DIY DCC Accessory Decoder, Light

Based on the earlier design, I created a new, smaller PCB. The power selection is removed, because they were generally only used for relays. An option is added to use common ground, instead of common V+. The firmware is still the same. So check the 'big brother' manual for all options available.



The 7805 is a smaller version and is only used for powering the microprocessor. Four (optional) soldering jumpers are added for software options.

Extra soldering jumpers are added to select GND and +V to the driver. We can use an ULN2803 with a common V+ and switching to ground... Or use an alternative like the TD62783 with common ground and switching to V+.

In that case, pin 9 and pin 10 of the driver IC is reversed, hence the extra jumpers.

The front of the PCB is straightforward to solder all components.

The jumpers are located at the bottom of the board.









To power the ULN2803, the jumpers on the bottom (marked GND) need to be connected (soldered).



To power a TD62783, the jumpers within the IC area (marked +V) need to be connected (soldered).

NOTE: DO NOT FORGET TO SOLDER THE CORRECT JUMPERS OR THE CIRCUIT WILL NOT WORK.. OR BURST IN FLAMES..!