Quad "H" Bridge Output Module 00-00916-120 PMC Output Modules

The Quad "H" Bridge Module is a member of Intellitec's Multiplex Control family. It works in combination with the PMC CPU and other standard, semi-custom, or custom I/O modules.

The 916-120 provides power fusing, switching, and distribution all in one module. It would typically be used to operate reversible motor loads. This module has eight, 10 amp SPDT relays connected in four "H" bridge configurations. When a channel is activated, it connects one end of the load to the Battery, while the other end is connected to Ground. Each of the four "H" bridges is fed from a fuse position that can be filled with a fuse, or circuit breaker. The total module current should not exceed 20 Amps.

The Quad "H" Bridge Module includes 9 diagnostic LED's. One indicates the loss of the communication signal and the others indicate the activation of the individual outputs.

Each of the first eight channels will turn on one of the relays in the four "H" bridges. A channel 9 signal will turn on all the odd numbered channel relays and channel 10 signal will turn on all the even channels. This allows simultaneous operation of the four motor loads with a single input.

Each of the outputs can also be used as individual outputs with the understanding that the load will be grounded when turned off. This allows the module to power up to 8 individual loads.



PAT NO. 4,907,222 & 6,011,997

All of the output harnesses are connected with AMP Mate-N-Lok connectors to reduce installation time and errors.

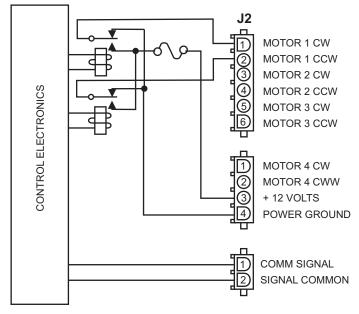
The approximate module dimensions are: 5.8" X 5.0" X 1.45" (147mm X 127mm X 36mm).

The module should be installed in a protected environment, inside the vehicle.

TRUTH TABLE EXAMPLE						
PMC CH 1			PMC CH 10	MOTOR 1	J2-1	J2-2
OFF	OFF	OFF	OFF	OFF	GND	GND
ON	OFF	OFF	OFF	CW	BAT+	GND
OFF	ON	OFF	OFF	CCW	GND	BAT+
ON	ON	OFF	OFF	OFF	BAT+	BAT+
OFF	OFF	ON	OFF	CW	BAT+	
OFF	OFF	OFF	ON	CCW	GND	BAT+

Repeat for motors 2,3 and 4 Channels 9 & 10 affect all motors

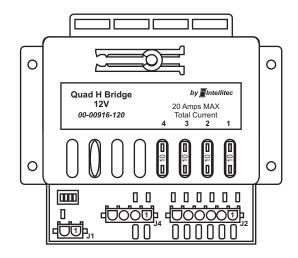
NOTE: Only one output circuit shown



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SPECIFICATIONS

General Connections	00-00916-120		
Nominal Vehicle Voltage	je	12V	
Module Current		20 Amp Max	
J4-3	+ 12 Volts	•	
J4-4	Ground		
J1-1	PMC Signal	18 awg Min	
J1-2	PMC Ground	14 awg Min	



CHANNEL DESIGNATIONS

Channel	Relay	Connection	Туре	Fuse	Rating
1	Relay 1	J2-1	Relay Output, Form C (SPDT)	Fuse 1	10 Amp Max
2	Relay 2	J2-2	Relay Output, Form C (SPDT)	Fuse 1	10 Amp Max
3	Relay 3	J2-3	Relay Output, Form C (SPDT)	Fuse 2	10 Amp Max
4	Relay 4	J2-4	Relay Output, Form C (SPDT)	Fuse 2	10 Amp Max
5	Relay 5	J2-5	Relay Output, Form C (SPDT)	Fuse 3	10 Amp Max
6	Relay 6	J2-6	Relay Output, Form C (SPDT)	Fuse 3	10 Amp Max
7	Relay 7	J3-1	Relay Output, Form C (SPDT)	Fuse 4	10 Amp Max
8	Relay 8	J3-2	Relay Output, Form C (SPDT)	Fuse 4	10 Amp Max
9	All Odd I	Number Relays Of	N		
10	All Even	Number Relays O	N		

NOTE:

The relays provide a fused source of voltage to the Load from the Battery when ON and Ground when OFF.

MATING CONNECTIONS

Designator	Function	Connector	Mating Part #	Contact, Typical
J1	PMC/Com	2 Pin Amp Mate-N-Lok	1-480698-0	350919-3
J2	Outputs	6 Pin Amp Mate-N-Lok	640585-1	350919-3
J4	Outputs/Power	4 Pin Amp Mate-N-Lok	1-480700-0	350919-3

MODULE SETTINGS

DID OW	MODILLE	DID OW	MODILLE
DIP SW 4 3 2 1	MODULE Address	DIP SW 4 3 2 1	MODULE Address
0000	Α	X 0 0 0	I
0 0 0 X	В	X 0 0 X	J
0 0 X 0	С	X 0 X 0	K
0 0 X X	D	X 0 X X	L
0 X 0 0	Ε	XX00	M
0 X 0 X	F	XX0X	N
0 X X 0	G	XXX0	0
0 X X X	Н	XXXX	Р
	0 0 0 0 0 0 0 X 0 0 X 0 0 0 X X 0 X 0 0 0 X 0 X 0 X 0 X	### Address 0 0 0 0 0	4321 Address 4321 0000 A X000 000X B X0X 00X0 C X0X 00XX D X0X 0X0X E XX00 0X0X F XX0X 0X0X G XXX0