



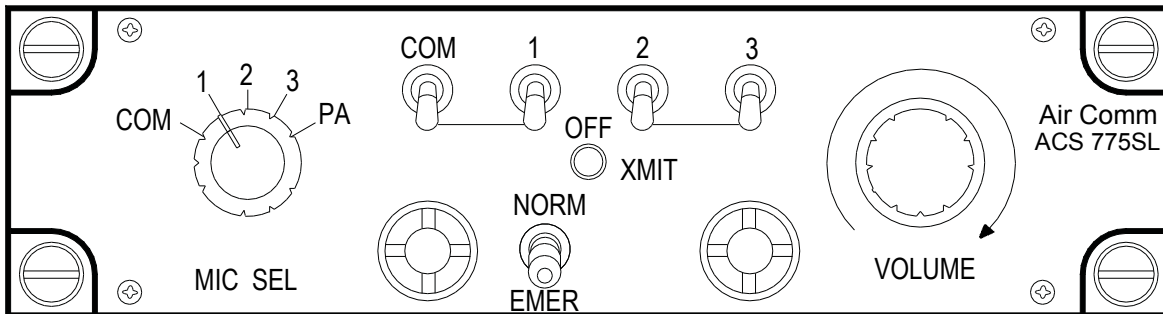
AIR COMM SYSTEMS, INC

AIRBORNE- AUDIO

Single Audio Mixer Panel Installation and Operations Manual

ACS 775SL-SP (A692-6) RHC

Revision 3.1



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ACS 775SL-SP Installation and Operations Manual Physical and Operating Specifications

■ Physical Specifications

SIZE: 5.75 in. (14.61cm) W
1.50 in. (3.81 cm) H
6.78 in. (17.22cm) D

WEIGHT: 1.50lb. (.68kg)

MOUNTING: Dzus rail mount

CONTROLS: Panel mounted - transmit = rotary switch, audio inputs = toggle switch,
volume control = dual potentiometer

ILLUMINATION: Edge lit front panel per MIL-P-7738E, type 3. Capable of connection to dimmer bus for adjustment. Amber transmit light indicates when unit is in transmit mode.

■ Operating Specifications

INPUTS: 4 selectable receive audio inputs and up to 5 transmit selections.

DUTY CYCLE: Continuous *POWER REQUIREMENTS:* 14 VDC

MAXIMUM OPERATING ALTITUDE: 16,500 ft.(5029 m)

OPERATING TEMPERATURE RANGE: -40 C to +85 C (operating)
-65 C to +125 C (storage)

CURRENT DRAIN: 70 mA at 14V (standby) - 500mA at 28V (max. signal)

