



**HUALIAO**  
• intercom •



# 产品手册

Product Manual

专注内部通话 打造民族品牌



## 关于 我们

广州华燎电气科技有限公司属华燎机构核心成员企业，2018 年 8 月正式成立，工厂座落于广州市花都区华兴工业区盛国高新科技园，注册资本 500 万元，致力于内部通讯系统及舞台智能科技的研发设计和创新制造，我们的研发核心成员均有 10 年以上的从业资历，部分研发顾问来自于美国某通讯公司的技术工程师，以及国内高校的专家教授。

内部通讯设备是我们的核心产品，目前主要以无线内部通话和有线内部通话为主要产品，未来将以矩阵通讯为主要研发方向。2019 年年底，第二代无线内通已测试完毕并着手批量化生产，未来数年，华燎科技将进入发展快车道，欢迎志同道合者加入我们，共同发展，欣华燎远！

Guangzhou Hualiao Electric Technology Co., Ltd. is a core member enterprise of Hualiao organization. It was formally established in August 2018. The factory is located in Shengguo high tech park, Huaxing Industrial Zone, Huadu District, Guangzhou city. With a registered capital of 5 million yuan, it is committed to the R & D design and innovative manufacturing of internal communication system and stage intelligent technology. Our core members of R & D have more than 10 years of working experience, and some of them have R & D experience. The consultants are from technical engineers of a communication company in the United States and experts and professors from domestic universities.

Internal communication equipment is our core product. At present, the main products are wireless intercom and wired intercom. In the future, matrix communication will be the main research and development direction. By the end of 2019, the test of the second generation wireless intercom has been completed and mass production has been started. In the next few years, Hualiao technology will enter the fast track of development. Welcome to join us for common development, Xinhua Liaoyuan!



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## HL-BS950 无线内通主机 Wireless Intercom System



### ● 产品简介 Product Introduction

华燎科技 HL-BS950 二代无线内部通话系统是依据广播电视行业及舞台演出行业打造的一款专业级的内部通话系统，支持 IP 组网、多主机联合、多中继台联合、异地 IP 互联功能，可满足融媒体中心与录制现场进行不限距离全双工通话。导演、导播、舞美总监、活动现场总指挥能够与现场各工作人员自由交流，同时也允许工作人员根据部门分成多个工作小组，每个组内都可以自由双向通话而不影响其他的部门。

HUALIAO Technology HL-BS950 second-generation wireless intercom system is a professional-level intercom system based on the radio and television industry and the stage performance industry. It supports IP networking, multi-host joint, multi-repeater joint, and remote IP interconnection. Function, it can meet the unlimited full-duplex call between the media center and the recording site. Directors, directors of dance beauty, and directors of the event site can communicate freely with the staff at the scene, and also allow staff to divide into multiple working groups according to the department, each group can talk freely two-way without affecting other departments.

### ● 产品参数 Product Parameters

频率范围	400-470Mhz	Frequency Range	400-470Mhz
组网方式	IP 互联网网, 无限距离	Networking Mode	IP networking, unlimited distance
中继方式	多主机联合、多中继台联合	Relay Mode	Multi host joint and multi relay joint
组网通话距离	不受距离限制	Network Call Distance	Unlimited distance
脱网通话距离	视距范围 2000 米	Off Line Call Distance	Visual range: 2000m
通话方式	全双工通话	Call Mode	Full duplex call
分机拓展	支持拓展 128 路全双工通话	Extension Extension	Support expansion of 128 full duplex calls
分组通话	支持 8 组, 每组分机不限数量	Group Call	It supports 8 groups with unlimited number of extensions in each group
选择通话	支持	Select Call	support
Tally 数量	12 路红绿双色	Tally Quantity	12 way red and green
支持切换台品牌	支持所有主流切换台 Tally 信号	Support Switching Station Brand	Support all mainstream switcher tally signals
噪音抑制	5 级可调	Noise Suppression	5 levels adjustable
主机尺寸 / 重量	440*255*90mm/3.8kg	Host Size / Weight	440*255*90mm/3.8kg
发射功率	≤ 1W	Transmitting Power	≤ 1W
待机功率	40mW/10mA	Standby Power	40mW/10mA
待机时间	15 天	Standby Time	15 days
充电接口	Type-C 快速充电	Charging interface	Type-C fast charging
通话时间	10 小时以上	Talk time	More than 10 hours
信道数	90 个	Number of channels	90
灵敏度	-110dbm	sensitivity	-110dbm
加密方式	32 位通信密码	Encryption method	32-bit communication password
数字语言编码	16K 采样率 64bits 精度	Digital language coding	16K sampling rate 64bits accuracy
分机尺寸 / 重量	29x72x110mm/350g	Extension size / weight	29x72x110mm/350g
分机电池	3.7V 锂离子可充电电池, 容量 5000mAh	Extension battery	3.7V lithium ion rechargeable battery,Capacity 5000mAh

● 产品特点 Product Features

1. 频率范围 400-470Mhz, 无中继模式下传输距离 2000 米、穿墙 8 层, 不受障碍物影响。

2. 发射功率 ≤ 1W, 不对其他设备造成干扰。

3. 氧化黑全铝材质标准 2U 机架式主机, 尺寸 / 重量 440\*255\*88mm/1.8kg。

4. 信道数可达 90 个。

5. 具备远程 IP 组网通话功能, 不受地域、距离限制。

6. 支持扩展 128 路的分机参与进行全双工通话, 具备 IP 远程互联, 能够连接不在同一地区的系统进行全双工通话, 可实现融媒体中心与采播现场的及时通话。

7. 主机具有分组通话的功能, 可根据不同部门最多分为 8 个组别, 群组之间互不干扰, 自由切换。

8. 支持各种通话系统互联:  
(1) 支持矩阵通话系统;  
(2) 支持二线制的 Party-Line 有线通话系统;  
(3) 支持四线制的 Party-Line 有线通话系统;  
(4) 支持 AUX OUT 语音输出、AUX IN 语音输入;  
(5) 能够连接调音台;  
(6) 能够连接 PSTN 电话系统。  
(7) 能够连接模拟或数字对讲机系统;

9. 具备联合组网扩展能力:  
(1) 支持多主机联合工作;  
(2) 支持多中继台联合工作;  
(3) 支持本地无线中继能力。

10. 具备选择性通话能力:  
(1) 不分群组时主机能够按分机编号允许其听说, 或禁止其听说;  
(2) 使用分组通话功能时, 分组内始终允许听说, 主机能够按组号允许某些组听主机说话, 或禁止某些组听主机说话。
1. The frequency range is 400-470Mhz, the transmission distance is 2,000 meters in the non-relay mode, and it passes through 8 layers of walls without being affected by obstacles.

