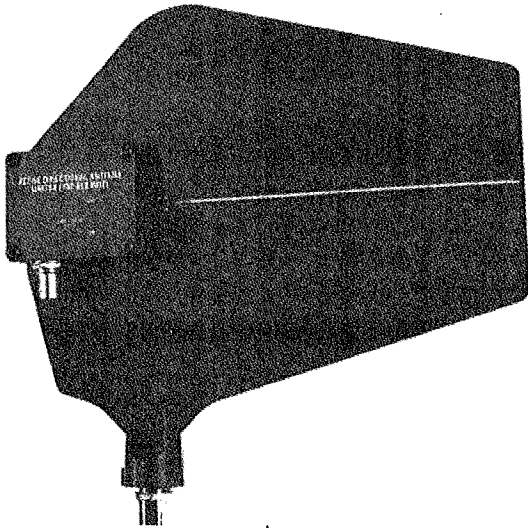


Wireless distributor system & antenna amplifier system guide

无线分配器系统&天线放大系统指南



POWERING ON/POWERING OFF THE



Last powered on

To avoid damaging internal components, the amplifier should be the **last** component in your system to be powered **on**.



First powered off


To avoid damaging internal components, the amplifier should be the **first** component in your system to be powered **off**.

CONNECTING ANTENNA CABLES

Accidentally connecting the center cable pin (power supply) to the cable housing (ground) may cause internal component damage. **Use caution when installing cables.**

SAFETY INFORMATION

! IMPORTANT SAFETY INSTRUCTIONS !

1. READ these instructions.
2. KEEP these instructions.
3. HEED all warnings.
4. FOLLOW all instructions.
5. DO NOT use this apparatus near water.
6. CLEAN ONLY with dry cloth.
7. DO NOT block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. DO NOT install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. DO NOT defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wider blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. PROTECT the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. ONLY USE attachments/accessories specified by the manufacturer.
12.  USE only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. UNPLUG this apparatus during lightning storms or when unused for long periods of time.
14. REFER all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. DO NOT expose the apparatus to dripping and splashing. DO NOT put objects filled with liquids, such as vases, on the apparatus.
16. The MAINS plug or an appliance coupler shall remain readily operable.
17. The airborne noise of the apparatus does not exceed 70dB (A).
18. Apparatus with CLASS I construction shall be connected to a MAINS socket outlet with a protective earthing connection.
19. To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
20. Do not attempt to modify this product. Doing so could result in personal injury and/or product failure.



This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

WARNING: Voltages in this equipment are hazardous to life. No user-serviceable parts inside. Refer all servicing to qualified service personnel. The safety certifications do not apply when the operating voltage is changed from the factory setting.

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Antenna distribution system

Allocator is one who has a magnification of UHF antenna distribution system, it can be split by a pair of antenna for wireless receiver to expand the function of the wireless microphone system. It will also be able to enlarge RF signal to compensate for it will be assigned to multiple output signal power joint caused by insertion loss. Each wireless frequency divider are allowed four receiver to share one antenna. Can be able to connect to the fifth receiver or the second antenna distributor. Also has electrical connection energy level joint for power supply of UHF wireless receiver system

Each system includes the following parts:

- Antenna distribution system
- Installed rack - hardware
- Surface - hardware
- Front - antenna installation hardware
- 18 inches of the side output power line
- The power cord
- Antenna cable for connecting the receiver

Ensure maximum sensitivity and signal processing ability, supply for the widest range of radio frequencies to the wireless receivers. To full use of the function of this system, please follow these guidelines to perform

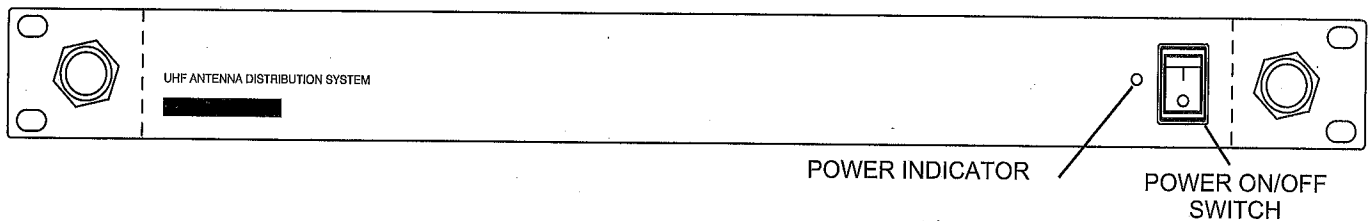
- If install the antenna for remote location, using extension and multiple transmitter should be placed in distance receiving antenna 3 meters (10 feet) away

