

Marshall
AMPLIFICATION

DSL
40C
40 Watt Combo

DSL
100H
100 Watt Head

Dual Super Lead, All-Valve Amps with Reverb

Owner's Manual



Marshall

From JIM MARSHALL

I would like to personally thank and congratulate you for selecting one of our Dual Super Lead, all-valve DSL100H heads or DSL40C combos.

Since I started Marshall Amplification in 1962 I have witnessed some incredible breakthroughs and advances in amplifier design technology. These include, switchable channels, Master Volume, Reverb, MIDI technology, speaker emulation and digital effects processing, to name just a few. These may seem like every day features nowadays but this certainly wasn't always the case. However, the same values that were present in the first Marshalls are still here today, that is, solid workmanship, reliability, iconic looks and above all great Marshall tone.

As you may know, when the JCM2000 Dual Super Lead series of amps was first introduced in 1997, we were delighted to see them get a fantastic reaction from guitar players and also the press. In fact one of the biggest American guitar magazines described the DSL100 as *"The best Marshall ever? It combines the best tonal qualities and features of both modern and vintage Marshall amps in one package."* Better still, when the world renowned magazine, Guitar Player, reviewed the DSL100 it printed *"The Ultimate Marshall?"* as a subheading on their June 1997 cover.

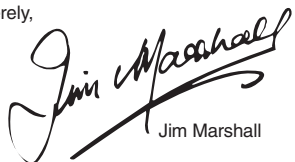
After a very successful life, the JCM2000 series was replaced by the JVM series in 2007, which has also gone onto great success and critical acclaim. That said, there is still a great deal of respect and demand for the DSL's with one of the UK's most popular guitar magazines recently referring to the DSL100 as "the go-to rock amp."

As a result of public demand, I have decided to introduce four affordable amplifiers based on the popular DSL100, two of which are featured in this manual: a 100-Watt head – the DSL100H, and a 40-Watt combo – the DSL40C. In addition to their new names, these EL34 powered beauties both boast the same exact front panel features and functions. They also include a variable Resonance control (as opposed to the fixed off or on Deep switch on the original) and a fresh, modern look, while remaining true to the great tones that made the original DSL100 such a popular amp.

I would like to wish you every success with all of your musical endeavours and also your DSL amp, which I know will provide you with great tones and playing pleasure for many years to come.

Welcome to the Marshall family!

Yours Sincerely,



Jim Marshall

Overview

The mindset behind the DSL100H is a simple one and obviously identical to that of the original JCM2000 DSL100 head – combine the world-renowned EL34 driven power-stage of the 1959 Super Lead Plexi (SLP) 100W head with a dual channel valve preamp, giving you two footswitchable Super Leads in one. Then, for good measure, add a built-in, studio-quality, digital spring Reverb plus extra preamp gain that can take you into JCM800 2203 territory and far beyond it. Hence the name DSL – Dual Super Lead. The DSL40C is the same exact beast except in a 40-Watt, 1x12" combo form, housing a custom-voiced Celestion speaker.

Both amps feature two footswitchable channels (footswitch supplied) named Classic Gain and Ultra Gain – each with two modes, selectable via a front-panel button. As their names imply, each channel has a very different character. Classic Gain takes you from a 1959 style clean to the snarl of a JCM800 2203, and everything in-between, via its Clean/Crunch mode button. Ultra Gain, on the other hand, takes you from a hot-rodded 2203 vibe to an even higher gain response with additional mid-boost, via its Lead 1/Lead 2, mode switch.

Both channels share a passive three-band EQ with controls for Bass, Middle and Treble. The Equalisation section also features a Tone Shift button which, when activated

(pushed in), shifts out the mid frequencies making the amp ideal for brutal, modern metal tones, especially when combined with high gain settings. Each channel also has its own individual Reverb level control for the built-in studio quality digital spring reverb. This effect can be switched on/off via the supplied footswitch.

Both amps' power section features controls for Resonance and Presence. Resonance adds a variable bass boost to your sound without muddying it up, while the Presence adds high end. The ability to select either full output power or half-power via the Pentode/Triode switch on the rear panel, adds further to your DSL's already impressive feature set. The all-round tonal and gain versatility makes both the DSL100H & DSL40C superb and flexible performance tools for today's most demanding playing situations and you can rest assured it is packed full of our famed Marshall tone.

