32” Standalone LCD Monitor

Model No.W32L100-PTA1

User Manual

Document Version 1.3
Document Part No.915232001001

Contents

Preface **4**
About This User Manual **7**
Chapter 1: Introduction **8**
1.1 Overview 9
1.2 Product Features 9
1.3 Package Contents 9
1.4 Product Overview 10
1.5 Control Buttons 11
1.6 Power Modes 11
Chapter 2: Installation **12**
2.1 Wiring Requirements 13
2.2 Mounting Guide 13
2.3 Cable Mounting Considerations 14
2.4 Connecting Power 15
2.5 Connecting Peripherals 15
2.6 Connector Description 16
2.6.1 VGA Connector 16
2.6.2 HDMI Connector 16
2.6.3 USB for Touch 16
2.6.4 RJ-11 Connector 17
2.6.5 DVI Connector 17
2.6.6 Display Port 1.2 Connector 18
2.6.7 SDI Input Connector 18
2.6.8 SDI Output Connector 18
2.6.9 DC out 5 V/ 1 A Connector 19
2.6.10 DC in24V Connector 19
2.6.11 RS-232 for Remote Control 19
2.7 Turning on the System 20
Chapter 3: Operating the Device **21**
3.1 IR Remote Control 22
3.2 OSD Menu Navigation 23
3.3 Troubleshooting Guide 24
Chapter 4: Important Information **25**
4.1 General Guideline 26
4.2 Indications for Use/ Intended Use 26
4.3 For Customers in the U.S.A 26
4.4 Customers outside the U.S.A 26
4.4.1 Important safeguards/notices for use in healthcare applications 27

4.4.2 Important EMC notices for use in healthcare applications 27
4.5 Warning and Cautions 31
4.5.1 ForthecustomersinU.S.A.andCanada 32
4.5.2 Safety 33
4.5.3 Installation 33
4.5.4 Precautions for connecting this unit with other healthcare devices 33
4.5.5 Use with an electrosurgical knife, etc. 33
4.5.6 Precautions for using this unit safely 34
4.5.7 Recommendation to use more than one unit 34
4.6 About the LCD Monitor Panel 34
4.6.1 Images that may cause burn-in 34
4.6.2 To reduce the risk of burn-in 34
4.6.3 About the screen protect panel 34
4.6.4 A long period of use 35
4.6.5 Moisture condensation 35
4.6.6 Cleaning before cleaning 35
4.6.7 Cleaning the monitor 35
4.6.8 Flat surface for better maintenance 36
4.6.9 Repacking 36
4.6.10 Disposal of the unit 36
4.7 Biological Hazard and Returns 37
Appendix 38
Appendix A: Technical Specifications 39
Appendix B: Frequency Table 40
Appendix C: Meaning of Symbols on the unit 41
Appendix D: Intended User Profile 42

Preface

Copyright Notice

No part of this document may be reproduced, copied, translated, or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the prior written permission of the original manufacturer.

Trademark Acknowledgement

Brand and product names are trademarks or registered trademarks of their respective owners.

Disclaimer

We reserve the right to make changes, without notice, to any product, including circuits and/or software described or contained in this manual in order to improve design and/or performance. We assume no responsibility or liability for the use of the described product(s) conveys no license or title under any patent, copyright, or masks work rights to these products, and make no representations or warranties that these products are free from patent, copyright, or mask work right infringement, unless otherwise specified. Applications that are described in this manual are for illustration purposes only. We make no representation or guarantee that such application will be suitable for the specified use without further testing or modification.

Warranty

Our warranty guarantees that each of its products will be free from material and workmanship defects for a period of one year from the invoice date. If the customer discovers a defect, we will, at his/her option, repair or replace the defective product at no charge to the customer, provide it is returned during the warranty period of one year, with transportation charges prepaid. The returned product must be properly packaged in its original packaging to obtain warranty service. If the serial number and the product shipping data differ by over 30 days, the in-warranty service will be made according to the shipping date. In the serial numbers the third and fourth two digits give the year of manufacture, and the fifth digit means the month (e. g., with A for October, B for November and C for December).

For example, the serial number 1W16Axxxxxxxx means October of year 2016.

Customer Service

We provide a service guide for any problem by the following steps: First, visit the website of our distributor to find the update information about the product. Second, contact with your distributor, sales representative, or our customer service center for technical support if you need additional assistance.

You may need the following information ready before you call:

- Product serial number
- Software (OS, version, application software, etc.)
- Description of complete problem
- The exact wording of any error messages

In addition, free technical support is available from our engineers every business day. We are always ready to give advice on application requirements or specific information on the installation and operation of any of our products.

Advisory Conventions

Four types of advisories are used throughout the user manual to provide helpful information or to alert you to the potential for hardware damage or personal injury. These are Notes, Important, Cautions, and Warnings. The following is an example of each type of advisory.

Note:
A note is used to emphasize helpful information

Important:
An important note indicates information that is important for you to know.

Caution A Caution alert indicates potential damage to hardware and explains how to avoid the potential problem.
Attention Une alerted' attention indique un dommage possible à l'équipement et explique comment éviter le problem potentiel.

Warning! An Electrical Shock Warning indicates the potential harm from electrical hazards and how to avoid the potential problem.
Avertissement! Un Avertissement de Choc Électrique indique le potentiel de chocs sur des emplacements électriques et comment éviter ces problèmes.

Safety Information

Warning! Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.
Avertissement! Toujours débrancher le cordon d'alimentation du châssis lorsque vous l'avez sur celui-ci. Ne pas brancher de connexions lorsque l'alimentation est présente. Des composants électroniques sensibles peuvent être endommagés par des sauts d'alimentation. Seulement du personnel expérimenté devraitouvrirces châssis.

Caution Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.
Attention Toujours verifier votre mise à la terre afin d'éliminer toute charge statique avant de toucher la carte CPU. Les équipements électroniques modernes sont très sensibles aux décharges d'électricité statique. Toujours utiliser un bracelet de mise à la terre comme précaution. Placer toutes les composantes électroniques sur une surface conçue pour dissiper les charge, ou dans un sac anti-statique lorsqu'elles ne sont pas dans le chassis.

Safety Precautions

For your safety carefully read all the safety instructions before using the device. Keep this user manual for future reference.

- Always disconnect this equipment from any AC outlet before cleaning. Do not use liquid or spray detergents for cleaning. Use a damp cloth.
- For pluggable equipment, the power outlet must be installed near the equipment and must be easily accessible.
- Keep this equipment away from humidity.
- Put this equipment on a reliable surface during installation. Dropping it or letting it fall could cause damage.
- The openings on the enclosure are for air convection and to protect the equipment from overheating.
- Before connecting the equipment to the power outlet make sure the voltage of the power source is correct.
- Position the power cord so that people cannot step on it. Do not place anything over the power cord.
- If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient over-voltage.
- Never pour any liquid into an opening. This could cause fire or electrical shock.
- Never open the equipment. For safety reasons, only qualified service personnel should open the equipment.
- All cautions and warnings on the equipment should be noted.
- Always ground yourself to remove any static charge before touching the board.

Warning!

- Any person who connects external equipment to signal input, signal output, or other connectors has formed a system and is therefore responsible for the system to comply with the standard IEC 60601-1, safety requirements for medical electrical systems
- Do not modify this equipment without authorization of the manufacturer."
- Do not place the Monitor to be difficult to operate the disconnection device from power supply cord and to fully disengage the power to the unit, please disconnect the power cord from the AC inlet.

Avertissement!

- Toute personne qui connecte un équipement externe à l'entrée de signal, à la sortie de signal ou à d'autres connecteurs a formé un système et est donc responsable de la conformité du système à la norme CEI 60601-1, exigences de sécurité pour les systèmes électromédicaux
- Ne modifiez pas cet équipement sans l'autorisation du fabricant. »
- Ne placez pas le moniteur dans des conditions difficiles à utiliser le dispositif de déconnexion du cordon d'alimentation et pour couper complètement l'alimentation de l'unité, veuillez débrancher le cordon d'alimentation de la prise secteur.

