



Congratulations on your selection of the **TN100 TONE NAVIGATOR** Frank Gambale Midi guitar preamp. The **TN100** is the ultimate digitally controlled analog preamp. The signal path "TONE GENERATION" is totally analog. No algorithms of simulated tone here. We worked with guitarist Frank Gambale to perfect a preamp with enough preshaping, EQ controls and internal effects to Navigate to the ultimate Tone. The Tone Navigator's unique EQ section includes the normal BASS, MID, TREBLE, and PRESENCE plus two Mid-sweep stages only found on high-end studio consoles. If you're like most guitarist and thought, "if only I could tweak the Mid frequencies just a little my sound would be perfect," then this preamp is a dream come true. The Tone Navigator's dual mid-sweep controls allow you to tweak the mids twice. Covering the full guitar spectrum and beyond. The Tone Navigator allows you to store 99 MIDI accessible patches of Clean1(scooped), Clean2(flat), Crunch, or Distortion tones. The internal dual effects engines add lush Reverb, Delay, Chorus, and Flange effects to any patch. The optional **FS22** footswitch will allow remote selection of a patch. For full MIDI remote control, add a Midi footswitch.

- One button access for each tone control
- Vacuum Florescent Display for high visibility in light or dark conditions
- Large two digit patch number display for long distance viewing
- 119 patches (99 user and 20 Frank Gambale set)
- Front and Rear panel 1/4" input
- Rear 1/4" unbalanced and XLR balanced outputs
- Cabinet Voiced (Output 2) 1/4" & XLR outputs
- Effects loop with Stereo Return
- FS-22 Footswitch jack and MIDI IN and Thru
- Premium construction and universal 120/230 Volt AC power supply
- 19" 1U all steel chassis with Chrome front panel and knobs

**RECEIVING INSPECTION—read before getting started**

INSPECT YOUR AMP FOR ANY DAMAGE which may have occurred during shipping. If any damage is found, please notify the shipping company and CARVIN immediately. SAVE THE CARTON & ALL PACKING MATERIALS. In the event you have to re-ship your unit, always use the original carton and packing material. This will provide the best possible protection during shipment. CARVIN and the shipping company are not liable for any damage caused by improper packing. SAVE YOUR INVOICE. It will be required for warranty service if needed in the future. SHIPMENT SHORTAGE. If you find items missing, they may have been shipped separately. Please allow several days for the rest of your order to arrive before inquiring. RECORD THE SERIAL NUMBER on the enclosed warranty card for your records. Keep your portion of the card and return the portion with your name and comments to us.

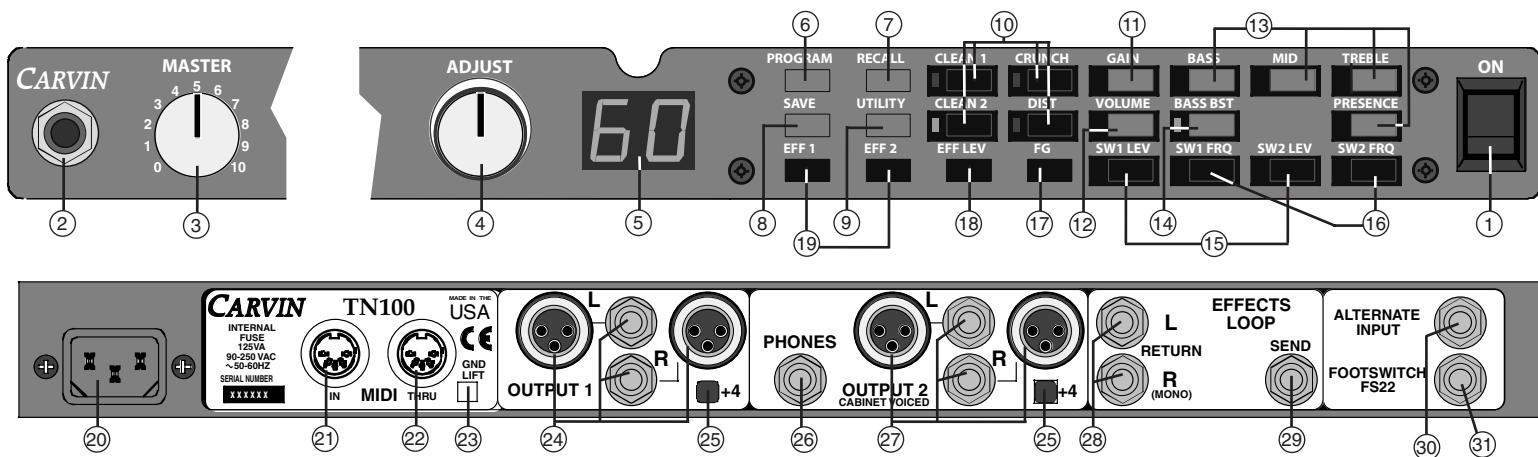
USA customers register online at: [www.carvin.com/registration](http://www.carvin.com/registration)  
 All other countries register online at: [www.carvinworld.com/registration](http://www.carvinworld.com/registration)

