

## EN-4: Inverting the sense of a digital input

- When a digital input is mapped to an application, the contact sense, by default, determines that an OPEN circuit is interpreted as a boolean FALSE condition and a CLOSED circuit is a boolean TRUE condition. You can, however, choose to invert the sense of the contact input on the 10-DI and IO-MULTIIO modules to match your specific site demands. This engineering note describes how to do this. Be aware that input sense inversion is not available on the 'run' and 'fault' inputs of the IO-6DOH-12DI module.
- The LED indicator on the module has a proscribed operation and it is **always** consistent with the boolean condition, however it is important to realise that quite apart from the inversion, the LED indicator condition will vary depending upon which sensor type it is configured as.

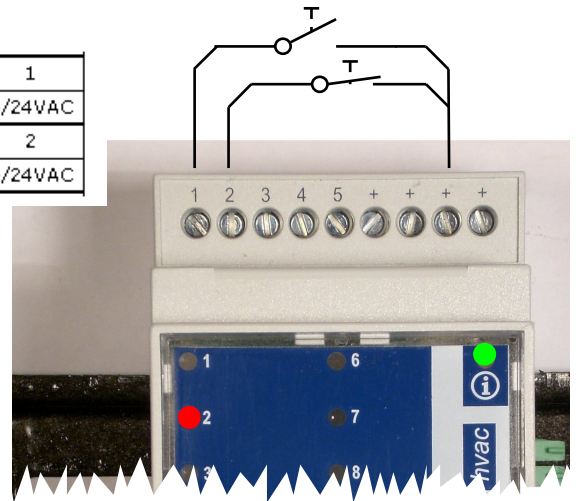
DI1	5-1 Floor pressure switch	Status input	false	1 +/24VAC
DI2	5-2 Fire alarm contact	Alarm input	true	2 +/24VAC

**Note:**  
This is the default configuration of these sensor types

Input status – Status input	
State	LED
Open contact = False	Off
Closed contact = True	Green

Input status – Alarm input	
State	LED
Open contact = False	Green
Closed contact = True	Red



**Note:**  
The LED condition is determined by the sensor type that is configured for the channel

To invert the sense of the input simply set the 'Invert input' property to **True**



**Note:**  
The inverted input sense is changed within the I/O module and by doing this; the LED indicator is consistent with the boolean state

DI1	5-1 Floor pressure switch	Status input	true	1 +/24VAC
DI2	5-2 Fire alarm contact	Alarm input	false	2 +/24VAC

