The Unofficial

## GT-3 Owner's Manual Supplement

Second Edition © January, 2001, December 2008

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### Introduction

The GT-3 Guitar Effects Processor was introduced by BOSS<sup>®1</sup> on January 28, 1999 at the 1999 National Association of Music Merchants show (NAMM). It is not a replacement for, or successor to, the GT-5, which is an amazing BOSS<sup>®</sup> Effects Processor, but rather a feature/price break-through. The GT-3 does not have all of the features of the GT-5, but neither does the GT-5 have all of the features of the GT-3, places a superior BOSS<sup>®</sup> effects processor between the ME-30 and the GT-5. This placement does not indicate inferiority of the GT-3 to the GT-5 in sound quality or capability, but rather where it fits into the price structure of BOSS<sup>®</sup> effect processors. Prior to the introduction of the GT-3, BOSS<sup>®</sup> had a serious gap in the guitar signal processor market in the \$300-\$400 price range. This gave BOSS<sup>®</sup> competitors such as DigiTech<sup>®</sup> and ZOOM<sup>®</sup> a distinct advantage in the eyes of prospective buyers. That advantage has now been blown away!

While the GT-3 itself is a terrific guitar signal processor, the manual is unclear to many and is silent on various features. So we put together this supplement.

### How to Use This Supplement

This document is not intended as a replacement for the Owner's Manual, but rather as a supplement to be used in conjunction with the manual. As such, references to the Owner's Manual will be made throughout this supplement.

References to buttons, switch pedals, and the value dial on the GT-3 will be represented as bold black letters between braces. Example: [**BUTTON**].

References to information shown in the display area on the GT-3 will be represented as bold green letters between braces. Example: {Display Area}.

**NOTE**: When this supplement is printed using a non-color printer, the green letters will appear gray.

**NOTE:** Page references in *Italics* refer to the GT-3 Owner's Manual (e.g. (O. M. pp.9-12.)). Page references not in italics refer to pages in this supplement.

The objective of this supplement is not to duplicate information already covered in the Owner's Manual. Rather, it has been written to provide clarification in areas where the manual does not provide clear understanding for many. As a result, reading only the supplement may not tell you everything you need to know.

We suggest you read the Owner's Manual first to get the information offered there. Then consult this supplement to see if there is additional information provided on that subject area.

The layout of this supplement does not follow the same order as the Owner's Manual. Instead it follows the path I think users will want to take when starting out with the GT-3. It flows from simple concepts to more complicated. Items in the beginning of this supplement may found in the middle or end of the Owner's Manual. Use the table of contents in the front of this supplement, and the index in the back to determine whether a particular subject has been included here.

Some of you may not want to read this Supplement from cover to cover, and because of how we've attempted to write it, you shouldn't have to. Many of you will want to read it just to see whether you've missed anything along the way. (Others may want to read the entire supplement just to point out errors and discrepancies. ©)

If there is a feature of the GT-3 that has not been covered here or one that you think needs further clarification, please send us a message. You can contact Stephen Golden at <<u>forsmg-gt3@yahoo.com</u>>.

<sup>&</sup>lt;sup>1</sup> BOSS is a registered trademark of the ROLAND corporation.

### Connections

In general, the connections and interface descriptions in the Owner's Manual are clear, so they will not be discussed in detail in this supplement. (O. M. pp.9-12.) For additional information about MIDI connections and MIDI in general, please see the MIDI section later in this Supplement (p.14).

### Summary of the Interface

The top face of the GT-3 has a lighted display, a [VALUE] dial, two [BANK] pedals ([UP] and [DOWN]), twelve effect buttons, eight feature/edit-related buttons, four numbered pedals, one [CTL] pedal, and one expression pedal (EXP).

### Banks, Patches, Effects

Sounds in the GT-3 are composed of effect sets called "patches." They are grouped in "banks" of four patches each. There are 35 banks containing a total of 140 patches that are user editable and 50 banks containing 200 patches that are permanent, non-editable standard sounds.

**NOTE:** In the display window, the bank-indicator-number changes when switched between a user patch and a permanent patch. When a user patch is selected, (patch locations 1-1 through 35-4), the number is light on a dark background. However, when a patch from one of the permanent banks is selected, the patch number displays in "reverse video" meaning that the background is light, and the number is dark.

You can modify an effect by pressing the appropriate effect button. From there, you can turn the effect on or off by either pressing the button again, or by rotating the [VALUE] dial either clockwise or counterclockwise as appropriate.

To switch between patches within a bank, press one of the numbered pedals, [1] through [4], or you can turn the [VALUE] dial.

To switch between banks, press one of the bank pedals, [<u>UP</u>] or [<u>DOWN</u>], and then press the desired numbered pedal, [<u>1</u>] through [<u>4</u>], to access the patch location within the new bank.

**NOTE:** "*Patch Change Mode*" (*O. M. p.36*) defaults to the setting {<u>Wait for a NUM</u>}. What does this mean? Normally when you change banks on the GT-3, the effect will not switch until you select one of the patch pedals in that bank. The light on the pedal corresponding to the patch that was active in the previous bank will flash indicating for you to select one of the patches in the bank. If you want the effect in a patch to be heard as soon as you switch banks, you can modify the "patch change mode parameter" to say {<u>Switch It Now</u>}. The effect will change as soon as you switch banks. This is explained in greater detail on p.13.

### Editing a patch

### **Direct editing**

Perhaps the easiest way to edit a patch is to start by pressing one of the *Effect Select Buttons*. For example, to modify the delay effect in the patch, press [**DELAY**]. You will be able to turn the [**VALUE**] dial to set the effect either on or off. From that point, if you continue turning the [**VALUE**] dial clockwise, you will see first the current USER settings in the display, (labeled U1 - U4) and then the preset Quick Setting options (labeled P1 - P10) for the effect. (O. M. p.21)

### Quick Setting Method:

If you choose to use one of the *Quick Setting* options, you do not need to manually set the effect parameters.

Turn the [VALUE] dial clockwise or counterclockwise until the function to be controlled is shown in the display. This sets the effect for the patch using preset values. At this point, if you want to edit another effect, press the corresponding effect button, otherwise, press [WRITE] to save the settings.

**NOTE:** If you forget to press [WRITE] after your final edit for the patch, not only will you lose these edits, but you will also lose any other settings changed since the last time you saved the patch.

### Normal Setting Method:

Press the  $[\geq]$  parameter button once.

You will see the first value that can be edited for the effect in the display. From here, you can press the [<] and [>] parameter buttons as desired to modify the effect parameters. Since each effect has many different parameters, they will not be discussed in detail here. (O. M. p.22-24)

### Jumping through the parameters:<sup>2</sup>

The jump feature allows you to jump from the Start to the End of each effect parameter group and the Next and Previous assigns without having to key through each parameter

To jump to the end of a parameter string for a given effect, instead of hitting the  $[\geq]$  button repeatedly, if you press and hold  $[\geq]$  and then press  $[\leq]$ , you will arrive at the last parameter of the group or the "right" end of the string of parameters. Likewise, if you press and hold  $[\leq]$  and then press  $[\geq]$ , you will arrive at the first parameter of the group or the "left" end of the string of parameters. The Jump feature works in a similar way for the [**PEDAL/ASSIGN**] settings however, instead of the Jump taking you to either the "left" or the "right" end of a parameter string, the jump takes you to the label or header of each [**PEDAL/ASSIGN**] area.

For example: Rather than hitting  $[\geq]$  25 times or more to get to Assign #4, press and hold  $[\geq]$  and then hit  $[\leq]$  5 times and you'll be at ASSIGN 4. Starting from {**EXP PEDAL**}, you'll go to {**CTL PEDAL**}, {**ASSIGN 1**}, {**ASSIGN 2**}, etc. To go back, press and hold  $[\leq]$  and then hit  $[\geq]$ .

**NOTE:** When editing an effect for a patch, if that particular effect is not turned {<u>ON</u>}, the name of the effect in the display as well as the light on the effect button will blink.

<sup>&</sup>lt;sup>2</sup> From Jeff Brown <<u>you\_enjoy\_myself@hotmail.com</u>>

### EZ Edit

*EZ Edit* is an editing method that allows you to create a new sound using factory-preset values. It steps you through six categories of effects and lets you select from various preset parameter sets.

Whether *EZ Edit* is easier than finding a patch similar to the sound you want and editing it directly is a matter of opinion. The *EZ Edit* method is likely to be most useful when starting from nothing to create a new patch.<sup>3</sup> (*O. M. p.19.*) One advantage to this method is that you can create and edit the patch using the foot pedals while you play. (*O. M. p.20*)

#### **Order of Effects**

You can choose the order of effects for your patch. That is, whether you want chorus before distortion or delay before the chorus, etc. (Also see *Recommended Effect Sequence* on p.39.)

To set the order in specific patch,

### Press [MASTER],

Press the  $[\geq]$  parameter button six times until you come to the {Effect Chain} field.

Turn the [VALUE] dial to select the desired position in the chain for the effect you are inserting. (Effects can be inserted at the beginning of the chain, the end of the chain or between any two other effects in the chain).

Next, press the effect button for the effect you wish to insert. Ex: To insert reverb as the first effect in a chain, use the [VALUE] dial to position the bar at the beginning of the chain and press [REVERB]. (Abbreviations for the effects are listed in the Owner's Manual on p.38.)

### Writing (saving) a patch

When you have finished making changes to a patch, you will want to save it. To save a patch, press [<u>WRITE</u>]. You will first be asked so specify a patch location in which to save it. The default is always the current patch. If that is where you want to save it, press [<u>WRITE</u>] a second time. Otherwise, turn the [<u>VALUE</u>] dial either clockwise or counterclockwise until the desired patch number appears in the display and then press [<u>WRITE</u>] a second time. If at any time you decide to **not** save the patch or the changes made to a patch, press [<u>EXIT</u>]. (O. M. p.32)

### Naming a patch

After writing a patch, you will probably want to give it a meaningful name. To do this,

Press [MASTER].

Press the  $[\geq]$  parameter button seven times until you come to the Name field.

Turn the [VALUE] dial until the appropriate letter appears on the display.

Use the  $[\geq]$  parameter button to move to the next character. To back up, use the  $[\leq]$  parameter button.

**NOTE:** Stenciled under [**EZ EDIT**], [**MANUAL**], and [**TUNER/BYPASS**] you will notice the following secondary functions for these buttons which are used in this mode. They are [**CAPS**], [**INSERT**], and [**DELETE**], which simplify creating and editing the patch name.

To make a letter toggle between upper and lower case, press [CAPS].

To insert a space, press [INS]. If desired, you can then replace the space with a character by selecting a character value with the [VALUE] dial.

To delete a character, press [DEL].

When finished, press [WRITE], and confirm it by pressing [WRITE] a second time. (O. M. p.31)

### Canceling an edit

To cancel an edit at any point before you [WRITE] it, simply press [EXIT]. The changes you made will still be present in the patch, but once you select a different patch, the edits will be removed. (O. M. p.31)

 $<sup>^{3}</sup>$  Perhaps someone else has a better idea of what BOSS had in mind for using this feature.

### **User Settings**

User settings are tied to effects (delay, mod, chorus, od/ds), **not** to patches. The user settings are defined with default parameters from the factory. When you press an effect button and turn the [<u>VALUE</u>] dial, you will see U1=... U2=... and so on. Four {<u>USER</u>} settings for each effect are available to every patch. (O. M. p.21)

For example, if you like a particular type of chorus, delay, or overdrive, the GT-3 lets you save this effect into one of the four {**USER**} areas for that effect. Once stored as a user setting, it can be applied to any other patch. Instead of having to tweak each patch manually to get this sound, you can simply retrieve it from your User Settings just as you saved it.

To set up a USER area for easy access in other patches, select the effect by pressing the appropriate effect button.

Modify the parameters of that effect to your liking.

Press and hold the NUMBER PEDAL ([1] - [4]) corresponding to the desired {USER} setting "slot." (For example: to save it in {USER 1} – press pedal [1], in {USER 2} – press pedal [2], and etc.) While holding the pedal down, press [WRITE].

You will be presented with a {**NAME**} field in the display. Give the {**USER**} setting a meaningful name that will enable you to identify it later. (Use the same method as *Naming a Patch* above.)

Press [WRITE] again. The {USER} setting is now saved.

### Accessing User Settings:

To access a user setting for any patch, press the corresponding effect button, and turn the [VALUE] dial. The user setting you named should appear under U1, U2, U3, or U4. Once it shows in the display, press [WRITE] or you can press another effect button and modify another effect. When you're finished editing the patch, press [WRITE], confirm the location for the write, and press [WRITE] again.

**NOTE:** If you forget to press [WRITE] after your final edit for the patch, not only will you lose these edits, but you will also lose any other settings changed since the last time you saved the patch.

### Feature/Edit buttons

The [EXIT], [<] and [>] parameter, [WRITE], and [EZ EDIT] buttons are discussed in context elsewhere in this supplement.

### MANUAL Button

When you invoke manual mode you can dynamically turn on and off up to six effects/features with your foot as if you had six individual stomp boxes (individual effect pedals) in front of you. I think a better name to call this mode would have been "STOMP BOX MODE." Manual mode essentially enables you to have multiple "patches" within a single patch. Turn on manual mode by pressing [MANUAL]. Turn it off by pressing [MANUAL] again. The display will show a mapping of which effect is on each pedal. These assignments can be changed by using the [<] and [>] parameter buttons to move the cursor to the desired pedal position and then turning the [VALUE] dial until the desired effect appears in that position.

While in Manual Mode, effects in displayed in CAPS are on. Effects displayed in lower case are off.

NOTE: You can turn manual mode on and off with the [CTL] pedal if you have assigned the [CTL] pedal to control {MANUAL ON} for the patch. Assigning the [CTL] pedal is discussed on p.23 (Manual ON) and on p.24 ("Global Manual Mode") of this supplement.

### **TUNER/BYPASS Button**

The GT-3 has an accurate, well-designed Guitar Tuner built right into it. When you press [**TUNER/BYPASS**], the display shows a representation of arrows with a center box. When you play a guitar string, the name of the musical note being played is shown in the display as well as an indication of how far off true the played note is, whether high or low. As you tune the string, the representation should approach the center and when true, only the center box will be lit. In the *Bypass* mode, the output is not muted so if you want to mute the output as you tune up, rock the Expression pedal all the way toward you. If you always want to tune silently, you can set the tuner to *Mute* mode, which will cut the GT-3 output whenever the *Tuner* is accessed.

To set the tuner to {Mute} mode

Press [**TUNER**].

Press the  $[\geq]$  parameter twice until you see {**TUNER Out**} in the display.

Turn the [VALUE] dial counterclockwise to change the setting from {Bypass} to {Mute} and turn the [VALUE] dial clockwise to change the setting from {Mute} to {Bypass}.

NOTE: All effects are bypassed when you are in TUNER mode.

#### Setting the Tuner Pitch:

The tuner defaults to A-440 but can also be set to non-standard pitch instead by adjusting the TUNER PITCH parameters. (O. M. p.16)

To set the tuner to a non-standard pitch

Press [**TUNER**].

Press the [>] parameter once. You will see {**TUNER Pitch**} in the display. Turn the [**VALUE**] dial clockwise or counterclockwise to change the pitch.

### UTILITY

The GT-3 Owner's Manual does a reasonably good job describing the [UTILITY] settings, so most of them will not be discussed in detail here. (O. M. pp.33-37)

### GLOBAL

GLOBAL settings allow you to make immediate overall settings to the GT-3's output.

Output Setting – Allows you to configure the GT-3 to be best suited to the type of amplification you will be using.

Low EQ – Allows you to adjust the Low EQ for all patches.

High EQ – Allows you to adjust the High EQ for all patches.

NS Threshold – Allows you to adjust the Noise Suppressor threshold for all patches.

Reverberation level – Allows you to adjust the reverberation level for all patches.

### METER

The METER function allows you to graphically view the volume levels of either the input, output or the output level of an individual effect.

