



Multiplex Integration Schematic

2022 Phaeton

37 BH 40 AH 40 IH 40 QBH 40 QKH 44 OH

SPYDER
CONTROLS CORP

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! COMPONENTS ARE NOT TO SCALE !

Schematic Connections Legend









	Constant Ground
	Constant 12V+
	Switched Ground
	Switched 12V+
	Reverse Polarity
	Signal
	120V AC Line
	Network









Table of Contents

17	Moryde TV Lift (Optional)
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! COMPONENTS ARE NOT TO SCALE !

Schematic Connections Legend

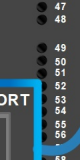
	Constant Ground
	Constant 12V+
	Switched Ground
	Switched 12V+
	Reverse Polarity
	Signal
	120V AC Line
	Network

G6 Panel

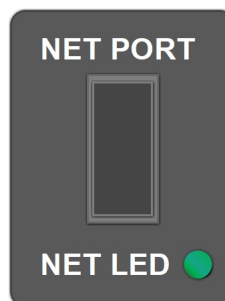


The CHANNEL LED

corresponds with the circuit listed on the house or chassis G6A panels. The LED will turn on or off indicating whether the circuit is on or off. Please refer to the house or chassis panel pinouts for a complete channel list.



NET PORT



NET PORT

NET LED

The NET PORT is a helpful diagnostic tool. Spyder may ask you to use this port to troubleshoot network issues. The NET LED reports the network status of the G6 panel.

Spyder Controls Website

To access more information on your coach or to contact us by email please navigate to: <http://spydercontrols.com/customer-login/>