**TN100 SERIES SPECIFICATIONS:**

<b>Input Impedance:</b>	100k ohms
<b>Channels:</b>	99 user, +20 Frank Gambale set
<b>Tone Pre-Shapes:</b>	Clean 1, Clean 2, Crunch and Dist.
<b>Tone Controls:</b>	+/-32 steps BASS: 80Hz MID: 700Hz TREBLE: 7k Hz PRESENCE: 11k Hz Sweep 1: 90 - 4.4k Hz Sweep 2: 200 - 9.5k Hz
<b>Line Out:</b>	1.5 VAC @ full power
<b>Midi In Phantom Power:</b>	9V DC @ 100mA, Pin 3+, Pin 1-
<b>Power:</b>	90V or 250V AC
<b>Fuse:</b>	5 amp 250V internal
<b>Dimensions:</b>	1.75" H x 19" W x 8" D
<b>Net Weight:</b>	6 lbs
<b>Warranty:</b>	One Year
<b>Options:</b>	<b>FS22</b>



# TN100 TONE NAVIGATOR FRONT & REAR PANEL CONTROLS



## Frank Gambale Guitar Pre-amp

### FRONT PANEL

#### 1. POWER SWITCH

Push the POWER SWITCH up to turn the PRE-AMP on. The PRE-AMP should be the first unit to be turned on and the last unit to be turned off. When the unit is turned on it will automatically recall the last patch that was loaded before the unit was turned off.

#### 2. INPUT

Connect a 1/4" guitar cable to this input. This jack will turn off the rear input jack. Use a professional quality 1/4" shielded guitar cord (Carvin SH25) no longer than 25 feet. A longer cable will reduce the overall treble response from your pickups.

#### 3. MASTER VOLUME

This is the Volume control for the pre-amp. It is pre-effects loop.

#### 4. ADJUST KNOB

Used to adjust parameters on the main display.

#### 5. PATCH DISPLAY

Displays the current patch. Changes only when a new patch is loaded

#### 6. PROGRAM

01: FG Lead 1

Returns the display to patch selection mode. Push this button to get out of any other modes and display the current patch name. Use the ADJUST knob to scroll through patches 01 - 99. These are also MIDI accessible.

#### 7. RECALL

Push RECALL to load a selected patch. If pushed when in a mode besides PROGRAM, the current patch is re-loaded without saving any changes. After a RECALL the unit returns to PROGRAM mode.

#### 8. SAVE

01: FG Lead 1  
Save 01? (SAVE)

Push once to enter 'SAVE' mode. The display will then ask for a location to save into.

01: FG Lead 1  
Save 12? (SAVE)

Use the ADJUST knob to change the location or press SAVE to write to memory. Press any other button to exit the SAVE process. After a SAVE the unit returns to PROGRAM mode.

