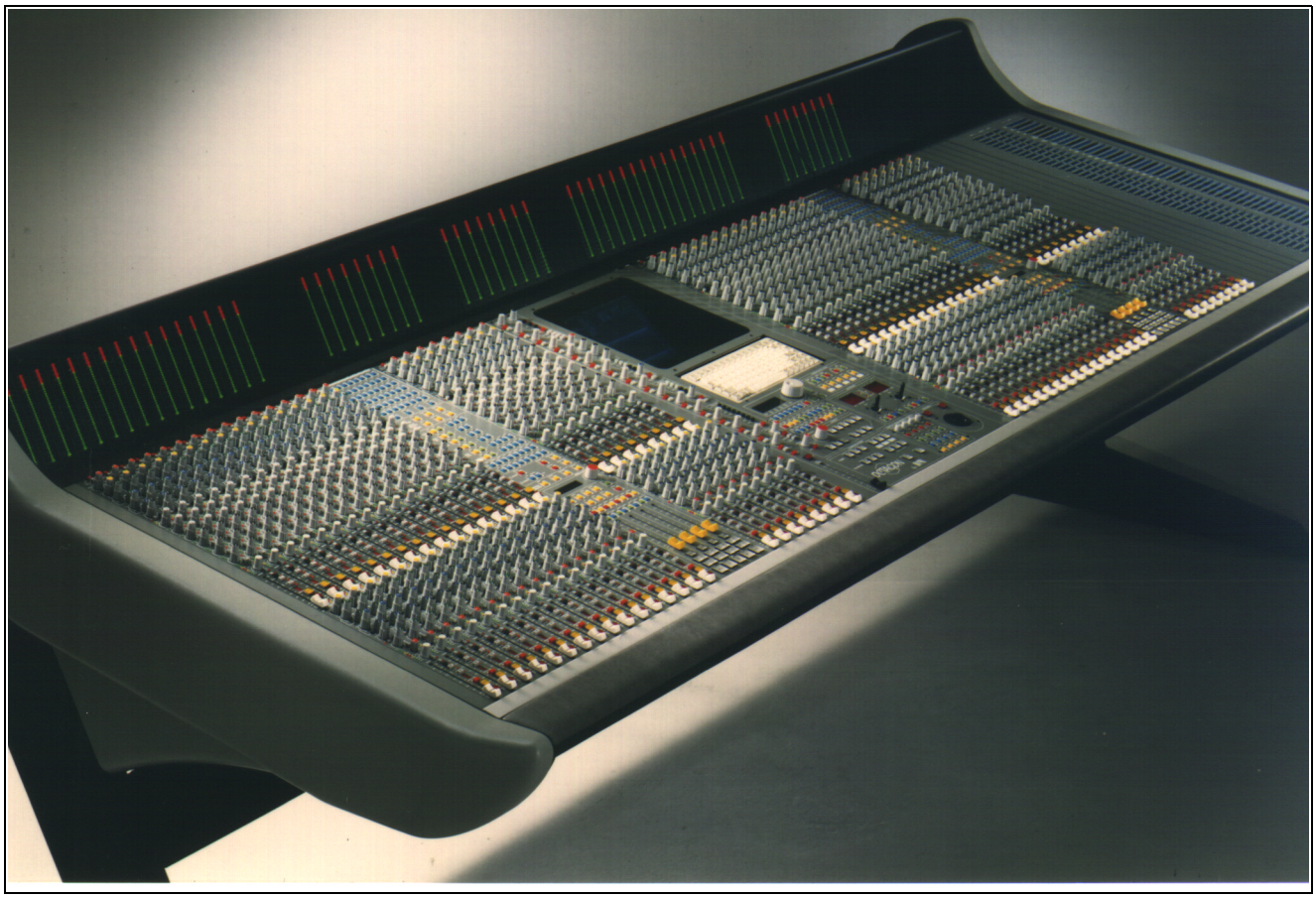
PRODUCT INFORMATION



OCTAGON

Multi-format production console

The *OCTAGON* is D&R's latest digitally controlled analog large multi-format production console. The *OCTAGON* is aimed at the film and post market as well as serving music recording studio's with multi-format surround sound options.

