

MIDI Mate™

Footswitchable MIDI Controller

Version 2

USER'S MANUAL



May be covered by one or more of the following: U.S. Patents #4538297, 4647876, 4696044, 4745309, 4881047, 4893099 and 5124657. Other patents pending. Foreign patents pending.

PRECAUTIONS

NOTE: IT IS VERY IMPORTANT THAT YOU READ THIS SECTION TO PROVIDE YEARS OF TROUBLE FREE USE. THIS UNIT REQUIRES CAREFUL HANDLING.

All warnings on this equipment and in the operating instructions should be adhered to and all operating instructions should be followed.

Do not use this equipment near water. Care should be taken so that objects do not fall and liquids are not spilled into the unit through any openings.

The power cord should be unplugged from the outlet when left unused for a long period of time.

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

POWER REQUIREMENTS

This unit accepts power from the 9VAC/1.5A adaptor supplied with the unit.

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.

Contents

Introduction	1
MIDI	1
MIDI Channel	1
MIDI Commands	2
Quick Setup	4
Features and Operation	6
BANK ACCESS	8
INSTANT ACCESS	10
CONTROLLER ACCESS	11
Editing the MIDI Mate™	14
Title Editing	17
MIDI Channel Editing	19
Controller Assignment Editing	21
Programmable Patch Changes Editing	24
Factory Reinitialization	26
Expression Pedal "Y" Cords	28
MIDI Implementation	29

Introduction

Congratulations on your purchase of the Rocktron MIDI Mate™! The MIDI Mate™ provides many different features and modes of operation. Its modes of operation range from very simple (transmitting a single program change on a single MIDI channel) to complex (such as transmitting six program changes on six separate MIDI channels, five control changes on five separate MIDI channels and a continuous control change on a separate MIDI channel). The MIDI Mate™ is capable of sending three different kinds of MIDI commands on a specified MIDI channel to any MIDI device.

To use the MIDI Mate™ to its full potential requires some understanding of MIDI commands and specifications.

MIDI

MIDI stands for **M**usical **I**nstrument **D**igital **I**nterface, and is an industry standard system for communication between musical equipment. Some MIDI devices only transmit MIDI messages, these are called *transmitters*. There are other MIDI devices which can only receive MIDI messages, these are called *receivers*. In addition, there are also MIDI devices that both receive and transmit MIDI messages which can be called receivers or transmitters. A receiver may be thought of as a MIDI "ear", that is to say that it listens but never speaks. A MIDI transmitter may be thought of as a MIDI "mouth", that is to say it speaks, but never listens. A device that can both transmit and receive MIDI may be thought of as having a MIDI "ear" and a MIDI "mouth" that allows it to both listen and speak. A very simple MIDI setup requires only that there be a MIDI transmitter and a MIDI receiver - one to speak and one to listen. More complex MIDI setups may have devices that speak and listen to each other at the same time. The MIDI Mate™ is a MIDI transmitter, capable of changing parameters on MIDI receivers.

MIDI Channel

A MIDI channel is simply a way of encoding a command so that multiple devices may talk to each other using the same physical wires. Unless messages are encoded for the same channel, the transmitted message will be ignored by the receiving device. By encoding signals in this manner, the MIDI Mate™ can tell a particular receiving device to perform a certain task while simultaneously telling a different receiving

device to do something else. Each receiving device only acts on the command intended for it.

MIDI Commands

The most common type of MIDI command is the *MIDI program change* (often called a patch change). This command is intended to recall the programmed settings of a receiving device. A programmable device, such as the Rocktron ProGAP™ guitar preamp, may have parameters such as the gain set to 40, the bass level set to 5dB, and the output level set to 10dB. These settings can then be stored in preset #10. Each time the ProGAP™ receives program change 10, these settings are recalled.

Another type of MIDI command is the *MIDI control change*. This command is used to set a single parameter on a receiving unit to a specific value. The preset of the receiving device is not changed, only the value of the specified parameter. The specified parameter on the receiving device is mapped to a number called a *control number*. A transmitting device sending a control change will specify the MIDI channel, the control number, and the value that the specified parameter should change to, or the *controller value*. The controller value is a number from 0 to 127 that the receiving device attaches to an actual parameter value.

How a device responds to a MIDI control change depends on both the device and the parameter. Some devices will not understand a MIDI control change and will simply ignore it. Other devices, like the Rocktron ProGAP™, will respond to MIDI control changes. All of the parameters that determine the sound of the ProGAP™ can be adjusted through MIDI control changes. The ProGAP™ has 64 values for each parameter with each parameter value corresponding to a different controller value. A convenient way to perform MIDI control changes on these parameters is to use a *continuous controller*. An expression pedal, volume pedal, fader, or any potentiometer that can be plugged into the MIDI Mate™ qualifies as a continuous controller. As the continuous controller resistance is changed, a new controller value is sent to the receiving device. For example, if an expression pedal is plugged into the MIDI Mate™, the pedal control number is set to 10, and the ProGAP™'s output level is mapped to control number 10, moving the pedal back and forth causes the output level to change. To achieve this, all that must be done is to match control numbers between the parameter of the receiving device and the pedal of the transmitting device. It is important to remember that the MIDI channels of the transmitting and receiving devices must also match.

The loop and controls on the Rocktron ProGAP™ can be changed through MIDI control changes as well. Since the loop and controls can have only an on or off status, they are conveniently called *on/off controllers*. For on/off controllers, a control change command with a controller value of less than 64 is interpreted to be off. A value greater than 63 is interpreted to be on.