System function

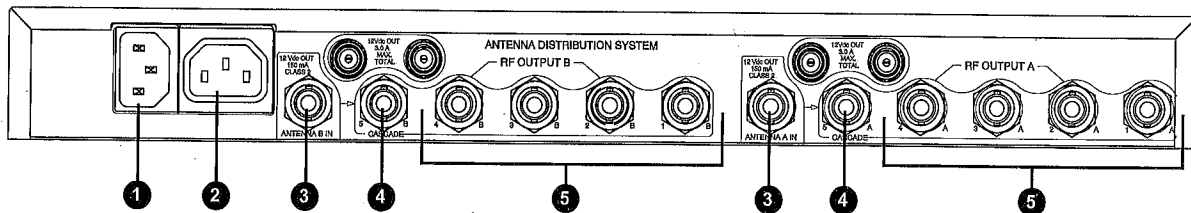
- **Extension ability:** UHF antenna system dedicated to large UHF wireless system, each unit can make four wireless receiver using the same two antenna, cascade port can connect to the fifth receiver second distributor.
- **Compatibility:** distributor can work with compatible frequency range of all wireless microphone receiver.
- **Cascade port:** Two 5 \square BNC type antenna cascade port can connect an unit of a distributor or fifth wireless receiver. Large wireless system can work in the case of using a pair of antenna.
- **Output power and output connector:** Up to five receiver for chain link, and through the power supply output connector from a single power supply.
- **Low noise and intermodulation distortion:** Maintain clear signal, minimum distortion degree
- **Insertion loss compensation:** When the signal split among multiple output ports, the signal intensity will attenuate, then the distributor can enlarge signal compensation, to ensure providing strong signal for the receiver.

CONTROLS AND CONNECTORS

Front Panel



Back Panel



- 1 **AC Power INPUT Connector.**
- 2 **AC Power OUTPUT Connector.** Each has a Power OUTPUT connector for daisy-chaining up to five (5) UHF Diversity Single or Dual Receivers to a single power source.
- 3 **ANTENNA IN Ports, Channel A & B.** BNC-type connectors for antennas.
- 4 **RF CASCADE Connectors (Output connector 5), Channel A & B.** BNC-type connectors for adding a fifth receiver, or additional, permitting more wireless receivers to be connected.
- 5 **RF OUTPUT Connectors, Channel A & B.** BNC-type connectors for up to four wireless receivers.

NOTE: This connector does not work for Receivers.

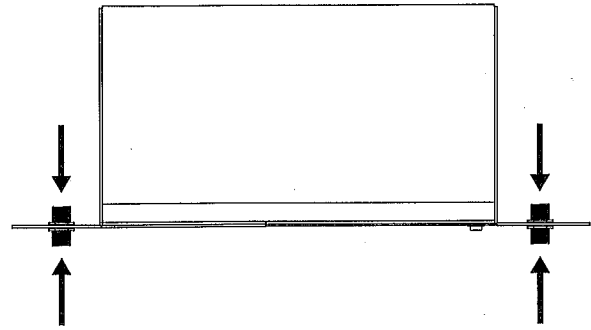
Install an antenna distributor

Attached with the installation of the side of the side of hardware required

This series is equipped with antenna of side installation. Move the antenna to the side frame, so that we can improve the performance of the system. When a device is located in the rack, the antenna should be in front or remote installation.

1. Put the diaphragm joint through the hole on each stent, using the attached accessories to make it fixed on each side.
2. Connect the antenna extension cord to the receiver antenna input and joint.
3. Installed antenna on the diaphragm joint, make its formerly stretched out of the panel.

Note: to get the best effect, we should adjust the antenna outward tilt angle of 45 degrees apart. This can ensure the best reception, and greatly reduce the possibility of signal attenuation. Before using a wireless system, must be tested.



