Solidcom C1 Full-duplex Wireless Intercom System 【With HUB Base】

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作者	Banny	部门	FAE
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1. Product Introduction

The Solidcom C1 full-duplex wireless intercom headset system, adopting the advanced DECT 6.0 technology, is Hollyland's first true wireless and self-contained headset communication solution with exceptional sound clarity. The system operates in the 1.9GHz band, providing a reliable transmission range up to 1000ft (350m) radius (LOS).

With no belt pack or base station, it offers a highly portable and hands-free coordinating experience for media production teams or any team looking for real-time non-blocking voice communication in socially distanced working scenarios.

1.1 Key Features

- Full-duplex wireless communication system with 350m transmission range
- Premium AEC (Acoustic Echo Cancellation) performance, with:
  - 100Hz to 7KHz wideband frequency response
  - 16KHz audio sampling rate
  - Signal-noise ratio > 55dB
  - Distortion factor < 1%
- Built on the latest DECT 6.0 technology, works in 1.9GHz frequency band, suppo
  automatically frequency hopping that achieves a stronger anti-interference abili
- The HUB base has rich extensive interfaces:
  - 2 RJ45 ports for digital IP cascade
  - 1 RJ45 port for connecting the 4w interface via analog signal
  - 1 XLR interface for PGM signal input

- 1 XLR port for connecting other 2W wired intercom system, such as Clear-com, RTS, etc.
- The HUB can be connected via network cable to achieve multiple device cascadi accommodate more complex team communication needs.
- Quality built, compact, lightweight and durable. The headset use PC and ABS do injection molding process, ensuring reliable performance in harsh environments
- The HUB base supports AB two groups grouping function
- The voice reminder function keep you informed of the system status, such as lo and device connection state, etc.
- The intercom headset is friendly for both left- and right-handers, allowing the m to turn clockwisely and anti-clockwisely
- Mute/unmute the mic by pushing it upward/downward
- The HUB base allows multiple ways of power supply, providing greater convenie portability. These include NP-F battery, V-Mount/G-Mount battery, and 12V DC adapter
- **The HUB base features UAC function, supporting direct connection with the con the USB interface,** allowing the intercom system to join communication with any conference running on meeting software, such as Zoom.

1.2 Packaging

The equipment is packed in an ABS hard plastic case, and the case is made by eco-friendly EVA material, which is waterproof, pressure resistant and shock resistant, protecting the device from damage during transportation.

DEVICE	Details
❶ Headset	8 Headsets + 1 3.5mm Wire Headset
❷ Base Station	1 HUB base supports connection of 8 headsets in maximum
❸ Lithium-ion Battery	16 batteries (for 8-person package w/ 2 for each headset)
❹ Over-ear Cushion & MIC Foam Cover	Each intercom headset is provided with 1 on-ear sponge cus and an additional over-ear leather cushion
❺ Battery Charging Base	Each set of intercom system comes standard with 1 chargin that can power 8 batteries at a time
❻ 12V DC Adapter	Each set of intercom system comes standard with two 12V I adapters for charging the HUB base and the charging base

	respectively

2. Quick To Use

2.1 HUB Station

The HUB station can be powered by 1 to 2 NP-F batteries, a V-Mount/G-Mount battery and/or the 12V DC adapter. Click the power button on the back of the HUB to turn the device on. Its boot time is about 30s.

2.2 Intercom Headset

Put the battery into the battery compartment of the headset, and switch the power button to turn on. The indicator light on the MIC will shine in steady green when connection is normal.

2.3 Microphone in Mute & Talk

❶ TNC Antenna Interface	1.9GHz Antenna
❷ 12V DC Power Interface	12V DC Power Supply
❸ TypeC USB Interface	UAC Interface, allowing direct connection with computer
❹ HUB Power Button	Power Switch
❺ 3PIN XLR Audio Input Interface	Support PGM signal input
❻ 3PIN XLR Audio Interface	Connect to 2W wired intercom system, such as Clear-Com RTS
❼ RJ45 Network Interface (Digital Signal)	Support standard TCP/IP protocol, digital signal IP interconnection
❽ RJ45 Network Interface (Digital Signal)	Support standard TCP/IP protocol, digital signal IP interconnection
❾ RJ45 Network Interface (Analog Signal)	Support standard 4W analog audio protocol for connection 4W compatible systems, such as Clear-Com or RTS

