

AHB
ALLEN AND HEATH BRENNEL LTD.

Modular III Multitrack Recording Console



The Allen and Heath Mod III recording console has been welcomed as the most logical multitrack console currently available. No other unit can be operated so easily, even by technically untrained musicians, and yet offer all the complex multitrack requirements for a modern studio. Discrete silicon circuitry with transformer balanced inputs ensure minimum noise and distortion while a fully modular construction makes service and maintenance an insignificant problem.

The Mod III is one of a new breed of AHB consoles which reflect increased quality consciousness and higher technology as exemplified in Syncon, one of the most sophisticated 24 track consoles available. The list of notable AHB clients is

ever lengthening and their status within the industry reflects the quality and reputation of our products: They include Genesis, Alan Price, Tasco, BBC, Pink Floyd, IBC, Virgin Records, Can, Kraftwerk, Pathway Studios, Virtual Earth, RG Jones, Mawpower, Rank, Royal Shakespeare Co., Harold Fielding and many more.

- * Fully modular for ease of service and expansion
- * 16 track monitoring as standard
- * Sweep frequency, three band Eq.
- * Automatic line in/line out monitor switching
- * Comprehensive monitor selection
- * Insertion points on all inputs and groups
- * Special package system discounts available
- * P and G fader and flight case options

Mod III Control Functions

A. Input Module

A1. Input Selector

Feeds mic or line level signal to channel.

A2. Input Pad

Attenuates mic signal by 20 dB and line signal by 12 dB.

A3. Hi Pass Filter

Eliminates input overload caused by rumble or vibration.

A4. Mic Gain

By varying the gain of the mic preamplifier the correct signal level may be obtained within the channel hence minimising noise and distortion. 40 dB of gain is available. Line input gain may be optimised by a pre-set potentiometer allowing any source to be ideally matched.

A5. Insertion Point

A stereo jack socket provides a send and return circuit at 0 dBm for the use of special effects such as the Pro Limiter.

A6. Equalization

The selected signal may be corrected by the following controls. Hi Frequency shelving, Mid range sweep frequency and low frequency shelving. Reference should be made to the diagram in this brochure. A cut switch is provided for A-B equalization monitoring.

A7. Auxiliary Sends

Three auxiliaries are provided and these may be used for foldback or echo sends as required. Auxiliary 2 may be selected pre or post fader by a link under the module panel.

A8. Routing

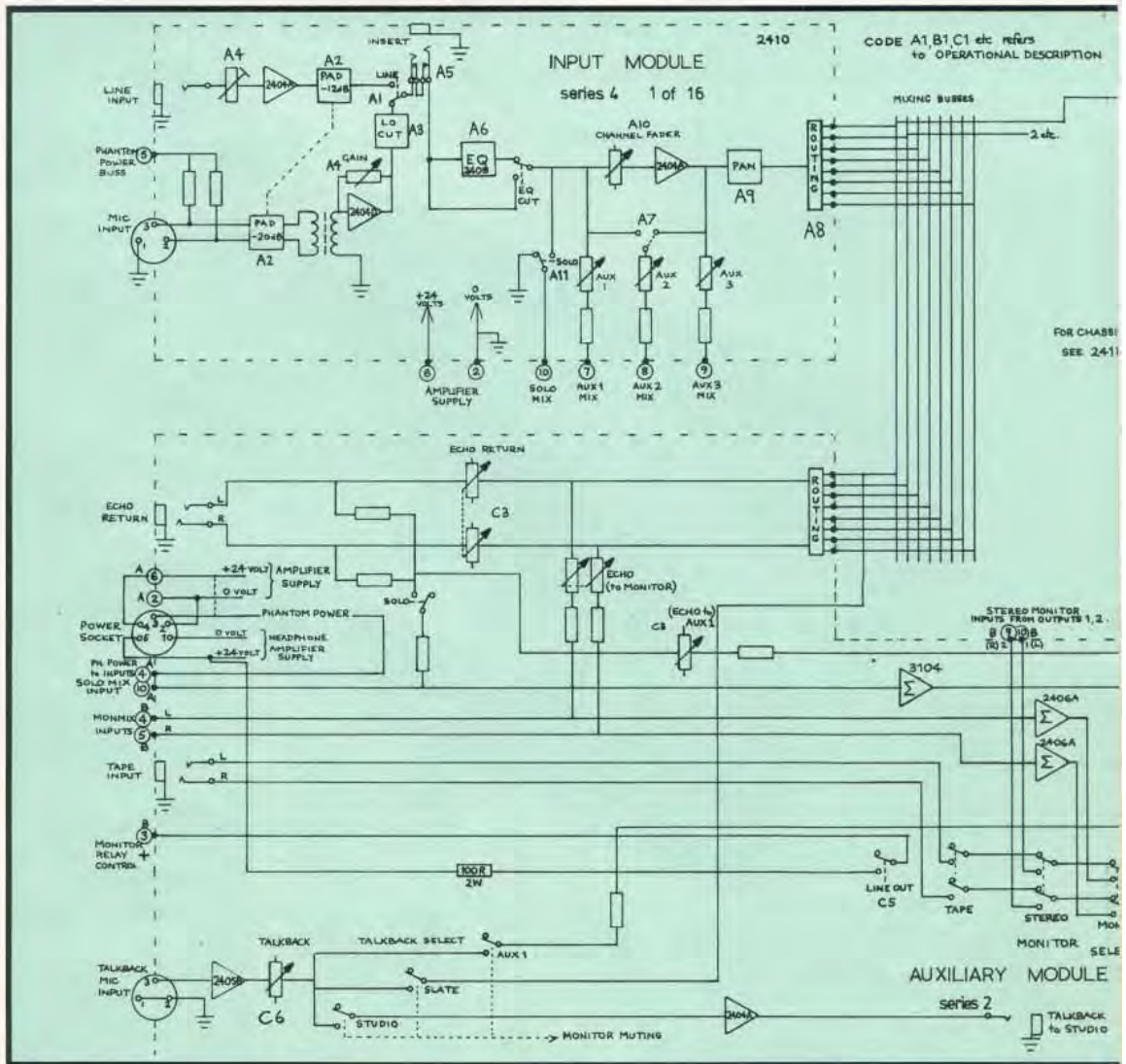
Each input channel may be fed to any of 8 group outputs by means of mix-busses wired into the console chassis. In the mixdown mode busses 1 and 2 feed the stereo master output. A PFL (solo) button feeds a separate buss which may be selected by the monitor section of the mixer and enables the engineer to listen to individual channels during a session without affecting the main signal levels.

