

12000 series analog consoles

FULL LINE CATALOG

- **Modular, 18 input channel mainframe**
- **12 & 18 input channel models**
- **Powerful telephone interface**
- **VCA's, so your audio stays clean**



12K18-12
displayed with (2) optional
TRS1 selector modules

The 12000 series console line is one of the most powerful analog radio consoles ever built with hundreds on the air around the world. Flexible, reliable, and high performance, the 12000 is ideal for all on air, production, news, and other radio broadcast applications.

One of the most Popular consoles ever...

... with the features & performance YOU ask for !

MODULAR MAINFRAME

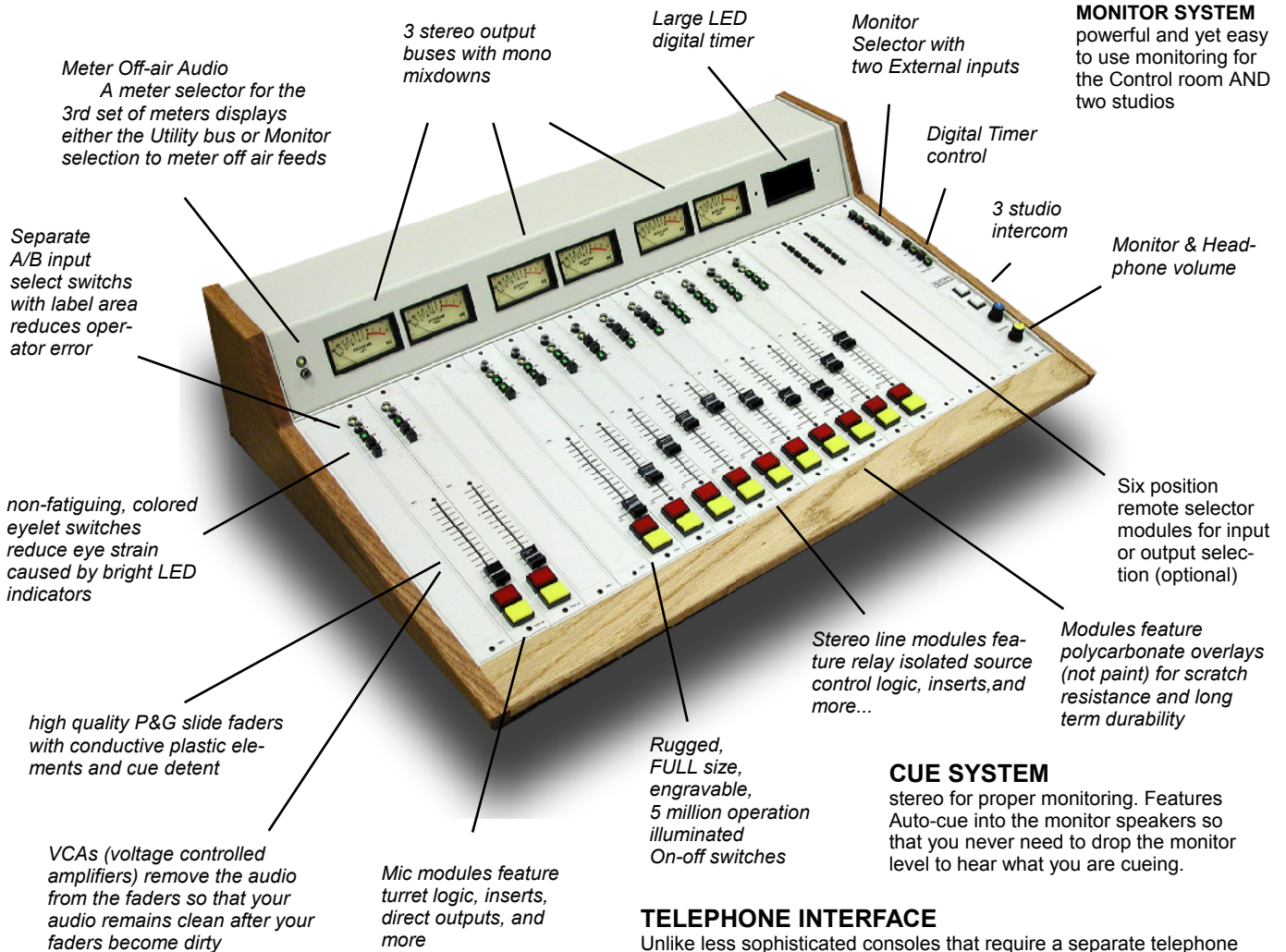
18 input position model shown. Available in 8, 18, & 28 module sizes. Universal design allows any module in any position. Fully shielded with metal side panels. All electronics is on modules for ease of repair. I/O connectors are under VU meter panel for ease of access while in use (no connectors under modules).

