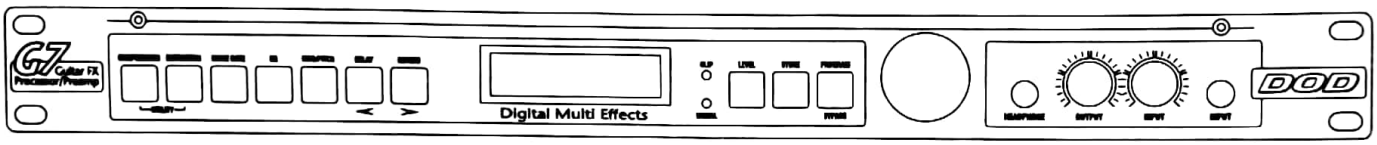
Owner's Manual

G7 Guitar FX Processor/Preamp



DOD

A Harman International Company

Introduction

Welcome to the world of the DOD G7! You have purchased the finest guitar signal processor and preamp of its kind; hardly a surprise when it comes from DOD. The G7 gives you both functional flexibility and tonal excellence, driven by our proven effects processing technology.

The G7's palette of effects gives you a noise gate, a 2-band EQ, analog compression, two analog distortions, a modulation section (modulation section can act as a chorus, flanger, phaser, tremolo, detuner, or octave up / down pitch shifter), a 2-tap delay, and a reverb.

With 30 factory Programs and 30 user Programs, you'll always have a good starting point for creating any sound you want and plenty of space to store your own custom configurations.

About the Pictorial Guide Indicators

This manual can be used in two ways: you can read the text on the right side of the page, or you can follow the pictorial guides in the left margin. The pictorial guides show you how to get through each procedure without reading a lot of text. There are a few steps that require reading, though, but they will also be indicated. Following is a key that describes the pictorial guide symbols:


.....This symbol means it's important that you read the indicated text

.....Turn the Data wheel


.....Press the indicated button

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.

Warranty

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

2. DOD 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. DOD liability under this warranty is limited to repairing or replacing defective materials that show evidence of defect, provided the product is returned to DOD 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 DOD 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. DOD 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 DOD 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 DOD 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.

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 - GETTING STARTED

Supplying Power

The G7, 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 a few tips that will help you get the best possible performance out of your G7 while avoiding damage:

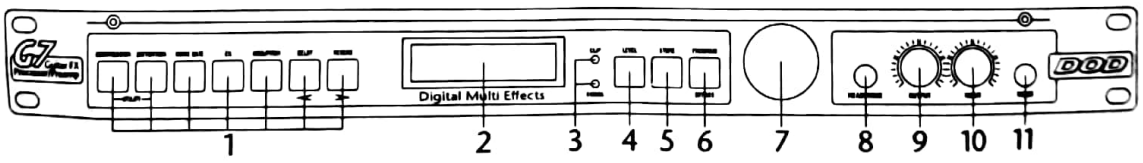
- Always make sure you have a "clean" power source for connecting to the G7. This means that the AC power line you connect to the G7 should be as free from voltage fluctuations and RF interference as possible. In recording environments, "clean" power is also important in preventing AC hum or buzz from getting to tape.

- Use a good quality spike / surge suppressor (also called a power strip). This is an inexpensive solution to all but the most severe AC line conditions. A good quality power strip can save you a lot of money in repair bills because they prevent large spikes and surges from reaching your equipment racks. Also in this category (but more expensive) are rackmount power supplies. Some of these, like the DOD 828, have retractable light tubes and RF filtering.

- Although more expensive, AC line conditioners offer the best protection from improper line voltages. Line conditioners constantly monitor the AC line for excessively high or low voltages and instantaneously compensate to deliver a consistent voltage to the connected equipment.

- Always make sure that your audio lines are as far as possible from power cables. This will further prevent noise, hum, and stray magnetic fields from entering your signal path. If audio and power lines must run close to each other, try to avoid running them parallel to one another.

