

Discover CAN BUS Type-B Battery Discharge Indicator User Guide

Home » Discover » Discover CAN BUS Type-B Battery Discharge Indicator User Guide 1



Contents

- 1 Discover CAN BUS Type-B Battery Discharge Indicator
- **2 INTRODUCTION**
- **3 INSTALLATION OPTIONS AND REQUIRED MATERIALS** 3.1 LED INDICATORS
- **4 ELECTRICAL OVERVIEW**
- 5 MECHANICAL (mm)
- **6 BATTERY PINOUT ASSIGNMENTS**
- **6.1 Pinout Assignments LITHIUM PROFESSIONAL**
- **7 BDI TYPE-B ENVIRONMENTAL SPECIFICATIONS**
- **8 INSTALLATION**
- **9 BATTERY MODELS**
- 10 Documents / Resources
- 11 Related Posts



Discover CAN BUS Type-B Battery Discharge Indicator



INTRODUCTION

The Type-B Battery Discharge Indicator (BDI) communicates with Discover Lithium batteries over CAN Bus using the LYNK Port on LITHIUM PROFESSIONAL or AEBus Port on AES LiFePO4 Industrial batteries. The TYPE-B BDI displays warnings, charging status, and state-of-charge (SOC) using incremental LED SEGMENTS. The BDI device is plug and play, deriving both power and battery status directly from the LYNK Port or AEBus Port. The TYPE-B BDI will provide the aggregate SoC for up to 20 Discover Lithium Batteries. The Type-B BDI is rated IP 30, with an installed frontal rating of IP 65.

Compatible Batteries

- AES LiFePO4 Industrial Batteries: 12-48-6650, 12-36-6700, 14-24-2800, 14-36-3000, 14-48-3000
- LITHIUM PROFESSIONAL Batteries: DLP-GC2-12V, DLP-GC2-24V, DLP-GC2-36V, DLP-GC2-48V 2.0

INSTALLATION OPTIONS AND REQUIRED MATERIALS

The Type-B Battery is available as a head unit (950-0034) and used with AES LiFePO4 or LITHIUM PROFESSIONAL batteries. The installer must supply a cable of the appropriate length with a pinout and connector appropriate for either an AES LiFePO4 Industrial battery or a LITHIUM PROFESSIONAL battery. Refer to section 6.0 Battery Pinout Assignments for details on connectors and pinouts.

A kit (950-0039) that includes both the TYPE-B head unit (950-0034) and an LYNK NETWORK BDI 1.8M cable (790-0079) is available from Discover for installation with LITHIUM PROFESSIONAL batteries.

LED INDICATORS

Normal Operation

Only 1 LED will be on during regular operation.

Position	Activity	
	Flash – State of Charge 0% to 9 %	
LED 1	Solid on – State of Charge range 10% to 19 %	
LED 2	Solid on – State of Charge range 20% to 29 %	
LED 3	Solid on – State of Charge range 30% to 39 %	
LED 4	Solid on – State of Charge range 40% to 49 %	
LED 5	Solid on – State of Charge range 50% to 59 %	
LED 6	Solid on – State of Charge range 60% to 69 %	
LED 7	Solid on – State of Charge range 70% to 79 %	
LED 8	Solid on – State of Charge range 80% to 89 %	
LED 9	Solid on – State of Charge range 90% to 94%	
LED 10	Solid on – State of Charge range 95% to 100%	

Charging Operation

The active State of Charge LED will slowly flash

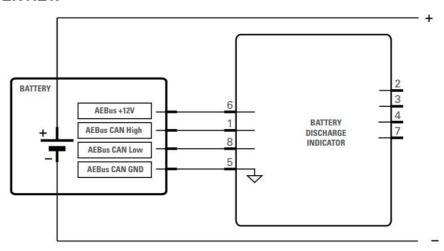
Battery Protection Indication

When a connected battery has active protection (faults), LED 1 through LED 10 will all flash at the same time.

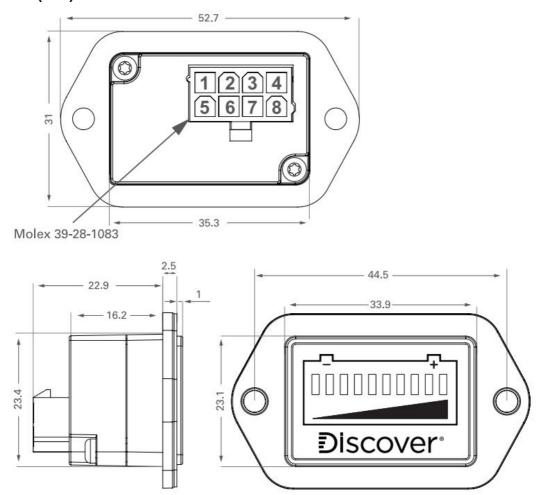
No Battery Detected

The LED interface will continuously cycle through all LEDs when the BDI-B is powered on, but no batteries are detected.

