IS-84 Input / Output Selector

User's Manual

RJM Music Technology, Inc.

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Version 1.0
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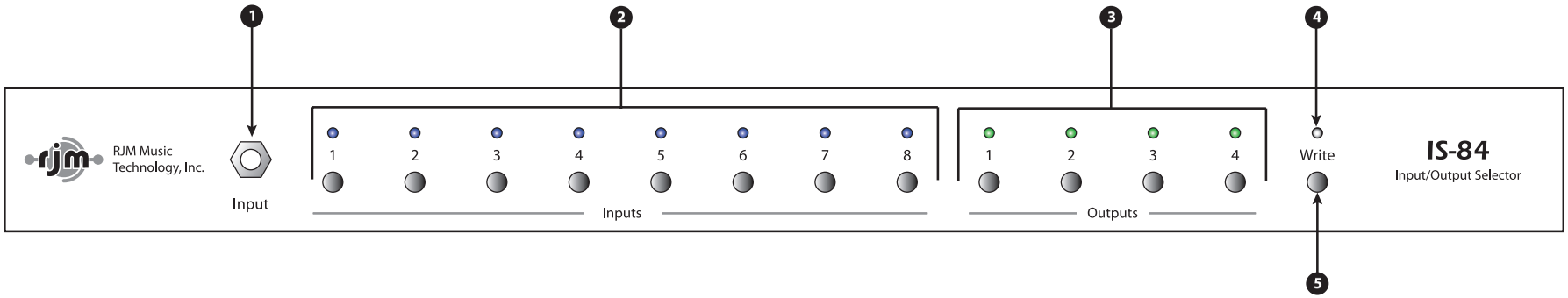
Introduction

Thank you for purchasing an IS-84 input selector! The IS-84 is designed to be the most versatile input selector on the market, ideal for managing multiple signal sources such as wireless receivers, and sending them to one or more destinations.

The IS-84 provides eight inputs on the rear panel and one input on the front. There are four outputs on the rear, two isolated and two non-isolated. The inputs and outputs are selected using the front panel buttons or through a MIDI controller. Any input or inputs that are selected will be mixed down and sent to the selected outputs.

IS-84 Features

- Eight line level inputs on the rear panel
- One buffered input on the front panel overrides the first rear panel input. This input can be used for direct connection of a guitar
- Integrated line mixer to combine all selected inputs
- Four outputs on the rear panel. Two are isolated, two are non-isolated
- Front panel buttons allow direct control of inputs and outputs
- Multiple operation modes allows the IS-84 to be configured to your needs
- Works with all MIDI footswitches
- Responds to Program Change and Continuous Controller messages
- Up to 256 programs can be saved in memory
- High-quality relays and audio circuitry for optimal sonic performance, compatibility and reliability
- Provides phantom power to compatible MIDI devices when used with 7-pin MIDI cable


1
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RJM Music
Technology, Inc.
Input
1
2
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Inputs
1
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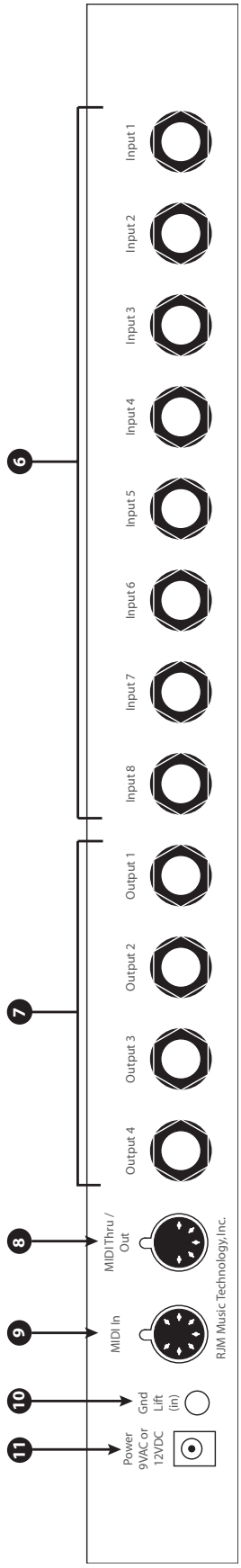
Outputs
Write
IS-84
Input/Output Selector


Input 1
Input 2
Input 3
Input 4
Input 5
Input 6
Input 7
Input 8
Output 1
Output 2
Output 3
Output 4
MIDI Thru / Out
MIDI In
RJM Music Technology, Inc.
Gnd Lift (in)
Power 9VAC or 12VDC
6
7
8
9
10
11

Controls and Connectors

Front Panel

1. Input Jack – This jack is intended for direct connection of a guitar. It includes our high quality buffer circuit for optimum guitar tone. Plugging something into this jack overrides Input 1 on the rear. The Input 1 switch must be turned on for this jack to be active.

