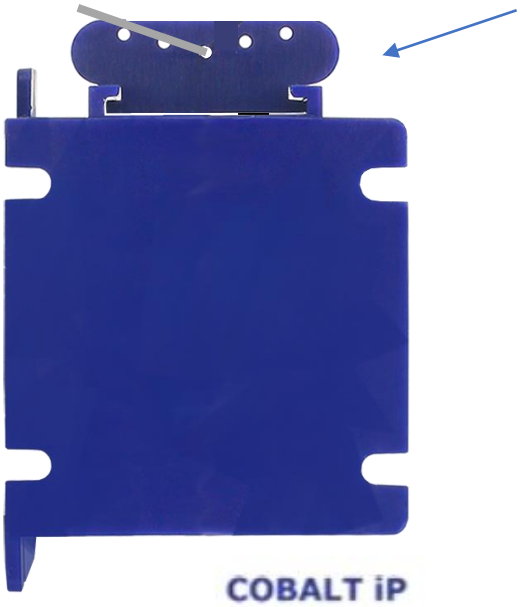
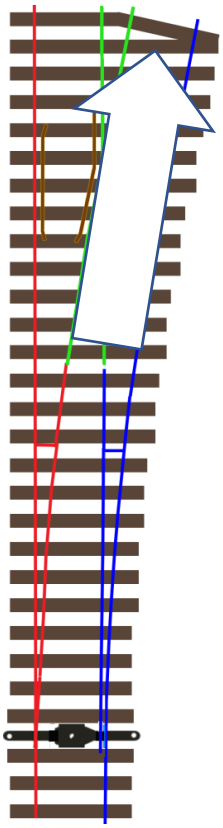
Cobalt Point Motor Switch Logic

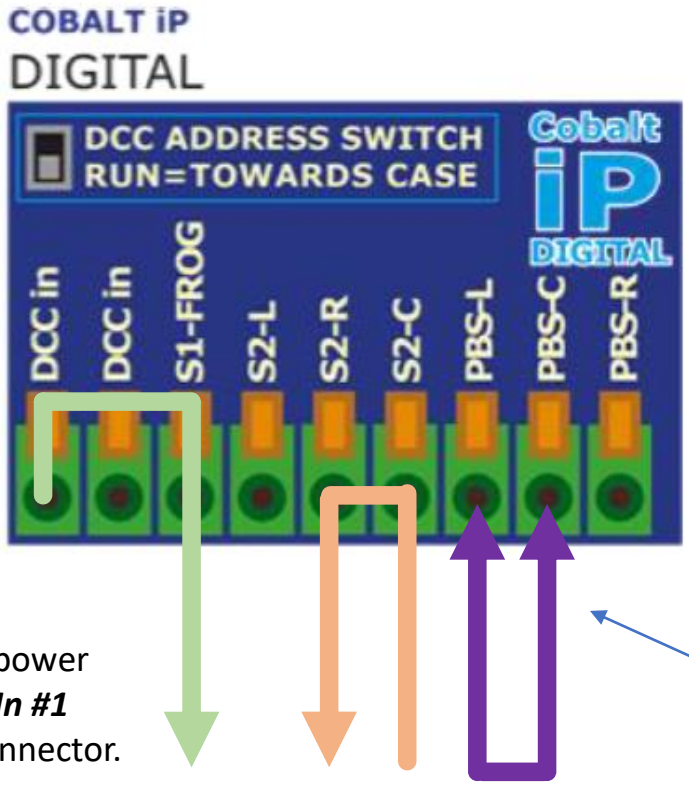
Cobalt iP Digital



Scenario:

- Looking down the spigot is to the right.
- The throw arm to is to the left.
- The motor is fixed under the baseboard in this orientation…
- ..so… the turnout is switched to right.





S1-Frog takes power from the ***DCC In #1*** i.e. the first connector.

S2-C connects to S2-R

Bridging PBS-C to PBS-L switches the turnout to the right (PBS-C to PBS-R switches it to left and PBS-L to PBS-R switches the motor left/right alternately). Reversing the motor (using address 197) will reverse this pushbutton rule.

