



***LR150, LR230
& LR300***

Linear Response Combos

AUDIO STATE



From Jim Marshall

I would like to thank you personally for selecting one of our Linear Response amplifiers.

From my early teens right up to the present day I have spent the majority of my time around other musicians. My own musical career started as a singer and moved shortly afterwards into the world of drumming. As well as playing drums professionally I also taught a vast number of drummers, many of whom went onto become professional drummers in their own right.

I began building Marshall guitar amplifiers in 1962 and have been doing so ever since. Throughout this time I have met many different musicians, of all levels and of all abilities and not just guitarists. It is by listening to these musicians that I have ensured that we have continued to make the products that are needed and it is by continuing to listen, that we always will.

As a direct result of this experience with musicians in general, we have launched the Linear Response Range. Though Marshall is normally associated with dedicated guitar amps, in many circumstances a multi-purpose amp is needed to allow a number of different people to plug in different instruments and microphones at once. The LR300, LR230 and LR150 are multi-purpose, multi-input amps which can be used for just about any instrument, (including guitar on the LR300 thanks to the inclusion of our acclaimed speaker emulation circuitry).

You can rest assured that each Linear Response amp comes with the reliability you would expect from Marshall Amplification, plus a superb range of features and of course, great tone.

I would like to wish you every success with all of your musical endeavours and also your new Marshall amp. I am sure that you will find it a pleasure to play for many years to come.

Yours sincerely,

Marshall

WARNING!

Please read the following list carefully.

- A. ALWAYS ensure that a good quality mains plug is fitted to your Audio State™ conforming to the latest B.S.I. standards (UK only) lead supplied.
- B. ALWAYS ensure that the plug is wired in accordance with the regulations of your country.
- C. DO NOT attempt to remove the chassis. There are no user serviceable parts inside your Audio State™.
- D. ALWAYS have your Audio State™ serviced or repaired by competent, qualified service technicians.
- E. NEVER use your Audio State™ in damp or wet conditions.
- F. DO NOT obstruct airflow around the amplifier, a clearance of 30cm is required at the top, back and sides.
- G. **WARNING This apparatus must be earthed.**

Introduction

LR300

The Marshall LR300 is a combination of a 5 channel mono mixer, high quality 300 Watt RMS power amp with distortion reducing limiting circuit and a compact high quality loudspeaker system, intended to provide a very versatile single unit solution to all applications where linear stage amplification is required. Let us just take a moment to understand what we mean by Linear Response. Linear response essentially means getting out what we put in, only louder, without any undue colouration, distortion, or undesired frequency changes, just as you would expect from a good PA or HiFi system. Those qualities are desired in a guitar amp, for instance, but NOT when you are amplifying keyboards, sound modules, pre-recorded music or vocals. The LR300 allows you to do this with ease as it is self contained in one package, rather than carrying around (and finding stage space for) the minimum of three units that would make up a normal PA type set up.

The LR300's 5 channels come equipped with a variety of input and sound forming options, plus the power and sonic quality to enable many different live sound uses to be performed. For instance, the LR300 can be used to mix and amplify up to 5 keyboards, sound modules and/or sequencers, as either a main system at club level or as a monitor system on louder concert stages. Want to use a guitar as well? No problem! With the inclusion of the reknowned Marshall loudspeaker emulation system on channel 4, not only is great clean guitar sound possible, it also allows the use of external distortion generating effects, i.e. stomp boxes or preamps, without the sound being harsh and fizzy, unlike a normal PA system or mixer. Great for keyboard players who double on guitar!

Besides the normal jack line inputs on all channels, channels 1 and 2 also feature balanced XLR inputs for low impedance microphones for vocal or acoustic instrument amplifying duties, plus channel 5 also has phono inputs for tape, CD, or even a computer sound card! Channel 1 also features a dedicated series FX loop, so that you can add specialised FX to that channel, i.e. how about a harmonizer on your vocals?

