GENETX™ GUITAR PROCESSOR

GNX1

USER'S GUIDE

:::: DigiTech

The Power to Create

I

DECLARATION OF CONFORMITY

Manufacturer's Name: DigiTech
Manufacturer's Address: 8760 S. Sandy Parkway
                            Sandy, Utah 84070, USA

declares that the product:

Product name: GNX1
Note: Product name may be suffixed by the letters EX, EU, JA, and UK.

Product option: all (requires Class II power adapter that conforms to the requirements of EN60065, EN60742, or equivalent.)

conforms to the following Product Specifications:

Safety:	IEC60065 (1998)
	EN 60065 (1993)
EMC:	EN 55013 (1990)
	EN 55020 (1991)

Supplementary Information:

The product herewith complies with the requirements of the Low Voltage Directive 72/23/EEC and the EMC Directive 89/336/EEC as amended by Directive 93/68/EEC.

DigiTech / Johnson
8760 S. Sandy Parkway
Sandy, Utah 84070, USA
Date: January 25, 2001

European Contact: Your local DigiTech / Johnson Sales and Service Office or

Harman Music Group
8760 South Sandy Parkway
Sandy, Utah
84070 USA
Ph: (801) 566-8800
Fax: (801) 568-7573

Warranty

We at *Digitech* are very proud of our products and back-up each one we sell with the following *warranty:*

1. The warranty registration card must be mailed within ten days after purchase date to validate this warranty.

2. Digitech warrants this product, when used solely within the U.S., to be free from defects in materials and workmanship under normal use and service.

3. Digitech liability under this warranty is limited to repairing or replacing defective materials that show evidence of defect, provided the product is returned to Digitech WITH RETURN AUTHORIZATION, where all parts and labor will be covered up to a period of one year. A Return Authorization number may be obtained from Digitech by telephone. The company shall not be liable for any consequential damage as a result of the product's use in any circuit or assembly.

4. Proof-of-purchase is considered to be the burden of the consumer.

5. Digitech reserves the right to make changes in design, or make additions to, or improvements upon this product without incurring any obligation to install the same on products previously manufactured.

6. The consumer forfeits the benefits of this warranty if the product's main assembly is opened and tampered with by anyone other than a certified Digitech technician or, if the product is used with AC voltages outside of the range suggested by the manufacturer.

7. The foregoing is in lieu of all other warranties, expressed or implied, and Digitech neither assumes nor authorizes any person to assume any obligation or liability in connection with the sale of this product. In no event shall Digitech or its dealers be liable for special or consequential damages or from any delay in the performance of this warranty due to causes beyond their control.

NOTE: The information contained in this manual is subject to change at any time without notification. Some information contained in this manual may also be inaccurate due to undocumented changes in the product or operating system since this version of the manual was completed. The information contained in this version of the owner's manual supersedes all previous versions.

Table of Contents

Section One - Introduction

Congratulations on purchasing the DigiTech GNX1, the most advanced guitar processor of its kind. There has never been a guitar system as unlimited as the GNX1. Thanks to the highly advanced technology provided by GeNetX™ and the extreme horsepower contained in the Audio DNA™ DSP engine, you now have the capability to literally create the tone of your own guitar amplifier and speaker cabinet. All of this power enables you to create a sound that is as unique as your music. In addition to designing your own amp and speaker cabinet, the GNX1 provides the sound coloring tools only a library full of studio quality effects could produce.

The intuitive user interface makes programming as simple as turning a knob. However, when you have to stop playing because your fingers are bleeding, we feel that your recovery time would be well spent by reading through this User's Guide with your GNX1 in front of you. It could assist you in improving on the seemingly perfect tone you may have already created.

Included Items
Before you tear open the packaging and toss the manual over your shoulder, please check to make sure the following items have been included:

- **GNX1**
- **PS0913B Power Supply**
- **Warranty Card**
- **User's Guide**

The utmost care was taken in manufacturing and packaging your GNX1. Everything should be included and in perfect working condition. However, if you find that anything is missing, contact the factory at once. Please take a moment to fill out the Warranty Card. It is your safeguard in the unlikely event that the GNX1 develops a problem.

SECTION ONE – INTRODUCTION

Quick Start

This Quick Start guide is included for those of you who would rather begin creating now and read about the depths of the GNX1 gene pool later.

Making Connections:

Connect your instrument to the **Input** jack on the rear panel. Connect the **Left /Right Outputs** to the input(s) of your amplifier(s), power amp, or mixer.

Apply Power:

Turn the **Output Knob** on the rear panel of the GNX1 all the way down (fully counter clockwise). Connect the plug of the PS0913B power supply to the **Power** jack on the GNX1. Connect the other end of the PS0913B power supply to an AC outlet and turn the GNX1 **Power Switch** to the on position. Turn the power of your amplifier(s) to the on position and adjust the volume(s)to a normal playing level. Gradually increase the GNX1 **Output Knob** to achieve the desired volume.

Select Output Mode:

To select the output mode, press the **Utility** button once and use the **Data Up /Down** buttons to select either Stereo or Mono output mode.

Select Target System Setup:

The GNX1 needs to know the type of amplification system it will be used with. From the previous Output selection step, press the **Rhythm** button once. This will take you to the Target System Setup menu. Use the **Data Up/Down** buttons to select the amplification system you will be using the GNX1 with. Then press the **Exit** button to return the GNX1 to Performance mode.

Select Preset:

The GNX1 comes with 48 pre-programmed Factory Presets, and 48 User Presets. From the factory, the User Presets are exact duplicates of the Factory Presets. This allows you to experiment without running the risk of losing any of the original sounds contained in the GNX1.

Use the **Bank Footswitch** (9) to Select a Bank and the **1-3 Footswitches** (1) to select different Presets. The **Data Up/Down** buttons (7) can also be used to select a Preset. Once you have found Presets that suit your taste, you can alter the sounds to your specific needs. Turning the **Knobs** (5) below the Display will select Amp and Cabinet Models for the Green and Red Amp Channels. The **Middle Knob** will Warp the two channels together. Pressing the **Status** button (4) will provide access to the Gain, EQ, and Level Parameters for the Green and Red Channels. The Effects contained in each Preset can be edited also. Press the **Effect Select Up/Down** buttons (3) to access and edit any of the effects. The Matrix LEDs will light indicating which Effect has been selected. Follow the row with the lighted LED across to determine which column the Parameter needing adjustment is located. Once a parameter has been selected, you may increase or decrease the parameter value to your liking by rotating the **Knob** located directly above the column for the desired parameter. Remember that you are not at risk of losing any of the sounds the GNX1 came with so, don't be afraid to experiment.

A Guided Tour of the GNX1

The Front Panel
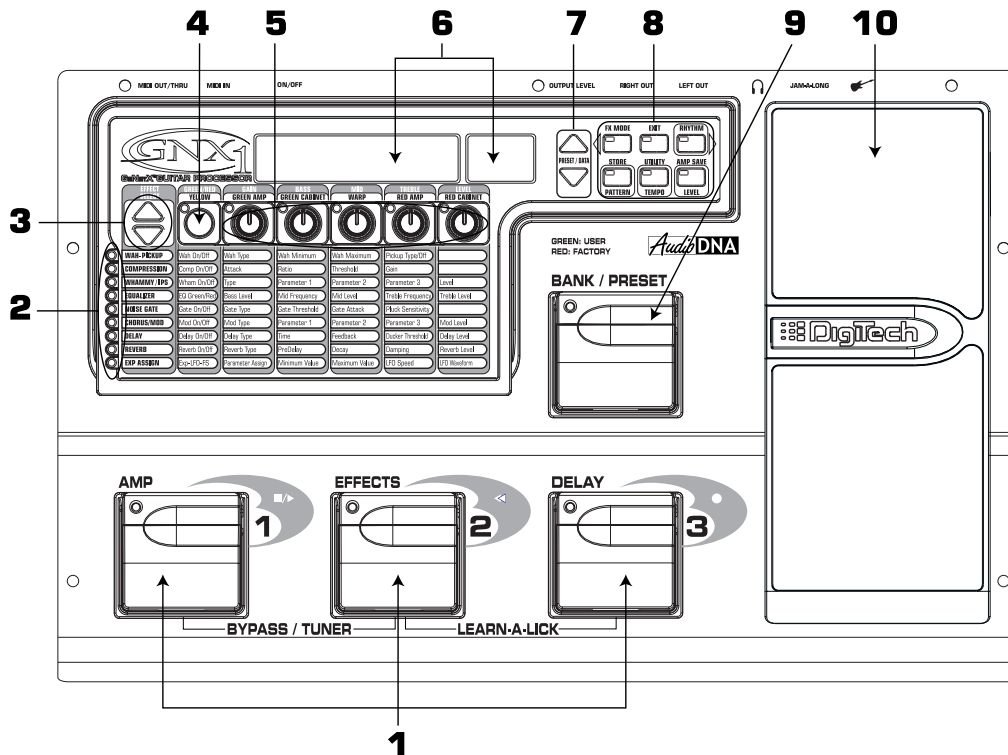
1.1-3 Footswitches - Depending on the currently selected mode, these 3 footswitches are used to select Presets, access the Tuner, turn individual effects on and off, change Amp Channels, select functions in Learn-A-Lick mode, or bypass the GNX1.

2. Matrix - The Matrix LEDs provide a visual indication of active effects for the currently selected Preset in performance mode, or the currently selected effect row in edit mode.

3. Effect Select Buttons - The Effect Select buttons are used in conjunction with the Matrix LEDs to choose the row of effects you wish to edit.

4. Status Button - In Performance mode, the Status button is used to select the Green or Red Amp Channel. The Status button is also used to enable the Amp and Cabinet Warping feature (indicated by a yellow LED next to the Status button). In Edit mode it is used to change the on/off status of the selected effect, select the Green or Red Channel for EQ edits, or select a controller type for Expression Assignment.

5. Parameter Knobs - In performance mode, these 5 knobs are used to select Amp Models, Speaker Cabinets, and Warp the Models. In Green or Red mode, they adjust the Amp Gain, EQ and Level for the Green and Red Amp Channels. In Edit mode, they are used to adjust the Parameters listed in the column directly below each knob for the currently selected row of Effects.

6. Display - The Display consists of six alpha-numeric green characters, and two red numeric digits. The Display provides information for several different functions depending on the mode that has been selected. In **Performance** mode, the Display will show the currently selected Preset name and number. The Display will also show Bank names when changing banks, and momentarily flash the active Amp Channel when the Amp Channel is switched. In **Edit** mode, the alpha-numeric Display will show the currently selected Effect Parameter and value or status of the Parameter. In **Tuner** mode, the numeric Display will show the note played and provide sharp or flat indications. In **Learn-A-Lick** mode, the alpha-numeric display shows the currently selected function and the numeric Display provides an elapsed time for record and playback.

Section One – Introduction

7. Data Up/Down Buttons - These buttons are used to increase and decrease the currently selected Preset in Performance mode, value of currently displayed parameter in edit mode, the value or status of the currently selected Utility or Rhythm function, or the alpha-numeric character in the naming procedure.

8. Mode Buttons - These 6 buttons are used to select various modes in which the GNX1 will function. The Exit button performs a single function while the other 5 buttons perform dual functions based upon the current operation of the GNX1. The buttons are labeled as follows:

A) FX Mode - The FX Mode button selects whether the 1-3 footswitches will recall Presets within the selected Bank, or act as on/off switches for the individual effects in the currently selected Preset. The FX Mode button will light when the switches are performing effects on/off functions. The function of this button changes to select the previous character when naming a Preset, or select the previous menu in Utility mode.

B) Exit - This button acts as a panic button and is used to escape from any mode or level of editing returning the GNX1 to Performance mode.

C) Rhythm - The Rhythm button is used to access the Rhythm Trainer drum loop feature in the GNX1. When the Rhythm feature is selected, the LED will light, the drum loop begins playing, and the bottom row of Mode buttons can be used in conjunction with the Data Up and Down buttons to select and edit the Pattern, Tempo, and Level. The function of this button changes to select the next character when naming a Preset, or select the next menu in Utility mode.

D) Store - The Store button is used to save your custom edits to the user Presets. The function of this button changes to select Pattern in Rhythm mode.

E) Utility - The Utility button provides access to several global functions including Output Mode, Target System Setup, Volume Pedal Update, V-Switch, Pedal Calibration, Bank Names, MIDI Channel, Sysex Dumps, MIDI Mapping, MIDI Merge, and Factory Reset menus. The function of this button changes to select Tempo in Rhythm mode.

F) Amp Save - This button is used to store any changes made to the characteristics of Amps and Cabinets (tone, gain, level, amp type, cabinet type, warp, or cabinet tuning) as HyperModels™ for later retrieval or warping. The function of this button changes to select Level in Rhythm mode.

9. Bank/Preset Footswitch - The function of this switch will change depending upon whether the FX Mode is active or inactive. When FX Mode is active, this switch is used to change Presets. Successive presses of this switch will advance through all User Presets (indicated by a green LED), and Factory Presets (indicated by a red LED). Pressing and holding this switch will descend backwards through all User and Factory Presets. When FX Mode is inactive, successive presses of this switch will advance through all User (indicated by a green LED) and Factory (indicated by a red LED) Banks. Pressing and holding this switch will descend backwards through all User and Factory Banks.

10. Expression Pedal - The Expression Pedal controls the assigned Effect Parameter in real time. Most Parameters within the GNX1 are available for Expression Pedal assignment. Applying extra pressure to the toe of the Expression Pedal will switch between controlling the assigned Parameter and turning the Wah on and off.

Rear Panel
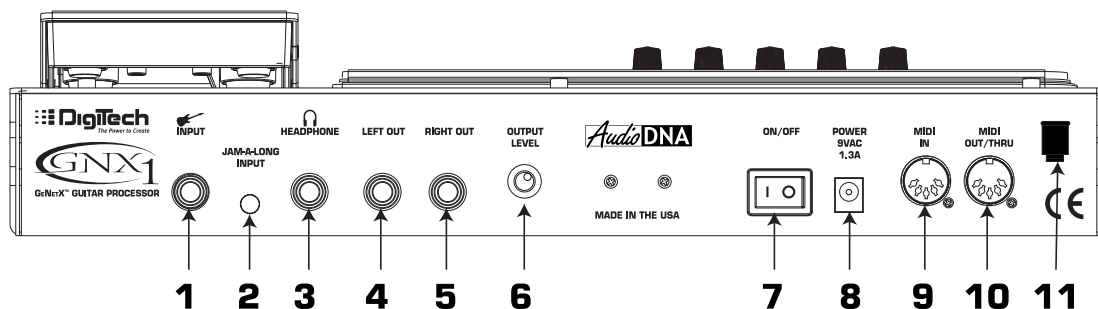
1. Input Jack - Connect your instrument to this jack.

2. Jam-A-Long Jack - Use an 1/8″ stereo plug to connect this jack to the output of a tape or CD player. This allows you to jam along with the music, or to record a musical passage into the Learn-A-Lick phrase recorder.

3. Headphone Output - Connect stereo headphones to this jack. Be sure to set the Target System Setup mode to Direct when listening through Headphones (see page 34 for more information on selecting the Target System Setup). Do not connect a mono plug to this jack as doing so may damage the output driver.

4. Left Output - Connect from this jack to the input of an amplifier, input of a power amp, or line input of a mixing console.

5. Right Output - Use this jack in conjunction with the Left Output for stereo applications. Connect from this output to the input of a second amplifier, or the right input of a stereo power amp.

6. Output Level - This knob controls the overall volume level of the GNX1.

7. Power Switch - Turns the power to the GNX1 on and off.

8. Power Input - Connect only the provided DigiTech PS0913B power supply to this jack.

9. MIDI In - This jack is used to receive all incoming MIDI data intended to control the GNX1. Connect from this jack to the MIDI out of a computer, sequencer, MIDI controller, or MIDI storage device.

10. MIDI Out/Thru - This jack is used for all MIDI data being sent out of the GNX1. Connect from this jack to the MIDI in of a computer, or external MIDI recording device. When enabled, the MIDI Thru function of this jack sends out the same information that is received at the MIDI In of the GNX1.

11. Strain Relief - This is used to secure the power cord and prevent possible disconnects during performance.

SECTION ONE – INTRODUCTION
Getting Started

Making Connections

Before connecting the GNX1, make sure that the power to your amplifier is turned off, and that the power switch on the rear panel of the GNX1 is in the off position.

There are several different connection options available when using the GNX1. You may run mono into an amp or power amp, stereo into two amps or a stereo power amp, direct into a mixing console, or a combination of these. The following diagrams show the connections for some of these options.

NOTE: The type of amplification system the GNX1 will be used in should be selected in the **Target System Setup** of the Utility menu. See page 34 for more information on selecting the Target System Setup.

Mono Operation

Connect your guitar to the input of the GNX1. Connect the Left output of the GNX1 to the instrument input on your amplifier, or to the line input of a power amp. Select Mono as the Output mode in the Utility menu. See page 34 for more on selecting the Output mode.

Guitar Input/Effect Return   **Left Output**   **Input**
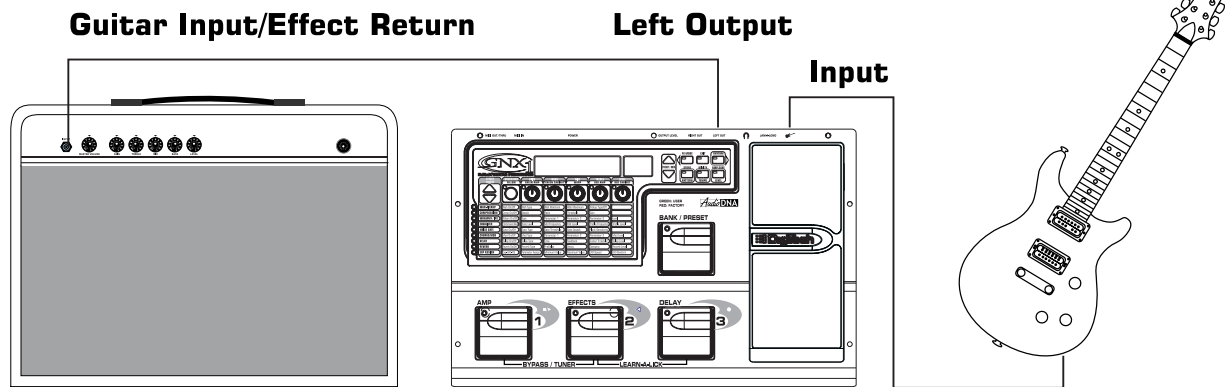
Stereo Operation

For stereo operation connect the guitar to the input of the GNX1. Connect from the GNX1's Left output to the input of one amplifier or channel of a power amp. Connect from the Right output of the GNX1 to a second amplifier, or to a second channel of a power amp. Select Stereo as the Output mode in the Utility menu. See page 34 for more on selecting the Output mode.

