



USER MANUAL

Hardware installation manual





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Traditional Chinese

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WELCOME

Welcome to this user manual

ADP Panel PC

Comprehensive space management and information



service provider

ADP Panel PC is committed to integrating the best technology and services with the service mechanisms required by space and developing smart space service terminals, all to provide users with all-round superior space management solutions. You can easily complete operations on the Panel PC, whether you want to book a conference, reserve a space on site, call for services, or inquire about conferences, courses, or personal information using your RFID identification card.

1

Chapter

Introduction to the ADP Panel PC

1

External composition

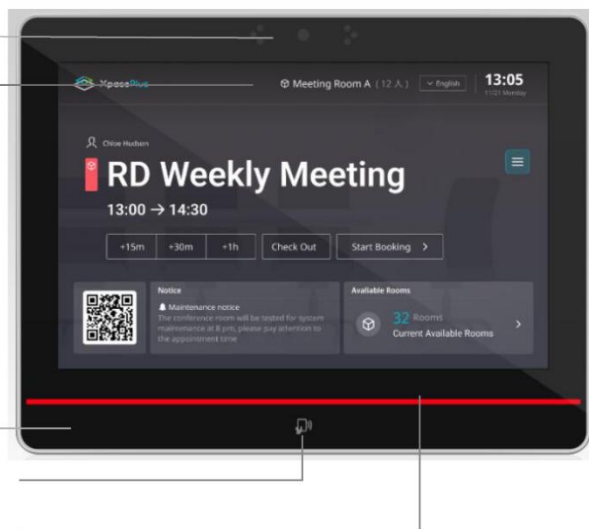
Camera and fill
light

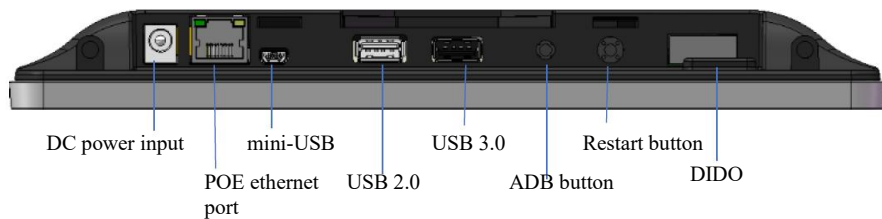
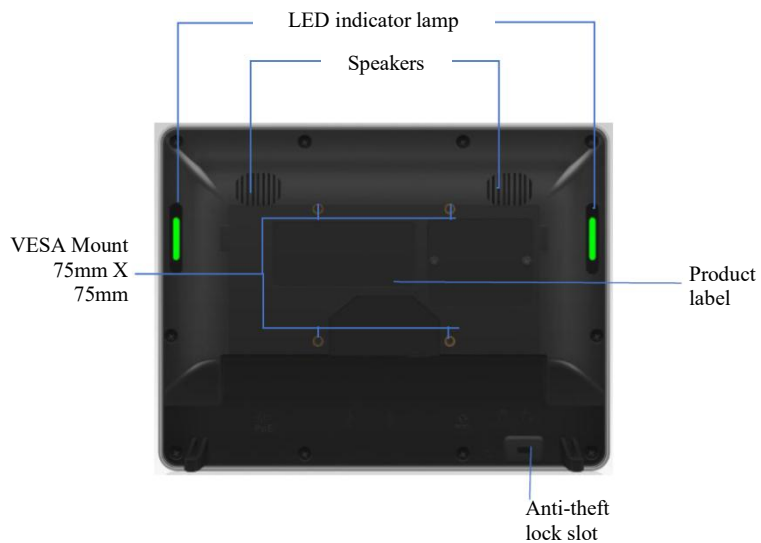
Touchscreen