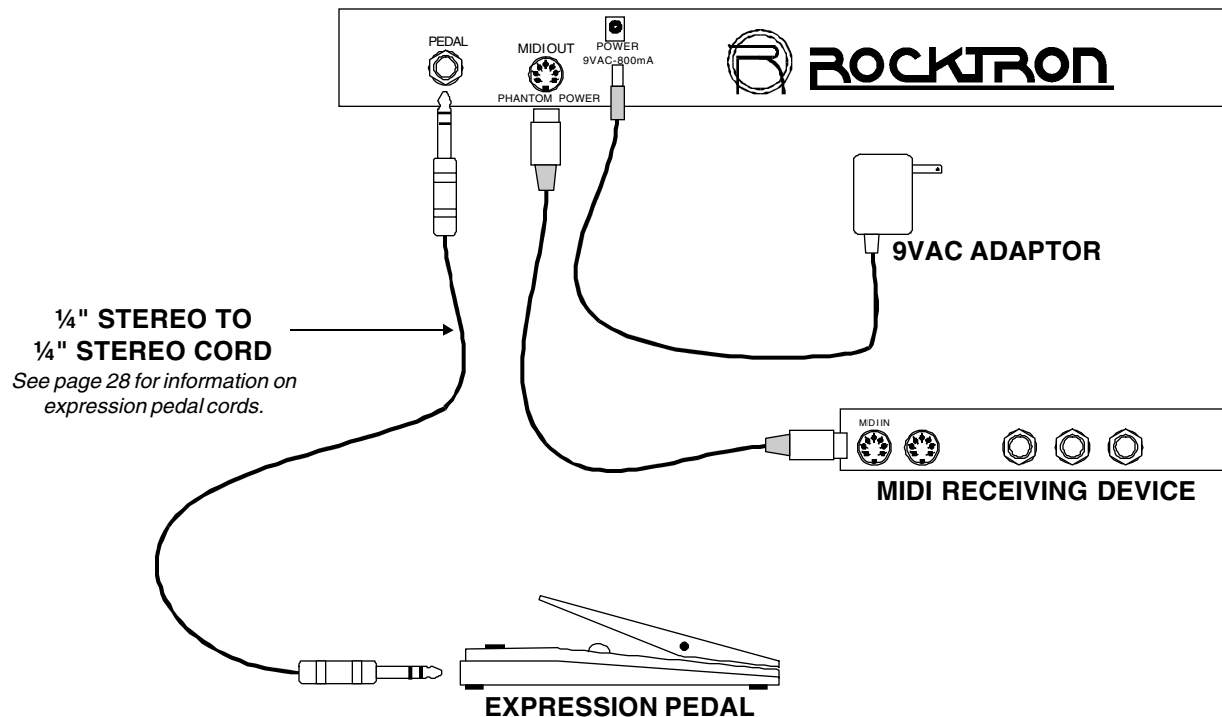
Quick Setup

To start using the MIDI Mate™ right away, use a 5 pin MIDI connector and plug one end into the MIDI OUT jack of the MIDI Mate™. Plug the other end into the MIDI IN jack of a MIDI receiving device. Plug the adaptor supplied with the MIDI Mate™ into the POWER jack of the MIDI Mate™. Plug the adaptor into a nearby compatible wall socket.

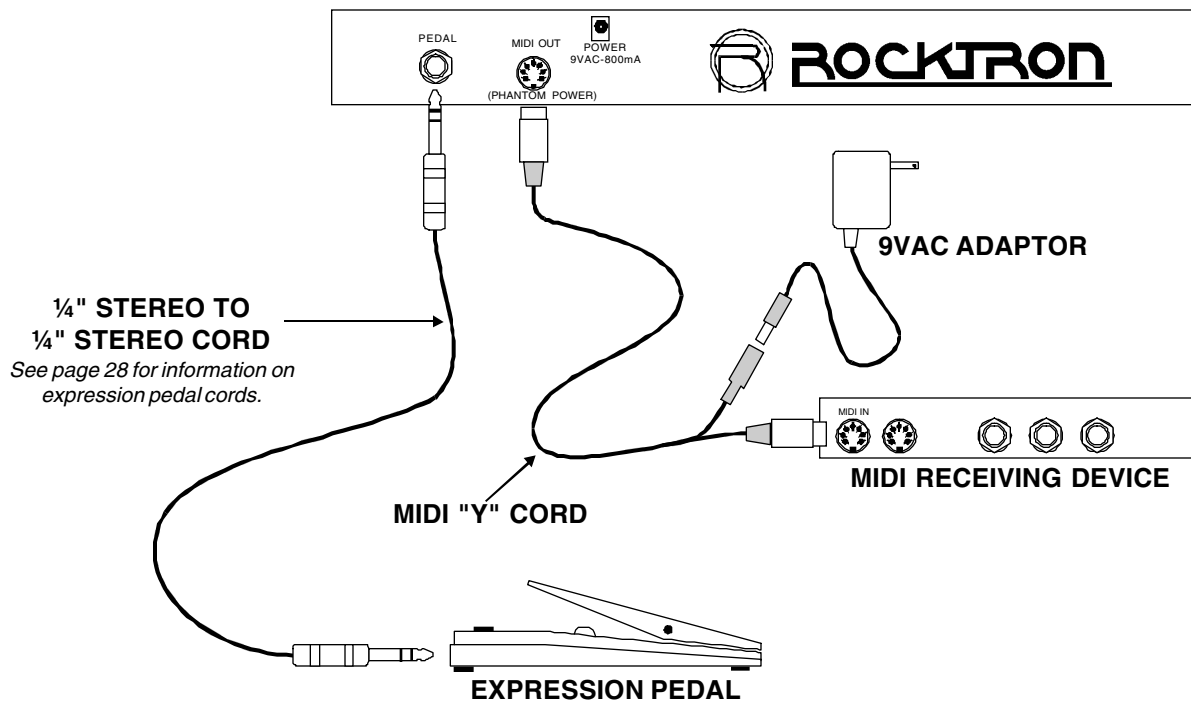
Now assign SET1's MIDI channel to the same MIDI channel of the device that is receiving MIDI. Press the 2ND button so that the 2ND LED lights. Now press the EDIT FUNCTION SELECT "→" button twice, until "MIDI Channels" scrolls across the display. Allow the scrolling to finish, and "SICH 1" will be displayed. This shows that SET1 is assigned to MIDI channel 1. To change the MIDI channel to match a receiving device's MIDI channel, use the BANK (ADJUST) buttons. When finished, press the 2ND button to turn off the 2ND LED.

Now the MIDI Mate™ will send the program change displayed by the three character display to any MIDI receiver on the same channel.

Typical Quick Setup:



Quick Setup using a MIDI "Y" cord:



The power cord may be plugged into a special MIDI "Y" cord (Rocktron Part# 006-1097) to power the MIDI Mate™ through pins 6 and 7 of the MIDI Mate™ MIDI OUT jack. Rocktron also has a 5 to 5 pin MIDI cable (Part# 001-1095) and 7 to 7 pin MIDI cable (Part# RMM900) available to power the MIDI Mate™ through phantom power on other products.

Rocktron also offers an expression pedal stereo "Y" cord (Part# 006-1107).

Features and Operation

The MIDI Mate™ features:

- Three modes of operation-

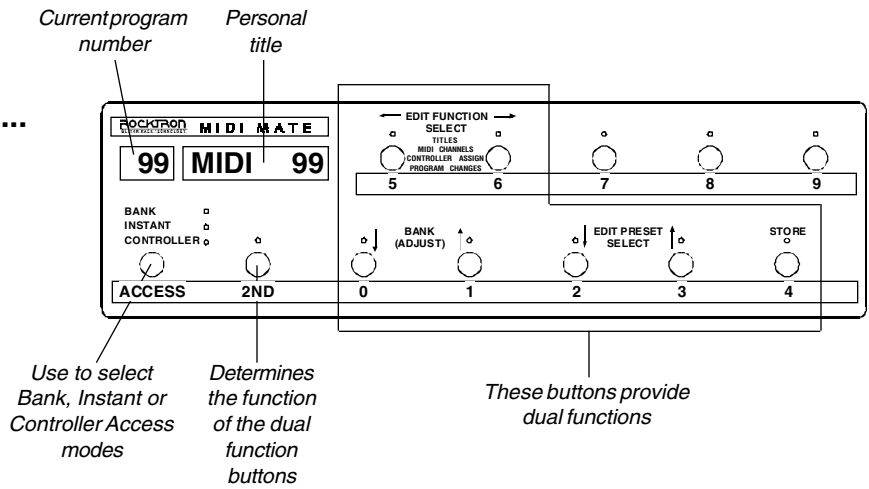
Bank Mode - Allows you to change presets within a bank of ten presets with the touch of a single button.

Instant Mode - Allows you to change instantly from preset 01 to 99 with the touch of two buttons.

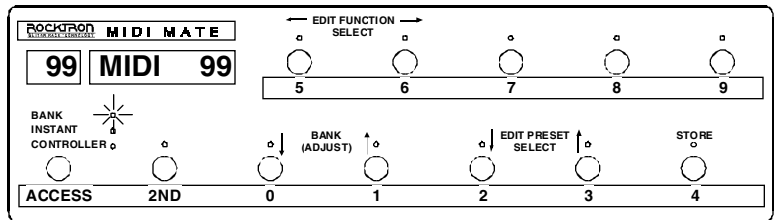
Controller Mode - Allows you to change presets within a bank of 5 presets with the touch of a single button, as well as access 5 buttons which can send MIDI on/off control commands with the touch of a single button.

