Marshall

JMP-1

Valve Midi Pre-amp

Nov '98

Handbook

Introduction

The relationship between the guitarist and amplifier has been our prime concern since the earliest Marshall's were produced. We always aim to give that extra edge, which can help to inspire the player, fuelling creativity and the ability to express.

Advances in technology have allowed us to modify and enhance this basic principle for the benefit of the musician. However, we have never lost sight of that extra emotional drive that only valves are capable of producing. The whole character of our unique sound emanates from the breathing full bodied pure tone of the valve.

Your JMP-1 MIDI pre-amp is a carefully designed coalescence between modern MIDI technology and classic Marshall valve circuitry. It's many tones are all valve generated and presented in a way that is both comfortable and familiar to guitar players.

The digital control capabilities add a new degree of flexibility to the way in which the tones can be switched and processed. The advantages provided by this level of control are truly astounding. After studying the manual and with a little practical exploration, you will find an unbelievable range of sounds and will very soon wonder how you managed without MIDI. The only limit is your own imagination.

JMP-1 Front Panel Features

1. Input Socket   Connect the guitar to this socket.

2. Headphone Socket   For the connection of stereo headphones. Headphones with an impedance of 600 Ohms will give the best performance. Connecting headphones does not disable the outputs of the pre-amp.

3. Output Level Control   Controls the volume level from the master left and right outputs (Item 25).

4. Display   The display is split into two sections and shows patch and data information.

5. Patch Key   Push this key to enter patch selection mode (0-99). The patch key LED will illuminate to indicate patch mode.

6. Store Key   Use this key to store a patch in the memory.

Operational Note:

Push once and the store key LED will flash. The data entry control (7) can now be used to change the storage location. Pushing patch or a parameter key will abandon the store. Push the store key again to complete the store. (Also see section Creating Your Sounds).

7. Data Entry Control   This rotary control is used to increment/decrement data information, or to select a patch in patch mode.

8. Volume Key   Push this key to adjust the patch volume level between 0 and 20. The volume key LED will illuminate to indicate that the volume parameter has been selected. The data display will show the current value. The value can then be adjusted using the rotary data entry control (7).

9. Gain Key   Push this key to adjust the level of gain between 0 - 20.

10-13. Tone Control Keys	These keys should be combined to shape the Bass, Middle, Treble, and Presence tone parameters. They can all be adjusted between -6 and +6.
14. Effect Key	This key varies the mix of the stereo effects loop between 0 and 12. At 0 only the direct signal is heard and at 12 only the effected signal is heard. When at 12 the loop is effectively running in series i.e. no direct signal. This is ideal for use with a graphic equalizer or compressor limiter. As the effect parameter level is reduced, more direct signal is introduced as with a parallel loop. This is best suited to Chorus, Delay, Reverb etc.
15. OD1 Key	This key selects overdrive 1, a warm vintage drive reminiscent of Marshall Super Lead amps through to modern day Master Volumes.
16. OD2 Key	Selects overdrive 2. This a tightly focused high gain drive which can be smooth or aggressive depending on the E.Q. and gain settings.
17. Bass Shift	This is a subtle low frequency character control which can be switched in or out of any sound selection.
18. Clean 1 Key	Selects Clean 1, which has a full warm character and pure vintage tone.
19. Clean 2 Key	Selects Clean 2. This has a bright sparkling tone ideal for clean picking and ringing chords.
20. MIDI-Mapping Key	The mapping function enables the mapping of incoming MIDI patch messages to internal patches and outgoing MIDI patch numbers to external devices. (See MIDI mapping).
21. MIDI Channel Key	This key selects the MIDI Channel on which the JMP-1 transmits and receives MIDI information.
22. Power Switch	On/Off switch for mains power.

Rear Panel Features

23. Emulated Outputs	Left and right outputs featuring Marshall speaker emulation. The volume level from these outputs is controlled by the volume level parameter key (8) not by the output level control (3).

Operational Note: Stereo Speaker Emulation.

