Posisso Programmable Distortion :: Digitech PROGRAM MABLE DISTORTION

::: Digilech

::: DigiTech

NTRODUCTION

he DIGITECH PDS1550 combines the most wanted and used professional features of a distortion device in a single, versatile package. Now there is no need to have three or more pedals to get that certain sound: it can be preset easily in advance and called up as wanted. The 1550 uses all solid state analog and digital technology to achieve its low battery drain and long, dependable performance. The DIGITECH PDS1550 is a combination of two distortions in a single case with two foot switches. One foot switch is for IN/OUT the other toggles between the two distortions. There are seven controls: three for the parametric, gain and level for distortion A. and gain and level for distortion B. The PDS1550 is powered by a single 9V battery easily accessed

from the top of the unit. Either the FX 95 or PDS 1550 battery eliminators will provide power from 110V for this device.

Distortion A is a "Heavy Metal" distortion with programmable filters, a 10-40ms delay with programmable delay time and enable, and finally a 3 control parametric EQ at the output. Programming is done by removing the bottom plate and setting the DIP switches and trimpot according to preference.

Distortion B is an overdrive-type distortion with a very wide range gain control. It is capable of adjusting from completely clean, to very overdriven distortion. The parametric may be enabled or disabled by a DIP switch for the distortion.

CONTROL DESCRIPTIONS

GAIN A, GAIN B: These control the available amount of distortion—the higher the gain, the more distortion.

LEVEL A, LEVEL B: These are for setting the output level of the distortion to match with the dry guitar signal. After setting the desired gain setting for the desired distortion, the level should be set to match the dry quitar level.

FREQUENCY: Adjusts the tone at which the parametric EQ is active.

OCTAVES: Sets the bandwidth for the $\overline{CUT/B00}ST$ from 1.6 to .1 octaves, this is also called a Q control on some EQ's.

CUT/BOOST: This determines whether the active function of the parametric EQ is set for a notch or a peak.

A and B LED'S: Show the status

of the enabled distortion; both blinking = bypass.

FOOT SWITCHES: The left switch selects A or B distortion, and the right switch selects effect or bypass.

1/0: The INPUT jack is unbalanced and is an instrument level. The DRY OUT jack is unbuffered and is hard wired to the input. The OUTPUT provides a buffered unbalanced signal output. The POWER jack is for 10-12 VDC positive tip and is used for battery eliminator operation.

USING THE ON-BOARD PARAMETRIC E Q

The parametric EQ can be used to modify the distortion to emulate a large variety of overdriven amps and speakers. By bearing in mind that the fundamental frequency range of a guitar is about 100 Hz to 1600 Hz, the midrange can be boosted for a thin sound that can be sharpened with the octaves control. By cutting the midrange a very full wide-range sound is achieved. Setting the octaves for .1 and boosting will give a WAH-WAH sound when the FREQUENCY control is rotated. This is useful for

"nasal" or "fixed pedal WAH-WAH" settings. The best way to appreciate the parametric EQ is to experiment with it.

The following sample setting chart is an example of the types of sounds that are available with combinations of the parametric EQ controls, delay times, filters, and gain settings. The types of sound colorations are almost limitless. Experimentation will reveal that the PDS1550 can produce any distortion effect available and many others yet to be discovered.





Heavy Metal 1



Tube Overdrive



Heavy Metal 2 (Bright)



English Tube

PROGRAMMING THE PDS 1550

DIP SWITCH NUMBERS AND FUNCTIONS

Remove from the bottom of unit the four screws and bottomplate for access to the programming functions.

- 1 & 2: These adjust the delay time; both off = 40ms, one on = 20ms, both on = 10ms.
 - 3: Distortion B parametric disable.
- 4 & 5: Are the high cut/boost filters that are adjusted by the trim-

- pot at the end of the DIP switches.
- 6: Low boost ON/OFF.
- 7: Delay ON/OFF (DISTORTION A ONLY).

Hi filter trimpot is for boosting or cutting the upper guitar range (when switches 4, 5, or 4 and 5 are on).

JACKS

INPUT: The INPUT jack is an unbalanced connection to the unit. It will accept line or instrument level signals.

DRY OUT: The DRY OUT jack provides an unbuffered input signal as an output for use when driving more than one device with a single signal.

OUTPUT: The OUTPUT jack provides an unbalanced output signal from the unit

POWER: The POWER jack facilitates connection to an A.C. adapter. The ideal supply is the Digitech PDS100 available from DOD. However, any D.C. power supply with a voltage of 9V to 15V that can supply 40ma can be used. Tip is power, shield is ground.



SPECIFICATIONS

POWER: Nine volt battery or PDS1500 or FX 95 adapters.

INPUT IMPEDANCE: 500K ohms.

OUTPUT IMPEDANCE: 1K Ohms.

FREQUENCY RESPONSE: 50Hz—20kHz dry, 100Hz—4kHz delay.

DELAY TIME: 10ms-40ms (A distortion only).

GAIN A: > 100K V/V max.

GAIN B: 1K V/V max.

PARAMETRIC FREQUENCY: 100Hz = 3700Hz

PARAMETRIC BANDWIDTH 1.6
-.1 octaves

PARAMETRIC CUT/BOOST: 0dB -20dB.

WEIGHT: 2.3 lbs.

DIMENSIONS: 5" x 6" x 1.9" (127mm x 152mm x 48mm).

DOD WARRANTY

- The warranty registration card must be mailed within 10 days after purchase date to validate this warranty.
- DOD warrants this product, when used solely within the U.S., to be free from defects in material and workmanship under normal use and service.
- 3. DOD Electronics liability under this warranty is limited to repairing or replacing defective material that show evidence of defect, provided the

product is returned through the original dealer, where all parts and labor will be covered up to a period of one year. The company shall not be liable for any consequential damage as a result of the product's use in any circuit or assembly.

- Proof of date of purchase is considered to be the burden of the consumer.
- 5. If this product is battery operated: Batteries are not covered by this warranty. Please remove weak

or dead batteries in order to prevent corrosion damage.

- 6. 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 PRE-VIOUSLY MANUFACTURED.
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