3.3 Headset Interface & Button

INTERFACE/BUTTON	FUNCTION DESCRIPTION
❶ A, B Group Button	Switch between A and B group calls

❷ Volume Button	Adjust the volume of the headset
❸ Switch Button	Power switch
❹ Type-C USB Interface	Upgrade & Pairing
❺ Battery Compartment	Battery installment
❻ Work Status Indicator	**Steady Green Indicator=》** Normal work state. Talk and lis enabled
	Green Indicator Flashing=》 No connection
	Red Indicator Flashing=》 Low battery, need to replace th battery

4. Device Power Supply, Charging & Battery Life

4.1 The HUB's Power Supply & Battery Life

Power Supply: ❶ NP-F battery ❷ V-Mount/G-Mount battery ❸ 12V DC Adapter

Multiple power supply modes can be used at the same time. The device will automatically

detect the power supply voltage, and give priority to the input power supply with a higher voltage.

e.g: When the HUB is connected to a 8.2V NP-F battery and a 12V DC adapter at the same time, while the input voltage of the 12V DC adapter is higher, the host will prioritize charging by the 12V DC adapter.

Common Power	Full Voltage
NP-F Battery	8.2V
V-Mount Battery	16V
G-Mount Battery	16V
12V DC Adapter	12V

UPS function: When the HUB is charged with multiple power supplies, the UPS function ensures uninterrupted power supply and stable operation of the HUB, providing double insurance in the case of power cutoff with one of the power source.

e.g: When two NP-F batteries are installed at the same time, by taking off one of the batteries, the HUB can keep working normally without interruption.

Common Battery	Battery Capacity	Battery Life
NP-F970	7.4V 6600mAh	> 18h
NP-F750	7.4V 4400mAh	> 12h
NP-F550	7.4V 2200mAh	> 6h
V-Mount	14.8V 150Wh	> 50h
G-Mount	14.8V 150Wh	> 50h

4.2 Intercom Headset Power Supply & Battery Life

The intercom headsets are powered by a detachable lithium battery. A set of 1-to-8 intercom system comes standard with 16 lithium-ion batteries and a Charging Base which can charge 8 batteries at the same time.

Headset Battery	Battery Capacity	Battery Life	Charging Base Specifications	Time to fully charge 8 batteries
H **L-BAT 700**	3.8V 700mAh	> 10h	Input 12V/2A	About 2.5h

5. Cascading of Multiple Intercom Systems

Multiple sets of intercom hosts can be cascaded to expand the number of more intercom headsets. The HUB supports 2 cascading methods, 4W analog signal cascading, and IP digital signal cascading. Generally, for 2 sets of hosts cascading, it is recommended to use 4W analog cascade, for 3 or more sets cascading, it is recommended to us IP digital signal.
It is recommended to use CAT5e Category 5E (cat 5e) cable for cascading cables, and the RJ45 connector adopts the standard 568B method.

Cascading cable	Common Spec	Longest cable length
Standard 568B	CAT 5e CAT 6e	300m

5.1 Cascading with 4W for 2 sets of host

5.1.1 Connection

The 2 HUB is connected to the [4W] interface via a standard network cable. The maximum length of the network cable is [300m].

5.1.2 4W Setting

After connecting the 4W interface via the network cable, you need to enter the [4 Wire Setting] setting of the HUB, and set the [Line Sequence Switching]. Set the 1st HUB as [Standard], and the 2nd HUB as [Cross].

【Setup Steps】

Host ❶	Enter [Line Sequence Switching] Me	Line sequence switching [Standard]
[4W] Setting		
Host ❷	Enter [Line Sequence Switching] Me	Line sequence switching [Cross]
[4W] Setting		

