DM-101

Reference Manual

Table of contents

Panel Descriptions

Top Panel

Name		Function
1	**[MEMORY] button**	Switches between or saves memories (MANUAL, 1–4).
	MEMORY indicators	Indicates the currently selected memory. When MIDI is used to select memories 5–127, all indicators go dark.
		* If you turn the [VARIATION] knob while the mode is MULTI-HEAD, MEMORY indicators 1–4 indicate the head pattern you selected. The indicators return to the normal memory display after a little while.
2	**[TAP DIVISION] button**	Specifies the delay time in terms of a note length relative to the BPM. **Preventing accidental operation (panel lock)** By long-pressing the [TAP DIVISION] button, you can switch between enabling (unlocking) or disabling (locking) the knobs and buttons. If you try to operate the knobs and buttons while they're locked, the TAP DIVISION indicator blinks.
	TAP DIVISION indicator	This indicates the delay time as a note value; the interval at which you press the pedal is considered as a quarter note (100%).

TAP DIVISION indicator					Explanation
𝅗𝅥	♩	♪	TRI	DOT	
✓				✓	Dotted half note (300%)
✓					Half note (200%)

Name	Function					

					✓		✓	Dotted quarter note (150%)

	✓			✓			Half-note triplet (133%)
		✓					Quarter note (100%)
			✓			✓	Dotted eighth note (75%)
		✓		✓			Quarter-note triplet (67%)
			✓				Eighth note (50%)
			✓	✓			Eighth-note triplet (33%)

* Not supported in some delay modes. For details, refer to "".