With so much versatility on tap the creative horizons of the LR300 are quite boundless. For example, how about using it as a percussion monitor - miking and mixing both electronic and acoustic drum sources. Or as a "band in a box" used by solo/duo artists (or even a full band!) for bar, lounge and cabaret functions where space and transport is limited, but high quality sound is the order of the day. For the more technically minded the LR300 also features a 15" premium bass driver and

compression driven Constant Directivity high frequency horn with a pro grade crossover and horn protection circuit. Each channel has 3 band EQ, gain and FX send controls, whilst the master has a parallel FX loop, spring reverb and line outs to send the mixed signal to a larger PA system or tape recorder if required.

The LR300 features a protection device fitted to the cross over filter to protect the horn. If pushed too hard into distortion, the horn will be automatically de-activated. Once the protection device has cooled down sufficiently it will re-activate the horn.

Besides the rugged side carrying handles, the LR300 has built in castor inserts to suit the optional Marshall castors, available from your Marshall dealer.

LR230

The Marshall LR230 is a stereo 30 Watt 2x10" combo and is ideal for home practice use providing the user(s) with the opportunity to mix up to 2 stereo sources such as keyboards, drum machines, tape decks, CD players and sequencers. Other features include an internal limiter to prevent distortion, a parallel effects loop and an in-built spring reverb.

LR150

The Marshall LR150 however is ideal for rehearsals and gigging. This 1x15" with piezo horn combo provides 150 Watts of power and allows a mix of up to 4 different inputs. The user(s) can send the mixed signal via the Line Out to a P.A. which is independent of the combo's master volume allowing the combo to be used as an onstage monitor. Other features include an internal limiter to prevent distortion, a parallel effects loop and an in-built spring reverb.

This handbook is designed to help you get the most from your Marshall Linear Response amplifier. We would suggest that you read this carefully before plugging in.



LR230 Front Panel Features (page 36)

Channel 1

1. Phono Input Left

This is a high impedance unbalanced input. Typical uses of Line Inputs are drum machines, C.D. players, tape deck, 4 tracks and computers. This is for connection to the left output of external device used.

2. Phono Input Right

This is a high impedance unbalanced input. This is for connection to the right output of external device used.

3. Left / Mono Jack

This is for either a mono input or the left side of a stereo input if item 4 is used as well. This is a high impedance unbalanced input. Typical uses

of Line Inputs are Keyboards, drum machines and sequencers.

4. Right Jack

For use with the right side of a stereo input when used in conjunction with item 3. This is a high impedance unbalanced input.

5. Volume

Controls individual volume level for channel 1. Overall volume will be governed by the Master Volume control (item 20).

6. Effect & Reverb

When using the in-built reverb on the LR230 this control will adjust the amount of reverb on Channel 1. When using an external effects processor this will control the amount of effected

signal through Channel 1, as it dictates the amount of signal to the Effects Send (item 12).

Note - this will be effected by the Effect Return control (item 15) and the Master Reverb control (item 16).

Channel 2

7. Mic Input XLR

Unbalanced low impedance for microphone input.

8. Left / Mono Jack

This is for either a mono input or the left side of a stereo input if item 9 is used as well. This is a high impedance unbalanced input. Typical uses of Line Inputs are Keyboards, drum machines and sequencers.

9. Right Jack

For use with the right side of a stereo input when used in conjunction with item 8. This is a high impedance unbalanced input.

10. Volume

Controls individual volume level for channel 2. Overall volume will be governed by the Master Volume control (item 20).

11. Effect & Reverb

When using the in-built reverb on the LR230 this control will adjust the amount of reverb on Channel 2. When using an external effects processor this will control the amount of effected signal through Channel 2, as it dictates the amount of signal to the Effects Send (item 12).

Note - this will be effected by the Effect Return control (item 15) and the Master Reverb control (item 16).

Effects

The LR230 features a parallel effects loop to allow you to use external effects processors.

12. Send Jack

For connection to the input of an external effects processor (mixed to mono).

