

# **Programmable BASS<sup>TM</sup>**

## **INSTRUCTION MANUAL**

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

 **ROCKTRON**  
GUITAR RACK PROCESSORS



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# 1. INTRODUCTION

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The Rocktron Guitar Rack Series Programmable BASS is a professional MIDI programmable bass preamp featuring compression, 3 band semi-parametric EQ, stereo chorus and HUSH II noise reduction providing an infinite array of tones for the bassist.

This operating manual will introduce you to the Programmable BASS and its functions. After reading this manual carefully, keep it for future reference.

## ***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.

DO NOT ATTEMPT TO SERVICE THIS EQUIPMENT. THIS EQUIPMENT SHOULD BE SERVICED BY QUALIFIED SERVICE PERSONNEL ONLY. DO NOT REMOVE THE COVER FROM THIS EQUIPMENT AT ANY TIME. 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 WARRANTY SERVICE TO THIS EQUIPMENT, AS WELL AS CAUSING SHOCK HAZARD.

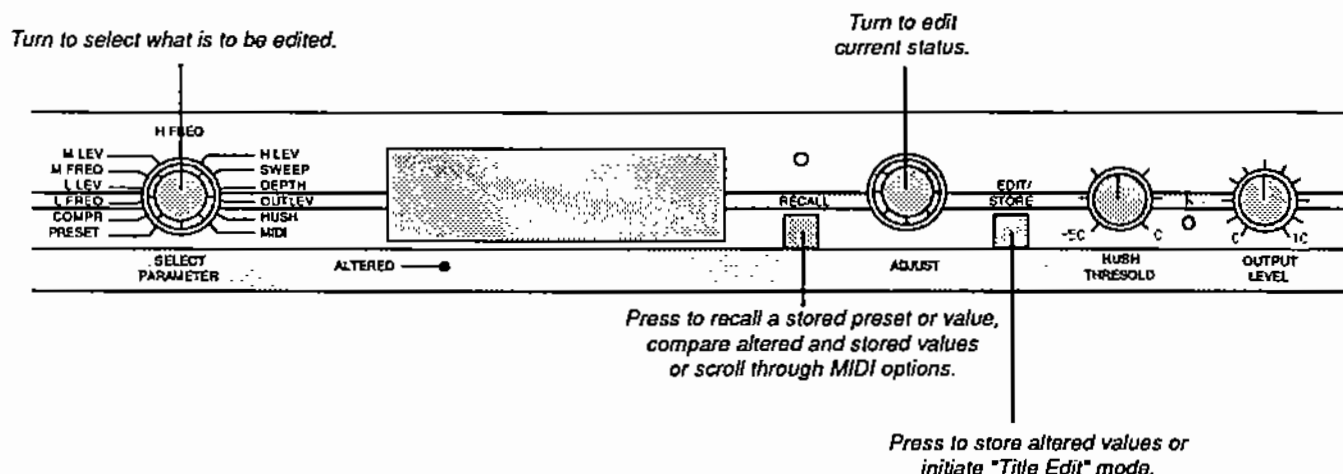
## ***POWER REQUIREMENTS***

This unit accepts power from the 9VAC/1500mA adaptor supplied with the unit. This 9V RMS AC voltage is internally processed by a voltage doubler, thus generating a bi-polar + & - 15V to maintain the headroom and sound quality of professional, studio quality equipment. Using an external power source such as this minimizes excessive noise and hum problems often associated with internal transformers, giving the user optimal performance.

## ***OPERATING TEMPERATURE***

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

## 2. QUICK REFERENCE



### A. Recalling a Stored Preset

- Step 1:** To RECALL a particular preset, turn the SELECT PARAMETER control fully counter-clockwise. This position is PRESET. The display will flash "PRESET", then "PR" and the preset number currently being used will flash for about 1 second, and then the preset title will appear on the display.
- Step 2:** To change to a different preset than what is currently being displayed, turn the ADJUST control until the number of the desired preset is displayed. The new preset number and title will continue to flash until the RECALL button is pressed.
- Step 3:** Pressing the RECALL button will change the preset to the new preset number. Until the RECALL button is pressed, no change in preset takes place.
- Cancelling:** To cancel the RECALL mode, either turn the ADJUST control back to the original preset number, or turn the SELECT PARAMETER control clockwise into another setting. No change will take place as long as the RECALL button is not pressed.

### B. Changing Adjustable Parameter Values

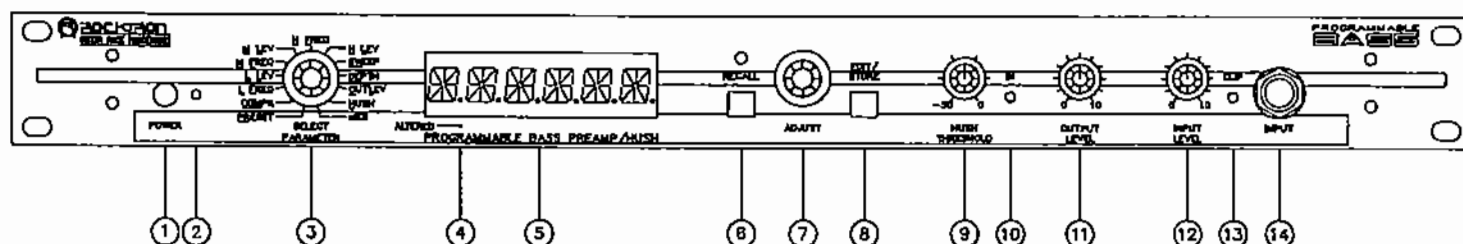
- Step 1:** One position clockwise of PRESET is the first of the next 11 positions of the SELECT PARAMETER control that are adjustable parameters for modifying in each preset. Each parameter is displayed when the SELECT PARAMETER control is turned to its position.
- Step 2:** The parameter value stored for each of the 11 adjustable will be immediately modified by turning the ADJUST control to the desired new value. As soon as the parameter value is changed, the Altered Indicator will light. The Altered Indicator is the decimal point of the first character of the display.
- Step 3:** To immediately return to the stored value in the preset, press the RECALL button. The RECALL button will allow the Programmable BASS to alternate between the currently stored value and an adjusted value. This allows the user to compare the two values with the touch of a button. All of the 11 adjustable parameters can be modified and compared in this manner.

### C. Storing Changed Parameter Values

- Step 1:** To copy one preset into another, recall the preset that is to be copied. Changes to any of the adjustable parameters can be made at this time.
- Step 2:** Then, after making any adjustments, press the EDIT/STORE button while in any one of the adjustable parameters. This will initiate the copy mode and "ENTER PRESET" will scroll across the display.
- Step 3:** Wait until the scrolling of "ENTER PRESET" is completed. The current preset number and title will alternately flash on the display until the ADJUST control is turned to the new preset number to which the copy is to be entered and the EDIT/STORE button is pressed. The modified preset can be copied over itself by pressing the EDIT/STORE button without turning the ADJUST control to a different preset number beforehand.
- Step 4:** The selected preset number and title will continue to flash until the EDIT/STORE button is pressed. The display will then flash "STORED" briefly. This will indicate that the current preset parameters were successfully stored into the new preset.

**NOTE!** If the EDIT/STORE button is pressed before the "ENTER PRESET" scrolling message is completed, no storing will take place. Press the EDIT/STORE button again for another opportunity to store.

### 3. FRONT PANEL OPERATION



(1). . .**POWER** switch:

(2). . .**POWER ON/OFF LED**:

When lit, indicates the Programmable BASS is powered and ready for operation.

(3). . .**PARAMETER SELECT** control:

13 positions (Preset function, 11 adjustable parameters and MIDI options) full counter-clockwise to full clockwise.

#### **Preset Function**

**PRESET**: preset number and title, 128 total presets available (30 factory presets, 98 fully adjustable presets).

#### **Adjustable Parameters**

(with 64 incremented positions each, except HUSH)

<b>COMPRS:</b>	compressor threshold level	-30dB to +20dB
<b>L FREQ:</b>	low band EQ frequency	10Hz to 400Hz
<b>L LEVL:</b>	low band EQ level	-40dB to +25.5dB
<b>M FREQ:</b>	mid band EQ frequency	200Hz to 2.6KHz
<b>M LEVL:</b>	mid band EQ level	-40dB to +15dB
<b>H FREQ:</b>	high band EQ frequency	460Hz to 8KHz
<b>H LEVL:</b>	high band EQ level	-40dB to +33dB
<b>SWEEP:</b>	chorus sweep rate	.280Hz to 4.5Hz
<b>DEPTH:</b>	chorus depth	0 to 100
<b>OUTLEV:</b>	programmable output level	-55dB to +6dB
<b>HUSH:</b>	hush noise reduction	off/on

#### **MIDI Options**

MIDI: mapping status, program mapping, controller mapping, MIDI channel and inc/dec footswitch type.

**(4). . . *ALTERED* indicator:**

The ALTERED indicator is the first decimal point of the first character of the display. When this decimal point is lit, it indicates that the ADJUST has been turned to a different parameter value (ALTERED value) than that which is stored in the present (STORED value).

**(5). . . *DISPLAY* panel:**

The Display panel consists of 6 alphanumeric characters of 14 segments each. On initial power up, the LED display will show a brief LED segment test. All LED segments are lit at this time, indicating that all segments are operating correctly.

**(6). . . *RECALL* button:**

The RECALL button's function is dependent on the SELECT PARAMETER control.

When the SELECT PARAMETER control is in PRESET, the RECALL button is used to recall the displayed preset number.

When the SELECT PARAMETER control is in one of the 11 adjustable parameters (COMPR, L FREQ, L0 LEV, etc.), the RECALL button is used as a toggle between the STORED value and the ALTERED value.