COLORS & DESIGNS

The console is available in standard Arrakis platinum or in optional Arrakis beige, as well as in the standard tabletop configuration or low profile through-table option.

MONITOR SYSTEM

powerful and yet easy to use monitoring for the Control room AND two studios



MODULES

A wide variety of modules are available for this mainframe. A six input remote selector module, distribution amplifier module, machine control module, mic input modules, stereo line input modules, advanced input modules with panning and mode select.

CUE SYSTEM

stereo for proper monitoring. Features Auto-cue into the monitor speakers so that you never need to drop the monitor level to hear what you are cueing.

TELEPHONE INTERFACE

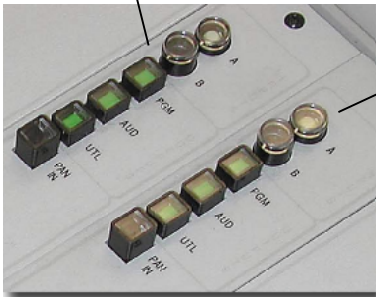
Unlike less sophisticated consoles that require a separate telephone section of the console with one more thing for your on air talent to learn, this console has the telephone system built in. Just flip an internal switch on the channel connected to your phone hybrid and then use the console as normal. Listen to the caller by placing him into cue. Use the Program bus for on air, and use the Audition bus for off-line work. What could be easier?

Console Module Features

It is the little DETAILS that are important ...

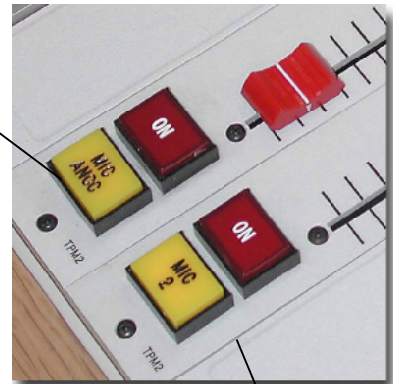
Things like FULL size switches where you can read the engraved caps, polycarbonate overlays so that you can't scratch off the labeling, VCA's so that the fader can get dirty but your audio stays clean, and source control logic for BOTH the A & B inputs are the little things that make an average console into a great one.

Non-fatiguing, colored eyelet switches reduce eye strain caused by bright LED indicators



Separate A/B input select switches with label area reduces operator error

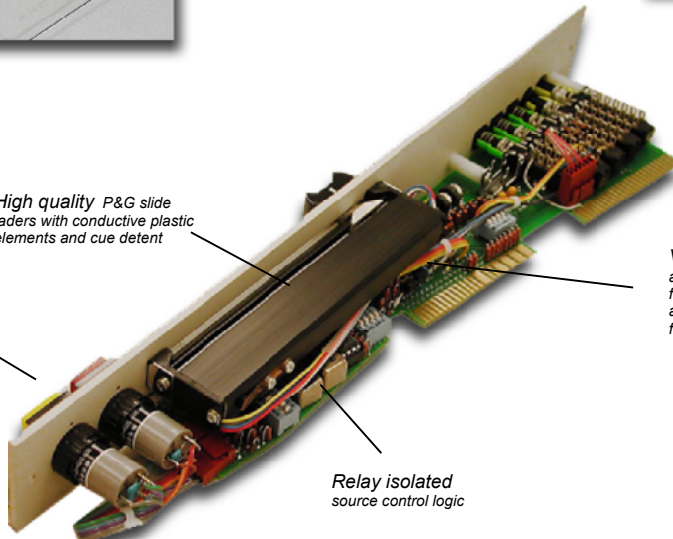
FULL size, easy to read, large engraving, On-off switches



