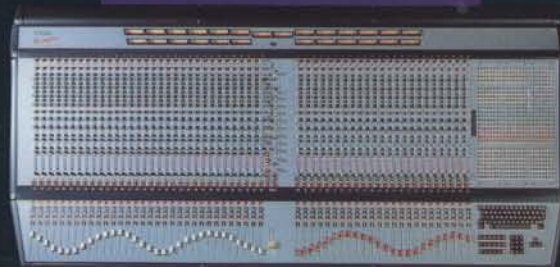


DDA

Profile



SOUND THINKING

Profile key features

- *24 Bus Console with 24 Track Monitoring*
- *56 Module chassis gives 32/24 format*
- *136 Inputs available in Mix*
- *Identical four band fully parametric equalisers on all modules*
- *Sweep high pass filter*
- *'SPLINT' concept radically reduces switching and patching*
- *8 Automateable switch functions per channel*
- *Full function colour graphic automation system*
- *10 Auxiliary Buses, with Direct Out facility on each channel*
- *EFFECTS RETURN function on every module*
- *Comprehensive Master section*
- *Two Foldback (Cue) Outputs*
- *Split Solo-In-Place function*
- *Speaker selection switching for up to 4 pairs of monitors*
- *Modern styling and Compact Size*
- *Multipoint patchbay with up to 224 tielines*
- *Optional Mic Patching lines (Studio tie-lines)*
- *Strong aluminium extrusion construction with separate fader section*
- *VU or LED Bargraph metering options*



PROFILE and the SPLINT concept

Modern Recording Studio's requirements are being dictated by available space and budget, in order to maximise profit as interest rates and other costs rise. The PROFILE console offers a large number of inputs in a compact, modern styled frame, at a very affordable price. Designed for 24 track use primarily, the flexibility of its signal routing ensures easy operation.

The DDA PROFILE console follows the DMR12 in its use of DDA's 'SPLINT' concept. That concept uses the idea of essentially a split type of console design,

with facilities imported from the In-line design.

In essence, all modules, whether mic input channels, line modules or dedicated output

channels, have the same facilities on the input or monitor return signal path, which include identical four band equalisers, auxiliary feeds and routing to the multitrack buses. This configuration removes the compromises found on the split or inline styles where the whole configuration is changed when changing from record mode to mixdown mode. With the SPLINT style, monitoring and mixing can all be performed from the same position on the console, as all the facilities are the same, and normal line inputs and synths can be left permanently wired to the normal channel inputs. The second advantage of the SPLINT idea is that all monitoring/mixing is performed on long-throw faders, with group output levels being simply trimmed on a rotary pot. No more switching over for mix, and no more monitoring on rotary pots!!

The inclusion of fully parametric four band equalisers on both input and monitor sections avoids the compromise of having to split the EQ into two sections, as found on many inline designs in this price range.

Module Functionality

There are two types of input module, which are in most respects the same. The exception is that the Mic Input has Mic amplifier and gain control, while the Line/Group module has group summing amplifier and bus trim instead.

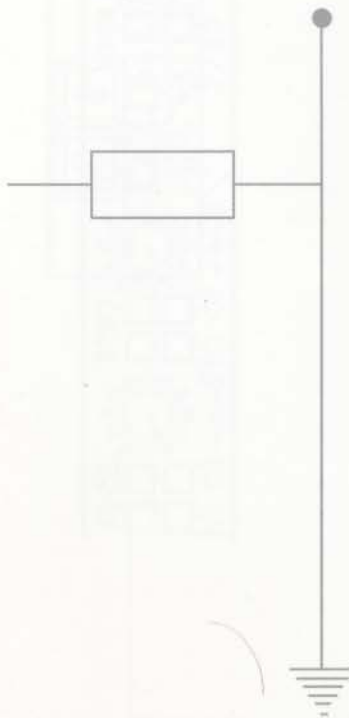
Twenty four line/group modules are dedicated to the multitrack sends and returns. The other 32 modules are normally the mic/line input type.

