

# MSC38A Series - Eight Channel Master Speed Control

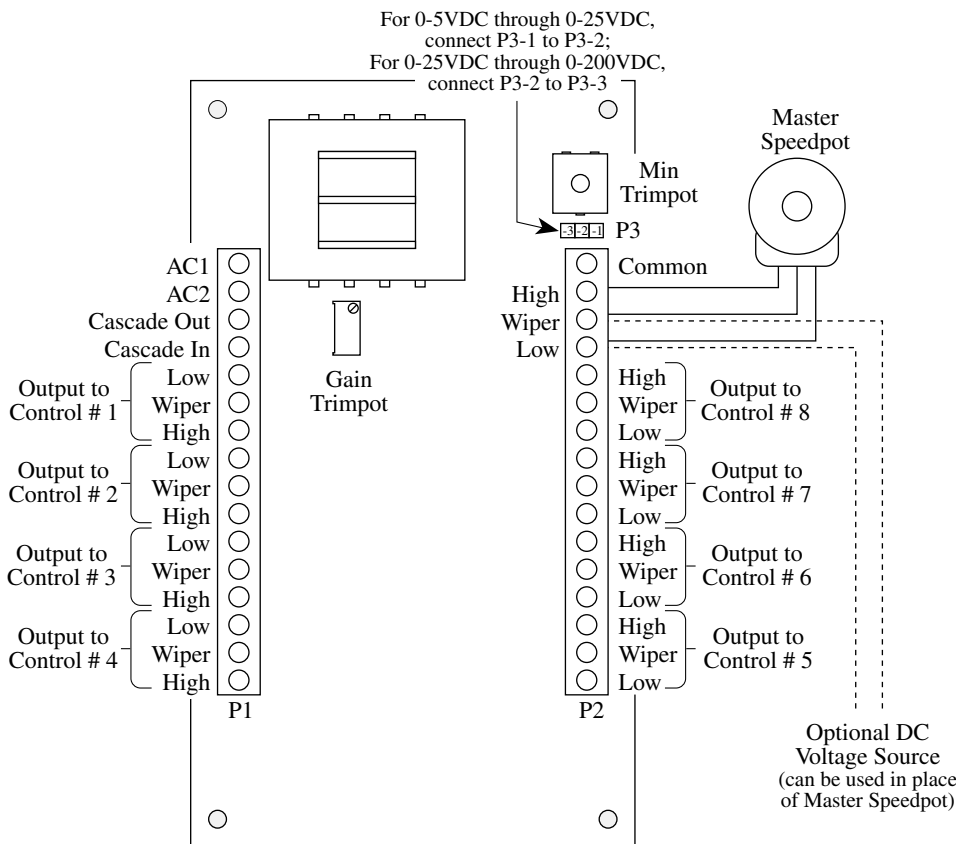
This is a master speed control unit capable of operating multiple speed controls from a single master potentiometer or any grounded or ungrounded DC voltage or current\* signal, field selectable range of 0-5 through 0-25VDC or 0-25 through 0-200VDC.

## STANDARD FEATURES

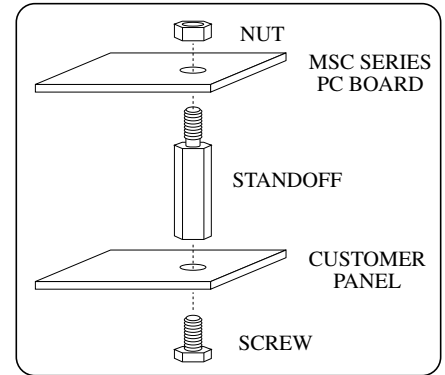
- ⇒ 120 VAC ±10%, 50/60 Hertz line source.
- ⇒ Eight (3-wire) output channels - each optically isolated.
- ⇒ MSC38A Series may be cascaded to operate more than eight drives.
- ⇒ Master command input circuit electrically isolated from AC.
- ⇒ Rapid response time.
- ⇒ European type terminal connectors permit 14-24 AWG sizes.
- ⇒ Supply voltage of driven unit is 5-25VDC maximum.
- ⇒ 5KΩ speed potentiometer with leads, dial, and knob for remote mounting included.
- ⇒ Interfaces with Dart 125, 250, or 500 Series controls or most other manufacturers drives.
- ⇒ Outputs are controlled via a 5KΩ Master Pot, a field selectable DC voltage signal (0-5 through 0-25VDC or 0-25 through 0-200VDC), or a 4-20mA current source\*.
- ⇒ Each output is capable of driving input impedances as low as 500Ω.

\* Consult factory for "current source" applications.

