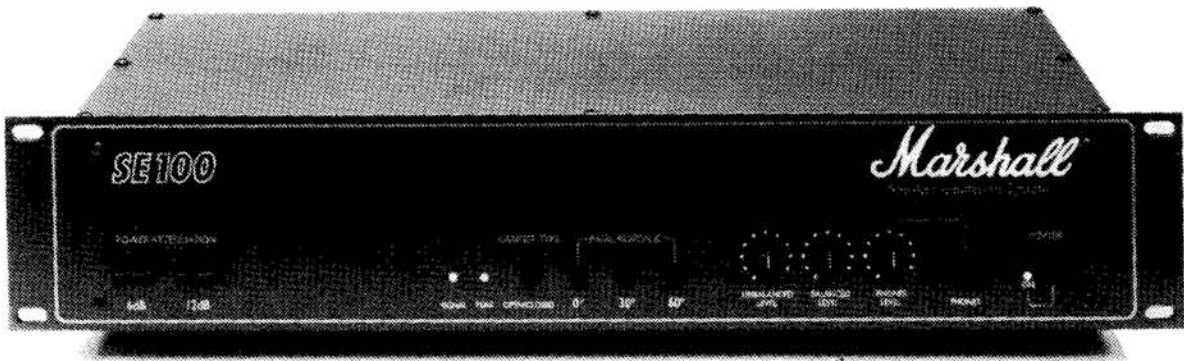


Marshall

Speaker Emulator

SE100
SE100
SE100
SE100



Speaker Emulation System

Introduction

The SE 100 is a studio quality device that marks the beginning of an innovative new product generation from Marshall.

It is extremely versatile yet simple to use, providing a Reactive Load, Speaker Emulator and Power Attenuator, any combination of which may be used simultaneously.

The SE100 has a multitude of possible applications, but falls principally into the areas of either the Studio environment or live performance.

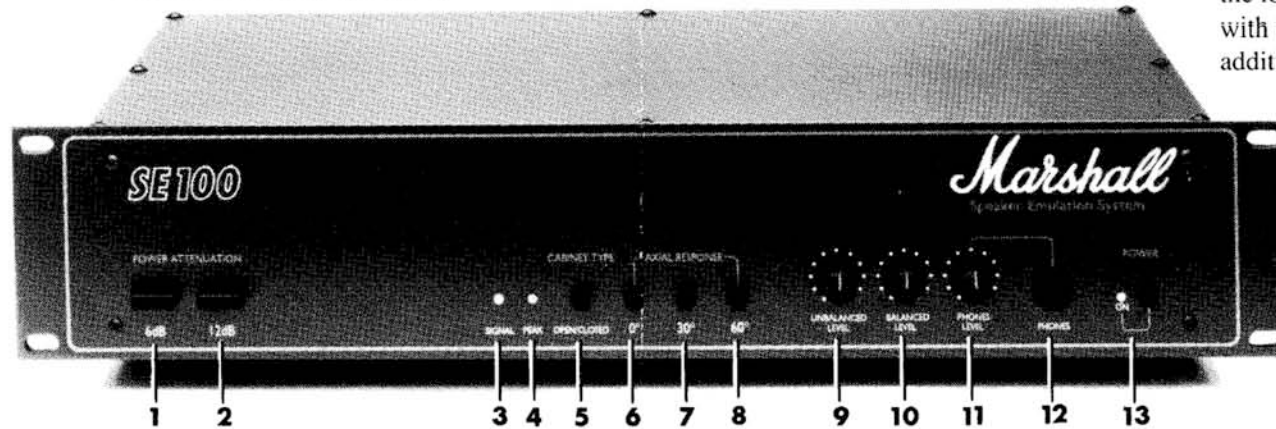
In the Studio

The SE100 marks the end of the struggle for "that guitar sound". Guitarists will be able to use their amplifiers right up to maximum volume (for power amp distortion) and link directly to the desk from the SE100's balanced or unbalanced emulator outputs. (The balanced output features earth/ground lift to remove the possibility of earth/ground loops).

The Line input can be used to link pre-amps, with line level output signals, through the SE100's tone shaping circuitry. No speaker connection is necessary, even when driving a 100 Watt amp into the SE100 at full tilt. This allows the home recordist or studio engineer to record great guitar sounds silently by simply plugging in two cables. For practice, private listening is available through the headphone socket.

Three Axis Response switches emulate the effect of different microphone placement and add further subtle authenticity to the recorded sound. In addition, the *Cabinet Type* switch provides the option of open or closed back cabinet emulation.

Wasted studio time ends with the SE100 which provides REAL amp sound, at realistic volume, in an instant.



