



TACTICAL COMMUNICATION HEADSET

拾音降噪战术耳机

使用说明

FCS FMA

## 产品简介



FCS AMP拾音降噪战术耳机采用了FCS自主研发的TSFS（True Sound Field Situation）全景声真实环境声音处理技术。用户佩戴以后，能有效增强现场声音环境态势的听觉判断，如某些常见的声音特征，进行增强、强化或衰减处理（脚步、枪声、爆炸声），经过多方面检测和实战检验，能够让用户获得更敏锐更快速的战术响应。FCS AMP耳机具有良好的兼容性，采用NATO标准可插拔式下出线，配合相应PTT即可实现不同电台的连接和通讯使用。

## 产品特点/Features



### 26dB降噪

NRR:26dB H:34dB M:28dB L:16dB



### 360°全景声辨位

通过FCS自主研发的TSFS全景声真实环境声音处理技术，实现对方位的辨析与感知，能够自动分辨声场的细微声响并对特定声音进行自动调整和放大，提供更多细节用于战术判断。



### 多场景模式切换

室内模式：室内射击或密闭空间环境，进一步消除反射噪音。  
室外模式：户外射击或露天开放场所，消除短促脉冲噪声。  
侦听模式：夜间或较安静的环境下可远距离拾取细微声音进行数倍的放大以增强听力。



### 双通道通信

可同时支持连接两台电台进行双通道通信。



### 抗电磁干扰设计

在电路硬件上，深入考虑EMI、EMC的相关行业电磁兼容标准，可有效避免其他设备所产生的电磁干扰。



### 射击环境听觉保护技术

自适应隔离有害声压，有效保护听觉。  
全自动电子声压保护临界点：约85dB。



### 快拆设计

快速拆换设计，能够无损将头梁进行拆装并快速换成头盔导轨连接桥实现盔戴式。



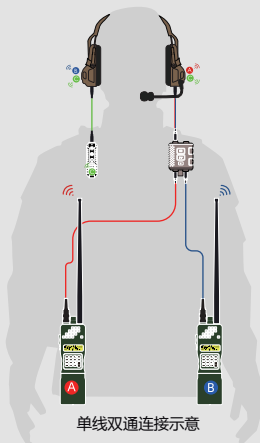
### AUX蓝牙适配器

AMP支持连接AUX蓝牙适配器实现无线蓝牙功能。

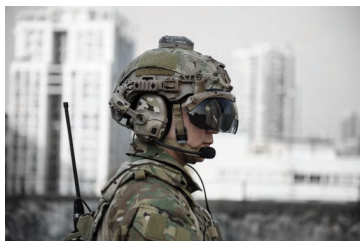


### 高续航

理论续航值达60小时，耳机无操作约4小时后自动关机。



## Product introduction



FCS AMP tactical communication headset use the TSFS (True Sound Field Situation) panoramic sound real environment sound processing technology independently developed by FCS. After the user wears it, it can effectively enhance the auditory judgment of the on-site sound environment. For example, some common sound features can be enhanced, strengthened or attenuated (footsteps, gunshots, explosions). Users get sharper and faster tactical responses. FCS AMP headset have good compatibility, adopt NATO standard pluggable lower outlet, and cooperate with corresponding PTT to realize the connection and communication of different radio stations.

## Features



### 26dB NOISE REDUCTION

NRR:26dB H:34dB M:28dB L:16dB



### 360° PANORAMIC SOUND POSITION RECOGNITION

Through the TSFS panoramic real environment sound processing technology independently developed by FCS, it can realize the identification and perception of orientation, and can automatically distinguish the subtle sounds of the sound field and automatically adjust and amplify specific sounds, providing more details for tactical judgment.



### MULTI-SCENE MODE SWITCHING

**INDOOR MODE:** Indoor shooting or confined space environment, further eliminates reflected noise.

**OUTDOOR MODE:** Shooting outdoors or in an open-air open place, eliminating short burst noises.

**LISTENING MODE:** At night or in a quieter environment, you can pick up subtle sounds from a distance and amplify them several times to enhance your hearing.



### DUAL CHANNEL COMMUNICATION

It can support the connection of two radios at the same time for dual-channel communication.



### ANTI-ELECTROMAGNETIC INTERFERENCE DESIGN

In terms of circuit hardware, in-depth consideration of the relevant industry electromagnetic compatibility standards of EMI and EMC can effectively avoid electromagnetic interference generated by other equipment.



