

EXM OEM Interface Module

Model: 7070

Wiring Supplement

The OEM Interface Module is used in conjunction with either A) the Elkhart Brass Joystick Controller (Model 7030) or B) customer supplied momentary switches, when controlling an EXM monitor. The intent of this document is to provide signal details from the ports on the OEM Interface Module, and recommendations for wiring to those ports when option B is utilized.

The OEM Interface Module may be configured to handle switching power or ground. The Module may be powered with 12 or 24 VDC. As with all wiring, the customer is advised to follow all applicable NEC and NFPA requirements.

OEM Interface Module installation and operation instructions can be found in the EXM monitor manuals.

CONFIGURATION

The OEM Interface Module is configured through the EXM Configuration Tool software. There are three different options available for configuring the OEM Interface Module:

- OEM – Switch Ground
- OEM – Switch Power
- OEM – Joystick (7030)

Select “OEM – Switch Ground” when using OEM supplied switches. See Figure 1 for Standard Wiring and Figure 3 for Alternate Wiring.

Select “OEM – Switch Power” when using OEM supplied switches. See Figure 2 for Standard Wiring and Figure 4 for Alternate Wiring.

Select “OEM – Joystick (7030)” when using the Elkhart Brass Joystick Controller (7030). Refer to the EXM monitor manual for installation instructions.

More information for using the EXM Configuration Tool software can be found in the EXM Configuration Tool manual (document no. 98510000). Both the manual and software can be downloaded from www.elkhartbrass.com.

WIRING DIAGRAMS

Standard Wiring

Standard wiring diagrams are shown in Figure 1: OEM – Switch Ground (Standard Wiring) and Figure 2: OEM – Switch Power (Standard Wiring).

The OEM Interface Module was designed to supply individual I/Os for typical EXM controls on the “EXTERNAL SWITCHES” connector and the “VALVE” connector. The OSC, AUX, POWER LED, and STATUS LED can be wired to the “JOYSTICK” and/or “POWER” connectors. These additional controls require that some connections be shared. All of the control wiring is shown in the diagrams.

The wire lengths, wire gauges, and fuses are recommendations to handle the max power load into the 7070 OEM Interface Module. Refer to the EXM monitor manual for the OEM Interface Module specifications. Refer to NEC and NFPA for applicable wiring requirements.

Alternate Wiring

Alternative wiring diagrams are shown in Figure 3: OEM – Switch Ground (Alternative Wiring) and Figure 4: OEM – Switch Power (Alternative Wiring).

As shown in these diagrams, the OEM Interface Module may be wired such that some components share connections to save cable runs.

- All switches may be wired to one common return if desired
- LED circuits may receive power directly from the vehicle battery so long as the circuits are designed to limit the current to the LED manufacturer’s recommendations. (100 mA maximum)

Other wiring remains the same as the standard configurations.