Connect the receiver

The location of the single receiver

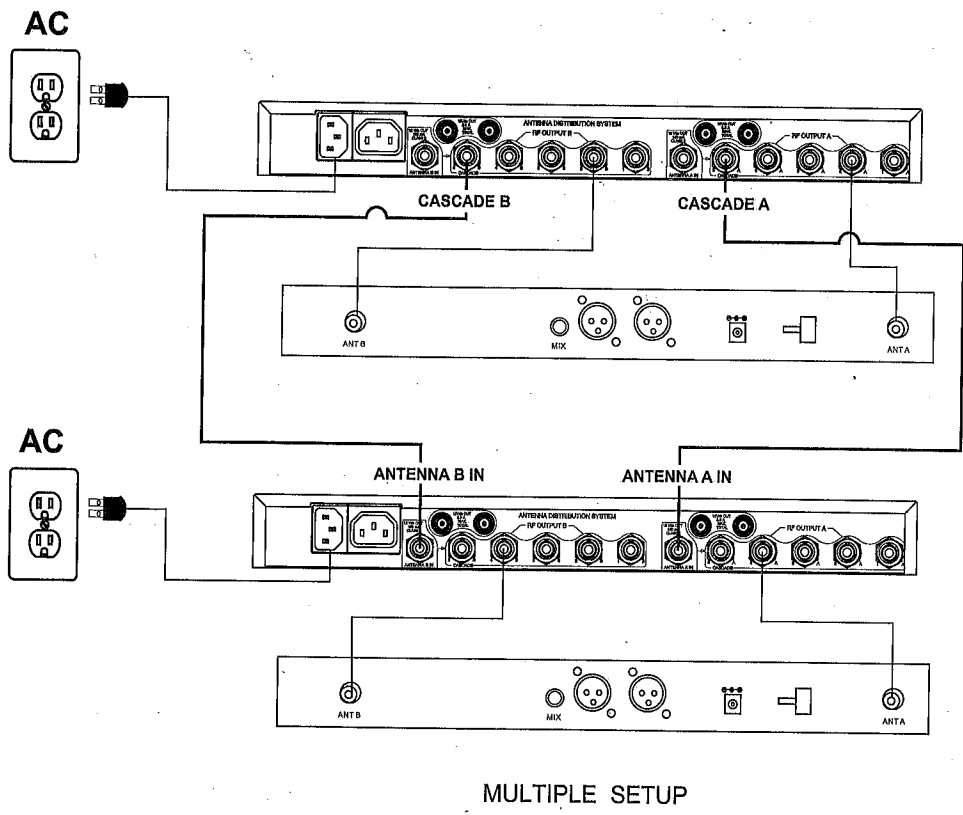
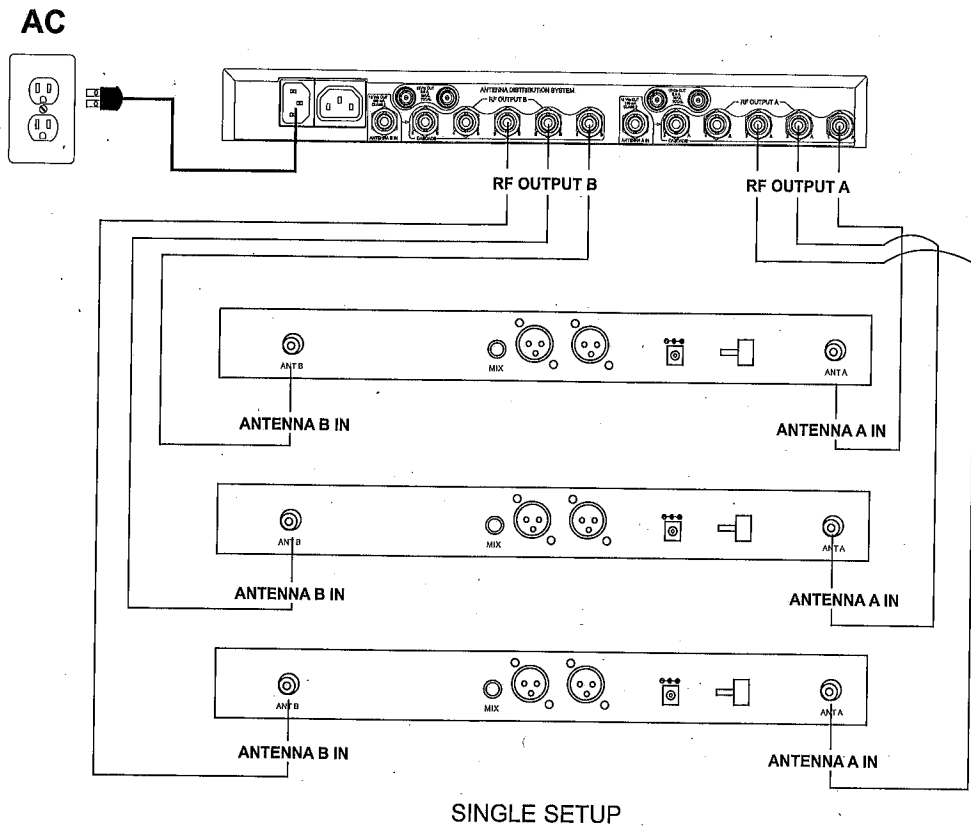
1. Using low loss 50 Ω coaxial cable distributor on the left and right side (channel 1 to 4, A and B) RF output port which is connected to each receiver's antenna input of the left and right side. Use cascade port to connect the fifth receiver.
2. Use the power cord, the distributor is connected to the power socket.
3. Chain the receiver with the output power cables together, distributor output connector shall be with the receiver input connectors. Use the same way to connect the rest of the receiver. Connect the power input of the equipment to the power supply.

