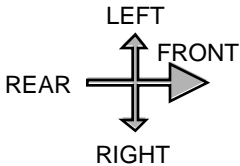


Summary: This sheet shows how to hook up the control unit to a permanent layout. (Use Sheet 4 instead of this sheet if you want to build a self-contained track unit.)

NOTE:

- DIAGRAM SHOWS 15 WIRE CABLE, WITH 13 WIRES USED. FOR LONG RUNS, YOU CAN USE THE EXTRA TWO WIRES TO "DOUBLE UP" ON TERMINALS 3 AND 8 TO REDUCE VOLTAGE DROP IN THE DC.
- CABLE SHOWN IS DESCRIBED AS "18GA 15 CONDUCTOR STRANDED CABLE W/ PVC JACKET, CAROL CABLE CO. PART NO. C2423."
- WIRES THAT CARRY THE SAME SIGNAL ARE JUMPERED AT TERMINAL BLOCKS TB8 & TB9, IN ORDER TO MINIMIZE THE NUMBER OF WIRES USED IN THE CABLE.
- A 12 WIRE CABLE CAN BE USED IF WIRE 14 WHICH IS THE 4TH TARGET LIGHT IS NOT USED. (THE ONLY SIGNAL THAT HAS THIS NONPROTOTYPICAL 4TH TARGET LIGHT IS THE SPECIAL SHILOH SIGNALS #GS3S.)



WIRING COLOR CODE:

- RED: AC (-) UNSWITCHED
- YELLOW: AC (+) UNSWITCHED
- GREEN: AC (+) SWITCHED
- BLUE: DC (+) UNSWITCHED
- BLACK: DC (+) SWITCHED
- (DC (-) RT RAIL IS CONTINUOUS)
- GRAY: AC (+) TARGET LIGHTS

SOME AVAILABLE CABLES:

- 18 ga: CAROL #C2412, 12 WIRE (ALL WIRE PT # 20018012, \$0.52/FT)
- SIGNAL #51123, 12 WIRE (ALL WIRE PT # 20018012, \$0.52/FT)
- CAROL #C2423, 15 WIRE (ALL WIRE PT # 20018015, \$0.77/FT)
- CAROL #C2424, 19 WIRE (ALL WIRE PT # 20018019, \$1.00/FT)
- 16 ga: CAROL #C2428, 15 WIRE (special order , \$0.1.10/FT, 500 FT MIN.)
- COLORS SHOWN ON THE DRAWING ARE FOR THE CAROL 15 WIRE CABLE.
- CAROL CABLE CO, MANCHESTER, NH, 800-424-5666.
- SIGNAL CABLE CO, CHICAGO ILL, 800-323-9355.

CABLES ARE AVAILABLE IN DENVER FROM ALL WIRE COMPANY, 303/295-0106, \$50 MINIMUM PURCHASE (LOCATED AT NW CORNER OF 56TH & WASHINGTON).

- NOTE:**
- COLOR CODES SHOWN APPLY TO WIRES ON CONTROL UNIT AND WIRES 1 THRU 16 FROM THE TERMINAL BLOCKS TB8 AND TB9 GOING TO THE TRACK.
 - WIRE COLORS IN THE CABLE DO NOT CORRESPOND TO THE OFFICIAL "INGRAM AUTOCONTROLS COLOR CODE", AS THEY ARE CONTROLLED BY THE CABLE MANUFACTURER, AND I HAVE NO CONTROL OVER THEM.

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