About This User Manual

This User Manual provides information about using the Winmate® 32” PT Series 4K UHD LCD Monitor. The documentation set provides information for specific user needs and includes:

- **32” PT Series 4K UHD LCD Monitor User Manual** – contains a detailed description of how to use the LCD Monitor, its components, and features.

Note: Some pictures in this guide are samples and can differ from the actual product.

Document Revision History

Version	Date	Note
1.0	27-Mar-2020	New document release.
1.1	3-Jul-2020	Revise accessories.
1.2	3-Aug-2020	Revise symbols and marking.
1.3	13-Oct-2020	Add 1.5 “Power Modes”

Chapter 1: Introduction

This chapter gives you product overview, describes features and hardware specification. You will find all accessories that come with the device in the packing list. Mechanical dimensions and drawings included in this chapter.

1.1 Overview

Congratulations on purchasing Winmate® 32” PT Series 4K UHD LCD Monitor. Versatile Display in a chassis standalone housing designed for wall and VESA mounting with integrated bracket design for industrial and commercial applications.

1.2 Product Features

Winmate® 32” PT Series 4K UHD LCD Monitor features:

- 32” LCD Monitor with 4K UHD (3840 x 2160) native resolution
- Projected capacitive(PCAP) touch screen
- Bottom side keys x 5
- Fanless and ventless design, easy-to-clean
- Support VGA , DVI , HDMI , DP variety signal input
- Support IR remote controller

1.3 Package Contents

Carefully remove the box and unpack your LCD Monitor. Please check if all the items listed below are inside your package. If any of these items are missing or damaged, contact us immediately.

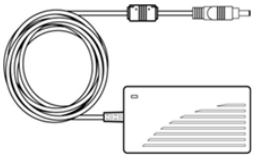
Factory shipment list:

- **LCD Monitor**

Varies by product

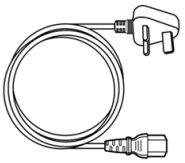
- **User Manual (Hardcopy)**

Part No.915232001001



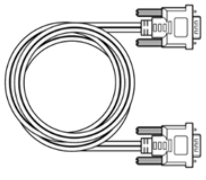
- **100-240 V AC Power Adapter**

Part No.922D150W24V4



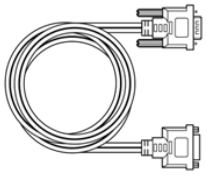
- **Power Cord**

Varies by country



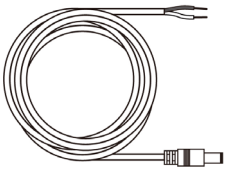
- **VGA Cable**

Part No.9441151150P3



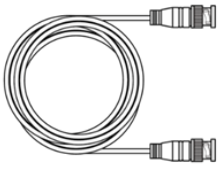
- **DVI Cable**

Part No.9455295290Q0



- **DC Jack to Open Wire Cable**

Part No. 94JQ02L020K2



- **SDICable**

Part No. 9470020020K1

- **Remote Controller**

Part No. 9B0000000418

- **M4 VESA Mount Screws (15 pcs)**

Part No. 913511101024

USB Cable for Touch (Optional)

Part No. 948018102100

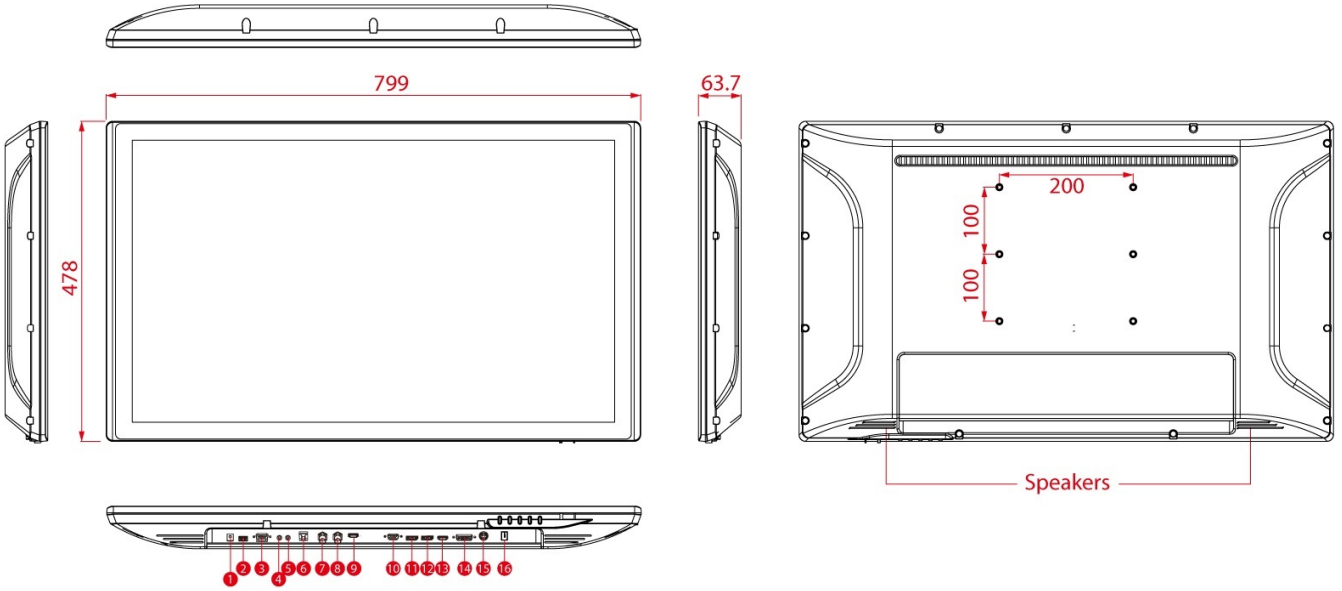
1.4 Product Overview

This section describes the physical appearance of the 32” PT Series 4K UHD LCD Monitor

Note: All dimensions in the drawing below has tolerance ± 1 mm.

32”, W32L100-PTA1

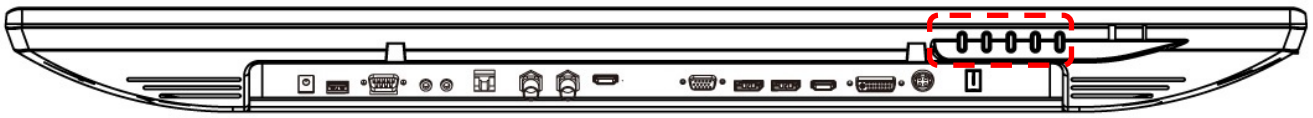
Unit: mm
Dimensions:799 x 478 x 63.7



№	Description	№	Description
❶	Power 5V/ 1A Out	❾	HDMI 2.0
❷	USB 2.0	❿	VGA in
❸	RS-232	⓫	DP 1.2 in
❹	Line out	⓬	DP 1.2 out
❺	Mic in	⓭	HDMI 1.4
❻	RJ-11	⓮	Dual DVI in
❼	SDI out	⓯	24 DC in
❽	SDI in	⓰	Switch

1.5 Control Buttons

Control Buttons are located on the OSD control panel on the rear side of the device. The OSD Control Panel varies by product specifications.



OSD Control Panel (5 Key)
32” PT Series LCD Monitor features 5 key OSD control panel.

Icon	Function
◀	Select left.
▶	Select the right / Call main OSD menu.
−	Decrease the value / Select up.
+	Increase the value / Select down.
⏻	Power switch

1.6 Power Modes

This table shows the LED indicator combinations and its meaning.

Green	Amber	Description
OFF	**OFF**	Power On mode Image being displayed
ON	**ON**	Searching for a signal
OFF	**ON**	No signal found or standby mode
ON	**OFF**	Soft Power Off mode The soft power button was pressed
OFF	**OFF**	Hard Power Off mode No image being displayed

Chapter 2: Installation

This chapter provides hardware installation instructions and mounting guide for all available mounting options. Pay attention to caution and warning to avoid any damages.