Note: one chain link can be divided into top to five UHF receiver power supply.

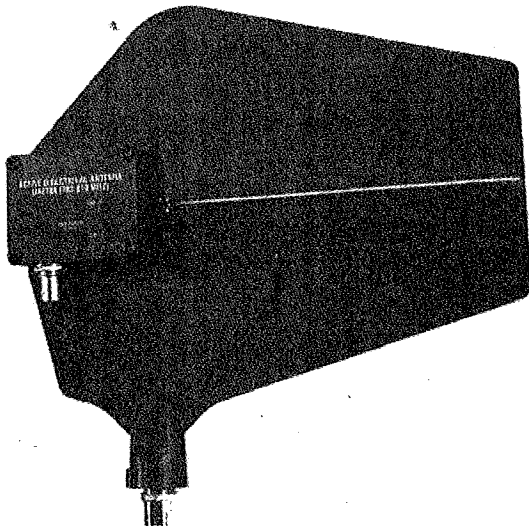
Multiple distributor Settings

1. Will A distributor of RF output channel cascade port A and B (5) joint is connected to the receiver, the antenna input, channel A and B.
2. If necessary, can be connected to other devices in the same way.
3. Through the chain link to a receiver connected to the power supply output line together, distributor output shall be with the receiver input connectors. Use the same way to connect the rest of the receiver. Connect the equipment of the power input to the ac power.

Warning: in add extra distributor to the system, should be separate connect each distributor to independent power supply. A dispatcher for top to 5 receiver power supply. By the power supply output port to chain link for dispatcher power supply will lead to a single power supply overload, and may cause equipment damage.



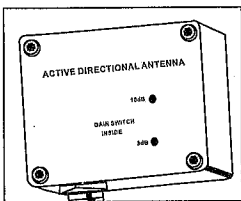
Active Directional Antenna



Directional antenna uses a log periodic-dipole array to offer enhanced reception when directed toward the desired coverage area. An integrated amplifier compensates for coaxial cable signal loss, and is selectable to 3 or 10 dB gain. Can be mounted on a microphone stand, suspended from the ceiling, or mounted to a wall using the integrated swivel adapter bracket. It is weather resistant for use outdoors.

Features

1. Low-noise signal amplifier compensates for insertion loss in coaxial cable
2. Compatible with all brand true diversity and wireless diversity receiver system
3. Integrated threaded adapter mounts easily to microphone stands
4. Two-position gain selector switch (internal)



los LED indican la ganancia seleccionada

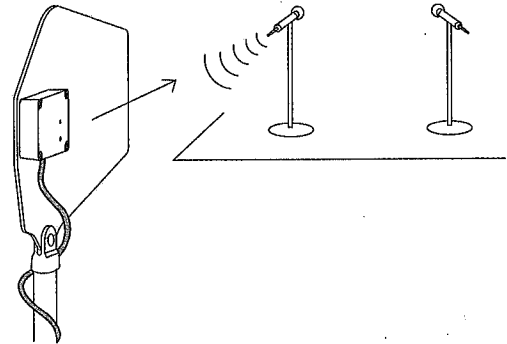
Rojo = 10dB
Verde = 3dB

Installation

1. Connect the directional antenna to the receiver or antenna distribution system. Use the original low-loss coaxial antenna cable.
2. Set the gain (located inside the amplifier housing) to +3 dB for shorter cable runs, and +10 dB for longer runs. Note that the quality of the cable, not just the length, contributes to signal loss. A lighter-grade 50 foot cable may require more gain than a 100 foot, low-loss cable.
3. Direct the antenna toward the intended coverage area.

To maintain top performance

1. Avoid sharp bends or kinks in the cables
2. Do not deform cables with makeshift clamps, such as bending a nail over the cable
3. Do not use in permanent outdoor installations
4. Do not expose to extreme moisture.



The LED indicator selection gain

To access the gain switch, remove the preamplifier box (printed side) by unscrewing the four screws at each corner. Gain settings are marked on the PC board inside.

Antenna Placement

Use the following guidelines when mounting antennas:

1. Antennas and receivers must be from the same band.
2. Mount antenna at least one wavelength (two feet) apart.
3. Position antennas so there is nothing obstructing a line of sight to the transmitter (including the audience).
4. Keep antennas away from large metal objects.

Using tips

Always perform a "walk around" test to verify coverage before using a wireless system during a speech or performance. Experiment with antenna placement to find the optimum location.

If necessary, mark "trouble spots" and ask presenters or performers to avoid those areas.