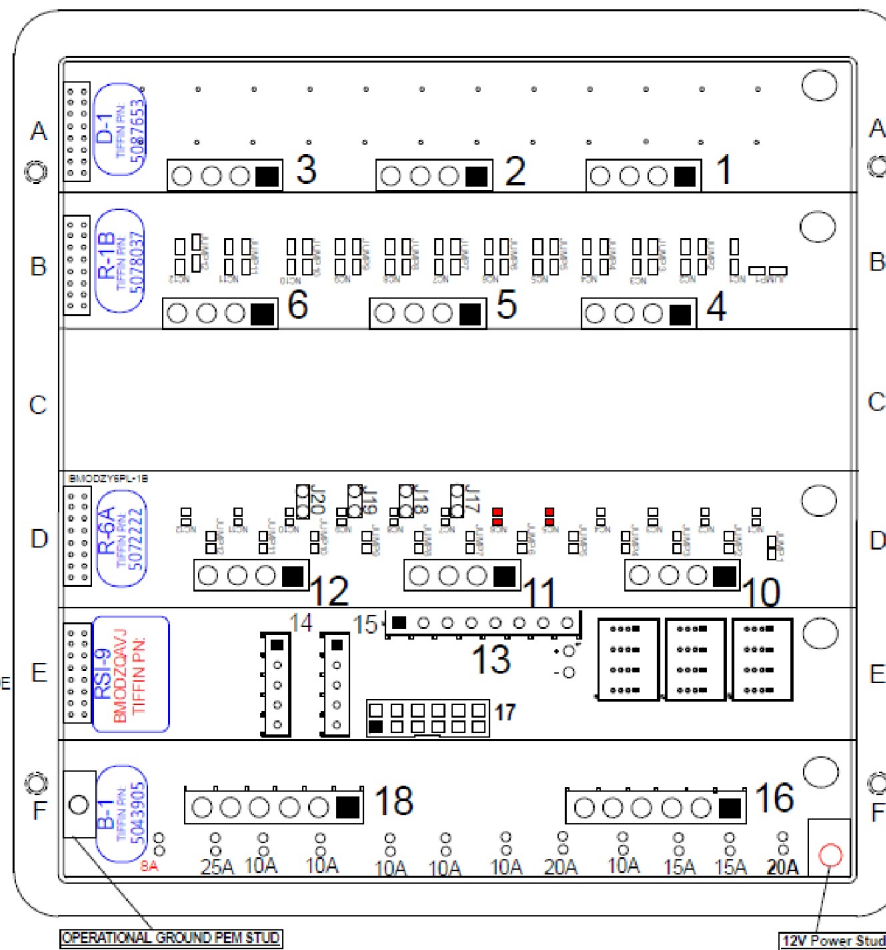
Username: Tiffin

Password: Motorhomes

G6A CONTROL PANEL LAYOUT
 Tiffin PN: 5114027 Spyder PN: BENCZ52DJ
 2022 BUS/PHTN - HOUSE Rev 0vA
PINOUT DIAGRAM - 2021.02.16

Back View

- CONNECTOR 4**
 - 4-1 (G6 LED 13) REAR BATH/MID SINK CEILING LIGHTS
 - 4-2 (G6 LED 14) TASK LIGHTS
 - 4-3 (G6 LED 15) MID BATH CEILING LIGHTS
 - 4-4 (G6 LED 16) MID BATH VANITY LIGHTS
- CONNECTOR 5**
 - 5-1 (G6 LED 17) REAR BATH/MID SINK VANITY LIGHTS
 - 5-2 (G6 LED 18) TV ACCENT LIGHTS
 - 5-3 (G6 LED 19) FR ACNT LIGHTS
 - 5-4 (G6 LED 20) FR ACNT LIGHTS
- CONNECTOR 6**
 - 6-1 (G6 LED 21) BED ACCENT
 - 6-2 (G6 LED 22) CLOSET LIGHT
 - 6-3 (G6 LED 23) RR ACNT LIGHTS
 - 6-4 (G6 LED 24) RR ACNT LIGHTS
- CONNECTOR 10**
 - 10-1 (G6 LED 37) FLR HT ZONE 1
 - 10-2 (G6 LED 38) FLR HT ZONE 2
 - 10-3 (G6 LED 39) CEILING FAN LO
 - 10-4 (G6 LED 40) CEILING FAN HI
- CONNECTOR 11**
 - 11-1 (G6 LED 41) BED LIFT UP
 - 11-2 (G6 LED 42) BED LIFT DN
 - 11-3 (G6 LED 43) FR TV LIFT UP
 - 11-4 (G6 LED 44) FR TV LIFT DN
- J17 --- FR TV LIFT COMMON
- J18 --- FR TV LIFT COMMON
- J19 --- RR TV LIFT COMMON
- J20 --- RR TV LIFT COMMON
- CONNECTOR 12**
 - 12-1 (G6 LED 45) BED TV LIFT UP
 - 12-2 (G6 LED 46) BED TV LIFT DN
 - 12-3 (G6 LED 47) FIREPLACE OVERRIDE
 - 12-4 (G6 LED 48)
- CONNECTOR 17**
 - 17-6
 - 17-5 REAR AC THERMISTOR
 - 17-4 MID AC THERMISTOR
 - 17-3 FRONT AC THERMISTOR
 - 17-2 REAR FLOOR HT THERMISTOR
 - 17-1 FRONT FLOOR HT THERMISTOR
- CONNECTOR 14 (12V+ INPUTS)**
 - 14-1 WTR HTR STATUS
 - 14-2 GEN FAULT STATUS 12V+
 - 14-3
 - 14-4 BED LIFT PLUNGER
 - 14-5
- CONNECTOR 15 (GND INPUTS)**
 - 15-1
 - 15-2 BEDROOM LIGHT SWITCH
 - 15-3 CLOSET LIGHT SW
 - 15-4 DASH ACNT LT ON
 - 15-5 DASH ACNT LT OFF



