Marlon

D&R
mixing consoles

**The D&R "MARILON" is a 24 buss, in-line format, recording and mixing console with all the functions and features needed for to-days multi-track and MIDI recording sessions.**

**With the minimum of audio path, the circuitry not only provides tremendeous headroom and crystal clear sound, but noise and distortion so low that it almost matches the quality of a straight wire.**

**In creating the "MARILON", D&R undertook comprehensive studies of both its own and competitors products, followed by a radical re-appraisal of every element of the design.**

**The Marilon's electronics (like all D&R products) incorporate advanced circuitry and components using the latest in computer aided design and assembly techniques resulting in a product unsurpassed in the electronic industry.**

Marilon

## TOTALLY MODULAR DESIGN.

The "Marilon" is available in a choice of two chassis, either completely or partially loaded with modules, as required, and with optional patchbay, and 25 pin sub "D" type connectors. Alternatively, either chassis can be ordered with a small number of modules and the patchbay partially loaded enabling gradual expansion as required or afforded.

Being totally modular, the "Marilon" was designed with a wide range of customers budgets in mind. The "Marilon" input/output module has many functions and features making recording and mixing easy and pleasant.

All inputs and outputs are electronically balanced and utilize the latest intergrated circuits available with current technology. The "Marilon" has a full four band semi-parametric equalizer covering the entire audio band from 50-20.000 Hz. The upper two bands have bell/shelve switching as well as channel/monitor switching and act like high and low frequency bands but cover the entire 50Hz to 20,000Hz audio bandwidth.

The lower two bands are switchable between channel and monitor and also cover the 50Hz to 20,000 Hz range. This wide range design gives control over the whole audio bandwidth in both channel and monitor signal paths at the same time, a unique "Marilon" feature. The high pass filter is a fixed 100Hz, 12 dB per octave filter in the channel signal path only.

## A 32 CHANNEL "MARILON" HAS 104 INPUTS IN MIXDOWN WITH 32 AUX BUSSES.

There are 8 discrete aux sends per module. Aux 1-4 are switchable between monitor/channel and pre/post fader. Aux 5&6 and 7&8 are switchable between monitor/channel and pre/post fader as well, but have an added feature. It is possible to disconnect the outputs from the aux 5&6 busses and route them to the 24 track routing busses to create a total of 32 aux send busses.

The concentric pot (volume & panpot) controlling aux 7&8 has a dual function in being able to act as a third line input when the line B switch is activated. The aux 7&8 outputs are taken from their busses and redirected to the main stereo buss. The line B input will now feed the aux 7&8 section, which creates a unique third line input per module.

The monitor section (with slide fader) is directly assigned to the master stereo mix buss and has its own solo and mute switches as well as fader reverse, master group level controls, and a tape/source switch.

The "Marilon" channel module also features a master selectable pfl/stereo in-place solo system, an input peak indicator, and a master mix buss assignment switch.

The seperate fader section enables easy installation of most moving fader automation systems available to day such as Neve "Flying Faders" and GML.


## CHANNEL IN-LINE MODULE.

+48 volt phantom powering.
-10db input pad.
Balanced LINE A input.
PHASE reverse on both mic/lineA and tape return, when selected.
Dual concentric gain controls for MIC/LINE and TAPE return.
All controls are active and very low on noise.
The MIX switch is the channel status switch for the record/remix mode.

100 Hz HIGH PASS filter.

The HF and LF sections are per section switchable between bell and shelve and per pair between channel and monitor.
The HF ranges from 1kHz to 20kHz.
The LF ranges from 50Hz to 1kHz.
A boost or cut of 16dB is available.
The HMF and LMF sections are fixed 1.5 Q bell type equalizers and have the same ranges as the HF/LF eq.
Both sections are per pair switchable between channel and monitor.

The whole EQ has an on/off switch.

AUX 1&2 and 3&4 are per pair switchable between channel and monitor and pre/post fader.

AUX 5&6 is switchable together with AUX 7&8 between channel and monitor and pre/post fader.
To increase the number of aux sends, AUX 5&6 can be assigned to the 24 multitrack busses.

