

STOP CONTROLS

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LDK Lighted Draw Knob



FEATURES:

- Silent Operation
- Knob illuminates when the stop is on
- No Coils to draw high current: Requires less than 0.1 ampere to operate lamp
- Lightweight, compact design to facilitate tighter switch placement
- Easy to install
- Enclosed construction for dust protection
- Rugged and dependable
- JMP5 pure gold contacts for maximum reliability
- Traditional operation: Pull knob to turn on and push knob to turn off
- Plug in lamp for ease of replacement
- Elegant feel

SPECIFICATIONS:

DIMENSIONAL:

Length: 3.00" from back of mounting board to end of terminals.

Body Diameter: 1.2"

Flange Diameter: 1.75"

Mounting Holes: .875" center hole with three each .136" screw holes equally spaced on a 1.500" circle.

MECHANICAL:

Travel: .300" from center position to the on and off positions.

Toggle Force: 15 ounces

Life: 250,000 cycles minimum

LAMP:

Type: ANSI #1705 AS15.

Brightness: .5 mean spherical candle power. (MSCP)

Current: .080 amps.

Voltage: 14 volts maximum 11.5 volts recommended.

Life: 2,000 hours at 14 volts 22,000 hours at 11.5 volts.

Note: The ANSI #1705 lamp was selected to be operated at 11.5 volts. This lower voltage protects against internal heat build-up and lengthens the lamp life 1100%.

ELECTRICAL:

Contact Type: Momentary contacts.

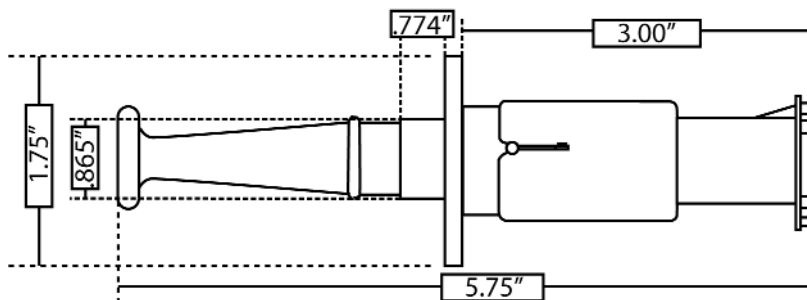
Contact Material: JMP5 contact material—pure gold clad over MDA-220 base material.

Contact Resistance: .1 ohm maximum after 25,000 operations with no load.

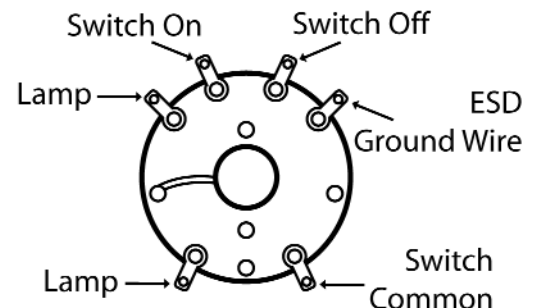
Contact Current: 1 amp maximum. (resistive)

Contact Voltage: 50 volts maximum.

Terminations: Individual terminals provided for solder connections.