ELECTRICAL OVERVIEW



MECHANICAL (mm)

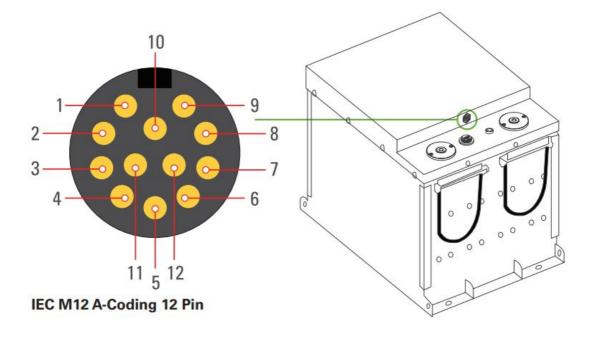


Pinout Assignments for BDI (MOLEX 39-28-1083)

Pin 1	LYNK Bus (AEBus) CAN High	
Pin 5	LYNK Bus (AEBus) CAN GND	
Pin 6	LYNK Bus (AEBus) CAN +12V *	
Pin 8	LYNK Bus (AEBus) CAN Low	

BATTERY PINOUT ASSIGNMENTS

Pinout Assignments for AES LiFePO4 Industrial Batteries



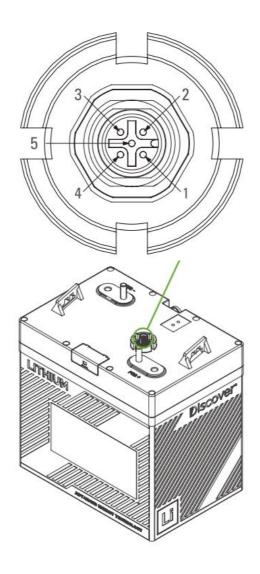
Pin 3	LYNK Bus (AEBus) CAN GND	
Pin 4	LYNK Bus (AEBus) CAN High	
Pin 5	LYNK Bus (AEBus) CAN Low	
Pin 12	LYNK Bus (AEBus) CAN +12V *	

^{*} Not all models are equipped with an internal 12V power supply.

Pinout Assignments LITHIUM PROFESSIONAL Batteries

IEC M12 A-Coding 5 Pin

PIN Number	Function
1	ON/OFF Switch
2	LYNK Bus CAN L
3	LYNK Bus CAN H
4	LYNK Bus 12V +
5	LYNK Bus GND



BDI TYPE-B ENVIRONMENTAL SPECIFICATIONS

• **Operation:** -40°C to 85°C (-40°F to 185°F)

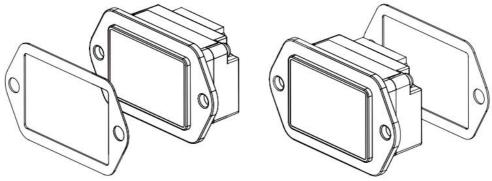
• **Storage:** -50°C to 90°C (-58°F to 194°F)

• Humidity: 95 % RH non-condensing at 38°C (100°F)

Rated IP 30, with an installed frontal rating of IP 55 when installed with provided gasket.

INSTALLATION

Gasket Mounting – Front or Back



Secure BDI with M 2.5 bolts or screws.

Connect Harness

Connect the cable harness to either LYNK Port or AEbus Port on the battery, then connect to TYPE-B BDI.

BATTERY MODELS

AES LIFEPO4 INDUSTRIAL BATTERIES:

- 12-48-6650
- 12-36-6700
- 14-24-2800
- 14-36-3000
- 14-48-3000

LITHIUM PROFESSIONAL BATTERIES:

- DLP-GC2-12V
- DLP-GC2-24V
- DLP-GC2-36V
- DLP-GC2-48V

Documents / Resources



<u>Discover CAN BUS Type-B Battery Discharge Indicator</u> [pdf] User Guide CAN BUS, CAN BUS Type-B Battery Discharge Indicator, Type-B Battery Discharge Indicator, B attery Discharge Indicator, Indicator

Manuals+,