

**Liftgate Charging System with Nosebox** 

The DIRECT™ nosebox line combines all the best features of our original liftgate charging systems into a space-saving nosebox.

It also includes an interior light controller (harness sold separately) designed to turn the lights on inside a trailer and automatically shut them off either:

- via a timer
- if the liftgate batteries drop to a low state of charge.

#### **Electrical Specifications:**

	Min	Max
Operating Voltage	7 V	16 V
Operating Temperature	-40°C	85°C
Quiescent current		< 30 mA

#### **Product Weights:**

Nosebox/plate: approx. 6 lbs

Nosebox/plate/cables: approx. 18 lbs

See the following pages for drawings and diagrams.



#### **Features:**

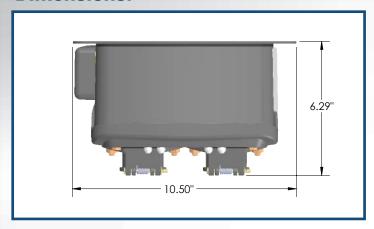
- Saves space on front of trailer
- Combines liftgate charging system into nosebox
- Mazimizes energy transfer from truck to liftgate batteries
- Maintains and protects batteries
- Maximizes battery life and reduces downtime
- Utilizes dual pole connection and voltage drop compensation to provide faster recharge
- Automatically chooses best charge source: aux, dual pole, or reefer (with optional reefer harness)
- Gives priority to the ABS by turning off within 1/20<sup>th</sup> of a second if the source voltage drops below 9.5 V
- Outputs a signal that can be connected to a telematics system (will alert if liftgate battery gets critically low)
- Replaceable receptacles in case of damage
- Easy to read LED indication
- Powers interior dome lights from the liftgate battery (optional harness required)
- Designed to meet SAE J1455
- Patented (patent #s 8,004,242 and 9,725,000)
- 3-year warranty

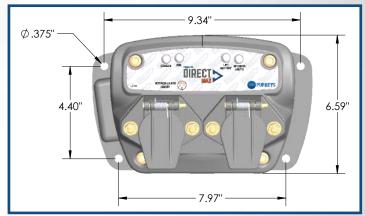




### **Drawings and Diagrams**

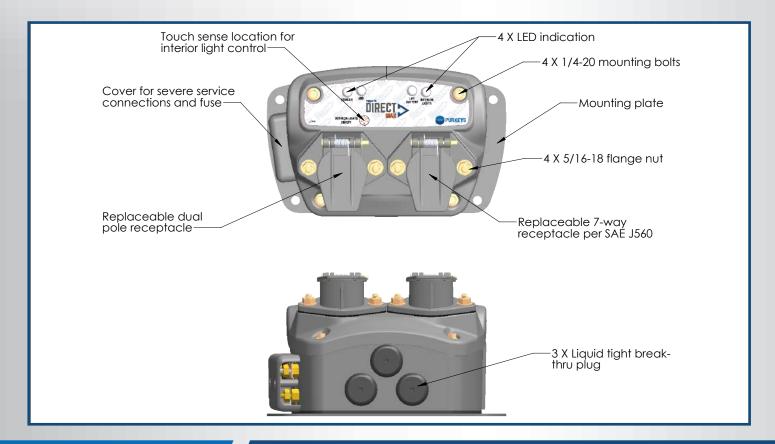
#### **Dimensions:**





Note: nosebox without plate uses an industry standard bolt pattern.

