Sigtronics Transcom II

…A Portable Battery Powered Intercom!

Voice Activated Communication … Any Pilot … Any Plane!

Discover the dramatic improvement in flight cabin conversation with Sigtronics' Transcom II. Pilot-to- Passenger hands-free conversation, radio transmit capability, battery power or auxiliary power, and input-output source all rolled up into one! All standard aircraft headsets and portable push-to-talk switches are compatible with the Transcom II.

BATTERY OR AIRCRAFT POWER: The Transcom II is powered by an internal 9V battery enabling approximately 40 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 pilot and co-pilot. 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 co-pilot). 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 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, thus providing the most fail-safe unit on the market.

AUXILIARY AUDIO OUTPUT: Record ATC clearances or flight instructor's lessons on your cassette player.

AUXILIARY AUDIO INPUT: Plug in your portable music source and enjoy music or instructional recordings!

WARRANTY: The Transcom II is constructed of high quality components, carries a five year parts and labor warranty, and is manufactured in the U.S.A.

SPECIFICATIONS:
>   **Weight:** 14 oz. with battery and auxiliary power cord. (SPO-22)
>   **Size:** 4" x 2.9" x 2" (SPO-22)
>   **Power:** 11-34 VDC
>   **Maximum Current Drain:** 0.05 amps.
>   **Environmental:** TSO-C50b

MODELS OF TRANSCOM II: Transcom II models available are a 2-way (SPO-22 & -22N), 4-way (SPO-42 & -42N), 6-way (SPO-62 & -62N), 8-way (SPO-82), and a 10-way model (SPO-102).

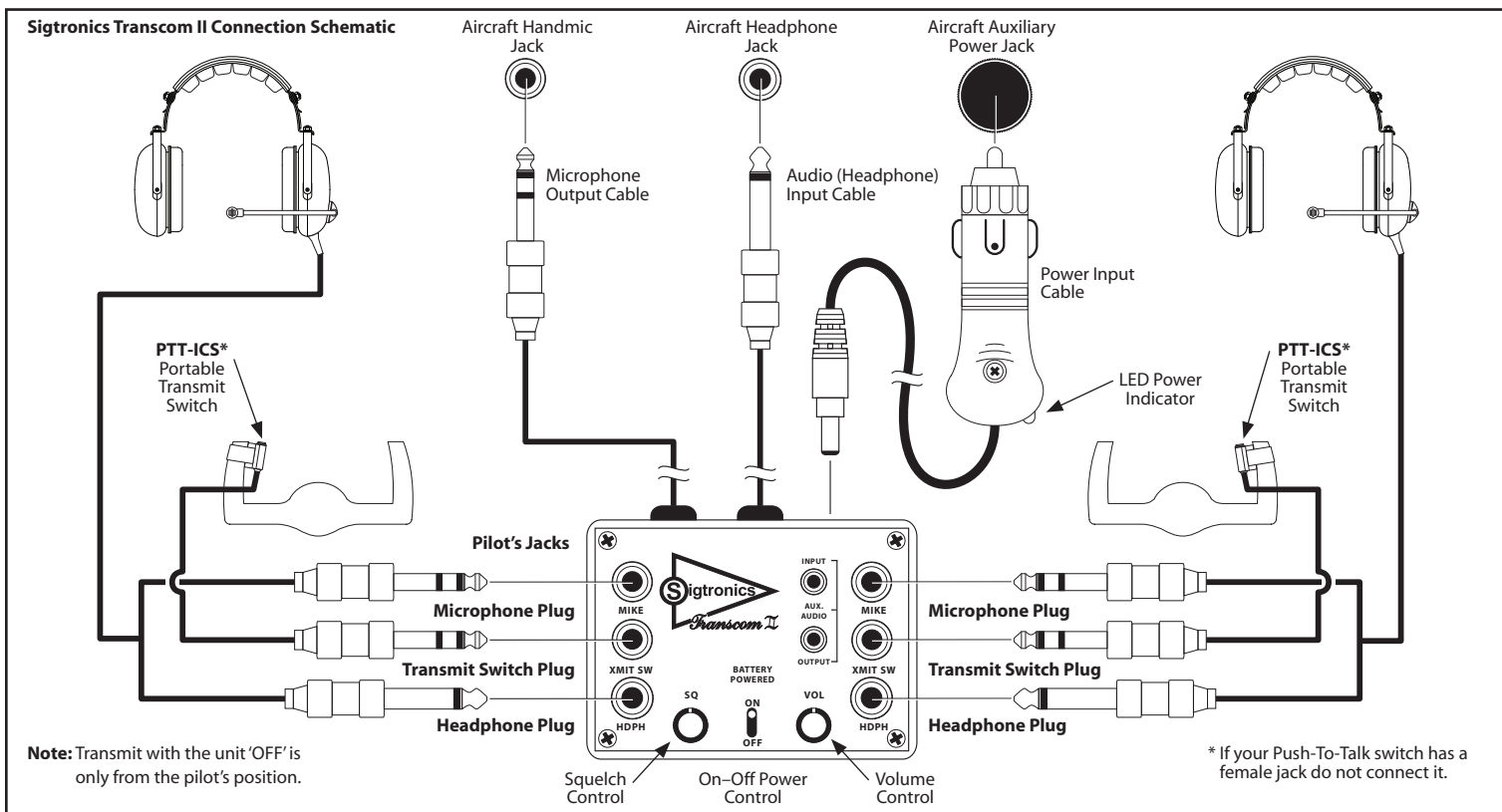***Originators of aircraft Voice Activated Intercoms***

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Made in the U.S.A.   **w w w . s i g t r o n i c s . c o m**

Sigtronics Transcom II Connection Schematic

Aircraft Handmic Jack

Aircraft Headphone Jack

Aircraft Auxiliary Power Jack

Microphone Output Cable

Audio (Headphone) Input Cable

Power Input Cable

LED Power Indicator

PTT-ICS* Portable Transmit Switch

PTT-ICS* Portable Transmit Switch

Pilot's Jacks

Microphone Plug

Transmit Switch Plug

Headphone Plug

INPUT

AUX. AUDIO

OUTPUT

MIKE

XMIT SW

HDPH

BATTERY POWERED

SQ

ON OFF

VOL

MIKE

XMIT SW

HDPH

Microphone Plug

Transmit Switch Plug

Headphone Plug

Note: Transmit with the unit 'OFF' is only from the pilot's position.

Squelch Control

On–Off Power Control

Volume Control

* If your Push-To-Talk switch has a female jack do not connect it.

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.

Auxiliary Audio Input Jack: Plug in your portable music source and enjoy music or instructional recordings. Accepts 1/8" mini monaural headphone plugs. Stereo and monaural adapters are available from Sigtronics for your interface needs.

Auxiliary Audio Output Jack: Record intercom or radio work. Terrific for instructional purposes.

STEP 1 – How To Use The Transcom II:

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. 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.

C. Set audio panel to "Headphone" position, if applicable.

D. 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.

E. 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.

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 Trancsom II. The Transcom II automatically provides simulated transmit side-tone. You may also transmit from the *pilot's position* with the unit 'OFF'. (Fail Safe feature).

A small, square, trimmer potentiometer is provided inside the unit for adjusting 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 Transom failure. No switching is necessary. A 'fail-safe' feature.

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-42, -62, -82 and -102:

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.

Model SPO-42