The Marshall speaker emulation circuit is a special filter which gives a signal virtually identical in sound to a speaker cabinet. This allows you to link directly to the PA and obtain a stunning direct sound in a live situation. In the studio it will give a true guitar tone direct to tape.

24. Emulated Level Selection Switch	Selection switch providing +4dB or -10dB output levels on the speaker emulated outputs.
25. Master Outputs	Left and right outputs for connection to a power amplifier.

26. Master Level Selection Switch   Gives +4dB or -10dB Master output level options.

27. Effects Return Jacks   Left and right jack sockets for connection from the outputs of an external effects processor. If using a mono effects processor the left hand return socket only should be used. In this instance both the left and right master outputs and speaker emulated outputs will now be working in mono.

28. Effects Level Selection Switch   Provides level selection of +4dB or -10dB to match the level of external effects processors.

29. Effects Send Jack   Output for connection to the input of the external effects processor.

30. Footswitch Socket   Connection point for optional Marshall four way footswitch to give 4 patch selection.

31. MIDI OUT   Sends outgoing MIDI messages from the JMP-1.

32. MIDI THRU   Sends out MIDI messages identical to those coming in through the MIDI IN terminal.

33. MIDI IN   Terminal to receive incoming MIDI messages from external MIDI device.

When you switch on

When switching on the JMP-1, the unit will run through an initialising process and will then default to the patch number that was selected when the JMP-1 was last switched off (Fig1). Your JMP-1 is now ready for action.

Fig 1 Patch
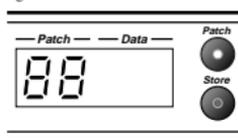
Creating Your Sounds

Your JMP-1 is capable of producing a vast array of different tones, stored in the 100 available patches. The simplicity of creating and storing these sounds is a major advantage and feature of the pre-amp. A "Patch" is a combination of all the programmable elements that you put in, therefore if all tone and volume selections are at 0, no sound will be produced. Each patch is made up of:

(A) The channel selection i.e. OD1, OD2, Clean 1, Clean 2 & Bass Shift

(B) The individual volume, gain, tone and effects levels that you have selected.

The first step is to select a patch by pressing the patch key (5) using the rotary data control (7) to reach the desired patch number. The next stage is to "build" your required sound, firstly by selecting the channel OD1, OD2, Clean 1 or Clean 2 with or without bass shift, then by selecting the volume, gain, tone and effects levels. These controls work in exactly the same way as a normal Marshall amplifier, where increasing the gain brings in more overdrive and the tone selections interact to "shape" the sound.

The JMP-1's controls are there to be used to the full and by experimenting with all the extremes you will quickly understand it's capabilities and build your own library of sounds.

Storing Yours Sounds

When you are satisfied with the sound that you have created, storage is achieved in the following way. Push the store key (6) once , the LED will flash (Fig 2). Select the desired patch location using the data entry control (7). (Pressing the patch or any parameter key will abandon the store). Push store a second time to complete the store

Memory Lock

A memory lock can be set to keep your data safe. This will disable any functions that write data to the internal memory i.e Store, Mapping, Channel & System Exclusive. If the memory is locked an 'L' will appear in the right of the display when you attempt a store (Fig 3). At this stage the lock can be toggled on or off by pressing the Channel key.

Sound Selections

There is a definite identifiable character to the "Marshall Sound" throughout the years. largely derived from the unique qualities of valve power. Our expertise in harnessing valve drive has been fully exploited in the JMP-1 to recreate the various classic sounds and to generate new tones that will become the classics of the future. Bearing in mind the variations in guitar types and styles, plus the flexibility of the control parameters, the following guide gives an indication of each channel's basic sound type.

Clean 1

This is a warm full bodied clean tone, ideal for rich chords, which can be softened for jazz tones or, by adding gain, will suit clean lead lines with a hint of vintage distortion.

Clean 2

In complete contrast to Clean 1, Clean 2 is bright and glassy with a clear jangling tone. In addition it contains the unique lively "edge" found only in the early JTM 45 and Super Lead Amps operating at volumes just below distortion.