Parameters saved for each patch are:

- |               |                    |                           |
|---------------|--------------------|---------------------------|
| A) Volume     | H) Sw1 Lev         | O) EFF1 Selection         |
| B) Gain       | I) Sw1 Frq         | P) EFF1 Parameter 1 and 2 |
| C) Bass Boost | J) Sw2 Lev         | Q) EFF2 Selection         |
| D) Bass       | K) Sw2 Frq         | R) EFF2 Parameter 1 and 2 |
| E) Mid        | L) Clean1, Clean2, | S) Effects Loop ON/OFF    |
| F) Treble     | Crunch, or Dist    |                           |
| G) Presence   | M) Patch Name      |                           |

#### 9. UTILITY

This button enters a menu of the UTILITY functions. Use the ADJUST knob to scroll through the menu items then press the UTILITY button again to enter that function.

A) The first item is 'Edit Patch Name?'.

01: FG Lead 1  
Edit Patch Name?

Push the UTILITY button again to start editing the current patch name. Notice cursor location.

01: FG Lead 1  
Edit Patch Name?

Each time you press the UTILITY button will move the cursor to the right one character. Use the ADJUST knob to change the character. When you are done press the SAVE button to save your changes. Press any other button to skip saving and you will lose the changes you have made.

B) Next is 'MIDI Channel'.

01: FG Lead 1  
Edit Midi CHAN?

Press the UTILITY button to see the current MIDI channel the preamp is set to receive MIDI Program changes on. Use the ADJUST knob to change channels.

01: FG Lead 1  
MIDI Chan.: 1

Any channel from 1 - 16 can be chosen. Press any button to exit and the change will be saved.

C) Factory Reset:

01: FG Lead 1  
\*Factory Reset?\*

To re-load the factory presets for patches 1 - 99. Press the UTILITY button again to enter the Reset mode.

\*Factory Reset?\*

You must then use the ADJUST knob to change the 'NO' to 'Yes',

\*Factory Reset?\*

then press the UTILITY button again to complete the Factory Reset. You will be returned to the patch number you were previously on.

#### 10. CLEAN1, CLEAN2, CRUNCH, and DIST

CLEAN1 is a scooped mid style with accent on the high end. CLEAN2 is a flatter style of clean that brings out the mids. CRUNCH is a slight mid heavy light distortion. DIST is a full blown saturated and scooped lead-distortion. Only one tone may be selected at any time.

#### 11. GAIN

01: FG Lead 1  
Gain: 56

Used to control the input gain of the front-end. Adjusts from 0 to 64. Pickup selection will affect gain settings. Lower gain setting if distortion heard on clean channels.

#### 12. VOLUME

01: FG Lead 1  
Volume: 46

Used to control and equalize the volume of each patch. Adjusts from 0 to 64.

#### 13. BASS, MID, TREBLE, and PRESENCE

01: FG Lead 1  
Bass: +24

One button access to each of the basic tone controls. BASS at 80 Hz, MID at 700 Hz, TREBLE at 7 kHz, and PRESENCE at 11 kHz. Each control is adjustable +/- 32 steps.

#### 14. BASS BST (BOOST)

Creates a 3 dB boost at 125 Hz. Toggles on or off with each button press.

### 15. SW1/2 LEV (Sweep 1/2 Level)

01: FG Lead 1  
Sweep1 Lvl: +12

These are the frequency mid-sweep levels, adjustable +/- 32 steps, equaling a boost/cut of 15dB.

### 16. SW1/2 FRQ (Sweep 1/2 Frequency)

01: FG Lead 1  
Sw1 Frq: 1.0 kHz

The lower frequency (SW1) mid-sweep frequency control, adjusts from 90 Hz - 4.4 kHz. The higher frequency (SW2) mid-sweep frequency control, adjusting from 200 Hz - 9.5 kHz.

### 17. FG (Frank Gambale)

F0: FG Lead 1

Press to access Frank's 20 favorite patches. These are hardwired into the unit and cannot be overwritten. You can save these patches into normal memory to add your own little tweaks. These are also accessible as MIDI patch 100 - 119. To return to the user patches (01-99) press the PROGRAM button and scroll to the left or right to get to 01 or 99.