Front Panel Controls



The front panel of the G7 is laid out in a simple and straightforward way to make programming as easy as possible. Functions of each section are:

1) **EFFECTS EDIT BUTTONS** - These 7 buttons let you access all the effects in each Program. From left to right, the buttons are: COMPRESSION, DISTORTION, NOISE GATE, EQ, MOD/PITCH, DELAY, and REVERB.

2) **DISPLAY WINDOW** - The display window shows information pertaining to the selected mode. For instance, in Program mode (the default mode after power-up), the top line of the display shows the selected Program's name, while the bottom line shows the on / off status of each effect.

3) **SIGNAL / CLIP LEDS** - These LEDs work in conjunction with the setting of the input level control. The SIGNAL LED lights green when signal is received. The CLIP LED lights red when the signal overloads the G7.

4) **LEVEL BUTTON** - The LEVEL button is used to to set the overall level of the Program. This is a great feature that allows you to match levels between Programs.

5) **STORE BUTTON** - Stores your custom Programs in the memory location you select.

6) **PROGRAM BUTTON** - When you're in Edit mode, the PROGRAM button returns the G7 to Program mode. If you're already in Program mode, it toggles the G7 in and out of Bypass mode.

7) **DATA WHEEL** - In Program mode, use the Data wheel to scroll through Programs. In Edit mode, use it to change the setting of effects.

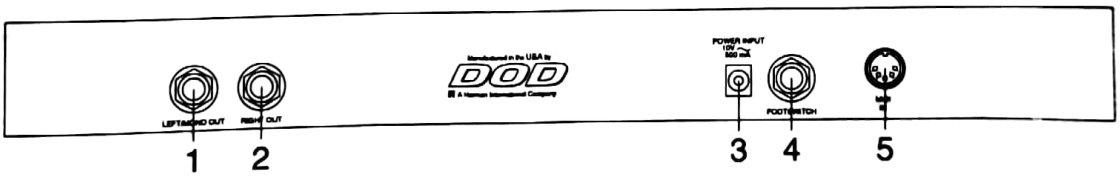
8) **HEADPHONE OUTPUT** - Plug your headphones in here. Headphone level is controlled by the setting of the OUTPUT knob.

9) **OUTPUT KNOB** - Controls the output level of the G7.

10) **INPUT KNOB** - Controls the level of the signal at the G7's input stage. Play your instrument and watch the SIGNAL and CLIP LEDs carefully as you set this knob. Turn up the input level until the CLIP LED begins to light and back off the knob slightly. When the INPUT knob is set properly, the CLIP LED should flicker dimly on only the loudest passages.

11) **INSTRUMENT INPUT** - Plug your instrument in here.

Rear Panel Connections



The G7's rear panel is even simpler than the front, and that means faster hookup times for you. The rear panel has:

1) **LEFT / MONO OUT** - For mono applications, use this output. The levels at the LEFT / MONO OUT and RIGHT OUT are controlled by the OUTPUT knob on the front panel.

2) **RIGHT OUT** - Although it will work in mono applications, the RIGHT OUT jack is used in combination with the LEFT OUT for stereo setups. The levels at the LEFT / MONO OUT and RIGHT OUT are controlled by the OUTPUT knob on the front panel.

3) **POWER ADAPTER INPUT** - Connect the AC power adapter to this jack. Use only the adapter (DOD PS-750) supplied with the G7. Use of any other adapter may damage the unit.

4) **FOOTSWITCH** - The FOOTSWITCH jack is used to connect the optional FS-300 three-button footswitch to the G7. The FS-300 gives you three control options: Program Up, Program Down, and Bypass. Any momentary switch can be used with the G7 FOOTSWITCH Jack. Just remember to plug in the switch before you power up the unit. If your footswitch has only one switch, it will act as a Bypass.

5) **MIDI IN** - This is the MIDI input. You can use external MIDI devices (like sequencers, computers or MIDI footswitches) to send Program Change information to the G7.

