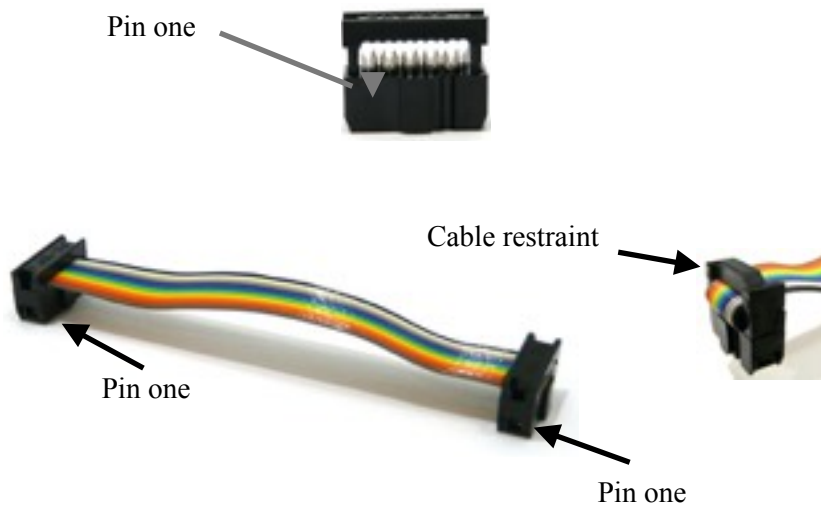


Ribbon Cable connectors:

1. Cut ribbon cable to desired length. If the optional cable restraint is used approx. 1/2" of cable is required per connector.
2. Gently separate connector parts to make room for inserting ribbon cable. Connector parts may have separated during shipping, but are easily re-assembled (direction does not matter). Cable restraint is separate.
3. Insert ribbon cable lining up the brown wire with the "pin one" indicator arrow.
4. Using a vice or crimp tool press the connector parts together.

NOTE: We recommend that both "pin one" indicator arrows face the same direction. This ensures ease in connecting products and correct operation.

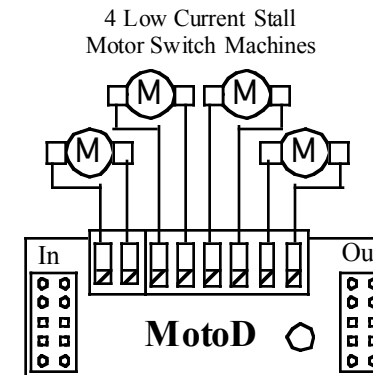


TEAM DIGITAL

Improving the world of DCC

MotoD Satellite Stall Motor Driver

- > Drives 4 stall Tortoise™ switch machines
- > Connects to the SRC16 family
- > Adjustable speed via SRC16 & SRC162 only not the SRC162e



Compatibility:

The MotoD can not drive the SwitchMaster, Scale Shops, Switch Tender, Hoffmann, Tillig or Fulgurex motors. May drive the Cobalt but not recommended.

Note:

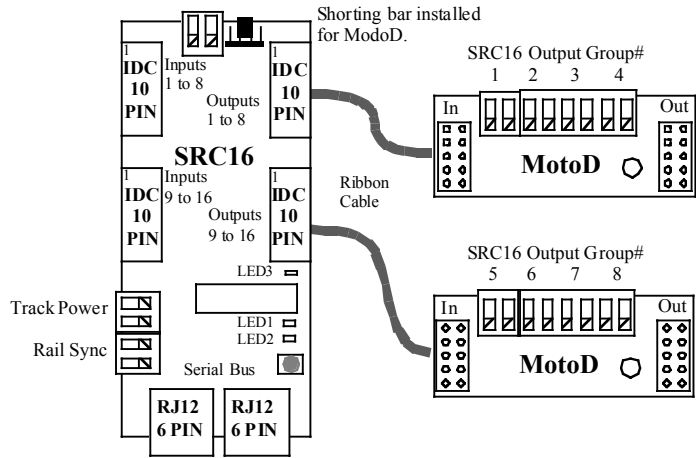
Slow motion does not necessarily mean stall. A stall motor means it can stall (stop moving with power applied) and not draw a lot of current.

WARNING: This product contains a chemical known to the state of California to cause cancer, birth defects or other reproductive harm.