### 18. EFF LEV (Effects Level)

01: FG Lead 1  
Eff1/2 Level: 23

This adjusts the over-all effects level of both EFF1 and EFF2. This does not affect the external FX loop levels. Push the button again to access the external Effects Loop SEND ON/OFF control,

01: FG Lead 1  
Ext. FX Loop: ON

then use the ADJUST knob to turn it ON/OFF. Press the EFF LEV button again to return to effects level.

### 19. EFF1 and EFF2

Effect1: \_Delay  
Regen: 15 Time: 31

There are two effect positions available (EFF1 and EFF2). Each slot may have any one of the 4 effects (Reverb, Delay, Chorus, or Flange). The first push of one of these buttons allows you to select what effect is in that slot by using the ADJUST knob. Push the button again to move to the first parameter.

Effect1: Reverb  
Damp: 09 Decay: 18

Each push of the button scrolls through the parameters or effect selection.

Effect1: Flange  
Speed: 04 Dpth: 21

All parameters have values 1 to 32.

Parameters for each effect are:

A) Reverb - Damping (amount of Presence) and Decay.

B) Delay - Regeneration (# of repeats) and Time.

C) Chorus - Reverb and Depth.

D) Flange - Speed and Depth.

E) Off - Mutes only that effect, 1 or 2.

### REAR PANEL

#### 20. AC INPUT

The preamp will accept power in the range of 90-250 VAC 50-60 Hz.

#### 21. MIDI IN

This jack accepts all standard 5 pin DIN MIDI connectors. MIDI channel can be set to any of the 16 MIDI channels through the UTILITY menu. MIDI phantom power is supplied as +9V DC on pin 3 and ground on pin 1.

#### 22. MIDI THRU

This is a hard-wired MIDI THRU. All input at the MIDI IN jack is sent out the MIDI THRU.

#### 23. GND LIFT (GROUND LIFT)

Use this switch to help get rid of annoying ground loops in your system.

#### 24. OUTPUT1 L (Left) and R (Right) (To Amp)

Both Balanced XLR jack and Unbalanced 1/4" jack outputs are provided for flexibility in connecting up to your system.

#### 25. +4

This switch allows you to switch between levels of +4 dB and -15 dB. Push it in if you need the hotter +4 dB. Each switch applies to all the jacks in that section.

#### 26. PHONES

Stereo headphone jack is filtered to tame the harsh high end. Its level is also controlled by the OUTPUT2 sections +4 dB switch.

#### 27. OUTPUT2 CABINET VOICED (DIRECT OUT)

This section is similar to OUTPUT1 however the signal is filtered to simulate the response of a guitar speaker cabinet. This is great for going straight to a mixer for recording or live sound.

#### 28. RETURN L + R

Effects Loop return jacks are set up to return a stereo effect. If a Mono effect is used the jacks will sum the signal equally to both sides. If a return to only one side is desired a spare 1/4" plug can be plugged into the unused return jack to break the connection.

#### 29. SEND

The effects send signal is post Master Volume so any changes there must be accommodated at your effects unit. The SEND signal may also be turned off through the Effect level button.

