

Marshall
AMPLIFICATION



Marshall



MA100H, MA100C, MA50H & MA50C
Owners Manual

Marshall



From Jim Marshall

I would like to take this opportunity to personally congratulate you on choosing this MA amplifier from Marshall.

It has always been my aim to produce guitar amplification equipment that meets the needs and requirements of every guitarist, whether those needs be a UK made, all-valve professional head and speaker cabinet or a low cost, solid-state combo. As a musician myself, I know the importance of finding 'your sound' and understand how frustrating it can be when the only thing that stands in your way is not your talent, but your bank account. But how to cater for those budget conscious guitarists craving that true valve-driven Marshall sound? I put this question to the Marshall Research & Development team and their answer was the MA Series; a range of simple, road-worthy, all-valve amplifiers with an affordable price tag. This incredible range of dual channel amps has now made pure Marshall valve tone more accessible than ever, a fact I am very excited about.

We have also worked extremely closely with our overseas manufacturer to ensure that the MA Series delivers exactly what you would expect from a Marshall; solid construction, proven reliability and, above all, great tone.

I would like to wish you every success with your new Marshall amplifier. Welcome to the family.

Yours Sincerely,

Dr Jim Marshall OBE

Overview

The new Marshall MA Series comprises four models:

MA100H 100W head
MA50H 50W head
MA100C 100W 2 x 12" combo
MA50C 50W 1 x 12" combo.

Aimed at the players who find themselves on a tighter budget than some of their contemporaries, this range of practically featured valve amplifiers has enabled the dream of owning an iconic full-size Marshall stack to come true at last!

Designed, developed and quality controlled in the UK and manufactured in Vietnam by our selected OEM partner, the MA Series is a two channel valve amplifier with independent control sections. A 'Boost' function on the Overdrive channel creates a pseudo third 'channel' which translates to a very performance-friendly amplifier for today's modern guitar player. 'Resonance' and 'Presence' controls allow for fine tuning of the amp's tone at any volume level in any musical style, be it crystal clean, modern metal or anything in between.

The Basics

Mains Input & Fuse

Your amp is provided with a detachable mains (power) lead, which is connected on the rear panel. The specific mains input voltage rating that your amplifier has been manufactured for is indicated on the rear panel.

WARNING: Before going any further, make sure your amplifier is compatible with your electrical supply. If you have any doubt, please seek help from a qualified technician - your Marshall dealer can help you in this respect.

Quick Start

1. Make sure that the speakers/cabinet(s) are connected to the correct impedance LOUDSPEAKER jack(s) on the rear panel.

See the Speaker Output guides sections (22-23) in this handbook for specific information regarding impedance matching. When using an extension cabinet make sure that you are using a proper speaker cable. Never use a screened (shielded) guitar cable for this purpose.

WARNING! Failure to do any of the above may damage your amplifier.

2. Ensure that the VOLUME controls on the front panel are set to zero.

3. Connect the supplied mains (power) lead into the MAINS INPUT on the rear panel first and then into an electrical outlet.

4. Plug your guitar into the INPUT jack socket on the front panel.

The MA Series also contains a spring reverb with front panel level control, a series FX loop and a two-way footswitch (PEDL-91001) that caters for remote channel change and boost engage, especially useful during live performance.

The preamp utilises three ECC83 (12AX7) double triodes with the trusty EL34 once again delivering the power into the speakers. The MA100H and MA50H units also feature transparent baffles and subtle internal lighting, allowing the chassis and valves to be viewed in all their glory.

The tone is full-bodied, harmonically rich and instantly recognisable as Marshall . . . enjoy!