The concentric pot controlling AUX 7&8 can be used as effect return by activating the LINE B switch. At that moment the 7&8 outputs coming from the pan-pot are disconnected from their AUX 7&8 busses and routed to the master stereo mix buss.
The LINE B input will now feed the AUX 7&8 controls, which creates a unique third (line-B input).

A MUTE switch is provided for AUX 7&8 or LINE-B controls.
The monitor section has a PAN-POT which is directly routed to the main stereo mix.

The TAPE/source switch selects whether tape send or return is being monitored.
The group (GRP) switch lets you use the monitor fader as a group master for the multitrack summing amps.
REV reverses the large and small faders.
The SOLO switch lets you hear a pre-fade signal or post fade stereo in place signal dependent upon master status settings.
The monitor MUTE only mutes the monitor signal path.
A PEAK led indicates peaks 4 dB below clipping.
The L/R switch routes the channel signal directly to the main stereo buss.
The PAN pans between odd and even busses and or the stereo mix buss.
The channel SOLO switch has the same functions as the monitor solo.
The channel MUTE switch mutes the channel including aux sends assigned to the channel path.

Patch points per channel are Line A, line B, channel insert send and return, monitor input, monitor insert send and return, and the group outputs.

Each four patch rows are followed by four multitrack channel inputs and outputs. All patch points are wired fully balanced.

The patchbay can accept a maximum of 48 input rows and up to 32 multitrack inputs and outputs, which are "normalled" to the group outputs and monitor inputs. All master inputs/outputs and 144 tie lines make this recessed and plexiglass covered patchbay a pleasure to work with.

All interfacing is via 25 pole female sub "D" type connectors, accepting eight balanced pairs of signals per connector. If no patchbay is installed, all inputs and outputs of the console are always accessable on the bottom panels.

## THE WELDED STEEL CHASSIS YIELDS EXCEPTIONAL GOOD SHIELDING AND STRENGTH.

The welded steel chassis yields remarkable shielding against R.F. interference. An integral cable trunk and space in the pedestal legs (for all cables) allow for a neat appearance when installing the Marilon.

The "Marilon" cosmetics are of the highest order with recessed meter hood and patchbay covered by smoked plexiglas.

Your creativity deserves the "Marilon" and putting it to work in your studio will allow you to put ....."**Every sound under control"**


## CHANNEL IN/OUTPUTS.

Balanced mic input.

Balanced line A input.

Balanced line B input.

Channel insert send.

Channel insert return.

Monitor input (tape return).

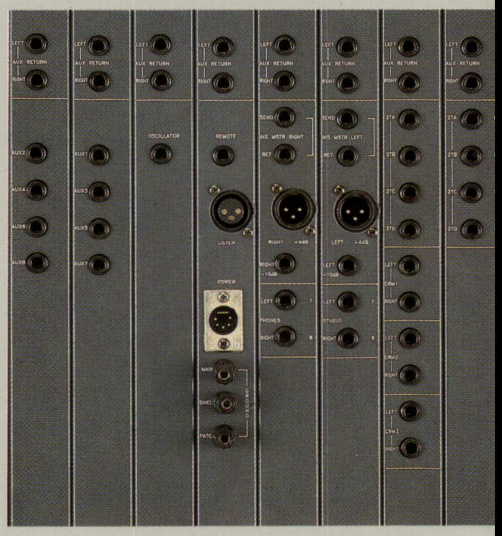
Monitor insert send.

Monitor insert return.

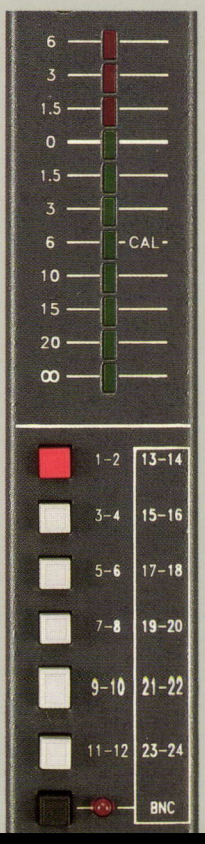
Group output (tape send).

