# IQ Remote User's Manual

# Contents

# **Revision History**

| No. | Version | Description | Date |
|---|---|---|---|
| 1 | V1.0 | First release | 2018/06/27 |
| 2. | V1.1 | Revise | 2022/05/29 |
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# 1 Foreword

## 1.1 Copyright Notice

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## 1.2 Notes

Applicable notes are listed in the following table:

| Sign | Notice Type | Description |
| --- | --- | --- |
| ![i] | 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**

Qolsys 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 Qolsys caused by failure of conforming to this manual or the safety instructions on device label, Qolsys 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 Qolsys for any uncertainty about the requirements of necessary power source.

Power adapter Spec.
Model:SW-070100AB
INPUT:100-240V~50/60Hz 0.3A Max
OUTPUT:DC 7.0V,1000mA
MADE IN CHINA BY SURE-POWER

⚠️ CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE

DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS

⚠️ 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 Qolsys 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 Qolsys. 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..

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

# 3 IQ Remote Hardware Instructions

## 3.1 Product Appearance



Front View



Back View

## 3.2 Specifications

| CPU | Processor | RK-3368H , ARM Octa-core Cortex-A53, Quad Core CPU,1.5GHz |
|---|---|---|
| Memory | RAM | 2GB LPDDR3 |
| | Flash | 16GB EMMC Flash |
| Display | LCD | 7″ TFT LCD |
| | Resolution | 1024*600 24bit Color |
| | Display Colors | 16.7M |
| | Brightness | 250cd/m2 |
| | View Angle | 80U/80D, 80L/80R |
| | Touch Screen | Cap-touch, multi-point |
| Supported format | Audio | MP3, 3GPP, WAV |
| | Video | MP4, 3GPP |
| | Picture | BMP, GIF, JPEG, PNG |
| Interfaces | USB | 1X Micro USB2.0 OTG |
| | Wireless | 1xwifi 802.11a/b/g/n/ac, 1xBluetooth5.0, with inner FPC antenna |
| | Internal Audio | Internal Speaker |
| | | Internal MIC |
| | RTC | Supported |
| | Gas gauge | Supported |
| | Camera | 1x5M Front Camera(Fixed Focus) |
| Software | OS | Android 7.1 |
| Power | Battery | 3.7V, 2400mAh |
| | DC Power Supply | 7V,1.0A |
| Mechanical | Dimensions | 191x116.7x19.7mm |
| | Weight | 0.45Kg |
| Environment Condition | Temperature | Operating Temperature: 0℃ ~ +40℃ |
| | | Storage: -20℃ ~ +45℃,Recommended:26±5℃ |
| | Humidity | 10-85%RH (Non-Condensation), operating and storage |
| | Vibration | 2G, 9-26Hz (10 times in X,Y,Z directions) |