### SYSTEM

The SYSTEM function allows you to set system-related features.<sup>4</sup>

LCD Contrast	<ul> <li>Allows you to adjust the contrast of the display for optimized viewir</li> </ul>	ıg.
Dial Eurotion	Allows you to control whother turning the [VALUE] dial will char	00 02

Dial Function	– Allows you to control whether turning the <b>VALUE</b> dial will change patches
	when not in patch edit mode.
	Allows you to get the function of systemal OTI model #1, whether it will be

- SUB CTL 1 Allows you to set the function of external CTL pedal #1, whether it will be "assignable," set to toggle MANUAL mode on and off, or set to toggle TUNER on and off.
- SUB CTL 2 Allows you to set the function of external CTL pedal #2, whether it will be "assignable," set to toggle MANUAL mode on and off, or set to toggle TUNER on and off.
- Patch Change Mode There are two options that can be selected under {Patch Change Mode}. The first option is {Switch It Now}. In this mode as you press the up and down [BANK] pedals, the sound of each new bank will be immediately heard. This may not be desirable if your destination patch is several banks up or down from the present one. In this case the factory-preset mode, "Wait for Num" may be the better choice. In {Wait for a NUM} mode, once you leave the current bank by pressing either [UP] or [DOWN] bank pedal, the sound remains unchanged until you specify a patch location by pressing one of the numbered pedals, [1] through [4]. This means that if you are at bank 3-1 and your destination is patch 5-4, the sound will not change until you press patch pedal [4] after having switched to bank 5.
  - **NOTE:** As you change banks up or down, the individual patch number indicator, the light on pedals [1] through [4], will stay on the number of the previously selected patch. In the example above, pressing the [UP] bank pedal would change the Bank from 3-1 to 4-1, then to 5-1, until the last step where patch pedal [4] is pressed changing the selected patch number from 1 to 4.
- Bank Extent Allows you to limit the range of banks accessed by the bank pedals. For example, if all the patches you use are contained in banks 1 7, you could set the bank extent to 7 and successively pressing the [BANK] pedals will cycle only through these seven banks. This enables you to access bank 7 from bank 1 by a single press of the [DOWN] bank pedal.

<sup>&</sup>lt;sup>4</sup> Please see the Owner's Manual. p.35

Assign Hold<sup>5</sup> –

On - The current value of the expression pedal is read upon loading a new patch. For example, if you have the expression pedal returned in one patch, and without moving the expression pedal, you change to a patch where the expression pedal controls volume, the patch will be silent. This is the way Norm apparently wanted the pedal to work.

Off- The current value of the expression pedal is not read upon loading a new patch. For example, if you have the expression pedal returned in one patch, and without moving the expression pedal, you change to a patch where the expression pedal controls volume, the patch will be at full volume until you move the expression pedal. This is the behavior Norm was complaining about below.

In other words, with Assign Hold: On, when you switch from a patch where the EP controls the same parameter (Volume, for example), the parameter will retain the setting established in the previous patch (the volume will not change). With Assign Hold OFF, when you switch from a patch where the EP controls the same parameter (Volume, for example), the parameter will be set at the maximum level (the volume will not change). (Also see the Owner's Manual p.36)

#### Here is a simple example demonstrating how ASSIGN HOLD works:<sup>6</sup>

Set in the global parameters ASSIGN HOLD to ON.

Go to patch 36/1 (Tube Stack).

Rock the expression pedal back. There will be no sound because the pedal is controlling foot volume.

Now change the patch to 36/2(Cool crunch).

Again there is no sound. The position of the expression pedal is respected.

(In patch 36/2 it is also controlling the foot volume).

Now do the same with the ASSIGN HOLD to OFF.

When you make the change to patch 36/2 there is sound, in spite of the expression pedal being rocked back. Its position is not respected. The initial value of foot volume (100) defined under the master button is taken.

That's all. Positions of controls are respected while a patch is changed.

### MIDI

The MIDI function allows you to set and access MIDI functions. (Also see MIDI on p.14, MIDI Data Transfer on p.15, and MIDI for PC Connections on p.51.)

#### Harmonist Scale

The Harmonist is an intelligent pitch shifter that can add harmony to the notes you play on your guitar. However, for the Harmonist to know what note is correct for the scale of the song being played, you must tell it the scale of the song relative to the key of C. The *Harmonist Scale* allows you to set the scale for correct notes played by the *Harmonist* when it is set to the *Harmony* mode. If you're not proficient in scales, a little trial and error will usually produce the correct *Harmonist Scale*. (*O. M. p.36*)

### Auto-Riff Phrase

The Auto-Riff Phrase area is where you define your own phrases for the Auto-Riff effect. Auto-Riff is an effect that plays a phrase of notes when you play a single note on the guitar. There are 30 factory-preset riff definitions for you to use, and you can program and save up to ten definitions your own. To select an Auto-Riff, access it from the [**MOD**] effect. See Auto-Riff on p.30 of this document. (*Also see O. M. pp.34, 37, 47, & 49*)

<sup>&</sup>lt;sup>5</sup> From Russ Poncher <<u>rponcher@earthlink.net</u>>

<sup>&</sup>lt;sup>6</sup> From: "Jan Huizinga" <janh@Unit4.nl>

### **MIDI Data Transfer**

The transmission and reception of MIDI information by the GT-3 is named from a narrow perspective and can be misleading. "MIDI Bulk Dump" sounds like the GT-3 will be sending MIDI data, and "MIDI Bulk Load" sounds like the GT-3 will be receiving data. However, the names do not describe the direction information will be flowing. Instead, they describe the device that will be controlling the exchange of information. MIDI Bulk Dump allows the GT-3 to control the MIDI data transfer and it's a one-way send *only*. MIDI Bulk Load allows an external device to control the MIDI data transfer allowing send and receive of MIDI data.<sup>7</sup>

(Also see MIDI on p.14, and MIDI for PC Connections on p.51.)

### MIDI Bulk Dump

#### **GT-3 Controls the MIDI Transfer**

(See p.61 of the Owner's Manual.)

The term DUMP seems to imply transferring all available data, but this is not the case. You do have some limited control over what data is actually transmitted. For more information on how to specify what MIDI information is transmitted see *p.61 of the Owner's Manual*.

Press [**UTILITY**] four times to get to the MIDI access area.

- Press the [≥] parameter button until you see {MIDI Bulk Dump} (to transmit MIDI data) in the display.
- Determine the range of MIDI data you would like the GT-3 to transmit by selecting the start parameter and the end parameter using [VALUE] dial and using the [<] [≥] buttons to switch between start and end.

The range can include:

SYSTEM data (Tuner, Utility, and Manual settings),

- Quick FX (Effect settings, Pedal Settings, and control assign settings stored in the USER areas.)
- Any contiguous set of user bank/patch numbers from 1-1 to 35-4, and the

TEMP area (the contents of the currently selected patch).

To start the transfer, press [WRITE].

### MIDI Bulk Load

#### External Device (PC) Controls the MIDI Transfer

(See p.62 of the Owner's Manual)

Press [UTILITY] four times to get to the MIDI access area.

- Press the [≥] parameter button until you see {MIDI Bulk Load} (to receive MIDI data) in the display. The GT-3 is now ready to receive MIDI data. Begin the transmission from the sending device.
- **NOTE:** Some PC programs, such as GT-3 Editor<sup>8</sup> and GT-3 Manager<sup>9</sup>, perform both transmit and receive functions from the {**MIDI Bulk Load**} mode and allow considerably more flexibility in setting up your GT-3 from your PC.

<sup>&</sup>lt;sup>7</sup> I'd like to thank Nick Oatley <<u>nick.oatley@seri.co.uk</u>> for making this concept clear to me.

<sup>&</sup>lt;sup>8</sup> http://www.kagi.com/amcsoftware/gt3.html

<sup>&</sup>lt;sup>9</sup> http://www.bossgt3.co.uk/

### Expression (EXP) and Control (CTL) Pedals

The Expression and Control pedals allow you to modify the sound produced by the GT-3 while you're playing through it. For each patch, these pedals are set to specific functions at the factory. You cannot permanently change the control functions for the *preset* patches. However, for the **{USER**} patches, the functions of these pedals can be changed.

When setting the EXP and [CTL] pedals, the "target" refers to the function to be controlled; the "source" refers to the pedal that is going to be used to control it.

In reference to Expression Pedals, when the toe of the pedal is down, we will refer to the pedal as being "rocked forward." When the toe of the pedal is up, we will refer to the pedal as being "rocked back."

### Expression Pedal

For each patch (including both user and preset patches) the Expression pedal has been factory set to control a specific function. In the user patches, you can change the Expression pedal to control a different function from the one set at the factory.

The functions the Expression pedal can control are: (O. M. p.24) P1:Foot VolumeP5:Pedal DriveP2:Wah PedalP6:Preamp VolumeP2:Padel ShiftP7:Charung Laugh

- P3: Pedal Shift

P4: Delay Level

- P10: Master Level
  - P11: Auto-Wah Level

P7: Chorus Level

P8: Reverberation Level P12: Pedal Ring

P9: Human Pedal

### Setting the Expression Pedal

To set the Expression Pedal to perform a different function,

#### Press [PEDAL/ASSIGN]

Set the Expression Pedal to {ON} by turning the [VALUE] dial clockwise one notch position. (If the value already says {ON}, no action is necessary to activate it.)

If you continue to turn the [VALUE] dial clockwise, you will first see the current USER settings. Next are the pre-set Quick Setting options for this effect, which are available for use in all user patches. Quick Settings are factory-preset parameter settings. (O. M. p.21)

#### Normal Setting Method:

Press the [>] parameter button once.

Turn the **[VALUE**] dial either clockwise or counterclockwise until the function to be controlled by the Expression pedal is shown on the display.

Press the [>] parameter button again.

Set the "minimum" value for the function as appropriate by turning the [VALUE] dial clockwise or counterclockwise. (e.g. Volume, minimum would likely be zero). This will be the value attained when the pedal is rocked back.

Press the  $[\geq]$  parameter button again.

Set the "maximum" value for the function as appropriate by turning the [VALUE] dial clockwise or counterclockwise. (e.g. Volume, maximum would likely be 100). This will be the value attained when the pedal is rocked forward.

To go back to a previous parameter, press the [<] parameter button.

If you want to save the patch at this time, press [WRITE], specify or confirm the destination patch, and press [WRITE] again. Instead, you may choose to edit another effect in the patch by pressing the appropriate effect button.

#### **Quick Setting Method:**

If you choose to use one of the Quick Setting options, you do not need to go through the "Normal Setting Method" steps described below.

Turn the [VALUE] dial clockwise or counterclockwise until the function to be controlled is shown in the display. This sets the factory-preset values for the effect. At this point you can edit another effect by pressing the corresponding effect button or press [WRITE] to save the settings.

**NOTE:** If you forget to press [WRITE] after your final edit for the patch, not only will you lose these edits, but you will also lose any other settings changed since the last time you saved the patch.

### CTL Pedal

For each patch, user and preset, the [CTL] pedal has been factory set to control a specific function. In the user patches, you can change the [CTL] pedal to control a different function from the one set at the factory.

The functions the [CTL] pedal can control are: (O. M. p.24)\*

- P6: Auto Riff (AR) Hold
- P7: Synth Hold
- P8: Mute
- P9: Tuner On

P5: Anti-feedback (AFB) search

P10: Manual On

\*Other effects and parameters can be turned on and off using the [CTL] pedal.

#### Setting the CTL Pedal

P4:

To set the [CTL] pedal to a different function,

#### Press [PEDAL/ASSIGN].

P1: Master BPM

P2: Feedbacker

Delay on

P3: Vibrato

Press the [>] parameter four times.

- Set the [CTL] pedal to {ON} by turning the [VALUE] dial clockwise one position. (If the value already says {ON}, no action is necessary to activate it.)
- **NOTE:** If you continue to turn the [<u>VALUE</u>] dial clockwise, you will first see the current USER settings. Next are the pre-set Quick Setting options for this effect which are available for use in all user patches. Quick Settings are simply factory-preset parameter settings. (O. *M. p.21*)

#### Normal Setting Method:

Press the  $[\geq]$  parameter button once.

Turn the [VALUE] dial either clockwise or counterclockwise until the function to be controlled by the [CTL] pedal is shown on the display.

Press the [>] parameter button once.

Set the "minimum" value for the function as appropriate by turning the [VALUE] dial clockwise or counterclockwise. (e.g. Volume, minimum would likely be zero). This will be the value attained when the pedal is rocked forward.

Press the  $[\geq]$  parameter button once.

Set the "maximum" value for the function as appropriate by turning the [<u>VALUE</u>] dial clockwise or counterclockwise. (e.g. Volume, maximum would likely be 100). This will be the value attained when the pedal is rocked back.

To go back to a previous parameter, press the  $[\leq]$  parameter button.

- If you want to save the patch at this time, press [WRITE], specify or confirm the destination patch, and press [WRITE] again. Instead, you may choose to edit another effect in the patch by pressing the appropriate effect button.
- **NOTE:** If you forget to press [WRITE] after your final edit for the patch, not only will you lose these edits, but you will also lose any other settings changed since the last time you saved the patch.

#### Quick Setting Method:

If you choose to use one of the Quick Setting options, you do not need to go through the "Normal Setting Method" steps described below.

Turn the [**VALUE**] dial clockwise or counterclockwise until the function to be controlled is shown in the display. At this point you can edit another effect by pressing the corresponding effect button, otherwise, press [**WRITE**] to save the settings.

**NOTE:** If you forget to press [<u>WRITE</u>] after your final edit for the patch, not only will you lose these edits, but you will also lose any other settings changed since the last time you saved the patch.

### **Control Assign**

#### (O. M. p.26)

If you've read the above topics, you're already familiar with the Expression Pedal, and the [<u>CTL</u>] pedal. These devices allow you to control parameters dynamically with your foot while playing the guitar. In terms of the PEDAL/ASSIGN, these are referred to as "sources." The function, effect or parameter, you will control with the source is called the "target." **An ASSIGN is a definition of a source and its associated target.** With the ASSIGNS you set up the source that will do the controlling and target to be controlled. In other words, you are assigning control. There are a total of ten source "definition areas" available for each patch: the EXP Pedal and [<u>CTL</u>] pedal where the source is unchangeable, and eight ASSIGNS. In other words, for the EXP Pedal and the CTL pedal sources, *they are the source*. (You cannot set the source for EXP Pedal to be CTL; that would be a contradiction.) For the ASSIGNS, you can set the source yourself to one of the sources available in the GT-3 (see p.20 below).

To see these definition areas,

#### Press [PEDAL/ASSIGN].

You will see {EXP PEDAL} in the display.

If the Expression pedal is currently turned {**OFF**}, pressing the  $[\ge]$  parameter button again, will bring up the CTL PEDAL in the display. If the [**CTL**] pedal is currently set to {**ON**}, press the  $[\ge]$  parameter button again. A menu will appear in the display where the target for the Expression Pedal can be set. From here, pressing the  $[\ge]$  parameter button successively after that will step you through the various parameters that can be assigned. Once you reach the end of the {**EXP PEDAL**} definition fields, pressing the  $[\ge]$  parameter button will take you to the beginning of the {**CTL PEDAL**} parameter menu.

Press the  $[\geq]$  parameter button.

You will see {CTL PEDAL} in the display.

If the [CTL] pedal is currently set to {OFF}, press the [ $\geq$ ] parameter button again. You will see {<u>ASSIGN 1</u>} in the display. If it is {<u>ON</u>}, pressing the [ $\geq$ ] parameter button again will bring up a menu where the target for the [<u>CTL</u>] pedal\_can be set. Pressing the [ $\geq$ ] parameter button successively will step you through the various parameters to be assigned. Once you reach the end of the [<u>CTL</u>] pedal definition fields, pressing the [ $\geq$ ] parameter button will take you to the {<u>ASSIGN 1</u>}.

Press the  $[\geq]$  parameter button.

You will see {<u>ASSIGN 1</u>} in the display.

If it is {<u>OFF</u>}, pressing the  $[\geq]$  parameter button again will display {<u>ASSIGN 2</u>}. Successive presses of the  $[\geq]$  parameter button will display each {<u>ASSIGN</u>} in sequence through {<u>ASSIGN 8</u>} for each {<u>ASSIGN</u>} that is {<u>OFF</u>}.

For each {<u>ASSIGN</u>} that is {<u>ON</u>}, pressing the [ $\geq$ ] parameter button again will produce a menu in the display where you can set the target for that particular assign. Pressing the [ $\geq$ ] parameter button successively will step you through the rest of the parameters that can be modified for this {<u>ASSIGN</u>}.