Guitar Input/Effect Return   **Left Output**   **Right Output**   **Input**   **Guitar Input/Effect Return**
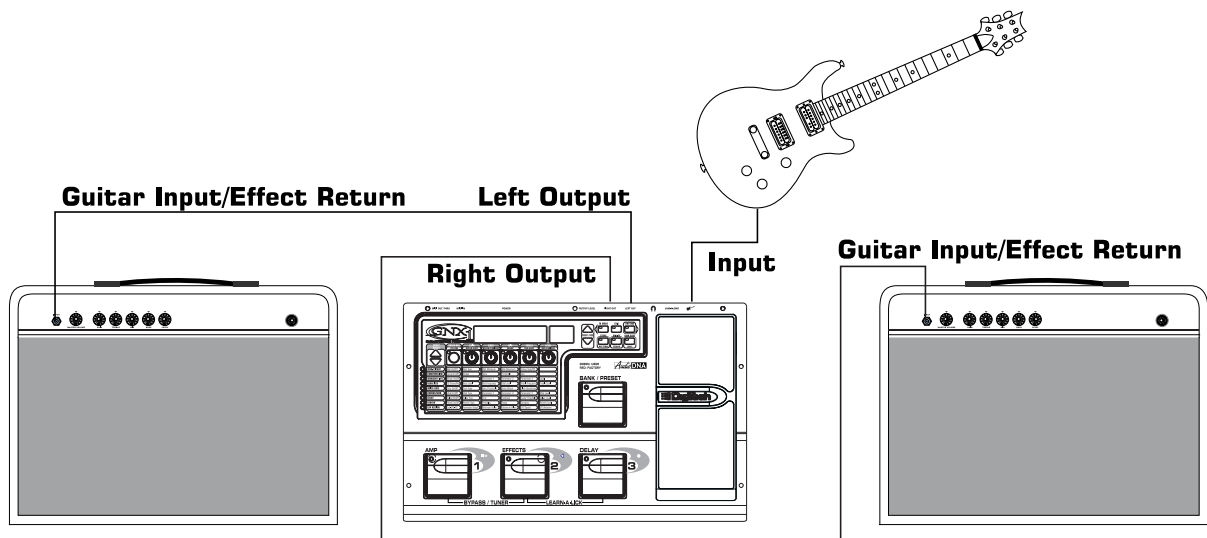
Direct to a Mixing Console

The GNX1 can be connected directly to the inputs of a house PA system, or to a recording console. Connect the guitar to the input of the GNX1. Connect from the outputs of the GNX1 to the channel inputs of the mixing console. If the GNX1 is to be used in Stereo mode, set the pan controls of the mixer hard left and right, and select stereo as the output mode in the GNX1's Utility menu. See page 34 for more information on the output mode.
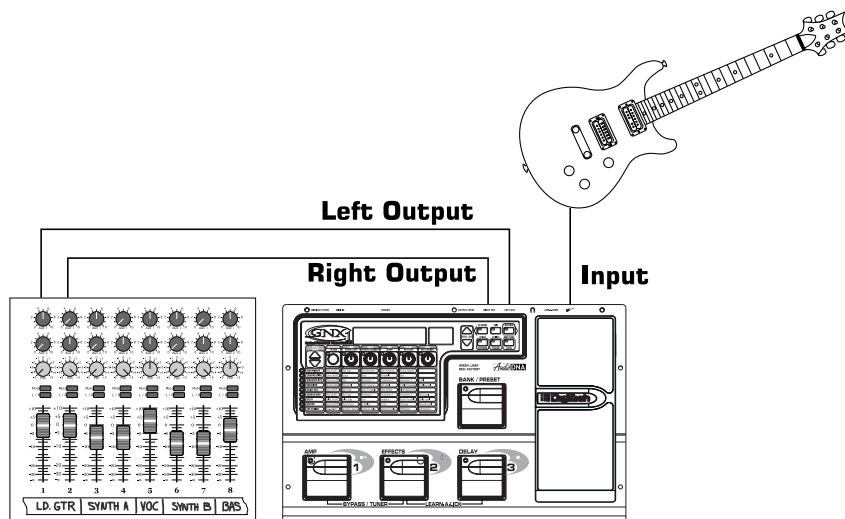
Applying Power

Once the audio connections have been made, turn the Output Level on the rear panel of the GNX1 all the way down (counterclockwise). Connect the PS0913B to the power jack on the back of the GNX1 and the other end to an AC outlet. Turn the power switch of the GNX1 to the On position. Turn the power to your amplifier(s) on. Set the amp(s) to a clean tone and set the tone controls to a flat EQ response (on most amps, this would be 0 or 5 on the tone controls). Turn the Output Level of the GNX1 up to achieve the desired volume level.

About the GNX1

The Presets

Presets are named and numbered locations of programmed sounds which reside in the GNX1. Presets can be recalled with the Footswitches or the Data Up and Down Switches. The GNX1 comes with 48 Factory and 48 User Presets available. The Factory Presets will not allow you to store any changes to them. The User Presets are locations where your creations may be stored. From the factory, the 48 User Presets are exact duplicates of the 48 Factory Presets. This allows you to make your own Presets without the worry of losing any of the original sounds that the GNX1 came with. When you select a Preset, the name of the Preset will be shown in the green alpha-numeric Display and the number of the Preset will be shown in the red numeric Display. The LED at the top of the Bank/Preset Footswitch will light green to indicate a User Preset and red to indicate a Factory Preset.
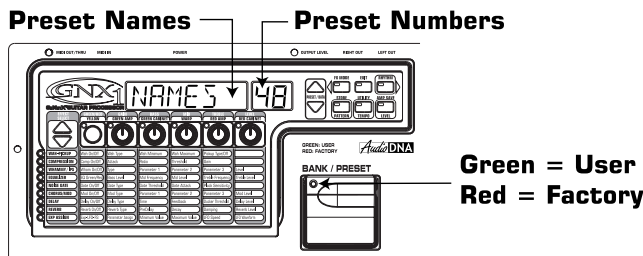
SECTION ONE – INTRODUCTION

Performance Mode

When you first apply power to the GNX1, it will power up in Performance mode. This is the top level mode and the mode used while you are performing. While in Performance mode, the Display will show the currently selected Preset's name and number. The vertical LEDs on the Matrix will indicate the Effects which are active in the selected Preset. From Performance mode, you have access to all of the Presets within the GNX1 with your choice of assigning the Footswitches to either Preset Mode or FX Mode.

Preset Mode

Preset Mode is the default mode from the factory. In Preset mode, the 1-3 Footswitches will call up Presets in the currently selected Bank. The Bank Switch is used to select the 16 User/Factory Banks. Successive presses of the Bank/Preset switch will advance forward through all User/Factory Banks. Pressing and holding the Bank/Preset switch will scroll backwards through all User/Factory Banks. Once the desired Bank has been selected, the LEDs in the 1-3 Footswitches will flash indicating that a Preset within that bank needs to be selected in order to activate the Bank. If no Preset selection is made within 5 seconds, The GNX1 will return to the last Bank and Preset that had been active.

LED Off Indicates Preset Mode

Switches Select Presets

Selects Banks
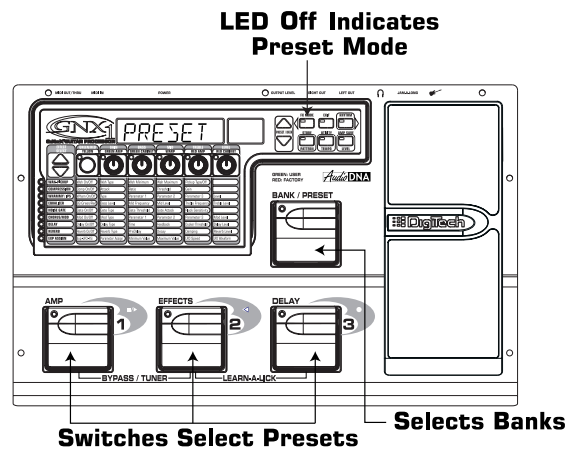
FX Mode

FX mode is another mode of operation which can be used during a performance. The FX Mode button (located to the right of the Display) is used to switch between Preset and FX Modes. When the FX mode is active, the FX Mode button will light. In FX Mode, the 1-3 Footswitches toggle the designated Effects. Depending on which effects are active in the current Preset, these switches may have one or more LEDs lit indicating the status of these effects. Footswitch 1 toggles between the Green, Red, and Yellow amp channels. Footswitch 1 will light either green, red, or yellow indicating whether the Green Channel, Red Channel, or a Warped combination of the Green and Red Channels is active. Footswitch 2 turns on and off the Chorus/Mod Effects Module. Footswitch 3 turns on and off the Delay. The Bank/Preset switch is used to change Presets. Successive presses of the Bank/Preset switch will advance forward through all Factory and User Presets. Pressing and holding the Bank/Preset switch will scroll backwards through all Factory and User Presets.

LED On Indicates FX Mode

Switches Toggle Effects
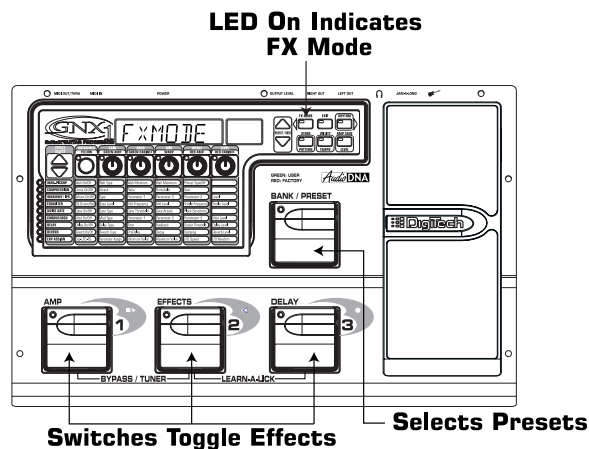
Selects Presets

The Footswitches

As explained previously, Preset Mode utilizes Footswitches 1-3 to select Presets, and the same switches will toggle Effects in FX Mode. However, these footswitches are also used to access other functions in the GNX1. Pressing the **1** and **2 Footswitches** simultaneously, or pressing the currently lit **Footswitch** (in Preset mode) will bypass the GNX1. Pressing and holding the **1** and **2 Footswitches** simultaneously will access the Tuner mode. Pressing the **2** and **3 Footswitches** simultaneously will activate the Learn-A-Lick mode. In the Learn-A-Lick mode, the 1-3 switches will activate the various Learn-A-Lick functions.

The Expression Pedal

As you go through the different Presets in the GNX1, you will find that the expression pedal has different functions. This pedal can be assigned to control three different parameters in each Preset. Rocking the **Expression Pedal** back and forth will change the value of the assigned parameters. You can assign minimum and maximum values (stop points) for each parameter that you control with the pedal. The Expression Pedal also includes a feature called V-Switch which allows you to override the Parameters assigned to the Expression Pedal and replace its assignment with the Wah. See page 32 for more information on assigning the Expression Pedal.

Bypass Mode

The GNX1 can be bypassed for a clean, unprocessed, straight guitar tone. Bypass mode disengages all Modeling and effects. To bypass the GNX1 in Preset mode, press the **Footswitch** representing the currently active Preset (the 1-3 footswitch that is lit), or press **Footswitch 1** and **2** simultaneously. To bypass the GNX1 while in FX Mode, press the **1** and **2 Footswitches** simultaneously. When the GNX1 is bypassed, the Display will read BYPASS and all LEDs in the Matrix will turn off. Pressing any **Footswitch** will exit Bypass and return to the last Preset used. None of the Matrix or Programming buttons are available in Bypass mode.

Tuner Mode

The Tuner in the GNX1 allows you to quickly tune or check the tuning on your guitar. Enter Tuner mode by pressing and holding **Footswitches 1** and **2** simultaneously. The Display will briefly show TUNER indicating that you are in Tuner mode. To begin tuning, play a note on your guitar (a harmonic at the 12th fret usually works best). The red numeric Display will show the note being played, and the green alpha-numeric display will indicate whether the note is sharp or flat. Arrows to the left (‹ ‹ ‹) indicate the note is sharp and should be tuned down. Arrows to the right (› › ›) indicate the note is flat and should be tuned up. When your note is in tune, the Display will read -› ‹- .

**Arrows Pointing Left
Indicate Note is Sharp**

**Arrows Pointing Right
Indicate Note is Flat**

Note Played

**Press and Hold to
Activate Tuner**
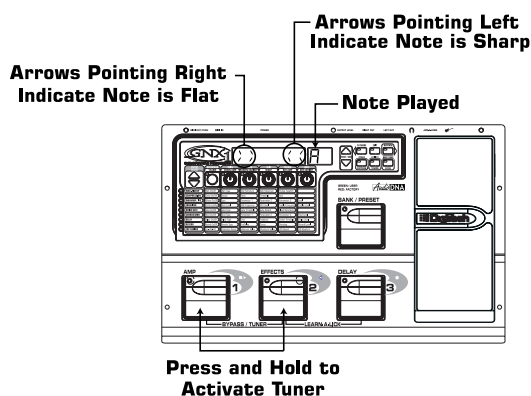
In Tuner mode, you can select your tuning reference with the **Data Up/Down** buttons. The default factory setting is A=440 Hz. The tuning reference ranges from 427 Hz to 453 Hz, which is the equivalent of ± 50 cents (1/2 semitone) in either direction from 440 Hz. When you scroll below 427 Hz, you will also find alternate dropped tunings. Alternate tunings are REF A (A=Ab), REF G (A=G), and REF G (A=Gb). The display window will briefly flash the currently selected tuning preference.

Exit tuner mode by pressing any of the **Footswitches**.

SECTION ONE – INTRODUCTION

Jam-A-Long

The Jam-A-Long feature allows you to connect a Tape, CD, or MP3 player to the GNX1, and Jam with your favorite artists. The signal from your Tape, CD, or MP3 player is output through the left and right, and headphone outputs of the GNX1. To use the Jam-A-Long feature, connect the headphone output of your Tape, CD, or MP3 player to the **Jam-A-Long Input** on the rear panel of the GNX1 using an 1/8″ stereo cable. Then press play on your Tape, CD, or MP3 player.

Learn-A-Lick Mode

The Learn-A-Lick function allows you to record a 9 second passage of music and play it back as slow as 1/4 speed with no change in pitch. This is very useful for picking out the notes of a fast guitar solo.

There are 6 functions for Learn-A-Lick. They are:

- Stop (Controlled by the number 1 Footswitch)
- Play (Controlled by the number 1 Footswitch)
- Tempo Down (Controlled with Data Down button)
- Rewind (Controlled by the number 2 Footswitch)
- Record (Controlled by the number 3 Footswitch)
- Tempo Up (Controlled by the Data Up button)

Using Learn-A-Lick

1. Connect the output of your Tape, CD, or MP3 player's headphone output to the Jam-A-Long input jack on the rear panel using an 1/8″ stereo plug. Set the level of the player to a desired listening level.
2. Cue up to the passage you want to record and hit pause on the Tape, CD, or MP3 player.
3. Press and hold the number **2** and **3 Footswitches** to enter Learn-A-Lick mode. The display will read: LALICK .
4. Release the pause button on your playback device and press the number **3 (Record) Footswitch**. The display will read: RECORD and recording will begin. The red numeric Display will provide a time elapsed reference while recording is in process. When recording is completed, the phrase will be set to an auto-loop playback mode indicated by PLAY in the Display.
5. Press stop or pause on the playback device.
6. Press the **Data Down** button to slow the playback down. Press the **Data Up** button to increase the playback speed to normal at 1/8 speed intervals. Your interval choices include: FULL, 7/8, 3/4, 5/8, 1/2, 3/8, and 1/4 speeds.
7. Pressing the number **2 (Rewind) Footswitch** steps back through the loop at 1 second intervals.
8. The **Expression Pedal** will control output level of the recorded phrase.
9. To stop the playback, press the number **1 (Stop) Footswitch**.
10. To resume playback, press the number **1 Footswitch** again.
11. To record a new passage, press the number **3 (Record) Footswitch**.
12. To exit the Learn-A-Lick mode, press and hold the number **2** and **3 Footswitches**, or press the **Exit** button.

GNX1

Rhythm Trainer

The Rhythm Trainer in the GNX1 is a great tool for developing a great sense of timing, rehearsing different musical styles, or just jamming. The Rhythm Trainer plays sampled drum beats in an infinite loop allowing you to select from a variety of patterns, change the tempo, and adjust the volume level. When the Rhythm Trainer is activated, the drum samples are mixed with your guitar signal at the left, right, and headphone outputs of the GNX1.

To activate the Rhythm Trainer, press the **Rhythm** button once. The Rhythm button's LED will light and the current drum pattern will playback continuously. If Rhythm mode is activated from Performance mode, the LEDs in the Store, Utility, and Amp Save buttons will light indicating that the function of these switches has been replaced with a secondary Rhythm Trainer function. Selecting these buttons while the Rhythm Trainer is active will show the secondary Rhythm function in the Display allowing the Pattern, Tempo, or Level to be adjusted using the **Data Up/Down** buttons.

Pattern

Press the **Pattern** (Store) button to access the drum pattern function. The currently selected drum pattern will be shown in the Display. Use the **Data Up** and **Down** buttons to select the Pattern. There are 30 different Patterns and a metronome available including:

ROCK 1	POP2	DANCE2	SWING1
ROCK 2	POP3	DANCE3	SWING2
ROCK 3	FUNK1	DANCE4	REGGAE
ROCK 4	FUNK2	URBAN1	CHACHA
HROCK1	FUNK3	URBAN2	BOSSA1
HROCK2	BLUES	CNTRY1	BOSSA2
HROCK3	JAZZ	CNTRY2	METRO
POP1	DANCE1	CNTRY3	

Tempo

Press the **Tempo** (Utility) button to access the tempo adjustment. The display shows the current tempo in beats per minute (BPM). Use the **Data Up** and **Down** buttons to change the tempo of the selected Pattern. Tempo ranges from 40BPM (40 beats per minute) to 240BPM (240 beats per minute).

Level

Press the **Level** (Amp Save) button to access the Level adjustment. The display reads DRMLVL (drum level). Use the **Data Up** and **Down** buttons to select the playback volume of the drum loop. Level ranges from 1 to 99.

Presets can be changed or edited while the Rhythm mode is enabled.

Press the **Rhythm** button again to deactivate the Rhythm Trainer.

Section Two - Editing Functions

Editing/Creating a Preset

The GNX1 was designed to make the process of sound creation easy and intuitive. Because the GNX1 provides both Amp Modeling and Effects Processing, the editing functions have been divided into two sections; the Amp/Cabinet Modeling section which provides editing for the Amp and Cabinet Modeling, and the Effects section which provides editing of the extensive Effects library. The GeNetX™ technology contained in the GNX1 allows you to go much further than mere Amp Modeling. GeNetX™ lets you create your own Amp/Cabinet HyperModel™, tune the resonant frequency of the speaker cabinet and store this custom creation to a User Amp/Cabinet location. When editing either the Amp/Cabinet Modeling, or the Effects section, you must start with one of the User or Factory Presets. It is not possible to start with a completely empty Preset. The Preset you begin with does not necessarily need to be the location which you intend to have it reside, as you can save your creation to any User Preset location during the store process. To begin creating a HyperModel™ or just editing the Effects, you will have to select a Preset which will be your starting point by using the **Footswitches** or **Data Up/Down** buttons.

