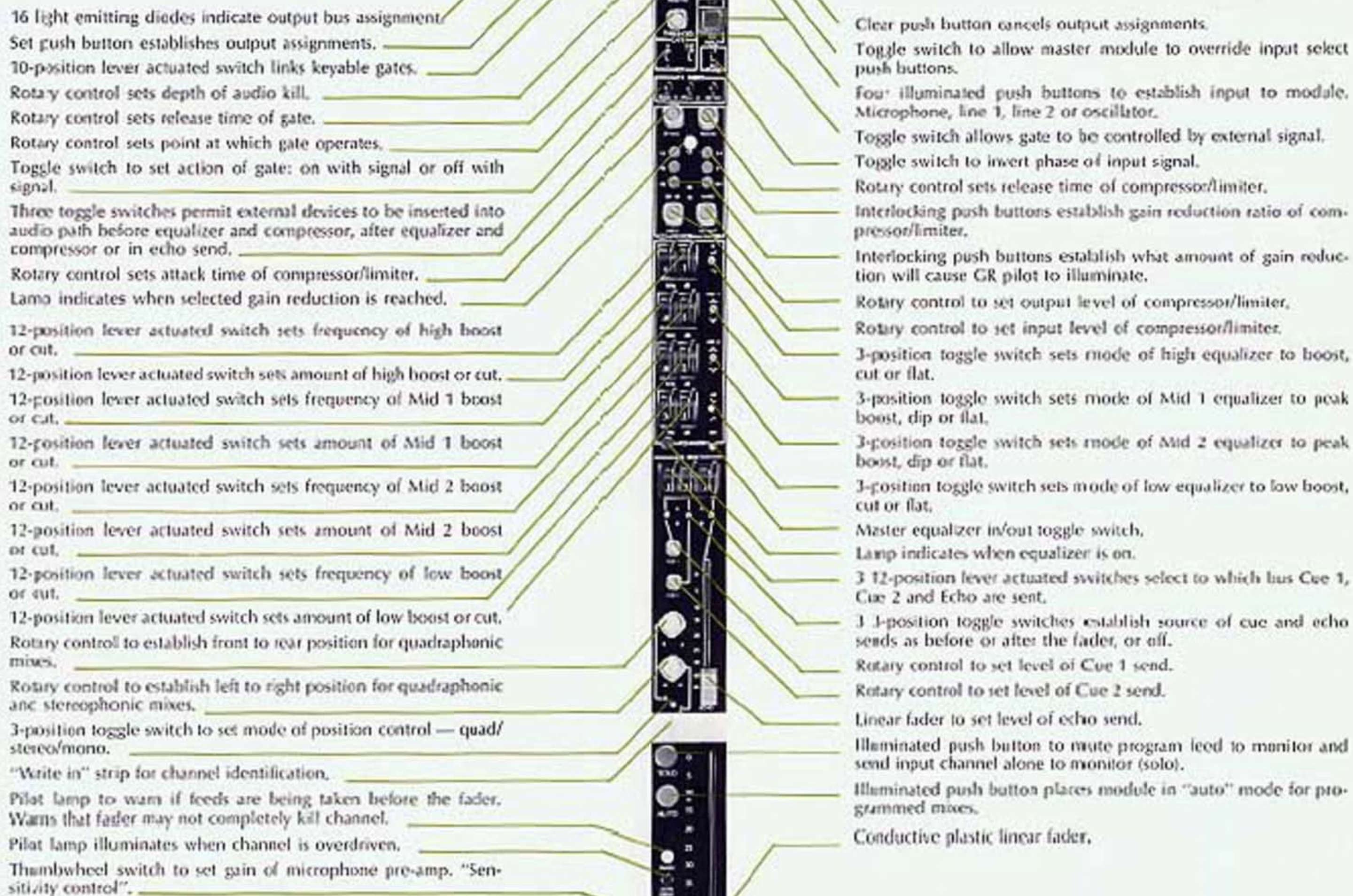


2010 Input Module



2010 Input Module

Module 2010 in the Series is our input strip... a highly sophisticated, very impressive module.

It has a four-section equalizer which allows — simultaneously at four different parts of the audio spectrum — up to 12 dB boost or cut. A three-position toggle switch determines shelf boost, flat or cut at high and low sections; and peak boost, flat or dip in the two mid-range sections.

