

Elanda



USER MANUAL



S27

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Shenzhen Elanda Tech Co., Ltd

Dear User

Thank you for choosing Elanda.

This manual provides quick guidance on “installation, operation, and maintenance”. We recommend reading it first.

Product hardware may be upgraded for performance. Please refer to the actual product if there are minor differences from this manual. For any questions, feel free to contact us.

Thank You

SAFETY AND USE PRECAUTIONS

For the best performance and longevity of your kiosk, please follow these guidelines.

- Placement: Place the kiosk on a flat, stable surface away from direct sunlight, moisture, and excessive dust. Avoid strong electromagnetic fields.
- Power: Use the correct voltage as marked on the device. Do not share an outlet with high-power appliances. Ensure the power socket is easily accessible.
- Operating Temperature: Use the kiosk only within its designed temperature range of 0°C to 40°C.
- Cleaning: Wipe the surface with a dry cloth only. Never use wet cloths or chemicals like gasoline.
- Troubleshooting: If the kiosk malfunctions, immediately disconnect the power. Do not attempt to repair it yourself. Contact your service provider.

Disclaimer: Elanda is not liable for damage caused by improper use, unauthorized repairs, or the use of non-Elanda parts.

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Package Content

 Floor-standing Installation

No.	Items	Quantity
1	Main System of S27	1 pc
2	Base Plate	1 pc
3	Column	1 pc
4	Accessory Kit (including following)	1 pc
	Screen Bracket	2 pcs
	AC Power Cord	1 pc
	Key for Main System	2 pc
	M5-12mm Screw (lock screen bracket)	12 pcs
	M6-12mm Screws (locking the column and base plate)	4 pcs
	M8*60 Expansion Screw (locking base plate)	4 pcs
5	User Manual	1 pc

Wall Mount Installation

No.	Items	Quantity
1	Main System of S27	1 pc
2	Wall mount bracket	1 pc
3	User Manual	1 pc
4	Accessory Kit (including following)	1 pc
	AC Power Cord	1 pc
	Key for Main System	2 pc
	M5-12mm Screw (lock screen bracket)	12 pcs
	M6-12mm Screws (Lock wall)	6 pcs
	thumbscrew	4 pcs
	hex wrench	1 pc
	50mm protective grommet	2 pcs
	φ50mm cable management cap	10 pcs

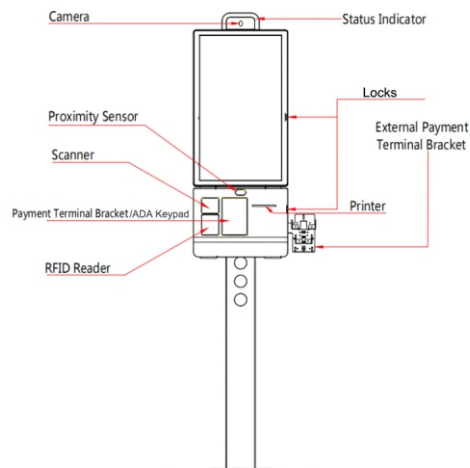
Overview

Features

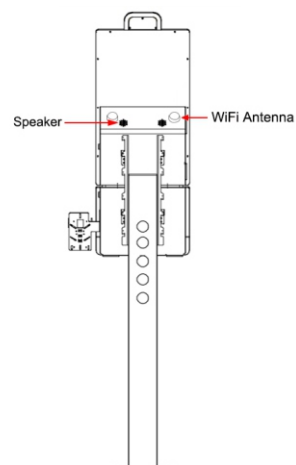
- 27" FHD Industrial Grade PCAP-Touch Screen
- Modular Options: Thermal Printer, Camera, Proximity Sensor, Status Indicator, Scanner, MSR/RFID Card Reader, Payment Device Cradle, ADA Keypad
- WiFi Dual Band 2.4/5G, BT4.2/BT5.0
- Wall-Mounting, Floor-Standing
- Sturdy Pedestal supports two kiosks
- Chassis and printer lock strengthen safety
- Clean and Safe cable management
- Efficient Cooling system

Product View

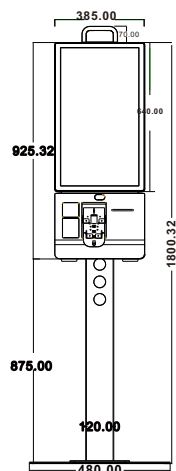
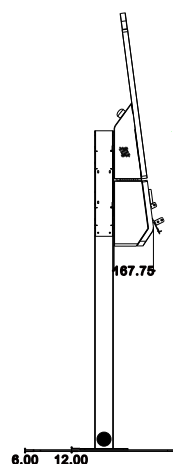
Front



Rear



Dimension (mm)



