In days of old, there existed a creature called a "custom console." But there were problems with custom consoles. When the little old consolemaker charged what they really cost, the customer went broke. And when the customer paid what they were really worth, the little old console-maker went broke.

Then came the days of the stock console. There were problems with these creatures too. They all looked alike, worked alike, and sounded alike–just as though they had been stamped out with some giant cookie-cutter. Very efficient–but not exactly to the liking of a group of talented, creative clients who all wanted theirs... "a little bit different."

> PRESENTING...A HARRISON COMPROMISE

OLD

-

MR-2 NOT STOCK! NOT CUSTOMIZED!

...it's SPECIALIZED!!

WHY MR-2?

MR-2 delivers more usable console for the money. Efficient design has reduced the labor and material content, while improving features, signal handling, and reliability.

MR-2 offers a full range of options and features, allowing you to specialize your console to your functional and budgeting needs.

MR-2 expansion frames and module update kits continue to keep your console matched to your future needs.

Resale prices of Harrison-designed-and-built consoles demonstrate that MR-2 will continue to protect you even at trade-in.

More Usable Console for the Money?

Somehow that sounds like cheating-as though you could get something for nothing. NOT SO!!

The secret is to eliminate things that cost money but do not add any function or "quality" to the console.

The console designers at Harrison Systems have identified many traditional inefficiencies and have eliminated these in the design of MR-2.

Printed-circuit boards have been made smaller (thus, less expensive) through the use of double-sided artwork and a more meticulous, time-consuming design process.

Almost all hand-wiring in the frame has been eliminated. Mother-board-mounted multi-pin connectors are used for inputs and outputs.

Seldom-used features (like Quad) have been eliminated and replaced with more desirable and useful features.

Module width has been reduced to 40.6 mm (1.6''), thus reducing metal-work cost for a given console size.

In other words, every small detail of the MR-2 design has been critically optimized for efficiency. This efficiency does not mean, however, a reduction in signal-handling quality or reliability. In fact, just the opposite is true.

A radical new multiple-ground system is at work to even further reduce induced noise.

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- OLAIE

Modern "dielectrically isolated" switches are used for all logically controlled switch functions.

Patch points now operate full line level (+4 dBu or +6 dBu) and are isolated and balanced.

These are only a few of the reasons that allow us to confidently say that MR-2 is the most efficient, cost-effective console ever offered by anyone to the industry.

We think you will agree and make it your choice as well.

MR-2 Video Meters Debut Harrison High-resolution Graphics Subsystem

Things aren't always what they seem. Such is the case with Harrison's new 32-channel video bar-graph meter system.

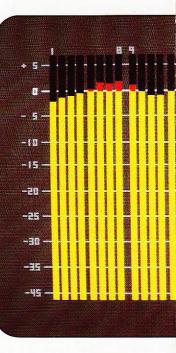
These new meters are really just the first application for the new Harrison high-resolution video graphics subsystem (designed as a part of the new AUTO-SET II automation system). The graphics subsystem will become a part of many Harrison products in the future. It is particularly applicable when displayed-information density is high and/or rapidly changing.

Initially supplied software and hardware support six meter modes and 32 channels. The six modes include VU, full-range PPM, two combination modes, and two "peak-hold" modes.

Future options will support spectrum analysis and any other good suggestions we might get.

The Harrison graphics subsystem is totally software controlled and is, for all practical purposes, a real-time animation machine. Each of its 49,152 pixels may be individually modified in less time than it takes to display one full video frame. As the system contains two full pixel memories, one can be modified while the other is being displayed.

The system is capable of displaying 16 colors (out of a repertoire of over 4000) at one time. Best of all, it makes one of the nicest and most flexible metering systems you've ever seen.





MR-2 Changes As Your Needs Change

Expansion frames and module update kits are available to keep MR-2 specialized as your needs change in the future.

It's a very nice thing to have some assurance that you might be able to get a console <u>paid for</u> before you have to replace it.

It's also a very nice thing to be able to purchase a console for today's needs, rather than overbuy to accommodate some unspecified, nebulous future need that may never materialize.

Expansion frames allow the complement of input modules in an MR-2 to be increased in multiples of eight (i.e., 8, 16, 24, 32). The modular patchbay can also be expanded very efficiently to accommodate the increase in input positions.

Module update kits allow input modules to be converted from manual to automated, from 24-assign to 48-assign, etc.