2.1 Wiring Requirements

The following common safety precautions should be observed before installing any electronic device:

- Strive to use separate, non-intersecting paths to route power and networking wires. If power wiring and device wiring paths must cross make sure the wires are perpendicular at the intersection point.
- Keep the wires separated according to interface. The rule of thumb is that wiring that shares similar electrical characteristics may be bundled together.
- Do not bundle input wiring with output wiring. Keep them separate.
- When necessary, it is strongly advised that you label wiring to all devices in the system.
- Do not run signal or communication wiring and power wiring in the same conduit. To avoid interference, wires with different signal characteristics (i.e., different interfaces) should be routed separately.
- Be sure to disconnect the power cord before installing and/or wiring your device.
- Verify the maximum possible current for each wire gauge, especially for the power cords. Observe all electrical codes dictating the maximum current allowable for each wire gauge.
- If the current goes above the maximum ratings, the wiring could overheat, causing serious damage to your equipment.

Be careful when handling the unit. When the unit is plugged in, the internal components generate a lot of heat which may leave the outer casing too hot to touch.

2.2 Mounting Guide

The 32” PT Series 4K UHD LCD Monitor can be applied for several different installation methods, including wall mount, VESA mount. Refer to sub-sections below for more details.

Caution Follow mounting instructions and use recommended mounting hardware to avoid the risk of injury.

Attention Suivez les instructions de montage et d'utilisation recommandé le matériel de montage pour éviter le risque de blessure.

The 32” PT Series 4K UHD LCD Monitor comes with VESA Mount holes for mounting. Winmate provides VESA mounting kit by request.

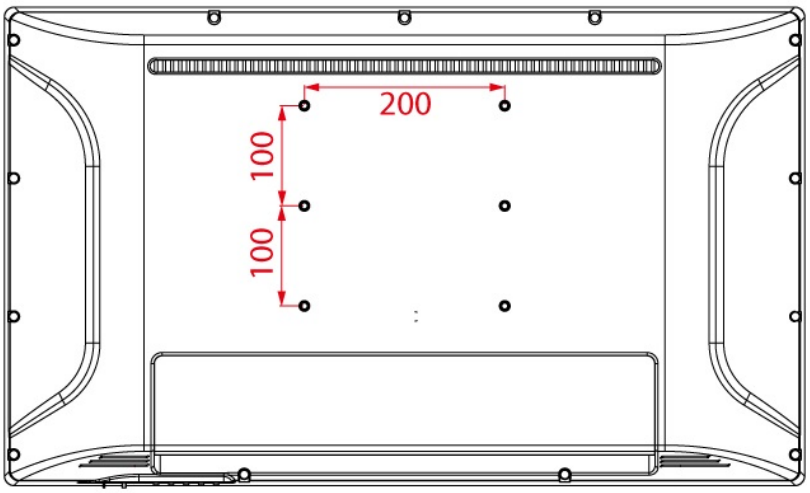
VESE plate dimensions and screw size:

Size	VESA PlateSize	Screw Size
32”	100x200 mm, 200x200 mm	M4x25, Ø6 mm

Mount the wall bracket to the wall using fasteners appropriate for the type of wall structure following all applicable building code standards. Ensure the unit is mounted to a solid structure material and surface, such as a support beam or wall.

Under normal use, the I/O port is always at the bottom of LCD Monitor.

VESA Mount 100 x 200 mm, 200 x 200 mm



2.3 Cable Mounting Considerations

For a nice look and safe installation, make sure cables are neatly hidden behind the device.

Caution Observe all local installation requirements for connection cable type and protection level.
Attention Suivre tous les règlements locaux d'installations, de câblage et niveaux de protection.

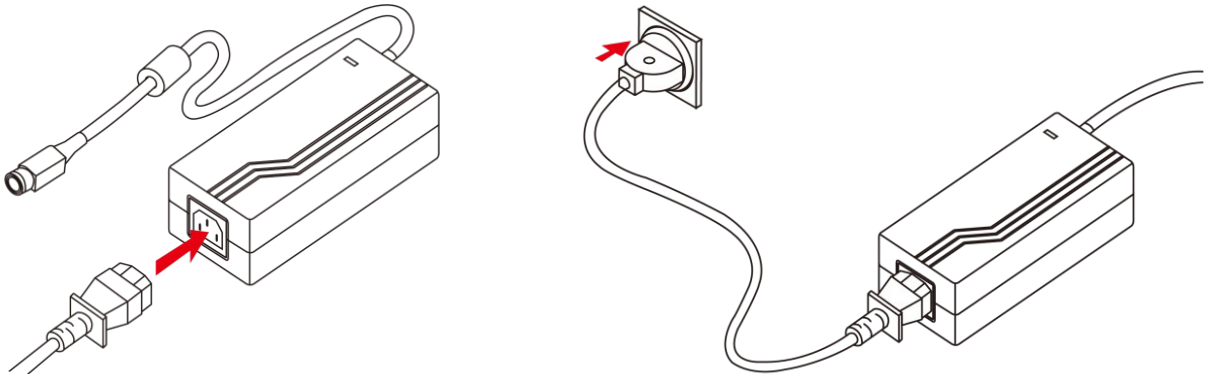
Caution Turn off the device and disconnect other peripherals before installation.
Attention Éteindre l'appareil et débrancher tous les périphériques avant l'installation.

2.4 Connecting Power

This section provides information on how to use connectors on the 32” PT Series 4K UHD LCD Monitor. Be cautious while working with these modules. Please carefully read the content of this chapter in order to avoid any damages.

Installation instruction:

1. Connect the AC cord to the AC IN terminal on the AC adaptor.
2. Connect the DC OUT terminal of the AC adaptor to the DC IN terminal on the monitor.
3. Align the notch on the cord connector with the guiding groove and plug it in.
4. Connect the AC cord plug to the power outlet.



2.5 Connecting Peripherals

The panel control port is designed for monitors that work with a variety of compatible video sources. Due to the possible deviations between these signal sources, you may have to make adjustments to the monitor settings from the OSD menu when switching between these sources.

Note: Notice that standard input terminals include 3G, SDI, VGA, HDMI 2.0, Dual DVI in, DP 1.2, HDMI 1.4, and Audio In. Standard output terminals include DP (Multi-Stream Transport), Audio Out, 5V/ 1A out, 3G SDI. (Loop Through supports 1080P. Your device may be equipped with other input terminals based on your order.

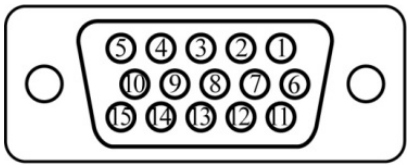
Use cables included in your package to connect your LCD Monitor to external devices.

2.6 Connector Description

2.6.1 VGA Connector

The 32” PT Series 4K UHD LCD Monitor uses standard 15pin D-sub connector. Plug 15-pin VGA signal cable to the VGA connector in the rear of the motherboard, and plug the other end to the monitor. Secure cable connectors with hexagonal copper pillars M3x4mm.

The pin assignment and signal names for VGA connector

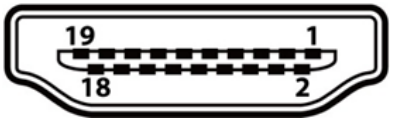


Pin №	Signal Name	Pin №	Signal Name
1	RED.	2	GREEN
3	BLUE	4	NC
5	GND	6	AGND
7	AGND	8	AGND
9	VGA_5V	10	GND
11	NC	12	DDCSDA
13	H Sync	14	V Sync
15	DDCSCL		

2.6.2 HDMI Connector

The 32” PT Series 4K UHD LCD Monitor uses standard HDMI connector. Plug HDMI signal cable to the HDMI connector on the rear side of the PC system and plug the other end to the monitor.

