



## CANLink<sup>®</sup> CL-609-1XX 2x3 Keypad Sealed CAN Keypad Family

### Special Features include:

- (6) Multiplexed rubber membrane pushbuttons
  - Also available: 2x4, 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 two right columns of buttons  
- used for bar graph feature
- Optional 2<sup>nd</sup> Connector for one of following features:
  - Easy daisy-chain connection of multiple keypads
  - 4 pins for various combinations of Inputs / Outputs
  - 2 pins can be used as harness code inputs
- (1) J1939 CAN port

The HED<sup>®</sup> CL-609 is a solid-state microprocessor based keypad module that is a member of the HED<sup>®</sup> CANLink<sup>®</sup> multiplex control family. It provides a versatile, programmable, and highly visible operator interface.

Designed for use as part of a distributed system, the CL-609 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<sup>®</sup> CL-609 can be programmed using HED's do-it-yourself CANLink<sup>®</sup> Composer<sup>™</sup> programming tool or directly by HED<sup>®</sup> engineering, and is designed for use with the CANLink<sup>®</sup> Conductor<sup>™</sup> software tool for diagnostics and field troubleshooting.

### Specifications

Mating Connectors: Deutsch	DT06-4SA (with W4SA wedge) DT06-4SB (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-609 2x3 Keypad

### A Connector

Deutsch DT04-4PA 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 DT04-4PB 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	Output DOUT/PWM(-) (0.75A)
4	Output DOUT/PWM(-) (0.75A)

### B Connector Option #2

Deutsch DT04-4PB 4-pin Connector	
Pin	Function
1	BAT(+) Module
2	BAT(-) Module
3	CAN-H
4	CAN-L

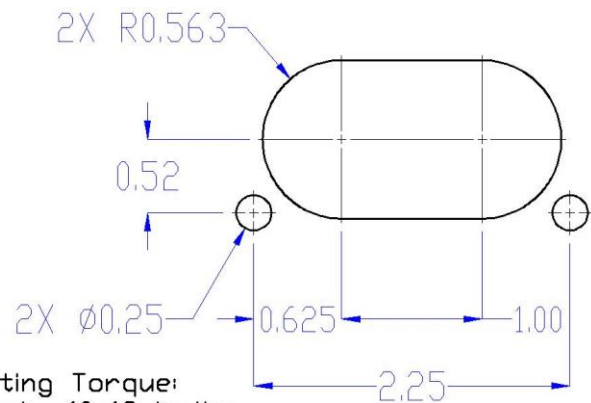
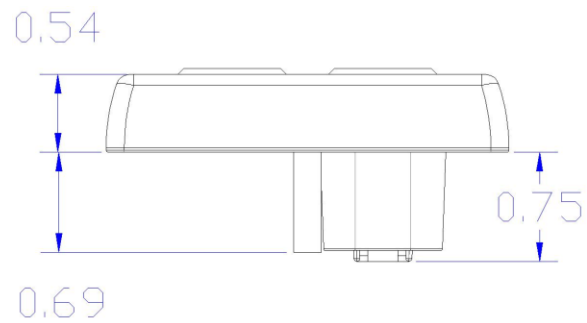
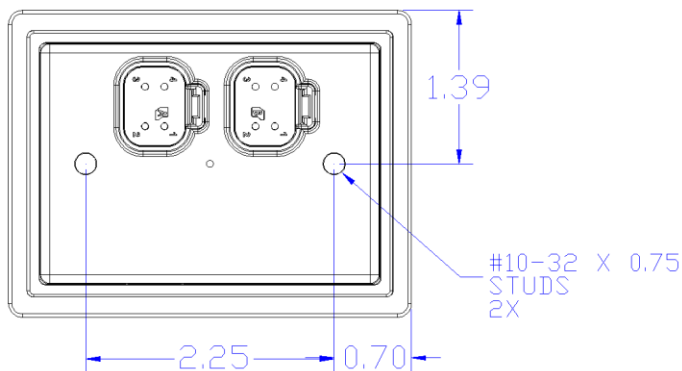
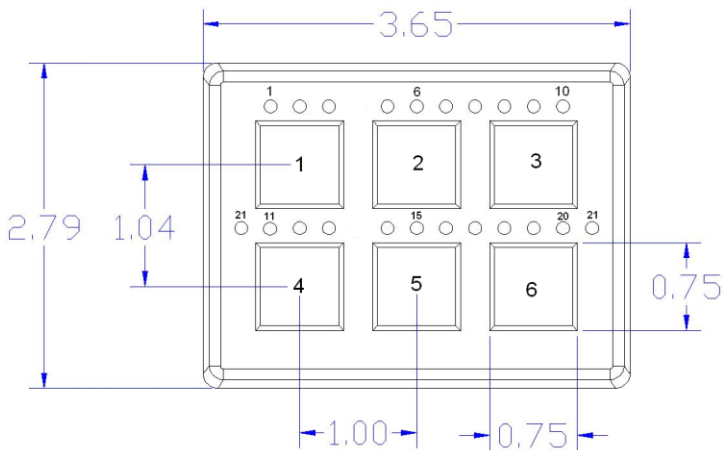
### Composer I/O Assignments for Button Inputs & LED Outputs

- 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-609-1XX 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.



Mounting Torque:  
Typical: 10-18 in-lbs  
Max: 25 in-lbs  
Note: Lock washer  
should be utilized

Panel Cut-Out