Construction and format

PROFILE has been designed not only to perform exceptionally well and be visually stunning, but also to be mechanically and electronically stable. Custom aluminium extrusions provide a light yet rigid base for the compact design, which, including modules and patchbay, measures just under 8 feet (2.45 metres) in length. Modules are seated in a frame-secured PCB motherboard system which allows easy removal for servicing.

Automation

Automation is supplied by a full-colour graphics, hard-disk, PC-based system, which in addition to fader and mutes can automate up to 7 switches per channel in the mix against timecode. Other powerful features include a simple noise gate function, cue-list editing and MIDI control.



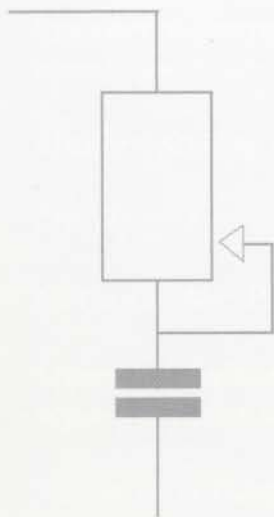
the mic input module



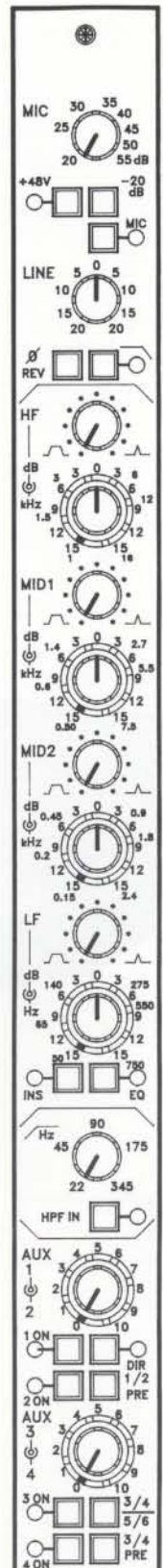
The Mic Input module has two inputs, Mic and Line, each with separate buffer/gain stages and gain controls. The mic input also has phantom power and 20dB pad switches. Phase reverse switching and a switchable low pass filter follow the selected input.

The equaliser is a four band, fully parametric design, all bands having gain of 15dB, and frequency coverages of 1.2kHz to 20kHz (HF), 700Hz to 12kHz (Hi-Mid), 250Hz to 3.6kHz (LO-Mid), and 45Hz to 750Hz (LF). All Q controls are fully variable from 0.35 to 5, and the EQ section can be switched in or out of circuit.

Following the EQ is the insert point. Insert sends are always active, with the return being switched in on the module. This function can be automated (option).



A switchable sweep high pass filter (45Hz to 750Hz) follows on the module, independent of the main EQ section. Ten auxiliary buses are arranged as 6 mono sends and two stereo sends. Sends 1-6 are controlled by two dual concentric pots: Level 1/2 and Level 3/4 or 5/6. Auxiliary 1 can be switched to become a controlled direct out from the channel, and can then be used as a dedicated effects send, or track send if required. Pre/post switching is for both Auxes 1 and 2. Aux controls 3 and 4 can be switched to feed buses 5 and 6, again with pre/post switching for the pair under control. Stereo pairs A & B each have level and pan controls, with individual pre/post switching. All controlled aux buses have individual on/off switches. These can all be automated so that bringing in effects during a mix can be repeated faithfully time after time.



the mic input module



The AUX RTN button uses the AUX A controls to pick up the non-selected input (LINE if MIC is selected and vice-versa) and feed it directly to the stereo mix bus, for use as an effects return or extra tape return in mixdown. If the MIC input is used in this way, using the 20dB pad will make it suitable for line level signals, and by the addition of the optional Mic Patching, easy cross-patching of effects or other line signals allows 112 line level inputs in mix, without utilizing group injects. In this case, both inputs will have individual gain trim controls.