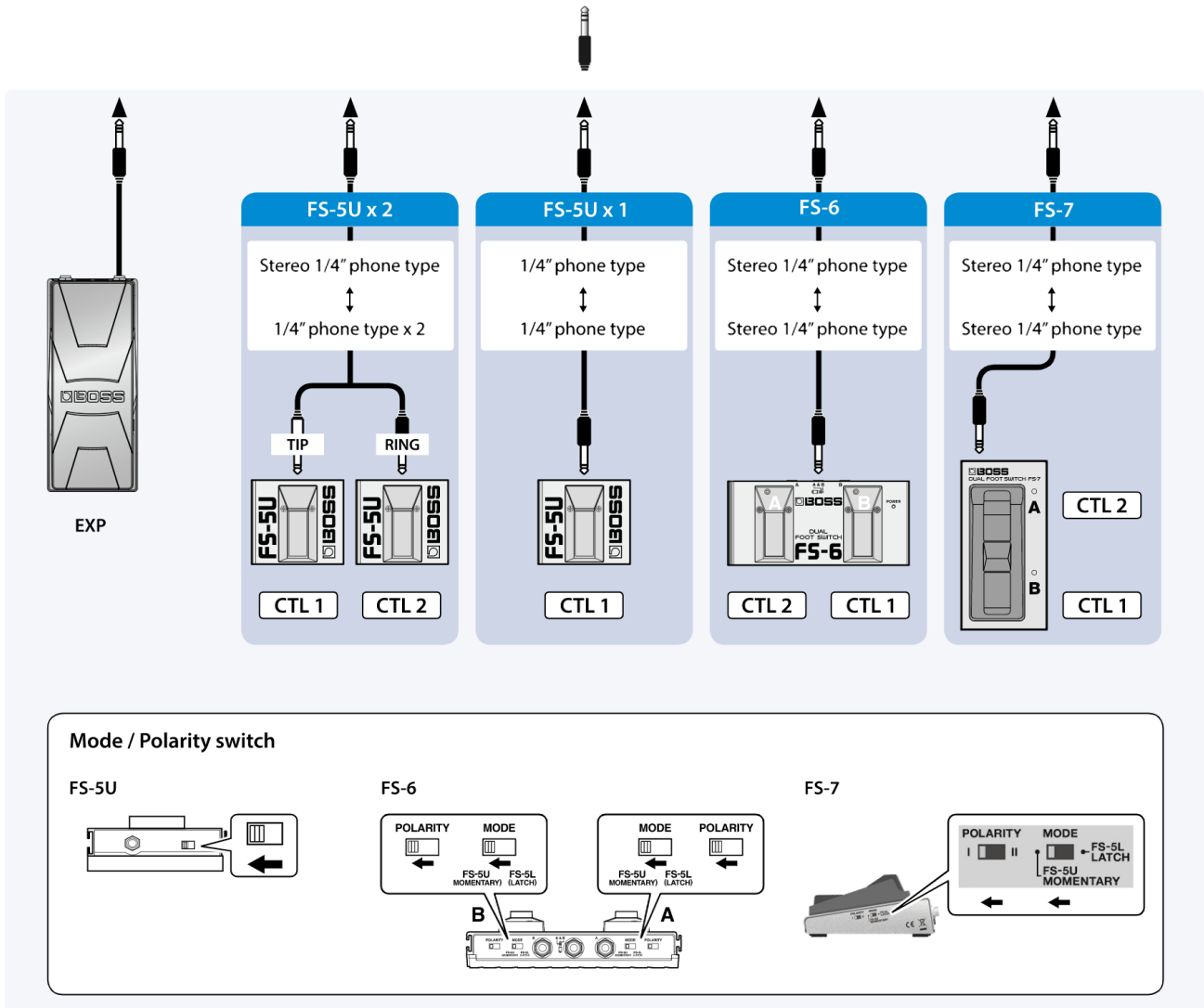| #	Name	Function
3	**[MOD RATE] knob**	Adjusts the modulation rate of the delay sound.
4	**[MOD DEPTH] knob**	Adjusts the modulation depth of the delay sound.
5	**[VARIATION] knob**	Adjusts the tonal character of the delay sound. The effect differs depending on the mode. See the "1.5. Mode List(P.8)" for details.
6	**Mode knob**	Selects the delay mode (type). 1.5. Mode List(P.8)
7	**[DELAY TIME] knob**	Adjusts the delay time. Turning the knob toward the right increases the delay time.
8	**[INTENSITY] knob**	Adjusts the number of delay repeats. Turn this knob toward the right to increase the number of repeats. If you turn the knob all the way to the left, a single delay is heard. * If you turn the knob all the way to the right, oscillation might occur.
9	**[DELAY VOLUME] knob**	Adjusts the volume of the delay sound. Turn this knob toward the right to increase the delay sound. If you turn the knob all the way to the left, only direct sound is heard.
10	**[ON/OFF] switch**	Turns the delay on/off.
11	**[MEMORY] switch**	Press to switch between memories.
12	**[TAP] switch**	By pressing the switch at the tempo of the song you're performing, this lets you specify a matching delay time. If the tempo is lower than the minimum delay time, the delay time is set to 1/2 and 1/4 of the tempo. If the tempo is higher than the maximum delay time, the delay time is set to two and four times the tempo. * Not supported in some delay modes. For details, refer to "1.5. Mode List(P.8)".

