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PARAMETER SELECT

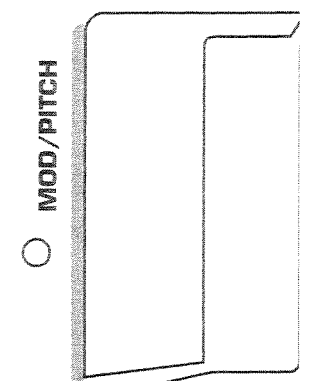
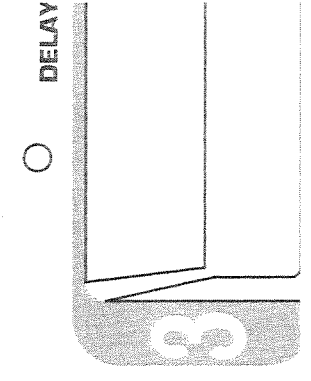
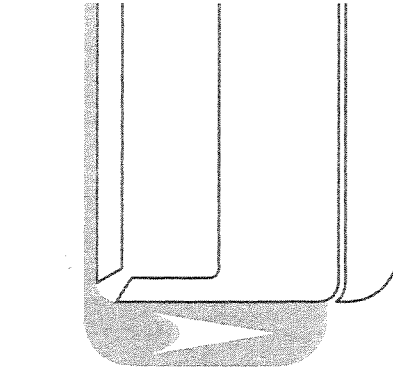
VALUE

CLIP  
 SIGNAL  
 STORE

BANK PGM#

**RP-5**  
 Digitech

Compressor	On/Off	Amount	Distortion	On/Off	Type	Silencer™	On/Off	Threshold	Attenuation	Attack Time	Master Vol	Level (CC1)							
Equalization	On/Off	Freq 1	Gain 1	Freq 2	Gain 2	Freq 3	Gain 3	Speaker Cab	On/Off	Type	Wah Wah	On/Off	Type	Position (CC2)	Value 1 (CC4)	Value 2 (CC5)	Value 3 (CC6)	Feedback	Decay Time
Dual Delay	On/Off	Type	Level (CC7)	Time 1	Time 2	EQ Freq	EQ Gain	Reverb	On/Off	Type	Level (CC8)								



# RP-5 Guitar Signal Processor/Foot Controller and Preamp

Owner's Manual



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## INTRODUCTION

Congratulations, and thank you for your purchase of the DigiTech RP-5 Guitar Signal Processor / Preamp. The RP-5 offers you the same fresh approach to guitar sound creation as the now famous RP-10. DigiTech's revolutionary S-DISC™ processor makes it all happen. Its compact size occupies less floor space, while maintaining the power of analog distortion, with the precision and clarity of the S-DISC™ digital multi-effects. Special features of the RP-5 include:

- Full bandwidth effects (20-20kHz)
- Stereo signal processing
- Quick Module and Parameter access
- CC pedal jack which allows for real time control of certain Parameters
- Programmable cabinet emulation for running direct to a mixing console (great for both studio and live applications)
- Front panel Presence control and headphone output

All of your effects needs can be filled by a single unit. This owner's manual is your key to understanding the powerful world of the RP-5. Read it carefully. After you've had time to familiarize yourself with the unit, try experimenting with unusual effects settings. You may achieve some interesting results.

## SAFETY PRECAUTIONS

Do not open the unit. Do not attempt to service the unit yourself. Refer all servicing to qualified personnel. Opening the chassis for any reason will void the manufacturer's warranty. Do not get the unit wet. If liquid is spilled on the unit, shut it off immediately and take it to a dealer for service. Disconnect the equipment during storms to prevent damage.

**U.K. ONLY** - A molded mains plug that has been cut off from the cord is unsafe. Discard the mains plug at a suitable disposal facility. NEVER UNDER ANY CIRCUMSTANCES SHOULD YOU INSERT A DAMAGED OR CUT MAINS PLUG INTO A 13 AMP POWER SOCKET. Do not use the mains plug without the fuse cover in place. Replacement fuse covers can be obtained from your local retailer. Replacement fuses are 13 amps and MUST be ASTA approved to BS1362.

## LITHIUM BATTERY WARNING

**CAUTION!** This product contains a lithium battery. There is danger of explosion if battery is incorrectly replaced. Replace only with an Eveready CR 2032 or equivalent. Make sure the battery is installed with the correct polarity. Discard used batteries according to manufacturer's instructions.

**ADVARSEL!** Lithiumbatteri - Eksplosjonsfare. Ved utskifting benyttes kun batteri som anbefalt av apparatfabrikanten. Brukt batteri returneres apparatleverandøren.

**ADVARSEL!** Lithiumbatteri - Eksplosjonsfare ved feilagtig håndtering. Udskiftning må kun ske med batteri av samme fabrikat og type. Levér

det brugte batteri tilbage til leverandøren.

**VAROITUS!** Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

**WARNING!** Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera använt batteri enligt fabrikantens instruktion.

## WARRANTY

1. The warranty registration card must be mailed within ten days after purchase date to validate this warranty.
2. DigiTech warrants this product, when used solely within the U.S., to be free from defects in materials and workmanship under normal use and service.
3. DigiTech liability under this warranty is limited to repairing or replacing defective materials that show evidence of defect, provided the product is returned to DigiTech WITH RETURN AUTHORIZATION, where all parts and labor will be covered up to a period of one year. A Return Authorization number may be obtained from DigiTech by telephone. The company shall not be liable for any consequential damage as a result of the product's use in any circuit or assembly.
4. Proof-of-purchase is considered to be the burden of the consumer.
5. DigiTech reserves the right to make changes in design or make additions to or improvements upon this product without incurring any obligation to install the same on products previously manufactured.
6. The foregoing is in lieu of all other warranties, expressed or implied, and DigiTech neither assumes nor authorizes any person to assume for it any obligation or liability in connection with the sale of this product. In no event shall DigiTech or its dealers be liable for special or consequential damages or from any delay in the performance of this warranty due to causes beyond their control.