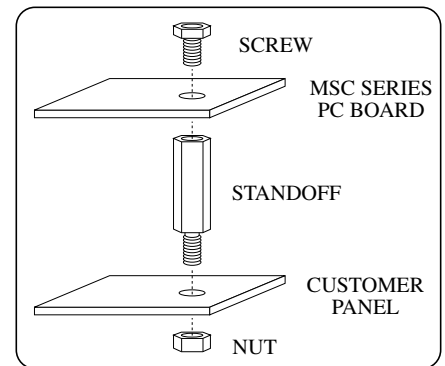
## MSC38A HOOK-UP FOR DIRECT OPERATION



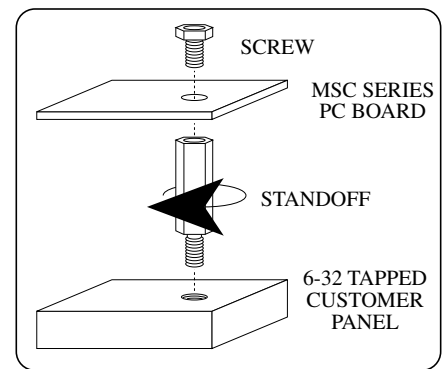
## MOUNTING CONFIGURATIONS



Conventional mounting (female)



Conventional mounting (male)

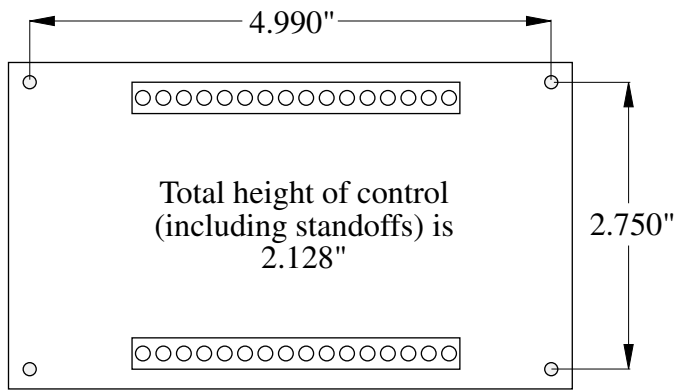


For mounting on customer panel with inaccessible backside, panel holes can be drilled and tapped to 6-32 and the standoffs screwed directly into the panel.

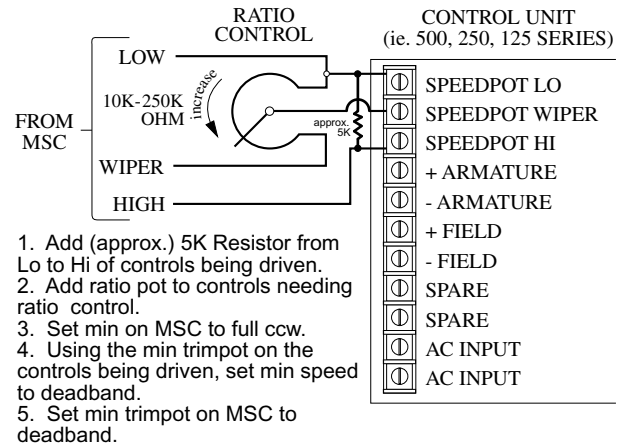
## CONTROL DIMENSIONS

	English	Metric
Width	3.129"	7.948 cm.
Height	2.128"	5.405 cm.
Length	5.403"	13.724 cm.
Weight	7.36 oz.	208.3 gm.

## MOUNTING DIMENSIONS



## INPUT HOOK-UP FOR RATIO OPERATION



## OPERATING CONDITIONS

Temperature .....	-10° to +45° C. (+15° to 113° F.)
AC Input Voltage .....	120VAC ±10% Rated Line Voltage
Input Frequency .....	50/60 Hertz
Output Voltage .....	0-5 through 0-25VDC each channel
Output Current .....	10 mA per channel

## MSC38A SET-UP PROCEDURE

1. Once the hook-up has been completed, select the proper voltage range on P3. Use lower speed range (connect P3-1 to P3-2) if using the Master Speedpot.
2. Preset Gain and Min trimpots on the MSC38A to full CCW (counter clockwise). Set Master Speedpot fully CCW or DC voltage signal to 0 VDC.
3. Preset Max and Min trimpots on all speed controls fully CCW.
4. Apply power to MSC38A and controllers.
5. Set Master Speedpot fully CW or DC voltage signal to maximum setting.
6. Increase Gain Trimpot setting until no further increase in speed controller output occurs.
7. Adjust Max trimpot on each speed control to the desired output setting.
8. Set Master Speedpot fully CCW or DC voltage signal back to 0 VDC.
9. Adjust Min trimpot of MSC38A CW until an output from the speed control occurs, then back off (CCW) until 0 volts is achieved on speed controller output.
- 10 Adjust Min trimpot of each speed control to the desired minimum speed setting if something other than zero volts is desired.

## CASCADE HOOK-UP FOR BASIC CONTROLS

For more than 8 outputs using a single Master Speedpot, controls can be cascaded together via the cascade and common terminals as shown here.