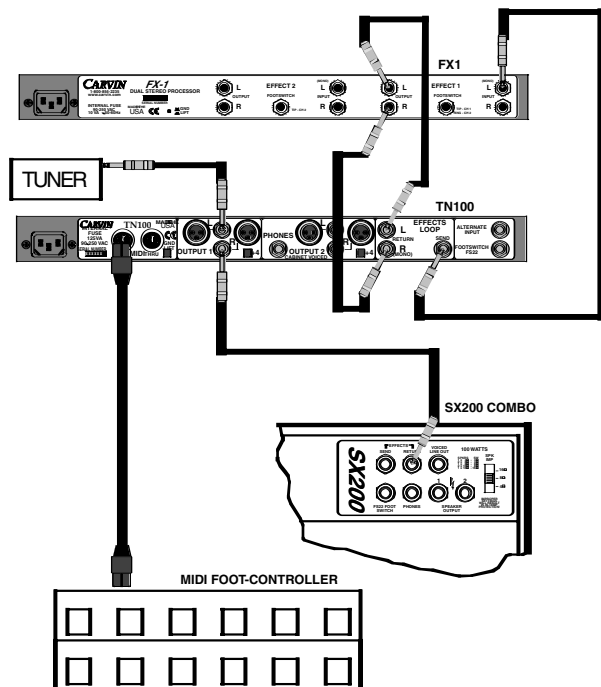
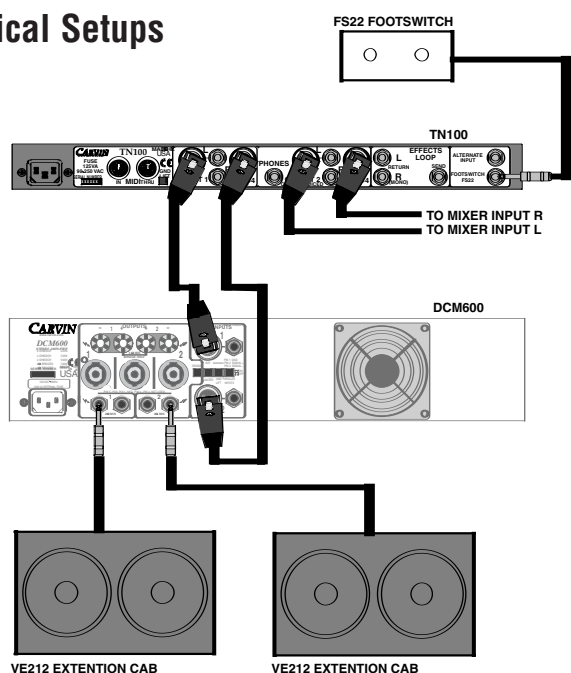
#### 30. ALTERNATE INPUT

Great for plugging in your wireless rack-mount, or for keeping a clean look with no cables on the front of your system. This plug is turned off if the front panel INPUT is used.

#### 31. FOOTSWITCH FS22

Carvin's standard FS22 footswitch can be used to switch patches UP and DOWN.

### Typical Setups





This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



**IMPORTANT! FOR YOUR PROTECTION, PLEASE READ THE FOLLOWING:**

**WATER AND MOISTURE:** Appliance should not be used near water (near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc). Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

**POWER SOURCES:** The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

**GROUNDING OR POLARIZATION:** Precautions should be taken so that the grounding or polarization means of an appliance is not defeated.

**POWER CORD PROTECTION:** Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

**SERVICING:** The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

**FUSING:** If your unit is equipped with a fuse receptacle, replace only with the same type fuse. Refer to replacement text on the unit for correct fuse type.

**SAFETY INSTRUCTIONS (EUROPEAN)**

The conductors in the AC power cord are colored in accordance with the following code.

**GREEN & YELLOW—Earth BLUE—Neutral BROWN—Live**

**U.K. MAIN PLUG WARNING:** A molded main plug that has been cut off from the cord is unsafe. NEVER UNDER ANY CIRCUMSTANCES SHOULD YOU INSERT A DAMAGED OR CUT MAIN PLUG INTO A POWER SOCKET.

**LIMITED WARRANTY**

Your Carvin amplifier is guaranteed against failure for ONE YEAR unless otherwise stated. Carvin will service and supply all parts at no charge to the customer providing the unit is under warranty. Shipping costs are the responsibility of the customer. CARVIN DOES NOT PAY FOR PARTS OR SERVICING OTHER THAN OUR OWN. A COPY OF THE ORIGINAL INVOICE IS REQUIRED TO VERIFY YOUR WARRANTY. Carvin assumes no responsibility for horn drivers or speakers damaged by this unit. This warranty does not cover, and no liability is assumed, for damage due to: natural disasters, accidents, abuse, loss of parts, lack of reasonable care, incorrect use, or failure to follow instructions. This warranty is in lieu of all other warranties, expressed or implied. No representative or person is authorized to represent or assume for Carvin any liability in connection with the sale or servicing of Carvin products. CARVIN SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

When RETURNING merchandise to the factory, you may call **800-854-2235** for a return authorization number. Describe in writing each problem. If your unit is out of warranty, you will be charged the current FLAT RATE for parts and labor to bring your unit up to factory specifications.

