

Sigtronics Transcom III

PORTABLE BATTERY POWERED STEREO INTERCOM

BATTERY OR AIRCRAFT POWER: The Transcom III is powered by an internal 9V battery enabling up to 13 hours of operation in airplanes lacking a cigarette lighter socket. An auxiliary 4 foot power cord with *LED Power Indicator* is supplied for use in airplanes which have a socket. The LED indicator will be on if power is available, it will be off if no power or reversed socket wiring. **Note:** The LED shows power available, not intercom On or Off. When using the power cord the battery is bypassed, thus preserving the life of the battery. It is not necessary for the battery to be operative in order to use the auxiliary power cord. The battery powered feature is especially convenient for students and instructors who move from plane to plane.

VOICE ACTIVATED: The voice activation feature allows "hands-free" communication between all headsets plugged into the Transcom III. Start speaking and the intercom instantly turns on (no clipping) to relay your message clearly to the other headsets; stop talking and it turns off to reduce background noise.

TRANSMIT: Use your portable push-to-talk switch for transmitting to air traffic control. Transmitting can be accomplished from two positions (pilot and copilot). The intercom function is automatically disabled during transmitting, so that only the voice of the person transmitting goes over the air. However, the transmitting person's voice is heard at all headset positions via the intercoms side-tone output. This feature is especially valuable to the instructor and the student who wish to monitor each other's transmissions.

FAIL SAFE RADIO COMMUNICATIONS: Even with the intercom "OFF", the pilot can hear all radio communications and can transmit through the aircraft radio using the headset boom mic. The headset mic is routed directly to the radio via the "ON-OFF" switch. The "fail safe" feature also works should the battery go dead in mid-flight.

AUXILIARY AUDIO: Input from a portable stereo music source or a cell phone for music and phone calls. Note all headsets will hear the cell phone conversation and can talk to the calling party. Included Aux cable can be used for either purpose. Just plug one end into your device and the other into the Transcom III AUX jack.

Volume of the Aux audio (music or cell phone) is controlled by the device itself not by the intercom volume control.

Audio from the AUX jack is partially muted when intercom squelch breaks for intercom conversations and is fully muted when any radio traffic happens, both receiving and transmitting.

Record ATC clearances or flight instructor's lessons with optional headphone adapter.

WARRANTY: The Transcom III is constructed of high quality components, carries a five year parts and labor warranty.

SPECIFICATIONS:

SPO-23 Weight: 13.8 oz. with battery and auxiliary power cord.
Size: 4" x 2.9" x 2" **Power:** 11-34 VDC
Maximum Current Drain: 0.05 amps.

MODELS OF TRANSCOM III: Transcom III intercoms are available in Standard and High Noise Environment versions (N models).

2-way: SPO-23 and SPO-23N

4-way: SPO-43 and SPO-43N

6-way: SPO-63 and SPO-63N

CONTROLS:

Power Switch: On-Off

Volume Control: Controls intercom volume.

Squelch Control: This control is normally used to adjust for variations in background noise found in different aircraft. Squelch setting also effects outgoing cell phone mic audio.

Stereo / Mono Switch: Set for the type of headsets (stereo or monaural) plugged into the intercom. See Tables 1 and 2.

Auxiliary Jack: Accepts a 1/8" standard 3 conductor mini stereo headphone plug from your portable music source or a 1/8" 4 conductor plug for cell phone connection.