Microphone

NFC card reader

LED indicator
light strip





Hardware component specifications

LCD panel specifications	
Dimensions	10-inch LED backlit panel
Contrast	800:1
Brightness	350 nits
Viewing angle	-85° - 85° (horizontal); -85° - 85° (vertical)
Touchscreen	Capacitive touch monitor; supports multi-touch
System specifications	
Processor	Quad-Core ARM Cortex-A55 CPU 1.8 Hz
Memory	16 GB LPDDR3
Storage device	Onboard 32 GB eMMC
Operating system	Android 11
System input/output	
Digital input/output	2 x DI, 2 x DO, where one of the DO supplies 12V 1A to drive the lock
LED indicator lamp strip	RGB color (front indicator light strip x 1, side indicator light strip x 2)
iBeacon	Built-in iBeacon Transmitter
Reset button	1 x Reset button
USB port	USB 2.0 port x 1 / USB 3.0 port x 1 / USB OTG x 1
Ethernet / LAN	1 x RJ45 10/100/1000; supports PoE, IEEE 802.3AT
Built-in equipment	
Frontend NFC & HID	Compliance: 13.56MH zand 125KHz Supports MIFARE standard, 14443A S50 and S70 14443A protocol cards Sensing distance of 3 cm
Audio in	Front directional microphone
Audio out	1 watt speaker x 2
Camera module	2 million pixels, wide dynamic range, FF (fixed focus); aperture F = 2.0, night fill light
Watchdog	Hardware watchdog
Power specifications	
Power over Ethernet	802.3 AT
DC power supply	12V
Power consumption	25 watts (on full load)
Structural specifications	
Cooling system	Fanless aluminum heat sink
Wall mounting	VESA Mount (7.5x 75mm)
Exterior dimensions	Width 260 x Height 190 x Thickness 28mm
Environmental specifications	
Operating temperature	0°C ~ 50°C
Operating humidity	10% ~ 90%
Water protection rating	Front-end IP54 protection from water spray

REAR



2

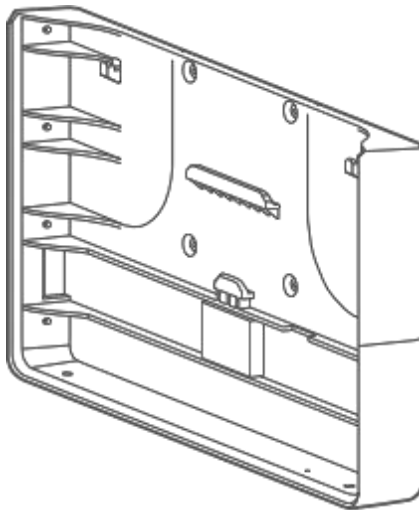
Chapter

Hardware connections and settings

1

Wall mount bracket

Panel PC back
bracket



Wall mount bracket

Accessory bag and
installation
manual



X 2

Hexalobular socket anti-theft screw

Hardware installation manual

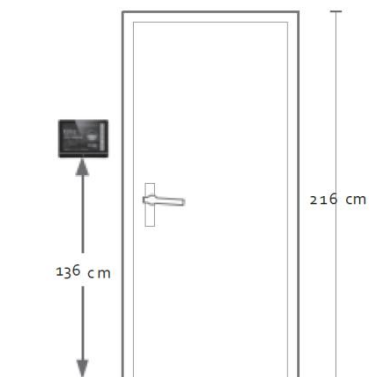
Panel PC installation and cabling specifications

2.1

Recommend installation locations for Panel PC

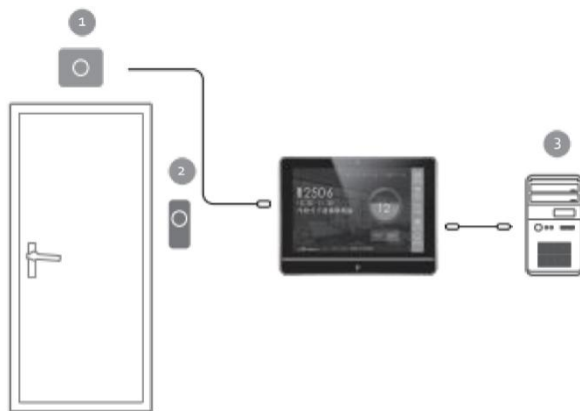
Suitable height for installation based on average height: when installing the Panel PC, the lower edge of the device body should be 136cm above ground level; height can also be adjusted according to the customer's actual usage.