Technical Parameters

RF frequency range

470-952MHZ

Power requirements

Remote 12 Vdc from coaxial cable connection to receiver or antenna distribution system, 0.68-0.81 W

Reception pattern

Cardioid: 3 dB beam Width: 100 degrees

Antenna gain

On Axis: 7dB typical

Gain indicators

3 dB: Green LED

10 dB: Red LED

Third order intercept point (3OIP)

> 30 dBm (at output)

Connector

Input and output: Female, BNC-type

打开 / 关闭放大器的电源



最后打开电源

为避免损坏内部元件，放大器应该是系统中最后打开电源的元件。



首先关闭电源

为避免损坏内部元件，放大器应该是系统中第一个关闭电源的元件。

连接天线缆线

将缆线的中心插针（电源）意外连接到缆线外壳（接地）可能会损坏内部元件。安装连线时应格外小心。

安全信息

重要安全事項!

1. 必須閱讀這些注意事項。
2. 必須保留這些注意事項。
3. 必須注意所有警告內容。
4. 必須遵循所有注意事項。
5. 不要在靠近水的地方使用本設備。
6. 只能用幹布擦拭設備。
7. 不要堵塞通風口。應遵循製造商的說明進行安裝。
8. 不要將本設備安裝在任何熱源的附近，如散熱器、調溫器、火爐或其它可能產生熱量的裝置（包括功率放大器）。
9. 不要破壞接地類型插頭的安全功能。區分極性的插頭具有兩個插片，其中一個較另一個寬。接地類型插頭帶有兩個插片和第三個接地插腳。較寬的插片或第三個插腳是為安全目的設置的。如果提供的插頭無法插入您的插座，請向電工諮詢，更換合適的插座。
10. 保護電源線防止被腳踩踏或被夾住，尤其是在插頭、方便插座和機身電源線引出處。
11. 只能使用製造商指定的連接件/附件。
12. 只能使用製造商指定的或隨設備售出的手推車、支座、三角架、托架或支撐台。如果使用手推車，在移動裝有設備的手推車時應注意安全，避免設備翻落。
13. 在雷電天氣或長時間不使用時，應拔下設備的插頭。
14. 所有維修工作均應由合格的維修人員執行。在設備因以下情況損壞時，應進行維修：電源線或插頭損壞、液體濺濺到設備中或異物進入設備，設備暴露在雨水或潮濕環境中，無法正常工作，或摔落到地上。
15. 不要將本設備暴露在可能滴水 and 濺水的地方。不要將裝有液體的容器（如花瓶等）放在本設備上。
16. 電源插頭或電器轉接頭應保持在隨時可用狀態。
17. 本裝置的空氣噪聲低於 70dB (A)。
18. 應將符合 I 類標準的設備連接到帶有接地保護裝置的主電源插座。
19. 為降低起火或電擊危險，請不要將本設備暴露在雨中或潮濕環境下。
20. 不要嘗試改裝本產品。這樣做會導致人身傷害和/或產品故障。



這個符號表示本設備中存在可能導致觸電的危險電壓。



此符號表示本部件附帶的說明書中具有重要的操作和安全說明。

警告：此設備中的電壓具有致命危險。設備內部沒有用戶可維修的部件。所有維修工作均應由合格的維修人員執行。如果改變了廠方設置的工作電壓，則安全合格證書不再適用。

天线分配系统

无线分配器是一个具有放大功能的 UHF 天线分配系统，它能够通过将一对天线拆分给无线接收机来扩展无线话筒系统的功能。它还能够放大射频信号以补偿因为将信号功率分配给多个输出接头而导致的插入损失。每个无线分配器最多允许四个接收机使用同一对天线。够连接到第五个接收机或第二个无线分配器。还具有能够为无线接收机 UHF 系统 供电的电级联接头能源接头。

每个系统都包括以下部件：

- 天线分配系统
- 机架-安装硬件
- 表面-安装硬件
- 前侧-安装天线硬件
- 18-英寸电源输出线
- 电源线
- 用于接收机连接的天线电缆线

能确保最大的灵敏度和信号处理能力，能够为众多无线接收机提供最广范围的无线电频率。要充分利用此系统的功能，请按照以下指导原则执行：

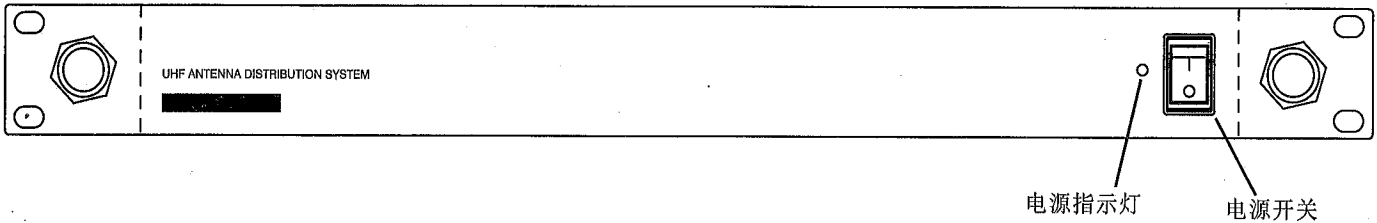
- 如果为在较远位置安装的天线使用延长线，应将多个发射机放置在距离接收天线 3 米 [10 英尺] 以外的地方

