

The keyboard can be split or layered for internal sounds and to control external MIDI devices. In the diagram above, only 3 of the 4 possible zones are being used.

ZONE MIDI CHANNEL ASSIGNMENTS

For each Quick Key, each of the four zones can be programmed to transmit on a different MIDI channel. *If Off is selected, that zone will be turned Off for MIDI transmission AND keyboard control.* Place the cursor under each zone's channel number and select the MIDI channel number (or Off) using the data entry control, inc/dec buttons or numeric keys.

CH:1	2	3	4	← Zone Number
01	02	Off	16	← MIDI Channel Number

ZONE VOLUME ASSIGNMENTS

This screen allows you to adjust the volume of each of the four zones. This function sets the volume of the internal sounds on the four zones. A MIDI volume message is also sent for each zone when a Quick Key is selected (unless the channel select for that zone is turned off). Place the cursor under each zones volume parameter and adjust the volume using the data entry control, inc/dec buttons or numeric keys.

VOL1	2	3	4	← Zone Number
127	100	075	120	← Zone Volume

PERFORMANCE EDIT MENU

ZONE PAN ASSIGNMENTS

This screen allows you to adjust the stereo pan position of each of the four keyboard zones. A MIDI pan message is also sent for each zone when a QuickKey is selected (unless the channel select for that zone is turned off). Place the cursor under each zones Pan parameter and adjust the pan position using the data entry control, inc/dec buttons or numeric keys. When Pan is set to "P" the pan settings in the preset will be used.

PAN1	2	3	4	← Zone Number
=P	-7	+7	=P	← Zone Pan

ZONE OCTAVE TRANSPOSE

This function allows each keyboard zone to be transposed up or down three octaves in octave increments. Notes transmitted over MIDI will also be transposed. Place the cursor under the transpose parameter for each zone and change the transposition using the data entry control, inc/dec buttons or numeric keys. A setting of "0" indicates no transposition.

OCT1	2	3	4	← Zone Number
+0	-3	+3	+0	← Zone Octave Transpose

ZONE CONTROLLER ENABLE

This function allows you to enable or disable the various continuous controllers for each keyboard zone. MIDI information will also be enabled or disabled. Place the cursor under the controller type and change it using the data entry control, inc/dec buttons or numeric keys.

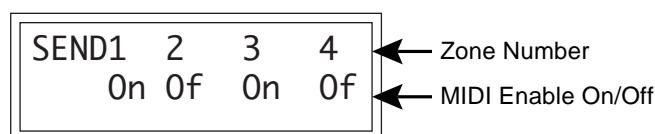
	CTL	1	2	3	4	← Zone Number
Controller →	PWh	On	Of	On	Of	← Status of Controller for each Zone

ZONE MIDI SEND

PWH	= Pitch Wheel
Mod	= Modulation Wheel
Prs	= Pressure (Aftertouch)
FSw	= Footswitch
Ped	= Pedal

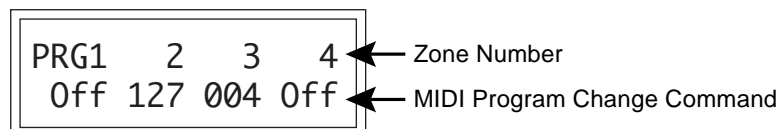
PERFORMANCE EDIT MENU

This screen allows you turn MIDI transmission On or Off for each of the four keyboard zones. **Turning a zone Off inhibits all MIDI data** associated with the Quick Key such as note data, program change data, volume, pan and other controller data. **The internal preset associated with the zone will be played and controlled normally.**



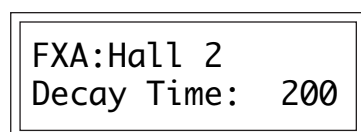
ZONE MIDI PROGRAM CHANGE ASSIGNMENTS

Each zone can be programmed to send out a MIDI Program Change command whenever a Quick Key is selected. The program change command will be sent on the MIDI channel selected in the Zone MIDI Channel Assignment screen (previously described). Place the cursor under each zones program change parameter and change the program change command (preset change) using the data entry control, inc/dec buttons or numeric keys. When Off is selected, no program change command will be transmitted for that zone.



EFFECT A (for Multimode)

This function allows you to select which effect is assigned to effect buss A. In addition to several types of reverb, the A effects consist of other stereo time delay effects such as delays, choruser, phase shifters, etc. (see the effects section for details).



