

## **Multi-Point Intercommunication System Model A301-138K-[ ]**



The A301-138K-[ ] is a self-contained local intercommunication system that provides a dedicated interphone line for up to 12 passengers with 8 ohm headsets. This local interphone accesses the aircraft intercommunication system by plugging into the 8 ohm headset connection at any intercommunication control system station.

### **Model A301-138-124000 Multi-Point Unit**

### **FEATURES AND OPTIONS**

When connected to the aircraft intercommunication system, access to the main system can be enabled or disabled by the Connect/Monitor/Isolate Switch on the side of the housing. The switch can also be wired from a connector on the housing to a more accessible location or to multiple locations. In Isolation mode, the passenger interphone is isolated from the main system and the host station operates like any other ICS station. With the connection enabled, the passengers connect to the host station and interaction with the main system is controlled by the host station switch settings. An optional Monitor mode allows the passengers to hear aircraft audio without the ability to speak into it.

The A301-138-( ) is available with 4, 6, 8, 10, or 12 points of attachment for personnel headsets, in addition to providing a headset connection for the host ICS station. This system can be expanded by plugging one A301-138-( ) into another, creating an extended local interphone where each unit can be separated into a private group by the Connect/Monitor/Isolate Switch.

Andrea Systems produces the Multi-Point System as a kit including all cables and headsets.



Approved by Telephonics for use with their SDI system.

C46-5468 Rev A

## SPECIFICATIONS\*

### PHYSICAL CHARACTERISTICS

Designed for Overhead Mount

- Size: 17" W x 4.3" H x 8.3" D  
(not including cables)
- Weight: Less than 8.0 lbs.

### ENVIRONMENTAL

- MIL-E-5400 CLASS 1
- Continuous Operating Temp.: -54°C to +55°C
- Intermittent Operating Temp.: +55°C to +71°C
- EMI: MIL-STD-461G
- Lightning: RTCA DO-160F, A2G22

### MATING CONNECTORS

- The Power Cable provides an MS3456W16-11P connector for aircraft power.
- The Audio Interface Cable connects to the aircraft using:
  - MS3476W10-6P for UH-60A/L
  - MS3476W12-10P for UH-60M
  - MS3456W16S-1P for C-130H
  - Request information for other aircraft.
- PTT Headset Cables mate to MS3470W10-6S on the Multi-Point Unit. The M9177/5-2PTT unit on the PTT cable provides a MIL-C-9177 four conductor jack for an 8 ohm headset.



### POWER REQUIREMENTS

- Input Power: 27.5 VDC (22 to 29 VDC)
- No Signal: 7W
- 350mW Headset Output for 13 Headsets: 40W
- Maximum Power (Warning Tones): 55W

### VOLTAGE LEVELS

- 5 ohm Mic Input: 0.1 to 4.0 mVrms
- Headset Output: 1.67 Vrms

### IMPEDANCES

- Microphone Input: 5 ohms
- Headset Output: 8 ohms

### MICROPHONE AMPLIFIER PERFORMANCE

- Distortion: 3% Max. @ 0.6 mVrms In  
5% Max. @ 4.0 mVrms In
- Frequency Response: +1/-2 dB 300 to 6000Hz
- AGC maintains constant output for wide variations in input.

### HEADSET AMPLIFIER PERFORMANCE

- Distortion: 5% Max.
- Frequency Response: +1/-2 dB 300 to 6000Hz

### SIGNAL ISLATION AT 1KHz

- Audio Lines: -60 dB below 50 mW

## The Multi-Point Kit

Each Multi-Point application is assigned an A301-138K-( ) Kit dash number which specifies the equipment required for that particular installation. Typically the kit will include the following:

A301-138-( )	Multi-Point Unit
C73-1020470-( )	Ground Wire
C73-1020500-( )	Power Cable
C73-1020510-( )	Audio Interface Cable
C73-1020520-( )	Headset PTT Cables
C73-1020535-( )	Remote Con/Iso/Mon Cable
ASL-H10-76	8 ohm Headsets

Dash numbers for each of the above define configurable features such as cable length.

\*Specifications subject to change without notice.

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