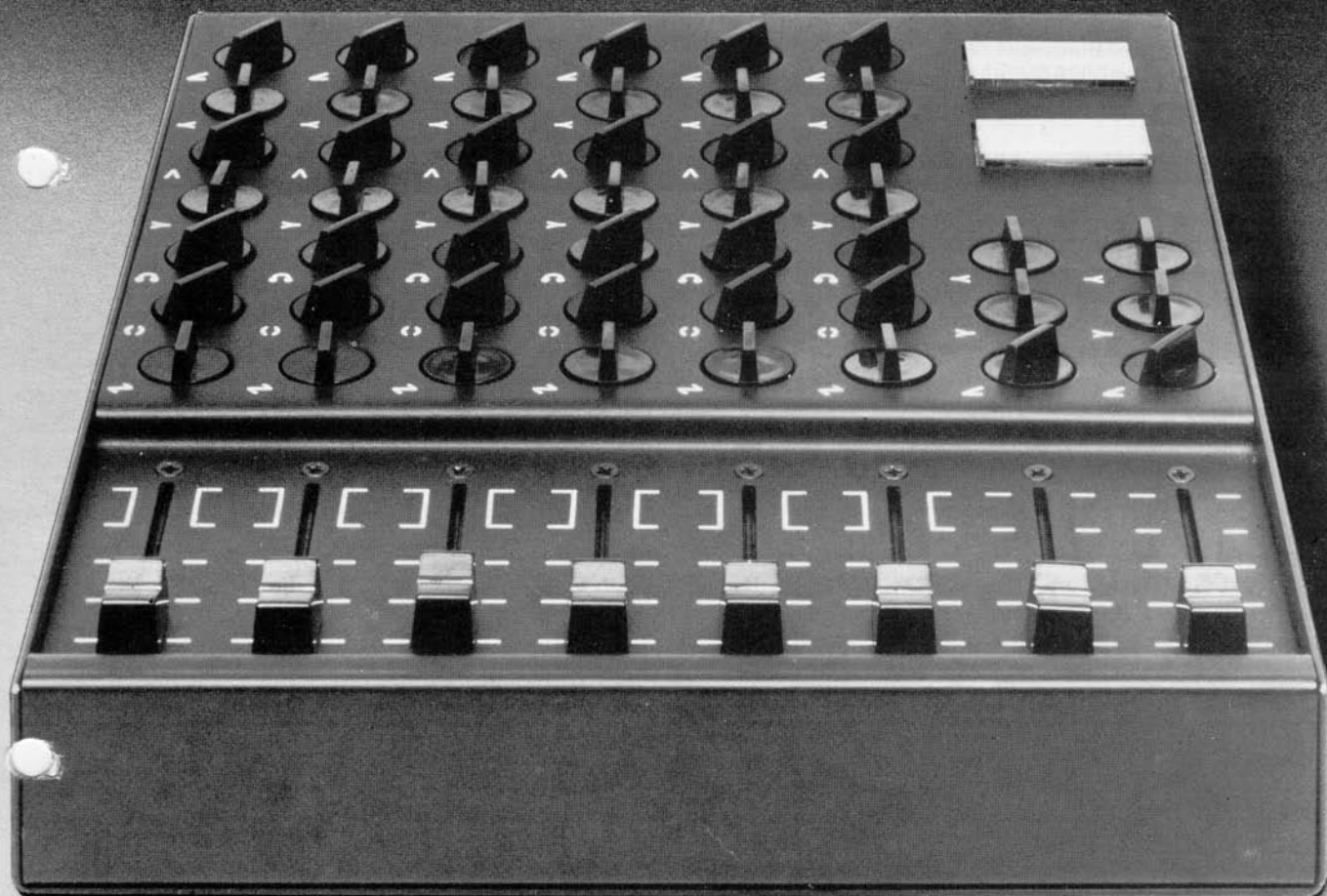


MINIMIX



Allen and Heath Ltd Pembroke House Campsbourne Road Hornsey, London N8. Telephone 01-340 3291 (10 lines)

Minimix is a unique system of interlinking units which may be used individually or together to provide low cost, quality mixing facility for any application.

