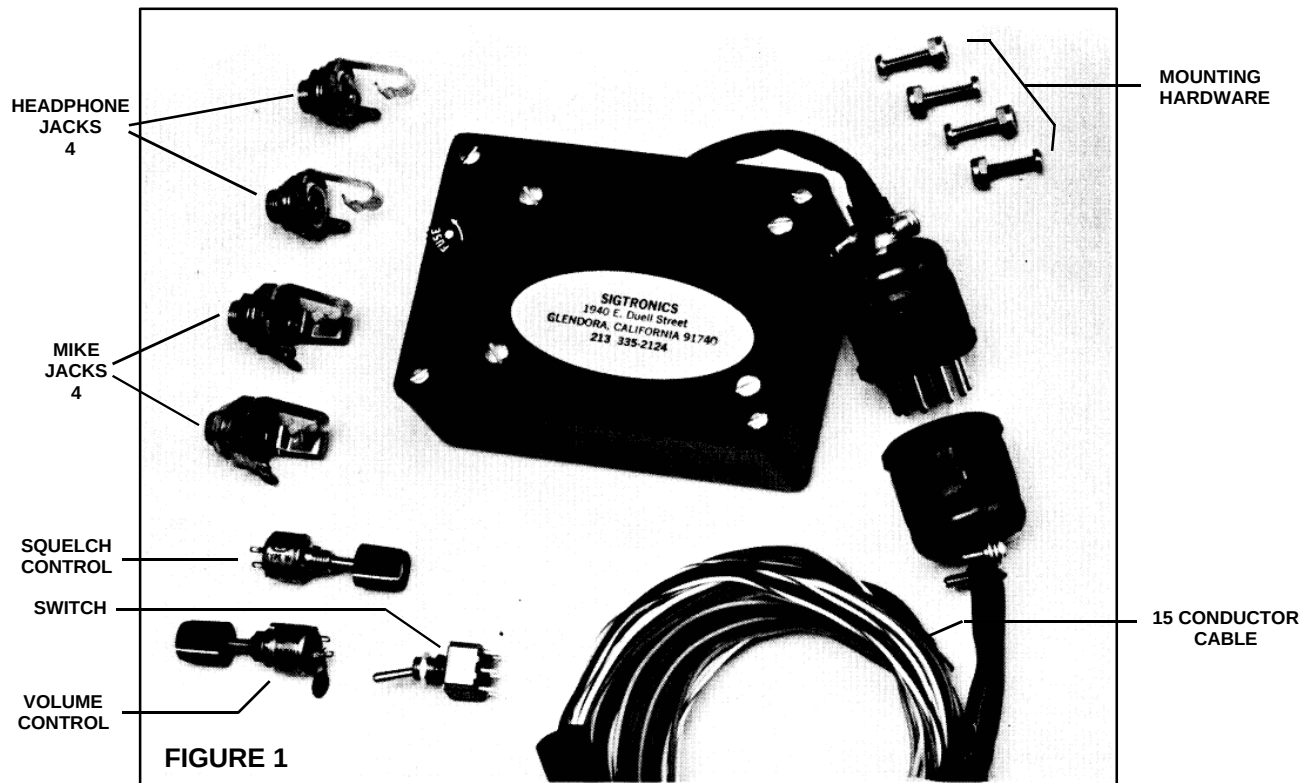


SIGTRONICS "TRANSCOM" INSTALLATION AND OPERATING INSTRUCTIONS (REMOTE 4 WAY)



TRANSCOM is a voice actuated aircraft intercom with the capability for transmitting through the aircraft radio by the mere push of a button. It was designed for simplicity of use.

Three controls are provided to operate the unit.

POWER SWITCH - Turns unit on and off.

VOLUME CONTROL - Controls the intercom volume. (The radio volume is controlled conventionally.)

SQUELCH CONTROL - Controls the threshold of amplifier turn-on. This control is normally used to adjust for variations in background noise found in different aircraft.

HARDWARE PROVIDED:

Two Microphone Input Jacks - They accept the standard aircraft mike plugs (i.e., carbon or amplified dynamic microphone).

Two Output Jacks - They accept the standard .250" aircraft headphone plug.

Transmitting from both positions is possible on a one-at-a-time basis. Each position disables the other while transmitting.

