

**ROCKTRON**  
TECHNOLOGY FOR GUITARISTS

# MIDIXCHANGE

## INSTRUCTION MANUAL

- COMPACT DESIGN AND ROAD TOUGH
- RUNS ON A SINGLE 9-VOLT BATTERY, PHANTOM POWER OR 9V AC/DC ADAPTER (NOT INCLUDED)
- WORKS WITH MOST MIDI CONTROLLABLE PRODUCTS
- TWO EXPRESSION PEDAL PORTS
- CC7 CONTINUOUS CONTROLLER PORT CONTROLS THE VOLUME ON MOST MIDI COMPATIBLE DEVICES
- CC17 CONTINUOUS CONTROLLER PORT CONTROLS THE VOLUME ON ROCKTRON PRODUCTS

MAY BE COVERED BY ONE OR MORE OF THE FOLLOWING: U.S. PATENTS  
#4538297, 4647876, 4696044, 4745309, 4881047, 4893099, 5124657, 5263091,  
5268527, 5319713, 5333201, 5402498 AND 5493617.  
OTHER PATENTS PENDING. FOREIGN PATENTS PENDING.



Your MIDI XChange™ pedal has been tested and complies with the following Standards and Directives as set forth by the European Union:

**Council Directive(s):** 89/336/EEC Electromagnetic Compatibility

**Standard(s):** EN55013, EN50082-1

This means that this product has been designed to meet stringent guidelines on how much RF energy it can emit, and that it should be immune from other sources of interference when properly used. Improper use of this equipment could result in increased RF emissions, which may or may not interfere with other electronic products.

To insure against this possibility, always use good shielded cables for all audio input and output connections. This will help insure compliance with the Directive(s).

For more information about other Rocktron products, please see your local dealer or one of our importers closest to you (listed on the Rocktron website - [www.rocktron.com](http://www.rocktron.com)).

---

## Precautions

Read all instructions contained in this manual.

Keep these instructions

Heed all warnings

Follow all instructions.

Do not use this apparatus near water.

Clean with dry cloth

## **Precautions Continued....**

Do not block any ventilation openings (if applicable). Install in accordance with the manufacturer's instructions.

Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.

This product is not equipped with a plug or cable. This pedal runs on a 9 Volt Battery, if a 9Volt DC adapter is the used please follow adapter manufacturer's operation instructions.

Only used attachments/accessories specified by the manufacturer.

Do not use this product with any case, stand tripod, bracket or table that is not specified by the manufacturer. Insure that the case, stand, tripod, bracket etc. is properly adjusted and setup (follow all instructions). Extra care and caution should be taken to avoid tip over and injury.

Unplug this apparatus during lightening storms or when unused during long periods of time.

Refer all service to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply or plug is damaged, liquid has been spilled or objects have fallen into the apparatus or if the apparatus has been exposed to rain or moisture, does not operate normally or has been dropped.

**DO NOT ATTEMPT TO SERVICE THIS EQUIPMENT. QUALIFIED PERSONNEL SHOULD SERVICE THIS EQUIPMENT ONLY. DO NOT MAKE ANY INTERNAL ADJUSTMENTS OR ADDITIONS TO THIS EQUIPMENT AT ANY TIME OR TAMPER WITH INTERNAL ELECTRONIC COMPONENTS AT ANY TIME. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY VOID THE WARRANTY OF THIS EQUIPMENT AS WELL AS CAUSING A SHOCK HAZARD.**

### **OPERATING TEMPERATURE**

Do not expose this unit to excessive heat. This unit is designed to operate between 32 F and 104 F (0 C and 40 C). This unit may not function properly under extreme temperatures.

