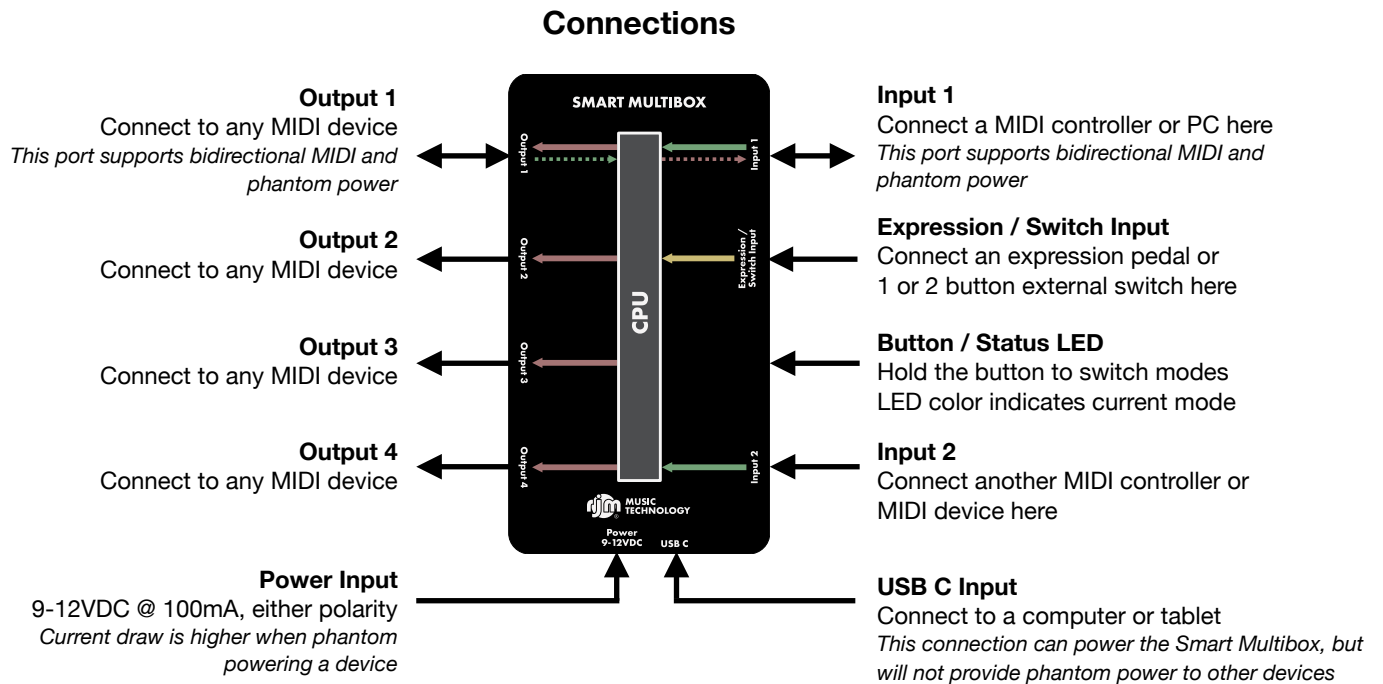# SMART MULTIBOX QUICK START

Thank you for purchasing a Smart Multibox! The Smart Multibox is a multi-purpose MIDI processor, capable of acting as a merger, thru box, router, filter and translator for MIDI connections.

Connections

Output 1
Connect to any MIDI device
This port supports bidirectional MIDI and phantom power

Output 2
Connect to any MIDI device

Output 3
Connect to any MIDI device

Output 4
Connect to any MIDI device

Power Input
9-12VDC @ 100mA, either polarity
Current draw is higher when phantom powering a device

Input 1
Connect a MIDI controller or PC here
This port supports bidirectional MIDI and phantom power

Expression / Switch Input
Connect an expression pedal or 1 or 2 button external switch here

Button / Status LED
Hold the button to switch modes
LED color indicates current mode

Input 2
Connect another MIDI controller or MIDI device here

USB C Input
Connect to a computer or tablet
This connection can power the Smart Multibox, but will not provide phantom power to other devices

SMART MULTIBOX — Output 1, Output 2, Output 3, Output 4, CPU, Input 1, Expression / Switch Input, Input 2, Power 9-12VDC, USB C, MUSIC TECHNOLOGY

***Note**: Input 1 and Output 1 use 7-pin MIDI jacks. You can still use standard 5-pin MIDI cables with these jacks. The extra 2 pins in a 7-pin connector are used for phantom power and can be left unconnected when used with standard MIDI devices.*

