



User Manual
P21WL01

Notice

The illustrations in this user's manual are for reference only. Actual product specifications may vary with territories.

The information in this user's manual is subject to change without notice.

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Preface

■ 1.1 Regulations information

- CE compliance

This device is classed as a technical information equipment (ITE) in class A and is intended for use in commercial, transport, retailer, public, automation...field.

- FCC rules

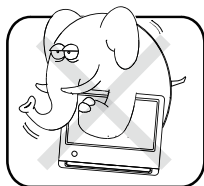
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



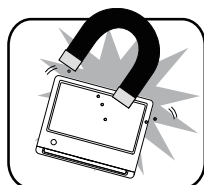
CAUTION: Any changes or modifications not expressly approved by the guarantee of this device could void the user's authority to operate the equipment.

■ 1.2 Safety instructions

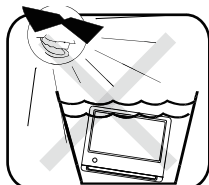
The following safety precautions will increase the life of the panel PC. Follow all Precautions and instructions.



Do not place this device underneath heavy loads or in an unstable position.



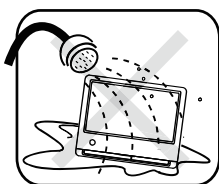
Do not use or expose this device around magnetic fields as magnetic interference may affect the performance of the device.



Do not expose this device to high levels of direct sunlight, high-humidity or wet conditions.



Do not block the air vents to this device or impede the airflow in any way.



Do not expose to or use near liquid, rain, or moisture.

Never pour any liquid into an opening. This may cause damage or electrical shock.

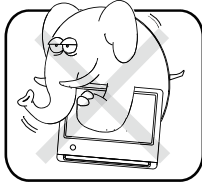
- The unit can be operated at an ambient temperature of max.40°C (104°F). Do not subject it to temperatures below 0°C (32°F) or above 40°C (104°F).



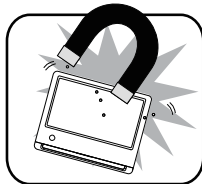
CAUTION: Incorrectly replacing the battery may damage this computer. Replace only with the same or equivalent type recommended by the manufacturer. Disposal of used batteries according to the manufacturer's instructions.

■ 1.2 Consignes de sécurité

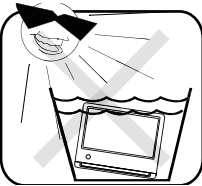
Les mesures de précaution suivantes servent à prolonger la durée de vie de l'ordinateur. Par conséquent, veuillez observer l'ensemble des mesures de précaution et des instructions.



Ne pas poser d'objets lourds sur l'appareil ou ne pas le mettre dans une position instable.



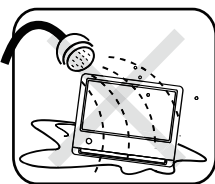
Ne pas exposer l'appareil à de forts champs magnétiques, puisque cela pourrait causer des interférences.



Ne pas exposer l'appareil directement aux rayons du soleil, à l'humidité ou ne pas le placer dans un endroit humide.



Ne pas couvrir la fente d'aération de l'appareil ou ne pas empêcher la circulation d'air de quelque sorte que ce soit.



Ne pas utiliser l'appareil à proximité de liquides, de pluie ou d'humidité.

Ne pas utiliser le modem pendant un orage.

- L'appareil peut être utilisé à une température ambiante maximum de 40°C (104°F). Ne pas exposer l'appareil à une température inférieure à 0°C (21°F) ou supérieure à 40°C (104°F).
- **ATTENTION** : Ne pas remplacer incorrectement la pile peut endommager l'ordinateur. La remplacer uniquement par un modèle identique ou un équivalent recommandé par fabricant. Débarrassez-vous des piles usagées d'après les instructions du constructeur.

■ 1.3 Notes for this manual



CAUTION! Important information that must be followed for safe operation.



NOTE: Information for special situations.

■ 1.4 Release history

Version	Revision note	Date
1.0	First released	06.2020

Getting to know the basics

■ 2.1 Product specification

This User's Manual provides instructions and illustrations on how to operate this panel PC. It is recommended to read this manual carefully before using this panel PC.

· Physical characteristic

Dimension	543 x 334 x 49.9 mm
Weight	7.6~8 kg (net) (depend upon the actually shipping product)

· CPU

Support processor	Intel® Whiskey Lake-U platform
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· Memory

DDR4	Support DDR4 memory, RAM socket x2 Speed: 2400MHz, maximum memory size 32GB
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· Power

AC adapter	90 watts , 3 pin
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· Storage

SATA-7pin	SSD 2.5", 7mm, Slidable design
M.2 M 2280	1x PCIe or SATA I/F (optional)

· Display

LCD	21.5" FHD, 16:9 LED type Resolution 1920*1080 supported
Touch	True-Flat PCAP touch

• I/O port

- 4 x USB 3.0
- 2 x LAN (RJ45) : 1st LAN on MB, 2nd LAN via optional daughter board
- 1 x HDMI
- 2 x Audio jacks (Mic-in & Line-out)
- 1 x DC-in
- 1 x DVI-I (Single Link) (optional)
- 1 x DB9 (RS232)
- Optional Super IO (RS232 /422 /485) via IO board
 - RS232 with power supply : 5V (standard) &12V (with specific optional board)

• Audio

Audio controller	Realtek ALC662VDO-GR
Internal speaker	2 x 2W

• Webcam

Webcam	Built-in FHD webcam module
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• Other

M.2 E 2230 for Wlan card


CAUTION: MODEL P21WL01 IS DESIGNED TO USE WITH THE DC INPUT:
(19Vdc / 4.74A) ADAPTERS.