AUDIO OUTPUT: Minimum 250 mW into 600 ohms

FREQUENCY RESPONSE: Within 6 db - 300-3000Hz

ICS INPUT IMPEDANCE: 600 ohms

RECEIVER INPUT IMPEDANCE: 600 ohms - matched to receiver

INPUT ISOLATION: Not less than 50 db between inputs

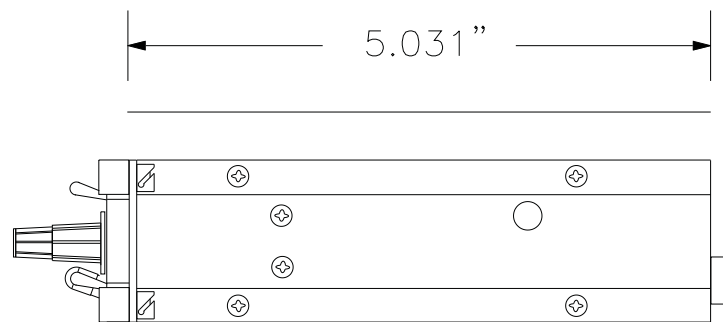
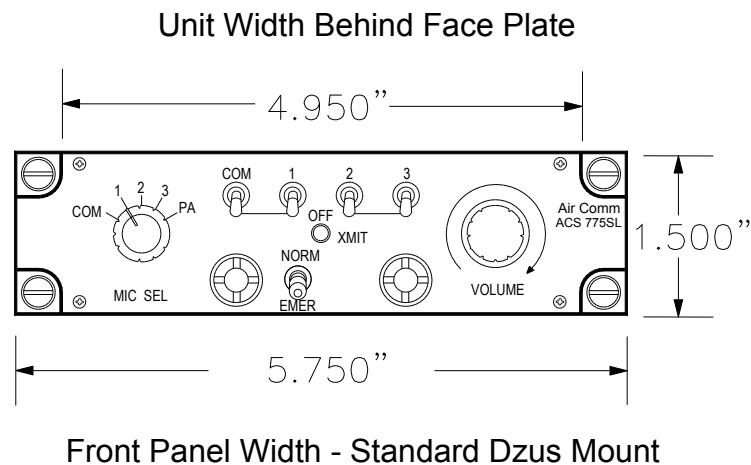
AUDIO MUTING: Not less than 40 db during transmit/ICS (optional)

MIC SENSITIVITY: 300 mV for rated output

DISTORTION: Less than 10% at 1000 Hz for maximum output

ACS 775SL-SP Installation and Operations Manual Physical Dimensions

■ Physical Dimension Outline for mounting



Allow up to 2.500" For Rear Connector and Cable Clearance

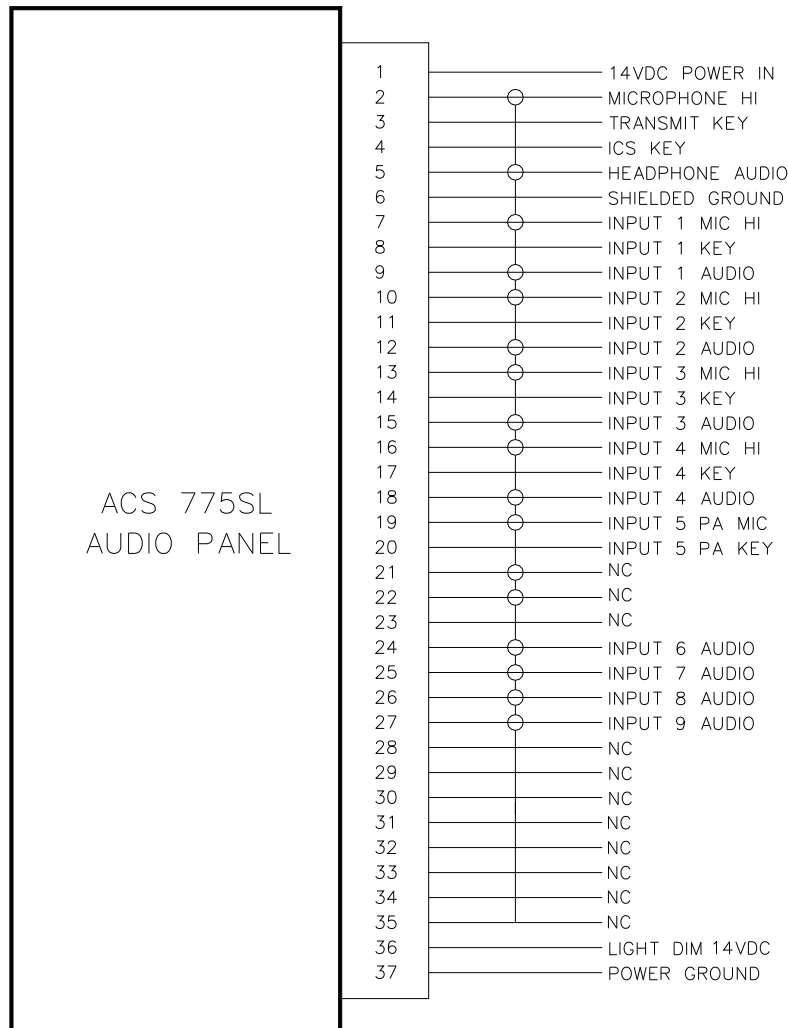
Physical Installation

The ACS 775SL-SP is designed to be Dzus mounted and should be installed in the aircraft using the Installation kit that is included. The above outline drawing of the unit with dimensions will facilitate the installation. Be sure that adequate clearance is allowed for the rear connector and cable harness.