- Eight character personal titles for each preset.
- Display of current MIDI program.
- LED over each button for instant recognition of preset.
- Phantom power supply.
- Expression pedal ready.
- Multiple MIDI program changes on separate MIDI channels.
- Multiple MIDI control changes.
- User friendly editing procedure.

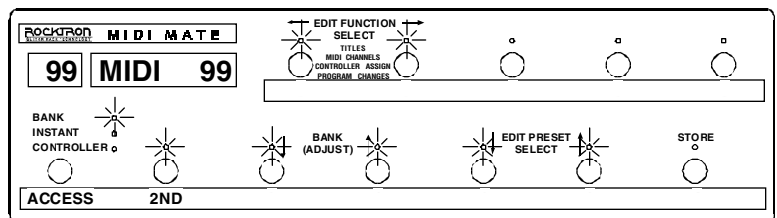
Basic operating features...



Function of dual function buttons with 2ND L.E.D. off
(This accesses the function printed below each button)



Function of dual function buttons with 2ND L.E.D. on
(This accesses the function printed above each button)



BANK ACCESS

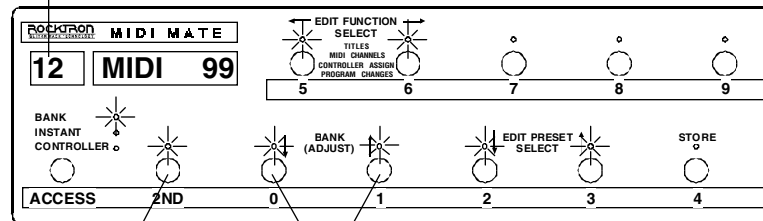
(Any program that starts with the same first 2 numbers may be chosen with the touch of a single button)

While in Bank mode (2ND LED off), the user may change presets within the current bank (bank numbers are 0 - 12). For example, the MIDI Mate™ powers on in bank "0". By touching a button while the "Rocktron MIDI Mate™" message is scrolling, the number of the pressed button will be the MIDI program change sent on its assigned channel. The bank number and the preset number are displayed in the three character numeric display. To change the bank on the MIDI Mate™, press the 2ND button until the 2ND LED lights. Now the BANK (ADJUST) "↑" or "↓" button may be pressed to change the bank number. The BANK (ADJUST) "↑" and "↓" buttons may be held down to scroll through the different bank numbers. When the button is released, the selected bank number will flash on and off. At this point button numbers 2 thru 9 may be pressed to send the corresponding MIDI program change. The 2ND LED does not need to be turned off unless preset change 0 or 1 within the chosen bank is desired. This cuts down on the number of buttons needed to be pressed while in the Bank access mode.

To change from bank 0 to 12

(The "Bank" is the first two digits of a three digit program number)

Bank display
blinking

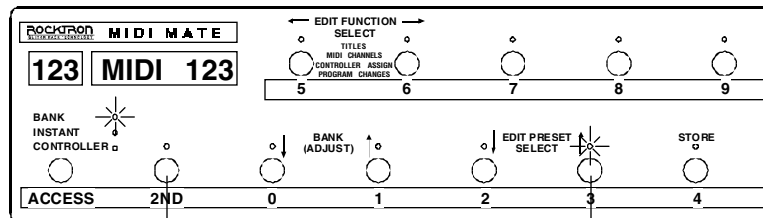


Step 1

Press the "2ND" button to turn the 2ND L.E.D. on

Step 2

Use the "Bank" buttons to select the bank.



Step 3

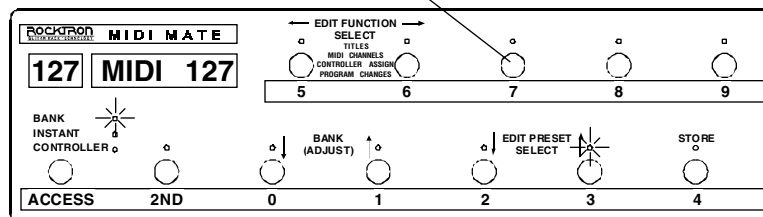
Press the "2ND" button to turn the 2ND L.E.D. off

Step 4

Press the last number of the desired program (for example, pressing 3 while in bank 12 changes to program 123)

Step 5

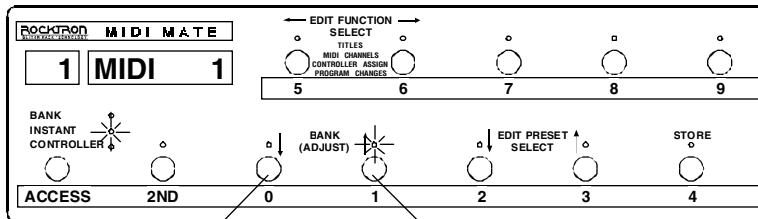
To continue changing programs in the same bank, press the last number of the program. Any other program that starts with the same first two numbers may be selected with a single button.



INSTANT ACCESS

(Changes to any program from 01 to 99 with the touch of 2 buttons)

The Instant mode allows the user to instantly change presets with the touch of two buttons. First be sure the INSTANT LED is lit, and the 2ND LED is off. Now press any combination of two buttons to change to the corresponding program. For example, by pressing button 0 and then button 1, the MIDI Mate™ will transmit program change 1. By pressing the 9 button twice, the MIDI program change 99 will be sent, and so on. The bank "↑" and "↓" function works in the Instant mode the same as it works in the Bank mode, thereby allowing access to presets 100 thru 128 while in the Instant mode.



Step 1
Press the "0"
button

Step 2
Press the "1"
button

To change to program 74:

Step 1
Press the "7" button
Step 2
Press the "4" button

To change to program 99:

Step 1
Press the "9" button
Step 2
Press the "9" button

CONTROLLER ACCESS

(To send a single MIDI on/off control change command with the touch of a button)

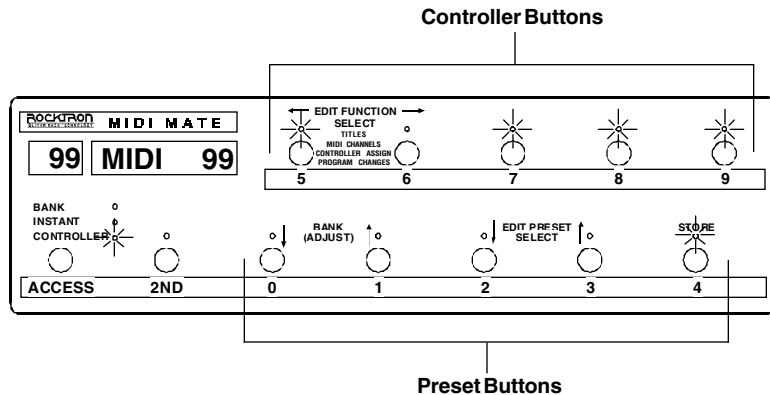
The Controller access mode allows for the use of on/off MIDI control changes. Buttons 5-9 on the MIDI Mate™ may be assigned to a control number, and when that button is pressed a MIDI control change will be transmitted corresponding to the assigned control number. A common use for this feature is to have direct remote control over another device's parameters without changing presets. For example, the Rocktron ProGAP™ has MIDI controllable control functions and a loop. If the ProGAP™'s loop is set to control number 9, and button 5 on the MIDI Mate™ is set to control number 9, the ProGAP™ loop can now be turned on or off by pressing button 5 on the MIDI Mate™. This cuts down on the number of presets needed because now presets do not need to be duplicated (for example, one with the loop on and one with the loop off).