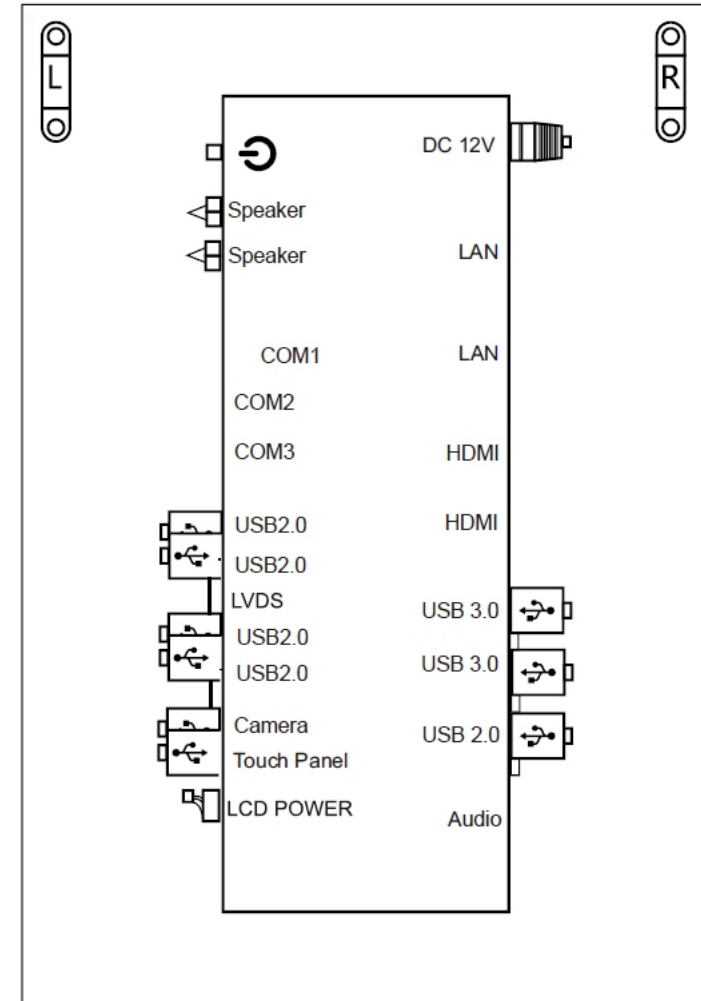
Specifications

Model Number		S27		
Processor		Intel® Celeron® Processor J6412 1.5M Cache, up to 2.60 GHz, Fan-Free	Intel® Core™ i3-1215U Processor 10M Cache, up to 4.40 GHz, Fan-Free Intel® Core™ i5-1235U Processor 12M Cache, up to 4.40 GHz, Fan-Free	Rockchip 3576, Transformer Architecture, Octa-core Processor, 6TOPS Computing Power, up to 2.2GHz Fan-Free
System Memory		1 x DDR4, SO-DIMM, 8GB (Max. 32GB)		LPDDR5, 8G(Onboard)
Storage		1 x M.2 NVMe 128GB SSD (256GB/512GB optional)	1 x M.2 128GB SSD, NVMe/SATA Adaptive (256GB/512GB optional)	eMMC 64GB
LCD	Size	27" TFT LCD Panel		
	Brightness	400-500cd/m²		
	Resolution	1920 x 1080		
Touch Screen		True-Flat Projected Capacitive Touch		
External I/O Port	USB	3 x USB3.0 + 9 x USB2.0	4 x USB3.0 + 6 x USB2.0	1 x USB3.0 + 7 x USB2.0 + 1 x Type-C
	Serial Port	2 x RJ50 + 1 x DB9		2 x RJ50
	DC-In	1 x DC-In		
	VGA	N/A		
	HDMI	2 x HDMI	1 x HDMI	N/A
	LAN	2 x LAN (10/100/1000Mb)		1 x LAN (10/100/1000Mb)
	TF Card Slot	N/A	N/A	N/A
	SIM Card Slot	N/A	N/A	1 x SIM Card Slot
	OTG Upgrade Button	N/A		1 x U-Boot
	Audio	1 x Audio (3.5mm Earphone Connector, Support Line-Out&Line-In)		
	LVDS Signal	1 x LVDS Signal (30-pin)		
	LVDS Backlight	1 x LVDS Backlight (6-pin)		
Power Switch	1 x Power Switch			
Power	1 x 12V-5A/60W (System) + 1 x 24V-2A/48W (Printer)	1 x 12V-7A/84W (System) + 1 x 24V-2A/48W (Printer)		1 x 12V-5A/60W (system) + 1 x 24V-2A/48W(Printer)
WiFi&BT		mPCI-E WiFi2.4-5G/BT4.2		WiFi2.4-5G/BT5.0 On Board
OS Support		Windows 10 IoT LTSC, Windows 11 IoT, Ubuntu		Android 14.0
Certification		CE, FCC, UKCA, RoHS		
Environment	Operating Condition	0°C - 40°C, 20% - 85% RH Non Condensing		
	Storage Condition	15°C - 70°C, 20% - 85% RH Non Condensing		