## **Introduction**

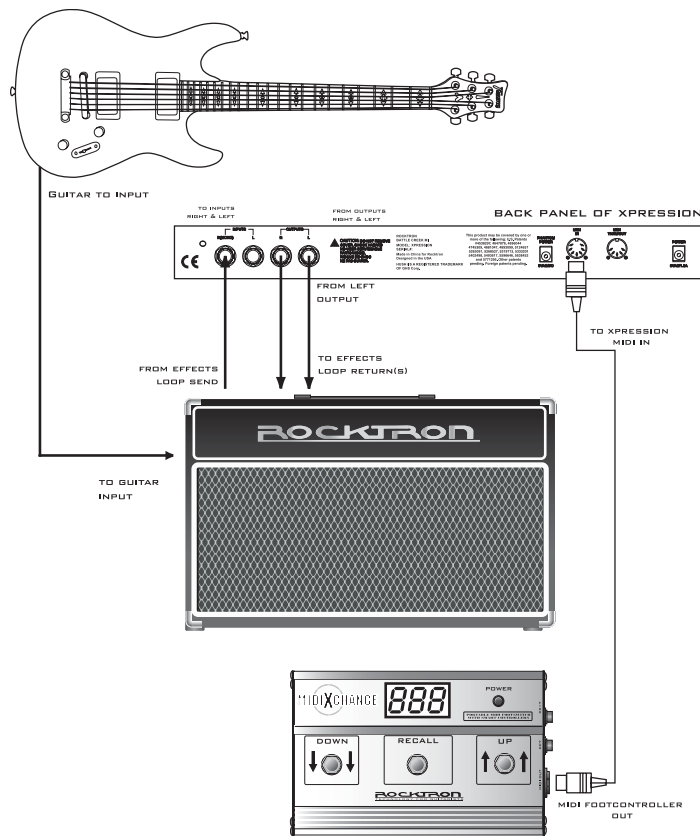
Congratulations on your purchase of the Rocktron MIDI XChange. The MIDI XChange is a simple to use, yet multifunctional MIDI switcher that not only runs MIDI switchable Rocktron product, but other MIDI switchable products as well.

Two built-in expression pedal ports allow you plug in up to two Rocktron HEX expression/volume controllers for continuous controlling of all sorts of parameters.

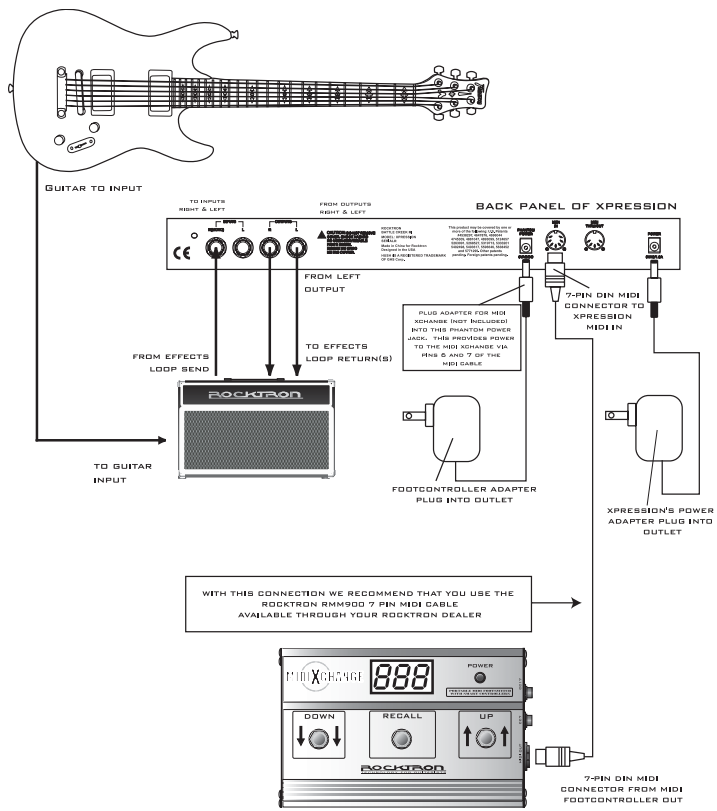
A fantastic feature of the MIDI XChange is that it runs on a 9-volt battery as well as external power. Thus, if you are doing a gig where it is hard to run power out to your floor pedals - you won't have any problem with the MIDI XChange as battery operation will allow you to make the preset and controller changes you need. And, the MIDI XChange is also phantom powerable through select Rocktron processors and amplifiers (see "connection" sections for more details).

Finally, the MIDI XChange is housed in a rugged roadworthy extruded aluminum chassis that will stand up to use and abuse. The easy access battery compartment will make changing batteries during a gig a breeze.

