# Panel Computer User Manual

# To users of this product

Thank you for purchasing our panel PC. This product adopts high-performance embedded computer hardware components and a combination of the X86 architecture. It is designed for operations under relatively severe environments of Multimedia advertising / industrial automation equipment / instrumentation / security / intelligence products and other fields and featuring such as anti-vibration, anti-jamming, wide power supply input, etc. The delicately optimized design meets the requirements of all users in its applications to various conditions and occasions. This product is small in shape, easily installed. Moreover, the mini Panel PC is easily adaptable to a professional electronic equipment of industry personal controlling as well as its ease of extensive use such as multimedia ad/instruments/military affairs/intelligent product field. With its excellent quality and exquisite manufacturing technology, your product will bring limitless entertainment and enjoyment to you.

In order to ensure the correct installation and the most efficient service, please read this user manual carefully.

## **Notice: Electric Safety**

- In order to prevent electric shock and possible severe damage to the unit, please temporarily remove the PC power adapter from the power socket before moving the Car PC.
- In order to prevent voltage fluctuations from damaging your purchase and the possibly to the vehicle's battery, please switch the computer's power switch to the "off" position or use wide voltage box while starting the vehicle.
- Once the computer's power has been put into the "on" position do not switch the computer's power to the "off" position until the computer is fully booted. When shutting down the computer follow the guidelines in this user guide.
- Please make sure that the power voltage setting has been adjusted to the standard voltage value of the location where the product is being used.
- No owner/user-serviceable components exist in this unit. Allow only qualified technical service personnel to service or open this unit. Contact our factory service department. Unauthorized tampering may void the product warranty.

## **Operational Security**

- Before using this product, please first make sure that all external wires and power adapters have been correctly connected. If you suspect any defects, please contact your sales agent or factory personnel immediately.
- To prevent electric short-circuiting, it is forbidden to leave any metal stuffs in the PC mainframe.
- Dust, humidity and dramatic temperature changes will affect the usage life of this computer. Please keep the machine away from these hazards.
- Although an anti-vibration mechanism is adopted inside the computer, please avoid traumatic movement, jolting or dropping of the unit.
- Please do not use chemical detergents to clean the device. Remove dust with a soft cloth to ensure brightness. If any technical problems occur while using this unit, please refer to our sales agents or related technicians. We will correct any problem as rapidly as possible. Please refer to your warranty.

# Content

I . PRODUCT DESCRIPTION	3
1. Application	3
2. Feature	3
3. FUNCTION DESCRIPTION	4
4. Specification	4
$\mathrm{II}$ . Sketch map of mainframe panel	5
1. Sketch map of mainframe front panel	5
2. Sketch map of mainframe rear panel	6
3. SKETCH MAP OF MAINFRAME INTERFACE	6
	7
$\operatorname{IV}$ . PRODUCT INSTALLATION INSTRUCTION	7
V . ACCESSORIES	8
	9

## I. Product description

### 1. Application

1.1 Computer: It is embedded human-machine interface of high capability with INTEL core. 7 inch 800x480 resolution TFT LCD with 4-wire resistive touch screen. It is compact and firm, good anti-vibration and electromagnetism shielded capability, and is optimal choice with using telecom, electric power, multimedia, security & defense, industry robotize control equipment and manufacturing field. It uses for human-machine interface, client terminal, PLC and POS communication and control terminal. Moreover, it used advanced structure design, convenient system installation. Multiple mount methods such as panel type, hanging, embedded mount and VESA standard, etc.

1.2 Extension functions: Audio, USB, LAN, VGA out, SIM slot, HDMI out, DC, XLR, COM and Antenna interfaces, through which user can accessorize this machine with multiple video outputs, main board encryption, support PXE and WOL, various extend functions, etc.

1.3 OS for optional: Windows 7, Windows 8, Windows Embedded 7 or Linux, user can install the relative OS.

#### 2. Feature

Stable performance—Industrial design, reliable quality.

Elegant and firm—Heat-reduced sheet with thick armor plate. The whole device is elegant and firm.

Compact design—With dimension of 200mm (L)  $\times$  117mm(W)  $\times$  46mm(D). The unit is easily installed.

High configuration—CPU can supply as request. Compare the unit's smaller dimension and upper performance features.

Low power consumption—Energy savings and efficient heat emissions make the unit compatible with the vehicle.

Professional design—The device is specifically designed with industry environment. Designed using optimal mechanical and electrical specifications, product features focusing on anti-vibration, power separation and heat emissions satisfy the most demanding user. The pc will function superbly in severe operating conditions including, but not limited to, temperature extremes, electromagnetic disturbances caused by inferior road conditions.

Power supply—This equipment has a wide-voltage input power control system.

# 3. Function description

Applications Functions	Industrial Control	Multi-media ads
Choose touch screen integrative unit	<ul> <li>Wi-Fi WLAN (extension)</li> <li>Wired network control</li> <li>Software control equipment</li> <li>Touch screen control</li> <li>Special software installation</li> </ul>	<ul> <li>Wi-Fi WLAN (extension)</li> <li>Wired network control</li> <li>Special multi-media software control</li> <li>One to more screens display output control</li> </ul>