Second group output is used for extra aux sends.

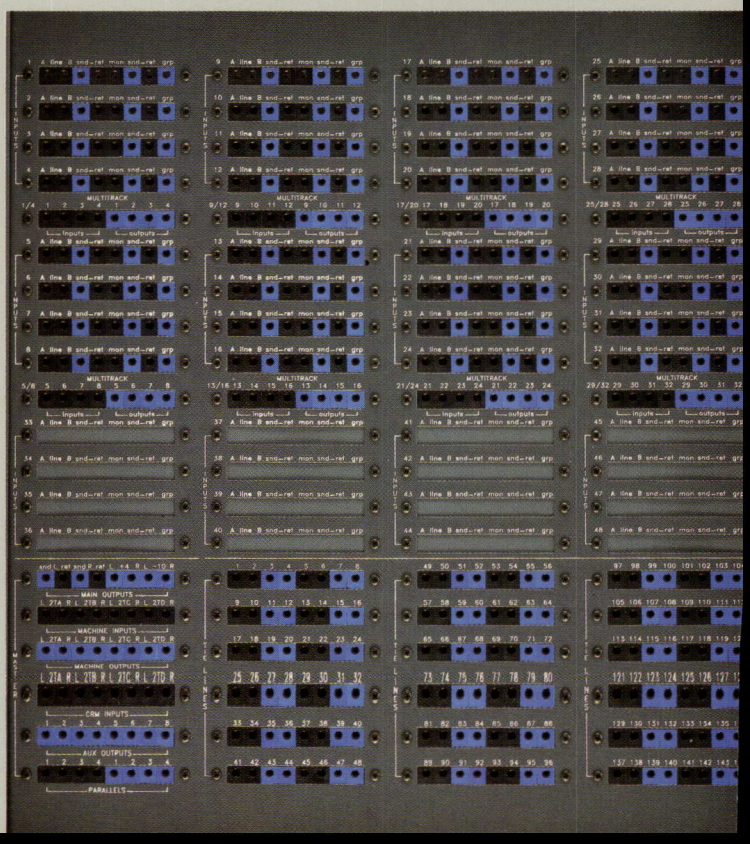
## MASTER IN AND OUTPUTS.



## CHANNEL METERING AND ROUTING.




## PATCHBAY FOR 32 CHANNELS WITH 144 TIE LINES.



Other features on the "Marilon" in-line modules are: clickfree phantom powering, tape & mic/line reverse (input reverse), phase reverse on both mic/line and tape inputs, clickless 10dB input pad, and an adjustable tape input.

The Monitor section can be fed by the mic/line input (mix status switch) and is routed to the main mix buss. The group switch (GRP) allows you to use the monitor fader as a group master to the multitrack buss. A fader reverse switch trades places between the channel fader and monitor fader.

### THE MARILON IS COMPLETELY MODULAR AND A DREAM TO SERVICE.

The "Marilon" uses high quality double sided and plated through printed circuit boards linked by a flexible (locking) IDC connector system.

The mic pre amp uses a new circuit design resulting in the lowest possible noise and distortion ever achieved.

The 24 track routing section is completely seperate from the rest of the module resulting in very low noise and crosstalk figures.

An eleven segment peak reading LED bargraph meter follows all incoming and outgoing signals of the channel module. The attack and release time constants comform to international standards.

In the standard configuration, the "Marilon" comes with 100 mm carbon track faders, mounted in a seperate fader section which allows for easy installation of moving fader or other types of automation. Conductive plastic faders are optional.

### THE MASTER MODULE AND EIGHT STEREO EFFECT RETURNS HAVE EXTENSIVE FEATURES.

Being extremely service friendly, the master section is comprised of eight seperate modules containing all of the control room functions and features needed for to-day's state of the art studio.

Also housed in the upper section of the master modules are eight stereo effect returns with two band EQ and aux sends 5&6 and 7&8. An active balance control, solo and mute switches, and a 60mm slide fader completes each of the eight stereo returns.