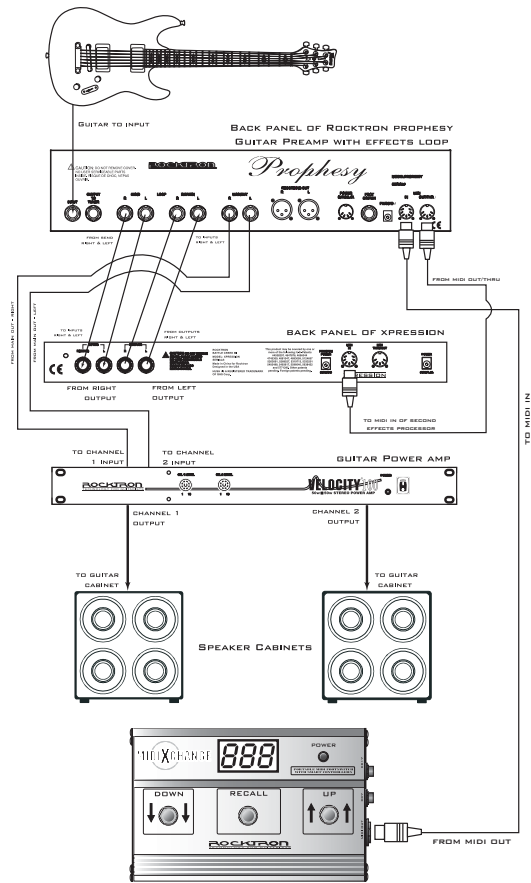
## Basic Connection with an effect processor



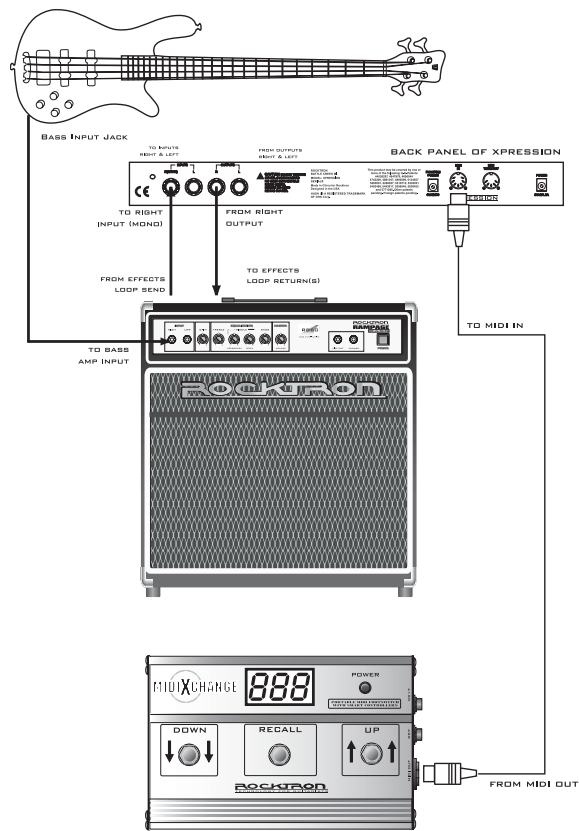
## Connection using a Rocktron Xpression and Phantom Power