When the SELECT PARAMETER control is in MIDI, the MIDI options can be stepped through by using the RECALL button. Those options are: mapping status, program mapping, controller mapping, MIDI channel number and inc/dec footswitch type.

**(7). . . *ADJUST* control:**

The ADJUST control's function is dependent on the SELECT PARAMETER control.

When the SELECT PARAMETER control is in PRESET, the ADJUST control can be used to select a preset number and to also edit preset titles.

When the SELECT PARAMETER control is in one of the 11 adjustable parameters, the ADJUST control allows the user to select the different values available for a particular adjustable parameter.

When the SELECT PARAMETER control is in MIDI, the ADJUST control selects the various choices of the different MIDI options.

**(8). . . *EDIT/STORE* button:**

The function of the EDIT/STORE button is dependent on the SELECT PARAMETER control.

When the SELECT PARAMETER control is in PRESET, the EDIT/STORE button is used to initiate the title edit function. All 128 titles can be edited to whatever the user prefers, this includes the 30 factory preset titles.

When the SELECT PARAMETER control is in one of the 11 adjustable parameters, the EDIT/STORE button is used to copy a preset into another preset (or into the same preset number).

When the SELECT PARAMETER control is in MIDI, use the EDIT/STORE button after entering any MIDI information that is to be stored in the memory.

**(9). . . *HUSH THRESHOLD* control:**

The Threshold control adjusts the level at which expansion takes place and the sensitivity of the dynamic filter. It is adjustable from -50dB to 0dB.



(10). . .**HUSH IN LED:**

When lit, indicates that the HUSH section of the Programmable BASS is operating and noise reduction is taking place.

(11). . .**OUTPUT LEVEL control:**

This control adjusts the level of the signal at the unit's output. It can be adjusted from no signal to unity gain.

(12). . .**INPUT LEVEL control:**

The INPUT LEVEL CONTROL adjusts the level of the signal at the unit's input. It can be adjusted from no signal to +12dB.

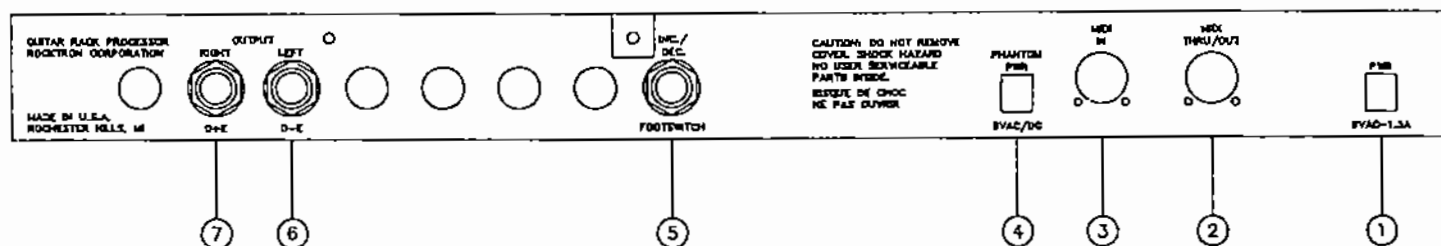
(13). . .**CLIP LED:**

When lit, this LED indicates that signal levels being received by the unit are too high and could cause audible distortion. If this occurs, turn the INPUT LEVEL control counter-clockwise until this LED does not light during normal operation.

(14). . .**INPUT jack:**

This standard 1/4" mono jack is used to provide input to the unit. It is front panel mounted for easy access. Read the SPECIFICATIONS section to determine the maximum input level. Failure to do so may overdrive the unit and damage internal circuitry.

## 4. REAR PANEL



### (1). . . **POWER** jack:

This unit accepts power from the 9VAC/1500mA adaptor supplied with the unit. This 9V RMS AC voltage is internally processed by a voltage doubler, thus generating a bi-polar + and - 15V to maintain the headroom and sound quality of professional, studio quality equipment. Using an external power source such as this minimizes excessive noise and hum problems often associated with internal transformers, giving the user optimal performance.

### (2). . . **MIDI THRU/OUT** jack:

This standard 5 pin DIN connector passes on the MIDI information that is received at the MIDI IN jack to other MIDI compatible devices via a MIDI cable. It also has the ability to send its own MIDI commands when program changes are made via a remote inc/dec footswitch. There is, however, a limit to the number of devices which can be chained (or connected in series) in this fashion. With more than 3 devices, a slight distortion of the MIDI signal can occur, which can cause an error in MIDI signal transmission. Should this problem arise, a MIDI Thru box can be used, which connects directly to the MIDI device which transmits MIDI information and has multiple connectors for the multiple devices receiving MIDI. MIDI cables should not exceed 50ft in length. When connecting multiple devices within a single rack, short cables of only 1-2 ft in length are much more desirable.

### (3). . . **MIDI IN** jack:

This 7 pin DIN connector receives MIDI information from the device which is transmitting the MIDI commands for the Programmable BASS to execute. This information can be passed on to other MIDI devices by using the MIDI Thru/Out jack.

### (4). . . **PHANTOM POWER** jack:

This jack offers the ability to power the Rocktron MIDI Mate Foot Controller from the 7 pin MIDI cable which connects from the MIDI Mate to the MIDI In jack on the rear panel of the ProgrammableBASS, eliminating the need to find an AC outlet near where the footpedal would be placed during a performance or the need to run an extension cord out to the MIDI Mate. Instead of inserting the adaptor into the MIDI mate "Power" jack, plug it into the "Phantom Power" jack on the Programmable BASS. This will power the MIDI Mate through pins 6 and 7 of the MIDI cable connecting the two units. A 7 pin MIDI cable must be used.

**(5). . .INC/DEC FOOTSWITCH jack:**

This standard 1/4" RTS jack accepts both latch and momentary contact type footswitches. To configure this jack for the type of footswitch you wish to use, read the OPERATION section of this manual concerning INC/DEC FOOTSWITCH TYPE (MIDI option selection). Use of a dual footswitch (stereo plug) will allow the user to increment or decrement through the presets, while using a single switch (mono plug) will only allow increments.

*Sleeve = GND Ring = DEC Tip = INC*

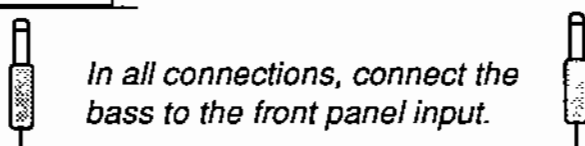
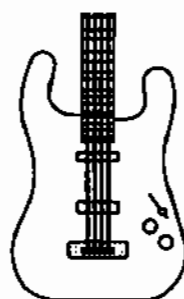
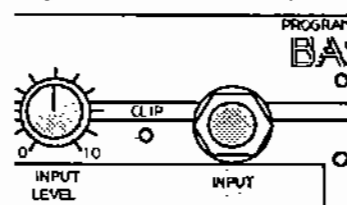
**(6) & (7). . .OUTPUT jacks:**

These standard 1/4" mono jacks provide output from the unit. The left is D - E (dry minus effect) and the right is D + E (dry plus effect).

# 5. CONNECTIONS

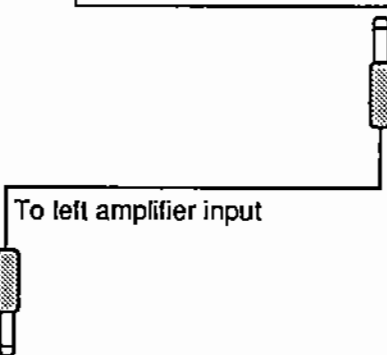
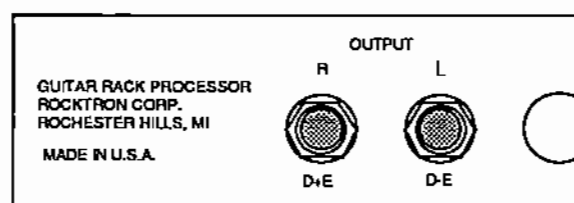
*Used with bass amplifiers:*

Programmable BASS™ front panel

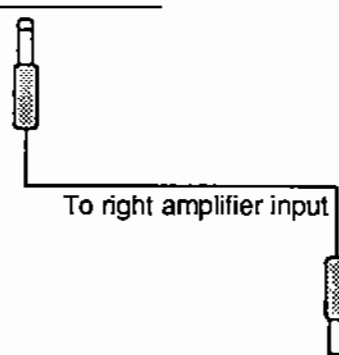
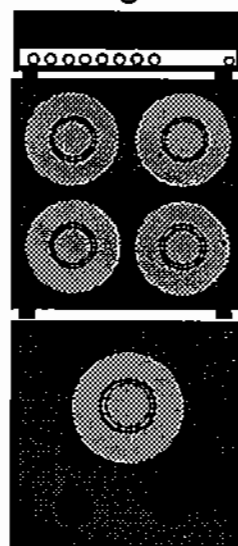