### THE CRM (CONTROL ROOM MONITOR) MODULE.

Included in the CRM module are three outputs which connect to three different monitor amps for the near field and large control room monitor speakers.This module has source switching for four balanced +4dBu two track machines or four unbalanced -10dBv machines. Aux send busses 7&8 can be monitored for easy building up of a stereo headphone mix. The Studio module is fed from the CRM module and/or the aux 7&8 outputs for foldback purposes.

### MARILON'S PFL (PRE-FADE LISTEN) AND STEREO IN-PLACE SOLO SYSTEM.

When the "Marilon" is in the pfl mode and you depress a solo switch, you hear that signal only through the CRM in mono. With the "Marilon" in the solo in-place mode and you depress a solo switch, you then hear the soloed signal in-place within the stereo image (which interups the main stereo mix buss). An active control with a range of +/- 10dB will adjust the level in either mode. The **Phones module** has a stereo volume control, a mute switch, and two source switches. The CRM and/or aux 7&8 can feed the studio.

### REMOTE TALKBACK IS A STANDARD FEATURE ON THE MARILON.

The **Communications module** provides you with talkback to the stereo phones, studio speakers, or group outputs as well as a two way communication between the control room and studio. Communication from the studio returns through the CRM 2 speakers which is normally used for near field monitors. The **Oscillator module** has a three frequency low distortion oscillator which is assignable to the aux send busses, groups, and patchbay. The **Auxiliairies** master modules control the out-going aux send signals. Each master aux has a level control, mute switch, and a AFL (after fade listen) switch.

A two channel, 37 segment, high resolution peak reading bargraph meter together with a phase meter provides you with precise level information. Analog VU meters for the master section are optional.

The compact **Bantam patchbay** is optional and completely modular. Designed to allow the user or installation person to hook-up the cables between the channel modules and patchbay modules, it can be expanded as your budget allows or ordered complete.


### ONE OF THE EIGHT STEREO EFFECTS RETURN MODULES.

**Stereo/mono switch combines the two left/right signals.**

**Active gain control with a 40dB range.**

**High frequency is shelving at 12 kHz with a boost or cut of 16dB.**

**Low frequency is shelving at 60Hz with a boost or cut of 16dB.**

**Aux 5 sends both left and right pre-fader signals to the aux 5 buss.**

**Aux 6 sends both left and right pre-fader signals to the aux 6 buss.**

**Aux 7&8 sends the pre-fade left and right signals to the 7&8 aux busses in full stereo.**

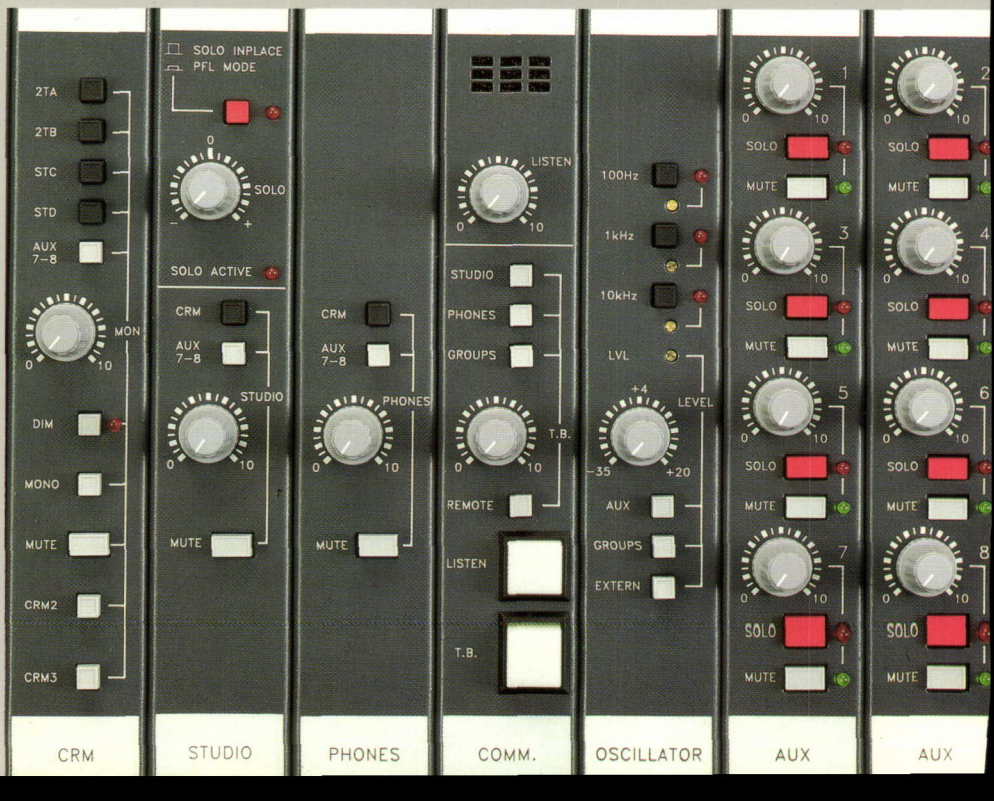
**The balance control adjusts actively the left/right levels in the return modules assigned to the main left right busses.**

