

CONTROL CONCEPTS INC.

INSTALLATION MANUAL MODEL 1010



CONTROL
CONCEPTS

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By purchasing CONTROL CONCEPTS, INC.'s products, the purchaser agrees to the terms and conditions of this limited warranty.

WARNING: The Control Concepts, Inc. power controllers use power thyristors to switch voltage to the connected load. Line voltage must be assumed at the output terminals at all times, even when the control signal has been removed and the load voltage appears to be off. It has been mandated by the National Electrical Code and the Occupational Safety and Health Act of 1970 that a physical disconnect be opened ahead of all remotely actuated controls before performing any maintenance work on the controller or its connected load.

PROPRIETARY DATA

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DESCRIPTION

The model 1010 provides an optically isolated constant current gate drive to a pair of SCR's. The drive is operated by applying a voltage to the control inputs.

The model 1010 can be used to operate each SCR separately by applying current or voltage to the correct input.

SPECIFICATIONS

Power Input:

120 Vac, +10%, -15% 50/60 Hz

Command Signal:

10 Vdc, 15 mA

Input Impedance:

600 Ohms

Gate Current:

250 mA current source, 20 V compliance

Duty Cycle:

Continuous

Electrical Isolation

Gate to Gate: 1500 V Peak
Gate to Command Signal: 1500 V Peak

Temperature

Operating: +35°C to +55°C
Storage: -40°C to +60°C

INSTALLATION

The circuit may be mounted in any position and should be located in an environment that is relatively free of dust and dirt and that does not exceed 55°C.

Mount the plastic "SnapTrak" on any flat surface by placing screws through the slots. Install the circuit into the "SnapTrak" making certain that the circuit does not touch the mounting screws and that the circuit is firmly in place.

RECOMMENDED TIGHTENING TORQUE
FOR SCREW DOWN TERMINALS:



WIRE SIZE (AWG)	TORQUE
12 TO 22GA	7.0 IN-LBS

MODEL No. IDENTIFICATION

MODEL NUMBER: 1010 - FC

CAUTION ADVISED

Portions of the circuit operate at the SCR potential, therefore, precautions should be taken to prevent accidental contact with the circuit.

MANUFACTURED BY



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INSTALLATION DRAWINGS

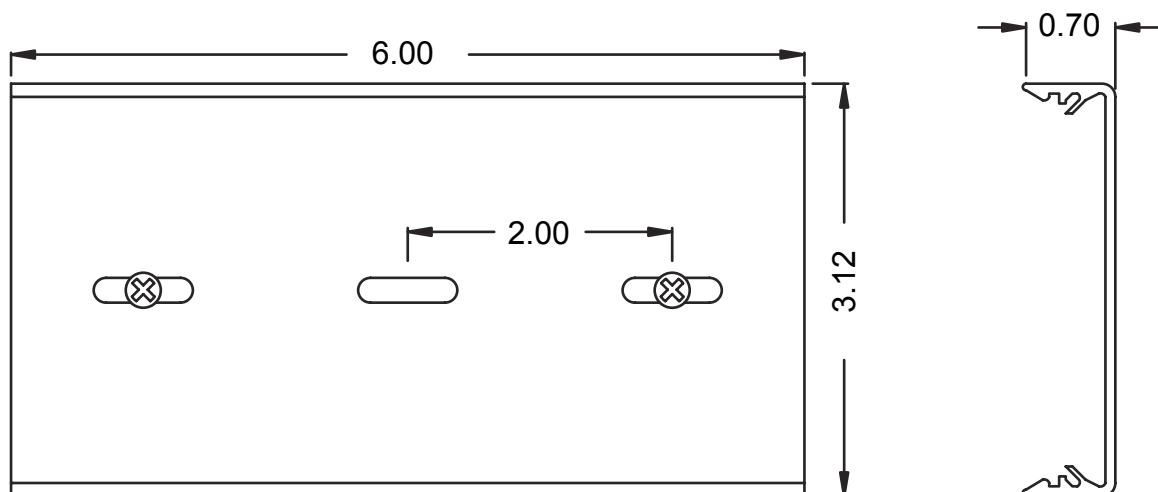


Figure 1. Install SnapTrak in desired location.