## Connection when using a rack system

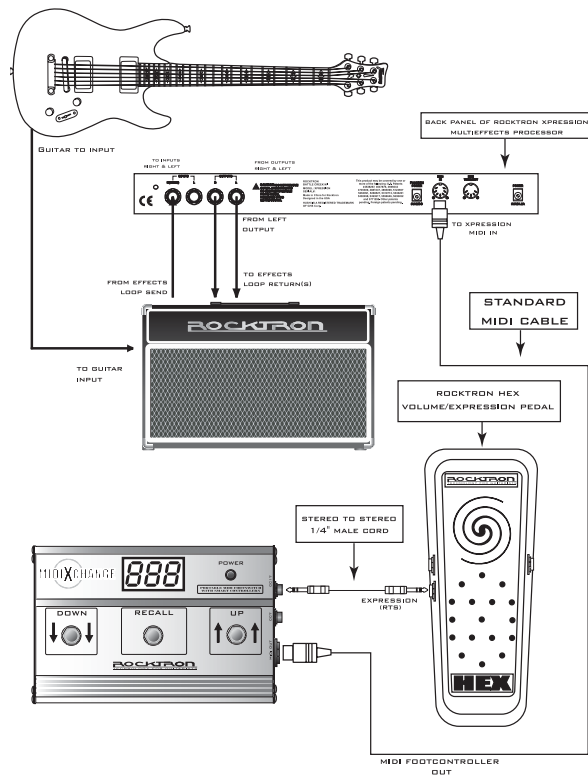


## Connection using a Rocktron Xpression with a Bass amplifier

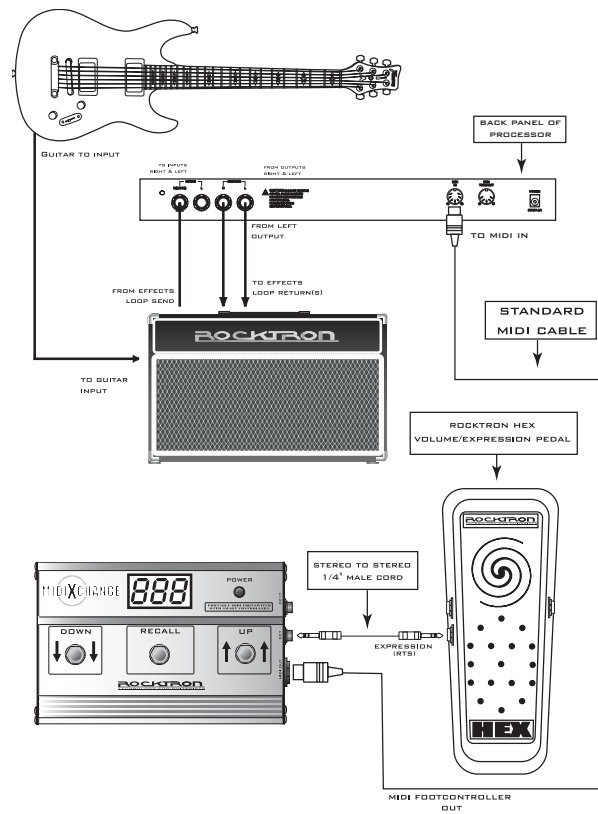




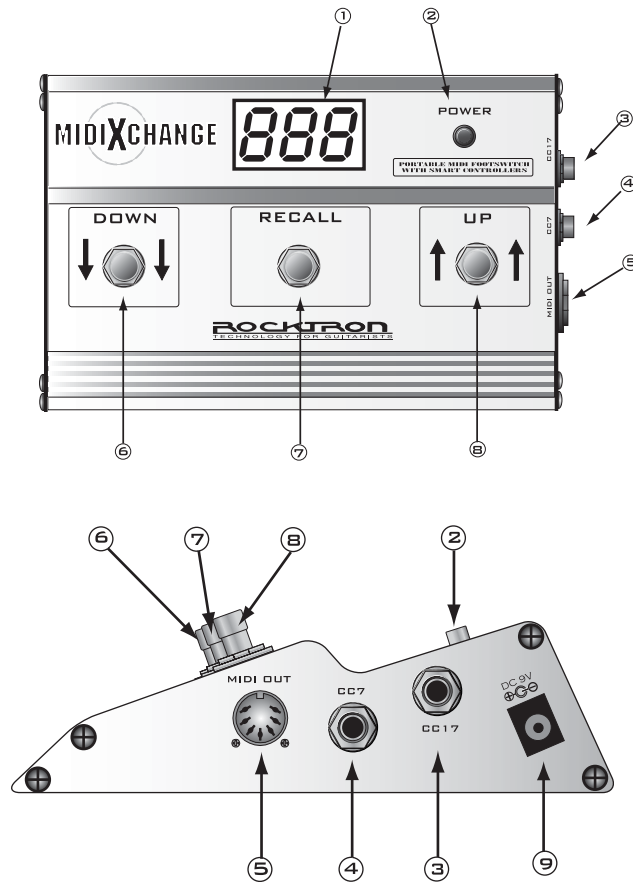
## Connection using a Rocktron HEX Pedal and Xpression Processor



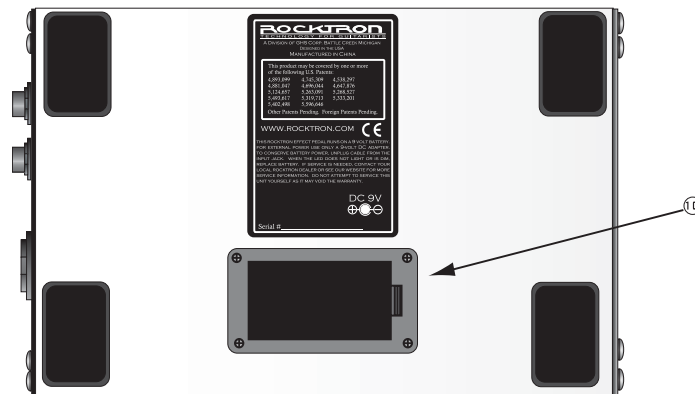
**Connection using a Rocktron HEX pedal and a non-Rocktron effects processor**



## Functions and Control Layout



**Functions and Control Layout continued....**



## Controls and Function Descriptions

---

1     **Display** - This three segment display will show you the preset you are on or which MIDI Channel is currently assigned (see Setting MIDI Channel section for more details).

