

Intercommunication System Control

Model A301-61A



Model A301-61A

THIS UNIT IS USED ON THE
FOLLOWING AIRCRAFT:

- S-76 Helicopter

FACILITIES AND OPERATING CONTROLS

All operating controls are mounted on the front panel.

TALK OPERATION: A seven-position rotary selector switch provides for selection, control, and voice modulation of six transmitters. The extreme CCW position of the selector provides intercommunication on the Interphone line.

NOTE: Intercommunication can be obtained for any selector position when the control is wired for two-button operation.

PUBLIC ADDRESS OPERATION: A momentary push-button switch provides for the operators voice signals to be applied through a 4 watt amplifier to a speaker in the cabin.

MONITORING: Ten monitor switches provide for individual selection and mixing of 10 audio input lines. A direct input line for warning signals is also provided.

LEVEL ADJUSTMENT: A master volume control permits adjustment of the headset level.

TRANSMITTER AUDIO LEVEL ADJUSTMENT: Six internal controls permit individual adjustment of the voice modulation level to each of the six associated transmitters.

LINE TERMINATIONS: Six resistors are included in the A301-61 for use as audio input line terminations.

OPTIONS: Cockpit voice recorder, Night vision capability

Andrea has TSO-C50b CAT CAAAXX authorization for the A301-61A.

DESCRIPTION AND USE

The A301-61A is a versatile, miniature solid state Intercommunication system control. It is designed to be the basic control unit for a multi-position (up to 12) intercommunication system of advanced design. It is a high reliability unit employing solid-state relay circuits and modular microphone, headset, and speaker amplifiers.

The A301-61A has great flexibility. It will provide specified performance from a 5 ohm Dynamic Microphone or a 100-ohm carbon microphone and an 8 ohm or 600 ohm headset.

C46-5378 Rev B

GENERAL CHARACTERISTICS

POWER

Input Voltage.....	21.5 to 30 VDC
No. Signal.....	3 Watts Max.
250 mW Headset Output.....	4.5 Watts Max.
4 Watt, Speaker, Output.....	17 Watts Max.

Size.....	5 3/4" W x 2 5/8" H x 4" D
Weight.....	1.75 lbs.
Lighting.....	2 - 6 V lamps @ .215 Amps
Connector.....	50 pin Cannon DD50P (Male)
Mating Connector.....	50 Pin Cannon DD50S

IMPEDANCE LEVELS

Microphones.....	5 ohms Dynamic or 100 ohm Carbon
Headset.....	8 ohms or 600 ohms
Speaker.....	8 ohms
Int. Line.....	600 ohms, internally furnished
Transmitter Output.....	100 ohms
Receiver Lines.....	600 ohms

SIGNAL LEVELS

AGC.....	Reference 2.75 V output for input variation of 10 to 1
AGC Attack Time.....	.2 Sec Max.
AGC Slope.....	3 dB Max output change for 20 dB input change
Distortion.....	3% Max.
Headset Amplifier - Output.....	250 mV
Distortion.....	10% Max.
Frequency Response.....	+/-6 dB from 300 to 6000 Hz.

Transmitter Lines.....	.1 to 1V Adjustable
Speaker Amplifier Output.....	4 Watts
Volume Control Range.....	40 dB
Isolation @ 1000 Hz.....	60 dB Min. between input lines or output lines