Specifications

Logitek is proud of the performance attained by the Custom Audio Series. We encourage you to compare our specifications with any others in the broadcast industry. If you would like more details on our measurements, please contact us and we'll gladly answer your questions.

Frequency Response (Any Input)	50-15,000 hz	±0.3 dB
	20-20,000 hz	±0.5 dB
Signal-to-noise ratio (Program and Audition Outputs)	Mike input (ref. -50 dBm input)	72 dB
	Line input (ref. 0 dBm input)	72 dB

Total Harmonic Distortion (% Max.)

output level	fundamental frequency	mike input 4 dBm	22 dBm	line input 4 dBm	22 dBm
	50 hz	.10	.10	.08	.10
	400 hz	.07	.07	.05	.07
	5000 hz	.07	.07	.03	.03
	20000 hz	.10	.10	.04	.04

Crosstalk	Any "off" input at clipping to any output	below noise
Overall Gain	Mike level input	>120 dB
Output Level	100% VU maximum rated	+4 dBm +27 dBm
Output Impedance	program and audition	600 ohms balanced

Input Levels and Impedances (Pushbutton Selectable)

		nor-mal (dBm)	maxi-mum (dBm)	impe-dance (ohms)
	mike input	-60	-30	150
	line inputs:			
	studio	0	+20	600
	telco	-10	+10	150
	hi-z	-10	+10	150K

Remote Control Outputs	+12VDC 500mA output corresponding to each input is switched on when input is selected on module and program and/or audition switch on module is turned on.
Remote Control Inputs	SPST to ground remotely controls program, audition and off pushbuttons on each module
Status Indicators	A bulb may be user-installed in each module's "off" push-button to indicate status of associated equipment.
Speaker Muting and Warning Lights	Three separate mutable output feeds which are DIP-switch programmable for any desired muting configurations. Cue automatically mutes with control room speaker. Separate +12 VDC 500mA warning light outputs follow muting selections.
Headphone Amp (8 ohm load)	Output Level	15 watts/channel
	THD	0.2% typical

Cue Amp (8 ohm load)	Output Level	7 watts/channel
Dimensions	5 Module Consoles	11"Hx19⅛"Wx19½"D
	6-12 Module Consoles	11"Hx44⅛"Wx19½"D
Finish	Black anodized aluminum with varnished oak trim
Warranty	90 days labor, one year parts, as detailed in Logitek Factory Warranty Policy

Standard Configurations and Options

A wide selection of Custom Audio Series consoles is available by combining up to twelve input modules with an assortment of optional features. For convenience, we have listed several standard configurations below. We will be happy to put together other combinations to meet your exact needs. Please contact your Logitek salesman for details.

Stereo and Monaural Consoles

Stereo	Mono	
CAS-5S	CAS-5M	Basic 5-Module 10-Input Console
CAS-6S	CAS-6M	Basic 6-Module 12-Input Console Expandable to 24 Inputs
CAS-8S	CAS-8M	Basic 8-Module 16-Input Console Expandable to 24 Inputs
CAS-12S	CAS-12M	Basic 12-Module 24-Input Console

Basic Mixing Modules and Additional Features

BASIC MODULE includes —
- two selectable line inputs,
- single slider with cue,
- pushbutton line termination,
- electronic switching,
- mono/stereo switch on stereo units.

ADDITIONAL MODULE FEATURES —
- mike/line selector with mike preamp,
- individual left and right channel faders,
- two-band equalization,
- three-band equalization with EQ IN switch,
- sub-master feed control.

Optional Built-in Accessories

HEADPHONE AMPLIFIER—15 watt/channel low-distortion amplifier

DISTRIBUTION AMPLIFIER—Feeds six isolated balanced stereo or mono outputs. Fed from program channel.

PRESELECTOR MODULE—Feeds eight additional stereo or mono inputs to either of two mixing modules. Stereo preselector modules include phase reverse pushbutton for setting up remotes. Replaces one mixing module position.