Rear Panel

Name		Function
13	INPUT jack	Connect your electric guitar, keyboard, or other musical instruments and effect units to this input jack.
14	OUTPUT A/MONO, B jacks	Connect your guitar amp, keyboard amp, other effect units or your mixer here. For mono output, connect to the A/MONO jack.
15	CTL1, 2/EXP jack	● **Using the jack as CTL 1, 2** You can connect a footswitch (FS-5U, FS-6, FS-7; sold separately) to switch MEMORY UP/DOWN and so on. ● **Using the jack as EXP** Connect an expression pedal (EV-30, Roland EV-5, etc.; sold separately) to continuously change the effect settings for the expression pedal's pushed-up (horizontal) position and for the pushed-down (slanted) position.
16	MIDI IN/OUT connectors	Use TRS/MIDI connecting cables (BMIDI-5-35, BMIDI-1-35, BCC-1-3535; sold separately) to connect this unit to an external MIDI device. You can use an external MIDI device to switch between up to 128 memories on this unit. * Do not use these connectors for connecting to audio devices. Doing so may cause a malfunction.
17	USB port	Connect your computer using a commercially available USB cable that supports USB 2.0. * Do not use a micro USB cable that is designed only for charging a device. Charge-only cables cannot transmit data. * Used only for updating programs.
18	DC IN jack	Connect the AC adaptor to this jack. Use only the specified AC adaptor (PSA-series), connected to a 100 V AC power source. When you connect the included AC adaptor to the DC IN jack, the unit turns on. 1.4. Turning the Power On/Off(P.7)
19	Ground terminal	Connect this to an external earth or ground. This should be connected when necessary.

* To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.

Connecting External Pedals

	FS-5U x 2	FS-5U x 1	FS-6	FS-7
	Stereo 1/4" phone type	1/4" phone type	Stereo 1/4" phone type	Stereo 1/4" phone type
	↕	↕	↕	↕
	1/4" phone type x 2	1/4" phone type	Stereo 1/4" phone type	Stereo 1/4" phone type

EXP

TIP   RING

FS-5U   FS-5U

| CTL 1 | CTL 2 | CTL 1 | CTL 2 | CTL 1 | CTL 2 / CTL 1 |

Mode / Polarity switch

FS-5U

FS-6

POLARITY   MODE
FS-5U   FS-5L
MOMENTARY (LATCH)

MODE   POLARITY
FS-5U   FS-5L
MOMENTARY (LATCH)

B   A

FS-7

POLARITY   MODE
I II   FS-5L
LATCH
FS-5U
MOMENTARY

Turning the Power On/Off

Once everything is properly connected, be sure to follow the procedure below to turn on their power. If you turn on equipment in the wrong order, you risk causing malfunction or equipment failure.

* Before turning the unit on/off, always be sure to turn the volume down. Even with the volume turned down, you might hear some sound when switching the unit on/off. However, this is normal and does not indicate a malfunction.

Turning the Power On

Turn on the power to your amp last.

Turning the Power Off

Turn off the power to your amp first.

Mode List

Mode	Explanation	Delay time	MIDI SYNC support for [TAP] switch	[VARIATION] knob function
CLASSIC `MONO`	A sound with a warmth that's characteristic of analog delays.	40–1,200 ms	✓	Adjusts the modulation waveform. The MIN setting produces a triangle wave, the center setting produces a sine wave; and the closer you get to the MAX setting, the more complex the waveform becomes.
VINTAGE `MONO`	Simulates the sound of the BOSS DM-2.	10–300 ms	✓	
MODERN `MONO`	Produces a clear delay sound with a distinct high end.	40–840 ms	✓	
MULTI-HEAD `MONO`	Produces a deep echo-like effect.	20–300 ms	✓	Selects the head pattern (delay pattern) (10 types). (*1, *2) When you turn the knob, MEMORY indicators 1–4 indicate the head pattern you selected. The indicators return to the normal memory display after a little while.
NON-LINEAR `MONO`	A delay that gives a reversed effect.	35–190 ms		Adjusts the volume for each delay interval.
AMBIENCE `MONO`	A sound that simulates a very narrow space.	VARIATION (Early reflection) MIN: 140–160 ms VARIATION (Early reflection) MAX: 290–400 ms		Adds the sounds of early reflections.
REFLECT `STEREO`	Produces a reverb-like effect.	90–320 ms		Produces a pre-delay effect (40–290 ms).
DOUBLING+ DELAY `STEREO`	Produces a short doubling delay that adds thickness to the sound, along with the reflection sound.	10–310 ms	✓	Adjusts the doubling delay time (10–20 ms).
WIDE `STEREO`	Shifts the respective OUTPUT A/B delay times to create a more expansive sound.	25–590 ms	✓	Adjusts the time difference for the OUTPUT A/B delay time.
DUAL MOD `STEREO`	Gives a modulation effect with different phases for OUTPUT A/B.	110–600 ms	✓	Adjusts the modulation phase for OUTPUT A/B. The MAX setting inverts the phase for OUTPUT A/B.
PAN `STEREO`	A stereo tap delay that outputs the delay sound with different timings for OUTPUT A/B.	20–450 ms	✓	Adjusts the time difference for the OUTPUT A/B delay time.
PATTERN `STEREO`	Creates a rhythmic delay effect.	VARIATION (Pattern) 1: 50–300 ms VARIATION (Pattern) 2: 60–300 ms VARIATION (Pattern) 3: 60–300 ms VARIATION (Pattern) 4: 40–190 ms VARIATION (Pattern) 5: 30–190 ms VARIATION (Pattern) 6: 50–300 ms VARIATION (Pattern) 7: 60–290 ms VARIATION (Pattern) 8: 20–80 ms VARIATION (Pattern) 9: 60–300 ms VARIATION (Pattern) 10: 60–300 ms	✓	Selects the delay pattern (10 types). (*1)