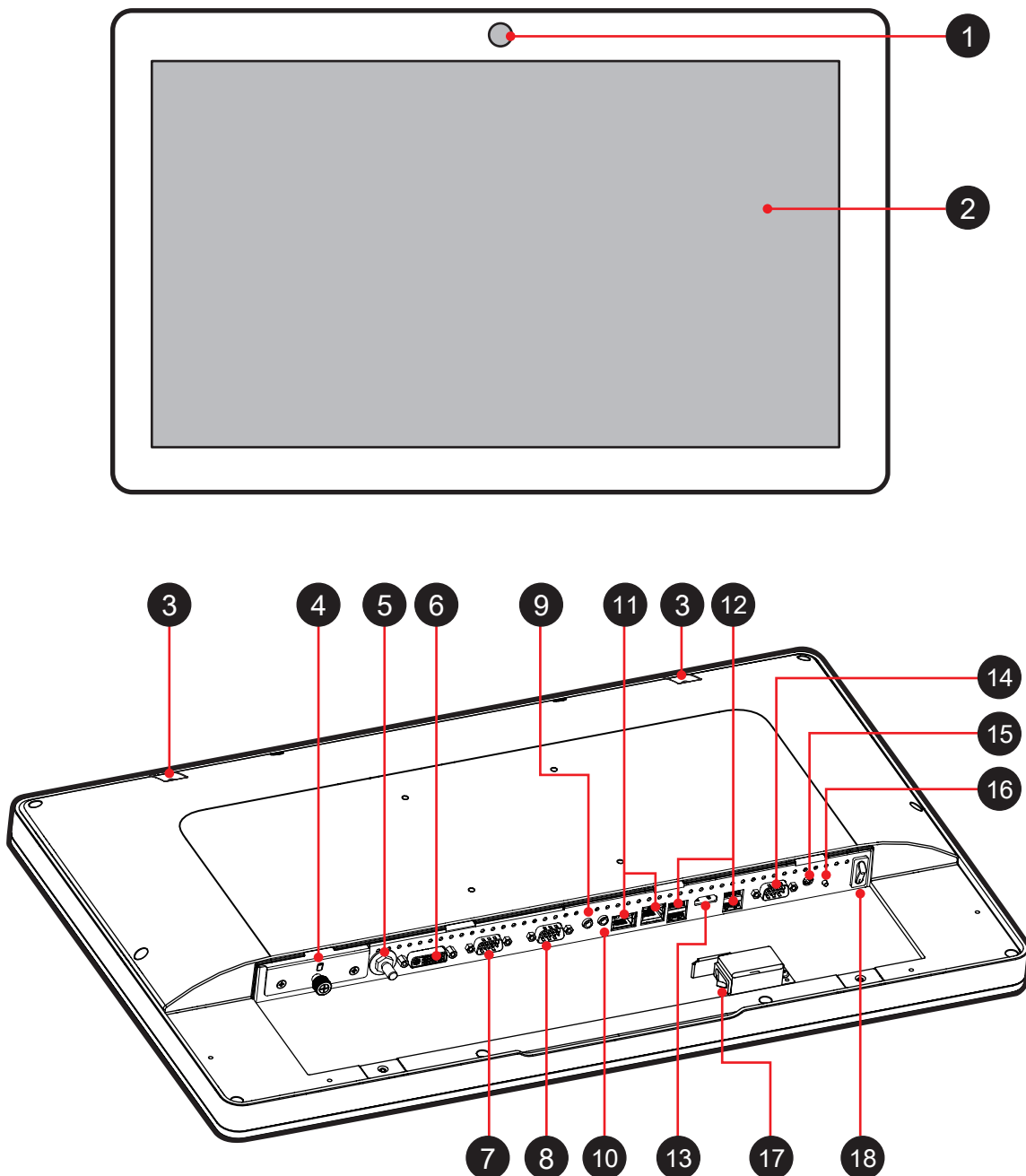


CAUTION! Adapter watt should follow default setting or refer to rating label information.

2.2 Product overview

Refer to the following illustration to identify the components on this side of the panel PC. Features and configurations vary by model.

 NOTE: The product's color, I/O port, indicator location, and specification will depend upon the actually shipping product.