2. The transmission power is ≤ 1W, which will not cause interference to other equipment.

3. Standard 2U rack-mounted mainframe made of oxidized black al aluminum material, size / weight 440 \* 255 \* 88mm / 1.8kg.

4. The number of channels can reach 90.

5. With remote IP networking call function, it is not restricted by area and distance.

6. Support extension 128-channel extensions to participate in full-duplex calls, with IP remote interconnection, can connect systems that are not in the same area for full-duplex calls, and realize timely calls between the media center and the production site.

7. The main unit has the function of group call, which can be divided into a maximum of 8 groups according to different departments, and the groups can switch freely without interference.

8. Support interconnection of various call systems:  
(1) Support matrix call system;  
(2) Party-Line wire communication system supporting two-wire system;  
(3) Party-Line wire telephone system supporting four-wire system;  
(4) Support AUX OUT voice output and AUX IN voice input;  
(5) Able to connect to the mixer;  
(6) Able to connect PSTN telephone system.  
(7) Able to connect analog or digital two-way radio systems.

9. with joint networking expansion capabilities:  
(1) Support multi-host joint work;  
(2) Support the joint work of multiple repeaters;  
(3) Support local wireless relay capability.

10. With selective call capability:  
(1) When the group is not divided into groups, the host can allow it to hear or forbid according to the extension number;  
(2) When using the group call function, listening and speaking are always allowed in the group, and the host can allow certain groups to listen to the host according to the group number, or prohibit certain groups from listening to the host.

## HL-PT520 无线内通腰包 Wireless Intercom Waistpack



### 产品特点 Product Features

- 分机具有 Type-c 接口快速充电。
- 内置锂电池 3.7V 容量 5000mAh, 可以持续通话 10 个小时以上, 待机 15 天以上。
- 具有可四面显示的一体化 tally 灯, 每个方位均清晰可见。
- 六芯 MINI 卡侬头专业音频耳机接口, 防脱拉设计安全可靠。
- 待机功率 40mW / 10mA。
- The extension has type-C interface for fast charging.
- Built in lithium battery 3.7V, capacity 5000mAh, can continue to talk for more than 10 hours, standby for more than 15 days.
- It has integrated tally light which can be displayed on four sides, and each direction is clearly visible.
- Six core Mini XLR professional audio headphone interface, anti pull design, safe and reliable.
- The standby power is 40mW / 10mA.

## HL-ABS2019 无线内通包装箱 Wireless Intercom Packing Case



### 产品简介 Product Introduction

具有高强度,高抗冲击,绝对密封防水,防潮,防尘,内附特硬方格海绵(或者保护间隔),是存放贵重仪器设备的理想专业用箱。广泛应用于公安、消防、反恐、军队(渡海作战)、航空、户外摄影、野外考察、科学探测等众多领域,精心保护您的珍贵器材。

**坚固:** 箱体采用高抗冲击的高分子聚合材料一体注塑成型坚韧抗压。

**密封:** 采用扁型弹性发泡密封橡胶条,确保防水气密。

**耐用:** 所有铰轴采用不锈钢材料,防腐耐用。

**多用途:** 正常工作范围为 - 40°C 至 + 80°C; 可选配吸湿卡, 实现低湿保存; 亦可根据实际需要选配附件, 满足各种特殊要求。

### 产品参数 Product Parameters

外尺寸	L663*W496*H338mm
内尺寸	L575*W406*H (上盖44+下盖255)mm
重量	10.5kg
颜色	黑色、橙色

External dimension	L663*W496*H338mm
Internal dimension	L575*W406*H (upper cover 44 + lower cover 255) mm
Weight	10.5kg
Beauty	Black, orange

It has high strength, high impact resistance, absolute sealing, waterproof, moisture-proof, dust-proof, with special hard square sponge (or protection interval), which is an ideal professional box for storing valuable instruments and equipment. It is widely used in public security, fire fighting, anti-terrorism, military (sea crossing operations), aviation, outdoor photography, field investigation, scientific exploration and many other fields, carefully protecting your precious equipment.

**Strong:** the box is made of high impact resistant polymer material, which is injection molded, tough and compressive.

**Sealing:** flat elastic foam sealing rubber strip is adopted to ensure waterproof and air tightness.

**Durable:** all hinge shafts are made of stainless steel, corrosion resistant and durable.

**Multi purpose:** the normal working range is from - 40°C to + 80°C; hygroscopic card is optional to realize low humidity preservation; accessories can be selected according to actual needs to meet various special requirements.