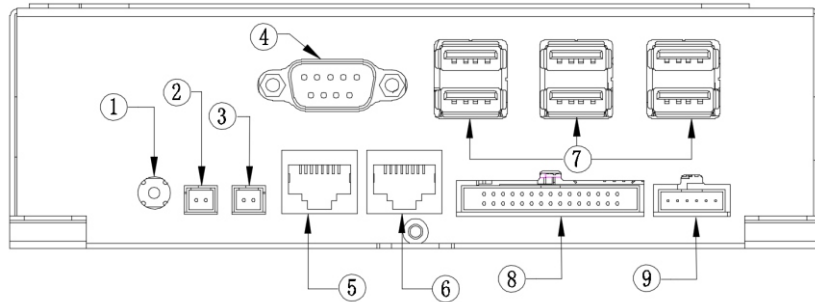
PC Box

I/O ports of J6412

Dimension/Weight N.W. in Kg)	Floor Standing	480mm x 500mm x 1800mm, 54.7kg
	Wall-mounted	385mm x 170mm x 925mm, 28Kg
Standard	Printer	3" Thermal Printer, Auto Cutter, 170 mm/s (SNBC-S80 250mm/s Optional)
Optional	Speaker	2 x 5W Speaker
	Scanner	WS71 (USB, 1D, 2D, Reading Precision: ±4mil, Scan Speed: 200cm/s, Resolution 640*480, Depth of field 10-130mm))
	NFC/RFID Reader	Support ISO/IEC 14443-A&B (MIFARE), JIS x 6319-4 (Felica), NFC Protocols - Tag Read/Write (ISO/IEC-18092)
	Payment Device Bracket	Custom Bracket Support for Various EMV Payment Devices
	Status Indicator	Status Indicator For MB and Printer (Red Light Indicate an Error, Blue or Green Light Indicate in Service)
	Proximity Sensor	60~80cm Proximity Sensor
	Pedestal	Base Plate, Column in Metal
	Camera	5MP Camera, USB Connection AI Security Camera
	Microphone	Microphone Supports AI Input
	Bagging Area	Two Durable Bagging Area for items sorting and checkout
	Security Scale	AI-powered weighing support loss prevention
	Wall Mount Bracket	40mm from wall to System
	Audio Navigation Keyboard (ADA/EAA/BFSG)	Integrated 3.5mm Audio Jack (6 Keys /18 Keys Optional)



Left I/O port description



① 1 x Power Button (blue light)

After plugging in the AC power cord, the machine will start automatically. The adapter indicator will turn green, and the power button light will be on. No need to press the power button manually.

② 1 x Speaker R (5W)

③ 1 x Speaker L (5W)

④ 1 x DB9 (COM1)

⑤ 1 x RJ50 (COM2)

Used for connecting the status indicator module (P10 with 5V voltage). For other devices connecting, please contact the Elanda technical team.

⑥ 1 x RJ50 (COM3)

Rj50 is a standard RS-232 signal com communication interface. Please do not use non-original adapter cables, as they may damage the port or the device due to different cable definitions.

⑦ 6 x USB2.0

⑧ 1 x LVDS Signal

The LVDS signal transmits display data to the LCD panel.

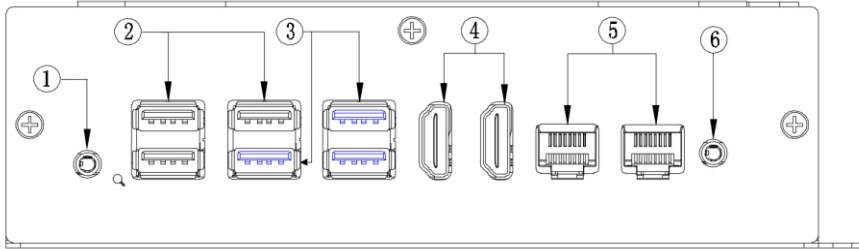
Note: Ensure the cable is connected in the correct direction. Incorrect insertion may damage the LCD screen or motherboard. Before unplugging the LVDS cable, take a photo for reference or contact technical support/local service provider.

⑨ 1 x LVDS Backlight

LVDS Backlight: Interface for LCD backlight power and brightness control.

Note: Ensure the cable is connected in the correct direction. Incorrect insertion may cause damage to the backlight board or motherboard.

Right I/O port description



① 1 x Audio

② 3 x USB2.0

③ 3 x USB3.0

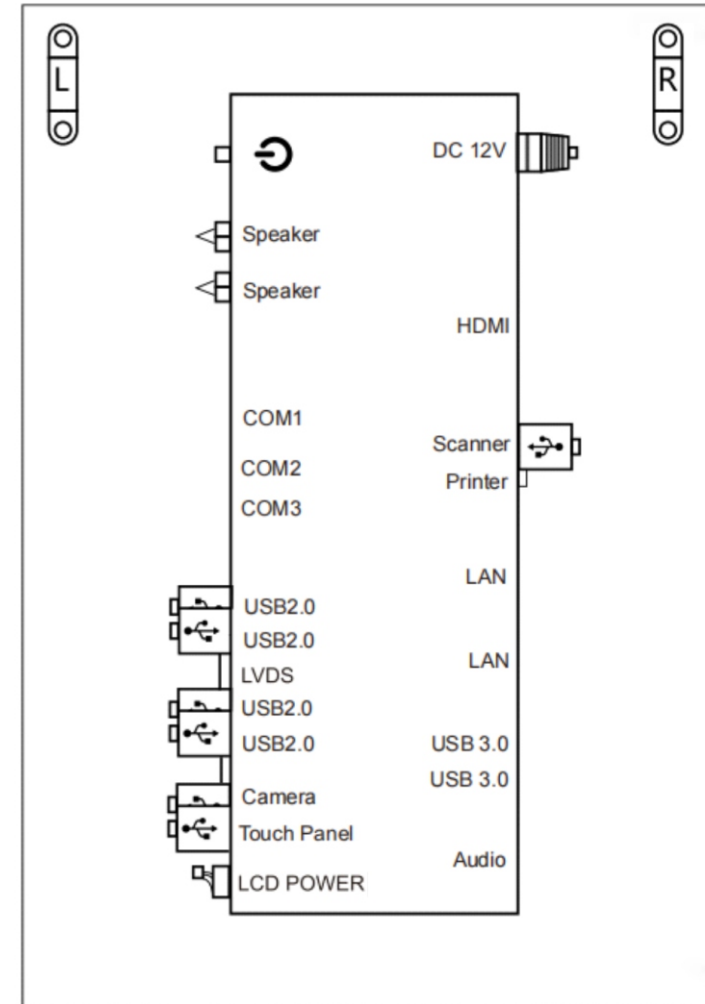
④ 2 x HDMI

⑤ 2 x LAN

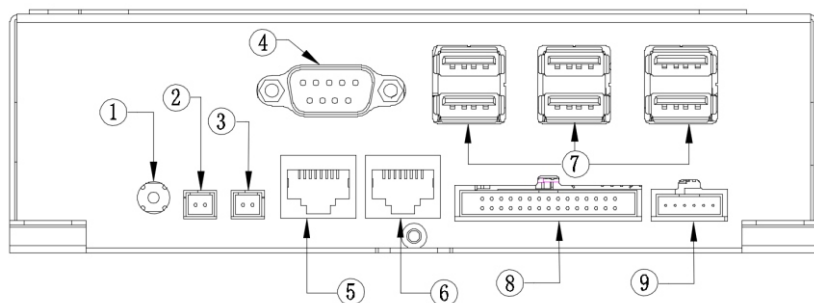
⑥ 2 x DC 12V 5A input

Please use the original power adapter to power the machine. If using a third-party adapter, ensure it matches the required power and plug specifications to avoid damage.