"OEM - Switch Ground" Standard Wiring

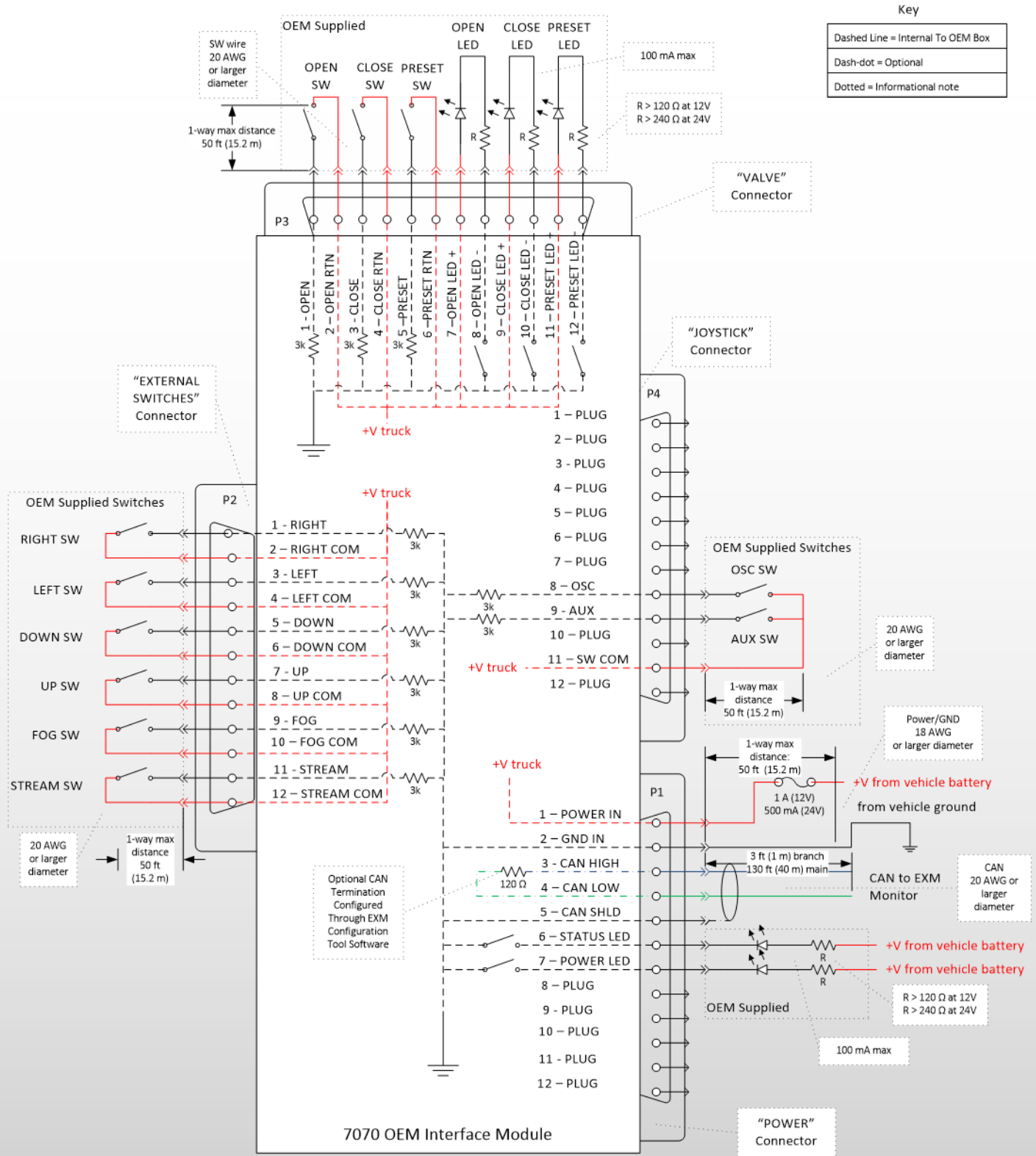


Figure 1: OEM – Switch Ground (Standard Wiring)

