



 AutoTRON

MAV1011

User's Manual



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Revision History

The revision history of MAV1011 User Manual is described below:

Version No.	Revision History	Date
1.0	Initial Release	2024/08/20

Thank you for choosing MACTRON Tablet

This instruction serves to enable users to get to know our product as soon as possible. Here we have made a brief introduction to the key layout and definitions in figures and words. And a brief explains for the basic operating functions.

Attention:

1. The instructions in this guide refer to the windows 10 system. If you are using other windows operating systems, some operations may be slightly different. If you are using another windows operating system, some operations may not suit you.
2. The instructions describe the general functions of most models. Your computer may not have some functionality, or some features on your computer are not described in the manual.
3. This instruction applies the following models: MAS1011 rugged tablet.
4. The illustrations in this instruction may be different from the product itself.

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1. Getting Started

Thank you for purchasing our MAV1011 products! To help you get familiar with the product faster, please refer to the user manual if you have any problems during use. This document mainly introduces the interface and system usage instructions of the rugged tablet MAV1011 and helps you quickly understand the use of the product through the picture instruction. If you have any insoluble problems during use, please contact our technical personnel to deal with them.

1.1. Packing List

After unpacking the shipping carton, you should find these standard items:

If you discover any of the items listed below are damaged or lost, please contact your local distributor immediately.

- MAV1011 x 1
- Power Adapter Cable x 1
- AC Power Adapter x 1
- WiFi Rod Antenna x 1
- GPS Vehicle Mushroom Antenna x 1
- 4G Rod Antenna x 1
- M12 Function Adapter Cable (USB and CAN Bus) 1 x 1
- M12 Function Adapter Cable (Serial Bus) 2 x 1
- M12 Function Adapter Cable (RJ45 LAN) 3 x 1

1.2. Connecting to AC Power

CAUTION : Use only the power adapter provided with this product. Using other power adapters may damage your device.

It must be connected to the AC power supply when it is turned on.

1. Insert the power cord of the power adapter into the power port of the device.



2. Plug the female end of the AC power cord into the power adapter and the male end into the power outlet.
3. The power outlet supplies power to the device through an adapter.
4. After connecting to the power supply, the power indicator light will be on.

1.3. Turning On and Off the Tablet

Turning On

After connecting to the power supply and press the power button (⏻), and wait for the device to power on. The operating system Microsoft Windows will start in 40 seconds. Please wait patiently.



Turning Off

When you finish a working session, you can stop the system by turning off the power or leaving it in Sleep or Hibernation mode.

2. Product Information

2.1. Specifications

Display	
Display Type	10.1" IPS TFT LCD
Resolution	800 x 1280
Brightness	700 nit
Touch Panel	5 points Capacitive touch screen
System	
CPU	Intel® Celeron® N5100 Processor
GPU	Intel® HD Graphics Gen 11
Memory	8 GB
Storage	128 GB
OS	Windows 11
I/O Ports	1 x USB 3.0 Type-A 1 x SIM card slot (optional) 1 x DC jack 1 x PORT1 (M12 for LAN) 1 x PORT2 (M12 for Serial Ports) 1 x PORT3 (M12 for USB 2.0/ CAN)
WiFi	802.11(a/b/g/n/ac), 2.4G+5.8G
4G	4G
Bluetooth	BT5.0 transmission distance: 10m
GPS	GPS, GLONASS
Physical	
Speaker	1 x 2.5W Single Horn
Microphone	Single MIC
Color	Black
Dimension (WxHxD)	264.5 x 184.1 x 23.0 mm
Weight	834g
Buttons	1 x Power 1 x Volume Key + (F1 Key) 1 x Volume Key - (F2 Key)
Indicator Light	Blue (Power indicator) Red (Power-on indicator) The red light flashes (Low battery indicator)

