



## TECHNICAL BULLETIN

### 1-800-237-0022

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Part No. - 56-30051-001 - DUAL SET POINT CONTROLLER

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#### CONCEPT:

The set point controller was designed to activate either a light or relay upon demand by the meter at specific set points. This controller can operate up to two different set points defined in the V600 Meter.

#### APPLICATION:

This controller can be used to operate many types of devices; lights and relays are most commonly used. The Set Point Controller can also operate other relays used to control larger electrical loads. An example of this would be the automatic control of a hydraulic system.

#### SPECIFICATIONS:

Relay Contact Specifications:     13A, 120 Vac, Resistive.  
  10A, 30 Vdc, Resistive.

#### INSTALLATION:

##### Step 1 - MOUNTING CONTROLLER

Find a suitable location in the cab or weather proof area and install the Set Point Controller using the supplied fasteners. **Note:** The Set Point Controller is **not** sealed from weather conditions, therefore not weather resistant.

##### Step 2 - WIRING CONTROLLER - STANDARD POWER SOURCE

Determine which kind of item the Set Point Controller will activate. The Set Point Controller will be able to drive a light or another device with a current draw of up to 5 amps if both relays are used or 10 amps if only one relay is used. **Note:** If more than 5 amps are required on both relays then proceed to Step 4, Wiring Controller - Optional Power Source.



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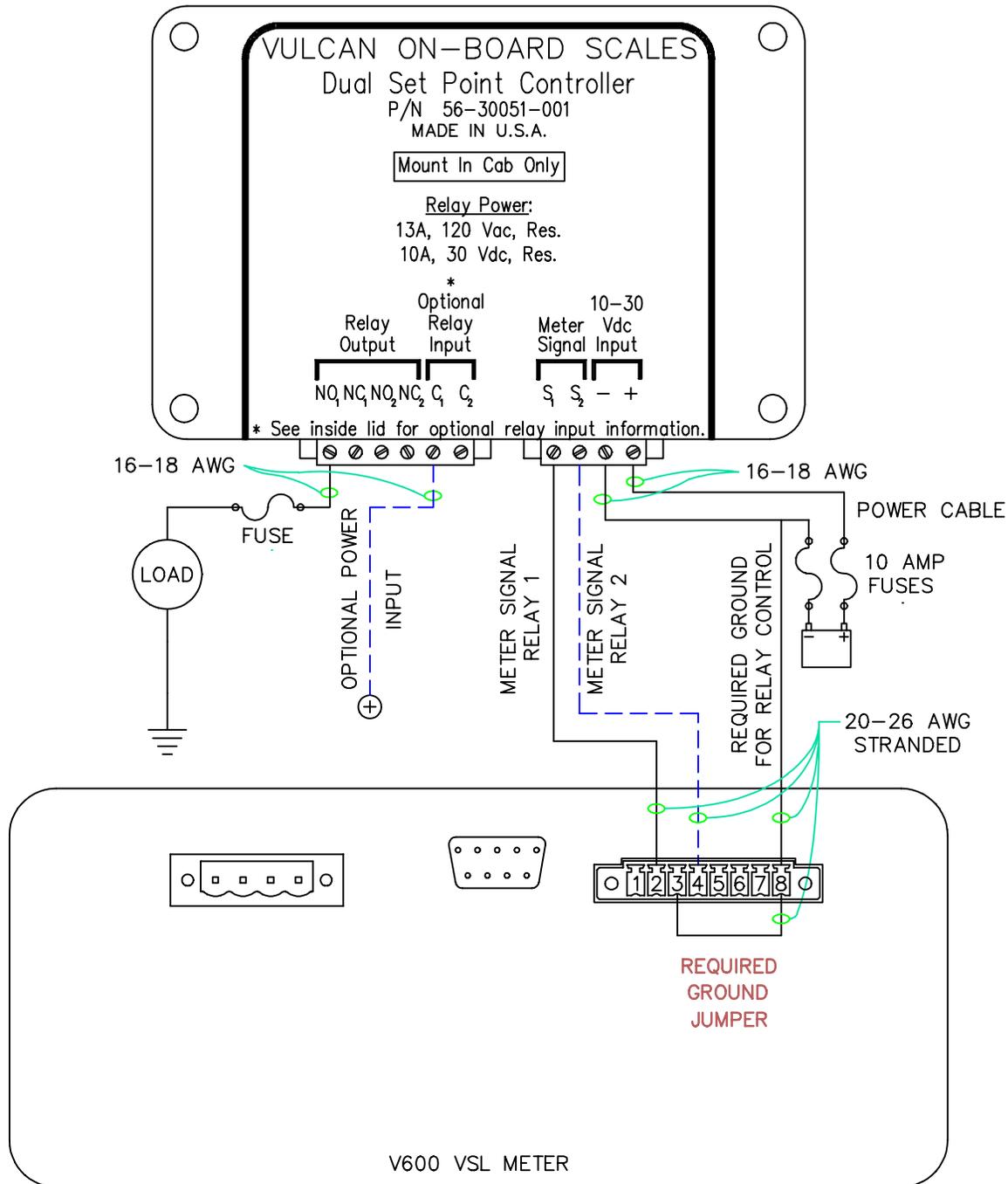