One of these parameters will be the source, or the device that will control the target. Once you reach the end of the {<u>ASSIGN</u>} definition fields for the current {<u>ASSIGN</u>}, pressing the [ $\ge$ ] parameter button will take you to the next {<u>ASSIGN</u>}.

You only need to set up the assigns you plan to use. You can also set up multiple assigns, but only turn  $\{\underline{ON}\}$  the ones you want to use in the patch at the moment. Leave the others  $\{\underline{OFF}\}$ . They can still be enabled at a later time.

#### Control sources you can use in the GT-3 are:

EXP Pedal

- CTL PedalSUB EXP Pedal- (External Expression Pedal optional accessory)10SUB CTL 1- (External Control pedal optional accessory)11SUB CTL 2- (External Control pedal optional accessory)12Internal Pedal- Must be triggered by either one of the [EXP] or [CTL] pedals, a Patch<br/>Change, or a MIDI event. Once it is triggered by a defined source, it operates<br/>independently of that source for the duration of the effect. (See p.37.) (O. M.<br/>p.29)
- Wave Pedal Automatically varies the effect or function as if it were being controlled by an Expression Pedal. The effect continues to be sounded until you stop it. (See p.37.) (O. M. p.30)
- MIDI Control Channel 1 through 95 The MIDI Control Channels allow an external MIDI device to dynamically change the settings on the GT-3 while you play. For example, if a sequencer controlled a keyboard, a drum machine, and your GT-3 simultaneously, while the Keyboard and drums were playing various parts of the song, you could program the sequencer to dynamically change GT-3 patches or other settings so you wouldn't have to bother even pressing the pedals. The patch or other various settings would change at the time you appointed in the sequencer program. This is really cool, but requires a thorough understanding of MIDI . (O. M. p.30)

 $<sup>^{10}</sup>$  Precludes the use of the SUB CTL devices.

<sup>&</sup>lt;sup>11</sup> Precludes the use of the SUB EXP Pedal.

<sup>&</sup>lt;sup>12</sup> Must be used in conjunction with SUB CTL 1. An insert cable is required. (See p.24)

### **Multi-Function CTL**

A single source can control multiple targets. That is, you can assign more than one feature to the same control source at the same time in a given patch. For example, you can assign both chorus and delay to the [**CTL**] pedal and turn them both on and off with the press of one pedal. A control source can control up to a maximum of nine different effects or functions simultaneously from the press of a single pedal.

### **Control functions:**

#### Master Beats Per Minute (BPM)

For effects that incorporate modulation, such as Phasing, Flanging, Chorusing, and Delay, you have the option of adjusting the BPM rate. The GT-3 also has a feature that allows you to tie all of the BPM values for individual effects to a MASTER BPM rate. You can even assign the MASTER BPM to a control pedal enabling dynamic synchronization of the BPM rate to match the tempo of the song you're playing.

**NOTE:** See the Owner's Manual for which effects use BPM and the name of the parameter. The name of the parameter might be rate or tempo but it will not be "BPM" (O. M. pp.38-57)

To tie the BPM of an individual effect to the MASTER BPM

Press the effect button you would like to control with the MASTER BPM.

- Press the [>] Parameter button until you arrive at a parameter that allows BPM as a value. (Delay, Chorus, or etc.)
- Set the BPM rate according to the note type that represents the frequency of the recurring effect, for example, quarter note, eighth note, or etc.

If you want to save the patch at this time, press [<u>WRITE</u>], specify or confirm the destination patch, and press [<u>WRITE</u>] again. Instead, you may choose to edit another effect in the patch by pressing the appropriate effect button.

**NOTE:** If you forget to press [<u>WRITE</u>] after your final edit for the patch, not only will you lose these edits, but you will also lose any other settings changed since the last time you saved the patch.

The Master BPM setting below is the BPM rate, which will be used for all effects that have the BPM rate set to be controlled by the Master BPM.

Now set the Master BPM rate (O. M. pp.57)

#### Press [MASTER].

Press the [>] Parameter button until you see Master BPM. Set the default master BPM rate.

**NOTE:** This value can be made to change dynamically by setting the Master BPM to be controlled by a pedal.

If you want to save the patch at this time, press [<u>WRITE</u>], specify or confirm the destination patch, and press [<u>WRITE</u>] again. Instead, you may choose to edit another effect in the patch by pressing the appropriate effect button.

**NOTE:** If you forget to press [<u>WRITE</u>] after your final edit for the patch, not only will you lose these edits, but you will also lose any other settings changed since the last time you saved the patch.

To set the MASTER BPM to be controlled by a source, see "Setting the [CTL] pedal" (p.18).

### Using the Control pedal to set the BPM rate

In some circles, this function is called "Tap Tempo." However, the "Tap Tempo" feature of the GT-3 has nothing to do with the "Tap setting" and "Tap time" parameters, which are part of the delay effect. It is an unfortunate coincidence in terminology. The Tap in the delay effect is related to the "tap"<sup>13</sup> of the left channel into the right channel if running a stereo delay. This allows you to change the moment at which the signal arrives at the right channel with respect to the left channel. (O. M. p.54, 55, & 57)

With that issue behind us, let's discuss using the [**CTL**] pedal to set the effect BPM (Beats Per Minute) rate with the tempo of the song you're playing. The BPM rate can be set for a variety of effects. The most profound of which is the Delay effect. Often you may want to set the BPM rate dynamically with the song you're playing. To do this, you must first set the effect BPM (Delay, for example) to point to the Master BPM (described on p.21). To do this, turn the knob past the specific millisecond BPM rates to the point where you see BPM and notes representing the frequency of the delay. This will be in terms of the Master BPM. For example, if the Master BPM is set to 120, that is the tempo of a quarter note in the patch BPM. An eighth note in the patch BPM will repeat twice as fast.

Now set the [<u>CTL</u>] pedal (described on p.18) to control the Master BPM. As a quick recap: press [**Pedal Assign**], select [CTL] for control using the [ $\geq$ ] button until you see [CTL PEDAL Target MST], then turn the [**VALUE**] knob clockwise nearly all the way to the end (199<sup>th</sup> option) to find {MST:Master BPM}. Save the patch by pressing [**WRITE**] and selecting the place to store it.

When you hear the tempo of the song, *tap* the [<u>CTL</u>] pedal with the tempo of the song and the MASTER BPM rate will be set accordingly. All effects that are set to use the MASTER BPM will now be operating according to the tempo of the song.

A preset patch that does this is 59-3 TEMPO DELAY.<sup>14</sup>

#### Feedbacker

Setting *Feedbacker* to [<u>CTL</u>] allows you to trigger the FEEDBACKER effect with your foot. Once the [<u>CTL</u>] pedal is set as a source, play a note and press the pedal. The GT-3 will produce a feedback sound the same frequency as the note played. This effect will last until the pedal is released. (See "Setting the [<u>CTL</u>] pedal" p.18. Also see "Using the Expression Pedal as a feedbacker " p.41.)

### Vibrato

Setting *Vibrato* to [**CTL**] allows you to trigger the Vibrato effect with your foot. Once the [**CTL**] pedal is set as a source, play a note or chord and press the pedal. If set to {**Normal**} mode, the vibrato effect will be heard while the pedal is pressed down. If set to {**Toggle**} mode, the vibrato effect will be heard until you press the pedal again. (See "Setting the [**CTL**] pedal" p.18.)

### Delay on

Setting *Delay On* to [**CTL**] allows you to trigger the delay effect with your foot. Once the [**CTL**] pedal is set as a source, play a note or chord and press the pedal. If set to {**Normal**} mode, the delay effect will be heard while the pedal is pressed down. If set to {**Toggle**} mode, the delay effect will be heard until you press the pedal again. (See "Setting the [**CTL**] pedal" p.18.)

### Anti-feedback (AFB) Search

Setting *AFB* to [<u>CTL</u>] allows you to trigger the Anti-feedback Search function with your foot. When you press the pedal, the GT-3 performs a scan of frequencies that might cause feedback and suppresses them. All other operations are interrupted during the anti-feedback scan. (*O.M. p.39*)

### Auto-Riff (AR) Hold

Auto-Riff Hold causes the current riff being played to hold continuously while the [CTL] pedal is pressed in {Normal} mode, or until the [CTL] pedal is pressed a second time in {Toggle} mode.

<sup>&</sup>lt;sup>13</sup> "Tap" as in "tapping into" a water or electrical line.

<sup>&</sup>lt;sup>14</sup> From: Russ Poncher <<u>rponcher@earthlink.net</u>>

### Synth Hold

Synth Hold causes the current synth sound being played to hold continuously while the [CTL] pedal is pressed in {Normal} mode, or until the [CTL] pedal is pressed a second time in {Toggle} mode.

**NOTE:** This feature only works with synth patches using a Square or Saw waveform. (For an example of this, try 71-3 GATE SYNTH. Play a note and press [CTL].)

#### Mute

Setting Mute to [CTL] allows you to silence the output of the GT-3 with your foot.

#### Tuner On

Setting Tuner On to [CTL] allows you to access the guitar tuner with your foot. (See "TUNER" on p.12.)

#### Manual On

Setting the *Manual Mode* to [CTL] allows you to turn on manual mode with your foot. (See "MANUAL" on p.11.)

#### Momentary Manual Mode Access<sup>15</sup>

You can place these settings into a patch to cause it to enter manual mode for about 7 seconds. This will allow you to make stomp-box-like changes when you first switch to the patch. If you need to use manual mode again, just press the patch number again. It works using the internal pedal. Use the following settings:

Assign 1 Target: MANUAL On/Off Min: On Max: Off Source: Internal Pedal Mode: Normal Act. Range Lo: 0 Act. Range Hi: 127 Trig: Patch Change Time: 70 Curve: Slow Rise

<sup>&</sup>lt;sup>15</sup> From: Russ Poncher <<u>rponcher@earthlink.net</u>>

### Sub EXP Pedal / Sub CTL 1/2

You can attach either one external Expression pedal or up to two external [<u>CTL</u>] pedals to the GT-3. This adds greater versatility to use of the GT-3 because you get additional sources for controlling EXP functions or up to three CTL functions.

Judging by the settings available for the external (Sub) CTL pedals, the Sub CTL1/2 feature seems to be primarily designed for use with the tuner and manual functions. With the [**UTILITY**]-{**SYSTEM**} definitions under CTL 1 and 2 you are defining the global use of the external [**CTL**] pedals. You can either set them to be globally available, for use as sources by the patches, or set them to be globally available for TUNER or MANUAL. When you go into the [**UTILITY**]-{**SYSTEM**} menu, for CTL 1 and 2 there are three options: {**ASSIGNABLE**} (to whatever you set in your individual patch), {**TUNER**}, or {**MANUAL**}.

Assigning one of the external pedals to TUNER and the other to MANUAL is a really useful feature because the on-board [<u>CTL</u>] pedal can then be assigned to any of the other pedal functions. This allows the MANUAL and TUNER functions to be available in every patch. (See "Global Manual Mode" below.)

If you're buying external pedals, I strongly recommend the momentary type, like the BOSS<sup>®</sup> FS-5U, instead of the latching type, like the BOSS<sup>®</sup> FS-5L. Even though in a patch you can set the GT-3 to recognize any of the [<u>CTL</u>] pedals as either "normal" or "toggle," and the owner's manual indicates you can use either type with the GT-3 (*O. M. p.28-29*), it's not quite that simple. After trying both types (FS-5L and FS-5U) I discovered that the [<u>UTILITY</u>]-{<u>SYSTEM</u>} option for **external** pedals does not offer the "normal/toggle" setting option. As a result, the latching type pedal requires four presses to accomplish what the unlatching does in two. (*O. M. p.35*)

### Connecting SUB CTL 1 & 2 to the GT-3 (Insert Cable)

To connect two foot-switch pedals to the GT-3 you need a cable that is  $\frac{1}{4}$ " Stereo (TRS) on one end that splits into two cables each having a  $\frac{1}{4}$ " mono (TS) plug on the other. This type of cable is often called an insert cable. So, if your sound guy has an extra insert cable lying around, that will work.

### "Global Manual Mode"

Having manual mode available to all patches with the press of a [CTL] pedal is a feature many of us want. This allows you to essentially set all patches to work as if they were six patches in one by being able to turn individual effects on and off within the patch. (See Manual Button on p.11 above.) To set up "Global Manual Mode" first connect an external [CTL] pedal to the GT-3. I recommend using the BOSS<sup>®</sup> FS-5U pedal. (See Sub EXP Pedal / Sub CTL 1,2 above.) Then, under the [UTILITY]-{SYSTEM} menu you can assign the external pedal to invoke manual mode whenever pressed.

**NOTE:** "Global Manual Mode" seems to be an option available only with external control pedals (Sub CTL 1 and 2). For any patch, you can set the [CTL] pedal to invoke the manual mode under the Pedal/Assign feature, but this only sets up manual mode access while you're in that patch. I don't believe there is any way to invoke "Global Manual Mode" using the on-board pedals.

### **Discussion on some Esoteric Effects**

### Harmonist

The Harmonist is an effect that produces a note synchronized to the note you play on your guitar. (See also Utility: Harmonist Scale p.14)

#### Harmonist:Pitch Shift<sup>16</sup>

The Harmonist pitch shift feature doesn't so much raise the pitch an octave, but it can add a note an octave higher to your sound. You can also have an octave lower, an octave higher AND an octave lower, or you can mix & match 3rds and 5ths (that quite an interesting sound), have it add 'tonics' or harmonies. The Preset section and the factory user set have some examples - patch 77.1 has a 5th harmony and 76.4 has a 3-part harmony - see the Harmonist settings under the modulation button - in the manual see page 47 - it's very interesting experimenting with these!

#### Harmonist note:17

The feedback function on the Harmonist is somewhat like the delay feedback. If you set the Harmonist pitch and fine parameters to zero, set the pre-delay to 240, and the feedback to 50 you will basically get around 5 or 6 repeats out of the Harmonist. Now try setting the pitch for HR1 to +1. When you play a single note this time, the Harmonist will slowly run through the chromatic scale. One of the presets, (81-3, DIMINISHED) uses the Harmonist to similarly run through the diminished scale. As far as I can tell, the feedback control for HR1 only feeds back HR1 into HR1. HR2 does not seem to be affected.

### Auto-Riff

Auto-Riff is a feature that allows you to turn out entire multi-note riffs by playing a single note on your guitar. (See Using Auto-Riff p.30)

### **Ring Modulator**<sup>18</sup>

Another deep effect is the Ring Modulator. In a classic Ring Modulator circuit, two notes or tones interact with each other to produce the sum and the difference of their frequencies, with none of the original frequencies present. The resulting sounds are often referred to as "metallic", and BOSS goes so far as to call them "unmusical", but they can sound quite nice (as well as totally alien). In the GT-3, one of the interacting notes is your guitar input, and the other is an internal oscillator. As a general guideline, when these two notes are "musically stable" the resulting sound is relatively "musical" and similar to the note you're playing on the guitar. But the further from a "musically stable" interval you program the internal oscillator, the wackier your output.

There are two modes in which the internal oscillator works: the "Normal" mode and the "Intelligent" mode. The GT-3's "normal" mode sets the internal oscillator to a single stable pitch. The range is calibrated from 0 to 100, and it corresponds to quarter-tone increments. Every octave then corresponds to 24 increments. (These following observations about the internal oscillator's pitch are not based on hard facts from the engineers at BOSS, but are educated guesses.) The setting of "1" corresponds to a low F of 87.3 Hz, with 3=F3/Gb, 5=G, 7=G#/Ab, and "9" equaling an A of 110 Hz. A "C" of 130.8 HZ is found at "15" and a "concert A" of 440 HZ resides at 57. The highest standard pitch is an F#/Gb of 1480 HZ at "99". Because this pitch remains stable while you play various other notes, the resulting sounds are wildly unpredictable. For instance, setting the internal oscillator to 57 ("concert A") will mean that any "A" you play will sound fairly normal, but an "E" will also sound like a (thick, fat) A, other notes related to A will create vaguely

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<sup>&</sup>lt;sup>18</sup> K. Douglas Baldwin <<u>dbaldwin@suffolk.lib.ny.us</u>>

musical sounds, and unrelated notes (like Eb or Bb) will create really off the wall textures, with wild high overtones and deep resonant undertones.