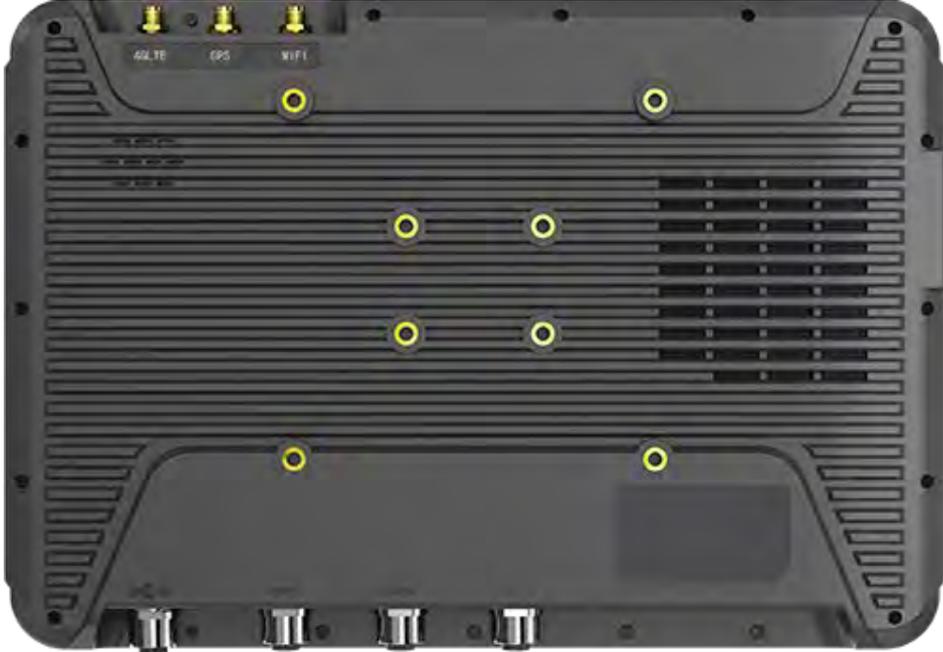
Battery	1000mAh/7.4V
Using Time	30 mins (50% volume sounds, 50% screen brightness, 1080P HD video display by default)
Power Adapter	DC ϕ 5.5 12V/4A
Standard Accessory	1 x Power Adapter 1 x WiFi Rod Antenna 1 x Power adapter Cable 1 x GPS Vehicle Mushroom Antenna 1 x 4G Rod Antenna 1 x M12 Function Adapter Cable 1 (12PIN USB2.0x1 + CAN Busx1) 1 x M12 Function Adapter Cable 2 (12PIN to full function RS232 power line+serial communication 485) 1 x M12 Function Adapter Cable 4 (12PIN to 100M RJ45) *Need to Rebuild 4G Small Board and Add LAN
Environment	
Rugged Feature	IP65
Certification	CE, FCC
Operating Temperature	-20°C ~ 60°C (DC Mode) -10°C ~ 60°C (Battery Mode)
Storage Temperature	-30°C ~ 70°C
Relative Humidity	95% (non-condensing)
Warranty	2 Years