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

**SECTION 1 - STARTUP**

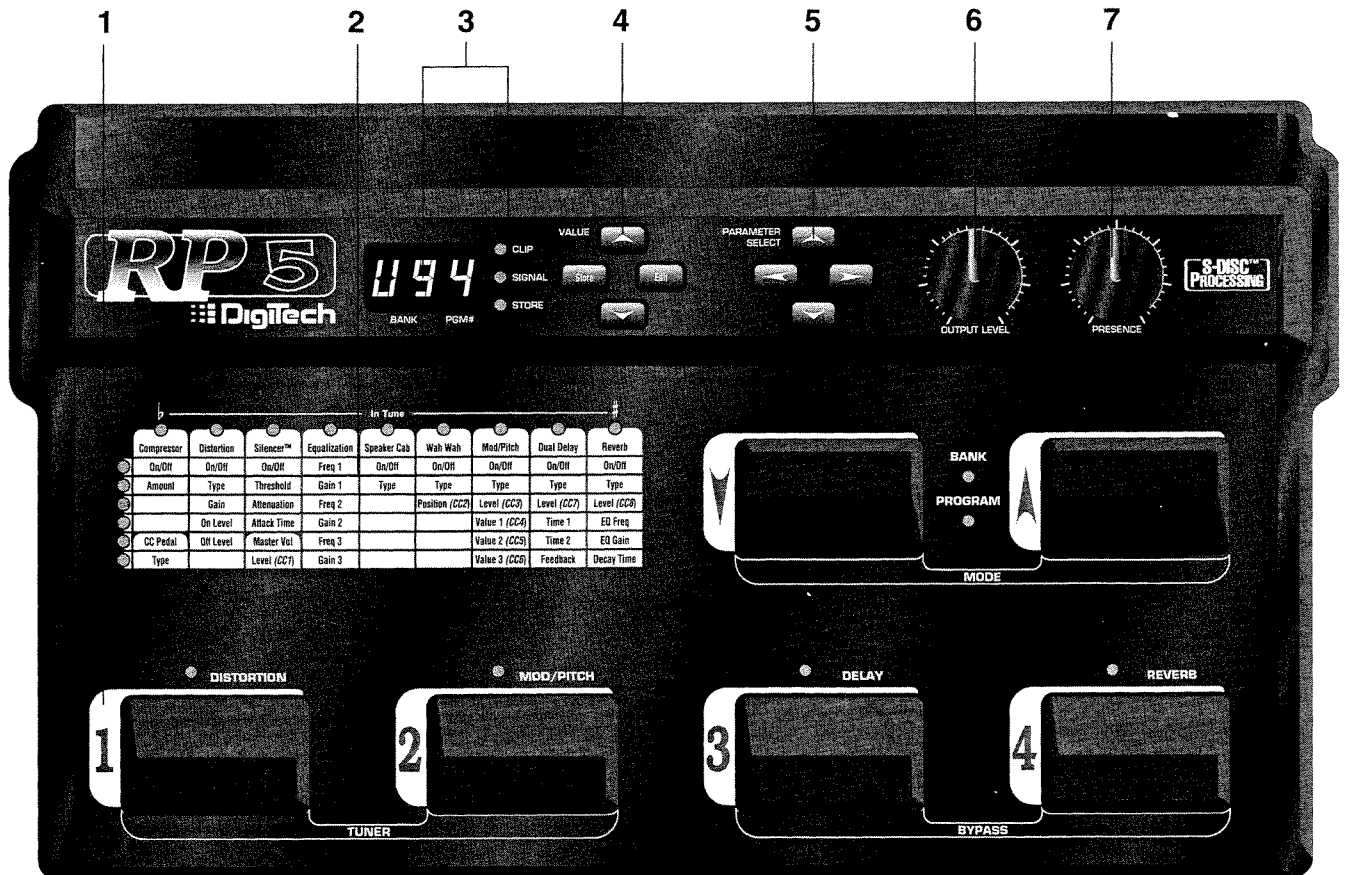
**SUPPLYING POWER**

**Line Conditioning** - The RP-5, like any piece of computer hardware, is sensitive to voltage drops, spikes, and surges. Interference such as lightning or power "brownouts" can seriously, and in extreme cases, permanently damage the circuitry inside the unit. Here are some ways to avoid this type of damage:

- Spike/Surge Suppressors - This is an inexpensive solution to all but the most severe of AC line conditions. Surge protected power strips usually cost only slightly more than unprotected strips, making them a worthy investment for protection of all your valuable gear.
- AC Line Conditioners - This is the best way to go for total protection from improper line voltages, albeit the more expensive way. Line conditioners constantly monitor for excessively high or low voltages and adjust accordingly, thus delivering consistent power levels.

**FRONT PANEL CONTROLS**

The front panel controls and functions of the RP-5 are as follows (refer to diagram):



## 6

- 1) **Pedalboard** - The RP-5's pedalboard consists of six footswitches. The two Mode footswitches to the right of the Parameter Matrix allow you to change from Program mode to Bank mode by pressing the <UP> and <DOWN> footswitches simultaneously. When changing modes, the appropriate LED will light to indicate whether you are in Program mode or Bank Mode. In Program Mode, the <UP> and <DOWN> footswitches allow you to move through Programs, while the four main switches, labeled 1 - 4, act as toggle On/Off switches for Distortion, Modulation, Delay, and Reverb. In Bank mode, the <UP> and <DOWN> footswitches allow you to move through Banks, while the 1-4 footswitches are used to select Programs. If footswitches 1 and 2 are pressed simultaneously, Tuner Mode will be activated. If footswitches 3 and 4 are pressed simultaneously, Bypass Mode will be activated.
  
- 2) **Parameter Matrix** - The Parameter Matrix consists of a group of horizontal Effect LEDs and a second group of vertical Parameter LEDs. The Effect LEDs are: Compressor, Distortion, Silencer, Equalization, Speaker Cab, Wah Wah, Mod/Pitch, Dual Delay, and Reverb. In Bank and Program mode, this matrix shows you which Effects are in use.
  
- 3) **Display Window and LEDs to the right** - The display window shows all current operating and programming information. The first numeric LED in the display window indicates whether you are in a User (**U**) or Factory Bank (**F**). The second indicates the Bank number currently in use, and the third indicates which Program number is currently in use. These numbers change as you scroll through the available Programs. The functions of the Signal, Clip, and Store indicator LEDs, located to the right of the display window, are as follows:
  - Signal - Indicates whether a signal is entering the RP-5.
  - Clip - Indicates analog clipping in the RP-5. Digital clipping can be detected when the third vertical LED from the top of the Parameter Matrix flashes. Distortion may be heard in the output signal if either analog or digital clipping occurs. If analog clipping occurs, check the Distortion On/Off levels. The analog levels may need to be lowered to eliminate the problem. To reduce digital clipping, the Master Volume and/or Effects levels should be checked and adjusted accordingly. As always, let your ears be the judge.
  - Store - Lights when a Parameter has been changed in a Program. When <STORE> is pressed once, the first seven segment LED in the Display window will flash. Once you have selected the Bank and Program location where you want to store your effects, press the <STORE> key again (see page 11, under Edit Mode for further information on storing a Program).
  