OPERATING INSTRUCTIONS

STEP 1. - INTERCOM MODE

A. Turn the power switch on.

B. Set the volume control to a low level.

C. Adjust the Squelch Control clockwise until background noise increases or the voice is heard by speaking into mike. Rotate the squelch counterclockwise until the noise diminishes. Then make small adjustments until

the voice triggers the unit on satisfactorily. Small adjustments may be necessary if the aircraft background noise changes significantly, such as from idle to full power.

STEP 2. - TRANSMIT MODE

When ready to transmit, depress the Transmit Switch and your voice is automatically transmitted via the aircraft radio.

STEP 3— RADIO MONITORING

When the unit is connected as in "WIRING INSTRUCTIONS" radio monitoring is automatic. The radio monitor circuit is always active, even with the TRANSCOM Power Switch in the OFF position.

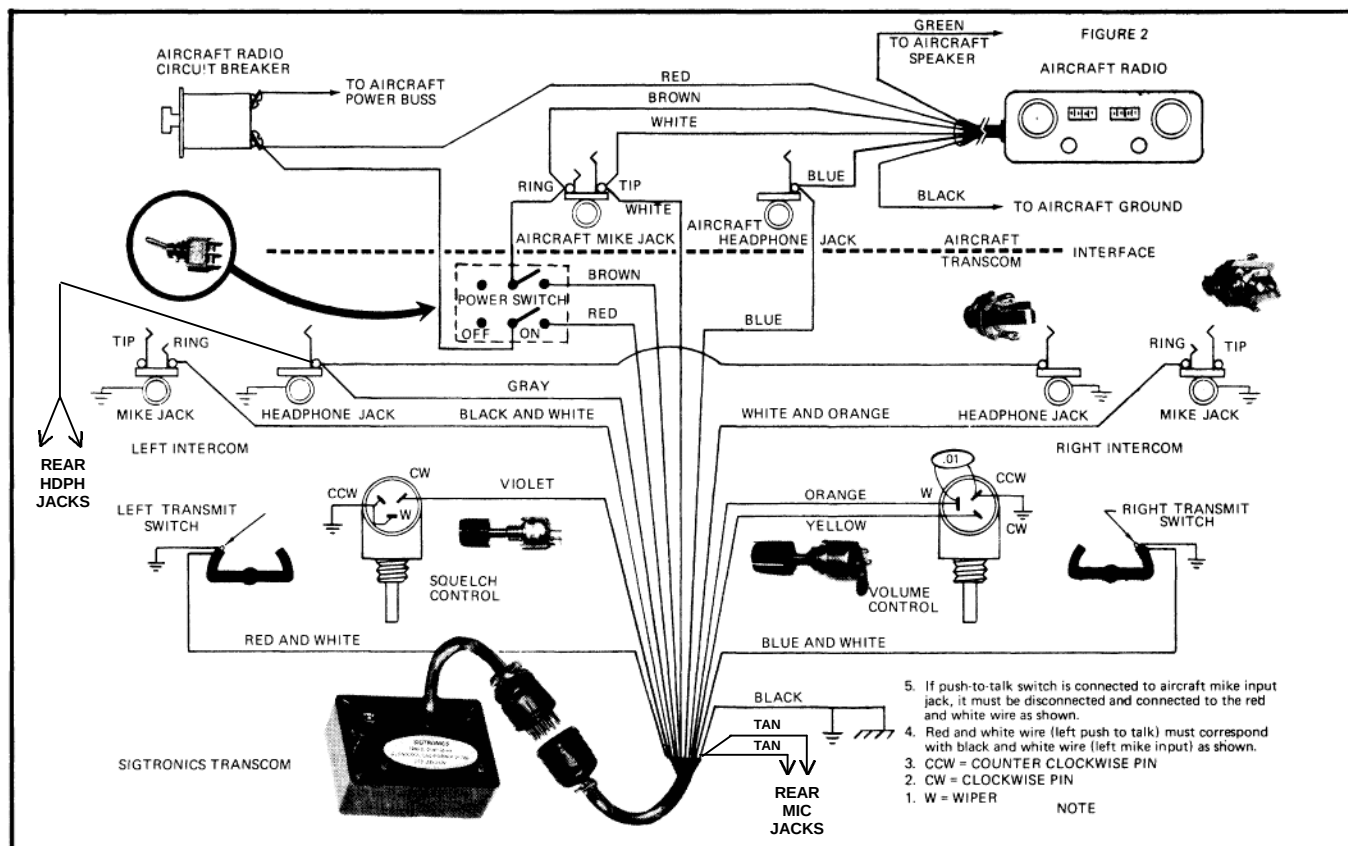
HELPFUL HINTS

1. Position the boom mike in close proximity to the mouth, as is the practice with a hand held mike, for best results.
2. Maintain minimum acceptable volume when using TRANSCOM, particularly in low noise environments.
3. The hand held mike may be left plugged into the aircraft mike input jack and used conventionally. However, the TRANSCOM must be switched off during transmitting. Radio reception will continue through the headphone, even with TRANSCOM switched off.
4. When transmitting, the intercom is automatically switched off and your voice is heard via the aircraft radio sidetone return. In cases where there is no sidetone return, nothing will be heard.
5. The push-to-talk switch circuit must have less than 5 ohms resistance for satisfactory operation.



SIGTRONICS CORPORATION
178 East Arrow Highway
San Dimas, California 91773
(909) 305-9399

INSTALLATION INSTRUCTIONS: Please read the following instructions carefully



PLUG PIN NO.	WIRE COLOR	FUNCTION	CONNECT TO:	PLUG PIN NO.	WIRE COLOR	FUNCTION	CONNECT TO:
1	White/Black	Left Mike Input	Ring Terminal of Intercom Left Mike Input Jack	11	White/Orange	Right Mike Input	Ring Terminal of Intercom Right Mike Input Jack
2	White/Red	Left Transmit Switch Input	Left Transmit Switch	12			No Connection
3	Violet	Squelch Control Input	Clockwise Pin of Squelch Control	13	Gray	Headphone Output	All Intercom Headphone Jacks
4	Black	Ground	Aircraft Chassis Ground	14	Blue	Radio Headphone Input	Aircraft Radio Headphone Output Jack
5	White	Transmit Relay Control Output	Tip Terminal of Aircraft Mike Input Jack	15	Tan	Rear Mic Jack	Ring Terminal of Rear Mic Jack