2. Input Buttons - These buttons turn inputs 1 through 8 on and off. The LED above each button is lit when the corresponding input is on. The input buttons can be configured in a number of ways, allowing only one input to be active at a time, allowing multiple inputs to be active, or making one input override the others.

3. Output Buttons - These buttons turn outputs 1 through 4 on and off. The LED above each button is lit when the corresponding audio loop is on. Like the inputs, the outputs can be configured in a number of ways. Outputs can be designated to stay on all of the time, or can be switched on and off as desired.

4. Power LED – Lights when the IS-84 is powered on.

5. Write Button – Hold this button for three seconds to save the current settings to memory. The LEDs will flash to confirm. This button is only used when the IS-84 is connected to a MIDI controller.

Rear Panel

6. Inputs 1-8 – These are line level, unbalanced inputs, designed for connection to wireless receivers or other line level signal sources. The inputs that are currently active are mixed down using the internal line mixer and sent to the outputs.

7. Outputs 1-4 – The signal from the internal line mixer is sent to all of the currently selected outputs. Outputs 1 and 2 are not isolated and outputs 3 and 4 are isolated.

8. MIDI Thru/Out – Any MIDI commands sent to the MIDI In port (9) are sent unchanged through this output. This port also acts as a MIDI output for the purpose of sending MIDI SysEx dumps – see the MIDI Usage section for more details.

9. MIDI In – Connect your MIDI footswitch controller here to send incoming MIDI commands to the IS-84.
NOTE: If your MIDI footswitch supports phantom power, you can connect a 7-pin MIDI cable here and the IS-84 will provide phantom power to the footswitch. Phantom power is supplied by the same AC adapter that powers the IS-84. If you use a 9VAC adapter to power the IS-84, the phantom power output will be 9VAC.

10. Gnd Lift – This switch controls whether or not the IS-84 chassis is grounded. If the button is out, the chassis is grounded. If It is in, the chassis is not grounded. Please note that this button is recessed to prevent it from being pressed accidentally – when the button is "out", it's almost flush with the chassis. If you find you have audio hum due to a grounding problem, activating or deactivating this switch may eliminate the hum. Please refer to the Grounding Issues section for more information.

11. Power – Connect a 9VAC or 12VDC, 1 Amp (or higher amperage) power supply here. The IS-84 will accept either center positive or center negative polarity.

Important: Note that the IS-84 uses a 9V AC or 12V DC power supply. Do NOT connect any other power supply to the unit. Many power supplies are very similar in appearance. Connecting the wrong power supply to the IS-84 can damage the unit and void your warranty.

MIDI Usage

The IS-84 can receive MIDI messages from any MIDI footswitch or other MIDI controller. By storing different settings, or "patches" for different MIDI program numbers, you can automatically recall a stored patch by sending the correct MIDI program number from your footswitch. You can assign which audio loops are on for each and every patch.

To save a setting to a MIDI program number:

- Select a MIDI program number with your MIDI footswitch or controller.
- Manually select the desired state of each Input and Output using the IS-84's front panel buttons.
- Hold down the Write Button (5) until the LEDs flash.

You can save up to 256 patches, using MIDI program numbers 1 through 128 in MIDI banks 0 and 1.

MIDI Continuous Controllers

In addition to supporting MIDI Program Change messages, the IS-84 also supports MIDI Continuous Controller (CC) messages. Using a MIDI controller capable of sending CC messages, you can assign a button on the controller to control an individual input or output. For example, you can have a button on your controller assigned to turn Output 3 on or off without affecting any of the other inputs or outputs.