2     **POWER Switch** - Pressing this button will turn “on” the MIDI XChange. Pressing the button again will turn “off” the MIDI XChange.

Upon turning the unit on the display (see point 1) will begin to flash the number “1”. At this point you may either press the RECALL switch to select preset “1” or use the UP and DOWN buttons to select the desired preset number. Press the RECALL button to choose the selected preset.

3

### **CC17 Jack (CONTINUOUS CONTROLLER 17 Jack)**

This jack will allow you to plug in a Rocktron HEX Volume/Expression pedal to control various parameters via MIDI (see HOW TO USE THE CC17 AND CC7 PORTS for details on how to operate this simple to use function).

4

### **CC7 Jack (CONTINUOUS CONTROLLER 7 Jack)**

This jack will allow you to plug in a Rocktron HEX Volume/Expression pedal to control various parameters via MIDI (see HOW TO USE THE CC17 AND CC7 PORTS for details on how to operate this simple to use function).

- 5 **MIDI OUT Jack** - This Jack is used to connect to various MIDI devices. Using a standard 5-Pin MIDI Cable or the Rocktron RMM900 7-Pin MIDI Cable connect from this jack to the “MIDI IN” on the receiving MIDI device. (See the CONNECTIONS sections for details on how to connect up to various MIDI devices).

Note - this is a 7-Pin jack, but a standard 5 pin MIDI cable may be used. However, you may use the Rocktron RMM900 7-Pin to 7-Pin MIDI Cable to receive phantom power from select Rocktron units that will provide power to the MIDI XChange.

- 6 **DOWN Switch** - This switch will allow you to scroll down to the desired preset. You may scroll down in two ways:
- 1) By depressing the switch and releasing it after the click will allow you to scroll down one preset at a time.
  - 2) By depressing the switch and holding it down the preset numbers will automatically start scrolling down. After 4 decrements the decrement speed will increase allowing for faster preset navigating.
- 7 **RECALL Switch** - this switch allows you to “select” the desired preset. Once you have used the UP switch (see point 8) or DOWN switch (see point 6) and scrolled to the desired preset that preset number will be flashing in the display along with the blue LED. Depressing the RECALL switch once and releasing it after the click will “select” the preset and the number in the display will stop flashing.

- 8 **UP Switch** - This switch will allow you to scroll up to the desired preset. You may scroll up in two ways:
- 1) By depressing the switch and releasing it after the click will allow you to scroll one preset at a time.
  - 2) By depressing the switch and holding it down the preset numbers will automatically start scrolling up. After 4 increments the increment speed will increase allowing for faster preset navigating.
- 9 **9-VOLT ADAPTER INPUT** - this 5.5/2.55mm coax plug will take a optional 9V DC adapter (*not included*) or 9VAC adapter [*Rocktron part number 006-1101 (110V) or 006-1102 (220V) - not included*] to provide power to the unit. The adapter power rating should be 100mA. Please follow all instructions that appear on the bottom of the unit. *Please note - do not use this plug and phantom power at the same time - this may damage the unit.*
- 10 **9-VOLT BATTERY COMPARTMENT** - to access pull on small tab labeled "OPEN". Replace with a new 9-Volt battery.

## MIDI Xchange Operation - Power Sources

The MIDI XChange is unique in respect that you may use most any type of power.

### **9-VOLT BATTERY**

The MIDI XChange is supplied with a 9Volt Battery - please see “9-VOLT BATTERY COMPARTMENT” section on how to change the battery. Before operation you will need to open the battery compartment and plug in the 9-Volt battery packaged in the compartment. Expected battery life is 12 hours under constant operation.