STEREO CUE SYSTEM—7 watt/channel amplifier with speakers. Replaces standard monaural cue system

REVERB—Solid-state, variable-delay, bucket-brigade reverb system, fed from sub-master controls on modules or directly off program and audition busses

CLOCK AND TIMER—Digital 12/24-hour real-time clock and separate one-hour up-timer with programmable auto-reset

L+R/L-R VU METER—Additional meter on stereo consoles to display L+R levels. Automatically switches to display L-R level when Monitor Mono pushbutton is depressed

INTERCOM—Bi-directional amplifier and three-station switching circuitry

As part of our ongoing commitment to product improvement, Logitek routinely introduces design refinements and improved materials and production methods into existing products. Since it would be impractical to publicize every change in every product, we reserve the right to make such changes without notice or obligation.

The Custom Audio Series

Logitek Electronic Systems, Inc.

3320 BERING DRIVE □ HOUSTON, TEXAS 77057 □ TOLL FREE 800-231-5870 (IN TEXAS CALL 713-782-4592 COLLECT.)

The Custom Audio Series

Technical Excellence

Logitek uses the latest proven techniques in electronic circuitry and interconnection methods to insure that each Custom Audio Series console will achieve superior levels of performance, quality and serviceability when installed, and will continue to operate reliably for years to come.

The Finest Solid-State Design

Custom Audio Series consoles use reliable techniques in solid-state design to achieve high performance without sacrificing simplicity.

Our transistorized switching circuitry is arranged in a series-shunt configuration, completely avoiding the distortion produced by series-only FET circuits, and the pops and delays caused by relay switching. CMOS logic eliminates RF sensitivity and reduces current drain. High slew-rate op-amps throughout the unit reduce THD and IM distortion to a minimum. Logitek's proprietary cable shielding process provides excellent RF and crosstalk protection for internal wiring.

Reliable, Easily Replaceable Parts

Premium parts are specified throughout each Custom Audio Series console, from gold-plated connectors to precision machined IC sockets. All circuit cards are constructed from mil-spec copper-clad fiberglass to maximize long-term reliability and simplify field repair.

Our conductive plastic slide faders have the smooth feel broadcasters look for, yet are rugged enough to withstand significant abuse. All other pots used in our

consoles are plastic, cermet, or hot-molded carbon types, rather than wirewound, and are sealed to prevent contamination.

All components used in Logitek consoles are readily available through distributors and manufacturers, as well as the Logitek factory. A complete parts list showing manufacturers and manufacturers' part numbers is included with each console. We use *no* private labeled components. Moreover, since all of our circuitry is designed around a small number of standard integrated circuits, a full supply of replacements can be stocked at minimal cost.

Simple Maintenance

The entirely modular design of the Custom Audio Series allows each section to be individually analyzed and serviced. Buffer amplifiers isolate all mixing points to prevent a malfunction in one circuit from affecting other circuits.

The face-plate of each mixing module can be removed without disconnecting the module's circuitry from the mainframe, allowing troubleshooting without the use of extender cables or testing frames. All other circuitry is located in a card cage, easily accessible through the top of the console. Program and audition circuits are identical and totally interchangeable.