The connector pin configuration of the ACS 775SL-SP rear connector and the recommended wire size for the aircraft cable harness is shown on the following page.

ACS 775SL-SP Installation and Operations Manual Interface Schematic

■ Connector Pin-out



The ACS 775SL-SP wiring harness should be constructed of Tefzel aircraft wire (M22759/16 grade or better). Power and ground wires should be 18 or 20 AWG, and all other wires may be 22 AWG. Shielded wires should be used where noted. Adequate protection against wear and chafing should be taken by using a braided cable sleeving or jacket. Before completing installation, verify that all cable connector pins are seated properly and that the connector is securely mounted to the unit mating connector. Important - please note the power of the unit before installing; it will be either 14VDC or 28VDC and clearly marked as such on the units data tag.

Pre-fabricated cable harnesses are available from Air Comm to expedite installation - consult our sales department for details.

ACS 775SL-SP Installation and Operations Manual Front Panel Controls

(See figure 1 - Page 8 for pictorial)

Description

The ACS 775SL-SP Single Audio Mixer Panel is a compact, lightweight unit which provides full audio control for a single position in the aircraft. It has the capability to provide its user with 4 receive audio selections, 4 non-selectable audio inputs, 5 transmitter selections and full headphone audio control.

1- NORM - EMER SWITCH

This switch controls the operation of the audio panel in the event of an audio amplifier failure. In the "up" position (NORM) the audio panel is in normal operating mode. In the "down" position (EMER) all audios are summed and then fed directly to the headphones. This enables the use of the transmitters and other equipment during audio amplifier failure.

2 - RECEIVE AUDIO SELECT-MUTE SWITCHES

Normal operation - In the "up" position the audio selected is channeled to its proper headphone. In the "down" position the audio selected is muted.

Emergency operation - In the "up" position the audio selected is muted. In the "down" position the audio selected is summed with any other audios selected and then sent to the headphone.

3 - HEADPHONE VOLUME CONTROLS

This concentric knob adjusts headphone volume and adjusts the radio volume. Clockwise rotation increases the volume - counter clockwise rotation decreases the volume. In the event of excessive or inadequate receiver volume the pots located on the rear of the unit may be adjusted for the proper level. (see FIGURE 2)

ACS 775SL-SP Installation and Operations

Manual Front Panel Controls (cont'd)

(See Figure 1 - Page 8 for pictorial)

4 - LIGHTING

The audio panel is lit by two 14V (P/N 330) lamps which provide night time visibility for all panel legends. These lamps may be replaced in the event of a failure by unscrewing the front panel mounted filter cap, inserting a new lamp, and reinserting the filter into the front panel.