- 4) **Value, Store, & Edit Keys** - The Value <UP> and <DOWN> keys allow you to scroll through the RP-5's Programs or change

Parameter values in Edit mode. The <STORE> key allows you to store an edited Program in memory for later use. The <EDIT> key allows you to edit the User and Factory Programs.

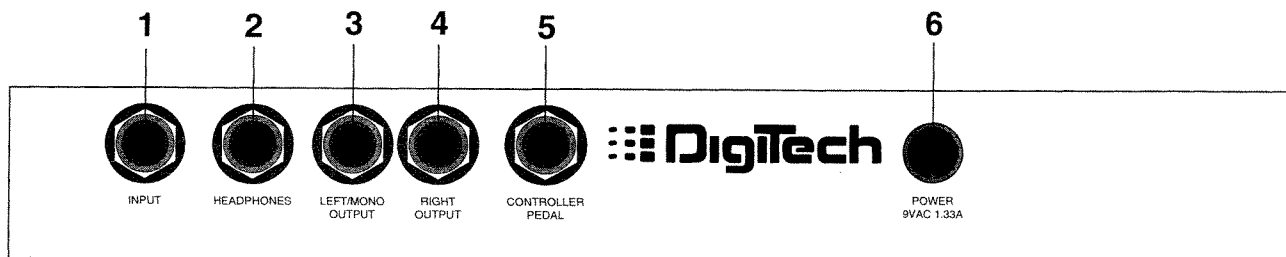
**5) Parameter Select Keys** -The <LEFT> and <RIGHT> Parameter keys allow you to navigate the horizontal Effect LEDs of the Parameter matrix. The <UP> and <DOWN> Parameter keys allow you to navigate the vertical Parameter LEDs of the Parameter matrix. These keys are only active in Edit mode.