# 4. Specification

ltem	Description		
Display screen	7 inch TFT LCD 1,152,000 pixels 800×480		
Contrast	500:1		
Brightness	450cd/m <sup>2</sup>		
View angle	140 %120 °(H/V)		
Touch screen	4-wire resistive		
CPU	Standard configure: Intel N2800, dual-core 1.86Ghz		
Memory	Standard configure: 2GB (DDR 3) up to 4GB		
Storage	PCle mSATA SSD 32GB, support up to 128G		
Chipset	Intel NM10 chipset		
Video card	Intel®GMA 3650/3600		
Audio output	AC97 4Ch, 3.1 Channels		
Video output	VGA、HDMI		
Ethernet card	$1 \times RJ-45$ network card port, 10M/100M Ethernet		
Wireless communication	WI-FI – USB (extension)		
	Bluetooth – USB (extension)		
communication	GPRS/3G – USB(extension)		
	$1 \times \text{Audio output, } 2 \times \text{USB, } 2 \times \text{LAN,}$		
	$1 \times VGA$ output, $1 \times HDMI$ output,		
Panel interface	$1 \times SIM$ slot, $2 \times DC$ 12V, $1 \times Mini$ XLR,		
	5×RS232(COM2 Support RS232/RS485/RS422)		
	1 ×Antenna		
OS	Windows 7, Windows 8, Windows Embedded 7 or Linux		
Working temperature	0°℃-50°℃		
Storage temperature	-10℃-65℃		
Power supply	DC 6V-32V (External power supply)		
Current	1.0 A-2.0 A		
Power consumption	$\leq 24W$		
Dimension	200mm ×117mm ×46mm		
Weight	1225g		

# **II**. Sketch map of mainframe panel

## **Standard Mount**





**Open Frame Mount (optional)** 



1. Sketch map of mainframe front panel

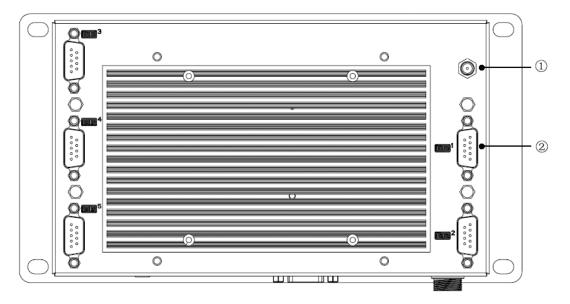


- 1. Power indicator light (Red light).
- 2, Hard Disk indicator light (Green light).
- 3、Reset.

(reset button function under XP system, hibernation function under Win 7 system.)

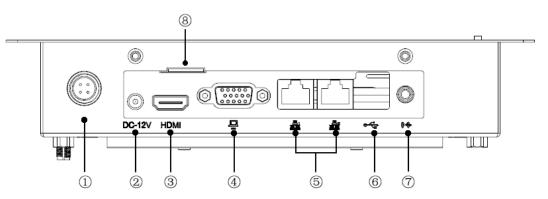
4. Power switch.

## 2. Sketch map of mainframe rear panel



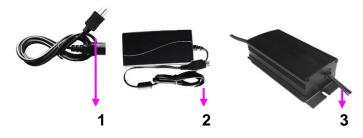
- 1、 3G antenna interface (optional).
- 2、COM1~ COM5 serial port, for external serial port equipment. (COM 2 can be switched to RS485 / RS422 / RS232)

## 3. Sketch map of mainframe interface



- 1. Mini XLR (for connect the vehicle power supply).
- 2 Power input.
- 3、HDMI output.
- 4, VGA output (connect PC).
- 5、 RJ-45 Ethernet interface, connected with 10/100M network cable.
- 6、USB×2: Connect with external USB equipment.
- 7、Audio output.
- 8、 SIM slot, external SIM card.

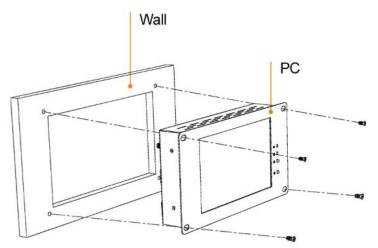
## $\blacksquare$ .Connection explanation



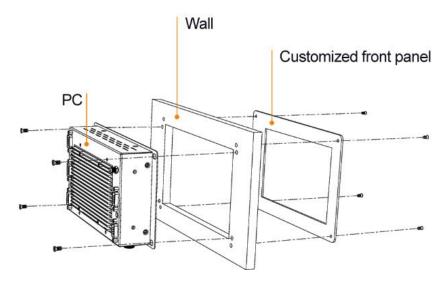
- 1, connect to power supply.
- 2, connect with power input port on the back of device, in order to provide power for device.
- 3. Car power (wide voltage box), connected with XLR connector on the back of device.

## $\operatorname{IV}$ . Product installation instruction

#### STANDARD MOUNT



#### **OPEN FRAME MOUNT (optional)**



#### VESA FOLDING BRACKET MOUNT (optional)



Fixed screw (KM4×10)

# V. Accessories



Description	Amount
Power supply adapter	1 pair
Fixed screw	4 pieces
Driver disk	1 piece
Manual	1 сору
Wide voltage box 6-32V (optional)	1 piece
Open frame bracket (optional)	1 Pair
VESA folding bracket (optional)	1 piece
VESA rail slot (optional)	1 piece

# **VI.Trouble shooting**

1. The power indicator doesn't light after you press the power button.

-Please check and make sure the power connection is correct and the power supply proper.

#### 2. No sound

-Please check and make sure the audio lint is connected properly.

-Please check is the system is in MUTE mode or the volume is down to the minimum level.

-Check whether the driver of audio card is installed correctly.

#### 3. No display

-Check whether the display work properly.-Check and make sure the connection is correctly.

### 4. USB device can't be identified.

-Re-insert the USB device, so that the system will recognize it again.

-Insert to another USB ports..

-Check whether the driver program is installed properly or not.

#### 5. How to start the USB2.0 function?

-Because of ICH4 this unit can read two USB2.0 port.

We suggest that install WINXP SP2 so that it needn't a driver for USB2.0 and could read the USB2.0, then work normally as transmission rate of 480Mbit.