High Quality - Low Cost Neither mechanical nor electronic design has been compromised to keep the price down. The equipment is capable of the highest quality results suitable for broadcasting or mastering.

Growing - System - The minimix concept means you buy what you need when you need it. As more channels and facilities are required, the basic units may be complemented to any degree of complexity.

Versatility - The facilities provided by minimix are usually only found in consoles costing many times the price. Today they are essential in both recording and sound reinforcement. The system is suitable for any application.

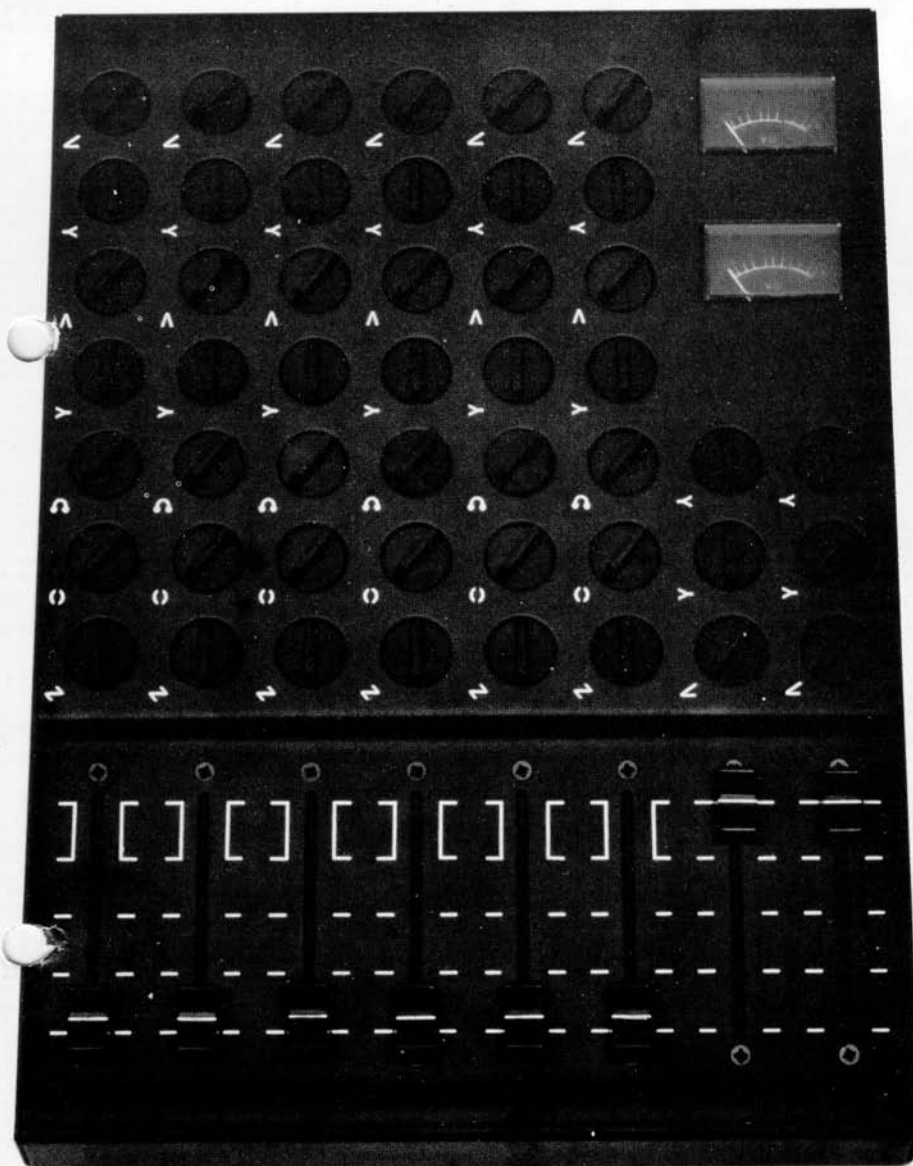
Rugged Construction - The units employ a single P.C. board construction and high grade components, which are all board mounting. The exclusion of wired connections gives extreme reliability. The cases are manufactured from steel, and given an attractive black stoved paint finish.

Compatibility - The input and output, levels and impedances have been selected to match all types of ancillary equipment without any problem. The standard RCA phono jack connectors used, make the system very simple to interconnect.

