

# PMC and Multipoint Switching System, 10 Channel Relay Output Modules

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The PMC Output Modules 00-00838-000 and 00-00838-410 are members of Intellitec's Programmable Multiplex Control family, as well as the 160 Channel Multipoint Switching System. They work in combination with the PMC CPU or the 160 Channel IPX Master and other standard, semi-custom, or custom I/O modules. The modules provide power fusing, switching, and distribution. They have five 20Amp SPST relays and five 10 amp SPST relays for switching loads to the battery. Each fuse position can be filled with a fuse or circuit breaker. The total module current should not exceed 70 Amps.

All of the output harness connections are made with AMP Mate-N-Lok connectors to reduce installation time and errors.

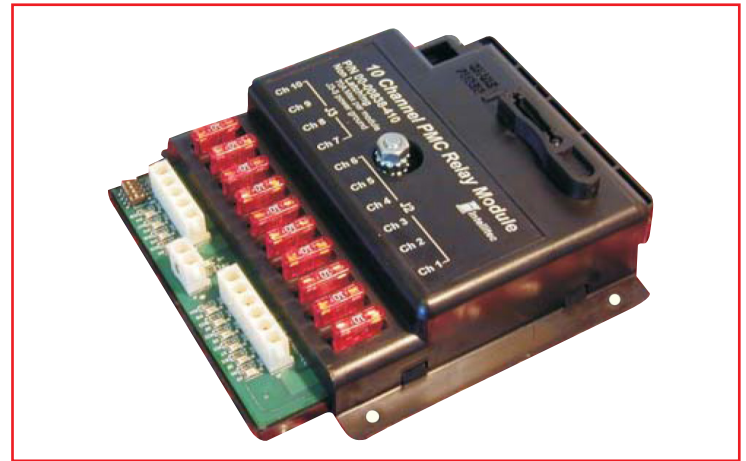
The approximate module dimensions are 7.0" X 6.25" X 1.875" (16.2mm X 15.9mm X 4.8mm). It should be installed in a protected environment inside the vehicle. The 838-000 and 838-410 can be set for module addresses of A- P. This allows each output of the module to be addressed for any one of 160 channels in groups of 10. Using the chart on the next page, set the dip switch to address the module.

## Latching Vs Non-Latching

The 838-000 is a latching module, which means that an output will turn on and latch on when it sees that its channel has been turned on momentarily. Once the output is on, the output will turn off when it sees its channel turn on momentarily again.

No program is necessary when used with either a PMC Central Processing Unit or the 160 Channel IPX Master. An output can be turned on by providing a momentary input on the same channel address. Another momentary input turns the output off.

Example: Intellitec's 10 button keypad has a button set for address B1 and a Latching Output Module 838-000 has an output set for address B1 while both are



connected to an IPX Master, or PMCCPU.

If push button B1 is pressed momentarily, output B1 of the output module will latch on. Pushing the button again will latch the output off. If a push button is set for BL/MR, pressing and holding the button for 3 seconds will cause all outputs that are latched on, to turn off.

When using this module with PMC you should neither check the latched switch box in the Windows set up software for the pushbutton nor should a Boolean be written to operate the output. Channel P10 for 3 seconds will unlatch all latched outputs.

The 838-410 is a non-latching module, which means the output will turn on when it sees its address but will not latch and should only be used with the PMC system. In this case, if the channel is turned on momentarily, the output will only be on while the channel is on, but will not latch. This module will respond to programming in the same fashion as any other PMC output module. To keep the output on, the channel must be kept on.

## Diagnostic Led Indicators

Next to each Mate-N-Lok output connection you will find an LED. If the output is on, the LED will be on. Should the output be on and a fuse is blown, the LED will not illuminate.

Next to pin J1-2, you will find an LED which illuminates RED and indicates that the multiplex communication signal is not normal.