In the GT-3's "Intelligent" mode, the input signal is tracked to create a "movable" internal oscillator, so any texture you conjure up will remain consistent for every note you play. This tracking oscillator may be set to any interval in QUARTER-TONES!!! with 72 being a unison, 48 being an octave down, 24 being two octaves down, 0 being three octaves down, and 96 being one octave up. With tweaking, the "unison" setting of 72 and the "octave down" setting of 48 will produce some excellent Roger Mayer Octavia/Fuzzface effects, while the 24 setting makes for a skroinky slap'n'pop bass sound and 96 does a good "chipmunks" sound.

A good place to begin exploring the possibilities of the Ring Modulator feature is with preset 78-1 ("RING PAN"). Change the preamp type to "Clean Twin" or something equally clear and low-gain, set the Ring Modulator's "Direct Level" to 0, and you'll get a very pure Ring Mod effect.

### **COSM - Composite Object Sound Modeling**

#### **COSM Preamp Analysis**

COSM technology analyzes the sound of the original amplifier creating a digital algorithm or model of the sonic characteristics and response. These precise models are placed into digital processors, allowing the GT-3 to reproduce the modeled sound quite closely to the original including dynamic and transient responses. An advantage of the modeled sound is that the digital model produces the characteristics consistently every time, as opposed to real amplifiers that can sound different from day to day and year to year. No need to worry about precise mic placement or waiting for tubes to warm up.

COSM Modeling technology gives the GT-3's preamp section an excellent collection of vintage and modern amplifier sounds.

JC-120	- Roland JC-120 Jazz Chorus amp	
Clean Twin	- Fender Twin Reverb	
Crunch	- Overdriven Fender type amp (M80)	(uncertain)
Match drive	- Matchless	
Voxy	- A VOX AC30	
Blues	- Fender Blues DeVille or Marshall Bluesbreaker	(uncertain)
BG Lead	- Mesa Boogie	
MS1959 (I, II, I+II)	- Marshall 1959 Plexi amp (numbers simulate the input jacks)	
	I - low gain input,	
	II - high gain input,	
	I & II - simulates a guitar jacked into both inputs using a splitter; which	
	seems to be popular with this amp.	
SLDN Lead	- Soldano	
Metal 5150	- Peavey 5150 amp	
Metal Drive	- Undetermined. Boss's invention perhaps	(uncertain)
AC. Guitar	- Acoustic Guitar simulator	

### **COSM Preamps**<sup>19</sup>

### It's like having 11 Different Guitar Amps!<sup>20</sup>

Here's something you might want to try.

I entered into the last 3 user banks (33-35) patches of each preamp model, naked. Just the preamp itself, with all EQ levels set to 50, all other effects off, Expression pedal set to volume (0-100), CTL pedal set to Tuner toggle. (Also had to neutralize or zero some settings like Presence and Boost Low/Mid/High in the preamp, to get some kind of neutrality. I suppose one could argue that this makes them impure, but then, they're all adjustable and nothing is pure about an amp if you want to get skeptical about any setting.)

With this, I have just added 12 amps to my collection, with nice clean sounds for each of them. I know that models aren't the real thing, but this is probably as close as I'll ever get to owning 11 classic amps (and one weird item called AC Guitar).

And I have to tell you, there are some darn nice "bare" sounds in JUST the preamps alone! I was very impressed by the natural distortion I could get from some.

<sup>&</sup>lt;sup>19</sup> Courtesy of Steve Miers <<u>steve\_miers@bmc.com</u>> and Bruce Joyce <<u>deadbeat@netdoor.com</u>>

<sup>&</sup>lt;sup>20</sup> David Stewart <<u>ds@marcen.com</u>>

#### Thoughts to consider when using the Preamps and Speaker Sims:<sup>21</sup>

When using the GT-3's preamp and speaker simulations, you don't want to have additional coloration from any pre-amps or speakers that come behind the GT-3. That is why you have to indicate by means of the global settings what your real back-end system is, so that the GT-3 can take the necessary compensatory actions. If you put the GT-3's preamp or speaker sim's OFF, the compensations would need to go also. Otherwise you would wind up with what's effectively a preamp- or speaker-less system.

However, some people at Roland claim that the compensations always take place, because acoustic guitar simulations and guitar synth's benefit from the resulting 'full range' systems. Here's a test to find out what's right for your system.<sup>22</sup>

#### 1.1. For the speaker compensation:

a. Set the global setting to Power Amp (Combo) and put the speaker sim effect OFF (happens automatically with the GT-3). Choose a combo preamp sim (for instance JC-120).

b. Play some stuff and listen through your real amp (don't matter if you use the guitar input or FX return, nor if your amp is actually a combo or stack).

c. Put the global settings to Line, set the speaker sim ON (automatic with the GT-3) and set MIC LEVEL=0, DIRECT LEVEL=100 (do not forget this).

d. Play the same stuff through the same setup e. If b. and d. sound equal, then putting the speaker sim OFF, also turns the speaker compensation off. If, on the other hand, b. sounds brighter than d. the compensation is always present regardless of the speaker sim status.

1.2 For the guitar preamp compensation:

a. Set the global setting to Power Amp (Combo) and put the GT's preamp sim effect OFF.

b. Play some stuff and listen through your real amp (don't matter if you use the guitar input or FX return, nor if your amp is actually a combo or stack).

c. Put the global settings to Guitar (Combo) and leave the GT's preamp sim effect OFF.

d. Play the same stuff through the same setup e. If b. and d. sound equal, then putting the GT preamp sim OFF, also turns the preamp compensation off. If on the other hand, b. sounds duller than d.

the compensation is always present regardless of the GT preamp sim status.

#### When using COSM Preamps....

David Stewart <<u>ds@marcen.com></u>

One mistake often made when setting up amp simulator-only patches: is to set the Exp pedal to do Foot Volume. Instead, set it to do Preamp level (volume), since that will control the clean/dirt ratio of the preamp itself.

#### **Speaker Simulator**

William K. Brown <<u>William.Brown@PHL.Boeing.com</u>>

Speaker Simulator is not engaged unless your Utility-Global setting is Line(Headphones) Now make sure your preamp menu SP Simulation has Mic Level 100 and Direct Level 0. This is towards the end of the preamp menus.

#### **Speaker Simulator Default**

Barry Pearce <<u>bsp.egroups@freenet.co.uk</u>>

If you don't have the speaker sim when using line/headphones then this is what you get. Its what I use all the time.

<sup>&</sup>lt;sup>21</sup> Ronny Willems <<u>ronny.willems@nbb.be</u>>

<sup>&</sup>lt;sup>22</sup> Ronny Willems: Not currently being a GT-3 owner, I have not performed these tests on the GT-3.

#### Testimonials for COSM

David Wilson <<u>Guitargod91@aol.com</u>>

I've found something that really helped me get a great 5150 patch out of my GT-3. The other guitar player in my band has 2 wolfgang's [guitars] and a 5150. I had him plug into his 5150 and get a sound I liked. I then grabbed his other wolfgang (so we had identical guitars) and plugged into my GT-3 then into the KB/A100 peavey I use for an amp. I then set the virtual controls on the modeled 5150 sim to the exact same settings he had.

I swear, the GT-3 nailed it perfectly. To get realistic simulations (I feel that's the beauty of a GT-3. To sound like other amps and do it well, not to have its own sound), we'd all do better to a/b the GT-3 with the sound we're going for.

As I do this, I'm getting more and more impressed with what the GT-3 can actually do with its modeling.

#### Greg Miller <<u>GMiller@PIRNIE.COM</u>>

I've had the VG-8 for a couple of years now, and I'll warn that these devices (inc. the GT-3, -5, GP-100, etc.) play with your mind. You "know" you need tubes to get great tube tones and/or a way cool guitar with hot pickups and technique to burn, and then you plug into one of these and get all these great sounds. But your head tells you they can't be real because there are no tubes, and that modeled tubes are not tubes at all. Nonsense. I have fooled a lot of great players into thinking they are hearing a real Boogie or Fender, and they walk away in disgust when they see my COSM stuff on the floor. It really annoys them (and amuses me). Their heads can't accept what their ears are telling them. Consider this - if these guys can't tell, then most of us can't tell either. And I'll bet none of our listeners can ever tell. So if you can get past this mental fart thing, you will live a long and happy life as a virtual tube amp guitarist, and in the process, save a lot of \$\$\$ and your backs.

#### Matthias Miller <<u>openthepodbaydoor\_hal@yahoo.com</u>>

When I first used the GT-3 I thought the amp sims and distortions were quite harsh and lacking in warmth. Once I got deep into programming it and learning how the amp sims, distortions and EQ's all worked together I got extremely warm sounds, did my entire album using just the GT-3 and a Tech21 combo, and plenty of people have asked me about the at least 5 different tube amps I must have used on my album.... The GT-3? As warm as you want it baby.

### Using Auto-Riff

When fully utilized, the Auto-Riff function consists of three parts:

- 1. The Auto-Riff Phrase.
- 2. Setting up the Auto-Riff effect in the patch.
- 3. Setting the Control/Assigns to trigger the riff (unless it is always in effect for the patch).

### The Auto-Riff Phrase

The Auto-Riff Phrase is a sequence of notes that will be heard when you play the trigger note. You can use one of the preset Auto-Riff phrases, or you can define your own.

To set up your own Auto-Riff phrases, press [**UTILITY**] six times until {**Auto-Riff Phrase**} appears in the display. Turn the [**VALUE**] dial to select one of the ten Auto-Riff {**USER**} areas.

#### **USER Auto-Riff Phrase definition**

Defining an auto-riff is a bit cumbersome until you get used to it. Actually, it's cumbersome even after you get used to it.

For each {**USER**} Auto-Riff definition, you can set up to 12 riffs, one riff for each semi-tone in the scale: Ab A Bb B C Db D Eb E F Gb G

In other words, for every note in the scale, you can specify the riff you want played whenever you play that note on the guitar. The note names act as labels for the riffs. In fact, since the User Auto-Riff definitions are set up with factory-preset riffs, any note you do not define will keep it's factory riff setting and play that riff when you play the corresponding note on the guitar. So I recommend you re-define an {**END**} in step 2 below, for any note to which you do not assign a riff. (More on this in a bit.)

For each note in the scale there is an IN note definition, the note that will trigger the riff, a step definition where you define each of the notes in the riff, one at a time, and an OUT note for each step.

**NOTE:** When you set an IN note name for an auto-riff, that note does not have to be part of the riff. Think of the IN notes as labels for storing a particular riff inside the Auto-Riff set.

### Auto-Riff Phrase Display

You can set an OUT note to be any note up to two octaves higher or lower than the IN note.

Let's take a moment to describe what you will see when you use the [VALUE] dial to input the OUT note. As you turn the [VALUE] dial with the cursor in the OUT position of the display, certain symbols will appear to the right and left of the note names.

- If the note you want OUT is the same as the IN note, only the note name will appear in the OUT position of the display.
- If the note you want OUT is higher than the IN note, the display will show a + to the left of the note name.
- If the note you want OUT is more than an octave higher than the IN note, the display will show a + to the left of the note name and an upward pointing triangle to the right of the note name.
- If the note you want OUT is two octaves higher than the IN note, the display will show a + to the left of the note name and two upward pointing triangles to the right of the note name.
- If the note you want OUT is lower than the IN note, the display will show a to the left of the note name.
- If the note you want OUT is more than an octave lower than the IN note, the display will show a to the left of the note name and a downward pointing triangle to the right of the note name.
- If the note you want OUT is two octaves lower than the IN note, the display will show a to the left of the note name and two downward pointing triangles to the right of the note name.

#### To set up the riff

Let's say the IN note is C, the step is 1, and the output note is C. This means when you play a C, the auto-riff will start the riff by playing a C as the first note in the riff.

Let's say we want a riff of C Db D Eb E.

Our first note (C) is already set as we described above. Using the  $[\geq]$  parameter key, move the cursor to the step number and turn the [VALUE] dial until it reads 2.<sup>23</sup> This will be the second step, or the second note played in the riff. Use the  $[\geq]$  parameter key to move the cursor to the Out position. Now turn the [VALUE] dial until it reads the note you want for the second note of the riff. In our case, this will be Db. The display will show a +Db.

Using the [ $\leq$ ] parameter key, move the cursor back to the step number and turn the [<u>VALUE</u>] dial until it reads 3. This will be the third note in the riff. Use the [ $\geq$ ] parameter key to move the cursor to the OUT position. Turn the [<u>VALUE</u>] dial until it reads +D.

Using the [<] parameter key, move the cursor back to the step number and turn the [VALUE] dial until it reads 4. This will be the fourth step or the fourth note in the riff. Use the [>] parameter key to move the cursor to the OUT position. Turn the [VALUE] dial until it reads +Eb.

Using the [<] parameter key, move the cursor back to the step number and turn the [VALUE] dial until it reads 5. This will be the fifth step, or the fifth note in the riff. Use the [>] parameter key to move the cursor to the OUT position. Turn the [VALUE] dial until it reads +E.

To complete our riff, press the [ $\leq$ ] parameter key to move the cursor back to the step number and turn the [<u>VALUE</u>] dial until it reads 6. We are going to designate step 6 as the end of our riff. Use the [ $\geq$ ] parameter key to move the cursor to the OUT position. Turn the [<u>VALUE</u>] dial clockwise until it reads {<u>END</u>} in the display. (It's the last value in the list.) There is no need to press [<u>WRITE</u>] because the changes are "saved" dynamically as you work. Either press [<u>EXIT</u>], or another effect button if you want to continue editing the patch.

Now, that's a pretty simple five-note riff. The GT-3 Auto-Riff feature is capable of much more.

The note that triggers the riff does not need to be the first note played in the riff. Let's say you had two riffs that started with C. You can't program two riffs in the same Auto-Riff definition to be triggered by the same note. However, you can set the first riff to start with a C note but triggered by playing C on the guitar, and the second riff to start with a C note to be triggered by playing Db instead of C.

For example: { User1 STEP OUT } {IN:C 1 C } { User1 STEP OUT } {IN:Db 1 C }

Even though the trigger notes are different, both riffs will play a C for the first note. Whenever you play a C on your guitar, the first riff will begin by playing a C. Whenever you play a Db on your guitar, the second riff will begin by playing a C.

<sup>&</sup>lt;sup>23</sup> The Owner's Manual mentions that you can set the IN and the STEP by playing them on the guitar, but it can be pretty tricky and it's easy to accidentally undo any programming you might have done manually. (O. M. p.37)

All the USER Auto-Riffs have been preset at the factory with the same phrase for each note. If you set up your riffs to be triggered with a C and a Db, as described above, every other note you play will cause the factory-preset riff to be triggered. This is probably not what you want. To prevent the factory-preset riffs from being played, you will need to set each note in the scale for which you have not defined a riff to play OUT the same note that was put IN (yes, up to all of the eleven other notes). Then when you play a note, it will play naturally, with only that note being heard and *no* Auto Riff will be triggered.

For example:	{ User1	STEP	OUT	}	{User1	STEP	OUT	}
	{IN:E	1	E	}	{IN:E	2	end	}
	{ User1 {IN:F and so (	STEP 1	OUT F	} }	{User1 {IN:F	STEP 2	OUT end	} }

**NOTE:** If you set step 1 with an OUT value of {**END**}, no sound will be produced when you play that note.

You are probably well aware that notes are not always the same length in a riff. To accommodate this, you can cause a note in a riff to be held for more than one step by following it with a step containing a dash in the OUT position. The dash in the OUT position "maintains the state of the previous step and no attack is added." (O. M. p.37) In other words, a step with a note followed by a step with a dash will hold the note for two steps. To specify a dash in the OUT position, use the [>] parameter button to place the cursor on the OUT position and turn the [VALUE] dial clockwise until a dash appears. The dash is the next to the last value in the list — right before the {END} value.

**NOTE:** Steps with dashes count as one of the total sixteen steps that can be held in an Auto-Riff definition.

While you can hold a note in a riff by following it with one or more steps with dashes, you cannot shorten a note in a riff. The only thing you can do to make a note shorter (or play faster, if you prefer) is to make all of the other notes longer by adding dashes after them, and increasing the Auto-Riff tempo in the patch accordingly (see p.33). I strongly recommend you plan your riffs in advance (perhaps even drawing them out on paper) before you try to program them into the Auto-Riff Phrase.