The *OCTAGON* is the culmination of 25 years of music recording console design in combination with the users feedback from CinemiX customers. With in-depth knowledge of audio post-production we have managed to create a new multi-format audio console that combines the advantages of an analog audio path with fast repeatable digital control.

The result is a highly flexible multi-format console for music recording studios, film mixing studios and post-production houses that are using film style techniques.

EXTENSIVE MASTER SECTION WITH UP TO 7.1 MULTI FORMAT MONITORING:

Two *OCTAGON* frames with integrated master section and power supplies allowing up to 60 or 84 dual input modules, making a total of 168 inputs available at mix down. Special customised frames are available on request.

The *OCTAGON's* frame comes standard with a master section and an internal gold plated Tiny Telephone patchbay, (externally mounted patch bays are optional). The extensive master section of the *OCTAGON* includes a TFT screen, "QWERTY" keyboard, trackball, automated solo system, two automated joystick surround panners, master/CRM inserts for direct interfacing with all current encoders and decoders such as DS4-E, CP-65, SEU4, SDU4, RSP and academy filters for correcting room acoustics. There are 8 Main output buses, and an advanced CRM matrix for monitoring in all well known multi-channel formats.

The *OCTAGON* features **Recall** on all pots and switches, and **Auto Reset** on all switch functions in the input module, the Aux master and the CRM section. The console's automation runs on D&R's proven **Powerfade** software using an external PC. Automation is based on SMPTE time code, and can accept time code running in slow motion, various speeds and even backwards.

UP TO FOUR CONTROL MODULES CAN BE INSTALLED TO ACCESS ANY INPUT MODULE:

The *OCTAGON* uses a control module to globally or locally set signal routing and functions in the input modules such as the 48 buss digital routing, the input selection and Auxiliary sourcing and pre/post switching. Full 8 way surround output routing is also controlled by the Control Module. Special functions are: Assignment of ledbars reading mic/line input, tape/playback or group output. Even ballistics change from Peak to VU reading is set by the control module. One control module houses the controls for 4 Control Group faders to globally control VCA group levels with group solo, mute and grouped automation switches. Fast machine controls for local control of recording devices and user definable macro switches can be used for record on/off or direct/playback switching of a whole group of inputs.

A maximum of four control module's can be positioned anywhere in the frame for multi operator use in large scale film post production.

TRUE DUAL PATH INPUTS WITH FULL FOUR BAND EQ AND 16 AUX BUSES:

The *OCTAGON's* Dual Line module has 2 identical input circuits, both capable of handling mic-line, tape or group signals. Both sections have full 4-band EQ with bandwidth controls for the mid-sections. The lower section has a variable High and Low pass filter.