Polycarbonate overlays (not paint) for scratch resistance and long term durability

High quality P&G slide faders with conductive plastic elements and cue detent

Rugged, 5 million operation illuminated On-off switches

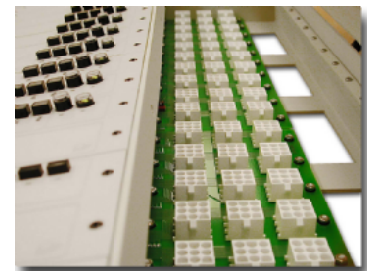
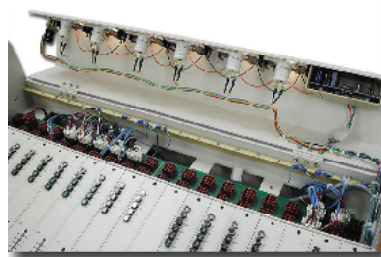


VCAs (voltage controlled amplifiers) remove the audio from the faders so that your audio remains clean after your faders become dirty

Relay isolated source control logic

Things like high quality slide faders, high reliability rotary faders, socketed ICs, and relay isolated logic guarantees many years of rugged professional use.

A true modular design with full size, strain relieved connectors means the console will install quickly and be easily maintained.



Easy to Install
connectorized for fast and easy installation

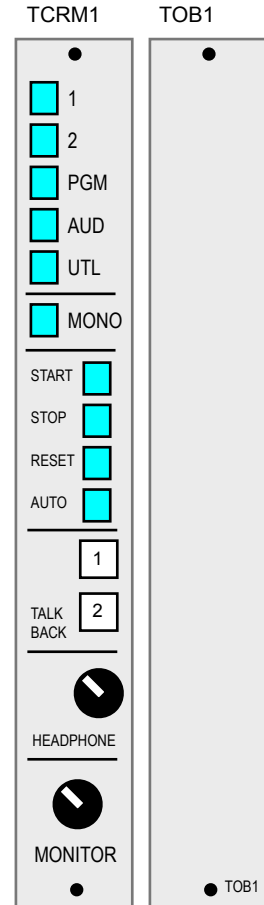
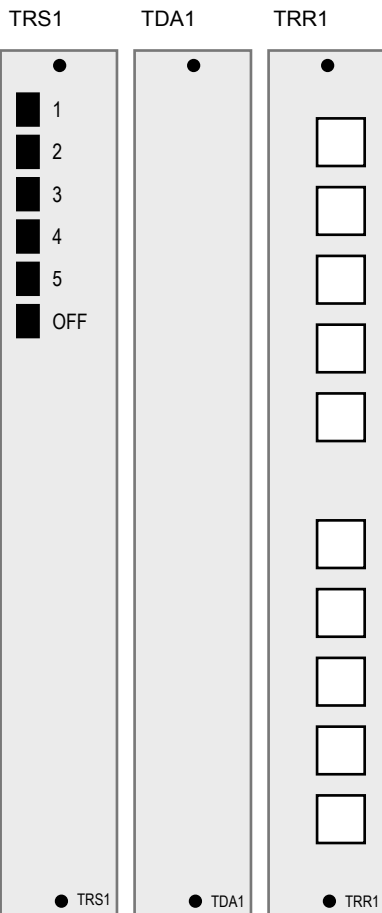
Just hinge back the Meter Panel
easy access to I/O connectors