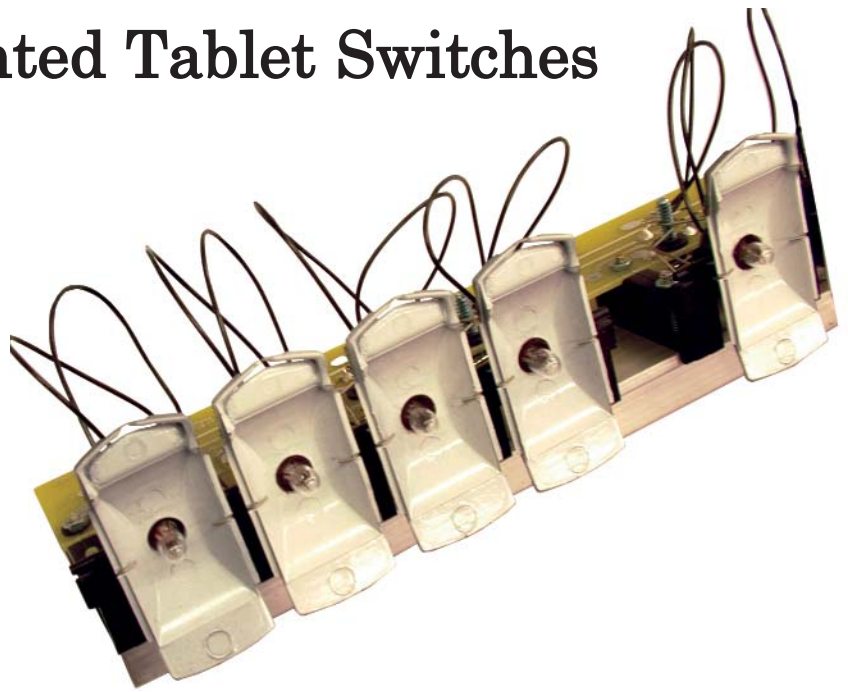
Drawings are a representation only



LTS Lighted Tablet Switches

FEATURES:

- Silent Operation
- Tablet illuminated when stop is on
- No Coils to draw high currents—Requires less than 0.1 ampere per stop
- Easy to install as a single assembly for all stops
- Rugged, dependable
- Traditional operation—Push top of tablet to turn off and bottom of tablet to turn on or reverse operation to simulate tilting tablets
- Assemblies made to any length and configuration



SPECIFICATIONS:

DIMENSIONAL:

Tablet Width: .9" wide

Tablet Height: 2.0" high

Switch Spacing: Switches are mounted at 1.0" horizontal spacing.

Depth: 2.7" overall depth; 1.5" from mounting board to back of the assembly.

Mounting: Switch assemblies are mounted on a continuous aluminum rail. Mounting holes are provided in the rail to mount all assemblies at once.

MECHANICAL:

Travel: .125" travel from center position to either the on or off position when pressed at top or bottom edge of tablet

Key Leveling: Slotted shaft provided for screw adjust leveling

Life: 250,000 operations

LAMP:

Type: ANSI #1705 AS15.

Brightness: .5 mean spherical candle power. (MSCP)

Current: .080 amps.

Voltage: 14 volts maximum. 11.5 volts recommended.

Life: 2,000 hours at 14 volts. 22,000 hours at 11.5 volts.

Note: The ANSI #1705 lamp was selected to be operated at 11.5 volts. This lower voltage prohibits internal heat build-up and lengthens lamp life by 1100%.

ELECTRICAL:

Contact Type: Momentary contacts.

Contact Material: JMP5 contact material—Pure gold clad over MDA 220 base material.

Contact Resistance: 0.1 ohm maximum after 25,000 operations with no load.

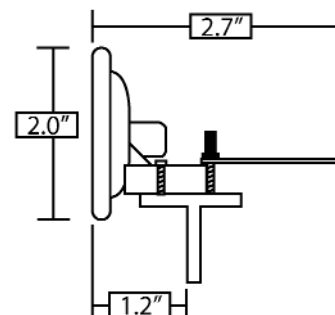
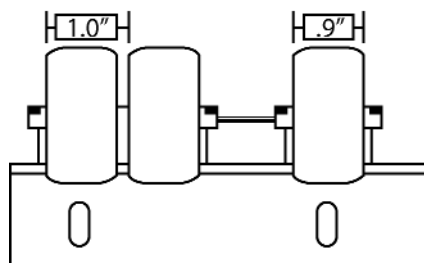
Contact Current: 1 amp maximum. (resistive)

Contact Voltage: 50 volts maximum.

Terminations: Individual solder pads provided for solder connections. Wiring harnesses are available.