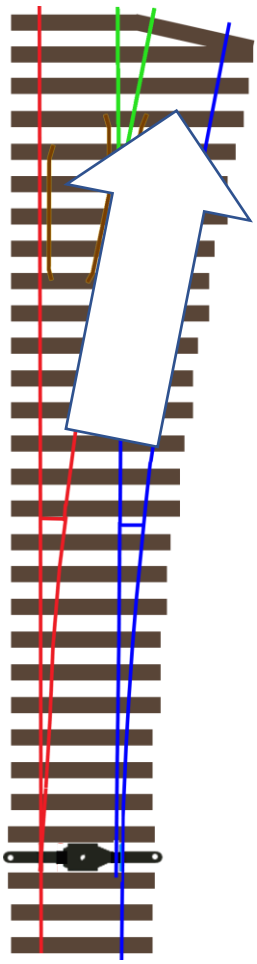
Cobalt Point Motor Switch Logic

Cobalt iP (Analog)/Ω)

Scenario:

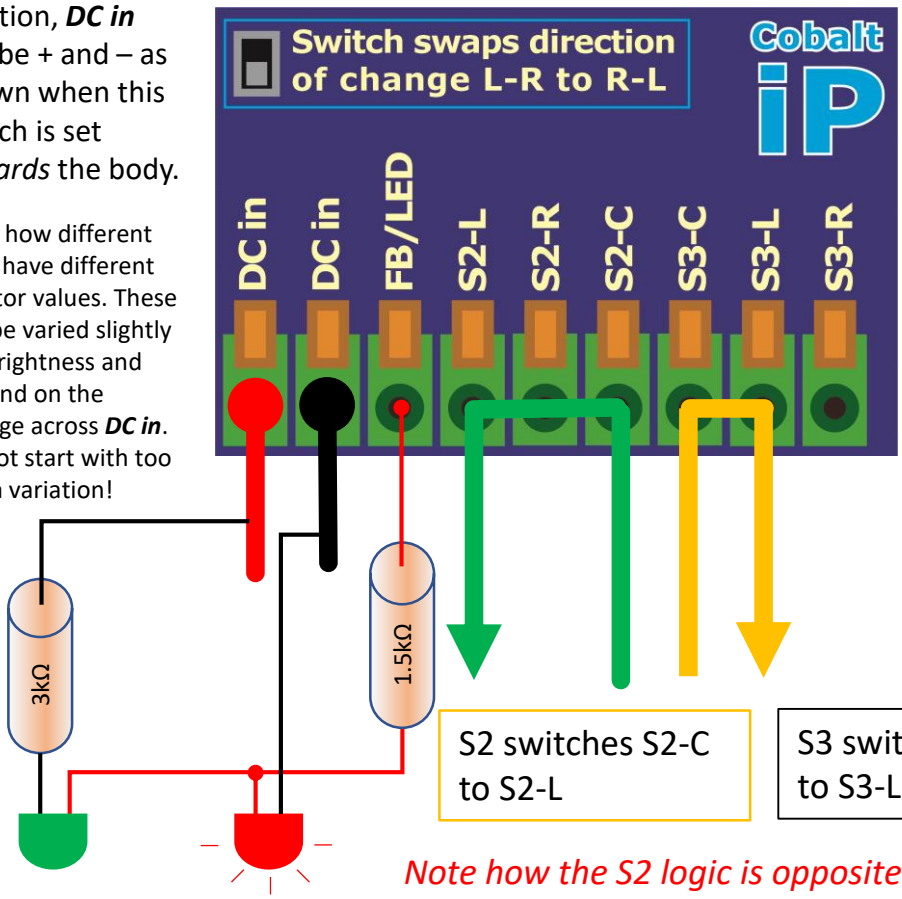
- Looking down the spigot is to the right.
- The throw arm to is to the left.
- The motor is fixed under the baseboard in this orientation..
- ..so… the turnout is switched to right.

Swapping direction with this switch on the Cobalt iP means **DC in** #1 will now have to be "black" and **DC in** #2 "red" to achieve this throw arm position. Consequently, the LEDs will be reversed i.e. the green LED will light instead.



For this motor position, ***DC in*** will be + and – as shown when this switch is set *towards* the body.

Note how different LEDs have different resistor values. These can be varied slightly for brightness and depend on the voltage across ***DC in***. Do not start with too low a variation!