The status of the parameter that is being turned on/off by the MIDI Mate™ is stored by the MIDI Mate™ also, thereby sending the correct MIDI control change command (on or off) when the program is changed. For every button assigned to a control number, a control change will be sent every time the preset is changed. For example, if buttons 5, 6, 7 and 8 are set to control numbers 11, 12, 13 and 14 respectively, every time a program change is made four MIDI control change commands (control changes 11,12,13,14) would be sent on the corresponding MIDI channels. These four control changes would send the status (on/off) of the controls that were last stored for that preset. To store a controller "On", make sure that the CONTROLLER Access LED is lit, and that the corresponding MIDI channel is not set to "Off", then press the button of the assigned control number so that the LED above the button is lit. A lit LED above the button means the controller is on, and an unlit LED above the button means the controller is off. Set the control status for all the assigned buttons in this fashion. For buttons not assigned to a control number, the LED above them will not light. Once all the LEDs are set to represent the correct status (on or off) of all assigned controllers, then this status can be stored with the current preset by first pressing the 2ND button so that the 2ND LED lights. Then press the STORE button. "Stored" will flash briefly on the display showing that the current status has been stored. (This is the only function for the STORE button.)

Buttons 0-4 may be used to change presets while in the Controller

access mode. To change preset banks, press the 2ND button so that the 2ND L.E.D. is lit, then press the Bank "↑" or "↓" buttons to select the desired bank. Presets are grouped in banks of 5 in the Controller Access mode. Therefore, if you are currently in bank 55 and button 1 is pressed, preset 56 will be recalled and the L.E.D. above button 1 will be lit. Consider each button# as a value that will be added to the current blinking bank# if pressed. preset should be "on", then that status must be stored "on" for that preset, and for every preset the control is desired "on".

Button functions in Controller access mode:



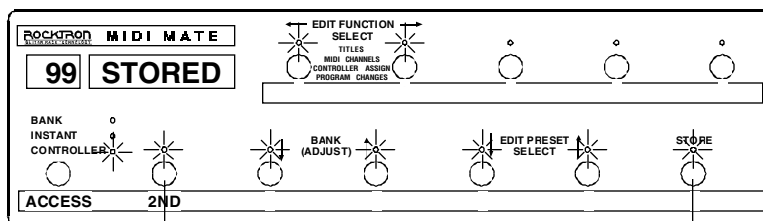
Set assigned buttons (see "Controller Assignment Edit" section) and set controller MIDI channel (see "MIDI Channel Edit" section).

L.E.D. "on" sends control ON command (control value of 127).

L.E.D. "off" sends control OFF command (control value of 0).

Storing the current status

(To store the status of on/off buttons in the current program)

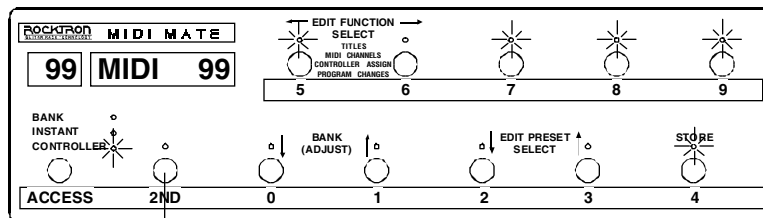


Step 1

Turn on the 2ND L.E.D. by pressing the 2ND button.

Step 2

Press the STORE button (The MIDI Mate™ will display "STORED" briefly).



Step 3

Press the 2ND button to turn the 2ND L.E.D. off. Now each time program 99 is recalled, this configuration of on/off buttons is recalled.

Editing the MIDI Mate™

The editing features of the MIDI Mate™ are designed to be helpful by incorporating scrolling messages and requiring the least number of buttons to press as possible. The MIDI Mate™ automatically stores the choices that the user makes to make it easier for the user to edit parameters. The STORE button does not store the choices in the editing mode - it has no function in the editing mode. The parameters which can be edited include: titles, MIDI channels, assignable controller numbers and additional patch changes. The MIDI Mate™ incorporates a unique editing feature using the EDIT PRESET SELECT buttons. These buttons allow the user to change the preset that is being edited without leaving the editing mode.

Anytime that the 2ND LED is lit, the EDIT PRESET SELECT buttons will increment ("↑") or decrement ("↓") the current preset by one. These buttons may also be held down to scroll through the presets. This feature allows the user to enter the edit mode, do all the editing necessary for all the presets, then exit the edit mode with the least number of buttons pressed. The editing is divided into four sections - "Titles", "MIDI Channels", "Controller Assignment" and "Program Changes" - and can be accessed while in any access mode. The editing functions are accessible by pressing the EDIT FUNCTION SELECT "←" and "→" buttons. The editing parameters can be adjusted by using the BANK (ADJUST) "↑" and "↓" buttons.

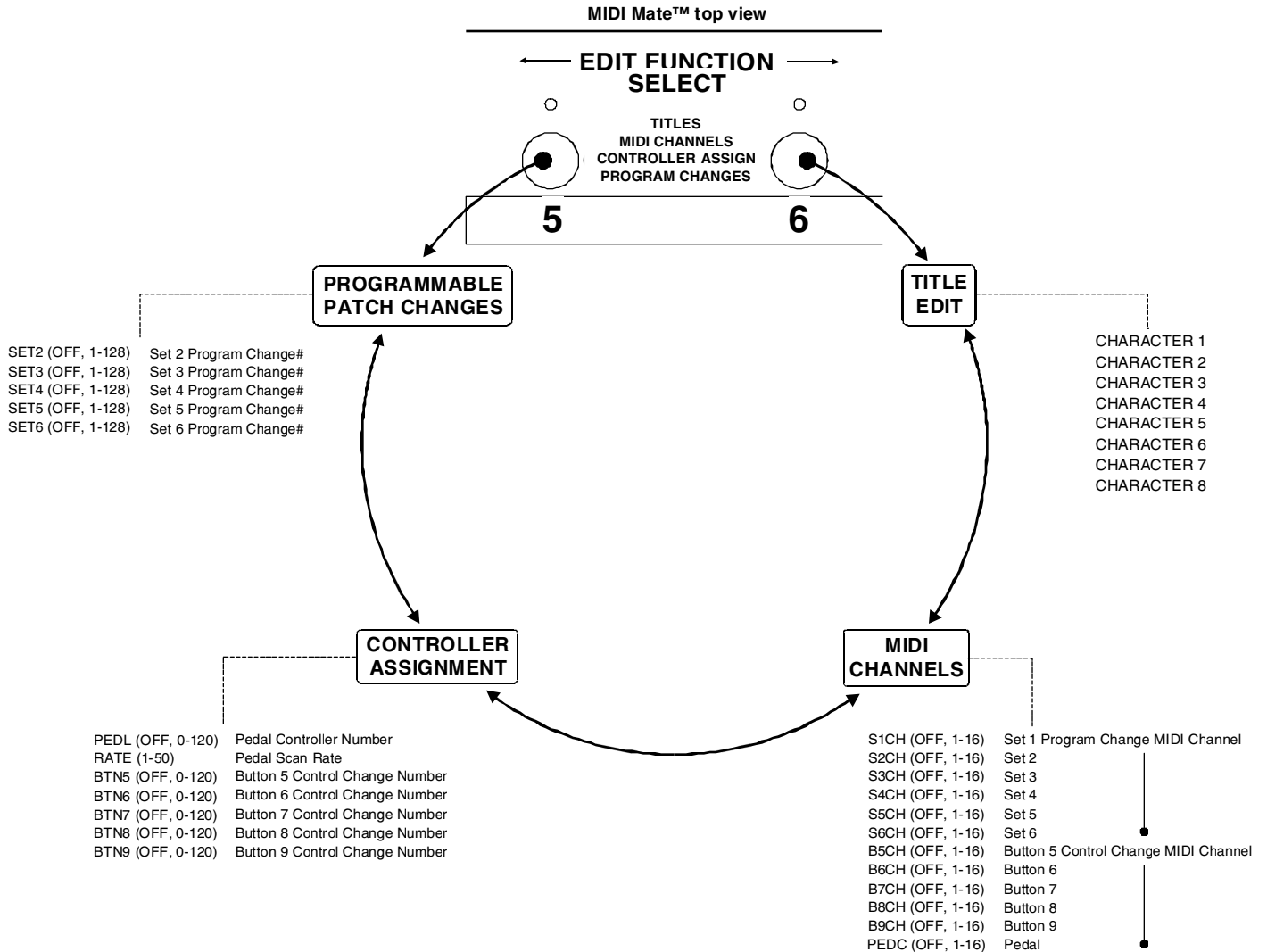
The editing mode may be initiated in any of the access modes by pressing the 2ND button so that the 2ND LED is lit. Then press the EDIT FUNCTION SELECT "→" button. "*Title Edit*" will scroll across the display. If the EDIT FUNCTION SELECT "→" button is pressed a second time before the scrolling is complete, "*MIDI Channels*" will scroll across the display. If the EDIT FUNCTION SELECT "→" button is pressed a third time before the scrolling is complete, "*Controller Assignment*" will scroll across the display. And if the EDIT FUNCTION SELECT "→" button is pressed a fourth time before the scrolling is complete, "*Programmable Patch Changes*" will scroll across the display, thereby completing the cycle of all four editing sections.

