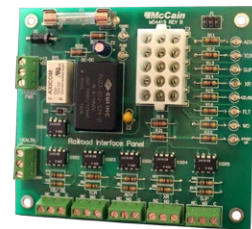


SWARCO

McCain RAILROAD INTERFACE PANEL

ATC
CALTRANS
NEMA

The McCain Railroad Interface Panel (RRIP) helps traffic agencies improve safety and operations at railroad crossings in adherence with the proposed regulations from the Federal Highway Administration (FHWA) standard. The McCain RRIP provides a single termination panel for all field wires in any traffic cabinet/controller configuration. Field inputs enable traffic agencies to easily monitor railroad status and interface with the signal controller. Continually monitored fail-safe circuits relay any change in state of critical inputs to the traffic controller to help ensure motorist and pedestrian safety.



NEMA/Caltrans



ATC

KEY BENEFITS

- Boosts motorist and pedestrian safety at railroad crossings with an enhanced fail-safe design
- Provides a single entry point for railroad inputs, making it easier to setup, maintain, and troubleshoot
- Compatible with Caltrans, NEMA, and ATC cabinets

PRODUCT DESCRIPTION

The McCain RRIP is a termination panel for railroad field wires and acts as a single multi-wire preemption interface. Limiting interfaces between field wires and traffic controllers makes it easy for traffic agencies to troubleshoot, maintain, and replace.

The compact unit has five input circuits that bring in preempt data such as TCR, XR, and gate-down status. By design, both sides of the relay contacts are monitored for a change of state. The outputs to the traffic controller are optically isolated before leaving the board. A health circuit monitors the traffic cabinet and if its in flash or fault, opens the health circuit relay contacts. LED indicators display controller status (vs. panel status) for easy visual verification of proper wiring and an active connection.

The McCain RRIP is available in two form factors - a PCB design for NEMA/Caltrans cabinets and a rack-mounted design for ATC cabinets, offering a solution for any cabinet and controller configuration.

McCain RAILROAD INTERFACE PANEL

STANDARD FEATURES

LED Status Indicators

Labeled LED indicators illuminate based on the output from the controller to ensure the controller is accurately monitoring each input.

- Input indicators, one per input (5)
- Controller watchdog indicator
- Fault indicator

Health Circuit

A health circuit, consisting of a mechanical relay, indicates to the railroad if an issue arises with the traffic cabinet, e.g. if there is a problem with the TCR and SUP field wires, which can cause the cabinet to not see a preemption.

Wire Harness

- NEMA/Caltrans
 - C11 connector (M54451)
Plugs directly into the 2070 controller and provides all the inputs and outputs used.
 - Input file cable with spade lugs (M54766)
Enables the RRIP to be wired directly into the cabinet's input file. This option is not compatible with the LED status indicators.
 - C5 connector with spade lugs (M55309)
Provides wires with spade lugs for the input file and a C5 connector to drive LED indicators from outputs in the auxiliary file.
- ATC Kit (M73668)
 - Railroad ATC Interface Module (M73140)
 - Harness, SB1/SB2 (M48062)
 - Harness, 24VDC Input (M73665)
 - Railroad Harness (M77351)



Wire Harness with 2070 C11 Connector¹

TERMINAL BLOCKS

The RRIP supports five standard relay connections (NO, NC, and common) and one mechanical relay for the traffic cabinet health circuit. The RRIP panel circuits are:

Three-Position Terminal Blocks

- ADV - Advance preemption
- TCR - Traffic control relay²
- SUP - Supervisor relay³
- XR - Crossing active when lights start flashing and gates start down
- ISL - Island circuit or gate down circuit when gates are near horizontal

Additional Terminal Block

- HLT - Health circuit, a closed circuit means the traffic cabinet is operating normally

GENERAL SPECIFICATIONS

	NEMA/CALTRANS	ATC
Dimensions:	4.5"W x 4"H	19"W x 1.75"H x 3"D
Railroad Side Power:	+12 volts @ 1/4A DC power supply	+12 volts @ 1/4A isolated power supply
LED Power:	N/A	+24 volt power supply
Environment:	Operating Temperature: -37°C to +74°C Humidity: 0 to 95% (non-condensing)	
Mounting:	1/2" standoffs for mounting to cabinet side panel (4)	19" EIA rack mount
Shipping Weight:	1 lb	
Part Numbers:	M54419A	M73140

¹Sold separately

²Sometimes called PRE

³Reverse operation of the TCR