系统功能

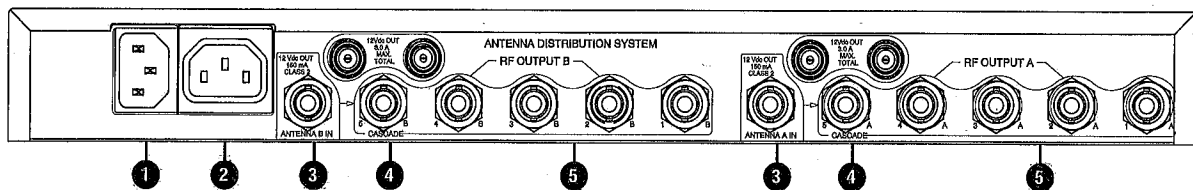
- **扩展能力。** UHF 天线分配系统专门用于大型 UHF 无线系统。每个单元能够让四个无线接收机使用相同的两条天线，级联端口能够连接到第五个接收机或第二个分配器。
- **兼容性。** 分配器能够与在兼容频率范围内工作的所有无线麦克风接收机兼容。
- **级联端口。** 两个 50 Ω BNC 型天线级联端口能够额外连接一个分配器单元或第五个无线接收机。大型无线系统可以在使用一对天线的情况下工作。
- **电源输出和输出接头。** 最多可以在电源输出上以链式连接 5 (5) 个接收机，并通过电源输出接头从单个电源供电。
- **低噪声和互调失真。** 能够保持清晰的信号，具有最低失真度。
- **插入损失补偿。** 在将信号拆分给多个输出端口时，信号强度将衰减。分配器能够对信号进行放大补偿，以确保为接收机提供较强的信号。
- **前侧-安装天线。** 分配器附带有在前侧安装天线所需的硬件。

控制和连接

前面板

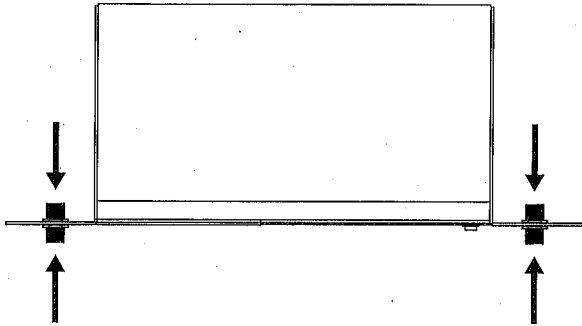


后面板



- 1 交流电源输入接头。
- 2 交流电源输出接头。
- 3 天线输入端口，通道 A 和 B。用于天线的 BNC 型接头。
- 4 射频频级联接头（输出接头 5），通道 A 和 B。BNC-型接头能够添加第五个接收机或额外的分配器，并能够连接更多无线接收机。
- 5 射频频输出接头，通道 A 和 B。BNC-型接头用于最多四个无线接收机。

前侧- 安装天线



此系列配备了前侧安装天线。前侧安装方式应将天线移动到机架前侧，这样可以提高系统性能。当设备位于机架中时，天线应为前侧或远程安装。

1. 将隔板接头从每个支架上的孔中穿过，使用附带的配件将其固定在每一侧。
2. 将附带的天线延长线连接到接收机天线输入端和接头。
3. 将天线安装在隔板接头上，使其从前面板上伸出。

注释：要获得最佳效果，应将天线调整为向外分开倾斜 45° 角。这能够确保获得最佳的接收效果，并大幅度降低信号衰减的可能性。在使用无线系统之前，一定要进行系统测试。