We at Harrison sincerely believe that the best way to insure our own future is to do everything in our power to protect yours. That is the essence of MR-2.

Concept of SPECIALIZED Console Is New with MR-2

A full range of options and features allows the MR-2 console to be adapted to your functional and budgeting needs at the time of purchase. This, we have chosen to call "<u>SPECIALIZED</u>." It's not <u>custom</u>, but it certainly isn't <u>stock</u> either.

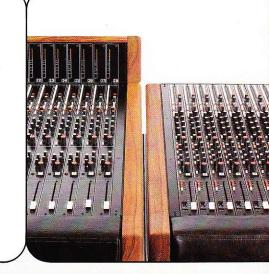
The specialized MR-2 allows you to build your own patchbay or choose from our integral, modular patchbays.

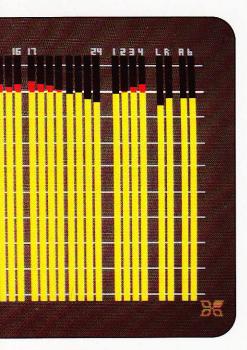
You can choose from several meter options, including no meters at all, if that's your bag. Other meter options include Harrison LED meters, moving-coil meters, NTP gas-discharge meters, and high-resolution CRT graphics meters.

Two standard input modules are available for MR-2. One is a simple, non-VCA, manualfader design. The other is a fully loaded, automated design. If you like, within limits you can specialize your own input module, for a small metal-work setup-and-screening charge (see module order-entry document).

You can move modules around, change colors (extra cost), have switches on your equalizer, and even change your mind later–with extension frames and module update kits.

Your Harrison dealer stands ready to discuss all aspects of a <u>SPECIALIZED</u> MR-2. And we stand ready to build one "Just for You."





MR-2 INPUT-MODULE FEATURES

- 48 assignment busses
- Eight echo sends
- "Easy-set" stereo cue send
- Four-band, fully parametric EQ
- Full +4-dBu patch points
- · Patch and EQ insert into monitor
- Sigma-cue overdub monitor
- Automated fader, nine group busses
- Six statuses, new parallel modes
- Cue send used to double line-inputs
- Individual 48-volt enable
- Phase reverse on monitor and main
- Pre-listen on monitor and main
- Patch-point insert pre- or post-EQ

OTHER MR-2 FEATURES

- Tracking VCA monitor-level (CR)
- Two stereo foldback systems
- Isolated ground-reference system
- Tuchel multi-pin connector interface
- Independent cue send on echo return
- New 'BUSS' intercom system
- Eight external monitor sources
- Optional meter systems
- Optional patchbays

arris

HARRISON SYSTEMS, INCORPORATED P.O. Box 22964, Nashville, Tennessee 37202 (615) 834-1184, Telex 555133

- Optional input-module selection
- Conductor communicate interface
- Automated mix and group faders
- Expansion frames available



Automated Post-Production from Harrison 🗜

in the second

(automation) mixing

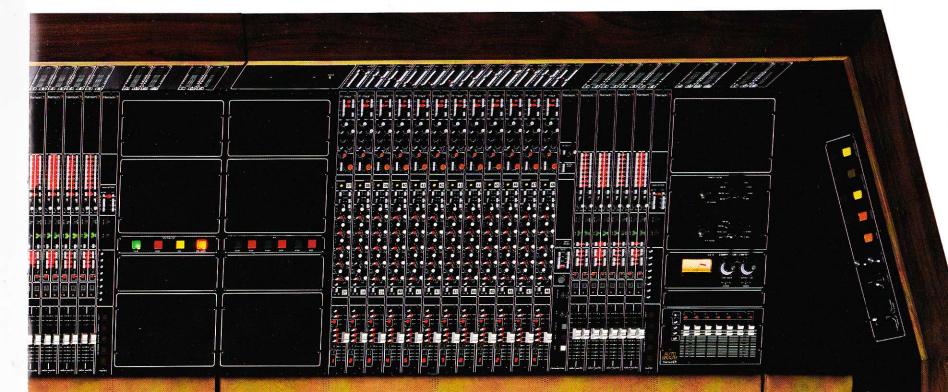
Audio

Sound Post Production towers above all other audio recording and mixing processes in the challenges it presents the console designer. Post production offers the best opportunity for automated (memory) mixing. The diversity of signal routing requirements necessary to accommodate existing and future formats, without traps, is mind boggling. Reliability must be unimpeachable. And the panel layout must be such that the post production mixer can concentrate on the picture and what he hears rather than the mixing desk.