STEP 1 – How To Use The Transcom III:

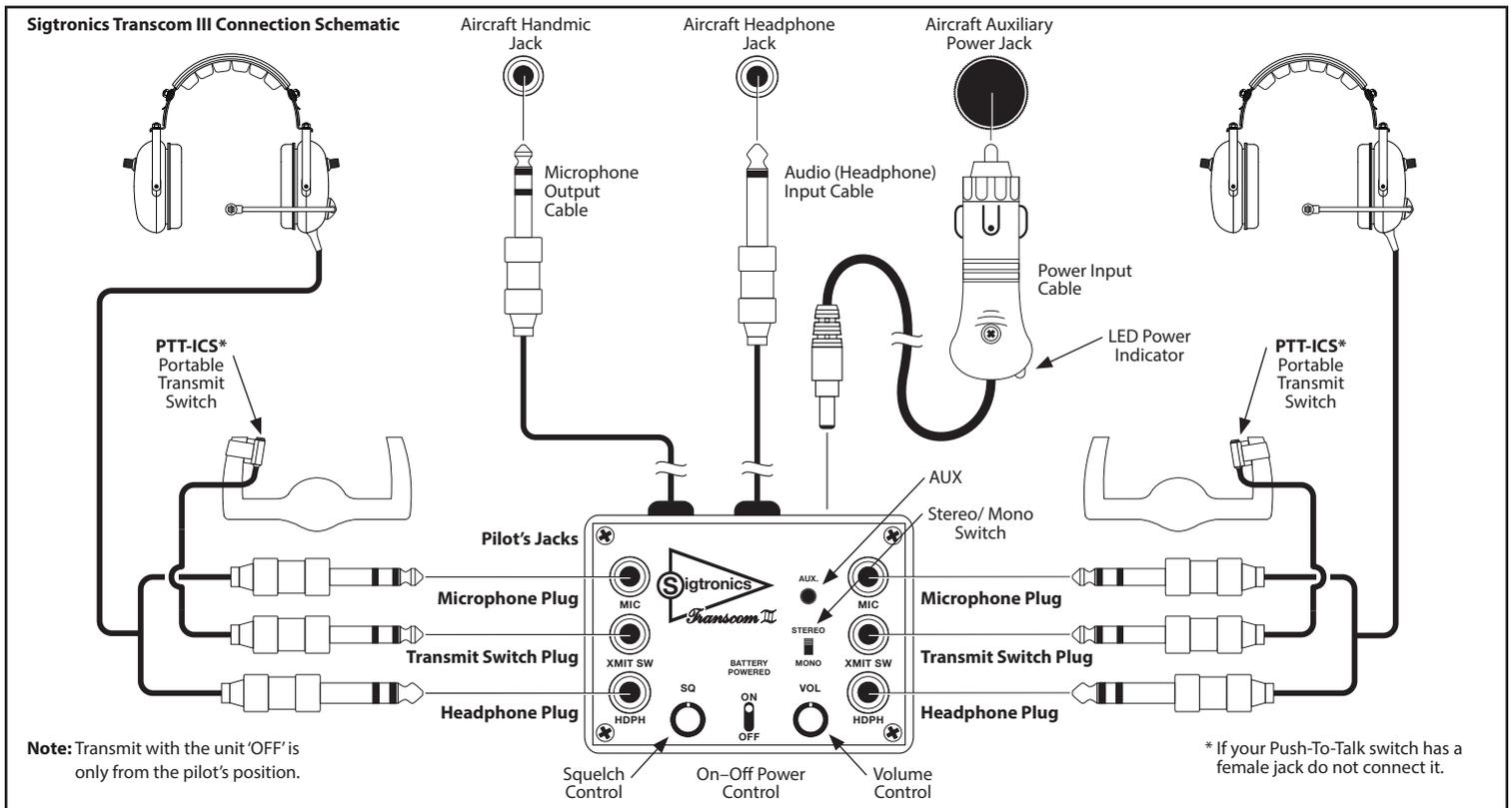
- A. Connect the Sigtronics Transcom as illustrated in the Connection Schematic. Be certain that the transmit switch and corresponding headset mic plugs are connected on the same side as shown in the schematic, since the mic input on the opposite side is disabled when a transmit switch is activated.
- B. Set the Transcom Stereo / Mono switch as appropriate for the type of headsets used. See Tables 1 and 2.
- C. Put on headset(s) and position the boom mic close to the mouth, as you would with a hand-held mic. Voice clarity is best when the mic is at one side of the mouth and 1/4" from the lips.
- D. Set audio panel to "Headphone" position, if applicable.
- E. Turn power 'ON' and set the volume control to a low level. (1/4th to 1/3rd open for best signal to noise ratio). Maintain minimum acceptable volume for hearing protection.
- F. Adjust squelch control clockwise until background noise becomes audible. Then rotate counter-clockwise small, incremental amounts until background noise disappears. This procedure is necessary because the squelch is a 'fast on, slow off' circuit. Small adjustments may be necessary if aircraft background noise changes significantly, such as from idle to full power.



