

971-194

SOUNDMASTER™

P.A. MIXERS

INSTRUCTIONS FOR USE

U.K. 220 - 240v

Before you use this equipment please read these instructions.



The SOUNDMASTER name and logo are the registered trade marks of M-Jay Electronics Limited

Declaration of Conformity

Equipment Soundmaster PAM 802, PAM 1202, PAM 1602 mixers
Manufacturer M Jay Electronics Limited
Address Albion Mills
Church Street
Morley
Leeds
LS27 8LY
England

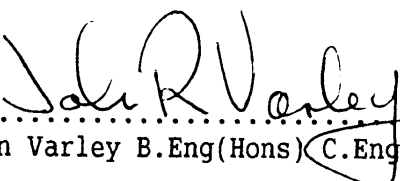
European Standards 1) EN 50 081-1 Emission
2) EN 50 082-2 Immunity
3) EN 60 555 Conducted Emissions
4) EN 60065

Conformity Criteria 1) Radiated emissions are less than 30 dB μ V/m @ 10m from the equipment. Conducted emissions are less than 56dB μ V/m.
2) The performance of the equipment will not be impaired by a radiated signal in the band 27MHz to 500MHz with a signal strength of 3v/m and with 80% modulation
3) The AC power input current harmonics are within the limits set by EN 60 555-3,-3. The conducted RF emissions are below the limits described in EN55 022 class b.

Description of Equipment Public address mixing desks

I certify that the apparatus identified above conforms to the requirements of Council Directives 89/336/EEC and 73/23/EEC and therefore complies with the requirements of Council Directive 73/23/EEC, (The Low Voltage Directive) on the harmonisation of the laws of Member States relating to electrical equipment designed for use within certain voltage limits as amended by Article 13 of Council Directive 93/68/EEC

Signed


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John Varley B.Eng(Hons) C.Eng MIEE

Date

19 August 1997

Position

Managing Director

Company

M Jay Electronics Limited

PAM Series Mixing Consoles - Performance Specification

Input Module

Mic Input

Mic gain	continuously variable +70dB to -6dB
Input Sensitivity	-70 dB (300 mV)
Input impedance	800 Ω balanced
Maximum input	+26dB
Headroom	20dB
Input Noise	better than -124dB

Line Input

Line gain	continuously variable +30 to -30dB
Line impedance	10K Ω balanced
Maximum input	+30dB

E.Q.

Treble	\pm 12dB at 8KHz or 12KHz
Bass	\pm 12dB at 150Hz or 70Hz
Mid	\pm 12dB sweep from 500Hz to 10KHz

Frequency response +0 -0.5dB (20 Hz to 20kHz)

Auxiliary Channels

Aux Input

Input sensitivity	-20dB
Line impedance	10K Ω balanced
Maximum input	+30dB

E.Q.

Treble	\pm 12dB at 8KHz or 12KHz
Bass	\pm 12dB at 150Hz or 70Hz
Mid	\pm 12dB sweep from 500Hz to 10KHz

Frequency response +0 -0.5dB (20 Hz to 20kHz)

Aux outputs 0dB 100 Ω unbalanced

Master Output

Stereo outputs 0dB 100 Ω unbalanced
Monitor Output +10dBu into 22 Ω stereo

Connectors

Microphone inputs	3 pole female XLR type
Line inputs	3 pole $\frac{1}{4}$ " jack socket
Aux inputs	3 pole $\frac{1}{4}$ " jack socket
Aux outputs	3 pole $\frac{1}{4}$ " jack socket
Master outputs	3 pole $\frac{1}{4}$ " jack socket

Congratulations on purchasing a high quality SOUNDMASTER Mixing desk

The Soundmaster range of P.A. Mixers are available in three sizes:

PAM 8-2	Eight input channels and one output / monitor module
PAM 12-2	Twelve input channels and one output / monitor module
PAM 16-2	Sixteen input channels and one output / monitor module

The mains lead supplied with this equipment should be wired as follows:

The **BROWN** wire should be connected to the **LIVE** terminal

The **BLUE** wire should be connected to the **NEUTRAL** terminal

The **GREEN / YELLOW** wire must be connected to the **EARTH** terminal

THIS UNIT MUST BE CONNECTED TO EARTH AT ALL TIMES -- FAILURE TO DO SO COULD BE FATAL.

