

# 4 Channel DC Input / 6 Channel Relay Output 00-00953-406/416 PMC I/O Module

The 4 Channel DC Input / 6 Channel Relay Output PMC I/O module is the newest member of the Programmable Multiplex Control family. This module replaces the following part number module (00-00621-406/416). The **00-00953-406/416** works in combination with the PMC CPU and other semi-custom, or custom I/O modules.

The 406/416 provides power fusing, switching, and distribution in one module. It has two, 20 Amp SPST relays and four, 10 Amp SPST relays for switching loads from the battery. Each fuse position can be filled with a fuse or circuit breaker. The total module current should not exceed 50 Amps.

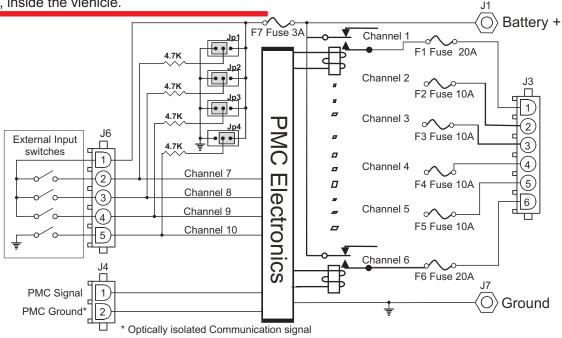
There are four input connections for rocker, limit, or sensor switches. Each individual input can be configured as either a low side switch to ground, or as high side switch to battery. Input information is directly communicated to the CPU and the relays are controlled by the CPU via the PMC communications link. All of the output harnesses are connected with AMP Mate-N-Lok connectors to reduce installation time and errors.

The approximate module dimensions are 6-3/8" X 6-3/4" X 1- 13/16". It should be installed in a protected environment, inside the viehicle.



#### **DIRECT CONTROL**

Switch block, Sw1-positions 5 and 6, provides direct control of output channels 5 and 6. If the dip switch position 5 is moved to the ON position, output channel 5 will be controlled directly from input channel 7. Booleans written for this channel will have no effect. If the dip switch position 6 is moved to the ON position, output channel 6 will be controlled directly from input channel 8. This function eliminates the CPU's processing time for the channel involved.



#### Input Configuration

Four inputs labeled Jp1 - Jp4 can be individually set for either positive (high-side) switched to the battery, or negative (low-side) switched to ground. Setting a jumper to short the two pins closest to the edge of the board selects positive switch. Setting a jumper to short the two pins away from the edge of the board selects negative switch. Default configuration (position) of jumpers is low side input.



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#### **SPECIFICATIONS**

<b>General Connections</b>	<b>;</b>		00-00953-416	00-00953-406
Nominal Vehicle Voltage	ge		12V	24V
J1	+ 12 Volts	Module Current	50 Amps Max	50 Amps Max
J7	Ground			
J6-1	Fuse #7 Power for Positive	switched inputs	3 Amps Max	3 Amps Max
J4-1	PMC Signal		18 awg Min	18 awg Min
J4-2	PMC Ground		14 awg Min	14 awg Min

### **CHANNEL DESIGNATIONS**

Channel	Connection	Туре	Name	Rating
1	J3-1	Relay Output, Form A (SPST),(1)	Relay 1 Fuse 1	20 Amp Max
2	J3-2	Relay Output, Form A (SPST),(1,2)	Relay 2 Fuse 2	10 Amp Max
3	J3-3	Relay Output, Form A (SPST),(1)	Relay 3 Fuse 3	10 Amp Max
4	J3-4	Relay Output, Form A (SPST),(1)	Relay 4 Fuse 4	10 Amp Max
5	J3-5	Relay Output, Form A (SPST),(1)	Relay 5 Fuse 5	10 Amp Max
6	J3-6	Relay Output, Form A (SPST),(1)	Relay 6 Fuse 6	20 Amp Max
7	J6-2	Input, Positive or Negative	Switch 1	See Note 3
8	J6-3	Input, Positive or Negative	Switch 2	See Note 3
9	J6-4	Input, Positive or Negative	Switch 3	See Note 3
10	J6-5	Input, Positive or Negative	Switch 4	See Note 3

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

Note 2: Fuse rating is de-rated from 15 Amp to 10 Amp when Relay 1 is fused at 20 Amps.

Note 3: Max input resistance for 'Negative' or 'Low' side Configuration is 1 K. Max input resistance for 'Positive' or 'High' side configuration is 3.6K

#### **MATING CONNECTIONS**

Designator	<b>Function</b>	Connector	Mating Part #	Contact,	Typical
JĪ	Battery	1/4 20 Ring Term			
J3	Outputs	6 Pin Amp Mate-N-Lok	640585-1	350919-3	640310-3
J7	Ground	Fast on Stab			
J6	Inputs	5 Pin Amp Mate-N-Lok	1-480763-0	350919-3	640310-3
J4	PMC/Com	n 2 Pin Amp Mate-N-Lok	1-480698-0	350919-3	640310-3

#### **MODULE SETTINGS**

Module can be set for 1 of 16 address.

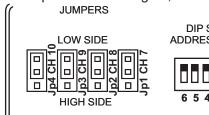
Set four dip switches per table to the right.

X = Switch is **OFF**.

0 = Switch is ON.

(Switches shown in ON position.)

Direct input switch settings 5, 6.



DIP SWITCH ADDRESS SELECT
6 5 4 3 2 1

S	WITCH	MODULE	S	SWITCH	MODULE
6	54321	Address	6	54321	Address
ı	0000	Α	- 1	X 0 0 0	I
1	000X	В		X00X	J
1	00X0	С		X 0 X 0	K
1	00XX	D		XOXX	L
1	0 X 0 0	E		XX00	M
1	0 X 0 X	F		XX0X	N
1	0 X X 0	G		XXX0	0
	loxxx	Н		XXXX	Р
Χ	0 Direct In	put CH 5			
0 2	X Direct In	put CH 6			