EXEMPLAR WIRING DIAGRAMS FOR ICOM A200 COMM XCVR
NOTES:

1. INSULATE ALL JACKS FROM AIRFRAME GROUND WITH EXTRUDED WASHERS OR OTHER NON-CONDUCTIVE MOUNTING MATERIAL.

2. THE ICOM A200 DRAWS ONLY 2.7 AMPS MAXIMUM. ANY BREAKER OR FUSE FROM 5 TO 15 AMPS MAY BE USED TO PROTECT THE RADIO'S 18AWG POWER WIRING HOWEVER A 5A DEVICE IS RECOMMENDED.

3. SPEAKER SHOULD BE 4 OHM IMPEDANCE AND HAVE THE LARGEST MAGNET YOU CAN FIND FOR THE SIZE SPEAKER YOU SELECT. SPEAKER INSTALLATION RECOMMENDED ONLY FOR PREFLIGHT OPS AND/OR GROUND MAINTENANCE. HEADSETS RECOMMENDED FOR FLIGHT OPS. IF SPEAKER NOT INSTALLED, RECOMMEND YOU 'DUMMY LOAD' THE SPEAKER OUTPUT WITH A 5 OHM 2W RESISTOR. (2 EA 10 OHM 1W RESISTORS IN PARALLEL - RADIO SHACK CATALOG #271-51).

4. EXTEND PIOTAILS FROM POWER PINS (L, R) AND GROUND PINS (6, 15, F, S) 6-INCHES.

5. 16-14AWG BUTT SPLICE (AMP PIDG 320562 OR EQUAL).

6. 22AWG JUMPERS APPROX 2" LONG TO TIE II, 13, M AND P TOGETHER.

7. AUX AUDIO INPUTS ARE USEFUL WHEN NO AUDIO ISOLATION AMPLIFIER AND ONLY ONE A200 COMM TRANSCEIVER IS INSTALLED.

8. WIRES SHOWN AS \[\text{twisted pairs},\] YOU CAN USE A DRILL MOTOR TO SPIN ABOUT 2 TURNS PER INCH OF TWIST IN A PAIR OF WIRES. THE TWISTING KEEPS THE TWO WIRES TOGETHER FOR ROUTING AND REDUCES POSSIBILITY OF NOISE PICKUP. THERE ARE NO POLARITY SENSITIVE DEVICES WIRE WITH TWISTED PAIR ON THIS DIAGRAM MEANING THAT IT DOESN'T MATTER HOW THE TWO WIRES ARE CONNECTED AT EITHER END.

9. ALL WIRES 22AWG TEFZEL (M22759 OR EQUAL) UNLESS MARKED OTHERWISE.

10. ICOM PUBLISHED DATA DOESN'T SHOW HOW TO DO A MINIMUM INSTALLATION THAT ACCOMMODATES A TWO PILOT HEADSET/MICROPHONE INSTALLATION. IF YOU DO NOT PLAN TO INSTALL AN INTERCOM SYSTEM THAT MIXES TWO HEADSET/MICS TO A SINGLE COMM OUTPUT, YOU MIGHT CONSIDER INCORPORATING THE FIRST-COME-FIRST-SERVED MICROPHONE SWITCHING SCHEME DEPICTED ON PAGE 5.

11. OBVIOUSLY, WHEN IT COMES TO AUDIO SYSTEMS, THERE ARE HUNDREDS OF VARIATIONS ON A THEME. THESE DRAWINGS ARE INTENDED TO SUGGEST THE MINIMALLY FUNCTIONAL AUDIO SYSTEM ARCHITECTURES. SEE CHAPTER 18 OF THE AEROELECTRIC CONNECTION FOR FURTHER DISCUSSION ON AUDIO SYSTEMS.
This isolation amplifier is a modern incarnation of amplifiers used on light aircraft of yesteryear except that (1) it does not have a speaker amplifier (we've learned to value our hearing over the years) and (2) it supports stereo headsets for music while mixing the monaural aviation signals together so they're heard in both ears.

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**Notes for this page only:**

1. Ground symbol on schematic denotes common ground for the assembly. This ground should be isolated from the chassis ground.
2. www.digikey.com can supply all parts.
3. Recommended connector is 15-pin D-sub.
4. The amplifier as shown provides approximately unity gain.
5. This device would be an excellent candidate for assembly using the "cladboarding" technique described on www.aeroelectric.com
NOTES FOR THIS PAGE ONLY:

1. THIS CIRCUIT PROVIDES FIRST-COME/FIRST-SERVE ACCESS TO THE TRANSMITTER BY EITHER PILOT WITH LOCKOUT AND MUTING OF OTHER PILOT'S MICROPHONE.
2. SUGGESTED RELAYS: POTTER BRUMFIELD KHA 4DPT MINATURE (DIGIKEY CAT# PB4/2)
3. MOUNTING OPTIONS: YOU MAY SOLDER DIRECTLY TO RELAY TERMINALS OR INSTALL RELAYS IN SOCKETS (DIGIKEY CAT# PB4/4) HELD IN PLACE WITH SPRING WIRE BAIL (DIGIKEY CAT# PB4/4).
4. DIODES (NL30D) OR SIMILAR
5. ALL WIRING 22AWG.