# DSL100HR & DSL40CR



**OWNER'S MANUAL** 

Marshall



# INTRODUCTION

Congratulations on your purchase of this Dual Super Lead (DSL) amplifier from Marshall Amplification.

The DSL provides the legendary Marshall tone, allowing you to express your distinct playing style and attitude. From clean to distorted overdrives, the DSL is a versatile all valve amp that allows you to easily dial in the sound you desire.

This DSL amplifier not only delivers the tone you expect from a Super Lead amplifier it is also packed with an array of features such as an effects loop, power reduction and studio quality digital reverb. Right out of the box your DSL provides you with the functionality you need to take your sound from rehearsal to the stage with confidence.

Your DSL amplifier has been designed specifically for those who need the full rich tone of a valve amp. This makes the amp ideal for a live environment, studio or at home thanks to the power reduction system.

We hope you enjoy performing, practicing and recording with your DSL amplifier.

- The Marshall Team.

# **DSL 100/40 OVERVIEW**

The DSL 100 Head and 40 Combo feature the same functions. The combo is loaded with a 12" G12 V-type speaker chosen for its ability to deliver exceptional tone and flexibility.

The DSL features two foot switchable channels: CLASSIC GAIN and ULTRA GAIN.

The CLASSIC GAIN channel delivers sparkling clean sounds through to the more aggressive break-up of a Marshall JCM800 amplifier. The ULTRA GAIN channel provides even more distortion and break-up for players looking for higher gain tones from their amplifier.

Both channels share a passive three-band EQ, with BASS, MIDDLE and TREBLE controls. The EQ section also features Tone Shift, which when activated reconfigures the pre-amp mid frequencies making DSL ideal for contemporary metal tones, especially when combined with higher gain settings.

The DSL features professional quality digital REVERB and a series FX LOOP. The LOW POWER function adds a further dimension to the DSL sound, giving you rich valve tone at an ear-friendly volume.

For the most demanding players, the DSL 40 Combo and DSL 100 Head feature MIDI compatibility meaning outboard MIDI equipment can access all the features needed to perform.

# **WARNING! IMPORTANT SAFETY INSTRUCTIONS**

#### **WARNING:**

Before going any further, make sure that your amplifier is compatible with your mains electricity 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:**

The specific mains input voltage rating that your amplifier has been manufactured for is indicated on the rear panel of the amplifier. Your amplifier is provided with a detachable mains (power) lead, which should be connected to the MAINS INPUT socket on the rear panel of the amplifier (Rear Panel Function #26). The correct value and type 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 or type.

#### TRANSPORTING YOUR EQUIPMENT:

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

#### **IMPORTANT SET UP INFORMATION:**

1. When using the DSL20HR, or the DSL20CR with an extension speaker cabinet(s), make sure that the speaker cabinet(s) is connected to the correct impedance loudspeaker jack socket(s) on the rear panel of the amplifier. See the LOUDSPEAKERS guide in this manual for specific information regarding impedance matching (Rear Panel Function #33).

#### **WARNING:**

Failure to do the above may damage your amplifier. When connecting a speaker cabinet make sure that you use a proper speaker cable. Never use a screened (shielded) guitar cable for this purpose.

- 2. Ensure that the POWER switch is set to the OFF position (Front Panel Function #25).
- 3. Ensure the OUTPUT switch is in the STANDBY position (Front Panel Function #24).
- 4. Connect the supplied mains (power) lead into the MAINS INPUT (Rear Panel Function #26) first and then into an electricity outlet.
- 5. Ensure that the volume controls on the front panel are set to zero (Front Panel Functions #19 & #21).
- 6. Plug your guitar into the INPUT jack socket (Front Panel Function #1).
- Switch the amplifier ON using the POWER switch, wait for a few minutes and then switch the OUTPUT switch to either the LOW or HIGH position.
- 8. Turn the front panel POWER switch on and wait for a few minutes before going to point 9.
- Turn the selected channel volume up to your preferred level and your amplifier is ready to play.

# **COMPLIANCE STATEMENT**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including interference that may cause undesired operation.

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 the 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.

CAUTION: Any changes or modifications not expressly approved by the party responsible for compliance could void the users authority to operate the equipment.