Multi-position lever actuated switches in each section determine the degree of equalization (0-12 dB) and select one of 12 frequencies. The use of lever actuated switches permits rapid selection and provides efficient visual indication.

Each strip sports a solo monitor push button, permitting single channel override without affecting the program or monitor mixes. Solo monitor bus will also feed a designated VU meter — with or without performing its monitor override function. And a nice little extra is the write-in strip above each fader for source identification.

In keeping with Olive quality, main fader elements are conductive plastic with precious metal wiper fingers, providing the utmost in reliability and life.

For quadrasonic applications, two rotary controls determine static geometric positions; one establishes left to right, the other sets front to back.

A function switch allows one to become a stereo pan control or disconnects both from the circuit.

There are two cue send channels—twice as handy, especially for live extravaganza sessions. A linear-motion echo send fader is provided and ten send busses carry echo and cue. "Effects Insert" switches are provided to route external devices (such as a graphic equalizer or tape delay) to program and echo channels.

A keyable noise/leakage gate reduces studio noise, tape noise and track leakage; it's also useful for modifying sounds. Actually a sound activated channel On/Off switch, this feature can serve a variety of useful functions. For instance, the gate on a given input channel can be set to control the gates on other selected inputs.

In other words, one brass instrument could be used to control and open inputs for other horns, or even close microphones from a string section. To the imaginative operator, this feature alone can be worth another pair of hands.

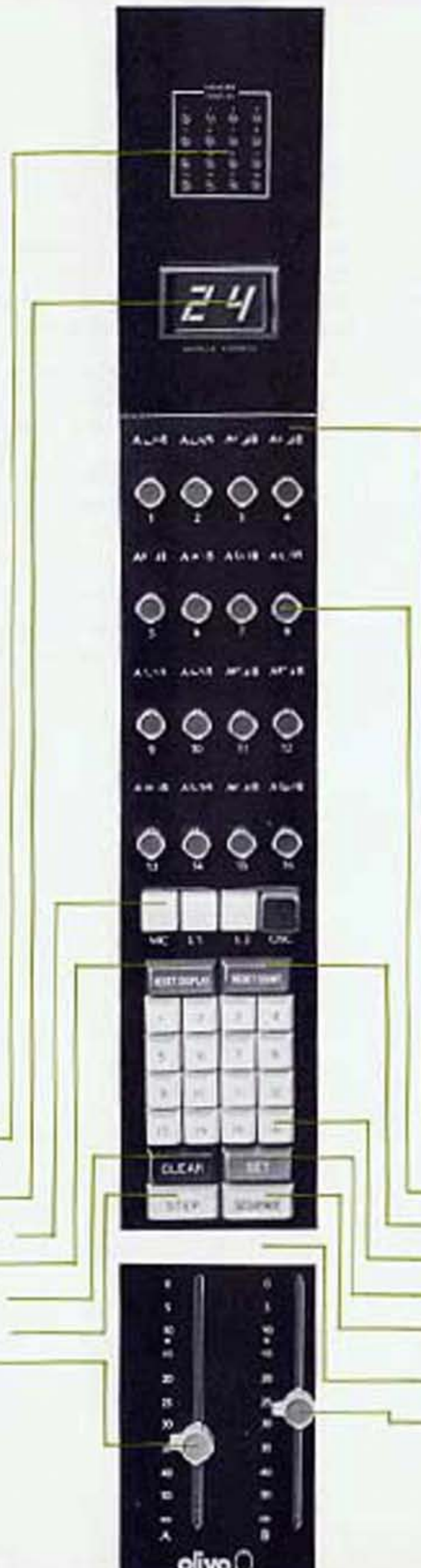
And our compressor/limiter is somewhat different too. There are controls for gain reduction ratio, release time, attack time, input level, output level, DS and indicator sensitivity. (The indicator is a lamp which glows when the compressor or limiter is meeting its preset gain reduction. With multiple input modules, this is much easier to follow than an array of gain reduction meters.)

Input and output assignment switches use electronic FET switches for the utmost in reliability. Inputs are selected by illuminated push buttons while outputs are assigned from a central keyset and their status indicated by light emitting diodes.