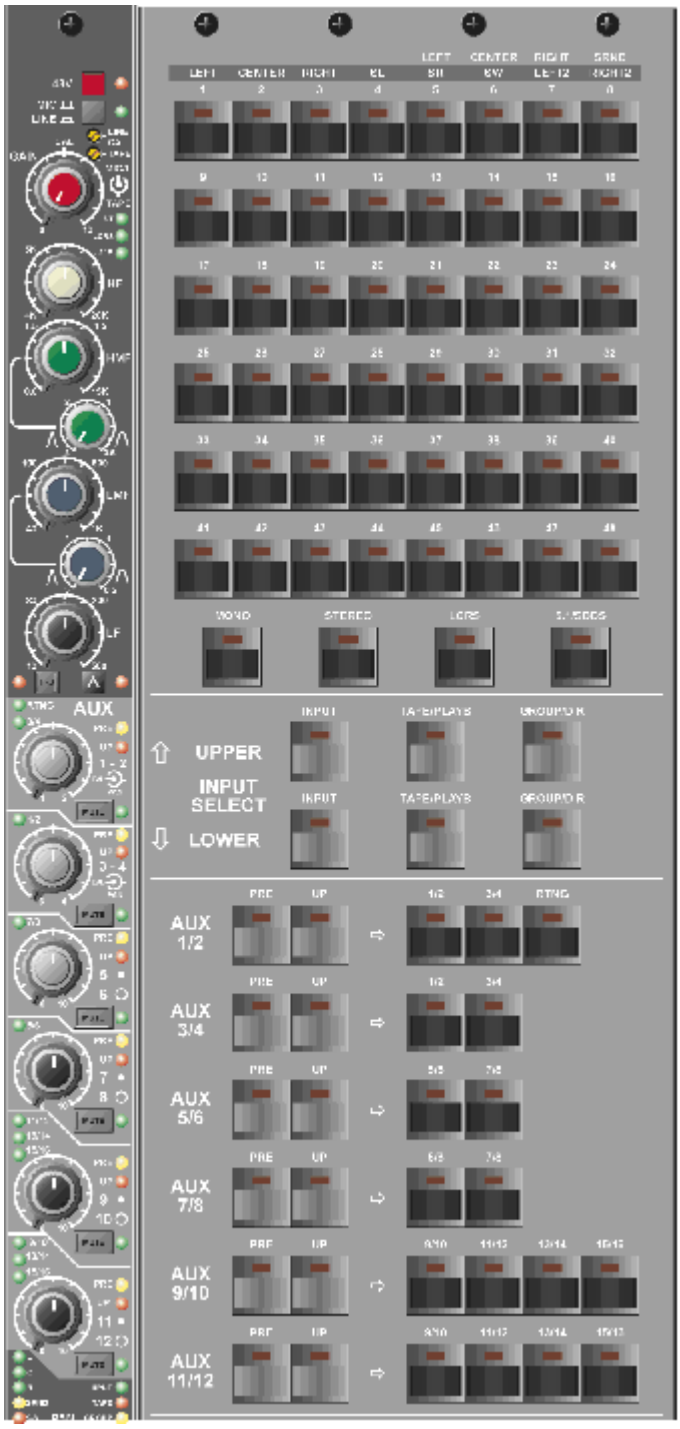
A calibration function is fitted in the upper section for fixed level "STEM" returns.

Each module has 12 Aux. send controls with pre/post and alternate source selection with access to a total of 16 Aux. buses.

The lower section has full 8 way panning while the upper section is fitted with left/right panning plus direct individual routing to all 48 buses and 8 main output buses.

Both sections are fitted with D&R's Powerfade motorfader system using 100m ALPS motorfaders as standard. (P&G motorfaders are optional).

The actual status of every input module is easily identified by small 3 mm leds to the left and right of the input strip. At a single glance the routing of an input signal is displayed. Copying and storing of different input settings is possible. A 37 segment peak/VU ledbar completes the input module. Because of its flexible construction, the *OCTAGON* can easily be configured for music recording studios. User-definable macro switches enable the engineer to quickly set up the *OCTAGON* according to his or her specific requirements.



The Octagon Dual Stereo module is to be announced later this year. It will have the same basic features as the Dual Line module. Typical stereo signal related functions will be included.

MORE EXCITING OPTIONS:

Every input module can accept high resolution RTW or NTP metering for improved resolution display of in and output signals instead of the standard 37 segment ledbars. Another option is Power Dynamics, D&R's software driven dynamics processor for compressing and gating functions per input. Optional is the externally housed STEMS/Matrix hardware, controlled from the console's surface. Various custom options are possible such as different frame sizes, customised panels for remote controls etc.

OCTAGON

.HIGHLIGHTS OF THE INPUT MODULES:

- Two nearly identical signal paths per module.
- Two full 4-band sweepable equalisers with full parametric Mid sections and Bell/Shelve switching for the low frequency band.
- Wide range sweepable High and Low pass filtering on the lower section.
- Both signal paths include automated 100 mm motorised faders and mutes. (VCA faders are optional).
- Full 8-way assignment and panning per module to the master and 48 buses.
- The Octagon features true 48 multi-buss routing, offering you the following formats: 48x1 (mono), 24x2 (stereo), 12x4 (LCRS), 6x8, (5.1, 7.1).
- 12 discrete Aux sends assignable to 16 Aux buses per module.
- Switchable inserts on both sections.
- Upper section includes a CAL(ibration) function for use with "STEM" returns.
- Automated local soft mutes for all Aux. sends.
- Special motor touch fine adjustment trimmers are user accessable on the front panel to be able to further improve *OCTAGON's* fader touch behaviour in different humidity environments.

