

Saf-T-Touch

Control Reliable Touch Button

Installation and instruction manual.



Can be used anywhere an ergonomic touch button is needed.

Description

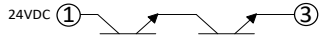
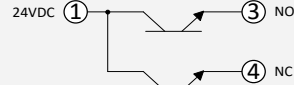
Cieco's Saf-T-Touch buttons are designed to replace mechanical push buttons in repetitive button applications and replace non-control reliable electronic buttons in safeguarding applications.

Saf-T-Touch buttons can also be used in applications where safety is not a concern but a reliable ergonomic touch button is needed.

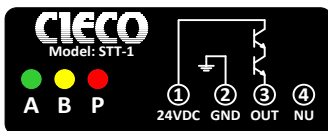
Features

- Diverse redundant finger sensors prevent inadvertent actuation due to shirt sleeves.
- Redundant cross checking microcontrollers and monitored outputs achieve control reliability.
- Requires no force to initiate the button output. This will drastically reduce carpal tunnel syndrome and hand fatigue in repetitive button operations.
- Industry standard 30.5mm hole mounting with a footprint that matches a typical push button with legend to easily replace existing mechanical pushbuttons.
- Indicators provide for easy troubleshooting and sensor status.
- Operational while wearing most types of gloves.
- De-Pluggable terminal and wiring diagram on button, provide for easy installation.
- Electro Magnetic Compatibility (EMC) feature provides superior noise immunity against external radiated and conducted noise.
- Solid state outputs with overload protection. No periodic relay replacement required.
- Opaque enclosure and lens IR filter block out visible light.
- Electro Magnetic Compatibility (EMC) feature provides superior noise immunity against external radiated and conducted noise

Saf-T-Touch model selection

MODEL#	Voltage	Output type	Output Connections
STT-1	24VDC	Monitored Redundant NO-NO	Series connected sourcing output 
STT-2	24VDC	Monitored redundant NO - NC	Complementary sourcing outputs 

Model STT-1 indicators and connections



STT-1 Status Indicators

- A - finger sensor A status (on is finger sensed, off is no finger or sensor B concurrent timer timed out)
- B - finger sensor B status (on is finger sensed, off is no finger or sensor A concurrent timer timed out)
- P - Power on

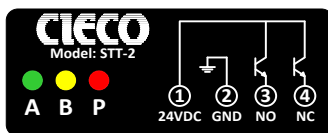


Pluggable connector.

Electrical Connections

- 1 - 24VDC @ 60ma (plus load current)
- 2 - Earth Ground
- 3 - Sourcing Output, Finger sensed = output sourcing (VDC supply -2.8V)
- 4 - Not Used

Model STT-2 indicator and connections



STT-2 Status Indicators

- A - finger sensor A status (on is finger sensed, off is no finger or sensor B concurrent timer timed out)
- B - finger sensor B status (on is finger sensed, off is no finger or sensor A concurrent timer timed out)
- P - Power on



Pluggable connector.

Electrical Connections

- 1 - 24VDC @ 60ma (plus load current)
- 2 - Earth Ground
- 3 - Normally Open Output * finger sensed = output sourcing (VDC supply -1.6V)
- 4 - Normally Closed Output * finger not sensed = output sourcing (VDC supply -1.6V)

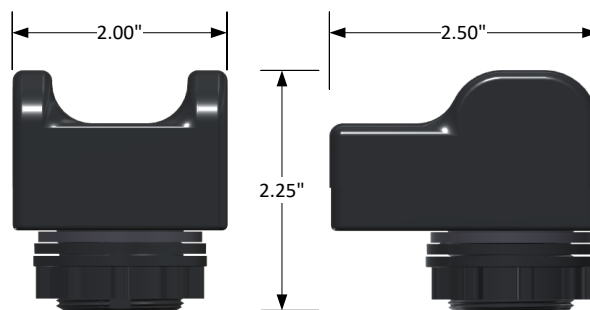
* When using the STT-2 buttons for safeguarding, **both N.O. and N.C. outputs must be connected to a two-hand safety module or an ANSI and OSHA compliant control system.**

