



P178

Fail-Safe Audio Mixer

A versatile and flexible summing amplifier for airborne audio systems.

Highlights

- **Ensures** that no fault in the system or power failure can prevent pass through of essential warnings or tones
- **Removes** the need for external relays, ensuring that essential tones are passed to unswitched inputs on any audio system
- **Includes** internal fault detection. Upon any fault, the relays go to their normally closed (fail-safe) position.

8-input mixer providing 3 composite outputs

Channel 1 and 2 outputs are fail-safe relay protected



Channels 3 through 8 are for non-essential tones

P178 Features

The P178 Fail-Safe Audio Mixer is an 8-input mixer providing 3 composite outputs. Channel 1 and Channel 2 outputs are failsafe relay protected for master caution or essential tones to ensure that no fault in the system or power failure can prevent pass through of essential warnings or tones. Input channels 3 through 8 are for non-essential tones and will drop offline in case of fault or power failure.

The P178 also removes the need for external relays, ensuring that essential tones are passed to unswitched inputs on any audio system. The unit also has internal fault detection. Upon any fault, the relays go to their normally closed (Failsafe) position. The Fail-Safe Audio Mixer also has a pull low line on fault if an external indicator is desired.

- 8-input mixer providing 3 composite outputs
- Channel 1 and Channel 2 outputs are fail-safe relays protected for master caution or essential tones
- Channels 3 through 8 are for non-essential tones and will drop offline in case of fault or power failure
- Removes the need for external relays

Specifications

STANDARD SPECIFICATIONS

Number of Inputs	8 each balanced @ 600 Ohm Impedance
Number of Outputs	3 each Composite @ 600 Ohm transformer coupled. Two are relay protected channels
Input Gain Adjustment	-17dB to +10dB
Output Gain Adjustment	-6dB to +6 dB
Output Signal	150 mW into 600 Ohms nominal
Output Current Limit	20 mA
Voltage (Start)	20 VDC
Voltage (Hold)	12 VDC
Voltage (Max)	32 VDC
Power	250 mA
Temperature	-40 to 90C
Finish	Gold Iridite per MIL-C-5541 Class 1A

P178 MECHANICAL SPECS

Height	1.05" [26.67 mm]
Width	3.04" [77.22 mm] less protrusion of connector
Length	5.75" [146.05 mm]
Weight	0.50 lb [0.23 kg]

Certification

CERTIFICATION	AIRFRAME(S)
FAA/ PMA STC SR02445SE	AS350B, BA, B1, B2, C, D, D1. AS355E, F, F1, F2, N, NP. EC130B4, T2. EC-135P1, P2, P2+, T1, T2, T2+. Bell 206A, A-1, B, L, L-1, L-3, L-4. Bell 407.
FAA/ PMA STC SR02444SE	MBB-117 (EC145) A-1, A-3, A-4, B-1, B-2, C-1, C-2, D-2. Bell 212, 412, 412EP, 412CF, 204B, 205A-1, B, 214B, B-1, 214ST.
Canada STC SH-09-17	AS350B, BA, B1, B2, C, D, D1. AS355E, F, F1, F2, N. EC-135P1, P2, P2+, T1, T2, T2+. Bell 206A, A-1, B, L, L-1, L-3, L-4. Bell 407.
Canada STC SH-14-33	MBB-117 (EC145) A-1, A-3, A-4, B-1, B-2, C-1, C-2. Bell 212, 412, 412EP, 412CF, 204B, 205A-1, B, 214B, B-1, 214ST.
EASA STC 10036806	AS350B, BA, B1, B2, B3, C, D, D1. AS355E, F, F1, F2. Bell 407.
Brazil CHST 2007S06-30	AS350B, BA, B1, B2, C, D, D1. AS355E, F, F1, F2. EC130B4, T2. EC-135P1, P2, P2+, T1, T2, T2+. BO-105A, C, LS A-1, LS A-3, S. Bell 206A, A-1, B, L, L-1, L-3, L-4. Bell 407. MBB-117 (EC145) A-1, A-3, A-4, B-1, B-2, C-1, C-2, D-2. Bell 212, 412, 412EP, 412CF, 204B, 205A-1, B, 214B, B-1, 214ST.

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