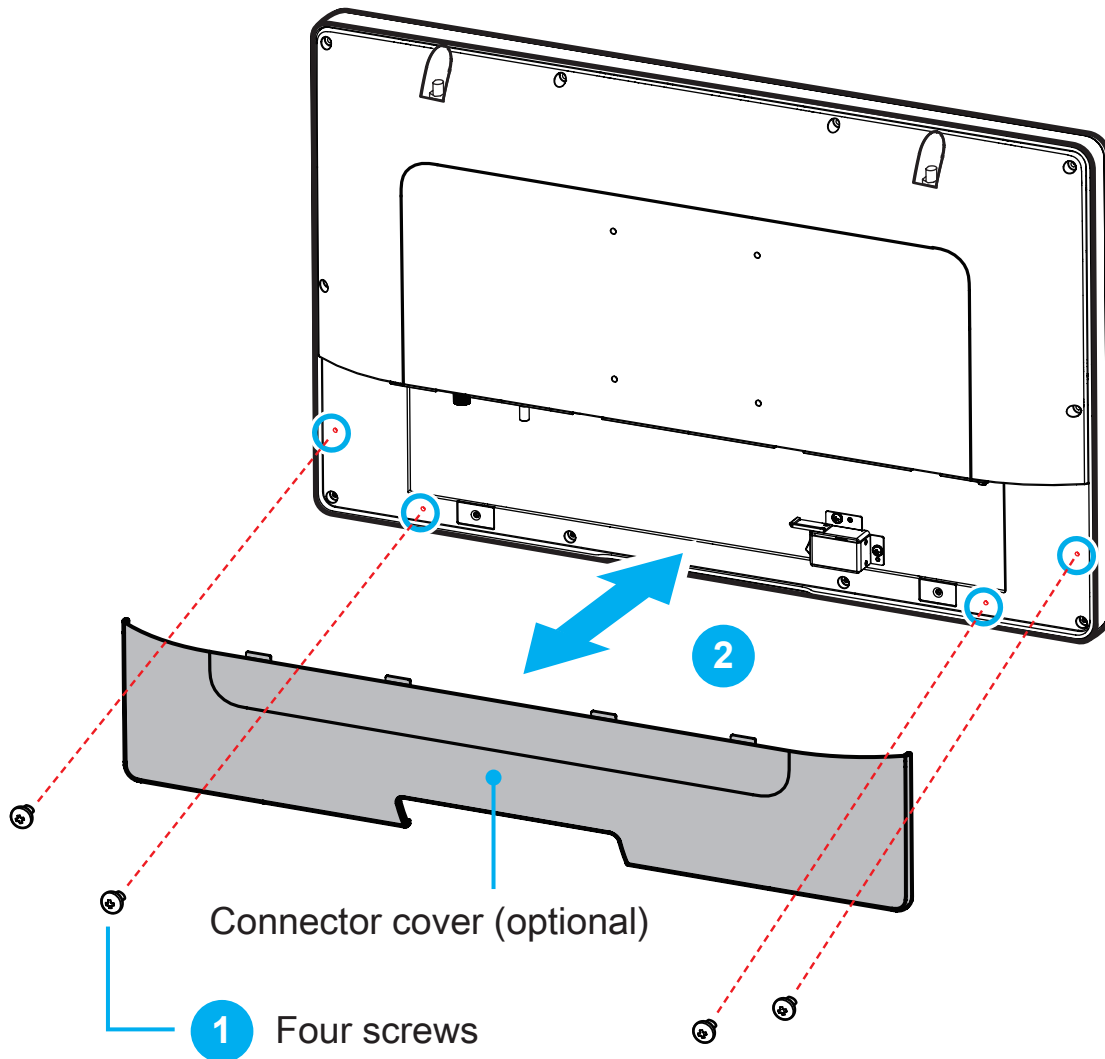
-
- 1 Webcam
 - 2 21.5" FHD LCD display (True-Flat PCAP touch)
 - 3 Connector for external antenna (optional)
 - 4 SSD 2.5", 7mm
 - 5 Potential equalization pin (POAG) (optional)
 - 6 DVI-I (Single Link) (optional)
 - 7 COM 3 port (RS232/ RS422/ RS485)
 - 8 COM 2 port (RS232/ RS422/ RS485)
 - 9 Headphone / Line-out jack
 - 10 Microphone jack
 - 11 LAN (RJ45) ports : 1st LAN on MB, 2nd LAN via optional daughter board (support wake on LAN)
 - 12 USB 3.0 ports
 - 13 HDMI port
 - 14 COM 1 port (RS232 only)
 - 15 Power jack (DC-IN)
 - 16 Power button
 - 17 or 18 Power switch : alternative (Depending on the model)

Getting Started

Before using the rear I/O connectors, you need to remove the connector cover first.

