

AVA-E

Audio/Voice Adapter

Remote Radio Keying How To



Revised August XX, 2015

Firmware Version 2.X

TABLE OF CONTENTS

Using the AVA with ground keying.....	3
Using the AVA with voltage keying.....	3
Using the AVA with Mix and Match.....	4

Using the AVA with dry contact closure keying

If your transmitter uses a contact closure as PTT

For radios that initiate a transmission using a contact closure, configure per the following.

On the sending (Near) side:

- Configure the AVA IP Network and Voice speed settings as per the manual
- Set this near side AVA unit to **E&M** mode. Set the M lead to control transmit option to **YES**.
- Connect the audio output from your equipment to Pins 3 and 6 on the E&M port RJ45
- Use the front panel MIC (Microphone) connector pins 1 and 8. Closing the contact on the MIC port between pins 1 and 8 sends a signal to the far end E&M port. At the far end, pins 1 and 2 on the E&M port will be closed when the local MIC pins 1 and 8 are closed. Conversely, when the local pins 1 and 8 are opened, the far end E&M pins 1 and 2 will go open.

On the remote side:

- Configure the AVA Network and Voice speed setting as per the manual
- Set this AVA unit into E&M mode.
- Connect the audio inputs of the radio to the pins 4 and 5 on the E&M port on the AVA.
- Use pins 1 and 2 of the E&M port to key the transceiver. These 2 leads are equivalent to a microphone “push-to-talk” set of contacts.

Using the AVA with local end voltage (wet) contact keying

If your transmitter uses a voltage as PTT

If the transceiver initiates a transmission using voltage signal to initiate a transmission, do the following. (Note standard AVA requires 38 volts to go off hook and 4 volts to hold). Relays can be customized for other voltages as needed.

On the sending (Near) side:

- Configure the AVA IP Network and Voice speed settings as per the manual
- Set this AVA unit into E&M mode and set the M lead to control transmit option to yes.
- Connect the audio output from the equipment to Pins 3 and 6 on the E&M port RJ45
- Connect the PTT lead from the equipment to Pin 7 on the E&M port. The voltage must be in the range of -38 to -60 VDC (nominal -48 VDC) to operate the relay. Connect the return of the -48 VDC to Pin 8 of the E&M port.

On the remote side you will:

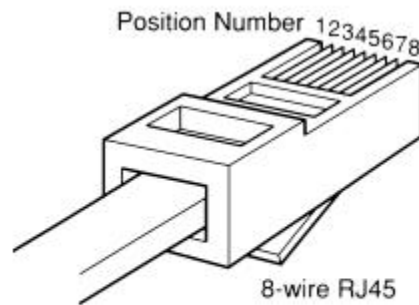
- Configure LAN and Voice speed settings as per the manual
- Set this AVA unit into E&M mode.

- Connect the audio inputs of the transceiver to the pins 4 and 5 on the E&M port on the AVA.
- Connect Pin 2 from the E&M Port to the transceivers PTT input.
- Connect Pin 1 to an external voltage source that will key the transceiver. (Relay is rated 380V at 100 ma)

Using the AVA with Mix and Match

If your transmitter uses a different setting than your "Mic"

The AVA units at each end can be mixed and matched using the MIC input for keying at both ends, E&M at both ends, or MIC at one end and E&M at the other end.



RJ-45 Plug Positions