LTS Rocker Tablets
Available in White and Off White

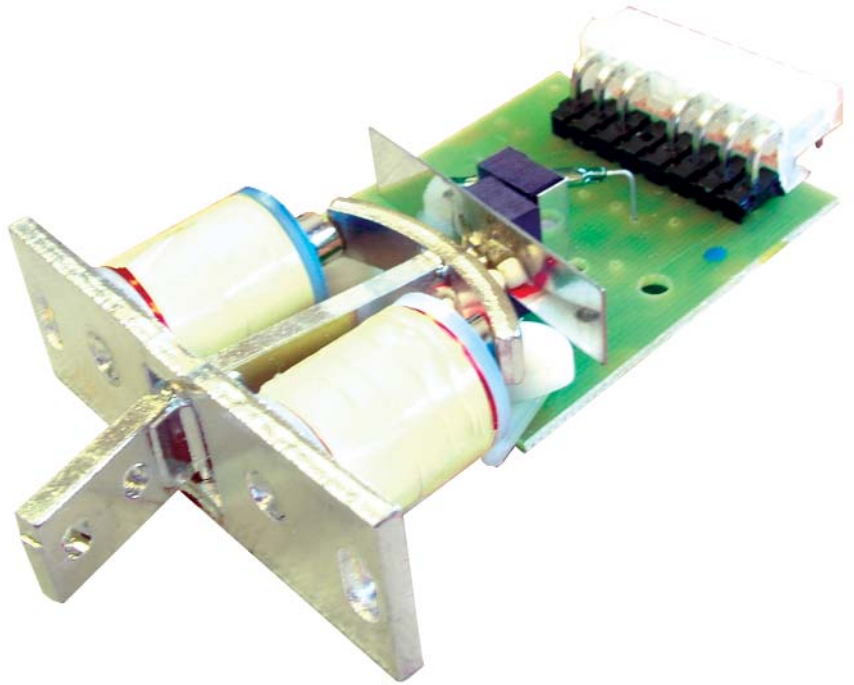


Overall length of assembly equals the number of switches and spaces x 1" + 1/2" for ends of rail outside of end switches

SAM Stop Action Magnet

FEATURES:

- Printed circuit board for mounting diodes, resistors & reed switches
- Positive or Negative Coil common. Specify when ordering.
- Patented cam adjustment for fast, permanent key leveling
- Accepts standard key tablets
- Unique, noise-free bearing design
- Magnetic toggling to eliminate sticking, while offering a smooth, quiet action
- Hermetically sealed reed switch, unaffected by dust or corrosion
- Available with one reed N.O. or N.C. or with two reeds. Specify when ordering
- Compact size and weight allowing tighter switch placement
- 28 ohm coils, which operate on 9.5 to 15 volts. Nonstandard coil specifications available
- Proven design since 1972 in over 500,000 units
- Specify either a Plug on Connector or solder directly to PC Board
- Available in 0,10,15, or 22 degree lever angles, Specify when ordering



SPECIFICATIONS:

DIMENSIONAL:

Height: 2.420"

Width: .830"

Depths: 2.450"

MOUNTING

Mounting Hole Dimension:

(Sized and designed for a #6 screw)

center to center: 2.080"

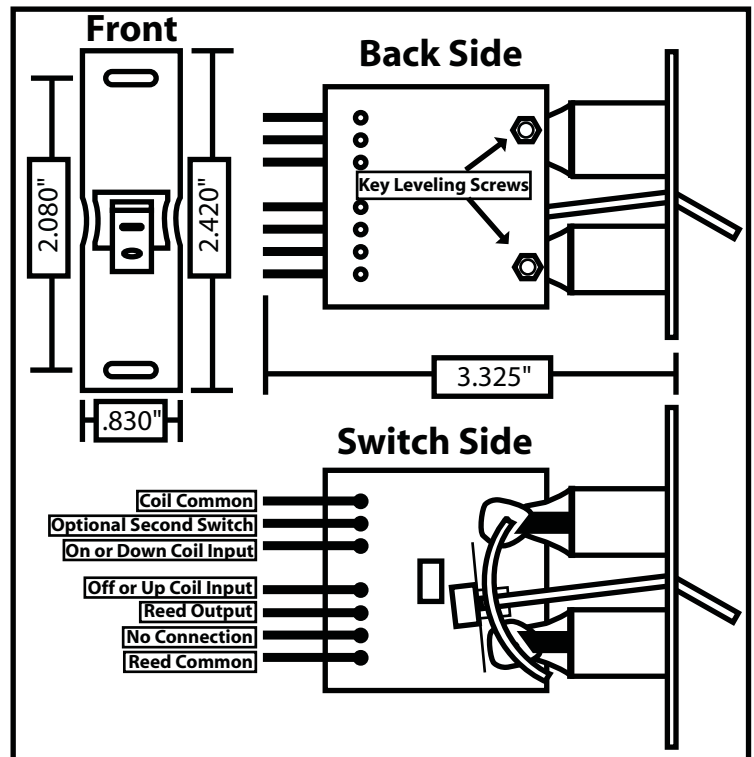
Key Leveling Adjustment: ¼' hex head

MECHANICAL:

Toggle Force: Minimum of 35 inch-grams measured at end of lever for standard toggle. Stronger toggle units available upon request.

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Plug-In Board Style



Lever Angle is computed when the switch is in the up (off) position

SAM Stop Action Magnet Continued

Lever Angle: Straight angle switches toggle from 5° above (Off) to 5° below (On) horizontal position. 10°, 15° & 22° angle switches are measured in the up (Off) position using horizontal (0°) as the reference point.