Continuing to press the EDIT FUNCTION SELECT "→" button

before the scrolling is complete will return the user to *"Title Edit"*, and continue repeating the four sections.

By pressing the EDIT FUNCTION SELECT " \leftarrow " button, the four editing sections will appear in reverse order from that above. The EDIT PRESET SELECT buttons will increment or decrement the preset being edited in any of these four editing sections. To exit the edit mode, press the 2ND button so that the 2ND LED is off, or change the access mode by pressing the ACCESS button. The editing LED will flash as long as the MIDI Mate™ is in the editing mode.

The EDIT FUNCTION SELECT buttons allow you to scroll through the available function headings for editing. Referring to the figure on the following page, repeatedly pressing the " \rightarrow " button will scroll through the function headings in a clockwise fashion, while the " \leftarrow " button will scroll counter-clockwise.



To access the menu below each heading, wait for the scrolling of the selected heading to complete. The EDIT FUNCTION SELECT buttons may then be used to scroll through the contents of each menu.

To avoid accessing the menu below a heading and move to the next heading, press the EDIT FUNCTION SELECT button again before the scrolling of the current heading is complete.

PRESS "2ND" ANYTIME TO EXIT EDITING

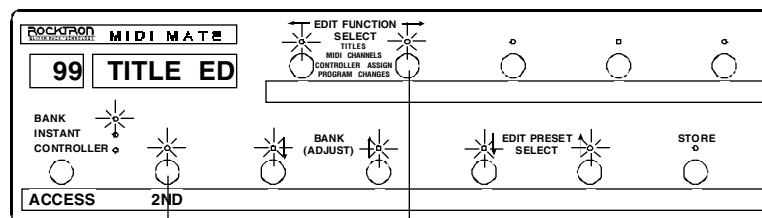
Title Editing

Enter the editing mode while in any access mode by pressing the 2ND button so that the 2ND LED lights. Now press the EDIT FUNCTION SELECT "→" button so that "Title Edit" scrolls across the display. Allow the scrolling to finish to enter the Title Edit mode. Once the scrolling has finished, the title of the current preset will be displayed with the decimal point of the first character of the title flashing. The BANK (ADJUST) buttons may now be pressed to scroll through the available characters that maybe used in the titles. When a character is selected, the EDIT FUNCTION SELECT "→" button can be pressed to store the character in memory and advance to the next character for editing.

All of the characters in the title mode can be edited in this fashion. The EDIT FUNCTION SELECT buttons are used to move the cursor (flashing decimal point) to the character position that you wish to edit. Pressing the EDIT FUNCTION SELECT "←" button will allow the user to edit the character one place to the left of the current character. If the far left character has been edited and editing is complete, the EDIT FUNCTION SELECT "←" button may be pressed to enter the Programmable Patch Changes edit mode. Pressing the Edit Function Select "→" button allows the next character to the right to be edited. If the far right character has been edited and editing is complete, the EDIT FUNCTION SELECT "→" button may be pressed to enter the MIDI Channels edit mode.

To enter the TITLE EDIT mode:

(The TITLE EDIT mode may be initiated while in any access mode)



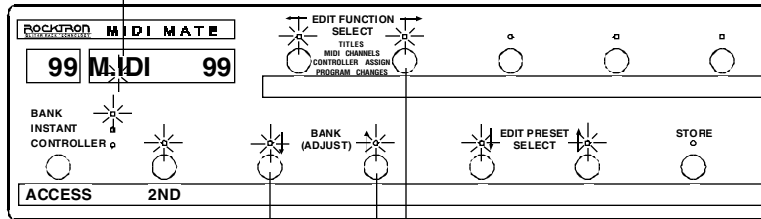
Step 1

Press the "2ND" button to turn the 2ND L.E.D. on

Step 2

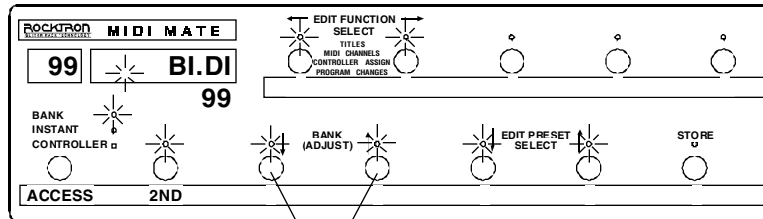
Press the EDIT FUNCTION SELECT "→" button ("TITLE EDIT" will scroll across the display). Wait for the scrolling to finish.

After the scrolling has completed, the title will be displayed with a blinking decimal point next to the first character.



Step 3
Use the ADJUST buttons to select a character.

Step 4
Press the EDIT FUNCTION SELECT "→" button to advance to the next character position to edit.



Step 5
Use the ADJUST buttons to select a character. Repeat this process until all the characters are edited.

Use the EDIT FUNCTION SELECT buttons to move the flashing cursor to the correct character position.
Use the ADJUST buttons to select a character.

Once the editing is completed, the next title may be edited by using the EDIT PRESET SELECT buttons.