■ Effect type can also be changed via MIDI realtime controller commands.

Controller

FXA = 82

FXB = 83

See the charts on pages 140 and 141

PERFORMANCE EDIT MENU

■ Effect type can also be changed via MIDI realtime controller commands.

Controller
FXA = 82
FXB = 83

See the charts on pages 140 and 141

■ The FX amounts can also be changed via MIDI realtime controller commands.

Controller
A = 84
B = 85
B>A = 86

See the charts on pages 140 and 141

■ For detailed explanations of each effect, see the effects chapter in this manual.

EFFECT B (for Multimode)

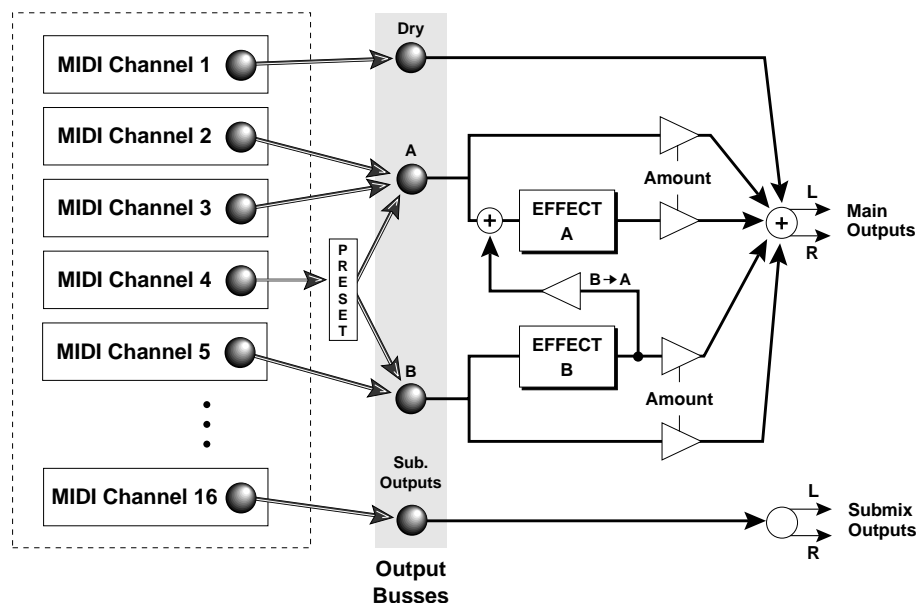
This function allows you to select which effect is assigned to effect buss B. The B effects consist of various delays, chorusers, phase shifters, fuzzes and even a ring modulator (see the effects section for details).

FXB: StereoFlange
LFO Rate 050

EFFECTS AMOUNT

This function allows you to adjust the percentage of wet and dry signals (processed and unprocessed) with 100% being only processed signal. Additionally, the B->A parameter allows you to adjust the amount of effect B which is fed through effect A. If B>A is set one value above 100%, "Only" is displayed and the B amount changes to Off. This disconnects effect B from the main outputs and routes all of the effect B signal through effect A.

FX AMOUNT A: 75%
B>A: 100% B: 30%



Block diagram of the Proteus effects section showing multiple channel effect routing. Each channel can be assigned to the A, B, Dry or Submix buss, or can be assigned to a buss as programmed in the preset.

PERFORMANCE EDIT MENU

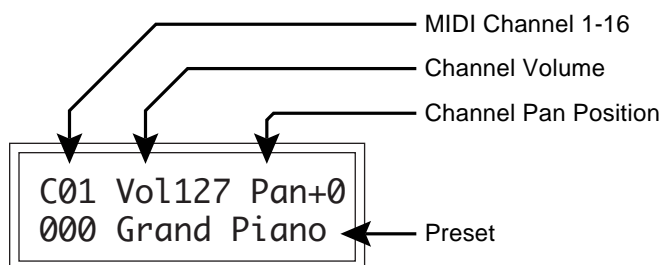
MULTIMODE EFFECT ASSIGN

For each of the 16 MIDI channels, you may select one of the two available effects busses, have the channel remain dry (no effects) or route the channel to the submix outputs. Selecting Preset allows the assignment selected in the preset to be used. The type of effects used and their amounts are selected in the previous screens.