OD1

Features the purity of distortion from the golden age of the plexi glass Super Leads. As the gain is increased you pass through degrees of distortion into a rich higher gain mode, with just the right nuances for the modern blues rock player. Vintage crunch, modern metal and fat blues lead sounds are all readily available.

OD2

Tightly focused stunning high gain is what you will find in OD2. Modern and aggressive, smooth and fluid, the gain levels and singing tone of this channel will give you infinite sustain whilst retaining a pure toneful quality.

Bass Shift

The Bass Shift option can be switched in or out of any channel selection. When selected it thickens the bottom end of the sound and tightens the playing feel. On clean selections it adds body and on overdrive provides the extra low end "throb" so essential for heavy rock sounds.

Factory Sounds

Your JMP-1 has 26 sounds ready programmed into patches 00-25. These patches have been programmed by experienced guitarists. They have also been used in full stage and studio performance. These sounds can all be edited in the way described earlier and recalled if necessary using the procedure described in the section-"to re-initialise the JMP-1."

Pre set sounds

TITLE	MODE	B/S	VOL	GAIN	BASS	MID	TREB	PRES
00 Smoke-em	OD 2	off	18	20	3	-3	3	1
01 Chunkus	OD 1	off	17	20	1	-3	3	4
02 Sticky	OD 1	on	15	13	1	2	6	3
03 Cleeeeen	CL 2	off	20	9	3	-1	4	6
04 British Steel	OD 2	on	17	16	4	0	4	1
05 Nasal Tone	OD 2	on	16	20	0	1	6	6
06 Quo !!!	OD 2	on	17	10	2	-2	6	3
07 Angus-Ho	OD 2	on	17	14	0	-1	3	2
08 Filth	OD 2	on	17	20	2	-6	6	6
09 Bloooz-O	OD 2	on	17	11	2	-2	3	2
10 Bloooz-O+	OD 2	on	17	19	2	-2	3	2
11 Tej'as	OD 1	on	16	14	1	-1	4	1
12 Modster	OD 1	on	14	20	2	1	5	5
13 Biffa	OD 1	off	15	20	2	0	3	3
14 More Gary	OD 2	on	17	4	3	0	3	3
15 Mid-lands	OD 1	on	14	17	2	6	3	3
16 Sunshine	OD 2	on	15	10	1	6	-6	3
17 Britaevious	CL 2	on	17	17	4	-2	6	6
18 Trash	OD 1	on	17	9	4	-1	2	3
19 800's	OD 1	off	16	15	6	0	3	3
20 LA Crunch	OD 1	on	16	17	6	1	3	2
21 Crusher	OD 1	on	18	12	5	-4	5	4
22 Grit Clean	CL 2	off	16	19	3	-1	4	6
23 Shred Spread	OD 1	on	17	20	5	0	6	6
24 Warm Grit	CL 1	on	16	20	-1	3	6	6
25 Mellow	CL 1	off	20	14	2	-2	1	1