*In all connections, connect the bass to the front panel input.*

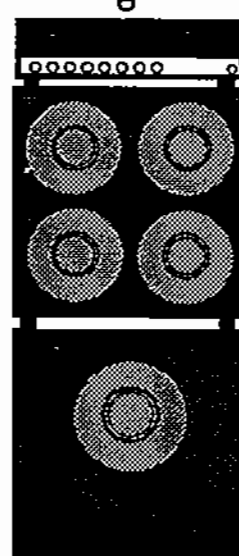
Programmable BASS™ rear panel



To left amplifier input

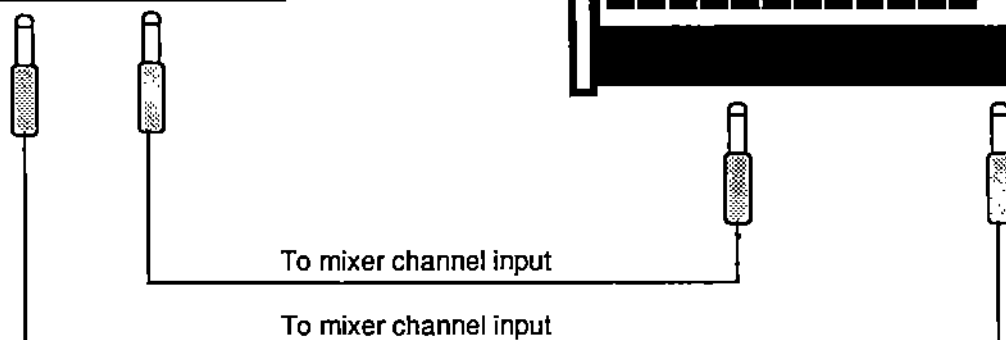
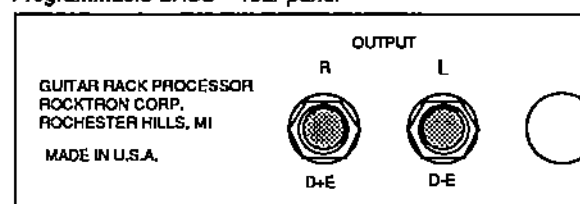


To right amplifier input



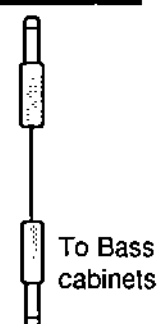
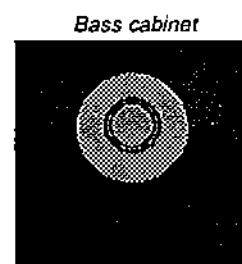
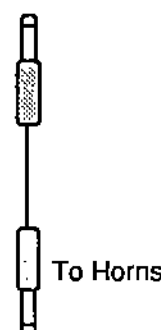
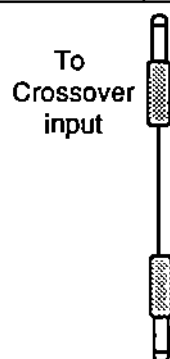
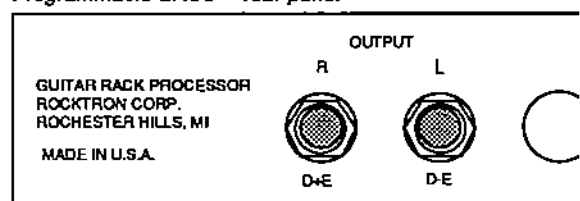
**Used with a mixing console:**

*Programmable BASS™ rear panel*

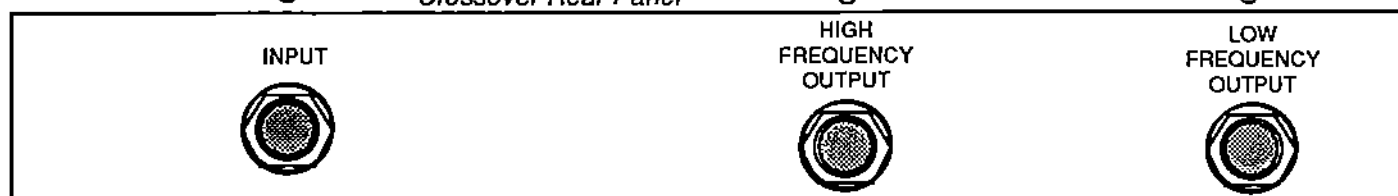


**Used with a full range system:**

*Programmable BASS™ rear panel*



*Crossover Rear Panel*



## 6. OPERATION

### A. Power Up

When the Programmable BASS is initially powered on, the LED display will show a brief segment test. All LED segments are lit briefly indicating that all segments are working. The Programmable BASS then automatically recalls preset 31. The message "ROCKTRON PROGRAMMABLE BASS" will scroll (and continue to scroll) until the SELECT PARAMETER or ADJUST controls are turned, or the RECALL or EDIT/STORE buttons are pressed.

"PRESET" is a particular position of the SELECT PARAMETER control of the Programmable BASS. There are 13 positions in the SELECT PARAMETER control. Full counter-clockwise is PRESET, which selects the preset number to be recalled. There are 128 different preset numbers available to recall. Initially, factory presets 1-30 are repeated through the remaining memory locations (presets 31-128). Each individual preset stores a selected value for each of the 11 adjustable parameters. These 11 stored values in each preset are what determines how each preset will sound.

### B. Recalling a Stored Preset

**Step 1:** To RECALL a particular preset, turn the SELECT PARAMETER control fully counter-clockwise. This position is PRESET. The display will flash "PRESET", then "PR" and the preset number currently being used will flash for about 1 second, and then the preset title will appear on the display.

Turn fully counter clockwise to "PRESET"



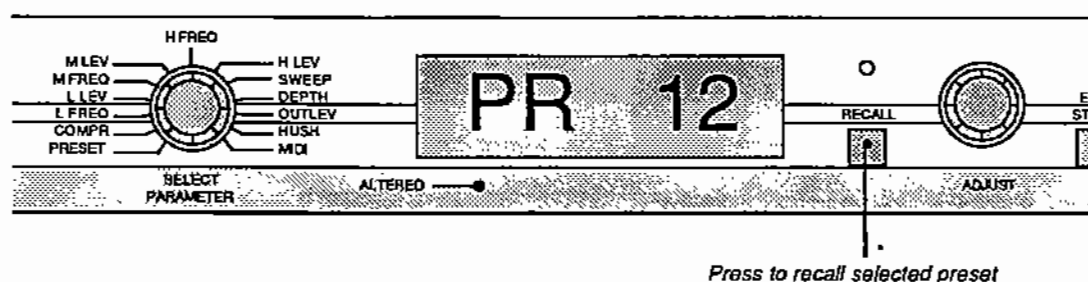
**Step 2:** To change to a different preset than what is currently being displayed, turn the ADJUST control until the number of the desired preset is displayed. The new preset number and title will continue to flash until the RECALL button is pressed.

Turn to select a new preset number



New preset number will flash

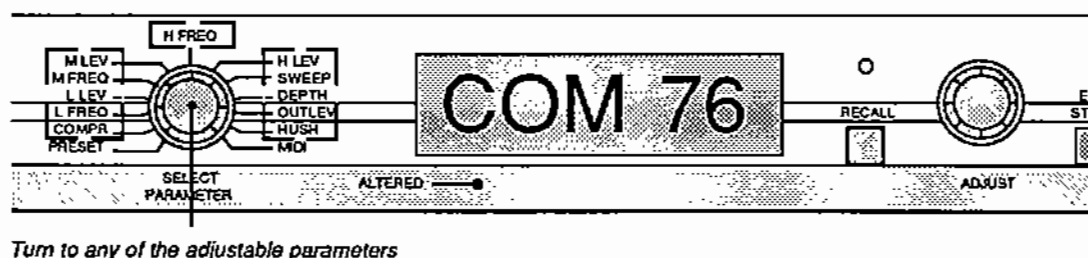
**Step 3:** Pressing the RECALL button will change the preset to the new preset number. Until the RECALL button is pressed, no change in preset takes place.



**Cancelling:** To cancel the RECALL mode, either turn the ADJUST control back to the original preset number, or turn the SELECT PARAMETER control clockwise into another setting. No change will take place as long as the RECALL button is not pressed.

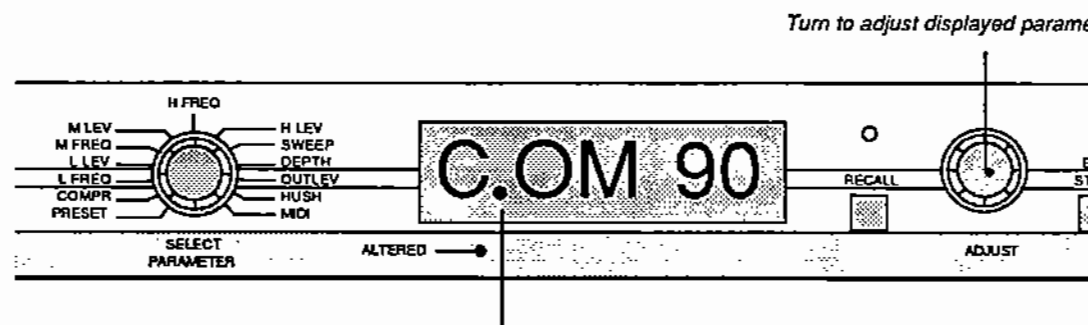
### C. Changing Adjustable Parameter Values

**Step 1:** One position clockwise of PRESET is the first of the next 11 positions of the SELECT PARAMETER control that are adjustable parameters for modifying in each preset. Each parameter is displayed when the SELECT PARAMETER control is turned to its position.



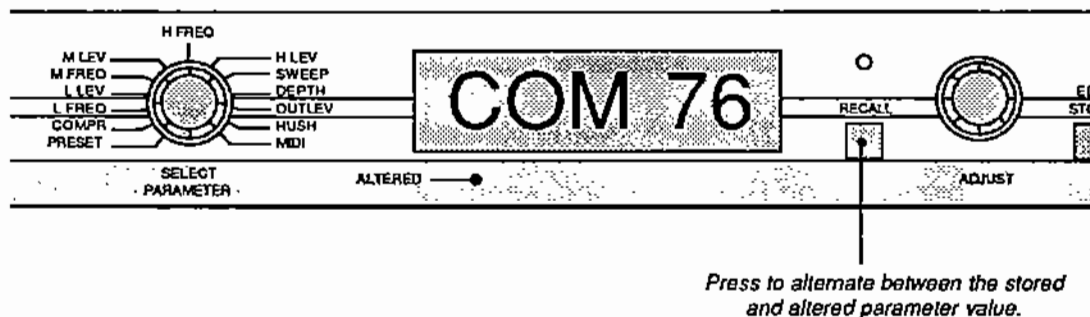
*Turn to any of the adjustable parameters*

**Step 2:** The parameter value stored for each of the 11 adjustable will be immediately modified by turning the ADJUST control to the desired new value. As soon as the parameter value is changed, the Altered Indicator will light. The Altered Indicator is the decimal point of the first character of the display.