### HEARING PROTECTION TECHNOLOGY FOR SHOOTING ENVIRONMENT

Adaptive isolation of harmful sound pressure, effective protection of hearing. Automatic electronic sound pressure protection critical point: about 85dB.



### QUICK RELEASE DESIGN

The quick disassembly and replacement design can disassemble and assemble the head beam without damage and quickly replace it with the helmet rail connection bridge to realize the helmet wearing type.



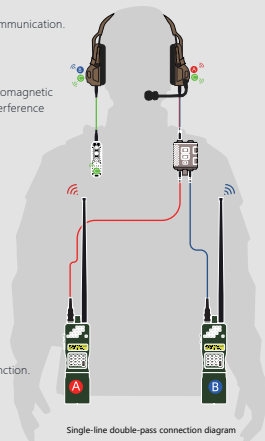
### AUX BLUETOOTH ADAPTER

AMP supports connecting AUX Bluetooth adapter to realize wireless Bluetooth function.

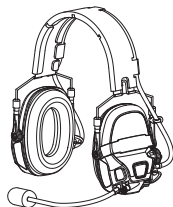


### HIGH BATTERY LIFE

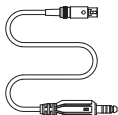
The theoretical battery life is up to 60 hours, and the headset will automatically shut down after about 4 hours of inactivity.



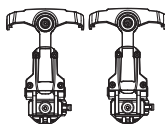
## 标配清单/Standard list



1 耳机/headset



2 U174/U 连接线  
/U174/U line



3 导轨连接桥  
/Rail connection bridge



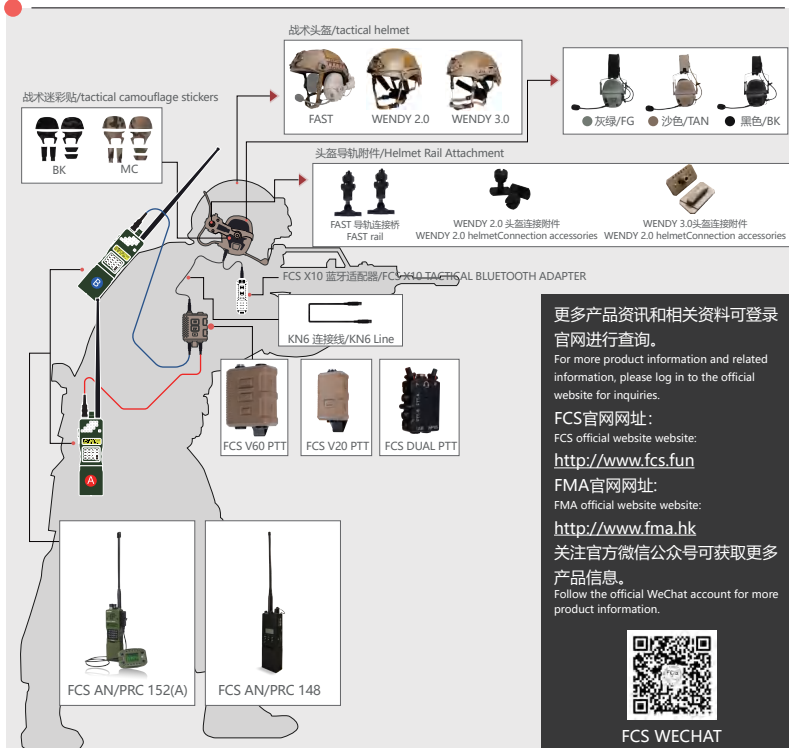
4 头盔魔术贴  
/Velcro



5 产品说明书  
/Product Manual

6 备用橡胶固定带一套/A set of spare rubber straps

## 装配示意图/Assembly diagram



更多产品资讯和相关资料可登录  
官网进行查询。

For more product information and related  
information, please log in to the official  
website for inquiries.