By default, the following continuous controller numbers are used:

IS-84 Input	CC number
Input 1	80
Input 2	81
Input 3	82
Input 4	83
Input 5	84
Input 6	85
Input 7	86
Input 8	87

IS-84 Output	CC number
Output 1	88
Output 2	89
Output 3	90
Output 4	91

The Continuous Controller ranges can be adjusted in Setup Mode.

Please note that Continuous Controller messages operate exactly the same as pressing buttons on the front panel. All Setup Mode options such as invert, group and momentary modes will be in effect when processing CC messages, and group mode will be active for single loop switching (but not loop pair switching).

Bank Selection

The IS-84 can store programs in MIDI banks 0 and 1, for a total of 256 programs. Continuous Controller #0 (Bank MSB) is used to select the current MIDI bank. Bank numbers above bank 1 are ignored.

By default, bank selection is disabled. You can enable bank selection using Setup Mode (see Setup Mode section).

Backing Up Your Settings: SysEx Dump

A SysEx (System Exclusive) data dump will send the current Rack Gizmo system configuration out through the MIDI Thru/Out port. You can then save this data to your computer, or copy the settings directly to another IS-84.

Hold down the Input 4 button while powering up the IS-84, and the IS-84 will immediately send the SysEx Dump. It only takes a couple of seconds to complete.

If you wish to copy settings from one IS-84 to another, connect the MIDI Thru/Out jack of the transmitting unit to the MIDI In jack of the receiving unit, then power up the transmitting unit while holding down the Input 4 button. (Note that the receiving IS-84 must be powered on and ***not*** in Setup Mode in order to receive a SysEx dump.) The receiving unit will display a progress bar on its front panel LEDs. The transfer goes very quickly, taking only a couple of seconds. In the case of an error, the receiving unit will flash all LEDs 5 times.

Once the transfer completes, the receiving unit will reset, then return to normal operating mode. The receiving unit now has an exact copy of the transmitting unit's settings.

Setup Mode

To configure the IS-84, you must first enter Setup Mode. Holding down selected buttons while powering the unit on will bring up selected setup modes, as detailed in this section.

Selecting MIDI Channel and MIDI Options

Hold the Output 1 button while powering the IS-84 on. Keep holding the button until the LEDs flash. The Input and Output buttons will then allow you to select the MIDI channel the IS-84 responds to as well as set other MIDI related options.

MIDI Channels

The IS-84 is set by default to send and receive on MIDI Channel 1. To change the send/receive channel, use the Output buttons to select the channel as shown below:

MIDI Channel	Output 1 LED	Output 2 LED	Output 3 LED	Output 4 LED
1 (default)	OFF	OFF	OFF	OFF
2	**ON**	OFF	OFF	OFF
3	OFF	**ON**	OFF	OFF
4	**ON**	**ON**	OFF	OFF
5	OFF	OFF	**ON**	OFF
6	**ON**	OFF	**ON**	OFF
7	OFF	**ON**	**ON**	OFF
8	**ON**	**ON**	**ON**	OFF
9	OFF	OFF	OFF	**ON**
10	**ON**	OFF	OFF	**ON**
11	OFF	**ON**	OFF	**ON**
12	**ON**	**ON**	OFF	**ON**
13	OFF	OFF	**ON**	**ON**
14	**ON**	OFF	**ON**	**ON**
15	OFF	**ON**	**ON**	**ON**
16	**ON**	**ON**	**ON**	**ON**

You can also set a few other MIDI-related options using the Input buttons:

Continuous Controller Ranges

The Input 1 and 2 buttons control the Continuous Controller range for all audio Inputs:

Audio Input CC Range	GCX Number	Input 1 LED	Input 2 LED
80…87 (default)	1	OFF	OFF
88…95	2	**ON**	OFF
64…71	3	OFF	**ON**
56…63	4	**ON**	**ON**

The Input 3 and 4 buttons control the Continuous Controller range for all audio Outputs:

Audio Output CC Range	GCX Number	Input 3 LED	Input 4 LED
80…87	1	OFF	OFF
88…95 (default)	2	**ON**	OFF
64…71	3	OFF	**ON**
56…63	4	**ON**	**ON**

GCX Compatibility Mode

The Input 5 switch turns on GCX compatibility mode for the audio Inputs. This makes the audio Inputs respond to MIDI commands like the GCX switcher, manufactured by Voodoo Lab. In GCX compatibility mode, the audio Inputs respond only to Continuous Controller messages on MIDI channel 16, regardless of the MIDI channel setting. The GCX number is set by Input Switches 1 and 2 (see above).

