VT-TABLET-5081 User's Manual

Chengdu Vantron Technology, Ltd.

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Revision History

No.	Version	Description	Date
1	V1.0	First release	2018/07/05
2	V1.1	Change description	2018/07/27
2	V1.2	Revise	2018/10/25

1 Foreword

1.1 Copyright Notice

While all information contained herein have been carefully checked to assure its accuracy in technical details and printing, Vantron assumes no responsibility resulting from any error or features of this manual, or from improper uses of this manual or the software. Please contact our technical department for relevant operation solutions if there is any problem that cannot be solved according to this manual.

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1.2 Notes

Applicable notes are listed in the following table:

Sign	Notice Type	Description
	Notice	Important information and regulations
	Caution	Caution for latent damage to system or harm to personnel

1.3 Statement

It is recommended to read and comply with this manual before operating VT-Tablet which provides important guidance and helps decreasing the danger of injury, electric shock, fire, or any damage to the device.

1.4 Disclaimer

Vantron assumes no legal liability of accidents resulting from failure of conforming to the safety instructions.

1.5 Limitation of Liability/Non-warranty

For direct or indirect damage to this device or other devices of Vantron caused by failure of conforming to this manual or the safety instructions on device label, Vantron assumes neither warranty nor legal liability even if the device is still under warranty.

1.6 Safety Instructions

Keep and comply with all operation instructions, warnings, and information.

Pay attention to warnings on this device.

Read the following precautions so as to decrease the danger of injury, electric shock, fire, or any damage to the device.

1.7 Precautions

Pay attention to the product labels/safety instructions printed on silk screens.

Do not try repairing this product unless declared in this manual.

Keep away from heat source, such as heater, heat dissipater, or engine casing.

Do not insert other items into the slot (if any) of this device.

Keep the ventilation slot ventilated for cooling.

System fault may arise if other items are inserted into this device.

Installation: ensure correct installation according to instructions from the manufacturer with recommended installation tools.

Ensure ventilation and smoothness according to relevant ventilation standard.

1.8 Safety Instructions for Power Cables and Accessories

⚠Proper power source only

Start only with power source that satisfies voltage label and the voltage necessary according to this manual. Please contact technical support personnel of Vantron for any uncertainty about the requirements of necessary power source.

⚠Use tested power source

This product still contains a button lithium battery as a real-time clock after its external power source is removed and therefore should not be short-circuited during transportation or placed under high temperature.

⚠ Place cables properly:

Do not place cables at any place with extrusion danger.

⚠Cleaning Instructions

Please power off before cleaning the device.

Do not use spray detergent.

Clean with a damp cloth.

Do not try cleaning exposed electronic components unless with a dust collector.

Support for special fault: Power off and contact technical support personnel of Vantron in case of the following faults:

- The device is damaged.
- The temperature is excessively high.
- Fault is still not solved after the operation according to the manual.

2 Overview

2.1 Introduction

Thank you for choosing Vantron. It is our commitment to provide our valued customers with the embedded devices equipped with the state-of-the-art technology and the best product services.

Tablet enables the interaction between operators/users and applications, connects industrial control products such as wireless, transducer, battery inside, storage, etc. Tablet adopts a display for displaying and input units such as touch screen, keyboard, audio, kind of sensors etc. for writing working parameters or inputting operation commands. As a digital device for realizing information interaction between human and machine, Tablet is composed of hardware and software. Based on its ample function interfaces and powerful user operational interface, it is very suitable for control units such as medical device, intelligent transportation, industrial field, etc..

Vantron's VT-Tablet products are based on the most advanced ARM and NXP processors and have low-power consumption and high integration. The products are designed for applications such as industrials, medicals, and transportations etc.

2.2 Ordering Information

VT-TABLET-5081	8” TFT LCD, 1920x1200 16:10 Wide Screen, RK-3288, Quad core 1.4GHz, USB2.0 OTG, 10000mAh battery inside, WIFI/BT4.2/FM.

3 VT-TABLET-5081 Hardware Instructions

3.1 Product Appearance

Front View

3.2 Specifications

CPU	Processor	RK3288,ARM Coretex-A17, Quad-Core CPU, up to 1.4GHz
Memory	RAM	2GB LPDDR3(Optional 4GB)
	Flash	16GB EMMC Flash
Display	LCD	8" TFT LCD
	Resolution	1920x1200, 16:10, 24bit Color
	Contrast	900:1
	Brightness	390 cd/m2(Auto brightness by Light sensor)
	View Angle	85U/85D, 85L/85R
	Touch Screen	Cap-touch, multi-point,2.0mm thickness for ruggedized usage.
Interfaces	Camera	5M Pixels Camera
	USB	1xUSB2.0 OTG, (Type-C, Secured)
	Audio	3.5mm Headphone jack with MIC input, 2 x 0.8W speaker 1 x MIC at Upper Side
	Wireless	1 x dual band WiFi 802.11 a/b/g/n/ac, 1 x Bluetooth 4.2, 1 x FM Radio 1xGPS 1xNFC
	Sensors	FP Sensor, Light sensor, 3-axis accelerometer, Magnetometer, Gyro, Proximity, Hall Sensor
	RTC	Supported
Software	OS	Android 6.0
	Applications	Provide SDK
Power	DC Input	5V DC power supply. (Suggest 5V/3.0A)
	Battery	3.7V,10Ah Li-Battery, up to 7 hours
	Wireless Charging	4W WPC v1.1 Receiver, with NFC ANT +Coil Qi Wireless ANT Combined on Back Cover.
	Consumption	4~7W
Mechanical	Dimensions	Small than 235× 153 × 21mm
	Weight	0.68Kg (Panel)
	Installation	Rubber outside at edge for drop protection
Environment Condition	Temperature	Operating: -20℃ ~ +50℃, Storage: -20℃ ~ +50℃, Suggest:25℃(±5℃)
	Humidity	10-85%RH (Non-Condensation), operating and storage
Accessories		Optional 220VAC to 5V/3.0A Power adapter. Optional Identified Charger Station (Charge after matched with Tablet)

3.3 Interface Instructions

3.4 Dimension

Whole device Size: 235× 153 × 21mm

3.5 Buttons

Power/Sleep/Wake button

When you are not using Tablet, you can lock it to turn off the display and save the battery.