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## SPECIFICATIONS

Modules	00-00838-000	00-00838-410
Nominal Vehicle Voltage	12V	12V
Outputs	Latching Outputs	Non-Latching Outputs
Module Current	70 Amps Max total	

## General Connections

J1-1	Communications Signal (from Master or CPU)	18 Awg Min.
J1-2	Communications Ground (from Master or CPU)	14 Awg Min.

## CHANNEL DESIGNATIONS

Channel	Connection	Type	Name	Rating
1	J2-1	Relay Output, Form A (SPST),(1)	Relay 1 Fuse 1	20 Amp Max
2	J2-2	Relay Output, Form A (SPST),(1)	Relay 2 Fuse 2	10 Amp Max
3	J2-3	Relay Output, Form A (SPST),(1)	Relay 3 Fuse 3	20 Amp Max
4	J2-4	Relay Output, Form A (SPST),(1)	Relay 4 Fuse 4	10 Amp Max
5	J2-5	Relay Output, Form A (SPST),(1)	Relay 5 Fuse 5	20 Amp Max
6	J2-6	Relay Output, Form A (SPST),(1)	Relay 6 Fuse 6	10 Amp Max
7	J3-1	Relay Output, Form A (SPST),(1)	Relay 7 Fuse 7	20 Amp Max
8	J3-2	Relay Output, Form A (SPST),(1)	Relay 8 Fuse 8	10 Amp Max
9	J3-3	Relay Output, Form A (SPST),(1)	Relay 9 Fuse 9	20 Amp Max
10	J3-4	Relay Output, Form A (SPST),(1)	Relay 10 Fuse 10	10 Amp Max

Note 1: Relay provides a fused source of voltage to the Load from the Battery.

J3-5 Power Ground

NOTE: Total Module current not to exceed 70 Amps

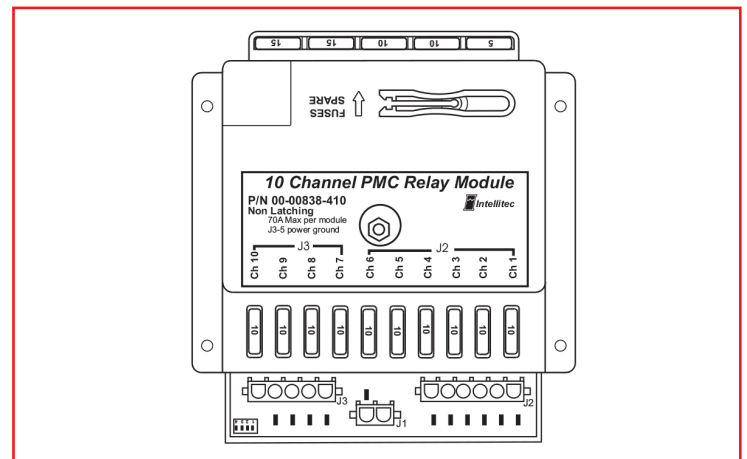
## MATING CONNECTIONS

Designator	Function	Connector	Mating Part #	Contact, Typical
J4	Battery	#10/32 Ring Term		for 14-18 AWG for 10-12 AWG
J3	Communication	2 Pin Amp Mate-N-Lok	1-480698-0	350919-3 640310-3
J2	Outputs	6 Pin Amp Mate-N-Lok	640585-1	350919-3 640310-3
J1	Outputs	5 Pin Amp Mate-N-Lok	1-480763-0	350919-3 640310-3

## MODULE SETTINGS

Module can be set for 1 of 16 address, A-P.  
Set four dip switches per table on right. X = Switch OFF

SWITCH	MODULE	SWITCH	MODULE
4 3 2 1	Address	4 3 2 1	Address
0 0 0 0	A	X 0 0 0	I
0 0 0 X	B	X 0 0 X	J
0 0 X 0	C	X 0 X 0	K
0 0 X X	D	X 0 X X	L
0 X 0 0	E	X X 0 0	M
0 X 0 X	F	X X 0 X	N
0 X X 0	G	X X X 0	O
0 X X X	H	X X X X	P



For further information on this product, please contact Intellitec.