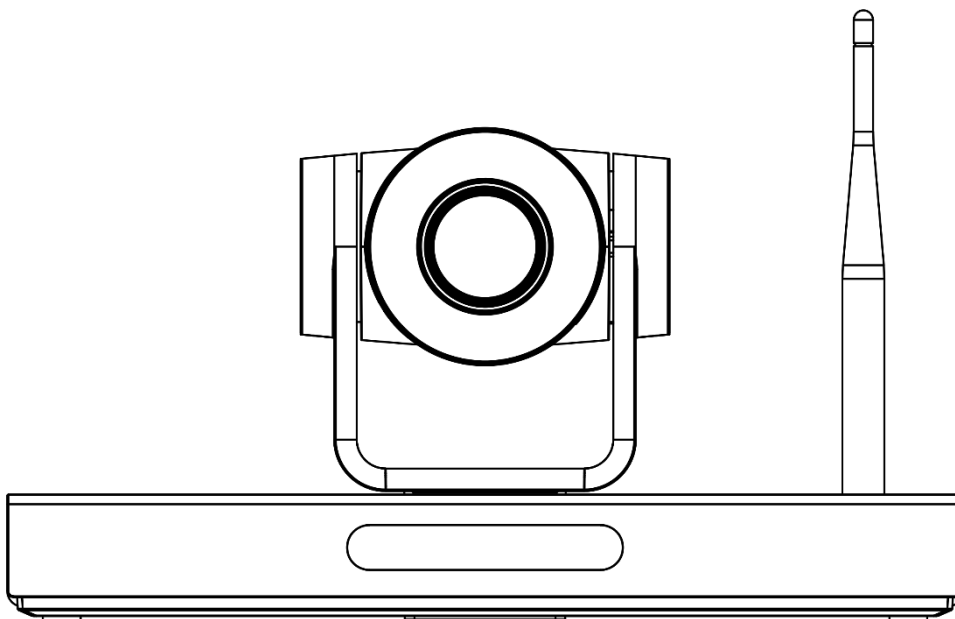


Conferencing Terminal

Android-based Video Conferencing Terminal

User Manual

(V1.0)



Preface




This manual is to ensure that the user can use the product properly and avoid danger while operating. Before using this product, please read the user manual carefully and keep it properly for future reference

Overview:

This manual is about UT680 camera operation.

Graphic Symbols

Description of graphic symbols used in this manual:

Symbols	Description
 Illustration	This symbol indicates that the words are clarification or supplement to this article.
 Caution	This symbol indicates that negligence of the instructions may lead to mishandling that may cause injury or property damage.
 Danger	This symbol indicates a risk that may result in damage to this machine or documents. Follow the instructions to avoid property damage.

Revision Record

Version	Revision Notes	Person	Revision Date
V1.0	first edition	Huang Chengzhen	2023/5/5

Attention

This manual introduces functions, installations and operations for this product in details. Please read this manual carefully before installation and use.

Precautions:

This product can only be used in the specified conditions in order to avoid any damage to the camera:

- 1) Do not expose the product to rain or moisture.
- 2) To prevent the risk of electric shock, do not open the case. Installation and maintenance should only be carried out by qualified technicians.
- 3) Do not use the product beyond the specified temperature, humidity or power supply specifications.
- 4) Please use a soft dry cloth to clean the camera. If the camera is very dirty, clean it with diluted neutral detergent; do not use any type of solvents, which may damage the surface.

Electrical Safety:

Installation and use of this product must strictly comply with local electrical safety standards.

Transportation:

Avoid any stress, vibration, or moisture during transportation, storage, installation and operation.

Do Not Dismantle Camera:

We are not responsible for any unauthorized modification or dismantling.