(*1) You can switch between patterns 1–10 by changing the knob position.
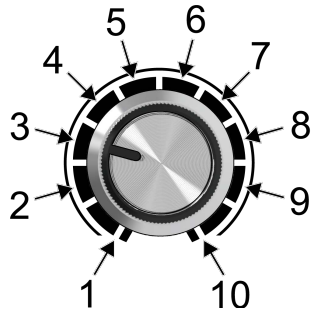
(*2) The contents of head patterns 1–10 are shown below.

	Head pattern									
	1	2	3	4	5	6	7	8	9	10
Playback head 1	●	●	●			●	●	●		●
Playback head 2	●			●		●	●		●	●
Playback head 3		●		●	●	●		●	●	●
Playback head 4			●		●		●	●	●	●

Saving and Switching Between Memories

Saving to a Memory

You can save the settings you've edited.

1. **Long-press the [MEMORY] button.**

   The indicator of the currently selected memory number blinks, and the memory enters write standby mode.

2. **Take your finger off the [MEMORY] button.**

3. **Press the [MEMORY] button to select where to save the memory.**

   Each time you press the button, the memory selector cycles through as follows: MANUAL→1→2→3→4.

   MEMO

   You can use an external MIDI device to select memories 5–127. When you select memories 5–127, the MEMORY 1–4 indicators all blink.

4. **Long-press the [MEMORY] button once more to save.**

   The memory number indicators blink rapidly. Once they remain lit, the write operation is finished.
   When using an external MIDI device to select memories 5–127, the MEMORY 1–4 indicators all blink rapidly and then go dark.

   * If you operate the knobs or footswitch before step 3, the write operation is canceled.

   * If you've saved to MANUAL, only the [TAPE] button and expression pedal settings are saved.

Switching Memories

Here's how to recall a saved memory.

1. **Press the [MEMORY] button or [MEMORY] switch to select the memory.**

   Each time you press the button/switch, the memory selector cycles through as follows: MANUAL→1→2→3→4.

   MEMO

   You can use an external MIDI device to select memories 5–127 via MIDI. When you select memories 5–127, the MEMORY 1–4 indicators all go dark.

What is "MANUAL"?

Normally, effects are applied according to the settings in memory. However, when you select MANUAL, effects are applied according to the position of the knobs on the panel. At this time, the TAP DIVISION and expression pedal settings that are recalled are those saved in MANUAL (which are editable).

Various Settings

Setting the Expression Pedal Function

By connecting an expression pedal (such as the EV-30, sold separately) to the CTL 1, 2/EXP jack, you can operate the top panel knobs except for the Mode knob.

You can set the respective sounds for when the expression pedal is at MAX position (pushed all the way up with your toes) and at MIN position (pushed all the way down with your heel), and make continuous changes to them.