The pin assignment and signal names for HDMI connector

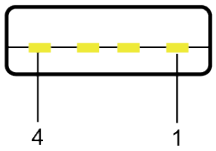


Pin №	Signal Name	Pin №	Signal Name
1	HDMI_RX2+	2	GND
3	HDMI_RX2-	4	HDMI_RX1+
5	GND	6	HDMI_RX1-
7	HDMI_RX0+	8	GND
9	HDMI_RX0-	10	HDMI_RXC+
11	GND	12	HDMI_RXC-
13	HDMI_CON_CEC	14	NC
15	HDMI_CON_SCL	16	HDMI_CON_SDA
17	GND	18	+5V_HDMI
19	HDMI_CON_HP		

2.6.3 USB for Touch

The 32” PT Series 4K UHD LCD Monitor uses a USB port for touch capabilities. Use USB cable to connect Display to touch.

The pin assignment and signal name of USB port for touch

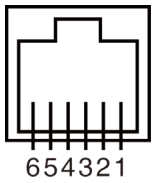


Pin No.	Signal Name	Pin No.	Signal Name
1	+5V	2	Data-
3	Data+	4	GND

2.6.4 RJ-11 Connector

The 32” PT Series 4K UHD LCD Monitor uses RJ11 connector to connect to external devices.

The pin assignment and signal name of the RJ11 connector

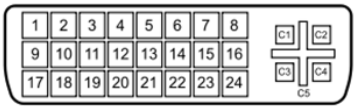


Pin No.	Signal Name	Pin No.	Signal Name
1	GND	2	RJ11_GPIO1
3	RJ11_GPIO2	4	RJ11_GPIO3
5	RJ11_GPIO4	6	GND

2.6.5 DVI Connector

Use dual-DVI to the connector in the rear of the PC system, and plug the other end to the TFT LCD Monitor. Fasten cable connectors with screws.

The pin assignment and signal names for the DVI connector

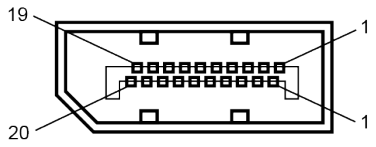


Pin №	Signal Name	Pin №	Signal Name
1	DVI_RX2-	2	DVI_RX2+
3	GND	4	4-
5	4+	6	DVI SCL
7	DVI SDA	8	NC
9	DVI_RX1-	10	DVI_RX1+
11	GND	12	3-
13	3+	14	+5V
15	DVI_CON_CABLE	16	DVI_CON_HP
17	DVI_RX0-	18	DVI_RX0+
19	GND	20	5-
21	5+	22	GND
23	DVI_CLKP	24	DVI_CLKN
C1	NC	C2	NC
C3	NC	C4	NC
C5	NC		

2.6.6 Display Port 1.2 Connector

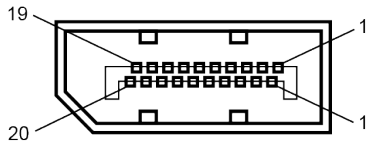
The 32” PT Series 4K UHD LCD Monitor uses Display Port 1.2 to connect to an external device.

The pin assignment and signal name of DP-IN



Pin No.	Signal Name	Pin No.	Signal Name
1	Lane 0	2	GND
3	Lane 0	4	Lane 1
5	GND	6	Lane 1
7	Lane 2	8	GND
9	Lane 2	10	Lane 3
11	GND	12	Lane 3
13	GND	14	Lane 3
15	AUX	16	GND
17	AUX	18	Hot Plug
19	Return	20	DP_PWR

Pin assignment and signal name of DP-Out



Pin No.	Signal Name	Pin No.	Signal Name
1	Lane 0	2	GND
3	Lane 0	4	Lane 1
5	GND	6	Lane 1
7	Lane 2	8	GND
9	Lane 2	10	Lane 3
11	GND	12	Lane 3
13	GND	14	Lane 3
15	AUX	16	GND
17	AUX	18	Hot Plug
19	Return	20	DP_PWR

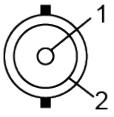
2.6.7 SDI Input Connector

The pin assignment and signal name of SDI-IN

Pin No.	Signal Name	Pin No.	Signal Name
1	SDI.	2	GND

2.6.8 SDI Output Connector

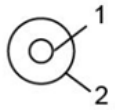
The pin assignment and signal name of SDI-Out



Pin No.	Signal Name	Pin No.	Signal Name
1	SDI	2	GND

2.6.9 DC out 5 V/ 1 A Connector

The pin assignment and signal name of DC out 5 V/ 1 A connector



Pin No.	Signal Name	Pin No.	Signal Name
1	+5V	2	GND

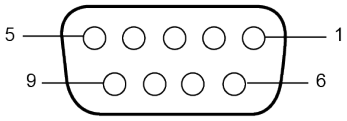
2.6.10 DC in24V Connector

Pin №	Signal Name	Pin №	Signal Name
1	+24VDC	2	GND
3	+24VDC	4	GND

2.6.11 RS-232 for Remote Control

Notice that RS-232 terminal for remote control is an optional connector of 332” PT Series 4K UHD LCD Monitor and may not be present in your device.

The pin assignment and signal name of RS-232 terminal

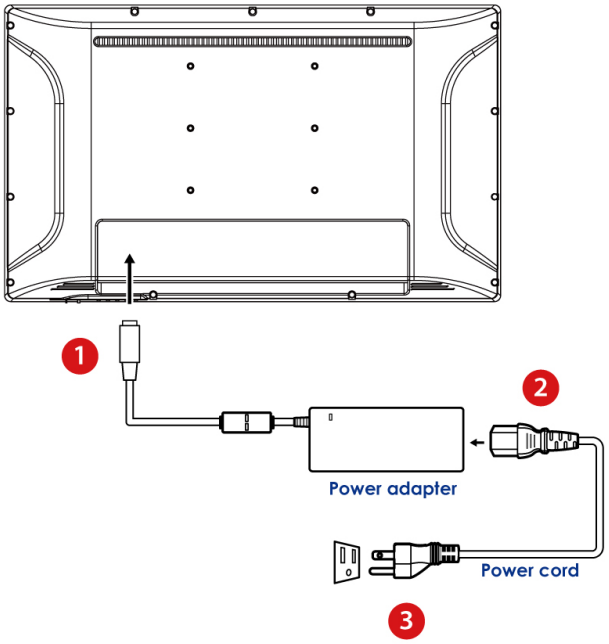


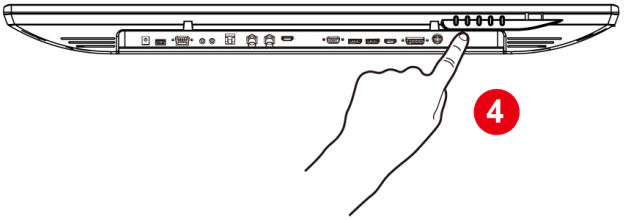
Pin No.	Signal Name	Signal Name
1	CD	NC (no connection)
2	RXD	Transmission data
3	TXD	Reception data
4	DTR	Data terminal ready
5	GND	GND
6	DSR	Data set ready
7	RTS	Request to send
8	CTS	Short circuit at pin 7 on the monitor
9	RI	NC (no connection)

2.7 Turning on the System

To turn on the system:

1. Connect the power adapter cable to the DC IN of the LCD Monitor.
2. Connect the power cord to the power adapter.
3. Connect the power cord to a power outlet.
4. Press the power button located on the OSD control panel on the rear to turn on the system.



