# MSR-604/602



### MSR-604/602 II

The MSR-604 II is a 4-channel one by four, active microphone/line level distribution system, capable of supplying 4, 8, 12, or 16 outputs from a single input. Each channel features an electronically balanced input with transformer option, MIC/LINE switching, GAIN switching, LISTEN facility for monitoring via the MSR-602 II PSU, phantom power, active outputs for main FOH and monitor consoles, and two transformer-coupled feeds giving 2500V isolation for any application requiring isolation from the main PA system. The system requires an MSR-602 II power supply, and is compatible with existing MSR-604 units (adapter cables required).

Options: MSR-TIXII Input balancing kit

MSR-TOXII
Output balancing for FOH and monitor

outputs

604-II-ADK
PSU adapter cable for use with MSR-604
type 1 units

The MSR-602 II is the power supply for the MSR-604 II and will run 10 MSR-604 II units. The unit also provides the headphone monitor output and signal metering. Two MSR-602 II units may be linked for fail-safe operation.

Channels: Four, independent or internally interconnected

#### TECHNICAL SPECIFICATION

#### **Input Section**

**IMPEDANCE** 

Mic: $2k\Omega$  Line:  $10k\Omega$ , electronically balanced

MAX. INPUT LEVEL Mic: +13dBu Line: +33dBu

INPUT CMRR >90dB @1kHz >75dB 50Hz to10kHz

CONNECTOR XLR3-31 or equivalent

PHANTOM POWER
48V DC via panel switch and LED indicator

#### Outputs

**OUTPUTS** 

Main (F.O.H) & Mon, electronically balanced

**IMPEDANCE** 

+3 out:  $<23\Omega$ , +13 out:  $<71\Omega$ ,

+23 out: <100 $\Omega$ 

CONNECTORS

XLR3-32 or equivalent

MAX. OUTPUT LEVEL

+3dBm, +13dBm, +23dBu, internally preset

See your local dealer or contact: BSS Audio, Linkside House, Summit Road, Potters Bar,
Hertfordshire EN6 3JB. United Kingdom.
Tel: +44(0)1707 660667 Fax: +44(0)1707 660755
http://www.bss.co.uk

USA Distribution: Harman Pro North America, 1449 Donelson Pike, Nashville TN 37217, USA.
Tel: (615) 399 2199 Fax: (615) 367 9046

### MSR-604/602

MAX. LOAD

+3 out:  $200\Omega$  +13, +23 out:  $600\Omega$ 

**OUTPUTS** 

Feeds, One & Two, Transformer balanced

**IMPEDANCE** 

<50Ω

**CHANNEL** 

DISTORTION

Clip LED @ 1dB below clip

Level metering and monitoring

MAX. OUTPUT LEVEL

+3dBm

**HEADROOM METER** 

On MSR-602 II PSU: Six point LED meter: ). -1, -3, -6, -12, -26dB via LISTEN switch

(T.H.D) <0.1% 20Hz to 20kHz @ 10dB below

(momentary)

MAX. LOAD  $600\Omega$ 

**ISOLATION** 

2.5kV AC rms

**HEADPHONE MONITOR** 

On MSR-602 II PSU: via LISTEN switch

(momentary)

**Gain Functions** 

Stereo/Mono 1/4" Jack socket

**GAIN** 

-40dB to +50dB

Load Impedance:  $4\Omega$  to  $600\Omega$ 

**GAIN SWITCH** 

-10, 0, 10, 20, 30 via panel

Maximum Output:  $1\Omega$  rms Level control: -90dB to 0dB

MIC/LINE PAD

0 / -20dB via panel

General

REMOTE PAD

0 / -10dB via F.O.H phantom

POWER REQUIREMENTS

+/-27V DC, +48V DC from MSR-602 II PSU

Connectors: 9 pin 'D', with lock jackscrews

only

**OUTPUT SCALING** 

+20/+10/0dB via internal jumper blocks

**WEIGHT** 3.8kg net, 8.4 lbs

(Main & Mon only) **System Performance** 

**DIMENSIONS** 

44mm x 482mm x 293mm, 1.75" x 19" x 11.6"

FREQUENCY RESPONSE <+/-0.5dB 20Hz to 20kHz

MSR-602 II POWER SUPPLY FOR MSR-

604 II

NOISE (E.I.N)

-10dB gain: <-114dBu

0dB gain: <-121dBu

10dB gain: <-124dBu

20dB gain: <-125dBu

30dB gain: <-126dBu

**AC INPUT** 

90-130/180-260 V AC 50/60Hz @ 150VA

CONNECTOR

3 pin IEC with locking clip

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# MSR-604/602



VOLTAGE SELECTOR

Rear panel:120/240 V

**SWITCH** 

Rear panel: High-inrush

**FUSE** 

Rear panel: F6.3A (120V)/F5A (240V)

DC OUTPUTS

+27V unregulated @ 4A max: low ripple -27V unregulated @ 4A max: low ripple 48V +/-5% regulated @ 500mA max

**FUSES** 

Rear panel: F5A (+27V); F5A (-27V);

F500mA (+48V)

**CONNECTORS** 

9 pin 'D' female: Loop out 9 pin 'D' male: Loop return

SYSTEM GROUND LIFT Rear panel: Slide switch

**INDICATORS** 

3 LED's, post-fuse, on +27, -27 and +48V

outputs

**HEADROOM METER** 

Via LISTEN bus and MSR-604 II

LISTEN switch (momentary)

Six point LED meter: 0, -1, 3, -6, -12, -26dB ref clip Input: via DC loop out connector

HEADPHONE METER

Via LISTEN bus and MSR-604 II

LISTEN switch

Input: via DC Loop out connector

Connector: Stereo/Mono 1/4" Jack socket

Load Impedance:  $4~\Omega$  to  $600~\Omega$  Maximum Output:  $4~\Omega:860$ m $\Omega$  rms

200 Ω:750mΩ rms

Level control:

Continuously variable -90dB to 0dB Headroom: >MSR-604 II channel clip

WEIGHT

7.0kg net, 15.4 lbs

**DIMENSIONS** 

44mm x 482mm x 293mm, 1.75" x 19" x 11.6"

In keeping with our policy of continued improvement, BSS Audio, reserves the right to alter specifications without further notice. This product was designed developed and produced by BSS Audio, Hertfordshire, England.

A Harman International Company.