13. Return Left / Mono Jack

For connection to the left output of a stereo external effects processor or from the output of a mono effects processor.

14. Return Right Jack

For connection to the right output of a stereo external effects processor.

15. Effect

Controls the ratio of effected to dry signal in your overall tone. Further control is given by Effect & Reverb controls on Channel 1 and Channel 2 (item 5 and item 10).

Reverb

16. Reverb

Controls master level of internal reverb.

17. Remote Jack

Allows you to switch internal reverb on and off from remote footswitch (optional extra, model no. PEDL-00020)

Master

18. Low

Controls overall low frequencies of combo.

19. High

Controls overall high frequencies of combo.

20. Volume

Controls overall volume of combo. This also controls the level of the Line Out on the rear panel.

21. Power Switch

Switches the mains power to the combo and indicates power status.

LR230 Rear Panel Features (page 36)

1. Mains Input

For connection to the mains. We would always recommend that your plug is wired in accordance with your country's regulations.

2. Headphone Jack

For headphone input when silent practice is the call of the day.

Note - connecting headphones will disconnect internal speakers.

Line Out

In some instances you will want to connect the LR230 to a P.A. system or to recording equipment. The Line Out level on the LR230 is controlled by the Master Volume (item 20).

3. Left

For connecting the left hand signal to a P.A. system or recording equipment.

4. Right

For connecting the right hand signal to a P.A. system or recording equipment

LR150 Top Panel Features (page38)**Channel 1 & Channel 2****1. & 5. Low**

Controls the low frequencies on Channel 1 and Channel 2 respectively.

2. & 6. High

Controls the high frequencies on Channel 1 and Channel 2 respectively.

3. & 7. Effect

When using the in-built reverb on the LR150 this control will adjust the amount of reverb on Channel 1 and Channel 2 respectively. When using an external effects processor this will control the amount of effected signal, as it dictates the amount of signal to the Effects Send (item 10) on the rear panel.

Note - this will be effected by the Effect Return control (item 19) and the Master Reverb control (item 20).

4. & 8. Volume

Controls individual volume level for channel 1 and 2 respectively. Overall volume will be governed by the Master Volume control (item 21).

Channel 3 & Channel 4**9. & 14. Low**

Controls the low frequencies on Channel 3 and Channel 4 respectively.

10. & 15. Mid

Controls the mid frequencies on Channel 3 and Channel 4 respectively.

11. & 16. High

Controls the high frequencies on Channel 3 and Channel 4 respectively.

12. & 17. Effect

When using the in-built reverb on the LR150 this control will adjust the amount of reverb on Channel 3 and Channel 4 respectively. When using an external effects processor this control will control the amount of effected signal, as it dictates the amount of signal to the Effects Send (item 10) on the rear panel.

Note - this will be effected by the Effect Return control (item 19) and the Master Reverb control (item 20).

13. & 18. Volume

Controls individual volume level for channel 3 and 4 respectively. Overall volume will be governed by the Master Volume control (item 21).

Master Section**19. Effect Return**

This is the master Effects Return and is an effects mix control, allowing you to decide when using an external effects processor how much of your overall sound will be effected. Further control is given by the individual Effect control which features on each channel.

20. Master Reverb

The LR150 comes complete with an in-built spring reverb. The overall reverb level for the combo is set here, with independent controls featuring on each channel allowing you to set independent levels for each channel.

21. Master Volume

The overall volume of the combo is set here. As with effects and reverb, there is an independent control on each channel allowing you to set independent volume levels for each channel. This will not however affect the level of the Line Out Jack on the rear panel (item 12).

22. LED

Indicates operating status of combo.

LR150 Rear Panel Features (page 38)

N.B. Reads from right to left on panel.

1. Mains Input

For connection to the mains. We would always recommend that your plug is wired in accordance with your country's regulations

2. Power

Switches the mains power to the combo

Channel 1

3. Line Input Jack

This is a high impedance unbalanced input. Typical uses of Line Inputs are Keyboards, drum machines and sequencers.