HL-BS950PRO 无线内通主机 Wireless Intercom System



● 产品参数 Product Parameters

频率范围	400-470Mhz	Frequency Range	400-470Mhz
组网方式	IP 互联网网, 无限距离	Networking Mode	IP networking, unlimited distance
中继方式	多主机联合、多中继台联合	Relay Mode	Multi host joint and multi relay joint
组网通话距离	不受距离限制	Network Call Distance	Unlimited distance
脱网通话距离	视距范围 2000 米	Off Line Call Distance	Visual range: 2000m
通话方式	全双工通话	Call Mode	Full duplex call
分机拓展	支持拓展 128 路全双工通话	Extension Extension	Support expansion of 128 full duplex calls
分组通话	支持 8 组, 每组分机不限数量	Group Call	It supports 8 groups with unlimited number of extensions in each group
选择通话	支持	Select Call	support
Tally 数量	12 路红绿双色	Tally Quantity	12 way red and green
支持切换台品牌	支持所有主流切换台 Tally 信号	Support Switching Station Brand	Support all mainstream switcher tally signals
噪音抑制	5 级可调	Noise Suppression	5 levels adjustable
主机尺寸 / 重量	440*255*90mm/3.8kg	Host Size / Weight	440*255*90mm/3.8kg
发射功率	≤ 1W	Transmitting Power	≤ 1W
待机功率	40mW/10mA	Standby Power	40mW/10mA
待机时间	15 天	Standby Time	15 days
充电接口	Type-C 快速充电	Charging interface	Type-C fast charging
通话时间	10 小时以上	Talk time	More than 10 hours
信道数	90 个	Number of channels	90
灵敏度	-110dbm	sensitivity	-110dbm
加密方式	32 位通信密码	Encryption method	32-bit communication password
数字语言编码	16K 采样率 64bits 精度	Digital language coding	16K sampling rate 64bits accuracy
分机尺寸 / 重量	29x72x110mm/350g	Extension size / weight	29x72x110mm/350g
分机电池	3.7V 锂离子可充电电池, 容量 5000mAh	Extension battery	3.7V lithium ion rechargeable battery,Capacity 5000mAh



## HL-PT520PRO 无线内通腰包 Wireless Intercom Waistpack



### ● 产品特点 Product Features

- 分机具有 Type-c 接口快速充电。
- 内置锂电池 3.7V 容量 5000mAh, 可以持续通话 10 个小时以上, 待机 15 天以上。
- 具有可四面显示的一体化 tally 灯, 每个方位均清晰可见。
- 六芯 MINI 卡侬头专业音频耳机接口, 防脱拉设计安全可靠。
- 待机功率 40mW / 10mA。
- The extension has type-C interface for fast charging.
- Built in lithium battery 3.7V, capacity 5000mAh, can continue to talk for more than 10 hours, standby for more than 15 days.
- It has integrated tally light which can be displayed on four sides, and each direction is clearly visible.
- Six core Mini XLR professional audio headphone interface, anti pull design, safe and reliable.
- The standby power is 40mW / 10mA.



HL-RP200 手持式无线内部通话室内中继台  
 Handheld Wireless Intercom Indoor Relay Station



● 产品特点 Product Features

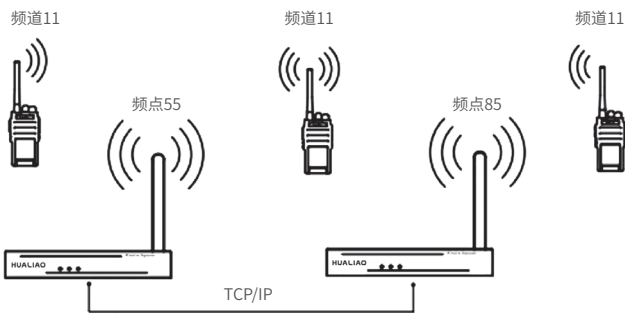
- 全双工中继台, 支持 8 路语音互相传输;
- IP 架构, 支持网络连接、远距离互通;
- 支持单中继中继、多中继 IP 组网、信号组网覆盖;
- 自主研发、专利产品
- 体积小、应用灵活、安装简单
- Full duplex relay station, supporting 8-channel voice transmission;
- IP architecture, network connectivity support;
- It supports single relay, multi relay IP networking and signal networking coverage;
- Independent research and development, patent products;
- Small size, flexible application, simple installation.

● 产品简介 Product Introduction

HL-RP200 无线中继台是依据华燎科技自主研发的 wDR-8 技术专利体系研发的一款室内型多路全双工 IP 中继台, 能支持 8 路语音实时转发, 支持 IP 组网中继、信号覆盖、单中继增程。具有使用方便、体积小、灵活部署, 施工成本低等众多优势。

HL-RP200 Wireless Relay Station Is An Indoor Multi-Channel Full Duplex IP Relay Station Developed According To The wDR-8 Technology Patent System Independently Developed By Hualiao Technology. It Can Support 8-Channel Voice Real-Time Forwarding, IP Networking Relay, Signal Coverage And Single Relay Extension. It Has Many Advantages, Such As Convenient Use, Small Size, Flexible Deployment, Low Construction Cost, Etc.

● 多中继组网 Multi Relay Network



● 产品参数 Product Parameters

产品型号	HL-RP200
产品尺寸	240mm*160mm*38mm (长 * 宽 * 高)
产品净重	1.1kg
发射功率	2W
频率范围	400-470MHz
调制类型	FSK/GFSK
工作制式	wDR-8
灵敏度	-108 dBm
工作温度	-20°C - 60°C
工作电压	12V
工作电流	130mA
信号类型	数字信号
通讯安全	9 位密码加密通话

Product Model	HL-RP200
Product Size	240mm*160mm*38mm (L * W * H)
Net Weight	1.1kg
Transmitting Power	2W
Frequency Range	400-470MHz
Modulation Type	FSK/GFSK
Working System	wDR-8
Sensitivity	-108 dBm
Working Temperature	-20°C - 60°C
Working Voltage	12V
Working Current	130mA
Signal Type	Digital Signal
Communication Security	9-Digit Encrypted Call

## HL-RP200IP 手持式无线内部通话户外中继台 Handheld Wireless Intercom Outdoor Relay Station



### 产品特点 Product Features

- 全双工中继台, 支持 8 路语音互相传输;
- IP 架构, 支持网络连接、远距离互通;
- IP67 防水等级
- 支持单中继中继、多中继 IP 组网、信号组网覆盖;
- 自主研发、专利产品
- Full duplex relay station, supporting 8-channel voice transmission;
- IP architecture, network connectivity support;
- IP67 waterproof grade
- It supports single relay, multi relay IP networking and signal networking coverage;
- Independent research and development, patent products