A9. Panning

The channel may be panned between odd and even busses in order to create stereo groups. It is normal practice for example to record the drum mix 'in place' onto two tracks of the tape recorder.

A10. Channel Fader

Controls the level of the input signal being fed to the mix busses. The standard carbon fader may be replaced by a Penny and Giles without modification of the panel.



B. Group (Output) Module

B1. Group Fader

Controls the signal level feed to each track of the tape recorder. The signal is also fed to the meter system and via an insertion point for limiting etc. Output faders 1 and 2 also provide the master stereo mixdown which may be selected to appear on meters 1 and 2.

B2. Monitor Fader

Provides an independent mix for the engineer in the control room. This is essential as the main output levels are determined by the required recording level, not the listening level and are not therefore suitable for monitoring.

B3. Monitor Pan

Each fader may be panned left or right in the monitor mix in order to simulate the final perspective. The monitor mix may be either the group outputs, the tape machine output, or when overdubbing—a combination of the two. A combination of the master monitor selector (C5) and the sync buttons (B4.) determine the signal appearing at the monitor fader.

B4. Sync/Group Select

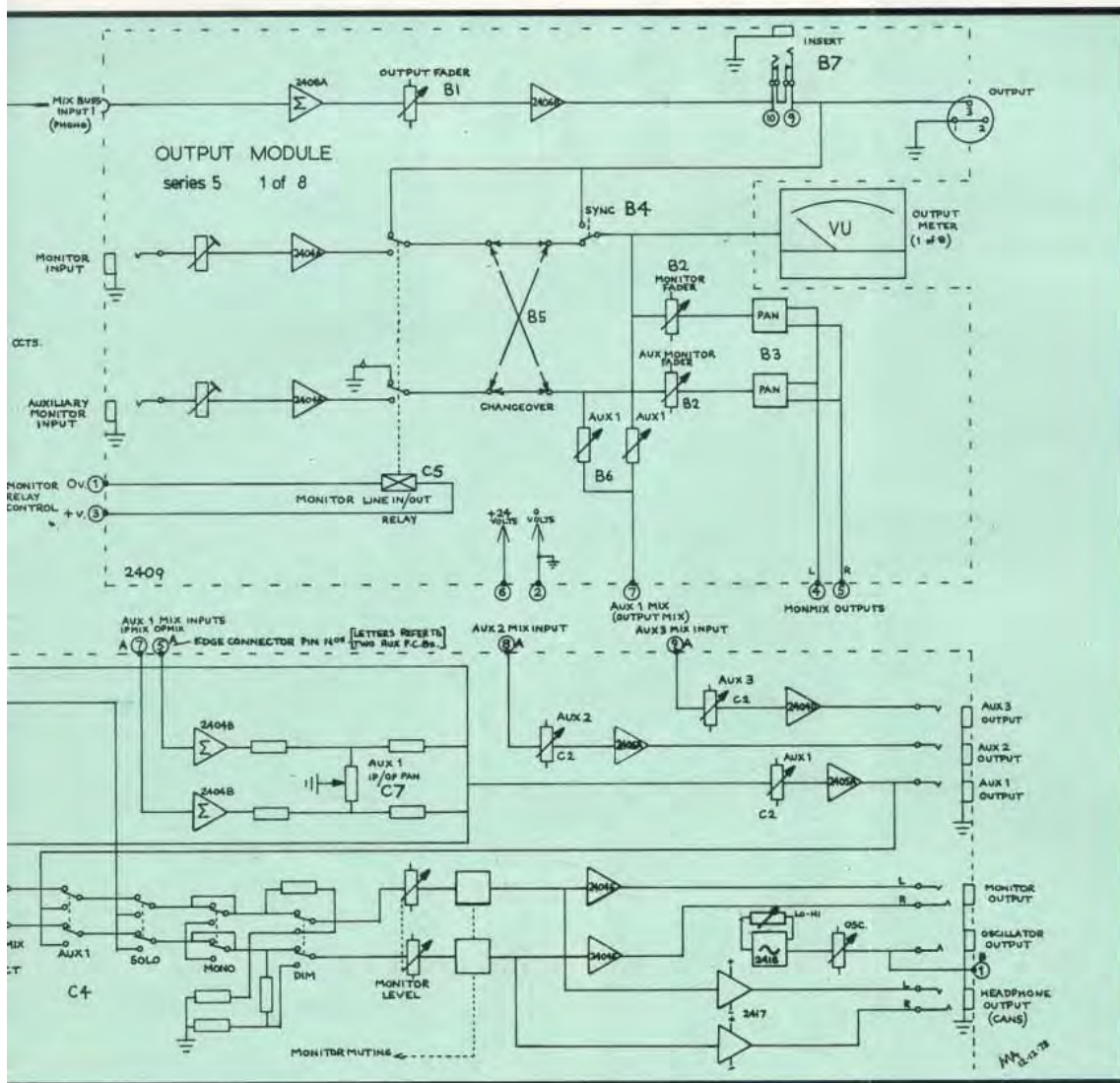
Determines the status of the monitor channel when overdubbing. It allows output group monitoring when the main monitor mix is off tape. The tape monitor input is buffered with variable pre-set gain.

B5. Auxiliary Monitor Select

Switches tape monitoring of tracks 1-8 to auxiliary monitor faders and allows monitoring and metering of tracks 9-16 on monitor faders 1-8 in a 16 track studio. In 8 track studios this function may be used for monitoring of stereo tape machines or other external equipment.