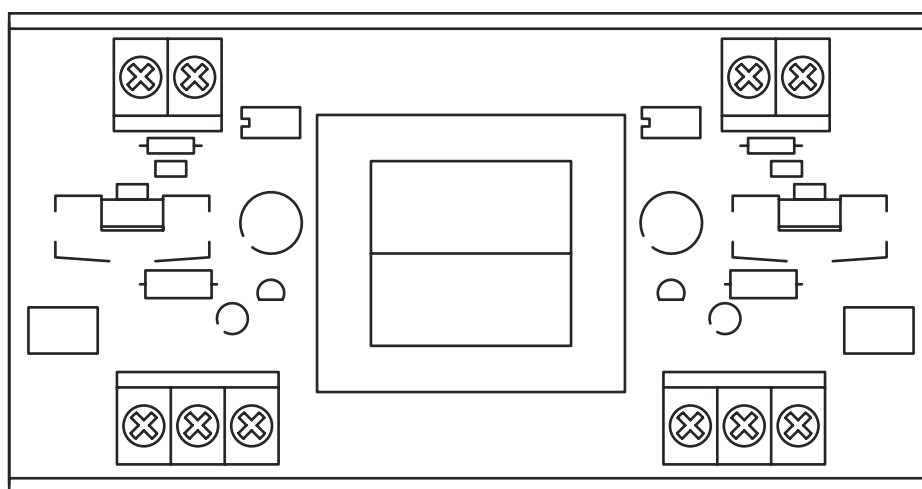
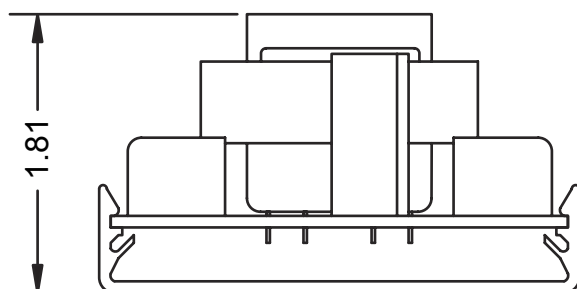


Figure 2. 1010 Circuit installed in SnapTrak.