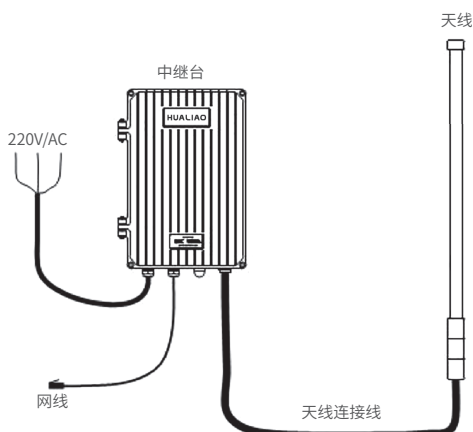
### 产品参数 Product Parameters

产品型号 Product Model	HL-RP200IP
产品尺寸 Product Size	280*186*78mm (长*宽*高) (L*W*H)
产品净重 Net Weight	1.8KG
防护等级 Protection Level	IP67
发射功率 Transmitting Power	2W
频率范围 Frequency Range	470*530MHz
调制类型 Modulation Type	FSK/GFSK
工作制式 Working System	wDR-8
工作温度 Working Temperature	-20°C -60°C
灵敏度 Sensitivity	-108dBm
工作电压 Working Voltage	100-220V AC
功耗 Power Waste	1.8W
信号类型 Signal Type	数字信号 Digital Signal
通讯安全 Communication Security	9位密码加密通话 9-Digit Encrypted Call

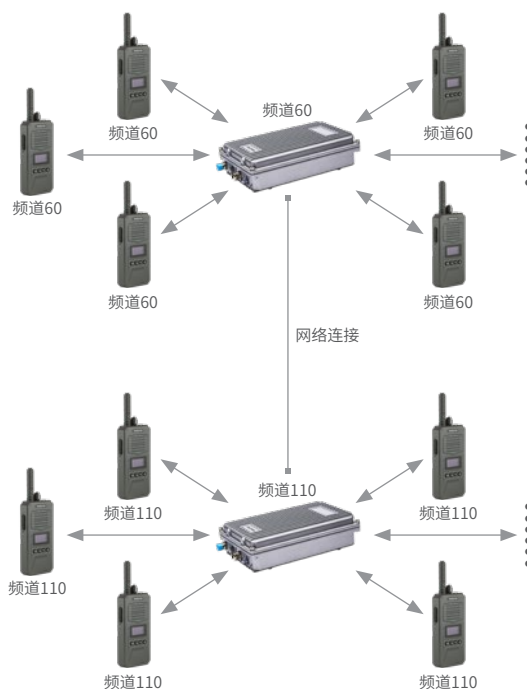
### 产品简介 Product Introduction

HL-RP200IP 无线中继台是依据华燎科技自主研发的 wDR-8 技术专利体系研发的一款多路全双工 IP 中继台, 能支持 8 路语音实时转发, 支持 IP 组网中继、信号覆盖、单中继增程。

wireless relay station is a multi-channel full duplex IP relay station developed according to the wDR-8 technology patent system independently developed by Hualiao technology. It can support 8-channel voice real-time forwarding, IP networking relay, signal coverage and single relay extension.



### 多中继台组网无线转发连接通话模式 Call Mode Of Wireless Forwarding Connection In Multi Relay Network



HL-PNI220 手持式无线内部通话终端  
Handheld Wireless Intercom Terminal



● 产品简介 Product Introduction

HL-PNI220 内部通话手持终端是依据华燎科技自主研发的 wDR-8 技术专利体系研发的一款全双工通讯产品，能支持同频道下 8 个内部通话手持终端同时说话，支持 IP 组网中继、脱网直通。HL-PNI220 型号专门为现场协调多人通话的使用场景而设计，比如军警任务、工程作业、应急通讯、消防抢险救灾、体育赛事、团队协作工作、户外运动等，采用全新外观设计，机身带有喇叭，具有 PTT 和 TALK 两种呼叫方式，允许最多 8 个内部通话手持终端免按键持续听说，不限数量的内部通话手持终端可以听。

HL-PNI220 internal communication handheld terminal is a full duplex communication product developed based on the wDR-8 technology patent system independently developed by Hualiao technology. It can support simultaneous speaking of eight internal communication handheld terminals under the same channel, and support IP networking relay and off network direct connection. HL-PNI220 is specially designed for scene coordination of multi-user communication, such as military and police tasks, engineering operations, emergency communication, fire rescue and disaster relief, sports events, team work, outdoor sports, etc. It adopts a brand-new appearance design. The fuselage is equipped with a loudspeaker, with PTT and talk calling modes. It allows up to 8 internal communication handheld terminals to continuously listen and hear without pressing a button, an unlimited number of internal call handheld terminals can listen.

● 产品特点 Product Features

- 一个频道内具有 8 个语音通道，可供 8 人同时说话；
- 无需按键，解放双手。数量在 8 个以内免按键，超过 8 个的按键通话。
- IP 组网中继为任意多个封闭空间提供信号覆盖。
- 视距范围通讯距离 2 公里，室内可穿透 4~6 层楼；
- 数字语音加密，彻底杜绝窃听；
- 锂离子电池容量 4000mAh 左右，超长待机 120 小时，持续使用时间 8~10 小时。
- 易于使用。可方便调节音量大小及频道。
- There are 8 voice channels in one channel, which can be used for 8 people to talk at the same time;
- No need to press the button, free your hands. If the number is less than 8, there is no need to press the button. If the number is more than 8, push to talk.
- IP network relay provides signal coverage for any number of closed spaces.
- Visual range: communication distance: 2km; indoor penetration: 4-6 floors;
- Digital voice encryption, completely eliminate eavesdropping;
- The capacity of lithium-ion battery is about 4000mAh, and it can stand by for 120 hours for a long time and last for 8-10 hours.
- Easy to use. The volume and channel can be adjusted conveniently.