Channel 2

4. Line Phono Input

This is a high impedance unbalanced input. Typical uses of Line Inputs are drum machines, C.D. players, tape deck, 4 tracks and computers.

5. Line Input Jack

This is a high impedance unbalanced input.

Channel 3

6. Mic Input XLR

This is a low impedance balanced input for use with microphones.

7. Line Input Jack

This is a high impedance unbalanced input.

Channel 4

8. Mic Input XLR

This is a low impedance balanced input for use with microphones.

9. Line Input Jack

This is a high impedance unbalanced input.

10. Send Jack

For connection to the input of an external effects processor.

11. Return Jack

For connection to the output of an external effects processor.

12. Line Out Jack

The Line Out jack can be used for connection to recording equipment for direct recording or for connection to a P.A. system. This is not effected by the Master Volume (item 21).

13. Remote Jack

Allows you to switch internal reverb on and off from remote footswitch (optional extra, model no. PEDL-00020).

AUDIO STATE LR300

LR300 Top Panel Features (page 40)

1, 6, 11, 16 & 23. High

Controls the high frequencies on Channel 1, 2, 3, 4 and 5 respectively.

2, 7, 12, 19, & 24. Effect

When using the in-built reverb on the LR300 this control will adjust the amount of reverb on Channel 1, 2, 3, 4 and 5 respectively. When using an external effects processor this will control the amount of effected signal, as it dictates the amount of signal to the Effects Send on the rear panel.

Note - this will be affected by the Effect Return control (item 28) and the Master Reverb control (item 29).

3, 8, 13, 20 & 25. Mid

Controls the middle frequencies on Channel 1, 2, 3, 4 and 5 respectively.

4, 9, 14, 21 & 26. Vol

Controls individual volume level for Channel 1, 2, 3, 4 and 5 respectively. Overall volume will be governed by the Master Volume (item 30).

5, 10, 15, 22 & 27. Low

Controls the Low frequencies on Channel 1, 2, 3, 4 and 5 respectively.

17. Switch - Speaker Emulator

Switches Speaker Emulator on.

The LR300 features Marshall acclaimed speaker emulation circuitry on Channel 4. When in operation, this will re-voice this channel to suit guitar.

18. LED

Indicates when Speaker Emulator is on.

28. Effect Return

This is the master Effects Return and is an effects mix control, allowing you to decide when using an external effects processor how much of your overall sound will be effected. Further control is given by the individual Effect control which features on each channel.

29. Master Reverb

The LR300 comes complete with an in-built spring reverb. The overall reverb level for the combo is set here, with independent controls featuring on each channel allowing you to set independent levels for each channel.

30. Master Volume

The overall volume of the combo is set here. As with effects and reverb, there is an independent control on each channel allowing you to set independent volume levels for each channel. This will not however affect the level of the Line Out Phono on the rear panel (item 11).

31. LED

Indicates operating status of combo.

LR300 Rear Panel Features (page 40)

1, 5, 7, 8 & 9. Line Input Jack

This is a high impedance unbalanced input for channels 1, 2, 3, 4 & 5 respectively. Typical uses of line jack type inputs are drum machines and keyboards.

2. Mic Input XLR - Channel 1

This is a low impedance balanced input for use with microphones.

3. Effects Send Jack

For connection to the input of an external effects processor. For use on Channel 1 only.

4. Effects Return Jack

For connection to the output of an external effects processor. For use on Channel 1 only.

6. Mic Input XLR - Channel 2

This is a low impedance balanced input for use with microphones.

10. Line Inputs Phono

These are high impedance unbalanced inputs. Typical uses of Line, phono type inputs are drum machines, C.D. players, tape deck, 4 tracks and computers.

11. Line Out Phono

The Line Out can be used for connection to recording equipment for direct recording or for connection to a P.A. system. This is not affected by the Master Volume.

12. Send Jack

For connection to the input of an external effects processor.

13. Return Jack

For connection to the output of an external effects processor.

