



Wireless Microphone Antenna System
(UHF620-960M)
User Manual

T-522A/522B/522FD

Thank you for choosing UHF Wireless Microphone Antenna System.

Please read this manual in detail before use.

The UHF wireless microphone antenna system consists of a pair of log-periodic dipole array antennas and a pair of antenna amplifiers, which are connected to the antenna splitter through a 50Ω feeder. The eight antenna output sockets of the splitter can directly connect up to eight receiver antennas.

It supports 32 independent frequencies to be used in the same occasion. In order to avoid mutual interference, please ask the manufacturer for the best non-interference frequency table before use, which may achieve better results. Or you can select different frequency bands for system use.

A system composed of the broadband log-periodic dipole array antennas and amplifiers and splitters supports the function of picking up and signal amplification, covering wireless microphones with all frequencies of 620-960M in the UHF segment.

The broadband log-periodic dipole array antenna provides the RF signal gain that is approximately 6dB higher than the receiver's standard whip antenna within a 90° range of the half-power lobe width (antenna impedance is 50Ω).

The antenna cover is high temperature and low temperature resistant ABS, and the inner bracket is stamped and formed from an industrial-grade one-piece copper sheet. The antenna lead wire is a 50Ω copper core silver-plated coaxial shielded wire. Equipped with mounting brackets and screws, it is suitable for outdoor installation.

The antenna system effectively prolongs the straight line barrier-free distance between the receiver and the transmitter, and the reasonable installation overcomes the obstacles between the receiver and the transmitter, making it safe and reliable. And it is widely used in theaters, large multimedia multipurpose halls, outdoor playgrounds, stadiums and other occasions.

Installation

Installation method and installation precautions for the best effect:

- ✧ The antenna is installed above the height of the person's head.
- ✧ The antenna is installed in a visible position in the same space as the microphone, without obstructions.
- ✧ Every two antennas are at least 1 meter apart.
- ✧ The antenna is installed at least 1 meter away from bulky metal objects or interference sources.
- ✧ The length of connecting the amplifier to the splitter or wireless receiver should be as short as possible. In the extreme case, the length of the feeder should not exceed 25 meters.
- ✧ The antenna should be used in dry weather. After each use, you should pack up the antenna in time and store it in a dry indoor environment. Rainy and wet weather may cause corrosion of the antenna's BNC header and exposed parts of the feeder. If rusted, it will seriously affect RF model transfer and antenna amplification function.

- ✧ Using factory-configured hinged mounting brackets, it can be mounted at a 90° angle to the wall. The hinge structure can adjust the best direction within the range of 45° up and down, so that the tip of the antenna points to the microphone position. For indoor use, the antenna can be attached to a standard microphone stand.
- ✧ @ After connecting the antenna, connect the antenna amplifier in series through the BNC connector. Pay attention to the ANT and OUT arrow signs marked on the amplifier. The end marked ANT is connected to the antenna, and the one marked OUT is connected to the feeder to the antenna terminal of the wireless microphone or the antenna terminal of the splitter. Incorrect connection direction can cause the antenna to lose its function.

