

INTRODUCTION

The PDS1002 and PDS2000 provide pro-quality digital delay effects in battery powered pedals. Separate EFFECT and INFINITE REPEAT foot switches make these units extremely functional and capable of doing such effects as sound on sound and infinite repeat without having to adjust any controls. In addition, the PDS2000 is capable of sampling a

signal up to two seconds long, and then repeating it at the touch of a footswitch or in sync with a drum machine. These units use the latest in CMOS technology for low battery drain with no sacrifice in quality. The rugged case and high performance of these units make them valuable tools both on the road and in the studio.

CONTROL DESCRIPTIONS

EFFECT: The EFFECT foot switch is a momentary switch which alternately switches in, and switches out the effect.

INFINITE REPEAT: The INFINITE REPEAT foot switch when pressed, will hold the signal currently in memory, until it is pressed again.

DELAY TIME: The DELAY TIME control sets the length of the delay within the selected range. (see DELAY RANGE)

REGEN: The REGEN control sets the amount of delayed signal which is sent back into the delay path to be delayed again. In the longer delay settings turning the REGEN control

up will result in more echoes being heard. On very short delay settings a higher REGEN setting will result in a more pronounced comb filter effect.

MIX: The MIX control sets the proportion of dry to delayed signal. At the 0% position the output contains dry signal only. At the 100% position the output contains delayed signal only. At the 12 o'clock position the output contains a 50% dry and 50% delayed signal.

OUTPUT: The OUTPUT control sets the level of the output signal. At the full clockwise position the output stage has a gain of +5 dB.

INPUT: The INPUT control sets the level of the input signal to the unit.

MODE SELECT: (PDS2000 only) The MODE SELECT switch has three positions, each corresponding to a particular mode. The three modes are:

NORMAL TRIGGER SAMPLE

In the NORMAL mode the unit works like a PDS1002. In the SAMPLING mode a touch of the INFINITE REPEAT pedal starts the sampling interval. When the end of the memory is reached the unit is automatically placed into the INFINITE REPEAT mode. In the TRIGGER mode a touch of the INFINITE REPEAT footswitch or a

positive going pulse from a drum machine will repeat the delay exactly once.

DELAY RANGE: The DELAY RANGE switch has three positions, each corresponding to a particular delay range. The three ranges are:

500msec-2000msec
125msec-500msec
31.3msec-125msec

When the DELAY RANGE switch is moved to another position, a 2 to 5 second mute will be activated. This is to clear the delay memory.

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APPLICATIONS

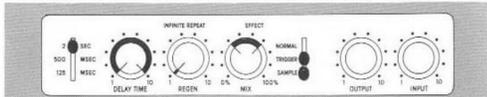
Sampling: (PDS2000 only) Set the MODE SELECT to the SAMPLING position, REGEN low, MIX as desired. Note that the DELAY TIME control will adjust the sampling time from 500 msec to 2000 msec regardless of the DELAY RANGE switch setting. Press the

INFINITE REPEAT footswitch, and apply an input signal. When the end of memory is reached the infinite repeat LED will light, indicating that the signal has been stored. Now change the MODE SELECT switch to the TRIGGER mode. Each



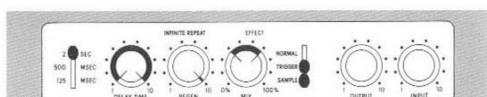
time the INFINITE REPEAT footswitch is pressed or a trigger pulse is received the signal will be re-

peated exactly once. The pitch of the signal may be varied by changing the DELAY TIME control.



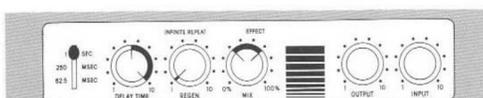
Sound on sound sampling: (PDS2000 only) Follow the same procedures as above except turn the REGEN control fully clockwise. With the MODE SELECT switch in the SAMPLING position, press the INFINITE REPEAT footswitch, and

apply an input signal. When the INFINITE REPEAT LED comes on, another signal may be overlaid by simply repeating the process. Remember that the earlier signals will be attenuated slightly.



Infinite repeat: Set the DELAY RANGE to the 1 Sec position, DELAY TIME high, REGEN low, and MIX as desired. Play a rhythm riff in time with the delay, press the INFINITE REPEAT foot switch. The rhythm will now be stored in memory and continue to repeat until the INFINITE

REPEAT foot switch is pressed again. Note that the EFFECT foot switch may be pressed without erasing the memory. Another touch of the EFFECT foot switch will bring the rhythm riff back.



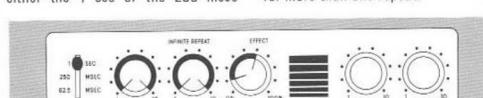
Sound on sound: This type of effect is achieved with the INFINITE REPEAT foot switch. Put down a rhythm riff as explained above. Turn the REGEN all the way up. Press the INFINITE REPEAT foot switch, play

a lick that fits the rhythm, and press the INFINITE REPEAT foot switch again. With this method, several tracks may be stored in the memory, however the earlier tracks will be attenuated slightly.