### **EXTERNAL ADAPTER - \*Not Included**

The MIDI XChange can also run off the following adapters:

- 1) 9VDC 100ma adapter (5.5/2.55mm Coax Plug - Outer ring positive (+) and Inner ring negative (-))\*
- 2) 9VAC 1.5A Rocktron Adapter [Part number 006-1101 (110V)]\*
- 3) 9VAC 1.5A Rocktron Adapter [Part number 006-1102 (220V)]\*

### **PHANTOM POWER**

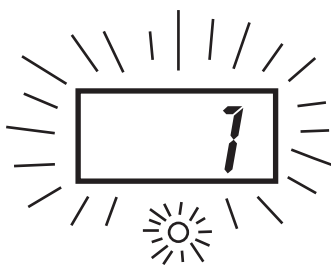
The MIDI XChange can also run off Phantom power through selected Rocktron products and the use of the Rocktron RMM900 7-Pin to 7-Pin MIDI Cable (sold seperately). This operation requires you to use a 9VAC 1.5A Adapter 5.5/2.55mm Coax Plug (not included) plugged into the back of select Rocktron products (see connection diagrams for more detail). Power is then supplied to the MIDI XChange through pins 6 and 7 of the RMM900 MIDI Cord. This is a great set up to minimize adapters and cables out in front of you on stage.



### POWER ON SEQUENCE

### SELECTING AND RECALLING PRESETS

When power is applied using the Power switch (see point 2), the MIDI XChange's display a blue LED will begin to flash. The number that appears in the display will look like this:



Now you are ready to select a preset. To select preset number 1 at this point - depress the RECALL switch (see point number 7 for details on the RECALL switch) - the display and the blue LED will stop flashing. This indicates that preset number 1 is selected as shown below:



### **UP, DOWN and RECALL Switches**

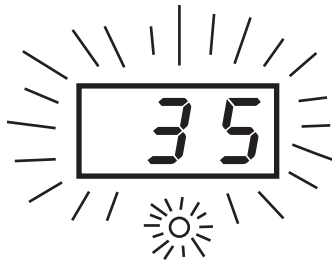
These switches will allow you to change presets or MIDI channels. The range is 1-128 for the presets and 1-16 for the MIDI Channels. *For details on changing the MIDI channel see section titled **SETTING MIDI CHANNEL** for more details on this function.*

**UP Switch** - Depressing and releasing this switch once will increase the preset number by one. Depressing and holding the switch down will engage the automatic increment feature of the MIDI XChange. The MIDI XChange will now begin scrolling up through the preset numbers. After 4 increments the increment speed will increase allowing faster preset navigation.

**DOWN Switch** - Depressing and releasing this switch once will decrease the preset number by one. Depressing and holding the switch down will engage the automatic decrement feature of the MIDI XChange. The MIDI XChange will now begin scrolling down through the preset numbers. After 4 decrements the decrement speed will increase allowing faster preset navigation.

**RECALL Switch** - This switch is used to “select” the preset or MIDI Channel. This switch is also used to toggle between the last two presets selected.

Once you have used the UP or DOWN switches to reach your desired preset you must then depress and release the RECALL switch to select the preset. In this example we have scrolled up from preset 1 to preset 35 (which is now flashing - see diagram following page):



Now preset number 1 is still selected. To select preset 35 depress and release the RECALL switch. The display will now show the number 35:



At this point - if you step on the RECALL switch again the MIDI XChange will toggle back to the last preset - in this case preset number 1. This function allows you to switch back and forth between the last two presets selected - in this case preset 1:



## **SMART CONTROLLER PORTS**

### **What are “SMART CONTROLLERS”**

Typically with most MIDI footcontrollers, when using continuous controller pedal(s) the “status” of the pedal(s) are not reported when a new program change command has been sent. This would most likely cause a discontinuity in volume requiring the user to step on his volume pedal to correct the change thus updating the pedal status manually.