14. Remote Footswitch

Allows you to switch internal reverb on and off from remote footswitch, (optional extra, model no. PEDL-00020).

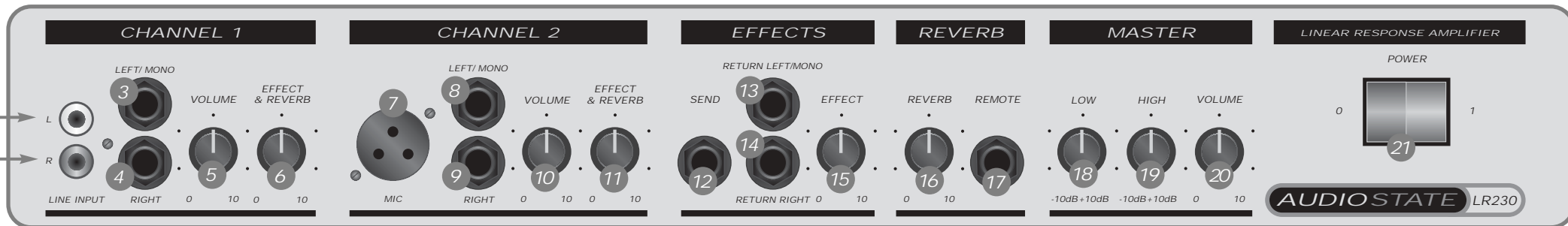
15. Power

Switches the mains power to the combo.

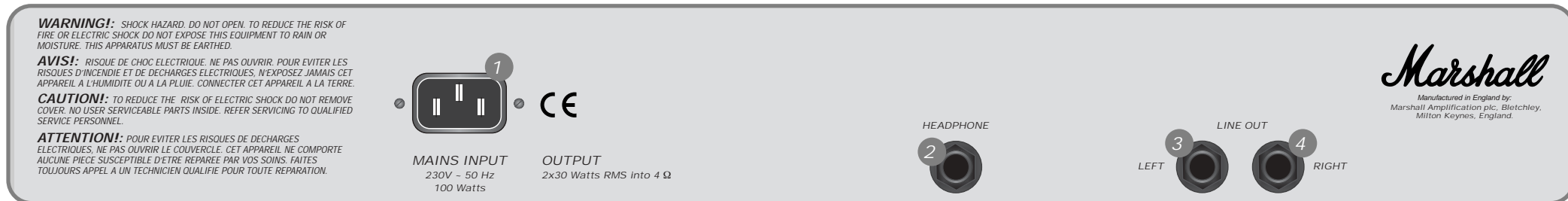
16. Mains Input

For connection to the mains. We would always recommend that your plug is wired in accordance with your country's regulations.