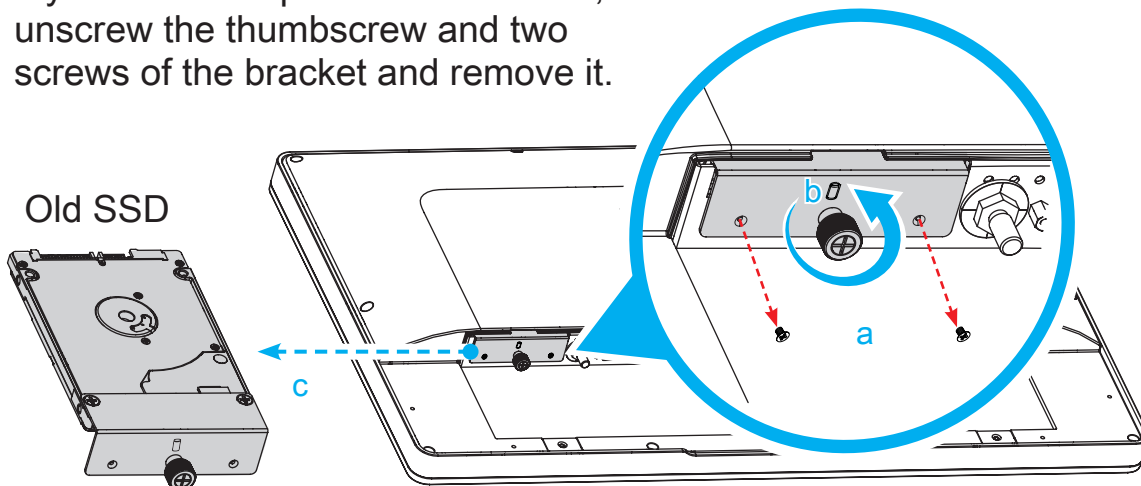
CAUTION: For safety reasons, please ensure that the power cord is disconnected before opening the case.

- Follow the steps 1 → 2 to remove the connector cover.
- Follow the steps 2 → 1 to install the connector cover.



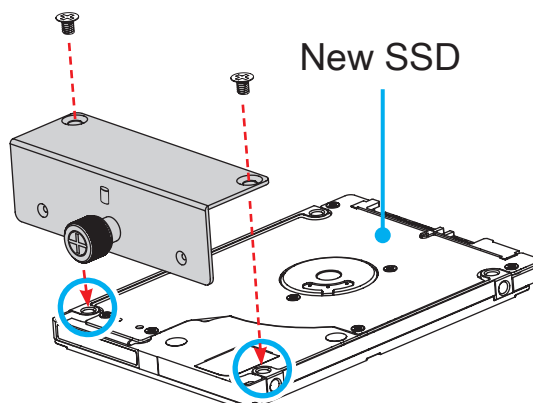
■ 3.1 How to replace the 2.5" SSD

1. If you want to replace the 2.5" SSD, unscrew the thumbscrew and two screws of the bracket and remove it.

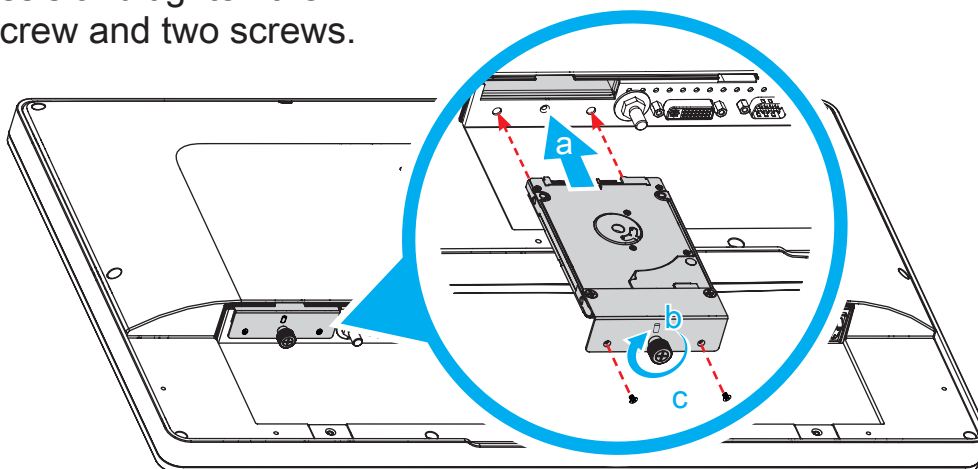


2. Unfasten the two screws (M3 x 4L) and remove old SSD.

As shown, install a new SSD in the bracket and secure with the two screws (M3*4).



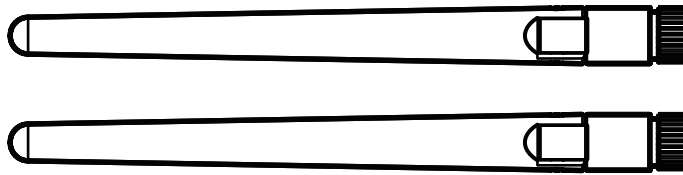
3. Slide the bracket back into the chassis and tighten the thumbscrew and two screws.



