

COGNEX® DS Field Calibration Hardware Trigger Setup

For multiple-sensor field calibration, all sensors must be triggered simultaneously. You can use any SPST switch and a standard photo-trigger. The Cognex-supplied SPST switch meets this requirement.

- 1 Push-button momentary-contact SPST switch with tinned leads (included with this kit only)
- 1 wire with tinned leads (included with this kit only)

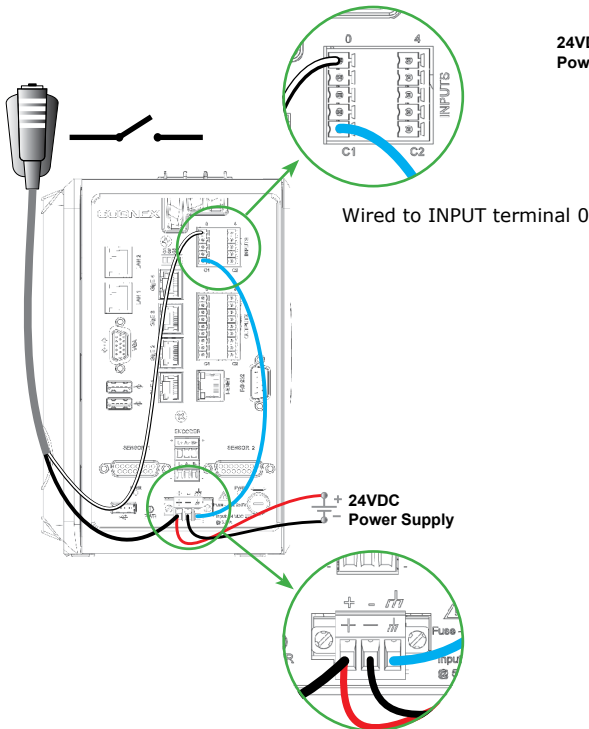
Connecting to a VC5 Vision Controller

The DS Field Calibrator utility allows you to use either of the two input terminals on the vision controller to detect hardware triggers using this switch. This trigger configuration does not persist once you exit the utility.

- Connect one lead of the switch to Pin 1 (+24VDC POWER) of the power connector.
- Connect the other lead of the switch to any INPUT terminal on the vision controller.

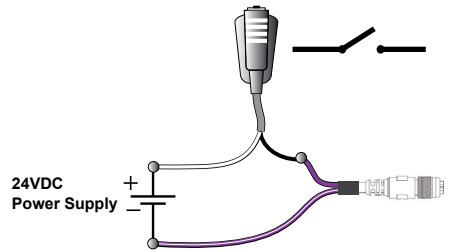
The vision controller supports two INPUT terminal rows. See your vision controller hardware documentation for details. The DS Field Calibrator utility allows you to specify which terminal you are using.

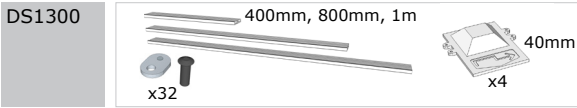
- Connect the second wire between the INPUT COMMON terminal in the same terminal row as the chosen INPUT terminal and Pin 3 (FRAME GROUND) terminal of the power connector.



Connecting to DS 1000 Sensor

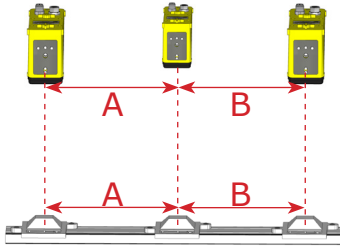
- Connect one lead of the switch to the + (power) terminal of the 24VDC power supply.
- Connect the other lead of the switch to the Trigger+ (violet) connection of the I/O cable.
- Connect the Trigger- (white/violet) connection of the I/O cable to the - (return) terminal of the 24VDC power supply.



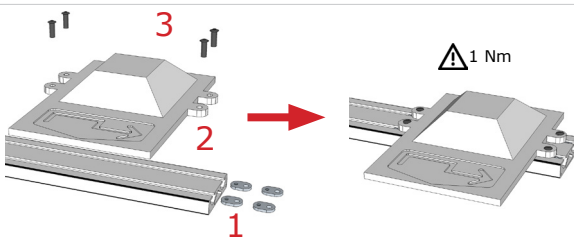
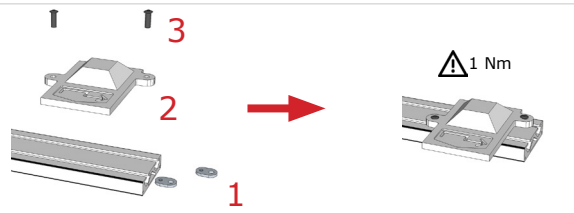


Caution: DS field calibration targets are precision instruments. For best accuracy, use gloves when handling, and avoid dropping or damaging targets.

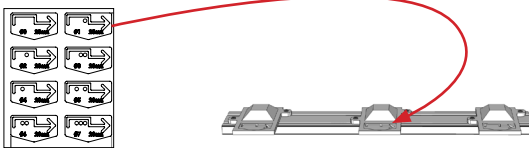
Multiple-sensor field calibration requires multiple calibration targets rigidly mounted with the same spacing as the sensors in the sensor array.



Use supplied T-nuts and screws to mount targets to rail.

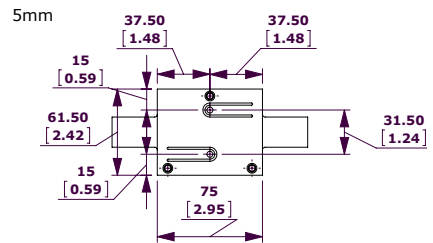
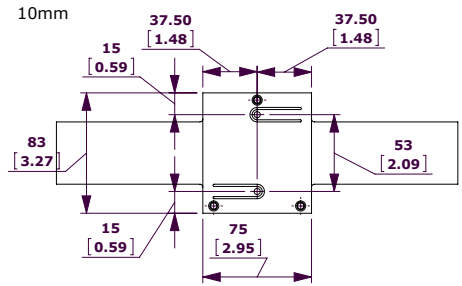


Apply a unique identification label to each target.



For best accuracy, mount 5 and 10mm targets as shown.

Drill and tap two mounting holes M4 thread, 8mm minimum depth, spaced 31.50 mm (5mm target) 53mm (10mm target). Minimum mounting plate size 75x61.5x10mm (5mm target) 75x83x10mm (10mm target).



Use indicated mounting holes only.