#### **Exterior Call-outs:**

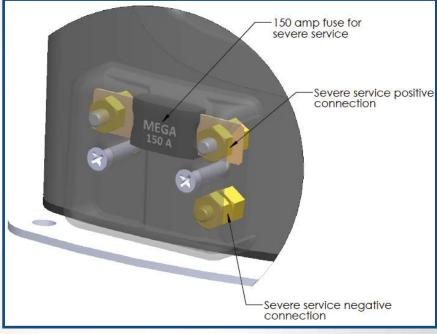




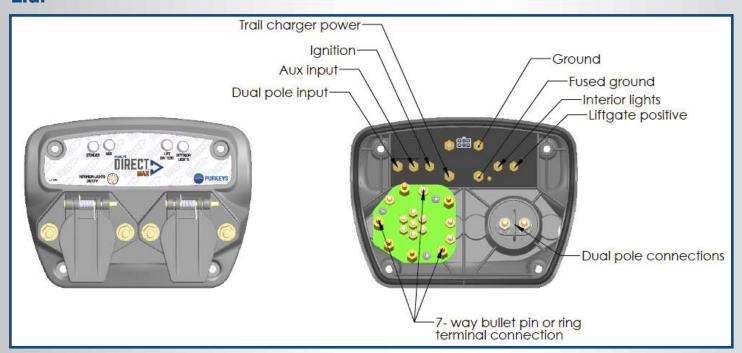
### **Drawings and Diagrams**

#### **Severe Service Connections:**





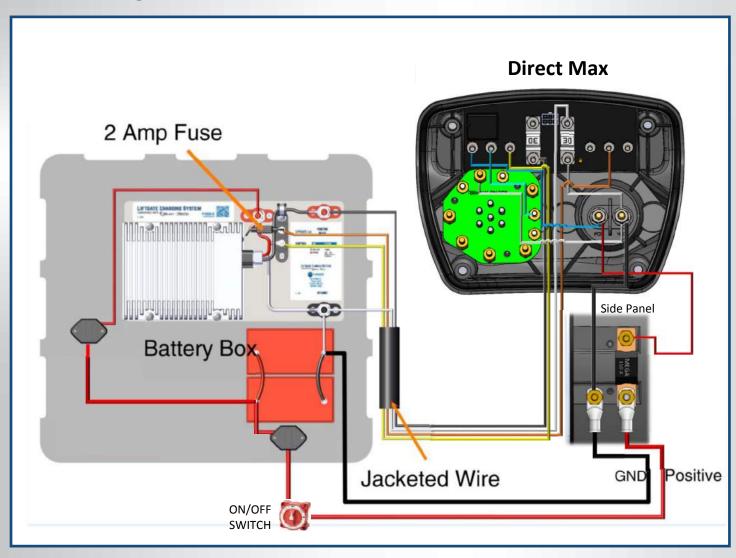
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## **Drawings and Diagrams**

## **Electrical Diagram:**



### **Part Numbers and Cable Specifications**

#### **Part Numbers:**

Part #	Output Harness Length	Includes DC/DC Converter?
MAX-25-A	25' ± 6"	NO
MAX-25-KIT	25' ± 6"	YES
MAX-50-A	50' ± 6"	NO
MAX-50-KIT	50' ± 6"	YES
MAX-70-A	70' ± 6"	NO
MAX-70-KIT	70' ± 6"	YES

### **Cable Specifications (H-00286):**

Gauge wire: 14 GA Orange

16 GA Yellow 8 GA Black

8 GA White

Overall O.D: .490" O.D

Wall: .030" ± .05

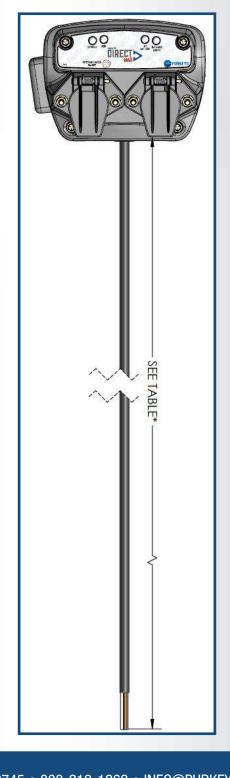
Stranding: 14 GA-19/27 16 GA 7/24

8 GA 19/21

Jacket Type: +80° C and -30° C

Black PVC

Wire insulation: GXL





# **Interior Light Controller and LED Logic**

### **Interior Light Controller:**

- Turn on/off from nosebox or from switch in trailer
- Turn off after timeout (includes settings for 15, 30, 60, and 90 minutes)
- Turn off after aux power goes from low to high
- Turn off if liftgate battery gets low (LVD)
- Blinks lights three times three minutes before turning off, two times two minutes before turning off, and once one minute before turning off



# **LED Logic:**

LED	STATUS	
Green solid	Charging	
Green blink	Good voltage	
Orange blink	Low voltage	
Orange rapid-blink	Fault	