**The solo switch brings the post effect fader signal into the monitoring.**

**The mute switch is active on both of the outgoing signals as well as the solo switch.**

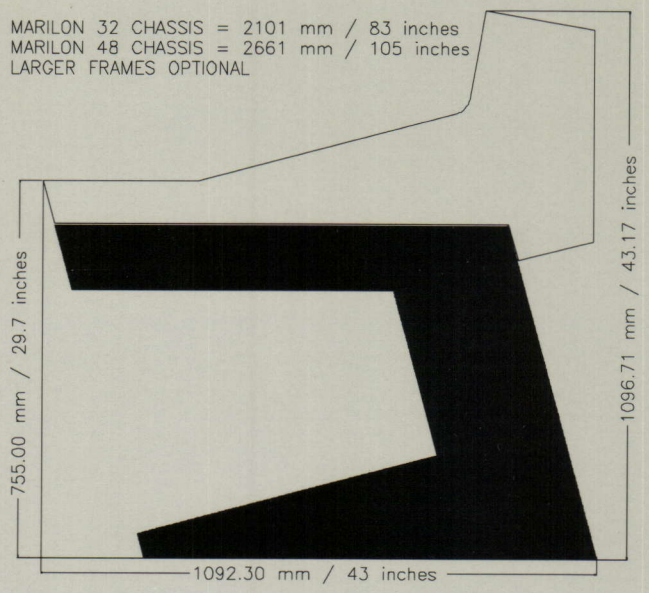
**A 60mm fader completes each of the eight effects return modules.**

### MASTER SECTION.



**SPECIFICATIONS:**

| | | |
|---|---|---|
| **INPUTS:** | Mic input, balanced, RF suppressed, 2 kOhm.<br>C.M.R.R. at 50 Hz, -70 dB.<br>Sensitivity: -80 dBu max for +4 dBu output.<br>Noise mic: Ein -129.5 dBu, 150 Ohm source. | Line A/B/tape inputs: bal. 10kOhm, -20dB to +20dB.<br>Mon./chan. inserts: 10kOhm/47Ohm bal. 0dBu.<br>Stereo machines:+4dBu balanced, -10dBv unb. |
| **OUTPUTS:** | Group, Main outputs, +4dBu / -10dBv balanced.<br>All other outputs +4dBu semi-balanced (ground compensated). | Noise master fader down: -98dB.<br>Noise 32 channels routed: -89 dB referred to +4dBu. |
| **EQUALIZATION:** | High pass filter, -3dB at 100Hz.<br>H.F. +/- 16dB from 1kHz to 20kHz, bell/shelve selectable.<br>L.F. +/- 16dB from 50Hz to 1 kHz, bell/shelve selectable.<br>H.M.F. +/- 16dB from 1kHz to 20kHz bell, Q 1.5<br>L.M.F. +/- 16dB from 50 Hz to 1kHz bell, Q 1.5 | H.F. / L.F. switchable between channel and monitor.<br><br>H.M.F. / L.M.F. switchable between channel and monitor. |
| **OVERALL:** | Nominal internal operating level 0dBu (0.775 V).<br>Frequency response, any input to any output 20-20.000 Hz, +0.0 -0.025dB.<br>Total harmonic distortion:<br>Mic. in, Grp. out: 1 kHz: 0.007%, 10kHz: 0.009%. | Maximum output: +26dBu into 600 Ohm balanced.<br>Maximum headroom: not less than +22dB anywhere in the console. |
| **CROSSTALK:** | Mic to line: < 90 dB at 1 kHz.<br>Channel mute: < 90 dB at 1kHz.<br>Pan-pot isolation: < 78dB at 1kHz. | Channel routing: < 90dB at 1kHz.<br>Channel fader: < 97dB at 1 kHz.<br>Aux send kill: -85dB at 1 kHz. |
| **WEIGHT:** | Marilon 32 frame 300kg / 660 Lbs.<br>Marilon 48 frame 350kg / 770 Lbs. | Larger frames optional. |
| **OPTIONS:** | Analog V.U. meters.<br>Conductive plastic faders.<br>C-Mix fader / mute automation. | Moving fader automation. |

