubleshooting

8.1. Cleaning

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.

8.2. Troubleshooting

Symptom	Possible Cause	Remedy
No picture is displayed	 The power cord is disconnected. The main power switch on the back of the display is not switched on. The selected input has no connection. The display is in standby mode. 	 Plug in the power cord. Make sure the power switch is switched on. 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	 The signal cable is not connected properly. The input signal is beyond the capabilities of the display. 	 Make sure that the signal cable is attached firmly. 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	 Improperly connected source signal cable. Volume is turned all the way down. [MUTE] is turned on. No external speaker connected. 	 Make sure that both video inputs and sound inputs are correctly connected. Press [VOL +] or [VOL -] button to hear sound. Switch MUTE off by using the •\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$
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.

9. Technical Specifications

9.1. CDE3205-EP

Display:

Item	Specifications	
Screen Size (Active Area)	698.4(H) x 392.85(V)	
Aspect Ratio	16:9	
Number of Pixels	1920 (H) x 1080 (V)	
Pixel Pitch	0.36375(H) x 0.36375(V)	
Displayable Colors	16.7M	
Brightness	350 cd/m ²	
Contrast Ratio (Typical)	1200:1	
Viewing Angle	178 degrees	

In/Out Terminals:

Item		Specifications
Speaker Output	Internal Speakers	10W (L) + 10W (R) [RMS]/8Ω, 1 Way 1 Speaker System
		82 dB/W/M/160 Hz ~ 13 KHz
Audio Output	3.5mm jack x 1	0.5V [rms] (Normal) / 2 Channel (L+R)
Audio Input	3.5 mm Stereo × 1	0.5V [rms] (Normal) / 2 Channel (L+R)
	RCA Jack × 2	
RS232C Input/	2.5mm jack x 2	RS232C in/RS232C out
Output		
LAN	RJ-45 Jack × 1 (8 pin)	10/100 LAN Port
HDMI Input	HDMI Jack × 1	Digital RGB: TMDS (Video + Audio)
	(Type A) (19 pin)	MAX: Video: 720p, 1080p, 1920 × 1080/60 Hz (WUXGA) Audio: 48 KHz / 2 Channel (L+R)
		Supports LPCM only
DVI-D Input	DVI-D jack	Digital RGB:TMDS (Video)
VGA Input	D-Sub Jack x 1	Analog RGB: 0.7V [p-p] (75Ω), H/CS/V:TTL (2.2kΩ),
	(15 pin)	SOG: 1V [p-p] (75Ω)
		MAX: 720p, 1080p, 1920 x 1080/60 Hz (WUXGA)
Component Input	RCA Jack x 3	Y: 1V [p-p] (75Ω), Pb: 0.7V [p-p] (75Ω), Pr : 0.7V [p-p] (75Ω)
		MAX: 480i, 576i, 480p, 576p, 720p, 1080i, 1080p
Video Input	RCA x 1 (Share with Component_Y)	Composite 1V [p-p] (75Ω)

General:

Item	Specifications
Power Supply	AC 100 - 240V, 50 - 60Hz, 1.5A
Power Consumption (Max)	81W
Power Consumption (typ.)	57W
Power Consumption (Standby & Off)	<0.5 W (RS232 in active)
Dimensions (With Stand) [W x H x D]	726.5mmx462.93mmx239.8mm
Dimensions (Without Stand) [W x H x D]	726.5mmx425.4mmx63.6mm
Weight (With Stand)	6.67 Kg
Weight (Without Stand)	5.2 Kg
Gross Weight (Without Stand)	7.8 Kg

Environmental Condition:

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

Internal Speaker:

Item	Specifications
Туре	1 Way 1 Speaker
Input	10 W (RMS)
Impedance	16Ω
Output Sound Pressure	82 dB/W/M
Frequency Response	160 Hz ~ 13 KHz

10. RS232 Protocol

10.1. 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.

10.2. Description

10.2.1. 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				
Тір	TXD	Output from Commercial TV or DS				
Ring	RXD	Input to Commercial TV or DS				
Sleeve	GND					

10.2.2.Communication Setting

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

10.2.3. 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)

10.3. Protocol

10.3.1.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: TV/DS ID	Total Byte of Message excluding "CR". Identification for each of TV/DS (01~98; default is 01) If we want to set all TV/DS settings, use the TV/DS ID " 99 ", and it will not have Reply command on this function. 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	<u>0x38</u>	<u>0x30</u> <u>0x32</u>	<u>0x73</u>	<u>0x24</u>	<u>0x30</u>	<u>0x37</u>	<u>0x36</u>	<u>0x0D</u>

Reply (Hex Format)

Name	Length	ID	Command Type	CR
Hex	<u>0x34</u>	<u>0x30</u> <u>0x32</u>	<u>0x2B</u>	<u>0x0D</u>

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	<u>0x38</u>	<u>0x30</u> <u>0x32</u>	<u>0x73</u>	<u>0x24</u>	<u>0x31</u>	<u>0x37</u>	<u>0x36</u>	<u>0x0D</u>

Reply (Hex Format)

Name	Length	ID	Command Type	CR
Hex	<u>0x34</u>	<u>0x30</u> <u>0x32</u>	<u>0x2D</u>	<u>0x0D</u>

Set function table:

Set Function	Length	ID	Command Type	Cor	nmand	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	c,	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 008 : Internal Mem 009 : DP	 No need for USB 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	í.	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	В	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
Tiling-Mode	8	S	Р	50	000: OFF 001: ON	(for DS)
Tiling- Compensation	8	S	Q	51	000: OFF 001: ON	(for DS) Bezel width compensation
Tiling-H by V Monitors	8	S	R	52	01x~09x: H 0x1~0x9: V	(for DS) 1. 2 nd digital for H monitors 2. 3 rd digital for V monitors
Tiling-Position	8	S	S	53	001~025	(for DS) Copy the screen of Position# to identified display
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

10.3.2. 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 0D (6rI000<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	<u>0x38</u>	<u>0x30</u> <u>0x35</u>	<u>0x67</u>	<u>0x62</u>	<u>0x30</u>	<u>0x30</u>	<u>0x30</u>	<u>0x0D</u>

Reply (Hex Format)

Na	ame	Length	ID	Command Type	Command	Value1	Value2	Value3	CR
н	lex	<u>0x38</u>	<u>0x30</u> <u>0x35</u>	<u>0x72</u>	<u>0x62</u>	<u>0x30</u>	<u>0x36</u>	<u>0x37</u>	<u>0x0D</u>

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	<u>0x38</u>	<u>0x30</u> 0x35	<u>0x67</u>	<u>0XD3</u>	<u>0x30</u>	<u>0x30</u>	<u>0x30</u>	<u>0x0D</u>

Reply (Hex Format)

Name	Length	ID	Command Type	CR
Hex	<u>0x34</u>	<u>0x30</u> <u>0x35</u>	<u>0x2D</u>	<u>0x0D</u>

Get function table:

Get Function	Length	ID	Command Type	Co	mmand	Value Range	Comments
			- 750	Code (ASCII)	Code (Hex)	(Three ASCII bytes)	
Get-Contrast	8		g	а	61	000 ~ 100	Gets Contrast value
Get-Brightness	8		g	b	62	000 ~ 100	Gets Brightness value
Get-Sharpness	8		g	с	63	000 ~ 100	Gets Sharpness value
Get-Color	8		g	d	64	000 ~ 100	Gets Color value
Get-Tint	8		g	е	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	I	6C	000: STBY 001: ON	
Get-Remote control	8		g	n	6E	000 : Disable 001 : Enable 002 : Pass through	
Get-Power Lock	8		g	0	6F	000 : Unlock 001 : Lock	
Get-Button Lock	8		g	р	70	000 : Unlock 001 : Lock	
Get-Menu Lock	8		g	q	71	000 : Unlock 001 : Lock	
Get-Tiling Mode	8		g	v	76	000: OFF 001: ON	(for DS)
Get-Tiling Compensation	8		g	w	77	000: OFF 001: ON	(for DS) Bezel width compensation
Get-Tiling H by V monitors	8		g	x	78	01x~09x: H monitors 0x1~0x9: V monitors	(for DS) 1. 2 nd digital for H monitors 2. 3 rd digital for V monitors
Get-Tiling position	8		g	у	79	000: OFF 001~025	(for DS) Copy the screen of Position# to identified display
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

10.3.3. 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	<u>0x36</u>	<u>0x30</u> <u>0x35</u>	<u>0x70</u>	<u>0x31</u>	<u>0x30</u>	<u>0x0D</u>

Кеу	Code (HEX)
1	01
2	02
3	03
4	04
5	05
3 4 5 6 7	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 (+)/	13
BRIGHTNESS+	15
CHANNEL/PAGE DOWN (-)/	14
BRIGHTNESS-	
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.

11. 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= 1-866-463-4775	service.ca@viewsonic.com
Europe	www.viewsoniceurope.com	http://www.viewsoniceurope.com/e	u/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	www.viewsonic.com/la/	C= http://www.viewsonic.com/la/ soporte/servicio-tecnico	soporte@viewsonic.com
Macau	www.hk.viewsonic.com	T= 853 2840 3687	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= 1-800-688-6688	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:

- 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 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:

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:	Model Number:	
Document Number:	Serial Number:	
Purchase Date:	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.
- 5.
- 6.
- 7.

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, Corpo	prativo 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:	Villahermosa:		
Distribuciones y Servicios Computacionales SA de CV.	Compumantenimietnos Garantizados, S.A. de C.V.		
Calle Juarez 284 local 2	AV. GREGORIO MENDEZ #1504		
Col. Bugambilias C.P: 83140	COL, FLORIDA C.P. 86040		
Tel: 01-66-22-14-9005	Tel: 01 (993) 3 52 00 47 / 3522074 / 3 52 20 09		
E-Mail: disc2@hmo.megared.net.mx	E-Mail: compumantenimientos@prodigy.net.mx		
Puebla, Pue. (Matriz):	Veracruz, Ver.:		
RENTA Y DATOS, S.A. DE C.V. Domicilio:	CONEXION Y DESARROLLO, S.A DE C.V.		
29 SUR 721 COL. LA PAZ	Av. Americas # 419		
72160 PUEBLA, PUE.	ENTRE PINZÓN Y ALVARADO		
Tel: 01(52).222.891.55.77 CON 10 LINEAS	Fracc. Reforma C.P. 91919		
E-Mail: datos@puebla.megared.net.mx	Tel: 01-22-91-00-31-67		
	E-Mail: gacosta@qplus.com.mx		
Chihuahua	Cuernavaca		
Soluciones Globales en Computación	Compusupport de Cuernavaca SA de CV		
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