SONICAKE

QWS-20

5.8G无线音频系统

www.sonicake.net

※ 我们将不断改进我们的产品并保留修改某些功能和规格（包括但不限于外观、包装设计、操作手册、配件、尺寸、规格参数、显示屏等）的权利，恕不另行通知。购买前请与当地经销商确认产品功能及规格。产品图片及颜色因拍照光线误差及屏幕设定，可能与实物产品效果有所差异，请以实物为准。

安全须知

1、禁止在水源附近或潮湿环境使用或充电，防止电路短路或电池故障。
2、存放时需置于阴凉干燥环境，避免湿气侵蚀内部元件。
3、避免阳光直射或高温环境，防止电池过热膨胀、外壳变形或漆面开裂。
4、使用原装或认证的数据线，避免电压不稳导致电池损伤或起火风险。
5、若长期闲置，每3个月充电至50%电量，防止电池过放损坏。
6、非专业人士禁止自行拆卸外壳或更换部件，需由专业技术人员维修。
7、若有电池膨胀、散发异味或异常发热，立即停止使用并联系售后，禁止继续充电或操作。
8、将电池投入火中或高温烤箱，或对电池进行机械挤压或切割，均可能导致爆炸。

产品概括

QWS-20是一款由SONICAKE研发的专业5.8G无线音频传输系统，专为音频设备、乐器（如电吉他、键盘、电吹管等）设计。支持30至50米的远距离稳定传输，拥有高保真音色，可有效避免信号卡顿。

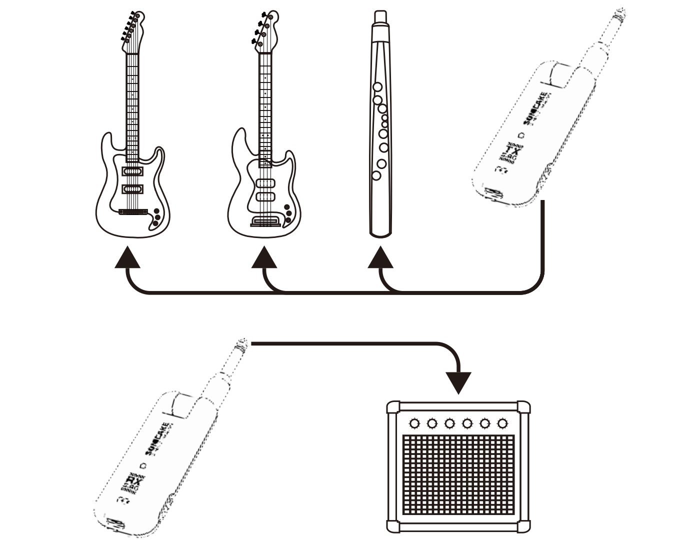
该系统具备强大的抗干扰能力，其5.8GHz频段传输能有效减少同环境下2.4GHz设备（如Wi-Fi、蓝牙）的干扰。信号具有良好的穿透性与绕射能力，能够适应有障碍物的复杂环境。

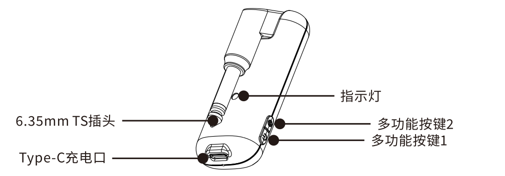
功能亮点

- 30-50米远距离稳定传输
- 8小时以上超长续航
- 支持切换6个频道抗干扰
- <4ms超低延迟
- 高保真音色
- 强大"一拖多"功能，扩展无忧（单个发射器支持连接 13台以上接收器，轻松应对各类大型场景的灵活扩展需求。）

操作说明

1、产品使用





注：本品可支持任何带有6.35mm音频接口的音频设备，如需3.5mm接口，可自备转接头转换使用。

2、开关机

开机：发射器与接收器在关机状态下，长按多功能按键1，3秒，指示灯常亮，开机成功。
关机：发射器与接收器在开机状态下，长按多功能按键1，3秒，指示灯熄灭，关机成功。