To program (or define) a riff that is more complicated than equal length notes, you'll need to incorporate some thought into your riff programming. In other words, the fastest note played will need to be represented by a single step, and longer notes will need to be the appropriate multiples of that note. If your fastest note in the riff is a sixteenth note, an eighth note must be represented by two steps: a step with the note followed by a step with a dash. A dotted eighth note must be represented by three steps: a step with the note followed by two steps with dashes. A quarter note must be represented by four steps: a step with the note followed by three steps with dashes, and so on.

Remember, an Auto-Riff holds a maximum of sixteen steps. This includes any steps with dashes. If your riff is more than a few notes, you may have to divide it into two riffs.

### Setting up the Auto-Riff Effect in the Patch

Once you've either decided on a preset riff or programmed your own riff as described above, you'll need to set the Auto-Riff Effect parameters in the patch. This is where you set the Auto-Riff tempo in the patch to play at the correct speed, and assign other parameters as well.

#### Press [MOD].

Set {<u>Auto-Riff</u>} to {<u>ON</u>}. Press the [ $\geq$ ] parameter button. Make sure the {<u>FX</u>} is {<u>AR</u>}. Press the [ $\geq$ ] parameter button. Set the phrase to the appropriate Riff (User 1, User 2, or etc.) using the [<u>VALUE</u>] dial. Using the [ $\geq$ ] parameter button and the [<u>VALUE</u>] dial, set the parameters for Auto-Riff in the patch. For

each parameter, set the values as you like. (O.M. p.49)

For example:

Loop: {**OFF**} means the riff will play once for each time you play the note.

{**ON**} means the riff will play over and over again as long as you let the string on your guitar vibrate at that note.

Tempo: Allows you to set the speed that the riffs will play.

Sens: This sets how hard you have to strike the string to trigger the Auto-Riff.

Attack: This sets how strongly the Auto-Riff notes sound like they're being played.

When you come to the {Effect level}, set it to the volume at which you want the riff to play.

When you come to the {Direct level}, set it to volume at which your own guitar notes will play.

- If you want to save the patch at this time, press [WRITE], specify or confirm the destination patch, and press [WRITE] again. Instead, you may choose to edit another effect in the patch by pressing the appropriate effect button.
- **NOTE:** If you forget to press [WRITE] after your final edit for the patch, not only will you lose these edits, but you will also lose any other settings changed since the last time you saved the patch.

### Setting the Control/Assigns to Trigger the Riff

Although it is not necessary, you will probably want to enable the Auto-Riff to only play at specific times. Otherwise, the Auto-Riff will play whenever you happen to play the trigger note on the guitar. To control when an Auto-Riff plays and when it doesn't you'll have to assign it to a control source. (A discussion on available control sources and how to use them starts on p16. A list of control sources is on p.20.) I suggest the [CTL] pedal because you can enable the Auto-Riffs with a single press.

#### Press [PEDAL/ASSIGN].

Press the  $[\geq]$  parameter button until you come to [CTL] pedal.

Turn the [VALUE] dial to set the [CTL] pedal to {ON}.

Press the  $[\geq]$  parameter button.

Set the Target to {AR: Effect Level} using the [VALUE] dial.

Press the [>] parameter button.

Set Min to 0 using the [VALUE] dial.

Press the  $[\geq]$  parameter button.

Set Max to 100 using the [VALUE] dial.

Press the [>] parameter button.

Set Mode using the [VALUE] dial. Use Normal if you want Auto-Riff to be in effect while the pedal is held down. Use Toggle if you want Auto-Riff to be in effect until you press the pedal again.

- If you want to save the patch at this time, press [WRITE], specify or confirm the destination patch, and press [WRITE] again. Instead, you may choose to edit another effect in the patch by pressing the appropriate effect button.
- **NOTE:** If you forget to press [WRITE] after your final edit for the patch, not only will you lose these edits, but you will also lose any other settings changed since the last time you saved the patch.

### An Auto-Riff Example

### Assigning the Auto-Riff to the patch

This is an example of setting the Auto-Riff so it is available to the patch for use with the CTL pedal. Even after you complete these settings, this "example" Auto-Riff will not play any riffs until you complete "Controlling the Auto-Riff" steps documented below. Once we complete all the steps in this example, your guitar will play normally (without Auto-Riffs) until you press the CTL pedal. With the [CTL] pedal pressed, a riff will kick-in whenever you play one of the trigger notes.

Press [MOD]

Set {Auto-Riff} to {ON}.

Press the  $[\geq]$  parameter button.

Make sure the {**FX**} is set to {**AR**}.

Press the [>] parameter button.

Set the phrase to the appropriate Riff (User 1, User 2, or etc.) using the [VALUE] dial.

Using the [≥] parameter button and the [VALUE] dial, set the parameters for Auto-Riff in the patch. For each parameter, set the values as you like. (O.M. p.49)

For example:

Loop: {OFF} means the riff will play once for each time you play the note.

{**ON**} means the riff will play over and over again as long as you let the string on your guitar vibrate at that note.

Tempo: Allows you to set the speed that the riffs will play.

Sens: This sets how hard you have to strike the string to trigger the Auto-Riff

Attack: This sets how strongly the Auto-Riff notes sound like they're being played.

- When you come to the {**Effect level**}, set it to zero. This is the volume at which the riff will play. (Yes, zero! In this example, we want the riff to **only** be in effect when we press [**CTL**]).
- When you come to the {Direct level}, set it to 100. This is the volume at which your own guitar notes will play.

Now our patch is set so that Auto Riff mode is *only* active when the [CTL] pedal is pressed.

**NOTE:** If you want the Auto-Riff feature to be active by default when you select this patch, do not set it up as we did in this example. Two examples of the Auto-Riff being on all the time are: 38-4 ARPEGGIATOR and 36-4 AUTO RIFF.

### Controlling the Auto-Riff

If you want to be able to control when an Auto-Riff plays and when it doesn't you'll have to assign it to a control source. (A discussion on available control sources and how to use them begins on p.16. A list of control sources can be found on p.20.) I suggest using the [<u>CTL</u>] pedal as the source pedal because you can set it to make the Auto-Riffs play while the pedal is held down, and not play when the pedal is released.

However, when the Auto-Riff is playing, you may not want the actual guitar note you played to be heard through the riff at the same time. So you'll need to set one [**CTL**] pedal to do two functions at once: Play the auto-riff and silence the note being played on the guitar.

#### **CTL Pedal**

Continuing with this example, one [CTL] pedal is going to control two things simultaneously:

- 1. We want the Auto-Riff Effect Level to be 100 and
- 2. We want the Auto-Riff Direct Level (guitar sound) to be 0 but only while we are holding down the [CTL] pedal.

### Setting the [CTL] pedal to turn the Auto-Riff Effect Level to 100: Press [PEDAL/ASSIGN].

Press the [>] parameter button until you come to [CTL] pedal. Turn the [VALUE] dial to set the [CTL] pedal to {ON}. Press the [>] parameter button. Set the Target to {AR: Effect Level} using the [VALUE] dial. Press the [>] parameter button. Set Min to 0 using the [VALUE] dial. Press the [>] parameter button. Set Max to 100 using the [VALUE] dial. Press the [>] parameter button. Set Max to 100 using the [VALUE] dial. Press the [>] parameter button. Set the Mode to {Normal} using the [VALUE] dial.

#### Setting ASSIGN 1 to turn the Auto-Riff Direct Level (guitar sound) to 0:

Press the  $[\ge]$  parameter button. You will see {ASSIGN 1}. Turn the [VALUE] dial to set {ASSIGN 1} to {ON}. Press the  $[\ge]$  parameter button. Set the Target to {AR: Direct Level} using the [VALUE] dial. Press the  $[\ge]$  parameter button. Set Min to 100 using the [VALUE] dial. Press the  $[\ge]$  parameter button. Set Max to 0 using the [VALUE] dial. Press the  $[\ge]$  parameter button. Set the Source to {CTL PEDAL} using the [VALUE] dial. Press the  $[\ge]$  parameter button. Set the Mode to {Normal} using the [VALUE] dial.

When you press and hold the [CTL] pedal, then play the Auto-Riff trigger note, the riff assigned to that trigger note will play. Likewise, as you play other notes, the riffs assigned to those trigger notes will play assuming the [CTL] pedal is still held down. Once you release the [CTL] pedal, normal guitar playing resumes.

#### A novel technique from Bill Davies <<u>billdavies@psn.net</u>>

I have a great deal of fun using the Auto-Riff feature to simulate a walking bass line (repeating a 16 note riff at the \*slowest\* possible speed, tempo = 1) and playing rhythm, lead, or e-bow effects over that.

I put the Auto-Riff as the last effect in the chain so that the bass line is not affected by other effects (reverb, delay, chorus, etc.) and place the GT-3 in manual mode so I can enable/disable effects as I am inspired.

### Auto-Riff "Sound on Sound"

#### To have an Auto-Riff play while you play over it:

Here is an example that allows you to have an Auto-Riff play continuously while you play your guitar along with it.

Press [MOD].

Set {<u>Auto-Riff</u>} to {<u>ON</u>}.
Press the [≥] parameter button.
Make sure the {<u>FX</u>} is {<u>AR</u>}.
Press the [≥] parameter button.
Set the phrase to the appropriate Riff (User 1, User 2, or etc.) using the [<u>VALUE</u>] dial.
Use the [≥] parameter button to select the Auto-Riff parameters.
When you come to {<u>Loop</u>}, set it to {<u>ON</u>} using the [<u>VALUE</u>] dial.
When you come to the {<u>Effect level</u>}, set it to 100 [<u>VALUE</u>] dial.
When you come to the {<u>Direct level</u>}, set it to 0 [<u>VALUE</u>] dial.
Press {<u>PEDAL/ASSIGN</u>].
Set the [<u>CTL</u>] pedal to {<u>AR:Hold</u>}.
Set an {<u>ASSIGN</u>} to turn on the {<u>AR:Direct Level</u>}.
Set the level for both the {<u>Min</u>} and {<u>Max</u>} to be 100.

**NOTE:** You can also set another {<u>ASSIGN</u>} to turn down the {<u>AR:Effect Level</u>} if the Auto-Riff plays too loudly for your overlay.

Now, start the riff by playing a note on your guitar. Press [CTL], and the riff will repeat indefinitely while you play your guitar over it. To stop the riff, press [CTL] again.

### **Internal Pedal**

This function varies an effect as if an Expression Pedal was automatically controlling it. You can trigger the Internal Pedal by one of the EXP or [**CTL**] pedals, a Patch Change, or a MIDI event. Once triggered, it performs an "expression event" according to the parameters you set. While it must be triggered by a defined source, the EXP or one of the [**CTL**] pedals, it operates independently of that source for the duration of the effect. (O. M. p.29 & 30)

In other words, the Internal Pedal causes an effect to change automatically as if you had it assigned to the Expression Pedal. For example, if you set Wah to the Internal Pedal and then assign the Internal Pedal to a [CTL] pedal, pressing the [CTL] pedal would cause the Wah effect to change as if you had moved the expression pedal. This happens once for each time you press the [CTL] pedal. If you want the Wah to continue once it starts, you would use the Wave Pedal described below.

### Wave Pedal

This function varies an effect as if an Expression Pedal was automatically and continuously controlling it. The effect is continual while the patch is active. You can trigger the Wave Pedal by one of the EXP or [**CTL**] pedals, a Patch Change, or a MIDI event. Once triggered, it continues according to the parameters you set. While it must be triggered by a defined source, the EXP or one of the [**CTL**] pedals, it operates independently of that source for the duration of the effect. (O. M. p.30.)

In other words, if you set the Wah to the Wave Pedal and then assign the Wave Pedal to a [<u>CTL</u>] pedal, the Wah would cycle through its Wah effect until you stopped it by either releasing the [<u>CTL</u>] pedal, in {<u>Normal</u>} mode, or by pressing the [<u>CTL</u>] pedal, in {<u>Toggle</u>} mode.

### Using the RETURN SEND EXT OD/DS jacks:

You can use the EXT OD/DS jacks as an effects loop to incorporate the sounds from another processor or preamp into the GT-3 path.

#### Example: Duplicating sounds from other effect units in the GT-3

From: G H <<u>gh@sarkyweb.demon.co.uk</u>>

- 1) Set up a patch on the GT-3 (or in the PC editor program) that just uses an external OD/DS. [Make sure all other effects are off.] Set the BASS & TREBLE to 0 as these add EQ to the loop. [Write the settings to the patch.]
- 2) Plug your pedal into the loop and set it up how you want it.
- 3) Now turn off the EXT OD/DS and turn on GT-3 internal distortion. Now write this to the patch. [Set up another patch to sound similar to the effect you're trying to duplicate.]
- 4) By switching between the two patches you can now compare your pedal and the GT-3 easily. [As you switch back and forth, you can edit the GT-3 sound until it's just right.]

This will work for other pedals as well, even multi-effects like the Zoom. I did this with a Zoom 505, and the only real "problem" I had was that you could really hear difference in quality!

### **EFFECT DESCRIPTIONS AND USES**

These are described in excruciating detail from pages 38 through 57 of the Owner's Manual. Users who see areas of ambiguity or omission in the Owner's Manual are encouraged to submit suggestions for elaboration in the next version of this Supplement.

### Effect tips

#### (Derived from the BOSS® Guitar Effects Guide Book, Vol.14)

#### **Overdrive -**

For a mild overdrive sound, set the drive to a lower level and avoid excessively high tone levels.

For a hard overdrive sound, set the drive high and boost the highs with the tone control.

For natural overdrive, set the drive moderately high, and boost the mid to high tone levels just a bit.

For a hard rock overdrive, set the drive all the way up, give moderate tone and boost the level.

For mellow overdrive, set the drive to about a third, boost the low tone settings and boost the overall level,

#### Reverb -

Reverb time sets the length of reverberation or decay.

Reverb level controls reverb intensity.

For clean light reverb, reduce the reverb level and set a longer reverb time.

For a thicker reverb, set a higher level and shorter time.

Use the tone settings to add brightness or depth to the sound.

It's best to start with milder settings and then increase them to the desired effect.

#### Delay -

To create a "doubling" sound for a duet in unison, use short delay times (50 ms or less) and cut feedback so only a single delay is produced.

You can get a reverb-like delay by using about five delays at 100-200 ms and setting a low volume.

To get an effect that repeats along with the song's beat set a delay time longer than 300 ms and match it to your song's tempo.

Delay times longer than 800 ms allow you to play harmony lines over the delayed sound.

#### Compression/Sustain -

For solos in ballads and mellow songs, set level to 50, attack about 60, and sustain about 60.

To balance the volume of each string for smooth chord accompaniment set level to 50, attack to 25, and sustain to 40.

When playing sustaining chords, try Attack at 50 and sustain at 75.

### **BOSS Recommended Effect Sequence**

#### (According to the BOSS® Guitar Effects Guide Book, Vol.14)

- 1. Any effect that detects an envelope, such as auto Wah and octave, should be connected close to the guitar. Usually, you should connect the Wah pedal before the distortion pedal so it can regulate the distortion however, hooking it up after the distortion may produce a sound you want. Try it either way to see which sound you like better.
- 2. Volume pedals should occur before delay effects so the volume can be lowered without cutting the reverb.
- 3. Noise gates should occur before delay effects so the can drop the guitar signal without effecting the reverb.

#### So here's the BOSS® recommended effect sequence:

Guitar Octave\* Auto-Wah\* Compressor Wah Distortion EQ Modulation - Phaser, Flanger, Pitch Shifter as you like\* Noise gate Volume pedal Delay\* Chorus\* Reverb\* Amp

\*Effects at the same indentation level can be in any order. Try different configurations here to discover the sound you like best.

### TIPS AND TRICKS<sup>24</sup>

### The Expression Pedal

### Expression Pedal as a Volume pedal

#### **Resolving volume pedal touchiness:**

From: Nick Oatley" <<u>nick.oatley@seri.co.uk</u>>

In the assigns, turn the PEDAL Assign off (it's probably doing the Foot Volume setting at the moment, but we don't need it here).

