

TEC4X

Multi-Effects Processor

TEC4X



USER GUIDE



 A Harman International Company

DECLARATION OF CONFORMITY

Manufacturer's Name: DOD Electronics
Manufacturer's Address: 8760 S. Sandy Parkway
Sandy, Utah 84070, USA

declares that the product:

Product Name: Tec4X

Product Options: All (requires a Class II power adapter that conforms to the requirements of EN 60065, EN 60742, or equivalent).

conforms to the following product specifications:

Safety: EN 60065 (1993) IEC 65 (1985) with Amendments 1,2,3
EMC: EN 55013: (1990) EN 55020: (1991)

Supplementary Information:

The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC as amended by directive 93/68/EEC.

DOD Electronics
President
8760 S. Sandy Parkway
Sandy, Utah 84070, USA

Effective: (4/13/98)

European Contact: Your Local DOD Sales and Service Office or

International Sales Office
3 Overlook Drive #4
Amherst, New Hampshire 03031, USA
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CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



ATTENTION: RISQUE DE CHOC ELECTRIQUE - NE PAS OUVRIR

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE

These symbols are internationally accepted symbols that warn of potential hazards with electrical products. The lightning flash means that there are dangerous voltages present within the unit. The exclamation point indicates that it is necessary for the user to refer to the owner's manual.

These symbols warn that there are no user serviceable parts inside the unit. 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 unit during storms to prevent damage.

WARNING

FOR YOUR PROTECTION, PLEASE READ THE FOLLOWING:

WATER AND MOISTURE: Appliance should not be used near water (e.g. 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: To reduce the risk of fire or electric shock, 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.

FOR UNITS EQUIPPED WITH EXTERNALLY ACCESSIBLE FUSE RECEPTACLE: Replace fuse with same type and rating only.

U.K. MAINS PLUG WARNING

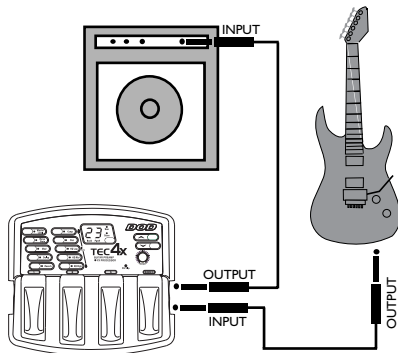
A moulded mains plug that has been cut off from the cord is unsafe. Discard the mains plug at a suitable disposal facility. NEVER UNDER ANY CIRCUMSTANCES SHOULD YOU INSERT A DAMAGED OR CUT MAINS PLUG INTO A 13 AMP POWER SOCKET. Do not use the mains plug without the fuse cover in place. Replacement fuse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

ELECTROMAGNETIC COMPATIBILITY

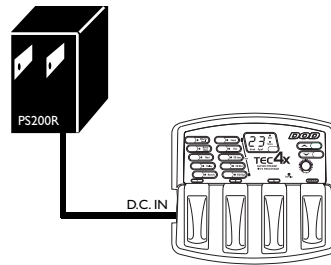
Operation is subject to the following conditions:

- this device may not cause harmful interference, and
- this device must accept any interference received, including interference that may cause undesired operation.
- use only shielded interconnecting cables.
- operation of this unit within significant electromagnetic fields should be avoided.

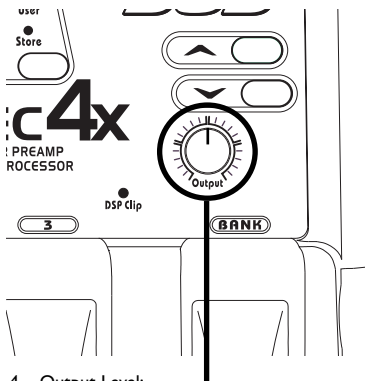
QUICK START GUIDE



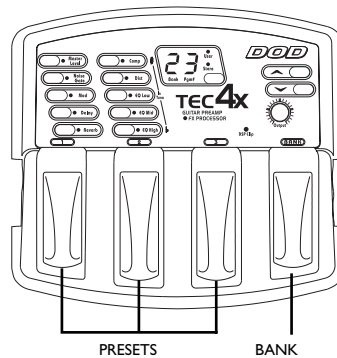
1. Input Connection:
Insert 1/4" cable from guitar to TEC4 input
2. Output Connection:
Insert 1/4" cable from TEC4 output to amplifier input.