SECTION 2 - PROGRAMMING THE G7

Selecting and Editing Programs

The G7 is designed to be both easy to program and flexible. The structure of a G7 Program is logical, and it doesn't require a lot of time to master. Here are a few simple steps you can use to get programming quickly.

1) After you power up, the G7 defaults to Program mode. Program mode can be identified by the heavy black letters used in the Program name and number. The letter "U" or "F" preceding the Program numbers tells you whether the Program is a User Program or a Factory Program. Use the Data wheel to scroll to a Program you like.

2) Look at the bottom line of the display; it shows a series of letters that represent each effect in the G7 and its current status. Lowercase letters mean that the indicated effect is off, while uppercase letters mean that the effect is on.

3) Here's a list of effects abbreviations as they appear in the bottom line of the display in Program mode:

C.....Compression	PHA.....Phaser *
D.....Distortion	TRM .....Tremolo *
G.....Gate	DTN .....Detuner *
E.....Equalizer	PCH.....Pitch Shifter *
CHO.....Chorus *	D.....Delay
FLA.....Flanger *	R.....Reverb

* When turned off, these effects appear as mod in the display window instead of the individual effect name.

4) You can manipulate effect settings by pressing the associated effects button on the front panel and turning the Data wheel.

5) When you press an effect button twice, you can toggle the effect on and off with each successive press of the button.

6) To return to Program mode, press PROGRAM.

Storing Programs

The G7 helps you remember to store Program changes by showing an asterisk in the bottom right corner of the display. Remember that if you change any settings in a Program, you must store the Program into a User memory location for the changes to be retained for later use.

To store a Program into a memory location:

- Press STORE. The display looks something like this:

```
PRG:U12 LIL'BITE
C→D→G→E→mod→D→r
```

Note that a cursor appears under the first letter in the Program name.

- Use the Data wheel to change the letter above the cursor. Use the DELAY and REVERB buttons to move the cursor left and right.

- When you're finished editing the Program name, press STORE again. The display reads:

```
STORE  LIL'BITE
to  U12 LIL'BITE
```

- Use the Data wheel to scroll to the Program number where you want to store the new Program. Remember that you can only store your custom Programs in User locations (the Program number is preceded by a "U"). Note that as you scroll, the bottom line of the display changes to show the name and number of the Program that is in the selected location.

- Press STORE again. The G7 returns to Program mode at the location of the newly stored Program.

Bypassing the G7's Programs

The G7's bypass functions are very simple. To bypass the G7 from the front panel:

- Press the PROGRAM button while the G7 is in Program mode. When the G7 is bypassed, the display looks something like this:

```
PRG:U21 BLEUSY
  ** Bypass **
```

The PROGRAM button toggles between Bypass mode and Program mode.

To bypass the G7 using the optional FS300 footswitch, press the BYPASS switch on the FS300. When you use an FS300, the BYPASS switch toggles between Bypass and Program mode.

The Utility Menu

The Utility menu has two options: MIDI channel designation and display contrast. They can be accessed from any mode in the G7 by simultaneously pressing the COMPRESSION and DISTORTION buttons.

To access the Utility menu:

- Press the COMPRESSION and DISTORTION buttons simultaneously. The display reads:

```
MIDI     Contrast
Ch#   1      5
```

- Use the DELAY and REVERB buttons to move the cursor between the options. Use the Data wheel to change the value of the selected option.

- To exit and return to Program mode, press PROGRAM.

The MIDI channel designation lets you choose which MIDI channel the G7 listens to for MIDI Program Change instructions. It can be set to any MIDI channel from 1 - 16 plus OMNI and OFF.

If the MIDI channel designation is set to OMNI, the G7 will respond to Program change data it sees on all 16 MIDI channels. If it is set to OFF, the G7 will ignore any MIDI data at the MIDI In port.

Once on the Utility menu screen, you can change the display contrast to make the display easier to read from different viewing angles. The display contrast ranges from 0 to 7.