As in the figure below:



2.2

Panel PC cabling system structure

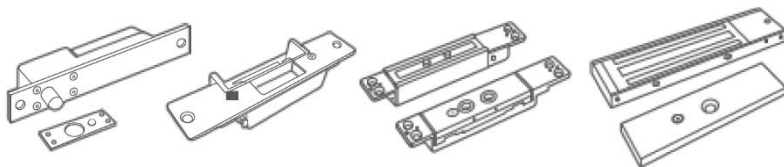


① Door lock electric lock DO directly drives the electric lock, no additional power supply needed.

② Open door button DI connection to door lock button

③ Server Ethernet supplies PoE power to the device, and no additional power supply is required

2.3 Reference for matching electric lock forms



Electric bolt lock

Electric strike lock

Model shear lock

Electromagnetic lock

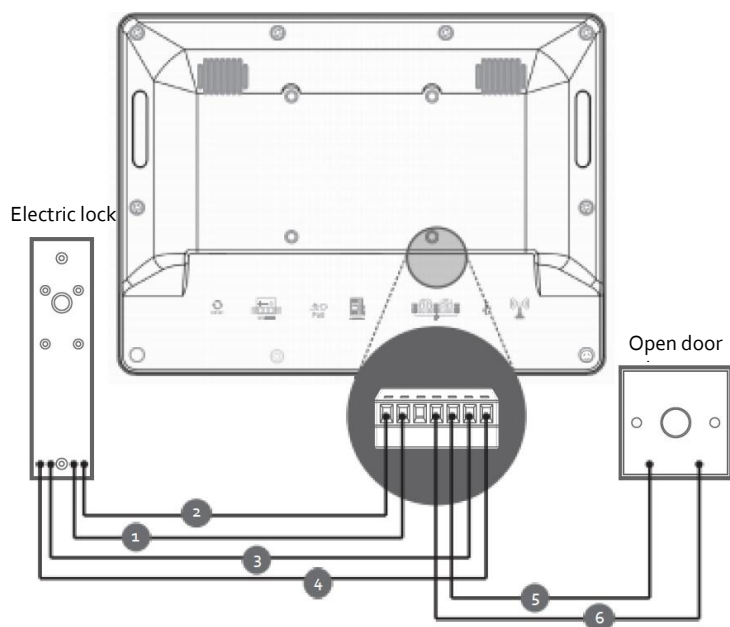
Electric lock must be selected in accordance with the onsite door material and specifications. When choosing an electric lock, pay attention to the following:

- **Door type:** Opens in, opens out, opens both in and out, side-pull or sliding door, etc.
- **Door frame material:** Metal [aluminum alloy, stainless steel], wooden, glass doors [with/without door frame].
- **Door margins:** Pay attention to the margins between the door and the door jamb to avoid the door becoming stuck during opening or closing.
- **Height and size:** Door height, size, and weight.
- **Door number:** Single, double, other.
- **Purpose of passage:** Fire escape, warehouse, normal passage, other.
- **Other:** Special requirements, signal output, or time delays.

2.4 Precautions when installing

- The power over Ethernet switch [PoE switch] **must be grounded** to avoid equipment failure caused by static electricity.
- A 4-core cable is used between the door lock electric lock and the Panel PC terminal. Cable diameter must be greater than 0.5 mm². Model: RVV4 × 0.5mm².
- A 2-core wire is used to connect the door opening button and the controller. Wire diameter must be greater than 0.5 mm². Model: RVV2 × 0.5mm².
- Data transmission between server and Panel PC is over a CAT 6 network cable. When the DC power cable and signal cable pass through the same conduit, try to use shielded cables.
- AC power cables and signal cables must be passed through conduits, and the two conduits should have space between them when they are arranged parallel over a long distance.
- Over 50cm.
- It is required to mark the cables when arranging them; wire connectors must be placed in the junction box.
- Pay attention to the cabling specifications of the terminals. Avoid having excessively long or exposed metal parts to prevent short circuits and communication failures.