● 产品参数 Product Parameters

技术体制 Technical System	wDR-8
同时通话数量 Number Of Simultaneous Calls	不限数量能听，最多 8 个同时说（中继模式下 4 个） Unlimited Number Can Listen, Up To 8 Simultaneous Speaking (4 In Relay Mode)
延伸覆盖 Extended Coverage	支持脱网直通、单中继台、多中继台 IP 组网 Support Off Network Direct, Single Relay, Multi Relay IP Networking
系统管理 System Management	支持软件调度台，系统管理，录音存储 Support Software Scheduling Console, System Management, Recording Storage
频率范围 Frequency Range	470-530Mhz
通话距离 Call Distance	视距范围 2 公里。（中继模式下不受限制） The Visual Range Is 2km. (Unlimited In Relay Mode)
发射功率 Transmitting Power	≤ 1W
尺寸 / 重量 Size / Weight	128x63x38mm / 225g
屏幕显示 Screen Display	LCD 屏幕 LCD Screen
通话方式 Call Mode	PTT/TALK
电池容量 Battery Capacity	3.7V 锂离子可充电电池，容量 4000mAh 左右 3.7V Lithium-Ion Rechargeable Battery With A Capacity Of About
待机功率 Standby Power	40mW / 10mA
待机时间 Standby Time	120 小时 120 hours
持续通话时间 Duration Of Call	8~10 小时 8-10 hours
加密 Encryption	32 位通信密码 32-Bit Communication Password
数字语音编码 Digital Speech Coding	8K 采样率 16bits 精度 Accuracy of 16bits at 8K sampling rate

## MS-502 有线内通主站 Wired Intercom Master Station



### 产品特点 Product Features

- 具有远程麦克风 MIC 和蜂鸣器开关功能
- 每通道具备呼叫和对讲按键, 监听按键及监听音量控制
- 通道之间链接
- 可以扩展链接
- 用于远程控制的继电器触发功能
- 可编程的拨码开关
- With Remote Microphone MIC And Buzzer Switch Function
- Each Channel Has Call And Intercom Buttons, Monitoring Keys And Monitoring Volume Control
- Links Between Channels
- Links Can Be Extended
- Relay Trigger Function For Remote Control
- Programmable Dial Switch

### 产品参数 Product Parameters

系统容量	最多连接 45 个单、双通道腰包或者 15 台 KB-501、KB-502 分站
内置预设功能	PRG 中断, 幻象电源, 远程开关, 继电器触发等
外置调节功能	话筒增益, 侧音调节, 主节目信号调节, 次节目信号调节, 语音调节
电源需求	100-240VAC/50-60Hz/45VA
系统供电	27DC/1.8A/PIN2
系统阻抗	220 欧姆 /PIN3/ 最远 2500 米
连接器	内通 XLR-3MX(3 A+3B)/PRGM+XLR-3F/ANNL+XLR-3M/ 话筒 +XLR-3F/ 耳机 +XLR-4M/6.35
远程控制	话筒哑音, 蜂鸣器哑音, 继电器, PA 控制
尺寸	19"X1UX200mm
净重	2.65KG
system capacity	Up to 45 single and dual channel waist bags or 15 kb-501 and kb-502 substations can be connected
Built in preset function	PRG interrupt, phantom power supply, remote switch, relay trigger, etc
External adjustment function	Microphone gain, side tone adjustment, main program signal adjustment, secondary program signal adjustment, voice adjustment
Power demand	100-240VAC/50-60Hz/45VA
System power supply	27DC/1.8A/PIN2
System impedance	220Ω /PIN3/ furthest 2500M
Connector	Intercom XLR-3MX(3 A+3B)/PRGM+XLR-3F/ANNL+XLR-3M/Microphone +XLR-3F/ Headset +XLR-4M/6.35
Remote control	Microphone mute, buzzer mute, relay, PA control
size	19"X1UX200mm
Net weight	2.65KG

MS-504 有线内通主站 **Wired Intercom Desktop Station**



● **产品简介** Product Introduction

主站给全部系统部件单元提供电源供应。当线路出现短路情况时，单元自动断路并瞬时恢复。最多可连接 50 个有限腰包或者 15 个台式基站和 15 个桌面，墙面基站或其他设备。

提供四个通道独立的对讲，接听，呼叫讯号按钮。同前面板按钮可轻易实现通道间的链接。

系统中的所有组件加上一个微型控制器，可以执行例如话筒哑音，远程关闭扬声器，锁定话筒或者 PPT 方式话筒开关等功能。基站提供一个具有分配控制和音量控制，可接收平衡式话筒和线路电平编程输入。头戴耳机的话筒讯号可驱动 PA 系统。可根据 PA 键的协作，提供继电器触发，帮助使用者自动执行多项任务，如记录，扬声器切换，提示灯等。该站在一个多点多站的复杂系统中可作为一个主机站控制系统的所有基站和桌面远程控制台。四人可编程的按钮可进行预先编辑，在使用过程中进行快速调用，可程序内容包括任意通道的对讲，接听，呼叫等功能。前面板包含一个鹅颈话筒，耳机连界面和一个高质量的扬声器。

The master station provides power supply for all system components. In case of short circuit, the unit will open circuit automatically and recover instantaneously. Up to 50 limited wallets or 15 desktop base stations and 15 desktop, wall base stations or other devices can be connected.

Provide four channels of independent intercom, answer, call signal button. The same as the front panel button can easily realize the link between channels.

All components in the system plus a micro controller can perform functions such as microphone mute, remote speaker off, microphone locking or PPT mode microphone switch. The base station provides a distribution control and volume control to receive balanced microphone and line level programming input. The microphone signal of headset can drive PA system. According to the cooperation of PA key, relay trigger can be provided to help users automatically perform multiple tasks, such as recording, speaker switching, prompt light, etc. The station can be used as a master station to control all base stations and desktop remote console in a multi-point and multi station complex system. The four person programmable button can be pre edited and quickly called in the process of use. The programmable content includes the functions of intercom, answering and calling of any channel. The front panel contains a gooseneck microphone, headset interface and a high quality speaker.