**6) Output Level** - Controls the overall output level of the RP-5. Also controls the overall level of the headphones.

**7) Presence** - Enhances the high frequency content of the overall sound. This will affect all presets.

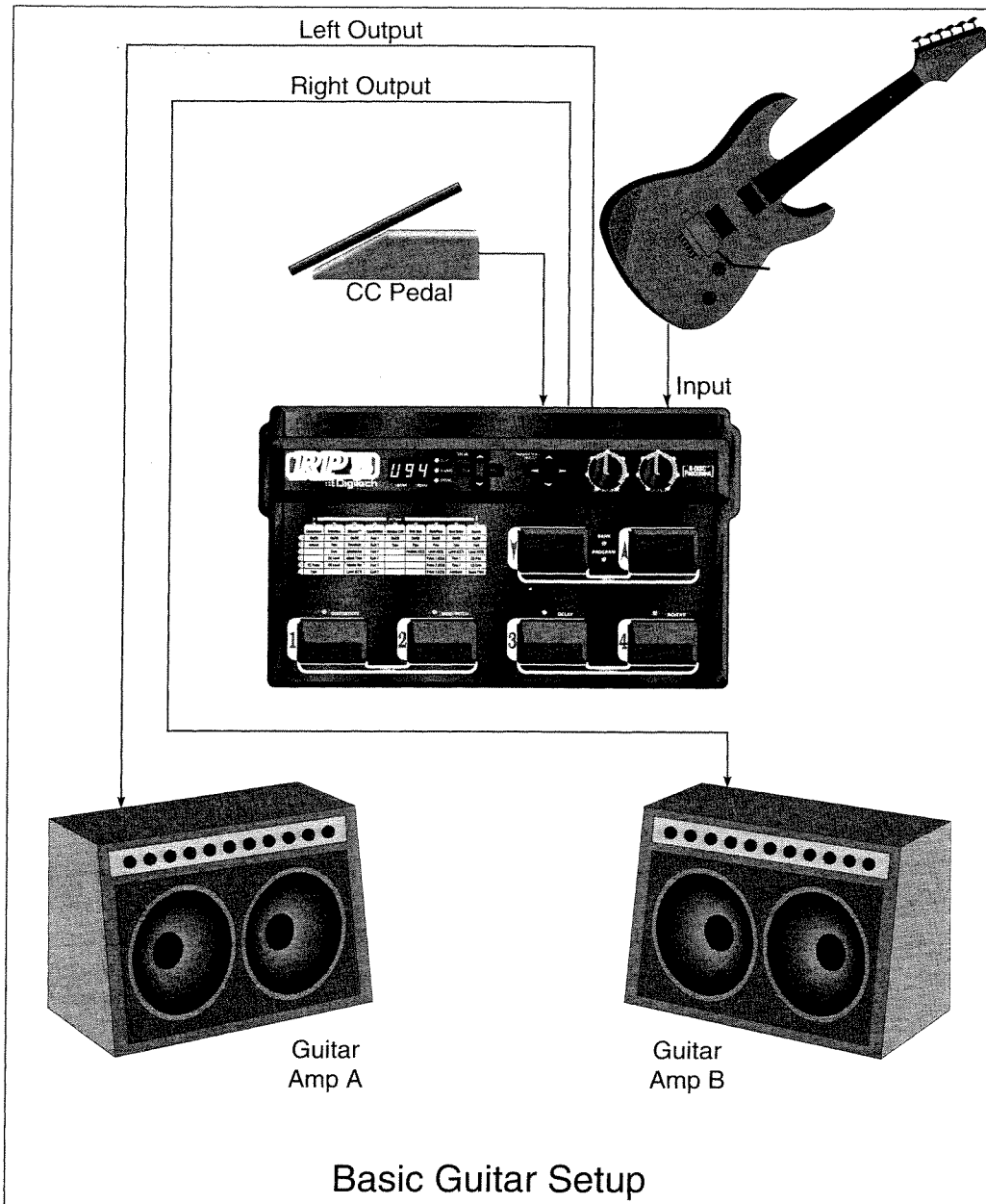
## REAR PANEL CONNECTIONS

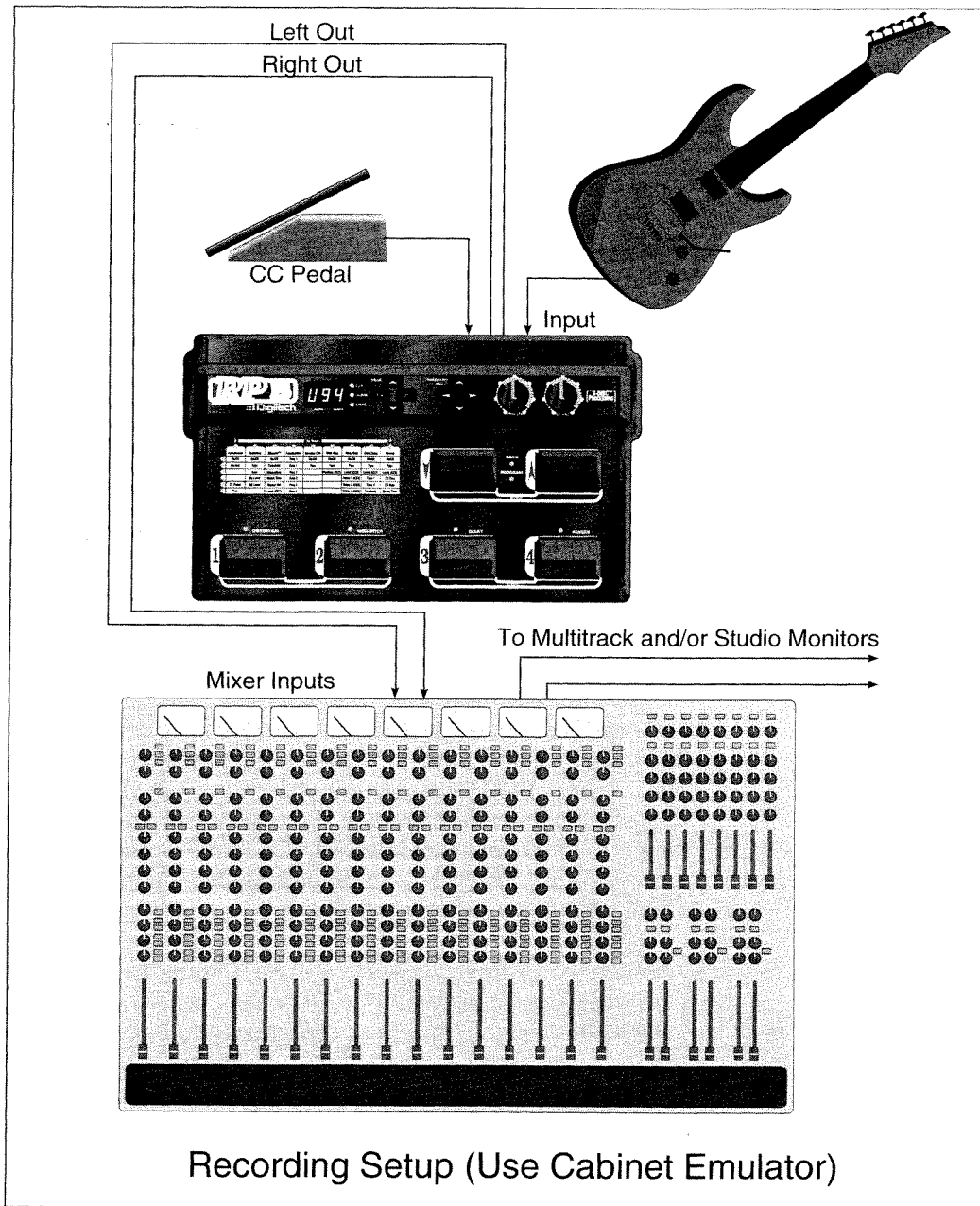
The RP-5 rear panel connectors and functions are as follows:



- 1) Input** - This is the RP-5's audio input. Plug your guitar in here.
- 2) Headphone Output** - 1/4" stereo plug for headphones. The headphone level is controlled by the main output level knob. Plugging in headphones will automatically switch the left/mono output to stereo output. It will also turn on the speaker cabinet emulator globally in all Programs.
- 3) Left/Mono Main Output** - This is the RP-5's left main audio output. This output alone must be used if a mono output is desired.
- 4) Right Main Output** - This is the RP-5's right main audio output. Use both left and right main outputs to take advantage of stereo effects.
- 5) Continuous Control Input**- Plug in your CC pedal here, such as, a DOD FX-17 or any volume pedal. The CC input gives you real time control over certain Parameters of the RP-5.
- 6) AC Line Input** - This is the AC adapter receptacle.







## SECTION 2 - BASIC OPERATIONS

### ABOUT THE RP-5 MODES

The RP-5 offers six modes, allowing easy operation of the Effects and Parameters. The modes are as follows:

#### PROGRAM MODE

Allows you to scroll through the 40 Programs by using the Value <UP> and <DOWN> keys as well as the <UP> and <DOWN> footswitches. Enter Program mode from Bank mode by pressing the <UP> and <DOWN> footswitches simultaneously until the Program LED lights and a **P** appears briefly in the display window. Footswitches 1-4 act as on/off toggle switches for the specified effects.

#### BANK MODE

Allows you to scroll quickly through Banks without going through every Program to get to the next Bank. Enter Bank mode from Program mode by pressing the <UP> and <DOWN> footswitches simultaneously until the Bank LED lights and a **b** appears briefly in the display window. When you enter Bank mode, the Bank and Program numbers from the previous mode will be retained. Once the Bank and Program numbers are displayed in the display window, you can use the Value <UP> and <DOWN> keys to scroll through Programs. This works exactly like Program mode.

When the <UP> and <DOWN> footswitches are used in Bank mode, you will scroll through Banks only. When you change a Bank using this method, the previous Program number is not displayed with the new Bank. The LEDs above footswitches 1-4 will begin flashing, indicating that you can choose a Program in the selected Bank by pressing one of the four footswitches. Once a Program has been selected, the Bank and Program number will be displayed. Exit Bank mode by changing to another mode.

#### EDIT MODE

Allows you to change Effects and Parameters in a Program. Enter Edit mode by pressing the <EDIT> key. The Display window now shows the value of the Parameter indicated by the LEDs in the Matrix. You can scroll through the Parameter matrix using the Parameter Select keys. The <UP> and <DOWN> keys allow you to scroll through the vertical Parameter LEDs, while the <LEFT> and <RIGHT> keys allow you to scroll through the horizontal Effect LEDs.

After selecting a Parameter, you can scroll through its values with the <UP> and <DOWN> Value Keys. When moving through Parameter values, the decimal point next to the Parameter value will flash when a stored value has been changed. If you return to the original value, the decimal point will disappear. If you exit Edit mode after changing the Parameters and then return to Edit mode, the last viewed Parameter will be displayed.