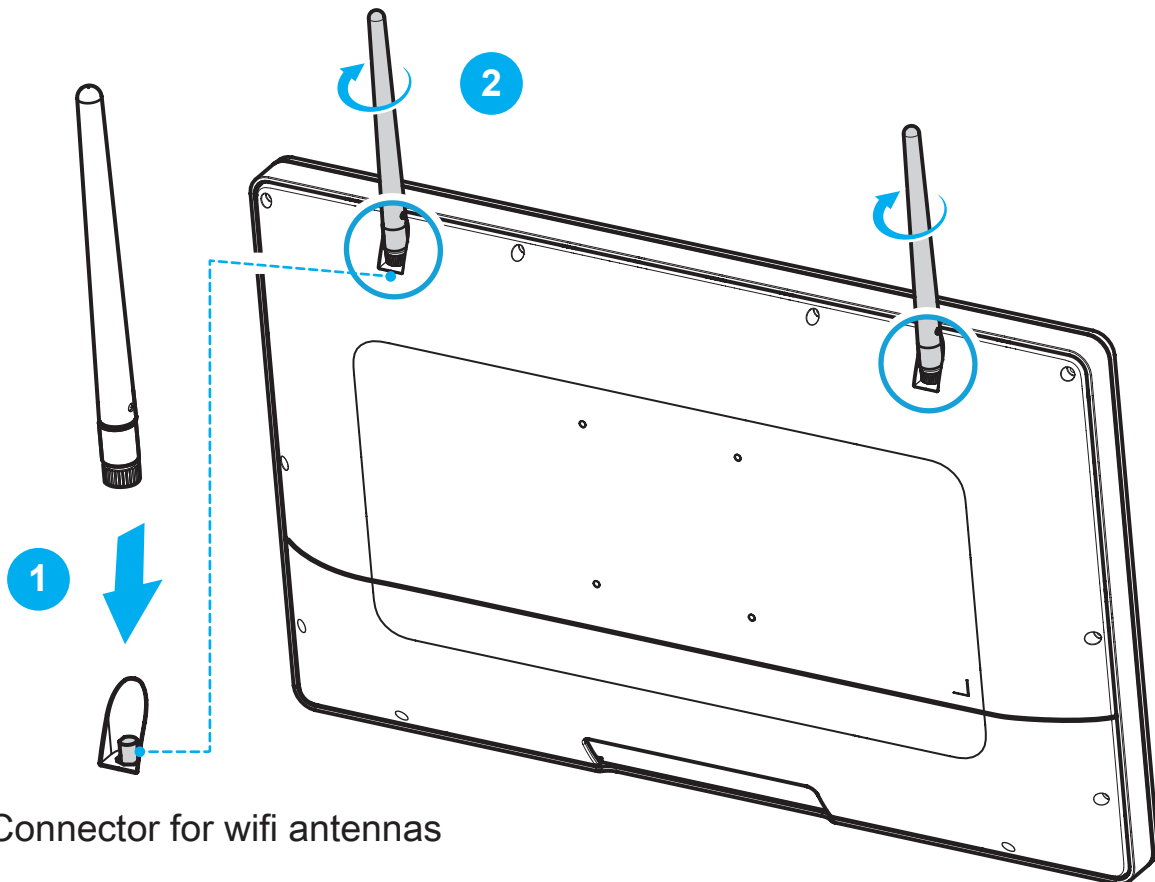
CAUTION: The thumbscrews should be tightened with a tool after both initial installation and subsequent access to the panel PC.

■ 3.2 Optional installation of WLAN antennas (appropriate chassis version required)

Take the two antennas out of the accessory box.



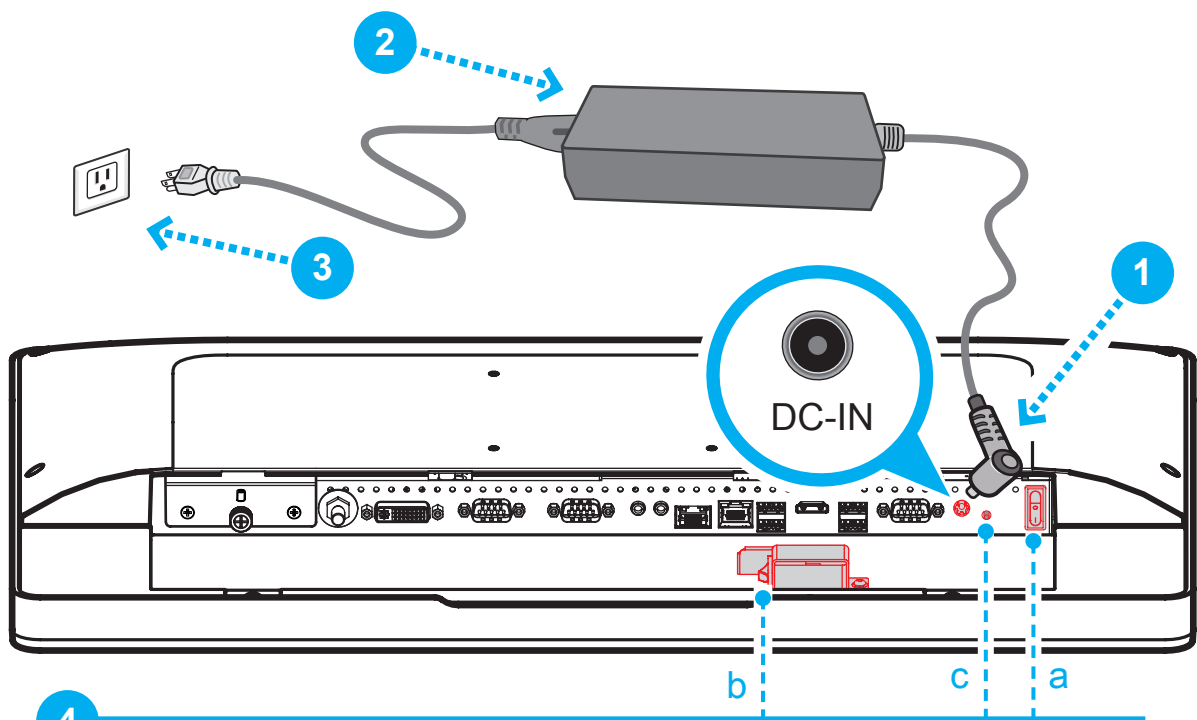
Screw the antennas on to the appropriate connectors on the back panel. Make sure the antennas are aligned vertically or horizontally to achieve the best possible signal reception.