3、电量

发射器与接收器，短按多功能按键1，显示电量
80% ~ 100% 绿灯闪烁
30% ~ 79% 黄灯闪烁
0% ~ 29% 低电量，红灯闪烁

4、充电

请使用设备自带双头的Type-C充电线，支持同时给发射器和接收器充电，充电时设备将自动关机并无法使用。

5、配对模式

第一步：进入配对
同时长按发射器与接收器的【多功能按键2】进入配对模式。此时，接收器指示灯常亮，发射器指示灯闪烁。
第二步：确认配对
短按发射器的【多功能按键2】，待发射器指示灯变为常亮后，说明配对成功，系统将自动退出配对模式。

6、切换频道

短按发射器多功能按键2，轮询切换6个频道。

产品清单

- 发射器×1
- 接收器×1
- 双头Type-C充电线×1
- 说明书×1

操作说明

工作频段	5.8GHz (6个频道)
系统频率响应	20Hz ~ 20kHz (+/-1dB)
采样率/精度	48kHz / 24Bit
传输距离	约30-50米 (视环境而定)
信噪比	>95dB
满电续航	≥8小时
延迟	<4ms
电池容量	500mAh (发射器/接收器)
工作温度范围	充电：0~45°C；放电：-10~60°C

（一）符合"微功率短距离无线电发射设备目录和技术要求"的具体条款和使用场景，采用的天线类型和性能，控制、调整及开关等使用方法；

（二）不得擅自改变使用场景或使用条件、扩大发射频率范围、加大发射功率（包括额外加装射频功率放大器），不得擅自更改发射天线；

（三）不得对其他合法的无线电台（站）产生有害干扰，也不得提出免受有害干扰保护；

（四）应当承受辐射射频能量的工业、科学及医疗（ISM）应用设备的干扰或其他合法的无线电台（站）干扰；

（五）如对其他合法的无线电台（站）产生有害干扰时，应立即停止使用，并采取措施消除干扰后方可继续使用；

（六）在航空器内和依据法律法规、国家有关规定、标准划设的射电天文台、气象雷达站、卫星地球站（含测控、测距、接收、导航站）等军民用无线电台（站）、机场等的电磁环境保护区域内使用微功率设备，应当遵守电磁环境保护及相关行业主管部门的规定；

（七）禁止在以机场跑道中心点为圆心、半径5000米的区域内使用各类模型遥控器；

（八）微功率设备使用时温度和电压的环境条件。

产品中有害物质的名称及含量

有害物质	部件名称		
	外壳（壳体）	电子部件（印刷电路板等）	附件（电源线、交流适配器等）
铅 (Pb)	×	×	×
汞 (Hg)	○	○	○
镉 (Cd)	○	○	○
六价铬 (Cr(VI))	○	○	○
多溴联苯 (PBB)	○	○	○
多溴二苯醚 (PBDE)	○	○	○
邻苯二甲酸二正丁酯 (DBP)	○	○	○
邻苯二甲酸二异丁酯 (DIBP)	○	○	○
邻苯二甲酸丁苄酯 (BBP)	○	○	○
邻苯二甲酸二(2-乙基)己酯 (DEHP)	○	○	○

本表格依据SJ/T 11364的规定编制。
○：表示该有害物质在该部件所有均质材料中的含量均在GB 26572规定的限量要求以下。
×：表示该有害物质至少在该部件的某一均质材料中的含量超出GB 26572规定的限量要求。
标记"×"的部件，皆因全球技术发展水平限制而无法实现有害物质的替代。印刷电路板组件包括印刷电路板(PCB)及其组件、集成电路(IC)和连接器。某些型号的产品可能不包含上表中的某些部件，请以实际购买机型为准。

环保使用期限

此标志适用于在中国国内销售的电子信息产品，表示环保使用期限的年数。所谓环保使用期限是指在自制造日起的规定期限内，产品中所含的有害物质不致引起环境污染，不会对人身、财产造成严重的不良影响。环保使用期限仅在遵照产品使用说明书，正确使用产品的条件下才有效。不当的使用，将会导致有害物质泄漏的危险。

SONICAKE

QWS-20

5.8G Wireless Audio System

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※ In the interest of product improvement, the specifications and/or the content of products (including but not limited to appearances, packaging design, manual content, accessories, size, parameters and display screen), are subject to change without prior notice. Please check with local supplier for exact offers. Specifications and features (including but not limited to appearances, colors and size) may vary by model owing to environmental factors, and all images are illustrative.