You can use different expression pedal settings for MANUAL and for each memory in MEMORY 1–4 respectively.

You can also set and add a different function to the functions you've already set. This lets you create settings that operate multiple knobs at once.

1. **Use the [MEMORY] button to select the memory (MANUAL, MEMORY 1–4) for which you want to configure the expression pedal.**

2. **Hold down the [TAP] switch and press the [TAP DIVISION] button.**

   The TRI indicator blinks

3. **Use the respective knobs to set the sound that's used when the pedal is at the MIN value (pushed all the way down with your heel).**

4. **Press the [TAP DIVISION] button again.**

   The DOT indicator blinks.

5. **Use the respective knobs to set the sound that's used when the pedal is at the MAX value (pushed all the way up with your toes).**

6. **Press the [TAP DIVISION] button again to exit the function settings.**

MEMO

If you want to clear the function settings for the expression pedal, go through steps 1 to 6 above without operating any knobs in steps 3 and 6.

NOTE

- To save the expression pedal function settings, you must save the memory.
- Use only the specified expression pedal. Connecting expression pedals made by third-party manufacturers may cause this unit to malfunction.

Setting the Footswitch Functions (CTL 1 FUNCTION, CTL 2 FUNCTION)

Here's how to configure the functions of the footswitch connected to the CTL 1, 2/EXP jack (FS-5U, FS-6, FS-7; sold separately).

1. **Press and hold down the [TAP] switch, and turn on the power.**

2. **Set the Mode knob to "CLASSIC" if you wish to set the CTL 1 function, or to "VINTAGE" if you wish to set the CTL 2 function.**

3. **Use the [MEMORY] button to select the function to set.**

MEMORY indicators	Function
MANUAL	Select the next memory.
1	Select the previous memory.
2	Turn on/off effects.
3	Press the footswitch at the tempo of the song you're playing to specify a matching delay time.

4. **Press the [TAP] switch to exit the function settings.**

Switches Between Output Modes

You can change how the output works by switching between output modes.

You can turn the output of the direct sound off when you want to output only the effect's sound, such as when you're connecting this unit to the send/return of a mixer.

1. **Press and hold down the [TAP] switch, and turn on the power.**

2. **Turn the Mode knob to the "MODERN" setting.**

3. **Use the [MEMORY] button to select the output mode.**

MEMORY indicators	Output mode	Function
MANUAL	NORMAL	**When a plug is inserted into the OUTPUT A/B jacks:** The effect sound (L ch) + direct sound is output from the OUTPUT A jack, and the effect sound (R ch) + direct sound is output from the OUTPUT B jack. **When a plug is inserted into the OUTPUT A jack only:** The effect sound and direct sound are output.
1	DIRECT/EFFECT	**When a plug is inserted into the OUTPUT A/B jacks:** The effect sound (L ch + R ch) is output from the OUTPUT A jack, and the direct sound is output from the OUTPUT B jack. **When a plug is inserted into the OUTPUT A jack only:** The effect sound (L ch + R ch) is output from the OUTPUT A jack.
2	DIRECT MUTE	Turns the direct sound output off. **When a plug is inserted into the OUTPUT A/B jacks:** The effect sound (L ch) is output from the OUTPUT A jack, and the effect sound (R ch) is output from the OUTPUT B jack. **When a plug is inserted into the OUTPUT A jack only:** The effect sound (L ch + R ch) is output from the OUTPUT A jack.

4. **Press the [TAP] switch to exit the function settings.**

Preserving/Muting the Tail of an Effect when the Effect is Switched Off (CARRYOVER)

This sets whether to preserve (carry over) the tail of an effect after the effect is switched off.

