

# MASCOT

MASCOT ELECTRIC CO., LTD.

## ANTENNA SYSTEM & ACCESSORIES



For Wireless Microphone System





*Keep Enhancing!*

The main antenna designs commonly encountered in the professional audio industry; it is better to well-understand of the characteristics of each antenna type in order to facilitate informed decisions regarding model selection and utilization for each specific application.

The antennas are a wireless system correlative auxiliary devices, which means they are equally capable acting as both transmitting and receiving transducers.

### **Why the external antennas are needed?**

Sometimes the signal transmission will dropouts or interfere by many factors, such as: crowd, distance or electronic products.

It is to improve signal transmission quality and transmission distance; the best solution will be installed an external antenna.

### **Benefits of Antenna System**

- It is to eliminate the signal dropouts.
- It is to provide a high-efficiency transmission and reception range.

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No matter how to adjust the receiver or transmitter position, the signal transmission quality for wireless microphone is still not good. The UHF antenna system is the solution for frustrated performers.



**AU-9A**  
LOG ANTENNA

- UHF wideband (500 MHz ~ 1GHz) frequency range.
- It can be used as a transmitting or receiving antenna for detachable antenna wireless microphone system or in-ear monitoring system.
- With 4 ~ 6dBi gain is suitable for various application required specific directionality.
- Adjustable connector design allows it to be mounted on a microphone stand, wall or suspended from the ceiling.
- Must go with AB-1 or AB-8A.

Pick-up Pattern	Uni-Directional
Open Angle	±50°
Frequency Range	500MHz ~ 1GHz
Front/Back Ratio	> = 18dB
Antenna Gain	5.5dBi
Wave Impedance	50Ω
RF Connector	BNC
Stand Adapter	5/8" x 27 brass thread
Overall Dimensions(mm)	273.3 x 273 x 26
WxHxD	
Weight	310g



**AB-1**  
ANTENNA BOOSTER

- Compatible with AU-9A Log Antenna.
- It can enhance the receiving sensitivity and compensate the signal loss from extend coaxial cable transmission.
- Powered by receiver or antenna divider.
- Optional for different frequency band, or full range frequency band.

Frequency Range	500MHz ~ 1GHz
Gain Range	15dB ± 1dB
Impedance	50Ω
Selectable Gain	0dB (passive) / -6dB
Power Supply	DC12V / 60mA
Overall Dimensions(mm)	65 x 40 x 15
WxHxD	



**AB-8A**  
ANTENNA BOOSTER

- Enhancing the receiving sensitivity and stability on application.
- RF amplifier can compensate for the RF signal losses extension cable up to 9dB.
- BNC type connector.

Frequency Range	500MHz ~ 1GHz
Gain Range	9dB ± 1dB
Impedance	50Ω
Power Supply	DC8V
Overall Dimensions(mm)	80 x 26 x 26
WxHxD	



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The signal transmission will be interfered, drop or disappeared by crowd, distance, or electronic products during the performance. The antenna booster is suggested to use for enhancing the signal transmission quality and stability.



**AD-214**  
ANTENNA DIVIDER

- Efficient use on managing multiple antenna into a pair of antennas.
- 4 pairs of antenna RF output are located at rear panel.
- Built-in RF amplifier can compensate the signal split losses.
- Supply DC power up to 4 receivers.
- BNC type connector.

Frequency Range	500MHz ~ 1GHz
Gain Range	3dB ± 0.5dB
Input Impedance	50Ω
Output Impedance	50Ω
Power Input	DC12 ~ 18V, 5A Switching Power Supply, 1DC Input, 4DC Output
RF Output Terminal	2 RF Inputs and 2 RF Outputs divided into 8 RF Outputs
Antenna DC Output	DC 12V (120mA) for EA antenna booster connection
RF connector	BNC Female Type
Overall Dimensions(mm) WxHxD	420 x 180 x 44



**AS-1**  
ANTENNA SPLITTER

- Split an incoming signal into two outgoing signals.
- It also can combine two incoming signals into one outgoing signal.
- BNC type connector.

Frequency Range	500MHz ~ 1GHz
Input Impedance	50Ω
Isolation	12dB
Loss	< 4.5dB
RF connector	BNC Female Type
Overall Dimensions(mm) WxHxD	40 x 32 x 28



**AH-2**  
ANTENNA HOLDER

- The wall-mountable antenna holder makes the AU-9A easily be connected to the receiver, which can be installed on the wall for indoor use.
- Compatible with AU-9A.

Screw Adapter	5/8" Female Type
Overall Dimensions(mm) WxHxD	80 x 26 x 26

The various accessories are offered for different install application.



**AH-1**  
ANTENNA HOLDER

- Easily assembled on the microphone stand or mounted on the wall.
- Compatible with AB-8A.