Live

On stage or rehearsing, the SE 100 is the key to achieving the greatest live guitar sound. At last the guitarist can explore all the feel and response of his amplifier on maximum volume levels, but attenuate the level through the cabinet so as not to swamp the band. Simultaneously he could connect, via the compensated output, into the desk and simulate his actual guitar speaker sound directly through the PA (or stage monitors) with unbelievable clarity and definition.

Many rack systems use a "dummy load" to bring an amplifier's output down to line level to match sophisticated effects processors. The processed signal from the uncompensated output of the SE100 can be re-amplified through guitar type speakers. However, unlike the "flat" sound of most dummy loads, the "inductive load" of the SE100 provides an ever changing picture to the amp, reacting to the player's touch just like an actual speaker. A direct signal can be taken from the compensated output into

attenuation; the 18dB setting will reduce a 100 Watt amp to reasonable room volume.

3. Signal LED: Indicator which shows that an input signal is present.

4. Peak LED: Indicator which shows before input clipping occurs (100W RMS).

5. Cabinet Type switch: Selector switch to simulate open or closed back cabinet performance. The difference between the two positions will be noticeable on the low and lower middle frequencies, with the closed position giving additional low end response.

6-8. Axial Response switches: Selector switches to simulate positions of 0°, 30° or 60° from the central cabinet axis. Recorded direct, this gives the same effect as miking up the cabinet in different room positions. Used live, subtle changes in sound will be apparent.

NOTE: Switches 5-8 do not affect the Uncompensated output.

9. Unbalanced Level control: Rotary control to adjust the Compensated or Uncompensated output levels.

10. Balanced Level control: Rotary level control for the balanced output.

11. Phones Level: Rotary level control for headphones.

12. Phones Jack: For the connection of stereo headphones (600 Ohms only, maximum power output 200mW); mono headphones not suitable.

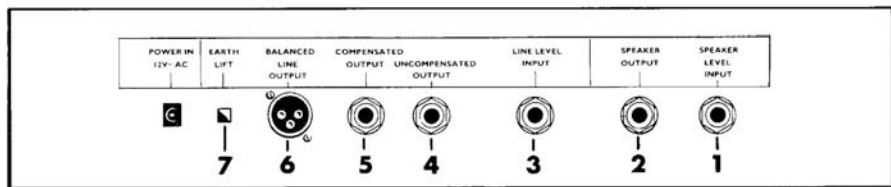
13. On/off indicator and switch.

the PA simultaneously with the stage level controlled by the attenuator circuit.

Incredible guitar systems can be built and exploited to the full using the Marshall SE100. This two unit rack device is so fundamentally useful that every professional studio, home recordist and guitar player will wonder how they ever managed without it.

Front Panel Features

1-2. Attenuation level switches: Push selector switches for level control between the amplifier and cabinet. The combinations of these switches give 0dB, 6dB, 12dB, and 18dB of



Rear Panel Features

1. Loudspeaker level input:

For connection from the speaker output of the amplifier. Once connected, the amplifier signal is routed through the Speaker output, Compensated/Uncompensated output and Balanced output simultaneously. This allows use of any combination of the output functions. Valve amplifiers should be set to 8 Ohms output impedance. The SE100 may also be used with solid state amps.

Maximum input power: 100 Watts RMS (this rating takes into account the higher peak levels produced by valve amplifiers).

2. Speaker Output: For connection to *guitar* type speaker cabinets (*not* studio monitors).

3. Line Input: Jack socket to accept connection from line level equipment (eg: a guitar pre-amp). Input impedance: 50k Ω , maximum input level: +23 dBm.

4. Uncompensated Output: This is a line level output suitable for connection into effects processors or other similar equipment. As part of a rack system, the SE100 acts as a “dummy load” for a valve guitar amplifier. The uncompensated output sends a line level signal out