A thorough maintenance manual accompanies each Custom Audio Series console. It includes complete installation instructions, full-sized schematic diagrams and detailed circuit descriptions.
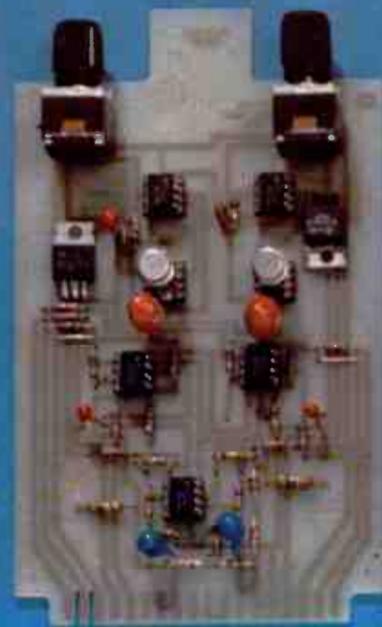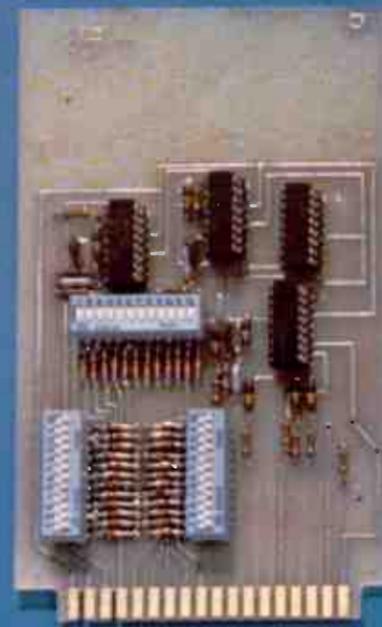
Logitek circuit cards are built from mil-spec fiberglass using the finest solid-state components. Muting card (left) features switch programmable muting selection. Final amp card (center) includes master gain controls. 15-volt supply card (right) has oversized heat-sink for superb reliability.
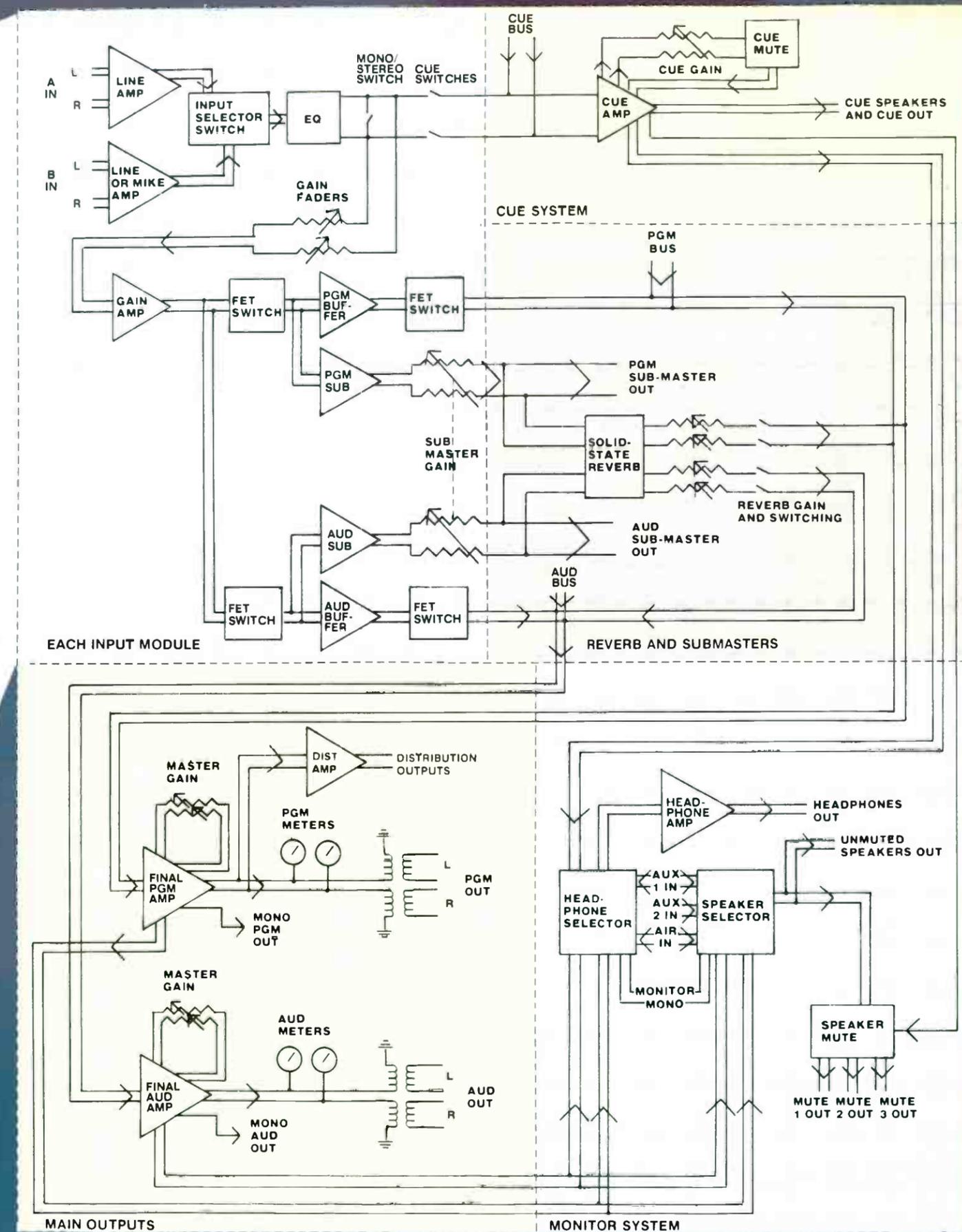
Custom Audio Series Block Diagram