"OEM - Switch Power" Standard Wiring

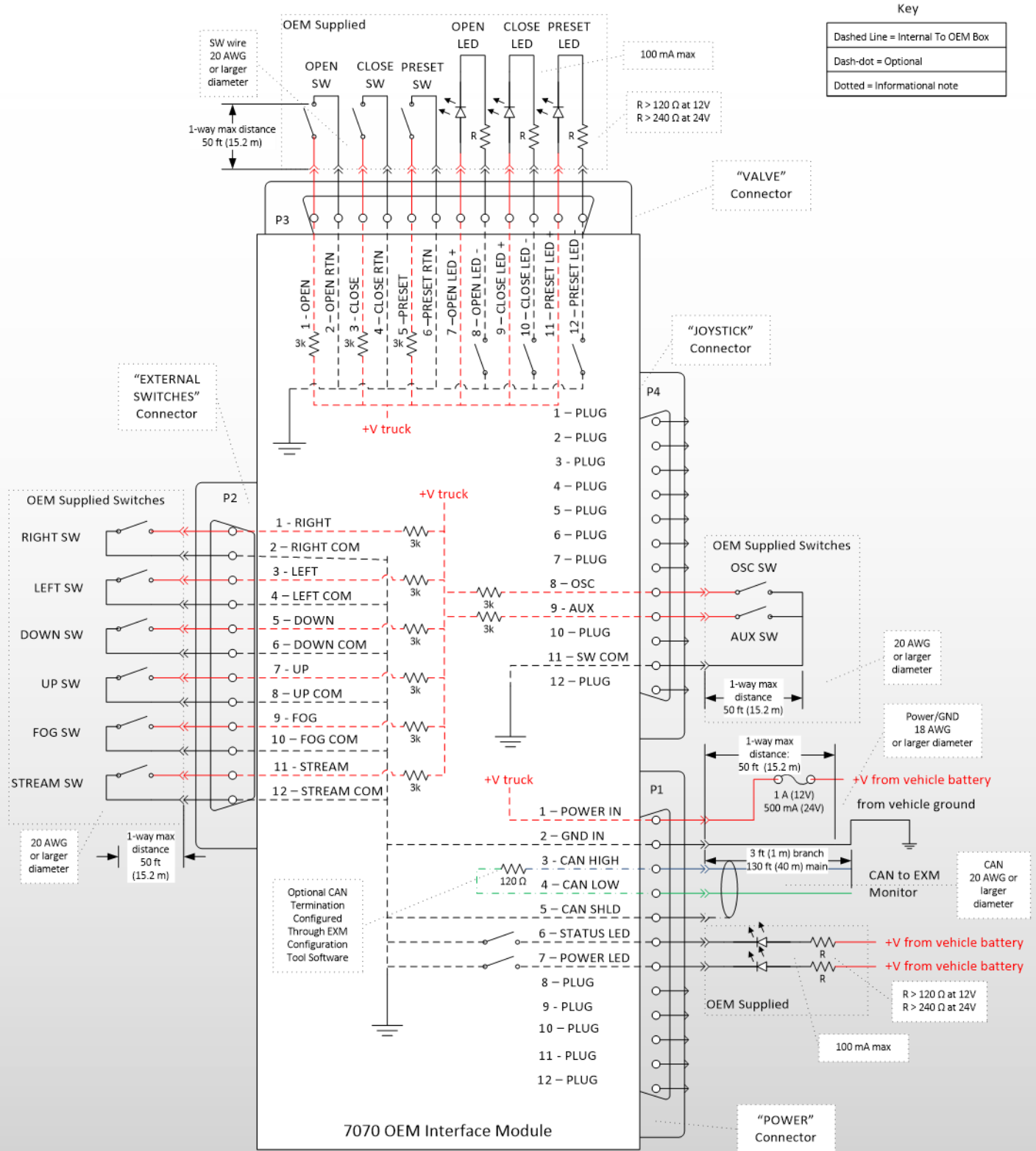


Figure 2: OEM – Switch Power (Standard Wiring)