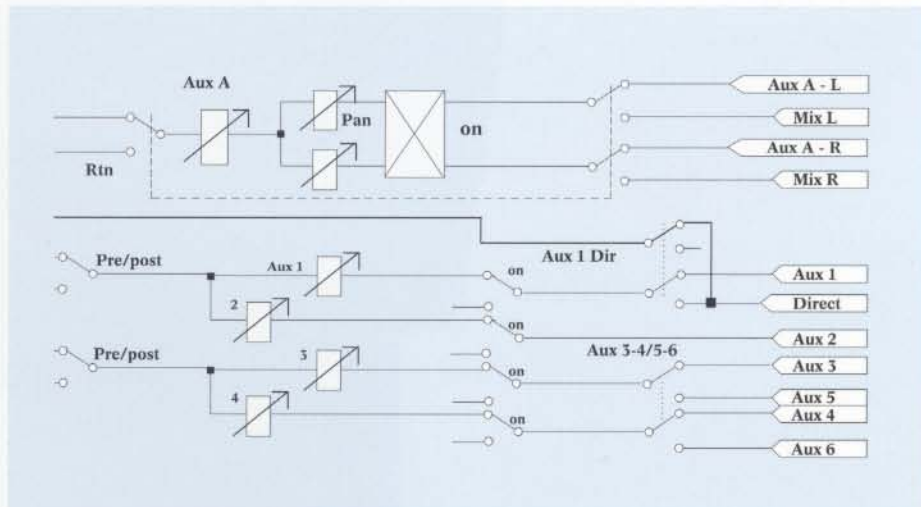
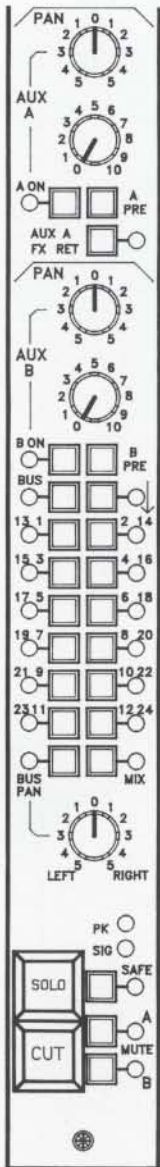
Additionally, the Aux B send can be switched to feed the routing matrix, so that individual channels can feed

dedicated stereo effects sends out of the routing section when in mix mode, providing up to 12 more stereo sends.

Pan facilities follow the routing switches, which are for buses 1-12 with shift access for buses 13-24. The channel signal can of course be routed to stereo as well.

Peak and signal present leds are provided, with SOLO switching (PFL, AFL or Solo-In-Place, controlled from the masters), and CUT switch. Two mute groups can be addressed from the module, with Master switches on the central master section.

A SAFE button is provided for the Solo-In-Place mode so that channels may be solo'd along with their effects returns.



Pro



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file



THINKING

- 12
- 11
- 10
- 9
- 8
- 7
- 6
- 5
- 4
- 3
- 2
- 1
- 0



Three levels of Auto-mation are offered for PROFILE.

Optifile offers a cost effective automated Profile console and provides



simple fader and mute automation, with fader mode control available on each individual channel. The system is very easy to use, and through a menu system offers a number of options for mix merging, including comparing two mixes, and off-line trimming of sections of a mix. The integral 3.5 floppy disk stores typically mixes of 90 minute duration.

On-line functions include automatic drop-in/drop-out, up to 9 VCA groups, and a large timecode display.

Pro-File is a much more sophisticated system, yet still retains operational simplicity. Based on IBM-PC architecture the main screen gives a view of all fader and VCA Sub-group settings. A ZOOM function allows any group of faders to be examined in more detail, along with the eight automated channel functions that correspond (Aux on/off, insert in/out, and MUTE). Up to 16 VCA

sub-groups can be formed and simultaneously displayed along with their members.

The VCA section, located on the module PCB, is also used to provide a NOISE GATE function, which can be dynamically recorded against time-code, and its parameters within the mix edited. The noise gate parameters which can be adjusted include threshold, decay and hysteresis.

Each group of 8 channels has its own 'computer' which controls local functions such as fader READ/WRITE/ UPDATE, and a SELECT button for mode and gate function control.