The ability to select either full output power or half-power via the Pentode/Triode switch on the rear panel, adds further to your DSL's already impressive feature set.

Enjoy your DSL amp and please read this handbook carefully before plugging in.

Follow all instructions and heed all warnings KEEP THESE INSTRUCTIONS

Warning:

Before going any further, make sure that 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.

Mains Input & Fuse:


Your amplifier is provided with either a detachable mains (power) lead which should be connected to the mains input socket on the rear panel of the amplifier or a fixed mains (power) lead attached to the rear of the amplifier. The specific mains input voltage rating that your amplifier has been manufactured for is indicated on the rear panel of the amplifier. The correct value and type of mains fuse for valve amplifiers is specified on the rear panel of the amplifier. NEVER attempt to bypass the fuse or fit one of the incorrect value or type.

Transporting your equipment:

Please ensure that your amplifier is switched off and unplugged from the mains electricity supply and that all removable cables have been disconnected from your equipment before attempting to move it.

Important set up information:

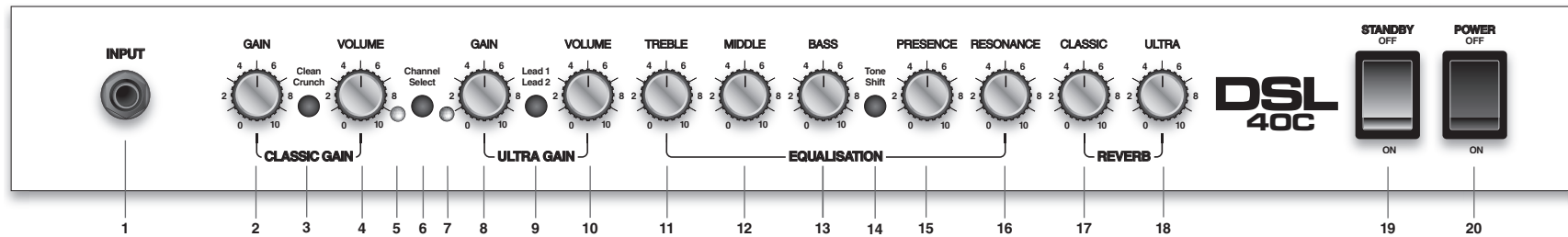
1. Make sure that the cabinet(s)/speakers, where appropriate, are connected to the correct impedance LOUDSPEAKER jack(s) on the rear panel of the amplifier. See the Speaker Output guides in this handbook, if applicable, for specific information regarding impedance matching. When using an extension cabinet 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. For amplifiers provided with a detachable mains (power) lead, 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.
5. Turn the front panel POWER switch on and, if a valve amplifier, wait a couple of minutes before going to point 6, other wise go to point 7.
6. After waiting engage the STANDBY switch (see Front Panel Features for full explanation).
7. Turn the volumes up to your preferred level and your amp is ready to play.

EUROPE ONLY – 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 DSL100H is 44A and the DSL40C is 27A.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
— Reorient or relocate the receiving antenna.
— Increase the separation between the equipment and receiver.
— Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
— Consult the dealer or an experienced radio/TV technician for help.

DSL40C Front Panel Controls & Switches (from Left to Right)



1. INPUT

Input jack socket for guitar cable.

CLASSIC GAIN CHANNEL

2. CLASSIC GAIN CHANNEL CONTROL

Controls the Gain level for the Classic Gain channel. As the amount of gain increases, so will the distortion level in your sound.

3. CLEAN/CRUNCH MODE SELECT BUTTON

The Classic Gain channel features two modes – Clean and Crunch. With the button pressed in, the Clean mode is reminiscent of an early 1959 Plexi Super Lead head and, depending on the Gain setting (2) will take you from clean to a Plexi style crunch. With the button pressed out, the Crunch mode gives you a JCM800 2203 style grind.

4. CLASSIC GAIN CHANNEL VOLUME CONTROL

Controls the volume level for the Classic Gain channel.