Magnetic Interference

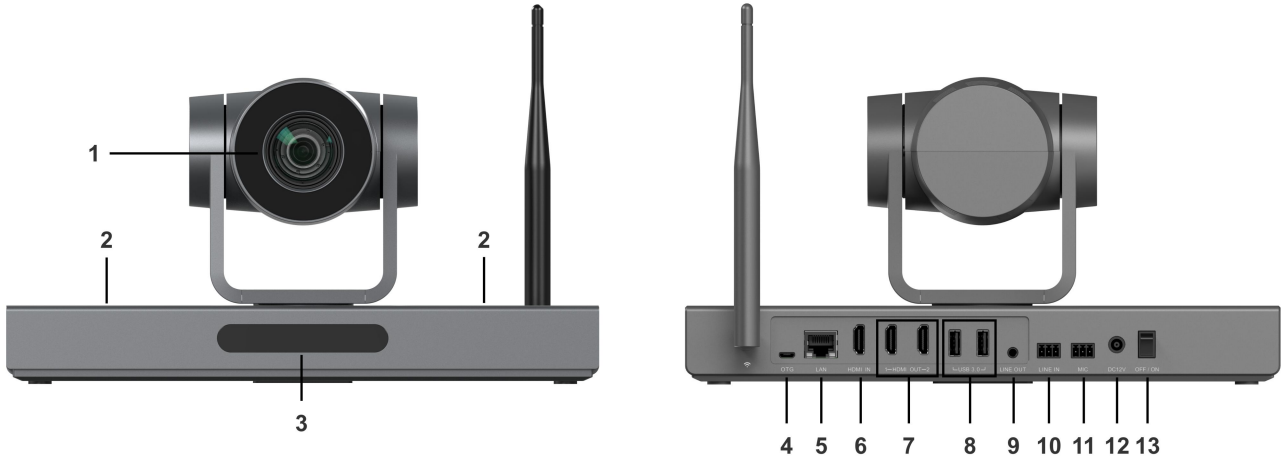
Electromagnetic fields at specific frequencies may affect the video image. This product is Class A. It may cause radio interference in household application. Appropriate measure is required.

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1. Quick installation instructions

1.1 Product panel



Serial number	Port	Describe
1	Camera	1x 200M Camera
2	Microphone	2x Electret Microphone, used for sound pickup.
3	Infrared	1x Infrared Receiver
4	OTG	1x Micro-USB Interface for device debugging
5	LAN	1x RJ45 Network port, connect to Ethernet
6	HDMI IN	1x HDMI Female port, for HDMI input source
7	HDMI OUT	2x HDMI Female port, used to connect HDMI display
8	USB	2x USB 2.0 Port: Connect USB devices such as mouse and keyboard
9	LINE OUT	1x 3.5mm Port, Line audio output
10	LINE IN	1x 3-pin Phoenix terminal, Line audio input
11	MIC IN	1x 3-pin Phoenix terminal, Microphone input with 48V phantom power supply
12	DC 12V	1x DC Port, Power access
13	ON/OFF	1x Power switch

1.2 Equipment Use

1. Check the hardware packaging list to confirm that the packaging is complete and all accessories are included.
2. Connect each interface cable to the corresponding device.
3. After connecting correctly, turn on the power of the main unit and press the power button, wait for about 10 seconds, and then it can be turned on. After booting, the terminal startup screen will be displayed on the TV screen. (Note: Please switch the signal source input of the TV screen to HDMI input mode)

1.3 video Output

Connect device to monitor through HDMI cable, and then select the correct input source on the monitor to output. UT680 Dual-screen display is supported. By default, the output content of the two HDMI ports is the same. Software is required to control dual-screen display.

1.4 Audio Input

- 1、 Built-in audio: It is default that the device pick up voice through built-in mics
- 2、 3-pin Phoenix head linear audio input: Connect the external pickup through the 3-pin Phoenix head audio cable (when the external pickup is connected, the audio input automatically switches to the external pickup)
- 3、 3-PIN Phoenix head microphone input: Connect the external microphone through the 3-PIN Phoenix head audio cable, support 48V phantom power supply.

1.5 Audio Onput

Linear audio output: Connect to external speaker through 3.5mm audio cable (When connecting to external speaker, audio out automatically switch into external speaker.)