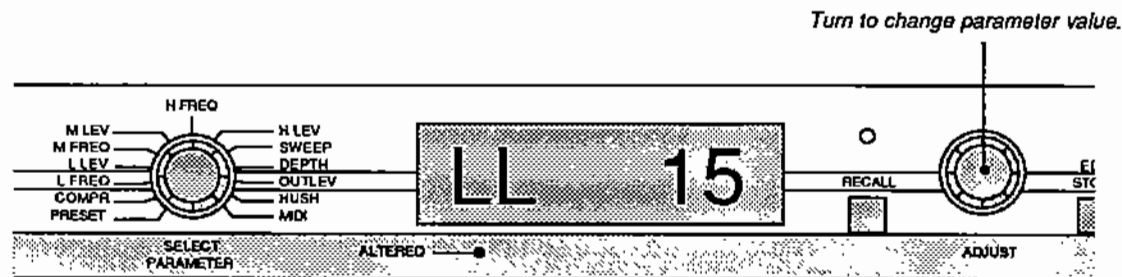
*After the stored parameter value is changed, the ALTERED indicator will light.*

**Step 3:** To immediately return to the stored value in the preset, press the RECALL button. The RECALL button will allow the Programmable BASS to alternate between the currently stored value and an adjusted value. This allows the user to compare the two values with the touch of a button. All of the 11 adjustable parameters can be modified and compared in this manner.

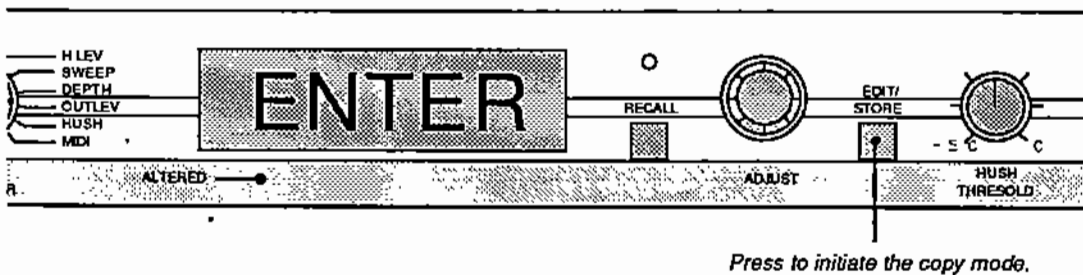


#### D. Storing Changed Parameter Values

**Step 1:** To STORE a changed parameter into a preset, use the ADJUST control while the adjustable parameter you wish to change is displayed (The Altered Indicator light should be on, verifying that the value is not a stored value). Essentially you will be copying the changed preset over the currently stored preset.

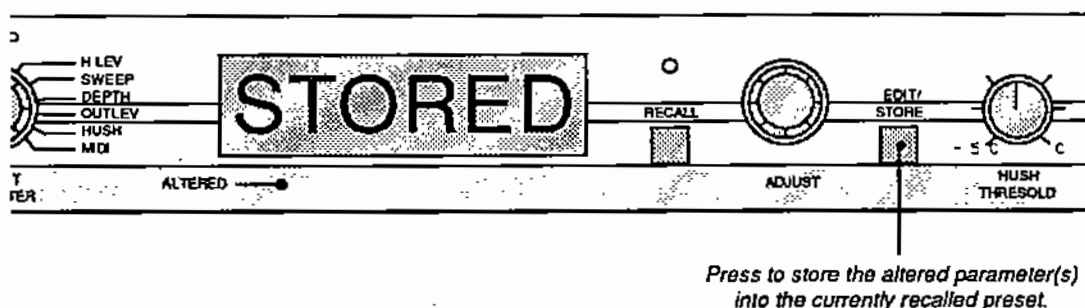


**Step 2:** Press the EDIT/STORE button to initiate the copy mode. "ENTER PRESET" will scroll across the display. Wait until the scrolling is completed, and the current preset number and title flashes alternately across the display.





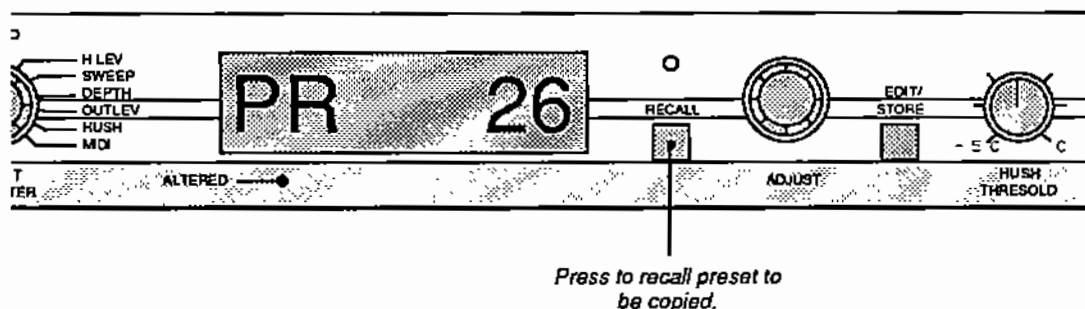
**Step 3:** Press the EDIT/STORE button, the display will flash "STORED" briefly, indicating that the changed parameters are now stored in that preset.



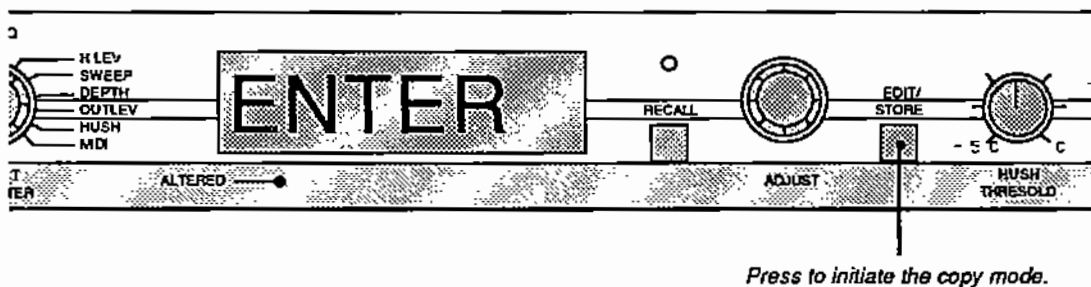
**NOTE!** If the EDIT/STORE button is pressed before the completion of the scrolling "ENTER PRESET" message, the changed preset will NOT store. Press the EDIT/STORE button again to store.

### E. Copying Presets

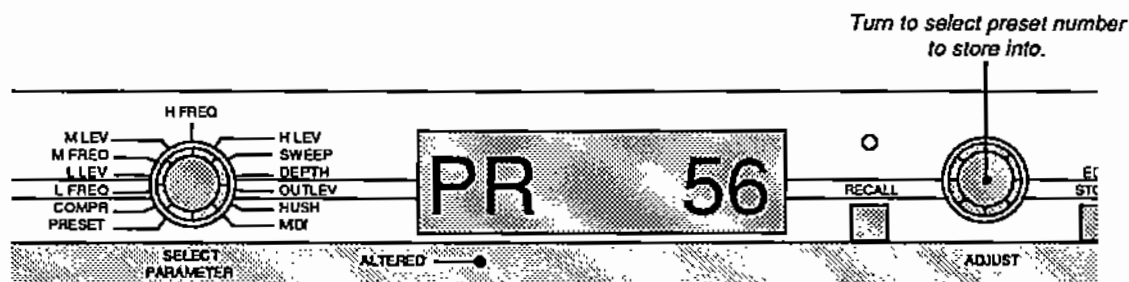
**Step 1:** To copy one preset into another, recall the preset that is to be copied. Changes to any of the adjustable parameters can be made at this time.



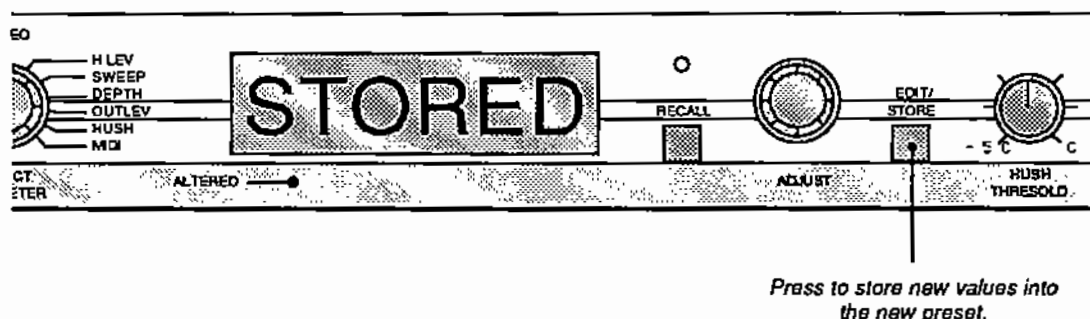
**Step 2:** Then, after making any adjustments, press the EDIT/STORE button while in any one of the adjustable parameters. This will initiate the copy mode and "ENTER PRESET" will scroll across the display.