The Concept of Change

Two years ago, we at Harrison Systems recognized that a unique challenge existed, not just to Harrison Systems, but to all audio mixing console manufacturers. More importantly the challenge was not being met, not even by the few traditional suppliers of post production consoles. We have met the challenge! Almost a full year of research was devoted to learning and understanding what is required of post production today, and what is likely to be required in the future. An interactive design process was implemented. New concepts and methods were investigated and shown to selected mixers and executives involved in sound post production. They criticized, and we listened. Finally, what began to emerge was a console that was a successful marriage of the best ideas from the people who must use it, and the people who must build it.



This brief brochure is neither a proper nor adequate forum for a complete operational and technical discussion. A brief outline of some of the major features is presented on the reverse side. We would, however, welcome an opportunity to have a complete discussion with you about the Harrison Post Production Series Mixing Consoles and your needs.



A major development is the concept of "Distributed Control Intelligence" (DCI). This involves placing an individual microcomputer in each input module of the console. This "DCI" concept offers the end-user many advantages over the older 'hardware logic controlled' analog consoles. Included in these advantages are tremendously expanded automation opportunities, improved ergonomics (human engineering), better reliability, easier maintenance, and many side benefits such as noiseless switching.

INPUT MODULE ... AUTOMATED FEATURES:

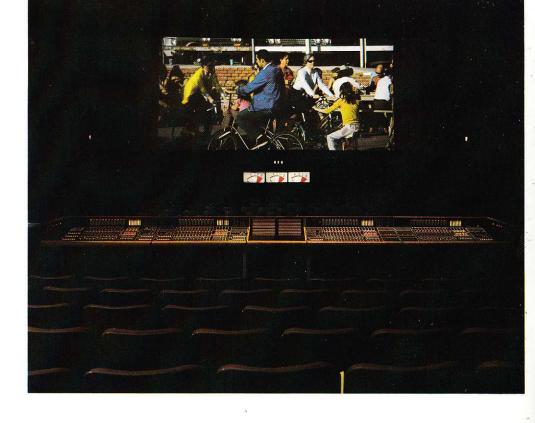
- Input pad (-20, -10, 0, or +10 dB)
- "B" line input select
- Phase reversal
- 2 A/B insert patch points
- In/Out switching for each of the 4 parametric EQ sections
- In/Out switching for the parametric hi & low pass filters
- Channel mute
- Fader level
- VCA group select with 7 segment LED readout display

other input module features...

- New State-Variable 4 band parametric equalizer. Each band is fitted with continuously variable boost/cut, frequency select, and bandwidth controls.
- Selectable 2 or 3 channel panning with true divergence control
- 4 echo sends
- Solo-in-place, with echo
- Unique "cueing" feature: electronic "prefader listen" function under software control. This feature allows monitoring of an input when the fader is either pulled all the way down, or when the channel is muted. The input signal is then superimposed over the mix on the monitors, but is not sent to the main busses, therefore not destroying the mix. This yields a very powerful function for tight punch-ins and punch-outs.
- Built-in self-diagnostic routines. Each input's 7 segment VCA group select LED readout doubles as an indicator for diagnostics, troubleshooting and calibration.
- New automation control switching which enables any input to function in any automation state.
- Separate solo and mute functions

OUTPUT CAPABILITIES:

- Individual left, center, and right, each operating position
- Individual 8 buss re-assign, each operating position
- Individual 4 echo sends, each operating position
- Composite left, center, and right, combining all positions
- Unique recorder input composite matrix
- 8 wide external meter select and pad



OTHER CONSOLE FEATURES:

- Two separate intercom systems
- Individual and master recorder controls
- Instrument quality test oscillator with pink noise generator
- Isolated oscillator of fixed frequency and level to facilitate recorder alignment
- Oscillator may be remotely activated

FRAME CONFIGURATIONS:

- Primary and Secondary frames are available to accomodate from 9 to 27 inputs in multiples of 3.
- A Secondary Section, in effect, is a pre-mix section. Each secondary section is supplied with 8 main output busses, left, center, and right panning busses, and 8 re-assign busses.
- A Primary Section takes the main output feeds and the left, center, and right panning feeds from all sections, including itself, and sums these signals for composite matrix output assignments.

All photographs taken at Walt Disney Productions, Burbank, California.