Amp/Cabinet Modeling

Once you have selected a Preset you wish to edit, you can select the Amp Models or Cabinet Types for your Preset. Amp/Cabinet Modeling is a technology which applies the tone of one of several vintage or modern Amp Models and Cabinet Types to your guitar signal. The GNX1 includes accurate emulations of 15 popular Amp Models, 1 Acoustic Guitar Simulation, and 6 Speaker Cabinet Types. Your choices include:

Amp Models

DIRECT	1	- Turns the amp modeling off	CRUNCH	10	- A nice crunchy tube amp combo
BLKFAC	2	- Based on a '65 Fender Twin Reverb	HIGAIN	11	- A high gain tube amp
BOUTIQ	3	- Based on a Matchless DC30	BLUES	12	- A sweet blues tone
RECTIF	4	- Based on a Mesa Dual Rectifier	MODGAN	13	- Based on a Marshall JCM900
HOTROD	5	- Based on a Mesa Boogie Mark II C	FUZZ	14	- A vintage fuzz distortion
TWEED	6	- Based on a '57 Fender Tweed Deluxe	BASSMN	15	- Based on a Fender Bassman
BRTCMB	7	- Based on a Vox AC30 top boost	HIWATG	16	- Based on a HiWatt 50 watt stack
CLNTUB	8	- A clean tube combo setting	ACOUST	17	- A flat top acoustic guitar
BRTSTK	9	- Based on a '78 Marshall Master Volume	EMPTY U1 to U9		- User HyperModel™ Locations

Marshall® is a registered trademark of Marshall Amplification Plc. Vox® is a registered trademark of Korg UK. Fender, Matchless, HiWatt, and Mesa Boogie, are trademarks of their respective companies and are in no way associated with DigiTech.

Cabinet Types

CAB OF	1	- Turns the cabinet modeling off	AM1x12	6	- American 1x12
AM2x12	2	- American 2x12	BL2x12	7	- Blonde 2x12
BR4x12	3	- British 4x12	FN4x12	8	- Fane 4x12
V 4x12	4	- Vintage 30 4x12	GR4x12	9	- Greenback 4x12
BR2x12	5	- British 2x12	EMPTY U1 to U9		- User Locations

Editing Amp Models and Cabinet Types

Each Preset in the GNX1 is equipped with a Green, Red, and Yellow (Warped) Amp Channel. The Green and Red Amp Channels include individually assignable Amp Models, Cabinet Types, Gain, EQ, and Level settings. The Speaker Cabinet can also be tuned meaning that you can select the Cabinet's resonant frequency. Once these Parameters have been adjusted for the Green and Red channels, they can be toggled instantly by use of the **Amp Channel Footswitch** (only when FX Mode is active). The Amp Models, Gain, EQ, and Level characteristics selected for the Green and Red channels can then be Warped together resulting in a completely new HyperModel™.

Selecting Amp/Cabinet Models

The first step to editing an Amp Model, Cabinet Type, or creating your own HyperModel™ is to select the Amp and Cabinet types for the Green and Red Amp channels in your Preset. To do this, the GNX1 must be in the Performance mode which is indicated by the LED next to the Status button lighting yellow. Pressing the **Exit** button will return the GNX1 to Performance mode regardless of the currently selected mode. The procedure for selecting an Amp Model or Cabinet Type for the Green or Red Amp Channels is as follows:

1. Use the **Parameter 1** knob (far left) to select the Green Amp Model. The Amp Model name will appear in the alpha-numeric Display. See the Amp/Cabinet Modeling section on page 12 for a complete list of Amp Models.
2. Use the **Parameter 2** knob (second from the left) to select the Green Cabinet Type. See the Amp/Cabinet Modeling section on page 12 for a complete list of Cabinet Types.
3. Use the **Parameter 4** knob (second from the right) to select the Red Amp Model.
4. Use the **Parameter 5** knob (far right) to select the Red Cabinet type.

Start with Yellow LED
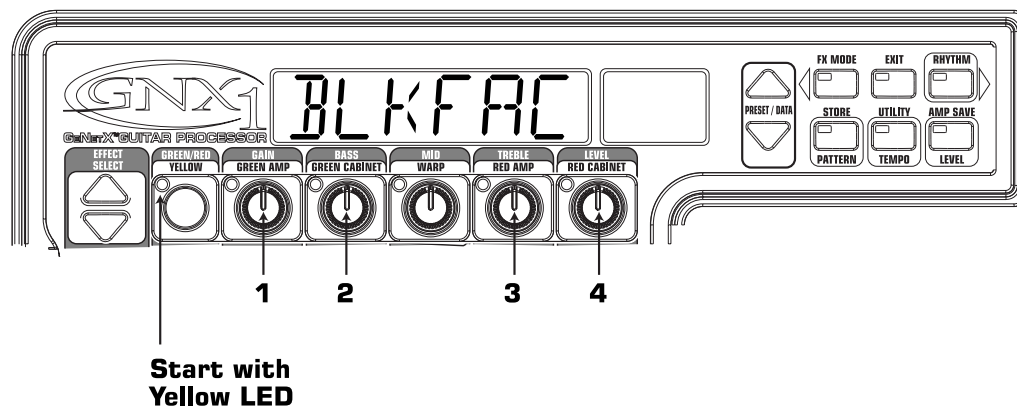
Adjusting Amp Parameters

The Gain, EQ, and Level Parameters can be adjusted individually for the Green and Red Amp Channels. The Gain ranges from 0 (0) to 99 (99). The Bass, Mid, and Treble EQ range from -12 (-12 dB) to 12 (+12 dB). The Level ranges from 0 (0) to 99 (99). The procedure for adjusting the Amp Parameters is as follows:

1. Press the **Status** button until all horizontal LEDs across the columns light green. This indicates that you have accessed the Amp Parameters for the Green Channel.
2. Use the **Parameter 1** knob to adjust the Gain (distortion drive) for the Green Amp Channel.
3. Use the **Parameter 2** knob to adjust the Bass (low frequency) enhancement for the Green Amp Channel.
4. Use the **Parameter 3** knob to adjust the Mid range frequency enhancement for the Green Amp Channel.
5. Use the **Parameter 4** knob to adjust the Treble (high frequency) enhancement for the Green Amp Channel.
6. Use the **Parameter 5** knob to adjust the Level (volume) for the Green Amp Channel.
7. Press the **Status** button again until all horizontal LEDs across the columns turn Red indicating that the Amp Parameters for the Red Channel have been accessed. Then repeat steps 2 through 6 for adjusting the Red Amp Channel.

1 - Green LEDs
7 - Red LEDs
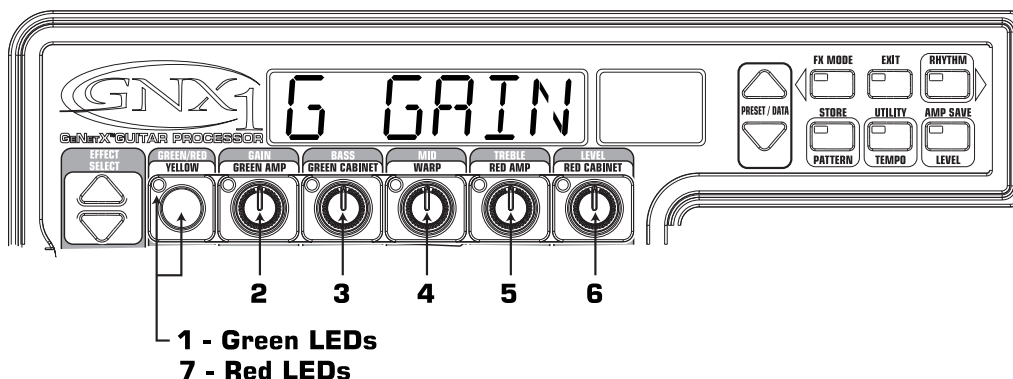
SECTION TWO – EDITING FUNCTIONS

Cabinet Tuning

The resonant frequency of the selected speaker cabinets can also be tuned individually. Cabinet Tuning ranges from -120 (one octave below) to 120 (one octave above). The procedure for tuning the cabinets is as follows:

1. Press and hold the **Status** button. Release the Status button after about 2 seconds when the Display reads CABTUN (Cabinet Tuning) and only the LEDs next to the Parameter 2 and 5 knobs will light indicating that the function of these knobs has changed to Cabinet tuning.
2. Rotating the **Parameter 2** knob will adjust the tuning of the Green Cabinet type (GT).
3. Rotating the **Parameter 5** knob will adjust the tuning of the Red Cabinet type (RT).
4. Once the desired tuning has been selected for both Green and Red Cabinets, press the **Exit** button once.
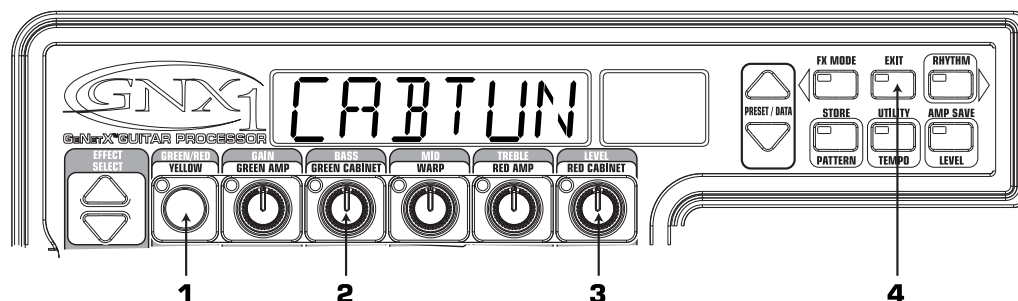
Creating HyperModels™

The creation of new, unique HyperModels™ is what GeNetX™ is all about. Once the Green and Red Amp Models and Cabinet types have been selected and the Amp Parameters and Cabinet Tuning have been adjusted, GeNetX™ technology allows you to do something amazing. The characteristics of each Amp and Cabinet assigned to the Green and Red Channels can actually be combined or "Warped" to create a completely new Amp HyperModel™. The procedure for Warping the Green and Red Amps together is as follows:

1. With the GNX1 in Performance mode (indicated by a yellow Status LED), rotate the **Parameter 3** knob to Warp the Green and Red Amps and Cabinets together. Rotating counterclockwise will add more of the Green Channel characteristics, and clockwise will add more of the Red Channel characteristics.

Saving HyperModels™ (Amp Save)

When you have obtained the desired blend of the Green and Red Channels, you must perform the Amp Save procedure to create your new HyperModel™ for future use. This HyperModel™ can be saved in one of 9 User HyperModel™ locations. Then your new HyperModel™ can be selected for use in either the Green or Red Amp Channel, and even be Warped again with any other Factory Amp Model or User HyperModel™. The Amp Save procedure is as follows:

1. Press the **Amp Save** button once. The Amp Save button will begin to flash and the Display will read NEWAMP. The N of NEWAMP will be flashing indicating that you can now name your HyperModel™.
2. Use the **Data Up/Down** buttons to select the desired alpha-numeric character.
3. Once the desired character has been selected, use the **Rhythm** button to move to the next character (to the right), or the **FX Mode** button to select the previous character (to the left).

3 Use FX Mode and Rhythm Buttons to Select Character Locations

1 Press Amp Save

2 Use Data Buttons to Change Characters
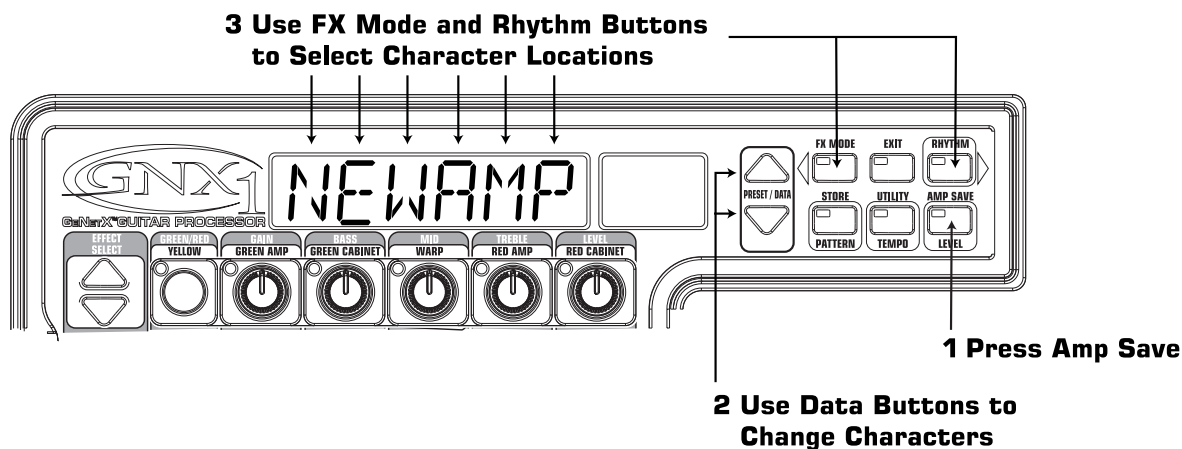
4. Repeat steps 2 and 3 until the desired HyperModel™ name is shown in the Display.

5. Press the **Amp Save** button again to select one of the 9 User HyperModel™ locations. If the GNX1 has any unused HyperModel™ locations available, the Display will read EMPTY U1. The U1 will be flashing indicating that this is the first available location for your new creation to be stored. If all 9 HyperModel™ locations are filled, the GNX1 will default to the first HyperModel™ location and will display the name of HyperModel™ stored in the number 1 location.

6. Use the **Data Up/Down** buttons to select the User location where the HyperModel™ will be saved. If all locations have been used, the Display will show the name of the HyperModel™ about to be overwritten.

5 Press Amp Save

6 Use Data Buttons to Select User Amp Location
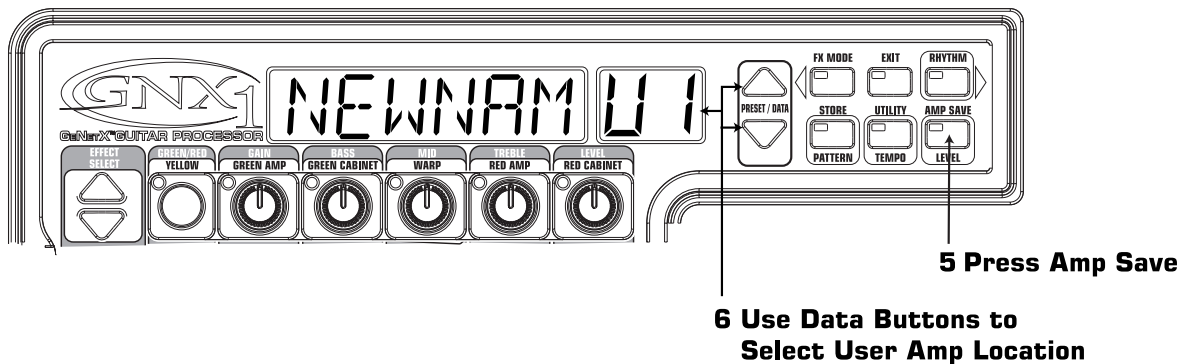
7. Once the desired location has been selected, press the **Amp Save** button again to complete the Amp Save procedure.

Pressing the **Exit** button at any time during the Amp Save procedure will abort the process.

Note: The Amp Save procedure only saves Amp/Cabinet combinations to the User HyperModel™ locations. It does not store any changes or the new HyperModel™ to the currently selected Preset. See page 17 for information on storing changes to a Preset

SECTION TWO – EDITING FUNCTIONS
Editing the Effects

The GNX1 contains a comprehensive library of fully programmable, studio quality Effects. The Effects section is accessed with the **Effect Select Up/Down** buttons. The Matrix LEDs will light one at a time to indicate the selected Effect row. When you have selected the desired effect row, you have up to 5 Parameters which can be edited. Each effect row has been divided into 6 columns of Parameters. The first column is the on/off control for the selected effect. Pressing the **Status** button at the top of the first column will turn the selected effect row on or off. The knobs at the top of the other 5 columns will control the Parameters listed directly beneath the corresponding knob for the selected Effect group. Each Effect Parameter is labeled in the Matrix. When a knob is turned, the corresponding Parameter name will appear in the green alpha-numeric Display and the Parameter value will be shown in the red numeric Display.
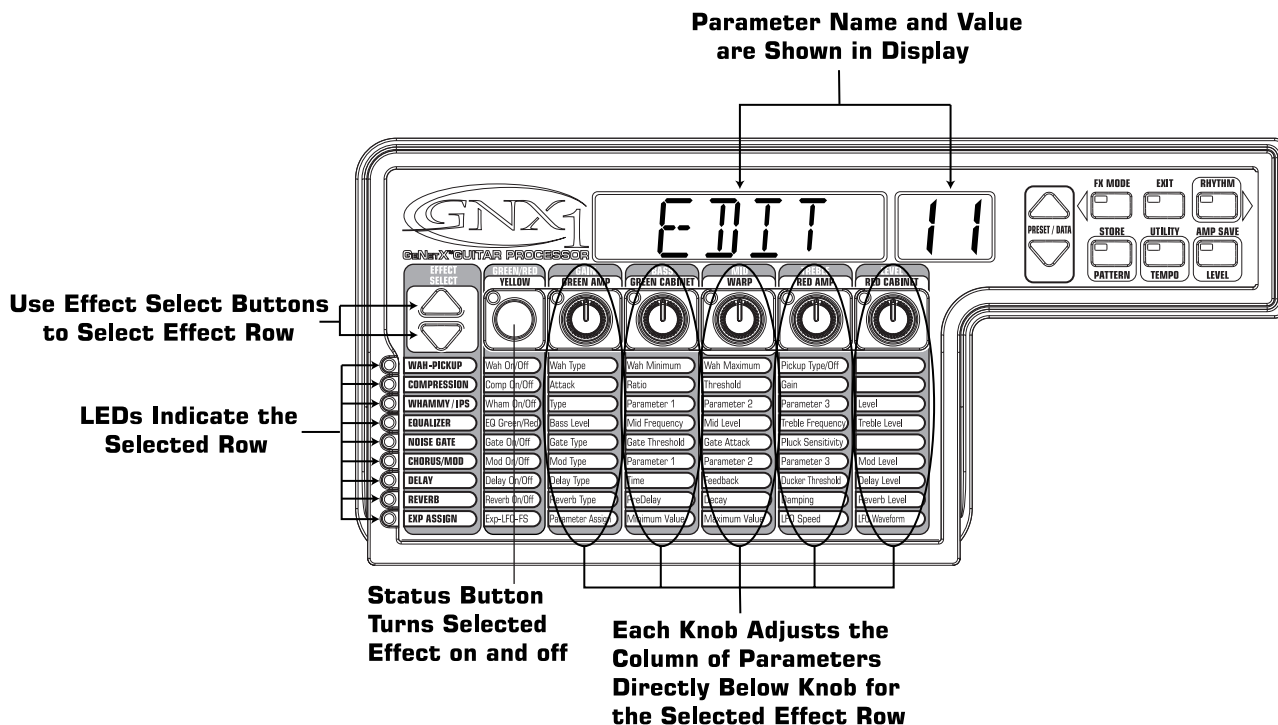
Rotating the **Parameter** knobs will increase or decrease the value of the corresponding Parameter and you will hear the change in real time. When Parameter values have been changed, the Store LED will light indicating the Preset has been modified and must be stored in order to retain your changes (see page 17 for more on the store procedure). Changing Presets, or turning the power off before storing any changes will erase your changes and revert to the stored values for the selected Preset. When the Preset has been edited to your liking, you may store your settings to any of the 48 User Preset locations.

