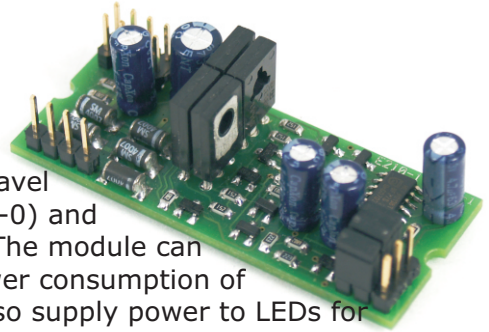


# AC Module ETS No.840

This AC Module is used to convert AC voltage to DC voltage for operating ETS locomotives and also serves as a means of changing the direction of travel for systems with both zero-voltage (AC-0) and switching/surge pulse voltage (AC-1). The module can operate 2 motors with a maximum power consumption of 2 x 1 amp and at the same time will also supply power to LEDs for lighting.



## Module Wiring:

The module is supplied with wiring pre-assembled to connector pins which are located on the circuit board. These pins must be soldered to their respective wires/connections in the locomotive (LED, Motors) as indicated in the **photo 1**.

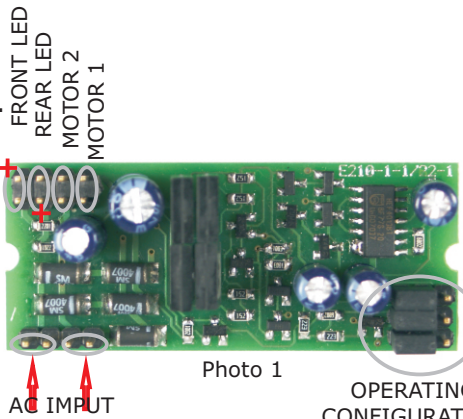


Photo 1

## Changing the Direction of travel:

Changing the direction of travel is achieved with the aid of 'jumper' conductor blocks which must be configured correctly on to the data-processor – see photos 1, 2 & 3.

OPERATING CONFIGURATION SETTINGS

**AC-0** The direction of travel is changed when the supply voltage drops to zero. The 'jumper' connector blocks must be configured on the data-processor pins as indicated in **photo 2**.



Photo 2

**AC-1** The direction of travel is changed when there is a voltage surge pulse of over 20V. The 'jumper' connector blocks must be configured on the data-processor pins as indicated in **photo 3**.



Photo 3

## Technical Data:

Input Voltage:	AC 0-18V
Output current for E-motors:	max. 2x 1A
Direction of Travel Change:	AC-0 or AC-1
Output voltage for LEDs:	20mA