Operating Modes

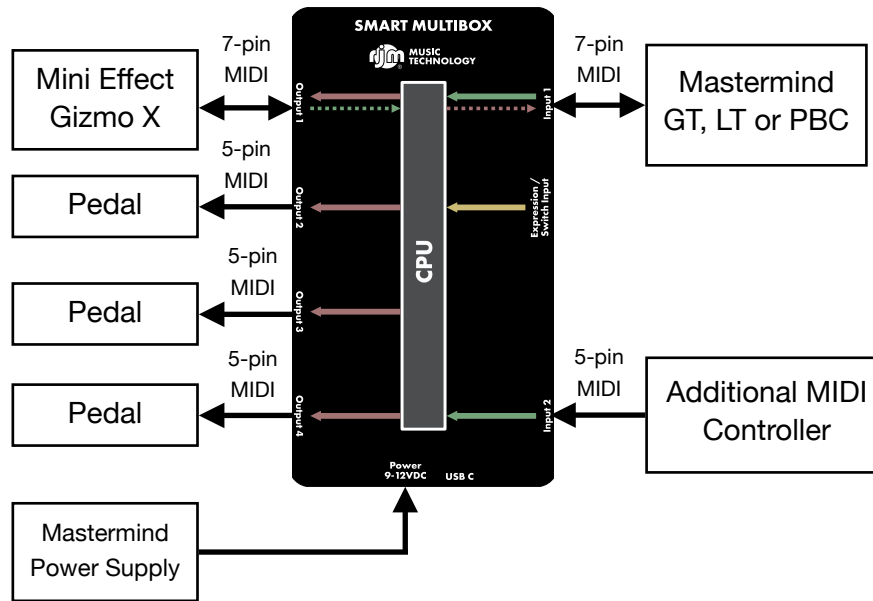The Smart Multibox has three main operating modes:

1. **Merge / Thru -** This is the default mode, indicated by a green Status LED. Any MIDI messages coming in to Input 1 or Input 2 are merged together and sent to all four outputs. An expression pedal connected to the Expression / Switch Input will result in MIDI CC #7, on channel 1, being sent to all MIDI outputs, based on the pedal position. In addition, it will perform the USB-MIDI function listed below.

2. **USB MIDI -** In this mode, the Smart Multibox acts as a USB-MIDI interface. The Status LED is red when in this mode. When plugged into a computer, it will appear as a MIDI interface in all MIDI enabled apps. Each MIDI input and output can be accessed individually. No automatic routing is done between MIDI inputs and outputs in this mode.

3. **Script Mode -** In this mode, the Smart Multibox performs different functions, based on the script that is currently loaded. The Smart Multibox Editor app can be used to write scripts, download scripts from the Internet, and save them on the Smart Multibox. The Status LED will be orange in this mode, unless the script changes it to a different color.

To switch between the different modes, hold the button on the side of the box for 3 seconds. The next mode in the list will be selected, and the LED will flash to confirm the mode change. The current mode selection will be remembered even after the Smart Multibox is powered down.

SMART MULTIBOX QUICK START

Using with RJM Music Products

The Smart Multibox has several features that make it particularly helpful when used with our other products. Phantom power and bidirectional MIDI are both supported, which help to reduce the number of cables needed in your rig.

In this configuration, the Mastermind connects through the Smart Multibox to a Mini Effect Gizmo X and several MIDI equipped effect pedals. The connection between the Mastermind and Mini Effect Gizmo X is bidirectional, allowing the Mastermind to control the Gizmo, and the Gizmo to send tuner status back to the Mastermind. A secondary MIDI controller or computer can be plugged in to Input 2, and any messages it sends will also be sent to all 4 outputs. The Smart Multibox also passes power to both the Mastermind and Mini Effect Gizmo X over 7-pin MIDI cables. In a configuration like this, be certain to use a power supply that can sufficiently power the Smart Multibox and any devices that it is phantom powering.

For this configuration, the Smart Multibox should be set to the Merge / Thru mode (green LED).

Smart Multibox Editor and Scripts

In Script Mode, the Smart Multibox can run scripts that tell it how to process and route incoming MIDI messages. This allows tremendous flexibility, making the Smart Multibox perform any number of MIDI-related jobs for specific applications. The Smart Multibox Editor app, available on our website, is used to send scripts to the Smart Multibox. It also allows you to download example scripts from our online database, and to edit or write your own scripts.

Scripts are written in MicroPython. More information about this language can be found at www.micropython.org. Documentation about the RJM specific extensions we've added can be found on our web site:
docs.rjmmusic.com/books/smart-multibox-programming-guide

Contact Us

You can submit a helpdesk ticket at: rjmmusic.freshdesk.com, or by email at support@rjmmusic.com

The RJM Forum is also a valuable source of information and assistance: www.rjmmusic.com/forum