● **产品参数** Product Parameters

电源需求 Power Demand	100-240VAC/50-60Hz/45VA
系统供电 System Power Supply	27DC/1.8A/PIN2
系统阻抗 System Impedance	220 欧姆 /PIN3/ 最远 2500 米
连接器 Connector	内通 XLR-3MX(3 A+3B)/PRGM+XLR-3F/ANLL+XLR-3M/ 话筒 +XLR-3F/ 耳机 +XLR-4M/6.35 Intercom xlr-3mx (3 A + 3b) / PRGM + xlr-3f / ANLL + xlr-3m / microphone + xlr-3f / headset + xlr-4m / 6.35
远程控制 Remote Control	话筒哑音，蜂鸣器哑音，继电器，PA 控制 Microphone mute, buzzer mute, relay, PA control
尺寸 Size	19"X1UX200mm
净重 Net Weight	2.65KG

## BP-1001 有线内通腰包 Wired Intercom Pocket



### ● 产品简介 Product Introduction

该单通道腰包主要针对便携情况使用。具有一个不易折断的安全可靠不锈钢背夹。通道内集群呼叫与双向通话。桌面移动式，小型方便。通话音质清晰，操作方便。该设备可以配置动圈式，适用于目前市场上其它国际品牌的同类型头戴式动圈耳机。可以兼容其它国际品牌产品互联互通。

The Single Channel Waist Bag Is Mainly Used For Portability. It Has A Safe And Reliable Stainless Steel Back Clip Which Is Not Easy To Break. Group Call And Two-Way Call In The Channel. Desktop Mobile, Small And Convenient. The Voice Quality Is Clear And Easy To Operate. The Device Can Be Equipped With Moving Coil Type, Which Is Suitable For The Same Type Of Dynamic Headphones Of Other International Brands In The Market. It Can Be Compatible With Other International Brand Products.

### ● 产品特点 Product Features

- 符合人体工程学, 轻质的铝制金属外壳
- 话筒具有 on/off 开关 (按住通话或者锁定)
- 远程话筒 - 关闭 (话筒)
- 远程扬声器 - 关闭 (扬声器)
- 具有清晰 CALL 键的讯号指示灯
- 温暖的话筒限幅器
- 预设配置: 话筒增益、限幅器等
- Ergonomic, lightweight aluminum metal housing
- Microphone with on / off switch (press and hold call or lock)
- Remote microphone - off (microphone)
- Remote speaker - off (speaker)
- Signal indicator with clear call key
- Warm microphone limiter
- Preset configuration: microphone gain, limiter, etc

### ● 产品参数 Product Parameters

**电源需求** 24-32V, 正常 27V/40 mA

**连接器** 内通 XLR-3M/XLR-3F

**耳机** XLR-4M

**远程控制** 话筒哑音, 扬声器哑音

**尺寸** 95x43x101mm

**净重** 400g

**Power demand** 24-32V, Normal 27V/40 mA

**Connector** Intercom XLR-3M/XLR-3F

**headset** XLR-4M

**Remote control** Microphone Mute, Speaker Mute

**size** 95x43x101mm

**Net weight** 400g



KB-501 有线内通墙面站 Wired Intercom Wall Station



● 产品简介 Product Introduction

单通道远程扬声器分站允许用户在共用线通信通道之中进行通话或接听。该机为半工状态，用户可以通过集成扬声器进行接听，并可通过分站上的按下即讲鹅颈麦克风进行通话。远程呼叫面板，可以轻松切换内部通讯喇叭的音量大小，可以显示来电呼叫指示和通话。提供配套的墙面安装盒。

The Single Channel Remote Speaker Substation Allows Users To Make Or Receive Calls In The Common Line Communication Channel. The Machine Is In Semi Working State. The User Can Answer Through The Integrated Speaker, And Can Talk Through The Goose Neck Microphone On The Substation. The Remote Call Panel Can Easily Switch The Volume Of The Internal Communication Speaker, And Display The Call Indication And Call. Provide Matching Wall Mounting Box.

● 产品特点 Product Features

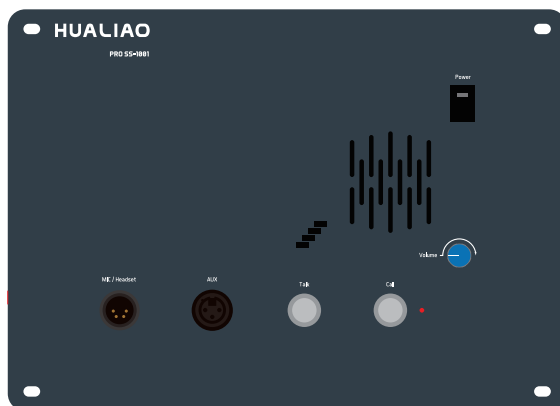
- 具有 PGM 信号独立输入, PGM 音量大小调节功能
- 轻质的铝制金属面板, 安装底盒为轻质铝合金材质
- 话筒具有 on/off 带灯开关 (按住通话)
- 内置扬声器, 拥有内通音量信号大小调节功能
- 远程话筒 - 关闭和远程扬声器 - 关闭控制
- 温暖的话筒限幅器
- 具有清晰 CALL 键的讯号指示灯
- With PGM signal independent input, PGM volume adjustment function
- The light aluminum metal panel and the bottom box are made of light aluminum alloy
- Microphone with on / off light switch (press and hold call)
- Built in speaker, with internal volume signal size adjustment function
- Remote microphone - off and remote speaker - off control
- Warm microphone limiter
- Signal indicator with clear call key

● 产品参数 Product Parameters

电源需求	24-32V, 正常 27V/40 mA
内通线路	PGM 输入工业级 3 芯接线柱, 内通线路输入工业级 5 芯接线柱
预设内配置	话筒增益, CALL 提示音音量大小调整, 限幅器大小调整等
话筒连接器	外置鹅颈心形动圈麦克风 (GN-18)
远程控制	提示灯 (闪烁和声音), 话筒哑音, 扬声器哑音
尺寸	250x50x135mm
净重	0.8kg
Power demand	24-32V, normal 27V/40mA
Internal communication line	PGM input industrial grade 3-core terminal, internal communication line input industrial grade 5-core terminal
Preset configuration	Microphone gain, call tone, volume adjustment, limiter size adjustment, etc
Microphone connector	External gooseneck cardioid dynamic microphone (GN-18)
Remote control	Light (flashing and sound), microphone mute, speaker mute
size	250x50x135mm
Net weight	0.8kg



## KB-502 有线内通桌面站 Wired Intercom Desktop Station



### ● 产品简介 Product Introduction

单通道远程扬声器分站允许用户在共用线通信通道之中进行通话或接听。该机为半工状态，用户可以通过集成扬声器进行接听，并可通过分站上的按下即讲鹅颈麦克风进行通话。远程呼叫面板，可以轻松切换内部通讯喇叭的音量大小，可以显示来电呼叫指示和通话。提供配套的墙面安装盒。

The Single Channel Remote Speaker Sub Station Allows Users To Make Calls Or Answer In The Common Line Communication Channel. The Machine Is In Semi Working State. The User Can Answer Through Integrated Speakers, And Can Use The Press On The Branch Station To Carry Out The Call Remote Call Panel. It Can Easily Switch The Volume Of The Internal Communication Horn, And Display The Call Indication And Call. Provide Matching Wall Mounting Box.