Set Assign 1 to control the Foot Volume. Set Target Range to be min=33. max=100.

Set Source Range to be min=0, max=127.

Then the full range of the pedal is mapped onto the top 2/3 of the volume setting (from 1/3 to full volume). If you still want to be able to turn the volume to zero at the very first bit of pedal travel (heel-down), then do this:

Set Assign 1 to control the Foot Volume. Set Target Range to be min=33, max=100. Set Source Range to be min=1, max=127. Set Assign 2 to control the Foot Volume. Set Target Range to be min=0, max=32. Set Source Range to be min=0, max=1.

Then the first tiny bit of pedal travel off the heel-down position takes the volume from zero to 1/3, the remaining travel (which is most of it) takes the volume from 1/3 to full.

If Assign 1 and/or 2 are already being used for other things, then pick some other ones. If you want to change a whole load of patches to include these settings, save them as a couple of presets first, then you can quickly recall them again for each patch.

#### Volume boost suggestions:

David Stewart <<u>ds@marcen.com</u>>

Here are two good ways to boost volume for lead levels:

1. Program the same patch, but at two levels, and put them side-by-side. Use one for rhythm; stomp on the next pedal for your solo; stomp back onto the rhythm patch to get out to backing. I use this a lot; I'll have a patch called, e.g., "TakeItEasyR" and "TakeItEasyL." (I sometimes have patches 1 and 2 in a bank with the same patch, 3 and 4 ditto, so I can stab at the machine with my foot and have less chance of getting a pedal I didn't mean to hit.)

2. Program the volume pedal so that the Min level is where you want it for rhythm part, and the max where you want it for lead part, and then go heel down for rhythm, toe down for lead, and back to heel down out of the lead. Note that your FV foot volume level range doesn't have to be 0 to 100; it can be 75 to 100, etc. That can help you switch volumes for two song parts very easily, without stomping patch pedals, getting discontinuous sounds, etc.

<sup>&</sup>lt;sup>24</sup> Your contributions are encouraged, not only in the Tips and Tricks section, but in every area of the Supplement. Please submit suggestions and tips to <<u>forsmg-gt3@yahoo.com</u>>

#### Simultaneous Volume and Tuner on the Expression Pedal

From: Russ Poncher <<u>rponcher@earthlink.net</u>>

On patches where I am using the expression pedal for volume control, I add an assign parameter to turn on the tuner when I have the pedal completely returned. As I have the tuner set up to mute (instead of bypass), this works very well.

ASSIGN 1 ON Target: TUNER ON/OFF Max: Off Min: On Source: EXP Pedal Act. Range Lo:0 Act. Range Hi:1

#### Expression pedal as a Feedbacker

From: Matthias Miller < openthepodbaydoor hal@yahoo.com>

I am employing feedback by using the Expression pedal to ramp up the dB's on the EQ at upper mid frequencies of 400. This is an Adrian Belew trick -- he used an EQ stomp-box that had the 400's at like plus 8 to 12 dB. This does a great job of inducing real and natural sounding feedback - and not always knowing with partial/overtone comes rising out of the mix. This is different than using the GT-3 feedbacker -- as you get a predictable tone on a single note, and if you play more than a single note, the GT-3 feedbacker does not know what to do and freaks. By blasting the 400 Hz range with the expression pedal, you can not only bring in different feedback tones according to how much you attenuate the 400 range, but you can play multiple notes, chords, harmonics, etc, and use them to trick the GT-3 into playing different partials. Depending on the amp sim and distortion box used, the GT-3 creates some surprisingly good, useful and controllable feedback. You can also have the expression pedal increase or decrease other frequency ranges at the same time you boost the 400 Hz range. Experiment!!

Expression pedal as Wah

#### An alternative way to program a Wah pedal on the GT-3/GT-5

Provided courtesy of Steve Coates <<u>steve@westgardens.demon.co.uk</u>>, GT-5 owner, Newcastle-upon-Tyne, England. "This is the definitive text on improving the GT-3's Wah." - Matthias Miller <<u>openthepodbaydoor hal@yahoo.com</u>>

The 'Pedal Wah' option accessed by the Wah button on the GT-3/5 is quite limited. It sets up a basic Wah, but I always felt the range was a bit limited and it lacked poke compared to the Coloursound and Vox WAH's I have used previously.

As the expression pedal, or an additional pedal connected to the Assign 1 jack (I heartily recommend this for live use) are capable of controlling the majority of parameters in the GT-3/5 effects, one alternative was to use this process to create a Wah using the Auto-Wah effect or the EQ section.

A Wah is essentially a sweepable band pass filter, in which a fixed boost is applied to a swept frequency. It can be simulated on many mixing desks with swept mid EQ by turning the boost up to near maximum and sweeping the frequency back and forth.

The difference in sound between various Wah pedals seems to be related to the Q or steepness of the boost and the range over which the boost travels from bass to treble.

In the Auto-Wah and EQ setups these parameters are editable, so setting the expression pedal to control the frequency of a boost programmed into the EQ effect, or replacing the control of the Auto-Wah by the pedal rather than the strength of the guitar signal should produce a Wah effect, and one with more editing available than the normal pedal setup. I tried both and the Auto-Wah seems to do it best for me, with the following settings:

Wah select	AW	Auto-Wah
Mode	BPF	Band Pass Filter, best for guitar, but the alternative, LPF or Low Pass Filter
		keeps more bass in the sound as the top is boosted
Polarity	Up	
Sens	0,	This effectively stops the Auto-Wah effect
Frequency	**	Not critical, the pedal will change this value
Peak	80	This sets how 'sharp' the Wah boost is
Rate	50	Not sure whether this effects the sound at all when controlled by a pedalwhy
		not experiment!
Depth	0	Again not so important when pedal controlled
Level	80	This will depend very much on how high you set Peak, and what you have
		following the Wah.

Then go to the Pedal assign section, choose the expression pedal (or ideally a pedal connected to the Assign 1 jack) and set the following:

Expression Pedal	On
Target	AW - Freq (Frequency)
Min	20
Max	92

I did try the same process with the EQ effect, programming a large mid boost and using the pedal to vary the frequency boost is at in the same way. It is equally effective, but to my ears the Auto-Wah adjustment sounds better. A posting on GT-5@onelist.com described how it is possible to set the effect to be switched off by rocking the pedal all the way back, heel down. This can also be done using the Auto-Wah effect.

Although I have drawn comparisons with the Coloursound Wah, this patch is not an emulation. Ordinary Wah effects are VERY analogue, but the sound I got from this patch was enough to persuade me to leave my Coloursound in the Studio for recording only, and keep to the GT-5 for live use.

An additional tip that applies to much of the programming of the GT-5 but especially for Wah, is to set the parameters while playing at the volume you intend to use them — especially the 'Peak' setting. The 'loudness' effect in human hearing will tend to prompt you to set the peak far too high if done at domestic levels, causing mayhem at gig volumes! And I should know.

### Expression Pedal as Volume and Wah

A common request on this group has been to be able to use the CTL pedal to switch the function of the Expression Pedal between Volume and Wah.

It seems to be the consensus of the group<sup>25</sup> that you can't have the CTL pedal switch the Volume parameter. It's just not one of the parameters the CTL pedal can control. However, Tony Ross <<u>6828@iname.com</u>> provided this solution where the EP controls the OD/DS level in the volume mode and the CTL pedal switches the EP from Wah to OD/DS.

To set the Expression pedal as a switchable on/off Wah pedal use the following settings:

#### Assign 1

Target: Overdrive/Distortion Target Parameter: On/Off Target min: On Target Max: Off Source Exp Pedal Source Mode: Toggle Active Range Low: 126 Active Range High: 127

#### Assign 2

Target: Overdrive/Distortion Target Parameter: Level Target min: 0 Target Max: 38 (or whatever works for your setup) Source Exp Pedal Source Mode: Normal Active Range Low: 0 Active Range High: 75 Assign 3 Target: WAH/Auto-Wah: Wah Pedal Target Parameter: On/Off Target min: Off Target Max: On Source Exp Pedal Source Mode: Toggle Active Range Low: 126 Active Range High: 127

#### Assign 4

Target: WAH/Auto-Wah: Wah Pedal Target Parameter: Pedal Target min: 0 Target Max: 100 Source Exp Pedal Source Mode: Normal Active Range Low: 0 Active Range High: 75

In the Assign 1 and 3 positions, the switch will operate if you move the pedal in the range from 126-127. This position on the pedal is at the end of the forward movement of the expression pedal. The Assign 1 and 3 Min and Max switch instructions are reversed. This causes the switch from Vol to Wah.

In the Assign 2 and 4 positions, the pedal will operate as either Wah or Vol in the range from 0 to 75. The reason we don't set it up to operate as Wah or Vol all the way to 126 is because you would be switching WAH on and off all the time.

Note: This technique requires placing a rubber pad beneath the toe of the expression pedal to prevent some accidental switching and to get some tactile sensation of the switching point. *The disadvantage to this is that you will not get use of the full expression pedal path for patches that do not use a "toe switch" function (beyond 125).* 

Nick Oatley <u>nick.oatley@seri.co.uk</u> demonstrates a superb example of "thinking outside the box" by suggesting a novel approach to this question. He suggests making two identical patches side by side on the GT-3, and setting one to use the EP as volume, and the other to use the EP as Wah. It's still a single pedal push to switch the EP function the same way the requested CTL function would work, so it accomplishes the task simply and eloquently.

<sup>&</sup>lt;sup>25</sup><u>http://www.egroups.com/group/GT-3</u>

Stephen M. Golden forsmg-gt3@yahoo.com

#### Additional notes on Wah

#### From: Tony Ross <6828@iname.com>

The GT-3 and GT-5 is just a preset Wah and you can't change it much. But the cool thing is because you can assign 8 things to the expression pedal you can change the Treble in the preamp or maybe the highmids in the EQ etc etc. When you do that you can get a customised Wah sound that exceeds the sound of the standard GT-3/5 Wah.

The other thing you can do is set the Auto-Wah to come on when you "click" the toe of the expression pedal, and assign the pedal to change the Frequency of the Auto Wah. When you do this you can get some really wild Wah sounds. The Auto-Wah has many more variables than the Pedal Wah by the way.

From: Bill Davies <<u>billdavies@psn.net</u>> For what it's worth these days I prefer the Wah sound where the Expression Pedal controls the AW:freq instead of the Wah effect.

### **Other Effect Tips**

Using Harmonist to tune down 1/2 step:

From: Paul Coleman <paulc500@hotmail.com>

As you may know, while practicing (playing along with a CD), it is sometimes necessary to tune down 1/2 step from standard pitch (440)to play along with certain artists/songs (i.e. SRV, old Van Halen, some Hendrix etc.). I have always thought that it was a hassle to tune down or to switch guitars etc.

Using the GT-3's Harmonist effect I found a way around this. Just add the following settings to your favorite practice patch, press the CTRL pedal and all output will be 1/2 step lower. Press it again and you're back to normal.

In theory this should work in reverse (although I haven't tested it). If you normally tune down 1/2 step change the Max setting in Assign 1 to +1 and the output should be Standard pitch (440).

CTRL Pedal: On	Harmonist: Off	Assign 1: On	Assign 2: On
Target = HR: On/Off	Voice = 1 - Voice	Target = HR1	Target = HR1 Fine
Min = Off	Mode = Fast	Pitch Min = 0	Min = 0
Max = On	Pitch = 0	Max = -1 (change to +1	Max = +50
Mode = Toggle	Fine = 0	to tune up 1/2 step)	Source = CTL
	PreDly = 0	Source = CTL	Pedal Mode = Toggle
	Feedback = 0	Pedal Mode =Toggle	Act. Range Lo. $= 0$
	Level = 100	Act. Range Lo. = 0	Act. Range Hi. = 127
	Direct Level = 0	Act. Range Hi. =127	-

Make sure that MODE under the Harmonist effect is set to FAST and that DIRECT LEVEL = 0. Verify that there are no other effects being activated when the CTL pedal is pressed (i.e. Assign 3 thru 8). For best results, put the harmonizer first in the chain.

### Warmer Distortions

From: David Oliveira <<u>dso@easyphone.pt</u>>

Many people have complained that the OD/DS distortions are too fuzzy and harsh. It could be an improper sp sim selection (also could be improved with EQ). However, what I usually do is to select a preamp/sp sim model, adjust the gain in order not to get distortion (as you know, the preamps simulate the gain distortion of each model...), and then add the OD/DS that I want. This way, this distortion effects sound much "warmer", more life-like.

### Using 2x2 Chorus

From: Russ Poncher <<u>rponcher@earthlink.net</u>>

What is the purpose of 2x2 Chorus, and how would you identify it?

Well, if you are listening to fingerstyle guitar and you notice that there seems to be chorus on the high strings and not on the low strings, that would be an example of something distinctly 2x2. The 2x2 is especially good for when you want to add some shimmer but not be too obvious.

The effect is mostly used with acoustic guitar, although I use it on a 60's jangly patch too.

### Using Feedbacker for Octave boost

From: Jeff Brown < you enjoy myself@hotmail.com>

I've been using the GT-3 feedbacker to simulate playing an octave higher. I'm learning a solo that goes too high for me play comfortably on the neck. By setting the feedbacker to boost +1 oct, the rise time to 0, and the depth to 100, it adds enough overtone to simulate a higher note, and I can play it more easily. I think this sounds much better than using the harmonist to shift an octave higher. It also works great to simulate tapping harmonics (i.e. holding a note and tapping 12 frets above).

### Infinite Delay Sound on Sound

From: Bill Davies <<u>billdavies@psn.net</u>>

I remember someone asking about how to set up the delay to capture a phrase and repeat it indefinitely while playing over it. The trick is to have the delay on and set your control pedal to simultaneously turn the delay feedback to max (100) and turn \*off\* the delay. For example,

Press	
CTL PEDAL	ASSIGN 1
Target DD:Feedback	Target DD:On/Off
Min 40	Min On
Max 100	Max Off
Mode Toggle	Source [ <b>CTL</b> ] pedal
	Mode Toggle

Press the [CTL] pedal to activate infinite repeat, press it again to return to normal delay mode

#### Keeping the same delay and reverb across patches:

From: Rich <<u>rgb@richardb.screaming.net</u>>

Page 14 of the 'official' GT3 manual says, "\*Delay & reverb sounds are interrupted when the patch is changed."

If you want to keep the same reverb and/or delay effect in another patch, you need to have these effects set to the same delay/reverb level/type. To help you do this, there are both *user* and *pre-set* delay & reverb settings which you can use to keep continuity between different patches, so that when you change patches, you get a smooth transition. *User* settings can be changed to your own tastes, *pre-sets* are factory set and can't be changed. See p.11 (*also see p 21, 26-27 in the O.M.*).

### Some things to try with Vocals through the GT-3:

From: Russ Poncher <<u>rponcher@earthlink.net</u>>

#### Using the GT-3 for Voice Processing

Start out by turning off the preamp or setting it to acoustic. The following effects are often used to record vocals: - Compression/Limiting - EQ - Harmonizer (Set to be from 5-8 cents off to fatten sound) - Chorus - Reverb Some special effects you will hear used on vocals include: - The mechanical voice/bullhorn - experiment with using distortion, short delay (10-40 ms), weird EQ settings, Flanger - Charlie Brown's Parents - Try using the Auto-Wah and seriously cutting treble. - Radio - Cut out low frequencies, boost upper midrange, add slight ring modulation. - The Voice of Doom - An octave below. Add some thunderous delay and reverb...

From: Stephen M. Golden <<u>forsmg-gt3@yahoo.com</u>>

#### Demon voices

In a play we were performing, we needed to modify various actors' voices to sound like demons. I came up with this patch that sounded pretty demonic through microphones.

Comp/Lim: Sustain: 50 Attack: 40 Tone: 0

Level: 50

Clean Twin Gain: Middle Volume: 40 Bass: 60 Middle: 0 Treble: 30 Presence: 55 Master: 80 Mic Setting: Center Mic Level: 100 Direct Level: 100

Preamp:

Threshold: 45
Release: 50
Ring Modulator:

Noise Suppressor:

### Ring Modulator:

Mode: Intelligent Frequency: 17 Effect Level: 100 Direct Level: 0 Chorus: Mode: Mono Rate: 40 Depth: 50 PreDelay: 4.0 ms High cut: Flat Effect Level: 100

### Getting that Big Body Guitar Sound

From: "Sutton Reid" <<u>suttonreid@hotmail.com</u>>

As someone who has owned his share of big body guitars, including a Johnny Smith (which I should never have sold), let me say two things:

One - you aren't going to get there.