1. **Press and hold down the [TAP] switch, and turn on the power.**

2. **Turn the Mode knob to the "MULTI-HEAD" setting.**

3. **Use the [MEMORY] button to select the setting.**

MEMORY indicators	Function
MANUAL	Reverberation carries over
1	Reverberation does not carry over

4. **Press the [TAP] switch to exit the settings.**

NOTE
- This is only supported when the effect is turned on/off. This is not supported when switching between memories.
- If this function is set to carry over the effect, the self-oscillation of the effect continues to be output, even if the effect is turned off while the effect sound is self-oscillating. To stop the self-oscillating sound, turn the [INTENSITY] knob all the way down.

Setting the Maximum Value of MEMORY (MEMORY EXTENT)

Here's how to set the maximum value for the selectable memories.

1. **Press and hold down the [TAP] switch, and turn on the power.**

2. **Turn the Mode knob to the "NON-LINEAR" setting.**

3. **Use the [MEMORY] button to set the maximum value.**

MEMORY indicators	Maximum Value
1	1
2	2
3	3
4	4

4. **Press the [TAP] switch to exit the settings.**

MIDI Settings

1. **Press and hold down the [ON/OFF] switch, and turn on the power.**

2. **Turn the Mode knob to select the parameter to set.**

3. **Use the [MEMORY] button to select the setting.**

4. **Press the [ON/OFF] switch to exit the settings.**

Setting	Mode knob	Value	Indicators that are lit	Explanation
Receive channel (RX CH)	**CLASSIC**	OFF	MEMORY: MANUAL TAP DIVISION: 𝅗𝅥	Off
		1	MEMORY: 1 TAP DIVISION: 𝅗𝅥	CH. 1
		2	MEMORY: 2 TAP DIVISION: 𝅗𝅥	CH. 2
		3	MEMORY: 3 TAP DIVISION: 𝅗𝅥	CH. 3
		4	MEMORY: 4 TAP DIVISION: 𝅗𝅥	CH. 4
		5	MEMORY: MANUAL TAP DIVISION: ♩	CH. 5
		6	MEMORY: 1 TAP DIVISION: ♩	CH. 6
		7	MEMORY: 2 TAP DIVISION: ♩	CH. 7
		8	MEMORY: 3 TAP DIVISION: ♩	CH. 8
		9	MEMORY: 4 TAP DIVISION: ♩	CH. 9
		10	MEMORY: MANUAL TAP DIVISION: ♪	CH. 10
		11	MEMORY: 1 TAP DIVISION: ♪	CH. 11
		12	MEMORY: 2 TAP DIVISION: ♪	CH. 12
		13	MEMORY: 3 TAP DIVISION: ♪	CH. 13
		14	MEMORY: 4 TAP DIVISION: ♪	CH. 14
		15	MEMORY: MANUAL TAP DIVISION: TRI	CH. 15
		16	MEMORY: 1 TAP DIVISION: TRI	CH. 16
Transmit channel (TX CH)	**VINTAGE**	OFF	MEMORY: MANUAL TAP DIVISION: 𝅗𝅥	Off
		1	MEMORY: 1 TAP DIVISION: 𝅗𝅥	CH. 1
		2	MEMORY: 2	CH. 2

