

1 Description

The DVC722 is an Expansion module designed for use with the DVC707 / DVC710 Master Modules. The DVC722 provides 40 sinking discreet inputs for use on 12 or 24 Volt control systems. Each input may be individually programmed as Latching or Non-Latching inputs as well as to ignore transient Voltage spikes (Toggle and Debounce features). The DVC722 is controlled by the master controller through its CAN Port. Baud rate and MAC ID settings as well as IO status and diagnostics are done through the serial port using the Intella® Program Loader Monitor (PLM).

The DVC722 is encapsulated in a rugged plastic enclosure with an epoxy resin that provides the best possible resistance to external forces such as dust, liquids, debris etc. while providing superior vibration protection for circuit components.



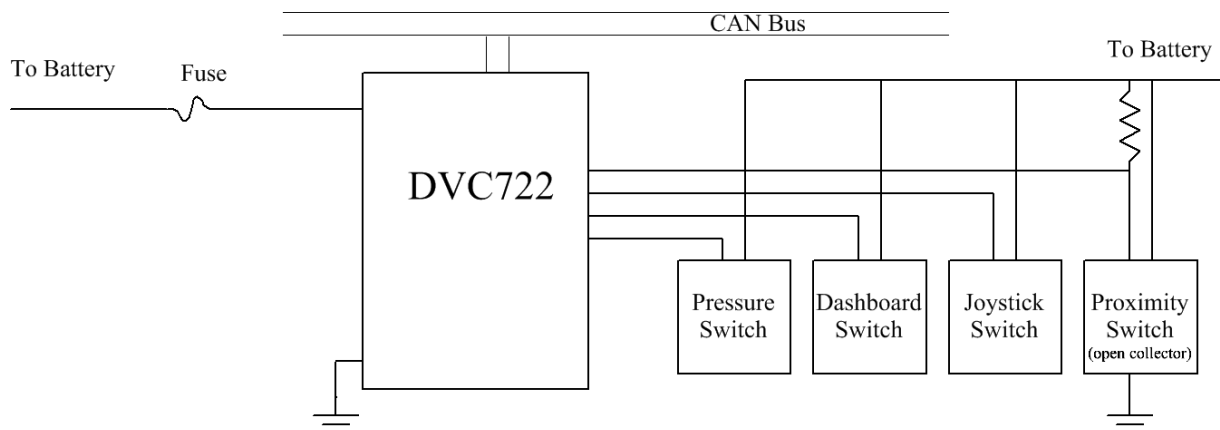
2 Features

- 40, Individually programmable discreet inputs (On / Off)
- Rs232 Port for setup and diagnostics
- CAN Port for system communication
- Water / Oil proof enclosure
- Industrial operating temperature range
- 12 or 24 Volt systems
- SAE J1939 Load Dump compliant
- Rugged, fully encapsulated module may be mounted virtually anywhere

3 Applications

- Mobile, Industrial, Agricultural, Marine or any other Hydraulic Equipment

4 Simplified Connection Diagram



5 Connector Information

Pin Out

30 Pin Cinch

Pin	Function	Pin	Function	Pin	Function
A1	N/C	B1	POWER COM	C1	Input 2
A2	CAN H	B2	+ POWER IN	C2	Input 3
A3	CAN L	B3	Input 1	C3	Input 4
D1	Input 5	E1	Input 8	F1	Input 11
D2	Input 6	E2	Input 9	F2	Input 12
D3	Input 7	E3	Input 10	F3	Input 13
G1	Input 14	H1	Input 17	J1	Input 20
G2	Input 15	H2	Input 18	J2	Input 21
G3	Input 16	H3	Input 19	J3	Input 22
K1	Input 23				
K2	Input 24				
K3	Input 25				

18 Pin Cinch

a1	Input 26	b1	Input 29	c1	Input 32
a2	Input 27	b2	Input 30	c2	Input 33
a3	Input 28	b3	Input 31	c3	Input 34
d1	Input 35	e1	Input 38	f1	RXD
d2	Input 36	e2	Input 39	f2	TXD
d3	Input 37	e3	Input 40	f3	POWER COM

NOTES:

1. The Power pin used must be fused with an ATO 5, AGC 5 or smaller fuse

Mating Connector information

HCT FACTORY ACCESSORIES	
Expansion Module Serial Port Adaptor:	999-10082
RS232 Cable Assembly:	999-10075
DVC722 Mating Kit:	999-10077
DVC722 Proto-Type Harness (3M): 30 pin connector	999-10105
DVC722 Proto-Type Harness (3M): 18 pin connector	999-10109

6 LED Indicators

A. **Digital Input Status** – on when active (Qty. 40) (Green)

B. **Module Status** (Qty. 1)(R/G):

OFF = No power to module.

Green = Device is operating in normal condition.

Flashing Green = Device in standby mode.

Flashing Red = Minor Fault.

Red = Unrecoverable Fault.

Flashing Red/Green = Device Self Testing.

C. **Network Status** (Qty. 1)(R/G):

OFF = Not powered/Not on-line.

Green = Link OK, on-line, connected.

Flashing Green = On-line, not connected

Flashing Red = Connection time out.

Red = Critical link failure

7 Electrical Characteristics

Absolute Maximum Ratings

Absolute Maximum Ratings indicate limits beyond which damage to the device may occur.

Supply Voltage	$\pm 32 V_{DC}$
Rs232 Port	Rxd = $\pm 15 V_{DC}$ Txd = $\pm 8 V_{DC}$
CAN Port	$\pm 14 V_{DC}$
Voltage at any Input Pin	$\pm 32 V_{DC}$
Temperature	
Operating	-40°C to +85°C
Storage	-40°C to +100°C

Recommended Operating Parameters / Pin Functions

Pin	Name	Function/Features	Range
B2	POWER IN (Note: 1)	Positive Power Supply Input	+12V _{DC} to +28V _{DC}
B1, F3	POWER COM (Note: 1)	Return for Power Supply or Signal Com	0 Volts (GND)
B3 – K3 And a1 – e3	Digital Inputs (Note: 5)	On / Off.	0 to +Supply

- Notes:**
- 1, Maximum continuous current allowed on any single connector Pin = 5 Amps
 - 2, All limits are guaranteed by testing or statistical analysis
 - 3, Z = >100K Ω
 - 4, Z = 120 Ω in Current Mode
 - 5, Z = 32.4K Ω
 - 6, Voltage references are with respect to GND (0V) unless otherwise specified.

8 Mounting