- CONNECTOR 1**
 - 1-1 (G6 LED 1) MAIN OH / LIV RM LIGHT
 - 1-2 (G6 LED 2) ENTRY / FLOOR LIGHT
 - 1-3 (G6 LED 3) PS CEILING LIGHTS
 - 1-4 (G6 LED 4) DS CEILING LIGHTS
- CONNECTOR 2**
 - 2-1 (G6 LED 5) HALL / DASH ACCENT LTS
 - 2-2 (G6 LED 6) PS SLIDE LIGHTS
 - 2-3 (G6 LED 7) SCONCE
 - 2-4 (G6 LED 8) DS SLIDE LIGHTS
- CONNECTOR 3**
 - 3-1 (G6 LED 9) FR CRTSY LIGHTS
 - 3-2 (G6 LED 10) RR CRTSY LIGHTS
 - 3-3 (G6 LED 11) BED SCONCE LIGHTS
 - 3-4 (G6 LED 12) BEDROOM LIGHTS
- CONNECTOR 13**
 - 13-1
 - 13-2 CONSTANT 12V+ (BATT)
 - 13-3 GND (COMMON FOR SENSORS)
 - 13-4 LPG SENSOR INPUT
 - 13-5 BLACK TANK SENSOR
 - 13-6 GREY TANK SENSOR
 - 13-7 FRESH TANK SENSOR
 - 13-8

- CONNECTOR 18**
 - 18-1 - BREAKER #67
 - 18-2 - BREAKER #68
 - 18-3 - BREAKER #69
 - 18-4 BRKR TO RR SLIDE - BREAKER #70
 - 18-5 FRIDGE - BREAKER #71
 - 18-6 - BREAKER #72
- CONNECTOR 16**
 - 16-1 - BREAKER #61
 - 16-2 FRONT FURNACE - BREAKER #62
 - 16-3 REAR FURNACE - BREAKER #63
 - 16-4 SWITCHER / LP/IR - BREAKER #64
 - 16-5 OUTSIDE TV - BREAKER #65
 - 16-6 - BREAKER #66

R=RELAY CARD
B=BREAKER CARD
RSI-9=INPUT MODULE
D=DIMMER CARD
J = JUMPERED

NOTE: CONNECTORS ARE SHOWN HERE IN THE LOADED (REAR) VIEW.

G6A CONTROL PANEL LAYOUT
Tiffin PN: 5113998 Spyder PN: BENCZ54DJ
2022 BUS/PHTN/ZEPHYR - CHASSIS Rev 1v0
PINOUT DIAGRAM - 2021.02.04

Back View

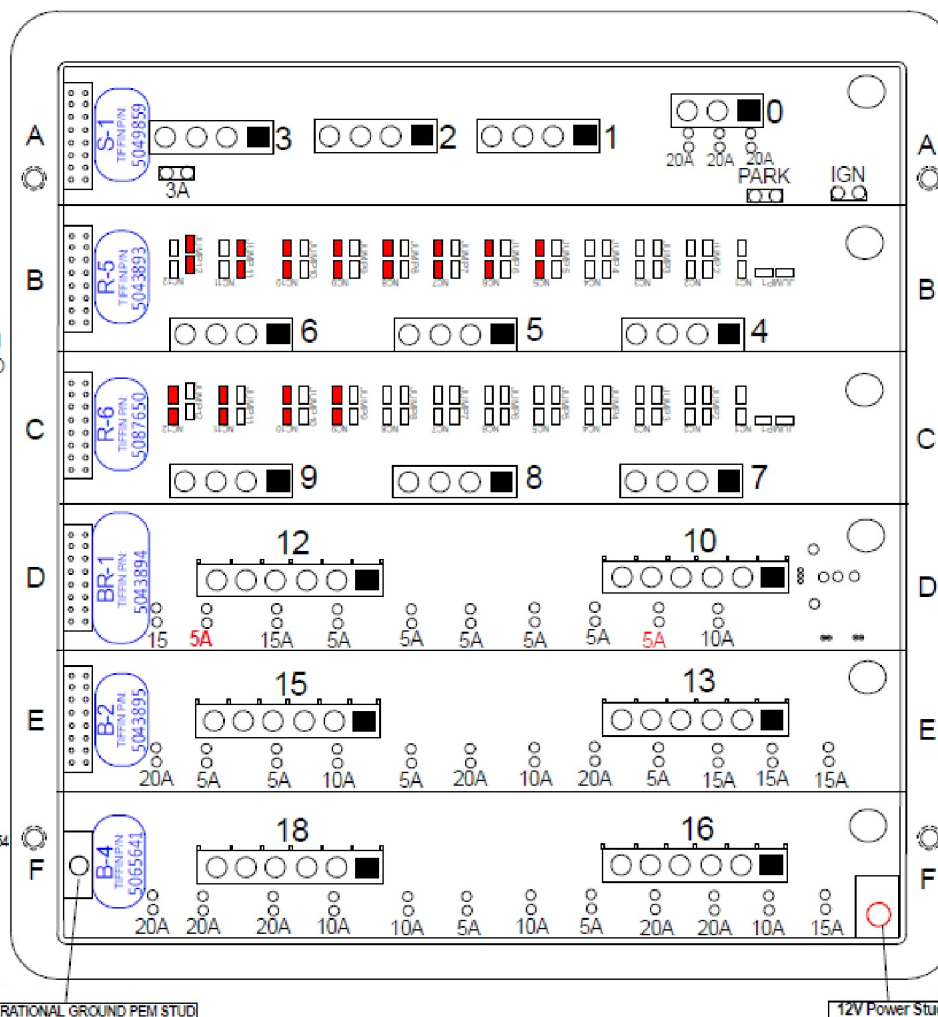
MUST HAVE SIDE MOUNTING TABS ON G6 PANEL