2.5 Detailed cabling diagram of electric lock/output button and Panel PC



1: Electric lock DC 12V

2: Electric lock ground cable

3: Door status detection NO

4: Door status detection COM

5: Open door button detection NO

6: Open door button detection COM

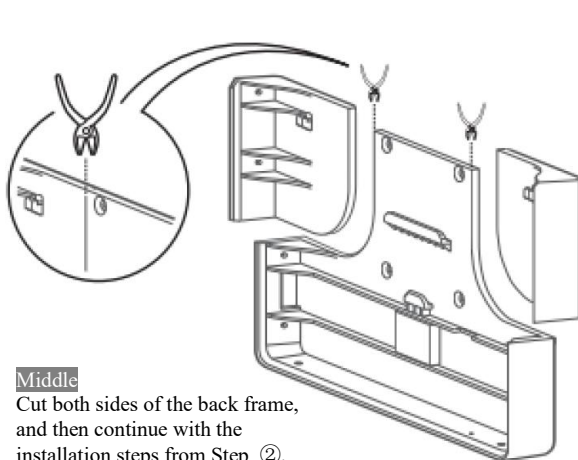
2.6 Panel PC back bracket and device body installation diagram

- Step ① First decide whether the back bracket is to be placed in the middle, close to the left wall, or close to the right wall. You can determine the position of the back bracket based on the cabling direction.

Back bracket cutting method:

After confirming the position of the back bracket,

- Cut the front section with diagonal cutting pliers
- Twist open with crimping pliers
- Smooth sharp edged with sandpaper

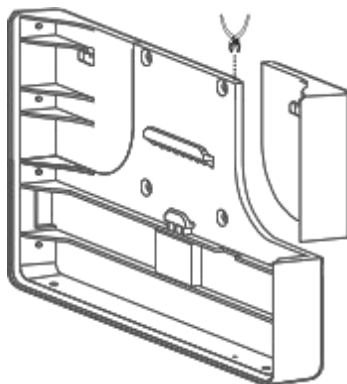


Middle

Cut both sides of the back frame, and then continue with the installation steps from Step ②.

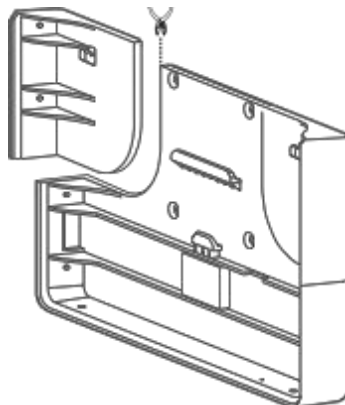
Close to left wall

Cut the right side of the back frame and continue with the installation steps from Step 5.



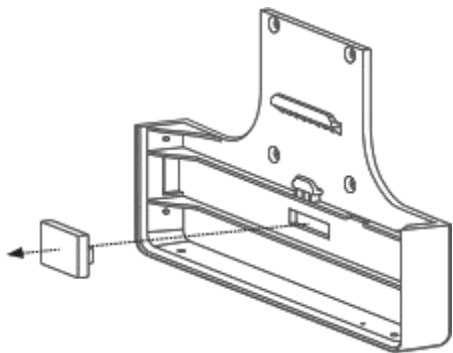
Close to right wall

Cut the left side of the back frame and continue with the installation steps from Step 5.



Step ②

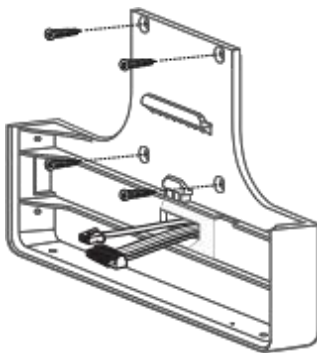
Pull the rubber off of the bracket and cut the adhesive back.