A 10-position lever actuated switch selects which submaster will control the internal voltage controlled attenuator. If, for example, five modules were used for five drum mics each module could be assigned to the same submaster fader which would act as an overall gain control. This however would not inhibit output assignment which retains its own delegations.

The module is a completely self-contained package with a large motherboard containing several plug in function cards. An internal voltage regulator supplies power to the logic and analog portions of the module.

2035 Master/Keyset Module



16 light emitting diodes show contents of output assignment memory.

Numerical display indicates position of sequential counter and number of input module being addressed.

4 push buttons override input select buttons on input modules.

Push button clears contents of output assignment memory.

Push button clears contents of memory from addressed module.

Push button advances sequential counter one step per actuation.

Conductive plastic master fader "A".

16 3-position toggle switches determine which master fader "A" or "B" will control level of bus. Center position leaves bus at full level.

16 rotary controls trim level of each bus.

Push button resets sequential counter to "00".

16 push buttons load output assignment memory.

Push button sets contents of memory into addressed module.

Push button advances sequential counter rapidly through full count.

"Write-in" strip.

Conductive plastic master fader "B".

2035 Master/Keyset Module

The 2035 Master/Keyset module contains all the electronics required for program outputs: 16 summing amplifiers and 16 line amplifiers, to process the bus output signals (from the input modules) and provide a balanced line level output. And 16 full range rotary trim controls can be used to balance levels between busses.

Each of the line amplifiers incorporates a voltage-controlled attenuator which may be controlled by either of two master faders. A toggle switch for each bus selects left or right master, or leaves the attenuator fully open. In this way, the console may be quickly setup with a single 16-gang master, two 8-gang masters or particular busses may be assigned to the left master, others to the right master and still others with no master (fully on).

This flexibility is really appreciated when you change modes from stereo or quad mixing to original multitrack recording or overdubbing.

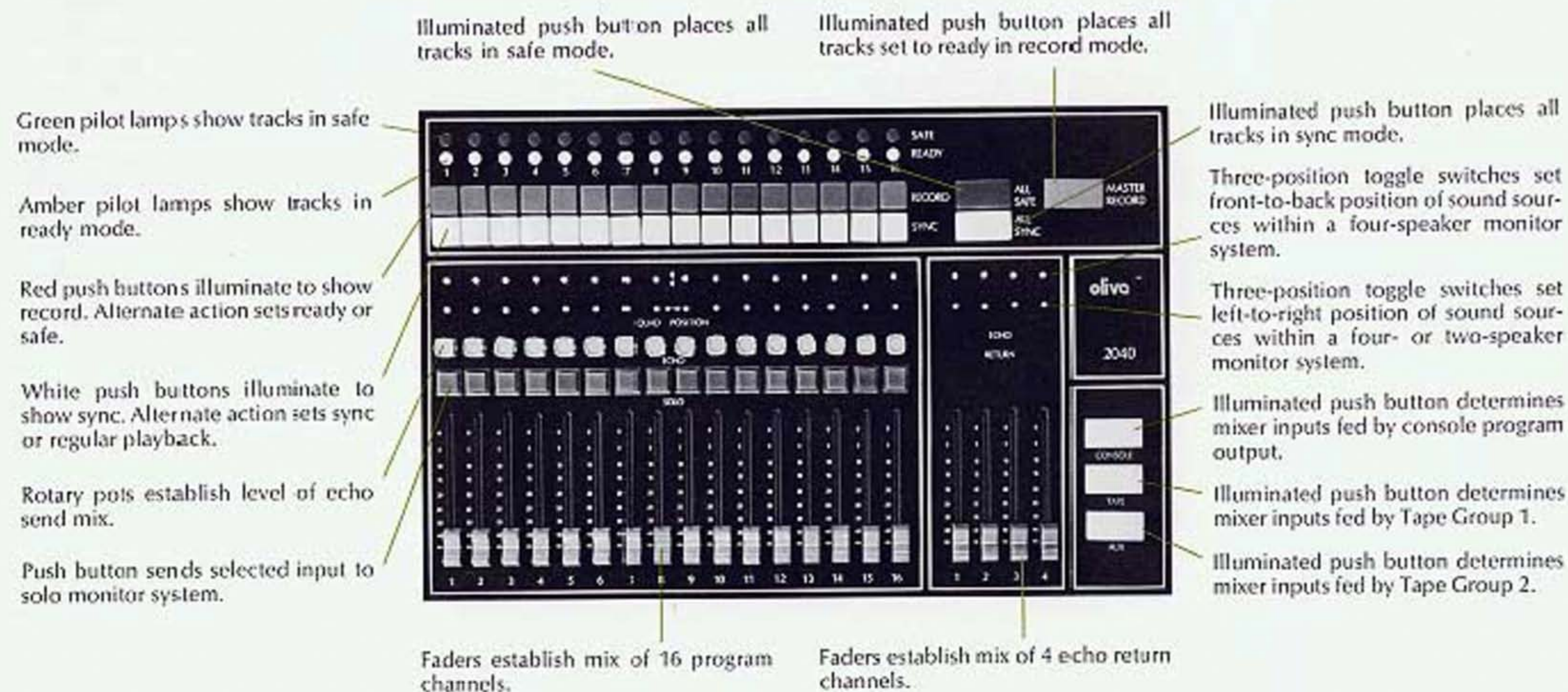
And the 2035 Master/Keyset module includes all the necessary control logic for input module output assignment. In fact, the 16-button keyset and auxiliary controls permit all output assignments to be made from this central location. If you wish to assign every input module to four busses (for a quad mix-down, for example), only six buttons would have to be pushed and the total assignment would take place in less than five seconds.