B6. Monitor Cue (to Aux 1)

Provides foldback of the monitor mix (pre-fade) in order that the musician may hear sync tracks while overdubbing. Output groups may also be sent to foldback which tends to save time when recording as individual input channel foldback need not be set.



C. Master Control Module

C1. Oscillator

Provides calibration tone for the setting of desk and tape machine levels. Both frequency and level are fully variable.

C2. Auxiliary Masters

Control level to echo and foldback as required.

C3. Echo Return

Allows stereo echo return to be routed to main mixbusses. Useful when recording tracks with echo or when subgrouping in mixdown. An independent control sends echo to the foldback mix (aux 1).

C4. Monitor Control System

Controls the status and level of the monitor mix. Every important section of the recording system may be fed to the monitor speakers and an independent echo return is provided for 'wet' monitoring.

C5. Monitor Status Relay Switch

Provides single button switching of the monitor mix from onto to off tape monitoring hence giving instant level and quality comparison. This important switch also changes the meter status so that A-B metering is also available at the push of a button. The monitoring section of a console is vital to any studio and we believe that the MOD III offers unrivalled facilities in its price range.

C6. Talkback System

In order to communicate with studio, musicians and also to identify tape tracks a microphone socket is built into the module. A switch bank allows talkback routing and a level control is also provided. The monitor speakers are automatically dimmed to suppress feedback and increase intelligibility. Any low impedance dynamic mic may be used.

