



General

The Audio Control Unit is designed to combine audio signals from four input sources into a single mixed audio output signal. The audio output and all four audio inputs are coupled to the ACU-101's internal circuitry through 600 Ω balanced transformers. Each of the four inputs have independent level controls located on the front panel. These controls allow volume adjustment of any particular input from OFF to a comfortable listening level. The ACU-101 has a gray, back lit front panel and is housed in a chassis that will fit in a standard Dzus slot. A 25-pin "D" connector is provided for the audio output and all four audio inputs. A D38999 series III connector is provided for connection to the power source. The power switch, located on the front panel, is a locking toggle switch. The locking toggle switch is provided to reduce the possibility of inadvertently turning the ACU power ON or OFF. A green power indicator is illuminated when the power switch is in the ON position.

Input

- Inputs: Four, transformer coupled 600 Ω balanced. J2, 25 pin "D" connector.
- Volume controls: Four located on the front panel, one control for each input.

Output

- Output: One, transformer coupled 600 Ω balanced. J2, 25 pin "D" connector.

Mechanical

- Weight: 1.5 lb. Max.
- Size: Depth 7.200" Max, Width 5.750" Max, Height 1.500" Max.
- Mounting: 2 each Dzus fasteners.
- Power Consumption: Nominal 2.25 watts, 3.5 watts Max. Not including illuminated panel.
- Power Switch: Locking Toggle Switch.

Primary Power

- Primary Power: 28 ± 6 VDC, isolated from signal ground and chassis ground, J1 M38999 Series III connector.

System

- Frequency Response: Flat, ±2 dB from 85 Hz to 20 kHz.
- Gain: Adjustable from –60 dB to +6 dB.
- Front Panel: Gray, back lit with power switch and green power indicator.

Environmental

- Operating Temperature Range
- Full Performance: 0 °C to +55 °C
- Degraded Performance: -25°C to -1 °C
- Non-Operating Temperature: -40 °C to +71 °C
- Shock: 10 g's for 11mS.
- Vibration: Double amplitude, sinusoidal excitation of 0.1 inches from 5 Hz to 20 Hz, and ±2 g's between 20 Hz and 500 Hz.
- Cooling: Conduction, through chassis.

Connectors

- J1: D38999/20-W-A-98-P-N

Pin A 28 VDC

Pin B 28 VDC RTN

Pin C Chassis

- J2: M24308/4-3, 25 Pin "D"

Pin 1 Channel 1 + Input

Pin 2 Channel 1 – Input

Pin 3 Channel 1 Center Tap

Pin 4 Channel 2 + Input

Pin 5 Channel 2 – Input

Pin 6 Channel 2 Center Tap

Pin 7 Channel 3 + Input

Pin 8 Channel 3 – Input

Pin 9 Channel 3 Center Tap

Pin 10 Channel 4 + Input

Pin 11 Channel 4 – Input

Pin 12 Channel 4 Center Tap

Pin 13 + Output

Pin 14 – Output

Pin 15 Output Center Tap

Pin 16 No Connection

Pin 17 No Connection

Pin 18 No Connection

Pin 19 No Connection

Pin 20 Signal Ground

Pin 21 Signal Ground

Pin 22 Signal Ground

Pin 23 Chassis

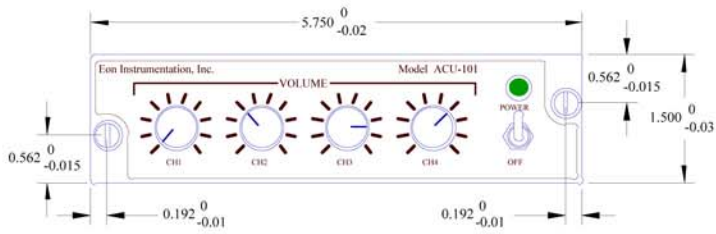
Pin 24 Back lighting

Pin 25 Back lighting return / Chassis.

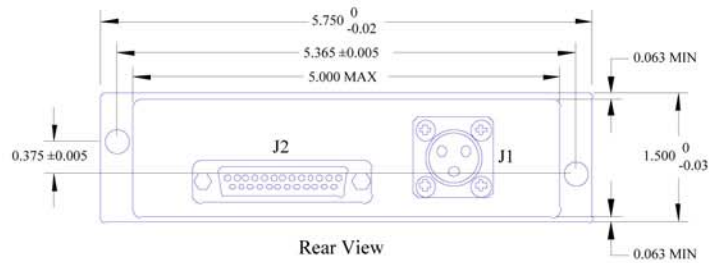
Audio Control Unit Model ACU-101

Outline & Mounting

Front View



Rear View



Top View