Positive Operation - Minimix is as functional as it looks. Great attention has been paid in the design to making sure it is ergonomic, simple, and positive to operate. Custom made knobs are used, legending has been kept as simple as possible, and the rear signal connectors are clearly marked.

Portable Use - The small size, provision for battery operation and light weight, make minimix ideally suited for mobile applications. It is the basis of a quality PA or recording setup.

Comprehensive Instructions - Each of the minimix units comes with a comprehensive manual covering all aspects of operation. It includes a description of modern techniques, and gives details and examples on how to get the best results from the equipment.



The **Minimixer** is a Miniature six channel stereo mixer offering comprehensive facility.

Input channels feature:-

Gain - Continuously variable to accept input from microphone to line.

Equalisation - Bass and treble lift and cut. Mid or presence lift.

Echo - Post fader mix to feed an external echo system.

Cue - Pre-fader mix for foldback or stage monitoring. This can also be used as a PFL or solo facility.

Pan - Routing the signal panoramically to the left and right outputs.

Fader - A linear motion channel level control.

There are also two auxillary line level inputs on the mixer. These have individual level controls, and two band bass/treble equalisers.

They are intended for stereo echo return, or linking mixers together.

The main output levels are controlled by a further two linear faders and are metered by two ARC scale VU meters.



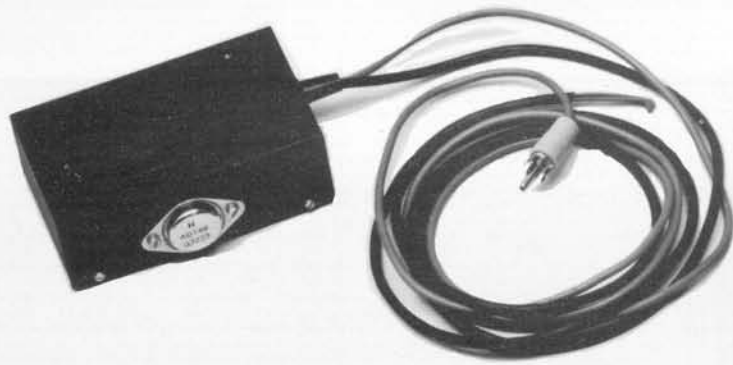
Monmix is a five channel line stereo mixer. As a monitor mixer for multitrack with four channel recorders, it provides level, pan and cueing facility with an extra input for phantom echo etc. When used in conjunction with the minimixer the cue buss can be linked through to simplify operation. The main monitoring can be arranged in stereo, and the selsync can be mixed in with the live cue signal for artists foldback. Alternatively, it can be used as a simple reduction mixer for four track work. The cue output may be connected to an echo system, the fifth channel being used for echo return. The outputs of

several minimixers and other line sources may be mixed together with monmix, giving master control over a series of sub mixers in complex PA or recording installations.

When operating in studio conditions several auxillary

facilities becomes necessary. The **Auxbox** has been designed for this purpose. An oscillator produces a line level test signal, which may be patched to any input to provide a test tone. This is also used for recording a reference tone on tape, to ensure compatibility of levels when dubbing or multitracking. The monitor facility provides level control and selects two stereo sources (one of which may be the monmix), the cue signal and an auxillary mono source, through changeover switching. The output feeds the monitor amplifier directly. This simplifies studio monitoring greatly. The built in talkback microphone and amplifier can be routed either to the cue buss or an external studio talkback system. Operation of either switch mutes the monitor signal to prevent acoustic howl round occurring. Finally the auxbox has a built in cue amplifier which boosts the low level cue output of the miniature mixer to line. The output of this may be directly connected to Hi Z headphones or to the cue system power amplifier.





The minimix system may be operated from batteries or mains supply units. Two such power packs are available, their rating being dependant on the size of the minimix system to be powered.

When using low Z microphones the accessory transformer is necessary. This matches the signal to the minimixer input. A standard cannon connector is used, and the primary winding is floating balanced to avoid hum pick up.



The minimix system interconnects using standard RCA phono jacks. Two types are available. One is a plug to plug jump lead, and the other a Y splitter with one socket to two plugs.