The Input 6 switch turns on GCX compatibility mode for the audio Outputs. The GCX number is set by Input Switches 3 and 4 (see above).

Bank Select Enable

The Input 7 switch controls whether or not the IS-84 will allow MIDI bank selection. When Input switch 8 is off, the IS-84 will ignore MIDI bank select messages. When Input switch 8 is on, the IS-84 will respond to bank select messages as described on page 6.

Input 8 Override

The Input 8 switch turns on Input 8 override mode. This mode makes Input 8 override any other inputs – turning on Input 8 will disable signal coming from other inputs. This does not affect the switch states on the front panel, so as soon as Input 8 is turned off, the IS-84 will enable any inputs whose switches are already on.

This option is typically used to make the Input 8 button a Mute button. (If you don't plug anything into Input 8, that is).

Saving MIDI Channel and Options

Once you've set the MIDI channel and options, press the Write button. The IS-84 is now in normal operational mode.

"Always On" Mode

The "Always On" mode can be used if you need any inputs or outputs to stay on at all times.

Hold down the Input 2 button while powering up the IS-84. Keep holding the button until the LEDs flash. You are now in "Always On" Mode.

While in this mode, use the front panel buttons to light the LED of any switch that needs to stay on at all times. Make certain no other LED is lit (except for the power LED!)

Once you've selected the desired switch(es), press the Write button. The IS-84 is now in normal operational mode, and the selected switches should turn on at power up and stay on.

Group Mode

The Group feature allows you define a group of buttons where pressing one button of the group turns that button on and turns all other buttons in the group off. This can be used to insure that only one input is active at any time. The same can be done for outputs.

To enter group mode, hold down the Input 3 button while powering up the Rack Gizmo. Keep holding the button until the LEDs flash.

Use the front panel buttons to light the LED of any switch that should be in the group. Make sure that no other LEDs are lit.

Note: The groups for audio Inputs and audio Outputs are separate. If you set both Inputs and Outputs to be part of a group, pressing an Input button will only affect other Inputs, and pressing an Output button will only affect other Outputs.

Once you've selected the switches that need to be grouped, press the Write button. The IS-84 is now in normal operational mode and the grouped buttons will now only allow one button to be selected at a time.

Quick Setup Buttons

Quick Setup buttons are provided to quickly set up the Input and Output switches for common configurations.

To use this feature, hold one of the following buttons while powering up the Rack Gizmo. Hold the button until the LEDs flash. The Rack Gizmo will configure the Function Switch buttons as follows:

Hold Input 1: Any Inputs or Outputs can be selected at any time. (Default setting)
Hold Input 2: Only one Input can be selected at a time, any Outputs can be selected.
Hold Input 3: Any Inputs can be selected, only one Output can be selected at a time.
Hold Input 4: Only one input and one output can be selected at a time.
Hold Input 5: Any Inputs can be selected, all Outputs are on at all times.
Hold Input 6: Only one Input can be selected at a time, all Outputs are on at all times.
Hold Input 7: Only one Input can be selected at a time, except that Input 8 can be selected independently and it overrides the other Inputs. Any Output can be selected at any time.
Hold Input 8: Only one Input can be selected at a time, except that Input 8 can be selected independently and it overrides the other inputs. All Outputs are on at all times.

Once the button has been held and the LEDs have flashed, release the button and the IS-84 will go directly to normal operating mode.

Factory Reset

To restore the IS-84 to the factory settings, hold the Output 1 and Output 4 buttons while powering up the IS-84. All of the LEDs will turn on for a few seconds, then turn off. Once they turn off, factory reset is complete and you can release the Output 1 and 4 buttons. The IS-84 is now in normal operational mode.

Troubleshooting

Problem: The LEDs don't flash when you hold down the Write Button.
Solution: The IS-84 did not receive a MIDI Program Change message. First, verify that you have a valid MIDI connection. The MIDI output of your MIDI controller should be connected to the MIDI input of the IS-84 by a MIDI cable that's known to be working correctly. The next most likely cause is that the IS-84 is set to a different MIDI channel than your MIDI controller. Check both devices to insure that they're set to the same channel. On the IS-84, the MIDI channel is set to 1 by default and can be changed in Setup Mode.

