Sigtronics Audio Switcher



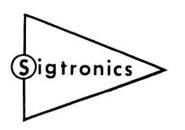
The Sigtronics' Audio Switcher enables the pilot and passengers to listen to any programmed entertainment, such as AM/FM radio, stereo or monaural recorded music without missing transmissions from ATC, flightwatch, or traffic!

SWITCHING: The pilot is automatically switched from the audio bus of his entertainment system to the VHF radio when a radio message is received or transmitted and is switched back when the radio traffic is completed.

OPERATING MODES: Several modes of operation are possible. The pilot may listen to entertainment and be switched to the VHF, or he may elect to remain on the VHF. He also has the option of putting the passengers on uninterrupted music or letting the VHF interrupt their music so they may hear the radio communications. (See Mode Selection Table)

RADIO MONITORING: The "fail-safe" design assures that the pilot will always receive the VHF, regardless of the position of the Switcher controls.

HEADPHONES: High or low impedance headphones may be used with the Switcher, however, all headphones being used simultaneously should be of the same impedance and efficiency. This assures that the audio volume will be the same for all persons.



SIGTRONICS CORPORATION

178 East Arrow Highway San Dimas, CA 91773 PHONE (909) 305-9399 **CONFIGURATIONS:** The Audio Switcher is available in four configurations:

1. 12V stereo

2. 24V stereo

3. 12V monaural

4. 24V monaural

COMPATIBILITY: The Audio Switcher interfaces with virtually any entertainment speaker output circuit.

Stereo Switchers - Compatible with stereo entertainment systems and stereo headphones.

Monaural Switchers - Compatible with monaural entertainment systems and monaural headphones.

Aircraft headphones or headsets may be used as monaural

WARRANTY: The Audio Switcher is built of high quality commercial components and carries a one year parts and labor warranty.

SPECIFICATIONS

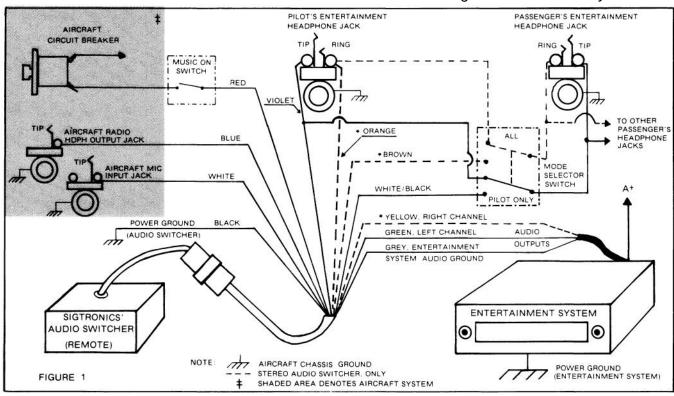
WEIGHT: 11 ounces with cables and accessories.

SIZE: 4" x 2.9" x 2"

POWER: Utilizes aircraft power. 12V or 24V available.
POWER SWITCH: Turns Switcher "ON" and "OFF".
PILOT/ALL SWITCH: Selects who is to be switched, when wired as shown in Figure 1. (See Mode Selection Table)
HEADPHONE JACKS: Accept standard .250" stereo headphone plugs in stereo units and .250" phone plugs in monaural units

MUSIC INPUT: The Switcher provides loading so that your entertainment system output will not be open circuited. This eliminates the possibility of harming any music system.

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	Red	Power Input	Aircraft circuit breaker thru ON/OFF switch	7	*Brown	Uninterrupted Output † (Rt. channel)	Pilot/All Mode Selector Switch
2	Black	Ground	Aircraft Chassis	8	White/Black	Uninterrupted Output † (Lt. channel)	Pilot/All Mode Selector Switch
3	White	XMIT Music Disable	Tip of Aircraft Mic Jack	9	*Yellow	Audio Input † (Rt. channel)	Right channel Audio Output of Stereo System
4	Blue	Input Radio Headphone	Output Jack Aircraft Radio Headphone	10	Green	Audio Input † (Lt. channel)	Left channel Audio Output of Entertainment System
5	Violet	Interrupted Output †(Lt. Channel)	Pilot's Headphone Jack Tip Terminal	11	Grey	Audio Ground	Entertainment System Audio Ground
6	Orange	Interrupted Output †(Rt. channel)	Pilot's Stereo Headphone Jack Ring Terminal	Note: * Stereo Switchers, only ‡ Relevant to Stereo Systems TABLE 1			

CHASSIS INSTALLATION

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

- 1. Remove the unit from the case.
- 2. After selecting a suitable mounting location in the aircraft, drill aircraft and switcher case with same hole pattern. Use a No. 27 drill (Clearance drill for 6/32").
- 3. Secure case to the aircraft with the screw heads **Inside** switcher case for circuit board clearance.
 - 4. Replace the unit in the case and secure.

WIRING INSTRUCTIONS

Four feet of cable has been provided to connect the unit to the aircraft and entertainment system.

Figure 1 illustrates the connections 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 1 and as indicated in Table 1. Sigtronics should be contacted if other means of connecting the unit are contemplated.

OPERATING INSTRUCTIONS

- **Step 1.** Turn aircraft radio "**ON**" and adjust squelch (if manual) and volume to suitable listening level.
- Step 2. Turn Audio Switcher and entertainment system "ON" and adjust entertainment to suitable listening level.
- Step 3. Select Pilot or All position to suit switching mode desired.
 Note: The Switcher controls can be changed from one mode to another at any time.

TRANSMIT: Transmitting is accomplished in the conventional manner, by using the hand-held microphone. Messages are received via the headphones being worn.

If the pilot has a headset with a boom microphone and uses a push-to-talk switch, then the headset microphone plug should be connected to the aircraft microphone jack and the headphone plug should be connected to the Switcher Headphone Jack.

*MODE SELECTION TABLE

PILOT/ALL ON/OFF SWITCH SWITCH		PILOT HEARS	PASSENGERS HEAR	
PILOT	ON	VHF Interrupt Music	Music Only	
ALL	ON	VHF Interrupt Music	VHF Interrupt Music	
PILOT	OFF	VHF Only	Music Only	
ALL	OFF	VHF Only	VHF Only	

*Applicable when wired as shown in Figure 1.