ELECTRICAL CONNECTIONS

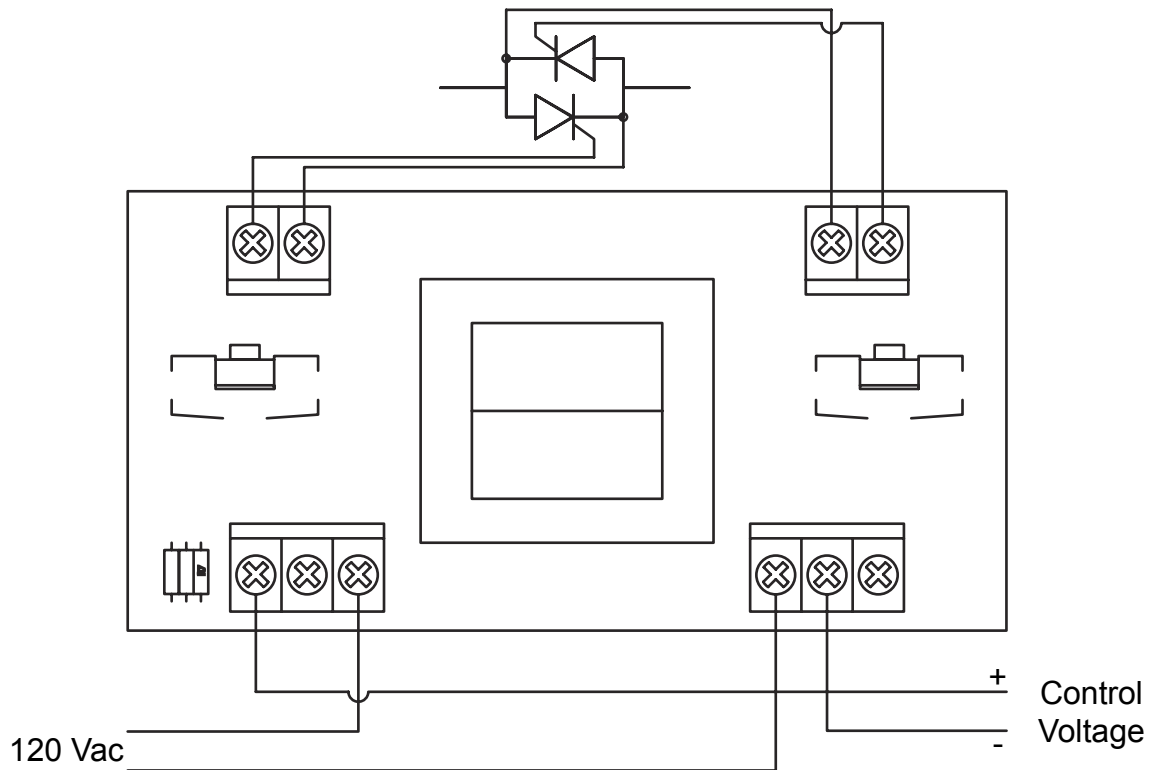


Figure 3. Application of 10 Vdc between +C1 & -C2 causes both gate drives to be ON.

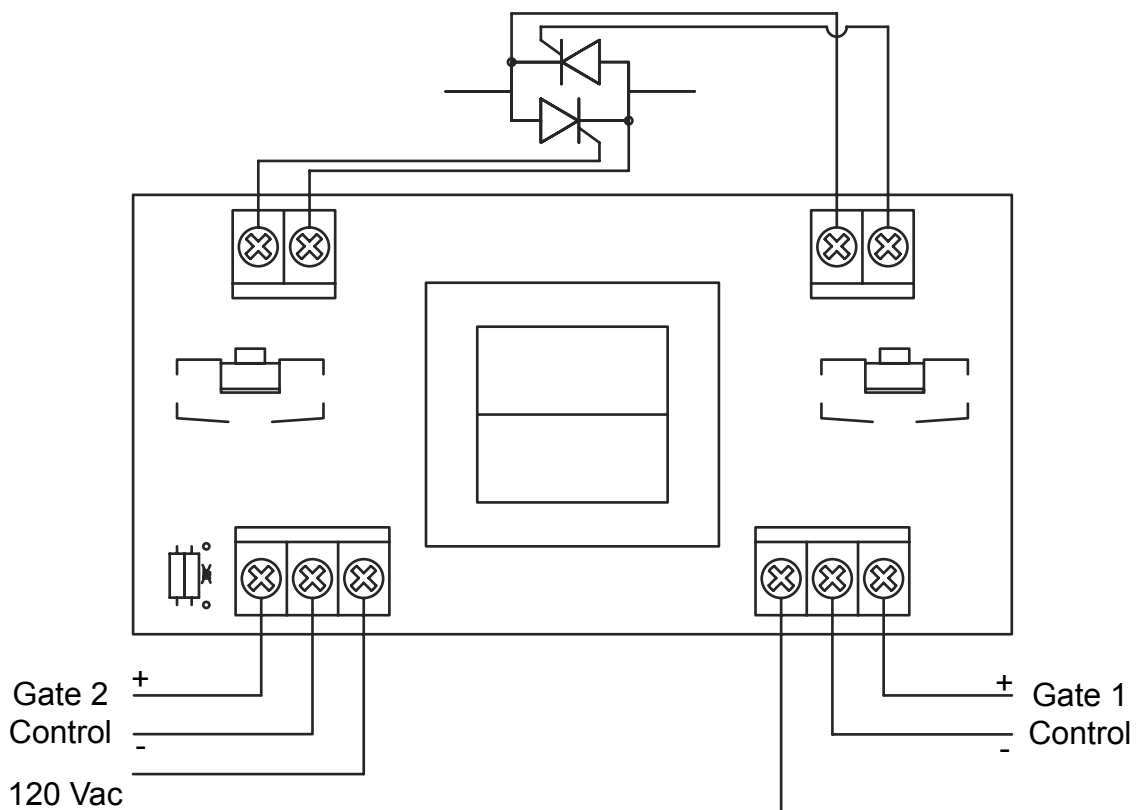


Figure 4. Remove R7 and apply 10 Vdc between +/- C2 or between +/- C1 for individual Gate drive control.