I/O ports of i3/i5 12th Generation



❏ Left I/O ports



❶ 1 x Power button (blue light)

After plugging in the AC power cord, the machine will start automatically. The adapter indicator will turn green, and the power button light will be on. No need to press the power button manually.

❷ 1 x Speaker R (5W)

❸ 1 x Speaker L (5W)

❹ 1 x DB9 (COM1)

❺ 1x RJ50 (COM2)

Used for connecting the status indicator module (P10 with 5V voltage). For other devices connecting, please contact the Elanda technical team.

Please do not use non-original adapter cables, as they may damage the port or the device due to different cable definitions.

❻ 1 x RJ50 (COM3)

Used for connecting the status indicator module (P10 with 5V voltage). For other devices connecting, please contact the Elanda technical team.

Please do not use non-original adapter cables, as they may damage the port or the device due to different cable definitions.

❼ 6 x USB2.0

❽ 1 x LVDS Signal

The LVDS signal transmits display data to the LCD panel.

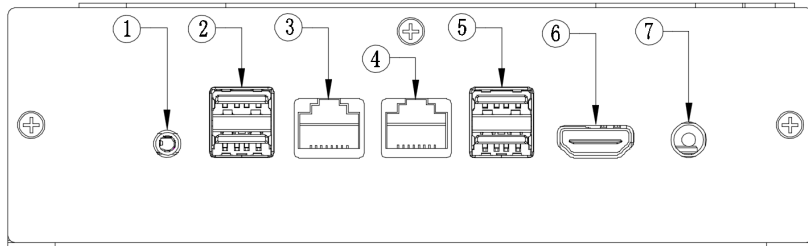
Note: Ensure the cable is connected in the correct direction. Incorrect insertion may damage the LCD screen or motherboard. Before unplugging the LVDS cable, take a photo for reference or contact technical support/local service provider.

❾ 1 x LVDS Backlight

LVDS Backlight: Interface for LCD backlight power and brightness control.

Note: Ensure the cable is connected in the correct direction. Incorrect insertion may cause damage to the backlight board or motherboard.

Right I/O port description



① 1 x Audio

② 2 x USB 3.0

③④ 1 x LAN port

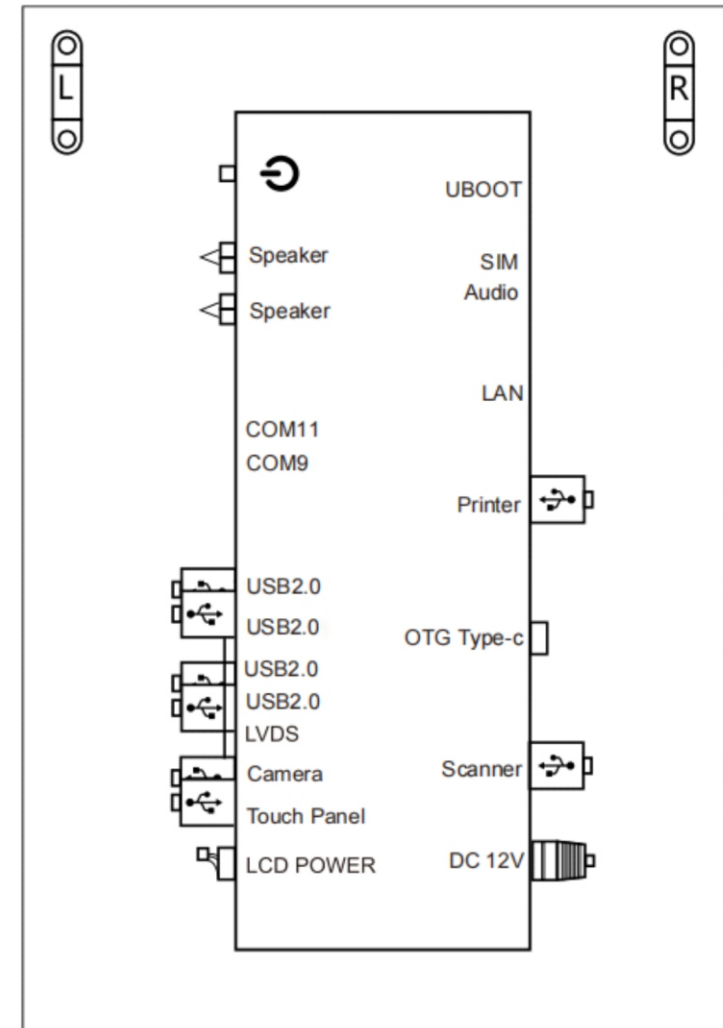
⑤ 2 x USB 3.0 (Printer and Scanner use)