About Splitter



19-inch 1U metal panel

Panel function

Power switch

Power indicator

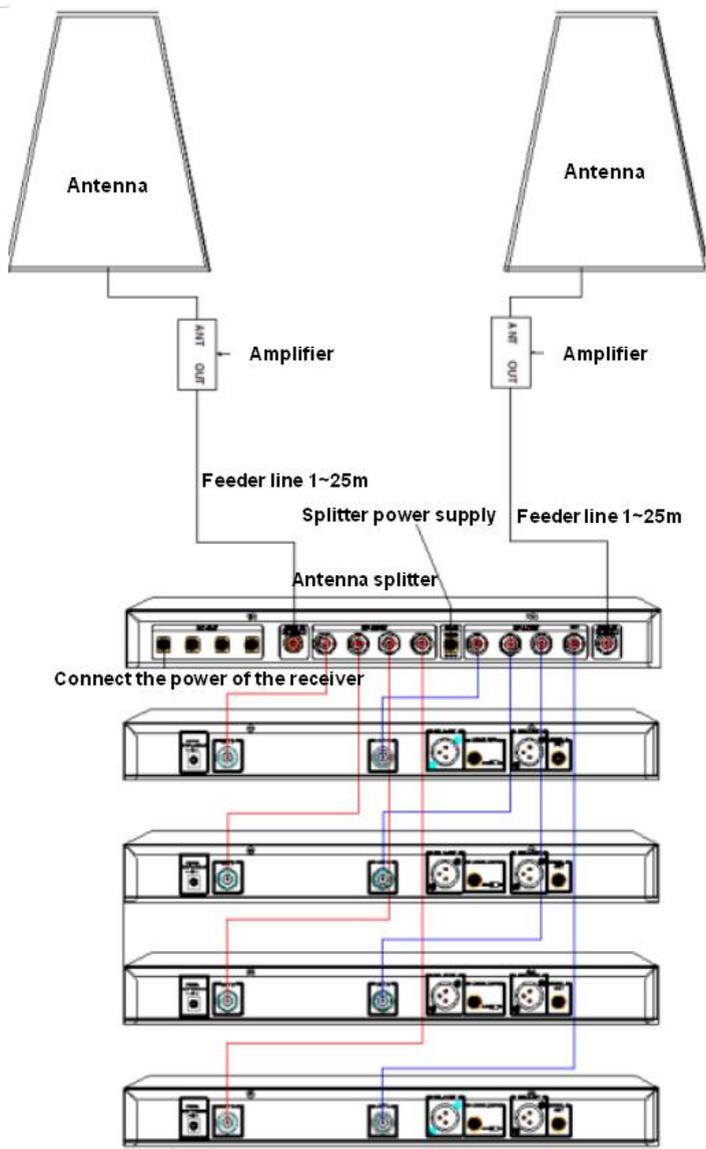
Feature

1. Provide a multi-channel system of 4 wireless microphone series automatic selection receivers, sharing a pair of antennas and a power supply.
2. Simplify the antenna assembly project and improve the receiving distance and performance.

Rear panel wiring diagram

It provides a multi-channel system using four 2-channel automatic selection and true diversity receivers, sharing a pair of antennas and a power supply, to simplify the antenna assembly process and improve the receiving distance and efficiency.

It adopts the latest design of active components with high dynamic and low noise, and active feedback current-stabilizing bias voltage. It features ultra-low internal modulation distortion and can be used in multiple channels simultaneously to eliminate mixing interference. Its output gain is about 1dB. Provide a switched power supply 12V/3A; distributed to four machines for use.



One-to-two true diversity receiver

Specification

Working frequency: all frequencies in the 640-960MHz range

Antenna distribution: two sets of active one-to-four distribution outputs

RF output gain: +1.0dB (frequency band center)

Input truncation point; 32M

Band selection: low end \cong 35dB, high end \cong 30dB

Input/input impedance: 50 Ω

Bandwidth: 320MHz

Antenna input power supply: 8.3-9.8V DC 230mA MAX for antenna amplifier

Antenna I/O connector: BNC

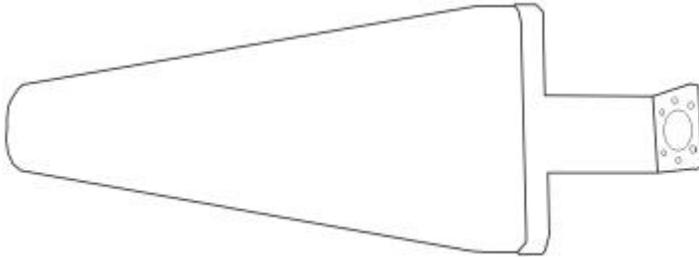
Power supply: DC 12-18V/3A

Dimension (mm): 482(W) \times 44(H) \times 190(D)

Weight (kg): 1.55kgs

About Antenna

Exquisite appearance, ABS engineering plastic housing, high and low temperature resistance, anti-shock, waterproof, strong protection ability. Adopt broadband technology, medium gain, low standing wave.