Safety Instructions

1. Do not use or charge near water sources or in damp environments to prevent short circuits or battery malfunctions.
2. Store in a cool and dry place to avoid moisture damage to internal components.
3. Avoid direct sunlight or high-temperature environments to prevent battery overheating, expansion, shell deformation or paint cracking.
4. Use original or certified data cables to avoid battery damage or fire risks due to unstable voltage.
5. If left unused for a long time, charge to 50% every 3 months to prevent battery damage from over-discharge.
6. Non-professionals are prohibited from disassembling the shell or replacing parts by themselves. Professional technicians should handle repairs.
7. If the battery is swollen, emits an odor or overheats abnormally, stop using it immediately and contact after-sales service. Do not continue charging or operating.
8. Disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery, that can result in an explosion.

Product Overview

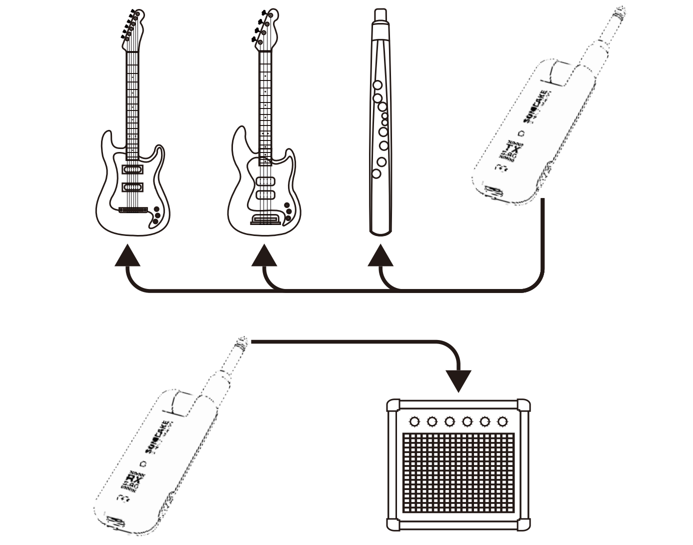
The QWS-20, developed by SONICAKE, is a professional 5.8G wireless audio transmission system specifically designed for audio equipment and musical instruments (such as electric guitars, keyboards, Digital Wind Instrument, etc.). It supports stable long-distance transmission of 30 to 50 meters and features high-fidelity sound quality, effectively avoiding signal stuttering.
The system possesses robust anti-interference capabilities. Its operation in the 5.8GHz band effectively reduces interference from 2.4GHz devices (such as Wi-Fi and Bluetooth) in the same environment. The signal offers good penetration and diffraction capabilities, enabling it to adapt to complex environments with obstacles.

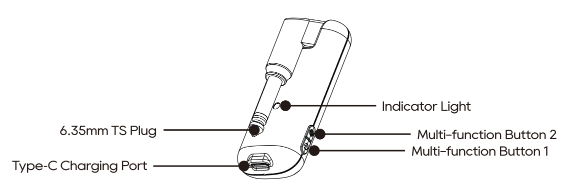
Key Features

- 30~50M Range
- Over 8H Battery Life
- 6 Channels
- <4ms Low Latency
- High-fidelity Sound Quality
- Powerful "One-to-Many" Connectivity for Effortless Expansion (A single transmitter can connect to 13 or more receivers simultaneously, easily accommodating the flexible expansion needs of various large-scale setups and performances.)

Operation Instructions

1. Product Usage





Note: This product is compatible with any audio equipment featuring a 6.35mm audio jack. For devices with a 3.5mm interface, please prepare an adapter for conversion.