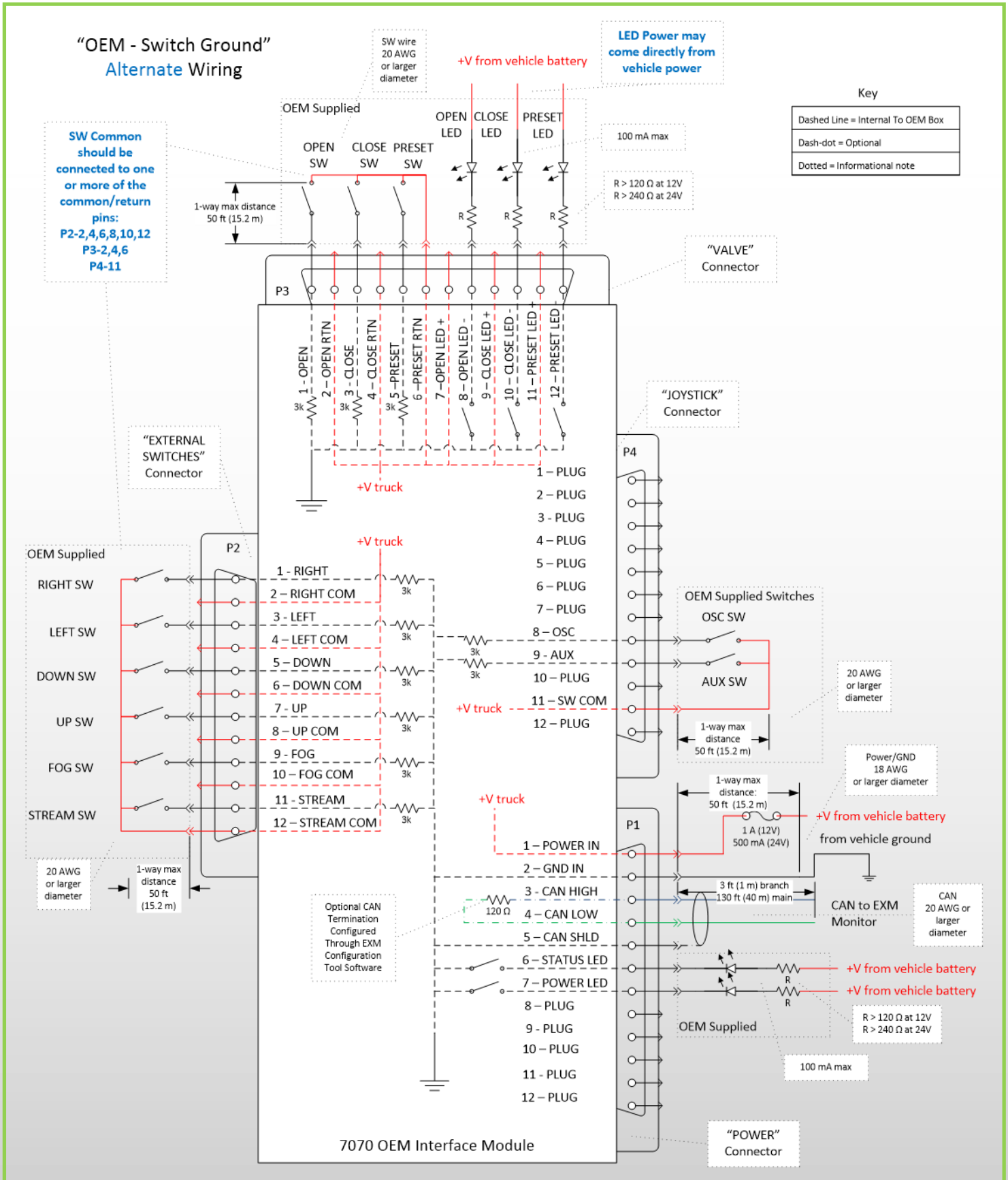


Figure 3: OEM – Switch Ground (Alternative Wiring)

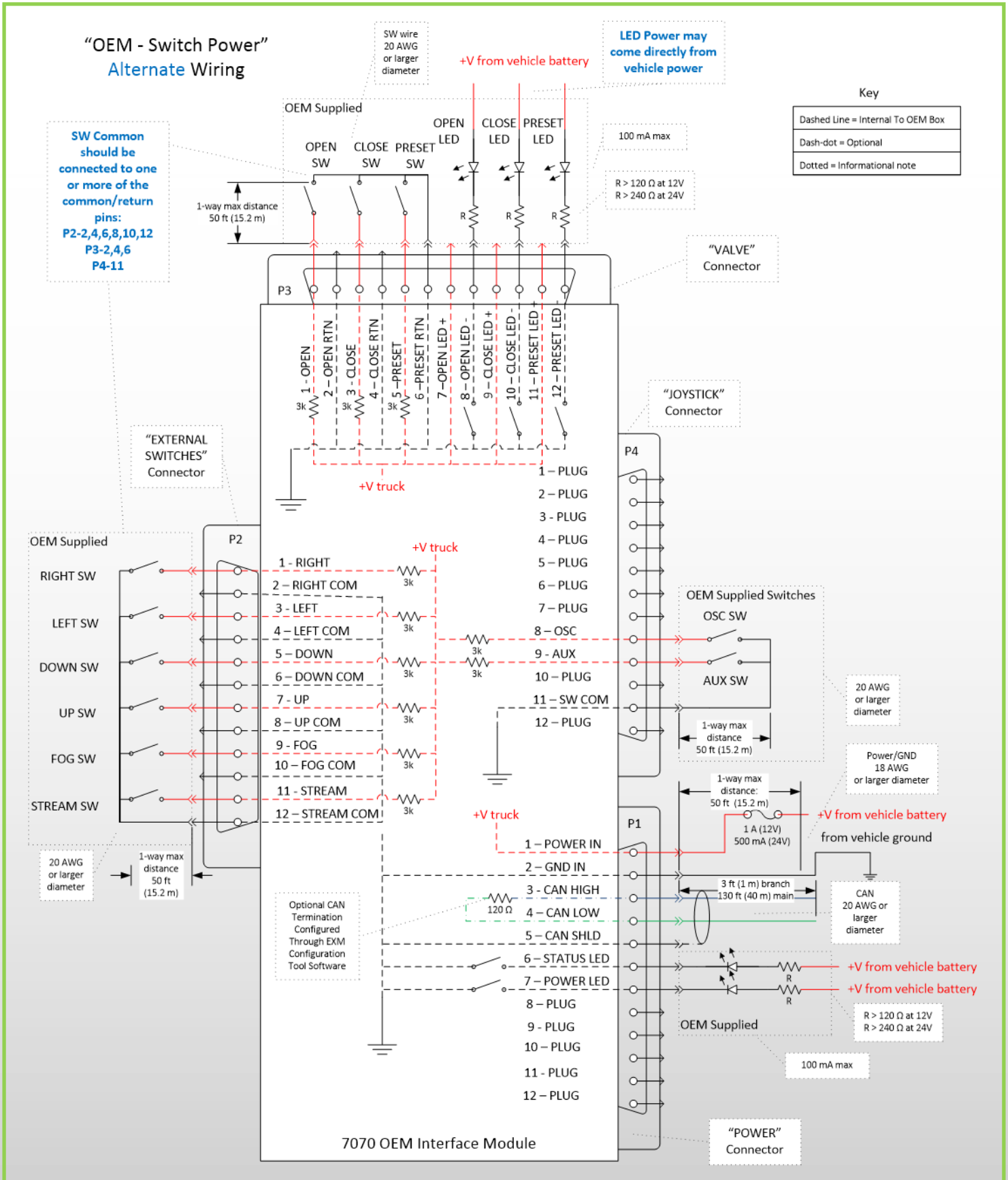


Figure 4: OEM – Switch Power (Alternative Wiring)