			TAP DIVISION: 𝅗𝅥	
		3	MEMORY: 3 TAP DIVISION: 𝅗𝅥	CH. 3
		4	MEMORY: 4 TAP DIVISION: 𝅗𝅥	CH. 4
		5	MEMORY: MANUAL TAP DIVISION: ♩	CH .5
		6	MEMORY: 1 TAP DIVISION: ♩	CH. 6
		7	MEMORY: 2 TAP DIVISION: ♩	CH. 7
		8	MEMORY: 3 TAP DIVISION: ♩	CH. 8
		9	MEMORY: 4 TAP DIVISION: ♩	CH. 9
		10	MEMORY: MANUAL TAP DIVISION: ♪	CH. 10
		11	MEMORY: 1 TAP DIVISION: ♪	CH.11
		12	MEMORY: 2 TAP DIVISION: ♪	CH. 12
		13	MEMORY: 3 TAP DIVISION: ♪	CH. 13
		14	MEMORY: 4 TAP DIVISION: ♪	CH. 14
		15	MEMORY: MANUAL TAP DIVISION: TRI	CH. 15
		16	MEMORY: 1 TAP DIVISION: TRI	CH. 16
		RX	MEMORY: 2 TAP DIVISION: TRI	Transmits on the same channel as the RX CHANNEL.
Receive program change message (PC IN)	MODERN	ON	MEMORY: MANUAL	Program change messages are received.
		OFF	MEMORY: 1	Program change messages are not received.
Transmit program change messages (PC OUT)	MULTI-HEAD	ON	MEMORY: MANUAL	Program change messages are transmitted.
		OFF	MEMORY: 1	Program change messages are not transmitted.
Receiving control change message (CC IN)	NON-LINEAR	ON	MEMORY: MANUAL	Control change messages are received.
		OFF	MEMORY: 1	Control change messages are not received.
Transmit control change messages (CC OUT)	AMBIENCE	ON	MEMORY: MANUAL	Control change messages are transmitted.
		OFF	MEMORY: 1	Control change messages are not transmitted.
Receiving MIDI clock sync (SYNC)	REFLECT	INTERNAL	MEMORY: MANUAL	Operations are synchronized to the DM-101's internal clock.
		AUTO	MEMORY: 1	Operations are synchronized to the MIDI clock received via MIDI. However, operations are automatically synchronized to the DM-101's internal clock if the unit is unable to receive the external clock.

Transmit REALTIME SOURCE	**DOUBLING+DELAY**	INTERNAL	MEMORY: MANUAL	Internal real-time messages are used as the clock source.
		MIDI	MEMORY: 1	Real-time messages from the MIDI IN connector are used as the clock source.
MIDI THRU	**WIDE**	ON	MEMORY: MANUAL	Specifies whether MIDI messages received at the MIDI IN connector are retransmitted as-is from the MIDI OUT connector (ON) or are not retransmitted (OFF).
		OFF	MEMORY: 1	
DEVICE ID	**DUAL MOD**	17	MEMORY: MANUAL TAP DIVISION: 𝅝	This sets the MIDI Device ID used for transmitting and receiving Exclusive messages.
		18	MEMORY: 1 TAP DIVISION: 𝅗𝅥	
		19	MEMORY: 2 TAP DIVISION: 𝅗𝅥	
		20	MEMORY: 3 TAP DIVISION: 𝅗𝅥	
		21	MEMORY: 4 TAP DIVISION: 𝅗𝅥	
		22	MEMORY: MANUAL TAP DIVISION: ♩	
		23	MEMORY: 1 TAP DIVISION: ♩	
		24	MEMORY: 2 TAP DIVISION: ♩	
		25	MEMORY: 3 TAP DIVISION: ♩	
		26	MEMORY: 4 TAP DIVISION: ♩	
		27	MEMORY: MANUAL TAP DIVISION: ♪	
		28	MEMORY: 1 TAP DIVISION: ♪	
		29	MEMORY: 2 TAP DIVISION: ♪	
		30	MEMORY: 3 TAP DIVISION: ♪	
		31	MEMORY: 4 TAP DIVISION: ♪	
		32	MEMORY: MANUAL TAP DIVISION: TRI	

Restoring the Factory Default Settings (Factory Reset)

1. **Press and hold down the [ON/OFF] switch and [TAP] switch, and turn on the power.**

2. **Press the [TAP] switch.**

   This starts the factory reset. The MEMORY indicators light up in this order: MANUAL→1→2→3→4. The reset is finished once the [ON/OFF] switch lights up.