Screw Adapter	5/8" Female Type
Overall Dimensions(mm) WxHxD	80 x 26 x 26



**BB-50 / BB-100 / BB-1000**  
EXTENSION CABLE

- Extension cable with BNC male connector for connection with receiver to booster, splitter or divider.
- Customized extension cable in different length is also available.

Cable	CFD200 / NL
Length	BB-50: 50cm BB-100: 100cm BB-1000: 10M

Ceiling Mounted Antenna Booster AB-8C can be integrated with room decoration, no space occupied and easy to install. Interference caused by audience or device will be eliminated and let performance successful.



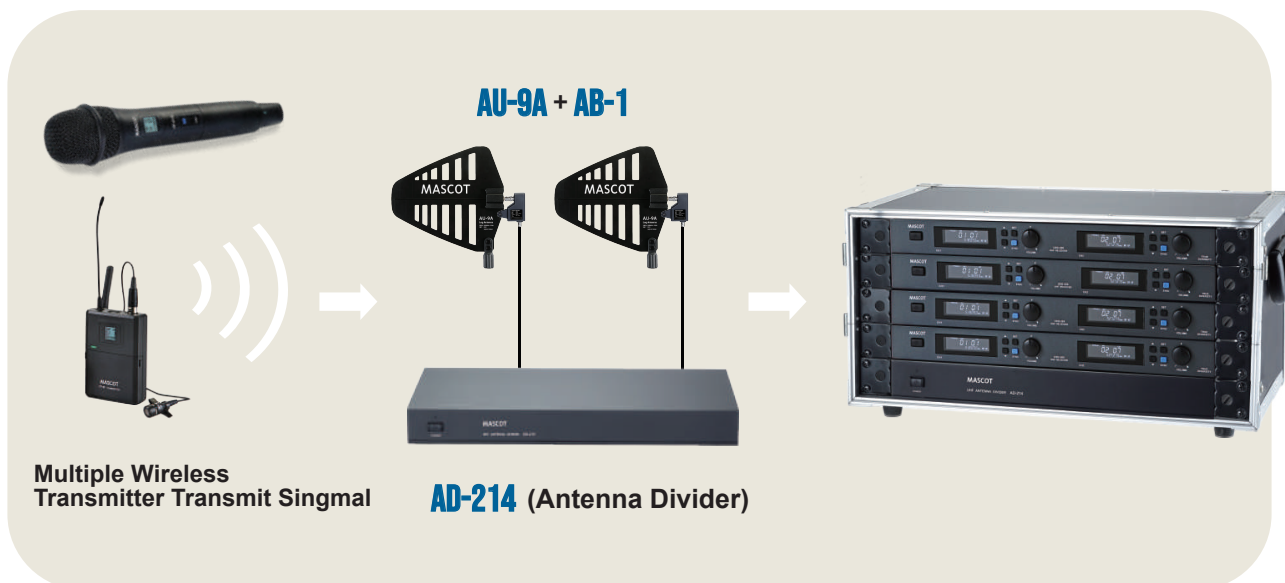
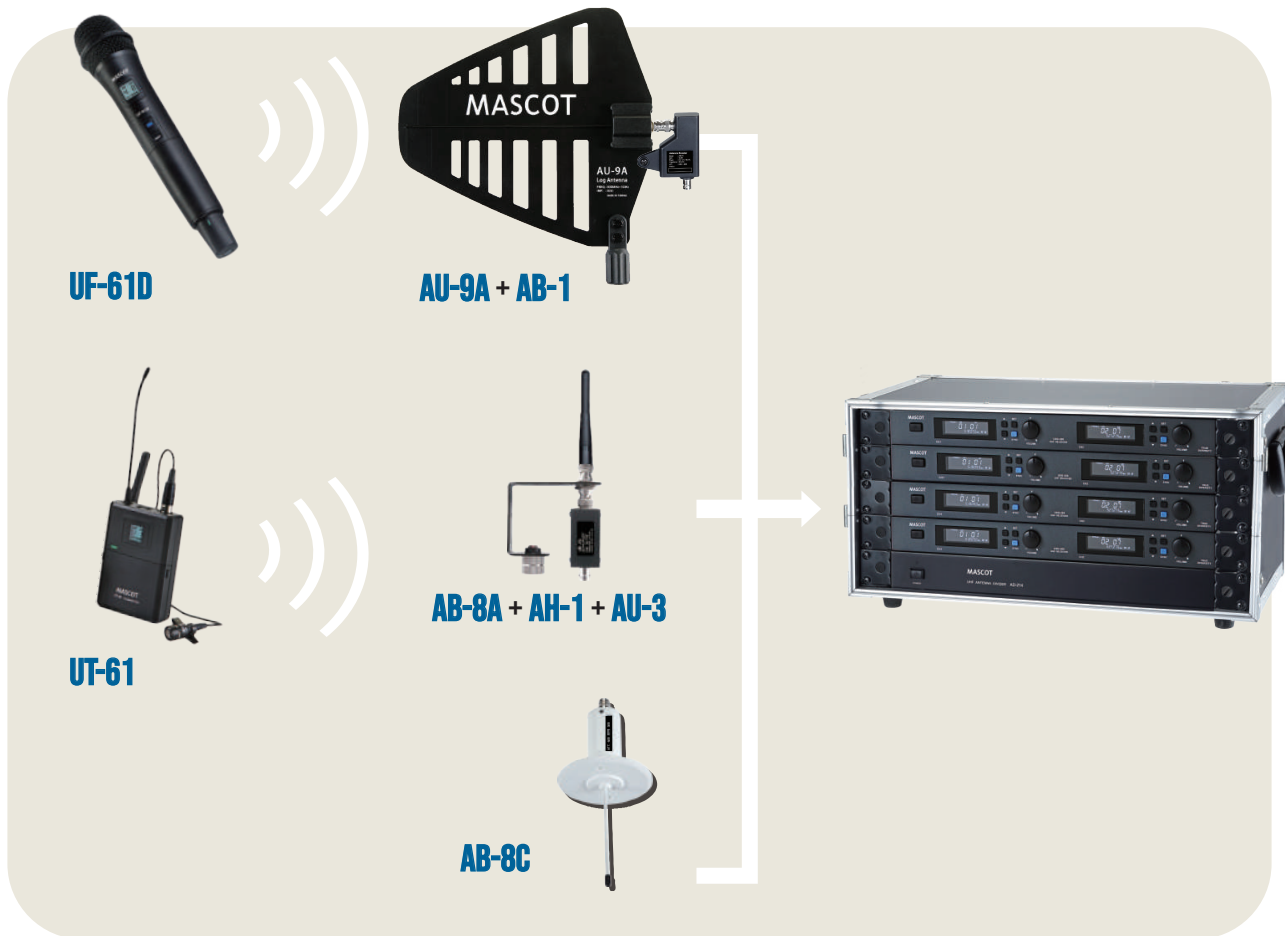
**AB-8C**  
CEILING MOUNTED  
ANTENNA BOOSTER