5.2 Two sets cascading via IP

5.2.1 Connection

Connect the two hosts to the [RJ45] interface with a standard network cable, you can connect to any of the 2W [RJ45] interface at the back of the HUB. The maximum length of the network cable is [300m].
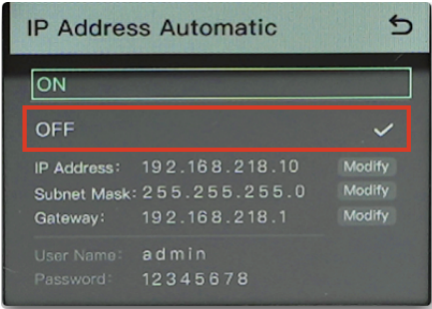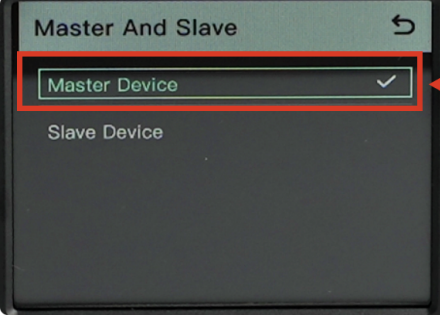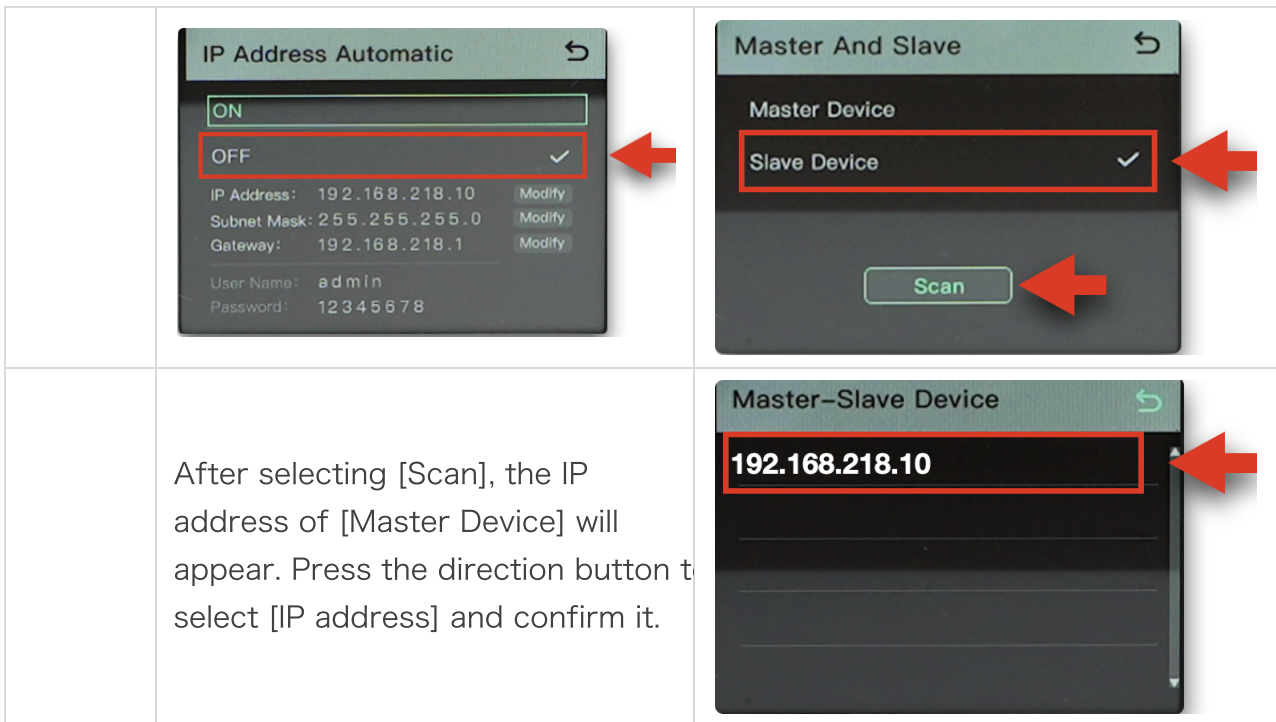

5.2.2 Master and Slave setting

After the two HUBs are connected via the network cable, you need to enter the [Master and Slave] menu, and designate the HUBs as Master or Slave device. Generally, the 1st HUB is set as [Master Device], and the 2nd HUB is set as [Slave Device] -->[Scan]-->[Select 1st host IP].

Note: In the [Network Settings] [IP Address Settings] of the two HUBs, the [IP Address Automatic] must be set to [OFF].

【Setup Steps】

Host ❶	Enter [Network] Menu, [IP Address Automatic] set to[OFF]	Enter [Master And Slave] Menu, select [Master Device]
Network Setting		
Host ❷	Enter [Network] Menu, [IP Address Automatic] set to[OFF]	Enter [Master And Slave] Menu, select [Slave Device]
Network Setting		

	After selecting [Scan], the IP address of [Master Device] will appear. Press the direction button to select [IP address] and confirm it.	