TITLE	MODE	ATTRIBUTES	PICKUPS		COMMENTS
00 Smoke-em	OD 2	Lots of drive & sustain	▬▬	⟋	It starts here
01 Chunkus	OD 1	Big, Ugly & Fat	▬▬	⟋	Gain controls "chunkiness"
02 Sticky	OD 1	Edgy grime	▬▬	⟋	Big change for different guitars
03 Cleeeeen	CL 2	Very	▬▬	⟋	Lots of headroom
04 British Steel	OD 2	Warm & Heavy	▬▬	⟋	English overdrive
05 Nasal Tone	OD 2	Thin, midrangy & cutting	▬▬	⟋	When tracks are full, this fits
06 Quo !!!	OD 2	Bright crunch	▬▬	⟋	Rocks you all over the world
07 Angus-Ho	OD 2	Mid '70s Marshall	▬▬	⟋	Tone
08 Filth	OD 2	Bright, semi scooped	▬▬	⟋	Great for chords
09 Bloooz-O	OD 2	Plexi 50 Watt	▬▬	⟋	Classic tone
10 Bloooz-O+	OD 2	Plexi 100 Watt	▬▬	⟋	As above, more aggressive
11 Tej'as	OD 1	Punchy/dark drive	▬▬	⟋	Increase gain for vintage singles
12 Modster	OD 1	Mod-ed Plexi	▬▬	⟋	More than enough
13 Biffa	OD 1	Obnoxious overdrive	▬▬	⟋	In your face crunch
14 More Gary	OD 2	JTM 45 on "6"	▬▬	⟋	Started it all
15 Mid-lands	OD 1	Honky mid range voice	▬▬	⟋	Cuts through
16 Sunshine	OD 2	Cleaner than you think!	▬▬	⟋	Increase Treb. for dark guitars
17 Britaevious	CL 2	Modern clean - Pick's up EFX well		⟋	Hi output pickups will distort
18 Trash	OD 1	Very broad modern tone	▬▬	⟋	Fills up a lot of space
19 800's	OD 1	JCM800 - Deliverin' the dB's	▬▬		Set bass to suit your guitar
20 LA Crunch	OD 1	Mod-ed JCM800 on "5"	▬▬		Decrease Pres. for single coils
21 Crusher	OD 1	JCM900 on "8"	▬▬		Mid control very effective
22 Grit Clean	CL 2	Clean & on the edge	▬▬		Hi output pickups will distort
23 Shred Spread	OD 1	Full scoop shred tone	▬▬		Bass control is the key here
24 Warm Grit	CL 1	Dark & on the edge		⟋	Hi output pickups will distort
25 Mellow	CL 1	Clean & pretty	▬▬	⟋	Roll back guitar tone for full "Jazz"

Some Notes On MIDI

In a modern guitar set-up you might have a number of elements, a pre-amp and an effects processor or two. By using MIDI to link these devices together, you can control them all simultaneously. This is the real use of MIDI for the guitarist (Musical Instrument Digital Interface). Most MIDI devices are equipped with three MIDI terminals, MIDI IN, MIDI THRU and MIDI OUT. The connection between these terminals is quite simple. A MIDI IN terminal would be connected to a MIDI Out or MIDI THRU terminal. Messages are sent from a MIDI OUT terminal to a MIDI IN terminal.

MIDI messages received at the MIDI IN terminal are simultaneously routed through at the MIDI THRU terminal. So the messages being sent via MIDI THRU are a direct copy of the messages received at MIDI IN. The MIDI OUT terminal is not the same as the MIDI THRU terminal. The JMP-1 will send it's own MIDI messages via the MIDI OUT terminal.

There are various different MIDI messages that one device can send to another. The most important message is the MIDI program (patch) change message. When the JMP-1 receives a program change message it will call up a patch. Whenever the JMP-1 calls up a new patch it also sends a MIDI program change message via the MIDI OUT terminal. Pressing a pedal on a MIDI foot controller will send a MIDI program change message. Each MIDI program change message carries a number between 00 and 127 corresponding to the patch/program to be called up. The JMP-1 has 100 internal patches but will respond to all 128 MIDI program change messages, by using a MIDI mapping table.

MIDI Channel

Another important thing to know about MIDI, is the idea of MIDI Channels. Most MIDI messages are sent over a MIDI Channel, of which there are 16. In order for one MIDI device to communicate with another, both devices must be operating on the same MIDI Channel.

The JMP-1 can be set to operate on any one of the 16 MIDI channels or in Omni mode. In Omni mode the JMP-1 will respond to MIDI messages on all channels and will transmit on channel 1.

To Set The MIDI Channel: After pressing the channel key the display will indicate the current MIDI Channel setting (Fig 4).

Fig 4 Channel selection
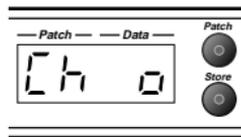
Use the data entry control to select channels 1 to 16 or Omni mode. Press the channel key again to store the channel setting and return to patch mode.