⑥ 1 x HDMI interface

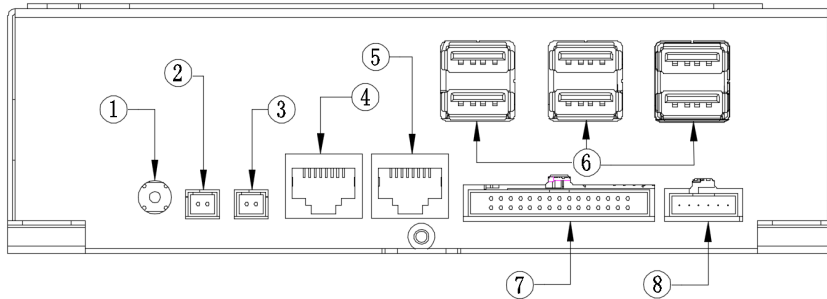
⑦ 1 x DC 12V 7A input

Please use the original power adapter to power the machine. If using a third-party adapter, ensure it matches the required power and plug specifications to avoid damage.

I/O ports of RK3576



Left I/O port description



① 1 x Power button (blue light)

After plugging in the AC power cord, the machine will start automatically. The adapter indicator will turn green, and the power button light will be on. No need to press the power button manually.

② 1 x Speaker R (5W)

③ 1 x Speaker L (5W)

④ 1 x RJ50 (COM11)

Used for connecting the status indicator module (P10 with 5V voltage). For other devices connecting, please contact the Elanda technical team.

Please do not use non-original adapter cables, as they may damage the port or the device due to different cable definitions.

⑤ 1 x RJ50 (COM9)

Used for connecting the status indicator module (P10 with 5V voltage). For other devices connecting, please contact the Elanda technical team.

Please do not use non-original adapter cables, as they may damage the port or the device due to different cable definitions.

⑥ 6 x USB2.0

⑦ 1 x LVDS Signal

The LVDS signal transmits display data to the LCD panel.

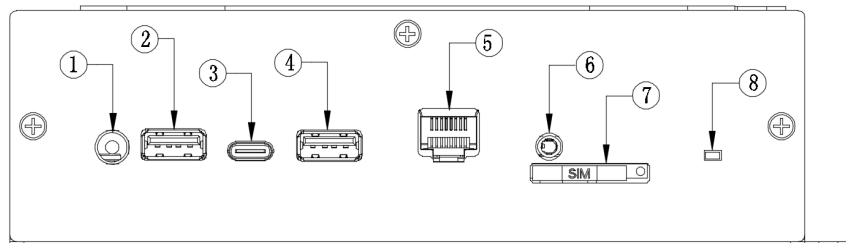
Note: Ensure the cable is connected in the correct direction. Incorrect insertion may damage the LCD screen or motherboard. Before unplugging the LVDS cable, take a photo for reference or contact technical support/local service provider.

⑧ 1 x LVDS Backlight

LVDS Backlight: Interface for LCD backlight power and brightness control.

Note: Ensure the cable is connected in the correct direction. Incorrect insertion may cause damage to the backlight board or motherboard.

Right I/O port description



① 1 x DC 12V/5A input

② 1 x USB2.0

③ 1 x Type-C (OTG)

This interface can be connected to a monitor with a Type-c interface as a second screen, and can also be used as a USB interface and OTG upgrade.

④ 1 x USB 3.0

⑤ 1 x LAN port

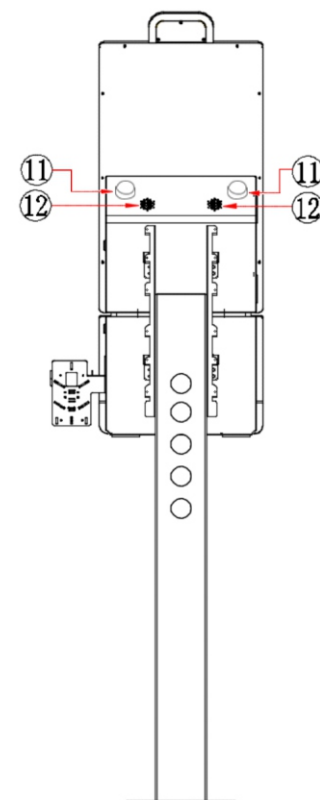
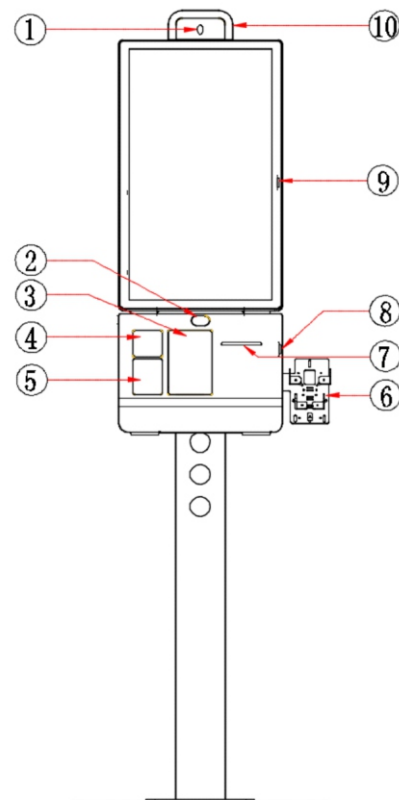
⑥ 1 x Audio

⑦ 1 x SIM Card Slot (reserved)

⑧ 1 x Reset(U-Boot)

Operations

Module Introduction



① Camera:

Uses USB communication, supports 5MP images, and defaults to a vertical screen display.

② Proximity Sensor:

This sensor connects via USB virtual serial port. The sensor distance within 60–80cm.