Step ③

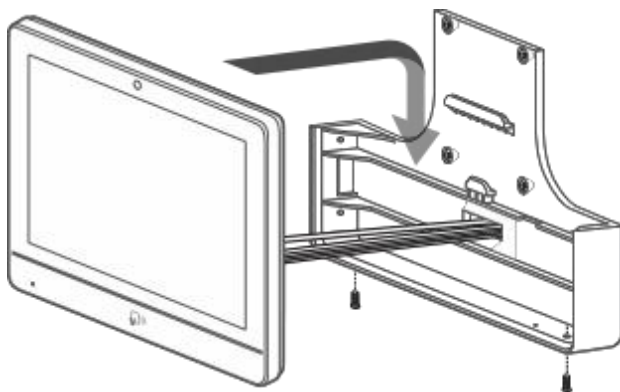
After arranging cabling through the back panel, confirm the horizontal position, then peel off the back adhesive and stick it to the wall.

Get suitable self-tapping screws or screws that fit with the material of the wall (stud) and fasten to the wall.



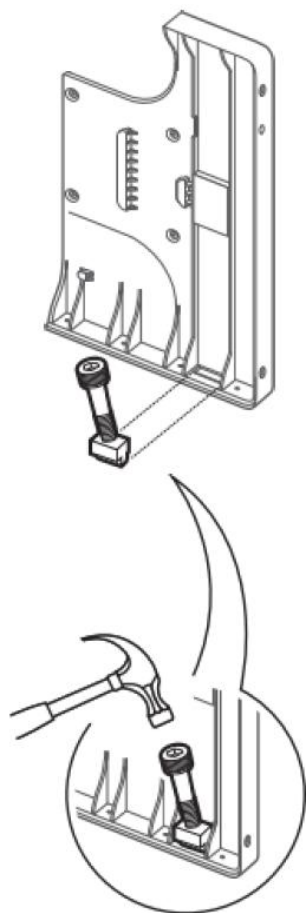
Step ④

Connect the Ethernet cable and control cable, insert the tenon from top to bottom, and screw in the anti-theft screw at the bottom. **Middle** installation is complete

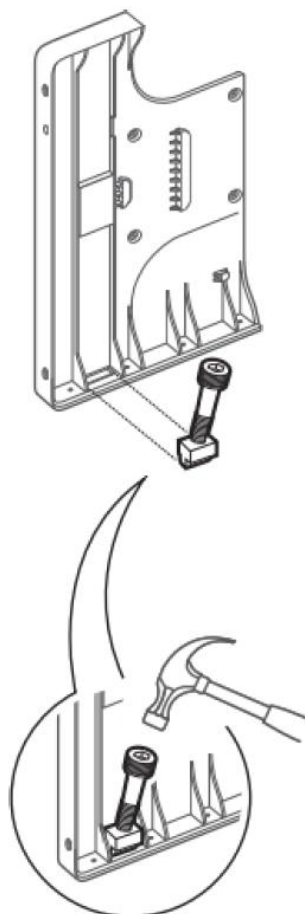


- Step ⑤ Drill a hole, and use a hammer to pry it open. Then use pliers to twist it open, and sand the sharp edges to avoid damaging the wire.

Close to left wall

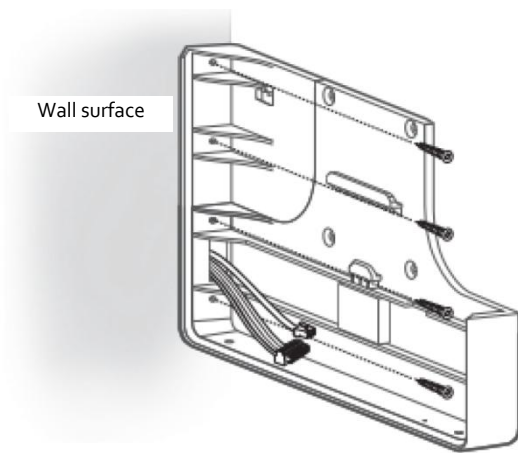


Close to right wall

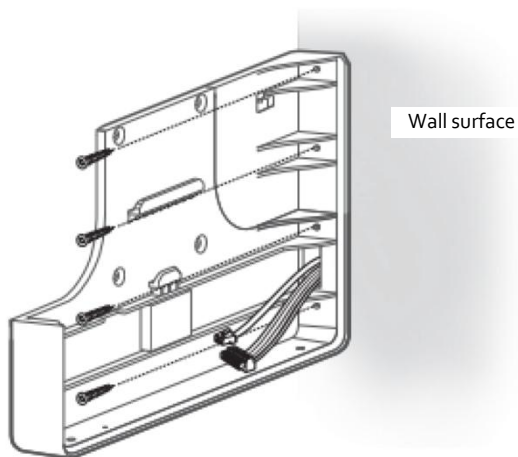


- Step ⑥ After arranging cabling through the back panel, confirm the horizontal position, then peel off the back adhesive and stick it to the wall.
Get suitable self-tapping screws or screws that fit with the material of the wall (stud) and fasten to the wall.