EFFECT ASSIGN
 MIDI Ch04:Preset

MULTIMODE PRESET-VOLUME-PAN ASSIGNMENT

This function allows you to set the Preset, Volume and Pan position for each of the 16 MIDI channels. These settings are only used when Multi-Mode is enabled. Place the cursor under the appropriate parameter and change the MIDI Channel Number, Volume, Pan Position and Preset Number using the data entry control or increment/decrement buttons. As the channel is changed, the display will change to show the preset, volume and pan parameters associated with the displayed channel.



■ Channel Pan should normally be set to "P" unless realtime control of panning is desired. This will allow the pan settings programmed for each preset to be used.

■ The keyboard will play the preset shown in the preset assignment screen last seen.

MIDI MULTIMODE

This function selects whether Proteus responds polyphonically or monophonically when in Multi mode. Polyphonic mode is the normal setting - chords are possible and channels are used as needed. Monophonic mode is sometimes useful with MIDI guitar controllers - each MIDI channel can only play one note.

MIDI MULTI MODE
 Polyphonic

PERFORMANCE EDIT MENU

RECEIVE PROGRAM CHANGE

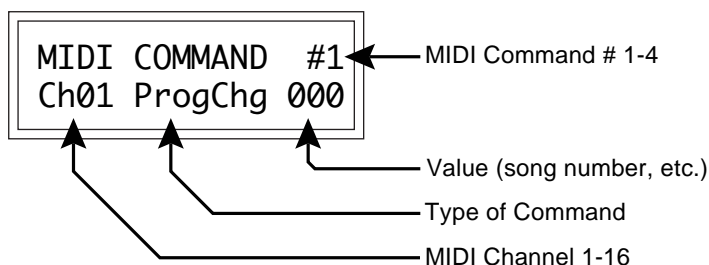
This function lets Proteus either utilize or ignore incoming MIDI program change commands for each channel. Note that MIDI can only select presets 000-127. Presets 128-299 can either be selected manually or over MIDI using the preset mapping function "MIDI PROGRAM > PRESET". See page 34 for more information on the Program-> Preset Map.

RECV PROG CHANGE
 channel:01 On

MIDI COMMAND 1-4

This function allows you to transmit up to four MIDI commands when a Performance Map is selected (not to be confused with a Quick Key selection). The MIDI commands include:

Program Change	Value and Channel
Song Select	Song Number and Channel
Song Start	Song Number and Channel
Song Stop	Song Number and Channel
Volume	Value and Channel
Pan	Value and Channel



PERFORMANCE EDIT MENU

RECORD USER DATA

This function allows you to record a string of MIDI data up to 320 bytes in length. This data will be transmitted when the Performance Map is selected. The MIDI data can be virtually anything; SysEx data, controller data, even synthesizer patch data if the file is not too large.

RECORD USER DATA
Start

To Record MIDI User Data:

1. Connect MIDI Out of another MIDI device to the MIDI In of Proteus.
2. Move the Cursor under Start and press Enter.
3. Send data from the MIDI device (play keys, etc.). Press Enter to Stop.

To Playback MIDI User Data:

1. Select the Performance Map.

EDIT USER DATA

This function allows you to edit a string of MIDI data up to 320 bytes in length. You can edit data which was recorded using the Record Data function above or enter MIDI data manually. Any hexadecimal value can be entered. Proteus does not check the data for accuracy, so check your MIDI data carefully if unexpected results occur. Place the cursor underneath the byte locations and use the data entry knob to change values. Place the cursor underneath the arrows (< >) and rotate the data entry knob in order to scroll back and forth through the MIDI data. Setting the data value below 00 deletes the byte location. Pressing the Enter button inserts a new byte location to the left of the cursor position.

EDIT USER DATA
[F0 18 04 00 03>

■ The user data is transmitted in one quick dump when a performance map is selected. Continuously changing values such as pitch wheel data will not be recorded correctly as they would into a sequencer.

PERFORMANCE EDIT MENU

MIDI PROG ->PRESET

This function selects one of the four MIDI Program to Preset Maps (programmed in the Master Edit menu) or turns the Program->Preset maps Off. The MIDI bank select command is disabled (transmission and reception) whenever a Program->Preset map is selected. For more information on the MIDI Bank select command see the MIDI specification at the back of this manual.

MIDI PROG>PRESET 1
