

DESCRIPTION

The Fail-Safe TCS replaces conventional toggle switches in high abuse, clean room and security environments. It features a large, nearly flush, tamperproof stainless steel actuator which mounts through the wall or panel, exposing only the touch bolt head. It attaches to a rugged module that contains reliable, solid state, electronic circuitry. By simply touching the actuator, the module will control up to 2000 watts of illumination. For ease of installation and trouble-free operation, the touch bolt and module are installed in the same junction box or fixture. Modules can be programmed and wired in several configurations, (see Mounting Details). Actuator mountable 20' (max.) from electrical module (see "Important Installation Notes" for further details).

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Touchbolt

Touch bolt hardware can be fixture- or wall-mounted. Available in 1/4-20 and 1/2-13 sizes. Stainless steel is standard. Includes bolt, nuts, insulators, and module touch wire connector.

Electrical

110V-277VAC, 50/60 HZ Connect to unswitched line 1000 Watts each load, 2000 Watts max per module (1 or 2 loads).

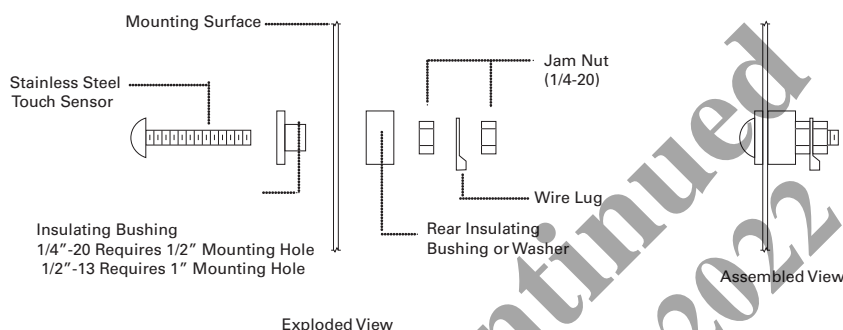
All models have built-in Low Voltage Overrides. Does not require external relay. 24 V AC/DC

operation provides force-on, force-off or neutral override function. Consult your Cooper Lighting Solutions Representative for override function usage.

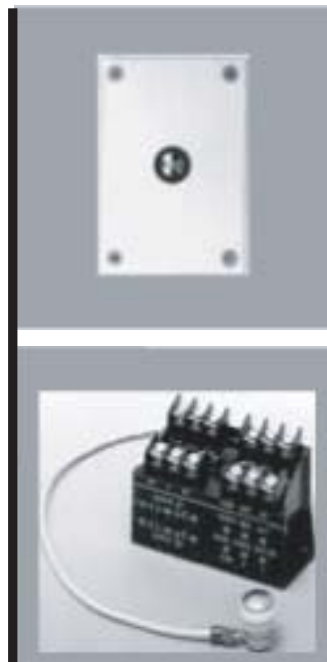
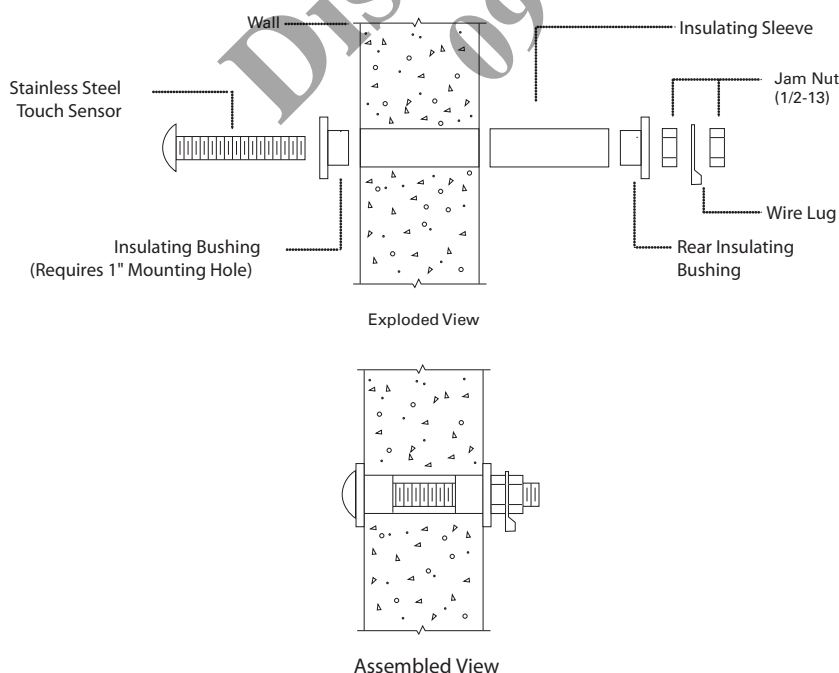
UL Listing

Recognized component appliance controls (ATNZ2).

Panel Mount Touchbolt Assembly (1/4-20 or 1/2-13)



Through Wall Touchbolt Assembly (1/2-13)



TCS TOUCH CONTROL SYSTEM

ENERGY DATA Input Watts

7 watts max.
(Loads not included)

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ORDERING INFORMATION

First specify Touch Control System, then Bolt Assembly and, finally, Options and Accessories

STAND ALONE ORDERING INFORMATION (Requires Accessories)

SAMPLE NUMBER: TCS/SQ4-120¹

TCS		
Module TCS=Touch Control Lighting System, for use with Incandescent/ HID or Fluorescent	Factory Preset Sequence (1 or 2 Loads) SQ1=2 Load, 4 Position (1,0/ 0,1/ 1,1/ 0,0) SQ2=2 Load, 3 Position (1,0/ 1,1/ 0,0) SQ3=2 Load, 3 Position (1,0/ 0,1/ 0,0) SQ4=1 or 2 Load, 2 Position (1,1/ 0,0) SQ4T=Time Delay; 15 sec. on, then off; 1 or 2 Load, 2 Position (1,1/ 0,0) SQ5=2 Load, 2 Position (1,0/ 0,1) 1=On; 0=Off (Circuit A, Circuit B)	Voltage UNV=120V-277VAC 50/60 Hz

Stand-Alone Notes:
¹ Bolt assemblies required for use with all stand-alone touch controls.