A high degree of MIDI control is included, and a comprehensive cue list is available for mix event editing. Events, such as the Aux on/off switches, can be added, moved or deleted from a mix. Mix editing provides numerous functions for mix merging, channel copying and slipping, or even swapping. It is even possible to merge portions of one mix with another.

For applications where moving fader automation is a requirement, an enhanced version of the **Uptown 990** system may be specified for PROFILE. A separate brochure detailing this option is available from DDA on request.



Pro-File main screen



Uptown main screen



the line/group module



The line/group module is in most respects identical in facilities to the mic input module, except that its inputs are normalled via the patchbay to the multitrack returns. In place of the mic input, there is a bus summing amplifier for tape output, with a level trim. This signal can be routed to stereo for monitoring of the bus signal. It can also function as a simple line input or effects return in mixdown using the group insert return point. The console can therefore offer up to 136 inputs in mix using the AUX RTN functions. When using the group insert, odd groups are routed to left, and even to right, enabling the simple creation of stereo sub-groups.

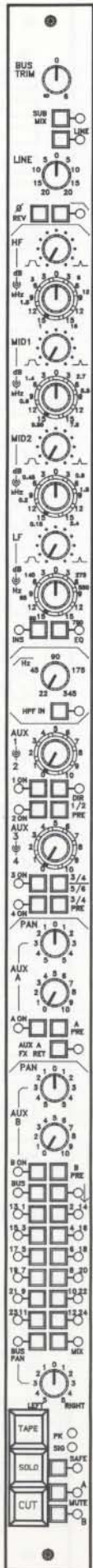
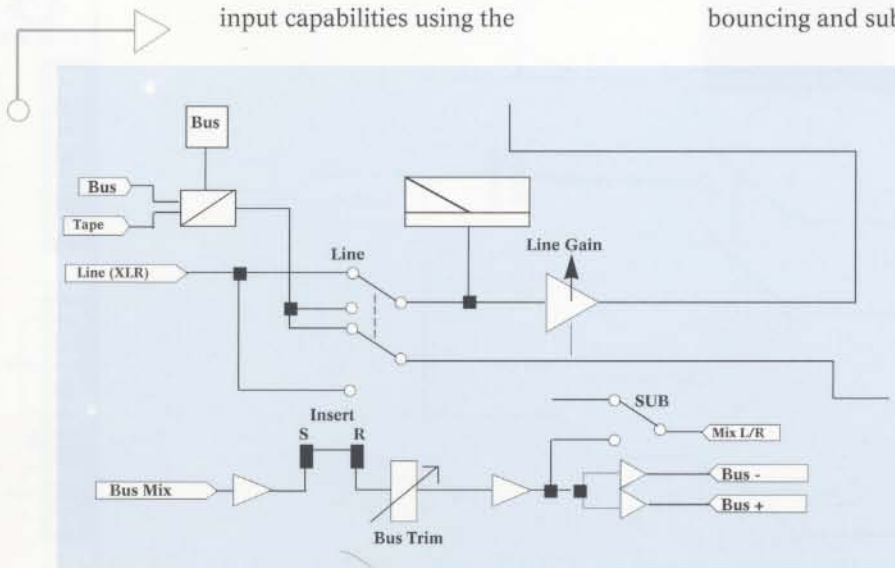
As well as input selection of BUS or TAPE signal, there is a third line input which can be switched in, accessible via a rear panel mounted XLR connector. This module can be used in place of a normal input module if no mic input is needed, to provide further input capabilities using the

insert/group to mix function, for example as a simple effects return.

The AUX RTN function on this module is similar to that on the Mic Input, except that it picks up the non-selected input from either the BUS/TAPE signal (selected on the BUS switch) or the extra line input. These line inputs can of course be permanently wired.

Input selection of BUS or TAPE monitor signal is selected at the bottom of the module, with a MASTER override on the central master module which permits an OVERDUB mode to be selected.