③ Payment terminal Bracket:

This is a designated installation location for a payment terminal, such as Ingenico LANE 3000/ Verifone P400/ Ingenico IPP350.

④ Barcode Scanner:

A USB-connected scanner that can read 1D and 2D barcodes from a distance of 20–50mm. For a list of supported barcode types, refer to the scanner's documentation.

⑤ RFID/NFC Module:

Connects to the host via USB, uses a 13.56MHz frequency, and has a read range of 500mm. It supports multiple different operating formats.

⑥ Reserved Peripheral Ports:

Reserved for other external peripheral modules, for installation of other modules of USB or serial port, such as payment terminal.

⑦ 80mm Thermal Receipt Printer:

It uses USB communication and can be configured as a USB virtual serial port. The printer supports the standard ESC/EPSON command set and various international character sets. For more details, refer to the printer's development documentation.

⑧ Lock for the Modules:

Access to the printer, power adapter and other modules.

⑨ Lock for Main System:

Access to the PC BOX and other important components.

⑩ Status Indicator:

Powered by the Main System's COM port, this light indicates the status of the system or application software. Default setting:

- Blue light: In service
- Flashing red light: Indicates a printer failure or paper shortage.
- Solid red light: The system and the application software not ready.

Note: The features require corresponding application development. For more details, refer to the status light development documentation.

⑪ WiFi or 4G Antenna:

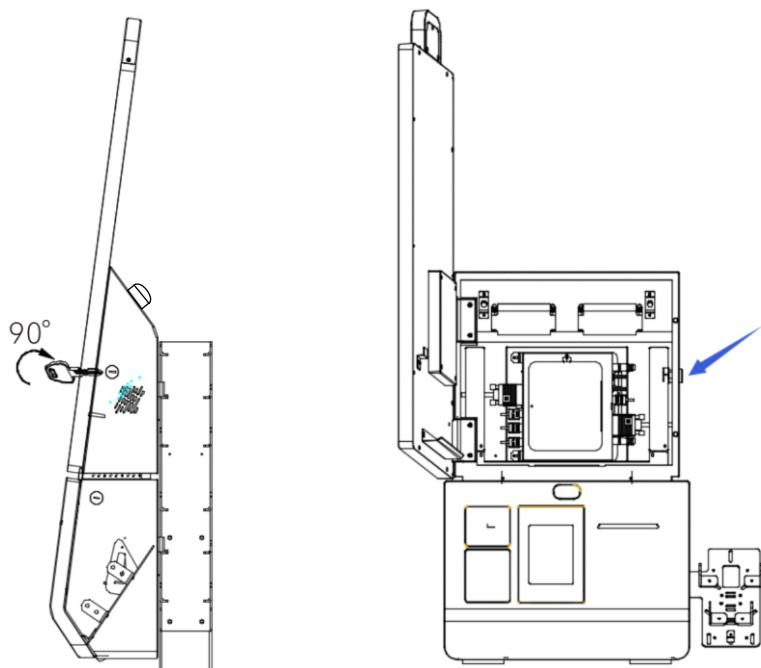
The antenna is to ensure a stable wireless signal. If damaged or lost, the signal might be poor.

⑫ Sound Holes

The device is equipped with two built-in 5W speakers. Please do not block or pierce with sharp or rigid objects, as this may cause noise or distortion. When cleaning the device with a towel, make sure that no water or detergent enters the sound holes.

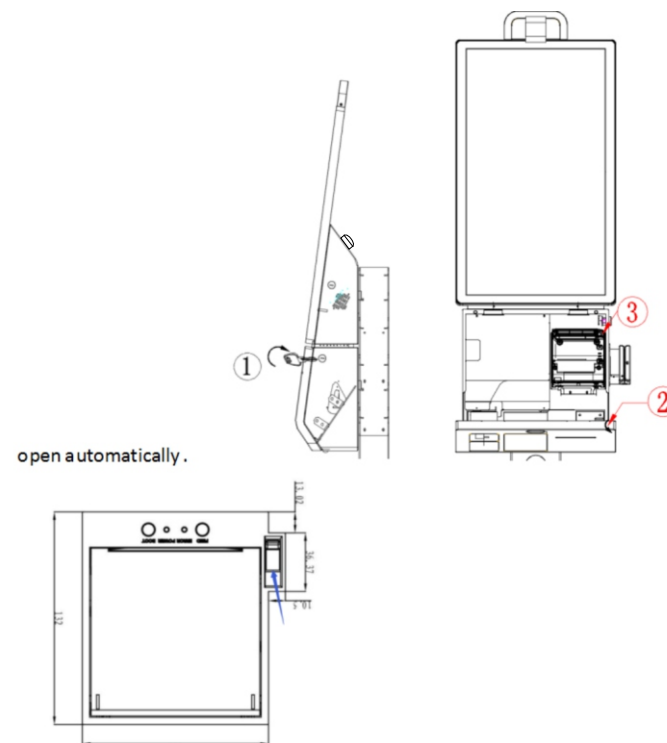
How to open the main unit door

Insert the key into the lock , and turn the key 90 degrees clockwise .



How to replace the paper roll

1. Insert the key into the lock. Turn the key 90 degrees clockwise .
2. Pull the metal cover downwards.
3. Press the printer button to open it.