Console Output & Option Modules

OUTPUT MODULES

* TCRM1 (control room monitor module) features monitor selector with 2 external inputs and mono monitor button for phase check. The timer controller selects between auto and manual operation. In auto mode, the input modules can be DIP switch set to zero, reset, and start the up timer. The module has muted and unmuted studio monitor outputs with talkback to support 2 studios and the control room. The headphone pot controls level and follows the monitor select switch. The monitor and headphones feature autocue. When any input channel is placed into cue, the monitor input dims and the cue (or talkback) plays over top of the main monitor. Autocue can be internally defeated and a standard mono cue feed to an external cue amp and speaker may be used.

* TOB1 (output module)
This module contains all bus summing amps and output drivers for the 3 stereo buses and mix minus buses. A mono mix of Program and Audition is also provided with balanced output. The VU driver buffers and trimmers are also located on this module and accessed by removing the module front panel.



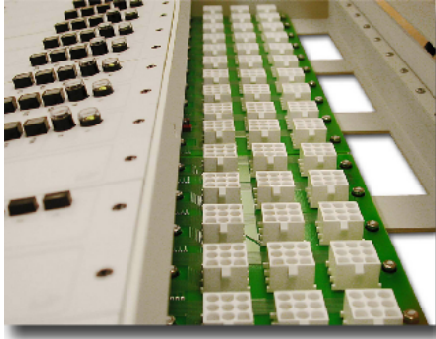
OPTION MODULES

* TRS1 (5 position remote selector switch) interlocked, 6 position, 4PDT switch for input or output selection. 5 selectable inputs with the 6th position off.

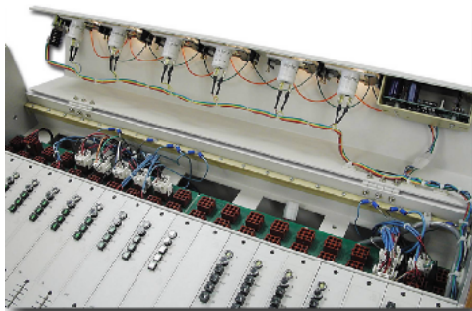
* TDA1 (1 stereo in, 4 stereo out DA) standard 1 in by 4 out stereo distribution amp. The trimmers are located under the front panel.

* TRR1 (TCT1)- (dual 5 button modules) SPST switches with tally lamps. Unwired for customer connection.

The Mainframe



Easy to Install
connectorized for fast and easy installation



Just hinge back the Meter Panel
easy access to I/O connectors

The 18 channel mainframe supports 18 input or option modules plus the Output module and Control room monitor module which come with the mainframe.

The most common 18 channel mainframe configuration is the Model 12K18-12. This configuration features (2) Mic input module, (10) Stereo line level input modules, and (6) Blank modules.

Another common 18 channel mainframe configuration is the Model 12K18-18. This configuration features (2) Mic input module, (16) Stereo line level input modules, and (0) Blank modules.

Versatile Mainframe design

The 12000 console is easy to install and service. The VU meter hinges back to provide fast and convenient access to the console input and output connectors. The entire console is modular with all audio electronics on easy to plug in and remove modules. This simplifies service, allows the console to be easily reconfigured to meet future needs, and can even provide room for future expansion. The console is a universal bus design so that any module can be placed in any position in the mainframe.

The 12000 is available in 3 mainframe sizes: 8, 18, and 28 input channels. Each of these consoles actually has 10, 20, and 30 module positions, but the two extra positions are used in each mainframe by the (1) Control Room Monitor module (TCRM1) and (2) Output module (TOB1) which are required for operation.

The standard mainframe is a tabletop design and available in beige color. Most customers choose the table top model to simplify installation and studio furniture design and the beige color because it matches wood trims. Upon request, a platinum color can be substituted for the beige color and/or a thru table mounted trim substituted for the tabletop mount.