**HELP SECTION**

- 1) WILL NOT TURN ON**  
Check the power to the amp. Check for tripped circuit breakers, unplugged extension cords or power-strip switches that may be turned off.
- 2) NO OUTPUT with POWER LIGHT ON**  
Make sure that your speaker is functioning and not blown. Check input, cables & effects connected to the effects loop, and extension speaker cables for defects & connections.
- 4) KEEP YOUR AMP LOOKING NEW**  
Try to keep your amplifier free from dust and moisture. To clean, use a damp cloth to wipe the controls chassis panel and wipe the vinyl covering. Use a dry cloth to be sure the moisture is removed.



**REFER SERVICING TO QUALIFIED SERVICE PERSONNEL! THIS UNIT CONTAINS HIGH VOLTAGE INSIDE!**

#	name	vol	gain	shape	basboost	bas	mid	trb	pres	sw1L	sw1F	sw2L	sw2F	eff1	parameter A	parameter B	eff2	parameter A	parameter B	dspLEV				
1	FG Lead 1	60	56	dist	on	0	0	0	-17	0		0		off			off			0				
2	FG Ld/Dly1	60	56	dist	on	0	0	0	-17	0		0		dly	regen	9	time	31	off		53			
3	FG Ld/Slap	60	56	dist	on	0	0	0	-17	0		0		dly	regen	4	time	12	off		53			
4	FG Ld/ChDI	60	56	dist	on	0	0	0	-17	0		0		dly	regen	9	time	30	chr	verb	1	depth	17	53
5	FG Crunch	60	23	dist	on	0	-14	-4	-5	0		0		dly	regen	1	time	18	chr	verb	1	depth	1	36
6	FG Clean1	60	62	clean1	off	1	-10	-9	-7	7	2.8k	0		off			off							0
7	FG Cln/FX1	60	62	clean1	off	1	-10	-9	-7	7	2.8k	0		chr	verb	32	depth	19	dly	regen	13	time	32	46
8	FG Cln/FX2	60	62	clean1	off	1	-10	-9	-7	7	2.8k	0		rvb	damping	32	decay	19	dly	regen	13	time	24	46
9	FG Cln/Slp	60	62	clean1	off	1	-10	-9	-7	7	2.8k	0		rvb	damping	32	decay	19	dly	regen	1	time	14	35
10	FG Cln/Ch2	60	62	clean1	off	1	-10	-9	-7	7	2.8k	0		chr	verb	16	depth	20	dly	regen	1	time	27	59
11	FG Crunch	60	32	dist	off	0	0	0	0	18	425	9	2.3k	off			off							0
12	FG Lead 2	60	56	dist	on	0	0	0	0	-12	3.6k	0		off			off							0
13	FG Lead 3	60	56	dist	off	0	0	0	12	18	300	0		off			off							0
14	Big Mids	60	56	dist	on	0	0	0	0	12	1.9k	0		off			off							0
15	Blues Neck	60	30	dist	off	-3	-25	0	0	-6	650	-20	1.4k	off			off							0
16	Warm Clean	60	64	clean1	off	5	-9	-29	-5	0		0		rvb	damping	16	decay	26	off					33
17	JazzGuitar	60	62	clean1	off	6	-5	-19	12	0		0		off			off							0
18	Acoustic 1	60	34	clean1	on	4	-18	0	5	-13	425	-21	1.7k	off			off							0
19	Acoustic 2	60	34	clean1	off	8	-26	0	11	0		-31	1.7k	off			off							0
20	Acoustic 3	60	34	clean1	off	6	-20	3	13	-6	325	-32	1.7k	off			off							0
21	60's VxCln	64	51	clean2	off	10	31	-8	-14	-32	250	-30	8.0k	rvb	damping	13	decay	18	off					48
22	60's VxDst	64	41	crunch	off	10	20	-18	-32	-32	250	-30	8.0k	rvb	damping	13	decay	18	off					48