Mixing Module Features and Options

Input and Line Termination Selector

Pushbutton selects from either two line-level inputs or between mike and line inputs. Mike line units include built-in low-noise mike preamp. Interlocking pushbuttons select one of three line-level impedance gain configurations.

Stereo/Mono Selector

Pushbuttons allow mono source to be fed to both left and right channels on stereo units.

Optional Equalization Controls

Two-band or three-band equalization, with indicating EQ IN switch on three-band units.

Optional Sub-master Feed

Adjustable feed to full stereo program and audition sub-master busses. Also serves as feed to optional built-in reverb system.

### One-step Audition/Program Controls

Silent, long-life Hall-effect pushbuttons to control audio feeds to program and audition busses. Single operation turns on audio feed, delegates audio to program and/or audition bus, turns on remote equipment, mutes speakers and resets timer. Remote control operation follows position of input selector pushbutton. Switches light to indicate status of module and remote devices.

Choice of Single or Dual Precision Slide Faders

High-reliability conductive plastic faders. Stereo models offer choice of single stereo fader or individual left and right channel faders for panning and special effects.

Cue Detent

Cue position on each fader for feed to mono or optional stereo cue amplifier.
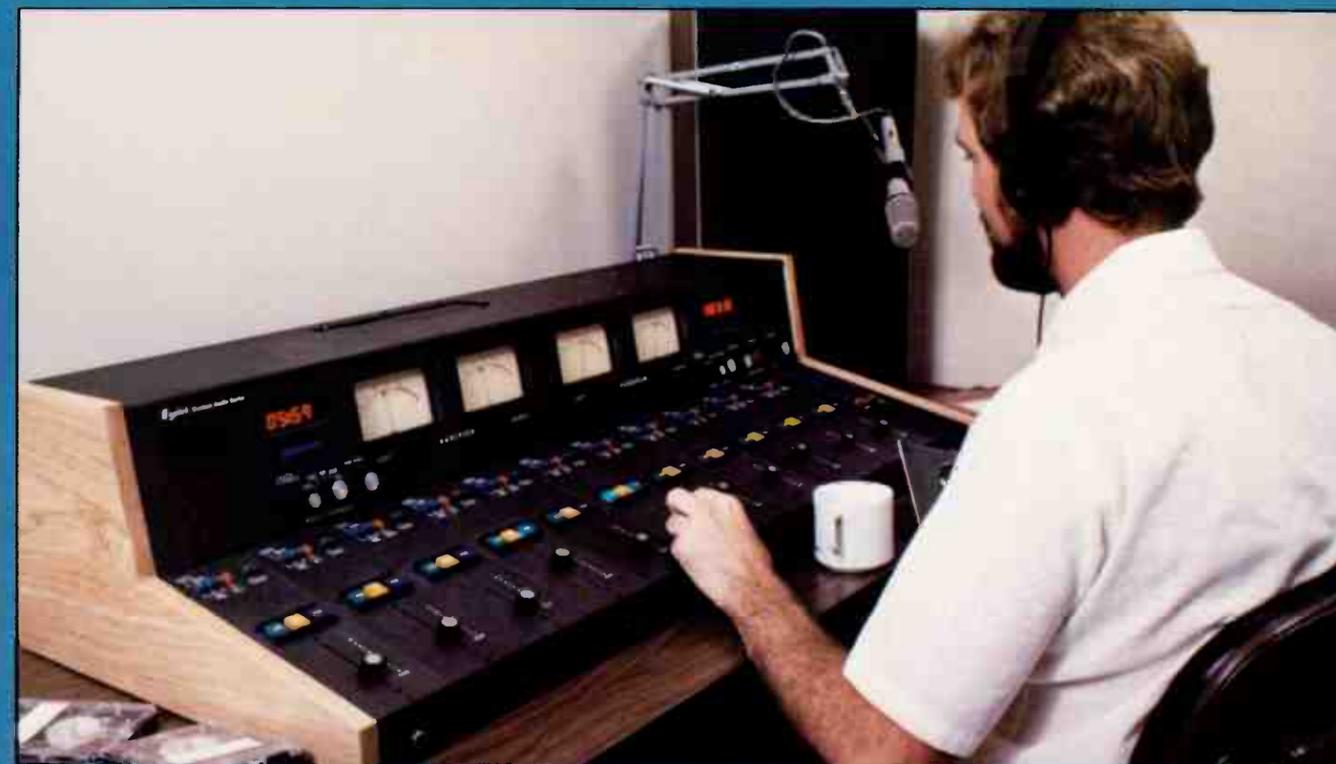
Operational Simplicity