- Invisible design and easily to be fixed directly to the ceiling.
- Built-in 9dB gain is suitable for installations required to extend the operating range, like supermarket or shopping center.

Frequency Range	500MHz ~ 1GHz
Gain Range	9dB ± 1dB
Antenna Impedance	50Ω
Max. Ceiling Thickness	15mm
Mounting Hole Ø	38mm
Connector	BNC
Input Voltage	8V DC 80mA (via coaxial cable)

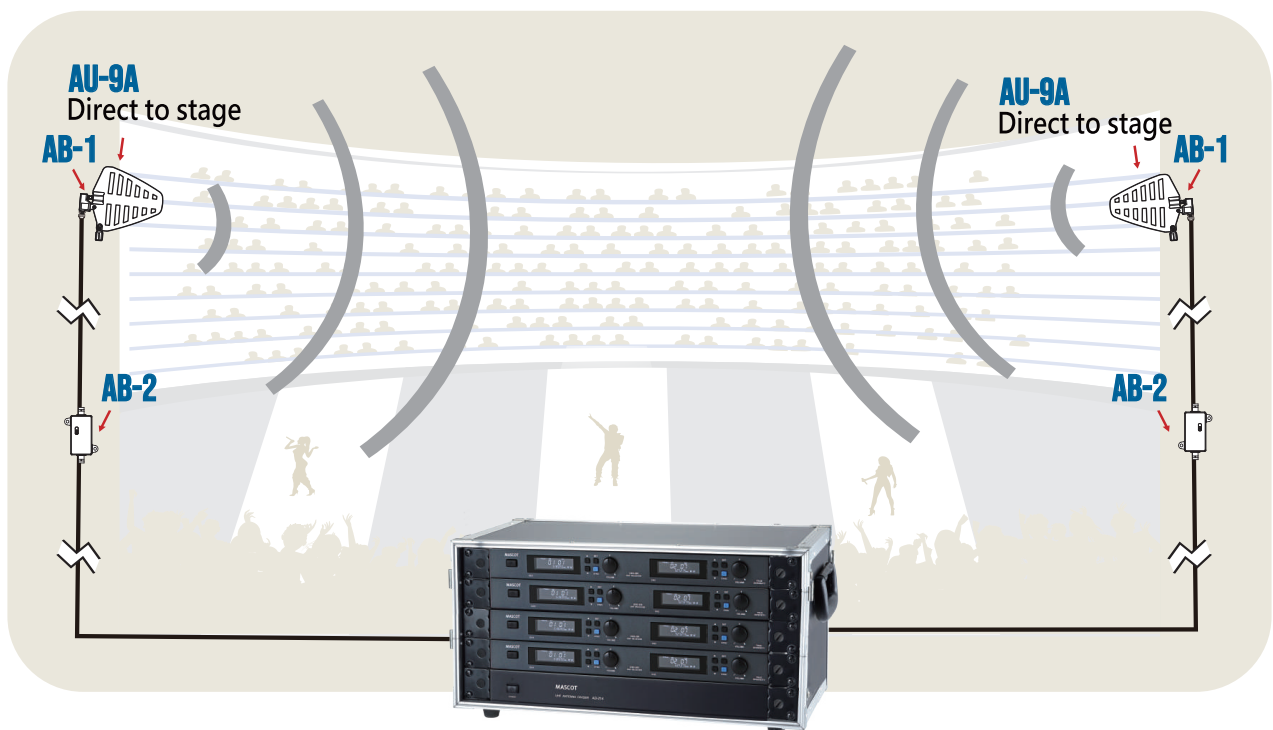
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No matter how to adjust the receiver or transmitter position, the signal transmission quality for wireless microphone is still not good. Or the performer has to stop playing due to receive unwanted noise constantly or the sound quality is not stable. The UHF antenna system can be ease performers' tension and frustration.



