

## CANLink® CL-442-142-XX I/O Module

**CL-442-142-10 : Master I/O**

**CL-442-142-20 : Client I/O – Not yet available**

**Up to 15 Inputs and 4 Outputs (15 total I/O pins):**

- (8) Switch to Battery digital inputs
- (2) Frequency or PWM inputs or (1) Encoder input
- (1) 0-5.5VDC 10-bit analog inputs
- (4) pins software configurable as PWM outputs with estimated current feedback (up to 3A), or switch to battery or switch to ground input
- (1) USB port (for interfacing to HED Orchestra tools)
- (2) J1939 CAN port



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.

### Specifications

|                               |   |
|-------------------------------|---|
| Enclosure:                    | Deutsch standard EEC-325x4 PCB enclosure with 24-pin receptacle.  |
| Mating Connectors:<br>Deutsch | DTM06-12SA<br>DTM06-12SB<br>WM-12S (wedge) – Two needed (one per connector)<br>0462-201-20141 20AWG sockets<br>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.<br>The boards are conformal coated with a silicone coating for further water/moisture protection.<br>All inputs and outputs are protected against shorts to Battery(+) or Battery(-).<br>100% of the boards are functionally tested before shipment. |

## CL-442-142-XX I/O Module

| DTM13-12PA (Gray) |  | DTM13-12PB (Black) |   |
|-------------------|--|--------------------|---|
| Pin               | Function   | Pin                | Function  |
| 1                 | CAN2-L   | 1                  | Input #13 STB/STG/<br>Output #1 DOUT/PWM/ECC(+)(3A) |
| 2                 | CAN2-H   | 2                  | Input #14 STB/STG/<br>Output #2 DOUT/PWM/ECC(+)(3A) |
| 3                 | Input #1 STB   | 3                  | Input #15 STB/STG/<br>Output #3 DOUT/PWM/ECC(+)(3A) |
| 4                 | Input #2 STB   | 4                  | Input #16 STB/STG/<br>Output #4 DOUT/PWM/ECC(+)(3A) |
| 5                 | Input #3 STB   | 5                  | Input #7 VTD(0-5.5V)                                |
| 6                 | Input #4 STB   | 6                  | Input #8 STB  |
| 7                 | Input #5<br>FRQ/PWM/Encoder(1A)                            | 7                  | Input #9 STB  |
| 8                 | Input #6<br>FRQ/PWM/Encoder(1B)                            | 8                  | Input #10 STB                                       |
| 9                 | CAN1-L   | 9                  | Input #11 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)  |

Note: Above pinout is for HED® part number CL-442-142.  
Additional part number data sheets available on HED® website.