I-O CONNECTORS-

The console uses AMP ML series crimp connectors. These connectors are a major upgrade in ease of use and reliability compared to other connectors common in the industry.

VU METERS-

The 8 channel mainframe has a single set of VU meters. These meters follow the monitor select switch for versatility.

The 18 channel mainframe has 3 sets of VU meters.

The 28 channel mainframe has 3 sets of VU meters plus a Mono meter of Program.

The 3rd set of meters on the 18 and 28 channel mainframe follow the monitor select switch as on the 8 channel mainframe.

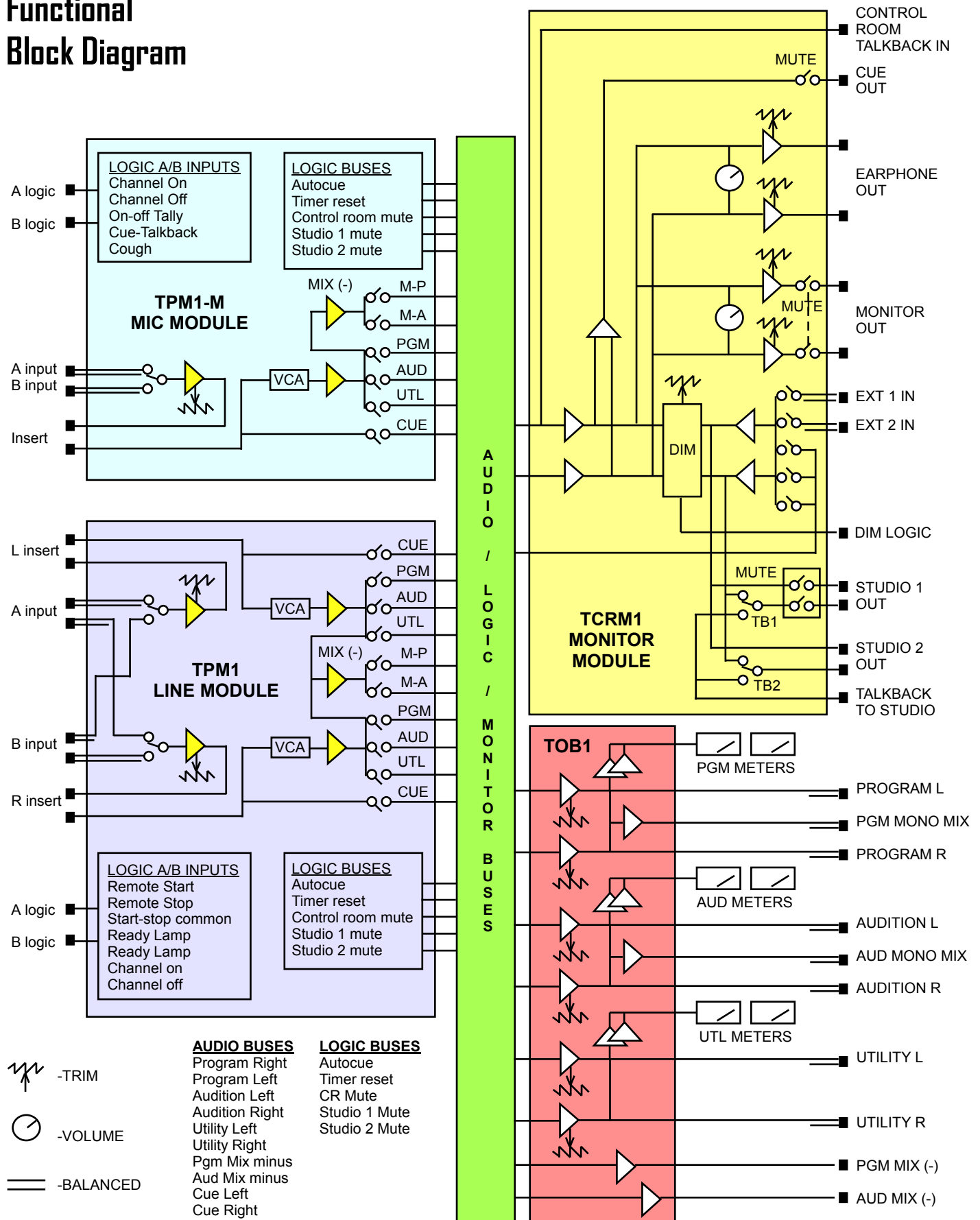
CONSOLE TIMER-

All three mainframe feature a 60 minute up timer. The timer can be controlled manually or automatically by the channel On switches on the input modules.

POWER SUPPLY-

The power supply is a pedestal mount supply. The supply features current limiting, foldback, and thermal protection for the ultimate in reliability. Jumpers may be changed on the supply to change operating AC voltage from as low as 90VAC to 240 VAC.

Functional Block Diagram



Product Specifications

Electronic Spec's

Stereo Line Input-
 Freq Response- +(-).5dB 20-20kHz
 S/N- -82dB typ, +8dBu in, +8 dBu out
 THD- .02% typ, +8dBu in, +8 dBu out
 CMRR- -75dB typ 1kHz
 Max Input- +23dBu, balanced

Mono Mic Input-
 Freq Response- +(-).5dB 20-20kHz
 EIN- -115dBu typ, -50dBu in, +8 dBu out
 THD- .05% typ, -50dBu in, +8 dBu out
 CMRR- -60dB typ 1kHz

Impedances
 Mic Input- > 2000 ohms
 Line Input- > 10000 ohms
 Outputs- < 100 ohms

System
 Max Output- +23dBu balanced
 Stereo Separation- -75dB typ 1KHz
 Pgm to Aud XTalk- -80dB typ 1KHz
