

## **Technical Data Sheet**



**Representative Product Photo** 

The CL-442 is a solid-state microprocessor based module and member of the HED® CANLink® multiplexed control family. Delivered in a Deutsch enclosure, this unit provides a high density I/O count in a compact and economical package.

Designed for use as a stand alone unit or as part of a distributed system, the CL-442 is also available in a clear enclosure with LED indicators for each input for simple troubleshooting in the field.

The HED® CL-442 can be programmed using HED®'s do-it-yourself 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.

# CANLink® CL-442-101 Module Master I/O Module

### 10 Inputs and 4 Outputs including:

- (4) switch to battery inputs
- (4) 0-5.5VDC 10-bit analog inputs
- (2) frequency inputs
- (4) 3A PWM outputs with estimated current feedback
- (1) 5V Regulated Sensor Supply (250mA)
- (1) USB port
- (1) J1939 CAN port

Specifications			
Enclosure:	Deutsch standard EEC-325x4 PCB enclosure with 24-pin receptacle.		
Mating Connectors:	DTM06-12SA		
Deutsch	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:	8-32 VDC		
Operating Temperature:	-40°C to 70°C		
Storage Temperature:	-40°C to 85°C		
IP Rating:	IP67		
PC Boards:	The printed circuit boards are designed for high EMI/RFI protection.		
	The boards are conformal coated with a silicone coating for further water/moisture protection.		
	All inputs and outputs are protected against shorts to Battery(+) or Battery(-).		
	100% of the boards are functionally tested before shipment.		





# Specifications

## CL-442-101 Master I/O Module

#### CL-442-101 Master I/O Module Pinout

DTM13-12PA (Gray)		DTM13-12PB (Black)	
Pin	Function	Pin	Function
1	Input #1 STB	1	Output #1 DOUT(+)/PWM(+)/ECC(+)(3A)
2	Input #2 STB	2	Output #2 DOUT(+)/PWM(+)/ECC(+)(3A)
3	Unswitched Battery(+)** / Input #12 Battery Voltage	3	Output #3 DOUT(+)/PWM(+)/ECC(+)(3A)
4	Input #3 STB	4	Output #4 DOUT(+)/PWM(+)/ECC(+)(3A)
5	Input #4 FREQ	5	Input #8 AIN(0-5.5V)
6	Input #5 FREQ	6	Input #9 AIN(0-5.5V)
7	Input #6 AIN(0-5.5V)	7	Input #10 STB
8	Input #7 AIN(0-5.5V)	8	5V Sensor Supply (250mA) / Input #11 Sensor Supply Voltage
9	CAN1-L	9	Sensor Supply Ground
10	CAN1-H	10	USB(DP)
11	BAT(-) Module	11	USB(DM)
12	BAT(+) Module and Outputs 1-4 / Input #13 Battery Voltage	12	USB(GND)

Note: Above pinout is for HED® part number CL-442-101.

Additional part number data sheets available on HED® website.

<sup>\*\*</sup>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. This feature is only available on versions of this module that are Master Module capable.



