

## MTS Speed Controller and Transformer for small layouts.

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Improved train speed control can be accomplished on small layouts by using an inexpensive motor speed controller along with a transformer and adapter plug. This controller works with DC operation on round, oval or point to point layouts and gives smoother, fine control of speed over using any of the older legacy controllers from Tyco<sup>(R)</sup>, Life-Like<sup>(R)</sup>, Bachmann<sup>(R)</sup> or Model Power<sup>(R)</sup>.

The SPEED CONTROLLER shown here has



A dial knob setting for adjusting the speed from 0 -100 %

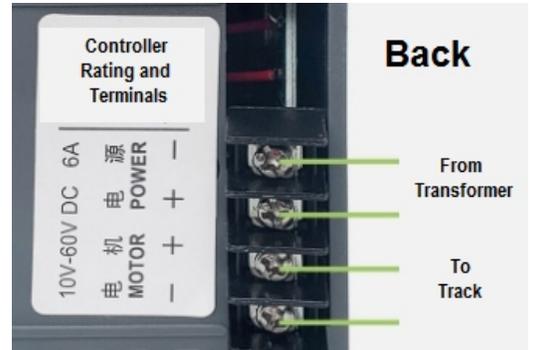
A red LED to indicate power to the controller.

A 3 way switch for setting the direction of current flow to the track. Forward (Up =.) Reverse (Down --) OFF (middle O).

The controller is rated for input voltage from a (110-120 V) wall transformer with voltage output of from 10-60 Volts and up to 6 amps of current flow.

Power input and output terminals are located on the back of the unit indicating how to hookup the wiring from the transformer

and wiring to the track. For HO and N scale operation a 12 Volt 2 amp transformer is adequate for most small layouts.



THE TRANSFORMER can vary depending on the voltage and amperage needed for running the trains. For small layouts

a 12 volt DC wall transformer rated for AC house voltage of 110 volts with 12 volts of Direct Voltage out and up to 2 amps (2000 milliamps) of current is adequate for locomotive motors rated for 12 volts. The transformer must have the center pin Positive on the inside of the cable's terminal plug.

Higher rated transformers can be used but **do not use** transformers that have AC output or transformers with a center Negative pin.



THE ADAPTER plug is needed to allow the transformer to connect to the Speed Controller's power input. This adapter is plugged onto the 5.5mm 2.1 mm terminal plug on the transformer cable. The polarity on the adapter plug is matched with those on the Power terminals on the back of the Controller and connected by the wires.

This SPEED CONTROLLER/TRANSFORMER setup is ideal for small layouts including the modeltrainsounds Auto-reversing system point to point layout and Stop and GO oval layout. Other examples include simple oval or circular track, shelf, ceiling and Christmas tree layouts etc. The setup unit is not recommended for large and complex layouts where DCC, AC or fixed DC output is needed. The controller can be housed in a control box.

**For convenience all components including the Speed Controller, Transformer (12VDC, 2A), Adapter Plug and Connection wires are available as package at the website. Project 25.**