UHF wide band antenna&
power distribution system manual





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.

    UNPLUG this apparatus during lightning storms or when unused for long periods of time.
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

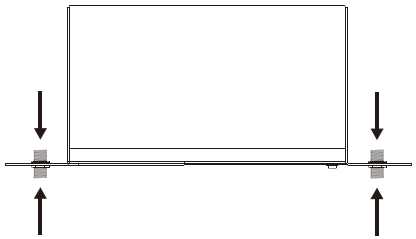
WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

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

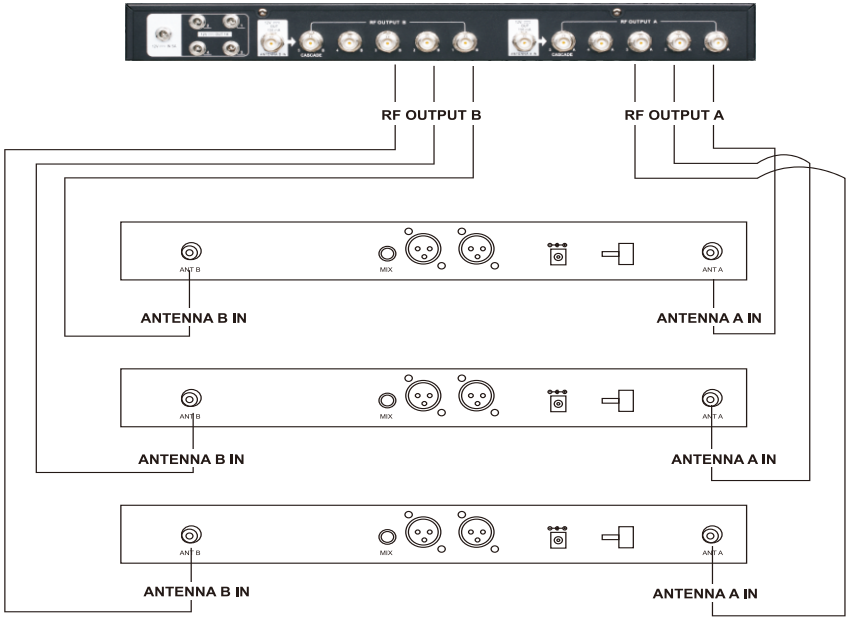
1. Using low loss 50 Ω coaxial cable distributor on the left and right side (channel 1 to 4, A and B) RF output port which is connected to each receiver's antenna input of the left and right side.Use cascade port to connect the fifth receiver.
2. Use the power cord, the distributor is connected to the 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.

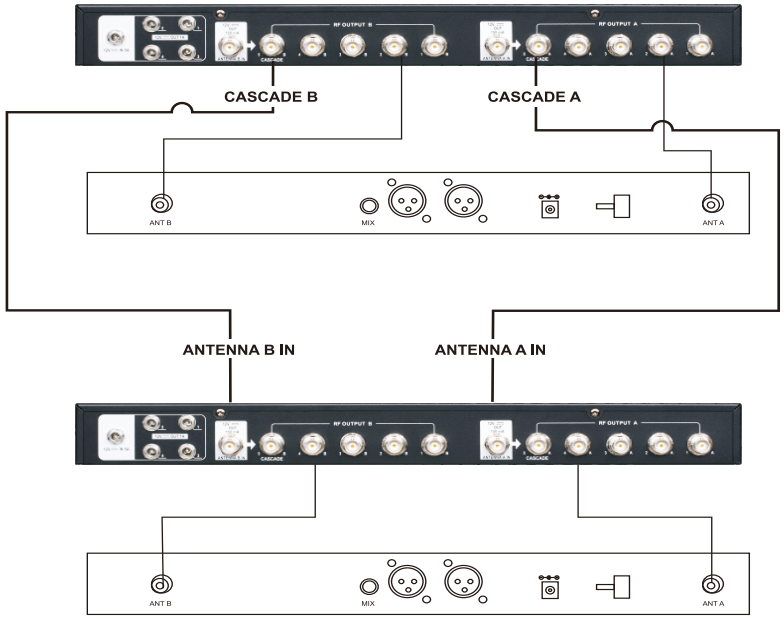
Multiple distributor Settings

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.



SINGLE SETUP



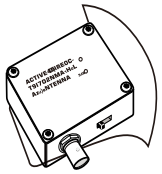
MULTIPLE SETUP



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



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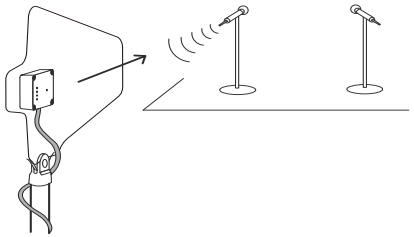
Installation

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.



LED indicator of gain selection

A gain switch is set on the side of the directional antenna amplifier box, and the gain setting is printed below the switch.

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

450-972MHZ

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: 7dBtypical

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

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

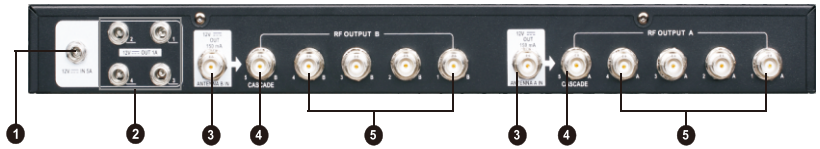
- **Extension ability:** UHF antenna system dedicated to large UHF wireless system, each unit can make four wireless receiver using the same two antenna, cascade port can connect to the fifth receiver second distributor.
- **Compatibility:** distributor can work with compatible frequency range of all wireless microphone receiver.
- **Cascade port:** Two 5□ 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 DC power input interface 12V/5A

2 DC power output interface 12V/1A

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.