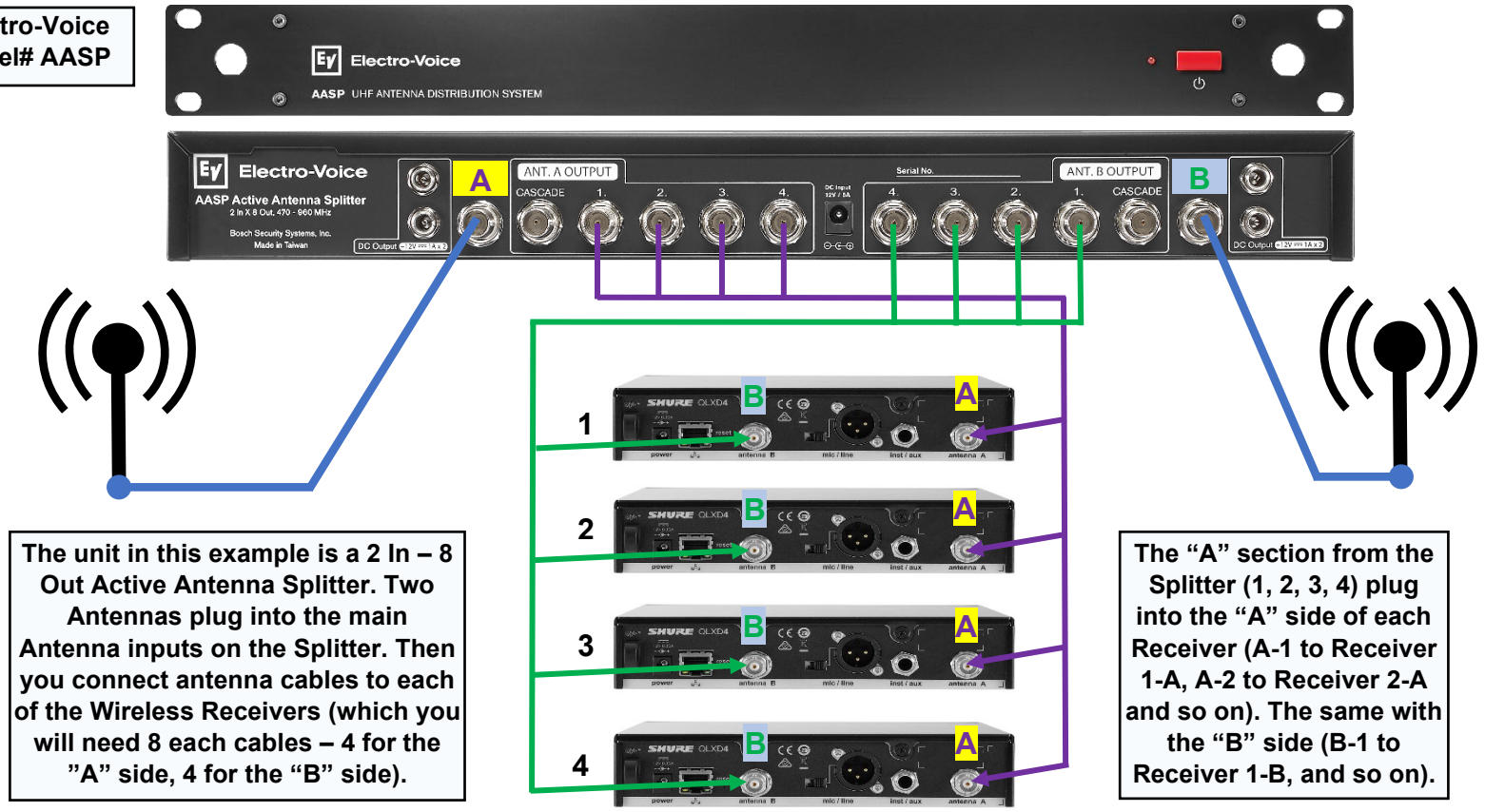
Wireless Microphone Antenna Splitter / Distribution System, Active Booster Amplifiers, and Antenna Placement Notes

Typical Antenna Splitter / Distribution System

Electro-Voice Model# AASP



The unit in this example is a 2 In – 8 Out Active Antenna Splitter. Two Antennas plug into the main Antenna inputs on the Splitter. Then you connect antenna cables to each of the Wireless Receivers (which you will need 8 each cables – 4 for the "A" side, 4 for the "B" side).

