

# E580 8-CHANNEL DI BOX (1U) INSTRUCTIONS FOR USE

### 20-035 EMO 19 inch rackmount 8 channel 1U DI E580

# CAUTION: UNDER NO CIRCUMSTANCES CONNECT THESE PRODUCTS TO ANY MAINS POWER SUPPLY.

#### **DESCRIPTION**

The E580 offers eight channels of passive DI box in a 1U rack-mounting format for applications where rack space is limited and multi-channel operation is required. With a depth of only 100mm it may be mounted in the rear of most racks.

Reversible rack ears allow the user to choose the orientation of the DI box in the rack. Each rack ear is held in place by 4 x M3 screws.

The facilities offered by the E580 together with its compact format make it ideal for use in keyboard racks in both recording and live situations.

#### **OUTPUT**

A 3-pin XLR type connector giving a floating output with a nominal level of 10mV suitable for most mixer inputs. Wiring to most normal, balanced twin-screened cable is as follows:

Pin 1 - Earth braid (screen)

Pin 2 - Red wire (signal positive/hot)

Pin 3 - Black wire (signal negative/cold)

For connections to unbalanced inputs use pins 1 & 3 joined together as earth (ground) and pin 2 as signal positive (hot). If the input connector is an unbalanced jack then XLR pins 1 & 3 go to the sleeve and pin 2 goes to the tip.

## JACK IN/OUT

Both jack sockets are mono, unbalanced types. As supplied they are connected in parallel, however, various connection options are available as described in the section titled HEADER OPTIONS.

The input sensitivity of each channel is switchable via a three-way slider switch as follows:

input impedance suitable for musical instrument pickups.

LINE INPUT This is a medium level input (max 30V) for use

with synthesizers and other line level outputs.

SPEAKER INPUT This is a high-level input (max 100V) suitable for use with loudspeaker circuits

including 100V line public address amplifier outputs.

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### **HEADER OPTIONS**

Various connector permutations may be set on each channel by moving jumper plugs on the PCB mounted headers. To access the PCB,s remove the 8 x top screws and slide the lid from the E580.

- a) To make both jacks equally active (as supplied)
  - a. CON 1 2-3
  - b. CON 2 1-2
- b) To make XLR jack master
  - a. CON 1 1-2
  - b. CON 2 1-2
- c) To make switch jack master:
  - a. CON 1 2-3
  - b. CON 2 2-3
- d) To disable XLR jack
  - a. CON 1
  - b. CON 2 Remove jumper
- e) To disable switch jack
  - a. CON 1 Remove jumper
  - b. CON 2 1-2
- f) CON 3 is a manufacturing option. Not for customer use.

Earth lifting facilities on each channel help to eliminate ground loops. Being transformer based the E580 offers true galvanic isolation.

# **GROUNDING OPTION**

CON 4 (marked chassis link).

When UN-LIFTED the ground contacts of the input jack sockets are connected to the E580 metalwork (and therefore also the XLR metal shell).

In the LIFT position the ground contacts of the input jack sockets are not connected to the E580 metalwork (and therefore also the XLR metal shell).

Whether pin 1 of the XLR is connected to the metalwork depends on the position of the Ground Lift switch.

Occasionally the unit may be susceptible to hum pickup when placed very close to transformers or power supplies as found in amplifiers. This problem can be solved by re-positioning the E580 or the power supply.

Should any problems occur, all cables, connectors, etc., should be checked before the unit is presumed to be at fault.

For further information or servicing please contact your local EMO Dealer.

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Our Policy is one of continuous development: all specifications and design details are subject to change without notice.