Note: The MIDI Channel setting is a 'Global' parameter and not stored with an individual patch. MIDI Channel setting is retained whilst the unit is not powered.

MIDI Mapping

MIDI mapping is a simple and very useful facility, but it often confuses those who are new to MIDI. The MIDI Mapping table is stored in the memory and is made up of two parts, Input mapping and Output mapping.
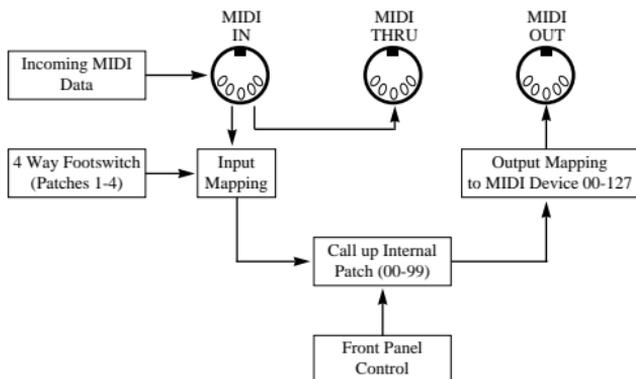
Input Mapping

The input mapping table makes it possible to transpose any incoming MIDI Program Change number to select any desired JMP-1 patch. For Example:

MIDI Program Change 124 could be mapped to JMP-1 patch 36, so whenever the JMP-1 received MIDI Program Change 124 it would call up patch 36. The Input mapping function is invaluable if you are using a MIDI foot controller that sends fixed Program Change messages.

Output Mapping

In the same nature as input mapping, the output mapping function can transpose any outgoing Program Change message. If the MIDI OUT of the JMP-1 is driving an external effects processor, the JMP-1's output mapping can be used to select a particular effects program for each JMP-1 patch, with the advantage that several JMP-1 patches can share the same program on the effects processor.

To Edit The Mapping Table:

1) Push Map key once to select incoming MIDI Program number. (See Fig 5). Use the data entry control to select the incoming Program number (00 to 127). The decimal point signifies program numbers 100 and over.

2) Push again to select the Internal Patch to be called up (00 to 99) (See Fig 6).

3) Push the Map key a third time to set the outgoing MIDI Program Change message to (00 to 127) (See Fig 7).

4) Pushing the Map key a fourth time will store edits and return the JMP-1 to Patch mode.

Note: The mapping table is remembered whilst the JMP-1 is not powered.

Fig 5. Input Mapping
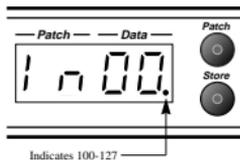
Fig 6. Internal Patch Number

Fig 7. Outgoing MIDI program

Indicates 100-127

Four Way Footswitch

The optional Marshall four way footswitch (model MPM 4E) provides a simple means of selecting four patches.

The footswitch will call up patches one to four, however, the Mapping facility can be used to call up any four of the 100 JMP-1 patches.

To Re-initialise The JMP-1

This procedure will re-load the factory sounds and reset the mapping table.

WARNING:- Your edited sounds will be lost if the unit is re-initialised.

Procedure, Hold down OD1 and Clean 1 whilst switching on the power.

Memory back-up

Fig 8. Error Detected

The JMP-1 has an internal battery back-up system to keep your patches safe while the unit is switched off. This battery should last for several years.

Every time you power up the JMP-1, a self check program is run. If any errors are detected an "E" will be displayed momentarily (Fig 8).

If this should occur repeatedly, then it is likely that the internal back-up battery needs replacing. Contact your dealer as soon as possible and back up your patches (see System Exclusive).
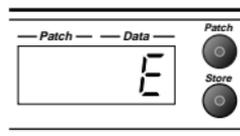
System Exclusive

By using system exclusive MIDI code, it is possible to dump all your patch and mapping settings to an external MIDI device such as a sequencer or data filer.