2.2. Product Overview

Front View



Rear View



Top View



Bottom View



Side View



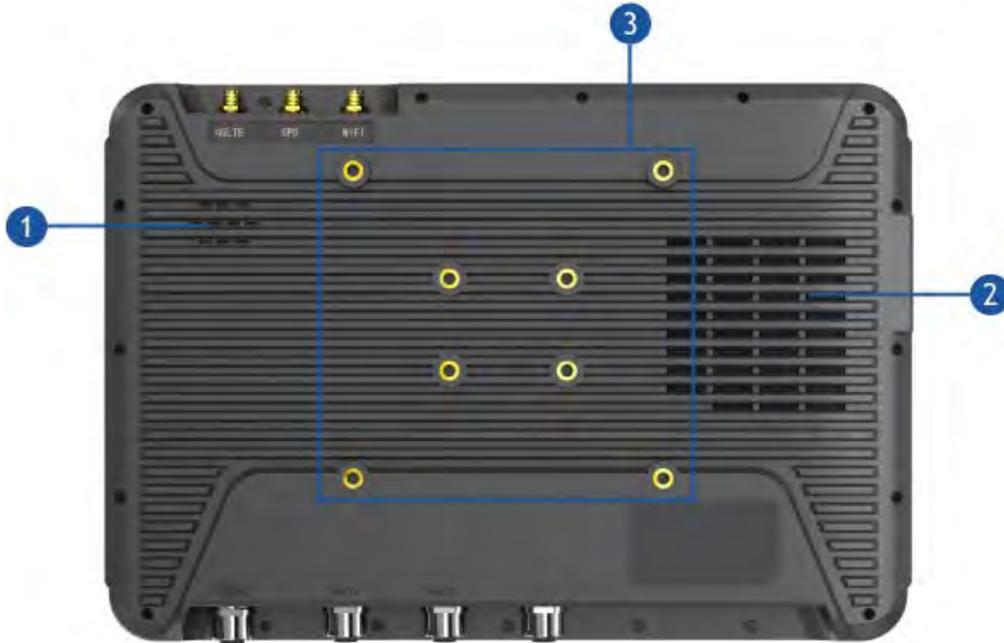
2.3. System Configuration

2.3.1. Front Components



Ref. No.	Component	Description
①	LED Indicator	Power light (blue when is turned on) Charging light (red when DC is powered on)
②	Power Button	In shutdown mode, press and hold the power button to power on the device; In the startup mode, short press the power button to turn off the screen and wake up the screen, press and hold the power button to power off or restart the device, or urgent call for help;
③	P1 button	Used to adjust and increase the volume.
④	P2 button	Used to adjust or reduce the volume.
⑤	P3 button	Customized button
⑥	P4 button	Customized button

2.3.2. Rear Components



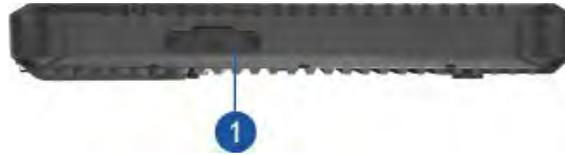
Ref. No.	Component	Description
1	Loudspeaker	Further spread sound.
2	Heat Sink	Device heat dissipation.
3	VESA hole or RAM ball head	For a fixation with VESA brackets VESA 75mm x 75mm , RAM 38mmx30mm.

2.3.3. Left-Side Components



Ref. No.	Component	Description
1	USB interface	USB3.0 used for data transmission and USB device expansion.

2.3.4. Right-Side Components



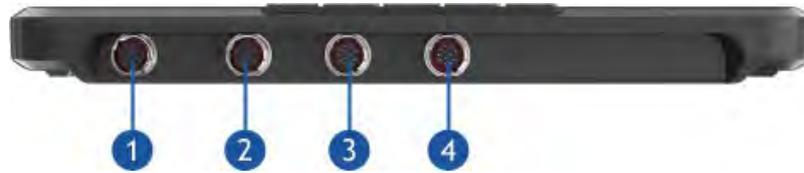
Ref. No.	Component	Description
①	SIM card slot	Insert SIM card to use 4G communication network functions

2.3.5. Top Components



Ref. No.	Component	Description
①	4G external antenna interface	Connect 4G rod antenna to receive 4G signals and networks
②	GPS external antenna interface	Connect GPS rod antenna to receive GPS signals
③	WiFi external antenna interface	Connect WiFi rod antenna to receive WiFi signals

2.3.6. Bottom Components



Ref. No.	Component	Description
①	Power Interface	Connect the power adapter to power the device.
②	Port 1	Network aerial plug, adaptive 100M or 1000M network.
③	Port 2	Serial port aviation plug, output signal is 9 pin full function RS232+3 pin data transmission RS232 or RS485.
④	Port 3	Signal interface, and signal output is USB2.0 x 2 + CAN/ CVBS x 1

3. Operating Your System

This chapter provides information about the use of the Tablet.

If you are new to Tablets, reading this chapter will help you learn the operating basics. If you are already a Tablet user, you may choose to read only the parts containing information unique to your Tablet.

CAUTION :

- Do not expose your skin to the Tablet when operating it in a very hot or cold environment.
- The Tablet can get uncomfortably warm when you use it in high temperatures. As a safety precaution in such a circumstance, do not place the Tablet on your lap or touch it with your bare hands for extended periods of time. Prolonged body contact can cause discomfort and potentially a burn.

3.1. Using the Touchscreen

CAUTION : Do not use a sharp object such as a ballpoint pen or pencil on the touchscreen. Doing so may damage the touchscreen surface. Use your finger or the stylus.

Select models have a capacitive touchscreen. This type of touchscreen responds to objects that have conductive properties, such as fingertips and a capacitive-tipped stylus. You can navigate on the screen without using a keyboard, or mouse.

The following table shows how you use the touchscreen to obtain equivalent mouse functions.

Term	Action	Equivalent Mouse Function
Tap	Touch the screen once.	Click / Point
Double-tap	Touch the screen twice rapidly.	Double-click
Tap and hold	Tap and hold until a popup menu appears.	Right-click

Drag	Click and hold the screen while moving.	Drag
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3.2. Using Wireless Connections

3.2.1. Using the WLAN

The WLAN (Wireless Local Area Network) module supports WIFI 802.11(a/b/g/n/ac).