Other push buttons (four) can override the local input push buttons on selected input modules to permit single button transfer from microphone to tape. This also allows single button punch-out and punch-in of several modules on cue — a feature often required in mixing, and usually requiring the coordinated efforts of several people.

Output busses are divided between two internal voltage regulators for added reliability and every function card is plug-in — as in all modules. The 2035 Master/Keyset is also available with 8-channel capacity. In this version, expansion to 16-channels is simply a matter of plugging in additional cards.

And with Olive's modular packaging concept, the 2035 may be located anywhere within the frame assembly. This permits your expanding or changing needs to be met simply and efficiently.

2040/2041 Monitor Mix & Sync



2040/2041 Monitor Mix & Sync

Monitoring made easy.

For large multi-channel Series 2000 systems, a broadly functional monitor mix and sync module is available. Studio time and effort in complicated mix sessions can be considerably reduced by a 16/24-channel mixer which is independent from the main console or program mixer.

The module 2040 includes 16 mix channels while the 2041 provides 24 mix channels. Other features and facilities are similar on each module. The module is essentially a mixer. It permits simulated mix downs for monitor and sync purposes; includes solo push buttons, echo send and return channels and quadrasonic/stereophonic positioning for each input.

The internal echo send facility on each channel permits "wet" monitoring of "dry" tapes and recording sessions. In addition, the echo mix on the program input modules may be returned to the monitor system during recording sessions for wet monitoring while the tracks are recorded without echo.

Three groups of inputs may be switched into the monitor mixer. The first group is "Console" and monitors the output busses from the console. The second group is "Tape" and monitors the 16 or 24 outputs from a multitrack tape machine. The third group is "Auxiliary" and will monitor additional machines or console sources.

The choice of these three groups is made by three illuminated push buttons. The audio is switched electronically by FETs.

The module is additionally a tape remote control. Full mode selection controls are provided for a multitrack tape machine. Each track has ready and safe lamps, a ready/safe selector, a sync/play selector, a record indicator and a sync indicator. These mode controls are functionally and visually oriented to relate to the mixing positions of the monitor mixer.

Internal logic circuitry interrogates the tape machine status track by track and provides commands to override the input selection of console or tape. A type of computer will analyze the current tape mode and establish a monitor mix selecting the proper combination of console and tape feeds to present a true synchronous monitor mix.

This eliminates countless hours of patching and errors common when manually establishing monitor mixes. And the logic is fast. At the instant of a "punch-in", for example, certain monitor feeds must change. The 2040/2041 makes these changes silently and in microseconds.

The final result is that the 2040/2041 presents a compact integrated package interfacing the console and tape machine in an efficient central facility.

