DIRT BOX

O P E R A T I N G INSTRUCTIONS



DIRT BOX EFFECTS UNIT operating instructions

WARNING: We advise caution if any of the following apply:-

- 1) You have a weak stomach
- 2) You are in labour
- 3) You iron creases in your jeans
- 4) You and your partner have matching anoraks
- 5) You eat chips with lasagne

INTRODUCTION

Congratulations on your purchase of a TRACE ELLIOT DIRT BOX effects unit.

The DIRT BOX is mainly intended for use with electric guitars, but if used imaginatively it can be used to add various degrees of Dirt to a variety of musical instruments including bass guitar, keyboards, vocals or zither.

The circuit topology is 100% FET which is a type of transistor that has non linear transfer characteristics similar to valves and therefore produces similar soft clipping.

By cascading several FET stages, in the manner of modern high gain valve amps, this soft clipping procreates to produce copious amounts of wanton filth.



CONTROLS

This product doesn't really need operating instructions, so if you can't wait to go and plug into your DIRT BOX, just set all the knobs pointing upwards, tweak to taste and see what noises your Box can make. You can always return to boring operating instructions when your extremities are sore.

Footswitches

The right hand footswitch turns the DIRT effect on or off, this corresponds to the red 'EFFECT ON' LED above the 'LEVEL' control. The left hand footswitch selects either single or double helpings of DIRT, this corresponds to the red 'GAIN 2' LED above the 'GAIN' control.

Input

A single jack socket is provided to plug your (musical) tool in to. This is a high impedance input which allows for perfect matching to both passive and active instruments.

Gain

This control is used to fine tune the degree of Dirt in the sound. Where this is set will depend on the output level and type of pickups the instrument has, the playing style and what kind of a day you've had.

Tone Controls

The equalisation network has been based on the traditional passive BASS, MIDDLE, TREBLE tone stack that has been used in all the best valve amplifiers for the last forty years. As it is passive you will find that the controls are interactive. Passive controls were chosen as they provide the best and most natural kind of equalisation for a guitar signal

Level

This controls the output level of the Dirt effect when it is selected. This can be used either to balance the Dirtied and non-Dirtied sounds or to provide a boost in volume when Dirt is required.

Output

This is to connect either to an amplifier or to the next effects unit in the chain.

Battery / mains adaptor connections

Power to the DIRT BOX is supplied from either the two internal 9 volt batteries or from the '18V DC IN' socket on the back of the unit (this requires a regulated 18 volts mains adaptor available from TRACE ELLIOT as an optional extra).

18 volts was used as a supply because we at TRACE ELLIOT consider that one battery of 9 volts does not give sufficient headroom in the circuitry for the peaks in the signal from your instrument. In the case of the circuit design of the DIRT BOX, a higher supply also enables the FET's to be biased at appropriate points to produce their particular sound.

Power to the DIRT BOX is turned on when a jack plug is inserted into the 'INPUT' socket.

Replacing the batteries

When either of the red LED's start to become dim or the output starts to become weak then it is time to replace the batteries.

The access to the batteries is through the bottom plate of the unit, by removing the single small screw that secures the battery cover in position. Lift the battery body from the outside edge of the unit to remove either battery.

Always replace both batteries at the same time and when inserting check that the polarity is correct.

For maximum life always use high power type batteries, this should then give you a useful working life of over 100 hours. Remember to always unplug the INPUT jack to the unit when not in use to conserve battery life.

An A.C. mains adaptor is available for the DIRT BOX from TRACE ELLIOT as an optional extra. This is a special 18 volt regulated D.C. unit. Do not use any other A.C. adaptor to power this pedal.

Technical Specifications

Preamp

Input Impedance $10M\Omega$

Nominal signal level -20dBu

Output Impedance $22K\Omega$

Nominal signal level -20dBu Passive bass,mid, and treble

Tone Controls Passive bass,mid, and to Circuit Topology Signal path 100% FET

Internal Supply 18 volts from 2, 9 volt batteries (MN1604)

Average load 3mA Average life 100 hours

External Supply 18 volt DC adaptor, centre pin negative

If treated with care and respect, your DIRT BOX should give you years of loyal service.