Card Legend

- R=RELAY CARD
- B=BREAKER CARD
- BR=BREAKER/RELAY CARD
- D=DIMMER CARD
- J=JUMPED

- CONNECTOR 4**
 - 4-1 (LED 13) AWNING LIGHT
 - 4-2 (LED 14) HEADLIGHTS (INDICATION FLASH)
 - 4-3 (LED 15) DOOR / ASSIST HANDLE
 - 4-4 (LED 16) SPARE
- CONNECTOR 5**
 - 5-1 (LED 17) SOFA DAY SHD UP
 - 5-2 (LED 18) SOFA DAY SHD DN
 - 5-3 (LED 19) SOFA NIGHT SHD UP
 - 5-4 (LED 20) SOFA NIGHT SHD DN
- CONNECTOR 6**
 - 6-1 (LED 21) STEP EXT
 - 6-2 (LED 22) STEP RET
 - 6-3 (LED 23) GEN START
 - 6-4 (LED 24) GEN STOP
- CONNECTOR 7**
 - 7-1 (LED 25) U-COACHACNT (PARK)
 - 7-2 (LED 26) WINDSHLD ACNT LT
 - 7-3 (LED 27) MAP LT
 - 7-4 (LED 28) SPARE
- CONNECTOR 8**
 - 8-1 (LED 29) PASSENGER FAN HI
 - 8-2 (LED 30) PASSENGER FAN LO
 - 8-3 (LED 31) ROAD LIGHT
 - 8-4 (LED 32) PORCH LIGHT
- CONNECTOR 9**
 - 9-1 (LED 33) SPARE
 - 9-2 (LED 34) SPARE
 - 9-3 (LED 35) GLY NIGHT SHD UP
 - 9-4 (LED 36) GLY NIGHT SHD DN
- CONNECTOR 10**
 - 10-1 - BREAKER #37
 - 10-2 - BREAKER #38
 - 10-3 DENSO A/C PWR/IGN(YLW) - BREAKER #39
 - 10-4 DRIVERS MIRROR PWR - BREAKER #40
 - 10-5 CAMERA IGN - BREAKER #41
 - 10-6 JACK BUZZER - BREAKER #42
- CONNECTOR 11**
 - 11-1 (LED 1) D/S FR SLIDE RET
 - 11-2 (LED 2) D/S FR SLIDE EXT
 - 11-3 (LED 3) P/S FR SLIDE RET
 - 11-4 (LED 4) P/S FR SLIDE EXT
- CONNECTOR 12**
 - 12-1 PANEL LAMP/HEADLT LED - BREAKER #43
 - 12-2 FRIDGE - BREAKER #44
 - 12-3 ENTRY STEP IGN - BREAKER #45
 - 12-4 DOCK LIGHT - BREAKER #46
 - 12-5 PASS SIDE MIRROR PWR - BREAKER #47
 - 12-6 POWER WINDOW OPTION - BREAKER #48
- CONNECTOR 13**
 - 13-1 MAP LT / RADIO / FANS - BREAKER #49
 - 13-2 DASH USB POWER - BREAKER #50
 - 13-3 - BREAKER #51
 - 13-4 ENTRY STEP SWITCH - BREAKER #52
 - 13-5 ENTRY STEP POWER - BREAKER #53
 - 13-6 KEYLESS ENTRY POWER - BREAKER #54
- CONNECTOR 14**
 - 14-1 (LED 5) D/S RR SLIDE RET
 - 14-2 (LED 6) D/S RR SLIDE EXT
 - 14-3 (LED 7) P/S RR SLIDE RET
 - 14-4 (LED 8) P/S RR SLIDE EXT
- CONNECTOR 15**
 - 15-1 POWER SEAT #1 - BREAKER #55
 - 15-2 CB - BREAKER #56
 - 15-3 ELEC STEP COVER - BREAKER #57
 - 15-4 SATELITE - BREAKER #58
 - 15-5 DASH SHADE MODULE - BREAKER #59
 - 15-6 POWER SEAT #2 - BREAKER #60