Two - you can get tone that will be VERY satisfying. (I use a Strat.)

The most important things you can do:

1) Use larger gauge strings. Bigger is better, but probably no more than 13's. 10's are an absolute minimum.

2) Use a thicker pick and pay close attention to what your technique does to the tone.

3) Use your thumb and fingers paying close attention to what your technique does to the tone.

4) Use the neck pickup.

Second most important:

5) Use the Twin amp sim with volume and tone set to 50ish.

6) Also try the JC120 and Match drive, possibly EQ to taste.

7) Also try the SLDN with the volume set to about 8 (try that on a "real" amp). I haven't had a chance to try this live, yet, so I'm not sure about it, but I think there is potential here.

8) Optionally, use a little reverb, but no other effects (OK, you can occasionally cheat on this).

#### Try this for a HollowBody sound:

From: "Suzanne Archibald" <<u>suzanne@crysalis.com</u>>

The patch I have for my strat -> Hollowbody is this:

input  $\rightarrow$  Acoustic Sim  $\rightarrow$  EQ on 'hollow body' preset  $\rightarrow$  JC120 Pre Its not perfect, but it's not bad either....

### Using the GT-3 to Breathe Life into Your Guitar:

A mystical-magical mini-instruction course on using your GT-3 — by Matthias Miller <openthepodbaydoor\_hal@yahoo.com><sup>26</sup>

The real power of the GT-3 is in learning how to use the control and expression pedals to alter sound in real time. This makes your guitar breathe and quiver, surge and swell, fade and pan, tremble and vibrate all in tandem with the specific notes you are playing. It's like surfing a huge sonic wave with your guitar surfboard. And the wave is any size and shape you want at any moment in your ride, and the wave goes on forever....

Altering the sound on the fly is the real strength of the GT-3 and appears to be the most confusing to people. Let's examine in detail how you can do this.

Simply put you have a total of 10 assignments:

- One dedicated to the cc pedal,
- One dedicated to the expression pedal, and
- 8 other assignments.

Each of these assignments can be controlled by either the CTL pedal the Expression pedal an external sub-CTL pedal, external sub-Expression pedal, the Internal pedal, and the Wave pedal. Each assignment can be virtually *any* element of any effect: turn it on/off, raise or lower the value of one component of the chorus pedal, etc.

So, you can hit the control pedal and

- 1. Raise the master volume from 70-72
- 2. Lower the pre-amp volume from 98 to 92
- 3. Change the gain on the pre-amp from medium to high
- 4. Increase the depth of the chorus from 14 to 33
- 5. Increase the number of delay repeats from 2 to 7
- 6. Turn on the pickup simulator
- 7. Turn off the Wah
- 8. Change the high-mid frequency band from 400 to 300 This would take care of the 8 arbitrary assigns You then have a dedicated cc: pedal assign so you could also
- 9. Raise the preamp treble from 7 to 8 all of the above would happen instantaneously as soon as you hit the cc button.

You could assign all 8 assigns to the expression pedal and then view the expression pedal as a range from 0 to 127 sliding the expression pedal from 0 to 10 would do #1 above sliding from 10 to 23 would do #2 and so forth.

This allows you to "morph" from sound to sound and is the real power of the GT-3.

Using the expression pedal to control the value of the pre-amp volume is a great way to dial in just the right amount of distortion for any moment of the song.

Assign pedals 1-8 are used just like when you assign a parameter to the control pedal or the expression pedal, but while the control pedal setting is dedicated to the control pedal and the expression pedal setting is dedicated to the expression pedal, assigns 1-8 can each be dedicated to either the control pedal, the expression pedal, or, if you buy some external pedals, to the sub-control pedals and sub-expression pedal. *Any* parameter of *any* effect can be assigned to a control pedal. You can set up a patch so that when you touch the control pedal up to 9 different things happen; or if you move the expression pedal, up to 9 different things happen.

<sup>&</sup>lt;sup>26</sup> Pay close attention to what this man's got to say! He's got an incredible grasp of the GT-3!

#### Using Assigns (Sound on Sound example):

For example, you could set your patch for a rhythm sound with no reverb and no echoes.

Now, let's say you want to sound like two guitars and sneak in quick lead stabs around your rhythm. Set the control pedal to normal (that means the parameters are changed while you hold it down, but as soon as you release the pedal the patch goes back to the original sound).

On assign 1 put in a nice big reverb on/off assign to the Control pedal

On assign 2 put in your delay on/off with say four repeats.

- On assign 3 put in a larger preamp volume to give these lead stabs more volume (if your standard patch calls for a pre-amp volume of say 25, go with 35 to give it a beefier tone. So hitting the control pedal ratchets the pre-amp from 25 to 35.
- On assign 4 put in either a master volume control or a amp master volume control so that hitting the control pedal reduces the volume of either of these to compensate for the increased volume that happens when you raise the pre-amp volume on assign 3 to get a larger tone. In this way you get a bigger tone but the volume compensation means the lead stabs are not louder than the rhythm figures.

So, play your rhythm figure and then as you hit the control pedal, blast a couple of quick lead notes, then let go of the control pedal and go back to your rhythm figure. You will notice that the delay repeats and the reverb tail will continue to play over your clean dry rhythm figure. You sound like two guitarists at once, with two completely different tones.

#### Using Assigns (another example):

Lets say your patch as a medium reverb of say 3.5 seconds and a volume of 40.

Assign volume to your expression pedal.

Take assign #1 and assign a range of reverb time to your expression pedal.

When your expression pedal is pushed down, make it your default 3.5 seconds and a volume of 40. When you roll your expression pedal back, make it 8 seconds and a volume of 80.

Now, play some licks or chords with the expression pedal down, with some good sounds happening, pull the expression pedal back. The volume goes to zero but the reverb gets huge! So your note ends, but the reverb of that note gets longer bigger wider louder and you get this swooshing white noise thing flowing out of your amp. By morphing back and forth with the pedal you play licks and push out all this moving reverb stuff....

This sort of stuff is useful if you are playing a guitar synth and using the GT-3 to send patch changes to the synth as well. In this way you can change your guitar sound without changing the synth patch.

#### The Internal Pedal:

The internal pedal is awesome. First you assign a function that triggers the internal pedal, like changing a patch, or fully depressing or pulling back on the expression pedal. That turns the internal pedal on. You assign a parameter change to the internal pedal. For example, reduce the volume from 100 to zero. You tell the internal pedal how much time to wait before executing this function and you tell it to make the change at a constant rate (linear), slowly (slow rise), or quickly (fast rise). So you can switch patches and blast all this loud cool stuff, and as you are banging on the guitar and jumping up and down, the guitar slowly fades out. Without you having to touch anything.

I use it for example on a synth solo, where the solo starts with just the synth violin section, but slowly a big powerful guitar sound comes up in volume to match the violin volume 00 creating a big rushing effect. You could assign the wave pedal to three different assigns so that slowly or quickly you bring up the number of repeats, the size of the reverb, the amount of distortion and turn the flanger on. You hit a new patch or rock back on the expression pedal, etc, etc, etc. Keep playing and slowly all these parameters move and you just concentrate on riding the wave.

You can reverse of all this by assigning additional assigns to wave pedals to the reverse of all of these parameters -- and just tell these assigns to wait much longer before executing these

functions. In this way you start with all these clean normal sounds, the first set of assign/wave pedals ramp your sounds up with distortion, echoes, flange etc, You riff for a few moments and all the sounds morph in reverse back to your clean sounds.

All this stuff can be used to make your guitar sound breathe, expand, contract etc.

#### The Wave Pedal:

The wave pedal is great for tremolo but also does fantastic things when applied to the ring modulation frequency or other elements for crazy sounds.

You can assign ranges to the expression pedal to execute multiple commands. The range is 0 to 127. So you can say

0-25 brings up distortion,

26 turns on the phaser,

25 turns if off,

40 turns on the chorus,

39 turns it off,

50 changes the chorus depth, etc. etc.

So when you play stuff and rock the expression pedal back and forth, all these different things happen at different expression pedal positions. Your guitar can go through 8 personality changes, all with overlapping ranges. ("Here" just the chorus is on, "here" both the chorus and phaser are on, "here" just the phaser is on, and so forth.)

You can yank the expression pedal around and morph from 50 repeats to 0 repeats, sweep your flanger, and have unbelievably huge and powerful sound changes going on just by playing with the expression pedal.

#### The Feedbacker:

For an example of using the Feedbacker, set the upper mid EQ at 400 and put the boost for this on your expression pedal. Play a solo, and hold a beautiful note and blast your expression pedal, and feedback will start. In this way you can bring melody feedback in and out, just by working your pedal. Do this with an increase in volume and reverb time and volume and your solos go to a new dimension.

### **Guitar EQ traits:**

Mike Apperson <<u>mlapp5409@prodigy.net</u>>

20Hz to 60Hz	More felt than heard and will mud up your	
	sound real quick.	
80Hz to 250Hz	Your power. It will make your sound thin or fat	
	Too much will create a thumpy sound (not the	
	good kind of thump either).	
Around 240Hz,	The body of your sound	
250Hz to 2KHz	Most important.	
500 to 1K	Can cause horn like sounds,	
1k to 2k	Will cause a tinny soundToo much and you'll	
	sound like your playing through the telephone.	
Around 2.5KHz.	Clarity	
2Khz to 5Khz	Too much here will tire your ears.	
Cutting back 3K, can make a beefy sound		
	but not too much	
5Khz to 20Khz	Brings out the clarity.	
	Too much will get very harsh though.	

### What's so special about the GT-3?

- 1. Having many of the benefits of owning several different amps, with NONE of the drawbacks.
- 2. Having amp sims that vintage/clean freaks like as much as the overdrive maniacs. Dial it in as you like it.
- 3. Having most/all of the effects that most guitarists want most of the time.
- 4. Having really good control over all the effects, effect chain, and amp sims.
- 5. Having the quality of the sounds, tone, and effects far higher than one floor mounted stomp box has any right to.
- Having speaker sim options that are good enough to go straight into the board, either live or for recording. Check out some of the recordings on the "sounds of the GT-3" for some samples. Follow the links to Dan Baker's site, I believe.
- 7. Having a usable midi implementation.
- 8. Having a purchase price of under \$400 USD.
- 9. And did I say that it works real well and the tubes never wear out?
- 10. I probably left something out.
- 11. OK, the GT3 is not perfect, but it is so close it is scary...
- 12. One thing that is true, it is not as seductive as some of the other boxes, but as you learn to use it you will value that this is the real deal.
- 13. I was not paid to say this and I bought my GT-3 with my own money...
- Sutton Reid <<u>suttonreid@hotmail.com</u>>

For the creative person it is bound to unleash a world of new things that some will be useful and some won't. For me it gave me \$1000s of dollars of equipment that can be driven by my Strat and solid-state amp! — Tracy Adams <<u>TAdams@cvps.com</u>>

I simply got tired years ago of having to deal with stomp boxes. Being in a dub reggae band, I go through a lot of effects changes (mainly delays and similar noises) and having them consistent and easily repeatable makes it well worth the time and money spent on the GT-3. Also, I love the flexibility of it, once I got used to the interface. Also of interest for me was having all the pre-amp sims, it means I can plug into nearly anything amplified and still sound like "me"

- David < dh@monkey-boy.com >

### How to think about your GT-3<sup>27</sup>

O.K. Here we go, a FREE lesson in GT-3. The best way to work with the GT-3 is NOT to think of it as a big blue box with loads of FX, or as a multi-FX unit. Think of it as a load of Stomp boxes. — You know, like the small Boss pedals. Now when making a sound, start with the amp and Speaker Sims. That will be your basic sound — the sound you are trying to make. Is it a sound like some known artist? What amp do they use? Start with that. Now add the FX, place things like, Comp, Feedbacker, Wah, OD/Dist before the Amp Sims. Now what would you put in to a REAL amp FX loop? Modulation FX right? Phaser, Flanger, Harmonist, Chorus, Delay — then put the Speaker Sim. Reverb is for the room, this should go after every thing, it's the last effect, put it after the Speaker Sim. As for the Volume Pedal ...well that is all down to taste. It can go be fore the Amp Sim or before the Delay. Why before the Delay? So that you can "Swell" the Guitar in and out and the Delay "tails" (the repeats) do not cut out or get cut short. All the above is what I think, it is not Gospel, it is NOT the law. But it has ALWAYS worked for me for many years with EVERY Multi FX unit on the market, and for many others. After I have passed this information to the paying GT-5 users out there, they have all come back and said how much easier the GT-5 has become to them. Once you have this way down-pat, you can then work the GT-3 any way you like, change the order of the FX, what ever you like. Just remember..... 'You are the GT-3's master, do not let it master you!!'. After all... YOU, bought IT. I hope this has helped to get you started on your way to better sounds.

<sup>&</sup>lt;sup>27</sup> PLANK, Manchester, U.K., <<u>plank.@libertysurf.co.uk</u>> <<u>plank@tinyonline.co.uk</u>>

### **MIDI for PC connections**

#### (O. M. pp.10,33,36,58-67)

*Musical Instrument Digital Interface (*MIDI), is useful for saving your settings and patches for backup purposes in case your GT-3 data becomes corrupt or gets reset to the factory settings. It is also useful for sharing patches with other GT-3 users. To do this, you will have to load PC software that recognizes SysEx data, and preferably GT-3 SysEx data. In addition, you will have to connect your GT-3 to the PC with a special cable that has a joystick connector on one end and two male MIDI connectors at the other. One of these MIDI connectors will be labeled IN and the other OUT. Simply plug these MIDI plugs into the back of your GT-3 with the IN plug going to the OUT jack and the OUT plug going to the IN jack.

This cable can cost anywhere from \$20 to \$50 US. One noteworthy source for one of these cables (at the time of this writing) is at <a href="http://www.cable4pc.com/midi301.htm">www.cable4pc.com/midi301.htm</a>. The MIDI connectors on the joystick adapter cable are sometimes female gender and so are the MIDI connectors on the GT-3. If this is the case, in addition to the PC to MIDI joystick adapter cable, you will need a pair of standard MIDI cables that have male MIDI connectors on each end. Then connect the two leads on the PC to MIDI Joystick adapter cable to the standard MIDI cable and the other end of the standard MIDI cable to the connectors on the GT-3. (*MIDI Connections: O. M. p.10, 58, 64*)

If you can afford to spend a few extra bucks (about \$50-\$100 US), instead of using the joystick connector, you can get a dedicated MIDI interface such as the parallel port PC-MIDI Flyer by Mark Of The Unicorn (MOTU) (<u>www.motu.com</u>) or one of the parallel, serial, or USB interfaces by MidiMan (<u>http://www.midiman.com/</u>) like the MidiSport 1x1 or 2x2 USB models. These interfaces allow MIDI devices to be connected to your computer without using the sound card joystick port, and in my experience provide a *much* more reliable connection to the PC.

#### Can't get your connection to work?

A common mistake made by new users is to plug the IN cable from the PC to the IN port of the GT-3 and the OUT cable from the PC to the OUT port of the GT-3. This seems to make sense, but is incorrect. Whenever you're connecting two MIDI devices, IN from one goes to OUT on the other, and OUT from the one goes to IN on the other. Try to imagine the signal flow the same way audio or video signals flow from one device to another. Data, like audio, is traveling in a specific direction. Data comes **OUT** of the GT-3 and goes **IN** to the computer. Likewise data flows **OUT** from the computer and **IN** to the GT-3. I believe confusion arises because the PC itself has no MIDI IN/OUT ports, so the joystick adapter cable makers assume the MIDI connectors themselves are IN and OUT of the PC. Think of the MIDI ends of the PC joystick adaptor cable as the PC itself.