PRESS "2ND" ANYTIME TO EXIT EDITING

MIDI Channel Editing

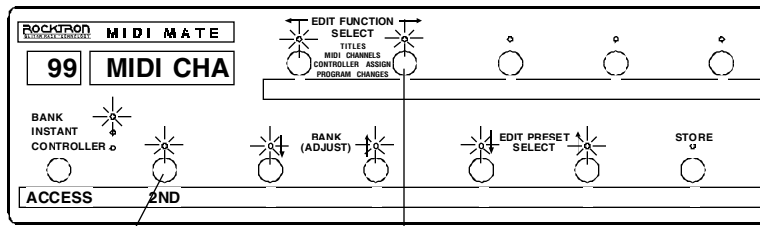
Enter the editing mode by pressing the 2ND button so that the 2ND LED lights while in any access mode. Now press the EDIT FUNCTION SELECT "→" button twice or until "*MIDI Channels*" scrolls across the display. Allow the scrolling to finish to enter the MIDI channel edit mode. Once the scrolling has finished "*SI CH*" (SET1 channel) will appear. The MIDI Mate™ is capable of sending out six different sets of patch changes on six different MIDI channels. Assign the MIDI channel to the same channel as the MIDI devices you wish the first set of patch changes to control.

The MIDI channel may be changed by pressing the BANK (ADJUST) "↑" or "↓" buttons. These buttons may be held down to allow the user to scroll through all the possible MIDI channels. The available MIDI channels for SET1 are 1-16 or OFF. Once SET1's MIDI channel is assigned, press the EDIT FUNCTION SELECT "→" button to select the MIDI channel you wish to send SET2's patch changes on. Again, the BANK (ADJUST) "↑" and "↓" buttons allow the user to scroll through the available choices to assign SET2's MIDI channel to. The possible choices for SET2's MIDI channel are 1- 16 or off. The MIDI channel for any set can be turned off to suspend transmission of that set's patch changes.

Once MIDI channels are chosen for all the sets, press the EDIT FUNCTION SELECT "→" button and "B5CH" ("Button 5 MIDI Controller Channel") will be displayed. This is where you choose the MIDI channel that you wish the MIDI on/off control change commands for button 5 to be sent on. Set this MIDI channel to the same MIDI channel as the MIDI devices you wish to control via MIDI on/off control change commands from button 5. If you don't want to send MIDI on/off control change commands set the corresponding MIDI Controller Channel to "*OFF*". By repeatedly pressing the EDIT FUNCTION SELECT "→" button, the user can assign the MIDI channel you wish the MIDI continuous controller (pedal) to operate on (abbreviated as "PEDC").

There are a total of 12 MIDI channels the MIDI Mate™ can operate on (all at the same time): 6 patch change channels, 5 on/off controller channels, and 1 continuous controller channel.

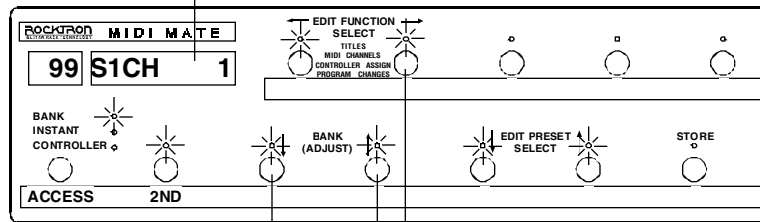
To enter the MIDI CHANNEL EDIT mode:



Step 1
Press the "2ND" button to turn the 2ND L.E.D. on

Step 2
Press the EDIT FUNCTION SELECT "→" button twice (or until "MIDI CHANNELS" scrolls across the display).
Wait for the scrolling to finish.

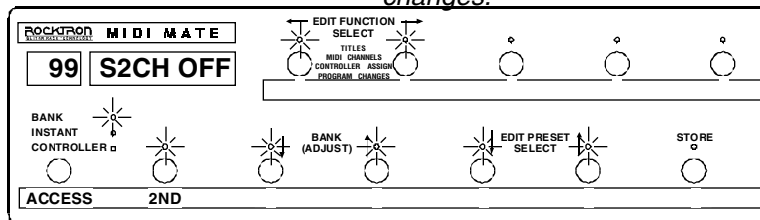
After the scrolling has completed, "S1CH" (Set 1 MIDI channel) will appear.



Step 3
Use the ADJUST buttons to select the MIDI channel that Set 1 is to be transmitted on (1-16 or OFF). Match Set 1's MIDI channel with the MIDI channel that the receiving device is set to.

Step 4
Press the EDIT FUNCTION SELECT "→" button to advance to the next channel to edit (Set 2).

Continue to use the BANK (ADJUST) buttons to choose a MIDI channel for each set of additional program changes.



The MIDI on/off commands may be assigned to individual MIDI channels. The continuous controller or pedal may be assigned to a MIDI channel also.

PRESS "2ND" ANYTIME TO EXIT EDITING

Controller Assignment Editing

Enter the editing mode by pressing the 2ND button so that the 2ND LED lights in any access mode. Then press the EDIT FUNCTION SELECT "←" button twice or until "*Controller Assignment*" scrolls across the display. Allow the scrolling to finish to enter the Controller Assignment edit mode. Once the scrolling has finished, "*PEDL*" will appear. (This is an abbreviation for "pedal".) In this editing section, the pedal and buttons 5-9 may be assigned a controller number. The pedal should be assigned the controller number that matches the number of the parameter that the pedal is to control. For example, the Rocktron ProGAP™'s output level may be mapped to controller number 8. By assigning the MIDI Mate™'s pedal to controller 8, the ProGAP™'s output level is now controlled by the MIDI Mate™'s pedal.

The MIDI Mate™'s pedal may be assigned a different control number for each preset. In this way you can control the output level parameter in preset 1, control the treble parameter in preset 2, and control the bass and gain parameters in preset 4 - just by matching control numbers to the parameters you wish to adjust

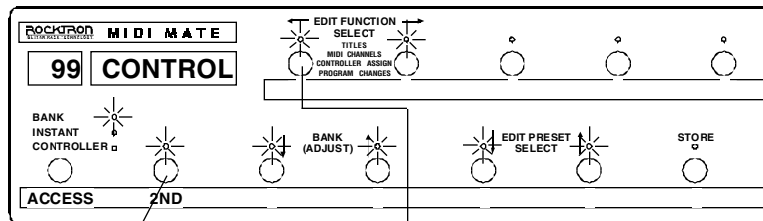
Buttons 5-9 on the MIDI Mate™ may also be assigned a control number. These numbers should match a MIDI device's on/off or in/out parameters. Another example using the Rocktron ProGAP™ would be to assign the ProGap™'s loop function to control number 9, and assign button 5 (abbreviated as "BTN5") on the MIDI Mate™ to control number 9. Now by pressing button 5 on the MIDI Mate™ while in the controller access mode, the ProGap™'s loop would switch in and out with the MIDI Mate™ displaying the current status of the loop by the LED over button 5.

The control numbers for the MIDI Mate™ buttons are not assignable for each preset. Using the example above of button 5 on the MIDI Mate™ being assigned to control number 9, regardless of what preset the MIDI Mate™ changes to, button 5 is still assigned to control number 9 each time the MIDI Mate™ changes presets. The last stored status of each assigned button is also sent on the corresponding controller MIDI channel.

The MIDI Mate™ is shipped from the factory with all the button control numbers set to "*OFF*". The pedal control number is set to "*OFF*" for each preset on the MIDI Mate™. If a button's control status for a particular preset should be "*ON*", then that status must be stored "*ON*" for that preset, and for every preset the control is desired "*ON*".