#### STORE MODE

Once you have adjusted the Parameters and Effects, you can store them to a user Program location. When you change an Effect or Parameter in a Program, the Store LED will light, indicating that you

have changed a Parameter and need to store the changes. To store, press the <STORE> key once. The first seven segment LED in the window will display a flashing **U**. Select the User Program and Bank you want to store your changes to using the Value <UP> and <DOWN> keys. Press the <STORE> key again to save the changes to this location. You can also use the store function to copy existing presets to different user locations. Exit this mode by pressing any footswitch or Parameter key.

#### **BYPASS MODE**

Allows you to bypass the RP-5's Effects. Enter this mode by pressing footswitches 3 & 4 simultaneously. **bYP** will appear in the display window, and the effect lights turn off to indicate you are in Bypass mode. Exit this mode by pressing any of the footswitches. When you exit this mode, the RP-5 will default to the last mode you used.

#### **TUNER MODE**

Allows you to tune your guitar. Enter Tuner mode by pressing footswitches 1 & 2 simultaneously. **tun** will appear briefly in the display window followed by --- to indicate that you are in Tuner mode. To begin tuning play a note on your guitar (a harmonic at the 12th fret will work best). The display window will show the note being played and the horizontal Parameter Matrix LEDs just under the tuning bar will light. Once the LED directly under IN TUNE of the tuning bar is lit, the note will be in tune. If the note is not in tune, 1 or 2 of the LEDs left or right of the IN TUNE LED will be lit. If they are to the left, the note is flat and you should tune up. If the LEDs are to the right, the note is sharp and you should tune down. You can change your tuning preference by using the value <UP> and <DOWN> keys. The default factory setting is : A=440 Hz. The tuning reference control ranges from 427 Hz to 453 Hz, which is the equivalent of  $\pm 50$  cents (1/2 semitone) in either direction from 440 Hz.

When you scroll down from 427 Hz, you will also find alternate dropped tunings. Alternate tunings are A = Ab (415), A = G (392), and A = Gb (370).

The display window will briefly flash the currently selected tuning preference.

Exit this mode by pressing any of the footswitches. When you exit this mode, the RP-5 will default to the last mode used.

**SECTION 3 - EFFECTS AND PARAMETERS**

**ABOUT THE PARAMETER MATRIX** The Parameter Matrix displays all the Effects and Parameters you can find in the RP-5. The Effects and their Parameters are as follows:

## Compression

<b>Parameters</b>	<b>Displayed Values</b>
On/Off	OFF - ON
Amount	LO - 1 . . . 78 - HI

**COMPRESSOR**

The RP-5's Compression can be used to increase sustain and to tighten up guitars, and is particularly useful on clean sounds. Parameters of the RP-5 compressor are as follows:

On / Off.....Turns the Module on or off.

Amount.....Controls the amount of compression applied to the signal. Higher settings yield a tighter, more focused sound, while lower settings allow better dynamics. Ranges from Lo-1 to 78-Hi.

## CC Pedal

<b>Parameters</b>	<b>Displayed Values</b>
Type	OFF . . . CC1 . . . CC8

**CC PEDAL**

The RP-5's CC Pedal allows you to control various Parameters of specific Effects with an external attachable pedal.

Type .....There are eight Parameters that can be controlled by the CC Pedal. These Parameters are labeled with parenthesis in the Parameter Maxtrix, indicating which CC value controls that Parameter.

### Distortion

<b>Parameters</b>	<b>Displayed Values</b>
On/Off	OFF - ON
Type	odr - Gru
Gain	0 . 1 . . . 11 . 00
On Level	-∞ . . . 12
Off Level	-∞ . . . 12

#### DISTORTIONS

The distortion section of the RP-5 has two extremely flexible distortion types, capable of producing the smoothest of the blues tones to the full shred gain of a cranked up stack.

On / Off.....Turns the Module on or off.

Type .....Selects the type of Distortion. Overdrive (**odr**) is a low to medium gain distortion, and Grunge (**Gru**) is an over the top high gain distortion.

Gain.....Controls the amount of distortion produced by the RP-5. High settings produce greater gain and drive for effortless soloing, while low settings offer better nuance and dynamic control. Ranges from 0.1 to 11.0.

On Level.....Sets the output level of the Distortion while the effect is ON. Ranges from -∞ to 12.

Off Level.....Sets the output level of the Distortion while the effect is OFF. Ranges from -∞ to 12.

### Silencer

<b>Parameters</b>	<b>Displayed Values</b>
On/Off	OFF - ON
Threshold	L0 - H1
Attenuation	0 . . . 100
Attack Time	0.00 . . . 2.00

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**SILENCER**

The RP-5's Silencer offers professional quality digital noise reduction to help keep the RP-5 as quiet as possible.

On / Off.....Turns the Module on or off.

Threshold .....Sets the level at which the Silencer™ gate will open. Ranges are Lo and Hi.

Attenuation .....Sets the amount of attenuation (signal reduction) when the Silencer™ gate is closed. Varies from 100 dB (eliminates the signal completely) to 0 dB (no attenuation).

Attack Time .....Controls how fast the Silencer™ gate opens after detecting a signal above the threshold. Large numbers yield slower attack times, while small numbers give a fast attack. Varies from 0 to 2000 milliseconds (2 seconds).

## Master Volume

<b>Parameters</b>	<b>Displayed Values</b>
Level (CC1)	0 . . . 100

### MASTER VOLUME

The RP-5's Master Volume controls the overall effect level of the selected program. The level can be controlled with the CC expression pedal for balancing levels in real-time during live performance. It is also useful to lower the overall digital effects level if overflow occurs.

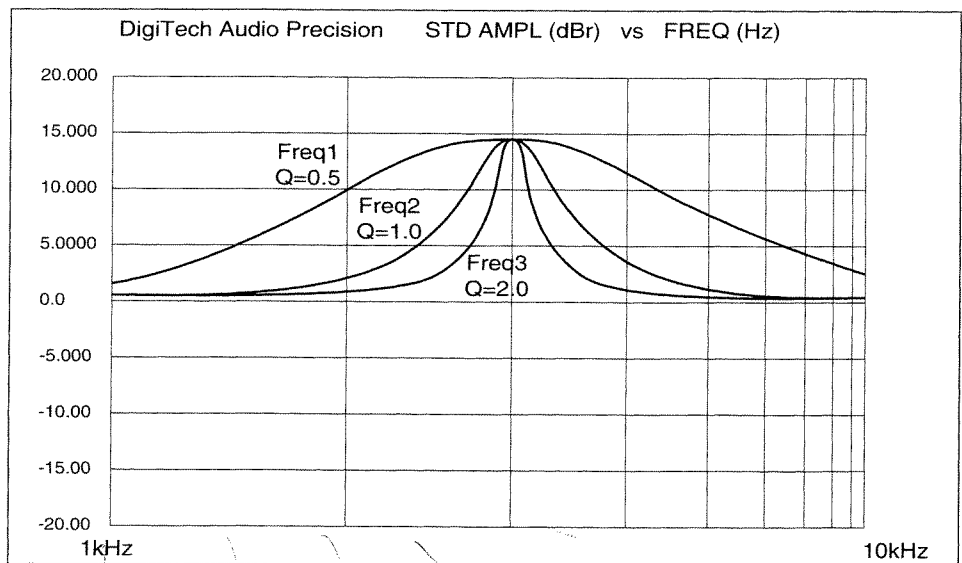
Level .....Controls the overall volume level. This can be done with the CC pedal or the Value keys in Edit mode. Variable from 0 to 100.