3. Power:
Make sure DOD PS200R adapter is connected.



4. Output Level:
Set the Output level to 12 o' clock.

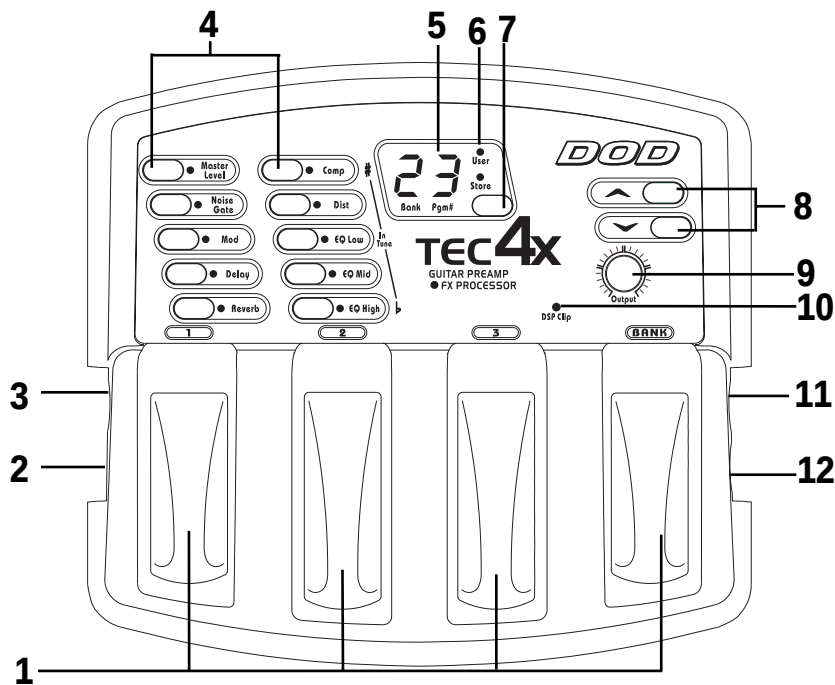


5. Banks/Presets:
The left 3 foot switches provide access to presets. The far right foot switch scrolls up through banks.

INTRODUCTION

Congratulations, and thank you for your purchase of the DOD Tec4X Multi-Effects Processor. The Tec4X is newly re-designed for great tone, effects, and flexibility. With the Tec4X you get 15 separate effects, including DOD's world famous GRUNGE™ distortion. You also get lush chorusing, rich delays, reverbs, and special FX not found anywhere else. DOD's Pixellator™ and Enveloped FX allow you to break new sonic ground. We also provide a 3-band EQ for total tone control of each preset. With 30 new factory presets, and space for 30 more of your own concoctions, the Tec4X gives you the tools to find your own sound. With a feature menu that reads like this, one would expect to pay a great deal more for a multi-effects processor of this caliber, but not at DOD. We always provide more for less.

FUNCTIONS



FUNCTIONS

1. **Program and Bank Selector Foot switches:** These foot switches provide access to the TEC4's banks/programs.
2. **Power Adapter Input:** This is where the PS200R power supply is connected. Use only the DOD PS200R, other adapters may damage the TEC4, and void the warranty.
3. **Volume/Wah/Sensitivity Control Input:** Connect optional DOD VCC1 to have real time control over volume levels, wah ranges, and auto wah sensitivity.
4. **Effect Selector Buttons:** These buttons allow you to select the effects you wish to use or bypass.
5. **LED Display:** The LED display in program mode shows which bank and program is currently selected. In Edit mode it shows the number and/or status of the selected effect. In Tuner mode it displays the note currently being played.
6. **Store and User LEDs:** The Store LED indicates that a change has been made to a preset. The User LED indicates whether you are in user, or factory banks.
7. **Store Button:** Use this button to store your custom programs in the user memory location of choice.
8. **Up/Down Buttons:** These buttons scroll up/down selected effects (edit mode), or up/down through banks/presets (performance mode).
9. **Output Knob:** Controls the overall output level sent to your amplifier input.
10. **Clip LED:** The clip LED lights when clipping occurs in the digital section of the TEC4, To eliminate clipping, reduce the setting of the Tec4's Master Level. Allow the LED to light occasionally with peak signals.
11. **Output Jack:** Connect cable from this jack to your amplifier input, also doubles as headphone output.
12. **Input Jack:** Plug in your instrument here.