4. Insert a new roll of paper, pay attention to the direction of the paper.
5. S80 Printer Function Introduction.

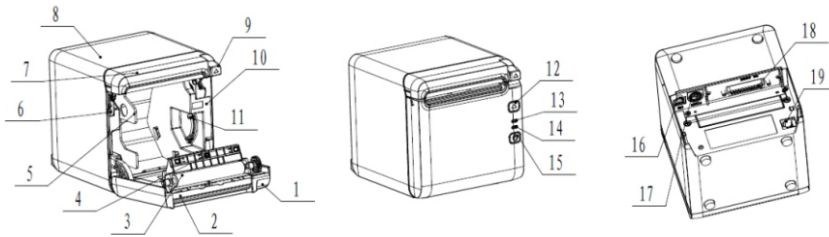
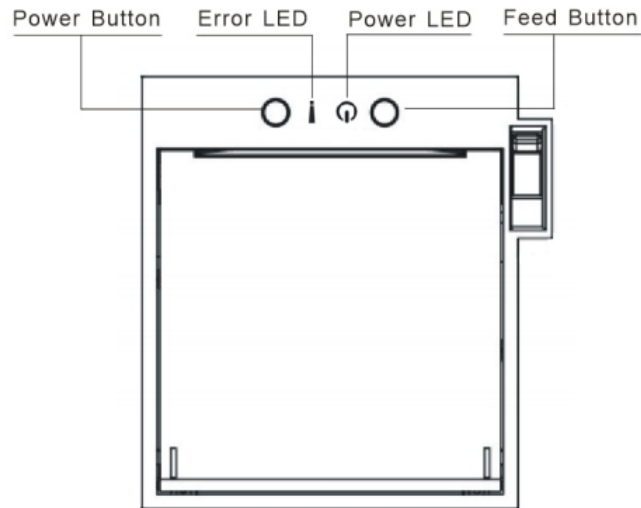


Fig. 3.1-1 Schematic drawing of appearance and modules

1—Top cover	2—Cutter	3—Platen roller
4—Paper end sensor	5—Paper guide	6—Micro switch
7—Cutter cover	8—Middle cover	9—Cover open spanner
10—Paper cabinet	11—Paper near end sensor	12—FEED button
13—ERROR LED	14—POWER LED	15—POWER button
16—USB	17—Power interface	18—Communication interface
19—Cash drawer interface		



Function :

The printer feeds on a line when the black mark sensor is disabled, the printer feed length is a unit of length of black label paper when the black label function is used In the following cases, Press the paper button to stop the feeding :

- ① Disable the button function when using command ESC C5.
- ② No paper.
- ③ Headstock lift.

Indicator light



1) Green

ON: Power connected

OFF: Power disconnected

2) Status: Normally on



1) Red

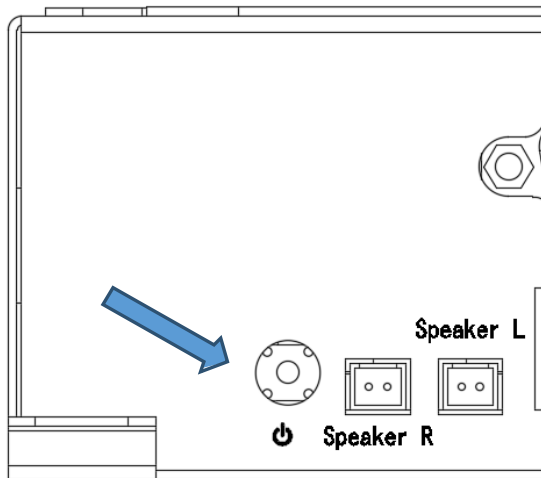
ON: Out of paper roll

OFF: Working properly

Power on/off the Main System

Power on the device

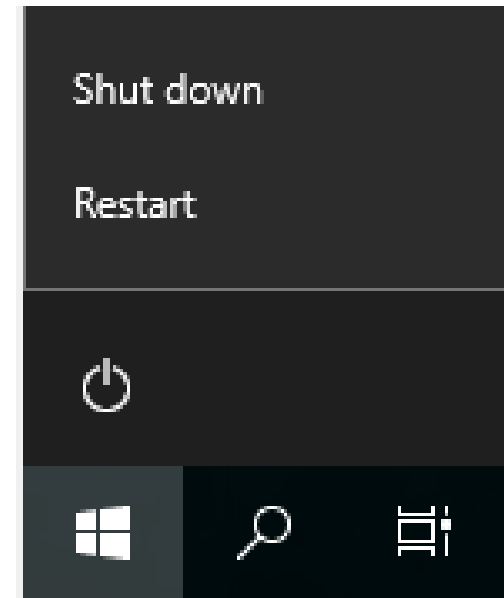
When the device is connected to a power source, it will automatically power on. If the system has been properly shut down, you can also press the Power Button on PC box to turn on manually.



Power Off the device

Windows Version:

Click the Start menu-Select the Power icon-Click Shut down to power off the device safely.



Android version

Click the bottom navigation bar-Select the Power icon-Click Shut down to power off the device safely.

FAQ

The Kiosk Fails to Power On ?

A. If kiosk isn't power on, please follow these steps to troubleshoot the issue: Check if the indicator light on the power adapter is on.

B. If the light is off, please check if the external AC power outlet is working.

C. Check whether the DC IN plug is securely connected to the I/O port. If it's loosen please replug.

D. Use a new power adapter which is same configuration(voltage and power) as the original one to try again.

E. Unplug the power adapter, re-plug and restart the kiosk after waiting one minute.

F. For any PC box/motherboard and internal cable issues, please contact local service provider for maintenance.

PC BOX Light is On, but the Screen is Blank ?

Troubleshooting steps:

A. For Windows version, if there is a 'beep' alarm sound when the kiosk powers on, call professional technician to reinstall or replace the memory card and test again.

B. If there's no beep sound, check if the power button is damaged. Professional technician can open the PC BOX to test it by shorting the power pins on the motherboard.