## Equalization

<b>Parameters</b>	<b>Displayed Values</b>
Freq1 (Q= 0.5) kHz	0.02 . . . 16.0
Gain 1	- 15 . . . 0 . . . 15
Freq 2 (Q= 1.0) kHz	0.02 . . . 16.0
Gain 2	- 15 . . . 0 . . . 15
Freq 3 (Q= 2.0) kHz	0.13 . . . 16.0
Gain 3	- 15 . . . 0 . . . 15

The RP-5 offer a three band parametric equalizer with set bandwidth Q's. The center frequency of each band is adjustable along with its gain (boost or cut).

High Q settings yield narrow bandwidth, where boost and cut have minimal effect on adjacent frequencies of the program material. Low Q settings affect a wider number of frequencies when the selected band is boosted or cut.



The diagram illustrates that Frequency 1 has a wider set Q of 0.5 while Frequencies 2 and 3 become more narrow with their respective Q settings of 1.0 and 2.0.

### EQUALIZATION



Frequency .....Allows you to select the center frequency of each band. Ranges for frequencies 1 & 2 are from .02 to 16.0. The Range for frequency 3 is 0.13 to 16.0.

Gain.....Allows you to boost and cut the frequency. Ranges are from -15 to 15.

## Speaker Cab

<b>Parameters</b>	<b>Displayed Values</b>
On/Off	OFF - 00
Type	1 . . . 10

### SPEAKER CABINET EMULATOR

The RP-5's programmable Speaker Cabinet circuitry allows you to use it in both recording and live situations without lugging heavy amps and/or cabinets around. Just connect the RP-5 outputs to a mixing console and kick in the Speaker Cabinet. No miking hassles, no heavy equipment: just full on miked cabinet sound. Programs can be stored with different Speaker Cabinet settings so you can customize your Banks for whatever sound types you need. Parameters are as follows:

On / Off.....Turns the Module on or off.

Cabinet Type.....Selects the tonal characteristics of the simulated cabinet. There are 10 different cabinet types; 1-3 are warm cabinets, 4-6 are medium cabinets, 7-9 are bright cabinets, and 10 is a full bandwidth cabinet for maximum frequency response.

## Wah Wah

<b>Parameters</b>	<b>Displayed Values</b>
On/Off	OFF - 00
Type	1 . . . 7
Position (CC2)	0 . . . 127

### WAHS

The RP-5 offers a classic wah wah effect, which can be used with or

without Distortion for that classic Wah-Wah sound.. The effect's position can be controlled with the CC expression pedal.

On / Off.....Turns the Module on and off.

Type .....The Wah Wah types include; Classic 1-3, Dark & Deep, Mid Range, Full Range, and Brass Attack

Position.....The PEDAL POSITION Parameter reflects the current setting of the continuous control device used to control the wah effect. This Parameter can be modified manually using the RP-5's Value keys to perform the wah function. As the Parameter is modified, the tone of the original note will change. Ranges 0 to 127.

### Mod/Pitch

<b>Parameters</b>	<b>Displayed Values</b>						
On/Off	OFF - ON						
Type	CHO	FLA	PHA	TRE	PAN	PCH	bnD
Level (CC3)	0...100	0...100	0...100	0...100	0...100	0...100	0...100
Value 1 (CC4)	Speed	Speed	Speed	Speed	Speed	Shift	Type
Value 2 (CC5)	Depth	Depth	Depth	Depth	Depth	Detune	Position
Value 3 (CC6)	Delay	Regen	Regen				

#### MOD/ PITCH

Is the RP-5's multi-function module, allowing you to select effects such as: Chorus, Flanger, Phaser, Pitch Shift, Tremolo, Pan and Whammy™ effects. The Parameters of these effects are adjusted in this module.

On / Off.....Turns the Module on or off.

Type .....Allows you to select a specific type of modulation/pitch effect. The Types are; Chorus, Flanger, Phaser, Tremolo, Panning, Pitch Shifting, and Pitch Bending.

Level.....Controls the overall mix level of the mod or pitch shifting effect. Ranges from 0 to 100.

Values 1, 2, & 3.....Once you have selected the specific Type of

effect you want, you can modify specific values within that Type.

## ***CHD*** (Chorus)

<b>Values 1,2,&amp;3</b>	<b>Displayed Values</b>
Speed	0 . . . 100
Depth	0 . . . 100
Delay	0 . . . 100

The RP-5 offers a chorus that is unique in both character and sound. This dual chorus offers exceptionally rich chorusing using multiple voices with different phase modulation characteristics. Chorus Parameters are as follows:

Speed.....Controls the speed of the chorus sweep.  
Ranges from 0 to 100.

Depth.....This Parameter sets the sweep depth (intensity) of the chorus. Ranges from 0 to 100.

Delay.....Sets the amount of delay present in the chorus effect. Ranges from 0 to 100.

## ***FLA*** (Flanger)

<b>Values 1,2,&amp;3</b>	<b>Displayed Values</b>
Speed	0 . . . 100
Depth (+Delay)	0 . . . 100
Regeneration	-99 . . . 0 . . . 99

The RP-5 also offers exceptionally rich, studio-quiet flanging. Flange Parameters are as follows:

Speed.....Controls the speed of the flange sweep.  
Ranges from 0 to 100.

Depth(+Delay).....Sets the depth amount and delay present in the flange effect. Ranges from 1 to 16.

Regeneration.....This Parameter sets the amount of regeneration which is perceived as the sweep depth (intensity) of the flange. Variable from -99 to 99.

## PHH (Phaser)

Values 1,2,&3	Displayed Values
Speed	0 . . . 100
Depth	0 . . . 100
Regeneration	0 . . . 99

The RP-5's classic adjustable phase shifting effect is reminiscent of mid-70's guitar and keyboard sounds.