You can also connect your GT-3 to keyboards, sequencers (such as the <u>ROLAND MC-50 mk II</u>), and MIDI storage devices (such as the Yamaha MDF-3). Such MIDI-capable devices can be used as sound modules, for dynamic patch or parameter changes, and for MIDI data storage and retrieval. When connecting MIDI cables to devices such as these, the IN/OUT confusion does not usually occur because each device has the respective ports on the device itself, and the cables are not labeled. (O. M. p.58)

### Notes on MIDI

by Kevin S. Miller <<u>ksmiller@pipeline.com</u>>

MIDI is just a way to "remote control" another device. It cannot make a device do something it was not designed to do. A common misconception is that MIDI data is a kind of digitized sound. It's not. MIDI can record the key presses that a keyboard player (or some other MIDI instrument) makes and then play them back on MIDI device such as another MIDI keyboard or a sound card in a PC. This type of MIDI data is often compared to a "player piano roll". You can put the roll on a different piano and it makes the sounds of the piano it's played on. A Concert Grand piano will not sound the same as an upright Honky-Tonk piano. Imagine the train wreck you'll hear when you try to play a MIDI piano part on a MIDI drum machine, or vice versa. The GT-3 is not a MIDI instrument. It cannot capture the notes you play and send them out the MIDI port, nor can it play a MIDI file from your PC or a MIDI keyboard.

A second function of MIDI is to capture and respond to "expression controls". The GT-3 can do this, I believe, but I've never attempted it. You could use your MIDI recorder (called a sequencer) to capture data such as patch changes and movements of the expression pedal and then play them back into your GT-3 during a performance or recording session so that you don't have to do it live.

Another thing I think you could do with the GT-3 (I know this can be done with other MIDI devices) is to assign any number of GT-3 parameters to be controlled by MIDI. Imagine that you could have 128 expression pedals connected to your GT-3, all controlled in real time by your computer. Well, with MIDI, you can. If you've ever seen a mixing console in a recording studio with sliders moving by themselves (after recording, during the mastering), that's usually how it's done. The light shows at concerts are also often controlled by MIDI sequences. MIDI control can be built into almost any kind of electronic device.

The other function of MIDI is to save and restore configuration settings. That's the "Bulk Dump" and the "Bulk Load" (p.15). This is used by the GT-3 to save and restore patches.

The Bulk Load feature is also what makes it possible to exchange individual patches with other GT-3 users.

For more information on using MIDI with the GT-3, see the UTILITY topic, MIDI sub topic (p.14), MIDI Data Transfer (p.15), and the MIDI Control Change settings (p.20). *(Also see O.M. pp.58-67.)* 

### GLOSSARY

This glossary may contain some words, which on the surface, may seem to be unnecessary. Keep in mind there are GT-3 users from around the world where English is a second language. For those people, additional words have been included.

Activate - To turn on, start or begin something.

- Assign A definition of a source and its associated target. Refers to the two parts that make up the control of a function, (effect or parameter). The pedal or control that will actually do the controlling is called the "SOURCE". The parameter or effect being controlled is called the "TARGET".
- Attack How quickly an effect engages after it is triggered. Also, the time it takes for a sound to reach its initial peak intensity. The first part of a sound's "envelope."
- Auto-Riff A definable sequence of notes that will be heard when playing the single trigger note.
- Bank Four patches organized into a numbered collection or group. The GT-3 has 85 Banks with four patches in each bank.
- Bank Indicator The lighted number in the display that shows the currently active bank.
- Bank Pedal A pair of pedals used to move up or down through banks of patches.
- BPM Beats per minute, (as in tempo).
- Bypass The state or condition where an effect or function is selectively disabled.
- Cancel To undo an action or free oneself of a commitment.
- Chorus A slight delayed and modulated signal combined with the original signal which creates a thick shimmering sound.
- Coincidence An inadvertent occurrence of two unrelated events.
- Compressor Reduces the loudest input levels while boosting the softest input levels thus evening out the volume levels of all input sounds. High and low volume threshold levels are typically adjustable. Also improves sustain without adding distortion.
- Control Pedal (CTL) Either the fifth "push pedal" on the GT-3 counting from the left or one of the optional external push pedals that allow you to control the sounds and settings of the GT-3 with your foot.
- Control Sources Eight possible controllers that can be set to control selected functions; EXP Pedal, CTL Pedal, SUB EXP Pedal, SUB CTL 1, SUB CTL 2, Internal Pedal, Wave Pedal and MIDI Control Change message, (Channel 1~31 and 64~95).
- Data Another word for information, usually describing computer-specific information.
- Decay The way a sound diminishes in intensity. The third and final part of a sound's "envelope."
- Default The value or function preset into the GT-3 at the factory.

Definitions - Values or choices, which can be selected from within a menu.

- Delay Samples the original sound and plays it back to simulate an echo.
- Delete Remove or cause to be gone.
- Device Generally, refers to any type of electronic item.

Direct Level - The level of you guitar's sound.

Disable - To turn off or make inactive.

Display - The window where all menus, values and other data are read.

Distortion - Produces a harder, metallic sound high in upper harmonics.

- Dynamically Something you can do while the unit is being used. EX: As you are playing the guitar through the GT-3.
- Editing The process of making setting and value changes.
- Effect A processing of the original sound which changes the sound resulting in a new and different sound.
- Effect Button A button on the GT-3 that allows you access effect parameters.
- Effect Level The sound level of the effect produced in response to playing your guitar.
- Enable To turn on or make active.
- Envelope The way in which a sound varies throughout its duration. Generally speaking, there are three aspects of a sound's envelope: *attack*, *sustain*, and *decay*.
- Event Something that happens.
- Expression Pedal The continuously variable controller on the GT-3. (The one that looks like a vehicle's accelerator pedal.)
- External Any device that plugs into the GT-3 like a SUB CTL pedal.
- EZ Edit An editing method that allows you to create a new sound using factory preset values which can be created and editing using the foot pedals while you play.
- Feedback An often unwanted squealing sound usually caused by a given sound being amplified by the same amplifier more than once. This is called a "*feedback loop*." Sound is picked up through a microphone or acoustic guitar pickup, amplified, and picked up by the microphone again, then amplified again etc. This loop continues building until a runaway squealing sound results. The AFB, (anti-feedback), effect in the GT-3 can be a useful tool in preventing or recovering from unwanted feedback. However, in many circumstances while playing Rock guitar, feedback is entirely desirable and even intentionally produced under controlled conditions.
- Feedbacker An effect which will produce a feedback sound of the same frequency as the note being played without having to nurse it out of your guitar manually by holding it near the amplifier's speaker.
- Flanger Combines a slight delay with the original signal for a swirling "doubled" effect.
- Foot switch May also be referred to as a foot pedal and will usually be a latching or non-latching type.
- Function An effect or parameter feature of the GT-3.
- Fuzz Distortion that radically emphasizes harmonics.
- Gate A point at which something turns on or shuts off. For example, a noise gate shuts off the sound of your guitar once the decay reaches a specific level which you set.
- Gender An important part of describing a connector type. A connector is designated as being either a male or female gender. A male type connector may also be referred to as a plug. A female type connector may also be referred to as a jack.

- Global Functions that cause a change across the entire unit. "Global Settings" on the GT-3 involve your "amp" setting, EQ, Noise suppressor, and reverb level. Global settings enable you to make quick changes across the entire GT-3 to match temporary changes in your playing situation. For example: plugging into your Boogie combo as opposed to setting up in a recording studio directly into the mix. Two GLOBAL functions that do not effect the sound are MANUAL and TUNER which you can set under the <SYSTEM> parameters to be globally dedicated to external CTL pedals.
- Harmonist An intelligent pitch shifter that automatically adds harmony to the notes you play depending on the key specified.
- Infinite Without ending, repeats or continues without stopping.
- Insert A single jack on musical equipment that allows you to both send a signal to an external device or path and receive a return signal back from that device or path. It requires a special "Insert cable" in order to do this.
- Insert Cable A special cable consisting of a Tip-Ring-Sleeve (stereo 1/4") plug on one end of the cable that splits to two cables with Tip-Sleeve (mono 1/4") plugs on the other. This cable is most commonly used as a means to send and receive a signal through a single jack. The Tip conductor is usually the "send" and the Ring conductor is the "return." In regard to the GT-3, an insert cable must be used to connect *two* external CTL pedals to the Sub CTL 1 / 2 jack.
- Interface The combination of buttons, pedals and display which are used to play and make adjustments on the GT-3.
- Internal Pedal A definable trigger set to cause something to happen. This trigger can be set up to coincide with the moving of the expression pedal, the pressing of a Control pedal or even changing to a different patch. The Internal Pedal can also cause a variation in the sound to occur as if you had rocked the expression pedal forward or back. You can set the rate and envelope of this variation to your liking.
- Joystick 15 pin connector on virtually all modern PC sound cards used primarily to attach a controlling device used mainly for playing computer games. Fortunately, it is also capable of being used as a MIDI interface to the PC.
- Keyboard Any piano style interface.
- LCD Liquid Crystal Display, one of several types of electronic displays.
- Level Volume or depth of an effect.
- Limiter Limits the peak levels of sounds so they do not exceed a set threshold.
- Manual With regard to operating the GT-3, this is the ability to turn on and off specific effects individually while you play by pressing the push pedals without making adjustments to the patch.
- Master BPM Global setting of the BPM, (Beats Per minute), for all effects having BPM as a featured parameter.
- Maximum Defines the highest, most or largest value.
- Menu A selection of options from which you can select one or more choices.
- Meter A graphical representation of the volume levels of either the input, main output or the output of an individual effect.

- MIDI Musical Instrument Data Interface A method of sharing digital information between musical/computer devices. This connection allows patches to be stored or shared with other GT-3 owners. It also permits backup of some or all settings on the GT-3 allowing recovery if GT-3 data becomes lost or corrupt, as is possible if "internal weak battery indicator" is ignored too long, or if you accidentally over-write your favorite patch.
- MIDI Bulk Dump A GT-3 MIDI Data Transfer mode where the GT-3 controls the transfer.
- MIDI Bulk Load A GT-3 MIDI Data Transfer mode where an external MIDI device controls the transfer.
- MIDI Storage Device A device that has as its primary purpose the function of storing MIDI information.
- Minimum Defines the lowest, least or smallest value.
- Mode Defines the way a device will react. There are usually several modes which cause a device to behave differently depending on the mode selected.
- Modify Same as adjust, alter, or program.
- Modulation Fluctuation of a sound or sound feature.
- Momentary Usually associated with a switch which is active only while the switch is pressed and shuts off once released.
- Mute The condition where there is no sound made from this effect or function.
- NAMM National Association of Music Merchants An international organization whose mission is to "unify, lead and strengthen the global music products industry and to increase active participation in music making." It is supported by more than 7,000 music products retailers, manufacturers, distributors, wholesalers and publishers located in the United States and in more than 100 other countries.
- Noise Gate Another term for the Noise Suppressor. This is a function that shuts off the sound of your guitar after the decay drops below a specific level which you set.
- Noise Suppressor Eliminates noise resulting from connecting multiple effects units or using very high gain.
- Normal As opposed to Toggle, this causes the push pedal to work in such a way that the switch is on while it is being pressed, and off when you release it.
- Normal Mode See Normal.
- Normal Setting Method A method of adding an effect to a patch using value settings which you select.
- Numbered Pedal Any of four pedals numbered 1 through 4 having multiple functions. Most common use is selecting individual patch numbers from within a selected bank.
- Octave Creates a signal one or two octaves lower than the original signal.
- On-Board Any part of the GT-3 that is physically located on the unit itself, such as the Numbered pedals.
- Order Of Effects Defines where an effect is placed in the signal path. If you had individual effect pedals, this would be the sequence in which you connect them with the cables. The sound can be drastically different using the exact same effects and settings but rearranging where each effect is placed in the chain of effects.
- Overdrive Simulates the sound of an overdriven tube amp and responds to playing touch.
- Owner's Manual The official manual included with the GT-3 when purchased new.

Parameter - Adjustable values which make up an effect.

- Patch A stored collection of settings specifying haw various effects are to be fine tuned and combined to create a specific sound.
- PC Personal Computer. This term is usually associated with DOS or Windows based computers. Although Macintosh, or Mac-type computers are considered by many to be "personal computers," the term "Personal Computer" or "PC" was once a registered trademark of the IBM Corporation. The term has since fallen into public domain, but generally is reserved for "IBM/Intel/Microsoft compatible" computers. (For those of us who are Macintosh people, take pride in this quote, "It's not a PC, it's a MAC!")
- Phaser Combines an out-of-phase signal with the original signal to produce a sound similar to the sound of a rotary speaker.
- Phrase A musical passage or sequence of notes.
- Pitch Shifter Shifts the pitch of the original sound by various intervals.
- Preset A value or setting which has been predefined at the factory.
- Program With regard to the GT-3: To edit, adjust, or modify any setting.
- Quick Setting Method A method of adding an effect to patch using factory preset values.
- Reverb Adds the sound of natural acoustic ambiance present in rooms and halls.
- Sensitivity How easily the vibration of a string on the guitar will be "heard" by the GT-3.
- Sequence The order effects are arranged, in other words; which effect is first, which is second, and so on. In general terms, the order of things.
- Sequencer A device that can record and save MIDI events for playback at a later time.
- Source The pedal or control that will actually do the controlling of the target.
- Step A single numbered instruction which is part of a logical series of numbered instructions.
- Sub CTL 1 / 2 A connector on the back of the GT-3 where 2 additional latching or non-latching Control Pedals can be connected.
- Sub EXP A connector on the back of the GT-3 where a second expression pedal can be connected. (Same connector as Sub CTL 1 / 2.)
- Successive Repeating the same action again and again.
- Supplement This document. An addition to something that provides what the object of the supplement lacks. E.g. This document is designed to be used together with the Owner's Manual because it provides what the Owner's Manual lacks. (We hope.)
- Sustain The relatively constant intensity level of a sound. This occurs between the *attack* and the *decay*. In a sound's envelope, if the decay begins immediately after the attack, there will be no sustain.
- Switch Pedal Another term for one of the "push" type pedals on the GT-3.
- Synth Abbreviation for synthesizer or synthesized.
- Synth Hold Causes the current synth sound being played to hold continuously until signaled to stop.
- SysEx MIDI System Exclusive data. Information that is specific to a given device and is usually unusable to other MIDI devices.

- System With regard to the GT-3: A set of system-related parameters which can be adjusted to the user's preference. They include LCD Contrast, Dial function, SUB CTL 1, and SUB CTL 2.
- Tap Setting In stereo delay, the timing of the delayed signal reaching the right channel with respect to the direct signal being sent to the left. This has nothing to do with "Tap Tempo."
- Tap Tempo The ability of the GT-3 to dynamically set the rate of an effect, such as delay, to the rate at which you press a CTL pedal.
- Tap Time See Tap Setting.
- Target The parameter or effect being controlled by the source.
- Terminology Words specific to a particular discipline. In this case, words specific to the GT-3 or musical instruments.
- Toggle With each press of a button an alternate state is reached, such as On/Off. Press once, the function is on, press again and the function is off.
- Toggle Mode Setting a CTL pedal so that it works as a Toggle. Press once, the function is on, press again, it's off.
- Tremolo Varies the volume of the original sound to create a pulsating effect.
- TRS Tip-Ring-Sleeve. Refers to the electrical contacts of a ¼ " phono, three conductor type connector, like the kind used on a stereo headphone plug. The Tip, as the name implies, is at the very tip of the connector. Next is an insulating disk which separates the Tip from the next part of the connector, the Ring. Next is another insulating disc separating the Ring from the Sleeve which is the last conductive part of the connector.
- Tuner A device that assists you in tuning your guitar. A Guitar tuning feature on the GT-3.
- User A storage area in the GT-3 where you can set your own favorite parameters for easy recall and implementation later. For example: User Bank, User Patch, User Setting.
- Utility A term generally referring to functions that perform housekeeping type chores, most of which affect the unit in a Global fashion.
- Wave Pedal Similar to the Internal pedal except the Wave Pedal allows for different continuous variation of the sound as if you were rocking the expression pedal back and forth.

Write - Same meaning as the word SAVE.

### **Acknowledgments**

I would like to thank John Sabbagh <<u>Jgsabbagh@aol.com</u>> (invalid: current e-mail unknown) for his extensive help in compiling and editing the first edition of this manual. His persistence, perseverance, and point of view covered great lengths in making this what we hope is a friendly, easy to understand manual.

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