Custom Audio Series consoles are extremely simple to operate, even with the full complement of options. All controls are easy to adjust and all labels are clear and concise. Two front-panel headphone jacks allow convenient monitoring in any studio arrangement, especially when the console includes our optional 15 watt-per-channel built-in headphone amp. Large, accurate program and audition meters simplify mixing and gain-riding. Positive action pushbuttons operate silent, solid-state switching circuits for maximum control without pops or key-clicks.
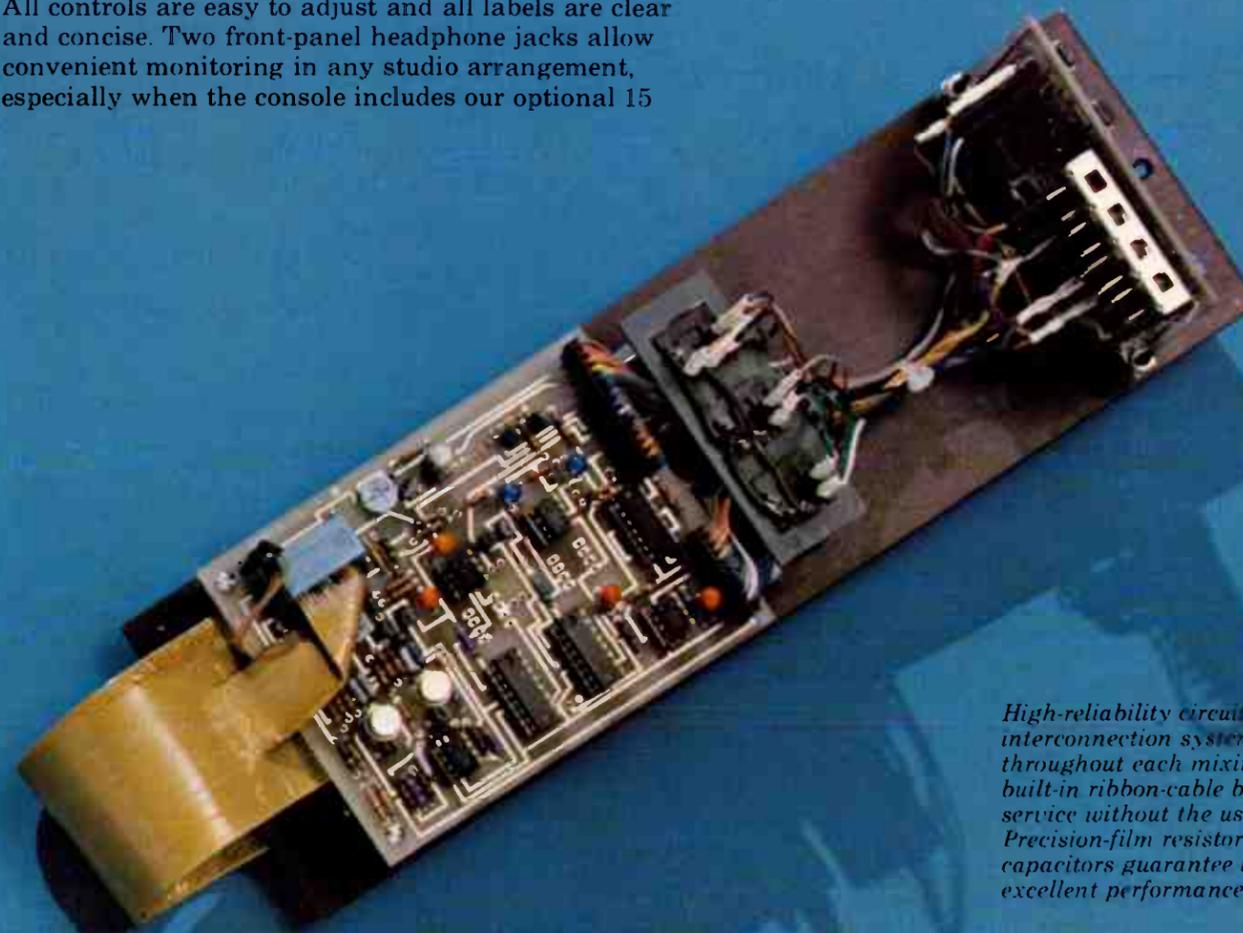
High-reliability circuitry and innovative interconnection systems are used throughout each mixing module. The built-in ribbon-cable bus allows on-line service without the use of extenders. Precision-film resistors and tantalum capacitors guarantee long life and excellent performance.