The "A" section from the Splitter (1, 2, 3, 4) plug into the "A" side of each Receiver (A-1 to Receiver 1-A, A-2 to Receiver 2-A and so on). The same with the "B" side (B-1 to Receiver 1-B, and so on).

Courtesy of Electro-Voice

Typical “Active” Antenna Boosters

Courtesy of Electro-Voice

Electro-Voice RE3-ACC-ALPA
Active log periodic antenna, 470-960MHz

- **Extends system range**
- **Switchable 3 dB and 10 dB of active gain**
- **Mounts on standard threaded microphone stand**

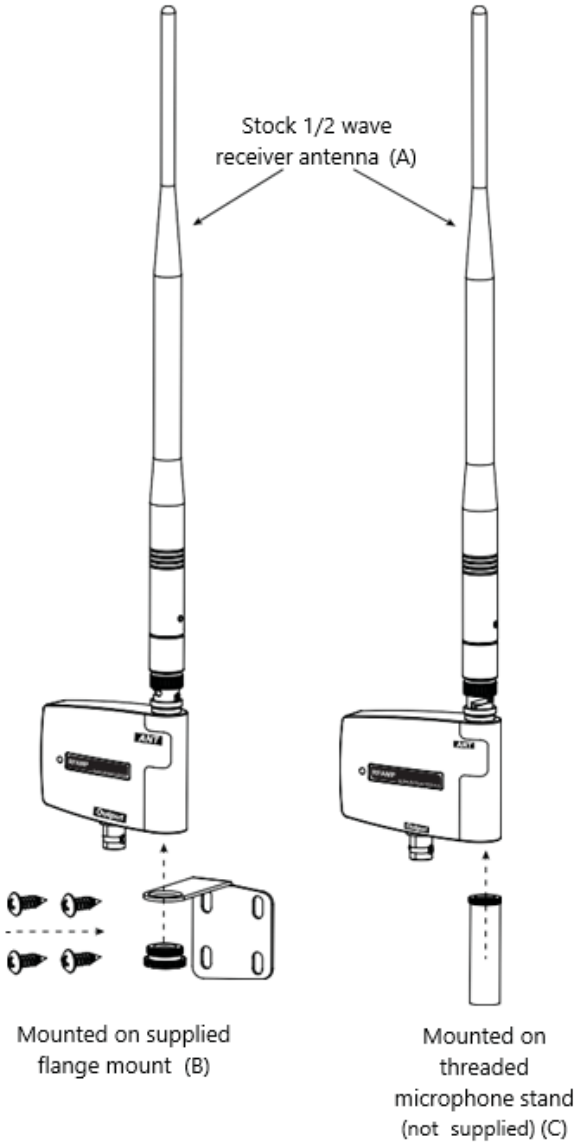
The ALPA is an active directional antenna with switchable 3 dB and 10 dB of amplified gain, which increases the desired RF signal while rejecting unwanted RF signals. ALPA mounts on a standard threaded microphone stand for easy placement. Intended to extend system range, ALPA should be used in conjunction with high-quality, low-loss coax cables such as items from the Electro-Voice CXU grade cables, which are available in various lengths. RF gain at the antenna can be increased by placing an RE3-ACC-RFAMP RF booster in line using short coax.

Electro-Voice RE3-ACC-RFAMP Active RF antenna booster, 470-960MHz

- **10dB RF booster amp module**
- **Powered by RE3-RX or AASP 12v DC booster feed power**
- **Mounts on supplied installation flange or on microphone stand**
- **Passes booster feed thru for cascading up to two modules**
- **Effectively remote-mounts stock ½ wave receiver antenna**

RFAMP is a 10dB RF amplifier module designed to function as an at-antenna RF amplifier to compensate for signal loss prior to a coax run, as well as an effective means of remote mounting the RE3-RX stock ½ wave receiver antenna when desired. RFAMP requires 12v DC booster power which is supplied at the antenna jacks of either the RE3-RX receiver, or the AASP active antenna splitter.

Mounting the RF amplifier module



Antenna Placement - Notes

- Antennas should be mounted as high as possible, and away from metal objects / components.
- As a guide to setting up Antennas - The performer using the transmitter should be able to "see" the receivers' antennas at all times. This is referred to as "line of sight."
- There are Bracket Mounting Kits that will allow you to mount the antennas away from the receiver, and in some cases – you may need to use an antenna booster to help with signal loss.
- On most wireless microphone systems, the tips of the antennas should be pointed at a 45-degree angle away from each other (read manufacturers user guide to verify your systems requirements).