Echo: Many different echo effects can be achieved with this unit. Use either the 1 sec or the 250 msec

settings. Adjust DELAY TIME for longer or shorter echoes. Add REGEN for more than one repeat.



Slap back: A slap back effect can be obtained by setting the DELAY RANGE switch to the 250 msec po-

sition, DELAY TIME low, REGEN low, and MIX set as desired.



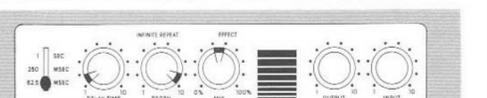
Doubling: A doubling effect can be obtained by setting the DELAY RANGE switch to the 62.5 msec po-

sition, DELAY TIME high, and MIX and REGEN set as desired.



Comb filter: A comb filter effect can be obtained by setting the DELAY RANGE switch to the 62.5 msec po-

sition, setting the REGEN control high, the MIX control to mid position, and DELAY TIME low.



INDICATOR LEDS

EFFECT: The EFFECT LED indicates the status of the unit. When on, it indicates the unit is active.

INFINITE REPEAT: (PDS1002) The INFINITE REPEAT LED indicates the status of the INFINITE REPEAT foot switch. When on, it indicates the unit is in the infinite repeat mode.

INFINITE REPEAT: (PDS2000) The INFINITE REPEAT LED in the NORMAL mode indicates the status of the INFINITE REPEAT footswitch. When on it indicates the unit is in the infinite repeat mode. In the TRIGGER mode the LED is always on, indicating that the signal is locked into the memory. In

the SAMPLE mode the LED turns off immediately upon pressing the INFINITE REPEAT footswitch, indicating that the memory is presently accepting a signal. At the end of the memory cycle the LED turns back on, indicating that the new signal is now locked into the memory.

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 with the relative levels of dry and delayed signal determined by the MIX control.

POWER: The POWER jack facilitates connection to an A.C. adapter. The ideal supply is the Digitech PDS-100 available from DOD. However, any D.C. power supply with a voltage of 9V to 15V that can supply 40



ma can be used. Tip is power, shield is ground.

TRIGGER INPUT: (PDS2000 only) The TRIGGER INPUT jack provides a means of triggering the

delay with an electrical pulse. Any device capable of producing a 5 volt pulse can be used to trigger the delay. Triggering occurs on the positive edge of the pulse.

BATTERY REQUIREMENTS

The PDS1002 has an average current drain of less than 30 ma. A normal 9V carbon battery will last about 3 to 4 hours. A high energy alkaline

will yield superior performance. Unplugging the input when not in use, will disconnect the battery and extend its life.

SPECIFICATIONS

POWER: 9V battery, A.C. adapter (Digitech PDS-100).

CURRENT DRAIN: PDS1002 D.C. 9V, typical 27 ma. PDS2000 D.C. 9V, typical 40 ma.

CONTROLS: INPUT LEVEL, OUTPUT LEVEL, MIX, REGEN, DELAY TIME.

OTHERS: INFINITE REPEAT and EFFECT in/out foot switches, LED Infinite Repeat and Effect in/out indicators, Delay Range switch, MODE SELECT switch (PDS 2000 only).

JACKS: Input, Dry Out, Output, A.C. adapter, TRIGGER in (PDS 2000 only).

DELAY TIME: PDS1002/PDS2000 31ms (min)-2sec (max) Delay ranges 31.3ms-125ms 125ms-500ms 500ms-2sec

FREQUENCY RESPONSE: Delay-40Hz-7kHz. Dry-15Hz-40kHz.

S/N RATIO: Delay-85 dB. Dry-90 dB.

INPUT IMPEDANCE: 500K ohms.

OUTPUT IMPEDANCE: 4.7K ohms.

WEIGHT: 2.3 lbs. (1.05 kg).

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.
- 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.

- 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.
- 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.
- The foregoing is in lieu of all other warranties, express 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 performances of any warranty due to causes beyond their control.

NOTE TO PDS 8000 ECHO PLUS OWNERS

Advancements in semiconductor manufacturing has allowed Digitech to bring to you an amazing amount of delay sampling time in a pedal form. The PDS 8000 Echo Plus gives you not only the clean effects of digital delay but also the ability to sample (digitally record in memory) a sound up to 8 seconds and play it back from the beginning at the touch of your foot, or in sync with a drum machine. This digital delay/sampler pedal gives you very affordable extended delay/sampling with professional performance and features.

The functions of the PDS 8000 Echo Plus and the PDS 2000 Digital Delay/Sampler are exactly the same. Please refer to the sections of this manual on the PDS 2000 for information on the operation of the PDS 8000 Echo Plus. The specifications and operating functions of the two units are the same with the exception that the PDS 8000 offers three extended ranges of delay/sampling, the longest range allowing up to 8 seconds of delay/sampling. Please take note of the extended ranges of the PDS 8000:

125 to 500 milliseconds
500 to 2000 milliseconds
2 to 8 seconds

Operating Note: When the PDS-8000 is first powered up, the delay is muted for 16 to 18 seconds to clear any random data (garbage) out of the memory. When switching between time delay ranges, the unit will mute for 8 to 9 seconds while it again clears random data from the memory. During muting, the dry signal is passed through the unit, affected only by the MIX control.