Problem: There is excessive hum in the audio signal.
Solution: There are a number of reasons that this might happen, but it's often a ground loop or other grounding problem. Please refer to the Grounding Issues section of this manual.

Problem: The Input 1 light is flashing. Also, the IS-84 may not be switching properly.
Solution: That light flashes to indicate that the voltage being supplied to the IS-84 isn't sufficient to power it reliably. This probably means you're using a 9VDC power supply instead of the required 9VAC or 12VDC supply. Switch to the correct power supply and the symptoms should go away.

Problem: The signal coming out of the buffer is too loud or too quiet.
Solution: There is a buffer level adjustment inside the IS-84. This is set to unity gain at the factory, but can be adjusted to provide a boost. Remove the IS-84 lid (you need to remove two screws on the top, two on each side, and one on the top center of the front panel). The level adjustment is a small blue trimpot near the front panel input jack. Using a Philips screwdriver, gently turn it all the way counterclockwise for unity gain, or clockwise for a volume boost.

More troubleshooting tips can be found on RJM Music forum: www.rjmmusic.com/forum.

Specifications

Dimensions	Standard 1U EIA rack enclosure 19 (W) x 1.75 (H) x 7.25 (D) inches 48.3 (W) x 4.5 (H) x 18.5 (D) cm
Weight	4 lbs, 11 oz 2.2 kg
Power	9VAC or 12VDC @ 550mA 5.5mm OD, 2.1mm ID x 9.5mm barrel connector (either polarity)
Phantom Power	Provided over pins 6 and 7 of the MIDI In jack (and pins 1 and 2 of the front panel MIDI jack) Voltage provided is the same as power applied at the IS-84 power jack 9VAC, maximum 450mA current when using provided AC adaptor
Memory	256 programs, arranged in 2 banks of 128 Memory is non-volatile and requires no backup battery

IS-84 MIDI Implementation Chart

MIDI Implementation Chart v 2.0 (Page 1 of 3) **Manufacturer:** RJM Music Technology, Inc. **Model:** Rack Gizmo **Version:** 1 **Date:** October 14, 2012				
		Transmit/Export	**Recognize/Import**	**Remarks**
1. Basic Information				
MIDI Channels		1-16	1-16	Channel 1 is set by default
Note Numbers		No	No	
Program change		1-128	1-128	
Bank Select Response? (Yes/No) If yes, list banks utilized in remarks column		No	No	Responds to CC#0 only, Uses banks 0 and 1
Modes supported :	Mode 1: Omni-On, Poly (Yes/No)	No	No	
	Mode 2: Omni-On, Mono (Yes/No)	No	No	
	Mode 3: Omni-Off, Poly (Yes/No)	Yes	Yes	
	Mode 4: Omni-Off, Mono (Yes/No)	Yes	Yes	
	Multi Mode (Yes/No)	No	No	
Note-On Velocity (Yes/No)		No	No	
Note-Off Velocity (Yes/No)		No	No	
Channel Aftertouch (Yes/No)		No	No	
Poly (Key) Aftertouch (Yes/No)		No	No	
Pitch Bend (Yes/No)		No	No	
Active Sensing (Yes/No)		No	No	
System Reset (Yes/No)		No	No	
Tune Request (Yes/No)		No	No	
Universal System Exclusive:	Sample Dump Standard (Yes/No)	No	No	
	Device Inquiry (Yes/No)	No	No	
	File Dump (Yes/No)	No	No	
	MIDI Tuning (Yes/No)	No	No	
	Master Volume (Yes/No)	No	No	
	Master Balance (Yes/No)	No	No	
	Notation Information (Yes/No)	No	No	
	Turn GM1 System On (Yes/No)	No	No	
	Turn GM2 System On (Yes/No)	No	No	
	Turn GM System Off (Yes/No)	No	No	
	DLS-1 (Yes/No)	No	No	
	File Reference (Yes/No)	No	No	
	Controller Destination (Yes/No)	No	No	
	Key-based Instrument Ctrl (Yes/No)	No	No	
	Master Fine/Coarse Tune (Yes/No)	No	No	
	Other Universal System Exclusive	No	No	
Manufacturer or Non-Commercial System Exclusive		Yes	Yes	RJM Music Technology, Inc Manuf. ID: 00 01 5B
NRPNs (Yes/No)		No	No	
RPN 00 (Pitch Bend Sensitivity) (Yes/No)		No	No	
RPN 01 (Channel Fine Tune) (Yes/No)		No	No	
RPN 02 (Channel Coarse Tune) (Yes/No)		No	No	
RPN 03 (Tuning Program Select) (Yes/No)		No	No	
RPN 04 (Tuning Bank Select) (Yes/No)		No	No	
RPN 05 (Modulation Depth Range) (Yes/No)		No	No	
2. MIDI Timing and Synchronization				
MIDI Clock (Yes/No)		No	No	
Song Position Pointer (Yes/No)		No	No	
Song Select (Yes/No)			No	
Start (Yes/No)		No	No	
Continue (Yes/No)		No	No	
Stop (Yes/No)		No	No	
MIDI Time Code (Yes/No)		No	No	
MIDI Machine Control (Yes/No)		No	No	
MIDI Show Control (Yes/No) If yes, MSC Level supported		No	No	
3. Extensions Compatibility				
General MIDI compatible? (Level(s)/No)		No	No	
Is GM default power-up mode? (Level/No)		No	No	
DLS compatible? (Levels(s)/No)		No	No	
(DLS File Type(s)/No)		No	No	
Standard MIDI Files (Type(s)/No)		No	No	
XMF Files (Type(s)/No)		No	No	
SP-MIDI compatible? (Yes/No)		No	No	