FCS官网网址:

FCS official website website:

<http://www.fcs.fun>

FMA官网网址:

FMA official website website:

<http://www.fma.hk>

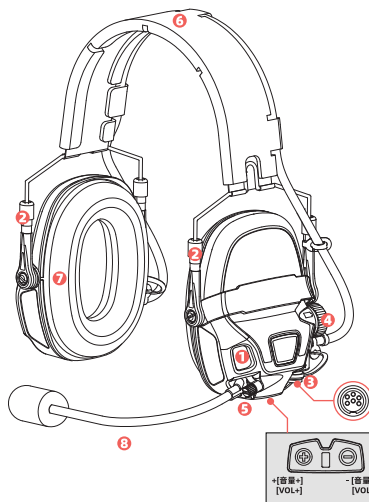
关注官方微信公众号可获取更多  
产品信息。

Follow the official WeChat account for more  
product information.

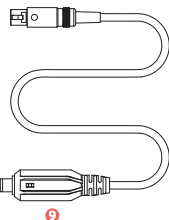


FCS WECHAT

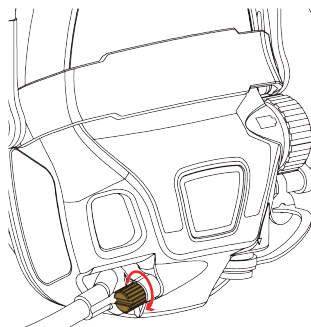
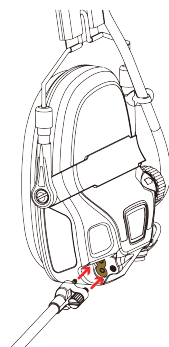
## 耳机外观介绍/Headset appearance introduction



- ① - TSFS拾音系统/TSFS pickup system
- ② - 头梁调节系统/Head beam adjustment system
- ③ - 定制KN6接口/Custom KN6 pin interface
- ④ - AAA 7号电池仓/AAA battery compartment
- ⑤ - 麦克风安装位/Microphone installation position
- ⑥ - 头梁/Head beam
- ⑦ - 耳垫/Ear pads
- ⑧ - 麦克风/microphone
- ⑨ - U-174/u 下出线  
/U-174/u headset  
download cable



## 安装麦克风/Install the microphone



①



按图示将麦克风安装连接  
/Install and connect the  
microphone as shown

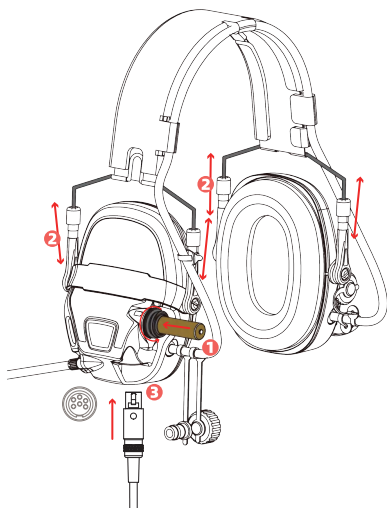
②



顺时针拧紧螺丝  
/Tighten the screw clockwise

※:耳机支持麦克风左右切换//The headset supports microphone left and right switching

## 使用说明/Instructions for use



逆时针拧开电池盖/Unscrew the battery cover counterclockwise  
按图示放置AAA(7号)干电池  
/Place AAA (size 7) dry battery as shown

※左右需各放置一节/Place one section on each side

※电池放置完毕之后，需拧紧电池盖，否则无法通电  
/After the battery is placed, the battery cover needs to be tightened,  
otherwise it cannot be powered



以佩戴舒适为目标，如图上下调节耳机到个人合适的佩戴位置。

/With the goal of wearing comfort as the goal,  
adjust the headset up and down to the appropriate  
wearing position as shown in the figure.



耳机连接线按图示进行连接。  
/Connect the earphone cable as  
shown in the figure.

## ● 开/关机/Power On/Off



**开机: 长按音量+或音量-开机**

Power on: Long press volume+ or volume-power on

**关机: 长按音量-关机**

Power off: Long press volume-power off

## ● 功能模式/Function mode



室内/室外模式: 同时短按[VOL+]+[VOL-]切换室内/室外模式

Indoor/outdoor mode: Short press [VOL+]+[VOL-] at the same time to switch indoor/outdoor mode

侦听模式: 在最大音量下长按[VOL+]3S(提示“超大音量”)切换为侦听模式。  
10S后自动关闭。

Listening mode: Press and hold [VOL+]3S at maximum volume (prompt "super volume") to switch to listening mode.  
and turn off automatically after 10s.