All other facilities such as equaliser, auxiliaries and routing, are identical to the mic input module. This flexibility allows permanent connection of external devices and multitracks to dedicated inputs, removing the need to cross-patch or switch around for mixdown. It also enables the routing to be used easily for track-bouncing and sub-group creation, by mixing all desired channels onto an unused bus, and using that bus trim as the master level for the sub-group or new track.



comprehensive masters



Two master modules offer a high number of facilities. The first module

contains an integral oscillator with four selectable frequencies which can be routed to stereo and the group buses.

Control room and studio monitor outputs are provided, the sources for control room being selected from two stereo tape returns, stereo mix, or a third 'external' stereo input. The main control room loudspeaker outputs are supplemented by three switched alternate speaker pairs, with a level control for the alternate set selected. In addition, LEFT CUT, RIGHT CUT, and MONO switching for the Control Room monitor speakers is provided.

SOLO mode is selectable between PFL, AFL or Solo-In-Place. This last mode can even be split so that either inputs or monitors or both can be set to SIP mode. In this mode, channels in the non-SIP section will not be

muted when another channel is SOLO'd, leaving effects returns unchanged in the mix balance.

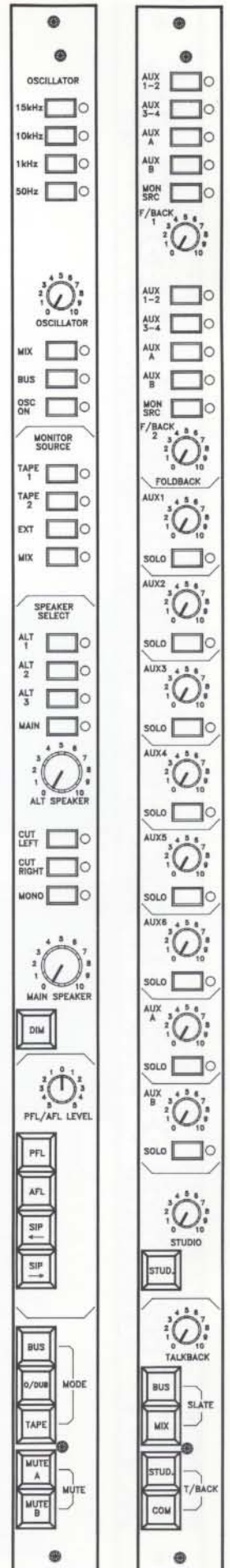
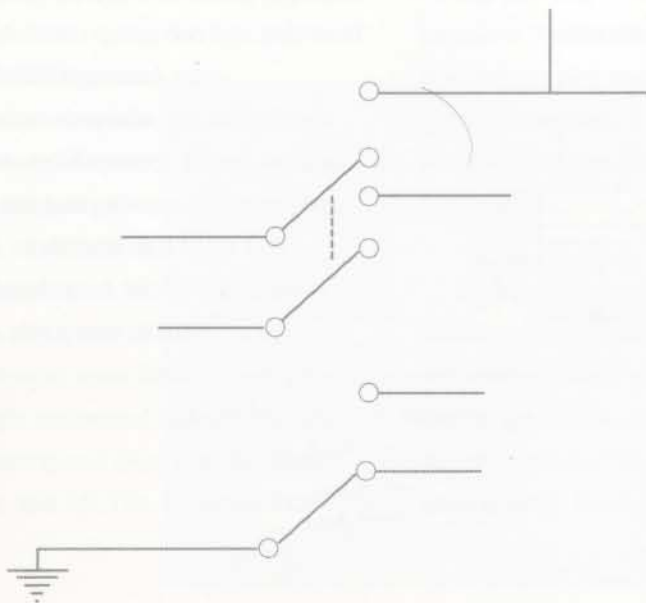
The monitor mode (input to line/group modules) select can be switched between global BUS, global TAPE, or OVERDUB. In the last mode, each output module can be flipped between group or tape individually.

Master switches for the two mute buses A and B are located on this master module.

The second module is the Auxiliary and Foldback master.

Two foldback outputs can be sourced from the auxiliary buses or monitor, and all auxiliary master outputs have level control and solo switching.