### ● 产品特点 Product Features

- 具有 PGM 信号独立输入, PGM 音量大小调节功能
- 轻质的铝制金属面板, 美观漂亮
- 话筒具有 on/off 带灯开关 (按住通话)
- 内置扬声器, 拥有内通音量信号大小调节功能
- 远程话筒 - 关闭和远程扬声器 - 关闭控制
- 温暖的话筒限幅器
- 具有清晰 CALL 键的讯号指示灯
- With PGM signal independent input, PGM volume adjustment function
- Light aluminum metal panel, beautiful and beautiful
- Microphone with on / off light switch (press and hold call)
- Built in speaker, with internal volume signal size adjustment function
- Remote microphone - off and remote speaker - off control
- Warm microphone limiter
- Signal indicator with clear call key

### ● 产品参数 Product Parameters

电源需求	24-32V, 正常 27V/40 mA
内通线路	PGM输入工业级3芯接线柱, 内通线路输入工业级5芯接线柱
预设内配置	话筒增益, CALL 提示音音量大小调整, 限幅器大小调整等
话筒连接器	鹅颈麦克风
远程控制	提示灯 (闪烁和声音), 话筒哑音, 扬声器哑音
尺寸	250x50x135mm
净重	0.8kG
Power Demand	24-32V, Normal 27V / 40mA
Internal Communication Line	PGM input industrial grade 3-core terminal, internal communication line input industrial grade 5-core terminal
Preset Configuration	Microphone gain, call tone, volume adjustment, limiter size adjustment, etc
Microphone Connector	Gooseneck microphone
Remote Control	Light (Flashing And Sound), Microphone Mute, Speaker Mute
Size	250x50x135mm
Net Weight	0.8kG

HL-BS101 无线内通主机用单耳机

Wireless Intercom Single Headset For Main Unit



产品特点 Features

- 四芯 Neutirk 卡侬专业音频接口，防脱拉设计。
- 头戴式单边和左右互换，甄选蛋白棉材料，佩戴舒适。
- 53MM 大功率封闭式动圈喇叭。
- 14MM 动圈、心型麦克风。
- Four core neutirk XLR professional audio interface, anti pull design.
- It can be worn on one side and left and right side. It is made of protein cotton material and comfortable to wear.
- 53mm high power enclosed moving coil horn.
- 14mm dynamic, heart-shaped microphone.

产品参数 Parameters

额定功率 Rated Power	30mW
最大功率 Maximum Power	500mW
耳机阻抗 Earphone Impedance	60Ω
耳机灵敏度 Earphone Sensitivity	115dB/1KHz
MIC 阻抗 MIC Impedance	250Ω
MIC 灵敏度 Mic Sensitivity	-58dB/1KHz
头弓夹力 Head Bow Clamping Force	4.5N

HL-PT100 无线内通腰包用单耳机

Wireless Intercom Single Headset For Bodypack



产品特点 Features

- 六芯 MINI 卡侬专业音频接口，防脱拉设计。
- 头戴式单边和左右互换，甄选蛋白棉材料，佩戴舒适。
- 53MM 大功率封闭式动圈喇叭。
- 14MM 动圈、心型麦克风。
- Four core neutirk XLR professional audio interface, anti pull design.
- It can be worn on one side and left and right side. It is made of protein cotton material and comfortable to wear.
- 53mm high power enclosed moving coil horn.
- 14mm dynamic, heart-shaped microphone.

产品参数 Parameters

额定功率 Rated Power	30mW
最大功率 Maximum Power	500mW
耳机阻抗 Earphone Impedance	60Ω
耳机灵敏度 Earphone Sensitivity	115dB/1KHz
MIC 阻抗 MIC Impedance	250Ω
MIC 灵敏度 Mic Sensitivity	-58dB/1KHz
头弓夹力 Head Bow Clamping Force	4.5N

## HL-BP101 有线内通用单耳机 Wired Intercom Single Headset



### 产品特点 Features

- 四芯 Neutirk 卡侬专业音频接口，防脱拉设计。
- 头戴式单边和左右互换，甄选蛋白棉材料，佩戴舒适。
- 53MM 大功率封闭式动圈喇叭。
- 14MM 动圈、心型麦克风。
- Four core neutirk XLR professional audio interface, anti pull design.
- It can be worn on one side and left and right side. It is made of protein cotton material and comfortable to wear.
- 53mm high power enclosed moving coil horn.
- 14mm dynamic, heart-shaped microphone.

### 产品参数 Parameters

额定功率 Rated Power	30mW
最大功率 Maximum Power	500mW
耳机阻抗 Earphone Impedance	60Ω
耳机灵敏度 Earphone Sensitivity	115dB/1KHz
MIC 阻抗 MIC Impedance	250Ω
MIC 灵敏度 Mic Sensitivity	-58dB/1KHz
头弓夹力 Head Bow Clamping Force	4.5N

## HL-BS102 无线内通主机用双耳机 Wireless Intercom Double Headset For Main Unit



### 产品特点 Features

- 四芯 Neutirk 卡侬专业音频接口，防脱拉设计。
- 头戴式单边和左右互换，甄选蛋白棉材料，佩戴舒适。
- 53MM 大功率封闭式动圈喇叭。
- 14MM 动圈、心型麦克风。
- Four core neutirk XLR professional audio interface, anti pull design.
- It can be worn on one side and left and right side. It is made of protein cotton material and comfortable to wear.
- 53mm high power enclosed moving coil horn.
- 14mm dynamic, heart-shaped microphone.