6	Brown	Mike Output	Ring of Aircraft Mike Input Jack	16	Tan	Rear Mic Jack	Ring Terminal of Rear Mic Jack
7	Red	Power Input	Radio Circuit Breaker	NOTE: Connect the CCW Pin of the Volume Control to Intercom System Ground. Connect the CCW Pin and Wiper of Squelch Control to Intercom System Ground. Connect one terminal of push-to-talk switch to Aircraft Chassis or Intercom System Ground. ⏏ Aircraft Chassis Ground. ⏏ Intercom System Ground.			
8	Orange	Volume Control Output	Volume Control Wiper				
9	Yellow	Volume Control Output	Volume Control Clockwise Pin				
10	White/Blue	Right Transmit Switch Input	Right Transmit Switch				

TABLE 1

CHASSIS INSTALLATION

Your **TRANSCOM** has been supplied with the necessary hardware to mount the Chassis to the aircraft.

Four grommets are installed in the Chassis bottom, intended for mounting.

Four 6/32" screws with self-locking nuts have been provided for mounting.

1. Remove the four corner panel screws from the unit.
2. Remove the unit from the case.
3. After selecting a suitable mounting location in the aircraft, drill aircraft with the same hole pattern as in the intercom case. Use a No. 27 drill (Clearance drill for 6/32").
4. Secure case to the aircraft with the screw heads inside intercom case for circuit board clearance. (Care should be taken not to crush the grommets while applying torque to the screws.)
5. Replace the unit in the case and secure.

WIRING INSTRUCTIONS

Your **TRANSCOM** has been supplied with four feet of cable to connect the unit to the aircraft.

Figure 2 illustrates the connection to be made.

Table 1 lists the connector plug pin numbers, the color, function, and destination of each wire connected to those pins.

Connections should be made as shown in Figure 2 and as indicated in Table 1. Sigtronics should be contacted if other means of connecting the unit are contemplated.

NOTE:

1. Care should be taken to verify that the aircraft radio wiring conforms to the standard color code.
2. The Squelch and Volume Control shafts should be cut to length after installation plan is complete.
3. To avoid ground loop induced noise, the microphone, volume control and squelch control grounds should be floated and returned to the unit ground. The unit ground, in turn, should be carried close to the aircraft mike input jack ground.
4. A small, square, white or gray trimmer potentiometer is provided inside the unit for adjusting the mike input level to the radio. In the event of overmodulation or reports of weak transmissions, an appropriate adjustment can be made. Clockwise rotation of the screwdriver adjustment increases the mike output level.