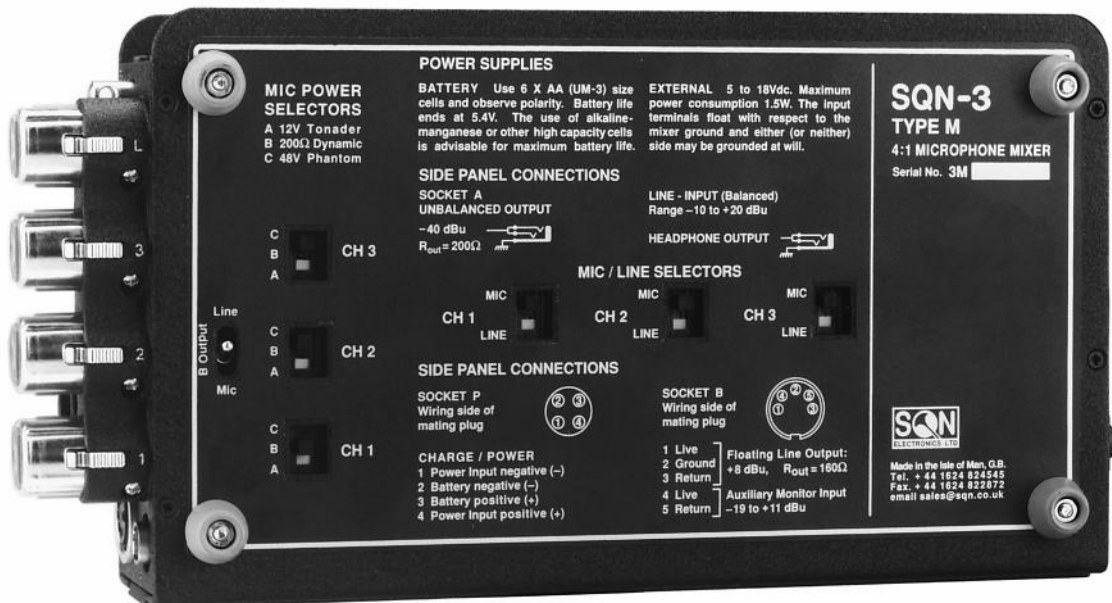


## *SQN-3M Miniature 4:1 Sound Mixer*

**The original broadcast quality mono portable mixer for TV, film and radio locations**



The SQN-3M Miniature 4:1 Sound Mixer is the original broadcast quality mono portable mixer for TV, film and radio locations. This mono mixer was designed to provide all the basic functions found necessary in using professional microphones for location recording. Since its introduction in 1980 it has been adopted as the industry standard for mono work in most European countries and further afield and has established a solid reputation for quality, reliability and longevity.



It remains the smallest truly professional mono mixer today offering comprehensive microphone powering, peak metering, a peak limiter, off tape monitoring, a slate microphone and pre-fade listening (to one channel).



Powered by 6 AA size internal alkaline cells, the SQN-3 Type M commonly functions for a week or two in professional use without reloading. Its unique sophisticated power supply delivers 48V phantom power until the battery dies, and the quick change battery compartment permits reloading in a few seconds. Provision is also made for accepting an unusually wide range (5V to 18V dc) of external supplies of either polarity without adjustment and with good efficiency.

### Features and Specification - SQN-3 Type M Series 4000

<b>Microphone Inputs</b>	Three identical channels using industry standard XLR-3 type female connectors. Each channel is individually switchable for: <b>Powering:</b> a) 12V T [DIN A-B] b) dynamic or self-powered microphones (150-600 Ohms) c) 48V phantom <b>Input attenuation:</b> 0dB, -10dB, or -20dB <b>Bass Cut:</b> Flat, -6dB or -12dB at 50Hz Line Attenuation: Adds -50dB before the mic preamp
<b>Mic. Input Sensitivity</b>	-70dBu for 0dB (peak level) on the meter with the channel gain at maximum and the Master Gain at 0dB.
<b>Max Level</b>	-20dBu (0dBu with 20dB attenuation).
<b>Mic. Polarity</b>	The unit is normally shipped wired to IEC standards, i.e. pin 2 in phase and positive T powering.
<b>Noise Figure</b>	-129dBu (A weighted) with 200 Ohm source resistance.
<b>Frequency Response</b>	30Hz to 20kHz +0,-1dB
<b>Line Input 1</b>	Dedicated balanced input by way of fourth XLR-3 female connector with side panel fader control.
<b>Line Inputs 2, 3, &amp; 4</b>	The mic channels 1, 2 & 3 may also be switched from mic. to line input mode, retaining their effective input attenuator and Bass Cut controls.
<b>Aux. Monitor Input</b>	Balanced input carried on same 5-way D.I.N. connector as line output.
<b>Aux. Input Level</b>	Minimum level -19dB; maximum level +11dB.
<b>Microphone Faders</b>	Recessed front panel rotary controls. Knobs contoured for ease of adjustment allowing fader position to be judged by touch or viewed from a distance.