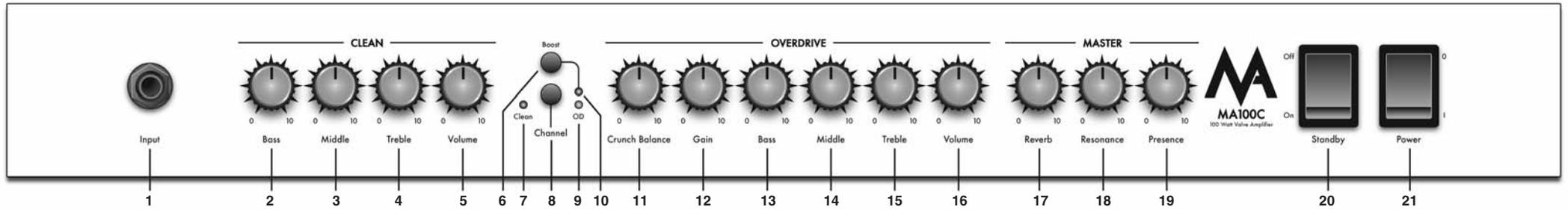
The correct value of mains fuse is specified on the rear panel of the amplifier. NEVER attempt to bypass the fuse or fit one of the incorrect value.

5. Turn the front panel POWER switch on and then wait a couple of minutes.

6. After waiting, engage the STANDBY switch (see section 20 of Front Panel Features for full explanation).

7. Turn the volumes up to your preferred level and your amp is ready to play.

Front panel shows MA100C – all other MA Series Head and Combo front panels share the same features.



MA Series Front Panel Features

Clean Channel

1. High Impedance Input Jack Socket

This is where you plug your guitar into the amp. You must use a screened (shielded) guitar cable. Never use an unshielded (unshielded) speaker cable. The input to any guitar amplifier is a very sensitive part of the signal path and is therefore susceptible to airborne radio interference, hence the need for a screened guitar cable. This screened cable should be of good quality. If you are in any doubt, your Marshall dealer will be more than happy to help and advise.

2. Bass

This controls the amount of low frequencies (bottom-end) in your clean tone.

3. Middle

This controls the mid-range of your sound. Turning this up will make your guitar's clean tone sound fatter and fuller.

4. Treble

This control determines the amount of treble and gives your guitar's clean tone a defining edge as it is turned up.

5. Volume

This control sets the overall output volume of the Clean channel.

Switching and Status Section

6. Boost Switch

This button allows the player to select a gain and volume boost on the Overdrive channel from the front panel if the supplied footswitch is not used. (See note below)

7. Clean Channel Status LED

This green LED indicator will illuminate whenever the Clean channel is selected.

8. Clean/Overdrive Channel Select Switch

This button allows the player to select the Clean or Overdrive channels from the front panel if the supplied footswitch is not used. (See note below)

Note: The front panel push buttons must be in the 'out' position when the amplifier is used with the supplied footswitch otherwise the footswitch will not function!

9. Overdrive Channel Status LED

This red LED indicator will illuminate whenever the Overdrive channel is selected.

10. Boost Status LED

This red LED indicator will illuminate whenever the boost function is active regardless of which channel is currently selected. The player can go from clean to crunch or clean to boosted Overdrive as well as crunch to boosted Overdrive, making for a versatile live setup.

Overdrive Channel

11. Crunch Balance

This control sets the difference in gain and volume between the unboosted Overdrive (crunch) and the boosted Overdrive. **It only operates in the unboosted mode and does not affect the boosted mode.** Turning this control down will decrease the gain and volume of the unboosted Overdrive tones in comparison to the boosted mode. Turning it up will increase the gain and volume resulting in progressively less difference between the two modes. Balancing this control for an optimum preset is the goal. (See 'Tonal Tips')

12. Gain

This controls the amount of saturation and hence distortion present in your overdriven tone. Turning this up will add more harmonic distortion to your sound resulting in a progressively thicker and more sustaining quality to your overdriven tones. (See 'Tonal Tips')

13. Bass

This controls the amount of low frequencies (bottom-end) in your overdrive tone.

