



DUAL TRIP AMPLIFIER TYPE 800 Installation & Setting up Instructions

The Type 800 has been designed as a space saving Trip Amplifier for use in control panels, either as a surface or a DIN rail mounted unit. Leaflet No 226 gives a full description.

External connections are made onto the front facia using the upper and lower terminal blocks provided. See Fig1 below.

Upper Terminals:- Supply Voltage Live and Neutral,
Relay Contact Connections.

Lower Terminals:- mA or Volts Input Terminals
Earth and 24V D.C. Power Output.

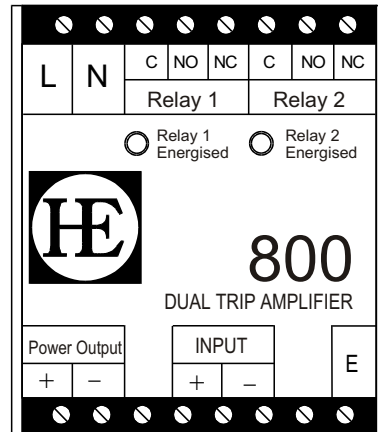


Fig 1. View with front facia in place

Setting Up

Each of the two channels can be set up as either (a) to control between 2 levels, such as is required by pump control. The "on" and "off" points can be as little as 5% between each other. This is known as the **variable differential mode** or (b) for point control such as required by an alarm. The built in 1% differential allows for hunting about the control point, such as caused by wave action. This is known as the **fixed 1% differential mode**.

Fig 2. Typical Applications.