SELECTING PROGRAMS

Use either the foot switches (1), or the Up/Down buttons (8). The first three foot switches select programs and the last foot switch selects banks. To select a specific bank, step on the bank foot switch repeatedly until the desired bank number appears in LED display (5). Then step on foot switch 1-3 to activate program in that bank. Only User programs can be selected with the bank foot switch. To select the Factory programs you must use the Up/Down buttons (8). From the factory, Factory programs are duplicated in all the User locations.

EDITING PROGRAMS

Editing programs on the TEC4 has been designed to be efficient and simple. To bypass a currently active effect, press the Effect Selector button (4) twice. The LED display will read "--", indicating the effect is bypassed. You can also turn a bypassed effect on using the same operation. To change an effect or its setting, press the Effect Selector button (4). This selects the effect to edit. The currently selected effect number will appear in the LED Display (5). Use the Up/Down buttons (8) to move up or down through the effects and effect settings. The Store LED will light indicating that you have made changes to the current program. When the desired effect or setting has been found, you can save your changes by pressing the Store Button (7). When the Store Button (7) has been pressed, the LED display will begin to flash (6). This is the TEC4 asking where you would like to save the program. Use the Up/Down Buttons (8) to select desired program number and press the Store Button (7) one more time to save. The TEC4X provides 30 User program locations for you to fill with programs of your own. You can also copy a program to a new location by pressing the Store Button (7) once and using the Up/Down Buttons (8) to select a new User program location and then pressing the Store Button (7) again.

BYPASSING

To bypass the current program, press the foot switch (1) of the program you are currently using. "bP" will appear in the LED display (5). To exit program bypass, press any foot switch.

TUNER ACTIVATION

To activate tuner, press and hold the foot switch (1) of the program you are currently using for approximately 2 seconds. "tL" will appear in the LED display (5). To tune, pluck a string repeatedly (a harmonic at the 12th fret is sometimes works best). The LED Display will show the note being tuned while the the second vertical row of Effect LEDs will show the tuning status of the note. The note is in tune when the green LED is lit. LEDs lit above the green LED indicate the note is sharp. LEDs lit below the green LED indicate the note is flat.

FACTORY RESET

Caution, this procedure will restore all User programs in the TEC4X to factory condition. All User programs will be erased. To factory reset the TEC4X, press and hold both the Compressor and Reverb buttons while powering up the TEC4. The display will read "r5". The TEC4 has now restored all programs to factory condition.

FX DESCRIPTION

COMPRESSION: Levels the peaks in the signal, helping to improve sustain.

DISTORTION: Amplifies the internal signal to an extreme degree, causing the circuitry to clip.

EQUALIZATION: Adjusts the emphasis/de-emphasis of frequencies in the signal

NOISE GATE: Turns off background noise when no signal is present.

CHORUS: Short modulating delay. This produces a "shimmering" type effect.

FLANGE: Short modulating delay, w/signal regeneration. Produces a "jet sounding" type effect

PHASER: Splits the signal, changes the phase of one signal and recombines with the original

TREMOLO: Automatically adjusts the volume of the signal up and down, w/variable speed.

RING MODULATOR: Takes the signals sum and difference and mixes it in with the original.

PIXELLATOR: Degrades the signal by undersampling and then mixing in the original signal.

PITCH SHIFTER: Creates a harmony with the original signal, and then mixes the two together.

DETUNE: Creates a duplicate of the original signal then delays and detunes it slightly.

WAH: Creates a filter that is swept manually through the signal.

AUTO WAH: Sweeps a filter through the signal according to the strength of the attack.

ENVELOPED FLANGE/PHASE: Sweep of the filter/speed is controlled by picking dynamic.

DELAY: Creates a duplicate of the original signal, and repeats it a moment later.

REVERB: Simulates the characteristics of being in a large room or environment.

