6. THE VRP CONSOLE

A stereo television post-production console and a single operator film re-recording console have many similarities given the types of tasks encountered in current studios. Any console designed to fulfill these tasks has to perform several functions, each being obvious to the user. The VRP design criteria was to provide a useful and sophisticated system which was transparent in operation to the user. Such exercises as intensive patch re-routing, multi-pushbutton switching and complex operator moves are minimized by carefully designed console 'logic' and routing. Valuable features such as switching the Dolby matrix into the monitor for film applications, and selecting either 4-track or 8-track for video post-working are accomplished by a unique film, television and multitrack architecture.

The VRP Series console, created after careful market research with a number of international recording organizations, offers the modern studio the following features:

* Up to 48-track multitrack operation
* 8-track stereo television operation
* 4-track mono television operation
* 2 x 2 track stereo operation
* Independent monitoring of up to 8 'discrete' outputs
* The facility to switch either the console output or the monitor output to tape
* Separate 'monitor re-mix' facility
* Master machine control including bus/tape switching
* Dolby D.S.4 matrix, including the facility of automatically deselecting the matrix when 'solo' is enabled.
* Four-channel 'Left, Centre, Right, Surround' (LCRS) recording and monitoring.
* LCRS stereo derived outputs
* LCRS mono derived outputs
* Film, television, and multitrack architecture
* LCRS rotary pan module on patch
* LCRS quad pan module on patch
* 'Academy' monitoring for film
6. The VRP Console

6.1. Console Modes

Three console modes are available: multitrack, film and television. The console mode pushbuttons are situated in the MODE area of the post production section.

6.1.1. Multitrack Mode

The MULTITRACK pushbutton sets the console into a standard 2–track format. The four routing pushbuttons in the mixdown section of the channel module are associated as follows: A/L and B/R – stereo output 1 and C/C and D/S – stereo output 2. The post production monitor matrix is inactive but the 8–track VU meter panel monitors the four mix outputs.

6.1.2. Television Mode

The TV pushbutton is selected in conjunction with either the 8–track 8T or 4–track 4T pushbuttons in the FORMAT area.

Monitoring will be via the main control room stereo speakers.

The eight tracks are treated as four stereo pairs, designated A, B, C and D (typically these might be dialogue 1, dialogue 2, music and effects). Two 4–track faders located below the monitor section control left and right (odd and even) tracks respectively. Each of the eight tracks has its own Bus

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a linear fader to the 2-track recorder. A 2-track master trim (2T MASTER TRIM) may be selected to control the sum of the group buses before (pre) the main 2-track output fader. Stereo cut pushbuttons (A CUT, B CUT, C CUT and D CUT) are provided across the groups and cut the A, B, C, and D contribution to the 2-track output.

The second stereo output is a monitor mix that is fed via the left and right monitor mix buses and includes for each stereo bus, a TRIM control plus SOLO CUT pushbuttons, located in the MONITOR sections. The solo function, in this mode, routes the selected stereo signal direct to the loudspeakers in place of the normal monitor signal. The MON TO SPKR MON SOURCE pushbutton in the MONITOR MASTER STATUS section selects this monitor mix to the monitor speakers in place of the main stereo mix. Selecting MON TO 2T 2T SOURCE on the same section assigns the monitor mix to the 2-track output, thus replacing the main stereo output.

6.1.3. Film Mode

The FILM pushbutton is selected in conjunction with either the 8-track 8T, 4-track 4T or LCRS pushbuttons in the FORMAT section.

Monitoring will be via separate film speakers

Speaker selection is left and right, if 8-track or 4-track only is selected. Speaker selection is left, centre, right, surround, if LCRS is selected.

If 8T is selected, routing selected from the channel module is as follows: A/L routes to buses A, left and right and pan is left/right, B/R routes to bus B, left and right and pan is left/right, etc.