14. Middle

This controls the mid-range of your sound. Turning this up will make your guitar overdrive sound fatter and fuller.

15. Treble

This control determines the amount of treble and gives your guitar overdrive tone a defining edge as it is turned up.

16. Volume

This control sets the overall output volume of the Overdrive channel. (See 'Tonal Tips')

Master Section

17. Reverb

This controls the level of the internal analogue spring reverb that is mixed with the direct guitar signal.

18. Resonance

This control operates in the power amp section of your amp and adds low frequencies to your tone, creating weight and depth. As you turn this control up your sound will acquire more bottom-end.

19. Presence

This control operates in the power amp section of your amp and adds high frequencies to your tone, creating crispness and bite. As you turn this control up your sound will become more cutting.

The optimum settings for the 'Presence' and 'Resonance' controls are heavily dependant on the overall volume that the power amp is operating at. For example, at low volumes, low Presence and high Resonance settings may sound best. At high volumes the opposite may be true.

20. Standby Switch

The Standby Switch is used in conjunction with the Power Switch (21) to 'warm up' the amplifier before use and to prolong the life of the valves. When powering up the amplifier always engage the Power Switch (21) first, leaving the Standby switch in the 'OFF' position. This enables the heater voltage, allowing the valves to come up to their correct operating temperature. After approximately two minutes the valves will have reached their correct operating temperature and the Standby Switch can then be engaged. In order to prolong valve life, the Standby Switch alone should also be used to turn the amplifier on and off during breaks in a performance. Also, when switching off, always disengage the Standby Switch prior to the main Power Switch.

21. Power Switch

This is the On/Off switch for the mains electric power to the amplifier.

SAFETY NOTE: Please ensure the amplifier is switched off and unplugged from the mains electricity supply whenever it is moved.

Tonal Tips

In order to maximise the live playing potential of this amp it is important to understand the interactivity between the Overdrive Volume (16), the Gain (12) and the Crunch Balance (11). Careful blending of these three controls is the key to optimum performance. Please take the time to find what works best for you.

The first thing to set is the Overdrive Volume (16) and Gain (12) in the boosted mode to give you your required solo level. Set the Presence, Resonance and Overdrive section EQ to your liking.

Next, disengage the boost and set the Crunch Balance (11) to give the desired crunch volume/gain difference compared to the boosted sound.

Higher Crunch Balance settings result in more unboosted mode gain but less of a volume difference when engaging the boost.

Lower Crunch Balance settings result in less unboosted mode gain but more of a volume difference when engaging the boost.

Finally, switch to the Clean channel and adjust the volume and EQ section to the desired level.

Rear panel shows MA100H – all other MA Series Head and Combo rear panels share the same features



MA Series Rear Panel Features

22. Speaker Output Jack Sockets x 2

These two jacks are tapped from the 8Ω winding of the output transformer and are wired in parallel. The required total load impedance of 8Ω will be realised with either of the following configurations;

One 8Ω cabinet plugged into one of the 8Ω outputs. Two 16Ω cabinets plugged into each of the 8Ω outputs.*

Note: The cable from the internal speakers of the MA100C combo should be plugged into either one of these sockets. If using an extension cab, then the internal speakers must be disconnected, otherwise the total impedance will be too low for the amp!

* 16Ω and 16Ω in parallel gives a total impedance of 8Ω.

23. Speaker Output Jack Socket

This jack is tapped from the 16Ω winding on the output transformer. When using a single 16Ω cabinet it should be plugged into this socket.

Note: The cable from the internal speaker of the MA50C combo should be plugged into this socket. If you want to use the internal speakers and an extension cab then the internal speaker lead must be transferred to one of the 8Ω outputs and the extension cab itself must be 16Ω and plugged into the other 8Ω output. If the internal speakers are not required then simply ensure the impedance of the extension cab is matched to the amp.

WARNING! Do not use the 8Ω outputs when using the 16Ω output (and vice versa) and never operate the amplifier without a load connected.