PRESETS

- | | |
|-----------------------|-------------------------|
| 01. METAL SOLO | 51. FAST CHORUS W/DELAY |
| 02. CLEAN CHO DEL | 52. METAL W/DELAY |
| 03. PITCH SOLO | 53. OVERDRIVE |
| 11. TALKBOX (HEAVY) | 61. AUTO-WAH / SLAP |
| 12. FAST TREMOLO | 62. ALIEN SLAVE GIRL |
| 13. DEATH METAL | 63. CROSS COUNTRY |
| 21. CREAMY METAL | 71. LONG DELAY/PITCH |
| 22. CLEAN LONG DELAY | 72. O.D. CHORUS |
| 23. BUZZBOX | 73. QUICK FLANGE |
| 31. CLN/ CH/DLY/VERB | 81. SINGLE STRING PAD |
| 32. DISTORTED DETUNE | 82. SURF |
| 33. HEAVY METAL PHASE | 83. RUMBLE |
| 41. RING MOD | 91. PIX OF DEATH |
| 42. BRITISH STACK | 92. HEAVY ENV/FLANGE |
| 43. CLEAN CAVERN | 93. CLN ENV/DLY. |

FX LIST

COMPRESSION: 1-3

1	Low
2	Medium
3	High

DISTORTION: 1-15

1-5	Mystic Blues™ Overdrive, increasing gain.
6-10	Corrosion™ Metal distortion, increasing gain.
11-15	Grunge™ Distortion, increasing gain.

EQ: -12 to 12

-12 12	EQ Low cut and boost
-12 12	EQ Mid cut and boost
-12 12	EQ High cut and boost

NOISE GATE: 1-15

1-9	Increase gate threshold and hysteresis
10-12	Fast swell with increasing thresh. and hyst.
13-15	Slow swell with increasing thresh. and hyst.

MODULATIONS:

C0-C9	Chorus, Increasing speed, decreasing depth
F0-F9	Flanger, 3 slow, 3 medium, 4 fast.
P0-P9	Phasor, 0-9 increasing speed
T0-T8	Tremolo, Increasing speed,
R0-R6	Ring Modulator, Increasing ring.
10-19	Pixellator, 0-6 increasing pixellation, 7-9 random.
S0-S9	Pitch shifter, 12 down x3, 5th down, 4th down, 3rd up, b3rd up, 4th up, 5th up, 12up.
d0-d8	Detune, 5 cents to 21 cents
H0-H2	Wah, ranges 1-3
A0-A2	Auto Wah, ranges 1-3
E0-E4	Enveloped Flanger, increasing depth
E5-E9	Enveloped Phaser, increasing speed

DELAY: 01-99

01-59	Mono 100ms to 500ms increasing in 100ms steps, increasing feedback and delay mix.
60-99	Multi-Tap 100ms to 500ms increasing in 100ms steps, increasing feedback and delay mix.

REVERB: 1-9

1-3	Room, 3 input levels.
4-6	Hall, 3 input levels.
7-9	Stadium, 3 input levels.

MASTER LEVEL: 0-99

0-99

MAINTENANCE AND SERVICE

Other than keeping the unit clean and occasionally checking the connectors and cables to the unit for integrity, there is no maintenance necessary for the TEC4X.

There are NO user serviceable parts inside the unit. Opening the chassis will void the warranty. All service and repair must be performed by the factory for the warranty to remain in service.

Should a problem arise with the TEC4X, please contact your authorized DOD Electronics dealer for return/repair procedures.

SPECIFICATIONS

INPUTS: 1/4" unbalanced

INPUT IMPEDANCE: 500k

OUTPUTS: 1/4" unbalanced

MAXIMUM OUTPUT LEVEL: +6dbu

FREQUENCY RESPONSE: 20Hz to 16KHz

SIGNAL TO NOISE RATIO: 88db

WARRANTY

1. The warranty registration card must be mailed within ten days after purchase date to validate the warranty of this DOD product.
2. DOD warrants this product one (1) year, 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 materials 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 (1) year. The company shall not be responsible for any consequential damage as a result of the products use in any circuit or assembly.
4. Proof of date of purchase is considered to be the burden of the consumer.
5. DOD reserves the right to make changes in design or make 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, either expressed or implied, and DOD neither assumes nor authorizes any person to assume 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.

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