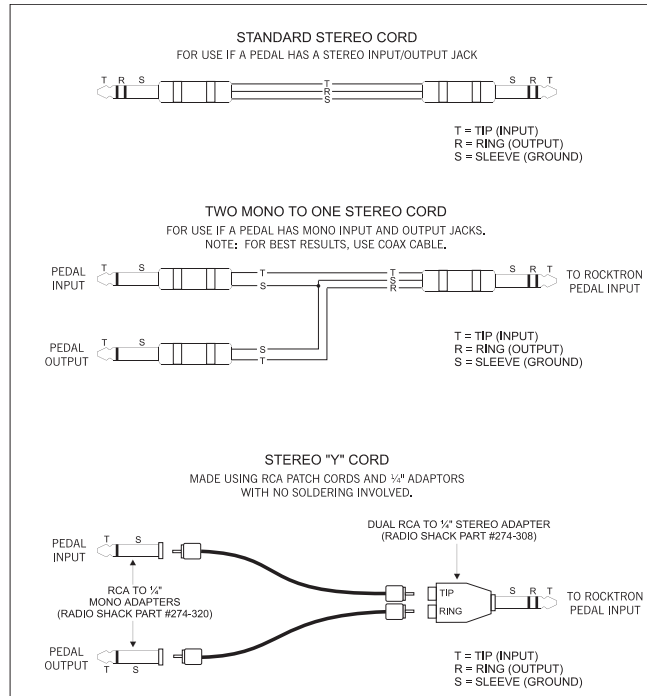
The MIDI XChange issues “current status” of both controller pedal ports upon the recall program change command being sent out. Also auto enable of these controller messages are detected when any of the two ports have a pedal attached to them. Everthing is handled by the MIDI XChange for ease of use.

An example of this would be - when you had reduce the volume of preset 1 with an expression pedal - when switching to preset 2, unlike other MIDI controllers, the MIDI XChange will automatically detect the position of the pedal and apply that to the volume of preset 2 - thus no loud or abrupt volume changes. This is ideal in a live situation.

The MIDI XChange has two SMART CONTROLLER PORTS - labeled CC17 (see point 3) and CC7 (see point 4). CC stands for CONTINUOUS CONTROLLER.

## HOW TO USE THE CC17 and CC7 PORTS:

Connections - when using the Rocktron HEX Volume/Expression pedal use a stereo to stereo 1/4 jack cable (not included). When using a pedal other than the HEX you will need two mono 1/4 male jacks to a RTS1/4 stereo male Y-Cord - there are several different kinds of expression pedal cables a few are shown below:



**CC17 Port** - This controller port is the default volume controller for all Rocktron products. Thus, all you need to do to control the volume of each preset is plug an expression pedal into this port and it will control the volume on all Rocktron products.

**CC7 Port** - This controller port is the default volume controller for most non-Rocktron products.

***NOTE:***

The use of these controllers numbers are not exclusive. By programing the receiving units (Rocktron processors or other non-Rocktron processors) controller assignments you could assign controller 17 or 7 to control various different parameters.

For example you can assign either controller to control the PITCH parameter in a PITCH SHIFTER to create a whammy effect.

**SETTING MIDI CHANNEL**

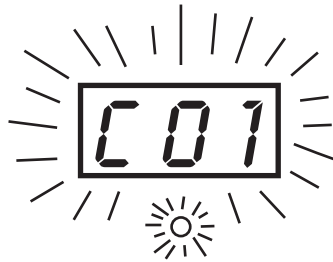
MIDI Channel selection allows you to select the channel that the MIDI XChange transmits MIDI information on. In most normal operating modes you will want to have selected MIDI channel 1. In this case your receiving MIDI device would have to be set to Receive Channel 1 or OMNI

To change the MIDI Channel follow these instructions:

**1) Turn MIDI XChange On**

- 2) **Press and hold the DOWN switch**
- 3) **While holding down the DOWN switch press the UP Switch and release both.**

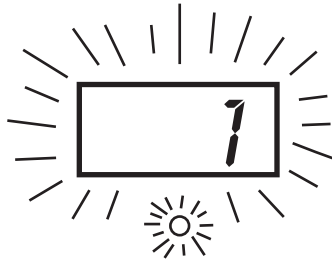
The display of the MIDI XChange should be flashing C01 and the blue LED will be flashing as shown in the diagram below.



Using the UP and DOWN switches you may now select the MIDI Channel you would like to use. For example, you would like to select MIDI channel 12. Using the UP button scroll up to C12. The display and the LED will continue to flash as shown below:



To select the MIDI Channel depress and release the RECALL switch once. The display will immediately go back to the selecting and recalling preset mode and a flashing number 1 will appear in the window as shown below:



At this point you may either press the RECALL switch to select preset number 1 or use the UP or DOWN switches to scroll to the desired preset.