<b>Master Fader</b>	Front panel rotary control governing all 4 inputs and allowing the level of mix to be adjusted from zero to +3dB (detent at 0dB).
<b>Level Meter</b>	Fast response peak reading meter with a log calibrated linear scale; full wave rectification. Nordic Norm and VU versions are available to special order. The meter scale is permanently illuminated by light emitting diodes for low light applications.
<b>Limiter</b>	Switchable; operates on the metered output to give approx. 20:1 compression ratio over an 18dB range. Attack time 0.5ms. Release time 100ms.
<b>Line Up Tone</b>	1.1kHz tone operated by a front panel TONE / MIC switch. The output level is internally adjustable and is usually set 8dB below peak level.
<b>Line Output 1</b>	Balanced, floating source with a clipping level of + 18dBu, or +20.5dBu into 10k Ohms. The output level is preset so that 0dB (peak level) on the meter corresponds to +8dBu. Distortion at +15dBu is less than 0.1% over the range of 30Hz to 20kHz. The output connector is a standard XLR-3 male type and the output impedance is 160 Ohms.
<b>Line Output 2</b>	Derived from Line Output 1, a second balanced line output is available from a 5-way D.I.N. locking connector which may be switched to Mic. level (-50dBu) by a toggle switch set into the mixer baseplate. Monitoring return on this socket facilitates single cable connection to recorder.
<b>3.5mm Jack</b>	Unbalanced output at -40 dBu allows connection of ancillary equipment such as transcription recorder.
<b>Output Monitoring</b>	The phones output level is adjustable from zero to 1.5V by a control on the side panel. The connector is a 6.3mm stereo jack, normally wired with tip and ring joined, accepting Gauge A or B connectors.
<b>Monitoring Switches</b>	Monitoring is selected by the MXR / AUX switch on the front panel. Choices are: Mixer Output Aux. Monitor Input Pre Fader signal from CH3 input amplifier
<b>Pre-Fade Listening</b>	Pre-Fade listening is available on CH3. The output of the CH3 Mic. amplifier may be monitored in the headphones even when the fader is closed. This is selected by a third, biased position on the MXR / AUX switch.
<b>Slate Mic</b>	The mixer now incorporates a slate or announcement mic with automatic gain control. The mic is placed behind the front panel between the TONE / MIC switch and the CH2 Fader. It is selected by pressing the TONE / MIC switch to the right. The mic output replaces the main audio. The switch is biased to return to the off position when released. If the monitoring is switched to external, it automatically returns to internal while the slate mic is active.
<b>Batteries</b>	Six AA (UM-3) size cells housed in a quick change compartment. The acceptable range of battery voltages is 5V dc to 18V dc allowing the use of Nickel-Cadmium rechargeable cells, Alkaline-Manganese cells or even Lithium cells. Access is provided to the battery terminals for recharging. A fresh set of Alkaline-Manganese cells will power the unit for more than 12 hours when using dynamic microphones.

<b>External Power</b>	A supply in the range 5V dc to 18V dc may be used. The maximum consumption will be 1.5W and quiescent consumption, without microphones, 700mW. The power input terminals float with respect to the SQN-3 ground so that external supplies of either polarity may be used. Alternatively, a power supply which does not share a ground with the SQN-3 may be used e.g. a camera battery.
<b>Battery Test</b>	The meter is fitted with a suppressed-zero scale, brought into operation by a front panel push button, which indicates the battery voltage directly.
<b>Case Size</b>	210mm x 120mm x 44mm.
<b>Construction</b>	<p>The outer case of the mixer is made of aluminium. The end blocks holding the connectors are milled from solid aluminium bar.</p> <p>All control knobs are special to SQN and are turned and milled from solid aluminium bar. The internal battery compartment is milled and bored from a solid block of polyacetal engineering polymer and the moving parts are aluminium and stainless steel.</p> <p>All labels and legends on the mixer are permanent. On the end blocks they are engraved; on the front panel they are printed into the hard-anodised surface; on the baseplate they are reverse printed on a polycarbonate label.</p> <p>The mechanical construction is a development of a system which has proven in the past to be resistant to mechanical damage.</p>
<b>Weight</b>	1.37kg. (1.51kg with batteries).
<b>Temperature Range</b>	The working temperature range is -40°C to +70°

**The SQN-3M mixer offers the professional recordist:**

Unsurpassed sound quality	Lowest running costs
Industry standard acceptability	Highest resale value
User friendly ergonomic layout	Long trouble-free service
Tried and tested electronic design	The utmost in portability
Superior mechanical engineering	Efficient factory back-up service