S2 switches S2-C to S2-L

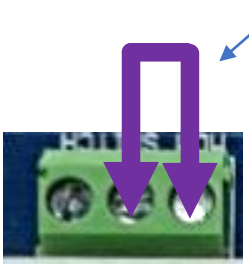
S3 switches S3-C to S3-L

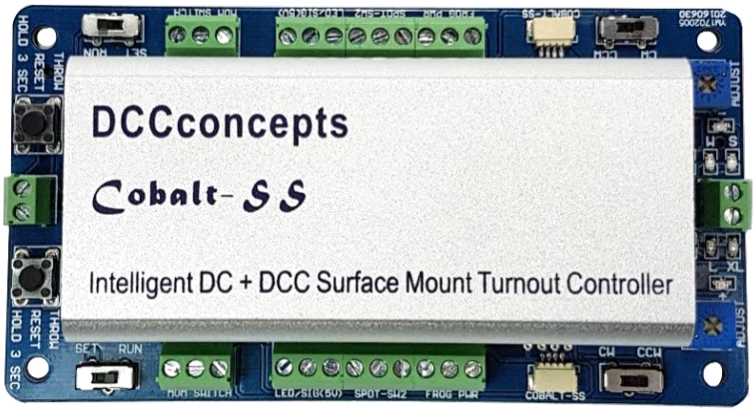
Note how the S2 logic is opposite to the Cobalt iP Digital !

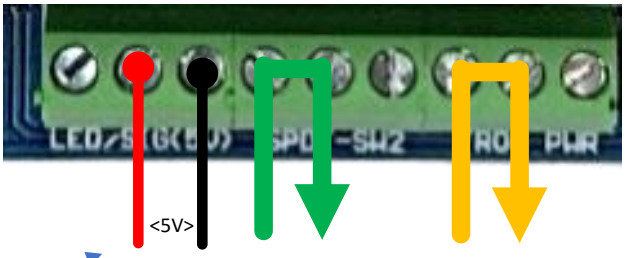
Cobalt Point Motor Switch Logic

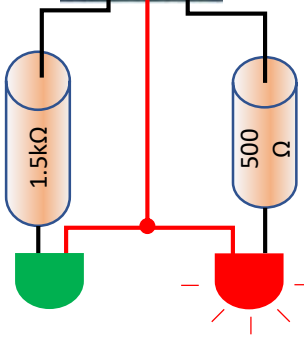
Cobalt SS

This MOM SWITCH input (i.e. momentary push button switch input) assumes a setting of CW not CCW

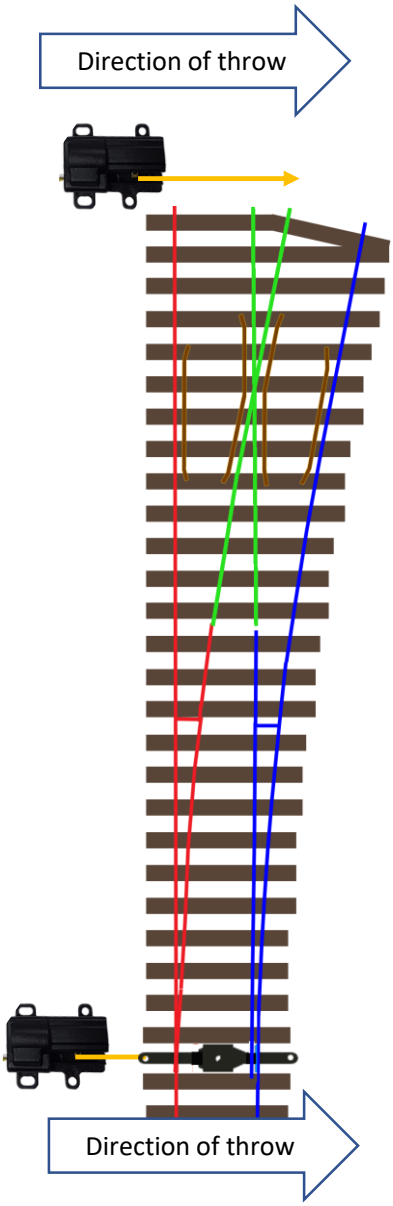








When commanded to throw in the other direction, the central connector of LED/SIG(5V) remains at +5V but the left connector is now ground i.e. 'negative'.



The CW / CCW setting only affects input (including the MOM) but not the output switches (LED/SIG(5V), SPDT-SW2 and FROG PWR). Consider these outputs as if they are linked to the actual motor shaft movement. Unlike the Cobalt iP Digital, FROG PWR is a SPDT switch like SPDT-SW2, not a power output.

Note how different LEDs have different resistor values. These values are indicative and can be varied (with caution) for brightness.