Model Railway Wiring Standard

(Developed from https://dccwiki.com/Wiring_Color_Code)

Purpose	Colour
Track Power (DCC)	■■■■■ Red
Track Power (DCC)	■■■■■ Black
Frog rails (DCC)	■■■■■ Green
Point motors (12V DC): common +ve	■■■■■ Blue
Point motors (12V DC): switch wires (both sides) -ve	■■■■■ Yellow
Signals and other lighting (12V DC): +ve	■■■■■ Orange
Signals and other lighting (12V DC): common -ve	■■■■■ Grey
DCC Concepts S-Lever switch harness (12V DC): common	■■■■■ Black
DCC Concepts S-Lever switch harness (12V DC): left	■■■■■ Orange
DCC Concepts S-Lever switch harness (12V DC): right	■■■■■ Blue

Wire gauges

- 16/0.2 wire for droppers and low voltage (3A).
- 32/0.2 wire for main bus (4.5A).

Ferrules

Use $0.5mm^2$ bootlace ferrules for 16/0.2 wire, and $1mm^2$ for 32/0.2 wire however:

- Arduino Motor Shield and MP1 Point Motor terminals are too small for a ferrule.
- DCC Concepts S-Lever wiring harness needs smaller ($0.25mm^2$ ferrules).
- Hobbytrax 12V distribution board needs ferrules to be squeezed flat.

Connectors

- Most terminal blocks are rated at 3A though 5A would be needed if used for main bus wires.
- Pluggable connector blocks are rated at 6A.