

Active Signal Distribution System

MSR-604ii



Four independent channels in a compact 1 U Rack Case

Each channel features:

- A single rear-panel mounted electronically balanced XLR input stage, for direct connection to the microphone, DI box, or other program source. The classic transistorised front-end has excellent common-mode rejection performance (better than -90dB at 1 kHz) and is fully RF suppressed. Transformer balancing is available as an option.
- Front-panel MIC/LINE switching for selection of input source level, utilising an internal 20dB attenuator. Source impedance is fully matched for either input.
- Two rear-panel mounted electronically balanced and non-floating outputs:

MAIN OUT, to drive the front-of-house mixing console, or main control area - the remote gain switching facility monitors this connector to detect phantom power voltage.

MON OUT, for connection the stage monitor console, or ancillary console being operated within the same grounding system. Transformer balancing is available as an option for both MAIN OUT and MON OUT.

- Two identical front-panel mounted and actively buffered floating outputs. Operating at Microphone levels, and being transformer balanced, FEEDS 1 & 2 can be used to drive Television, Radio and Mobile recording facilities or any other independent output. These outputs are isolated to 2,500V AC and remain completely separate from any alteration or modification to the signal by the MAIN and MON outputs.
- An independent PHANTOM power switch giving 48 volt supply to the channel input connection.
- GAIN switching in 10dB steps from -10dB to +30dB, which in conjunction with the internal attenuators means a properly adjustable gain structure for the distribution of signals at various input and output levels while preserving the maximum headroom and minimum noise.
- A LISTEN facility where the channel is routed to the system power supply Monitoring section, providing both a headphone feed and 6 segment led headroom meter for audio checking.
- A CLIP led, for instant identification of excessive input signals on any channel.
- REMOTE ATTENUATION indication via led, to show that phantom power has been enabled from the MAIN console to reduce the input level to the MSR-604ii by 10dB.

- EXBUS internal linking to provide an easy way to expand the number of outputs fed from a single input (up to 16 per unit).

Maximum rack space utilisation

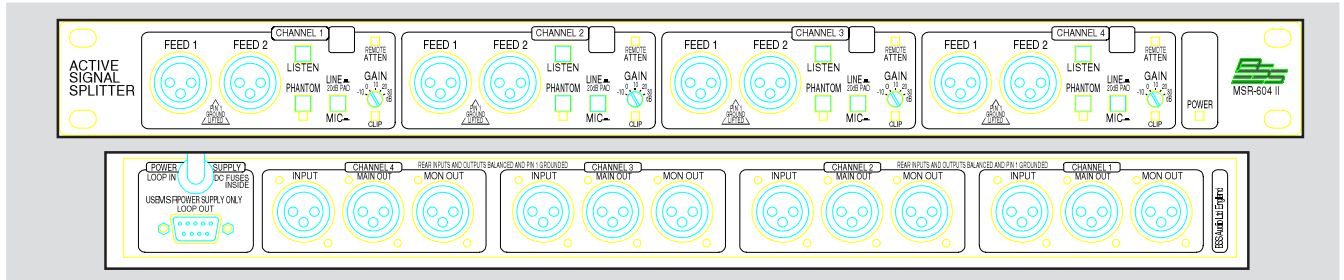
The entire MSR system is designed to be installed within a standard 19-inch racking system, where multiway cabling systems can be integrated through the MSR-604ii's XLR input and output connectors.

The 1 U 4-channel configuration of the MSR604ii makes the unit ideal for multiple use in a mobile or fixed racking system. Designed to withstand the rigours of international touring or mobile use, the MSR-604ii is equally at home when used for permanent installations in Theatres, Conference Centres, Hotels and other venues.

The rear-panel mounted outputs can be integrated with a multiway distribution panel fitted to the racking system, leaving the frontpanel mounted outputs free for instant and easy connection to external facilities. This modular format, with separate power supply, means that additional units can be easily added to an existing system - and that means greatly expanded flexibility.



MSR-604ii Active Signal Splitter



The flexible gain and attenuator settings make the MSR-604II a very versatile unit. For example, low-level acoustic sources where high-gains are required for a low-level signal - are catered for by the wide range of gain adjustment.

The MSR-604II will cope perfectly with the vast majority of situations, whether a condenser or moving coil microphone, or a DI box is being used, and the option of transformer balancing on inputs and outputs makes the system totally secure in operation.

Minimised set-up times through front-panel functions and remote control.

All major functions, such as gain, input source level, and phantom power on/off are all front-panel selectable which means that set-up time is kept to a minimum and may be accessed between performances if required. Also provided is a 10dB attenuator on each input, actuated through the REMOTE GAIN system when the MAIN output receives 48 volt phantom power. This facility activates after a 2 second delay as a precautionary measure in case of accidental operation.

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.

TECHNICAL SPECIFICATIONS

Input Section

IMPEDANCE

Mic: 2kOhm.
 Line: 10kOhm, electronically balanced.
 MAX. INPUT LEVEL Mic: +13dBu, Line: +33dBu.
 CMRR > 90dB @ 1kHz > 75dB 50Hz to 10kHz.
 CONNECTOR XLR3-31 or equivalent.
 PHANTOM POWER 48V DC via panel switch and LED

Outputs

Main (F.O.H) & Mon, electronically balanced
 IMPEDANCE +3 out: Less than 23 Ohm, +13 out: Less than 71 Ohm
 +23 out: Less than 100 Ohm
 CONNECTORS XLR3-32 or equivalent.
 MAX. O/P/UT LEVEL +3dBm, +13dBm, +23dBu, internally preset.
 MAX. LOAD +3 out: 200 Ohm +13, +23 out: 600 Ohm.

Feeds, Two

IMPEDANCE <50 Ohm.
 MAX. O/P/UT LEVEL +3dBm.
 MAX. LOAD 600 Ohm.
 ISOLATION 2.5kV ACrms.

Gain Functions

GAIN -40dB to +50dB.
 GAIN SWITCH -10, 0, 10, 20, 30 via panel.
 MIC/LINE PAD 0/-20dB via panel.
 REMOTE PAD 0/-10dB via F.O.H phantom.
 OUTPUT SCALING +20/+10/0dB via internal jumper blocks. (Main & Mon only).

System Performance

FREQ. RESPONSE +/-0.5dB, 20Hz to 20kHz.
 NOISE (E.I.N) -10dB gain: Less than -114dBu, 0dB gain: Less than -121dBu.
 10dB gain: Less than -124dBu, 20dB gain: Less than -125dBu.
 30dB gain: Less than -126dBu.
 DISTORTION (T.H.D) <0.1% 20Hz to 20kHz @ 10dB below clip.

Level metering and monitoring

CHANNEL Clip LED @ 1dB below clip.

General

POWER REQUIREMENTS +/-27V DC, +48V DC from MSR-602 II PSU only.
 WEIGHT 3.8kg net, 8.4 lbs.
 DIMENSIONS 44mm x 482mm x 293mm, 1.75" x 19" x 11.6".

BSS Audio, A Division of Harman International Industries Ltd,
 Cranborne House, Cranborne Road, Potters Bar,
 Herts EN6 3JN, England
 Tel +44(0)1707 660667 Fax +44(0)1707 660755
 email: info@bss.co.uk, online <http://www.bss.co.uk>
BSS Audio USA
 1449 Donelson Pike, Nashville TN 37217
 Tel (615) 360 0277 Fax (615) 360 0480
 email: BSSAudioUSA@harman.com
 Email info@bss.co.uk