IN-FIXTURE ORDERING INFORMATION (No Accessories Required)

SAMPLE NUMBER: FMW-D-2/132-120-80/86-TCS/SQ1/RE¹

TCS			
Fixture Catalog # FAS FCC FCT FDX FMB FMW FUS	Module TCS=Touch Control Lighting System, for use with Incandescent/ HID or Fluorescent In-Fixture Notes: ¹ TB-P4-TP Bolt Assembly is included for In-Fixture TCS packages.	Factory Preset Sequence (1 or 2 Loads) SQ1=2 Load, 4 Position (1,0/ 0,1/ 1,1/ 0,0) SQ2=2 Load, 3 Position (1,0/ 1,1/ 0,0) SQ3=2 Load, 3 Position (1,0/ 0,1/ 0,0) SQ4=1 or 2 Load, 2 Position (1,1/ 0,0) SQ4T=Time Delay; 15 sec. on, then off; 1 or 2 Load, 2 Position (1,1/ 0,0) SQ5=2 Load, 2 Position (1,0/ 0,1) 1=On; 0=Off (Circuit A, Circuit B)	Bolt Location on Fixture ¹ RE=Right End LE=Left End

IMPORTANT !

INSTALLATION NOTES:

- Max distance allowed of touch bolt wire from module is 20 feet.
- Wire for touch bolt uses 16AWG or larger stranded copper. Do not use shielded cable.
- Non-metallic conduit for touch bolt wire is required for reliable operation. Through-wall penetrations must be made using PVC conduit.
- Touch bolt wires cannot run in same conduit as power wires.
- Only one touch bolt wire can be run in a single conduit between the bolt and module.

ACCESSORY ORDERING INFORMATION

BOLT ASSEMBLY CATALOG NUMBERS (Required Accessory for Stand-Alone TCS)

Catalog # ²	Mounting	Thread ¹	Length	Panel or Wall Thickness Range
TB-P4-TP	Panel	1/4" - 20	3/4"	1/16" - 1/8"
TB-P4-025	Panel	1/4" - 20	2 1/2"	1/16" - 1/2"
TB-P2-025	Panel	1/2" - 13	2 1/2"	1/16" - 1/2"
TB-W2-060	Wall	1/2" - 13	6"	2 1/2" - 4 1/2"
TB-W2-080	Wall	1/2" - 13	8"	4 1/2" - 6 1/2"
TB-W2-100	Wall	1/2" - 13	10"	6 1/2" - 8 1/2"

Bolt Assembly Notes:

- Standard bolts are stainless steel.
- Other combinations or options available; consult Cooper Lighting Solutions representative.

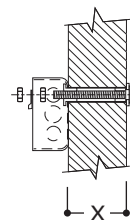
MOUNTING PLATE ASSEMBLIES

Catalog #	Description ¹	For Use With
TB-PLT4	2 Gang Security Plate Assy. for One 91) 1/4 Bolt Assy.	TB-P4-XX Bolt Assy.
TB-PLT2	2 Gang Security Plate Assy. for One (1) 1/2-13 Bolt Assy.	TB-P2-XX Bolt Assy. TB-W2-XX Bolt Assy.
TCS-411B	4 11/16" x 4 11/16" x 2 1/8" J-Box	Stand-Alone TCS
TCS-SB44	TB-PLT4 and TB-P4-TP Assemblies	Recessed J-Box (Detail E)

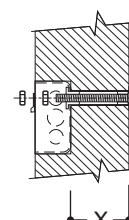
Mounting Accessory Notes:

- Security plate assemblies come with backplate and mounting hardware.

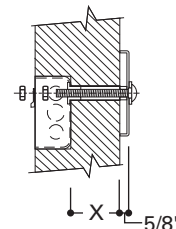
MOUNTING DETAILS



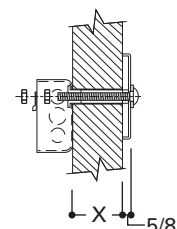
Detail A ^{4, 5}
Surface J-box TB-W2-XXX
bolt thru wall



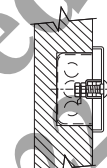
Detail B ^{4, 5}
Recessed J-box TB-W2-XXX
bolt thru wall



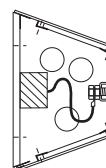
Detail C ^{4, 5}
Recessed J-box TB-W2-XXX
bolt thru wall with T
B-PLT2 security plate



Detail D ^{4, 5}
Surface J-box TB-W2-XXX
bolt thru wall with
TB-PLT2 security plate



Detail E ^{4, 5}
Recessed J-Box TCS in
J-Box with TCS-SB44
security plate and
short bolt assembly



Detail F
TCS fixture mounted
with short bolt

Notes

- TB-P4-TP bolt is standard for TCS in J-box behind cover plates (Detail E) and for in-fixture (Detail F) applications.
- 24V AC/DC override is standard on all TCS modules. (Force all loads on, all off, or neutral interaction.)
- TCS not available without override.
- TCS module not shown in J-Box for illustration purposes only.
- J-Box must be 4 11/16" x 4 11/16" x 2 1/8" or larger.