连接接收机

单个接收机的设置

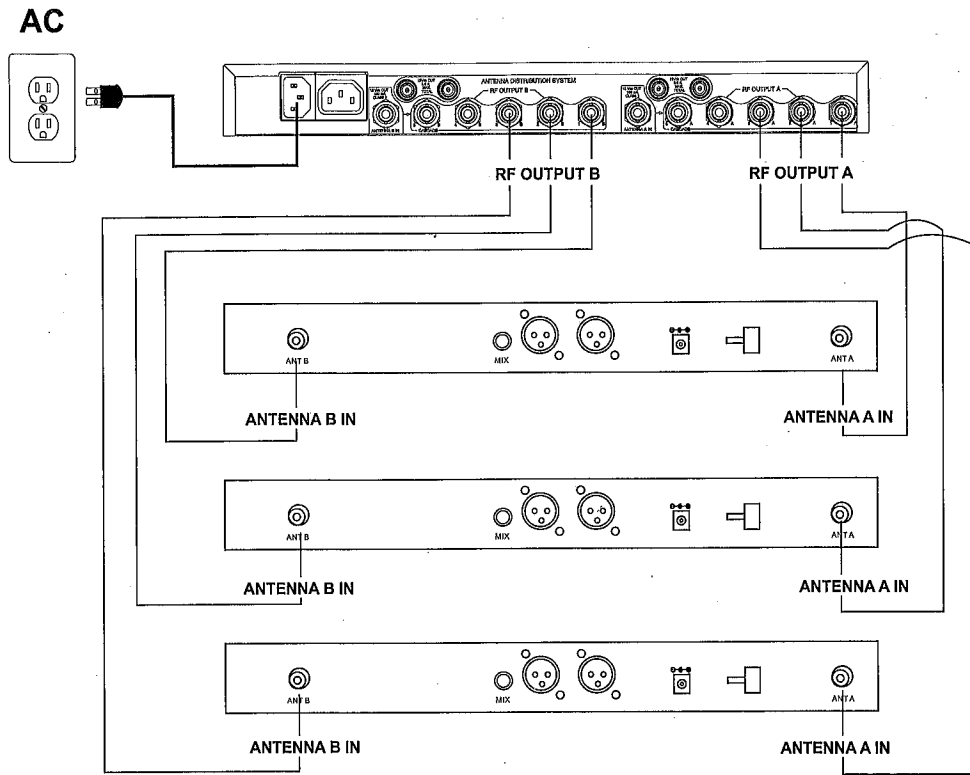
1. 使用低损耗 $50\ \Omega$ 同轴缆线将分配器上左侧和右侧（通道 1 至 4，A 和 B）射频输出端口连接到每个接收机上对应的左侧和右侧天线输入端。可以使用级联端口连接第五个接收机。
2. 使用附带的电源线，将分配器连接到电源插座。
3. 要以链式将接收机与电源输出缆线连接在一起，应将分配器的电源输出接头连接到接收机的电源输入接头。使用类似方式连接其余接收机。将设备的电源输入端连接到电源。

注释：一台以链式连接最多可为五 (5) 台 UHF 接收机供电。

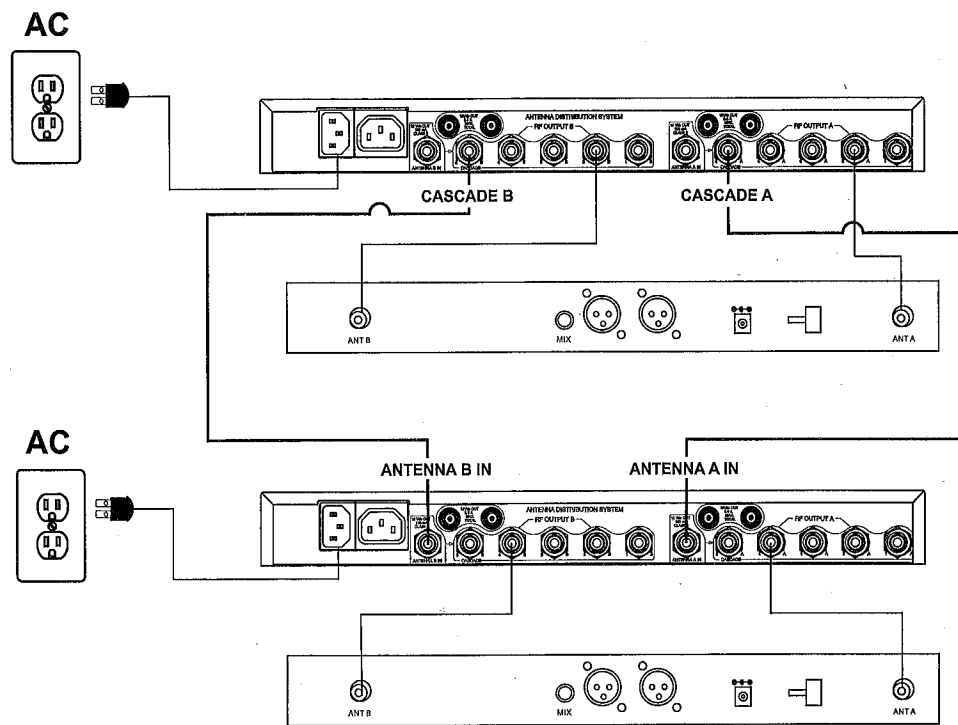
多个分配器设置

1. 将一个分配器的射频输出通道的级联端口 A 和 B（接头 5）连接到接收机、“天线输入”、通道 A 和 B。
2. 如果需要，可以用相同的方式连接其他设备。
3. 通过链式连接将接收机与电源输出线连接在一起，应将分配器的电源输出接头连接到接收机的电源输入接头。使用类似方式连接其余接收机。将设备的电源输入连接到交流电源。