Connector for wifi antennas

■ 3.3 Powering on the system

Follow the steps (1-3) below to connect the AC adapter to the power jack (DC-IN). Press the power switch/button (4) to turn on the system.



4

Method 1: Depending on the model, press the power switch (a or b) to turn on the system.

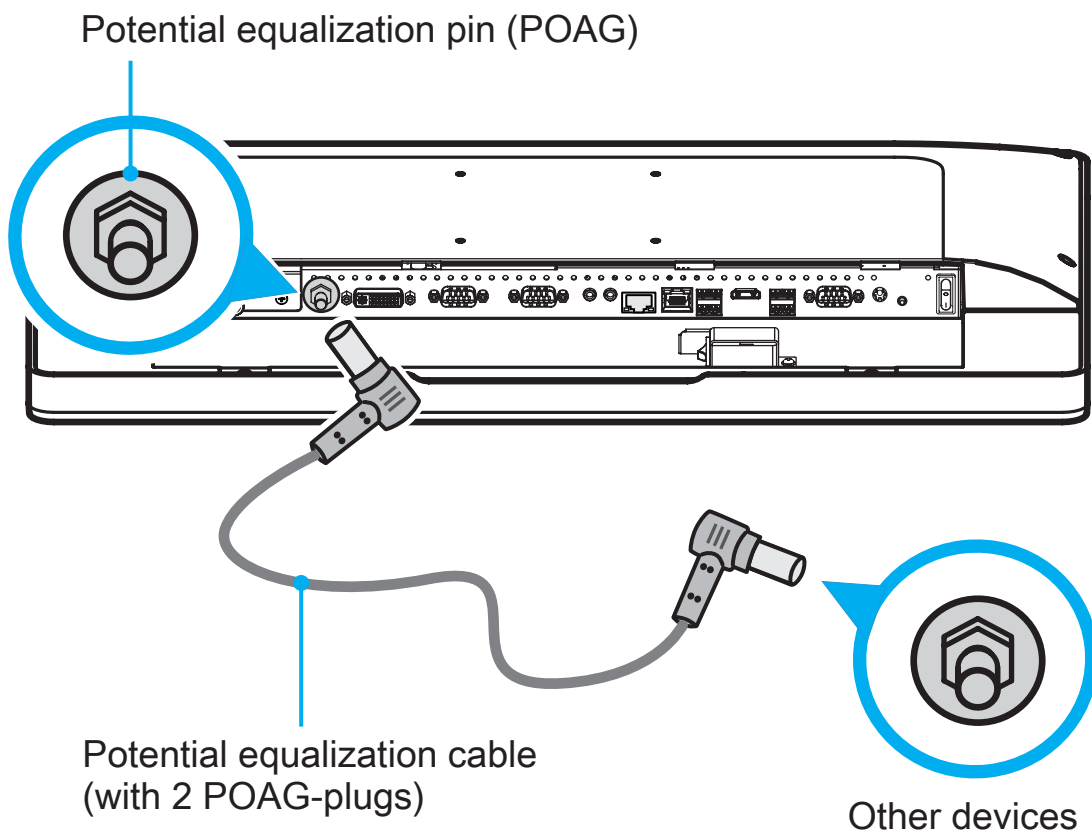
Method 2: Press the power button (c) to turn on the system.

NOTE: Press and hold the power button (a or b or c) for 5 seconds to force shutdown.

! CAUTION: Do not use inferior extension cords as this may result in damage to your panel PC. The panel PC comes with its own AC adapter. Do not use a different adapter to power the panel PC and other electrical devices.