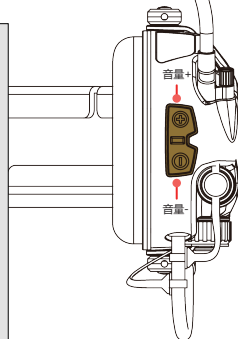
提示音切换: 同时长按[VOL+]+[VOL-]3S切换中/英文

Switch language: Long press [VOL+]+[VOL-]3S to switch between Chinese and English

自动关机功能: 耳机约4小时无操作自动关机。

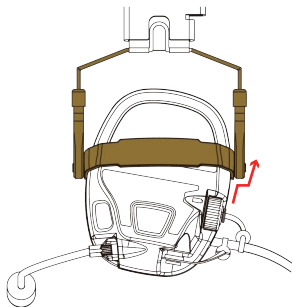
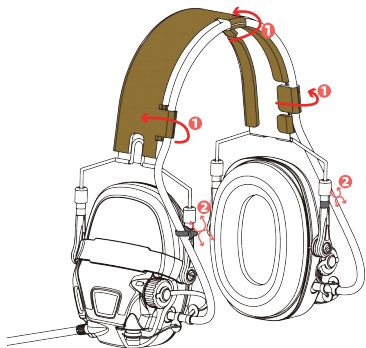
Auto power-off function: The headset will automatically power off without any operation for about 4 hours.

※: 开机默认模式为室外模式，默认语言为中文  
/The default mode of booting is outdoor mode,  
and the default language is Chinese



## 快拆换装佩戴模式/QUICK RELEASE AND DRESSING MODE

### 拆换头梁/Removing the head beam cloth cover



1 按图示将固定线缆的魔术贴解开  
/Untie the Velcro fixing the  
cable as shown

2 解开固定的橡胶绑带  
/Unfasten the fixed rubber  
strap

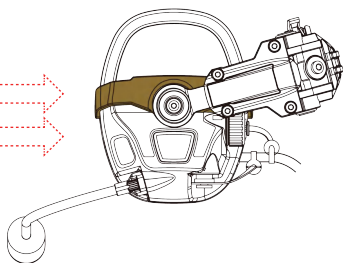
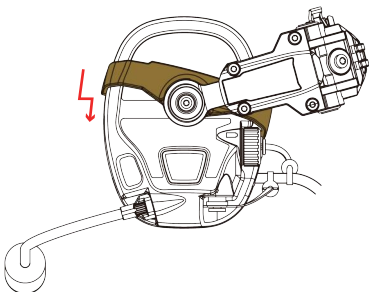


3 将头梁支架卡扣掰开，使耳机主体  
和头梁分离

Open the head beam bracket  
buckle to separate the headset  
body from the head beam

## 快拆换装佩戴模式/QUICK RELEASE AND DRESSING MODE

### 安装头盔连接桥/Install the helmet bridge



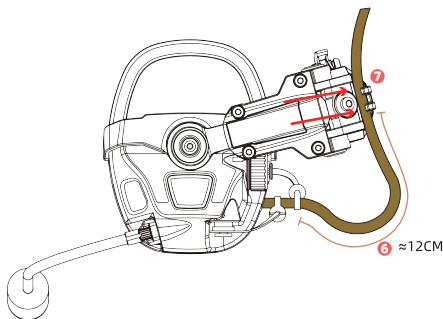
4 按图示安装连接桥  
/Install the connecting  
bridge as shown



5 ※注意连接桥卡扣方向，图示为正确方向  
/Pay attention to the direction of the  
connecting bridge buckle, the picture  
shows the correct direction

## 快拆换装佩戴模式/QUICK RELEASE AND DRESSING MODE

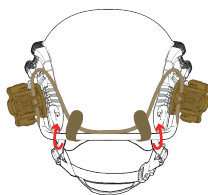
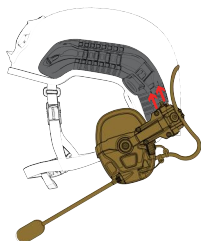
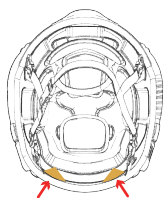
### 固定耳机线缆/Fixes cable



- 6 ≈12CM  
耳机至线缆卡口处预留约12CM的线缆，用于耳机翻转收纳。  
/Reserve a cable of about 12cm from the headset to the cable slot bayonet for flipping the headset for storage.
- 7 按图示将线缆卡入卡扣里  
/Untie the Velcro fixing the cable as shown

## 快拆换装佩戴模式/QUICK RELEASE AND DRESSING MODE

### 安装至头盔导轨/Mounts to helmet rails



8



按图示将魔术贴黏贴至头盔底部边缘  
/Stick the Velcro to the bottom edge of the helmet as shown

9



按图示将连接桥沿着FAST 滑轨卡入，调整至合适的位置。  
/Click the connecting bridge along the FAST rail as shown in the figure and adjust it to a suitable position.