MIDI Implementation Chart v 2.0 (Page 2 of 3)
Manufacturer: RJM Music Technology, Inc. **Model:** Rack Gizmo **Version:** 1 **Date:** October 14, 2012

Control #	Function	Transmitted (Y/N)	Recognized (Y/N)	Remarks
0	Bank Select (MSB)	N	Y	Banks 0 and 1 only
1	Modulation Wheel (MSB)	N	N	
2	Breath Controller (MSB)	N	N	
3		N	N	
4	Foot Controller (MSB)	N	N	
5	Portamento Time (MSB)	N	N	
6	Data Entry (MSB)	N	N	
7	Channel Volume (MSB)	N	N	
8	Balance (MSB)	N	N	
9		N	N	
10	Pan (MSB)	N	N	
11	Expression (MSB)	N	N	
12	Effect Control 1 (MSB)	N	N	
13	Effect Control 2 (MSB)	N	N	
14		N	N	
15		N	N	
16	General Purpose Controller 1 (MSB)	N	N	
17	General Purpose Controller 2 (MSB)	N	N	
18	General Purpose Controller 3 (MSB)	N	N	
19	General Purpose Controller 4 (MSB)	N	N	
20		N	N	
21		N	N	
22		N	N	
23		N	N	
24		N	N	
25		N	N	
26		N	N	
27		N	N	
28		N	N	
29		N	N	
30		N	N	
31		N	N	
32	Bank Select (LSB)	N	N	Use CC#0 instead
33	Modulation Wheel (LSB)	N	N	
34	Breath Controller (LSB)	N	N	
35		N	N	
36	Foot Controller (LSB)	N	N	
37	Portamento Time (LSB)	N	N	
38	Data Entry (LSB)	N	N	
39	Channel Volume (LSB)	N	N	
40	Balance (LSB)	N	N	
41		N	N	
42	Pan (LSB)	N	N	
43	Expression (LSB)	N	N	
44	Effect Control 1 (LSB)	N	N	
45	Effect Control 2 (LSB)	N	N	
46		N	N	
47		N	N	
48	General Purpose Controller 1 (LSB)	N	N	
49	General Purpose Controller 2 (LSB)	N	N	
50	General Purpose Controller 3 (LSB)	N	N	
51	General Purpose Controller 4 (LSB)	N	N	
52		N	Y	
53		N	Y	
54		N	Y	
55		N	Y	
56		N	Y	Alt. CC Range 2
57		N	Y	Alt. CC Range 2
58		N	Y	Alt. CC Range 2
59		N	Y	Alt. CC Range 2
60		N	Y	Alt. CC Range 2
61		N	Y	Alt. CC Range 2
62		N	Y	Alt. CC Range 2
63		N	Y	Alt. CC Range 2