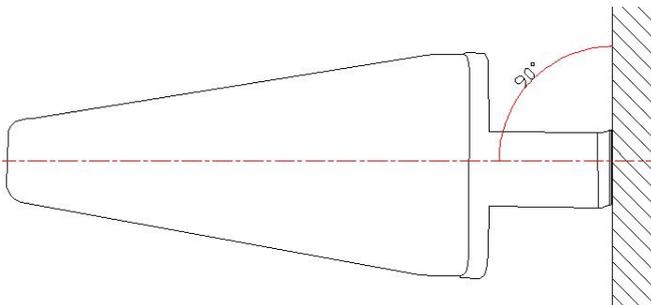


Feature

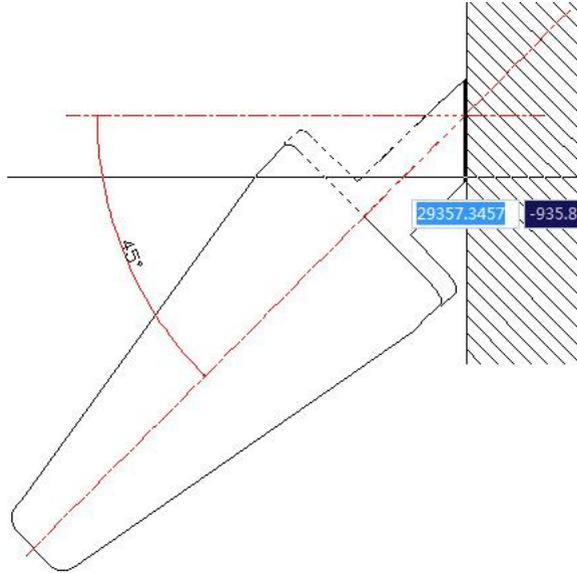
1. Broadband directional antenna 680-960MHZ.
2. Applicable to GSM, CDMA, WCDMA, WLAN, LTE networks.
3. It has the characteristics of wide frequency band, low standing wave and medium gain.

Installation

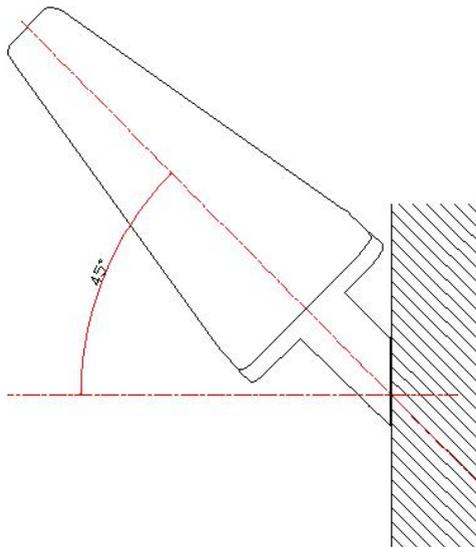
Using factory-configured hinged mounting brackets, it can be mounted at a 90° angle to the wall.



45° to the wall, downward.



45° to the wall, upward.



Specification

Frequency band: 680-960MHz

Gain: 11dB

Input impedance: 50Ω

Horizontal wave source width: 60°

Vertical wave source width: 50°

Front to back ratio: >18

Standing wave ratio: <1.5

Modular form: vertical

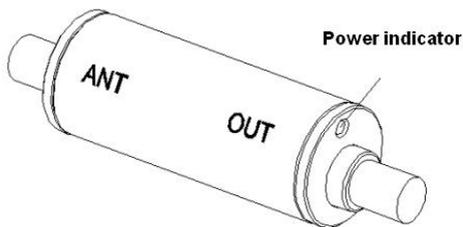
Maximum power: 50W

Connector model: N seat

Dimension: 442*205*60mm (L*W*H)

Weight: 1.0Kg

About Active Antenna Amplifier



It supports the gain amplification of the receiving antenna to compensate for the signal attenuation caused by the cable length.

Connect the BNC connector of the antenna to the antenna amplifier in series. Pay attention to the ANT and OUT arrow signs marked on the amplifier. The end marked ANT is connected to the antenna, and the one marked OUT is connected to the feeder to the antenna terminal of the wireless microphone or the antenna terminal of the splitter. Incorrect connection direction can cause the antenna to lose its function.

Specification

Frequency band: 640-960MHz

Gain: 12dB

Output/input impedance: 50Ω

Port model: BNC

Power supply: DC 9V (wireless receiver antenna terminal power supply, relay power supply to similar amplifiers in series) power LED display

Dimension: 65*25mm

Weight: 0.05Kg



Warning



1. Do not block the vent.
2. If the power cord is damaged, stop using it immediately.
3. It should not be placed in the following places: poor ventilation; dusty; direct sunlight; high ambient temperature or close to heat sources; subject to vibration.
4. It is required to be protected from rain and moisture.
5. It cannot be placed in a container that can be filled with liquid.
6. The housing is required to be safely grounded.
7. The power plug and socket are required to be compatible.
8. Please do not open the housing cover by yourself to avoid electric shock. When it fails, please contact the supplier or the manufacturer for maintenance services, or you can entrust professionals in professional departments with professional certificates. Non-professionals are forbidden to disassemble the machine by themselves, otherwise electric shock may endanger their life.

Specifications and parameters are subject to change without notice