5. CLASSIC GAIN CHANNEL LED

This LED lights-up green to indicate that the Classic Gain channel has been selected.

6. CHANNEL GAIN SELECTION BUTTON

Selects Ultra Gain channel when pushed in, and the Classic Gain channel when out.

ULTRA GAIN CHANNEL

7. ULTRA GAIN CHANNEL LED

This LED lights-up red to indicate that the Ultra Gain channel has been selected.

8. ULTRA GAIN CHANNEL CONTROL

Controls the Gain level for the Ultra Gain channel. As the amount of gain increases, so will the distortion level in your sound.

9. LEAD 1/LEAD 2 BUTTON

The Ultra Gain channel features two selectable modes – Lead 1 & Lead 2. Lead 1 (button out) gives an open, high-gain crunch, with traditional Marshall characteristics, similar to a hot-rodded JCM 800 2203. Lead 2 (button in) produces a mid-boosted tone with even higher gain possibilities.

10. ULTRA GAIN CHANNEL VOLUME CONTROL

Controls the volume level for the Ultra Gain channel.

EQUALISATION SECTION

11. TREBLE CONTROL

Controls the high frequencies of the guitar tone, making your guitar sound brighter when it is turned clockwise.

12. MIDDLE CONTROL

This controls the middle register of your guitar's sound. Turning this up will make your guitar sound fatter, while turning it down will result in a sharper, "scooped" tone – especially when used in conjunction with the Tone Shift button.

13. BASS CONTROL

Controls the amount of bottom end (low frequencies) in your tone.

14. TONE SHIFT BUTTON

The Tone Shift reconfigures the tone network adding a new dimension to passive tone shaping. When the button is pushed in and the Middle control (12) is turned down, the result is an aggressive, scooped-mid sound, ideal for many modern metal styles.

15. PRESENCE CONTROL

Turning this control clockwise adds higher frequencies to your guitar tone, creating crispness and bite and making the sound more cutting and "in your face." This control works within the powerstage.

16. RESONANCE CONTROL

Turning this control clockwise adds a resonant bass boost to your sound, increasing bottom end thud whilst making your tone fatter around that all-important low end. This control also works within the powerstage.

REVERB SECTION

17. CLASSIC GAIN CHANNEL REVERB CONTROL

Controls the Reverb level on the Classic Gain channel.

18. ULTRA CHANNEL REVERB CONTROL

Controls the Reverb level on the Ultra Gain channel.

POWER SECTION

19. STANDBY SWITCH

Controls H.T. or high voltage to the valves, allowing them to attain correct working temperature before playing.

NOTE 1: To prolong the life of the valves it is always advisable to switch on the Mains Power Switch (20) about 2 minutes before switching on the Standby (19).

NOTE 2: On powering your amp down, the Standby should always be switched off before the Power Switch is.

NOTE 3: The standby facility is particularly useful before playing, when changing guitars and between sets as it allows you to keep the valves operating at a functional temperature without any sound being produced.

20. POWER SWITCH

On/Off switch for mains power to the amplifier.

Technical Specification	
	DSL40C
Power (RMS)	40W
Valves	4 x ECC83
	2 x EL34
Channels	2
Speaker	1 x 12"
Weight (kg)	22.85
Dimensions (mm)	
W	621
H	490
D	252

DSL40C Rear Panel Features (from Left to Right)



1. MAINS INPUT SOCKET WITH 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.

OUTPUT POWER SELECTION

2. PENTODE/TRIODE SWITCH

When Pentode (full power) is selected the amp's output capability is the full 40-Watts. When Triode mode (half power) is selected, the amp's output is halved to 20-Watts. Triode mode also produces a smoother, less aggressive sound.

IMPORTANT OPERATIONAL NOTE: Whenever this switch is used the amp must always be in Standby mode.

FX LOOP

3. FX LOOP SEND

For connection to the input of an external effects pedal or processor.

4. FX LOOP RETURN

For connection from the output of an external effects pedal or processor.

5. FX LOOP SWITCH

This switches the DSL40C's Series FX loop on or off.