Specifications

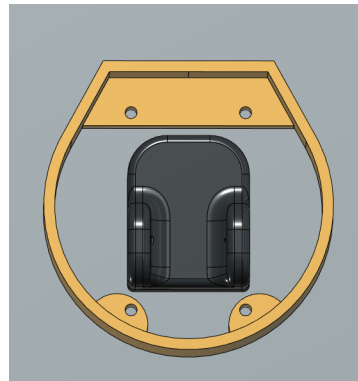
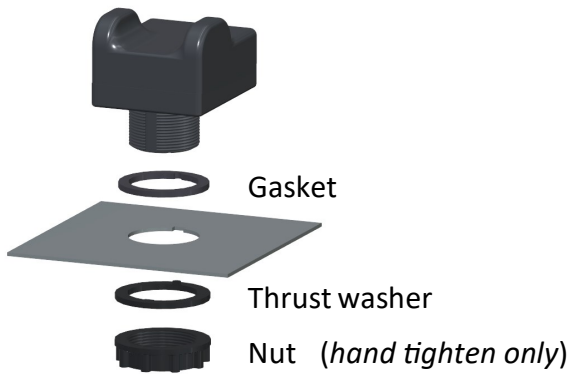
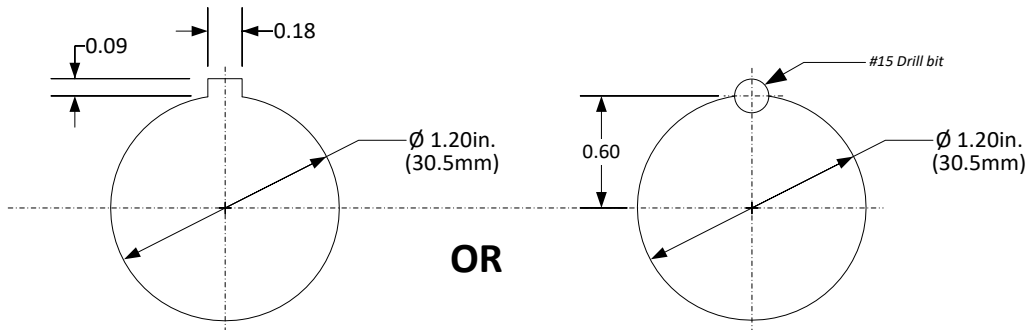
Supply Voltage	15-30VDC
Temperature	0 - 50° C (32 - 122° F)
ON/OFF Response time	40mS
Wire size	28-16 AWG
Max transistor output current	110mA
Leakage current	0.2uA
Housing material	Polycarbonate *
Environmental	Meets IP66 rating
Connections	De-pluggable 4 pin screw terminals

* Clean with mild soap or detergent and lukewarm water using a sponge or soft cloth. Rinse with clean water.

Dimensions



Mounting



Button can be used with most standard ring guards.



Cieco button guard
Part# GTB-1

Safeguarding using the Saf-T-Touch buttons.

Diverse redundant finger sensors, redundant cross checking microcontrollers and monitored outputs makes the Saf-T-Touch buttons a control reliable device. This qualifies the Saf-T-Touch button to be used as a safeguarding device. A safeguarding device is a device that detects or prevents inadvertent access to a hazard.

When used as a safeguarding device each two-hand device shall be designed and constructed to protect each hand control against unintended or inadvertent operation. Protecting the hand controls against unintended or inadvertent operation is usually accomplished by the use of ring guards or other fabricated shields.

The two-hand device shall have the individual hand controls arranged by design, construction, or separation to require the use of both hands for actuation. The design or installation of the operator control should be such that the operator cannot operate the two controls by the use of one hand and an elbow (or other portion) of the same arm. A means to meet this requirement is to separate the hand controls by a distance equal to or greater than 22 inches in a single linear dimension.

Saf-T-Touch buttons cannot operate alone as a safety device. When Saf-T-Touch buttons are being used as a safeguarding device, two Saf-T-Touch buttons must be used along with a two-hand safety module or an ANSI and OSHA compliant control system.

The two-hand control device shall require the synchronous use of both the operator's hands to initiate a machine cycle and concurrent actuation of the operator's hand controls during the hazardous portion of the machine cycle such that the operator cannot reach the hazard before the hazardous motion has ceased. Release of either hand control during the hazardous portion of the machine cycle shall initiate an immediate stop command.

The two-hand control device shall require the release of all hand operator controls and the re-actuation of all actuating controls before a machine cycle can be reinitiated.

Components, subassemblies or modules of two-hand control devices shall be control reliable.

The operator's hand controls of the two-hand device shall be located and maintained at a distance from the nearest hazard such that the operator cannot reach the hazard before cessation of hazardous motion. See ANSI B11.19 for distance calculations.