2. Power On/Off

Power On: While the transmitter and receiver are off, press and hold Multi-function Button 1 for 3 seconds until the indicator light stays steadily lit. This indicates successful power-on.
Power Off: While the transmitter and receiver are on, press and hold Multi-function Button 1 for 3 seconds until the indicator light turns off. This indicates successful shutdown.

3. Battery Level Check

Short press Multi-function Button 1 on either the transmitter or receiver to check the battery level. The indicator light will display the current battery status via color codes:
80% ~ 100%: Green light flashes.
30% ~ 79%: Yellow light flashes.
0% ~ 29%: Red light flashes (low battery).

4. Charging

Use the provided dual port Type-C splitter charging cable. The transmitter and receiver can be charged simultaneously. Note: The devices will automatically power off during charging and cannot be used while charging.

5. Pairing Mode

Step 1: Enter Pairing Mode
Press and hold [Multi-function Button 2] on both the transmitter and receiver simultaneously to enter pairing mode. At this point, the receiver's indicator light will remain solid, while the transmitter's indicator light will flash.
Step 2: Confirm Pairing
Short press [Multi-function Button 2] on the transmitter. Once the transmitter's indicator light turns solid, the pairing is successful, and the system will automatically exit pairing mode.

6. Switching Channels

Short press Multi-function Button 2 on the transmitter to cycle through the 6 channels.

Accessories List

- Transmitter × 1
- Receiver × 1
- Dual Port Type-C Splitter Charging Cable× 1
- User Manual × 1

Product Specifications

Operating Frequency Band	5.8GHz (6 channels)
System Frequency Response	20Hz ~ 20kHz (+/-1dB)
Sampling Rate / Precision	48kHz / 24Bit
Transmission Distance	Approx. 30~50 meters (depending on the environment)
Signal-to-Noise Ratio (SNR)	>95dB
Battery Life (Full Charge)	≥8 hours
Latency	<4ms
Battery Capacity	500mAh (Transmitter/Receiver)
Operating Temperature Range	Charging: 0~45°C Discharging: -10~60°C

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

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

ISED Caution:

Radio Standards Specification RSS-Gen, issue 5

- English:

This device contains licence-exempt transmitter(s) / receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:
This device may not cause interference.
This device must accept any interference, including interference that may cause undesired operation of the device.

RF exposure statement:
The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

- French:

Cet appareil contient des émetteurs / récepteurs exemptés de licence conformes aux RSS (RSS) d'Innovation, Sciences et Développement économique Canada. Le fonctionnement est soumis aux deux conditions suivantes:
Cet appareil ne doit pas causer d'interférences.
Cet appareil doit accepter toutes les interférences, y compris celles susceptibles de provoquer un fonctionnement indésirable de l'appareil.

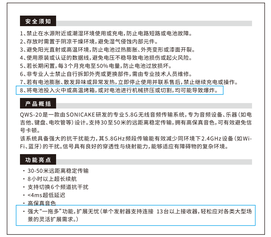
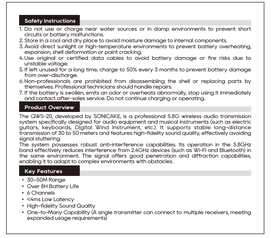
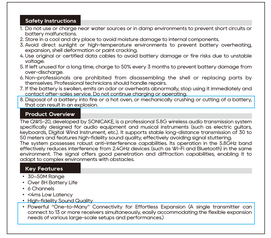
Déclaration d'exposition RF:
L'appareil a été évalué pour répondre aux exigences générales d'exposition aux RF. L'appareil peut être utilisé dans des conditions d'exposition portable sans restriction.

QWS-20
IC: 30072-QWS20
FCC ID: 2A7J4-QWS20
Made in China

料号：
623000152 QWS-20说明书

技术要求：
80g书纸，700*90mm（折后100*90mm），单色印刷，折页

修改说明

版本	修改前	修改后	日期
V02			260709
			

添加产品工作温度和电池警告语句，修改功能一拖多的描述，缩小插图，修改配对说明，中文增加《中华人民共和国工业和信息化部公告2019年第52号》中关于微功率设备的使用说明，增加TELEC标识和MIC号码，尺寸加长100mm