Input Channel Facilities

Input Connectors

Each channel has two input connectors. The XLR type connector is for a low impedance balanced microphone, the 1/4" jack socket is for high level or line inputs such as the output of a guitar, keyboard or tape recorder.

Gain Control

The gain control adjusts the input sensitivity of the channel to match the output of the microphone. Adjust this control so that loudest peaks of signal make the peak LED light briefly.

Peak LED

The Peak LED indicates when the input is approaching distortion. In normal use the LED should not be illuminated, occasional peaks indicate that the signal is 10 dB above its normal operating level, but it is not distorted. If the LED is continuously illuminated the input is overloaded and the Gain control should be reduced.

EQ. (Equalisation)

The Treble, Bass and middle controls (usually known as EQ) are provided to adjust the sound or to correct for deficiencies in the microphone performance. The centre position of these controls allows the signal to pass through this section without adding or subtracting to the sound. Rotating these controls will add or subtract from the signal at the respective band of frequencies. Care needs to be exercised when using these controls because excessive amounts of boost may exceed the mixer headroom (+20dB) so the gain control may need to be reduced accordingly.

AUX 1 & AUX 2

The Auxiliary send controls set the amount of signal which is sent to the foldback or the effects. These send signals are mixed and then sent to the Aux outputs. Aux 1 is pre fade and is usually used for foldback, Aux 2 is post fade and is usually used for the effects send.

Pan

The Pan control sets the stereo image (it pans between left and right speaker).

PFL

The signal can be monitored on headphones before it is fed to the outputs by the fader (Pre Fade Listen) Press the PFL switch and the LED will be illuminated to indicate that the channel PFL has been selected. This operation does not affect the signal output. This facility can also be used to monitor or set the correct output level from the channel. The PFL is a full mix buss so several channels can be monitored at the same time without interaction.

Fader

The level that the signal is fed to the main mixing buss is set by the fader. During a performance the faders will be adjusted to alter the sound, increasing or reducing differing parts of the show. The Fader is calibrated in 5dB divisions and the line indicates the 20dB headroom. If the output of the mixer is above 0dB when the fader is set to the start of the 20dB line then distortion will be present at the output.

Output Facilities

Master Output

The two Faders control the signal level which is fed to the power amplifiers, the output level is indicated by the two bargraph meters. The yellow LED is 0dB, the most common input for power amplifiers and tape recorders. The stereo outputs are available on two 1/4" jack sockets.

Aux Sends and Return

The output from the Aux mixing busses is available via the two 1/4" jack sockets. The level is 0dB and is the same as the stereo outputs. The aux return is fed into the 1/4" jack socket. This input is similar in facilities provided by the input channels, gain, Eq, Pan and the channel fader being used in the same way.

Monitoring

The stereo output from the mixer can be monitored on the headphone amplifier, the monitor level is set with the volume control. The PFL is fed to the headphone amplifier when the PFL switch is operated and this is indicated by the PFL LED being illuminated. When the monitoring is fed from the PFL buss the right hand bargraph displays the level on the PFL while the left hand bargraph displays the output signal. This facility is used to set or monitor the level of the signal on each channel.

Power supply

The built in power supply has a 20mm 1A quick blow fuse. In the event of the fuse blowing it should be replaced by one of the same type. The unit requires a mains supply of 220v to 240v, 50 or 60Hz.

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Soundmaster Electronics Ltd

a division of

M - Jay Electronics Ltd

Albion Mills

Church Street

Morley

Leeds

LS27 8LY

England

phone +44(0) 113 252 4956

fax +44(0) 113 252 5542

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