A Word About Mono Operation

The G7 can operate in either stereo or mono. It is important to remember that the way you connect your cables to the outputs can affect the output mode. Here's a simple way to remember how it works:

- If only one output cable is connected, the G7 switches to mono mode. Otherwise, it operates in stereo.

About the G7's Effects

The G7 has an extensive library of effects that cover virtually every possible need. Because they are so numerous, we have designed the following charts to give you as much relevant information as possible while omitting tedious or obvious details about each effect's setting. For example, Tremolos, Detuners, and Pitch Shifters are not shown because their effect names are self explanatory.

The G7 effects are:

EQUALIZERS

EQ#	1		2		3		4		5		6	
Name	Frq1/Gain1	F2/G2	F1/G1	F2/G2	F1/G1	F2/G2	F1/G1	F2/G2	F1/G1	F2/G2	F1/G1	F2/G2
Low Boost	100/8	6.3k/0	175/8	6.3k/0	275/8	6.3k/0	-	-	-	-	-	-
Mid Boost	800/8	8k/0	1.25k/2	8k/0	2.2k/8	8k/0	-	-	-	-	-	-
High Boost	1.6k/-3	3.4k/8	1.9k/-3	4.7k/10	2.2k/-5	8.5k/15	-	-	-	-	-	-
Mid Scoop	250/6	2.5k/4	500/6	4k/6	800/6	6.3k/9	150/9	2.5k/4	250/6	4k/8	400/6	5k/9

CHORUSES

Chorus #	1	2	3	4
Name	Speed/Level	Speed/Level	Speed/Level	Speed/Level
Slow	0.1/25	0.15/25	0.1/50	0.15/50
Medium	.25/25	.35/25	.25/50	.30/50
Fast	2.0/25	3.5/25	2.0/50	3.5/50

FLANGERS

Flanger #	1	2	3	4
Name	Speed/Fback	Speed/Fback	Speed/Fback	Speed/Fback
Slow	.1/40	.15/40	.15/50	.2/50
Medium	.3/50	.35/50	.40/60	.40/60
Fast	.7/60	.8/60	1.0/75	1.0/80

PHASERS

Phaser #	1	2	3	4
Name	Speed/Fback	Speed/Fback	Speed/Fback	Speed/Fback
Slow	.1/60	.1/70	.15/80	.15/80
Medium	.25/60	.25/70	.45/70	.45/80
Fast	.9/40	1.0/50	1.5/50	2.0/60

MONO DELAYS

Delay #	1	2	3	4	5	6	7	8	9
Name	fback/level	fback/level	fback/level	fback/level	fback/level	fback/level	fback/level	fback/level	fback/level
100	0/15	0/30	0/50	15/15	15/30	15/50	30/15	30/30	30/50
200	0/15	0/30	0/50	15/15	15/30	15/50	30/15	30/30	30/50
250	0/15	0/30	0/50	15/15	15/30	15/50	30/15	30/30	30/50
300	0/15	0/30	0/50	15/15	15/30	15/50	30/15	30/30	30/50
350	0/15	0/30	0/50	15/15	15/30	15/50	30/15	30/30	30/50
400	0/15	0/30	0/50	15/15	15/30	15/50	30/15	30/30	30/50
500	0/15	0/30	0/50	15/15	15/30	15/50	30/15	30/30	30/50

PONG DELAYS

Delay #	1	2	3	4	5	6	7	8	9
Name	fback/level	fback/level	fback/level	fback/level	fback/level	fback/level	fback/level	fback/level	fback/level
100/200	0/15	0/30	0/50	15/15	15/30	15/50	30/15	30/30	30/50
150/300	0/15	0/30	0/50	15/15	15/30	15/50	30/15	30/30	30/50
200/400	0/15	0/30	0/50	15/15	15/30	15/50	30/15	30/30	30/50
250/500	0/15	0/30	0/50	15/15	15/30	15/50	30/15	30/30	30/50

