Music Systems, Inc.

ROCK BAND 3 WIRELESS KEYBOARD:

MIDI User Guide

HMXHW1023

REVISION: 01

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INTRODUCTION

The Rock Band 3 Wireless Keyboard isn't just video game controller; it is also a genuine musical instrument that can be used in your MIDI Studio or on a live performance.

We created this manual to express the Rock Band 3 Wireless Keyboard's capabilities as a MIDI device. Once you are familiar with the topics covered in this user guide, you should have an understanding of:

- RB3 Keyboard Features and Functions
- RB3 Keyboard Interface
- MIDI
- How to use the RB3 Keyboard in a MIDI studio
  - Use as a Software MIDI Controller
  - Use as a controller for standalone hardware sound modules

WHAT IS MIDI?

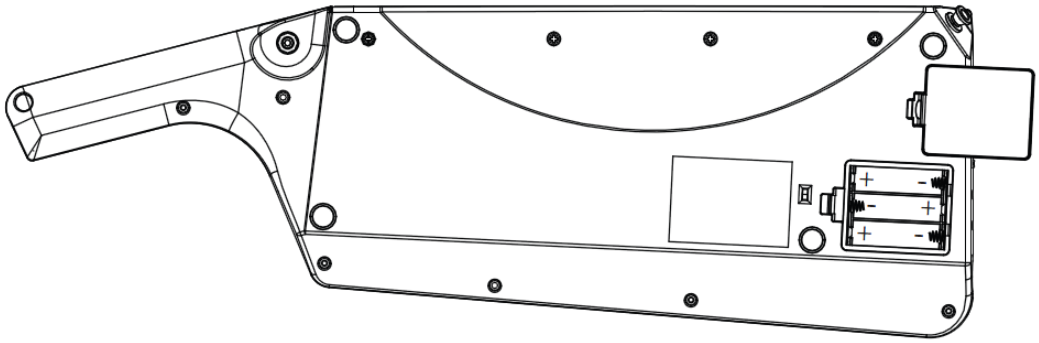
MIDI is the abbreviated term for **M**usical **I**nstrument **D**igital **I**nterface. MIDI is a language that provides a way for digital musical instruments (or other MIDI compatible devices) to communicate with one another. MIDI is not audio; the information contained within MIDI messages is used to trigger sounds from MIDI compatible sound modules.

The Rock Band 3 Wireless Keyboard supports a variety of MIDI functions. When used as a MIDI Controller, it is like a remote control that triggers sounds from external hardware or software devices. When you press a key, MIDI data is sent from the MIDI Output port. The data travels to the other MIDI devices via a 5-PIN MIDI cable. When the data is received by the device, sounds will be triggered and passed to your audio system.

FEATURES

- 25 Velocity Sensitive Keys
- TRS Port for connecting Stomp and/or Expression Pedals
- Modulation strip that can be used as Modulation or Pitch Controller
- Compatible with MIDI software sequencers and synthesizers
- Compatible with standalone MIDI sound modules
- Battery Powered

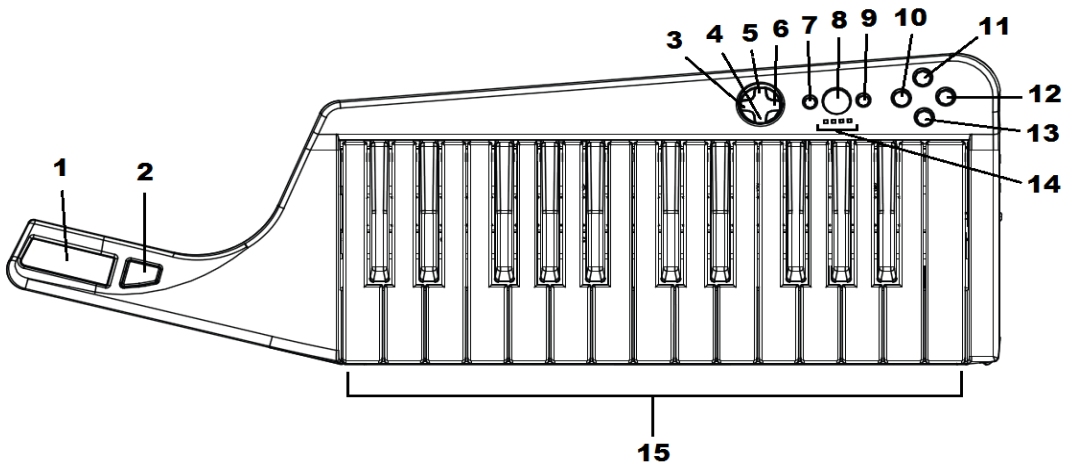
GETTING STARTED



The keyboard will need batteries to function in MIDI mode. To get started, please follow the steps below:

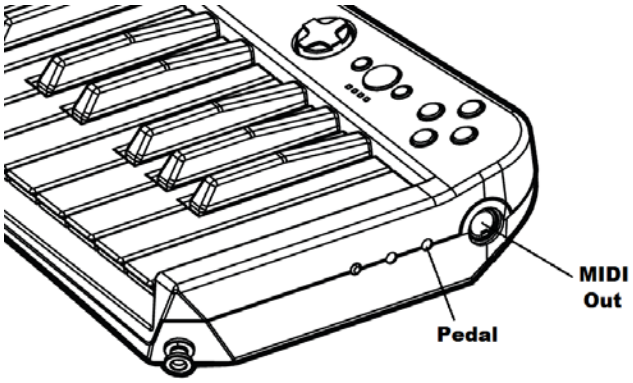
1. Place 3 AA batteries in the correct position in the battery compartment located on the bottom side of the keyboard.
2. Slide the power switch to ON (Playsta[illegible]/Wii) or press and hold button 8 (Xbo[illegible]).
3. Connect the keyboard to a MIDI sound [illegible] a MIDI interface with a 5-Pin MIDI Cable.

CONTROL SURFACE FUNCTIONS IN MIDI MODE



	Feature	Function
1	Touch Strip	Modulation Strip or Pitch Wheel
2	Overdrive/Touch Strip Toggle Button	Toggles Touch Strip function to Pitch Wheel when held down
3	Expression	Change pedal function to expression
4	Channel Volume	Change pedal function to channel volume
5	Drum Mapping on/off	Enable or disable drum mapping of lower octave of keys
6	Foot Controller	Change pedal function to foot controller
7	Stop	System real time Stop message
8	Continue	System real time Continue message
9	Start	System real time Start message
10	Octave Decrement	Decrease current octave number
11	Program Increment	Increase current program number
12	Octave Increment	Increase current octave number
13	Program Decrement	Decrease current program number
14	LED Indicators	4 LEDs to indicate various keyboard states or user actions
15	Keybed	25 velocity sensitive keys

CONNECTION PORTS



MIDI Out Port: Outputs MIDI data.

Pedal Port: Allows the use of use an optional pedal for extra functionality such as: expression, channel volume, and foot controller.

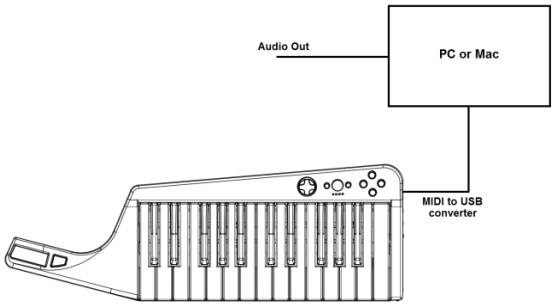
WORKING IN A MIDI STUDIO

Common MIDI Studio setups include a MIDI Controller (Rock Band 3 Wireless Keyboard), personal computer, MIDI sequencing software and/or a standalone MIDI sound module.

CONNECTING THE KEYBOARD TO A PERSONAL COMPUTER

When you want to use the keyboard as a controller to trigger sounds from your MIDI sequencing software or your computer's onboard MIDI synthesizer, a connection from the keyboard's MIDI output port to a MIDI Interface (such as the ***USB MIDI Sport 1x1***) will be necessary. Alternatively, the keyboard can be connected to a sound card or an audio interface as long as they are equipped with a MIDI input port. Audio output will be provided by the sound card or audio interface.

When using the Keyboard with MIDI sequencing software applications, be sure to consult the application user guide to ensure proper connectivity and communication.

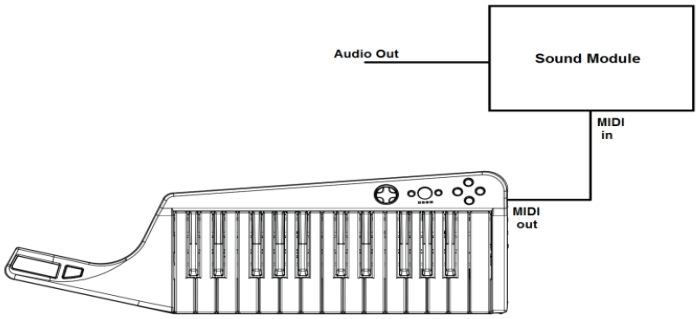


This diagram is a place holder

CONNECTING TO A MIDI SOUND MODULE

To connect to a MIDI sound module, connect one end of the MIDI cable to the MIDI Out port on the keyboard, and the other end of the cable to the MIDI In port on a sound module. Audio output will be provided by the sound module.

When using the keyboard with a sound module, be sure to consult the sound module user guide to ensure proper connectivity and communication.