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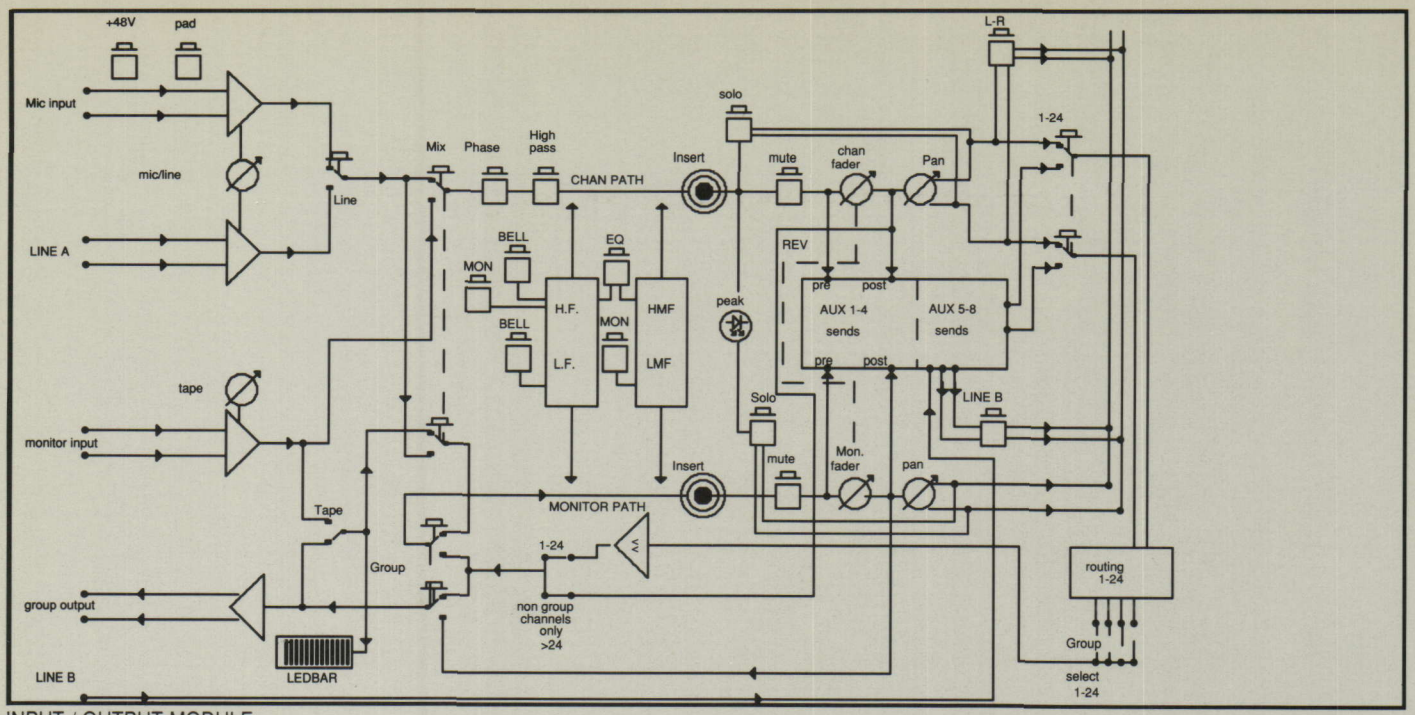