TAP DELAYS

Delay #	1	2	3	4	5	6	7	8	9
Name	fback/level	fback/level	fback/level	fback/level	fback/level	fback/level	fback/level	fback/level	fback/level
100/200	0/15	0/30	0/50	15/15	15/30	15/50	30/15	30/30	30/50
200/300	0/15	0/30	0/50	15/15	15/30	15/50	30/15	30/30	30/50
300/400	0/15	0/30	0/50	15/15	15/30	15/50	30/15	30/30	30/50
400/500	0/15	0/30	0/50	15/15	15/30	15/50	30/15	30/30	30/50

Factory Reset

If you want, the memory of the G7 can be reset to its original factory condition. This procedure erases all User Programs in memory.

To reset the G7 memory to its original factory condition:

WARNING! PERFORMING THIS FUNCTION WILL DESTROY ALL USER-PROGRAMMED DATA!

- Disconnect the power to the G7.

- Press and hold the PROGRAM/BYPASS button while powering up the unit. The display briefly reads:

```
DOD G7   ver***
```

- Immediately press the STORE button. The display briefly reads:

```
** RESET **
```

after which the screen shows User Program #1.

Factory Program List

Following is a list of the factory Programs available in the G7. They are divided into stylistic groups with a suggested application for each sound. As always, don't be afraid to experiment.

TOP 5	
1- BIG GUNS	SOLO DISTORTION + FX
2- CRUSHER	HEAVY DISTORTION
3- MR CLEAN	CLEAN CHORUS
4- GTR+BASS	OVERDRIVE + PITCH
5- CHOR L>R	PINGPONG DELAY + CHORUS
METAL	
6- ATOMPUNK	DISTORTION + PHASE
7- GRINDDET	DISTORTION + DETUNE
8- M BALLAD	CLEAN CHORUS
9- OH YEAH!	HEAVY SOLO + DELAY
10- RUDE BOY	GRUNGE DISTORTION +PITCH
ALTERNATIVE	
11- RHYTHM	DISTORTION + REVERB
12- LIL'BITE	LIGHT OVERDRIVE
13- FLANGEFAC	CLEAN FLANGE
14- ANARCHY	PUNK OVERDRIVE
15- MERMAIDS	HEAVY CHORUS
COUNTRY	
16- COWBOY	CLEAN TREMOLO
17- BIG SLAP	CLEAN SLAPBACK
18- LAP STEEL	VOLUME PEDAL
19- PEDSTEEL	VOLUME PEDAL + PITCH
20- ROCKTRY	COUNTRY ROCK
BLUES	
21- BLEUSY	OVERDRIVE + DETUNE
22- PAJAMAS	OVERDRIVE + CHORUS
23- BLUSLIDE	OVERDRIVE + REVERB
24- ORLEANS	CLEAN CHORUS
25- HARDTIME	NECK PICKUP DISTORTION
SPECIAL	
26- 3RDS	DISTORTION + PITCH
27- BIGSWELL	AUTO SWELL + CHOR/DELAY
28- JIMIFAZE	FUZZ PHASE
29- SURFS UP	VINTAGE SPRING REVERB
30- SYNTHTAR	AUTOSWELL + DIST/PITCH/DELAY

Specifications

A/D/A Resolution: 16 bit
Frequency Response: 20 - 16 kHz
THD: .003%
Signal-To-Noise Ratio: -87 dB
Input Impedance: 500 kΩ
Output Impedance: 100Ω
Power Supply: 9 VAC @ 750 mA

MIDI Program Mapping

Following is a chart that shows the MIDI Program Change number mapping of the G7.

MIDI Program #...	Recalls...
1 - 30	User Progs. 1 - 30
31 - 60	Factory Progs. 1 - 30
61	Bypass Toggle

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Printed in U.S.A. 4/95
Manufactured in the U.S.A.

G7 18-2120-A
OS V1.0

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