MAIN FEATURES MASTER SECTION OCTAGON OVERVIEW:

The integrated TFT video display, high quality trackball and associated full functioning QWERTY keyboard present you with a clean and uncluttered master section to control all automation related functions.

The master section of the Octagon houses all the electronics of the 8 main summing amps.

All 16 Aux. sends with Solo and automated Mute switching are conveniently positioned in a vertical row.

Below the Aux. master controls is the main 8 track automated master motorfader controlling 8 top quality low distortion (THAT) VCAs.

The next row of controls starts with the oscillator, capable of generating three important spot frequencies as well as **pink noise** for positioning multi-channel output test signals. Oscillator assignment to Master, Groups, Joysticks / Auxes, and external output is provided for.

COMPREHENSIVE COMMUNICATION FACILITIES ARE STANDARD:

Located below the oscillator section are the extensive communication controls. Three Listen inputs and one Talkback mic input eases communication dramatically. All intercom activities are activated in the lower part of the master section's communications area.

External activation of talk-back mics is possible. The talk-back mic can be assigned to Studio 1, Studio 2 and to all buses through the same assignment switches that the oscillator is using.

TWO FULLY FEATURED STUDIO OUTPUTS:

The studio outputs can be fed by the two track machines simultaneously if required, Left/right outputs, the inner(center) left/right outputs (L2/R2), Aux 1-2 and Aux 3-4. Both Studio outputs have Solo and Mute switching.

EIGHT TWO TRACK INPUTS AS STANDARD:

All fully balanced 2 track inputs can be monitored and summed if necessary .

There is the ability to connect the selected 2 tracks to the main outputs, or to feed the 2 tracks from one of the other 2 tracks for copying.

DIGITAL PROGRAMMABLE SOLO SYSTEM:

The *OCTAGON* has an extensive solo system. Apart from its direct accessable separate PFL and SOLO switches in the modules, several modes of operation are at your service.

There is a momentary solo action, giving only solo when the solo switch is held down. There is also an interlocking action, switching off previous selected solo switches. Apart from these convenient modes there is of course the regular "adding Solo mode", "destructive Solo mode" and "Solo In Place mode", plus the possibility of total cancelling (SOLO RESET) any selected Solo switch in the system.