 -70dB typ 20kHz
 Cue to Pgm XTalk- -90dB typ 1KHz
 -75dB typ 20kHz
 A to B input XTalk- -110dB typ 1KHz
 -90dB typ 20kHz

POWER SUPPLY

110vac - 220 VAC, 50-60 hz, jumper selectable, external supply

Functional Specifications

MAINFRAMES

Sizes - 8, 18, and 28 input channels.
 Mount - tabletop design (standard) low profile thru table (optional)
 Color - beige or platinum
 Connectors - AMP ML series crimp style
 VU Meters - 8 ch- 1 set, follows mon select sw
 18 ch- 3 sets
 28 ch- 3 sets plus mono meter of pgm bus
 Timer - all mainframes, manual & auto control

INPUT MODULES

TPM1 - stereo line level input module a/b input selector,
 Pgm - aud-utl output assignments
 Cue - by detent
 Logic - start/stop/ready/ch on-off
 TPM1-M - mono mic level input module a/b input selector,
 Pgm - aud-utl output assignments
 Logic - ch on-off/tally/talk/cough
 TPM2 - TPM1-M features plus pan control
 TMP3 - TOM1 features plus mode select

OUTPUT MODULE (TOB1)

Output buses - pgm, aud, utl, mix (-) 1, mic (-) 2 active balanced
 Mono mixdown - pgm & aud, active balanced
 VU Meter drivers - adjustable 0-8dBm out

CONTROL ROOM MONITOR MODULE (TCRM1)

CR Monitor Output- stereo, unbalanced
 CR Monitor Selector - (2) external inputs, pgm, aud, utl, & mono
 Stu Monitor Output - stereo, unbal, follows CR monitor selector
 Headpone System - stereo, hi z, follows monitor input selector.
 Cue System - stereo auto-cue into monitor system (defeatable),
 mono unbal output for external speaker

Physical Specifications

Dimensions -	Depth - 23 5/8",	
	Height - 7 3/8"	
	Width	
	TMF-8A	width - 17 1/4"
	TMF-18A	width - 32 5/8"
	TMF-28A	width - 48 1/8"