**Step 3:** Wait until the scrolling of "ENTER PRESET" is completed. The current preset number and title will alternately flash on the display until the ADJUST control is turned to the new preset number to which the copy is to be entered and the EDIT/STORE button is pressed. The modified preset can be copied over itself by pressing the EDIT/STORE button without turning the ADJUST control to a different preset number beforehand.

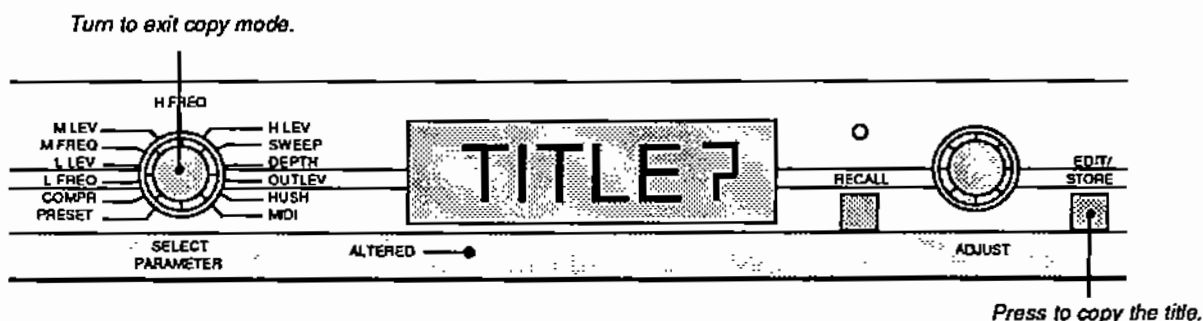


**Step 4:** The selected preset number and title will continue to flash until the EDIT/STORE button is pressed. The display will then flash "STORED". This will indicate that the current preset parameters were successfully stored into the new preset.

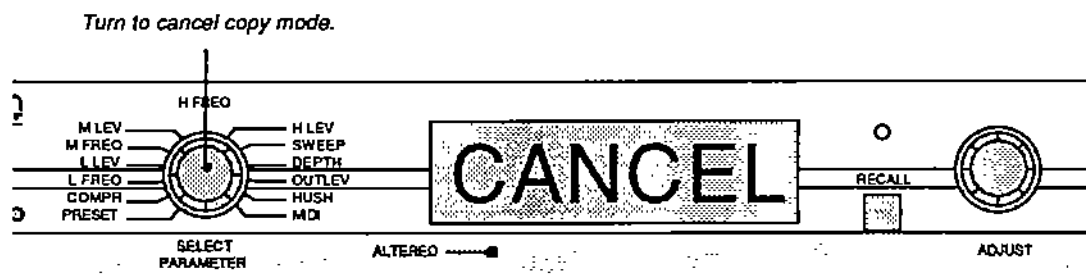


**NOTE!** If the EDIT/STORE button is pressed before the "ENTER PRESET" scrolling message is completed, no storing will take place. Press the EDIT/STORE button again for another opportunity to store.

**Step 5:** When storing into a new preset number, the Programmable BASS will display "TITLE?". This allows you to copy the title from the preset which has been edited. To do so, press the EDIT/STORE button. If this is not desired, turn the SELECT PARAMETER control to exit the function.



**Cancelling:** To cancel the copy mode once it has been initiated, turn the SELECT PARAMETER control one position in either direction. The display will briefly flash "CANCEL" and the Programmable BASS will return to its original state before the copy mode was initiated.



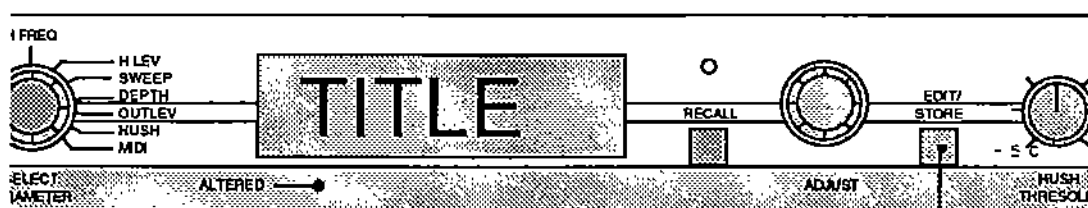
## F. Editing a Preset Title

**Step 1:** The titles for presets 1-128 can ALL be modified. To edit the title of a given preset, that preset must first be recalled.



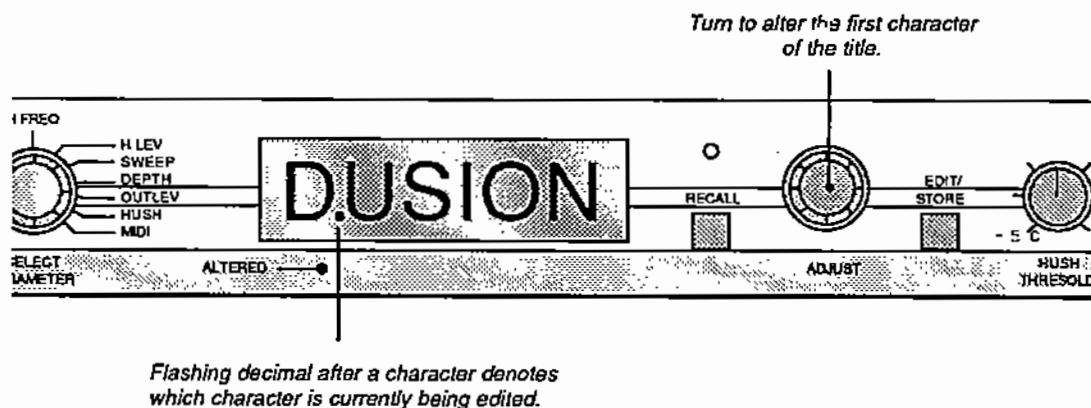
Press to recall preset title  
to be edited.

**Step 2:** When the title of the preset is being displayed, pressing the EDIT/STORE button will initiate the title edit mode. "TITLE EDIT" will scroll across the display, then the current title will appear with the decimal point of the first character flashing.

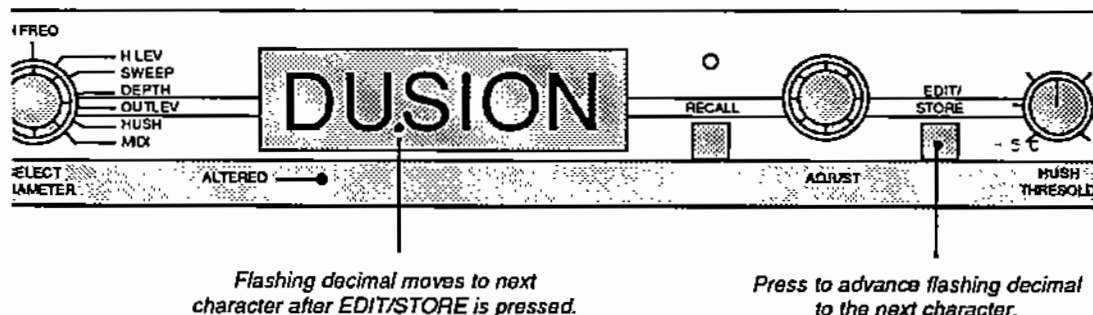


Press while preset title is  
displayed to initiate Title  
Edit mode.

**Step 3:** Turn the ADJUST control to change the first character of the title. The flashing decimal after the first character denotes which character is currently being edited.



**Step 4:** When the desired character is selected, press the EDIT/STORE button to store the character and start editing the next character. Each time the EDIT/STORE button is pressed, the flashing decimal point will advance to the next character. After each character is edited, the EDIT/STORE button must be pressed to store that character.

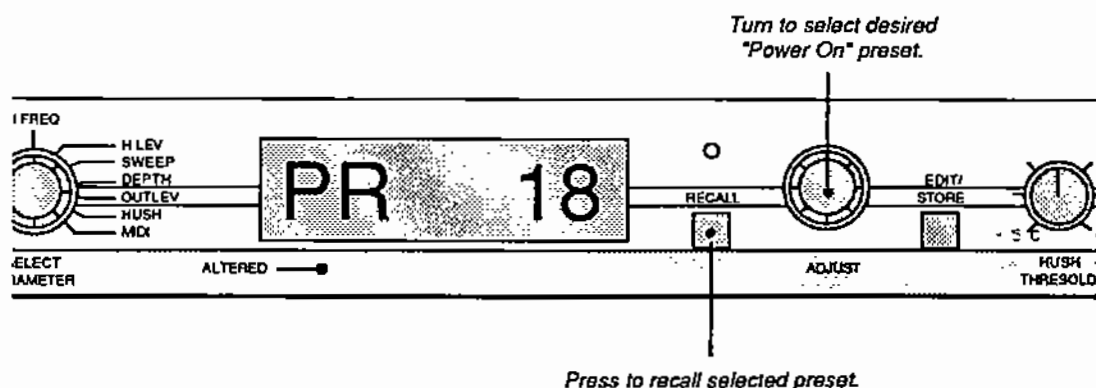


**Step 5:** To end title editing, press the RECALL button, or turn the SELECT PARAMETER control.

### G. Selecting a "Power On" Preset

The Programmable BASS will allow you to select a preset which will be recalled each time the unit is turned on.

**Step 1:** To select a "Power On" preset, first the preset you wish to be recalled each time the Programmable BASS is turned on.



**Step 2:** Turn the SELECT PARAMETER control fully clockwise to the "MIDI" position.



**Step 3:** Press the EDIT/STORE button. "STORED" will flash on the display and the current preset will be recalled each time the unit is turned on.