This diagram is a place holder

External Pedal Functionality

The pedal jack supports an optional analog Expression Pedal and/or digital Stomp Switch.

The analog expression pedal has three available functions – Expression, Channel Volume, and Foot Controller. To change pedal function, press the appropriate button on the directional pad.

Pedal Controls	
Pedal Type	**MIDI Assignment**
Analog Expression	Default: Expression Controller (can be changed using buttons 3, 4 and 6)
Digital Stomp	Damper Pedal/Sustain

Touch Strip

To use the Touch Strip, place a finger lightly on the strip. Moving your finger side to side on the strip will change the output value.

To toggle function as a Pitch Wheel, press and hold button 2. Button 2 must be held down while using the Touch Strip.

Understanding the Controls

Change Octave

The default base octave of 3 is adjustable from -1 (MIDI notes 0 – 11) through 7 (MIDI notes 96 – 107) using the octave increment and decrement buttons. The base octave corresponds to the leftmost set of 12 white and black keys from C to B.

Pressing both the octave increment and decrement buttons simultaneously will reset the current base octave to the default of 3.

Octave changes affect only those piano keys that are mapped to channel 1.

Change Program

The default Program value of 1 is adjustable from 1 to 128 using the Program increment and decrement buttons.

Pressing both the Program increment and decrement buttons simultaneously will reset the current Program value to the default of 0.

Program changes are transmitted on channel 1 only.

Panic Function

To immediately stop all notes across all channels press buttons 7, 8, and 9 simultaneously.

Drum Mapping

Drum Mapping enables the use of the lower octave on the keyboard for drum sounds.

To enable/disable, press UP on the directional pad. All drum notes are transmitted on MIDI channel 10.

Note Name	Drum Assignment	Note Name	Drum Assignment
C3	#35 – Acoustic Bass Drum	**F#3**	#50 – High Tom
C#3	#36 – Bass Drum 1	**G3**	#42 – Closed Hi Hat
D3	#38 – Acoustic Snare	**G#3**	#46 – Open Hi Hat
D#3	#40 – Electric Snare	**A3**	#49 – Crash Cymbal 1
E3	#41 – Low Floor Tom	**A#3**	#51 – Ride Cymbal 1
F3	#47 – Low Mid Tom	**B3**	#53 – Ride Bell

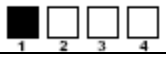
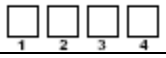
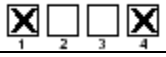
DEFAULT SETTINGS

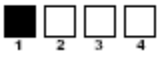
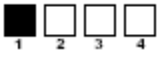
Transmit on	MIDI Channel 1
Octave	Value 3
Program	Value 1
Drum Mapping	Disabled
Touch Strip function	Modulation
Analog Pedal Function	Expression

LED INDICATORS

The four Player LEDs are used to indicate various internal states and to acknowledge actions that the user has performed. The LED behaviors are as follows:

Note: *LEDs revert back to their static indicator state,*  *, upon completion of any sequence*

User Action **User…**	**Resulting LED State** *(PS illustrated to show player #s)*
	LED Key ☐ = LED Off ■ = LED On ☒ = LED Unchanged
Turns Keyboard ON Xb 60 - holds Guide button for 2 seconds PS/Wii - slides power switch to ON	Display Count: Continuous 
Turns Keyboard OFF Xbo 0 - holds Guide button for 2 seconds PS/Wii - slides power switch to OFF	Display Count: Continuous 
Presses D-Pad Left to assign Expression Pedal to MIDI Expression channel 1	Display Count: Continuous 
Presses D-Pad Right to assign Expression Pedal to MIDI Foot Controller on channel 1	Display Count: Continuous 
Presses D-Pad Down to assign Expression Pedal to MIDI Channel Volume on channel 1	Display Count: Continuous 

Presses button to enable/disable Drum Kit mapping	Display Count: Continuous Enable:  Disable: 
Presses either Octave or Program increment button	Display Count: 1x 100mS  100mS  100mS  200mS 
Presses either Octave or Program decrement button	Display Count: 1x 100mS  100mS  100mS  200mS 
Resets either Octave or Program setting	Display Count: 1x 100mS  100mS  200mS 

FAQ

1. Can I use the USB dongle that I use to play Rock Band to connect to [illegible] with MIDI functionality?
    - No, to use the MIDI functionality of the keyboard, you must connect to another device using the MIDI Out port on the keyboard.

2. If the keyboard is considered a 'real instrument' why doesn't it make any sound?
    - This is true for many MIDI Controllers. One of the key features of a MIDI controller is its ability to generate sounds through other devices such as: drum machines, organs and sound modules. One controller can be used to drive all of those devices and be small enough to carry.