

EV4C

Electric Vehicle Interface Controller

HOW TO INSTALL

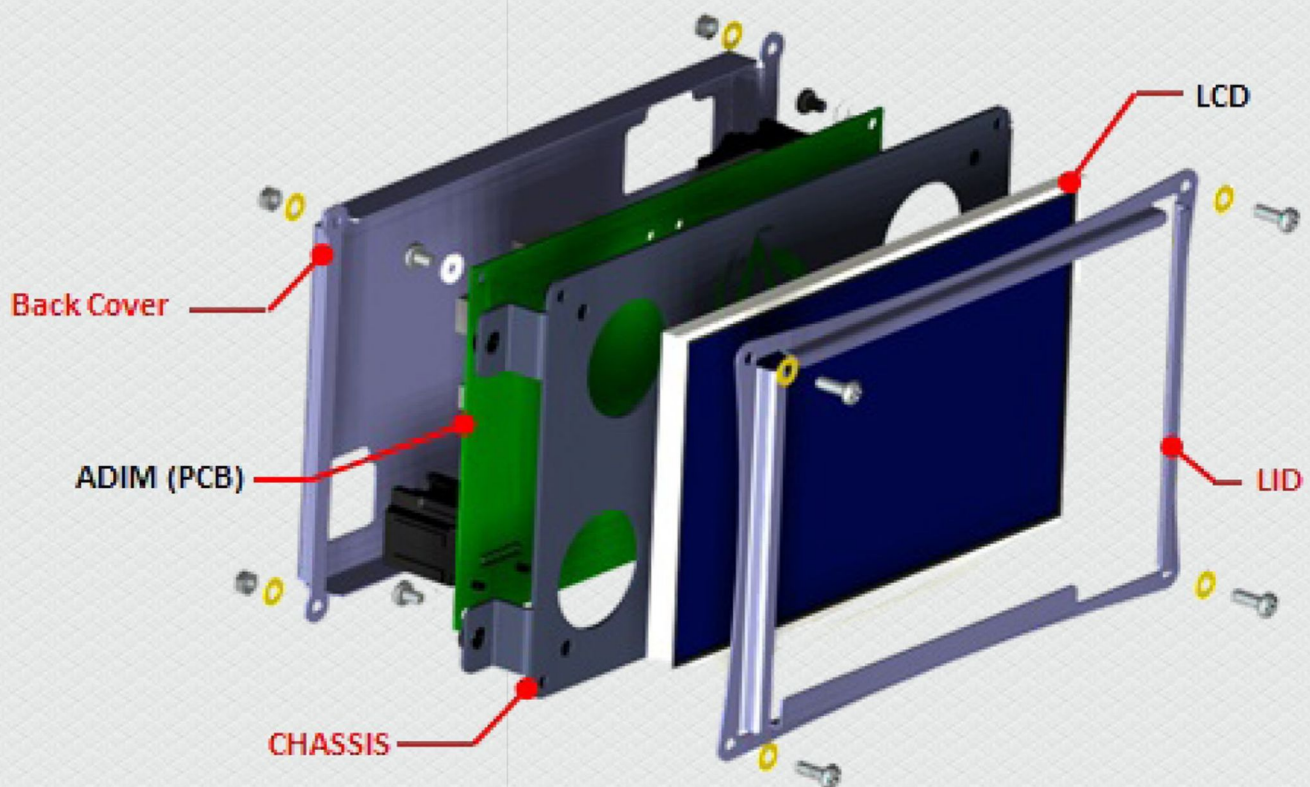
EVIC.BMS(ORION)



WHAT SHOULD BE IN THE BOX?