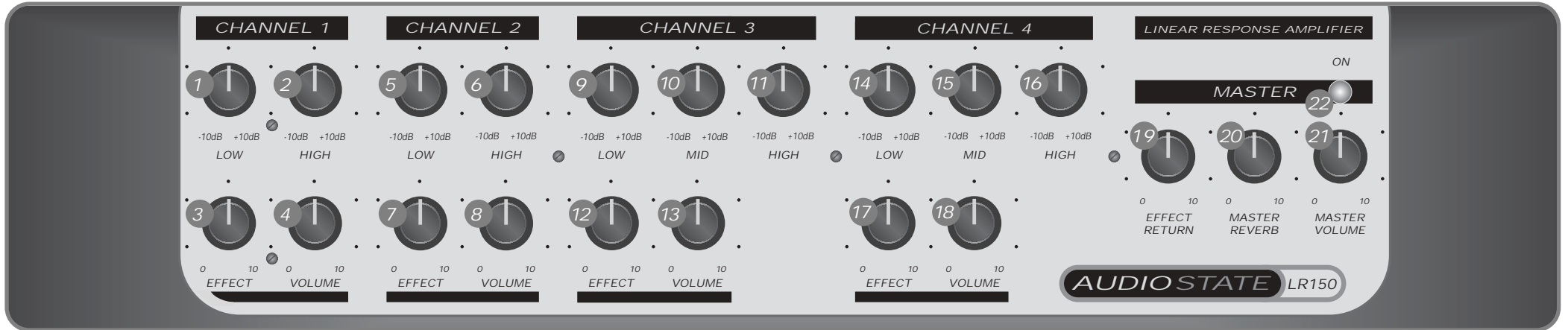
LR230 - Front Panel



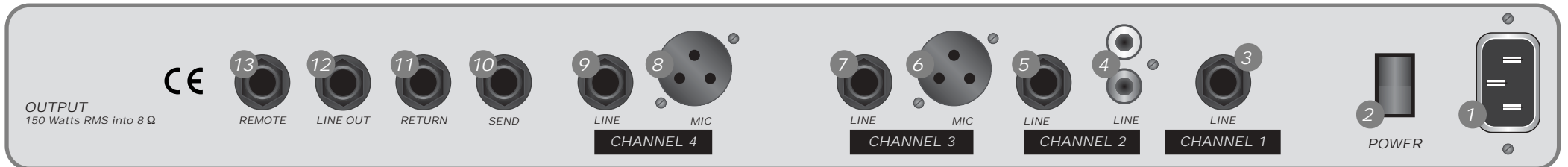
LR230 - Rear Panel



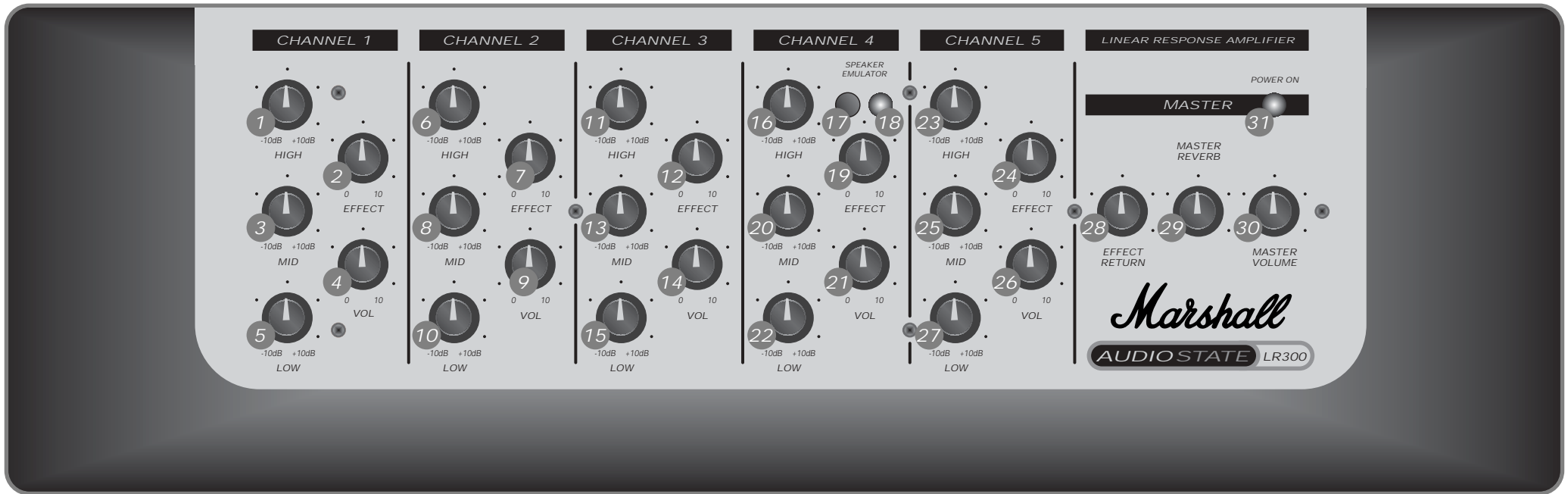
LR150 - Top Panel



LR150 - Rear Panel



LR300 - Top Panel



LR300 - Rear Panel