10

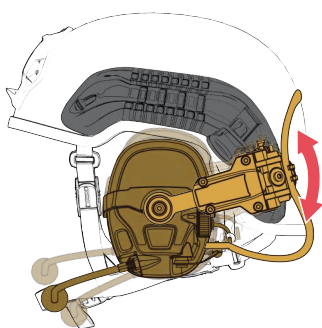


按图示将三角魔术贴贴于头盔内部，将长条魔术贴贴于头盔外部固定线缆  
/Stick the triangle Velcro to the inside of the helmet as shown, and stick the long strip of Velcro to the outside of the helmet to fix the cable

产品标配连接桥适用于FAST导轨，可直接进行快速拆换操作。wendy2.0头盔和wendy3.0头盔需选配头盔连接附件进行替换连接附件即可实现快速拆换操作。  
The standard connecting bridge of the product is suitable for FAST guide rail, which can be directly removed and replaced. The wendy2.0 helmet and the wendy3.0 helmet need to be equipped with a helmet connection accessory to replace the connecting piece to achieve quick replacement.



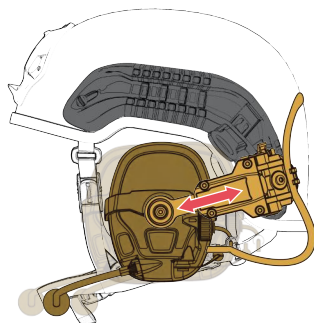
## 调整耳机/ADJUST THE HEADSET



1



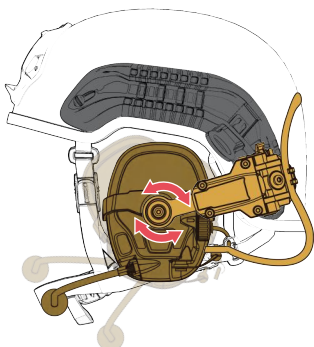
上下调整至合适状态  
/Adjust up and down to a  
suitable state



2



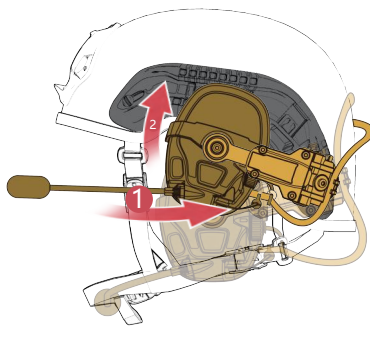
前后调整至合适状态  
/Adjust to the right state  
before and after



3



调整至合适角度  
/Adjust to a suitable angle  
according to the icon



4



按顺序收纳至头盔后方  
/Store it behind the helmet  
in the order shown

## 重要提醒/IMPORTANT REMINDER

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- 为确保耳机有效保护听觉系统（耳朵），请仔细阅读说明书的操作方式，将耳机调整至个人舒适的佩戴方式进行佩戴。
- 长期不使用耳机请将电池取出，避免电池漏液损坏耳机。
- 耳垫必须进行定期检查和维修，以防出现破裂或磨损而影响佩戴。
- 请定期清洁耳机外部，耳机支持IP66防水。
- 请勿将耳机进行暴晒或存放于高温环境当中。
- 在有易爆气体的地方，要关闭设备。
- In order to ensure that the headsets can effectively protect the hearing system (ears), please read the operation method of the manual carefully, and adjust the headsets to a comfortable wearing method.
- Please take out the battery if the headset is not used for a long time to avoid battery leakage and damage to the headset.
- Earpads must be regularly inspected and maintained to prevent cracks or wear that could affect the fit.
- Please clean the outside of the headset regularly, the headset supports IP66 waterproof.
- Do not expose the headset to sunlight or store it in a high temperature environment.
- Shut down the equipment in the place where there is explosive gas.