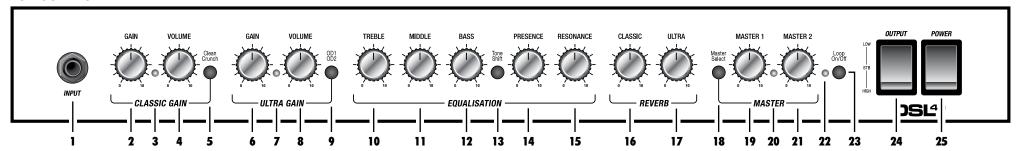
This device complies with CAN ICES-3(B)/NMB-3(B)

# PLEASE READ THIS MANUAL CAREFULLY BEFORE PLUGGING IN.

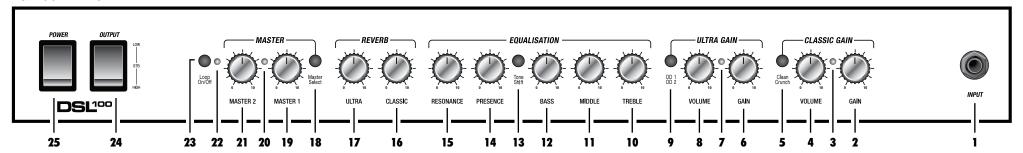
FOLLOW ALL INSTRUCTIONS AND HEED ALL WARNINGS.
KEEP THESE INSTRUCTIONS.

# **FRONT PANEL FUNCTIONS**

#### **DSL40CR FRONT PANEL**



### **DSL100HR FRONT PANEL**



#### 1. INPUT

Input jack socket for your guitar cable. Use a good quality screened/shielded guitar cable to help prevent noise interference.

#### **CLASSIC GAIN CHANNEL**

#### 2. GAIN

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

#### 3. MODE STATUS LED

This LED lights green to indicate that CLEAN mode is selected and red to indicate CRUNCH mode is selected.

#### 4. VOLUME

Controls the volume level of the CLASSIC GAIN channel.

#### 5. CLEAN/CRUNCH

Press to select CLEAN or CRUNCH mode. The CLASSIC GAIN channel's two modes take your sound from clean to overdriven tones.

#### **ULTRA GAIN CHANNEL**

#### 6. GAIN

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

#### 7. MODE STATUS LED

This LED lights green to indicate that OD1 mode is selected and red to indicate OD2 mode is selected.

#### 8. VOLUME

Controls the volume level of the ULTRA GAIN channel.

#### 9. OD1/OD2

Press to select OD1 or OD2 mode. The ULTRA GAIN channel's two modes go from an open, high gain overdrive to a mid-boosted tone with even higher gain possibilities.

#### **NOTES ON USING CHANNELS AND MODES:**

The channel is automatically selected when a mode switch is pressed: Clean/Crunch or

#### OD1/OD2.

When you select a channel its previous mode, FX loop and master volume settings will be recalled.

The channel can also be selected using the supplied 2-way footswitch. When the 2-way footswitch is connected, the front panel mode switch (Clean/Crunch or OD1/OD2) will be active only on the selected channel.

Use the optional 6-way footswitch (PEDL-91005) to switch between channels, modes and more – see the DSL FOOTSWITCHING section in this manual for further info.

# **FRONT PANEL FUNCTIONS (CONT.)**

#### **EQUALISATION SECTION**

#### 10. TREBLE

Controls the higher frequency content of your sound. Turning clockwise will increase the highs making the sound brighter and more crisp.

#### 11. MIDDLE

Controls the middle frequency of your sound. Turning clockwise adds girth. Turning anticlockwise reduces the middle frequencies 'scooping' your sound – this is accentuated when used in conjunction with Tone Shift. (Front Panel Function #13).

#### 12. BASS

Controls the amount of lower frequency, or bottom-end, in your sound. Turning clockwise will increase the bottom-end making the sound fuller.

#### **13. TONE SHIFT**

Tone Shift reconfigures the preamp EQ network adding a new dimension to tonal shaping.

**Tonal Note:** The preamp EQ network is dynamic and highly interactive. Please note that because of this, altering the setting of one control can change the way that the other controls behave – experiment to find your sound.

#### 14. PRESENCE

Controls the amount of higher frequencies of your sound. Turn clockwise to add crispness and bite for a more cutting tone. PRESENCE is a power-stage function and acts independently of the preamp EQ controls.

#### 15. RESONANCE

Controls the amount of lower frequencies in your sound. Turning this control clockwise adds a resonant

bass boost, increasing bottom-end. RESONANCE is a power-stage function and acts independently of the preamp EQ controls.