FOOTSWITCH

6. FOOTSWITCH JACK

For the connection of the supplied 2 button footswitch (PEDL-00009). This allows you to switch between the Classic Gain and Ultra Gain channels (Note: The footswitch overrides the front panel Channel switch) and also switches the Reverb on/off.

LOUDSPEAKER OUTPUTS

IMPORTANT OPERATIONAL NOTE: With all-valve amplifiers it is imperative that the amp is connected to a load whilst in operation and that the impedance output(s) on the amp matches the total impedance of the speaker cabinet(s) being used. Failure to comply with these points will result in damage to the amplifier.

The DSL40C features three outputs, a dedicated 16Ω output and two 8Ω outputs. The DSL40C must not be run into an impedance less than 8Ω.

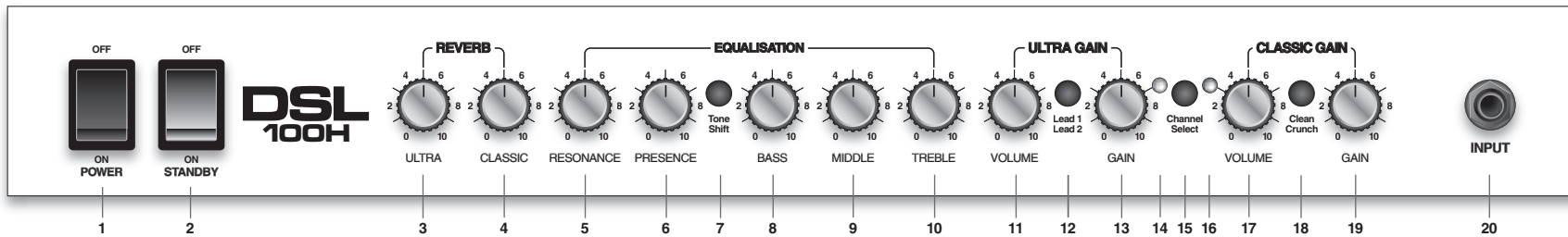
7. 16Ω SPEAKER OUTPUT

For the connection of a 16Ω speaker cabinet. It should be noted that when this Speaker Output is in use the remaining Speaker Outputs (8 & 9) are not operational.

8. & 9. 8Ω SPEAKER OUTPUTS

For use when the total impedance of the speaker cabinet(s) being used is 8Ω. That is, when using either 1 x 8Ω cab or 2 x 16Ω cabs.

DSL100H Front Panel Controls & Switches (from Left to Right)



POWER SECTION

1. POWER SWITCH

On/Off switch for mains power to the amplifier.

2. STANDBY SWITCH

Controls H.T. or high voltage to the valves, allowing them to attain correct working temperature before playing.

NOTE 1: To prolong the life of the valves it is always advisable to switch on the Mains Power Switch (1) about 2 minutes before switching on the Standby (2).

NOTE 2: On powering your amp down, the Standby should always be switched off before the Power Switch is.

NOTE 3: The standby facility is particularly useful before playing, when changing guitars and between sets as it allows you to keep the valves operating at a functional temperature without any sound being produced.

REVERB SECTION

3. ULTRA GAIN CHANNEL REVERB CONTROL

Controls the Reverb level on the Ultra Gain channel.

4. CLASSIC GAIN CHANNEL REVERB CONTROL

Controls the Reverb level on the Classic Gain channel.

EQUALISATION SECTION

5. RESONANCE CONTROL

Turning this control clockwise adds a resonant bass boost to your sound, increasing bottom end thud whilst making your tone fatter around that all-important low end. This is a function of the powerstage.

6. PRESENCE CONTROL

Turning this control clockwise adds higher frequencies to your guitar tone, creating crispness and bite and making the sound more cutting and in your face. This is also a function of the powerstage.

7. TONE SHIFT BUTTON

The Tone Shift reconfigures the tone network to give a new dimension to passive tone shaping. When the button is pushed in, and the Middle control (9) is turned down, the result is an aggressive, scooped-mid sound, ideal for many modern metal styles.

8. BASS CONTROL

Controls the amount of bottom end (low frequencies) in your tone.

9. MIDDLE CONTROL

This dictates the middle register of your guitar's sound. Turning this up will make your guitar sound fatter, while turning it down will result in a sharper, "scooped" tone – especially when used in conjunction with the Tone Shift button.