MECHANICAL PARTS ASSEMBLED EXPLODED VIEWS

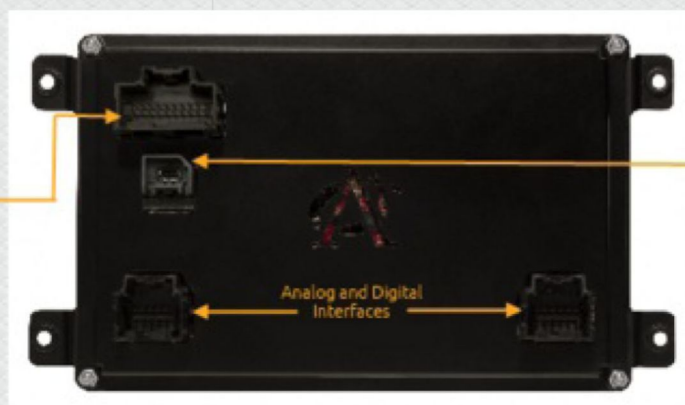
Essential Enclosure



ELECTRICAL INTERFACES 2 HARNESSES ARE PROVIDED



**POWER & CAN
HARNESS**



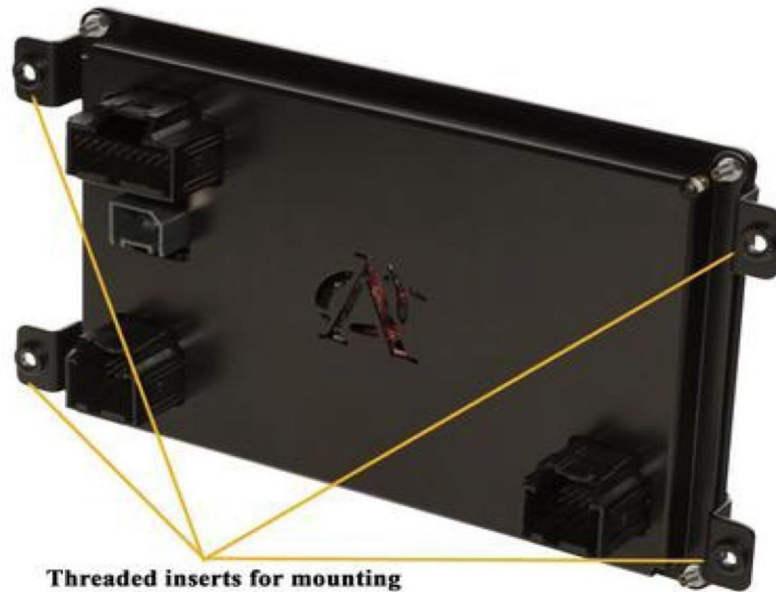
**USB on-the-go
CABLE**

HOW SHOULD EVERYTHING MOUNT?

ESSENTIAL ENCLOSURE

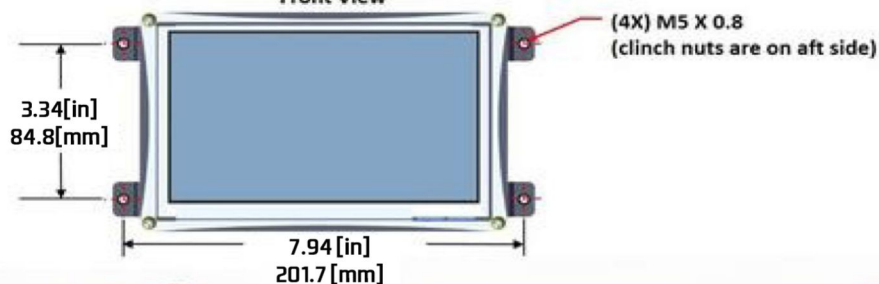
IMAGES BELOW PROVIDE MOUNTING INSTRUCTIONS