## 3.3 **Interface Instructions**

### 3.3.1 **Front View**



Front Camera

MIC

### 3.3.2 **Back View**



Speaker

Micro USB

DC Jack
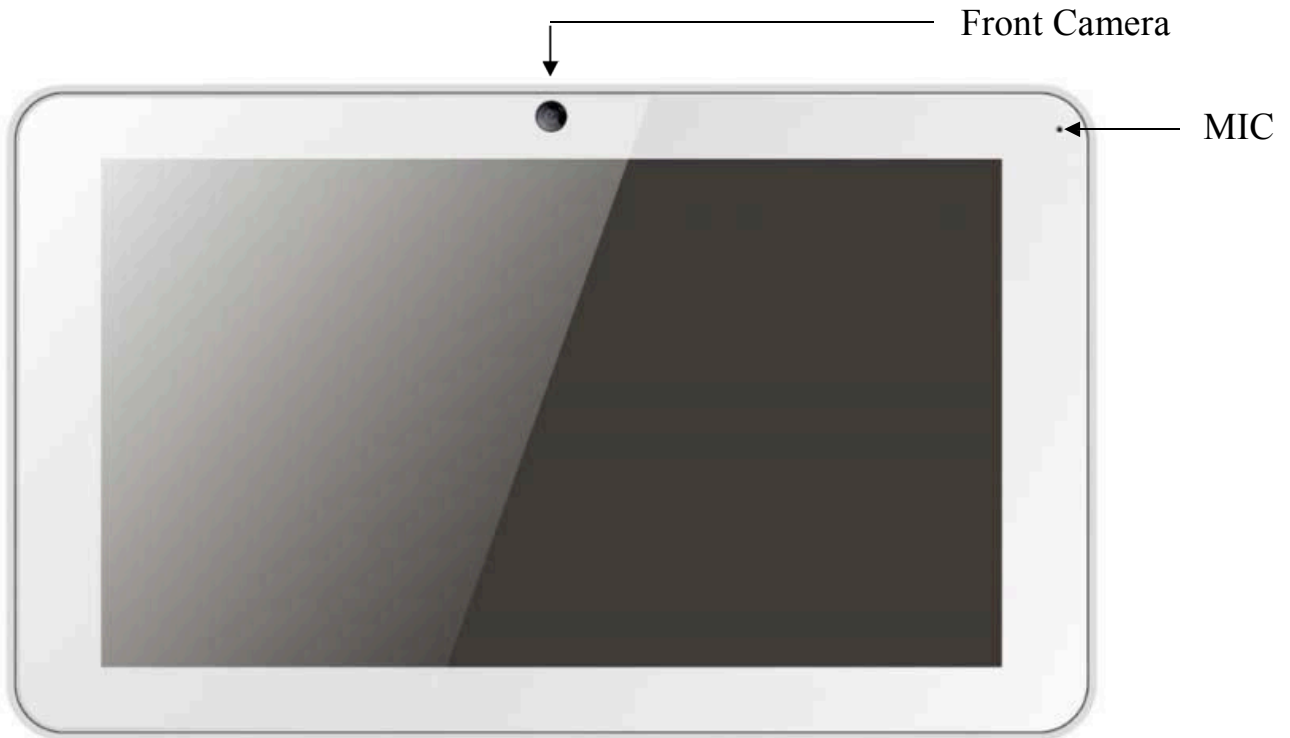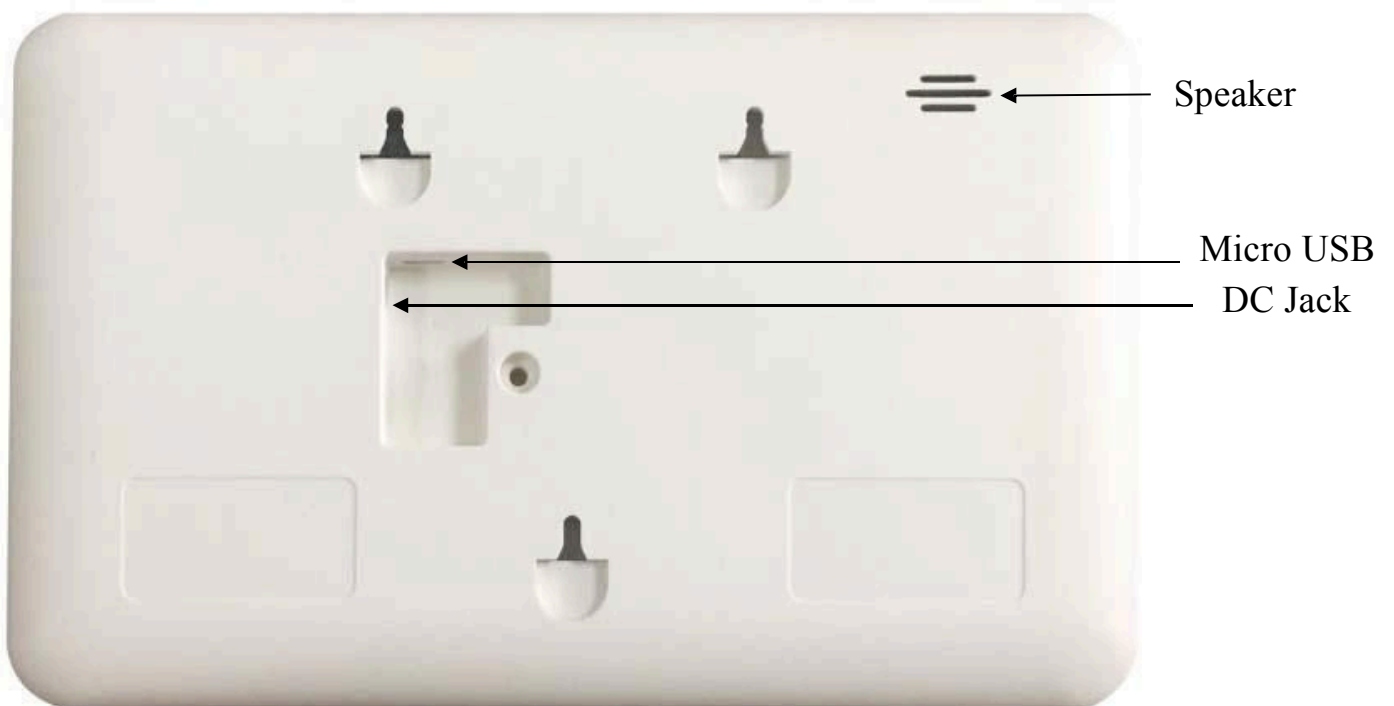
## 3.4 **Dimension**

Whole device Size: 191x116.7x19.7mm

## 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.

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

## 3.6 **Interface Description**

### 3.6.1 **Internal MIC**

Internal MIC with outstanding sensitivity and high SNR makes it very suitable for recording while suppressing the environment noise.