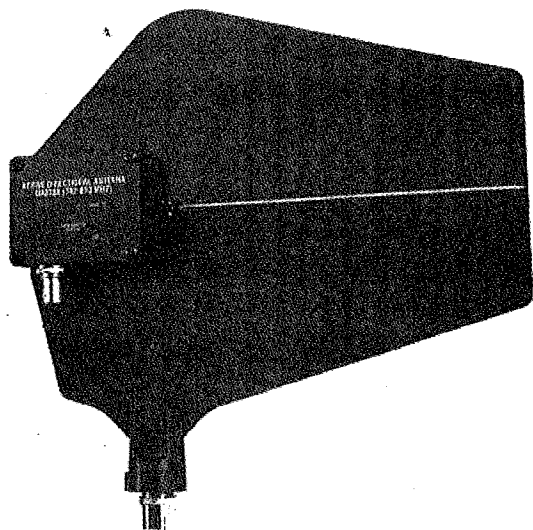
警告：在将额外的分配器添加到系统中时，应单独将每个分配器连接到独立的电源。**一台分配器最多能为五台 (5) 以上接收机供电。**通过电源输出端口以链式连接为多台分配器供电将导致单个电源过载，并可能引起设备损坏。



单个分配器的设置



多个分配器设置

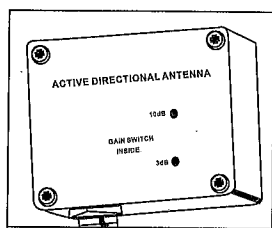


活动定向天线

定向天线使用对数周期偶极子阵列提供增强的接收时指向所需的覆盖范围。一个集成放大器补偿同轴电缆的信号损失。并选择3或10分贝增益。可以安装在一个麦克风,悬挂在天花板上,或者利用集成旋转适配器支架安装在墙上。在户外使用不受天气影响。

特点

1. 低噪信号放大补偿同轴电缆插入损耗。
2. 兼容任何品牌UHF真分集和天线分集无线接收系统。集成的螺丝接头与麦克风支架安装容易。
3. 两点增益选择开关(内部)。



LED指示灯的选择增益

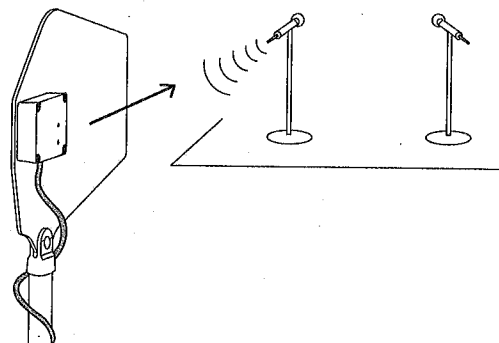
红灯 = 10dB
绿灯 = 3dB

安装

1. 连接定向天线到接收器或天线分布系统。利用原配低耗同轴天线。
2. 设置增益(放大器外壳内部定位)到+3dB短电缆运行,和+10dB长运行。注意电缆质量,不止长度还有信号损失。一条较轻的50英寸电缆比起100英寸低耗电电缆可能需要更多增益
3. 天线直接对着目的覆盖范围。

为保持最佳演出:

1. 避免电缆变弯处或缺陷
2. 不用凑合的电缆夹使电缆变形,如电缆弯曲钉子。
3. 不要长久使用户外设施
4. 不暴露极度潮湿的地方



LED指示选择增益

访问获得开关,移开前置放大器盖子(印刷面)拧开在每一个角落的四个螺丝。增益设置在印刷电路板内部

天线位置

安装天线时使用以下指南:

1. 天线和接收机必须来自同一个系列。
2. 挂载天线至少隔一个波长(两英尺)。
3. 使天线位置与发射机之间没有什么妨碍视线的物体(包括观众)。
4. 让天线远离金属物体。

使用提示:

使用无线系统用于演讲或演出前,总是执行“走动”测试来验证覆盖范围。测试天线位置找到最佳位点。如果有必要,记录“盲点”,使主持人或演员,避免这些地区。

技术参数

接收频率范围

(470-952MHZ)

功率要求

远程12 vdc同轴连接接收机或天线分布系统,0.68--0.81w

接收模式

心型话筒;3 db波束 宽度:100度

天线增益

轴线:7 db 标准

增益指示

3db:绿色LED

10db:红色LED

3阶交截点 30DBm

连接:

输入和输出: 母线, BNC类型
