

#### **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-ityourself CANLink® Composer<sup>™</sup> programming tool or directly by HED® engineering, and is designed for use with the CANLink® Conductor<sup>™</sup> software tool for diagnostics and field troubleshooting.

# CANLink® CL-442-115 Module Master I/O Module with LED I/O Indicators

#### 10 Inputs and 4 Outputs including:

- (8) switch to battery inputs
- (2) 0-5.5VDC 10-bit analog inputs
  - (4) 3A PWM outputs with estimated current feedback
- (1) USB port
- (2) 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<br>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.  |  |  |
|                          | * Harness codes are switch to ground inputs used to identify I/O module location and function to the master controller |  |  |



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



## Specifications

## CL-442-115 Master I/O Module

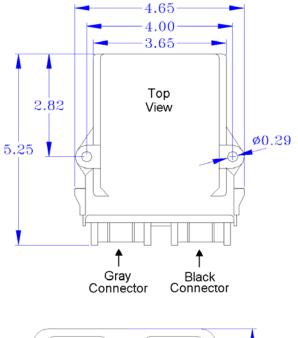
#### CL-442-115 Master I/O Module Pinout

| DTM13-12PA (Gray) |  | DTM13-12PB (Black) |  |
|-------------------|--|--------------------|--|
| Pin               | Function   | Pin                | Function                               |
| 1                 | CAN2-L   | 1                  | Output #1<br>DOUT(+)/PWM(+)/ECC(+)(3A) |
| 2                 | CAN2-H   | 2                  | Output #2<br>DOUT(+)/PWM(+)/ECC(+)(3A) |
| 3                 | Unswitched Battery(+)** /<br>Input #11 Battery Voltage       | 3                  | Output #3<br>DOUT(+)/PWM(+)/ECC(+)(3A) |
| 4                 | Input #1 STB   | 4                  | Output #4<br>DOUT(+)/PWM(+)/ECC(+)(3A) |
| 5                 | Input #2 STB   | 5                  | Input #6 AIN(0-5.5V)                   |
| 6                 | Input #3 STB   | 6                  | Input #7 AIN(0-5.5V)                   |
| 7                 | Input #4 STB   | 7                  | Input #8 STB                           |
| 8                 | Input #5 STB   | 8                  | Input #9 STB                           |
| 9                 | CAN1-L   | 9                  | Input #10 STB                          |
| 10                | CAN1-H   | 10                 | USB(DP)                                |
| 11                | BAT(-) Module  | 11                 | USB(DM)                                |
| 12                | BAT(+) Module and Outputs 1-4 /<br>Input #12 Battery Voltage | 12                 | USB(GND)                               |



Additional part number 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. This feature is only available on versions of this module that are Master Module capable.





Front View

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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