Storing/Copying a Preset

When editing a Preset, the Store LED will light indicating that you have changed a Parameter and need to store the changes. Once you have modified the Amp Models, Cabinet types, and Effect Parameters to your liking, you can store your creation to a User Preset location. The following steps outline the procedure for storing a Preset:

1. Press the **Store** button once and the GNX1 will enter a naming mode. The first letter of the currently loaded Preset name will begin to flash.
2. Use the **Data Up/Down** buttons to select the desired alpha-numeric character
3. Press the **Rhythm** button to select the next character to the right, and the **FX Edit** button to select the previous character to the left.

3 Use FX Mode and Rhythm Buttons to Select Character Locations

1 Press Store

2 Use Data Buttons to Change Characters
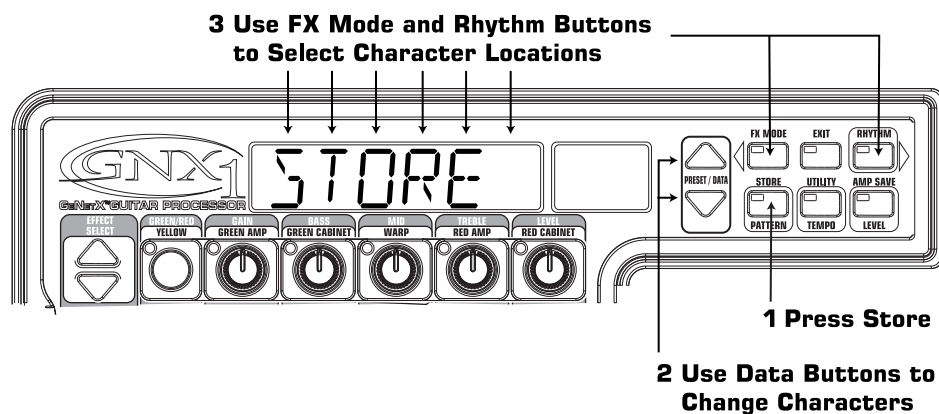
4. Repeat steps 2 and 3 until the desired Preset name shows in the Display.
5. Once you have entered the desired name for the Preset, press the **Store** button again. The current Preset location will flash in the numeric Display. This is asking you to select a User Preset location where your new sound will reside.
6. Select the User Preset location using the **Data Up/Down** buttons.

5 Press Store Again

6 Select a User Preset Using Data Buttons
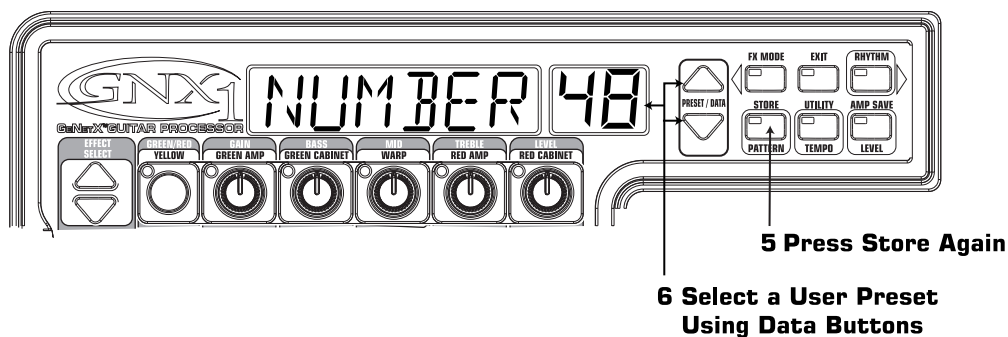
7. Press the **Store** button again to complete the Store process.

The procedure for copying one Preset to another Preset location is the same. Simply begin by selecting the Preset that you want to copy, then follow the steps listed above.

Pressing the **Exit** button at any time during the Store procedure will abort the Store process.

Section Three - Effects and Parameters

About the Effects

The GNX1 can be thought of as several different "virtual" amplifiers, and individual, hi-tech stomp boxes. With stomp boxes, the order in which they are connected can make a big difference in how good the overall sound is. Whether the stomp boxes are placed before the amp, or in the amp's effects loop will also make a difference. The GNX1 has the Effects connected in the most logical, and best sounding order. The following diagram shows the signal path through the processing contained in the GNX1.
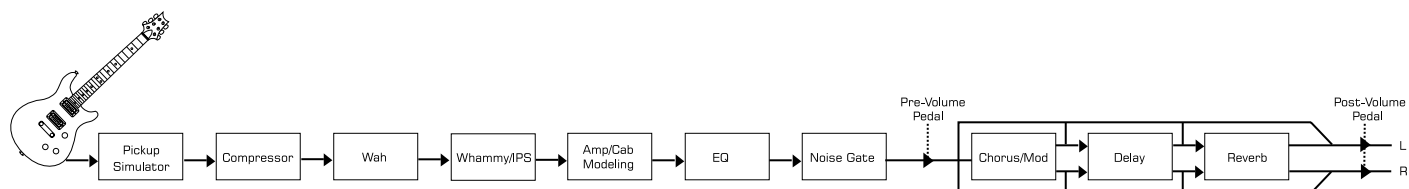
Effect Definitions

Each Effect within the GNX1 is fully programmable to suit your personal tastes and application. Understanding how these Effects will alter the sound, and how each Parameter will alter the Effect will help you achieve the sound you are looking for. The following overview outlines how each Effect and Parameter in the GNX1 will alter the sound.

Wah-Pickup

A **Wah** is an effect controlled by the Expression Pedal. A Wah applies a boost in gain to a narrow band of frequencies. As the Expression Pedal is rocked back and forth, the center frequency receiving the boost is swept up and down making the guitar sound as if it is saying "Wah." The Wah is engaged and disengaged by applying pressure to the V-Switch located under the toe of the Expression Pedal. See Page 35 for more information regarding the V-Switch.

The **Pickup Simulator** applies the warmth and thickness of a double coil humbucker pickup to a single coil guitar, or the unique, crisp sound of a single coil pickup to a guitar with a humbucker. This allows you to have the best of both worlds without ever changing guitars.

Wah On/Off - The **Status** button (or the V-Switch) engages and disengages the Wah effect.

Wah Type - The **Number 1 Knob** selects the type of Wah. Values include: CRY (Cry Wah is a traditional sounding Wah), $BOTIQU$ (Boutique Wah is a wide sweeping Wah with a more modern sound) and $FULRNG$ (Full Range Wah sweeps the entire spectrum of audible frequencies).

Wah Minimum - The **Number 2 Knob** is used to select the minimum point the Wah ($WAHMIN$) will reach in the toe up position of the Expression Pedal. Ranges from 0 to 99.

Wah Maximum - The **Number 3 Knob** is used to select the maximum point the Wah ($WAHMAX$) will reach in the toe down position of the Expression Pedal. Ranges from 0 to 99.

Pickup Type/Off - The **Number 4 Knob** selects the type of Pick Up to be be simulated. Values include: $PCKOFF$ (Pickup Simulator Off), $SC>HB$ (Gives a single coil pick up the warm tone of a humbucker), and $HB>SC$ (Gives a humbucker the unique sound of a single coil).

The Number 5 knob has no function when the Wah-Pickup is selected.

Compressor

A Compressor can be used to increase sustain, and tighten up guitars. A Compressor sets boundaries for a signal's strength. When a signal exceeds the set boundary, it is forced back into the set boundary. As the signal fades to a point where it no longer exceeds the boundary, the compressor expands the signal strength and increases sustain. Compression Parameters are as follows:

Comp On/Off - The **Status** button engages and disengages the Compressor.

Attack - The **Number 1 Knob** adjusts the length of time it takes for the Compressor to respond to a signal exceeding the Threshold. Values include: $FAST$, $MEDIUM$, and $SLOW$.

Ratio - The **Number 2 Knob** adjusts the input to output ratio once the Threshold has been exceeded. For instance, a Ratio of 4 to 1 means that a signal exceeding the Threshold by 4 dB will only be allowed 1 dB of increased output. Higher settings yield a tighter, sound and increase sustain. Lower settings allow better dynamics. Ranges include: $1.2-1$ (1.2:1), $1.5-1$ (1.5:1), $1.8-1$ (1.8:1), $2.0-1$ (2:1), $2.5-1$ (2.5:1), $3.0-1$ (3:1), $4.0-1$ (4:1), $5.0-1$ (5:1), $8.0-1$ (8:1), $10-1$ (10:1), $20-1$ (20:1), and $INF-1$ (infinity:1).

Threshold - The **Number 3 Knob** selects the maximum strength the signal is allowed to reach before the compressor begins to work. Low Threshold settings will activate the Compressor with weaker signals. Higher settings will require a stronger signal to activate compression. Ranges from 0 to 99.

Gain - The **Number 4 Knob** adjusts the Output Gain from the Compressor. This parameter should be used to balance the level of the Compressor in order to achieve unity gain. It is possible to clip other effects in the GNX1 by setting the Compressor Gain too high. Ranges from 0 to 20 (dB).

The Number 5 knob has no function when the Compressor is selected.

Whammy/IPS

This module includes 4 types of pitch altering effects: Whammy™, IPS, Detune, and Pitch Shift. The **Status** button engages (*IPS ON*) and disengages (*IPSOFF*) the Whammy/IPS module. The **Number 1 Knob** (Type) selects whether the module is a *WHAMMY* (Whammy™), *IPS* (Intelligent Pitch Shifter), *DETUNE* (Detuner), or *PITCH* (Pitch Shifter). Parameters 1, 2, and 3 in the Matrix will have different functions depending upon which effect is selected in this module.

Whammy™ is an effect that uses an Expression Pedal to bend the pitch of the incoming signal, or add a bendable harmony with the original signal. As the Pedal is moved, the note will bend either up or down. When Whammy™ is selected, it is automatically placed before the Amp Modeling as shown in the block diagram (at the beginning of the Effects section). The Whammy™ effect must be linked to the Expression Pedal in order to function. See page 32 for more information on linking the Expression Pedal.

Parameter 1 (Whammy™) - The **Number 2 Knob** selects the interval and direction of the pitch bend. Choices are as follows:

Whammy *(no Dry Signal)*
1OCTUP (1 octave up)
2OCTUP (2 octaves up)
2NDDWN (a second down)
REV2ND (a second down reversed pedal action)
4THDWN (a fourth down)
1OCTDN (an octave down)
2OCTDN (2 octaves down)
DIVBOM (Dive Bomb)

Harmony Bends *(Dry Signal Added)*
M3>MA3 (a minor third to a Major third)
2NDMA3 (a second above to a Major third up)
3RD4TH (a third above to a fourth up)
4TH5TH (a fourth above to a fifth up)
5THOCT (a fifth above to an octave up)
HOCTUP (one octave up)
HOCTDN (one octave down)
OCTU>D (one octave up to one octave down)

Parameter 2 (Whammy™) - The **Number 3 Knob** provides a manual control of the Whammy™ pedal position. Ranges from 0 to 99.

The Number 4 knob has no function when the Whammy™ is selected.

Intelligent Pitch Shifting (IPS) makes a copy of the incoming signal, and then changes the pitch of the copied note to a diatonically correct interval specified by the Amount Parameter. An Intelligent Pitch Shifter differs from a regular Pitch Shifter in the fact that an Intelligent Pitch Shifter will sharp or flat the shifted pitch in order to keep the specified interval within the selected key and scale creating a true harmony.

Parameter 1 (IPS) - The **Number 2 Knob** selects the Amount or harmony interval for the Intelligent Pitch Shifter. Interval choices include:

OCTDN (octave down)
7THDN (a seventh below)
6THDN (a sixth below)
5THDN (a fifth below)
4THDN (a fourth below)
3RDDN (a third below)
2NDDN (a second below)

2NDUP (a second above)
3RDUP (a third above)
4THUP (a fourth above)
5THUP (a fifth above)
6THUP (a sixth above)
7THUP (a seventh above)
OCTUP (an octave above)

Parameter 2 (IPS) - The **Number 3 Knob** selects the scale the IPS will use. Key choices include: *MAJOR* (Major), *MINOR* (minor), *DORIAN* (Dorian), *MIXLYD* (Mixolydian), *LYDIAN* (Lydian), *HARMIN* (Harmonic minor).

Parameter 3 (IPS) - The **Number 4 Knob** selects the musical key the IPS will use. Key choices range from *KEY E* (Key E) through *KEY E* (Key Eb) .

GNX1 **19**

SECTION THREE - EFFECTS AND PARAMETERS

Detuning is similar to a standard pitch shifter with the exception that it shifts the copied signal by less than a semitone resulting in an effect as if two guitars were slightly out of tune and playing in unison.

Parameter 1 (Detune) - The **Number 2 Knob** selects the AMNT (Amount) of detuning applied to the copied pitch in cents (100 cents equals 1 semitone). Ranges from -24 (24 cents below) to +24 (24 cents above).

The number 3 and 4 Knobs have no function when Detune is selected.

A **Pitch Shifter** will keep the shifted pitch at a parallel distance from the input note.

Parameter 1 (Pitch) - The **Number 2 Knob** selects the SHIFT (Shift) of the pitch in semitone intervals. Ranges from -24 (two octaves below) to +24 (two octaves above).

The number 3 and 4 Knobs have no function when Pitch is selected.

Level - The **Number 5 Knob** adjusts the Level or Mix (IPSLVL/IPSMIX)of all pitch altering effects in this module. Ranges from 0 to 99.

EQ

Equalization is an extremely useful tool used to further shape the tonal response of your guitar signal. The EQ in the GNX1 is similar to the tone knobs on an amplifier with the exception that the GNX1 allows you to choose the center frequency for the Mid Range and Treble adjustments.

EQ Green/Red - The **Status** button is used to select whether you are adjusting the EQ for the Amp Model assigned to the Green or the Red Amp Channel when a Warped combination of amps is selected.

Bass Level - The **Number 1 Knob** adjusts the amount of low end enhancement. Ranges from G/R BASS - 12 to 12 (dB).

Mid Frequency - The **Number 2 Knob** selects the frequency to which the boost will be applied by the Mid Level knob. Ranges from 300HZ (300 Hz.) to 5000HZ (5000 Hz.)

Mid Level - The **Number 3 Knob** adjusts the amount of mid range enhancement. Ranges from G/R MID - 12 to 12 (dB).

Treble Frequency - The **Number 4 Knob** selects the frequency to which the boost will be applied by the Treble Level knob. Ranges from 500HZ (500 Hz.) to 8000HZ (8000 Hz.)

Treble Level - The **Number 5 Knob** adjusts the amount of high end enhancement. Ranges from G/R TRBL - 12 to 12 (dB).

Noise Gate

A **Noise Gate** is designed to eliminate hiss and ambient noise while you are not playing. A Noise Gate can also be used to create an automatic swell in volume. The GNX1 includes two different types of Noise Gates: Silencer™, and Pluck. The Silencer™ operates as a standard Noise Gate. The Pluck Noise Gate is designed to close after every note (depending on the Pluck Sensitivity). This allows automatic volume swells to occur on a note for note basis.

Gate On/Off - The **Status** button turns the Noise Gate on (GAT ON) and off (GATOFF).

Gate Type - The **Number 1 Knob** selects between the SILNCR (Silencer ™) or PLUCK (Pluck) type of Noise Gates.

Gate Threshold - The **Number 2 Knob** sets the signal strength required to open or close the Noise Gate. The Gate Threshold (THRESH) parameter ranges from 0 (opens easily) to 40 (requires strong signals to open).

Gate Attack - The **Number 3 Knob** adjusts the length of time it takes the gate to open (ATTACK) and the signal to become audible once the Threshold has been exceeded. Ranges from 0 (immediate signal), to 9 (This setting will gradually ramp up the volume).

Pluck Sensitivity - The **Number 4 Knob** controls the point where the Gate retriggers (PLUCK) when using the Pluck type Noise Gate. This Parameter is only available when Pluck is the selected type of Noise Gate. Ranges from 0 (requires strong signals to retrigger) to 99 (retriggers with weak signals).

The Number 5 knob has no function when the Noise Gate is selected.

GNX1

Chorus/Mod Effects

The Modulation Effects row is a multi-function module allowing you to select effects such as; Chorus, Flanger, Phaser, Triggered Flanger, Triggered Phaser, Tremolo, Panner, Vibrato, Rotary Speaker, AutoYa™, YaYa™, SynthTalk™, Envelope Filter (auto wah), Detune, and Pitch Shift. Only one of the effects in this row can be used at a time. When the Chorus/Mod row is selected, the **Status** button is used to turn the Effect module on (EFF ON) and off (EFFOFF). The **Number 1 Knob** is used select the type of Effect to be used. After selecting the type of effect in this module, the **Number 2**, **Number 3**, **Number 4**, and **Number 5 Knobs** can then be used to adjust the individual Parameters associated with the selected effect. The following pages describe each Effect and their Parameters in more detail.

Chorus (CHORUS)
A **Chorus** adds a short delay to your signal. The delayed signal is modulated in and out of tune and then mixed back with the original signal to create a thicker sound.
Parameter 1 - The **Number 2 Knob** adjusts the rate (SPEED) of the modulation. Ranges from 1 to 99.
Parameter 2 - The **Number 3 Knob** adjusts the intensity (DEPTH) of the modulation. Ranges from 1 to 99.
Parameter 3 - The **Number 4 Knob** adjusts the PreDelay (PREDLY) or length of time before the Chorus effect is applied to the input signal. Ranges from 1 to 20.
* Parameter 4 - Selects the waveform used by the Chorus. Waveforms include Triangle, Sine, and Square.
* Parameter 5 - Adjusts the left to right balance of the wet signal. Ranges from L 99 to R 99.
Mod Level - The **Number 5 Knob** controls the volume of the Chorus. Ranges from 0 to 99.