If 4T is selected, routing selected from the channel module is as follows: A/L routes to buses A, left and right and pan is left/right, B/R routes to bus B, left and right and pan is left/right, etc.

If LCRS is selected routing from the channel module is as follows:

- A/L routes to L GROUP, B/R routes to R GROUP, C/C routes to C GROUP and D/S routes to S GROUP; pan operates between left and right, or, if selected, between centre and surround.

- In film mode the pushbutton matrix that includes DS4, CPSS, DS4 SOLO L & R, C TO STRIPE and S TO STRIPE can be brought into operation only if LCRS is selected.
6. The VRP Console

6.2. Processing Options

6.2.1. DS4 Processor

To record LCRS signals on optical tracks, a DOLBY processor, the DS4, is employed which consists of a 4-track to 2-track encoder and a corresponding 2-track to 4-track decoder. This processor is invoked by the DS4 pushbutton which switches all four sends and returns. The encoder signals can be plugged into the 2-track record output insertions and then by pressing L & R the encoded signal may be auditioned on the left and right speakers. If DS4 SOLO is selected, the DS4 processor will be dropped out of the monitor path when a SOLO pushbutton in one of the L, R, C, or S MONITOR sections is selected; this option can be inhibited by an external RECORD function DC control if required.

In the LCRS format the 2-track and Monitor bargraph meters are switched to read the L, C, R, and S loudspeaker feeds, (before the loudspeaker level control). The first four 8-track VU meters follow the Bus TAPE switches reading L, C, R, and S. Meter 5 will read the mono output and meter 6 is available on the jackfield. Meters 7 and 8 will read the level of the DS4 encoded signals. The MONITOR CUT pushbuttons operate on the four film loudspeaker outputs.

Monitor/Facilities Panel
Format/Processing/Master Status

6.2.2. CP55 Room Equalizer

This pushbutton enables an external CP55 variable room equalizer to be switched into the monitoring circuit.

6.2.3. Academy Filter

The ACADE pushbutton enables a customer supplied Academy (or similar) filter to be switched into the mono loudspeaker feed; since this is often a passive device, a 600 ohm source and terminating resistors are included and the resulting 6dB drop accepted.
6.3. **MONO** Pushbutton

The **MONO** pushbutton operates differently in different modes.

In **FILM** Mode, the **MONO** pushbutton enables audition of a mono derivation of the stereo 2-track bus to allow checks for compatibility. The mono output is fed to the centre screen loudspeaker; the left and right loudspeakers are muted.

In **LCRS** Format, the **MONO** pushbutton is used to derive a mono copy of the LCRS original. In LCRS format the left and right inputs are fed to the 2-track buses and the mono output is derived from these. The centre or surrounding information can be added to the derived mono output, using the **C TO STRIPE** and **S TO STRIPE** pushbuttons. Operating these pushbuttons routes the centre and surround signals to both of the 2-track buses. The combined mono output is now monitored by the centre film loudspeaker whilst the remaining speakers are cut. Meter 5 reads the mono output. The Academy filter can be selected in this mode.

In the **TV** and **TV TO SCREEN** modes, the **MONO** pushbutton functions identically to the **MONO** pushbutton on the standard panel alongside.
6.4. 8-Track Reassignment

When LCRS format is selected the pushbutton enables an 8-track external source to be reassigned, using the numbered pushbuttons in the 8T TO RE-ASSIGN section, to any of the four speakers, left, right, centre or surround. The programme mix (i.e. the desk output) is inhibited and the monitor mix trim controls are bypassed.

Routing can be additive and therefore an external source can be assigned to any number of monitor outputs. It would only be appropriate to use left and right unless LCRS is selected.

Eight-track re-assignment is automatically selected in 8T and LCRS format.

6.4.1. 8-Track Output Insertion

The 8-TRACK OUTPUT INSERTION pushbuttons ( 1 to 8 ) enable external devices that have been pre-patched into the 8-track jack insertion points.