

BS 250 Specification Sheet

Flush Mount switch for steel doors.

BS-250 Flush Mount Switch & POWER CONTROLLER (BS-201)

By **BETTERSWITCH INCORPORATED**
Installation Instructions and Wiring Diagram for Steel Doors & Jambs

Power Rating: 120 VAC/60 Hz. 10 AMP Resistive load.

Load Type: Resistive Load Only.

ETL Approved for United States and Canada.

***Consult BETTERSWITCH Inc, for technical information.**

*Two or more BETTERSWITCH reed switches can be wired together parallel to control one betterswitch power controller

*Two or more lights or receptacles can be operated by one Betterswitch power controller.

To be used in conjunction with BETTERSWITCH

Reed switches; Normally Closed

UL & ULC Listed Type with or without suffixes WG and XWG

Caution: To Avoid Fire, Shock, Death or Damage to power controller:

Turn off power at Circuit Breaker or fuse to fixture, receptacle, motor or devise to be worked on prior to installation.

INSTALLATION:

1.) Turn Off Power at Circuit Breaker or Fuse Box for circuit to be worked on prior to removing cover plate from Motor, Light fixture, Receptacle or Device to be controlled and expose wiring.

2.) Route Low Voltage wire (1) pair # 18 AWG stranded Conductors class 2 Rated insulation jacket from Motor, Light Fixture, Receptacle or Device to remote Location where mounting of switch is located.

3.) **Install Switch in steel jamb:** *Spacers are only use on steel doors and steel jambs

if jamb is steel and door is wood spacer is required in jamb only, 3/8" hole in spacer to accept switch or magnet.

(EXAMPLE)

A.) **Steel jamb:** Drill hole in top or strike side of doorjamb using a 3/4" Drill bit to allow spacer & switch to be Pushed into hole using your thumb *DO NOT DRIVE SPACER INTO HOLE IF YOU CANNOT PUSH SPACER INTO HOLE WITH THUMB, MAKE HOLE LARGER.

Make up # 18 AWG 2 conductor wire to screw terminals on bottom of switch before mounting switch into spacer.

Be careful not to over tighten.

B.) **Steel door:** Drill 3/4" hole in door side and install spacer & magnet with thumb.

*NOTE: The switch and magnet should line up as close as possible with minimum gap between them 1/2" Max.

4.) **Install Power Controller:** making up conductors per diagram.

After all the connections have been made, the BS-250 can be placed into a electrical junction box.

Secure the box cover and reapply power to branch circuit.

(EXAMPLE)

A.) **Black wire:** To incoming power (Line)

B.) **Red wire:** To switch leg (load) of device your controlling.

C.) **White wire:** To Neutral wire.

(Low Voltage Wiring)

D.) **N/O installation, Light is on** when door is closed! use (DIAGRAM NO.1.) tie the Blue & Yellow Low Voltage wires together, then Make up wire to one terminal (Landing Lug) of remote switch using (CLASS 2 TWO CONDUCTOR STRANDED WIRE #18 AWG.) see DIAGRAM NO. 1, Make up Orange wire to second terminal (Landing Lug) of remote switch using the second wire of (CLASS 2 two conductor wire)

Recheck all wiring connections before restoring power to circuit.

***Operated Load:** is activated by mating the magnet to the low voltage switch, which is wired to the power controller and will send line voltage to fixture or any other device to be controlled!

E.) **N/C installation, Light is off** when door is closed! use (DIAGRAM NO.2) (Orange wire not used)

Cap off Orange wire with wire nut, Make up the Blue & Yellow Low Voltage wires to the 2- terminals (Landing Lugs) of remote switch using (CLASS 2 TWO CONDUCTOR WIRE #18 AWG.)

Recheck all wiring connections before restoring power to circuit.

***Operated Load:** is activated by separating the magnet from the low voltage switch, which is wired to the power controller and will send line voltage to fixture or any other device to be controlled!

5.) Re-install Receptacle plate, motor housing, light fixture cover plate or cover plate of device to be controlled and restore power to Circuit.

TROUBLE SHOOT POWER CONTROLLER

1.) **Light won't turn on!**

A.) Check that you have 120 Volts of power between black and white wires of power controller, if yes

B.) Jump yellow and blue wire at controller if light turns on check low voltage wire or switch for continuity.

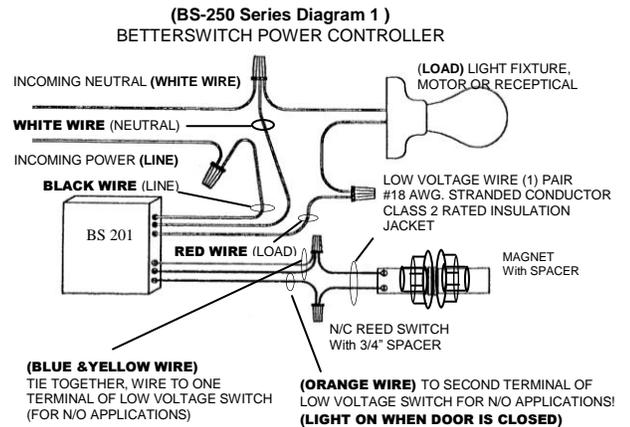
2.) **Light won't turn off !**

A.) Check Magnet is installed in door and lined up as close as possible with minimum gap between them 1/2" Maximum.

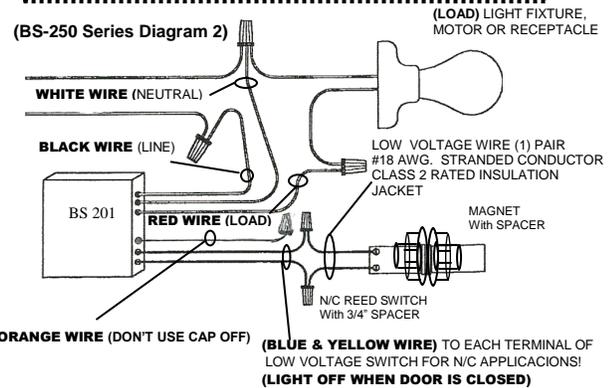
B.) Check yellow and blue low voltage wire at power controller by separating 18 Gage wire from switch, does light turn off? If yes!

C.) Check low voltage wire from switch to power controller that it's not shorted together.

D.) Check switch with continuity meter at screw terminals does switch open and close when magnet is placed in front of it and removed? If not replace reed switch!



In accordance with the National Electrical Code, Article 725-54 (a), (1) Exception No. 3, or the Canadian CE Code Handbook, Rule 16-212, Sub rule (4) —The BS Power controller can be wired to a remote Switch using Class 2 wiring methods. Check with your local electrical inspector to Comply with local codes and wiring practice.



Conforms to ANSI/UL std.508
 Certified to CAN/CSA std.
 C22.2 No. 14

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To install more than one BS151 reed switch to power controller, Home run a low voltage 2 conductor stranded 18 AWG class 2 insulation jacket wire from second reed switch location to power controller, connect new low voltage wire parallel with the first reed switch at power controller.

