

## Installation Instructions for Becker AR3201, comm radio harness:

READ ALL THE INSTRUCTIONS BEFORE BEGINNING INSTALLATION.

1) 'AR3201 SPKR': Solder center conductor to (+) tab on a 4 ohm, 5-watt speaker. Solder the black shield wire to the (-) tab.

2) 'AR3201 PTT = Blu, AR3201 Mic Hi = Wh, AR3201 Mic Lo = Blk': All conductors of this multi-conductor wire go to the mic jack. Solder the blue striped wire to the push-to-talk tab, which is the 'tallest' contact on the jack. Solder the plain, white, wire to the mic hi tab, which is the 'shorter' contact on the jack. Solder the black shield wire to the ground tab corresponding to the jack's threaded portion. **Be aware that the AR3201 uses an internal jumper to choose between standard and dynamic mic output. See the manufacturer's manual to see if this jumper needs to be moved to match your installation.**

(\*) If installing a push-to-talk switch, use the single conductor, shielded wire, marked 'AR3201 PTT'. Solder the center conductor and shield wire to the tabs of a customer-provided, push-to-talk switch. Activating EITHER the remote PTT switch OR the PTT switch on a mic assembly connected to the mic jack will allow voice transmission over the radio.

3) 'AR3201 LTS': If you wish to activate the backlight on the radio face, solder the 'Light' wire to one tab of the normally open contacts of a customer-provided switch. Solder a +12 VDC wire to the other contact. When the contacts close, the backlight in the radio face will be lit. If desired a dimmer pot may be used in place of the switch. If no lights will be used, cap and stow this wire.

4) 'AR3201 GND': Attach this twisted pair of wires to, either airframe ground or a dedicated avionics ground. This may be accomplished with solder or by installing a ring terminal and using the appropriate hardware.

5) 'AR3201 PWR': Install an appropriately sized ring terminal and attach it to the 'load' terminal of a 12-volt, 3-amp circuit breaker. **\* ALWAYS check that the power supplied to the radio is correct as per the manufacturer's requirements. \***

6) Connect the 15-socket connector to the back of the radio with the slide locks.

7) Connect a coax antenna cable from the antenna to the BNC connector at the back of the radio.

Special notes:

These instructions only address the electrical installation of this radio. Follow the manufacturer's instructions for all other aspects of the installation, such as the antenna connections and the mechanical mounting.

If a wire is not used, such as the light wire, cap and stow each conductor.

The customer must provide a mic jack when used. Suggest Switchcraft, S12B mic jack, or equivalent.

When installing the mic jack on a conductive surface, fiber isolation washers MUST be used. Drill a 7/16" hole to allow the shoulder of the black washer to seat and push the mic jack through its hole. Place the brown fiber washer and thin metal washer over the threads and tighten the nut. Suggest Switchcraft, S1028 (brown), and S1029 (black) isolation washers or equivalent.

Verify correct connections of power and ground wires. Engage the circuit breaker and turn on the radio. Program the radio as per the manufacturer's instructions and ensure that any desired options are activated currently.

Tune the radio to any desired frequency and listen for incoming signals, on the speaker. Plug a hand mic or boom mic into the mic jack and check that a clear voice signal is transmitted. Any aircraft band radio can be used when making these checks, such as a handheld or the radio in another aircraft.

**\*NEVER attempt to transmit without the antenna connected to a com radio. The transmitter WILL be damaged. \***

Fly and enjoy!