

## CVR AUDIO MIXER



AvtechTyee 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, AvtechTyee CVR Audio Mixers are needed to sum and route audio signals from microphones, headphones and speakers to the cockpit voice recorder. Proven AvtechTyee 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)

Since 1969 AvtechTyee has been a leader in the design, development, and manufacture of electronic systems for the aerospace industry, with a focus in three product groups: Audio, Avionics and Structures.

AvtechTyee products are flying onboard 42 aircraft types within the air transport, regional commuter, and business jet sectors, serving 450 customers in 49 countries of the world.

Our versatility in supporting aerospace electronics requirements ranges from the custom design and manufacturing of complex power supplies to complete Digital Audio Systems.

AvtechTyee is certified to ISO9001, AS9100 and the FAA's ACSEP. Product Support includes in-house repair services (FAA approved Repair Station #IG6R621N), loaner/exchange programs, and both in-house and offsite airline training.

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## Why a CVR Audio Mixer?

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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.

AvtechTye 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.

AvtechTye 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

<b>Input</b>	<b>Nominal Range (VRMS)</b>	<b>Impedance</b>
<b>Part Number</b>	5020-1 (Single Channel) 5020-1-1 (Dual Channel)	N/A
<b>Hand Mic</b>	0.250	150 ohm
<b>Mask Mic</b>	0.250	150 ohm
<b>Boom Mic</b>	0.250	150 ohm
<b>Aux</b>	3.0	20K ohm
<b>Headphones</b>	3.0	20K ohm
<b>Cockpit Speaker</b>	4.5	30K ohm
<b>Cabin Speaker</b>	4.5	20K ohm
<b>CVR Output</b>	0.5	2K ohm
<b>Power Input</b>	28 VDC @ 200mA	N/A
<b>Mating Connector</b>	DCM-37S	N/A