Finally, a talkback microphone mounted in the meterbridge, can be routed to buses or stereo mix, and also to studio and foldback/cue outputs.



connectors & patchbay



Patchbay

The PROFILE patchbay is a very comprehensive, multi-point TT bantam jack unit, based on reliable Mosses & Mitchell long frame metal jack sockets. The entire unit is hinged to provide access for routine maintenance.

The layout is conventional in nature, with each function for all channels running horizontally along the bay. The first 32 Mic input channels are run as two blocks of 16, with jacks for line in, insert send and return and direct out.

The 24 line/group modules are arranged as rows of 24 jacks, with provision for bus and tape in, insert send and return, and bus out. Up to 224 tielines may be fitted in the patchbay.

The optional Mic patching for the 32 Mic inputs may be fitted in the meterbridge area directly above the patchbay.

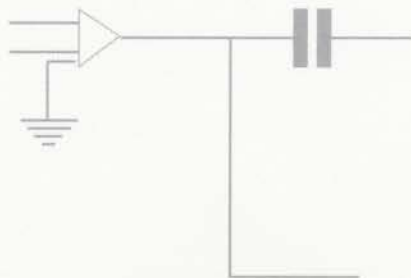
Input and Output Connections

All Mic inputs, and the extra line inputs, are via XLR-type connectors on the rear of the console.

The remaining inputs and outputs, such as Multitrack interface and other line level inputs/outputs, are on 56 way EDAC/ELCO connectors which are located on a panel within the console leg structure. This provides a convenient and tidy way of managing the cable system around the desk.

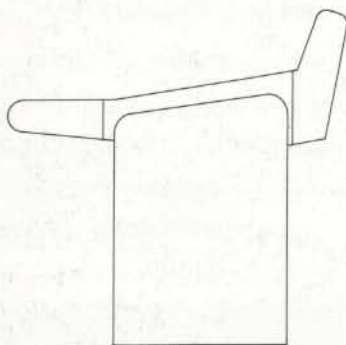
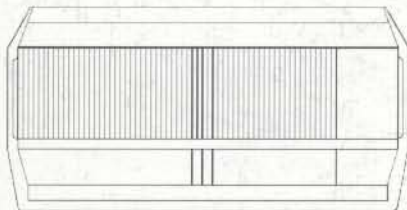
Metering Options

Either moving coil VU meters or 40 segment led bargraph meters may be fitted. The bargraphs may be switched between VU or PPM characteristics.



Profile

Technical Specifications



Overall Height: 42" (1067 mm)
Height to faders: 31" (787mm)
Depth: 43" (1092mm)
Length: 96.6" (2403mm)

Input Impedance (electronically balanced)

Microphone >2 kOhm
Line >10 kOhm

Maximum Gain

Microphone (Channel input to mix input) 60 dB
Line (input to mix input) 25 dB

Frequency Response (channel input to mix output)

Mic to mix (gain = 20dB) 20Hz, -1.0 dB
20kHz -0.25 dB
Line to mix output (gain = 0dB) 20Hz, -1.0 dB
20kHz -0.25 dB
Line to group output (gain 0dB) 20Hz, -1.0 dB
20kHz -0.25 dB

Noise (DIN Audio)

Microphone (gain 55dB, EIN Ref 200 Ohm) <-127 dBv
Mix Output (gain 0dB, 32 channels routed,
all faders down) <-79 dBv
Single line input (to mix output, channel fader at 0dB)
EQ out <-87 dBv
EQ in <-84 dBv

Distortion

Mic to mix, gain 20dBv, +20dBv output <0.05%
Line to mix, gain 55dBv, +20dBv output <0.05%
Line to mix, gain 20dB, all routed, +20dBv output <0.007%
Line to group, gain 20dB, all routed, + 20dBv output <0.007%

Output Impedance (electronically balanced)

All outputs <75 Ohm

Crosstalk

Adjacent channel 1kHz -100 dBv
Group to mix 1kHz -80 dBv

N.B. 0dBv = 0.775 volt



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