## 警告/WARNING

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**严禁没有维修资格的人员拆卸、维修设备，如果设备在使用过程中出现不能解决的问题，请您咨询授权维修人员或致电经销商。私自拆装会对耳机造成不可逆转的损害，因私自拆装对耳机造成的损害不在保修范围之内。**

**严禁将耳机浸泡在水中，因浸水对耳机造成的损害不在保修范围之内。**

**It is strictly forbidden to disassemble and repair the equipment by personnel who are not qualified for maintenance. If there is a problem that cannot be solved during the use of the equipment, please consult authorized maintenance personnel or call the dealer. Unauthorized disassembly will cause irreversible damage to the headsets, and the damage to the headsets caused by unauthorized disassembly is not covered by the warranty.**

**It is strictly forbidden to immerse the headset in water, the damage to the earphones caused by water immersion is not covered by the warranty.**

## 常见故障及检修维修/COMMON FAULTS AND MAINTENANCE

故障/FAULT	原因/REASON	解决方法/SOLUTION
无法开机 Can not boot	1. 电池电压太低 The battery voltage is too low 2. 电池极性接反 The battery polarity is reversed	1. 更换新电池; Replace the battery with a new one; 2. 正确按极性安装电池。 Install the battery with the correct polarity. 3. 拧紧电池盖。 Tighten the battery cover.
无法发送语音 Unable to send voice	麦克风接头松动 Microphone connector loose	拧紧麦克风固定螺丝。 Tighten the microphone retaining screw.
连接/通讯异常 connection/ communication abnormal	1. 连接线没有正确连接。 1. The cable is not properly connected. 2. 使用非NATO标准的PTT。 2. Use non-NATO standard PTT.	<p>请正确连接PTT和对讲机/Please connect PTT and radio correctly FCS V60 PTT ,FCS V20 PTT,FCS DUAL PTT 正确连接示意图如下 The correct connection diagram of FCS V60 PTT, FCS V20 PTT, FCS DUAL PTT is as follows</p> <p>上接耳机/connect headset (HEADSET) 上接耳机/connect headset (COM 3) 上接耳机/connect headset 下接电台/connect radio (COM 1) 下接电台/connect radio (COM 2) 下接电台/connect radio 上接耳机/connect headset PTT-A PTT-B COM 1 COM 2 COM 1+2 下接电台/connect radio</p> <p>请使用NATO标准的PTT。 Please use NATO standard PTT.</p>

## 关于保修/ABOUT THE WARRANTY

本产品耳机主体保修期限为一年，易损件头梁布，胶件不在保修范围之内。

若您的耳机需要进行保修，请联系当地经销商进行保修。

The warranty period of the main body of this product is one year, and the wearing parts are not covered by the warranty.

If your headset needs warranty, please contact your local dealer for warranty.

## 产品参数/PRODUCT PARAMETERS

电子元件 /Electronic Component	规格参数 /Specifications	
拾音元件 /pickup element	灵敏度 /Sensitivity	-38dB ( $\pm 3$ dB, 各频率平均值) /-38dB ( $\pm 3$ dB, average for each frequency)
	启动降噪值 /Enable noise reduction value	$\approx 85$ dB
	电源 /power	7号电池 (AAA)*2干电池 / AAA*2 dry battery
	拾音特性 /Pickup characteristics	全向 /Omnidirectional
	尺寸直径 /Size diameter	27mm
扬声器元件 /speaker element	抗阻特性 /Impedance characteristics	32 OHM
	额定功率 /rated power	30mW
	频响特性 /Frequency response characteristics	全频带 /full frequency band
麦克风元件 /microphone element	麦克风 /microphone	驻极电容麦克风 /Electret condenser microphone
	喇叭 /trumpet	动圈 /moving coil
环境音音频声响 /Ambient sound audio sound	20-15000Hz	
声压保护 /Sound pressure protection	85-95dB	
接口 /interface	定制KN6接口 /Customized KN6 interface	
电源 /power	7号 (AAA) 干电池*2用于拾音降噪供电无线电通信 /AAA battery*2 for sound pickup and noise reduction, power supply for radio communication	
兼容 /compatible	兼容北约标准, 通过连接V60 PTT实现单线双通, 同时连接两部电台进行通信 /Compatible with NATO standards, single-line double-pass is realized by connecting V60 PTT, and two radios are connected for communication at the same time	
材质 /material	复合材料 /composite material	
重量 /weight	389g (不含连接线) /389g (without cable)	