Toggle Arc: 9° angle from stop to stop when adjustment cams are in mid position.

Key Leveling Range: Cams will adjust each stop $\pm 2^\circ$ for tablet leveling.

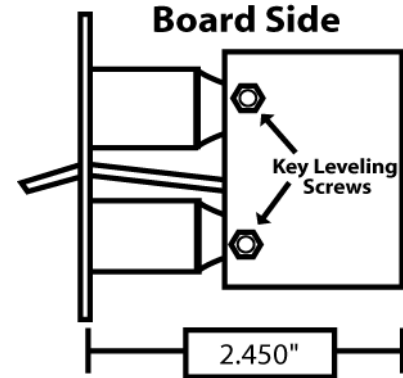
Life: 200,000 cycles minimum. Production quality control requires 500,000 cycle minimum in random sample testing.

ELECTRICAL:

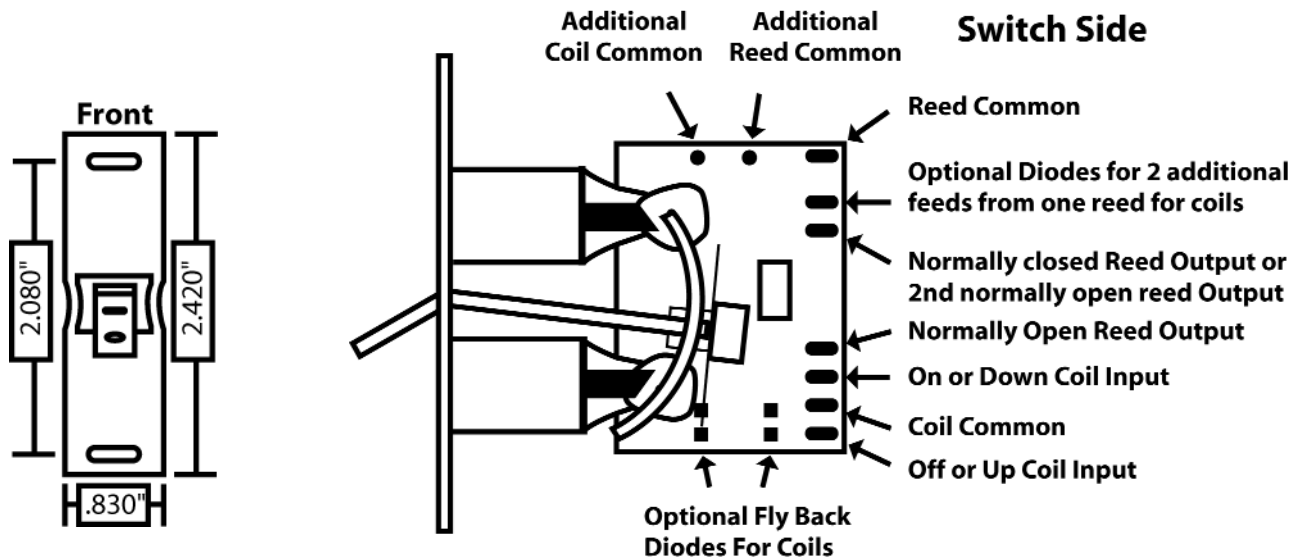
Operating Voltage: 14 volts D.C.; will operate from 9 volts to 15 volts continuous. Other coil voltages are available.

Reed Switch: 0.55 amp maximum switching current. 200 volts RMS minimum breakdown voltage; .100 ohms maximum initial contact resistance; .750 millisecond operating time including bounce. Reed switch must be protected from fly back voltage if directly operating an inductive load.

Circuit Board: (Either plug-in or solder pad type PC boards.) Provision to diode isolate two signals from one reed switch. Accepts two reeds maximum; both closing in down position or one closing in either position. Separate holes for bussing reed switch and coil commons. Hole to accept wire tie to strain relief wire loom.



DIRECT SOLDER STYLE SAM



SAM Stop Action Magnet Tablets

ROCKER TABLETS



Available in Stock Colors White and Off White

THEATER TABLETS



Available in Stock Colors White, Ivory, Black, and Red

NOTCHED CLASSICAL TABLETS



Available in Stock Colors White, Ivory, Black, and Red

ROUND CLASSICAL TABLETS



Available in Stock Colors White, Black, Red

Many other Colors and Tab Styles are available. Call for availability and lead times.