Flange (FLANGE)
A **Flanger** uses the same principle as a Chorus but uses a shorter delay time and adds regeneration (or repeats) to the modulating delay. This results in an exaggerated up and down sweeping motion to the effect.
Parameter 1 - The **Number 2 Knob** adjusts the rate (SPEED) of the modulation. Ranges from 1 to 99.
Parameter 2 - The **Number 3 Knob** adjusts the intensity (DEPTH) of the Modulation. Ranges from 1 to 99.
Parameter 3 - The **Number 4 Knob** adjusts the amount of feedback (REGEN) added to the Flanger delay. Ranges from 0 to 99.
* Parameter 4 - Selects the waveform used by the Flanger. Waveforms include Triangle, Sine, and Square.
* Parameter 5 - Adjusts the left to right balance of the wet signal. Ranges from L 99 to R 99.
Mod Mix - The **Number 5 Knob** controls the mix of wet and dry signal. Ranges from 0 (all dry) to 99 (all wet).

Phaser (PHASER)
A **Phaser** splits the incoming signal, and then changes the phasing of the signal. This signal is then taken in and out of phase and mixed back in with the original signal. As the phasing changes, different frequencies get canceled resulting in a warm sort of twisting sound.
Parameter 1 - The **Number 2 Knob** adjusts the rate (SPEED) of the modulating phase. Ranges from 1 to 99.
Parameter 2 - The **Number 3 Knob** adjusts the intensity (DEPTH) of the modulation. Ranges from 1 to 99.
Parameter 3 - The **Number 4 Knob** adjusts the amount of effected signal returned to the input of the Phaser (REGEN). Ranges from 0 to 99.
* Parameter 4 - Selects the waveform used by the Phaser. Waveforms include Triangle, Sine, and Square.
* Parameter 5 - Adjusts the left to right balance of the wet signal. Ranges from L 99 to R 99.
Mod Mix - The **Number 5 Knob** controls the mix of wet and dry signal. Ranges from 0 (all dry) to 99 (all wet).

Triggered Flanger (TRGFLG)
A **Triggered Flanger** is the same sound as a regular Flanger but allows you to choose the starting point of the Flanger sweep. In a regular Flanger, the low frequency oscillator (LFO) is continually sweeping up and down. This means that when you begin to play, the flanger may be at the top, bottom, or any random point of the sweep. With a Triggered Flanger, every time the signal exceeds the **Sensitivity** level setting, the Flanger will begin at the point of the sweep that you designate with the value of the **LFO Start** Parameter.
Parameter 1 - The **Number 2 Knob** adjusts the rate (SPEED) of the modulation. Ranges from 1 to 99.
Parameter 2 - The **Number 3 Knob** adjusts the strength the signal must be (SENSTV) in order to trigger the Flanger. Ranges from 1 (requiring strong signals to trigger) to 99 (triggers with weak signals).
Parameter 3 - The **Number 4 Knob** selects the Flanger sweep starting point (LFO ST). Ranges from 0 to 99.
Mod Mix - The **Number 5 Knob** controls the mix of wet and dry signal. Ranges from 0 (all dry) to 99 (all wet).

* These Parameters are only available using the GENEDIT™ computer editor software.

Section Three – Effects and Parameters

Triggered Phaser (*TRGPHR*)
A **Triggered Phaser** is the same sound as a regular Phaser but allows you to choose the starting point of the Phaser sweep. In a regular Phaser, the low frequency oscillator (LFO) is continually changing the phase of the signal. This means that when you begin to play, the phaser may be at the any random point of the phase. With a Triggered Phaser, every time the signal exceeds the **Sensitivity** level setting, the Phaser will begin at the point of phasing that you designate with the value of the **LFO Start** Parameter.
Parameter 1 - The **Number 2 Knob** adjusts the rate (*SPEED*) of the modulating phase. Ranges from *1* to *99*.
Parameter 2 - The **Number 3 Knob** adjusts the strength the signal must be (*SENSTV*) in order to trigger the Phaser. Ranges from *1* (requiring strong signals to trigger) to *99* (triggers with weak signals).
Parameter 3 - The **Number 4 Knob** selects the Phaser sweep starting point (*LFO ST*). Ranges from *0* to *99*.
Mod Mix - The **Number 5 Knob** controls the mix of wet and dry signal. Ranges from *0* (all dry) to *99* (all wet).

Tremolo (*TREMLO*)
A **Tremolo** effect modulates the volume of the signal at an even rate.
Parameter 1 - The **Number 2 Knob** adjusts the rate (*SPEED*) at which the volume modulates. Ranges from *1* to *99*.
Parameter 2 - The **Number 3 Knob** adjusts the intensity (*DEPTH*) of the modulating volume. Ranges from *0* to *99*.
Parameter 3 - The **Number 4 Knob** selects the type of wave form the modulation will use. Choices include: *TRINGL* (triangle), *SINE* (sine), and *SQUARE* (square).
The Number 5 knob has no function when the Tremolo is selected.

Panner (*PANNER*)
An **Auto Panner** modulates the sound from left to right at an even rate.
Parameter 1 - The **Number 2 Knob** adjusts the rate (*SPEED*) at which the signal pans from side to side. Ranges from *1* to *99*.
Parameter 2 - The **Number 3 Knob** adjusts the intensity (*DEPTH*) of the changing pan. Ranges from *0* to *99*.
Parameter 3 - The **Number 4 Knob** selects the type of wave form the modulation will use. Choices include: *TRINGL* (triangle), *SINE* (sine), and *SQUARE* (square).
The Number 5 knob has no function when the Panner is selected.

Vibrato (*VIBRTO*)
A **Vibrato** effect modulates the pitch of the incoming signal at an even rate.
Parameter 1 - The **Number 2 Knob** adjusts the rate (*SPEED*) at which the pitch modulates. Ranges from *1* to *99*.
Parameter 2 - The **Number 3 Knob** adjusts the intensity (*DEPTH*) of the modulating pitch. Ranges from *1* to *99*.
Parameter 3 - The **Number 4 Knob** selects the type of wave form the modulation will use. Choices include: *TRINGL* (triangle), *SINE* (sine), and *SQUARE* (square).

Rotary *Speaker* (*ROTARY*)
Rotary Speaker is an emulation of a device that included a spinning horn and rotor (woofer). The rotation of these two speakers produced an interesting combination of the sound panning from side to side, as well as a slight pitch change due to speed of the sound coming towards, and then going away from the listener.
Parameter 1 - The **Number 2 Knob** adjusts the rate (*SPEED*) of the spinning speakers. Ranges from *0* to *99*.
Parameter 2 - The **Number 3 Knob** controls the intensity (*DEPTH*) of the Effect. Ranges from *0* to *99*.
Parameter 3 - The **Number 4 Knob** controls the Pitch Shift (*DOPPLR*) effect which is the ratio between the horn and the rotor positions. Ranges from *0* to *99*.
* Parameter 4 - Selects the crossover frequency between the horn and rotor. Ranges from 200Hz to 1500Hz.
Mod Mix - The **Number 5 Knob** controls the mix of wet and dry signal. Ranges from *0* (all dry) to *99* (all wet).

* These Parameters are only available using the GENEDIT™ computer editor software.

AutoYa™ (*RUTOYR*)

An **AutoYa™** combines the characteristics of a Wah and a Flanger together creating an almost human vowel sound as if the guitar were saying "Yah." The AutoYa™ automatically provides this animation by modulating the sound at an even rate.

Parameter 1 - The **Number 2 Knob** adjusts the rate (*SPEED*) of the modulation. Ranges from *1* to *99*.

Parameter 2 - The **Number 3 Knob** adjusts the intensity (*DEPTH*) of the AutoYa™ effect. Ranges from *1* to *99*.

Parameter 3 - The **Number 4 Knob** adjusts the throaty quality (*RANGE*) of the AutoYa™ effect. Ranges from *1* to *50*.

* Parameter 4 - Adjusts the left to right balance of the wet signal. Ranges from L 99 to R 99.

Mod Mix - The **Number 5 Knob** controls the mix of wet and dry signal. Ranges from *0* (all dry) to *99* (all wet).

YaYa™ (*YRYR*)

The **YaYa™** is another effect exclusive to DigiTech products. The YaYa™ is controlled by the Expression Pedal and combines the characteristics of a wah and a flanger together providing a unique talk box type of effect. As the Expression Pedal is rocked back and forth, the guitar appears to say "Yah." The YaYa™ effect must be linked to the Expression Pedal in order to function. See page 32 for more information on linking the Expression Pedal.

Parameter 1 - The **Number 2 Knob** adjusts the Ya Pedal position (*YR PDL*). Ranges from *0* to *99*.

Parameter 2 - The **Number 3 Knob** adjusts the intensity (*DEPTH*) of the YaYa™ effect. Ranges from *1* to *99*.

Parameter 3 - The **Number 4 Knob** adjusts the throaty quality (*RANGE*) of the YaYa™ effect. Ranges from *1* to *50*.

* Parameter 4 - Adjusts the left to right balance of the wet signal. Ranges from L 99 to R 99.

Mod Mix - The **Number 5 Knob** controls the mix of wet and dry signal. Ranges from *0* (all dry) to *99* (all wet).

SynthTalk™ (*SYNTLK*)

SynthTalk™ is an effect exclusive to DigiTech. It makes your guitar seem to speak based upon the dynamics of your playing style.

Parameter 1 - The **Number 2 Knob** adjusts the *ATTACK* of the synthesized voice. Ranges from *0* to *99*.

Parameter 2 - The **Number 3 Knob** adjusts the *RELEAS* of the synthesized voice. Ranges from *1* to *99*, and *oo* (infinity).

Parameter 3 - The **Number 4 Knob** changes the characteristics of the various synth voices (*VOX*). Ranges from *0* to *99*.

* Parameter 4 - Adjusts the left to right balance of the wet signal. Ranges from L 99 to R 99.

Mod Level - The **Number 5 Knob** adjusts the sensitivity (*SENSTV*) of the input signal required to trigger the SynthTalk™ effect. Ranges from *1* to *99*.

Envelope Filter (*ENVLOP*)

The **Envelope Filter** is an automatic Wah effect that alters your sound based upon how hard the strings are struck.

Parameter 1 - The **Number 2 Knob** adjusts the sensitivity (*SENSTV*) of the input signal required to trigger the Wah effect. Ranges from *1* to *99*.

Parameter 2 - The **Number 3 Knob** adjusts the frequency range (*RANGE*) of the Wah effect. Ranges from *1* to *99*.

Parameter 3 - The **Number 4 Knob** adjusts the left/right balance (*BAL*) of the Wah signal. Ranges from *L99* (left 99) to *R99* (right 99).

Mod Mix - The **Number 5 Knob** controls the mix of wet and dry signal. Ranges from *0* (all dry) to *99* (all wet).

Detune (*DETUNE*)

A **Detuner** will make a copy of your incoming signal, take the copied signal slightly out of tune from the original, and mix the two signals together. The result is a doubling type of effect as if two guitars were playing the same part together.

Parameter 1 - The **Number 2 Knob** adjusts the amount of pitch difference (*AMNT*) applied to the copied signal. Ranges from *-24* cents to *+24* cents.

Parameter 2 - The **Number 3 Knob** adjusts the left/right balance (*BAL*) of the detuned signal. Ranges from *L99* (left 99) to *R99* (right 99).

Mod Level - The **Number 5 Knob** controls the volume of the detuned note. Ranges from *0* to *99*.

The Number 4 knob has no function when the Detune effect is selected.

* These Parameters are only available using the GENEDIT™ computer editor software.

GNX₁ **23**

SECTION THREE – EFFECTS AND PARAMETERS

Pitch Shift (`PITCH`)

A **Pitch Shifter** copies the incoming signal, then shifts the pitch of the copied note to a different note. The shifted note is then mixed back with the original signal sounding as if two guitars were playing parallel notes.

Parameter 1 - The **Number 2 Knob** adjusts the Amount of Pitch Shift (`SHIFT`) in intervals of one semi-tone. Ranges from `-12` (12 semitones below) to `+24` (24 semitones above).

Parameter 2 - The **Number 3 Knob** adjusts the left/right balance (`BAL`) of the shifted pitch. Ranges from `L99` (left 99) to `R99` (right 99).

Mod Level - The **Number 5 Knob** controls the volume of the shifted pitch. Ranges from `0` to `99`.

The Number 4 knob has no function when the Pitch Shifter is selected.

Delay

Delay is an effect that will record a portion of the incoming signal, and then play it back a short time later. The recorded segment can repeat just once, several times, or infinitely (which turns the input to the Delay off and allows you to play over the top of a passage in the Delay loop). The Delay in the GNX1 also includes a Ducker Threshold which allows you to set the signal strength required before the Delay will record. This feature allows you to control the Delay through the dynamics of your playing.

Delay On/Off - The **Status** button turns the Delay on (`DLY ON`) and off (`DLYOFF`).

Delay Type - The **Number 1 Knob** selects one of the 4 different types of Delay. Delay choices include:

`MONO` (Mono Digital Delay - clear concise repeats)   `ANALOG` (Analog Delay - deteriorates with each repeat)

`PPONG` (Ping Pong Delay - bounces from side to side)   `ALGPNG` (Analog Ping Pong - side to side with deterioration)

Time - The **Number 2 Knob** adjusts the length of time between repeats. Ranges from `10 MS` through `2000MS` (10 through 2000 ms in 10 ms increments). Using the **Data Up/Down** buttons while the Delay Time is showing in the Display will adjust the Delay Time in 1 ms increments.

Feedback - The **Number 3 Knob** adjusts the number of times the delayed signal will repeat (`FEEDBK`). Ranges from `1` to `99` and `RPHOLD` (infinite repeat).

Ducker Threshold - The **Number 4 Knob** adjusts the level (`THRESH`) the input signal must reach before the Delay signal is attenuated. Ranges from `0` to `99` and `oF` (off).

Delay Level - The **Number 5 Knob** adjusts the volume (`DLYLVL`) of the Delay signal. Ranges from `0` to `99`.

* Ducker Attenuation - The Ducker Level selects the amount of attenuation applied to the Delay signal when the Ducker Threshold has been exceeded. Ranges from 0 to 99.

* Delay Balance - The Delay Balance adjusts the left/right balance of the Delay signal. Ranges from L 99 to R 99.

Reverb

Reverb can give the listener a sense that the material is being performed in various acoustical environments. It can provide the tight acoustics of a small room, or the ambience of huge arena.

Reverb On/Off - The **Status** button turns the Reverb on (`RVB ON`) and off (`RVBOFF`).

Reverb Type - The **Number 1 Knob** selects the Type of Reverb or acoustic environment. The GNX1 provides ten different environments to choose from including:

`STUDIO`	= Studio	`AMPTHE`	= Amphitheater
`ROOM`	= Wood Room	`CHURCH`	= Church
`CLUB`	= Club	`GARAGE`	= Parking Garage
`PLATE`	= Plate	`ARENA`	= Arena
`HALL`	= Hall	`SPRING`	= Spring

PreDelay - The **Number 2 Knob** adjusts the amount of time (`PREDLY`) it takes for the initial sound to reach the first reflective surface in the simulated environment. Ranges from `0` to `15`.

Decay - The **Number 3 Knob** adjusts the length of time the Reverb is audible (`DECAY`). Ranges from `1` to `99`.

Damping - The **Number 4 Knob** controls the amount of sound which is absorbed (`DAMPNG`) in the simulated environment. Ranges from `0` to `99`.

Reverb Level - The **Number 5 Knob** adjusts the volume (`RVBLVL`) of the Reverb. Ranges from `0` to `99`.

* Reverb Balance - The Reverb Balance adjusts the left/right balance of the Reverb signal. Ranges from L 99 to R 99.

* These Parameters are only available using the GENEDIT™ computer editor software.

Section Four - Tutorial
A Guided Example

Suppose you wanted to create your own HyperModel™ that incorporated the sweet tones of a vintage Tweed with an American 2x12 cabinet, and the ripping distortion of a Rectified Amp with a British 4x12 cabinet. Let's also suppose that we want to be able to toggle between an acoustic guitar simulation and this new HyperModel™ in a Preset which gave your single coil pickup a humbucker sound, used no Compression, had a Noise Gate that opens quickly, a subtle Chorus effect, no Delay, and a little bit of a Hall reverb. The following steps will guide you through the procedure for creating just such a Preset in the GNX1.

Choose a Preset

The first step in creating a Preset is selecting your starting point. You can start with any Preset, but for this example let's start with Preset 40. Use the **Footswitches** or the **Data Up/Down** buttons to select Preset 40.

Create a HyperModel™

For this example, we are going to use a vintage Tweed amp with an American 2x12 Cabinet, and warp it with a Recitified Amp using a British 4x12 cabinet. After selecting Preset 40, the GNX1 will be ready to select the Amp Models (indicated by the yellow Status button LED).

Select the Green Channel Amp and Cabinet

The LEDs next to the Number 1 and Number 2 knobs are lit green indicating that these two knobs will select the Amp and Cabinet types for the Green Channel. To assign the vintage Tweed amp to the Green Channel, rotate the **Number 1 Knob** until the Display reads TWEED (Tweed). Then rotate the **Number 2 Knob** until the Display reads AM2x12 (American 2x12).

Rotate Number 1 Knob
Until Display Reads TWEED

Rotate Number 2 Knob
Until Display Reads AM2x12

Green Channel Amp/Cabinet
Selection Indicated by Green LEDs
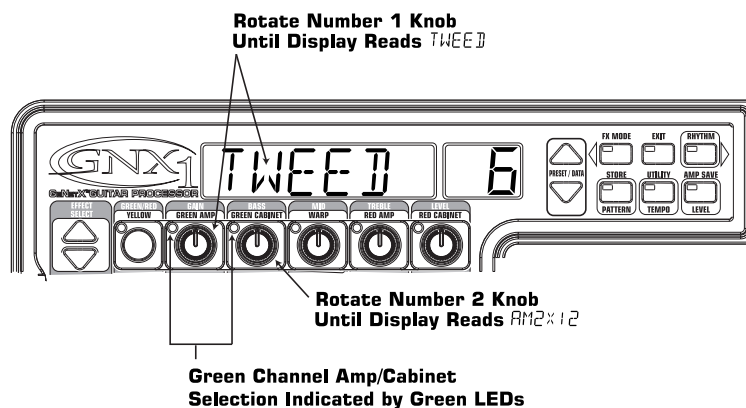
Select the Red Channel Amp and Cabinet

The LEDs next to the Number 4 and Number 5 knobs are lit red indicating that these two knobs will select the Amp and Cabinet types for the Red Channel. To assign the Rectified amp to the Red Channel, rotate the **Number 4 Knob** until the Display reads RECTIF (Rectified). Then rotate the **Number 5 Knob** until the Display reads BR4x12 (British 4x12).