1.6 system Interface

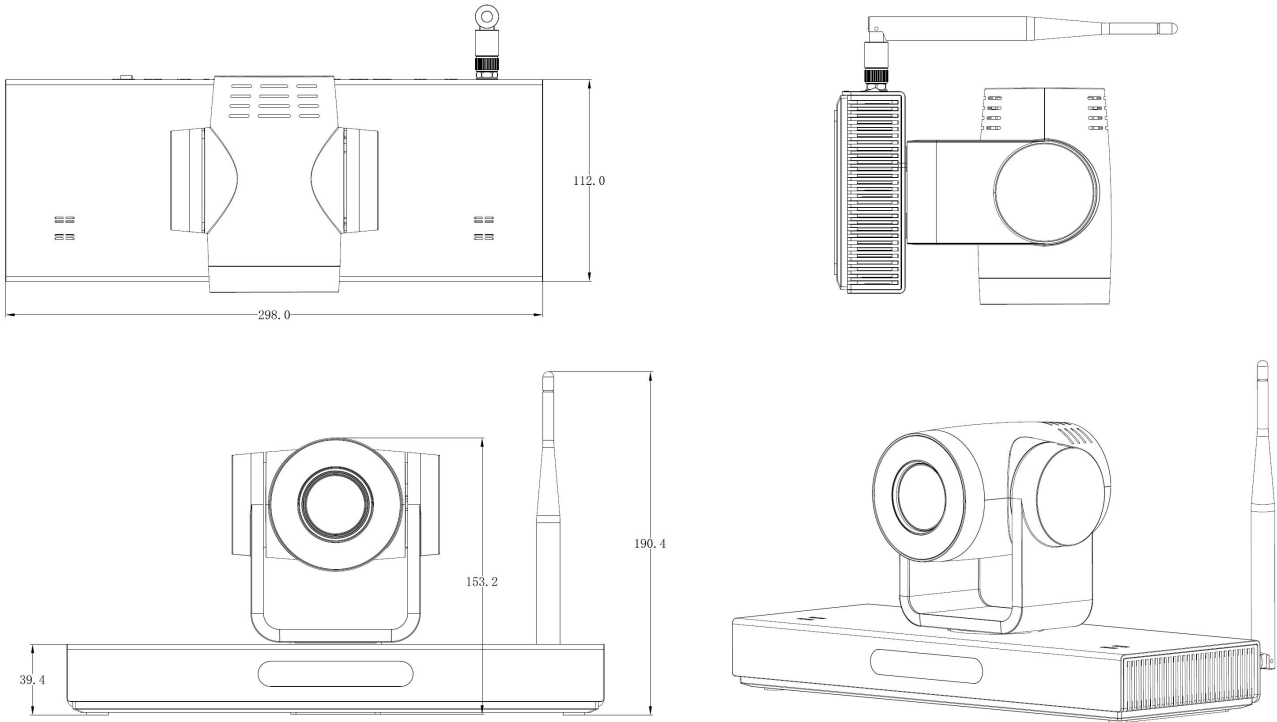
UT680 comes with Android 12, which is the native version of Android, and the overall interface can be controlled by the customer through the USB port to access the mouse or keyboard.

2.Product Overview

2.1Product Introduction

Android video conference terminal UT680 adopts 12x optical zoom lens, 78° large Angle of view, built-in intelligent echo cancellation, noise suppression audio algorithm, to provide users with high-quality conference audio-visual experience; Integrated design, integrated Android platform, camera, mechanical head, Wi-Fi, Bluetooth, support dual screen display, support wired/wireless screen projection, wiring installation is easy and fast; Full open API, built-in 8nm low-power high-performance processor, support the development of third-party applications, easy customer secondary development to achieve customized needs, is the ideal choice for small and medium-sized conference rooms.

2.1.1 Dimension



2-1 Dimension

2.1.2 Supplied Accessory

When you unpack your box, please check that all the supplied accessories are included:

Items	Quantity	● Supplied ○ Optional
All-in-one Intelligent	1	●

Terminal		
remote control	1	●
Power adapter	1	●
HDMI 2.0 line	1	●
CAT5 Net cable	1	●
3-pin Phoenix terminal	1	●

2.2 Product Features

Android video conference terminal UT680 adopts 12x optical zoom lens, 78° large Angle of view, built-in intelligent echo cancellation, noise suppression audio algorithm, to provide users with high-quality conference audio-visual experience; Integrated design, integrated Android platform, camera, mechanical head, Wi-Fi, Bluetooth, support dual screen display, support wired/wireless screen projection, wiring installation is easy and fast; Full open API, built-in 8nm low-power high-performance processor, support the development of third-party applications, easy customer secondary development to achieve customized needs, is the ideal choice for small and medium-sized conference rooms.