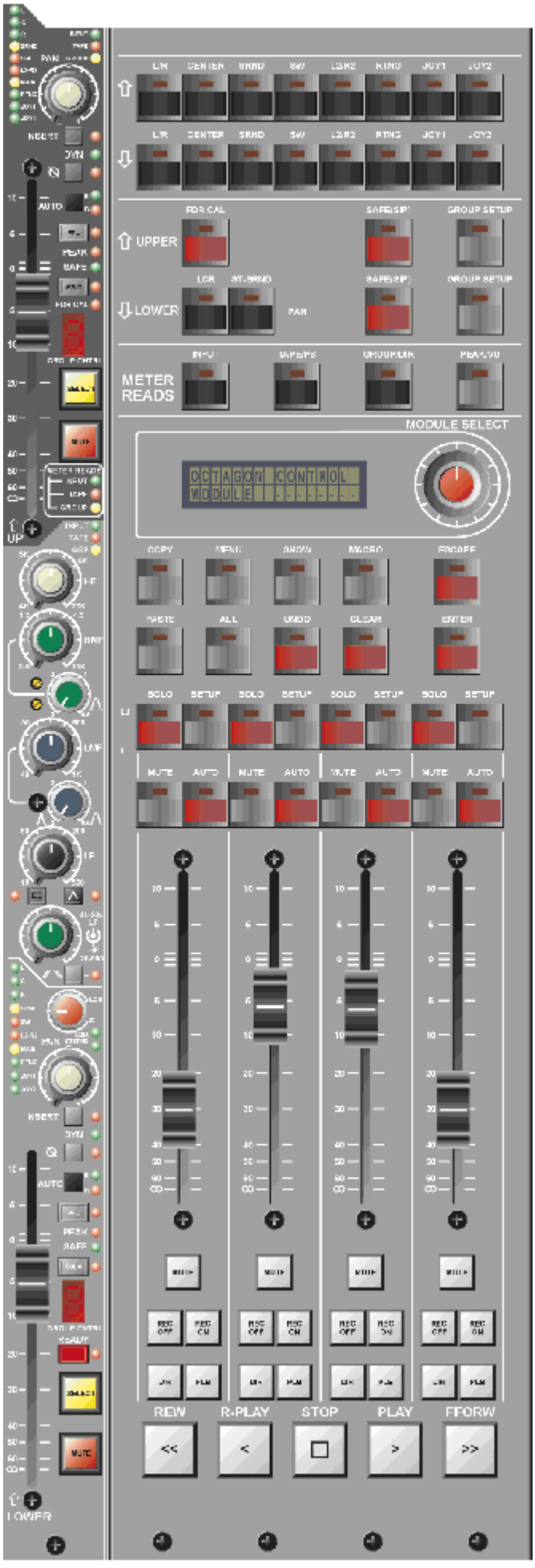
Apart from a separate AFL/PFL selection special solo presets can be made by programmable macro switches in the communications section. A red light switch is also present in the communications area. Automated red light signalling is part of the programmability of the *OCTAGON*.

MAIN CONTROL ROOM MONITORING SYSTEM:

The *OCTAGON's* CRM llistening control adjusts all 8 outputs with a precise digital attenuator.

A general Mute switch, Dim switch and a programmable listening level preset are part of the system.

A separate control with mono switch takes care of the near field level, independent of main monitors.



CONTROL ROOM MONITOR FUNCTIONS:

To the right of the CRM control (next to the total Mute switch) are 8 mute switches for selectively muting one or more of the 8 CRM outputs.

Above the CRM control is a sophisticated section of 20 switches controlling all surround sound related actions.

Master related functions are:

- Main L2/R2 to Main Left/Right output buses.
- On and off of main inserts.
- Encoder insert switching.
- 8 Track machine return to buss 1-8.
- Meters to main outputs.

Nearfield monitor related functions are:

- Solo, 2Tracks and CRM to nearfields.
- CRM to nearfield 1 or 2 outputs.
-

CRM related functions are:

- Main outputs to CRM.
- 2 Tracks to CRM.
- 8 Track to CRM.
- Centre to Left / Right.
- Left / Right to Mono.
- Surround to Mono.
- CRM insert 1 on/off. (Filters/CP65).
- CRM insert 2 on/off.
- CRM to Loudspeakerset 1 outputs(8x).
- CRM to Loudspeakerset 2 outputs.(8x)

All the above mentioned functions are very practical and many problems can be simplified using this elegant Control Monitor section.

JOYSTICKS WITH EXTENSIVE FORMAT PROGRAMMING:

Both joysticks are fitted with a large LED matrix to easily visualise the movements of the audio controlled by joystick movements.

The SET-UP switch in the Joystick area determines the mixing format, devergence and assignment to the 48 track buses or 8 main output buses. The following formats can be programmed.

- **Left / Right.**
- **Left / Centre / Right.**
- **Left / Left2 / Centre / Right2 / Right.**
- **Left / Centre / Right / Surround.**
- **Left / Right / Surround left / Surround right.**
- **Left / Centre / Right / Srnd lft / Srnd rght,**
- **Left / Left2 / Centre / Right2 / Right / SL/SR.**

Assignment LEDs placed around the LED matrix indicate which outputs have been activated. All the usual solo/mute and automation switches are of course available when using the joysticks.

LARGE LCD DISPLAY AND BRIGHT TFT DISPLAY KEEPS YOU ON TRACK WITH AUTOMATION DATA:

Six switch functions below the 4x20 LCD screen are used to select and change data in the display that need adjustment. A rotary encoder changes the data displayed and monitored.