Rotate Number 4 Knob
Until Display Reads RECTIF

Rotate Number 5 Knob
Until Display Reads BR4x12

Red Channel Amp/Cabinet
Selection Indicated by Red LEDs
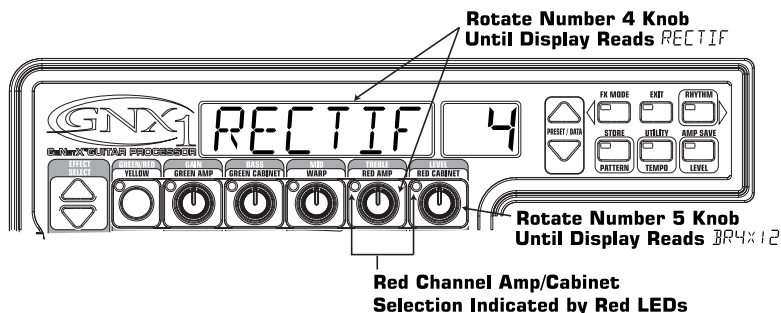
Section Four – Tutorial

Adjust the Green Channel Parameters

The Tweed amp that we selected for our Green Channel assignment will initialize with factory default settings for the Gain, EQ, and Level Parameters. These settings may not necessarily suit your personal taste and require some fine tuning. To access these Green Channel Parameters, press the **Status** button once. All horizontal LEDs will light green indicating that all 5 knobs will now adjust the Green Channel Parameters. Rotate the **Number 1 Knob** to adjust the Tweed Gain, **Number 2 Knob** to adjust the Tweed Bass, **Number 3 Knob** to adjust the Tweed Mids, **Number 4 Knob** to adjust the Tweed Treble, and the **Number 5 Knob** to adjust the Tweed Level.

**Press Status Button
All LEDs Light Green**

**Knob Functions Change to Adjust
Green Channel Gain, EQ and Level**
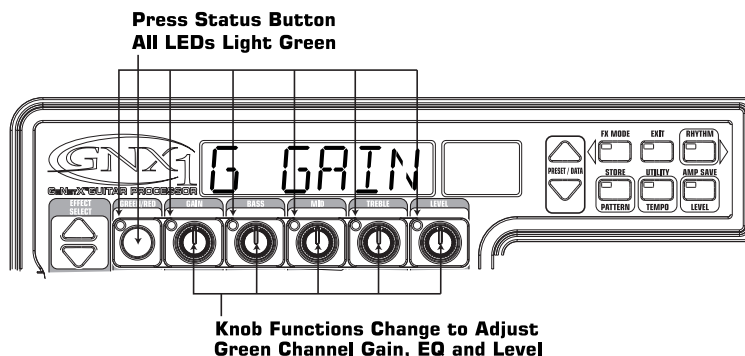
Adjust the Red Channel Parameters

Like the Tweed amp in the Green Channel, the Rectified amp in the Red Channel may need to be tweaked to suit your personal taste. To access these Red Channel Parameters, press the **Status** button again. All horizontal LEDs will light red indicating that all 5 knobs will now adjust the Red Channel Parameters. Rotate the **Number 1 Knob** to adjust the Rectified Gain, **Number 2 Knob** to adjust the Rectified Bass, **Number 3 Knob** to adjust the Rectified Mids, **Number 4 Knob** to adjust the Rectified Treble, and the **Number 5 Knob** to adjust the Rectified Level.

**Press Status Button Again
and All LEDs Light Red**

**Knob Functions Change to Adjust
Red Channel Gain, EQ and Level**
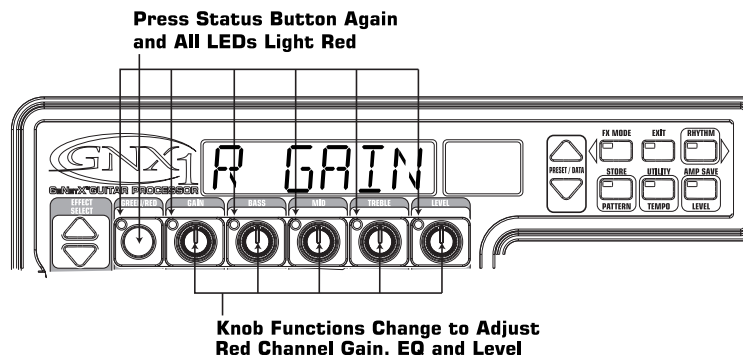
Tune the Cabinets (optional)

We may also want to adjust the resonance for the American 2x12 and the British 4x12 Cabinets. To access the Cabinet tuning for both Red and Green Channels, press and hold the **Status** button until the Display reads CABTUN (Cabinet Tuning). Release the Status button and rotate the **Number 2 Knob** to adjust the tuning for the Green Cabinet (GT 00) and the **Number 5 Knob** to adjust the tuning for the Red Cabinet (RT 00). Once the tuning of both Cabinets have been adjusted, press the Status button again to return to the Performance mode.

**Press and Hold Status Button Until Display Reads CABTUN
and Knob 2 LED Lights Green and Knob 5 LED Lights Red**

**Rotate Knob 2 to Adjust
Green Cabinet Tuning**

**Rotate Knob 5 to Adjust
Red Cabinet Tuning**
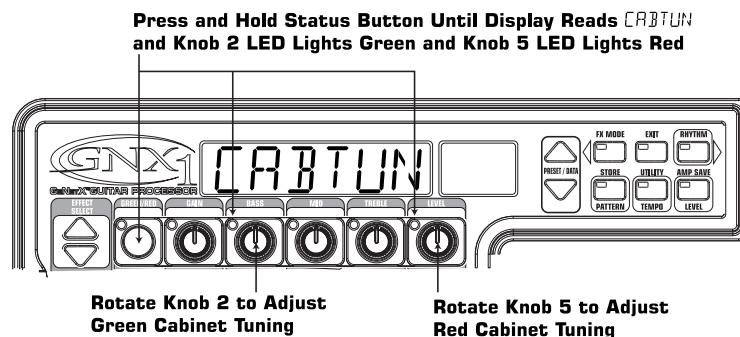
Warp the Green and Red Channels Together

When we have the Amps and Cabinets in our Green and Red Channels dialed in to suit our taste, we can Warp them together to create our new HyperModel™. Make sure your GNX1 is in yellow mode (indicated by the Status LED lighting yellow). If it is not in yellow mode, press the **Status** or **Exit** button until yellow mode has been accessed. Then rotate the **Number 3** (Warp) **Knob** to achieve the desired blend of the Amps and Cabinets in our Green and Red Channels.

Save the HyperModel™

Now that we have designed our own Amp/Cabinet HyperModel™, we need to save our creation to one of the 16 User HyperModel™ locations. This will enable us to use it in Presets. Press the **Amp Save** button once. The Display will read *NEWAMP* (New Amp) and the first letter (N) will be flashing. This is asking us to name the new HyperModel™. For the sake of this example, let's name the HyperModel™ "Rectwd" (Rectified Tweed). Press the **Data Up/Down** buttons to select R as the first letter. Then press the **Rhythm** button to select the next character in the Display. This character should already be an E because we started out with the name "NEWAMP." If it is not an E, press the **Data Up/Down** buttons to select E as the character. Continue to use the **Rhythm** button to select the next character location in the Display, and the **Data Up/Down** buttons to select the alphabetic characters until the Display reads *RECTWD*.
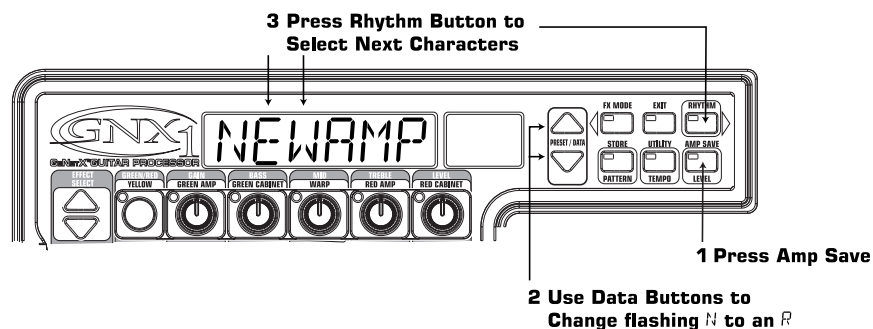

3 Press Rhythm Button to Select Next Characters

1 Press Amp Save

2 Use Data Buttons to Change flashing N to an R

Then press the **Amp Save** button again. This will take us to the second step of saving a HyperModel™, which is choosing one of the 9 User HyperModel™ locations. The alpha-numeric Display should read *EMPTY* (Empty) and the red numeric Display should read *U1* because this is the first HyperModel™ stored to your GNX1. Press the **Amp Save** button again to store this new creation to this Amp location. The Display will briefly read *AMPSVD* (Amp Saved) and then return to showing the name of the currently selected Preset.

Press Amp Save Again

Use Data Buttons to Select User Amp Location
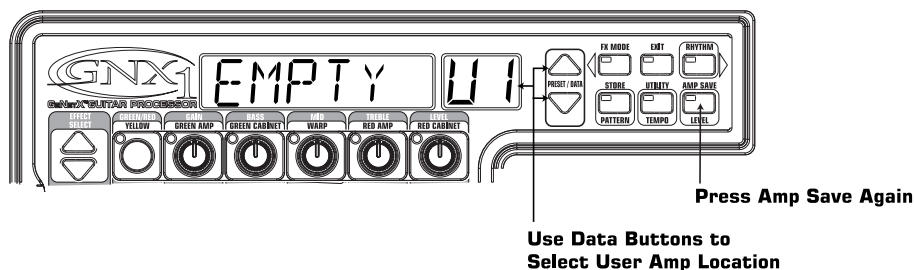
Assign Models to the Preset Channels

In the previous steps, we assigned a Tweed to the Green Channel and a Rectified Model to the Red Channel. Then we Warped the two together to create our HyperModel™. This HyperModel™ is now saved as an amp type that we named Rectwd, but it is not currently a part of our Preset. In this example Preset, we were going to have the ability to toggle between an acoustic guitar simulation and our new HyperModel™. To do this we need to assign the acoustic model to the Green Channel and our new Rectwd to the Red Channel of our Preset. The LED next to the Status button should currently be yellow. If it is not, press the **Exit** button. Now rotate the **Number 1 Knob** until the Display reads *ACOUST*. This is the Green Channel Model for the Preset. Now rotate the **Number 4 Knob** until the Display reads *RECTWD* (our new HyperModel™). This is the Red Channel Model for the Preset. We will now be able to toggle between these two sounds using the Amp Footswitch.

SECTION FOUR – TUTORIAL

Edit the Preset

The next step to creating our example Preset is to enter the Preset Edit mode. To do this, press the **Effect Select Down** button once. At this point the Matrix LED in the Wah-Pickup row should light. The Display will briefly show $EDIT$ and then cycle between showing the status of the Wah and Pickup simulator Effects. If the Display shows that the Wah is on ($WAH\ ON$), press the **Status** button once to turn it off (since our example is not using a Wah).

Press Effect Select Down Button and LED Lights on Wah-Pickup Effect Row

If Necessary, Press Status Button to Turn Wah Effect Off
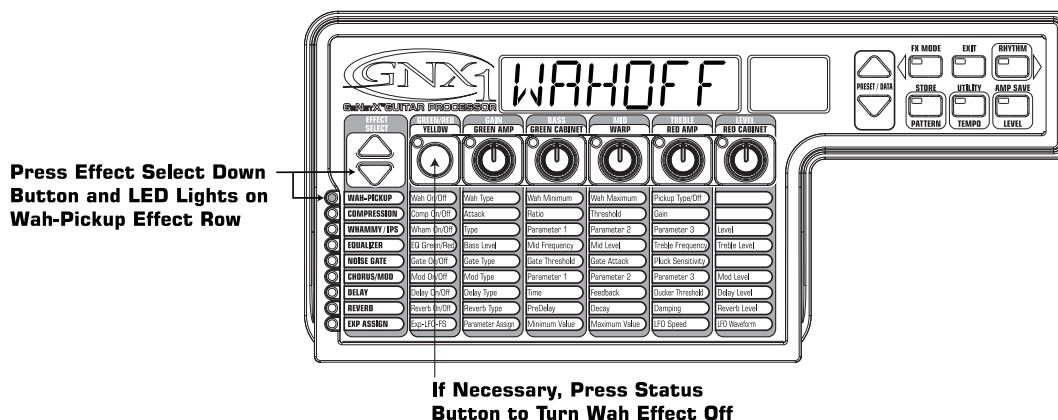
Select the Pickup Type

In our example Preset we were assuming that we were using a single coil pickup, but wanted it to sound like a double coil humbucker. With the Wah-Pickup LED lit, rotate the **Number 4 Knob** until the Display shows $SC>HB$. This means that a single coil will sound like a Humbucker.

Rotate Number 4 Knob Until Display Reads $SC>HB$
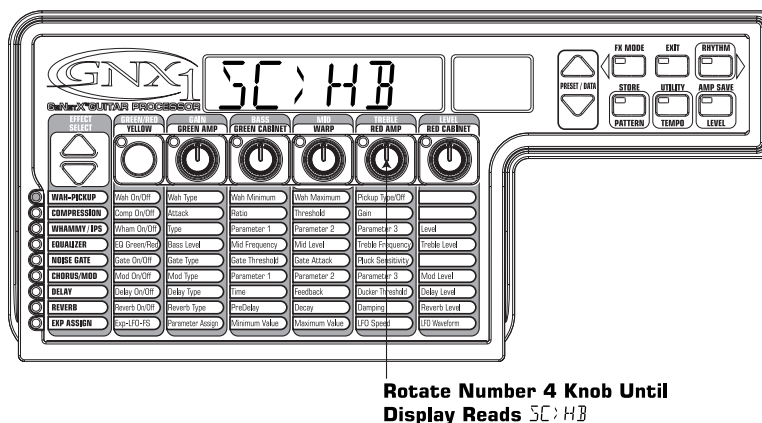
Turn the Compressor Off

Next, we didn't want to use compression in our Preset so, we need to turn the compressor off. Press the **Effect Select Down** button again. The LED on the Compression row will light and the Display will show the current status of the Compressor. If the Compressor is on, press the **Status** button until the Display shows $CMPOFF$. The Compressor will then be disengaged.

Turn the Whammy™/IPS Off

We didn't want to use any Whammy™ or IPS effects in this Preset. Press the **Effect Select Down** button again and the LED on the Whammy/IPS row will light. If the Display indicates that either one of these effects is active, press the **Status** button until the Display reads $IPSOFF$ (IPS Off).

Adjust the EQ

The EQ for both the Acoustic Model in the Green channel and our Rectwd HyperModel™ in the Red channel can be adjusted individually. To do so, press the **Effect Select Down** button again and the LED on the Equalizer row will light. The GNX1 will default to the EQ adjustments for the Red Channel and the Display will briefly read `EQ RED` (EQ Red). Rotate the **Number 1 Knob** to adjust the Red Channels Bass enhancement, the **Number 2 Knob** to select the center frequency for the Mid-range, the **Number 3 Knob** to adjust the Mid-range enhancement, the **Number 4 Knob** to select the center frequency for the Treble, and the **Number 5 Knob** to adjust the Treble enhancement. Press the **Status** button or **Amp Footswitch** to select the Green Channel's EQ adjustments. The Display will briefly read `EQ GRN` (EQ Green) and the same knobs will adjust the same EQ Parameters for the Green Channel.

Status Button Selects EQ
for Green or Red Channels

Press Effect Select
Down Again Until the
EQ LED Lights

Adjusts Bass   Mid Frequency   Adjusts Mids   Treble Frequency   Adjusts Treble
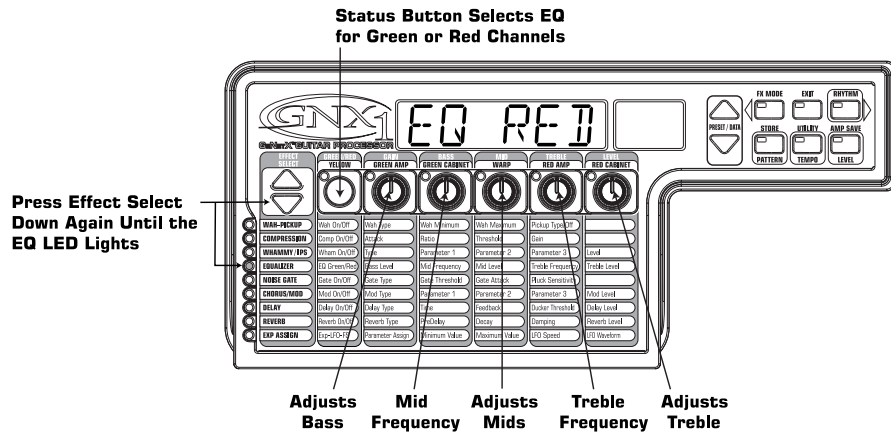
Adjust the Noise Gate

For our example, we wanted our Noise Gate to open quickly with a relatively weak signal. This type of gate would use the Silencer™ with a low Threshold and short Attack Time. Press the **Amp Footswitch** again to select the Red Amp Channel. Now press the **Effect Select Down** button and the LED in the Noise Gate row will light. If the Display indicates that the Noise Gate is off (`GATOFF`), press the **Status** button until the Display reads `GAT ON` (Gate On). Rotate the **Number 1 Knob** until the Display reads `SILNCR` (Silencer) as the type of gate. Rotate the **Number 2 Knob** to set the Threshold to a value of 20 (this may need further adjustment depending upon your guitar). Rotate the **Number 3 Knob** to set the Attack Time value to 0 (fast attack).

Use Status Button
to Turn Gate On

Press Effect Select
Down Again Until the
Noise Gate LED Lights

Select Silencer as Gate Type   SetThreshold Value to 20   Set Attack Value to 0
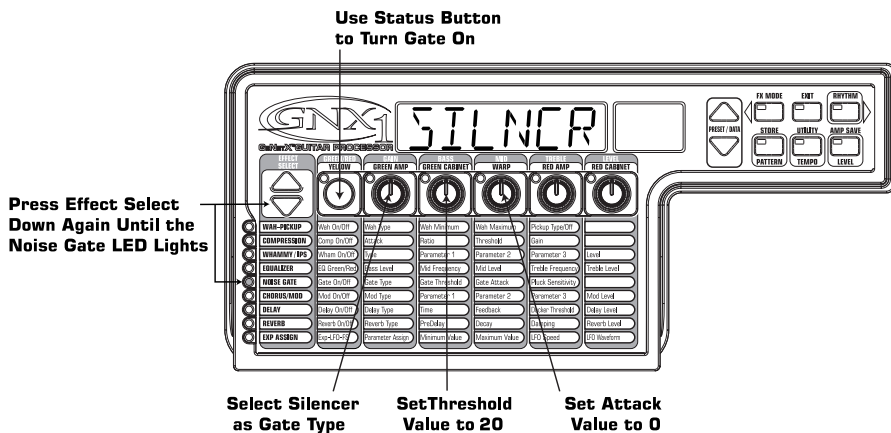
SECTION FOUR – TUTORIAL

Select and Adjust the Chorus

Next we wanted to thicken up the sound in our Preset by adding a subtle Chorus effect. Press the **Effect Select Down** button again and the LED in the Chorus/Mod row will light. If the Display indicates that this module is off (*EFFOFF*), press the **Status** button until the Display reads *EFF ON* (Effect On). Then rotate the **Number 1 Knob** until the Display shows *CHORUS* (Chorus) as the effect type. Rotate the **Number 2 Knob** to set the Chorus Speed to a value of 5. Rotate the **Number 3 Knob** to set the Chorus Depth to a value of 30. Rotate the **Number 5 Knob** to set the Chorus Level to a value of 50.