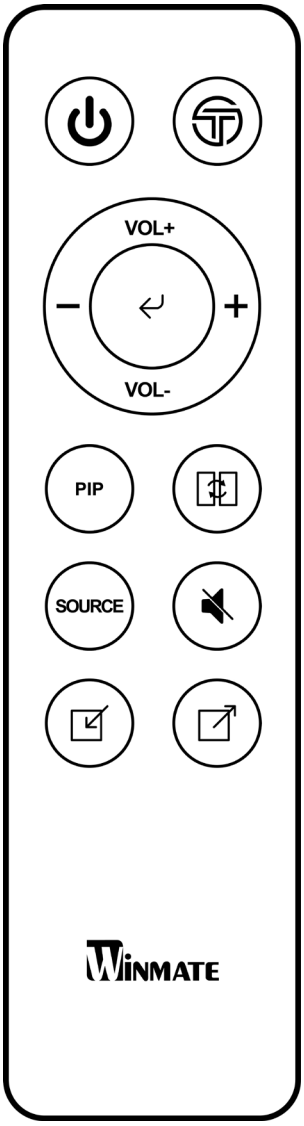


Chapter 3: Operating the Device

In this chapter you will find instructions on how to operate the LCD Monitor.

3.1 IR Remote Control

All the monitor controls can be accessed through the IR remote control. This controller has a few quick access keys for the user's convenience.



Soft Power

Quick Key – initiates Quick Menu

Central Key – Contains: Volume increase / decrease, down/ less, up/more, and enter

PIP Key – initiates the Picture in Picture Features.

Source Key – Initiates the next active video input

Zoom In Key – Initiates Zoom In

Swap Key – Initiates an image swap during a 2P mode

Mute Key – Activates or deactivates speakers

Zoom Out Key – initiates the Zoom out

3.2 OSD Menu Navigation

OSD Icon	Sub-menu	Settings	Note
BRICONTRAST	**BRIGHTNESS**	**slider bar**	Default 50
	Use to adjust the screen's brightness. Range 0 to 100		
	CONTRAST	**slider bar**	Default 50
	Use to adjust the screen's contrast. Range 0 to 100		
POSITION	**H POSITION**	**slider bar**	Default 50
	Use to adjust the image to the left or right on the screen. Range 0 to 100		
	V POSITION	**slider bar**	Default 50
	Use to adjust the image up or down on the screen. Range 0 to 100		
IMAGE	**AUTO**	**Select and execute**	
	Use to choose the best settings for the current input signal		
	CLOCK	**slider bar**	Default 50
	Use to adjust the value of horizontal image. Range 0 to 100		
	PAHSE	**slider bar**	Default 50
	Use to adjust the phase control (Phase adjustment may be required to optimize the display quality)		
	WHITE BALANCE	**Select and execute**	
	Use to set RGB signal voltage level		
COLOR	**USER**	**RGB slider bar**	
	Choose RED/GREEN/BLUE to set value of color temperature brightness to suit your own preference		
	9300K	**Select and execute**	
	Use to set value of monitor for the CIE coordinate 9300 color temperature		
	6500K	**Select and execute**	
	Use to set value of monitor for the CIE coordinate 6500 color temperature		
	ADC RIGHTNESS	**slider bar**	Default 50
	Set value of monitor for ADC. Brightness. Range 0 to 100		
XII GAMMA	**GAMMA 0**	**Select and execute**	Default GAMMA0
	Choose the parameter of GAMMA 0 as default setting.		
	GAMMA 1	**Select and execute**	
	Choose the parameter of GAMMA 1 as default setting.		
	GAMMA 2	**Select and execute**	
	Choose the parameter of GAMMA 2 as default setting.		
OP OPTION	**VR Brightness**	**ON/OFF**	Default OFF
	Choose the brightness control mode by VR control		
	Volume	**slider bar**	Default 10
	Use to set value of Volume		
	Speaker	**ON/OFF**	Default OFF
	Use to set value of Volume Speaker		

OSD Icon	Sub-menu	Settings	Note
CHANNEL	**AUTO SCAN**	**Select and execute**	Default mode
	Auto detect the input source		
	ANALOG	**Select and execute**	
	Switch the setting of signal input to Analog mode		
	HDMI	**Select and execute**	
	Switch the setting of signal input to HDMI mode		
RECALL	**YES**	**Select and execute**	
	Recall the factory default setting		
	NO	**Select and execute**	
	Return to main menu		
EXIT	**YES**	**Select and execute**	

3.3 Troubleshooting Guide

If your monitor fails to operate correctly, check the following chart for possible solution before calling for repairs. If you are unable to correct the fault by using this chart, stop using your monitor and contact your distributor or dealer for further assistance.

Condition	Check Point
The picture does not appear	• Check if the signal cable is firmly seated in the socket. • Check if the Power is ON at the computer • Check if the brightness control is at the appropriate position, not at the minimum.
The screen is not synchronized	• Check if the signal cable is firmly seated in the socket. • Check if the output level matches the input level of your computer. • Make sure the signal timings of the computer system are within the specification of the monitor. • If your computer was working with a CRT monitor, you should check the current signal timing and turn off your computer before you connect the VGA Cable to this monitor.
The position of the screen is not in the center	• Adjust the H-position, and V-position, or Perform the Auto adjustment.
The screen is too bright (too dark)	• Check if the brightness or contrast control is at the appropriate position, not at the Maximum (Minimum).
The screen is shaking or waving	• Perform the Auto adjustment. • Moving all objects which emit a magnetic field such as motor or transformer, away from the monitor. • Check if the specific voltage is applied. • Check if the signal timing of the computer system is within the specification of monitor.

Chapter 4: Important Information

In this chapter you will find important information. Please read this chapter before using the device.

4.1 General Guideline

It is recommended to reboot the device when some functions are defect or inactive. If it still can't solve the problems please contact your dealer or agent.

4.2 Indications for Use/ Intended Use

The LCD Monitor is intended to provide 4K 2D color video display from endoscopic/laparoscopic camera systems and other compatible healthcare imaging systems. The Monitor is a widescreen, high-definition, healthcare grade display for use during minimally invasive surgical procedures and is suitable for hospital operating rooms, surgical centers, clinics, doctors' offices and similar healthcare environments.

4.3 For Customers in the U.S.A

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

All interface cables used to connect peripherals must be shielded to comply with the limits for a digital devicepursuanttoSubpartBofpart15ofFCCRules.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference ,and
- This device must accept any interference received, including interference that may cause undesired operation.

4.4 Customers outside the U.S.A

This product has been manufactured by Winmate Inc.

Inquiries related to product compliance based on European Union legislation shall be addressed to the authorized representative, Winmate. For any service or guarantee matters, please refer to the addresses provided in the separate service or guarantee documents.

This unit has been certified per Standard CAN/ CSA-C22.2 No.60601-1.

4.4.1 Important safeguards/notices for use in healthcare applications

All the equipment connected to this unit shall be certified per Standard IEC 60601-1, IEC60950-1, IEC60065 or other IEC/ISO Standards applicable to the equipment.

Furthermore, all configurations shall comply with the system standard IEC60601-1. Everybody who connects additional equipment to the signal input part or signal output part configures a healthcare system, and is therefore, responsible that the system complies with the requirements of the system standard IEC60601-1.

If in doubt, consult the qualified service personnel.

The leakage current could increase when connected to other equipment.

For this equipment, all accessory equipment connected as noted above, must be connected to mains via an additional isolation transformer conforming to the construction requirements of IEC60601-1 and providing at least basic insulation.

This equipment generates, uses, and can radiate radio frequency energy. If it is not installed and used in accordance with the instruction manual, it may cause interference to other equipment. If this unit causes interference (which can be determined by unplugging the power cord from the unit), try these measures: Relocate the unit with respect to the susceptible equipment. Plug this unit and the susceptible equipment into different branch circuit.

4.4.2 Important EMC notices for use in healthcare applications

The W32L100-PTA1 needs special precautions regarding EMC and needs to be installed and put into service per the EMC information provided in the instructions for use. The portable and mobile RF communications equipment such as cellular phones can affect the W32L100-PTA1

WARNING! The use of accessories and cables other than those specified, with the exception of replacement parts sold by Winmate Inc., may result in increased emissions or decreased immunity of the W32L100-PTA1.

AVERTISSEMENT! L'utilisation d'accessoires et de cables autres que ceux spécifiés, à l'exception des pièces de rechangevendues par Winmate Inc., peutentraînerune augmentation des emission souune diminution de l'immunité du W32L100-PTA1.