EV4C
Essential Vehicle Interface Controller

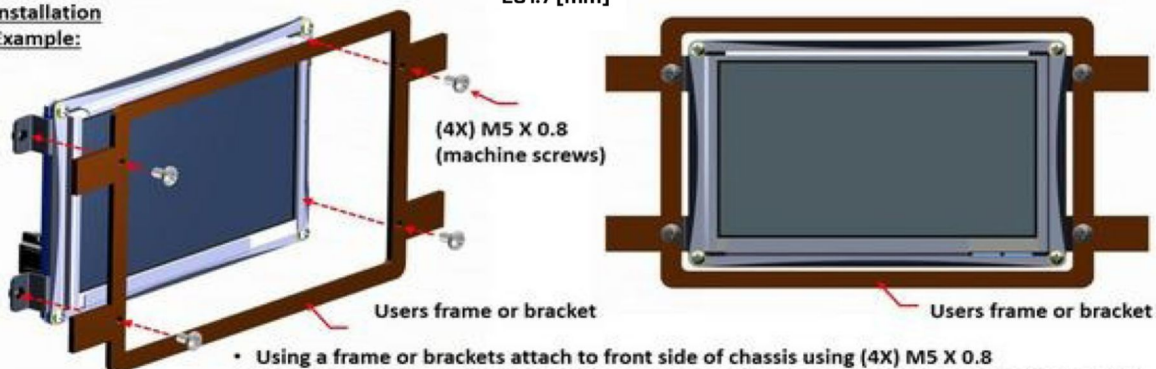


Vehicle Mounting Instructions

Mounting Hole Details
Front View



Installation
Example:



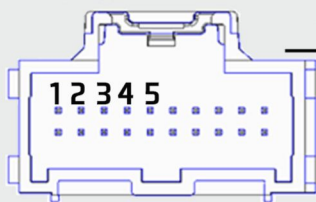
- Using a frame or brackets attach to front side of chassis using (4X) M5 X 0.8
- The clinch nuts are on the back of the chassis so it is recommended that EVIC is installed to the back side of the users frame or bracket.

HOW SHOULD EVERYTHING WIRE TOGETHER?

POWER AND COMMUNICATION

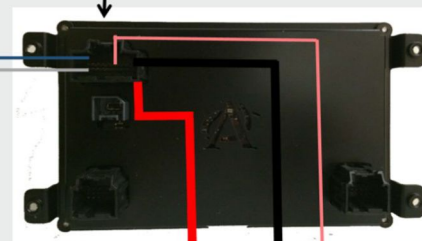
IMAGE BELOW SHOWS THE WIRING OF EVIC TO POWER IT ON AND TO WIRE THE COMMUNICATION INTERFACES WITH YOUR ELECTRIC VEHICLE'S DATA.

Power and CAN



20-pin Harness

Cav	Description	Awg Size	Color
1	VBAT	18	RD
2	GND	18	BK
3	VBAT_SW	18	PK
4	CAN-H_1	22	WT
5	CAN-L_1	22	GY



CAN High
CAN Low

Controller Area Network (CAN)

CAN is a commonly used communication protocol in automotive electronics and most EV sub-systems support this protocol.

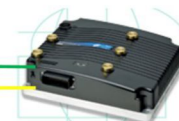
There are common operating bus speeds of CAN and they are listed below. Note: Each Sub-system on each CAN network NEEDS to operate at the same bus speed.

Bus Speeds

125 kbps
250 kbps
500 kbps
1 Mbps

Most Common

EV Sub-systems



Motor Controller



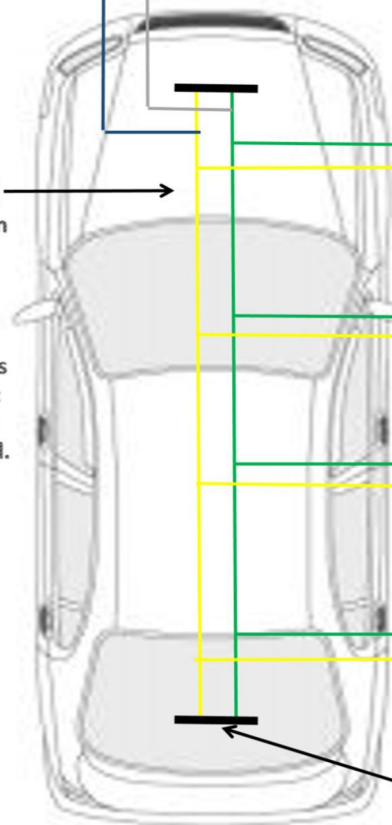
Charger



DC/DC Converter



Battery Management System



Important: Ensure your CAN network is properly terminated with a 120 ohm resistor at each end.



