

Intercommunication Set Control

Model C2105A/AIC-18 (PN A81-48, A81-93)

Model C6624(P)/AIC-25 (PN A81-48, A81-90)



**THIS UNIT IS USED ON THE
FOLLOWING AIRCRAFT:**

- F-16
- F-2
- F-117
- J-STARS

FACILITIES AND OPERATING CONTROLS

Intercommunication on the Interphone line.

Emergency Call operation on Call line at an exalted level without disconnecting monitored signals.

Simultaneous Talk and Listen operation.

Volume Control for setting level to headset.

Capability to drive LS-184A/AIC-10 loudspeaker.

Constant talk output level provided by AGC of Microphone Amplifier.

One watt Headset Amplifier output permits operation in high ambient noise environments.

DESCRIPTION AND USE

The Andrea A81 assemblies are high reliability, bulkhead mounted; Intercommunication Stations designed for airborne installations, and/or ground installations requiring Intercommunication facilities.

Each Station contains one transistorized encapsulated plug-in Microphone Amplifier and one transistorized, encapsulated, plug-in Headset Amplifier.

The Microphone Amplifier increases the audio voice signals from a 5 ohm dynamic microphone to a 2.0 volt level required on the Interphone line.

The Headset Amplifier raises the level of signals from the Interphone line to levels suitable for driving 8-10 ohm Headsets or Loudspeakers, such as the LS-184A/AIC-10.

C46-5390 Rev B

GENERAL CHARACTERISTICS

PERFORMANCE

A81-90.....	ASNAC-70-1
Andrea A81-34-1.....	MIL-I-27543
Andrea A81-48.....	SENXY 65-21
Environmental.....	MIL-E-5400, Class 3
Mean Time Between Failure.....	2000 hrs.
Size.....	3 5/8" W x 5 1/8" L x 4 3/8" D
Weight.....	2.7 lbs. Maximum

TEMPERATURE

Continuous Operation.....	-54° C to +95° C
Intermittent Operation.....	+95° C to +150° C
Storage.....	-65° C to +150° C

POWER REQUIREMENTS

Input Voltage.....	27.5 VDC (17-29 V)
Talk Condition.....	5.7 W
Listen Condition.....	4.0 W
EMI.....	MIL-1-6181 for A81-34-1 & A81-48
EMI.....	MIL-STD 462 for A81-90 & A81-93
Connector.....	Cannon KO2-21-30PN
Mating Connector.....	Cannon KO3-21-30SN

OPERATIONAL PERFORMANCE

Gain @ 1 KHz - Listen.....	22 dB +/-5 dB
Gain - Talk.....	68 dB +/-5 dB
Interphone Line Level.....	2.0 V for - 40 dBm Input
Headset Output.....	1.0 W
Volume Control Range.....	31 dB +/-3 dB
Frequency.....	300 to 6000 Hz

NOISE WITH 3 V RIPPLE ON 27.5 VDC LINE

Talk Operation.....	3 mV @ 400 Hz 4 mV @ 1200 Hz 5 mV @ 6000 Hz
Listen Operation.....	3 mV @ 400 Hz 5 mV @ 1200 Hz 10 mV @ 6000 Hz
Call Exalt.....	6 dB

SIDETONE LEVEL

Interphone Operation.....	6 dB
Call Operation.....	12 dB