C. Check the power supply is working functionally. Also, check the LVDS signal cable and the LVDS backlight cable are both securely connected.

D. For any PC box/motherboard and internal cable issues, please contact local service provider for maintenance.

Touch Screen Unresponsive ?

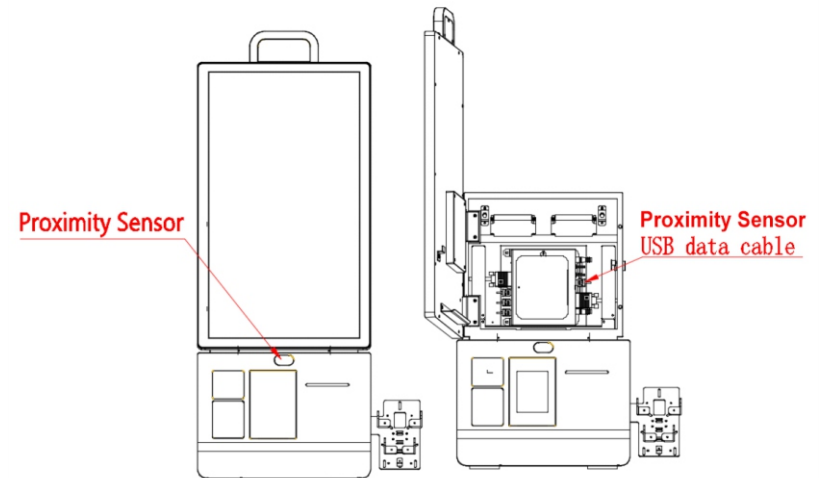
A. In Windows, open Control Panel > Hardware and Sound and select Tablet PC Settings. Follow the on-screen instructions to calibrate the touch screen.

B. Make sure the touch cable is plugged in securely. Try a different USB port to see if the touch works.

C. If the above steps fail, the touch controller or touch panel may need to be replaced. Refer to the disassembly guide for instructions.

Proximity Sensor Not Working ?

①The connection line position diagram of the proximity sensor module is as follows.



② Working Principle

The proximity sensor is a peripheral device connected to a USB virtual COM port. It returns '1' when someone approaches and '0' when no one is near.

The proximity sensor detects the distance to an obstacle based on the reflection intensity of an infrared signal. It features a pair of infrared transmitting and receiving diodes. The transmitting diode emits an infrared signal at a specific frequency. When this signal encounters an obstacle, it is reflected and captured by the receiving diode. A signal processor then calculates the distance based on changes in the reflected light intensity.

③ Troubleshooting Steps

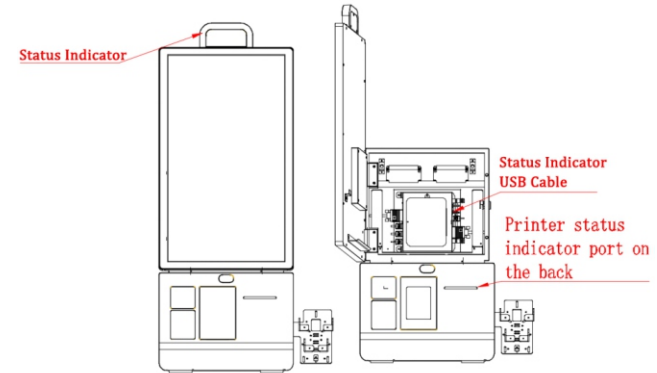
A. First, confirm whether the software is developed for the proximity sensor. The sensor's functionality can only be reported back once the software is properly configured.

B. Use COM tools to check the corresponding COM return value. If a value is returned, the hardware is functioning normally, and you can proceed with software development and debugging.

C. If no return value is detected, check if the USB cable is loose or disconnected. If the issue persists, contact the technical support center or your local service provider for assistance.

🚩 Status Indicator Not Working?

① The connection diagram for the status indicator module is shown below:



② Working Principle

The status indicator has three operating states.

1. Red light flashes when the printer is out of paper or encounters an error.
2. Red light stays solid when the system has not started or the software is not running.
3. Blue light remains on when the device is operating normally.

③ Troubleshooting Steps

If the status indicator is flashing or solid red.

- A. Check if the printer is out of paper.
- B. Verify whether the printer power supply is normal.
- C. Ensure the printer door is fully closed and functional.
- D. If Windows fails to start or enter the desktop, the status indicator stays solid red. Once on the desktop, check if the application software (Status Indicator Control) is running.
- E. Confirm whether your POS software finish the development for status indicator integration or not.

Why did the Printer Fail to Print the Receipt?

- A. Firstly, check the printer's error light is solid on or flashing.
- B. Secondly, check if the printer is out of paper or if the paper is incorrectly installed.
- C. Finally, confirm the USB cable is secure and test the printer with the Windows driver or a dedicated tool. If the test print works, check software settings. If it fails, contact technical support or your local service provider.

Note:

1. For S80 printer, the status indicator requires a USB connection to the PC BOX to show the printer's status.
2. For PT80km printer, the status indicator uses a serial cable to directly connect to the printer.

Why Does the Built-in Scanner Fail to Scan or Scan Incorrectly?

- A. Confirm if there is a "beep" sound during scanning. If yes, the scanner is working; check scan results in Notepad or a testing tool.
- B. If no "beep" sound, check if the bar code type is supported and the bar code is unclear or damaged.
- C. If there is a return value but no "Enter/Confirm" action, refer to the setup manual to add the "Enter/Confirm" setting. For details, contact the technical support center or your local service provider for assistance.