#### **MIDI CHANNEL CONFIRMATION**

If you want to confirm this simply turn off the MIDI XChange and wait 10 seconds then turn it back on again. The display will indicate the current MIDI Channel.



**MIDI MESSAGE**

MIDI CHANNEL = 1- 16 [0H-FH]

**PROGRAM CHANGE MESSAGE:**

[PC COMMAND || MIDI CHANNEL] = 0C0H

[VALUE] = 1-128 [000H-07FH]

COMPLETE MESSAGE = 0C0 07F

**CONTINUOUS CONTROLLER MESSAGE**

[CC COMMAND || MIDI CHANNEL] = 0B0H

[CC NUMBER] = 7 or 17 [007H or 011H]

[EOX] = 0F7H

COMPLETE MESSAGE = 0B0 007 0F7

## Other Rocktron Products

### **Rack Gear:**

**Gainiac** (*preamp w/12ax7 tube*)

**Chameleon® 2000** (*preamp w/multi-effects*)

**RepliTone MP**(*modelling preamp w/multi-effects*)

**Xpression** (*multi-effects processor*)

**Blue Thunder** (*bass preamp w/multi-effects*)

**Voodoo Valve®** (*preamp w/12ax7 tube and multi-effects*)

**Prophesy** (*our top of the line preamp with multi-effects*)

**HUSH® Super C** (*guitar noise silencing system*)

**Vendetta VP4 Preamp** (*All Tube 4-Channel Guitar preamp - 2 Rack Space*)

**Velocity® 100** (*2x50W Stereo Power Amp for Guitar*)

### **Stomp Boxes:**

**Rampage Distortion, Tsunami Chorus, Austin Gold Overdrive,**

**Vertigo Vibe Rotating Vibe Pedal, HUSH® The Pedal,**

**Sonic Glory Overdrive, Short Timer Digital Delay,**

**Big Crush Compressor, Deep Blue Chorus**

**Silver Dragon Tube Distortion Pedal,**

**Metal Planet Distortion**

**Banshee Talk Box**

**Black Cat Moan Wah Wah**

### **Foot Controllers:**

**MIDI Mate** (*Midi Foot Controller*)

**All Access**® (*Midi Foot Controller*)    **HEX** (*Expression Pedal*)

**RMM900**(*7-pin Din MIDI Cable*)    **RM4** (*MIDI Controller for Vendetta amps*)

**RFS1 and RFS2** (*Single and Double Latching Footswitches for Rampage Amps*)

### **Electric Guitar - Acoustic Guitar and Bass Amplifiers:**

**Vendetta Head**(*100 W Head 4-Channels All Tube - MIDI Switchable*)

**Vendetta Combo** (*100W 2x12 Combo Celestion 90s all Tube4-Channel MIDI Switchable*)

**R80DSP** (*80W 1x12 Amp w/Digital Effects*)

**RT80** (*80W 1x12 Amp w/Reverb & Built-in Tuner*)

**R120DSP** (*120W 2x10 Amp w/Digital Effects*)

**RT122C** (*120W 2x12 Amp w/Stereo Chorus, Reverb & Chromatic Tuner*)

**R50DSP** (*50 Watt 2x8" Guitar Amp w/Digital Effects*)

**R50C** (*50 Watt 2x8" Guitar Amp w/Reverb & Chorus*)

**R20** (*20 Watt 1x8" Amp w/Reverb*)    **R10** (*10 Watt 1x6.5"*)

**ACOUSTIC** (*60 Watt Acoustic Amp with Chorus & Reverb*)

**RA50DSP** (*50W Acoustic Amp w/Digital Effects - Wedge Shape*)

**RA30DSP** (*30W Acoustic Amp w/Digital Effects - Wedge Shape*)

**RB20** (*Bass Amp 20W with 8" Speaker*)    **RB30** (*Bass Amp 30W with 10" Speaker*)

**RB60** (*Bass Amp 60W with 12" Speaker*)

**RB100** (*Bass Amp 100W with 15" Speaker*)

**ROCKTRON**  
TECHNOLOGY FOR GUITARISTS

**MIDIXCHANGE**

Rocktron - A Division of GHS Corporation  
2813 Wilber Ave  
Battle Creek MI 49015  
USA

Rocktron Phone: 1-(269)-968-3351  
Email: [info@rocktron.com](mailto:info@rocktron.com)

[www.rocktron.com](http://www.rocktron.com)

2003-0001  
Rev. 02/01/03