Broadcaster - Engineered Features

Inside. . .

Logitek Custom Audio Series consoles are unique in their use of innovative circuitry to solve many of the problems found in other units. Internal switches have been designed-in for easy selection of operating options, while all trimmers have been designed-out except where desirable for channel matching.

Rocker-switch Muting Selection

Each of three independent muting circuits can be controlled by any combination of mike mixing modules. Muting assignments are programmed on dip rocker switches, which can be changed in just seconds to fit any application. Low-level FET muting circuits assure reliability.

Interchangeable Program and Audition Circuits

Program and audition circuits are completely identical, providing 100% redundancy in amplifier stages. In case of failure, the program and audition amplifier cards can be interchanged in less than a minute, assuring virtually continuous service.

Unique Built-in Distribution Amp

A complete 6-output stereo distribution amp can be built-in to each Custom Audio Series console (excluding CAS-5 models,) guaranteeing superb isolation between the air chain and other equipment. Designed on one plug-in card, this distribution amp has the same excellent performance as our ADA-8 rack-mounted unit.

Model CAS-5S

An Open-and-Shut Case

Each Custom Audio Series console is designed to be serviced by normal humans, not contortionists. Fold-apart construction allows easy access to all parts of the console. Our unique hinged wiring frame makes installation quick and easy, then hides back inside the console, out-of-sight and out-of-reach. Wire-capturing terminal blocks make crimping, soldering and punching obsolete.

Each console is totally self-contained in a single desk-top chassis. There are no holes to be cut in your studio furniture, and no external boxes to take up valuable rack space.

And Out. . .

Sensible, operator-tested panel layout allows Logitek to maximize operating capability while eliminating operator confusion. Rather than entering the "who-has-the-most-knobs" contest, we take care to limit our external controls to only those needed for normal operation.

Single-pushbutton Operation

One touch does it all: turns on the audio, assigns the signal to the program and/or audition busses, starts remote devices, and, if desired, mutes speakers and resets the console's timer. The simplest board to run, anywhere!

Built-in Status Indicators and Remote Audio Switching

Each "OFF" pushbutton doubles as a status light for remote devices. Use the status lights for visible end-of-cart warnings, or sequence through a stack of carts using the console's remote audio controls to automatically turn mixing modules and cart machines on and off as you go.

Automatic Monitor Quieting When Cuing

Logitek's unique quieting circuit lowers the level of the in-room speakers whenever a mixing module is placed in "CUE," eliminating the need to turn down the monitor volume everytime a record is cued. This simple feature saves operator effort as well as reducing wear on the volume pot!