# ANTENNA SYSTEM & ACCESSORIES

Sometimes the signal transmission will be interfered, dropped, or disappeared by crowd, distance, or electronic products during the show. The Log Antenna AU-9A with Antenna Booster AB-1 are suggested to be used for enhancing the signal transmission quality and stability for a successful performance.



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L3



L4

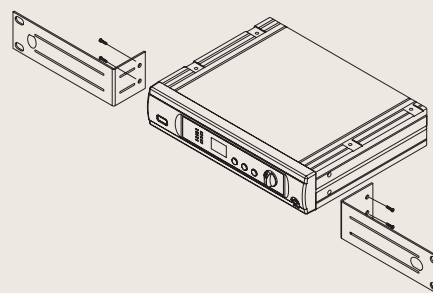


C2

## L3 LONG L TYPE METAL RACK

### 特點

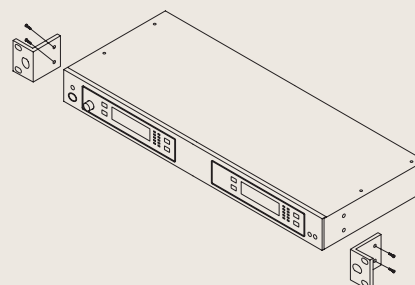
\*2 pieces L3 to mount a 1/2 rack size receivers in a 19" rack.



## L4 SHORT L TYPE METAL RACK

### 特點

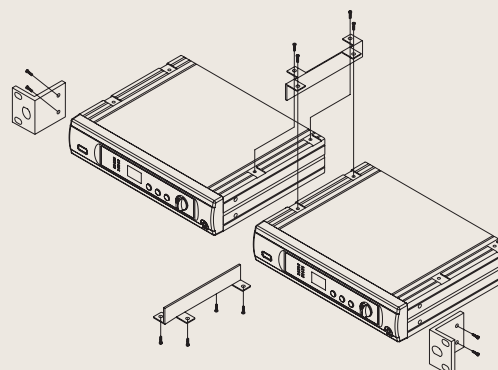
\*2 pieces L4 to mount a 1/2 rack size receivers in a 19" rack.



## C2 CONNECTING PLATE

### 特點

\*2 pieces L4 with 2 pieces C2 can combine two 1/2 rack size receivers in a 19" rack.







CB-401



CB-402



CB-402M



H-12



PE

## CB-401 GUITAR CABLE

### 特點

- \*3.5Ø screw type plug / 6.3Ø plug.
- \*Bodypack transmitter to guitar, instruments or other recording equipment.

## CB-402 GUITAR CABLE

### 特點

- \*3pin mini XLR TA3F Female connector / 6.3Ø plug.
- \*Bodypack transmitter to guitar, instruments or other recording equipment.

## CB-402M GUITAR CABLE

### 特點

- \*3pin mini XLR TA3F Female connector / 6.3Ø metal plug.
- \*Bodypack transmitter to guitar, instruments or other recording equipment.

## H-12 MICROPHONE HOLDER

### 特點

- \*Suitable for handheld microphone.

## PE CARRY CASE

### 特點

- \*Convenient and durable case.
- \*Suitable for package of a half 19" wireless microphone set.