3.2.2. Turning On/ Off the WLAN Radio

3.2.2.1 To turn on the WLAN radio:

Click  → [Settings] → [Network & Internet] → [WLAN], Slide the WLAN switch to the [On] position.

3.2.2.2 To turn off the WLAN radio:

You can turn off the WLAN radio the same way you turn it on.

If you want to quickly turn off all wireless radio, simply switch on Airplane mode.

Click  → [Settings] → [Network & Internet] → [Airplane mode], Slide the Airplane Mode switch to the [On] position.

3.2.2.3 Connecting to a WLAN Network:

1. Make sure that the WLAN function is enabled (as described above).
2. Click the network icon  in the lower right of the task bar.
3. In the list of available wireless networks, click a network, and then click Connect.
4. Some networks require a network security key or passphrase. To connect to one of those networks, ask your network administrator or Internet service provider (ISP) for the security key or passphrase.

3.3. Using the Bluetooth Feature

The Bluetooth technology allows short-range wireless communications between devices without requiring a cable connection. Data can be transmitted through walls, pockets and briefcases as long as two devices are within range.

3.3.1. Turning On / Off the Bluetooth Radio

3.3.1.1 To turn on the Bluetooth radio:

Click  → [Settings] → [Devices] → [Bluetooth] , Slide the Bluetooth switch to the [On] position.

3.3.1.2 To turn off the Bluetooth radio:

You can turn off the Bluetooth radio the same way you turn it on.

If you want to quickly turn off all wireless radio, simply switch on Airplane mode.

Click  → [Settings] → [Network & Internet] → [Airplane mode] , Slide the Airplane Mode switch to the [On] position.

3.3.1.3 Connecting to another Bluetooth Device

1. Make sure that the Bluetooth function is enabled (as described above).
2. Make sure that the target Bluetooth device is turned on, discoverable and within close range. (See the documentation that came with the Bluetooth device.)
3. Click  → [Settings] → [Devices] → [Bluetooth].
4. Select the device you want to connect from the search results.
5. Depending on the type of Bluetooth device that you want to connect to, you will need to enter the pertinent information.

For detailed information on using the Bluetooth feature, see Windows's online Help.

4. Managing Power

Your Tablet operates on external AC power. This chapter tells you how you can effectively manage power.

4.1. AC Adapter

CAUTION:

- The AC adapter is designed for use with your Tablet only. Connecting the AC adapter to another device can damage the adapter.
- The AC power cord supplied with your Tablet is for use in the country where you purchased your Tablet. If you plan to go overseas with the Tablet, consult your dealer for the appropriate power cord.
- When you disconnect the AC adapter, disconnect from the electrical outlet first and then from the Tablet. A reverse procedure may damage the AC adapter or Tablet.
- When unplugging the connector, always hold the plug head. Never pull on the cord.

The AC adapter serves as a converter from AC (Alternating Current) to DC (Direct Current) power because your Tablet runs on DC power, but an electrical outlet usually provides AC power. It also charges the battery pack when connected to AC power.

The adapter operates on any voltage in the range of 100~240V AC.

5. Expanding Your Tablet

You can expand the capabilities of your Tablet by connecting other peripheral devices.

When using a device, be sure to read the instructions accompanying the device together with the relevant section in this chapter.

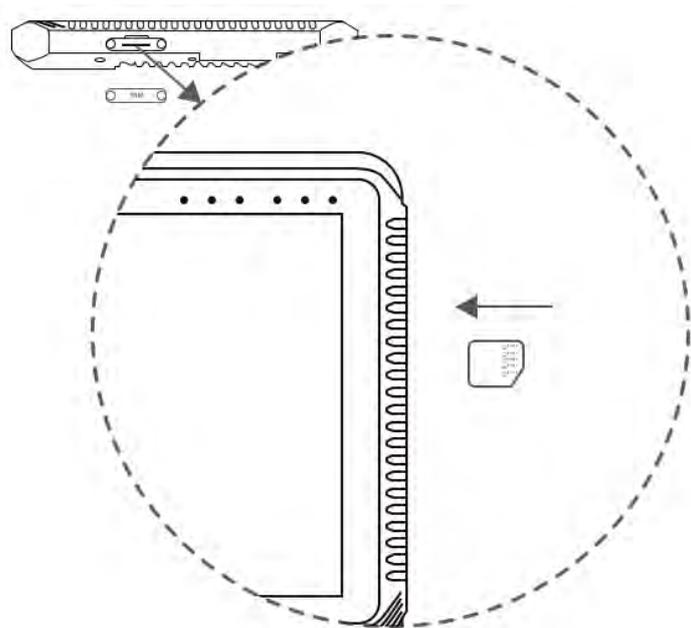
5.1. Connecting Peripheral Devices

5.1.1. Connecting a USB Device

Your Tablet has one USB 3.0 ports for connecting USB devices, such as a digital camera, scanner, printer, modem, and mouse.