ALWAYS ensure you use good quality speaker (unshielded) cables. NEVER use guitar (shielded) cables.

24. Footswitch Socket

This is where the supplied two-way footswitch (PEDL-91001) is connected. Ensure that the front panel push buttons on the amp are in the OUT position when using the footswitch.

Footswitch information:

The two-way footswitch allows for remote selection of channels and enabling of the boost function, particularly useful in live performance.

The left button controls the channel selection and is labelled 'Clean / OD'. Above this switch the associated red LED will be off when the Clean channel is selected and on when the Overdrive channel is selected.

The right button enables the boost function for the Overdrive channel. This can be preset to 'on' even while playing in the Clean channel, so when you change to Overdrive it's automatically in boosted mode if you so desire. Above this switch the associated red LED will be off when the Boost is disengaged and on when the Boost is selected.

Effects Loop Send & Return Jacks:

To increase the flexibility of your amplifier even further, you may choose to add external effects in its Series Effects Loop. Nominal level is -10dBV.

25. External FX (Bypass/Loop)

When 'out', this switch will cause the FX Loop Return input to ignore any signal from connected external FX, however, the Send output is always active. Push this switch 'in' to enable the loop.

Note: If this switch is accidentally pushed 'in' and there is nothing plugged in to the loop, the signal will still pass through from send to return by means of an internal link on the switching jacks. This link is disconnected when something is plugged into the return socket. The send socket has no effect on the status of the internal link and therefore can be used as a line out to a tuner or the return of a second amp for example.

26. Return

Connect the (mono) output of an external effects processor here.

27. Send

Connect the (mono) input of an external effects processor here.

Generally, effects involving distortion or Wah Wah aren't usually put in an effects loop because they sound 'best' when they're before the amp (i.e. placed between the guitar and the amp's input). However, when it comes to your sound, it's up to you!

28. Mains Input Socket with incorporated Mains Fuse

Your amp is provided with a detachable mains (power) lead, which is connected here. The specific mains input voltage rating that your amplifier has been manufactured for is indicated on the rear panel. Before connecting for the first time, please ensure that your amplifier is compatible with your electricity supply. If you have any doubt, please seek advice from a qualified technician. Your Marshall dealer will help you in this respect.

The correct value of mains fuse located in the small drawer at the bottom of the mains socket is specified on the rear panel of the amplifier. The drawer contains a space for a spare fuse. NEVER attempt to bypass the fuse or fit one of the incorrect value.

Note: It is wise to carry spare fuses at all times.

MA Series Technical Specification

	MA100H	MA50H
Power (RMS)	100W	50W
Valves	3 x ECC83 + 4 x EL34	3 x ECC83 + 2 x EL34
Channels	2	2
Dimensions (mm) W, H, D	750 x 310 x 250	750 x 310 x 250
Weight (kg)	18.4	16.4
	MA100C	MA50C
Power (RMS)	100W	50W
Valves	3 x ECC83 + 4 x EL34	3 x ECC83 + 2 x EL34
Channels	2	2
Speaker Configuration	2 x 12"	1 x 12"
Dimensions (mm) W, H, D	680 x 510 x 265	635 x 510 x 270
Weight (kg)	28.4	22.7

* EUROPE ONLY **CE** - Note: This equipment has been tested and found to comply with the requirements of the EMC Directive (Environments E1, E2 and E3 EN 55103-1/2) and the Low Voltage Directive in the E.U.

* EUROPE ONLY - Note: The Peak Inrush current for the MA100H & MA100C is 27 amps. The Peak Inrush current for the MA50H & MA50C is 20 amps.

Follow all instructions and heed all warnings
KEEP THESE INSTRUCTIONS !



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Whilst the information contained herein is correct at the time of publication, due to our policy of constant improvement and development, Marshall Amplification plc reserve the right to alter specifications without prior notice.

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