Guidance and manufacturer's declaration-electromagnetic emissions		
The W32L100-PTA1 is intended for use in the electromagnetic environment specified below. The customer or theuseroftheW32L100-PTA1 should assure that it is used in such an environment.		
Emission test	Compliance	Electromagnetic environment-guidance
RF emissions CISPR 11	Group1	The W32L100-PTA1 uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	The W32L100-PTA1 is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	D	
Voltage fluctuations/flicker emissions IEC 61000-3-3	Complies	

Guidance and manufacturer's declaration - electromagnetic immunity			
The W32L100-PTA1 is intended for use in the electromagnetic environment specified below. The customer or the user of the W32L100-PTA1 should assure that it is used in such as environment.			
Immunity test	IEC60601 test level	Compliance level	Electromagnetic environment-guidance
Electrostatic discharge (ESD) IEC 61000-4-2	±6kVcontact ±8kVair	±6kVcontact ±8kVair	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines ±1 kV for input/ output lines	±2kVfor power supply lines ±1kVfor input/ output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV line(s) to line(s) ±2 kV line(s) to earth	±1kVdifferential mode ±2kVcommon mode	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5% (>95% dip in) for0.5cycle 40% (60% dipin) for5cycles 70% (30% dipin) for 25 cycles <5% (>95% dip in) for5sec	<5% (>95% dip in) for0.5cycle 40% (60% dipin) for 5 cycles 70% (30% dipin) for 25 cycles <5% (>95% dip in) for5sec	Mains power quality should be that of a typical commercial or hospital environment. If the user of the-W32L100-PTA1 requires continued operation during power mains interruptions, it is recommended that the W32L100-PTA1be powered from an uninterruptible power supply or a battery.
Power frequency (50/60Hz) magnetic field IEC 61000-4-8	3 A/m	3A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
NOTE: is the A.C. mains voltage prior to application of the test level.			

Guidance and manufacturer's declaration-electromagnetic immunity			
The W32L100-PTA1 is intended for use in the electromagnetic environment specified below. The customer or the user of the W32L100-PTA1 should assure that it is used in such as environment.			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment-guidance
Conducted RF IEC 61000-4-6	3 V rms 150 kHz to 80 MHz	3 V rms 150 kHz to 80 MHz	Portable and mobile RF communications equipment should be used no closer to any part oftheW32L100-PTA1, including cables, than the recommended separation distance calculated from the equation appliance to the frequency of the transmitter. Recommended separation distance: *d* $d=\left[\frac{3,5}{v_1}\right]\sqrt{p}$
Radiated RF IEC 61000-4-3	3 V/m 80 MHzto2.5 GHz	3 V/m 80 MHzto2.5 GHz	**Recommended Separation Distance** $d=\left[\frac{3,5}{E_1}\right]\sqrt{p}$80MHz to800 MHz $d=\left[\frac{7}{E_1}\right]\sqrt{p}$80MHz to2.5 GHz Where *P* is the maximum output power rating of the transmitter in watts (W) per the transmitter manufacturer and is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey,[A] should be less than the compliance level in each frequency range. [B] Interference may occur near equipment marked with following symbol:
NOTE 1: At 80 MHz and 800 MHz, the higher frequency range applies. NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			
Field strengths from fixed transmitters, such as base stations for radio(cellular/cordless) telephones and land mobile radios, amateur radio ,AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which theW32L100-PTA1 is used exceeds the applicable RF compliance level above, the W32L100-PTA1 should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocatingtheW32L100-PTA1.			

Recommended separation distances between portable and mobile Communications equipment and the W32L100-PTA1

TheW32L100-PTA1 is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user oftheW32L100-PTA1 can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the W32L100-PTA1 as recommended below, per the maximum output power of the communications equipment.

Rated maximum output power [W] of transmitter	Separation distance per frequency of transmitter [m]		
	150kHzto80MHz *d*=1.2 $d=\left[\frac{3,5}{v_1}\right]\sqrt{p}$	80 MHzto800MHz *d*=1.2 $d=\left[\frac{3,5}{E_1}\right]\sqrt{p}$	800 MHz to 2.5 GHz *d*=2.3 $d=\left[\frac{7}{E_1}\right]\sqrt{p}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated a maximum output power not listed above, the recommended separation distance *d* in meters (m)can be estimated using the equation applicable to the frequencyofthetransmitter,where*P*isthemaximumoutputpowerratingofthe transmitter in watts (W) per the transmitter manufacturer.

NOTE1: At 80 MHzand800 MHz, the separation distance for the higher frequency range applies.
NOTE2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

4.5 Warning and Cautions

WARNING ! The apparatus shall not be exposed to dripping or splashing. No objects filled with liquids, such as vases, shall be placed on the apparatus.

AVERTISSEMENT! L'appareil ne doit pas être exposé aux gouttes ou aux éclaboussures. Aucun objet rempli de liquide, tel que des vases, ne doit être placé sur l'appareil.

WARNING !To prevent injuries, firmly fix the unit to the floor or wall following the installation manual.

AVERTISSEMENT! Pour éviter les blessures, fixezfermementl'appareil au sol ou au mur en suivant le manueld'installation.

WARNING!If the W32L100-PTA1 should be used adjacent to or stacked with other equipment, it should be observed to verify normal operation in the configuration in which it will be used.

AVERTISSEMENT! Si le W32L100-PTA1 doitêtreutilisé à côtéouempilé avec un autreéquipement, ildoitêtreobservé pour vérifier son fonctionnement normal dans la configuration danslaquelleil sera utilisé.

CAUTIONWhen you dispose of the unit or accessories, you must obey the laws in the relative area or country and the regulations in the relative hospital regarding environmental pollution.

ATTENTIONLorsquevousvousdébarrassez de l'appareilou des accessoires, vousdevez respecter les lois de la régionou du pays concerné et les réglementations relatives à la pollution de l'environnementhospitalier.

CAUTIONWhen installing, the installation space must be secured in consideration of the ventilation and service operation. Leave a space 4 cm (1 5/8 inches) or more behind, 10 cm (4 inches) or more from the left and right sides of, 6 cm (2 3/8 inches) or more from the bottom side of, and 30 cm (11 7/8 inches) or more above the unit.

ATTENTIONLors de l'installation, l'espaced'installationdoitêtresécurisé en tenant compte de la ventilation et de l'opérationd'entretien. Laissez un espace de 4 cm (1 5/8 pouces) ou plus derrière, 10 cm (4 pouces) ou plus des côtés gauche et droit de , 6 cm (2 3/8 pouces) ou plus du côtéinférieur de, et 30 cm (11 7/8 pouces) ou plus au-dessus de l'unité.

WARNING! Warning on power connection: a proper power cord for your local power supply. Use the approved Power Cord (3-core mains lead) / Appliance Connector /Plug with earthing-contacts that conforms to the safety regulations of each country if applicable. Use the Power Cord (3-core mains lead) / Appliance Connector / Plug conforming to the proper ratings (Voltage, Ampere). If you have questions on the use of the above Power Cord / Appliance Connector / Plug, please consult qualified service personnel.

AVERTISSEMENT! Avertissement sur la connexion électrique: un cordon d'alimentation adapté à votre alimentation électrique locale. Utilisez le cordon d'alimentation (cordon d'alimentation à 3 conducteurs) / le connecteur d'appareil / la prise avec des contacts de mise à la terre conformes aux réglementations de sécurité de chaque pays, le cas échéant. Utilisez le cordon d'alimentation (cordon d'alimentation à 3 conducteurs) / connecteur d'appareil / prise conforme aux valeurs nominales appropriées (tension, ampère). Si vous avez des questions sur l'utilisation du cordon d'alimentation / connecteur d'appareil / prise ci-dessus, veuillez consulter un personnel de service qualifié.

4.5.1 ForthecustomersinU.S.A.andCanada

Please use the following power supply cord.