Close to left wall

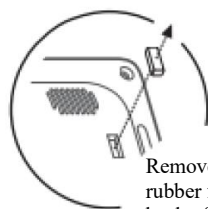


Close to right wall

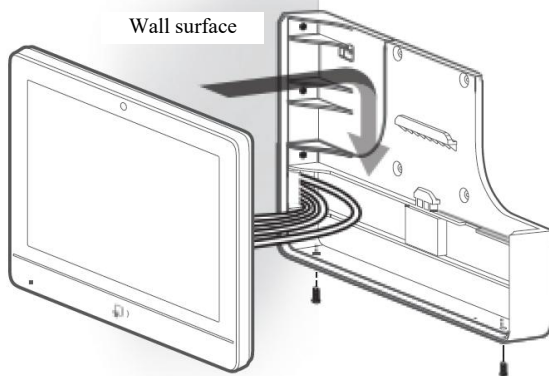


- Step ⑦ Take the rubber off of the back of the device. Connect the Ethernet cable and control cable, insert the tenon from top to bottom, and screw in the anti-theft screw at the bottom. **Close to left/right wall** installation complete.

Close to left wall



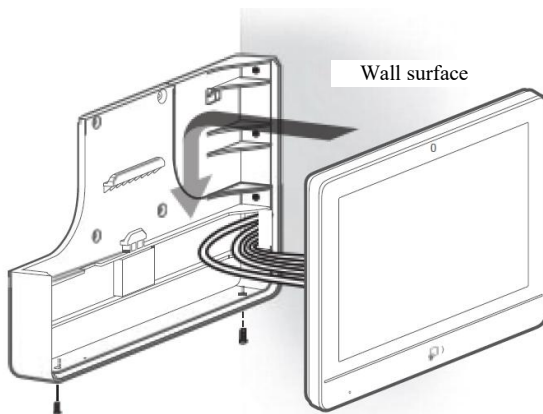
Remove the rubber from the back of the Panel PC device



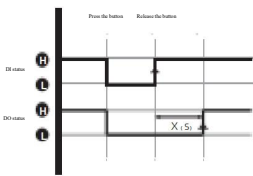
Close to right wall



Remove the rubber from the back of the Panel PC device



DIO activity meter			
	Mode	Figure	Explanation
1	Keep DO at Hi		
2	Keep DO at Lo		
3	DI ↓, DO=H		1. This mode is applicable when the door opening button connected to DI is Normal Close and the electric lock connected to DO is powered to unlock. 2. When DI↓, start counting X(s).
4	DI ↓, DO=L		1. This mode is applicable when the door opening button connected to DI is Normal Close and the electric lock connected to DO is unpowered to unlock. 2. When DI↓, start counting X(s).
5	DI ↑, DO=H		1. This mode is applicable when the door opening button connected to DI is Normal Open and the electric lock connected to DO is powered to unlock. 2. When DI↑, start counting X(s).

6	DI ↑, DO=L		1. This mode is applicable when the door opening button connected to DI is Normal Open and the electric lock connected to DO is unpowered to unlock. 2. When DI↑, start counting X(s).
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[Note] X(S) is the number of seconds of delay

Thanks for using the Panel PC system

For more information, service, and support

See the following resources or use the following channels to obtain more information on Panel PC security, software, services, and support.

AUO Display Plus website <https://www.auodplus.com/en-global>

About FCC compliance

FCC ID:2A639-P1000-R

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. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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 in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance 20cm between the radiator and your body: Use only the supplied antenna.