The LCD screen is also part of the optional dynamics package when installed. A separate ledbar to the right of the rotary encoder indicates the gain reduction. A dynamics on/off switch (per channel) eases comparisons between treated and untreated signals when D&R's Powerdynamics package is installed. Power dynamics allows you to compress and gate signals without losing valuable module inserts. Linking and copying of favourite settings is possible.

RECALL OF ALL POTS AND SWITCHES ARE PART OF THE OCTAGON'S DESING:

All input module settings of all switches and pots can be stored at the touch of a button. The vast majority of all switches are instantly reset when recalled from the Octagon's memory banks.

Recall is done by an easy LED guided nulling system, that uses existing LED rows from the input modules. It is even possible to null Multiple modules simultaneously for faster console reset. Separate storage of specific EQ settings to create sound libraries is possible.

Five user definable pre-sets are at your fingertips to instantly change the complete console setting.

When ordered, a separate rack mounted monitor matrix can be connected to the *OCTAGON* to further extend the number of STEM returns.

Total control of these STEMS is in the master section.

Switching between Direct(bus) and Tape(PEC) per STEM, as well as total trim of STEMs is possible.

Notice that the upper section of the Octagon can accept all STEM returns up to the maximum amount of input modules positioned in the frame.

METERING:

Every module has a 37 segment ledbar located above the input strip. VU or Peak reading, and a wide selection of sources can be controlled from the control module. Analog type VU meters are optional.

The master section has, as standard, ten 37 segment ledbars reading from left ro right:

Solo left and right, Left / Center / Right / Surround Left / Surround Right / Sub Bass / Left2 / Right2. A Phase meter completes the meter section.

A FULLY LOADED GOLD PLATED TINY TELEPHONE PATCH BAY IS INTEGRATED:

All inputs and outputs of the Octagon are accessable at the patch bay, and due to "normalling", a minimum of permanent patch cords is necessary. The fully balanced interface at +4dBu is standardised via 25 pole sub-D connectors at the back of the console.

An internal patchbay can be positioned on the left or right side of the frame.

I hope we have given you a brief overview of the possibilities of the Octagon. If you need more specific information please contact our HQ, or send us an E-mail or fax.

TECHNICAL SPECIFICATIONS:

INPUTS:

Mic: 2kOhm balanced. noise -129 dBr. maximum gain 84dB, max input +12dBu.
Line: 10kOhm balanced. +4dBu (+/-20dB).
Tape/Stem: 10kOhm bal. +4dBu (+/-20dB).
Tape/Line calibration range: +/- 4dB.
Maximum input: +22dBu.
Insert returns: 10kOhm, balanced +4dBu.
2/8 tracks: 10kOhm balanced +4dBu.
Encoder/decoder: 10kOhm, bal. +4dBu
Academy filter inputs: 10KOhm, bal. +4dBu

OUTPUTS:

All outputs electronically balanced: impedance <47Ohm at +4dBu.
Maximum output: +26dBu.
(Group outputs have a +/-4dB calibration trimmer).

OVERALL:

Headroom: no less than 22dB anywhere.
Frequency response: 10Hz-100.000Hz (-2dB).
Harmonic distortion: 0.006% (VCA out), 0.016% VCA in (That 2180 2nd harmonic distortion only)
Noise: 32 channels routed -89dBr.
Crosstalk: not below - 90dBr.
Phase: From Line in to Group out. 0.2 degrees @1kHz.

NOTES:

0dBu=775mV.
All measurements were made on an Audio Precison System One.

D&R reserves the right to change these specs at any time,due to new product improvements and new components,

OPTIONS:

Penny and Giles motorfaders.
NTP/RTW metering.
Analog VU meters.
Powerdynamics on modules only.
External patchbay.
Outboard Matrix Unit (extra STEM returns).
Producers desk.
Script-Tray.
Internal 19" rack mount.

CONFIGURATIONS:

Octagon 60:
A 60 frame can handle:
60 dual line input modules / 8 dual stereo line returns / master / a maximum of 2 control modules and an internal patchbay. (136 inputs).

