

PROVEN

Quality, Dependability and Reliability

Avtech CVR Audio Mixers are designed to comply with FAA regulations mandating cockpit voice recorders for all multi-engine, turbine-powered aircraft that require two crew members and seat six or more passengers. Unless audio panels are replaced or modified, Avtech CVR Audio Mixers are needed to sum and route audio signals from microphones, headphones and speakers to the cockpit voice recorder. Proven Avtech audio technology provides "hot mic" biasing, adjustable channels for balancing audio levels, and paired pins to make installations easy and economical. Both single- and dual-station units are available. And, of course, these systems are qualified to TSO C50c requirements.



CVR AUDIO MIXER

As CVRs are added to additional classifications of the world's aircraft, Avtech CVR Audio Mixers will help ensure that systems comply with FAA Airworthiness Standards.

- Designed to eliminate the need for costly audio system modification or replacement
- Single and dual channels available
- Paired pins on the input/output connector allow for parallel connections to audio system eliminating the need for external splicing
- Certified to FAA TSO C50c requirement and tested per DO-160B categories (C2,B, MN, X,X,X,X,F,X,X,A,A,A,A)

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Why a CVR Audio Mixer?

Some audio systems aboard aircraft covered by the FAA regulations are not CVR compatible, which means two things: 1) they do not sum audio signals from critical sources such as microphones and headphones, and 2) they do not provide continuous biasing which is needed for "hot mic" operation. As described in FAA Airworthiness Standards, FAR Parts 23, 24, 27, 29, 91, 121, 125, and 135 for cockpit voice recorders, each boom, mask, or handheld microphone used at cockpit-crew stations must be continuously "hot," whether keyed or not. In many cases, installation of the CVR will not resolve this requirement without modification or replacement of the audio panels.

Avtech CVR Audio Mixers provide an easy, cost-effective means to accomplish these requirements external to the audio system, by summing parallel signals from audio sources and supplying them as one output to the CVR.

Avtech CVR Audio Mixers are designed to make an installation easier. Paired pins at the input/output connector allow parallel pickups of audio signals at the Audio Mixer for improved noise rejection.

Also, by using the Model 5020-1-1 Dual Mixer, one mixer can handle two stations, requiring just one installation for the pilot and co-pilot positions. This dual mixer still allows signals from each crew position to be individually adjusted to provide proper signal levels to the corresponding channels within the CVR. Circuit redundancy (pilot-to-copilot) is 100% in the 5020-1-1.

SPECIFICATIONS

Input	Nominal Range (VRMS)	Impedance
Part Number	5020-1 (Single Channel) 5020-1-1 (Dual Channel)	N/A
Hand Mic	0.250	150 ohm
Mask Mic	0.250	150 ohm
Boom Mic	0.250	150 ohm
Aux	3.0	20K ohm
Headphones	3.0	20K ohm
Cockpit Speaker	4.5	30K ohm
Cabin Speaker	4.5	20K ohm