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SPO	Stereo Headset		Monaural Headset
SPO Stereo / Mono switch position	Headset switch position: Stereo	Headset switch position: Mono	—
Stereo	★ Radio, Intercom, and Music heard in both ears. Music is in stereo.	✘ Radio, Intercom, and one Music channels heard in both ears.	✘ Radio, Intercom, and one Music channel heard in both ears.
Mono	✘ Radio, Intercom, and both Music channels heard in one ear.	★ Radio, Intercom, and Music heard in both ears. Music is in mono.	★ Radio, Intercom, and Music heard in both ears. Music is in mono.

SPO	Stereo Headset		Monaural Headset
SPO Stereo / Mono switch position	Headset switch position: Stereo	Headset switch position: Mono	—
Stereo	✘ Radio, Intercom, and one Music channel heard in one ear.	✘ Radio, Intercom, and one Music channels heard in both ears.	✘ Radio, Intercom, and one Music channel heard in both ears.
Mono	✘ Radio, Intercom, and both Music channels heard in one ear.	★ Radio, Intercom, and Music heard in both ears. Music is in mono.	★ Radio, Intercom, and Music heard in both ears. Music is in mono.

★ Correct Radio, Intercom, and Music system function.

✘ Incorrect and/or disabled Radio, Intercom, or Music system function.

NOTE: All above conditions are with the SPO intercom power switch in the on position. If it becomes necessary to turn the SPO intercom off (low battery), **the SPO Stereo / Mono switch must be set to Mono when using Monaural headsets.** This is in order to use the headsets and intercom in Fail Safe mode.

STEP 2 – Transmit Mode:

To transmit, depress the transmit switch and your voice is automatically transmitted via the aircraft radio. When transmitting, your voice or side-tone is heard in all headsets connected to the Transcom III. The Transcom III automatically provides simulated transmit side-tone. Any AUX audio is muted when the PTT switch is pressed. You may also transmit from the **pilot's position** with the unit 'OFF'. See STEP 3 if using monaural headsets.

A small, square, trimmer potentiometer is provided inside the unit to adjust the mic input level to the radio. In the event of over-modulation or reports of weak transmissions, an appropriate adjustment can be made. Clockwise rotation of the screwdriver adjustment increases the mic output level.

STEP 3 – Radio Monitoring:

When the unit is connected as in Step 1, radio monitoring is automatic. The radio monitor circuit is always active, even with the intercom power switch in the 'off' position or in the event of a Transcom failure. No switching is

necessary with stereo headsets. With monaural headsets, the SPO intercom Stereo / Mono switch must be set to Mono for radio monitoring in the headsets when the SPO is off.

BATTERY REPLACEMENT INSTRUCTIONS:

1. Turn unit "OFF"
2. Remove battery door by pressing on the center as you slide it out.
3. Remove the battery and disconnect the battery connector.
4. Connect a new battery and insert it into the unit the same way as the original.
5. Slide the battery door back in and resume normal operation.

Battery Replacement Instructions for SPO-43 and SPO-63:

The only indication of a low battery will be the lack of power, and neither the front unit nor rear unit(s) will function. There will never be an indication of low rear unit batteries, since the front unit battery will carry all units, if needed. Therefore, make it a practice to change all batteries at the same time.