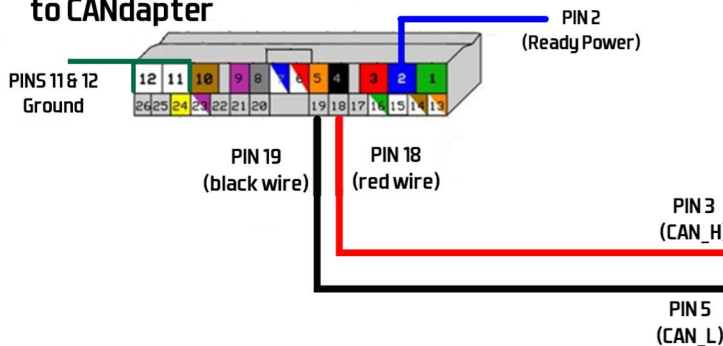
CONFIGURE ORION BMS WITH EVIC USING ORION's UTILITY TOOL

IMPORTANT NOT TO SKIP STEP-BY-STEP INSTRUCTIONS ARE PROVIDED BELOW

EV4C
Electric Vehicle Interface Controller

Start Here Main Connector

- 1) Wire Power and Ground
- 2) Connect Wires CAN_H and CAN_L to CANdapter



CANdapter



- 3) Install Orion BMS Utility to laptop or PC
4. Plug CANdapter to laptop or PC

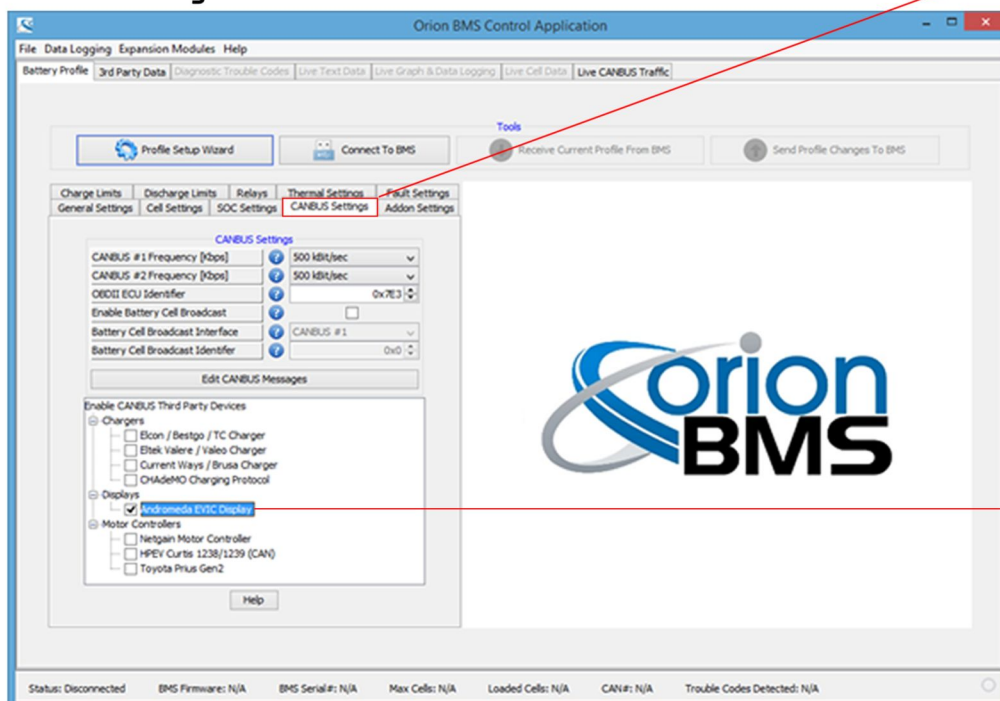


ANDROMEDA
INTERFACES, INC.