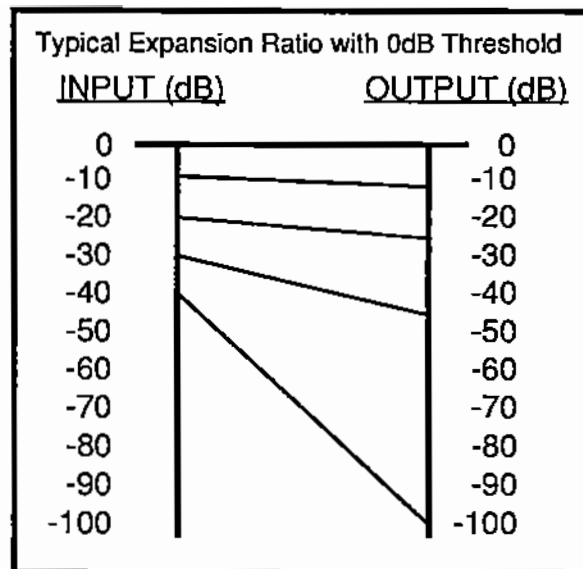


Press to store the "Power On" preset.

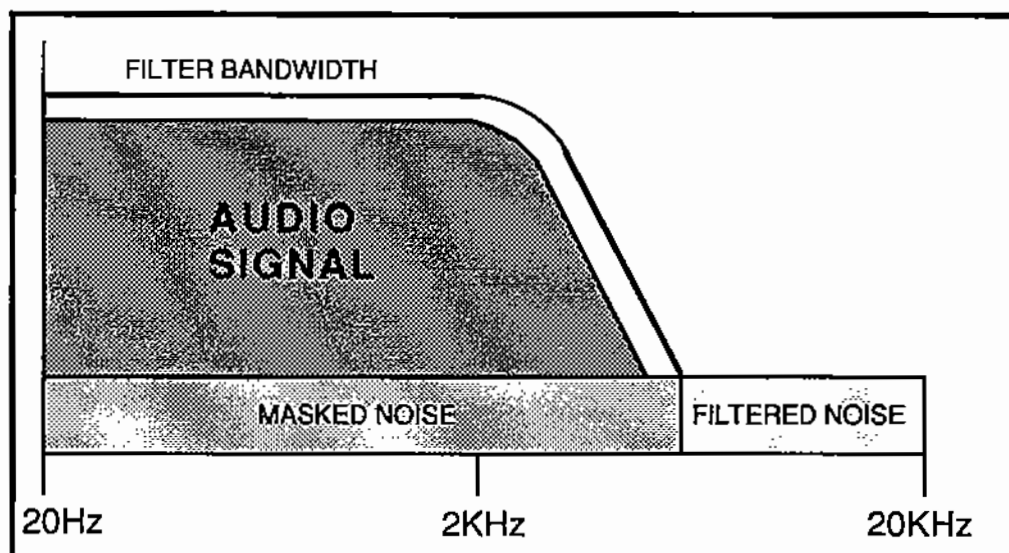
## H. HUSH™ Section

The HUSH is Rocktron's own single-ended noise reduction system. The HUSH circuit is comprised of two parts: the expander and the dynamically controlled low-pass filter.

The expander operates like an electronic volume control. The design utilizes a voltage controlled amplifier (VCA) circuit which can control the gain between the input and output from unit to 30, 40, or even 50dB of gain reduction. When the input signal is above the user pre-set threshold point, the VCA circuit is at unity gain. This means that the amplitude of the output signal will be equal to that of the input signal. As the input signal amplitude drops below the user preset threshold point, downward expansion begins. At this point the expander operates like an electronic volume control and gradually begins to decrease the output signal level relative to the input signal. For example, if the input signal were to drop below the threshold point by 10dB, the output would drop approximately 12dB. As the input signal drops further below the threshold point, downward expansion increases exponentially. For example, if the input signal dropped 20dB below the threshold point, the output level would drop by approximately 30dB. A drop in the input level by 30dB would cause the output to drop by approximately 60dB, i.e. 30dB of gain reduction. In the absence of any input signal, the expander circuit will reduce the gain so that the noise floor becomes inaudible (see figure at top of next page).



The dynamically-controlled low-pass filter operates as follows. In the absence of any audio signal, the dynamic filter will close down to the factory preset cut-off point of 800Hz. This means that the filter is only allowing frequencies of 800Hz and below to pass through. If an input signal had a bandwidth from 20Hz to 1KHz, the filter would open far enough to pass up to the 1KHz frequency and its harmonics, while reducing any noise present from approximately 2KHz to 20KHz. If a broad band signal, with frequency components up to 20KHz appears at the input, the dynamic filter would open to its full extreme allowing the bandwidth to open all the way to 40KHz. In simple terms, what this means is that if a signal is present at the input which is primarily bass components, the dynamic filter will reduce any mid or high band noise. However, if the input signal has high frequency components present, the dynamic filter will open to its full extreme to pass the signal and eliminate the possibility of a loss of high end frequency response. (see fig. below)



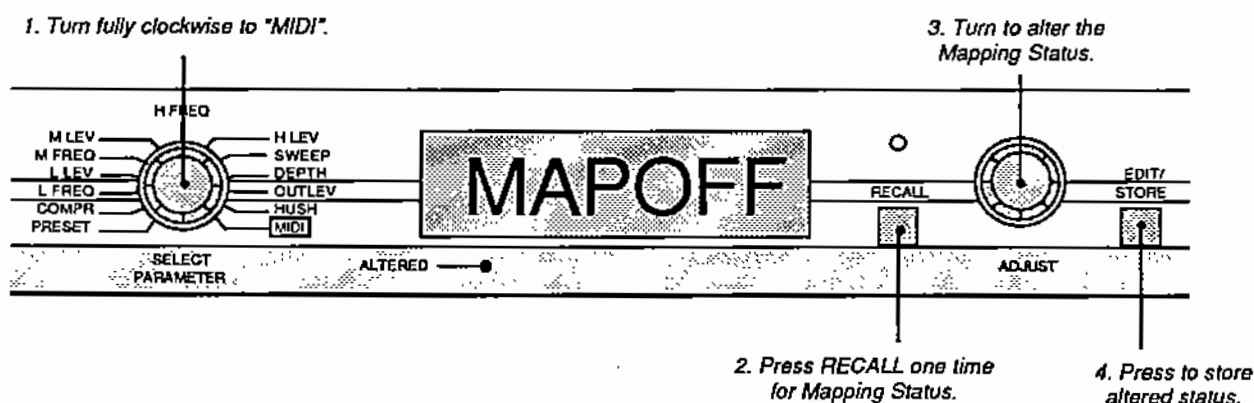
These two processes of downward expansion and dynamic filtering work in unison to produce the highly proficient HUSH noise reduction system.

## 7. MIDI OPTIONS

The most clockwise position of the SELECT PARAMETER control is MIDI. The MIDI options available are as follows: mapping status, program mapping, controller mapping, MIDI channel and Inc/Dec Footswitch type. These options may be stepped through by pressing the RECALL button repeatedly. At each option, the status can be viewed. By turning the SELECT PARAMETER control counter-clockwise while in any mode but the program mapping or controller mapping modes, you will exit the MIDI options.

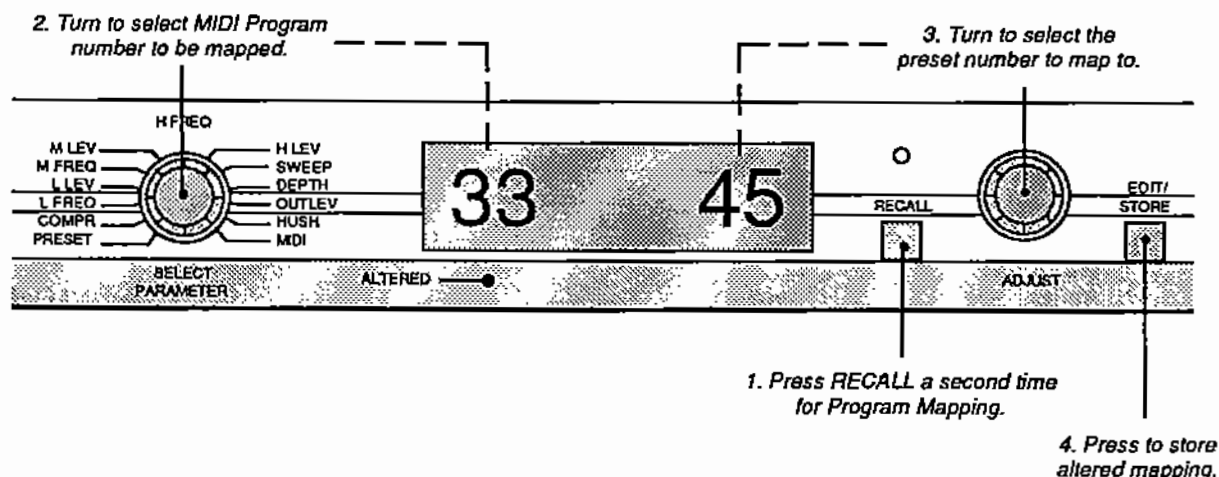
### A. Mapping Status

Mapping status turns the program mapping ON or OFF. When the program mapping is OFF and a MIDI program change is initiated, the preset number recalled is the program number sent via MIDI. When the program mapping is ON and a MIDI program change is initiated, the program number sent via MIDI is mapped to a preset number and that preset is recalled by the Programmable BASS. The program mapping status may be changed by turning the ADJUST control and pressing the EDIT/STORE button. The changed status will remain in effect until it is changed again, even after the unit is powered down.