Speed.....Controls the speed of the phase sweep. Ranges from 0 to 100

Depth.....Sets the sweep depth (intensity) of the phaser. Ranges from 0 to 100.

Regeneration.....Controls the amount of phased sound fed back to the input of the Module. High regeneration settings produce dramatic and interesting unnatural sounds. Ranges from 0 to 99.

## TR E (Tremolo)

Values 1,2,&3	Displayed Values
Speed	0 . . . 100
Depth	0 . . . 100
Not Available	

Tremolo was one of the first real effects, and appeared mostly on early guitar amplifiers. Because of this, tremolo is sometimes perceived as sounding "old" or "vintage". The RP-5, breathes new life into this classic effect, providing totally transparent volume modulation of sound sources.

Speed.....Controls the tremolo speed (speed of modula-

tion). Ranges from 0 to 100.

Depth.....Adjusts the intensity of the tremolo effect.  
Ranges from 0 to 100.

## *PAN* (Auto Panning)

Values 1,2,&3	Displayed Values
Speed	0 . . . 100
Depth	0 . . . 100
Not Available	

An auto panner is a modern relative of the tremolo that modulates the sound from left to right at a given rate. Parameters are as follows:

Speed.....Controls the panning speed (speed of modulation). Ranges from 0 to 100

Depth.....Adjusts the intensity of the panning effect.  
Ranges from 0 to 100.

## *PCH* (Pitch Shifting)

Values 1,2,&3	Displayed Values
Shift	-24 . . 0 . . . 24
Detune	-99 . . 0 . . . 99
Not Available	

This RP-5's Pitch Shifting effect gives you a shifted signal from 0 to 24 semi-tones above or below the pitch of the input signal.

Shift.....Sets the interval between the original note and the pitch shifted note. Variable from -24 to 24

Detune.....Determines the amount of detuning applied to the shifted note. Variable from -99 to 99.

***bnd*** (Pitch Bending/Whammy)

Values 1,2,&3	Displayed Values
Type	1 . . . 16
Position	0 . . . 100
Not Available	

The RP-5's pitch bending effect allows you to smoothly shift between two preset pitch intervals using the CC Pedal.

Type.....Selects the function of the Whammy™ Module. There are 16 functions available in regular Whammy Modules. They are as follows:

- |                   |                                 |
|-------------------|---------------------------------|
| 1= Shallow Detune | 9=Major 2nd Up to Major 3rd Up  |
| 2=Deep Detune     | 10=Minor 3rd Up to Major 3rd Up |
| 3=1 Octave Up     | 11=Major 3rd Up to 4th Up       |
| 4=Up 2 Octaves    | 12=4th Up to 5th Up             |
| 5=Down 2nd        | 13=5th Up to 6th Up             |
| 6=Down 1 Octave   | 14=5th Up to 7th Up             |
| 7=Down 2 Octaves  | 15=4th Down to Minor 3rd Down   |
| 8=Down 6 Octaves  | 16=5th Down to 4th Down         |

Position.....The POSITION Parameter reflects the current setting of the continuous control device used to control the Whammy™ effect. This Parameter can be modified manually using a CC pedal attached to the RP-5's. As the Parameter is modified, the pitch of the original note will change in intervals according to the setting of the WHAMMY TYPE. Ranges from 0 to 100.

## Dual Delay

<b>Parameters</b>	<b>Displayed Values</b>
On/Off	OFF - ON
Type	1 . . . 7
Level	0 . . . 100
Delay 1	0 . . . 800
Delay 2	0 . . . 800
Feedback	0 . . . 99

Delays times 1 & 2 can be programmed independently. However, On/Off, Type, Level, and Feedback will program the same for BOTH Delays 1 & 2. For example, if you choose to program your Level to 50, both Delays 1 & 2 will be 50.

The available delay time ranges are 0.00 (no delay) to 0.8 seconds (800 milliseconds). Delay Parameters are as follows:

On / Off.....Turns the Effect on and off.

Type .....Determines the type of delay. Type 1 is a mono delay, Types 2 through 4 are two tap mono delays, and Types 5 through 7 are two tap stereo delays (see chart below for further information)

<b>Type:</b>	<b>Left Output:</b>	<b>Right Output:</b>	<b>Feedback Source:</b>
1	Delay 1	Delay 1	Delay 1
2	Delays 1 & 2	Delays 1 & 2	Delay 1
3	Delays 1 & 2	Delays 1 & 2	Delay 2
4	Delays 1 & 2	Delays 1 & 2	Delays 1 & 2
5	Delay 1	Delay 2	Delay 1
6	Delay 1	Delay 2	Delay 2
7	Delay 1	Delay 2	Delays 1 & 2

Level.....Controls the level of the delay in both Delay 1 and Delay 2. Ranges from 0 to 100.

Feedback .....Is a percentage of the output signal that will be fed back. Ranges from 0 to 99.

## Reverb

<b>Parameters</b>	<b>Displayed Values</b>
On/Off	OFF - ON
Type	1 . . . 10
Level	0 . . . 100
EQ Freq (kHz)	0.02 - 16.0
EQ Gain	- 15 . . . 0 . . . 15
Decay Time	1 . . . 10

Ambience, or reverberation, is produced when sound energy is reflected off room surfaces and objects. Using reverberation in recorded program material gives the listener a sense that the material is being performed in an actual room or hall. It is this similarity to actual acoustic spaces that makes reverberation a useful tool in recorded music. Reverb Parameters and their functions are as follows:

On / Off.....Turns the Module on or off.

Type .....Allows you to choose your ambience or setting you want to use. There are ten types:  
 1=Club           6=Garage  
 2=Studio       7=Hall  
 3=Bathroom   8=Church  
 4=Plate       9=Arena  
 5=Sound Stage 10=Spring

Level.....Controls the amount of reverb signal to be mixed in with the dry signal. Ranges from 0 to 100.

EQ Frequency.....Adjusts the center frequency of the Reverb EQ. Ranges from .02 to 16kHz.

EQ Gain.....Allows you to increase and decrease the level of the EQ frequency. Ranges from -15 to 15 dB.

Decay Time.....The amount of time it takes for the Reverb to fade to inaudibility. Ranges from 1 to 10.



# 24

## REINITIALIZING THE RP-5

This option allows you to restore the contents of the RP-5's user memory to the original factory condition.