5.3 Three sets cascading via IP

3 HUB sets cascading are recommended to be cascaded via IP network. The 1st HUB is set to [Master Device], and the 2nd and 3rd HUBs are set to [Slave Device]. The setting method is the same as introduced under [5.2 Two sets cascading via IP].
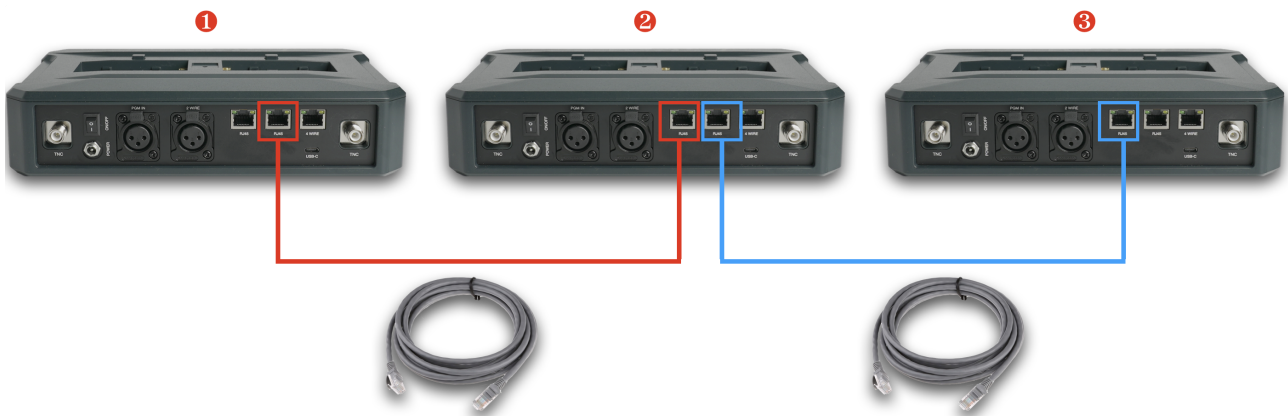
6. Group Settings

The intercom system supports A, B group settings, you can check the current group setting information in the [Group] page of the HUB's menu. Please connect your PC to the 【RJ45 interface】 of the HUB, enter 【Host Setting Page】 in the webserver, or make group settings in the 【Solidcom APP】 directly on your mobile device.
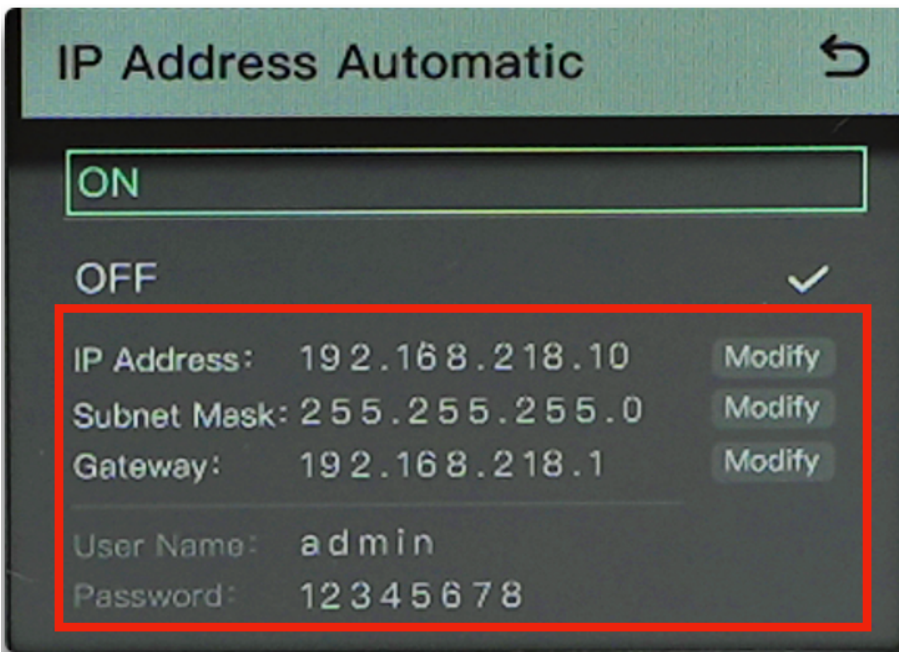
6.1 View HUB's Information

【HOLLYLAND】

HUB Operation: 【Long Press The Round Menu Button】=》Enter 【Group】 menu page to check group settings.