UnitedStatesandCanada	
Plug Type	HOSPITALGRADE*
Cord Type	Min. Type SJT Min.18 AWG
Minimum Rating for Plug and Appliance Couplers	10A/125V
Safety Approval	UL Listed and CSA

Unplug the power cord from the power adapter to disconnect the device from mains.

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

CAUTION This unit is heavy. Make sure to unpack and move the unit with two or more people.

ATTENTION Cet appareil est lourd. Assurez-vous de déballer et de déplacer l'unité avec deux personnes ou plus.

4.5.2 Safety

- W32L100-PTA1 is a DC powered device. Use with the supplied AC adaptor (EM11701F).
- Operate the unit on 100-240V AC only.
- The nameplate indicating operating voltage, etc. is located on the AC adaptor.
- Should any solid object or liquid fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it is not to be used for several days or more.
- To disconnect the AC power cord, pull it out by grasping the plug. Never pull the cord itself.
- The socket-outlet shall be installed near the equipment and shall be easily accessible.
- Unplug the power cord from the power adapter to disconnect the device from mains.

4.5.3 Installation

- Prevent internal heat build-up allowing adequate air circulation。
- Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- Do not install the unit near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Do not place the monitor near equipment which generates magnetism, such as a transformer or high voltage power lines.

4.5.4 Precautions for connecting this unit with other healthcare devices

Before you utilize this device and/or connect this device to any other healthcare device, please be aware of and abide by the following precautions:

- Before actually using this device for healthcare practice, please check and confirm that you do not experience any discomfort in the use of this monitor
- If you experience or are likely to experience discomfort, please refrain from using this device.
- Generally, discomfort (such as eye strain, fatigue, nausea, or motion sickness) can be provoked by quick movements of video picture, focal positioning of video images, distances between moving objects and changing image colors.
- Before prolonged use, make sure the image of the connected healthcare device is displayed properly.

4.5.5 Use with an electrosurgical knife, etc.

If this unit is used together with an electrosurgical knife, etc., the picture may be disturbed, warped or otherwise abnormal because of strong radio waves or voltages from the device. This is not a malfunction. When you use this unit simultaneously with a device from which strong radio waves or voltages are emitted, confirm the effect of this before using such devices, and install this unit in a way that minimizes the effect of radio wave interference.

4.5.6 Precautions for using this unit safely

- Some people may experience discomfort (such as eye strain, fatigue, or nausea) while watching video images. It is recommended that all viewers take regular breaks while watching video images. The length and frequency of necessary breaks will vary from person to person. You must decide what works best.
- Avoid watching the display in environments where your head may shake, because there is a higher possibility that you experience discomfort.

4.5.7 Recommendation to use more than one unit

As problems, can occasionally occur, when the monitor is used under critical conditions, we strongly recommend you use more than one unit or prepare a spare unit for replacement.

4.6 About the LCD Monitor Panel

- The LCD panel fitted to this unit is manufactured with high precision technology, giving a functioning pixel ratio of at least 99.99%. Thus, a very small proportion of pixels may be “stuck”, either always off (black), always on (red, green, or blue), or flashing. In addition, over a long period of use, because of the physical characteristics of the liquid crystal display, such “stuck” pixels may appear spontaneously. These problems are not a malfunction.
- Do not leave the LCD screen facing the sun as it can damage the LCD screen. Take care when you place the unit by a window.
- Do not store the monitor FACE DOWN.
- Do not push or scratch the LCD screen.
- Do not place a heavy object on the LCD screen. This may cause the screen to lose uniformity.
- If the unit is used in a cold place, a residual image may appear on the screen. This is not a malfunction. When the monitor becomes warm, the screen returns to normal.
- The screen and the cabinet become warm during operation. This is not a malfunction.

4.6.1 Images that may cause burn-in

- Masked / boarded images with aspect ratios other than 16:9
- Color bars or images that remain static for a long time
- Continuous characters or messages displaying on the screen

4.6.2 To reduce the risk of burn-in

Turn off the character displays from connected equipment.

4.6.3 About the screen protect panel

The screen protect panel is made of toughened glass, but there is a possibility that it may crack.

- Handle with care. Avoid strong impact, such as dropping from a high place or an object swinging into it.

- Do not scratch the panel with a sharp object or place it in harm's way.

4.6.4 A long period of use

- Due to the characteristics of LCD panel, displaying static images for extended periods, or using the unit repeatedly in a high temperature/high humidity environments may cause image smearing, burn-in, areas of which brightness is permanently changed, lines, or a decrease in overall brightness.
- In particular, continued displaying of an image smaller than the monitor screen, such as in a different aspect ratio, may shorten the life of the unit.
- Avoid displaying a still image for an extended period, or using the unit repeatedly in a high temperature/high humidity environment such an airtight room, or around the outlet of an air conditioner.

4.6.5 Moisture condensation

If the unit is suddenly taken from a cold to a warm location, or if ambient temperature suddenly rises, moisture may form on the outer surface of the unit and/or inside of the unit. This is known as condensation. If condensation occurs, turn off the unit and wait until the condensation clears before operating the unit. Operating the unit while condensation is present may damage the unit.

4.6.6 Cleaning before cleaning

Be sure to disconnect the AC power cord from the AC outlet.

4.6.7 Cleaning the monitor

A material that withstands disinfection is used for the front protection plate of the healthcare use LCD monitor. The protection plate surface is specially treated to reduce reflection of light. When solvents such as benzene or thinner, or acid, alkaline or abrasive detergent or chemical cleaning cloth are used for the protection plate surface/monitor surface, the performance of the monitor may be impaired or the finish of the surface may be damaged. Take care with respect to the following:

- Clean the protection plate surface/monitor surface with a 50 to 70 v/v% concentration of isopropyl alcohol or a 76.9 to 81.4 v/v% concentration of ethanol using a swab method. Wipe the protection plate surface gently (wipe using less than 1 N force).
- Stubborn stains may be removed with a soft cloth such as a cleaning cloth lightly dampened with mild detergent solution using a swab method and then clean using the above chemical solution.
- Never use solvents such as benzene or thinner, or acid, alkaline or abrasive detergent, or chemical cleaning cloth for cleaning or disinfection, as they will damage the protection plate surface/monitor surface.
- Do not use unnecessary force to rub the protection plate surface/monitor surface with a stained cloth. The protection plate surface/monitor surface may be scratched.
- Do not keep the protection plate surface/monitor surface in contact with a rubber or vinyl resin product for a long period of time. The finish of the surface may deteriorate.

4.6.8 Flat surface for better maintenance

The design allows the user to easily wipe liquids and gel off the LCD panel and control buttons – ensuring a high standard of disinfection and cleanliness.

4.6.9 Repacking

Do not throw away the carton and packing materials. They can be used again to repack monitor.

If you have any questions about this unit, contact your authorized dealer.

4.6.10 Disposal of the unit

Do not dispose of the unit with general waste. Do not include the monitor with household waste.

4.7 Biological Hazard and Returns

The structure and the specifications of this device as well as the materials used for manufacturing makes it easy to wipe and clean and therefore suitable to be used for various applications in hospitals and other healthcare environments, where procedures for frequent cleaning are specified.

However, normal use shall exclude biological contaminated environments, to prevent spreading of infections. Therefore use of this device in such environments is at the exclusive risk of Customer. In case this device is used where potential biological contamination cannot be excluded.

Customer shall implement the decontamination process as defined in the latest edition of the ANSI/AAMI ST35 standard on each single failed Product that is returned for servicing, repair, reworking or failure investigation to Seller (or to the Authorized Service Provider). At least one adhesive yellow label shall be attached on the top site of the package of returned Product and accompanied by a declaration statement proving the Product has been successfully decontaminated.

Returned Products that is not provided with such external decontamination label, and/or whenever such declaration is missing, can be rejected by Seller (or by the Authorized Service Provider) and shipped back at Customer expenses.

Appendix

This chapter contains additional product information, including troubleshooting guide and frequency table.