EV4C
Electric Vehicle Interface Controller

1) Launch Orion BMS Utility

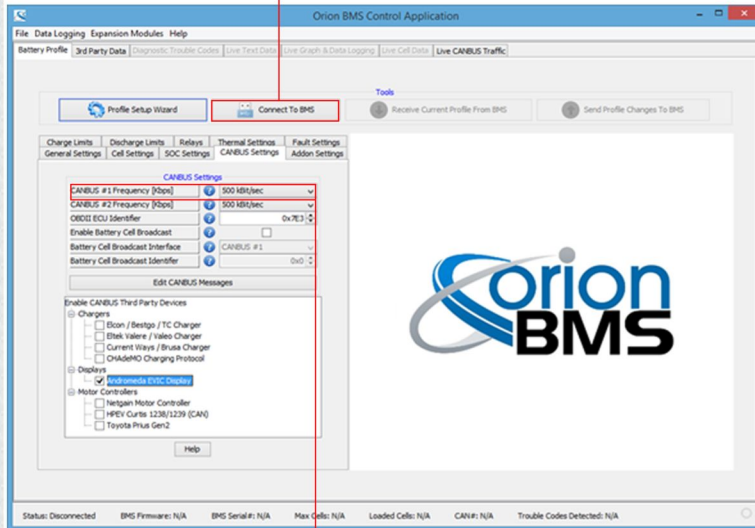
2) Go to CANBUS Setting Tab



- 3) Select
Andromeda
EVIC Display

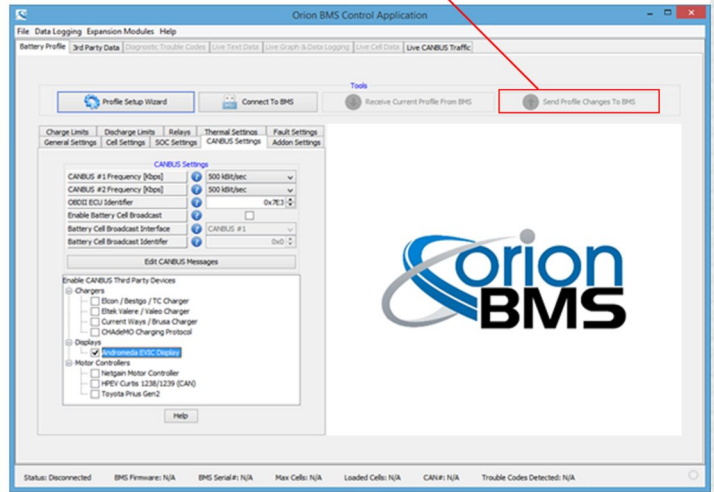
ANDROMEDA
INTERFACES, INC.