Octagon 84:
A 84 frame can handle:
84 dual line input modules / 8 dual stereo line returns / master / a maximum of 4 control modules and an internal patchbay. (184 inputs).

DIMENSIONS AND WEIGHT:

Length:
Octagon 60: 3270 mm / 128,7".
Octagon 84: 4460 mm / 175,6".

Weight:
Octagon 60: 400kg / 880 Lbs.
Octagon 84: 500kg / 1100 Lbs.

For further information please contact:

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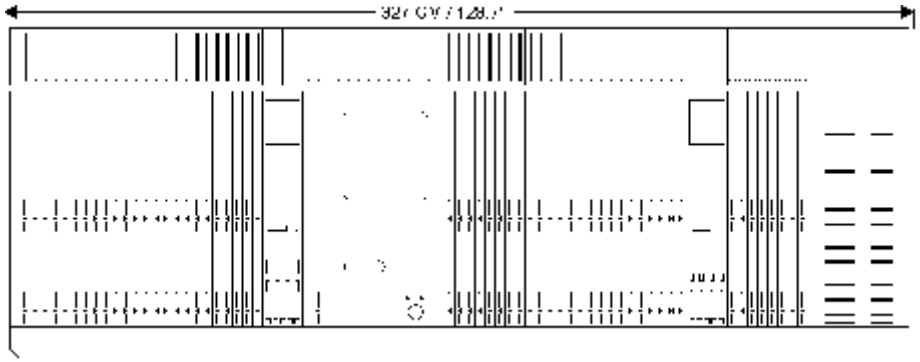
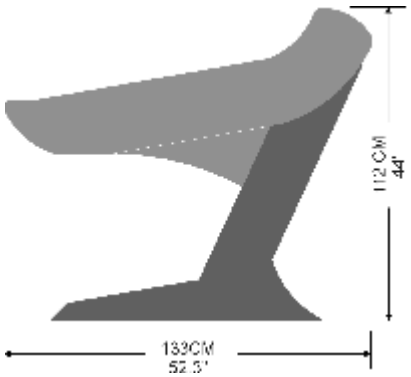
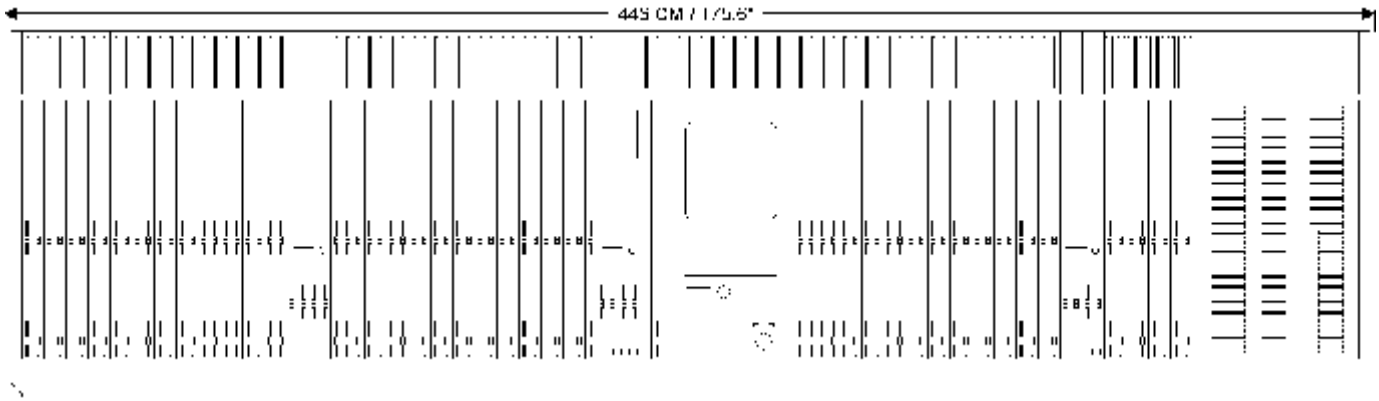




Frame 60



Frame 84