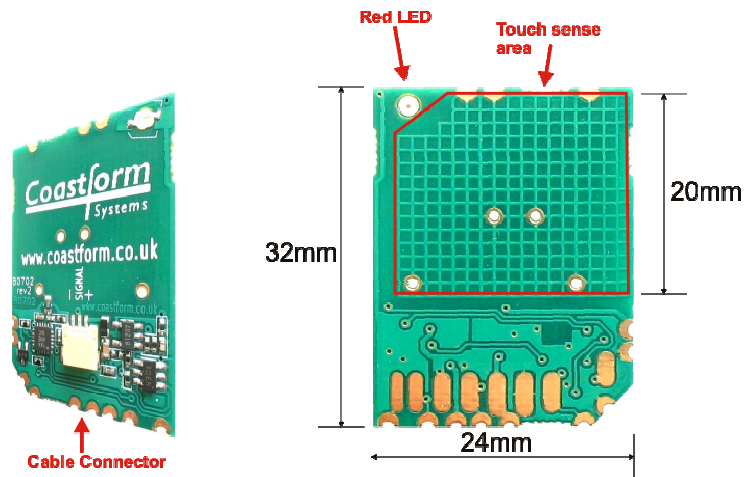


Electronic Touch Switch – B0702

Installation Instructions



Installation

Please read these instructions before installation or use.

In the box you should find: B0702 Touch switch, cable(optional), high-performance double-sided adhesive strips.

Test the unit operation **before** final mounting.

Do not mount near to **noisy mains cabling**. Close proximity to noisy mains circuits (eg wiring to unsuppressed fluorescent lighting) could cause false detections. Test first !

Window mounting: test the position and unit operation first using standard adhesive tape to attach the B0702 to the window. The flat side of the PCB should be in contact with the window, with the small white connector at the bottom. If all is well, clean the window to ensure it is free of dirt and grease; Peel the plain backing off the high-performance adhesive strips supplied and apply to the flat side of the touch switch; Peel the opposite backing off the adhesive and push the touch switch firmly onto the window. Do not apply pressure to the component area of the circuit board.

Cable: One end of the cable has a small white connector fitted, to mate with the socket on the touch switch, and the other end has free-ends for connecting directly into screw terminals on a target micro-controller board.

Carefully align the white plug with the socket on the touch switch, aligning the red wire with the **+** above the socket, and aligning the black wire with the **-** above the socket. The plug and socket are polarised to prevent them being assembled incorrectly. Carefully squeeze the plug into the socket, using finger and thumb, until a small click is felt.

Wire Colour	Function
Red	Power: + (5V to 24V DC)
Black	Power: - (0V, Gnd)
Brown	Output Signal (Open-Drain)

Output: The signal output is on the middle pin of the connector (pink wire), and is driven by a FET transistor switch (open drain). When the touch switch is operated, the transistor turns on drives the output to 0V (Gnd). A pull-up resistor will be needed at the input on the target device (micro-controller board such as Arduino, or media player) to define a logic high when the touch switch is not touched. The pull-up voltage must not exceed 48V.

Before applying power, ensure the mounting is **mechanically stable**, otherwise false detections can occur. **Avoid moving** the unit after the power is switched on, otherwise it may take a few minutes to re-establish the calibration point. Also **avoid touching** the unit **during power-up**, otherwise the unit will calibrate to your fingers and then be insensitive for a few minutes until the calibration point is re-established.

Be careful not to let the signal wire touch a power connection or an I/O output pin of another microcontroller system or the output transistor could be permanently damaged.

Simply touch anywhere in front of the touch area on the opposite side of the window, to operate.

Isolation

The touchpad **must not be earthed!** It must be electrically isolated from earth in order to operate. If the touchpad is window mounted this will typically provide more than adequate isolation.

SPECIFICATIONS

Working Voltage (Max)	5V to 24V DC (24V max.). Battery operation not recommended
Current consumption	4mA
Output type	Open-Drain (Requires pull-up at input on target micro-controller board)
Output rating	50mA @ 30V DC
Sensitive area	Square hatched area above electronics. 20mm x 20mm
Calibration	Automatic. Fully self-calibrating, for life
Activation time	Active during touch
Output indicators	Bright, red LED
Dimensions	32mm x 24mm x 4mm (same footprint as SD card)
Window Mount:	Use high-performance double-sided adhesive supplied
Sensitivity	Proximity and touch, even through gloves or double-glazing