Lock tablet: Press the Power/Sleep/Wake button.
Unlock tablet: Press the Power/Sleep/Wake button, then drag the slider.
Turn tablet off: Press and hold the Power/Sleep/Wake button greater than 6 seconds.
Turn tablet on: Press and hold the Power/Sleep/Wake button until logo appears.

Volume buttons

You can use volume up or volume down to adjust the audio volume.

Never apply excessive pressure to a button, because this may cause damage that is not covered under the warranty.

3.6 LED

Status LED

Green: solid green indicated the adapter is present and the battery charging termination.
Yellow: solid yellow indicated the battery is charging.
Red: solid red indicated the battery capacity less than 10%.

3.7 Interface Description

3.7.1 Internal MIC in Interface

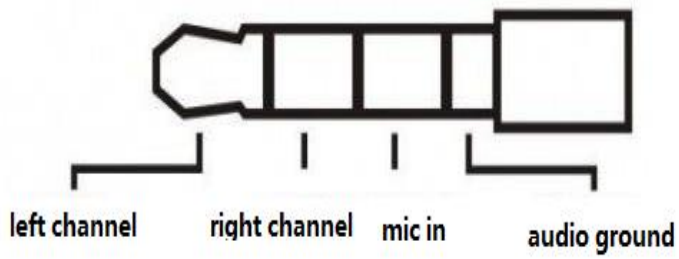
This hole is used to the onboard MIC in.

3.7.2 USB OTG (USB type C)

It is a USB2.0 OTG port (USB type C), you can connect to PC as USB client to manage the android device and connect a USB device using USB OTG to HOST adapter cable. It also can connect to USB adapter charge the table.

3.7.3 3.5mm Headphone Jack with external MIC in

It is a standard 4-pole 3.5mm Headphone Jack with external MIC in , every pole signal is defined as below.



3.7.4 WPC

The tablet with a standard WPC1.1 passivity receiving terminal. We can charge the table with WPC ant.

3.8 Packing List

No	Part Description	Quantity	Type
1	VT-TABLET-5081	1 PCS	

4 Software Instructions

4.1 Brief Introduction

VT-TABLET-5081 has been pre-loaded with Android image, so that the system can run MFG tools to update the system image, please reference to SW-UM.

5 Tips

⚠ Waste Disposal

It is recommended to disassemble the device before abandoning it in conformity with local regulations. Please ensure that the abandoned batteries are disposed according to local regulations on waste disposal. Do not throw batteries into fire (explosive) or put in common waste canister. Products or product packages with the sign of "explosive" should not be disposed like household waste but delivered to specialized electrical & electronic waste recycling/disposal center. Proper disposal of this sort of waste helps avoiding harm and adverse effect upon surroundings and people's health. Please contact local organizations or recycling/disposal center for more recycling/disposal methods of related products.

Comply with the following safety tips:

⚠ Do not use in combustible and explosive environment

Keep away from combustible and explosive environment for fear of danger.

⚠ Keep away from all energized circuits.

Operators should not remove enclosure from the device. Only the group or person with factory certification is permitted to open the enclosure to adjust and replace the structure and components of the device. Do not change components unless the power cord is removed. In some cases, the device may still have residual voltage even if the power cord is removed. Therefore, it is a must to remove and fully discharge the device before contact so as to avoid injury.

⚠ Unauthorized changes to this product or its components are prohibited.

In the aim of avoiding accidents as far as possible, it is not allowed to replace the system or change components unless with permission and certification. Please contact the technical department of Vantron or local branches for help.

⚠ Pay attention to caution signs.

Caution signs in this manual remind of possible danger. Please comply with relevant safety tips below each sign. Meanwhile, you should strictly conform to all

safety tips for operation environment.

Notice

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Exposure to Radio Frequency Energy

This product has been tested and meets the SAR (Specific Absorption Rate) exposure requirements. The product is designed and manufactured to comply with the limits for exposure to RF energy set by the Federal Communications Commission (FCC) of the United States. The exposure standard employs a unit of measurement known as the specific absorption, or SAR. Tests for SAR are conducted using standard operating positions specified by these agencies, with this product transmitting at its highest certified power level in all tested frequency bands.

This product has been tested, and meets the FCC RF exposure guidelines.

The highest value for body SAR is 1.35 W/kg.

FCC Warning

This device complies with FCC class B Rules. Operation is subject to the Following conditions.

This device may not cause harmful interference.

This device must accept any interference received, including interference that may cause undesired operation.

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.

—Consult the dealer or an experienced radio/TV technician for help.

Any modification to the product is not permitted unless authorized by Vantron. It's not allowed to disassemble the product, it is not allowed to replace the system or change components unless with permission and certification. Please contact the technical support department of Vantron or local branches for help.

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