### 产品参数 Parameters

额定功率 Rated Power	30mW
最大功率 Maximum Power	500mW
耳机阻抗 Earphone Impedance	60Ω
耳机灵敏度 Earphone Sensitivity	115dB/1KHz
MIC 阻抗 MIC Impedance	250Ω
MIC 灵敏度 Mic Sensitivity	-58dB/1KHz
头弓夹力 Head Bow Clamping Force	4.5N

HL-PT102 无线内通腰包用双耳机  
Wireless Intercom Double Headset For Bodypack



● 产品特点 Features

- 六芯 MINI 卡侬专业音频接口, 防脱拉设计。
- 头戴式单边和左右互换, 甄选蛋白棉材料, 佩戴舒适。
- 53MM 大功率封闭式动圈喇叭。
- 14MM 动圈、心型麦克风。
- Four core neutirk XLR professional audio interface, anti pull design.
- It can be worn on one side and left and right side. It is made of protein cotton material and comfortable to wear.
- 53mm high power enclosed moving coil horn.
- 14mm dynamic, heart-shaped microphone.

● 产品参数 Parameters

额定功率 Rated Power	30mW
最大功率 Maximum Power	500mW
耳机阻抗 Earphone Impedance	60Ω
耳机灵敏度 Earphone Sensitivity	115dB/1KHz
MIC 阻抗 MIC Impedance	250Ω
MIC 灵敏度 Mic Sensitivity	-58dB/1KHz
头弓夹力 Head Bow Clamping Force	4.5N

HL-BP102 有线内通用双耳机  
Wired Intercom Double Headset



● 产品特点 Features

- 四芯 Neutirk 卡侬专业音频接口, 防脱拉设计。
- 头戴式单边和左右互换, 甄选蛋白棉材料, 佩戴舒适。
- 53MM 大功率封闭式动圈喇叭。
- 14MM 动圈、心型麦克风。
- Four core neutirk XLR professional audio interface, anti pull design.
- It can be worn on one side and left and right side. It is made of protein cotton material and comfortable to wear.
- 53mm high power enclosed moving coil horn.
- 14mm dynamic, heart-shaped microphone.

● 产品参数 Parameters

额定功率 Rated Power	30mW
最大功率 Maximum Power	500mW
耳机阻抗 Earphone Impedance	60Ω
耳机灵敏度 Earphone Sensitivity	115dB/1KHz
MIC 阻抗 MIC Impedance	250Ω
MIC 灵敏度 Mic Sensitivity	-58dB/1KHz
头弓夹力 Head Bow Clamping Force	4.5N

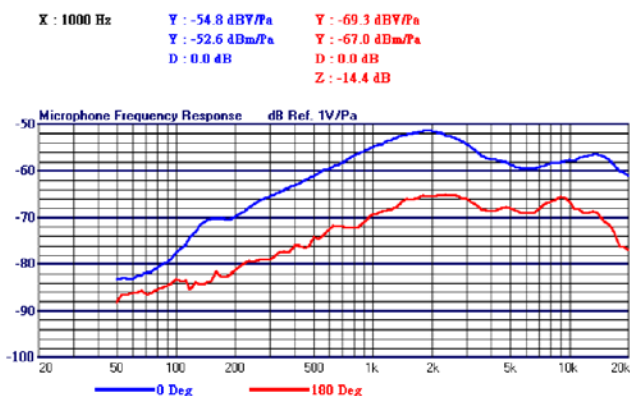
## HL-BS230 主机用鹅颈麦克风 Gooseneck Microphone For Main Engine



### 产品参数 Product Parameters

产品型号 Product Model	HL-BS230
产品名称 Product Name	动圈麦克风 Dynamic Microphone
指向性 Directivity	单指向 Single direction
频率响应 Frequency Response	80Hz~15KHz
灵敏度 Sensitivity	-54dB±3dB (0dB=1V/Pa at 1KHz)
输出阻抗 Output Impedance	600Ω±30%(at 1KHz)
线材 Wire Rod	Φ2mm*465mm 黑色屏蔽线 Φ2mm*465mm Black Shielded Wire
插头 Plug	四针 Four needles
重量 Weight	约 106.7g about 106.7g
测量标准 Measurement Standard	JIS C-5502

### 频率响应曲线图 Frequency Response Curve



## HL-T12 无线双色 Tally 灯 Wireless 2 Color Tally Light



### 产品特点

- 具有数字屏幕显示, 方便调节频道、亮度、灯号。
- 十级亮度可调, 可依据现场光线随时调整亮度, 全方向可见。
- 工作时间达 10-30 小时。一次充电可满足多次使用。
- 红绿双色大面积 LED 灯阵列。
- 具有 ¼ 接口, 支持热靴、绑带多种固定方式。
- 支持所有主流品牌切换台。
- With digital screen display, it is convenient to adjust channel, brightness and light signal.
- The brightness can be adjusted at any time according to the scene light, and it can be seen in all directions.
- Working hours up to 10-30 hours. One charge can meet multiple use.
- Red and green LED array with large area.
- It has a quarter connector, which supports a variety of fixation methods such as hot shoes and bandages.
- Support all mainstream brand switchboards.

HL-Y02 功分器



● 产品特点

全称功率分配器，是一种将一路输入信号能量分成两路或多路输出相等或不相等能量的器件，也可反过来将多路信号能量合成一路输出，此时可也称合路器。功分器的输出端口之间应保证一定的隔离度。380MHz~2500MHz 频率段二、三、四系列功分器，应用于 GSM/CDMA/PHS/WLAN 室内覆盖工程。

Full power distributor is a device that divides one input signal energy into two or multiple output equal or unequal energy, or can also synthesize multiple signal energy into one output, which can also be called combiner. The output port of power divider shall be kept isolated to a certain extent. The two, three and four series power divider of 380mhz-2500mhz frequency section is applied to gsm/cdma/phs/wlan indoor coverage project.

● 可选配件



USB 充电器



主机天线

# HUALIAO

• i n t e r c o m •

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