Under the "Controller Assignments" heading, the RATE parameter provides a selectable rate at which the MIDI Mate™ will sample the pedal position and send out control changes. The RATE parameter is adjustable from 1 to 50mS. The value selected determines how often a control change is sent from the MIDI Mate™ (i.e. "20" = 20 milliseconds, "42" = 42 milliseconds, etc.). The lower the value selected, the faster the transmission. A faster transmission rate may mean a smoother and more accurate response by the device receiving the control changes. However, the rate may need to be slowed down for devices where an error may occur from receiving MIDI messages faster than the device can process them.

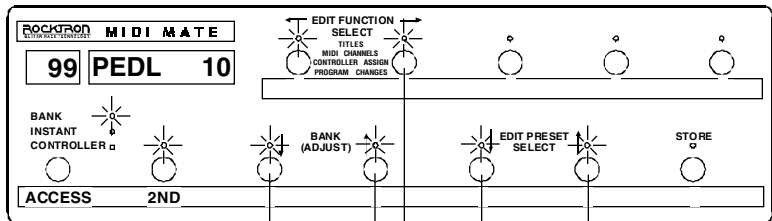
To enter the CONTROLLER ASSIGNMENT EDIT mode:



Step 1
Press the "2ND" button to turn the 2ND L.E.D. on.

Step 2
Press the EDIT FUNCTION SELECT "←" button twice (or until "CONTROLLER ASSIGNMENT" scrolls across the display). Wait for the scrolling to finish.

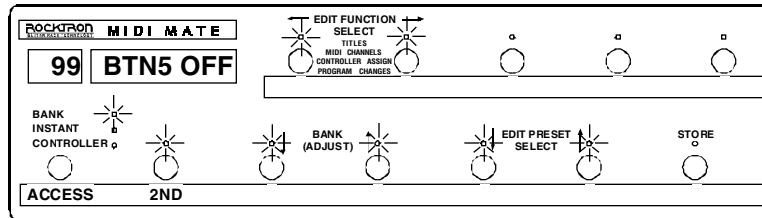
After the scrolling has completed, "PEDL" will appear with the control number that the pedal is assigned to. This pedal may be assigned to a different control number for each program. Buttons 5-9 may be assigned to one control number each for all programs.



Step 3
Use the ADJUST buttons to select the desired control number.

Step 4
Press the EDIT FUNCTION SELECT "→" button to edit the transmission rate of the pedal.

Note:
The EDIT PRESET SELECT buttons may be used to select the desired pedal control number for the next preset.



Continue to use the EDIT FUNCTION SELECT buttons to select which button a control number will be assigned to.

Continue using the BANK (ADJUST) buttons to select the control number for each button.

PRESS "2ND" ANYTIME TO EXIT EDITING

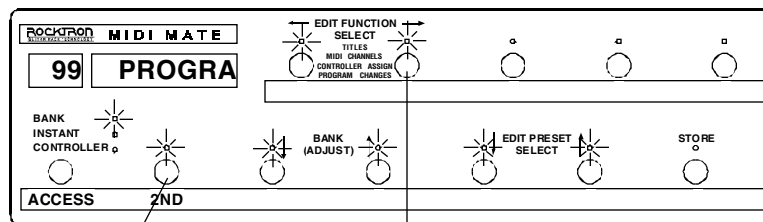
Programmable Patch Changes Editing

Enter the editing mode by pressing the 2ND button so that the 2ND LED lights while in any access mode. Now press the EDIT FUNCTION SELECT buttons until "Programmable Patch Changes" scrolls across the display. Allow the scrolling to finish to enter the Programmable Patch Changes edit mode. Once the scrolling has finished, "SET2" will appear. This is where additional patch changes may be programmed to be sent along with SET1's patch change. SET1 is the patch change that is displayed by the three character numeric display. SET2 through SET6 are additional patch changes that can be sent along with SET1's patch change on their assigned MIDI channels.

The number to the right of SET2 is the number of the patch change that will be sent on SET2's assigned MIDI channel. SET2's patch change may be changed by pressing the BANK (ADJUST) "↑" and "↓" buttons. By pressing the EDIT FUNCTION SELECT "→" button, the user may access SET3 through SET6's patch change in the same way.

To enter the PROGRAMMABLE PATCH CHANGES edit mode:

(Programmable Patch Changes are additional program changes that are programmed to be sent along with the current SET1 program change)



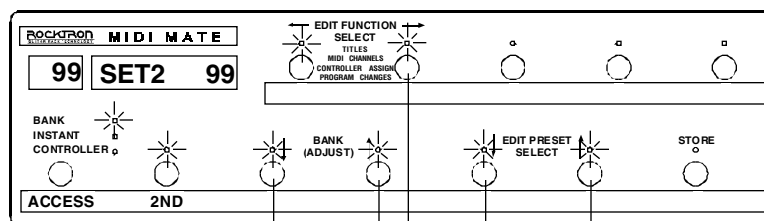
Step 1

Press the "2ND" button to turn the 2ND L.E.D. on

Step 2

Press the EDIT FUNCTION SELECT "←" button once (or until "PROGRAMMABLE PATCH CHANGES" scrolls across the display).
Wait for the scrolling to finish.

After the scrolling has completed, "SET2" will appear with a number to the right. This number is the program change that will be sent on SET2's MIDI channel.



Step 3

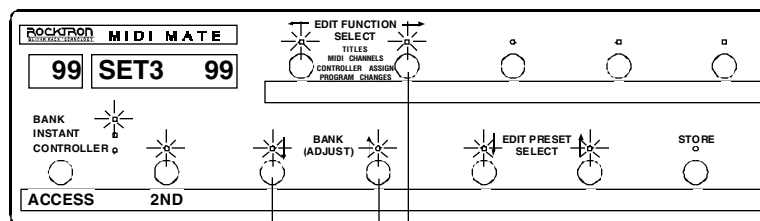
Use the ADJUST buttons to select the additional program change to be sent. The program changes are sent on the corresponding MIDI channel while editing.

Step 4

Press the EDIT FUNCTION SELECT "→" button to advance to SET3 program changes.

Note:

The EDIT PRESET SELECT buttons may be used to select the additional program change for the next preset.



Step 5

Use the BANK (ADJUST) buttons to select the additional program change to be sent on SET3's MIDI channel.

Step 6

Press the EDIT FUNCTION SELECT "→" button to advance to SET4 through SET6's program changes.

Once SET2 through SET6's changes are assigned for the current program, the next program may be edited using the EDIT PRESET SELECT buttons.

PRESS "2ND" ANYTIME TO EXIT EDITING

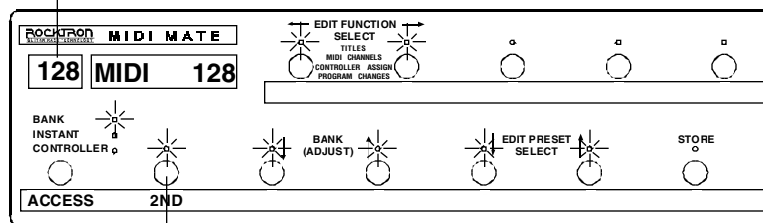
Factory Reinitialization

This feature of the MIDI Mate™ allows for all titles, controller assignments, patch changes, etc. to be reset to their original factory settings. To perform this procedure, follow the steps as shown.

! WARNING !
This procedure will permanently erase all user settings!