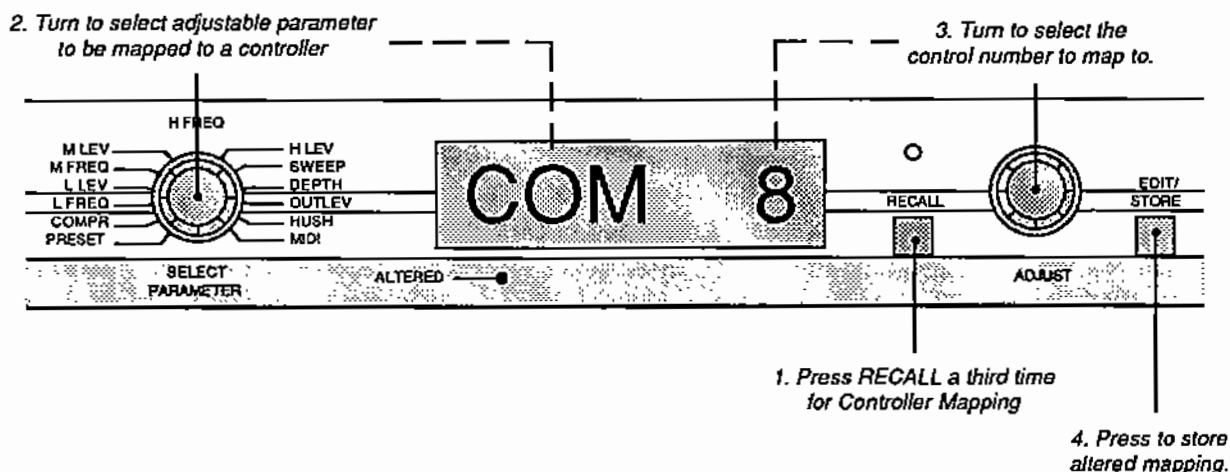
### B. Program Mapping

The program mapping is initially programmed for a one to one correspondence (That is, MIDI program number nine is mapped to preset nine, ten to ten, etc.). The program mapping may be changed by selecting the MIDI program number via the SELECT PARAMETER control, then by selecting the preset number to map to via the ADJUST control. The preset number may also be turned to the OFF position, thereby not responding to the corresponding MIDI program change. Once the desired preset number is selected, press the EDIT/STORE button to save the change for each altered mapping. The mapping change must be STORED before the Programmable BASS will respond to it.



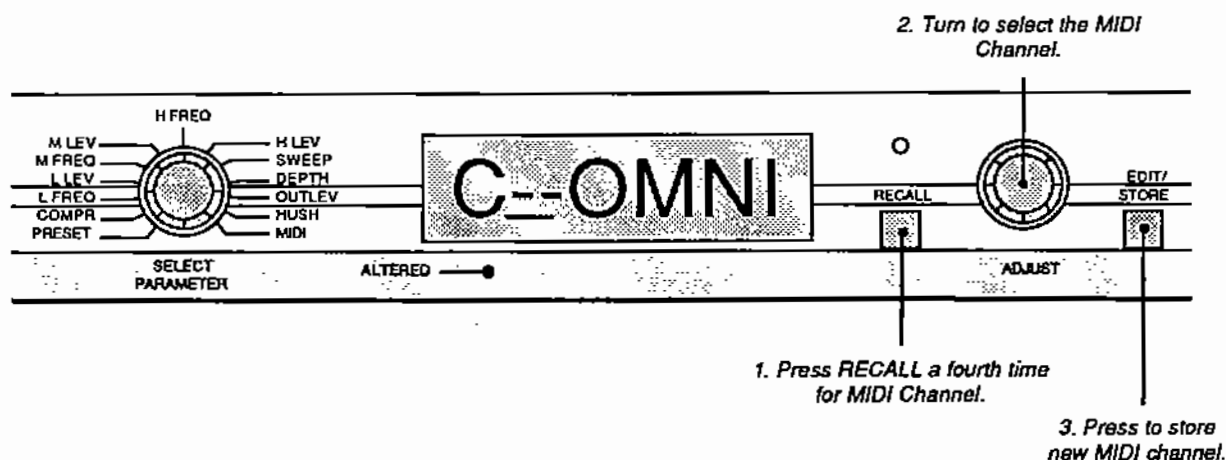
### C. Controller Mapping

The controller mapping will map a Programmable BASS adjustable parameter to a MIDI controller number, starting at controller zero through controller 120, or OFF. The controller mapping may be changed by selecting the parameter via the SELECT PARAMETER control, then by selecting the control number via the ADJUST control. The control number may also be turned to the OFF position, thereby not letting that parameter respond to any MIDI controller change. Once the desired control number is selected, press the EDIT/STORE button to save the change for each altered mapping. The mapping change must be STORED before the Programmable BASS will respond to it.



### D. MIDI Channel Number

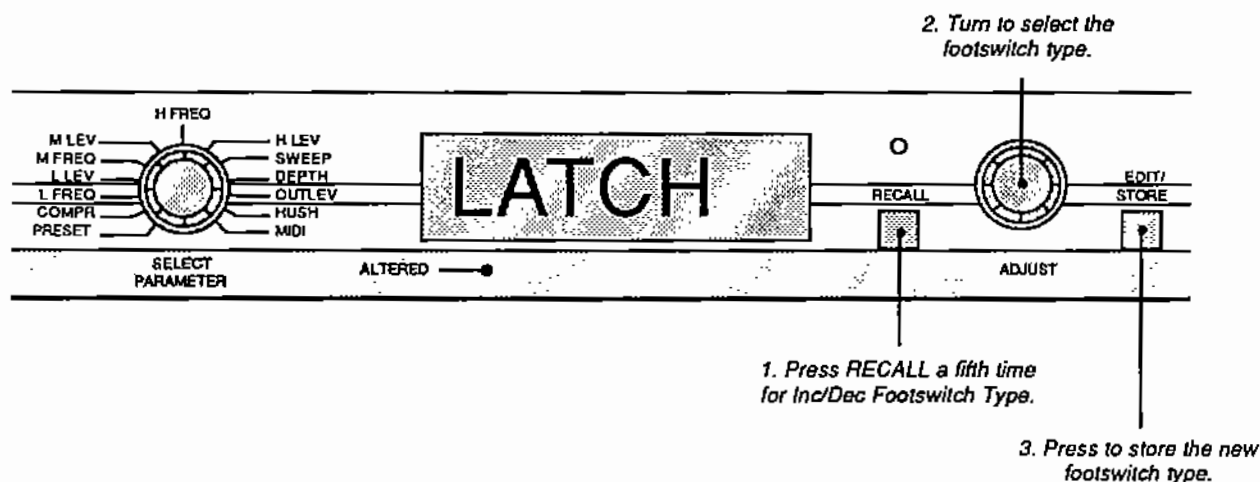
The MIDI channel number is the channel that the Programmable BASS will receive MIDI commands on. To immediately change the channel number, turn the ADJUST control to the desired channel. The channel number may be set to channel number 1-16, OMNI (receives on all channels), or to the OFF position (not allowing the Programmable BASS to receive any MIDI commands). The changed channel need not be stored before the Programmable BASS will respond to it. This change will remain in effect until it is changed again, or until the unit is turned off. If so desired, press the EDIT/STORE button to save the change for the next time the unit is turned on. Be sure that the MIDI channel of the Programmable BASS matches the MIDI channel of the transmitting device you wish to receive MIDI information from.





### E. Footswitch Type Selection

The inc/dec footswitch type allows the Programmable BASS to increment or decrement to the next preset with a simple latch type footswitch or a momentary footswitch. To immediately change the footswitch type, turn the ADJUST control. This change will remain in effect until it is changed again, or until the unit is turned off. If so desired, press the EDIT/STORE button to save the change for the next time the unit is turned on.

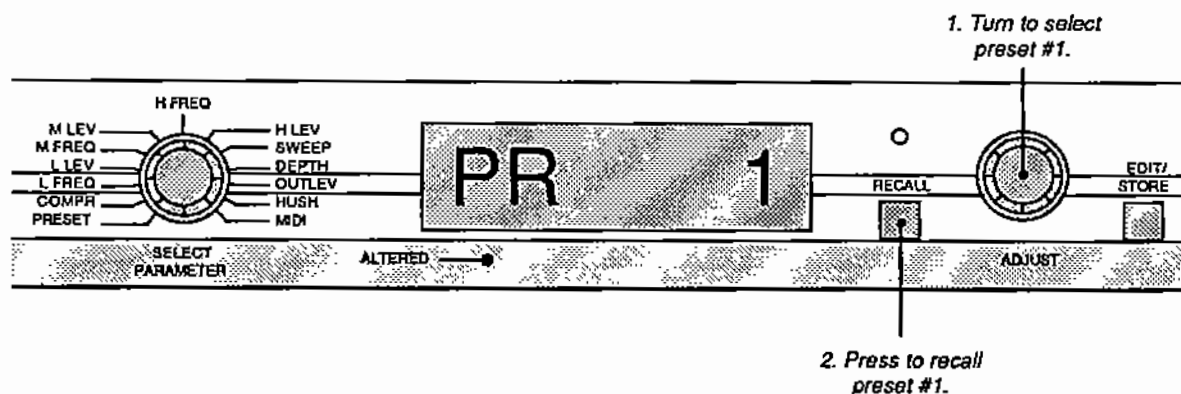


### F. Factory Reinitialization

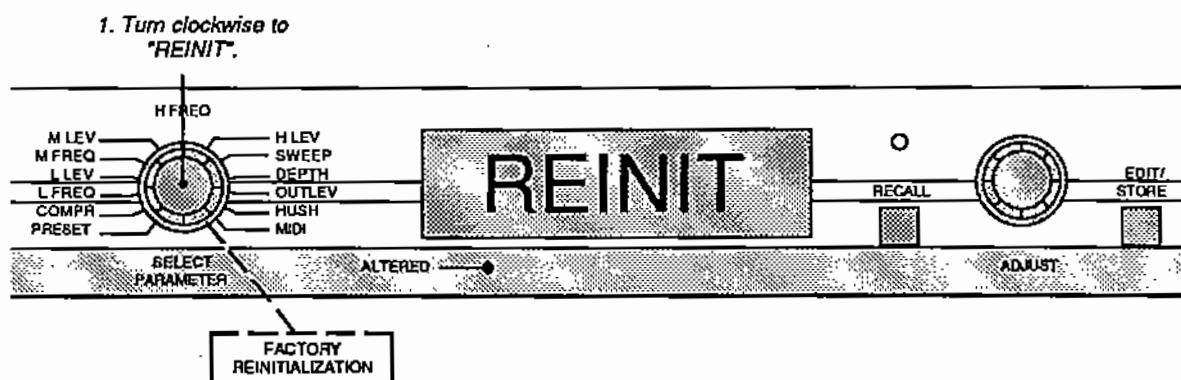
The Factory Reinitialization procedure will allow you to restore the Programmable BASS™ to it's original condition as shipped from Rocktron.