10. TREBLE CONTROL

Controls the high frequencies of the guitar tone, making your guitar sound brighter when it is turned clockwise.

ULTRA GAIN CHANNEL

11. ULTRA GAIN CHANNEL VOLUME CONTROL

Controls the volume level for the Ultra Gain channel.

12. LEAD 1/LEAD 2 BUTTON

The Ultra channel features two selectable modes – Lead 1 & Lead 2. Lead 1 (button out) gives an open, high-gain crunch, with traditional Marshall characteristics, similar to a hot-rodded JCM800 2203. Lead 2 (button in) produces a mid-boosted tone with even higher gain possibilities.

13. ULTRA GAIN CHANNEL GAIN CONTROL

Controls the Gain level for the Ultra Gain channel. As the amount of gain increases, so will the distortion level in your sound.

14. ULTRA GAIN CHANNEL LED

This LED lights-up red to indicate that the Ultra Gain channel has been selected.

15. CHANNEL SELECTION BUTTON

Selects Ultra Gain channel when pushed in, and the Classic Gain channel when out.

CLASSIC GAIN CHANNEL

16. CLASSIC GAIN CHANNEL LED

This LED lights-up green to indicate that the Classic Gain channel has been selected.

17. CLASSIC GAIN CHANNEL VOLUME CONTROL

Controls the volume level for the Classic Gain channel.

18. CLEAN/CRUNCH BUTTON

Just like the Ultra Gain channel, the Classic Gain channel features two modes – Clean and Crunch. The Clean mode is reminiscent of an early 1959 Plexi Super Lead head and, depending on the Gain setting (19) will take you from clean to a Plexi style crunch. The Crunch mode gives you a JCM800 2203 style grind.

19. CLASSIC GAIN CHANNEL GAIN CONTROL

Controls the gain level for the Classic Gain channel. As the amount of gain increases, so will the distortion level in your sound.

20. INPUT

Input jack socket for guitar cable.

Technical Specification	
	DSL100H
Power (RMS)	100W
Valves	4 x ECC83
	4 x EL34
Channels	2
Weight (kg)	24.2
Dimensions (mm)	
W	741
H	274
D	242

DSL100H Rear Panel Features (from Left to Right)



LOUDSPEAKER OUTPUTS

IMPORTANT OPERATIONAL NOTE: With all-valve amplifiers it is imperative that the amp is connected to a load whilst in operation and that the impedance output(s) on the amp matches the total impedance of the speaker cabinet(s) being used. Failure to comply with these points will result in damage to the amplifier.

The DSL100H features three outputs, a dedicated 16Ω output and two 8Ω outputs. The DSL100H must not be run into an impedance less than 8Ω.

1. & 2. 8Ω SPEAKER OUTPUTS

For use when the total impedance of the speaker cabinet(s) being used is 8Ω. That is, when using either single 8Ω cab or two 16Ω cabs.

3. 16Ω SPEAKER OUTPUT

For the connection of a 16Ω speaker cabinet. It should be noted that when this Speaker Output is in use the remaining Speaker Outputs, items 1 and 2, are not operational.

FOOTSWITCH

4. FOOTSWITCH JACK

For the connection of the supplied 2 button footswitch (PEDL-00009). This allows you to switch between the Classic Gain and Ultra Gain channels and also switches the Reverb on/off.

NOTE: The footswitch overrides the front panel Channel switch.

FX LOOP

5. FX LOOP SWITCH

This switches the DSL100H's Series FX loop on or off.

6. FX LOOP RETURN

For connection from the output of an external effects pedal or processor.

7. FX LOOP SEND

For connection to the input of an external effects pedal or processor.

OUTPUT POWER SELECTION

8. PENTODE/TRIODE SWITCH

When Pentode (full power) is selected the amp's output capability is the full 100-Watts. When Triode mode (half power) is selected, the amp's output is halved to 50-Watts. Triode mode also produces a smoother, less aggressive sound.

IMPORTANT OPERATIONAL NOTE: Whenever this switch is used the amp must always be in Standby mode.

9. MAINS INPUT SOCKET WITH 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.



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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.