Use Status Button to Effect Module On

Press Effect Select Down Again Until the Chorus/Mod LED Lights

Set Chorus Level to 50

Select Chorus as Mod Type

Set Chorus Speed to 5

Set Chorus Depth to 30
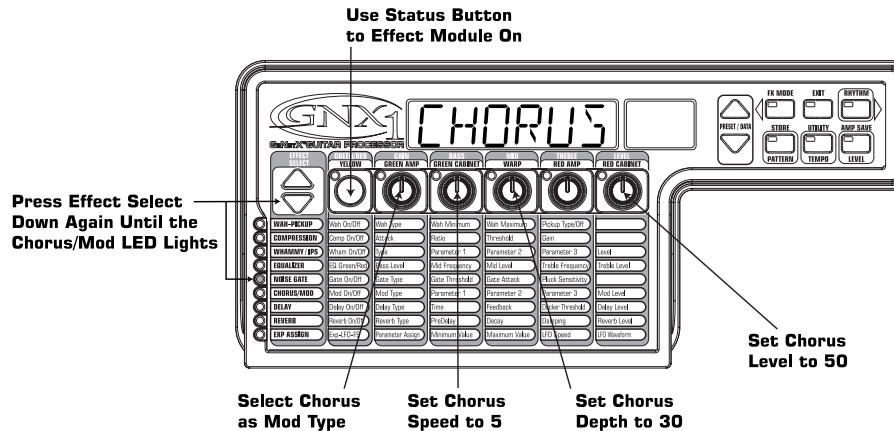
Turn the Delay Off

In our example Preset we wanted the Delay to be bypassed. Press the **Effect Select Down** button again and the LED in the Delay row will light. If the Display indicates that the Delay is on (*DLY ON*), press the **Status** button until the Display reads *DLYOFF* (Delay Off).

Select and Adjust the Reverb

In our example Preset we also wanted a little bit of Hall Reverb to provide some ambience. Press the **Effect Select Down** button again and the LED in the Reverb row will light. If the Display indicates that the Reverb is off (*RVBOFF*), press the **Status** button until the Display reads *RVB ON* (Reverb On). Rotate the **Number 1 Knob** to select *HALL* (Hall) as the Reverb Type. Rotate the **Number 2 Knob** to set the Reverb Predelay to a value of 2. Rotate the **Number 3 Knob** to set the Reverb Decay to a value of 15. Rotate the **Number 4 Knob** to set the Reverb Damping to a value of 40. Rotate the **Number 5 Knob** to set the Reverb Level to a value of 30.
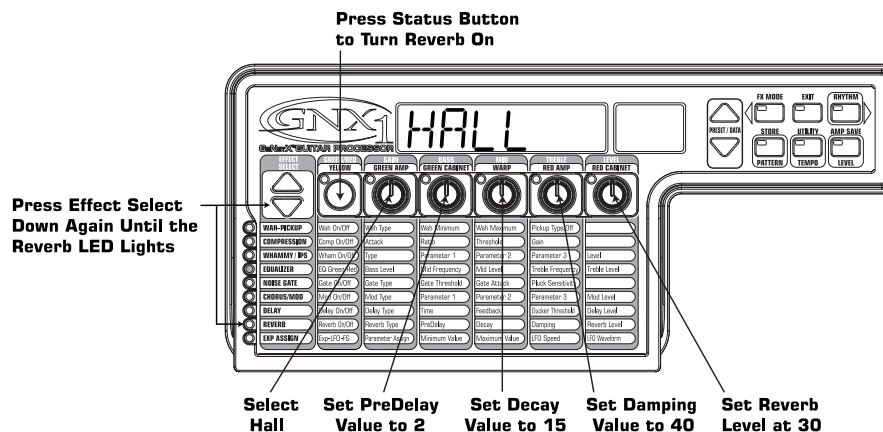

Press Status Button to Turn Reverb On

Press Effect Select Down Again Until the Reverb LED Lights

Select Hall

Set PreDelay Value to 2

Set Decay Value to 15

Set Damping Value to 40

Set Reverb Level at 30

Store the Preset

The last step that we need to do is to store our changes to a User Preset. If we changed Presets or turned the GNX1 off without storing these settings, it would forget what we had done and revert back to the original Preset. Press the **Store** button once. The first letter in the Display begins to flash which is asking us to rename the Preset. Since this is an example Preset, let's name the Preset *EXAMPL*. Press the **Data Up/Down** buttons until the flashing character in the Display is an *E*. Press the **Rhythm** button once and the second character begins to flash. Use the **Data Up/Down** buttons again until the flashing character is an *X*. Press the **Rhythm** button again to Select the third character and change it to an *A* using the **Data Up/Down** buttons. Continue using the **Rhythm** button to select the characters and the **Data Up/Down** buttons to change the characters.

3 Use FX Mode and Rhythm Buttons to Select Character Locations

1 Press Store

2 Use Data Buttons to Change Characters
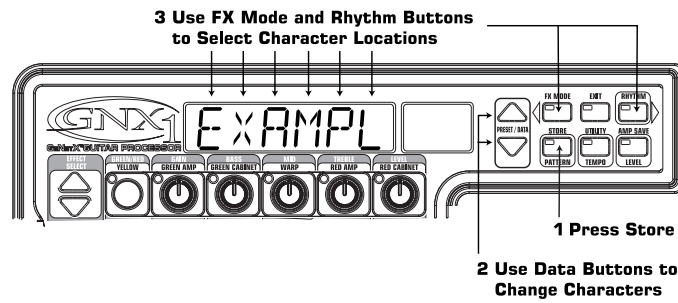
Once the Display reads *EXAMPL*, press the **Store** button again. Now the numbers in the red numeric Display are flashing, which is asking where to store this new Preset. Using the **Data Up/Down** buttons, select 48 as the destination. Press the **Store** button one more time to execute the Store function.

Press Store Again

Select User Preset 48 Using Data Buttons
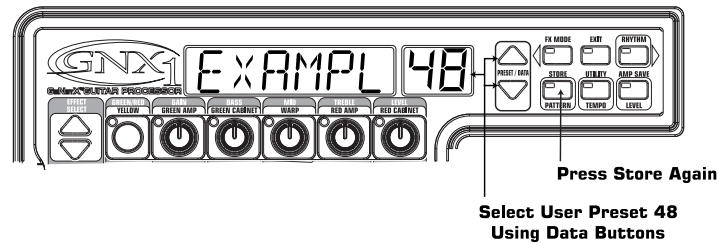
Congratulations! You have successfully created a Preset.

Section Five - Other Functions

Expression Pedal

The Expression Pedal on the GNX1 can be assigned to control up to 3 Parameters in real time including the Volume, Whammy™, Ya Ya™, or just about any other parameter.. When a parameter has been assigned to the Expression Pedal, the minimum and maximum values the assigned Parameter will reach can also be programmed. The GNX1's Expression Pedal includes DigiTech's exclusive V-Switch. The V-Switch allows the Expression Pedal assignment to be switched on the fly. Applying extra pressure to the toe of the Expression Pedal will engage the V-Switch and the function of the Expression Pedal will switch between the assigned parameter and Wah. The sensitivity or amount of pressure required to engage the V-Switch can be adjusted to suit your personal taste (or weight of your foot). See page 35 for the V-Switch Sensitivity adjustment procedure.

The procedure for assigning a parameter to the Expression Pedal is as follows:

1. Press the **Effect Select** button until the Exp Assign row has been selected.
2. Press the **Status** button until the Display reads $ExPIL1$ (Expression Pedal Link 1), $ExPIL2$ (Expression Pedal Link 2), or $ExPIL3$ (Expression Pedal Link 3), depending upon which assignment you wish to use or the number of Parameters you intend to assign. The Display will alternate between showing the Expression Pedal selection and the currently assigned Parameter.
3. Rotate the **Number 1 Knob** until the desired Parameter appears in the Display. See the Expression Parameter Assignment List on page 33 for a complete list of assignable Parameters.
4. Rotate the **Number 2 Knob** to select the minimum value the assigned parameter will reach with the Expression Pedal in the toe up position (not available when volume is the assigned parameter).
5. Rotate the **Number 3 Knob** to select the maximum value the assigned parameter will reach with the Expression Pedal in the toe down position (not available when volume is the assigned parameter).
6. Store your Expression Pedal assignment to your Preset. See page 17 for more information on the storing procedure.

LFOs

The GNX1 includes two assignable low frequency oscillators ($LFO1$ and $LFO2$) which can be assigned to any of the same parameters available for assignment to the Expression Pedal. A low frequency oscillator will automatically vary the value of the assigned parameter at a steady rate. A minimum and maximum value each LFO will reach may be also be assigned. For instance: if the Amp Gain was assigned to $LFO1$, and the minimum value was set at 1 and the maximum value was set at 99, the GNX1 would automatically sweep the amount of distortion from a clean sound to a distorted sound. Individual LFO speeds are also available for assignment. In the previous example, the LFO speed would determine the length of time it took the LFO to sweep from the clean to the distorted sound. The procedure for assigning the LFOs in the GNX1 is as follows:

1. Press the **Effect Select** button until the Exp Assign row has been selected.
2. Press the **Status button** to select whether you want to assign $LFO1$ (LFO1) or $LFO2$ (LFO2).
3. Rotate the **Number 1 Knob** until the desired Parameter appears in the Display. See the Expression Parameter Assignment list on page 33 for a complete list of assignable Parameters.
4. Rotate the **Number 2 Knob** to select the minimum value the assigned parameter will reach at the bottom turn around point for the LFO (not available when volume is the assigned parameter).
5. Rotate the **Number 3 Knob** to select the maximum value the assigned parameter will reach at the top turn around point for the LFO (not available when volume is the assigned parameter).
6. Rotate the **Number 4 Knob** to select the speed at which the LFO will oscillate from the minimum to the maximum values. LFO speed ranges from 05 HZ (.05 Hz) to 100 HZ (10.0 Hz).
7. Rotate the **Number 5 Knob** to select the waveform the LFO will oscillate on. Your choices include:
   $TRINGL$ (Triangle) - a smooth rise and fall, but abrupt turn around in oscillation.
   $SINE$ (Sine) - a smooth rise, fall, and turn around in oscillation.
   $SQUARE$ (Square) - an abrupt rise, fall, and turn around in oscillation.
8. Store your LFO assignment to your Preset. See page 17 for more information on the storing procedure.

Amp Footswitch

From the factory, the Amp Footswitch changes between the Green and the Red Amp Channels. However, the GNX1 allows you to select the function of the Amp Footswitch. The procedure for assigning the function of the Amp Footswitch is as follows:

1. Press the **Effect Select** button until the Exp Assign row has been selected.

2. Press the **Status button** until the Display reads *AMP FS* (Amp Footswitch).

3. Rotate the Number 1 Knob to select the desired function of the Amp Footswitch. Your choices include:

   G-R - Switches between the Green and Red Amp Channels.

   G-Y - Switches between the Green and Yellow (Warped) Channels.

   R-Y - Switches between the Red and Yellow (Warped) Channels.

   G-R-Y - Switches between the Green, Red, and Yellow (Warped) Channels.

4. Store your Amp Footswitch assignment to your Preset. See page 17 for more information on the storing procedure.

Expression Parameter Assignment List

The following Parameters can be assigned to the any of the 3 Expression Pedal links, LFO 1, or LFO 2.

NOLINK (No Link) - No Parameter is assigned

VOLPRE (Volume Pre) - Controls the Volume after the Amp Modeling but before the Effects.

VOLPST (Volume Post) - Controls the Volume at the end of the Effects chain.

A WARP (Amp Warp) - Warps the Green and Red Amp Models.

C WARP (Cabinet Warp) - Warps the Green and Red Cabinet types.

WARP (Warp) - Warps the Green and Red Channels.

CMPATK (Compressor Attack) - Controls the Compressor's Attack time.

CMPRTO (Compressor Ratio) - Controls the Compressor's Ratio.

CMPTHR (Compressor Threshold) - Controls the Compressor's Threshold.

CMPGAN (Compressor Gain) - Controls the Compressor's Gain.

AMOUNT/SHIFT (Parameter 1) - Controls the interval for the IPS module.

WHMPDL (Whammy™ Parameter 2) - Controls the pitch bend when Whammy™ is engaged.

SCALE (IPS Parameter 2) - Controls the scale when the IPS module is engaged.

KEY (IPS Parameter 3) - Controls the key type when the IPS module is engaged.

IPSMIX/IPSLVL (IPS Mix/Level) - Controls the wet/dry mix or Level for the IPS module.

AMPCHN (Amp Channel) - Switches Amp Channels.

G GAIN (Green Gain) - Controls the Amp Gain for the Green Channel.

G LEVL (Green Level) - Controls the Volume of the Green Channel.

R GAIN (Red Gain) - Controls the Amp Gain for the Red Channel.

R LEVL (Red Level) - Controls the Volume of the Red Channel.

GATTHR (Gate Threshold) - Controls the Noise Gate's Threshold.

GATATK (Gate Attack) - Controls the Noise Gate's Attack time.

PLKSNS (Gate Pluck) - Controls the Noise Gate's Pluck Sensitivity.

Modulation Effects Parameters

Active Effect

Chorus	*SPEED*	*DEPTH*	*PREDLY*	*MODBAL*	*MODLVL*
Flanger	*SPEED*	*DEPTH*	*REGEN*	*MODBAL*	*MODMIX*
Phaser	*SPEED*	*DEPTH*	*REGEN*	*MODBAL*	*MODMIX*
Triggered Flanger	*SPEED*	*SENSTV*	*LFO ST*	*MODMIX*	
Triggered Phaser	*SPEED*	*SENSTV*	*LFO ST*	*MODMIX*	
Tremolo	*SPEED*	*DEPTH*			
Panner	*SPEED*	*DEPTH*			
Vibrato	*SPEED*	*DEPTH*			
Rotary Speaker	*SPEED*	*DEPTH*	*DOPPLR*	*XOVER*	*MODBAL*	*MODMIX*
Auto Ya™	*SPEED*	*DEPTH*	*RANGE*	*MODBAL*	*MODMIX*
YaYa™	*YA PDL*	*DEPTH*	*RANGE*	*MODBAL*	*MODMIX*
SynthTalk	*ATTACK*	*RELEAS*	*VOX*	*MODBAL*	*SENSTV*

SECTION FIVE - OTHER FUNCTIONS

Active Effect

Envelope Filter	SENSTV	RANGE	MODBAL	MODMIX
Detune	AMOUNT	MODBAL	MODLVL	
Pitch Shift	SHIFT	MODBAL	MODLVL	

DLYFBK (Delay Feedback) - Controls the amount of Delay Feedback.

DUKTHR (Delay Threshold) - Controls the Ducker Threshold for the Delay.

DUKATN (Ducker Attenuation) - Controls the attenuation level applied to the Delay signal when the Ducker Threshold is exceeded.

DLYLVL (Delay Level) - Controls the Mix Level of the selected Delay Type.

DLYBAL (Delay Balance) - Controls the left/right balance of the selected Delay Type.

RVBPRE (Reverb Predelay) - Controls the Reverbs Predelay time.

RVBDCY (Reverb Decay) - Controls the Reverbs Decay time.

RVBLVL (Reverb Level) - Controls the Reverbs Mix Level.

RVBBAL (Reverb Balance) - Controls the left/right balance of the selected Reverb Type.

LF1SPD (LFO 1 Speed) - Controls the modulation speed of Expression LFO 1.

LF2SPD (LFO 2 Speed) - Controls the modulation speed of Expression LFO 2.

Utilities

The Utility section contains all of the menus for assigning global functions to the GNX1. Global functions affect the GNX1 in its entirety rather than on a per Preset basis. The Utility menus include: Mono/Stereo Output, Target System Setup, Volume Pedal Update, V-Switch Sensitivity, Pedal Calibration, Bank Naming, MIDI Channel, MIDI Sysex Dumps, Amp Dumps, MIDI Mapping, MIDI Merge, and Factory Reset. The Utility section is entered by pressing the **Utility** button at which time the Utility button will light. Once in the Utility menu, the **Rhythm** button selects the next menu (scrolls to the right), and the **FX Mode** button selects the previous menu (scrolls to the left). Each of these Utility menus is described in more detail in the following pages.

Mono/Stereo Output

The GNX1 needs to be told whether you wish to use it in a stereo or mono mode. In Stereo mode, the GNX1 will produce a wide stereo image when the Right and Left Outputs are connected to two different amplifiers. In Mono mode, the same signal will appear at the Left and Right Outputs. The procedure for selecting the output mode in the GNX1 is as follows:

1. Press the **Utility** button once. The LED in the Utility button will light indicating you are in the Utility section.
2. Using the **FX Mode** or **Rhythm** buttons, scroll to the left or right until the display shows either STEREO, or MONO as the active output mode.
3. Use the **Data Up/Down** buttons to select the desired output mode.
4. Press the **Exit** button to return to the GNX1 Presets.

Target System Setup

The GNX1 can be connected to any type of amplification system. However, the signal requirements will change depending upon the type of amplification used. The Target System Setup is intended to optimize the GNX1 for the type of amplification system it will be used with. The procedure for selecting the desired Target System is as follows:

1. Press the **Utility** button once. The LED in the Utility button will light indicating you are in the Utility section.
2. Using the **FX Mode** or **Rhythm** button, scroll to the left or right until the display shows one of the following listings of Target Systems:

DIRECT (For direct to console applications)

IN1X12 (Instrument input of a 1x12 combo amp)   FX2X12 (Input into the effect return of a 2x12 combo)

FX1X12 (Input into the effect return of a 1x12 combo)   IN4X12 (Instrument input of a 4x12 combo amp)

IN2X12 (Instrument input of a 2x12 combo amp)   FX4X12 (Input into the effect return of a 4x12 combo)

3. Press the **Data Up/Down** buttons to select the type of amplification system (from the preceding list) to be used.
4. Press the **Exit** button to return to the GNX1 Presets.

Volume Pedal Update

The GNX1 provides the option of selecting the Expression Pedal's position to be updated after changing Presets when it is linked to the Volume Parameter. This feature allows you to change Presets and retain the same volume level from the previous Preset if the Expression Pedal is assigned to control volume on both Presets. If this feature is disabled, new Presets will initialize at the volume level value stored to the Preset. The procedure for enabling or disabling the Volume Pedal Update is as follows:

1. Press the Utility button once. The LED in the Utility button will light indicating you are in the Utility section.
2. Using the **FX Mode** or **Rhythm** button, scroll to the left or right until the Display shows *VOLUPD* (Volume Pedal Update).
3. Press the **Data Up/Down** to select *On* (enabled), or *OF* (disabled).
4. Press the **Exit** button to return to the GNX1 Presets.