The 2040 module is packaged in a housing 20" x 13" while the 2041 is 24" x 13". When ordering, two options must be specified: 1) type of multitrack tape machine to be controlled, 2) type of quadrasonic positioning controls: the positioning controls may be either two 3-position toggle switches for rapid approximate stereo/quad positioning or two rotary controls for infinite positioning.

2043 Utility Mixer

Need additional mixes?

Supplementary to the 2040/2041 module, utility mixers are available, each containing 16-channel mix facility and four echo returns. A mini-fader and quadrasonic positioner are provided on each channel. Two push buttons select two groups of 16 sources.

These modules may be used (independent from the 2040/2041 monitor mix and sync module) to feed studio headsets and speakers for cue purposes; to generate mono or stereo mix downs; or to provide the control room monitors with preset mix patterns of previously recorded material.

Visual Display Group

Contained in a housing mounted above the module positions, the visual display system is normally supplied on a custom basis according to the specific requirements of each customer. Visual readout options available range from VU meters and sequential displays to clocks and spectrum displays.

VU Meters

Conventional 4" or 5" VU meters may be provided in whatever quantity required.

Sequential Level Display

This is a series of light emitting diodes (LED) employed to indicate program level. Available in groups of 8 or 16 for program output monitoring, these displays present a graphic display of level distribution over several channels at a single glance.

They permit rapid identification of overloads, and allow mixers to achieve a generally higher level of tape modulation before distortion begins to set in. Additionally they monitor a range of 40 dB — +10 dBm to -30 dBm.

Phase Oscilloscope

A 3" oscilloscope with identical x and y amplifiers to display a stereo signal for phase analysis. The use of logarithmic amplifiers produces a dB presentation and permits a wide range of analysis.

Spectrum Displays

These present a real-time graph of the frequency energy content of an audio signal. In use, they provide a visual indication of frequency balance, facilitate the matching of tapes, and detect potential disc and cassette mastering problem areas.

Like the sequential level display, they use light emitting diodes and a proprietary digital time-sharing circuit.

Digital Clock

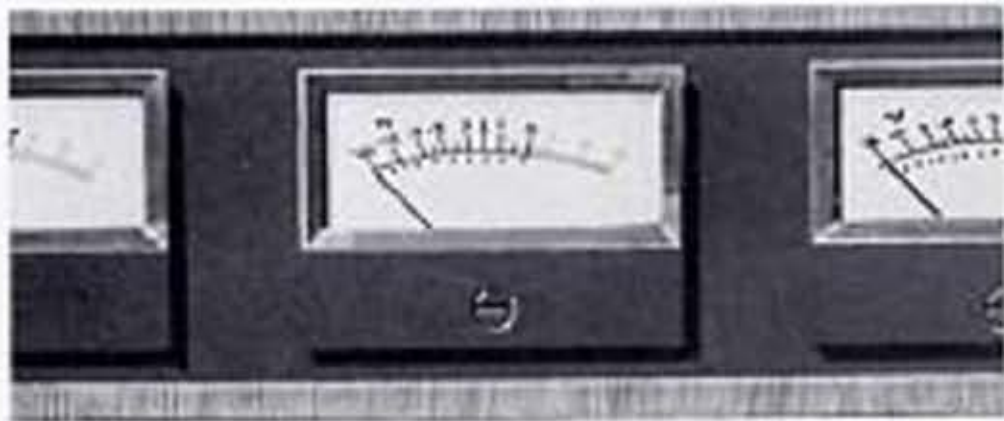
Available as a simple elapsed-time indicator — similar to a stop watch — or a sophisticated timing facility with count down, count up, display hold, count preset, event initiate and external time display. The Olive digital clock uses state-of-the-art MSI logic and LED segmented numeric displays. It may be provided with AC line sync or an internal high stability crystal oscillator can be included.

Remote controls for the clock are normally provided on the producer's table and on the mixer remote control panel.