- CONNECTOR 0**
 - 0-1 FRONT SLIDE MODULE
 - 0-2 VANITY SLIDE MODULE
 - 0-3 BED SLIDE MODULE
- CONNECTOR 1**
 - 1-1 (LED 1) D/S FR SLIDE RET
 - 1-2 (LED 2) D/S FR SLIDE EXT
 - 1-3 (LED 3) P/S FR SLIDE RET
 - 1-4 (LED 4) P/S FR SLIDE EXT
- CONNECTOR 2**
 - 2-1 (LED 5) D/S RR SLIDE RET
 - 2-2 (LED 6) D/S RR SLIDE EXT
 - 2-3 (LED 7) P/S RR SLIDE RET
 - 2-4 (LED 8) P/S RR SLIDE EXT
- CONNECTOR 3**
 - 3-1 (LED 9) HYDRAULIC PMP - D/S SLIDE
 - 3-2 (LED 10) HYDRAULIC PMP - P/S SLIDE
 - 3-3 (LED 11) PORCH/DOOR AWNING CONST
 - 3-4 (LED 12) SPARE
- CONNECTOR 3A**
 - 3A-1
- CONNECTOR 10**
 - 10-1 - BREAKER #37
 - 10-2 - BREAKER #38
 - 10-3 DENSO A/C PWR/IGN(YLW) - BREAKER #39
 - 10-4 DRIVERS MIRROR PWR - BREAKER #40
 - 10-5 CAMERA IGN - BREAKER #41
 - 10-6 JACK BUZZER - BREAKER #42
- CONNECTOR 12**
 - 12-1 PANEL LAMP/HEADLT LED - BREAKER #43
 - 12-2 FRIDGE - BREAKER #44
 - 12-3 ENTRY STEP IGN - BREAKER #45
 - 12-4 DOCK LIGHT - BREAKER #46
 - 12-5 PASS SIDE MIRROR PWR - BREAKER #47
 - 12-6 POWER WINDOW OPTION - BREAKER #48
- CONNECTOR 16**
 - 16-1 RADIO MEMORY / XM PWR - BREAKER #61
 - 16-2 DENSO A/C POWER - BREAKER #62
 - 16-3 12V+ OUTLET #1 - BREAKER #63
 - 16-4 12V+ OUTLET #2 - BREAKER #64
 - 16-5 ENGINE PREHEAT SWITCH - BREAKER #65
 - 16-6 PASS USB / TRIMARK HANDLE - BREAKER #66
- CONNECTOR 18**
 - 18-1 - BREAKER #67
 - 18-2 - BREAKER #68
 - 18-3 - BREAKER #69
 - 18-4 - BREAKER #70
 - 18-5 - BREAKER #71
 - 18-6 - BREAKER #72