3) Connect to BMS



Change CANBUS #1 from 500kbit/sec to 250kbit/sec

4) Send Profile Change to BMS

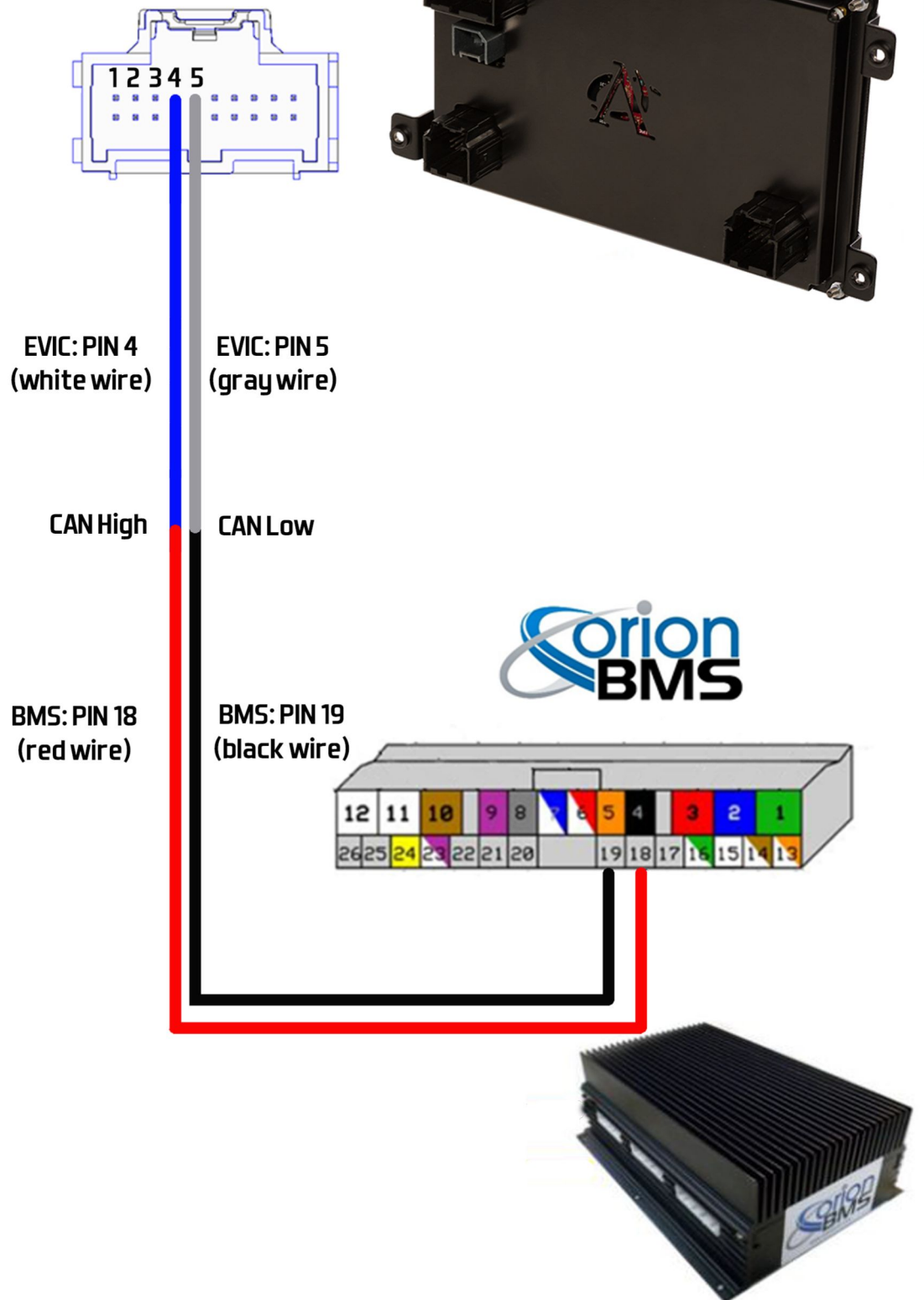


Wait for message box to ensure new profile was properly submitted to Orion BMS

ORION BATTERY MANAGEMENT SYSTEM TO EVIC

IMAGE BELOW SHOWS HOW TO WIRE THE
CAN WIRES TO EACH DEVICE.