5.1.2. Installing a SIM Card

Note: The SIM card slot module is optional. If the standard module you purchased is not equipped with this function, this chapter can be ignored. Remove the waterproof plug and insert the SIM card



6. Troubleshooting

Tablet problems can be caused by hardware, software, or both. When you encounter any problem, it might be a typical problem that can easily be solved. This chapter tells you what actions to take when solving common Tablet problems.

6.1. Preliminary Checklist

Here are helpful hints to follow before you take further actions when you encounter any problem:

- Try to identify the source and category of the problem.
- Make sure that you turn on all peripheral devices before turning on the device.
- If an external device has a problem, make sure that the cable connections are correct and secure.
- Make sure the settings in the BIOS are completely correct.
- Make sure that all the device drivers are correctly installed.
- Make notes of your observations. Are there any messages on the screen? Do any indicators light? Do you hear any beeps? Detailed descriptions are useful to the service personnel when you need to consult one for assistance.

If any problem persists after you follow the instructions in this chapter, contact an authorized dealer for help.

6.2. Solving Common Problems

Battery Problems

The battery does not charge (The red indicator is not on).

- Make sure that the AC adapter is properly connected.
- Make sure that the battery is not too hot or cold. Allow time for the battery pack to return to room temperature.

- If the battery doesn't charge after it has been stored in very low temperatures, try disconnecting and reconnecting the AC adapter to solve the problem.
- Make sure that the battery pack is installed correctly.
- Make sure that the battery terminals are clean.

The operating time of a fully charged battery becomes shorter.

- If you often partially recharge and discharge, the battery might not be charged to its full potential. Initialize the battery to solve the problem. (Fully charge in the shutdown state, discharge to 0%, and then fully charge the shutdown, cycle 2-3 times).

The battery operating time indicated by the battery meter does not match the actual operating time.

- The actual operating time can be different from the estimated time, depending on how you are using the Tablet. If the actual operating time is much less than the estimated time, initialize the battery.

Startup Problems

When you turn on the Tablet, it does not seem to respond.

- If you are using an external AC power, make sure that the AC adapter is correctly and securely connected. If so, make sure that the electrical outlet works properly.
- If you are using the battery power, make sure that the battery is not discharged.

WLAN Problems

I cannot use the WLAN feature.

- Make sure that the WLAN feature is turned on.

Transmission quality is poor.

- Your Tablet may be in an out-of-range situation. Move your Tablet closer to the Access Point or another WLAN device it is associated with.

- Check if there is high interference around the environment and solve the problem as described next.

Radio interference exists.

- Move your Tablet away from the device causing the radio interference such as microwave oven and large metal objects.
- Plug your Tablet into an outlet on a different branch circuit from that used by the affecting device.
- Consult your dealer or an experienced radio technician for help.

I cannot connect to another WLAN device.

- Make sure that the WLAN feature is turned on.
- Make sure that the SSID setting is the same for every WLAN device in the network.
- Your Tablet is not recognizing changes. Restart the Tablet.
- Make sure that the IP address or subnet mask setting is correct.

I cannot access the network.

- Make sure that the network configuration is appropriate.
- Make sure that the user's name or password is correct.
- You have moved out of range of the network.

Bluetooth Problems

I cannot connect to another Bluetooth-enabled device.

- Make sure that both devices have activated Bluetooth feature.
- Make sure that the distance between the two devices is within the limit and that there are no walls or other obstructions between the devices.
- Make sure that the other device is not in "Hidden" mode.
- Make sure that both devices are compatible.

Sound Problems

No sound is produced

- Make sure that the volume control is not set too low.
- Make sure that the Tablet is not in mute mode.
- Make sure that the Tablet is not in Sleep mode.
- If using an external speaker, make sure that the speaker is properly connected.

Distorted sound is produced.

- Make sure that the volume control is not set too high or too low. In most cases, a high setting can cause the audio electronics to distort the sound.

Software Problems

An application program does not work correctly.

- Make sure that the software is correctly installed.
- If an error message appears on the screen, consult the software program's documentation for further information.
- If you are sure the operation has stop, reset the Tablet.