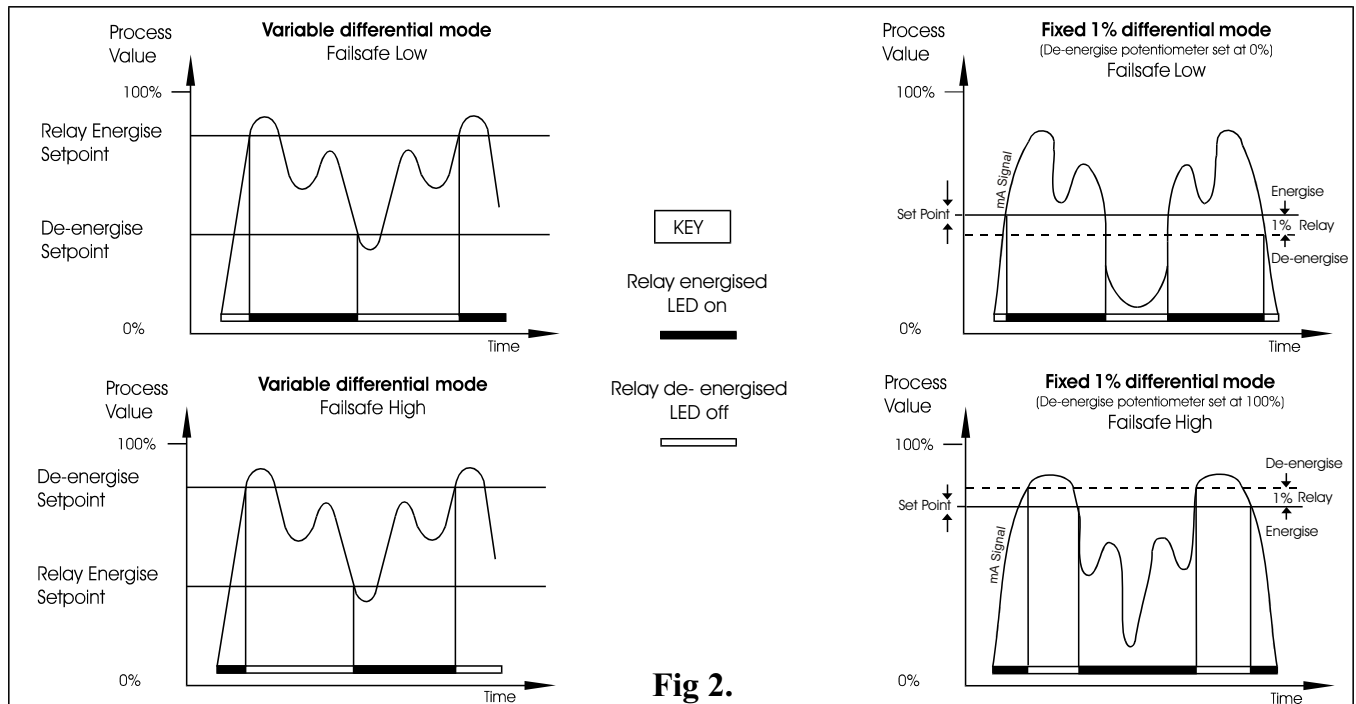


Fig 2.

To Set Trip Amp

Flip off the front facia panel to expose the setting up potentiometers and selector switches, as shown in Fig 3. (over), and follow the instructions.

A. Relay state indicator L.E.D.'s :- When illuminated these will indicate that the relay is energised.

B. "Relay Energised Setpoint" potentiometers (a1) and (a2). Set the percentage of maximum input, (mA or Volts) at which each relay energises.

C. "De-energise" or "Set Fail Safe" potentiometers (b1) and (b2). Set relay de-energise point in variable differential mode, or set Fail Safe in fixed 1% differential mode, or set Fail Safe in fixed 1% differential mode.

D. Mode switches to select fixed 1% differential mode or variable differential mode.

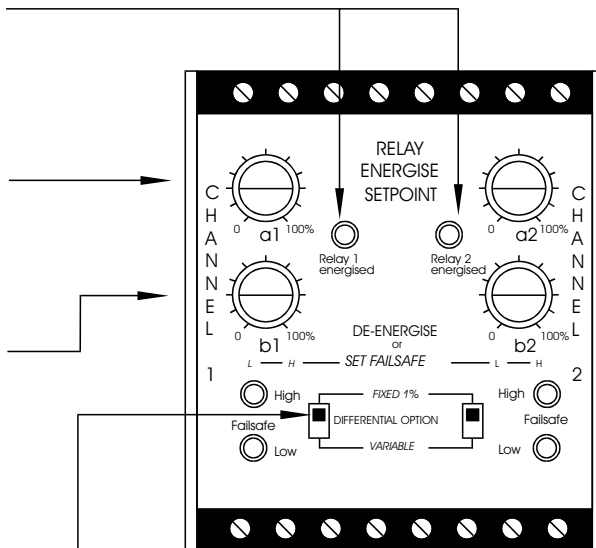


Fig 3. View with front facia removed

Fail Safe

In the "Variable Differential" mode, the (a) potentiometers set the relay energise points, and the (b) potentiometers the relay de-energise points. If (a) setting is greater than (b) it is Fail Safe High, and the F.S.H. L.E.D will light. If (b) setting is greater than (a) it is Fail Safe Low and the F.S.L. L.E.D. will light.

In the "Fixed 1% Differential" mode, the (a) potentiometer sets the energise point, and the (b) potentiometer sets the Fail Safe modes: 100% = Fail Safe High, 0% = Fail Safe Low.

Setting the Switches and Potentiometers

Fixed 1% Differential use:-

- * Set mode switch D to fixed 1% differential (upper) position
- * Select Fail Safe Low or Fail Safe High by turning de-energise potentiometer (b) to 0% (FSL) or 100% (FSH) the indication L.E.D's will flash if the de-energise potentiometer is not set to one of these options.
- * Configure energise set point using relay energise set point potentiometer (a).

Variable Differential use:-

- * Set mode switch D to variable differential (lower) position
- * Set relay energise set point using relay set point potentiometer (a).
- * Set relay de-energise set point using de-energise potentiometer (b)
- * If potentiometer (a) is set higher than (b) Fail Safe Low L.E.D. will light. If potentiometer (a) is set lower than (b) Fail Safe High L.E.D. will light. The energise and de-energise points must be set at least 5% apart. Settings within 5% will result in the indications L.E.D.'s of that channel flashing. Showing a fault situation.

This product has been designed and complies to the relevant standards as listed in its certificate of conformity The installer/user must ensure system compliance

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