### 3.6.2 **USB2.0 OTG(Micro)**

USB is only used for debugging and is not used by clients.
The USB 2.0 port can apply DC 5.0V ,1A to the tablet and works properly.

### 3.6.3 **Wireless(WIFI and BT)**

The tablet supports 802.11a/b/g/n/ac WIFI and BT5.0. With a good spec internal antenna, both WIFI and BT can achieve better performance.

### 3.6.4　　**Internal Audio**

The tablet has an internal omni-directional microphone and a 1.5 watt speaker.

### 3.6.5　　**Gas Gauge**

A gas gauge is used to monitor the capacity of the li-polymer battery so we can figure out the status of it precisely and immediately.

### 3.6.6　　**Front Camera**

The tablet has the ability to take beautiful photo and record the high resolution video.

### 3.6.7　　**RTC**

The tablet has internal RTC so the system time can keep a long time if we didn't turn it on.

# 4 Software Instructions

## 4.1 Brief Introduction

IQ Remote has been pre-loaded with Android image, so that the system can run Android tool 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 Qolsys 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.

**i**  Notice

Considering that reasonable efforts have been made to assure accuracy of this manual, Qolsys assumes no responsibility of possible missing contents and information, errors in contents, citations, examples, and source programs.

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**i**  FCC RF exposure information and statement

This device meets government requirements for exposure to radio waves. The guidelines are based on standards that were developed by independent scientific organizations through evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health. The SAR limit of USA(FCC) is 1.447W/Kg averaged. Device types: Tablet(FCC ID:2AAJXQS-IQRT2) has also been tested against this SAR limit. SAR information on this and other pad can be viewed on-line at http://www.fcc.gov/oet/ea/fccid/. Please use the device FCC ID number for search. This device was tested simulation typical 0 mm to body. To maintain compliance with FCC RF exposure requirements, the use of belt clips, holsters and similar accessories should not contain metallic components in its assembly, the use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided

**i**  FCC Warning

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

Note 1: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of 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.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

 IC RF exposure information and statement

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health. The SAR limit of IC is 1.447W/Kg averaged. Device types: Tablet(IC:11205A-QSIQRT2) has also been tested against this SAR limit. This device was tested simulation typical 0 mm to body. To maintain compliance with FCC RF exposure requirements, the use of belt clips, holsters and similar accessories should not contain metallic components in its assembly, the use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided. The highest reported SAR value for body conditions is 1.447W/Kg respectively.

Cet équipement est conforme aux limites d'exposition au rayonnement du CNR-102 de l'IC établies pour un environnement non contrôlé. Les lignes directrices sont fondées sur des normes qui ont été élaborées par des organisations scientifiques indépendantes au moyen d'une évaluation périodique et approfondie des études scientifiques. Les normes comprennent une marge de sécurité substantielle conçue pour assurer la sécurité de toutes les personnes, indépendamment de leur âge ou de leur état de santé. La limite SAR de CI est de 1.447 W/Kg en moyenne. Types d'appareils : Tablet(IC:11205A-QSIQRT2) a également été testé par rapport à cette limite SAR. Cet

appareil a été testé simulation typique 0 mm au corps. Pour maintenir la conformité aux exigences d'exposition aux RF de la FCC, l'utilisation de pinces à courroie, d'étuis et d'accessoires similaires ne devrait pas contenir de composants métalliques dans son assemblage, l'utilisation d'accessoires qui ne satisfont pas à ces exigences peut ne pas être conforme aux exigences d'exposition aux RF de la FCC et devrait être évitée. La valeur SAR déclarée la plus élevée pour les conditions corporelles est de 1.447 W / Kg respectivement.

### IC Warning

This device complies with Industry Canada's License-exempt RSS. 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

Cet appareil est conforme au RSS exempt de license d'Industrie Canada. Le fonctionnement est soumis aux deux conditions suivantes :

(1) Cet appareil ne peut pas causer d'interférences nuisibles, et
(2) Cet appareil doit accepter toute interférence reçue, y compris les interférences pouvant entraîner un fonctionnement indésirable.

### 5G statement

The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour uneutilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

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