3. **Turn off the power.**

   NOTE

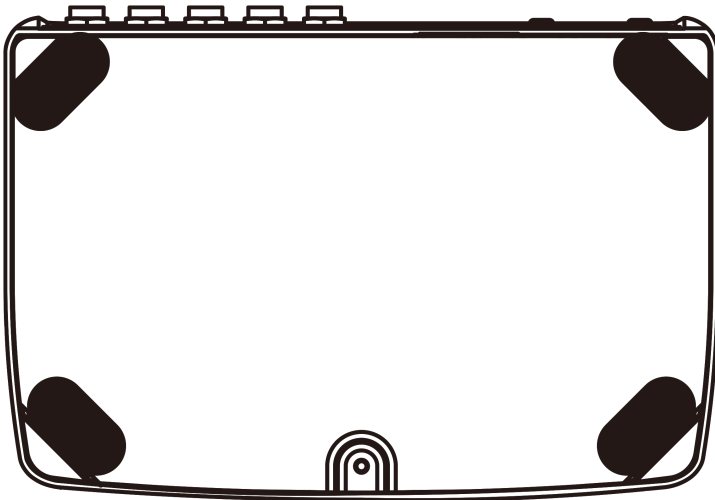   Don't turn off the power while the factory reset is in progress.

Attaching the Rubber Feet

You can attach the rubber feet (included) if necessary.

Attach them in the locations shown in the illustration.

* When turning the unit over, be careful so as to protect the buttons and knobs from damage. Also, handle the unit carefully; do not drop it.

* Using the unit without rubber feet may damage the floor.

Main Specifications

Memory	127 + Manual
Nominal Input Level	INPUT: -10 dBu
Input Impedance	INPUT: 1 MΩ
Nominal Output Level	OUTPUT A/MONO, OUTPUT B: -10 dBu
Output Impedance	OUTPUT A/MONO, OUTPUT B: 1 kΩ
Recommended Load Impedance	OUTPUT A/MONO, OUTPUT B: 10 kΩ or greater
Delay Mode	CLASSIC VINTAGE MODERN MULTI-HEAD NON-LINEAR AMBIENCE REFLECT [STEREO] DOUBLING+DELAY [STEREO] WIDE [STEREO] DUAL MOD [STEREO] PAN [STEREO] PATTERN [STEREO]
Bypass	Buffered bypass
Controls	[ON/OFF] switch, [MEMORY] switch, [TAP] switch [MOD RATE] knob, [MOD DEPTH] knob, [VARIATION] knob, Mode knob, [DELAY TIME] knob, [INTENSITY] knob, [DELAY VOLUME] knob [MEMORY] button, [TAP DIVISION] button
Connectors	INPUT jack, OUTPUT A/MONO jack, OUTPUT B jack: 1/4-inch phone type CTL 1, 2/EXP jack: 1/4-inch TRS phone type MIDI (IN, OUT) jacks: Stereo miniature phone type DC IN jack USB port: USB micro B-type (program update only)
Power Supply	AC adaptor
Current Draw	260 mA
Dimensions	192 (W) x 133 (D) x 52 (H) mm / 7-9/16 (W) x 5-15/64 (D) x 2-3/64 (H) inches 192 (W) x 133 (D) x 53 (H) mm / 7-9/16 (W) x 5-15/64 (D) x 2-3/32 (H) inches (including rubber foot)
Weight	830 g 1 lb 14 oz
Accessories	AC adaptor Startup Guide Leaflet ("USING THE UNIT SAFELY", "IMPORTANT NOTES", and "Information") Rubber foot x 4
Options (sold separately)	Footswitch: FS-5U Dual footswitch: FS-6, FS-7 Expression pedal: FV-500H, FV-500L, EV-30, Roland EV-5 MIDI/TRS connecting cable: BMIDI-5-35, BMIDI-1-35, BMIDI-2-35, BCC-1-3535, BCC-2-3535

* 0 dBu = 0.775 Vrms

* This document explains the specifications of the product at the time that the document was issued. For the latest information, refer to the Roland website.

DM-101

Reference Manual

01

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