To Transmit MIDI Dump Data:-

Connect a MIDI cable from the MIDI OUT of the JMP-1 to the MIDI IN of the receiving device. Press the PATCH key and the VOLUME key together to begin transmitting. The display will indicate that a MIDI exclusive dump is in progress by counting the data blocks (0 thru' 9) as they are transmitted (Fig 9). When the transmission is completed, the display will return to normal.

To Receive a System Exclusive Dump:-

Connect a MIDI cable from the MIDI OUT of the transmitting device to the MIDI IN on the JMP-1. (Ensure that the memory lock is off - see page 6)

WARNING:- Receiving a MIDI dump will re-write all your patches and mapping data, so be sure that you are loading the correct data before you start. If you are unsure then make a back up of your current data beforehand.

Fig 9. System Exclusive Dump

Execute the dump from the transmitting device. When the JMP-1 recognises the system exclusive code it will automatically respond by counting the MIDI data blocks as they are successfully received (Fig 9). If this does not happen then re-check the MIDI connections and that you are sending the correct file. When the transmission is completed, the display will return to normal.
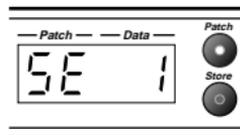
If their is an error (Fig 10) in the MIDI data the JMP-1 will abandon the load and return to normal. Try the load again, the error could be due to a file corruption or faulty cable.


Fig 10. System Exclusive error
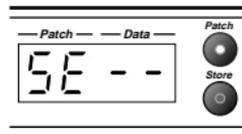
MIDI Implementation Chart

FUNCTION		TRANSMITTED	RECOGNIZED	REMARKS
Basic Channel	Default Channel	1 1-16	OMNI 1-16	Memorized
Mode	Default Message Altered	✕ ✕ ✕	MODE 1 ✕ ✕	
Note Number	True Voice	✕ ✕	✕ ✕	
Velocity	Note ON Note OFF	✕ ✕	✕ ✕	
After Touch	Key's Channels	✕ ✕	✕ ✕	
Pitch	Bender	✕	✕	
Control Change		✕	✕	
Program Change	True#	0-127 0-99	0-127 0-99	
System Exclusive		0	0	See Note
System Common	:Song Pos :Song Sel :Tune	✕ ✕	✕ ✕	
System Real Time	:Clock :Commands	✕ ✕	✕ ✕	
Aux. Messages	:Local ON/OFF :All Notes Off :Active Sense :Reset	✕ ✕ ✕ ✕	✕ ✕ ✕ ✕	
Notes		System Exclusive Patch dump and load when Memory lock is off.		

Mode 1 :OMNI ON, POLY   Mode 2 :OMNI ON, MONO   0:YES
Mode 3 :OMNI ON, POLY   Mode 4 :OMNI ON, MONO   ✕:NO

JMP-1 Front Panel Features

Marshall
VALVE MIDI PRE-AMP
JMP-1

Input

Phones

Output Level

Patch — *Data*

Patch

Store

Data - +

Volume

Gain

Bass

Middle

Treble

Presence

Effect

OD1

OD2

Bass Shift

Clean 1

Clean 2

Map

Channel

Power

Made in England

JMP-1 Rear Panel Features

Jim Marshall (Products) Ltd, England

WARNING: Fire and Shock Hazard - Do not Expose Unit to Rain or Moisture. Shock Hazard This Unit Must be Earthed. Don Not Open.
AVIS: Risque de choc Electrique - Ne Pas Ouvrir
WARNING: No User Serviceable Parts Inside. Refer to Qualified Personnel.

MAINS INPUT
230V ~ 50/60Hz 20 Watts

MIDI

FOOTSWITCH

EFFECTS

MASTER

SPEAKER EMULATOR

IN

THRU

OUT

SEND

+4 dB
-20 dB
LEVEL

R. RETURN

L. RETURN

+4 dB
-20 dB
LEVEL

R. OUTPUT

L. OUTPUT

+4 dB
-20 dB
LEVEL

R. OUTPUT

L. OUTPUT