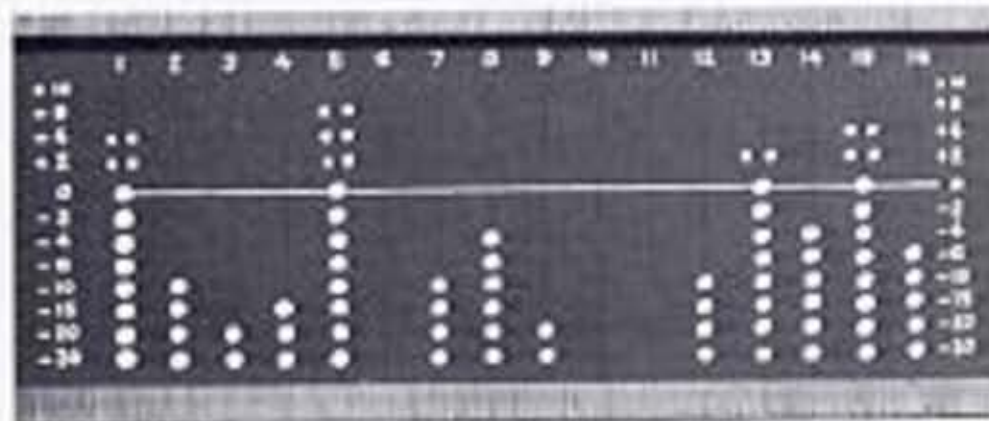
TV Monitor

A video monitor/receiver for studios using closed circuit television systems.

Visual Display Group



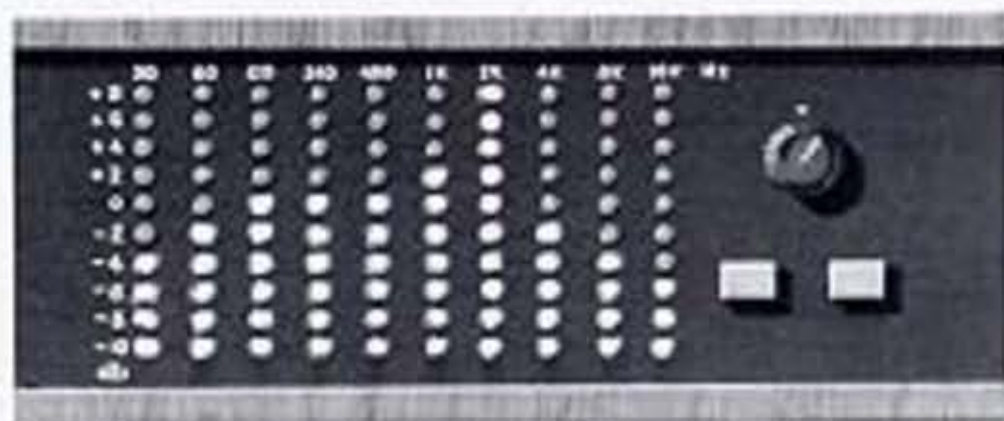
VU Meters



16-channel Sequential Display



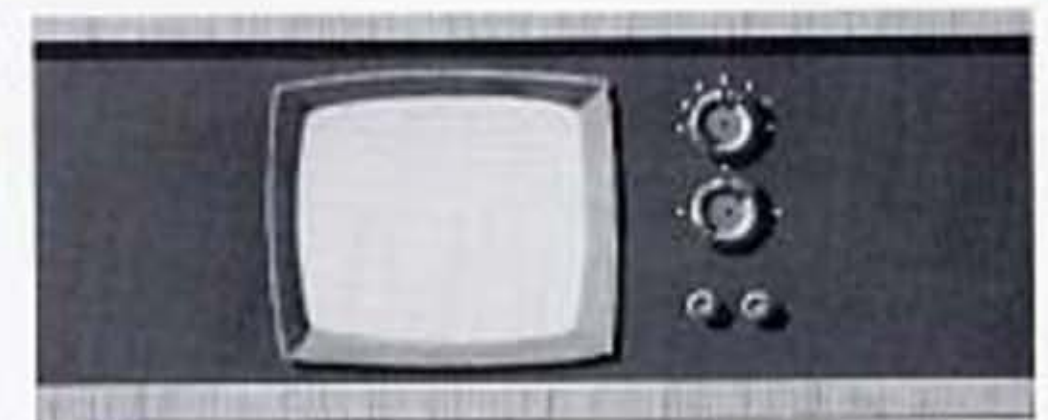
Phase Monitor Oscilloscope



Spectrum Display



Digital Clock/Stopwatch



Television Monitor