6.2 Connect Computer And HUB To Do Group Settings

Enter the 【Network】 option under menu page =》Default 【IP Address】【User Name】 and【Password】 will be displayed under 【Wire Network Setting】

1. Connect the computer to the HUB with the RJ45 network interface.
2. Set the IP address of the computer network setting as 【192.168.218.XXX】 , and th 【default IP address】 of the HUB to 【192.168.218.10】

Open the browser on the computer and visit **[http://192.168.218.11]** to enter the configuration page for the HUB.
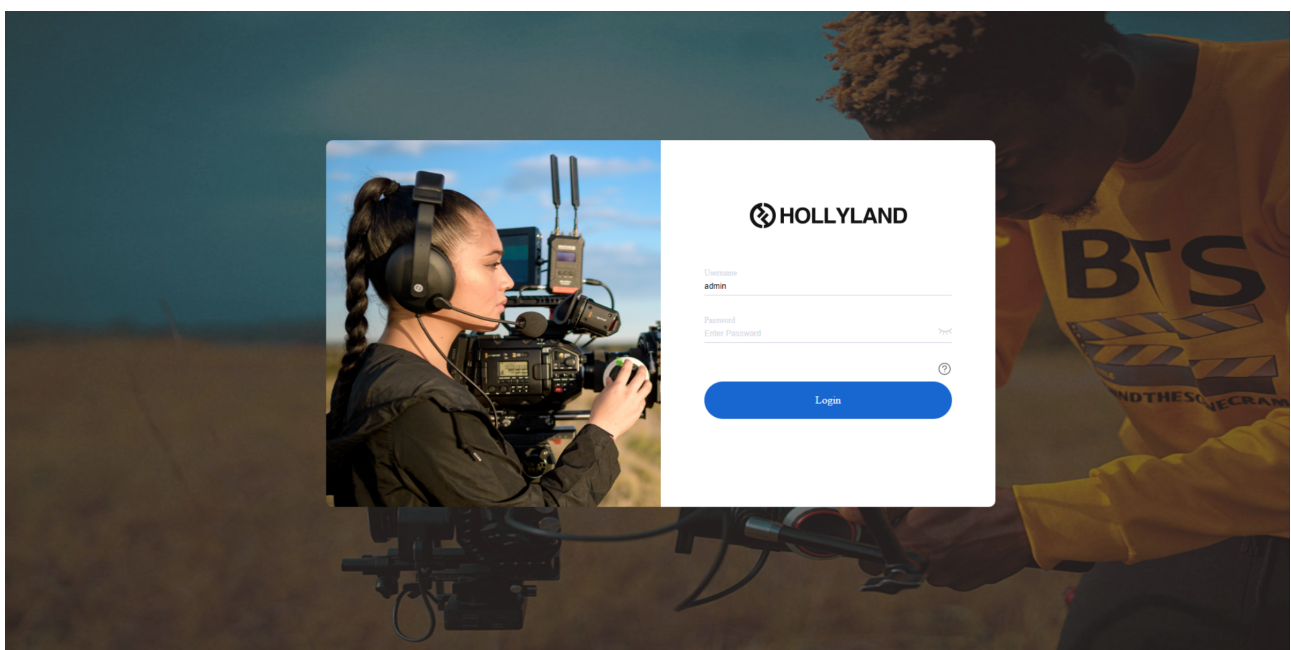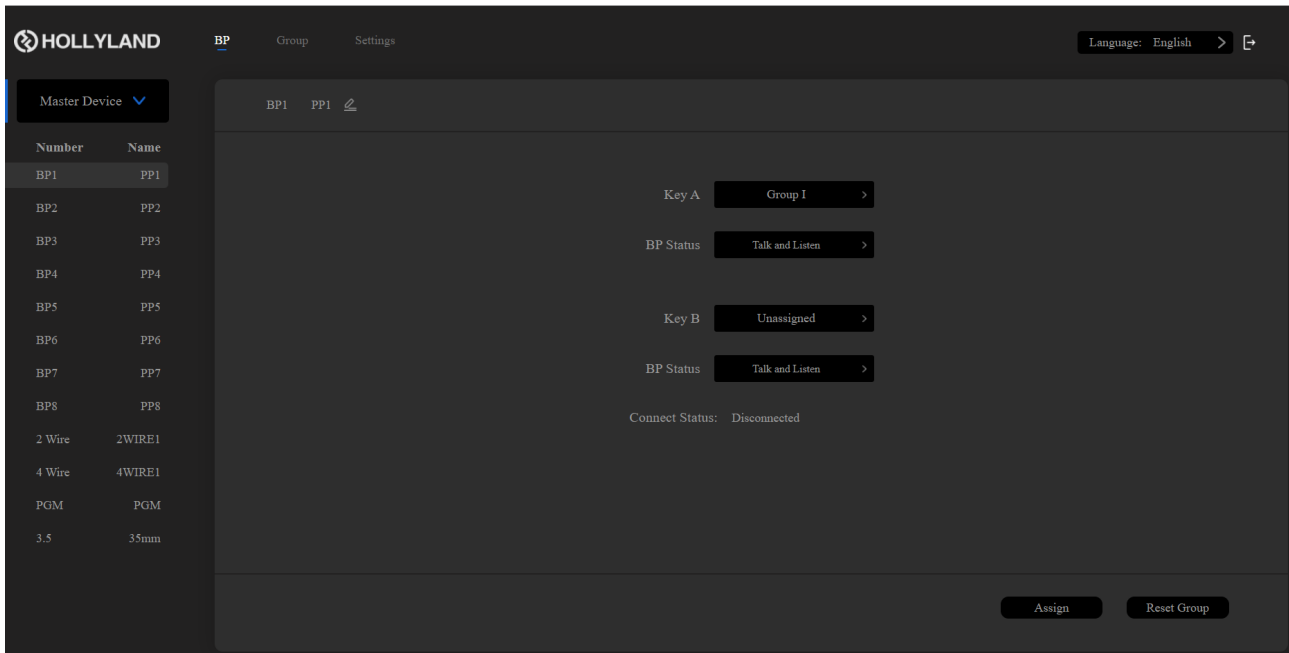
6.2 Headset Group Button

