

**Technical Data Sheet** 



The CL-103 is a solid-state microprocessor based module and member of the HED® CANLink® multiplexed control family. Delivered in a Deutsch enclosure, this unit provides powerful functionality in a compact and economical package.

Designed as a master control module, the CL-103 includes 4 different communications ports (7 Total). Three J1939 and one J1708 CAN ports enable the module to perform a dual role as a master controller and communications bridge between multiple CAN systems on one vehicle.

The HED® CL-103 can be programmed using HED®'s do-ityourself CANLink® Composer™ programming tool or directly by HED® engineering, and is designed for use with the CANLink® Conductor™ software tool for diagnostics and field troubleshooting.



Toll-free technical support: (800) 854-3533

# CANLink<sup>®</sup> CL-103-1XX Module Family Master Control Module

#### **Special Features include:**

- (3) J1939 CAN ports
- (2) RS232 ports
- (1) J1708 port
- (1) USB port
- (2) switch to ground inputs
- (1) 0.5A PWM output
- Battery voltage monitoring

Specifications		
Enclosure:	Deutsch standard EEC-325x4 PCB enclosure with 24-pin receptacle.	
Connectors:	DTM06-12SA	
	DTM06-12SB	
	WM-12S (wedge) – Two needed (one per connector)	
	0462-201-20141 20AWG sockets	
	0413-204-2005 Sealing Plugs – Unused pins are required to be sealed to maintain module sealing	
Operating Voltage Range:	8 to 32 VDC	
Operating Temperature:	-40°C to 70°C	
Storage Temperature:	-40°C to 85°C	
IP Rating:	IP 6K9K	
PC Boards:	The printed circuit boards designed for high EMI/RFI protection.	
	The boards are conformal coated with a silicone coating for further water/moisture protection.	
	All inputs are protected against shorts to Battery(+) or Battery(-).	
	100% of the boards are functionally tested before shipment.	
	* Harness codes are switch to ground inputs used to identify I/O module location and function to the master controller	

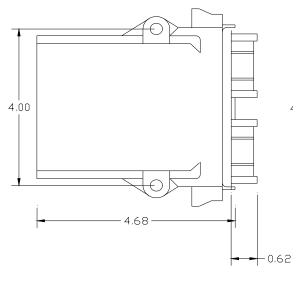


## Specifications

### **CL-103 Master Control Module**

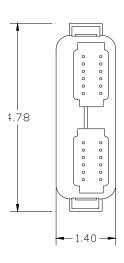
#### **CL-103 Master Control Module Pinout**

DTM13-12PA (Gray)		DTM13-12PB (Black)	
Pin	Function	Pin	Function
1	Unused	1	Input Unswitched BAT(+)**
2	USB (DP)	2	Output DOUT(+)/PWM(+)(0.5A)
3	USB (DM)	3	CAN/J1708 (Shield)
4	USB/RS232 (GND)	4	RS232-2 (Tx)
5	RS232-1 (Tx)	5	RS232-2 (Rx)
6	RS232-1 (Rx)	6	RS232 (GND)
7	CAN2-L	7	J1708-A
8	CAN2-H	8	J1708-B
9	CAN1-L	9	CAN3-L
10	CAN1-H	10	CAN3-H
11	BAT(-) Module	11	Input STG
12	BAT(+) Module / Input Battery Voltage	12	Input STG



Note: Different I/O combinations are available. Please refer to specific CL-103-1XX data sheet for I/O number designations for use within Composer<sup>™</sup>. Data sheets available on HED® website.

\*\*Unswitched vehicle battery must be connected to properly store data to EEPROM. Module will draw max of 200 micro amps (12V) and 400 micro amps (24V) after turning itself off.



Information contained on this sheet is accurate at the time of printing. HED, Inc. reserves the right to change specifications without notice.

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