V-Switch Threshold

Applying extra pressure on the toe of the Expression Pedal engages a feature we call the V-Switch. The V-Switch is used to alternate between the Expression Pedal controlling the assigned Parameter(s), and acting as a Wah Pedal. The sensitivity of the V-Switch can be tailored to engage with the amount of pressure you wish to use.

The following steps outline the procedure for adjusting the V-Switch threshold:

1. Press the **Utility** button once. The LED in the Utility button will light indicating you are in the Utility section.
2. Using the **FX Mode** or **Rhythm** button, scroll to the left or right until the Display shows *VSWICH* (V-Switch).
3. Press the **Data Up/Down** to select the threshold setting you desire. Ranges from *1* to *99* (with 99 requiring more pressure to engage). The sensitivity may be auditioned while making adjustments. The Display will read either *WAH ON*, or *WAHOFF* (depending on the status of the Wah) as the V-Switch engages and disengages.
4. Press the **Exit** button to return to the GNX1 Presets.

Expression Pedal Calibration

The Expression Pedal on the GNX1 needs to be recalibrated for use after a factory reset has been performed. This calibration procedure is automatically entered after a factory reset procedure. In the event the Pedal's calibration fails, or if the Pedal does not function properly, it can be re-calibrated using the Pedal Calibration menu. The procedure for Calibrating the Expression Pedal is as follows:

1. Press the **Utility** button once. The LED in the Utility button will light indicating you are in the Utility section.
2. Using the **FX Mode** or **Rhythm** button, scroll to the left or right until the alpha-numeric Display shows *PDLCAL* (Pedal Calibration).
3. Press the blinking **Store** button once to enter the Pedal Calibration Menu. The alpha-numeric Display reads *TOE DN* (Toe Down).
4. Rock the **Expression Pedal** all the way forward to the toe down position and press the blinking number **2 Footswitch**. The Display changes to read *TOE UP* (toe up).
5. Rock the **Expression Pedal** all the way back to the toe up position and press the blinking number **3 Footswitch**. The Display will show *VSWICH* and allow you to adjust the V-Switch threshold.
6. Rock the Expression Pedal forward and apply the desired V-Switch pressure to the toe of the pedal. If further adjustment to the threshold is required, use the **Data Up/Down** buttons to select the desired threshold.

Note: If the Display shows *ERROR*, an error has occurred and steps 2 through 5 should be repeated.

7. Press the **Exit** button to return to the GNX1 Presets.

SECTION FIVE – OTHER FUNCTIONS

Bank Names

The GNX1 provides the ability to customize the names of each of the 16 User Banks where the 48 User Presets reside. Customized Bank names aid in quickly identifying the User Bank containing the Presets you may need for a particular song or set. The procedure for naming the User Banks is as follows:

1. Press the **Utility** button once. The LED in the Utility button will light indicating you are in the Utility section.
2. Using the **FX Mode** or **Rhythm** button, scroll to the left or right until the alpha-numeric Display shows BANKS.
3. Use the **Data Up/Down** buttons to select the User Bank you wish to rename.
4. Press the **Store** button once which takes you into the naming menu. The far left alpha-numeric character of the Bank name begins to blink.
5. Use the **Data Up/Down** buttons to select the desired alpha-numeric character.
6. Press the **Rhythm** button to select the next character to the right, or the **FX Mode** button to select the previous character to the left.
7. Repeat steps 4 and 5 until the desired Bank name is shown in the Display
8. Once the desired Bank name is showing in the Display, press the Store button again. The Display will briefly show NAMSVD indicating that the Bank name has been saved, and then return to the new Bank name.
9. Press the **Exit** button to return to the GNX1 Presets.

MIDI Channel

The MIDI channel in the GNX1 is used for receiving incoming MIDI data only. The GNX1 does not send out any MIDI program change commands or CC data. The procedure for selecting the MIDI channel is as follows:

1. Press the **Utility** button once. The LED in the Utility button will light indicating you are in the Utility section.
2. Using the **FX Mode** or **Rhythm** button, scroll to the left or right until the alpha-numeric Display shows MIDICH. The numeric Display will show the currently selected MIDI channel.
3. Press the **Data Up/Down** to select the desired MIDI channel. your choices include 1 through 16, AL (all), and OF (off).
4. Press the **Exit** button to return to the GNX1 Presets.

Bulk Dump

The Sysex Bulk Dump menu allows up loading of all the GNX1 Presets and Utility data to a sysex librarian, or MIDI recording device. This is useful for making a backup copy of all your customized settings. The procedure for performing a Bulk Dump is as follows:

1. Connect a MIDI cable from the GNX1 MIDI Out to the the MIDI In of a MIDI recording device.
2. Press the **Utility** button once. The LED in the Utility button will light indicating you are in the Utility section.
3. Using the **FX Mode** or **Rhythm** button, scroll to the left or right until the alpha-numeric Display shows BLKDMP (Bulk Dump). The Store button begins blinking indicating that you must press the store button in order to send a bulk dump.
4. Set the MIDI recording device to record.
5. Press the **Store** button to begin the dump. The Display reads SNDBLK until the dump is complete at which time the Display will return to showing BLKDMP.
6. Press the **Exit** button to return to the GNX1 Presets.

Note: The Bulk Dump will send information on the MIDI channel defined in the MIDI Channel menu.

MIDI Preset Dump

The Sysex Preset Dump menu allows up loading of just the GNX1 Presets to a sysex librarian, or MIDI recording device. This is useful for making a backup copy of your customized Presets, or loading your Presets into another GNX1. The procedure for performing a Sysex Preset Dump is as follows:

1. Connect a MIDI cable from the GNX1 MIDI Out to the the MIDI In of a MIDI recording device or the MIDI in of another GNX1.
2. Press the **Utility** button once. The LED in the Utility button will light indicating you are in the Utility section.

3. Using the **FX Mode** or **Rhythm** button, scroll to the left or right until the alpha-numeric Display shows
   ⊓⊐⊓⊐⊓⊐ (Preset Dump). The numeric Display will show *1* indicating that the GNX1 is ready to dump Preset number 1.

4. Use the **Data Up/Down** buttons to select the Preset number you wish to send out.

5. Press the **Store** button once. The Display reads ⊐⊓⊐ ⊓⊐ which is asking you to select the destination Preset location.

6. Use the **Data Up/Down** buttons to select the destination Preset number.

7. Set the MIDI recording device to record.

8. Press the **Store** button again. The Display reads ⊓⊐⊓⊐⊓⊐ until the dump is complete at which time the Display briefly reads ⊐⊓⊐⊓ before it returns to showing ⊓⊐⊓⊐⊓⊐.

9. Press the **Exit** button to return to the GNX1 Presets.

The Preset Dump will send information on the MIDI channel defined in the MIDI Channel menu.

User Amp Dump

The Amp Dump menu allows up loading of just the GNX1 Amp HyperModels™ to a sysex librarian, or MIDI recording device. This is useful for making a backup copy of your customized Amp HyperModels™, or loading your HyperModels™ into another GNX1. The procedure for performing a Sysex Preset Dump is as follows:

1. Connect a MIDI cable from the GNX1 MIDI Out to the the MIDI In of a MIDI recording device or the MIDI in of another GNX1.

2. Press the **Utility** button once. The LED in the Utility button will light indicating you are in the Utility section.

3. Using the **FX Mode** or **Rhythm** button, scroll to the left or right until the alpha-numeric Display shows
   ⊓⊐⊓⊐⊓⊐ (Amp Dump). The numeric Display will show *1* indicating that the GNX1 is ready to dump Amp number 1.

4. Use the **Data Up/Down** buttons to select the Amp number you wish to send out.

5. Press the **Store** button once. The Display reads ⊐⊓⊐ ⊓⊐ which is asking you to select the destination User Amp location.

6. Use the **Data Up/Down** buttons to select the destination User Amp number.

7. Set the MIDI recording device to record.

8. Press the **Store** button again. The Display reads ⊓⊐⊓⊐⊓⊐ until the dump is complete at which time the Display briefly reads ⊐⊓⊐⊓ before it returns to showing ⊓⊐⊓⊐⊓⊐.

9. Press the **Exit** button to return to the GNX1 Presets.

The Amp Dump will send information on the MIDI channel defined in the MIDI Channel menu.

MIDI Mapping

The MIDI Mapping in the GNX1 allows any of the Factory, or User Preset to be accessed from external MIDI program change commands which may not necessarily correspond to the desired GNX1 Preset. This is useful when multiple MIDI devices are chained together and are all controlled by one central unit. For example, the main MIDI controller can send out a program change command telling a particular MIDI unit to change to Program 10, but you may want the GNX1 to change to User Preset 27. You can remap the GNX1 so when it receives MIDI Program change 10, it calls up User Preset 27. The Procedure for mapping MIDI program changes is as follows:

1. Press the **Utility** button once. The LED in the Utility button will light indicating you are in the Utility section.

2. Using the **FX Mode** or **Rhythm** button, scroll to the left or right until the alpha-numeric Display shows
   ⊓ ⊓⊐⊓.

3. With the digit to the right of the M blinking, use the **Data Up/Down** buttons to select the incoming MIDI program number you wish to remap.

4. When the incoming MIDI program number has been selected, press the **Rhythm** button once. The digit in the red numeric Display will begin to flash. This number represents the Preset number within the GNX1 that will be accessed when the GNX1 receives the MIDI program number shown to the right of the M in the alpha-numeric Display.

5. Press the **Data Up/Down** buttons to select the desired Preset number the GNX1 will initialize when it receives the selected MIDI program change.

6. Press the **Exit** button to return to the GNX1 Presets.

SECTION FIVE – OTHER FUNCTIONS

MIDI Merge

The MIDI Merge function is used to echo the incoming MIDI data to the MIDI Out port of the GNX1. This is useful when multiple MIDI devices are chained together, and you wish to pass the incoming MIDI Data on to MIDI devices downstream from the GNX1. The procedure for enabling or disabling the MIDI Merge function is as follows:

1. Press the **Utility** button once. The LED in the Utility button will light indicating you are in the Utility section.
2. Using the **FX Mode** or **Rhythm** buttons, scroll to the left or right until the alpha-numeric Display shows MMERGE (MIDI Merge). The red numeric Display will read either On (on) or OF (off) depending upon the current status of the MIDI merge function.
3. Press the **Data Up/Down** buttons to select the desired status.
4. Press the **Exit** button to return to the GNX1 Presets.

Factory Reset

This function resets the GNX1 to its original factory settings. This procedure will erase all custom user Presets, Utility settings, and recalibrate the Expression Pedal.

ATTENTION: Performing this function will erase all user-programmed data. All such data will be lost forever! Be sure you want to erase the memory and start fresh before continuing with this procedure.

The procedure for performing a Factory Reset is as follows:

1. Press the **Utility** button once. The LED in the Utility button will light indicating you are in the Utility section.
2. Using the **FX Mode** or **Rhythm** buttons, scroll to the left or right until the alpha-numeric Display shows RESET (Reset).
3. Press the **Data Up** button once. The Display reads NO YES (No Yes) and the NO is blinking.
4. This is your last chance to change your mind. Pressing the **Data Down** or **Exit** button while the no is blinking in the Display will abort the Reset procedure.
5. If you are sure that you want to reset all user settings, press the **Rhythm** button once to make the word YES begin blinking in the display.
6. Pressing the **Store** button will reset the GNX1. The display will return to the RESET screen
7. Press the **Exit** button to return to the GNX1 Presets.

GENEDIT™ Editor/Librarian

The creative flexibility of the GNX1 is impressive by itself. However, the possibilities are endless when you install the GENEDIT™ Editor/Librarian software in your home computer. Before installing the GENEDIT™ CD in your Mac or PC, connect the MIDI out from your computer to the MIDI In on the GNX1. Connect from the MIDI Out on the GNX1 to your computer's MIDI In. Then insert the GENEDIT™ CD ROM into the CD ROM drive on your computer.

PC

If the GENEDIT™ setup window does not appear on your monitor automatically, just select Run from your start menu, and double click on the Setup.exe file in your CD ROM drive. The GENEDIT™ Editor/Librarian software is intuitive and includes help menus to answer any questions, as well as guide you through programming and controlling the GNX1.

Mac

If the GENEDIT™ setup window does not appear on your monitor automatically, double click on the CD icon in your display. When the GENEDIT™ window opens, double click on the "Read Me" file. This document will provide the latest information and instructions for running the GENEDIT™ software. You may want to print this document out. Once you are finished with the Read Me file, close the document and double click on the Installer icon and follow the installation instructions from there.

Section Six - Appendix
Preset List

Bank 1 (SHOCAS)
1. HYBRID
2. CLNCHO
3. 2CHUNK

Bank 2 (GENETX)
4. WARPME
5. BLKBAS
6. MEAT2X

Bank 3 (STARS)
7. ERIC J
8. CARLOS
9. KOBB

Bank 4 (AMPS)
10. BASSMN
11. MATCHD
12. VOXTOP

Bank 5 (BLUES)
13. BLUDLY
14. BLUBAL
15. TEXBLU

Bank 6 (CNTRY)
16. PICKEN
17. PSTEEL
18. A MIXO

Bank 7 (ROCK)
19. MO WAH
20. FAZOUT
21. THICKR

Bank 8 (CLEAN)
22. ACOUST
23. CMPCLN
24. WRMCLN

Bank 9 (METAL)
25. RECTFY
26. SOLO
27. WHAMMY

Bank 10 (STUDIO)
28. STACKD
29. VOLSWL
30. BIGDUK

Bank 11 (JAZZ)
31. JAZZY
32. 5THS
33. FUSOLO

Bank 12 (VINTAG)
34. SURFIN
35. FUZZO
36. TREMBO

Bank 13 (FUNK)
37. CLNWAH
38. FNKPHS
39. ENVLOP

Bank 14 (HYBRID)
40. BLKFUZ
41. TUNCAB
42. WARPIN

Bank 15 (EXPRSN)
43. PSYNTH
44. ROTARY
45. YAYA

Bank 16 (SPECIA)
46. STUTER
47. TRIPLT
48. DIVBOM

MIDI CC List

Parameter	CC#	Parameter	CC#
Pickup Type/Off	CC 1	Amp Morph	CC 79
		Cabinet Morph	CC 80
Wah On/Off	CC 2	Amp/Cabinet Morph	CC 81
Wah Type	CC 3		
Wah Minimum	CC 4	Gate On/Off	CC 50
Wah Maximum	CC 5	Gate Type	CC 51
Wah Pedal	CC 6	Gate Threshold	CC 52
		Gate Attack	CC 53
Comp On/Off	CC 8	Gate Pluck	CC 54
Comp Attack	CC 9		
Comp Threshold	CC 10	Effect On/Off	CC 55
Comp Ratio	CC 11	Effect Type	CC 56
Comp Gain	CC 12	Effect Level	CC 57
		Effect Param 1	CC 58
IPS On/Off	CC 13	Effect Param 2	CC 59
IPS Type	CC 14	Effect Param 3	CC 60
IPS Level	CC 15	Effect Param 4	CC 61
IPS Param 1	CC 16	Effect Param 5	CC 62
IPS Param 2	CC 17		
IPS Param 3	CC 18	Delay On/Off	CC 63
Whammy Pedal	CC 19	Delay Type	CC 120
		Delay Level	CC 65
Amp Channel (FS)	CC 20	Delay Time (Coarse)	CC 66
		Delay Time (Fine)	CC 67
Green Amp Type	CC 22	Delay Feedback	CC 68
Green Amp Gain	CC 23	Ducker Threshold	CC 69
Green Amp Level	CC 24	Ducker Attenuation	CC 70
Green Cab Type	CC 25	Delay Balance	CC 71
Green Cab Tuning	CC 26		
Green Bass Level	CC 29	Reverb On/Off	CC 72
Green Mid Freq (Coarse)	CC 30	Reverb Type	CC 73
Green Mid Freq (Fine)	CC 31	Reverb Level	CC 74
Green Mid Level	CC 32	Reverb Decay	CC 75
Green Treble Freq (Coarse)	CC 33	Reverb Damping	CC 76
Green Treble Freq (Fine)	CC 34	Reverb PreDelay	CC 77
Green Treble Level	CC 35	Reverb Balance	CC 78
Red Amp Type	CC 36	Volume Pre	CC 7
Red Amp Gain	CC 37	Volume Post	CC92
Red Amp Level	CC 38		
Red Cab Type	CC 39	LFO 1 Speed	CC 105
Red Cab Tuning	CC 40	LFO 1 Waveform	CC 106
Red Bass Level	CC 43	LFO 2 Speed	CC 110
Red Mid Freq (Coarse)	CC 44	LFO 2 Waveform	CC 111
Red Mid Freq (Fine)	CC 45		
Red Mid Level	CC 46		
Red Treble Freq (Coarse)	CC 47		
Red Treble Freq (Fine)	CC 48		
Red Treble Level	CC 49		

GNX1

MIDI Implementation

Function	Transmitted	Received	Remarks
MIDI Channel	1 - 16	1 - 16	
Mode	X	2, 4	
Note Number	X	X	
Velocity	X	X	
After Touch	X	X	
Pitchbend	X	X	
Control Change	X	0 - 127	See MIDI CC List
Program Change	O	0 - 128	
System Exclusive	O	O	
System Common			
Song Position:	X	X	
Song Select:	X	X	
Tune:	X	X	
System Real Time			
Clock:	X	X	
Commands:	X	X	
Aux Messages	X	X	

Mode 2: Omni On, Mono   O: Yes
Mode 4: Omni Off, Mono   X: No

Specifications

A/D Converter:	24 bit
D/A Converter:	24 bit
Sampling Frequency:	44.1 kHz

DSP Section:
Dual Audio DNA™ DSP architecture

Connections:

Guitar Input and Outputs:	1/4" TS
Jam-A-Long/Learn-A-Lick:	1/8" Stereo TRS
Headphone:	1/4" Stereo TRS
MIDI:	In and Out/Thru

General:

Frequency Response:	20 Hz. – 20 kHz. +0, -3 dB
S/N ratio:	Greater than 95 dB; ref = max signal, 22kHz measurement bandwidth.
Total Harmonic Distortion:	Less than 0.04% (1kHz).
Memory Capacity:	48 Factory Presets, 48 User Presets

Power Requirements:

US and Canada:	120 VAC, 60 Hz	Adapter: PS0913B
Japan:	100 VAC, 50/60 Hz	Adapter: PS0913-100
Europe:	230 VAC, 50 Hz	Adapter: PS0913CE-230
UK:	240 VAC, 50 Hz	Adapter: PS0913-240B

Power Consumption:	15 watts
Dimensions:	Length 14.5" Width 9" Height 3"
Unit Weight:	6.4 lbs.