MSA Manual Stop Action

Same as the SAM Stop Action Magnet Only Without the Coils

FEATURES:

- Printed circuit board for mounting diodes, resistors & reed switches.
- Patented cam adjustment for fast, permanent key leveling.
- Accepts standard key tablets.
- Unique, noise-free bearing design.
- Magnetic toggling to eliminate sticking while offering a smooth, quiet action.
- Hermetically sealed reed switch unaffected by dust or corrosion.
- Available with one reed N/O or N/C or two reeds.
- Compact size and weight allowing tighter switch placement.
- Available with either pads for soldering connections on the P.C. board or a P.C. board a header connector.

SPECIFICATIONS:

DIMENSIONAL:

Height: 2.420"

Width: .830"

Depths: 2.450"

MOUNTING

Mounting Hole Dimension:

(Sized and designed for a #6 screw)

center to center: 2.080"

Key Leveling Adjustment: ¼' hex head

MECHANICAL:

Toggle Force: Minimum of 35 inches measured at end of lever for standard toggle. Stronger toggle units available upon request.

Lever Angle: Straight angle switches toggle from 5° above (Off)

to 5° below (On) horizontal position. 10°, 15° & 22° angle switches are measured in the up (Off) position using horizontal (0°) as the reference point. See first diagram below.

Toggle Angle: 9° angle from stop to stop when adjustment cams are in mid position.

Key Leveling Range: Cams will adjust to each stop $\pm 2^\circ$ for tablet leveling.

Life: 200,000 cycles minimum; Production quality control requires 500,000 cycle minimum in random sample testing.

ELECTRICAL:

Reed Switch: 22 to 32 ampere turns sensitivity; .55 amp maximum switching voltage; 250 volts RMS

minimum breakdown voltage; .100 ohms maximum initial contact resistance; .750 millisecond operating time including bounce. Reed switch must be protected from fly back voltage if directly operating an inductive load.

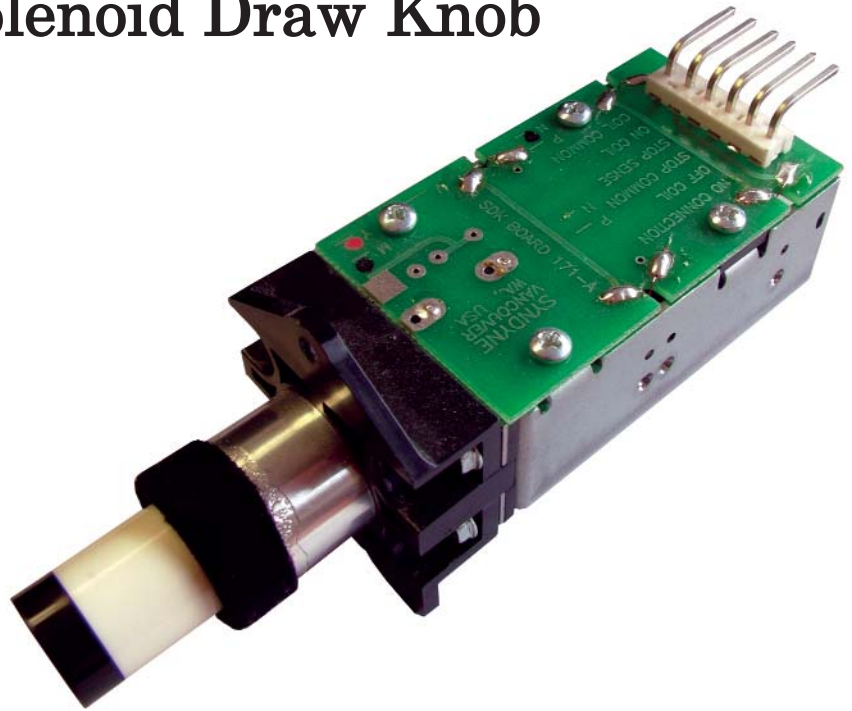
Circuit Board: Provisions to diode isolate two signals from one reed switch. Accepts two reeds maximum; both closing in either position. Separate holes for bussing reed switch and coil commons. Hole to accept wire tie to strain relief wire loom.

Terminals: Individual pads provided for solder connections. Optional plug-in connector is available.