MIDI Implementation Chart v 2.0 (Page 3 of 3)
Manufacturer: RJM Music Technology, Inc. **Model:** Rack Gizmo **Version:** 1 **Date:** October 14, 2012

Control #	Function	Transmitted (Y/N)	Recognized (Y/N)	Remarks
64	Sustain Pedal	N	Y	Alt. CC Range 1
65	Portamento On/Off	N	Y	Alt. CC Range 1
66	Sostenuto	N	Y	Alt. CC Range 1
67	Soft Pedal	N	Y	Alt. CC Range 1
68	Legato Footswitch	N	Y	Alt. CC Range 1
69	Hold 2	N	Y	Alt. CC Range 1
70	Sound Controller 1 (default: Sound Variation)	N	Y	Alt. CC Range 1
71	Sound Controller 2 (default: Timbre / Harmonic Quality)	N	Y	Alt. CC Range 1
72	Sound Controller 3 (default: Release Time)	N	N	
73	Sound Controller 4 (default: Attack Time)	N	N	
74	Sound Controller 5 (default: Brightness)	N	N	
75	Sound Controller 6 (GM2 default: Decay Time)	N	N	
76	Sound Controller 7 (GM2 default: Vibrato Rate)	N	N	
77	Sound Controller 8 (GM2 default: Vibrato Depth)	N	N	
78	Sound Controller 9 (GM2 default: Vibrato Delay)	N	N	
79	Sound Controller 10 (GM2 default: Undefined)	N	N	
80	General Purpose Controller 5	N	Y	Input 1
81	General Purpose Controller 6	N	Y	Input 2
82	General Purpose Controller 7	N	Y	Input 3
83	General Purpose Controller 8	N	Y	Input 4
84	Portamento Control	N	Y	Input 5
85		N	Y	Input 6
86		N	Y	Input 7
87		N	Y	Input 8
88		N	Y	Output 1
89		N	Y	Output 2
90		N	Y	Output 3
91	Effects 1 Depth (default: Reverb Send)	N	Y	Output 4
92	Effects 2 Depth (default: Tremolo Depth)	N	Y	
93	Effects 3 Depth (default: Chorus Send)	N	Y	
94	Effects 4 Depth (default: Celeste [Detune] Depth)	N	Y	
95	Effects 5 Depth (default: Phaser Depth)	N	Y	
96	Data Increment	N	N	
97	Data Decrement	N	N	
98	Non-Registered Parameter Number (LSB)	N	N	
99	Non-Registered Parameter Number(MSB)	N	N	
100	Registered Parameter Number (LSB)	N	N	
101	Registered Parameter Number(MSB)	N	N	
102		N	N	
103		N	N	
104		N	N	
105		N	N	
106		N	N	
107		N	N	
108		N	N	
109		N	N	
110		N	N	
111		N	N	
112		N	N	
113		N	N	
114		N	N	
115		N	N	
116		N	N	
117		N	N	
118		N	N	
119		N	N	
120	All Sound Off	N	N	
121	Reset All Controllers	N	N	
122	Local Control On/Off	N	N	
123	All Notes Off	N	N	
124	Omni Mode Off	N	N	
125	Omni Mode On	N	N	
126	Poly Mode Off	N	N	
127	Poly Mode On	N	N	

Warranty

RJM Music Technology, Inc. warrants this product against any defects in material or workmanship for a period of five years from the original date of purchase.

Should you experience any difficulty with this RJM Music product, please contact us as described below. If it is determined that the product has become defective within the warranty period and must be returned to the factory, RJM Music Technology will issue a Returned Merchandise Authorization (RMA) number and shipping and packaging instructions.

RJM Music Technology will repair or replace the product free of charge, provided it is returned freight prepaid to RJM Music Technology with a copy of a valid receipt and RMA number. Return shipping will be paid by RJM Music Technology within the U.S. only.

This warranty is transferable provided the current owner has the original dated purchase receipt and can provide a copy of it when submitting the warranty claim.

This warranty shall not apply to any goods that have been repaired or altered by anyone other than RJM Music Technology, Inc. or an RJM Music Technology authorized service center. This warranty does not cover damage to the product resulting from accidents or misuse. This is your sole warranty. There are no warranties which extend beyond the terms described herein.

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