23	80's JC120	10	20	dist	off	9	32	15	11	28	250	26	1.2k	flg	speed	2	depth	25	chr	verb	32	depth	28	50
24	80's Rock	10	45	dist	off	0	22	18	18	28	500	-8	9.5k	off			off							0
25	Bluesy 1	36	38	crunch	off	24	0	19	14	10	90	24	2.8k	rvb	damping	15	decay	22	off					42
26	Bluesy 2	18	64	crunch	off	19	0	14	14	10	90	24	2.8k	rvb	damping	15	decay	22	off					42
27	Bluesy 3	31	42	crunch	off	19	0	14	14	10	90	24	2.8k	rvb	damping	15	decay	22	chr	verb	1	depth	32	42
28	70's Rock1	50	12	dist	off	10	30	0	12	-27	300	-24	9.5k	off			off							0
29	70's Rock2	25	33	dist	off	2	0	-7	9	-1	625	29	1.4k	off			off							20
30	CRZY TRAIN	63	64	crunch	off	3	20	-18	-32	-32	250	-30	8.0k	dly	regen	1	time	6	chr	verb	1	depth	6	48
31	Blk Magic	40	64	crunch	off	12	5	5	3	18	1.2k	0		dly	regen	32	time	5	off					20
32	Marsh-melo	40	64	dist	off	0	17	0	14	0		0		off			off							26
33	AC Lead 1	40	64	dist	off	0	10	0	-32	18	375	32	9.5k	dly	regen	6	time	25	rvb	damping	6	decay	17	29
34	Clean Echo	21	64	clean1	on	0	25	0	-32	18	375	32	9.5k	dly	regen	20	time	25	chr	verb	6	depth	10	36
35	Twang	12	64	clean2	on	0	14	4	25	18	375	19	3.2k	dly	regen	1	time	12	dly	regen	1	time	12	30
36	Smooth+	40	64	dist	off	0	0	-12	-8	18	375	7	1.6k	dly	regen	6	time	25	rvb	damping	6	decay	17	36
37	Mild Grind	22	31	dist	off	0	6	6	4	16	375	19	3.0k	off			off							26
38	Rcto Speck	30	64	dist	on	-13	30	4	-16	18	90	-23	900	off			off							26
39	Blue-Chor	21	50	crunch	on	6	6	6	0	18	300	32	6.0k	chr	verb	5	depth	21	flg	speed	4	depth	20	64
40	Super Chor	21	64	clean2	on	6	0	4	10	18	300	32	6.0k	chr	verb	5	depth	21	flg	speed	4	depth	20	64
41	Clean Chrs	21	64	clean2	on	6	0	0	0	18	375	32	9.5k	dly	regen	4	time	2	chr	verb	6	depth	10	64
42	Brown Flng	40	64	dist	off	0	17	0	14	0		0		flg	speed	3	depth	30	dly	regen	6	time	18	64
43	Circles	21	64	clean1	on	11	25	0	0	18	375	32	9.5k	dly	regen	20	time	20	chr	verb	6	depth	10	64
44	Super Chug	40	55	dist	on	25	-6	12	0	-32	400	15	5.0k	off			off							0
45	Crisp Chug	40	64	dist	on	16	0	12	12	-32	300	21	5.0k	off			off							0
46	Show Lead1	40	64	dist	off	0	10	4	0	16	125	10	2.6k	chr	verb	7	depth	5	dly	regen	13	time	28	25
47	Delay Lead	40	60	dist	on	8	10	12	-6	20	375	10	3.4k	dly	regen	32	time	17	dly	regen	32	time	32	44
48	STD Rhythm	47	55	dist	on	0	0	0	0	20	90	12	1.5k	rvb	damping	32	decay	6	off					26
49	Ready4Flng	47	64	dist	on	0	0	0	0	20	90	12	4.3k	flg	speed	3	depth	32	flg	speed	3	depth	32	60
50-98	Repeat	1-49																						
99	SO Evrlong	47	40	crunch	on	32	-5	15	20	-26	700	15	3.4k	chr	verb	1	depth	13	chr	verb	1	depth	13	64