

PRELIMINARY DESCRIPTION

MEMORY PLUST.M. LEVEL CONTROL SYSTEM

The Allison Research Memory Plus^{T.M.} Level Control System is a portable, stand-alone system of automation, for use with any existing audio console, without modification.

In use, the Memory Plus^{T.M.} is connected between the tape machine (following any noise reduction decoders) and the console inputs. This connection may normally be made either via the console patch bay, or via multi-pin interrupt cables.

When connected in this manner, the Memory Plus^{T.M.} control surface is used to obtain fully programmable control of the following functions:

- 1. Channel level control
- 2. Grouping sub-masters
- 3. Grand master
- 4. Channel solos and mutes
- 5. Group solos and mutes
- 6. Assignment of channels to groups
- 7. Presets of all parameters above
- 8. Provisions for auxiliary switching

The console continues to perform the remaining functions such as echo, EQ, panning and etc.

Memory Plus^{T.M.} offers a diversification of performance far beyond that of typical "in console" automation system, due mainly to its utilization of digital processing techniques, rather than analog methods.

All parameters are independently accessable and are equipped with visual monitoring devices, so that the operator may be able to determine the validity of programmed changes, without having to rely only on his ears.

THE FABULOUS FADER T.M.

The Fabulous Faders^{T.M.} utilized in the Memory Plus^{T.M.} system are configured specifically for employment in digital control systems, rather than being simple adaptations of conventional resistive faders.

The Fabulous Fader^{T.M.} employs an optically encoded, continuous belt which drives an 8 bit digital up/down counter, as well as a 32 element linear L.E.D. array.

The result is that the fader has no mechanical position, and may be addressed electronically as well as by the human hand. The position of the fader, whether caused by finger movement or by the automation system, is visually indicated by the L.E.D. array.

Thus, the Fabulous Fader^{T.M.} allows an instinctive and instantaneous interplay between the operator and the digital control systeman ability which is not possible using conventional fader styles.

Some of the benefits gained are the ability to electronically "preset" fader positions, the elimination of "null lights" and "update points" and the means to "see" the mix happen when the system is under automatic control.

CENTRAL ENTERING

As a means to achieving total parametric control of the system, within reasonable limits of physical size and cost, the Allison Research "Central Control Philosophy" was applied to the Memory Plus^{T.M.} system. The result is a central matrix of momentary switches and L.E.D. indicators which is shared by all faders, and which serves as the entering point for most parameter changes. Its use results in the elimination of over 1000 switches and indicators which would be needed to give a conventionally interfaced system the accessibility of Memory Plus .

Operation of the Central Control is simple and logical, and the elimination of redundant controls results in a clean and uncluttered operating surface.

As an example of its operation, the act of solo-ing the drum track is accomplished by pressing the access button on the drum track fader, together with the solo button on the Central Control. All other parameters are similarly operated.

A unique visual monitoring system exists between the faders and the Central Control such that the status of any system parameter on any channel may be visually verified, without altering or interrupting the mix.

THE 65K PROGRAMMER

Storage and retrieval of dynamic mixing data is performed by the Allison Research 65K all digital programmer. The 65K is a studio proven second generation device which offers an essentially unlimited capacity (65,536 bits or 4096 analog functions) together with extremely fast access times of 4 milliseconds. This capacity versus access time relationship is made possible through proprietary priority encoding techniques, wherein changing parameters are given priority over static, or non-changing parameters.

Data processed by the 65K may be stored on ordinary audio tape tracks, as well as other storage media, with absolute freedom from errors.

PUTTING IT ALL TOGETHER

Then Memory Plus^{T.M.} system is packaged as a portable, two piece assembly which is readily moved from studio to studio. The 65K Programmer, LSP-1 (Level Section Processor) and VCA's are housed in a $12\frac{1}{4}$ " x 19" portable rack housing, while the Fabulous Faders^{T.M.} and Central Control matrix form a second package which serves as the control surface. The faders are supplied in standard blocks of eight, and are arranged on .750" centers.

A typical system employing 24 channel faders, grand master, 7 group faders and Central Control matrix measures 33" x 8½" x 3½".

Interconnection from the fader package to the rack mount package is made with flexable and lightweight flat wire cables.

MEMORY PLUST.M. LEVEL CONTROL PACKAGES

 16×7 (as shown on front cover)

\$12,500.00

The 16 x 7 is a portable programmable system for 16 channel mixdown. Its fader package consists of the Central Control Matrix, 16 channel faders, 7 grouping sub-masters, and one grand master fader. The electronics package contains 16 VCA's, the Level Section Processor (LSP-1), a 1024 bit digital programmer (65K-D1-1K) and all system power supplies and connectors.

AVAILABLE MEMORY PLUS LEVEL CONTROL PACKAGES

| 16 | X | 15 | as | above | except | 16 | channels, | 15 | group | masters | \$14,100.00 |
|----|---|----|----|-------|--------|----|-----------|----|-------|---------|-------------|
| 24 | X | 7 | 11 | 11 | | | channels, | | | | 14,900.00 |
| 24 | X | 15 | 11 | 11 | 11 | 24 | channels, | 15 | 11 | H | 16,500.00 |
| 32 | X | 7 | 11 | 11 | 11 | 32 | channels, | 7 | 11 | 11 | 17,300.00 |
| 32 | X | 15 | 11 | | 11 | 32 | channels, | 15 | H | 11 | 18,900.00 |
| 40 | X | 7 | 11 | 11 | 11 | 40 | channels, | 7 | 11 | 11 | 19,700.00 |
| 40 | X | 15 | 11 | II | п | 40 | channels, | 15 | 11 | п | 21,300.00 |
| 48 | Х | 7 | 11 | H | 11 | 48 | channels, | 7 | 11 | 11 | 22,100.00 |
| 48 | X | 15 | H | H | 11 | 48 | channels, | 15 | ,11 | 11 | 23,700.00 |

All central electronics (Programmer, LSP-1 and Central Control Matrix) are configured for the maximum system capacity of 48 channels, 15 groups and grand master, and require no modification or addition for expansion within the capacity limits stated.

Future expansion will, however, require replacement of fader package frame and internal cabling. Systems pre-wired for expansion are available on special order.