**WARNING:** Performing this function will destroy all user-programmed data. All such data will be lost forever!

To restore the factory Programs, the procedure is as follows:

- Plug in the RP-5 while holding down the Parameter Select <UP> key.
- When **r 5t** appears in the display window, press the Value <UP> key.

**SECTION 7 - APPENDIX****SPECIFICATIONS**

A/D Converter: 16 bit PCM  
D/A Converter: 16 bit PCM  
Sampling Frequency: 40 kHz

**DSP Section:**

Architecture: Static-Dynamic Instruction Set Computer (S-DISC™)  
Digital Signal Path Width: 24 bits (144.5 dB)  
Internal Data Path Width: 48 bits (289 dB)  
Dynamic Delay Memory: 64k x 24 bits (1.68 seconds)  
Static Delay Memory: 256 24-bit registers (6.55 milliseconds)  
Data ALU Processing: 10.0 MIPS  
Address ALU Processing: 15.0 MIPS  
Multiplier Size: 24 bits x 24 bits

**Input Section:**

Connector: 1/4" Unbalanced TRS  
Nominal Level: -8 dBu  
Maximum Level: +10 dBu  
Impedance: 470 kohms

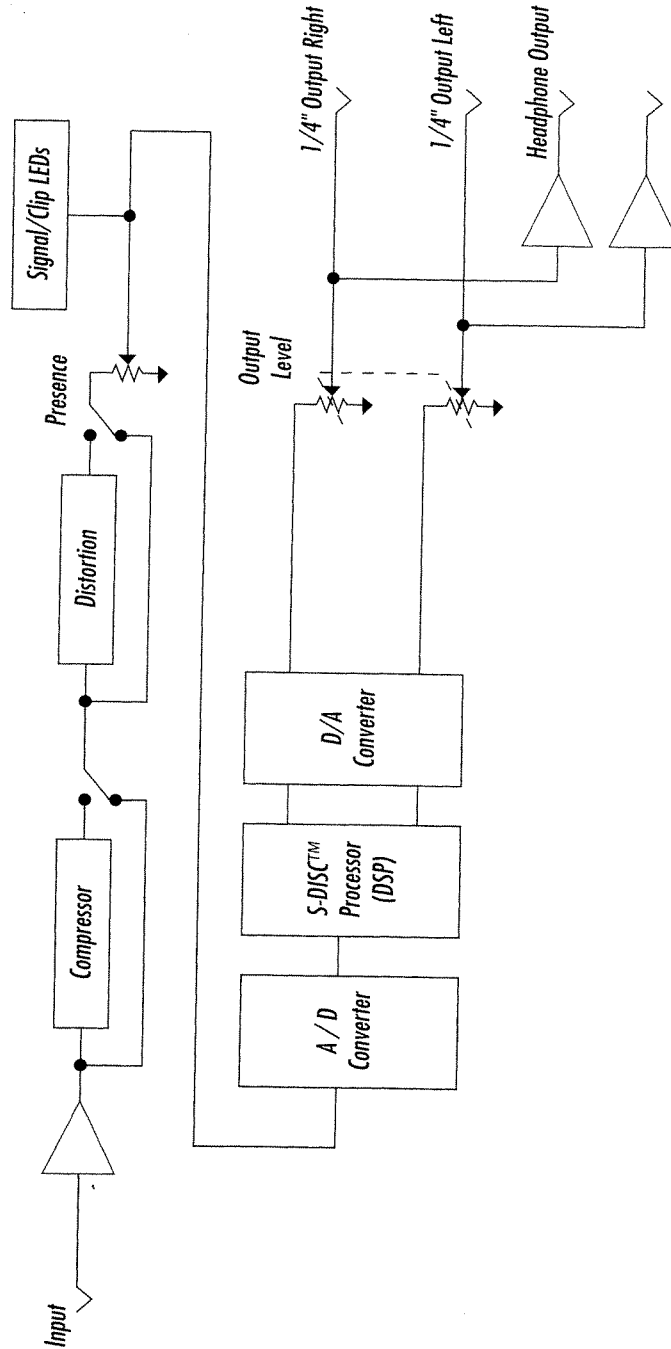
**Output Section:**

Connector: 1/4" TRS  
Nominal Level: +4 dBu  
Maximum Level: +18 dBu  
Impedance: 50 ohms

**General:**

Frequency Response: 20 Hz. - 20 kHz. +0, -3 dB  
S/N ratio: Greater than 90 dB; ref = max signal, 22 kHz measurement bandwidth  
Total Harmonic Distortion: Less than 0.04% (1 kHz.)  
Memory Capacity:  
    Factory: 40 programs,  
    User: 40 programs,  
Power Requirements:  
    US and Canada: 120 V AC, 60 Hz  
    Japan: 100 V AC, 50/60 Hz  
    Europe: 230 V AC, 50 Hz  
    UK: 240 V AC, 50 Hz  
Power Consumption: 12 watts  
Dimensions: 13.5" (482 mm) W x 1.75" (44 mm) H x 8.5" (229 mm) D

Following is a simplified block diagram of the RP-5.



**Preset List**

Following is a list of all the factory Programs in the RP-5.

<b>#</b>	<b>Title</b>	<b>#</b>	<b>Title</b>
<b>Pop I</b>		<b>Country</b>	
01	Big Solo	51	Clean Slapback
02	Tight Rhythm	52	Dirty Rhythm
03	Clean Chorus/Delay	53	Western Ballad
04	Tremolo Rhythm	54	Pedal Steel (CC Pedal)
<b>Pop II</b>		<b>Vintage</b>	
11	Flange Rhythm	61	Vintage with Delay
12	Clean 12 String	62	Surf Clean
13	Roto Phase	63	Vintage Wah
14	Pitch Shift Solo	64	Transistor Distortion
<b>Metal</b>		<b>Jazz/Fusion</b>	
21	Grind Crusher	71	Fusion Solo
22	Metal Rhythm	72	Clean Jazz
23	Metal Ballad	73	Pan With Delay
24	Heavy Rhythm	74	Compressed Clean
<b>Metal II</b>		<b>Blues</b>	
31	Honky Lead	81	Bluesy Delay
32	Metal Solo	82	Texas Blues
33	Clean Flange/Verb	83	Blues Slide (CC Pedal)
34	Rock Man	84	Sparkley Clean
<b>Modern</b>		<b>Special</b>	
41	Fuzz Box	91	Distortion Swell
42	Grungy	92	2 Octaves Down
43	Clean Tap Delay	93	Tape Machine (CC Pedal)
44	Grunge Solo	94	Wah Wah Man



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**OS v1.00**



**This manual  
is made from  
recycled  
materials.**