**!! CAUTION !!**  
*This procedure will permanently erase ALL user presets.*

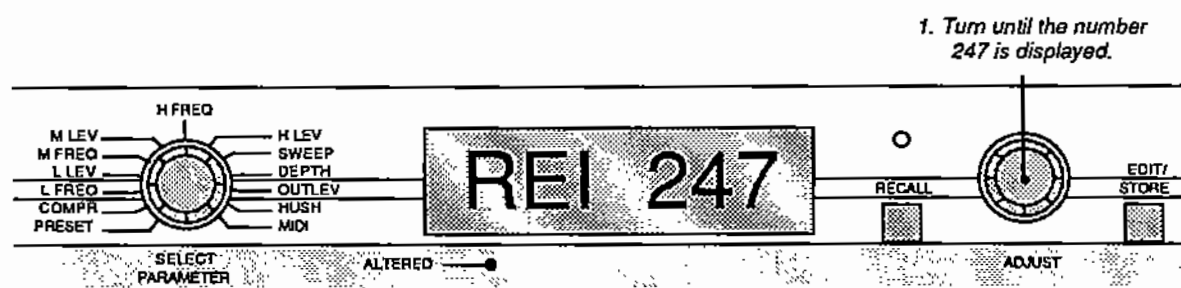
**Step 1:** To perform the factory reinitialization procedure, first recall preset #1.



**Step 2:** Turn the SELECT PARAMETER control fully clockwise until "REINIT" is displayed. This position is one step past "MIDI" and is only available in preset #1.



**Step 3:** Turn the ADJUST control until the number 247 is displayed.



**Step 4:** Pressing the EDIT/STORE button at this time will erase all user programs at this time. Press the EDIT/STORE button. The message "WAIT" will be displayed while the presets, titles, mappings, etc. are being reset to the original factory condition.



1. Press to reinitialize.

**NOTE:** All of the user settings are now erased and the message "ERR 0" should be displayed after the reinitialization is complete. If any message other than "ERR 0" is displayed, the unit may not have reinitialized properly. Once the reinitialization is complete, turn the SELECT PARAMETER control to exit the function.

## 8. SPECIFICATIONS

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### **INPUT**

Input Impedance	470K ohms
Maximum Input Level	+20dBu
Input Jacks	1/4" Mono

### **OUTPUT**

Output Impedance	less than 100 Ohms
Maximum Output Level	+20dBu
Output Jacks	1/4" Mono

### **NOISE FLOOR**

-85dBu

### **DYNAMIC RANGE**

105dBu

### **FREQUENCY RESPONSE**

+1/2dB, -1/2dB  
20Hz - 18KHz

### **MIDI IN CONNECTOR**

7 pin DIN

### **MIDI OUT/THRU CONNECTOR**

5 pin DIN

### **POWER REQUIREMENTS**

9VAC 1100mA

### **DIMENSIONS**

19" x 7" x 1 3/4"

# 9. MIDI IMPLEMENTATION

DATE: July 8, 1991  
MODEL: Programmable BASS

VERSION: 1.4

	FUNCTION	TRANSMITTED	RECOGNIZED	REMARKS
<b>BASIC CHANNEL</b>	DEFAULT CHANGED	1 - 16 1 - 16	1 - 16 1 - 16	MAY BE SAVED IN NONVOLATILE MEMORY
<b>MODE</b>	DEFAULT MESSAGES ALTERED	X X X	X X X	
<b>NOTE NUMBER</b>	TRUE VOICE	X	X	
<b>VELOCITY</b>	NOTE ON NOTE OFF	X X	X X	
<b>AFTER TOUCH</b>	KEY'S CHANNEL	X X	X X	
<b>PITCH BEND</b>		X	X	
<b>CONTROL CHANGE</b>		X X X X X X X X X X X	O O O O O O O O O O O	0 = COMPRESSION 1 = LOW FREQUENCY 2 = LOW LEVEL 3 = MID FREQUENCY 4 = MID LEVEL 5 = HIGH FREQUENCY 6 = HIGH LEVEL 7 = SWEEP 8 = DEPTH 9 = OUTPUT LEVEL 10 = HUSH IN/OUT
<b>PROGRAM CHANGE</b>	TRUE NUMBER	O	O	*PROGRAMS 1 - 128
<b>SYSTEM EXCLUSIVE</b>		X	X	
<b>SYSTEM COMMON</b>	SONG POSITION SONG SELECT TUNE REQUEST	X X X	X X X	
<b>SYSTEM REAL TIME</b>	CLOCK COMMANDS	X X	X X	
<b>AUX. MESSAGES</b>	LOCAL ON/OFF ALL NOTES OFF ACTIVE SENSING SYSTEM RESET	X X X X	X X X X	

**NOTES** \*ACTUAL MIDI PROGRAM VALUE SENT IS 0 - 127. CORRESPONDING TO PRESETS 1 - 128.  
THE Programmable BASS WILL SEND OUT THE PROGRAM CHANGE THAT CORRESPONDS TO THE PROGRAM THAT IS INCREMENTED OR DECREMENTED TO BY THE INC/DEC FOOTPEDAL.  
\*\*THE PARAMETERS MAY BE ASSIGNED TO ANY CONTROL NUMBER FROM 0 - 120, OR THEY MAY BE ASSIGNED TO BE "OFF".

O : YES  
X : NO

# 10. FACTORY PRESETS

#	TITLE	COMPRS	L FREQ	L LEVL	M FREQ	M LEVL	H FREQ	H LEVL	SWEEP	DEPTH	OUTLEV
1	FLAT	OFF	.010	0.0	.20	0.0	.46	0.0	0	OFF	0.0
2	JAZZ 1	36	.400	15.0	.20	15.0	.46	-40	3	50	-14
3	JAZZ 2	50	.400	21.0	2.60	15.0	2.59	-40	0	OFF	-10
4	JAZZ 3	36	.400	15.0	.20	15.0	.46	-40	2	50	-12
5	JAZZ 4	OFF	.400	15.0	2.60	15.0	.91	33.0	0	OFF	-24
6	POP1	100	.010	0.0	.20	15.0	6.50	20.0	0	OFF	-7.5
7	POP 2	OFF	.208	7.5	.56	1.0	.96	16.5	0	OFF	-5.5
8	POP 3	OFF	.400	17.5	1.80	15.0	8.00	28.0	0	61	-15
9	POP 4	61	.035	6.0	.68	-4.5	5.85	16.0	0	20	-2.2
10	POP 5	OFF	.067	-40	.60	8.5	.73	19.0	0	22	-15
11	DEEP	45	.093	9.5	1.85	-7.5	8.00	28.0	2	100	-4.0
12	FUSION	38	.400	11.0	.76	4.5	4.45	22.5	8	16	-12.0
13	SMOOTH	50	.100	12.0	1.50	7.5	2.46	-5.0	5	69	-10
14	RUMBLE	91	.080	15.0	1.15	5.5	3.65	19.5	0	50	-9.0
15	PBASS1	58	.087	7.5	.84	-17	1.60	20.0	0	OFF	-5.0
16	PBASS2	58	.400	15.0	.72	-3.5	8.00	20.0	9	33	-5.5
17	ROCK 1	47	.400	15.0	.31	0.0	.37	20.0	9	100	-14.0
18	ROCK 2	2	.106	-40	.20	-17	.54	-40	0	61	4.0
19	ROCK 3	OFF	.010	25.0	.26	15.0	.46	-40	0	50	-12
20	BASIC	50	.054	22.5	1.00	5.0	3.50	7.0	5	3	-11.0
21	THICK	100	.342	9.0	1.80	0.0	.56	23.0	20	11	-15
22	ROUND	67	.035	23.0	.41	-40	8.00	19.5	2	11	-12.0
23	SOLO 1	11	.324	2.0	.80	9.0	6.50	16.0	3	11	1.0
24	SOLO 2	16	.202	5.5	1.50	14.0	5.00	14.0	3	100	-5.5
25	SOLO 3	OFF	.208	1.0	.96	1.0	1.72	0.0	0	22	5.0
26	BRDGE1	42	.048	7.0	.56	6.0	4.60	13.0	0	OFF	0.0
27	BRDGE2	17	.048	7.0	.64	7.5	3.80	12.5	0	34	-3.0
28	FUNK 1	100	.400	-40	.20	-40	8.00	26.0	0	50	0.0
29	FUNK 2	100	.112	23.0	2.50	15.0	.46	20.0	0	OFF	-15
30	FUNK 3	50	.260	-8.0	.31	1.5	7.00	-40	0	OFF	6.5

**NOTE:** The HUSH™ parameter in each factory preset is set to "ON".