Appendix A: Technical Specifications

	Model Name
	W32L100-PTA1
LCD Monitor	
Size	32”
Resolution	3840 x 2160
Brightness	350cd/m2 (typ.), optional 700cd/m2
Contrast Ratio	1000:1 (typ.)
Viewing Angle	-89~89(H);-89~89(V)
Max Colors	1.07B
Touch	Projected-Capacitive Touch (Optional)
Interfaces	
Input Signal	1 x 3GSDI 1 x VGA 1 x HDMI 2.0 1 x Dual DVI in 1 x DP 1.2 1 x HDMI 1.4 1 x Audio In
Output Signal	1 x DP (Multi-Stream Transport) 1 x Audio Out 1 x 5V/ 1A out 1 x 3G SDI (Loop Through, support 1080P)
Touch Port	1 x USB 2.0
Remote Control	1 x RS232 (Optional)
Buttons and Indicators	
OSD Membrane	5 Key OSD. Control Panel
Audio	
Speaker	2 x 5W speaker
Power	
Power Input	24 V DC in 150W with External AC to DC Adapter
AC Adapter	External AC to DC Adapter (100-240 V AC, 2.5-1.0 A, 50-60 Hz) EDAC Power Electronics Co., Ltd / EM11701F
Power Consumption	55 W typical, normal operation
Mechanical	
Dimensions	799 x 478 x 63.7 mm
Weight	13.265kg
Mounting	VESA mount (100 x 200mm, 200 x 200 mm)
Environment	
Operating Temperature	0°C to 35°C, Humidity 10% to 90%
Storage Temperature	-20°C to 60°C, Humidity 5% to 95%
IP Rating	Front IP65
Atmospheric Pressure	700 - 1013 hPa
Standards and Certifiation	
Safety	CE, FCC

Appendix B: Frequency Table

The choice of supported modes depends on the monitor native resolution. Refer to the table below for more information about available input signals.

Signal name	Vertical Frequency (Hz)	DVI	VGA	SDI	DP 1.2	HDMI 1.4	HDMI 2.0
640 x 480	60	✔	✔		✔	✔	✔
	72	✔	✔		✔	✔	✔
	75	✔	✔		✔	✔	✔
480P	60	✔	✔	✔	✔	✔	✔
	72	✔	✔		✔	✔	✔
	75	✔	✔		✔	✔	✔
800 x 600	60	✔	✔		✔	✔	✔
	72	✔	✔		✔	✔	✔
	75	✔	✔		✔	✔	✔
1024 x 768	60	✔	✔		✔	✔	✔
	72	✔	✔		✔	✔	✔
	75	✔	✔		✔	✔	✔
720P	60	✔	✔	✔	✔	✔	✔
	72	✔	✔		✔	✔	✔
	75	✔	✔		✔	✔	✔
1280 x 1024	60	✔	✔		✔	✔	✔
	72	✔	✔		✔	✔	✔
	75	✔	✔		✔	✔	✔
1600 x 1200	60	✔	✔		✔	✔	✔
	72	✔	✔		✔	✔	✔
	75	✔	✔		✔	✔	✔
1920 x 1080	60	✔	✔	✔	✔	✔	✔
	72	✔	✔		✔	✔	✔
	75	✔	✔		✔	✔	✔
1920 x 1200	60	✔	✔		✔	✔	✔
2560 x 1440	60	✔			✔	✔	✔
3840 x 2160	30	✔			✔	✔	✔
	60				✔		✔
4096 x 2160	60				✔		✔

Appendix C: Meaning of Symbols on the unit

Symbol	Description	Symbol	Description	Symbol	Description
	Date of manufacture		This device complies with the Healthcare Device Directive 93/42/EEC		Serial number
	This way up		Manufacturer/product owner		Direct current
	Fragile		Stacking limit by number		Keep away from rain
	Temperature limits		Weight		General warning sign
	Indicates user need to read user manual before using the device		Recycling symbol for corrugated cardboard used for packaging		UL Recognized Component Mark
	TUVSUD Mark		UL Listing Mark		Indicates device is approved according To The VCCI Regulation
	Indicates this device is compliance with Part 15 of FCC rules (Class B)		Indicates device is approved according To The UL DEMKO Regulation		IEC60417-5033 Both direct and alternating current
	IEC60417-5019 Protective earth (ground)		Indicates this device must not throw in the trash.		IEC60417-5007 “ON” (power)

For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information. Information on Disposal in other Countries outside the **European Union.**

Winmate reserves the right to make changes in specifications and features shown herein, or discontinue the product at any time without notice or obligation."

Information on Disposal for Users of Waste Electrical & Electronic Equipment (private households)

This symbol on the products and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste.

For proper treatment, recovery and recycling, please take these products to designated collection points, where they will be accepted on a free of charge basis. Alternatively, in some countries you may be able to return your products to your local retailer upon the purchase of an equivalent new product.
Disposing of this product correctly will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling. Please contact your local authority for further details of your nearest designated collection point.
Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

Appendix D: Intended User Profile

Aged preference 50-70 (Intended User Profile 1):

Education: - vocational high school graduate
- Major in electrical or electronic
- No maximum
Knowledge: - minimum:
- Understanding the definition of voltage, current and frequency.
- Understanding the definition of Class I (basic insulation) and Class II (double insulation)
- Could recognize the symbols of alternating current (AC), direct current (DC), protective earth (ground), earth (ground), Class II equipment, caution, operating instructions, "ON' (power) and "OFF" (power)
- No maximum
Language Skills: Languages as specified in the marketing plan for power supply.
Experience: - minimum:
- Under 70 years old: training under surveillance
- Other: no special experience needed
- No maximum
Permissible - mild reading vision impairment or vision corrected to log MAR 0,2 (6/10 or20/32)
International
Efficiency Mark
China RoHS Mark
Indoor use only
PSE Mark
RoHS Mark
Alternating current

Impairments: - one arms / hand system capable of guiding and holding device
- Average degree of aging-related short term memory impairment
- Impaired by 40 % resulting in 60 % of normal hearing at 500 Hz to 2 kHz

Aged preference 30-50 (Intended User Profile 2)

Education: - vocational high school graduate
- Major in electrical or electronic
- No maximum
Knowledge: - minimum:
- Understanding the definition of voltage, current and frequency.
- Understanding the definition of Class I (basic insulation) and Class II (double insulation)
- could recognize the symbols of alternating current (AC), direct current (DC), protective earth (ground), earth (ground), Class II equipment, caution, operating instructions, "ON' (power) and "OFF" (power)
- No maximum

Language Skills: Languages as specified in the marketing plan for power supply.

Experience: - minimum:
- Under 50 years old: training under surveillance
- Other: no special experience needed
- No maximum
Permissible
Impairments:
- Mild reading vision impairment or vision corrected to log MAR 0,2 (6/10 or20/32)
- One arms / hand system capable of guiding and holding device
- Average degree of aging-related short term memory impairment
- impaired by 40 % resulting in 60 % of normal hearing at 500 Hz to 2 kHz

Aged preference 18-30 (Intended User Profile 3)

Education: - vocational high school graduate
- Major in electrical or electronic
- No maximum
Knowledge: - minimum:
- Understanding the definition of voltage, current and frequency.
- Understanding the definition of Class I (basic insulation) and Class II (double insulation)
- could recognize the symbols of alternating current (AC), direct current (DC), protective earth (ground), earth (ground), Class II equipment, caution, operating instructions, "ON' (power) and "OFF" (power)
Language Skills: Languages as specified in the marketing plan for power supply.

Experience: - minimum:
- Under 30 years old: training under surveillance
- Other: no special experience needed
- No maximum

Permissible Impairments:
- Mild reading vision impairment or vision corrected to log MAR 0,2 (6/10 or20/32)
- Two arms / hand system capable of guiding and holding device
-Average degree of aging-related short term memory impairment

Winmate Inc.
9F, No.111-6, Shing-De Rd., San-Chung District,
New Taipei City 24158, Taiwan, ROC
www.winmate.com

Copyright © Winmate Inc. All rights reserved.