#### **REVERB SECTION**

#### 16. REVERB CLASSIC

Controls the REVERB level of the CLASSIC GAIN Channel.

#### 17. REVERB ULTRA

Controls the REVERB level of the ULTRA GAIN Channel.

#### **MASTER VOLUME SECTION**

#### **18. MASTER SELECT**

This switches between MASTER 1 and MASTER 2.

**Note:** You can switch between MASTER 1 and MASTER 2 using the optional 6-way PEDL-91005 footswitch.

#### **19. MASTER 1**

Controls the overall volume level of the amplifier when selected.

#### **20. MASTER STATUS LED**

This LED lights green to indicate that MASTER 1 is selected and red to indicate MASTER 2 is selected.

#### **21. MASTER 2**

Controls the overall volume level of the amplifier when selected.

#### **22. LOOP STATUS LED**

This LED lights red to indicated that the FX LOOP is On. It is unlit when the FX LOOP in Off.

#### 23. LOOP ON/OFF

This switch activates and deactivates the EXTOOP.

Note: FX LOOP On/Off is footswitchable

# **FRONT PANEL FUNCTIONS (CONT.)**

using the supplied 2-way footswitch or the optional 6-way footswitch.

#### **24. OUTPUT**

This three position rocker switch combines STB (standby) and HIGH/ LOW output power functions. The output stage and power control for this amplifier has been designed to deliver the optimum tonal performance at all power levels. The HIGH and LOW output functions allow the user to choose between two configurations of the internal power supply. These two configurations give the choice between two output power levels, but ensure that the output valves behave in the same way for both. This means the amplifier can be put into LOW power mode without compromising on tone.

**HIGH:** This is the 100 Watt setting for the DSL100HR and the 40 Watt setting for the DSL40CR.

STB (standby): This is used in conjunction with the mains POWER switch (Front Panel Function #25). When powering up, always switch mains POWER on first, leaving the OUTPUT switch in the STB (standby) position. Standby mode should also be used to mute the amp during breaks in performances to avoid stress to the valves of the amplifier.

**LOW:** This is the 50 Watt setting for the DSL100HR and the 20 Watt for the DSL40CR.

#### 25. POWER

Mains power ON/OFF switch.

# **DSL FOOTSWITCHING**

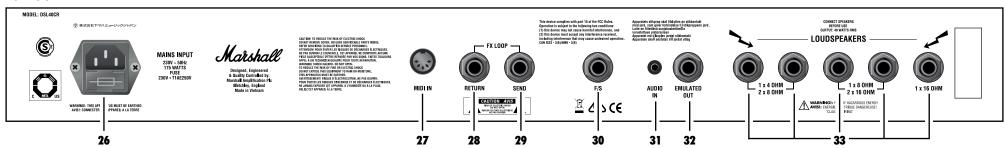
The DSL100HR and DSL40CR are supplied with a 2-way footswitch (PEDL-90012) for channel select and FX loop on/off.

There is also a 6-way footswitch (PEDL-91005) available that enables

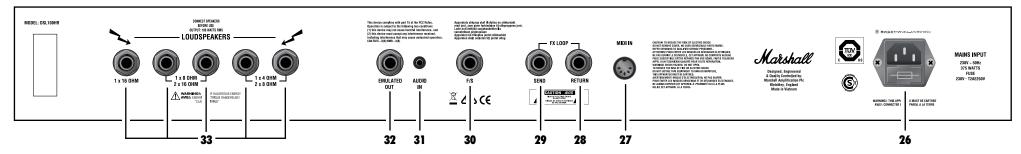
you to fully control your DSL100HR or DSL40CR during performance. You can select each mode: CLEAN, CRUNCH, OD1 or OD2, as well as select MASTER 1 or MASTER 2, and switch the FX LOOP On/Off.

# **REAR PANEL FUNCTIONS**

#### **DSL40CR REAR PANEL**



#### **DSL100HR REAR PANEL**



#### **26. MAINS INPUT**

Connects the amplifier to the mains electricity supply.

Note: The MAINS INPUT socket has an integrated fuse compartment. Ensure that the value of a replacement fuse matches the labelling on the amplifier rear panel. You MUST ALWAYS switch the amplifier OFF and disconnect it from the mains electricity supply before attempting to access the fuse compartment. If in doubt, contact your Marshall dealer.

#### 27. MIDI IN

Connect your external MIDI device to the MIDI IN socket.