Console Interface

Inputs

Mic Transformer balanced XLR female socket
Line 1/4" (6 mm) jack socket
Monitor 1/4" (6 mm) jack socket
Echo 1/4" (6 mm) jack socket

Outputs

Groups Unbalanced XLR male socket (balancing optional)
Auxiliaries 1/4" (6 mm) jack sockets
Tape, talkback etc. 1/4" (6 mm) jack sockets

Control Functions

A5. Insertion Point

Insertion Point

A4. Mic Gain

C1. Oscillator

A2. Input Pad

A3. Hi Pass Filter

A1. Input Selector

Auxiliary Monitor

C2. Auxiliary Masters

A6. Equalization

C5. Monitor Status Relay Switch

A7. Auxiliary Sends

C4. Monitor Control System

B4. Sync/Group Select

B5. Auxiliary Monitor Select

A8. Routing

B6. Monitor Cue (to Aux 1)

B3. Monitor Pan

C3. Echo Return

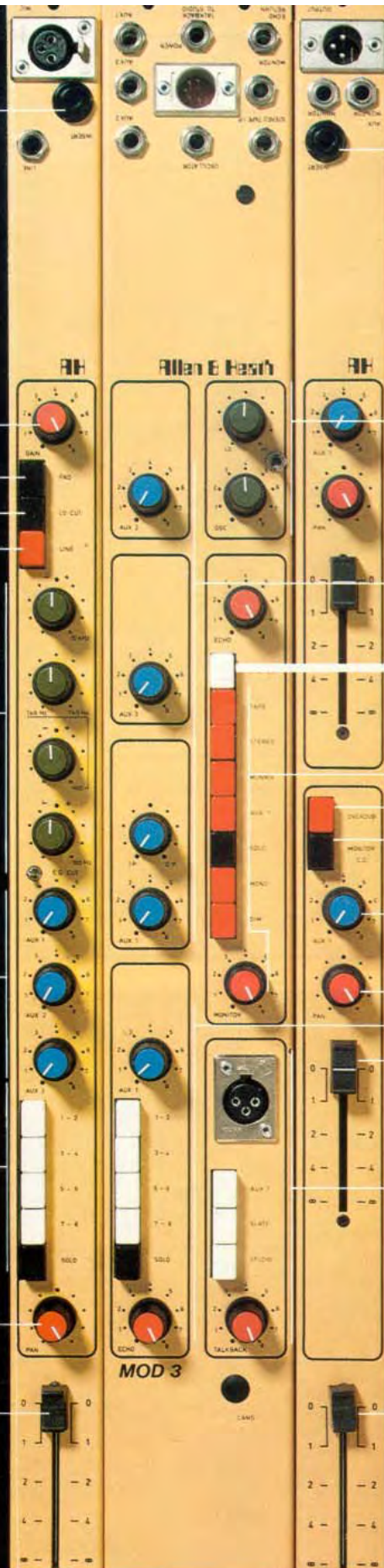
B2. Monitor Fader

A9. Panning

C6. Talkback System

A10. Channel Fader

B1. Group Fader



Specification

Mic Input

Input Impedance

Greater than 600 ohms for 50-250 ohm mics

Sensitivity

-80 dB to -40 dB continuously variable

Input Attenuator

20 dB mic 12 dB line

Equivalent Input Noise

-126 dB

Dimensions

Width 43 inches (1092 mm)
Depth 34.5 inches (876 mm)
Max Height 7.25 inches (184 mm)
Shipping Weight 210 lbs 95 kg



Line Input

Input Impedance

10 K ohm fully buffered

Sensitivity

0 dBm with pre-set gain reduction for +4 dBm or higher operating levels

Clipping Level

+14 dBm (pad out) or +26 dBm (pad in)

Line Outputs

Impedance

Less than 30 ohms suitable for all load impedances

Operating Level

0 dBm including insertion points

Output Headroom

+18 dBm

Signal to Noise

Typical Line In to Line Out

Better than -75 dB

Crosstalk

Better than -60 dB

Frequency Response

30 Hz to 20 kHz ± 1 dB

Equalization

Hi Frequency ± 16 dB at 10 kHz

Lo Frequency ± 16 dB at 100 Hz

Mid Frequency ± 18 dB at frequencies from 1.8 kHz to 7.5 kHz continuously variable.

Phantom Power

+24v Standard on all mic inputs

+48v Optional with MPS 5 Power Supply

Power Supply

External Unit 240/120v 50/60 Hz 50 watts

Authorised Agent

AHB

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