Operation:

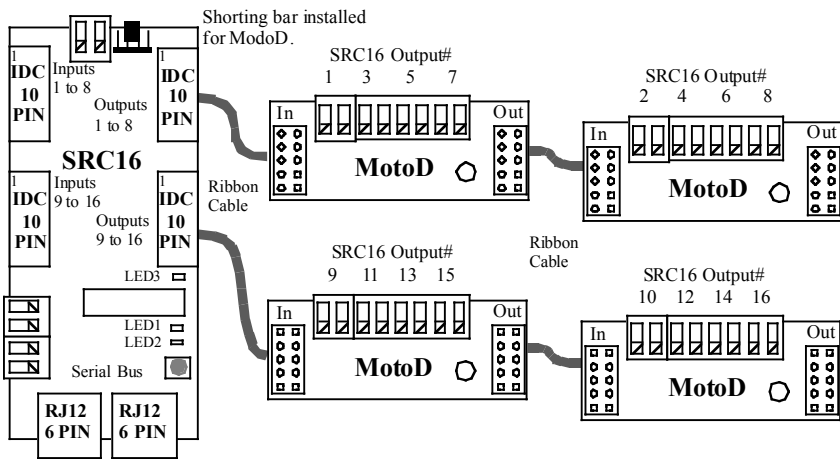
The MotoD is capable of driving four Tortoise™ motors for switch machine applications. A Team Digital SRC16(2)(e) is required to control and provide voltage to the MotoD. Up to four MotoDs can be connected to a single SRC16.

Each output of the MotoD requires a SRC16 output for control. If the SRC16 outputs are configured as pairs or groups (one output for throw and the other for close with the same address) then there is an equivalent of eight (8) SRC16 output addresses. See figure 1.



MotoD connections assigned by GROUP#
Figure 1

If more than two MotoDs are used with a SRC16, then each of the 16 SRC16 outputs must be assigned an address. See figure 2.



MotoD connections assigned by OUTPUT#
Figure 2

Using the MotoD:

The MotoD is connected to the SRC16 by ribbon cable. You can assemble your own connectors and cable using the Team Digital Cable Connector Kit or by purchasing the individual pieces. The MotoD is designed such that two of them can be daisy chained together to utilize the maximum number of SRC16 outputs. See figure 2.

The MotoD input and output connections must be observed as shown in figure 2. The ribbon cable connector must be plugged in to the SRC16 and MotoD so that pin 1 is lined up correctly as shown in figure 3. Otherwise damage to the MotoD and or SRC16 may occur.

The MotoD requires a higher voltage to operate stall motors than the normal output of the SRC16. For this reason the shorting bar on the SRC16 must be moved to the position shown in figure 3 or 4. When the shorting bar is in the position shown in figure 3, the MotoD outputs are about 11 to 13 volts depending on the voltage supplying the SRC16.

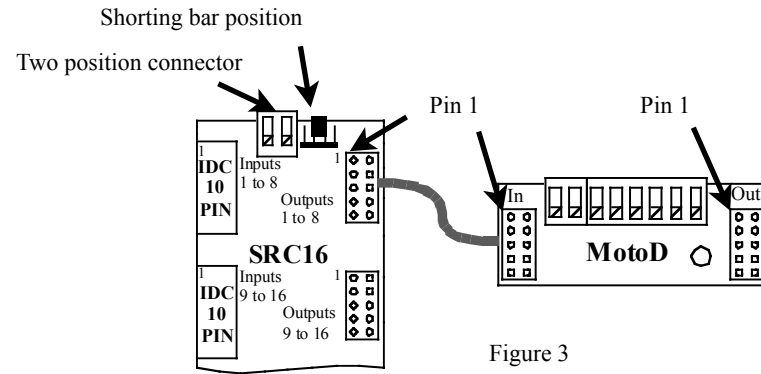


Figure 3

Adjusting motor speed:

Note: This option is only available on the SRC16/162 that have the 2 position connector beside the shorting bar. Not available on the SRC162e.

The speed of the motors can be changed by connecting a resistor to the terminals and moving the shorting bar to the position shown in figure 4. The value of the resistor will determine the speed of the motors connected to the MotoDs. The number of motors connected to the MotoDs will also determine the speed of the motors for any given resistor value. To get the desired speed, experimenting with the resistor value will most likely be required. This should be done after the all the motors have been connected. A typical resistor value to start with might be 15 ohms 1/2 watt.

Warning: Any time the shorting bar is moved or the resistor is connected or removed from the terminal connector power to the SRC16 should be off.

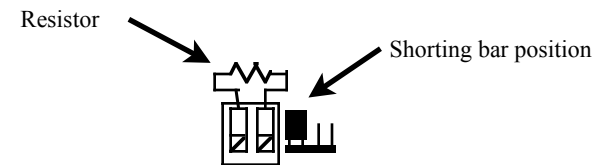


Figure 4