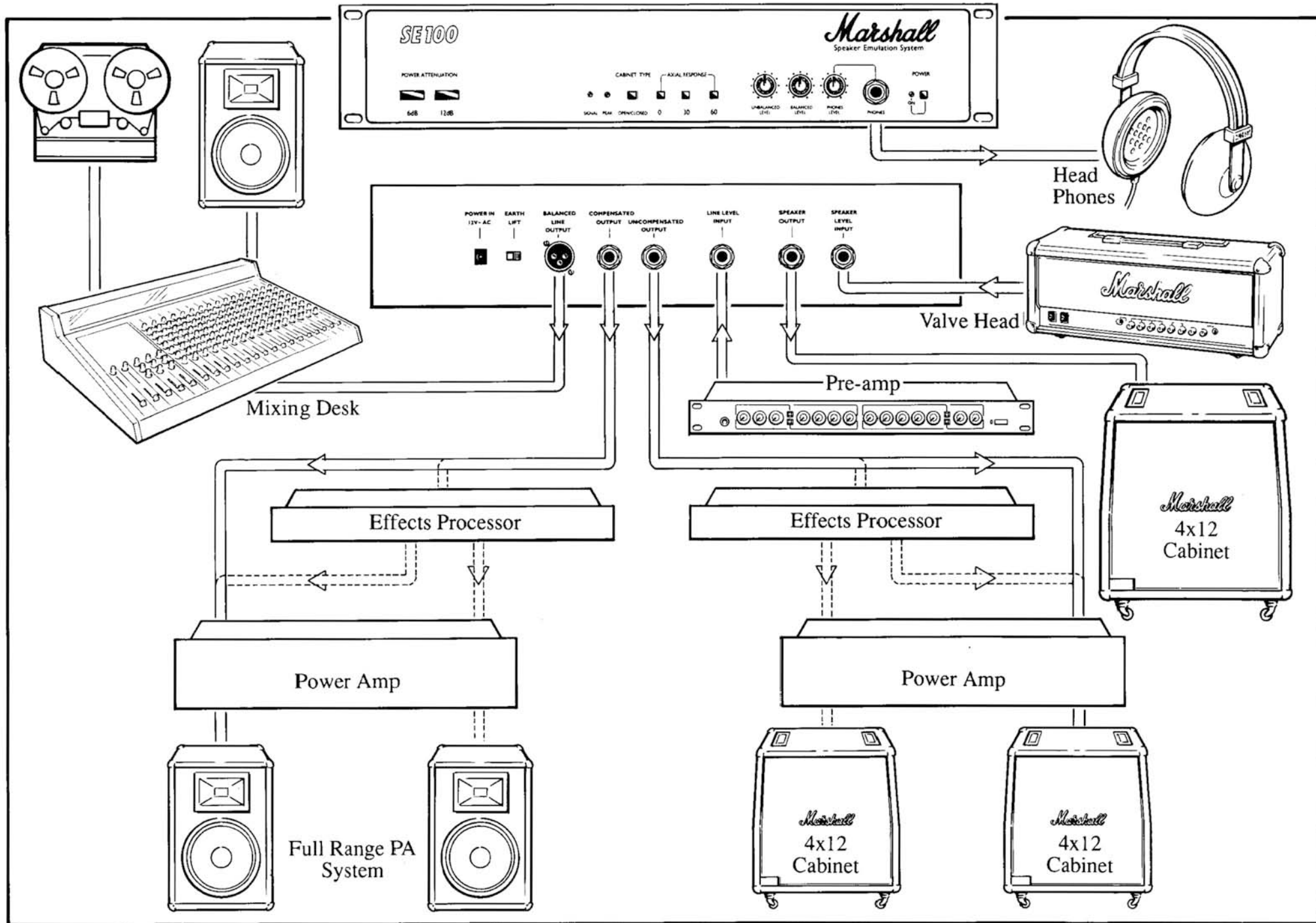
to a processor, which would then be re-amplified through power amps into *guitar* type cabinets. Output level: +4 dBm ref. 100 Watts RMS output, output impedance: 2.5k Ω max.

5. Compensated Output: The filtered signal from this output provides an accurate emulation of the amplifier/ speaker’s sound and response direct to recording desks or PA rigs using full range cabinets. Output level: +4dBm ref. 100 Watts RMS output, output impedance: 470 Ohms.

6. Balanced Output: For connection to balanced line equipment, eg: a mixing desk. Output level: +4 dBm ref. 100 Watts RMS output, output impedance: 470 Ohms.

7. Earth (ground) Lift switch: Removes the possibility of the SE100 causing an earth (ground) loop.

Power Supply: The SE100 comes complete with an external 15 volt AC mains adaptor.



WARNING! PLEASE READ THE FOLLOWING LIST CAREFULLY

- A. ALWAYS ensure that only the Marshall power supply provided is utilised.
- B. ALWAYS fit a good quality mains plug conforming to the latest BSI standards (UK only).
- C. ALWAYS wire the plug according to the correct colour code attached to the mains lead.
- D. DO NOT attempt to remove the lid. There are no user serviceable parts.
- E. NEVER use the SE100 in damp or wet conditions.
- F. ALWAYS have this equipment serviced or repaired by competent, qualified personnel.

ALWAYS ENSURE THAT MARSHALL APPROVED COMPONENTS ARE USED AS REPLACEMENTS

Marshall
AMPLIFICATION

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