



The HED[®] CL-610 is a solid-state microprocessor based keypad module that is a member of the HED[®] CANLink[®] multiplex control family. It provides a versatile, programmable, and highly visible operator interface.

Designed for use as part of a distributed system, the CL-610 can dramatically reduce vehicle dashboard wiring, and can be programmed with a dimming function.

Each button is available in various colors. Additionally, buttons can be programmed to flash codes for simple troubleshooting and warning indications.

The HED[®] CL-610 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-610-1XX 2x4 Keypad Sealed CAN Keypad Family

Special Features include:

- (8) Multiplexed rubber membrane pushbuttons
 - Also available: 2x3, 2x6 & 4x3 keypads
- Sealed construction (IP67)
- Long life: 1million+ key presses
- Large 0.75" x 0.75" buttons
- Capable of detecting multiple simultaneous key presses
- Dimmable LED indicators (via CAN or Analog Input)
- Dimmable LED backlit icons (via CAN or Analog Input)
- Optional Power LED indicator
- Customizable button labeling / icons
- Customizable LED indicator location & color
 - 3 LED indicators per button
 - 1 LED indicator between each pair of buttons
- used for bar graph feature
- Optional 2nd Connector for one of following features:
 - Easy daisy-chain connection of multiple keypads
 - 4 pins for various combinations of Inputs / Outputs
 - 4 pins can be used as harness code inputs
- (1) J1939 CAN port

Specifications

Mating Connectors: Deutsch	DT06-4S (with W4SA wedge) DT06-4S (with W4SB wedge) 0462-201-16141 16AWG Sockets
Operating Voltage Range:	8 to 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.

CL-610 2x4 Keypad

A Connector

Deutsch DT06-4PA 4-pin Connector	
Pin	Function
1	BAT(+) Module / Input Battery Voltage
2	BAT(-) Module
3	CAN-H
4	CAN-L

B Connector Option #1

Deutsch DT06-4PB 4-pin Connector	
Pin	Function
1	Input STB / STG / AIN or Output DOUT/PWM(-) (0.75A)
2	Input STB / STG or Output DOUT/PWM(-) (0.75A)
3	Input STB / STG or Output DOUT/PWM(-) (0.75A)
4	Input STB / STG or Output DOUT/PWM(-) (0.75A)

B Connector Option #2

Deutsch DT06-4PB 4-pin Connector	
Pin	Function
1	BAT(+) Module
2	BAT(-) Module
3	CAN-H
4	CAN-L

Composer I/O Assignments for Button Inputs & LED Outputs

- Composer Input numbering for each Button is shown on drawing.
- Composer Output numbering for each LED indicator is shown on drawing.

Note: Different feature combinations are available. Please refer to specific CL-610-1XX data sheet for feature number designations for use within Composer™. Data sheets available on HED® website.

Note: Outputs are sinking (grounding) outputs. 0.75A PWM frequency is limited at 1KHz. All are limited to duty cycle range of 10% to 90%.

Note: This B connector configuration allows for daisy-chaining of wire harnesses for applications using multiple keypads. When daisy chaining, customer is required to install 10A fuse to initial +Battery feeding first keypad.

