



Short Control with 1156 Lamps: A cost efficient way to handle shorts in a DCC Model Railroad Layout

by By Vic Bitleris

The current draw on 1156 lamps is pretty standard fare for most of our applications, about 2 amps. These are good for 4 to 5 amp DCC systems. The lamps cost about \$5.00 at auto supply stores, but I have seen them for as low as \$.50, depending on where you buy them. If you have a larger DCC System, for example 8 amps, a different lamp or solution may be required.



1156
Taillight bulb

Here is a Small Box that I use

Home Depot Part no.
B108R-UPC \$1.20
and Cover Part no.
HB1BL (sku 397627)
\$.62



DPDT
Switch



SPDT
Switch



PREPARE THE BOX AND COVER

You will need to drill a hole in the box bottom to accommodate a tight fit for the 1156 lamp. You will also need to add a slight notch for the ribs on the lamp.

At the end of this document is a URL for more technical information on what kind of lamp you would use, or if you would be better off with a commercial circuit breaker type solution.

You may use either a DPDT or SPDT Switch. I use DPDT, but SPDT are ok.

Radio Shack 275-652 for \$4.49

Radio Shack 275-651 for \$3.49





Here is what my installed box looks like



You may use 18 or 16 gauge stranded wire for the connections to the lamp and switch, as you prefer. I strongly recommend that you get the iron really hot. I used a 25 watt ordinary Weller. Once the iron is hot and solder flows easily, clean the side of the lamp base with emery paper or a file. Flux and solder quickly. Once done, do the contact on the bottom, once and really fast. Do not keep the iron there, the lamp will come apart.

There are many of these on the market and the most expensive ones are not necessarily the best. If you can discuss with an owner and find out about any issues.

Joe Fugate has a very nice PDF called:

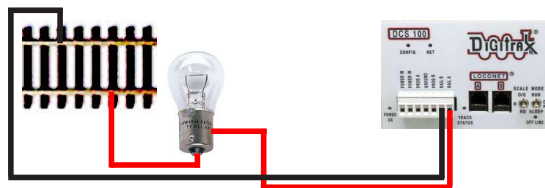
DCC-The Good, The Bad, and The Ugly

I suggest looking at the whole thing, but if you like the idea of 1156 lamps for short control, look at page 41 and page 47 for some very good detailed information.

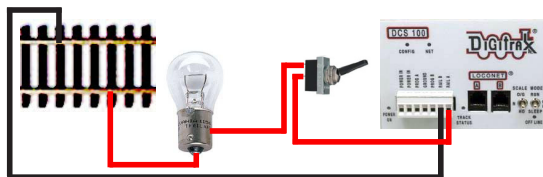
http://model-railroad-hobbyist.com/mrht_dcc-good-bad-ugly

And the pdf file itself

http://model-railroad-hobbyist.com/mrht_dcc-good-bad-ugly



The wiring is very simple, just put the 1156 in series with a DCC Block.



Add a switch, up for run, down for off.