SDK Solenoid Draw Knob

FEATURES:

- 12 volt or 24 volt operation. Specify when ordering
- Positive or negative coil common. Specify when ordering
- Positive or negative stop sense common
- Lightweight, compact design to facilitate tighter switch placement
- Easy to install
- Enclosed construction for dust protection
- Rugged, dependable
- Black, Red or Brown velveteen. Specify when ordering
- Traditional operation—Pull knob to turn on and push knob to turn off
- Elegant feel
- Models to fit on 1" or 3/4" thick jambs
- 3/4" or 3/8" travel length. Specify when ordering
- Black or white collars, stems, and heads. Specify when ordering



SPECIFICATIONS:

DIMENSIONAL:

Length: 3 5/8" from rear of jamb to end of connector

Mounting: Can be mounted in rows and columns as close as 1 3/4" by 1 3/4". Standard model mounts to 3/4" thick stop jamb. Optional 1" thick stop jamb available.

Weight: 6.24 ounces without head and stem.

MECHANICAL:

Travel: 3/4" travel between on and off positions is standard, 3/8" travel can be ordered as an option. Travel is centered in magnetic circuit to minimize bearing wear.

Detent: Travel feel provided by

permanent magnets.

Housing: Enclosed design to eliminate mounting screws from attaching to detent magnet and dust from collecting in workings of SDK.

Indicator: A clear back cover displays current position.

ELECTRICAL:

Reed switch: 0.55 amp maximum switching of resistive load. 200 volts rms minimum breakdown voltage. 0.100 ohms initial contact resistance. 0.750 millisecond operating time including contact bounce. Reed switch contact closes at 35% of travel from ON position, ensuring all stops turn off before any stops are added. Reed must be protected from fly back

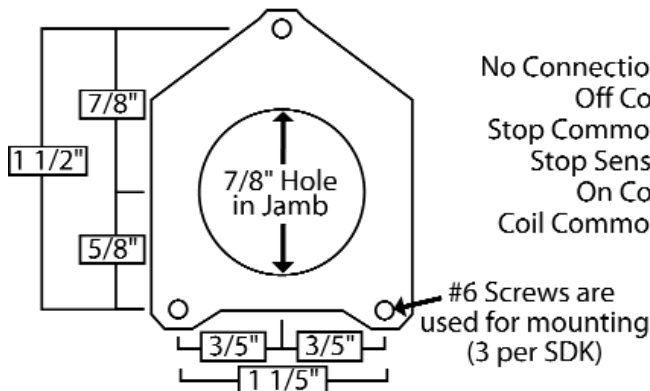
voltage if directly operating an inductive load.

Operating Voltage: Standard model has 28 ohm coils for use in 10-15VDC System. Other coil voltages available.

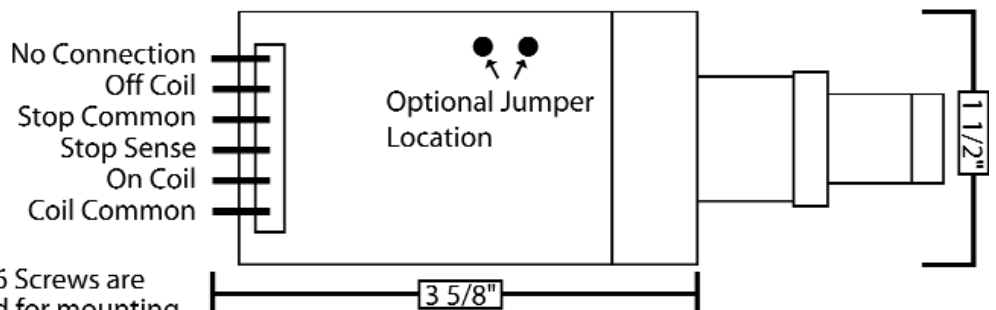
Circuits: Stop feed is isolated from coil common. Coil common can be ordered as positive or negative. Stop senses can have either positive or Negative feed. If both are same polarity, jumper can be added on board to simplify wiring Harness.

Connector: Supplied with .156" header on board and mating wiring connector. Can be ordered without header for soldering wires directly to board.

Mounting Information



Function of Terminals



SDK FELT COLORS



Red Felt

Black Felt

Brown Felt

SDK HEAD COLORS



White SDK Head

Ivory SDK Head

Black SDK Head

SDK STEM COLORS



White Stem

Black Stem

SDK COLLARS AND INDICATOR RINGS

Black Collar

White Collar



White Indicator Ring

Black Indicator Ring

Syndyne Corporation