

Vehicle Programmable Logic Controller (VPLC) 00-00808-000/240 Output/Input Module

Intellitec's **Vehicle Programmable Logic Controller** is designed to provide a flexible switching unit that is programmable by a Windows[™]-based GUI. **VPLC** is designed to perform a variety of functions including, but not limited to:

- Lighting on small emergency vehicles
- Airport vehicles
- Busses
- Other specialty vehicles

The Vehicle Programmable Logic Controller

provides ten, solid state, high-side outputs, each capable of carrying 10 amps. Each output can be programmed through a Windows[™]-based program, using Boolean logic to perform various functions, such as flashers, interior lights, communications equipment, hydraulic valves, interlocks, and timed outputs.



The **VPLC** uses an Intellitec multiplexed communications line with sixteen channels, each capable of being either an input or an output. This allows remote switch panels with as many as 16 switches to communicate with the controller over two non-shielded wires using logic statements such as: *Output = Ignition and Master Switch and Volts >12*.

VPLC provides the following features:

- 3 High-side direct inputs
 - Temperature
 - Voltage sensor
 - Event Counter
- 1 Audible Alarm Output
- 16 channels; selectable as Input or Output
- 10 Solid-state, FET outputs
- 10 Virtual channels
- 5 Timers; one-shot or duty timer selectable

The Audible Alarm is built into the potted assembly. It can also be programmed with Boolean logic.

EXAMPLE

VPLC Windows[™]-based GUI for programming boolean definitions

	N DEFINITION			
BOOLEAN OPERANDS BOOLEAN COMMANDS				
IPX1 IPX2 IPX3	AND OR NOT NOT			
FET5 =	IPX1 AND IPX2			
FET6 =	FETS OR IPX3			
FET7 =	NOT FET6			
FET8 =	FET7			
FET9 =	FET1 AND FET2 AND VRT1			
FET10 =	VRT1 OR VRT2			
VBT1 =	BUZZER AND VRT10			
VRT2 =				
VRT3 =				
VRT4 =				
VRT5 =	V1 AND IPX1			
VRT6 =				
VBT7 =				
VRT8 =				
VRT9 =				
VRT10 =				
BUZZER =	VRT5			
TRIG1 =				
TRIG2 =				
TRIG3 =				



SPECIFICATIONS

General Connections

Nominal Vehicle Voltage

Module Current

J2-A	PMC Signal
J2-B	PMC Ground
J3-B	Power Ground

12V 15 Amps Max 18 AWG Min 14 AWG Min

00-00808-000

00-00808-240 24V 15 Amps Max 18 AWG Min 14 AWG Min

NOTE: The FET outputs of channels 1-10 provide a protected source of voltage to the Load from the Battery. The maximum current for the entire module is 50 Amps. Due to the need to dissipate heat, the current being controlled by each output must be considered.

CHANNEL DESIGNATIONS

Outputs	Connection	Rating
Output 1	J1-A	10 Amps
Output 2	J1-B	10 Amps
Output 3	J1-C	10 Amps
Output 4	J1-D	10 Amps
Output 5	J1-E	10 Amps
Output 6	J1-F	10 Amps
Output 7	J1-G	10 Amps
Output 8	J1-H	10 Amps
Output 9	J1-J	10 Amps
Output 10	J1-K	10 Amps
Communica J2-A Groun J2-B Signal		Inputs High-side Input 2 Ground Transmit

J3-D

J3-E

J3-F

J3-G

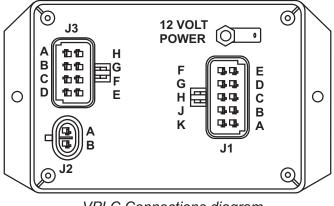
J3-H

Receive

Temp Sensor Temp Sensor

High-side Input 1

High-sideInput 3



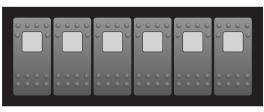
VPLC Connections diagram

SWITCH ADAPTER OPTIONS

The initial offering includes 3 accessory options: 00-00784-000 Rocker Switch Adapter -

One or two of these adapters may be used with Carling's Contura series switches to provide 7 and 14 multiplexed switch inputs.

00-00904-0006 button Pushbutton Panel00-00905-10010 button Pushbutton Panel



Rocker Switch Adapter Panel (switches not included)







10 button In the second second