Figure 138-A Set Point Connection Diagram



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#### Wiring Power Cable:

Route and secure the power cable, (16 - 18 gauge wire not supplied by Stress-Tek, Inc.), so it does not obstruct other in-cab equipment, strain relieve the power cable, and **cut** to length. Connect both the positive and negative power wires to the four position connector as in figure 138-A. **Do not** plug the connector into the Set Point Controller at this time.

Be sure to install fuse holders with 10 amp fuses on both the positive and negative power leads. Disassemble the positive fuse holder, (red wire). Apply grease to the positive connector at the battery post to inhibit corrosion. Connect fused power leads directly to battery posts for best operation. **Note:** If not connecting directly to the battery, be sure to use a location that has the proper voltage available at all times, and never more than 30 Vdc. **Do not** connect the power cable to a power source activated by the key switch, power **should** be supplied at all times.

#### Wiring Meter Signal Cable:

Route and secure the meter signal cable, (20 - 26 gauge wire, not supplied by Stress-Tek, Inc.), so it does not obstruct other in-cab equipment, strain relieve the power cable, and **cut** to length. Connect both signal wires, (S1 & S2) to the four position connector as in figure 138-A. **Do not** plug the terminal block into the Set Point Controller at this time.

#### Connecting A Device To The Set Point Controller:

Unplug the six position green connector from the Set Point Controller. Determine whether the device should to be connected to a normally open (not activated at startup) or normally closed (activated at startup) contact. The power is factory wired to the relay contacts. **Note:** If AC power or any other power demands are needed, then proceed to Step 4, Wiring Controller - Optional Power Source.

Install the device in the desired location. Connect the ground wire to a suitable chassis ground. Connect the positive power wire to the **NO1**, (normally open), position on the six terminal plug to have the device activate once the controller is activated by the meter. **Note:** If the device is to turn off when the controller is activated by the meter, the positive power wire must be connected to the **NC1**, (normally closed) position on the six terminal plug.

Follow the above procedure to connect a second device if needing two notification devices.



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#### Step 3 - V600 METER CONNECTIONS

Connect the meter signal cable and the ground wires to the eight position connector on the back of the V600 Meter as in figure 138-A. **Note:** The ground wire and the ground jumper wire (20 - 26 gauge wire, not supplied by Stress-Tek, Inc.), pin 3 to pin 8, **must** be installed to properly activate the Set Point Controller.

#### Step 4 - WIRING CONTROLLER - OPTIONAL POWER SOURCE

In some situations it may be desirable to switch to a different power source other than the battery; ie. AC power. This can be done by cutting the internal jumpers in the controller and wiring the new power source to the "common" relay input terminals.

##### Wiring Set Point Controller Power Cable:

Route and secure the power cable, (16 - 18 gauge wire not supplied by Stress-Tek, Inc.), so it does not obstruct other in-cab equipment, strain relieve the power cable, and **cut** to length. Connect both the positive and negative power wires to the four position connector as in figure 138-A. **Do not** plug the connector into the Set Point Controller at this time.

##### Wiring Device Power Cable:

Internally, C1 and C2 are factory wired to + Vdc input power. C1 and C2 are the common switch contacts for both relay outputs. If an optional power source is needed, **CUT JUMPER 1 FOR RELAY 1 and/or JUMPER 2 FOR RELAY 2**, (jumpers are located on the circuit board next to the relays). The relays can now use the optional input power contacts to the device's load. Follow relay specifications for contact rating. **Note:** Be sure to fuse each relay output separate when using an optional power source.

**Wiring Meter Signal Cable:** (Same As Wiring Controller - Standard Power Source).

**Connecting A Device To The Set Point Controller:** (Same As Wiring Controller - Standard Power Source).