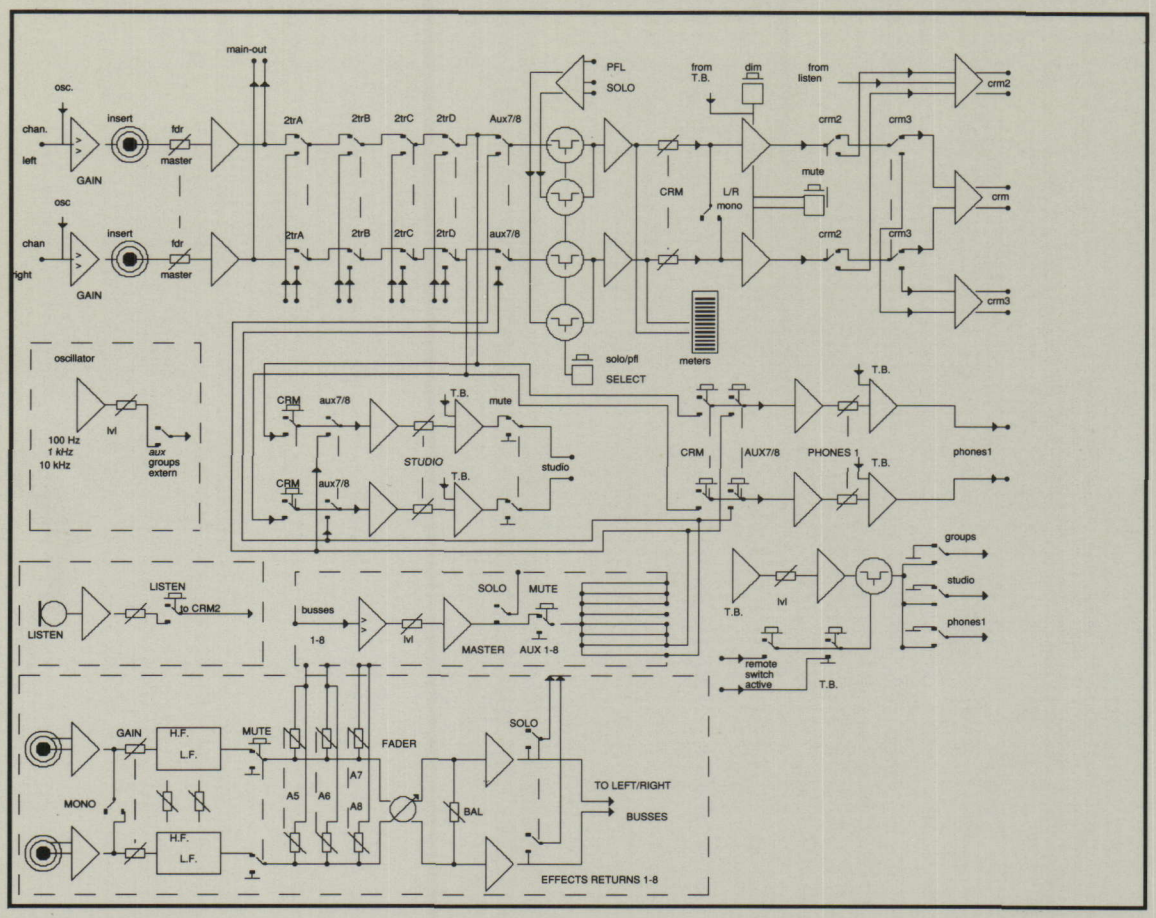



INPUT / OUTPUT MODULE.




MASTER MODULES.

D&R mixing consoles