MINIMIX SYSTEM SPECIFICATIONS

MINIMIXER

General 6 channel stereo mixer with dual line return.

Mechanical Double sided printed circuit board with board mounting components used throughout. Matt black stoved steel case.

Size 8 $\frac{3}{4}$ x11 $\frac{3}{4}$ x1 $\frac{1}{2}$ inches (22.3x29.8x3.8cm).

Weight 5 $\frac{1}{2}$ lbs. (2.5Kg)

Input sensitivity Continuously variable from better than -50dBm. at 100kohms. with accessory transformer better than -72dBm. at 200ohms.

Input noise Better than -122dBm. at 200ohms.

Input Equalisation Continuously variable + or - 15dB. at 100Hz.
+ or - 15dB. at 10kHz.
+ 10dB. at 700Hz.

Output Level 0dBm. (0.775V.) at 600ohm. Headroom +14dB.

Output Noise Better than -68dBm.

Line return 2 inputs feeding left and right busses. Variable from -10dBm. at 8kohms. Bass and treble control as per input channels.

Echo & Cue outputs Nominally -25dBm. at 8kohms. (47kohm buss from 0dBm.)

Frequency response + or - 1dB from 30Hz to 15kHz.

Distortion less than 0.2% at 0dBm.

Power supply requirements 22V. positive rail, smoothed and regulated at 140mA.

AUXBOX

General Auxillary function unit providing talkback, oscillator, monitor and cue link facility.

Mechanical Fibreglass printed circuit board. Board mounting components throughout. Matt black stoved steel case.

Size 3x1 $\frac{1}{4}$ x8 $\frac{3}{4}$ ins. (7.6x3.1x22.3cm).

Oscillator output +16dBm. into 600ohms at 1kHz.

Cue Link Buss level, 0dBm. nominal, 47k mix resistors. Line level, 0dBm at 47kohms.

Monitor/Cue outputs 0dBm. at 600ohms. Headroom +16 dB.

Monitor input impedance 0dBm. at 47kohms stereo, 22k mono.

Talkback output 0dBm. at 10kohms

Frequency response + or - 1dB. from 30Hz to 16kHz.

Distortion Less than 0.2% at 0dBm.

Power supply requirements 22V. positive rail smoothed and regulated at 40mA.

MONMIX

General 5 channel line stereo mixer.

Mechanical Fibreglass printed circuit board. Board mounting components throughout. Matt black stoved steel case.

Size 6 $\frac{7}{8}$ x1x5 $\frac{3}{4}$ inches. (17.5x2.5x14.6cm).

Weight 1 $\frac{3}{4}$ lbs. (0.8kg.)

Input sensitivity 0dBm. at 2kohms.

Cue buss link 47kohm mix buss nominally at 0dBm.

Max Gain +10dB.

Output level (Cue and main stereo) 0dBm at 600ohms. Headroom +16dBm.

Frequency Response + or - 1dB. from 30Hz. to 16kHz.

Distortion Less than 0.2% at 0dBm.

Noise Level Better than -75dBm.

Power Supply requirements 22V. positive rail, smoothed and regulated at 25mA.

POWER SUPPLIES

General Voltage regulated, mains operated power supply units.

Mechanical Fibreglass printed circuit board. Matt black stoved steel case.

Type MPS1 160mA at 22V. flying lead connection. Weight 1 $\frac{1}{3}$ lbs. (0.6kg.) Size 4 $\frac{3}{4}$ x2 $\frac{1}{2}$ x1 $\frac{1}{4}$ ins. (12.1x6.2x3.1cm).

Type MPS2 500mA at 22V. flying lead connection and 4RCA sockets. Weight 3 lbs (1.4kg.). Size 6x2 $\frac{1}{2}$ x3 $\frac{1}{2}$ ins. (15.2x6.2x8.9cm).

TRANSFORMER

General Low Z to Hi Z microphone matching transformer.

Mechanical Miniature transformer housed in cannon type plug body, flying connector to mixer input.

Impedance matching 200ohms to 100kohms. Gain better than 22dB.

LEADS

Type A 36" (1m.) RCA phono plug to plug.

Type B 12" (30cm.) Y parallel lead, two RCA phono plugs to one socket.