To enter the **FACTORY REINITIALIZE** mode:

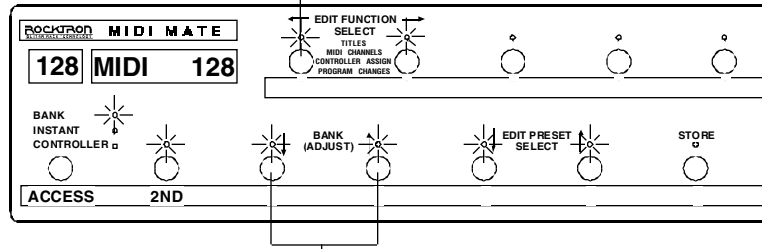
Step 1
Recall preset #128



Step 2
Press the 2ND button to turn the 2ND L.E.D. on.

Step 3

Press the EDIT FUNCTION SELECT "←" button once. "FACTORY REINITIALIZE" will scroll across the display.



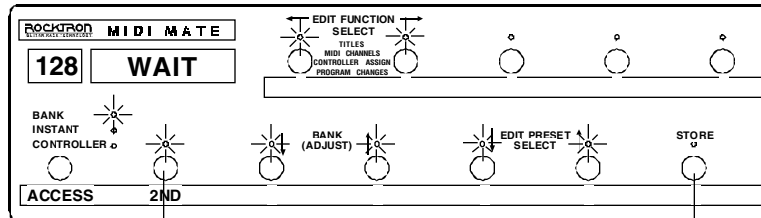
Step 4

* Use the BANK (ADJUST) buttons to set the code number to 244.

* For those upgrading from previous software 1.x versions, a code number of "10" may be entered (instead of 244) to initialize all settings *except* the user titles.

! WARNING !

Completing step 5 will permanently erase the user memory and replace it with the original factory memory!



Step 6

Press the 2ND button to exit the editing mode.

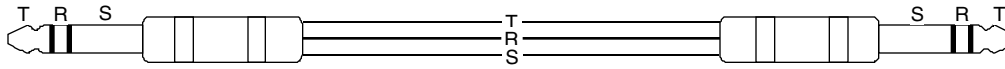
Step 5

Press the STORE button. "WAIT" will be displayed while the memory is being initialized. After it is complete, the message "ERR 0" should be displayed. If this message is not displayed, the memory may not have reinitialized properly.

Expression Pedal "Y" Cords

STANDARD STEREO CORD

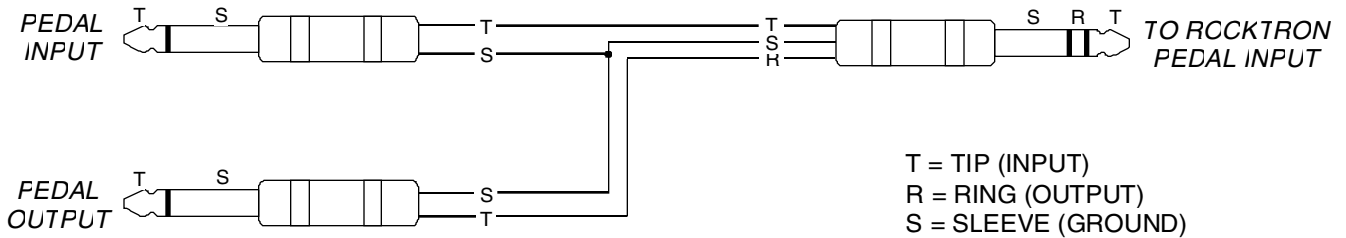
FOR USE IF A PEDAL HAS A STEREO INPUT/OUTPUT JACK



T = TIP (INPUT)
R = RING (OUTPUT)
S = SLEEVE (GROUND)

TWO MONO TO ONE STEREO CORD

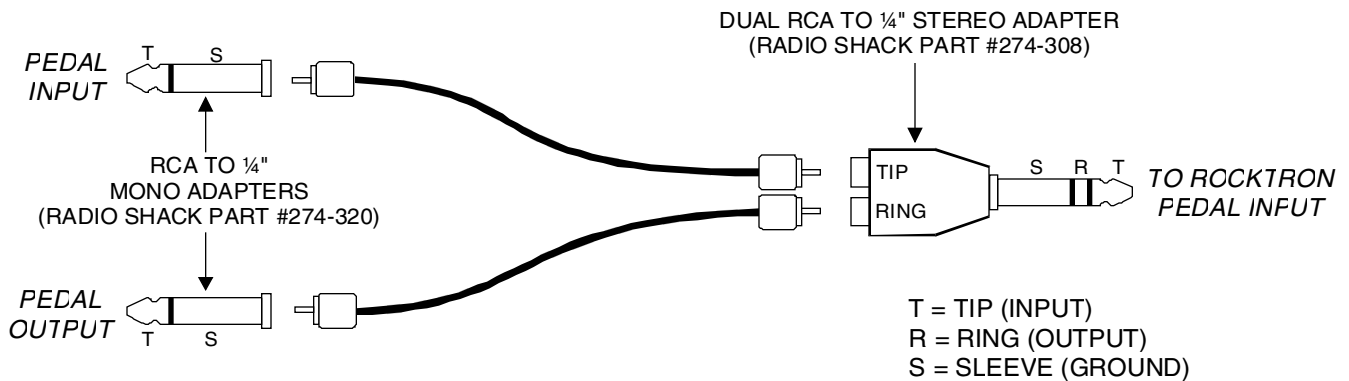
FOR USE IF A PEDAL HAS MONO INPUT AND OUTPUT JACKS.
NOTE: FOR BEST RESULTS, USE COAX CABLE.



T = TIP (INPUT)
R = RING (OUTPUT)
S = SLEEVE (GROUND)

STEREO "Y" CORD

MADE USING RCA PATCH CORDS AND 1/4" ADAPTORS
WITH NO SOLDERING INVOLVED.



T = TIP (INPUT)
R = RING (OUTPUT)
S = SLEEVE (GROUND)

MIDI Implementation

Software Version 2.x

	<u>FUNCTION</u>	<u>TRANSMITTED</u>	<u>RECOGNIZED</u>	<u>REMARKS</u>
BASIC CHANNEL	DEFAULT	1-16	X	MAY BE SAVED IN NON-VOLATILE MEMORY
	CHANGED	1-16	X	
MODE	DEFAULT	X	X	
	MESSAGES	X	X	
	ALTERED	X	X	
NOTE NUMBER	TRUE VOICE	X	X	
VELOCITY	NOTE ON	X	X	
	NOTE OFF	X	X	
AFTER TOUCH	KEY'S	X	X	
	CHANNEL	X	X	
PITCH BEND		X	X	
CONTROL CHANGE		O	X	**PEDL = OFF
		O	X	**BTN5 = OFF
		O	X	**BTN6 = OFF
		O	X	**BTN7 = OFF
		O	X	**BTN8 = OFF
		O	X	**BTN9 = OFF
PROGRAM CHANGE	TRUE NUMBER	O	X	*PROGRAMS 1-128
SYSTEM EXCLUSIVE		X	X	
SYSTEM COMMON	SONG POSITION	X	X	
	SONG SELECT	X	X	
	TUNE REQUEST	X	X	
SYSTEM REAL TIME	CLOCK	X	X	
	COMMANDS	X	X	
AUXILIARY MESSAGES	LOCAL ON/OFF	X	X	
	ALL NOTES OFF	X	X	
	ACTIVE SENSING	X	X	
	SYSTEM RESET	X	X	

O = YES
X = NO

NOTES

* Actual MIDI program value sent is 0=127 (corresponding to presets 1-128).

** The buttons and pedal can be assigned to any control number from 0-120, or off. The MIDI Mate™ comes from the factory with the buttons assigned as shown above.