The indicator on the headset's group button 【A】&【B】 will light up after finishing group settings on the HUB. Different colors mean different work status. Press 【A】/【B】 button to 【Enter/Exit】 the current group.

【A】【B】KEY COLOR	WORK STATUS
Orange	The headset has joined the group, you can talk and listen
No Light	The headset has not joined or been assigned to the group, yo not talk and listen

7. Headset Pairing

The intercom system will automatically pair up right out of box, no pairing is needed. Pairing is requiried when you need to replace or add a new headset.

7.1 Connect The HUB And Headset Via A USB Cable

A USB-A to Type-C cable is essential, connect one side to the USB interface on the HUB which is on the front panel, connect the other side to the Type-C interface of the headset. After connection, the 【Number Select】 page will be displayed on the screen of the HUB automatically, press the 【Round Menu Page】 to set the headset number.

7.2 Set the Headset's Number On HUB

Please turn on all headsets when you adding new headset to the system to 【Avoid Selecting

If you happen to set the wrong number, please operate pairing and number setting procedure again.

8. FAQ

8.1 Will a wireless video transmission system interfere with the wireless intercom system?

A: The wireless intercom system work in the 【1.9GHz】frequency band, while most wireless video transmission systems work in 【5.1～5.8GHz】, these devices work on different frequencies without any interference.

8.2 What should I pay attention to when using multiple sets of devices at the same time?

A: Keep the antennas of the two HUB's away from each other by keeping the two HUBs in at least 1m distance.

8.3 Will the quality of audio decrease when multiple systems are cascaded?

A: The audio quality will not decrease via 【IP Cascade】, because the IP interface transmits digital signal, so no worries of interference and attenuation. The audio quality of each device will not be affected.

8.4 How far does the cascading ethernet cables support?

A: The cascade ethernet cable support up to 300m, and use CAT5e or good quality cable is recommended, the network cable crystal port adopts the 568B standard.

8.5 What does it mean when the Mic indicator flashes green?

A: The flashing green light indicates that the connection between the headset and the HUB is

disconnected, usually it is 【out of the connection range of the HUB】, in this case you can try move closer to the HUB or master headset. When the headset is disconnected, the headset will also inform you with voice prompt.

8.6 How long will the battery of the headset last? How can I know that the battery is about to run out and needs to be replaced?

A: The battery of the headset can be used for 【about 10 hours】 with a full charge. When the headset is about to run out of power, the mic indicator on the headset will 【flash red】, and there will also be an 【audio reminder】 in the headset when the battery power is draining. You can also see the 【Battery Level】 of the headset on the 【HUB's screen】.