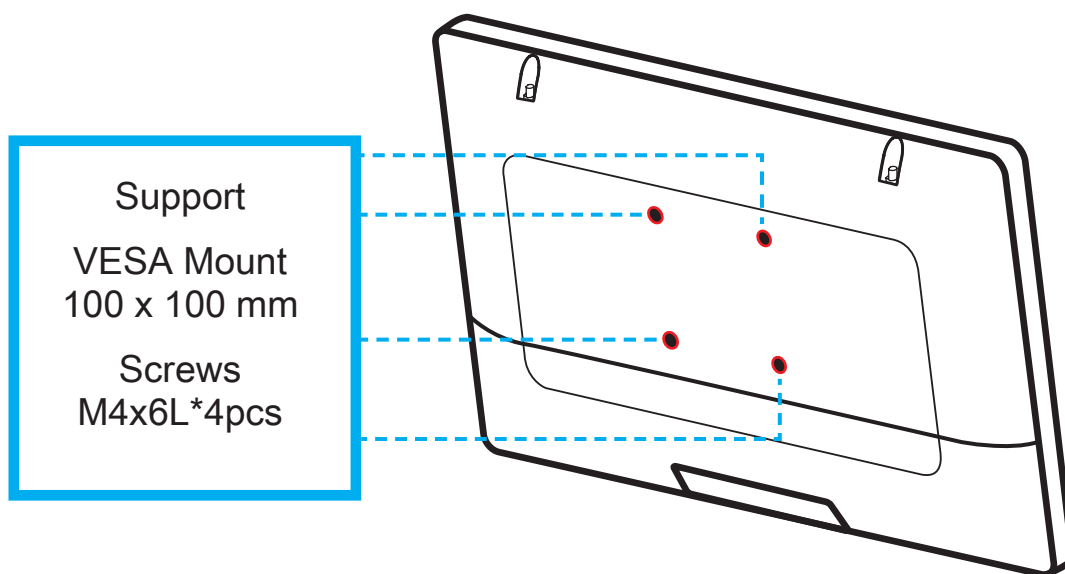
■ 3.4 Potential equalization (optional)


When potential equalization between the panel PC and other devices is required then connect the potential equalization pin (POAG) to the potential equalization terminal of the equipment.




■ 3.5 VESA mounting to the wall (optional)

The standard VESA openings show where an arm / wall mount kit which is available separately can be attached.



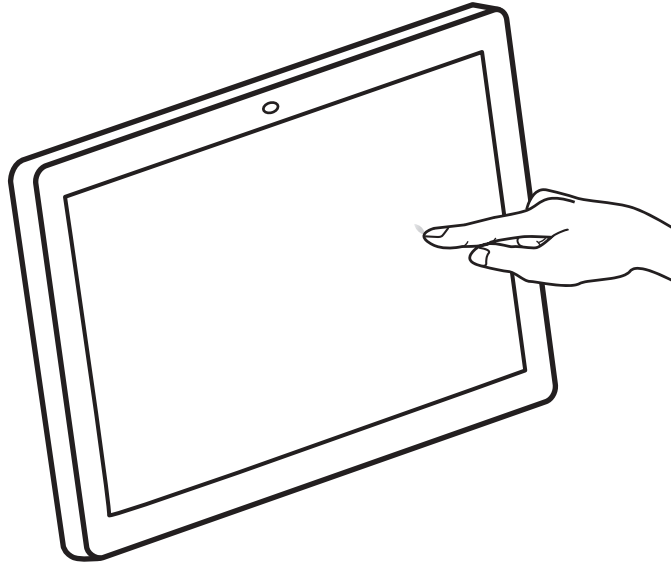
 NOTE: The Panel PC can be wall-mounted using a VESA compatible 100 mm x 100 mm wall / arm bracket. The maximum load capacity is 10 kg and mounting suitable in heights of ≤ 2 m only. The metal thickness of the VESA mount must be between 1.6 and 2.0 mm.

 REMARQUE: Le Panel PC peut être fixé au mur ou à un bras à l'aide d'un support VESA 100x100 mm. Le support doit être conçu pour une charge d'au moins 10 kg et ne doit pas être situé à plus de 2 m de hauteur. L'épaisseur du support de montage VESA doit être comprise entre 1,6 et 2,0 mm.

■ 3.6 How to use the Touch Panel

Touch panel brings digital life for an easy touch experience. Experience the ease of managing your digital life with a few touches. Your touch functions like a mouse device and all you need to interact with the touch panel.

1. Touch = left-click on the mouse
2. Touch and hold = right-click on the mouse



■ 3.7 Cleaning the screen

Follow these rules for cleaning the outside and handling your screen on the panel PC :