- Sensor: 2.07 million high-quality CMOS image sensor;
- Wide-angle undistorted lens: 78° large viewing angle lens, optical zoom up to 12 times;
- Wireless support: 2.4G / 5G bimode Wi-Fi, Bluetooth 5.0, convenient for customers to directly connect with wireless applications, such as wireless projection screen, Bluetooth speaker, etc.;
- Double screen abnormal display: Support dual HDMI output, can display main and auxiliary streams respectively in full screen;
- Multiple video compression standards: support H.265/H.264 video compression;
- Auto-focus technology: Advanced auto-focus algorithms enable lenses to achieve auto-focus efficiently, accurately and steadily;
- Low noise and high SNR: Low-noise CMOS effectively ensures the ultra-high SNR of screen. Advanced 2D and 3D noise reduction technologies further reduce noise and assure image sharpness;
- Fully Open API: Fully open API support for third-party application development, so customers could make secondary development with ease to meet their demands.
- Ultra-silent PTZ: Adopted high-precision stepping motor and precision motor drive controller, ensuring smooth operation and noiseless

2.3 Technical Specification

System	Android	Android 12
	SOC	RK3588
	RAM	8G
	ROM	32G
	Video Encoding	Max :8K@30Hz
	Video Decoding	Max :8K@60Hz
Camera	Image Sensor	2.07 Million High Quality CMOS Image Sensor
	FOV	D: 7.5° - 78.3° H: 6.6° - 70.2° V: 3.7° - 42°
	zoom	12x optical zoom
	video output	Max output :1080P
Audio	Microphone	Built-in 2x electret pickup microphone
	Audio processing	AEC AGC ANS
Physical Port	Display Interface	2x HDMI OUT, HDMI 2.0b, Max support :4K@60Hz Supports dual-screen display
	Content input	1x HDMI IN, HDMI 2.0b , Max support 4K@60Hz
	USB	2x USB 3.0 1x Micro USB Debugging port

	Wireless Interface	2.4G / 5G dual module Wi-Fi, Bluetooth 5.0
	Audio Interface	1x 3.5mmLinear output 1x LINE IN input, 3-pin Phoenix terminal 1x MIC IN input, 3-pin Phoenix terminal (with phantom power)
	Network Interface	1x 10/100M RJ45 Network port
	Power Port	HEC3800 Power socket (DC12V)
	Power switch	Power on or off the terminal
General norm	Electrical characteristics	Operating Voltage: DC 12V
	Environmental requirement	Storage Temperature: -10°C~+70°C Storage Humidity: 20%~95% Working Temperature: -10°C~+50°C Working Humidity: 20%~80% Working Environment: Indoors

3. Use of remote control



Item	Port	Description
1	Power Ke	Standby / Wake up
2	volume key	Volume up/down/Zoom in/out
3	Mute key	Mute
4	Mode switch key	Switch to camera mode (in this mode you can control the camera's head, etc.)
5	Back key	Back
6	Home Key	The camera menu can be brought up in camera mode
7	Up/down/left/right keys	PTZ control/move cursor

4. Maintenance and Troubleshooting

4.1 Maintenance

- 1) If the camera will not be used for a long time, please turn off the power switch.
- 2) Use a soft cloth or lotion-free tissue to clean the camera body.
- 3) Use a soft dry lint-free cloth to clean the lens. If the camera is very dirty, clean it with a diluted neutral detergent. Do not use any type of solvent or harsh detergent, which may damage the surface.

4.2 Troubleshooting

1) No image

- a、 Check whether the power cord is connected, voltage is OK, POWER lamp is lit
- b、 Check whether the camera can “self-test” after startup
- c、 Check that the rotary dial on rear work normally
- d、 Check that the HDMI cable is connected correctly

2) Image is shaky or vibrating.

Check that the video output, video monitor cable work normally.

3) Remote controller does not control the camera

- a、 Check that the batter of remote control is placed properly and full of power
- b、 Check that the working statue of the device is normal
- c、 Check whether the menu has been exited. Only after exiting the menu, the remote control can work normally; if the webpage outputs an image, the menu will not be displayed, then the menu will automatically exit and remote control can work on camera after 30 seconds without any operation.

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FCC STATEMENT :

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.

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.