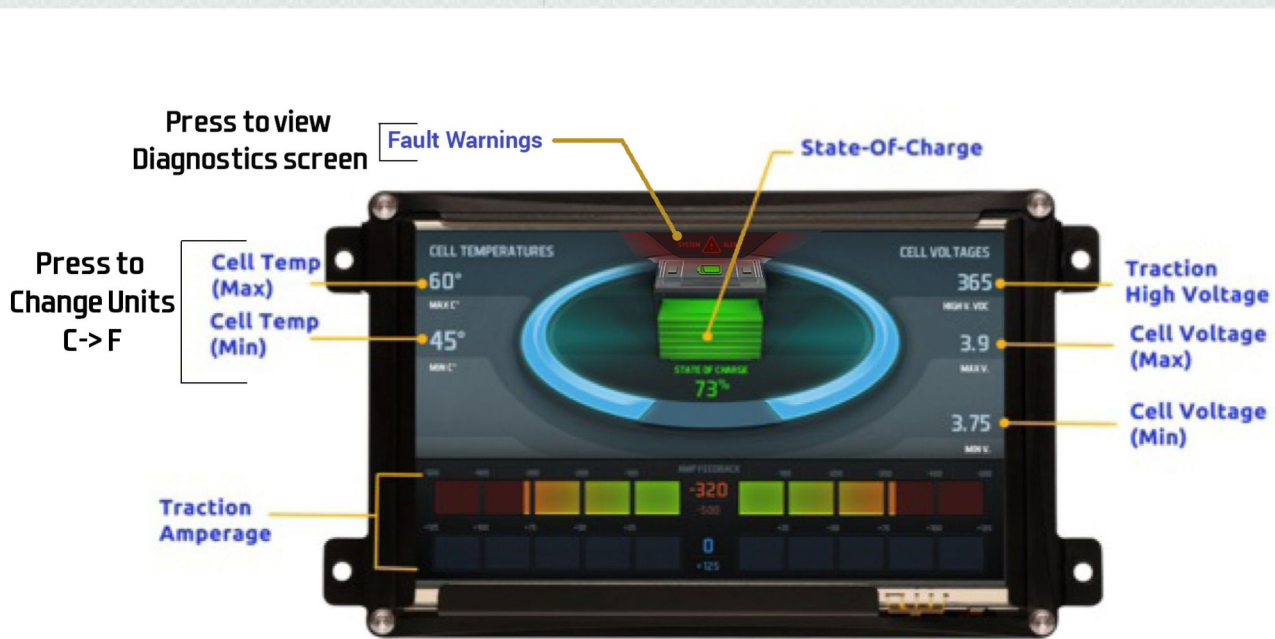
EVIC: Power & CAN Wiring Harness



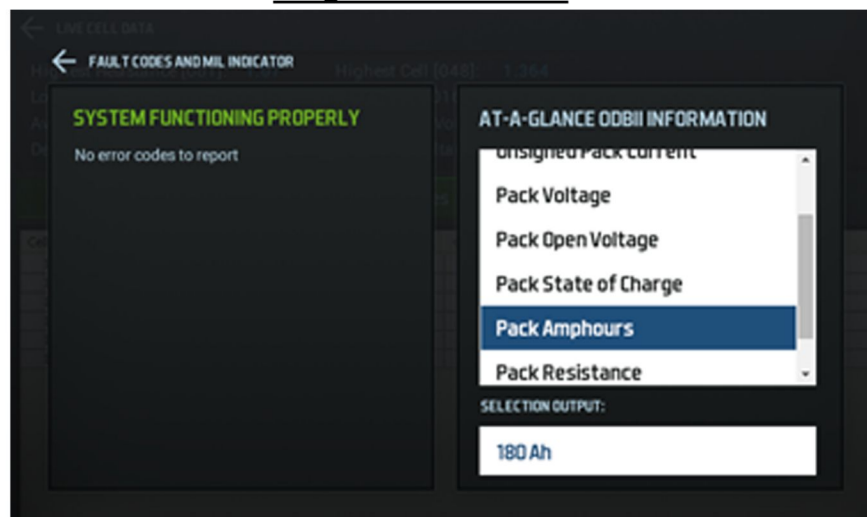
WHAT SHOULD HAPPEN WHEN YOU POWER UP?

GRAPHICAL USER INTERFACE

IMAGE BELOW SHOWS THE DATA THAT WILL BE DISPLAYED ON EVIC.BMS (ORION) ONCE EVERYTHING IS SUCCESSFULLY INSTALLED.



Diagnostics Screen



In this screen you can view specific battery pack details, warnings and request OBDII PIDs directly. (You can always access this screen by pressing the top of the screen above the battery)

WHAT SHOULD YOU DO WHEN NOTHING ABOVE
GOES ACCORDING TO PLAN?

DON'T PANIC

We know the feeling.

SUPPORT

Our support team will work to
resolve your issues.

CONTACT US

Contact us at 877-332-6055 or
email at support@ai-displays.com

PLEASE ENJOY YOUR
ELECTRIC VEHICLE
EXPERIENCE!

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