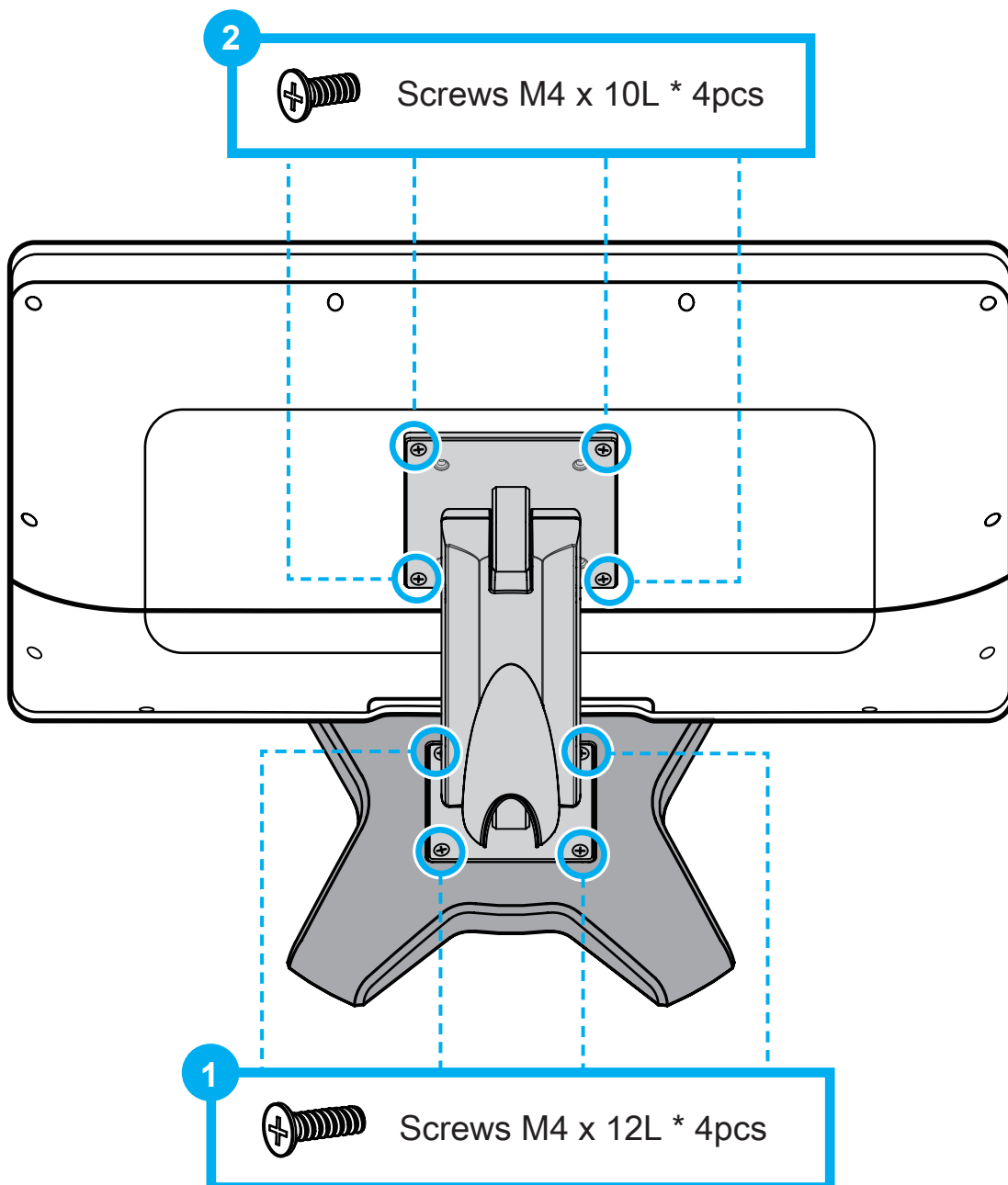
1. Moisten a soft cloth with a little water or alcohol (max. 75%) to clean the screen. Please never spray alcoholic cleaning agents directly onto the touchscreen.
2. Note that only the front side is IP65 protected. Be sure to avoid moisture on the other components.



CAUTION: Do not use or spray strong solvents such as benzine, thinner or any other solvent.

■ 3.8 Using the Vertical Stand (optional)

1. Tighten the vertical stand securely with four screws (M4 x 12L)
2. Properly tighten the vertical stand with four screws (M4 x 10L) at the rear of the Panel PC.



BIOS Setup


■ 4.1 About BIOS Setup

The default BIOS (Basic Input/Output System) is already properly configured and optimized, there is normally no need to run this utility.

■ 4.1.1 When to Use BIOS Setup ?

You may need to run the BIOS Setup when:

- An error message appears on the screen during the system booting up and is requested to run SETUP.
- You want to change the default settings for customized features.
- You want to reload the default BIOS settings.

 **CAUTION!** We strongly recommend that you change the BIOS settings only with the help of a trained service personnel.

■ 4.1.2 How to run BIOS Setup ?


To run the BIOS Setup Utility, turn on the panel PC and press the [Del] or [F2] key during the POST procedure.

If the message disappears before you respond and you still wish to enter Setup, either restart the system by turning it OFF and ON, or simultaneously pressing [Ctrl]+[Alt]+[Del] keys to restart.

The setup function only can be invoked by pressing [Del] or [F2] key during POST that provide an approach to change some setting and configuration the user prefer, and the changed values will save in the NVRAM and will take effect after the system rebooted.

Press [F7] key for Boot Menu.

• When OS support is Windows 10 :

1. Click the Start  menu and select Settings.
2. Select Update and Security.
3. Click Recovery
4. Under Advanced startup, click Restart now.
The system will restart and show the Windows 10 boot menu.
5. Select Troubleshoot.
6. Choose Advanced options.
7. Select UEFI Firmware Settings.
8. Click Restart to restart the system and enter UEFI (BIOS).