**Note:** The amplifier only accepts incoming data and it is not able to send any MIDI commands.

You can set the channel, the state of the LOOP and MASTER volume via MIDI messages.

MIDI commands allow the remote control of some front panel functions (refer to MIDI implementation chart at the end of this manual).

The MIDI receive channel is factory-set to channel 1. In order to set a different channel, press and hold the Loop On/Off switch (Front Panel Function #23) while powering up the amplifier to activate MIDI waiting mode. The LED will flash until a valid MIDI command is received. The MIDI receive channel will be set to the channel of that command.

To select MIDI OMNI receive, put the amplifier into MIDI waiting mode and

then press and hold the Master Select switch (Front Panel Function #18) until its LED flashes.

**Note:** When the 2-way footswitch is connected the amplifier will not respond to any MIDI messages.

#### 28. FX LOOP RETURN

Connect the output of an external FX pedal or processor.

#### 29. FX LOOP SEND

Connect the input of an external FX pedal or processor.

#### 30. F/S

Connect the supplied 2-way footswitch or the optional 6-way footswitch here.

#### 31. AUDIO IN

Connect an external device here to practice with or to jam along to music.

#### **32. EMULATED OUT**

Emulated line level output for headphones or connection to a mixer. The DSL is equipped with a high quality emulated output using Softube-designed studio cabinet emulation. This ensures that your headphone and output signal from this socket provide the best possible tone for practice or recording.

**Note:** Using EMULATED OUT does not omit the need for a speaker load to be connected to the amplifier (Rear Panel Function #33).

**Note:** For silent recording via EMULATED OUT set the OUTPUT switch to STB (Front Panel Function #24).

# **REAR PANEL FUNCTIONS (CONT.)**

#### **33. LOUDSPEAKERS**

There are five speaker outputs available. They are labelled according to the intended impedances:

- 1 x 16 OHM: connect a single 16 Ohm speaker cabinet to this jack.
- 1x 8 OHM or 2 x 16 OHM: connect a single 8 Ohm speaker cabinet or two 16 Ohm speaker cabinets.
- 1 x 4 OHM or 2 x 8 OHM: connect a single 4 Ohm speaker cabinet or two 8 Ohm speaker cabinets.

WARNING: Although the amplifier has five speaker outputs, never attempt to connect more speaker cabinets than rated. The safe combinations are: 1 x 16 Ohm, 1 x 8 Ohm, 2 x 16 Ohm, 1 x 4 Ohm or 2 x 8 Ohm only. Any other speaker cabinet configuration may stress the power amplifier section and in extreme cases may lead to valve and/or output transformer failure. NEVER use DSL100HR or DSL40CR without a speaker load.

# **MIDI IMPLEMENTATION CHART**

#### 1. BASIC INFORMATION

MANUFACTURER: Marshall MODE

MODEL: DSL 40 & DSL 100

VERSION: 1.1

FUNCTION	TRANSMITTED	RECOGNISED	REMARKS
MIDI Channels	N	Y (1-16)	Default receive channel 1
Note Numbers	N	N	
Program Change	N	Y (0-127)	Amp channels mapped to every four PC values
Bank Select Responce		N	
Modes Supported:			
Mode 1: Omni-On, Poly		N	
Mode 2: Omni-On, Mono		N	
Mode 3: Omni-Off, Poly		N	
Mode 4: Omni-Off, Mono		N	
Multi Mode		N	
Note-On Velocity	N	N	
Note-Off Velocity	N	N	
Universal System Exclusive	N	N	
Manufacture System Exclusive	N	N	

#### 2. MIDI TIMING AND SYNCHRONIZATION

FUNCTION	TRANSMITTED	RECOGNISED	REMARKS
MIDI Clock	N	N	

#### MIDI IMPLENATION CHART CONTROL NUMBER INFORMATION

MANUFACTURER: Marshall MODEL: DSL 40 & DSL 100

VERSION: 1.1 DATE: 24.08.17

FUNCTION	#	TRANSMITTED	RECOGNISED	REMARKS
	13	N	Υ	LOOP
				0 = Off
				1 = On
				2-127=Toggle State
14	14	N	Υ	Master
				0 = Off
				1 = On
				2-127=Toggle State

#### MARSHALLAMPS.COM



Marshall Amplification plc, Denbigh Road, Bletchley, Milton Keynes, MK1 1DQ, England. Telephone: +44 (0) 1908 375411 | Fax: +44 (0) 1908 376118 Registered in England. Registered Number: 805676