5 - MIC SELECTOR

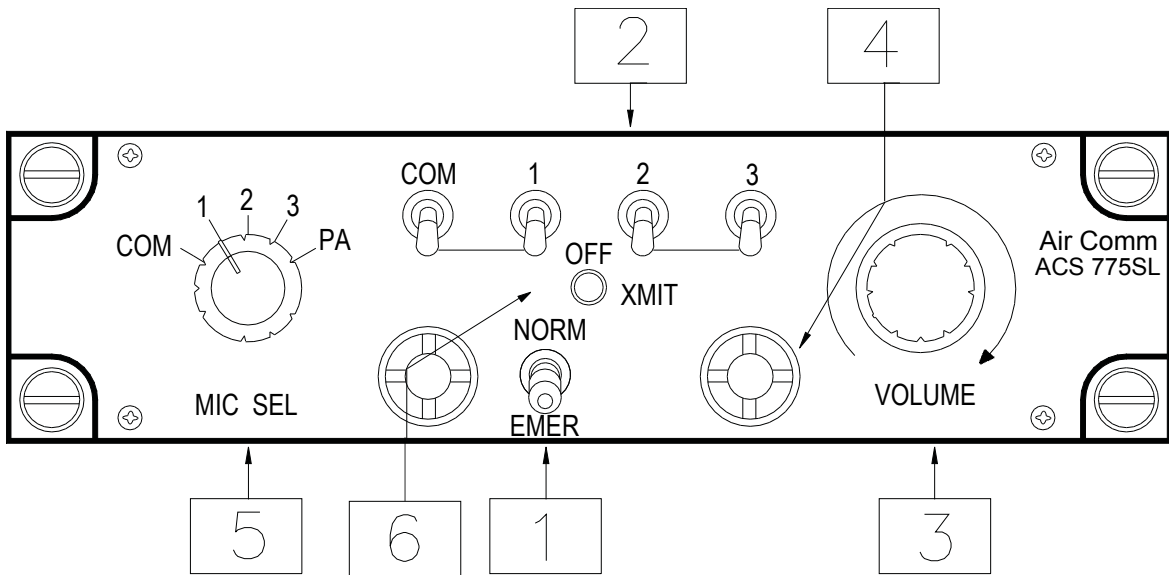
This rotary switch performs three functions simultaneously. It (a) connects the mic to the selected transmitter (b) selects the associated key line, and (c) selects the associated audio (if not already selected using the audio select-mute switch). Transmitters 1, 2, and 3 provide sidetone when transmitting.

6 - TRANSMIT INDICATOR

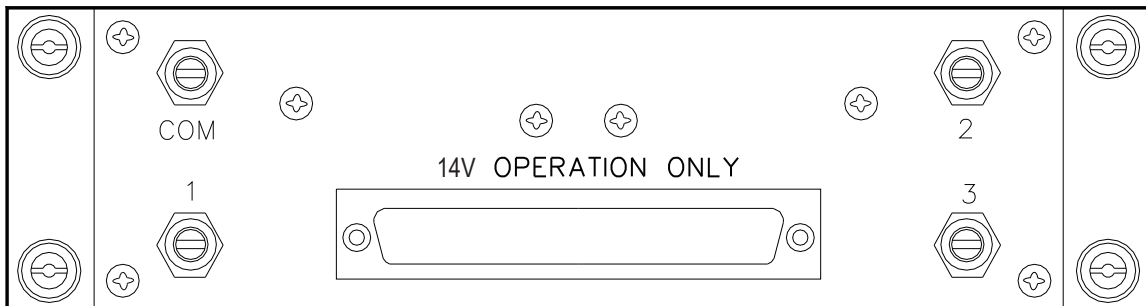
When the transmit key is activated this indicator lights up showing that the audio panel is in the transmit mode.

ACS 775SL-SP Installation and Operations Manual Front Panel Controls

■ **Figure 1 - Front Panel Controls**



■ **Figure 2 - Rear Panel Controls**



ACS 775SL-SP Installation and Operations Manual Warranty Information

LIMITED WARRANTY

Air Comm Systems, Inc. warrants each new product to be free from defective material and workmanship and agrees to remedy any defect or to furnish a new part in exchange for any defective unit provided an examination discloses such defect occurred under normal use and service, and provided the defective unit is delivered to us, with transportation charges prepaid, within 1 year from the date of acceptance of equipment by the owner. Each unit required and claimed defective must be returned to:

Air Comm Systems

37610 Sky Canyon Dr., Hangar 51

Murrieta, CA 92563

Ph: 951-677-0101

Fx: 951-677-0701

E-Mail: info@AirCommSystems.com

Attn: Service Dept.

This warranty does not extend to any products which have been subjected to misuse, neglect, accident, or in violation of instructions furnished, nor does it extend to units which have been repaired or altered outside of our factory except where such repairs are specifically authorized in writing by us.

This warranty is in lieu of all other warranties expressed or implied, and no representative or person is authorized to assume for us any other liability in connection with the sale of our products.