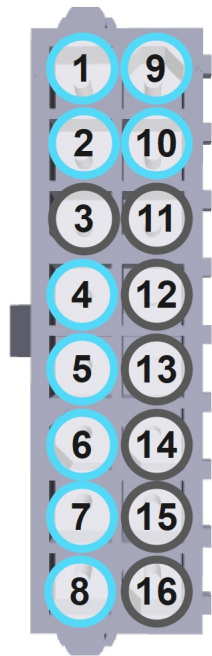
NOTE: CONNECTORS ARE SHOWN HERE IN THE LOADED (REAR) VIEW.

OPERATIONAL GROUND PEM STUD

12V Power Stud

J10

Input / Output



- 1 Generator (12V+)
- 2 Ignition (12V+)
- 4 Water Pump Switch (GND)
- 5 Park Brake (GND)
- 6 Merge Sense (GND)
- 7 Door Pin Sw (Logic A) (GND)
- 8 Door Pin Sw (Logic B) (GND)
- 9 CHS Voltage (12V+)
- 10 House Disconnect Sense (12V+)

J8

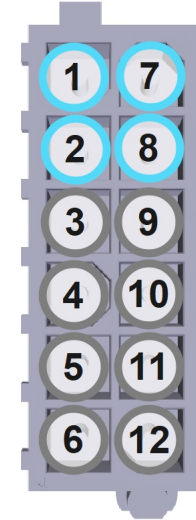
High Current + Rev Pol Outputs



- 1 Door Awning Extend
- 2 Door Awning Retract
- 3 Bay Doors Lock
- 4 Bay Doors Unlock
- 5 Water Pump
- 7 Entry Door Lock
- 8 Entry Door Unlock

J3

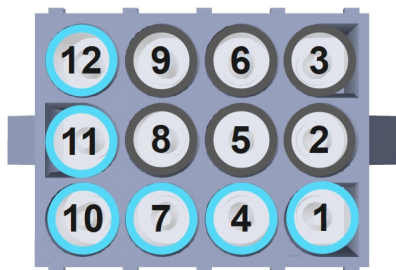
Thermistors



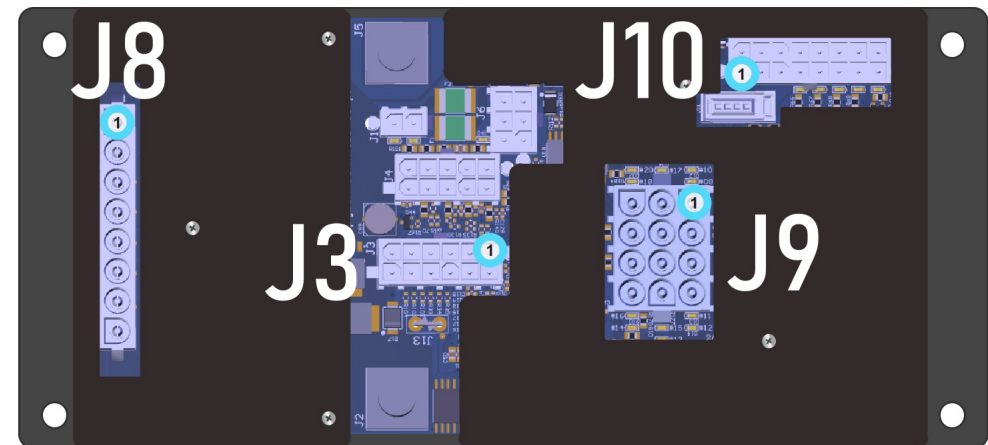
- 1 Bay Temp
- 2 EXT Temp
- 7 Bay Temp GND
- 8 EXT Temp GND

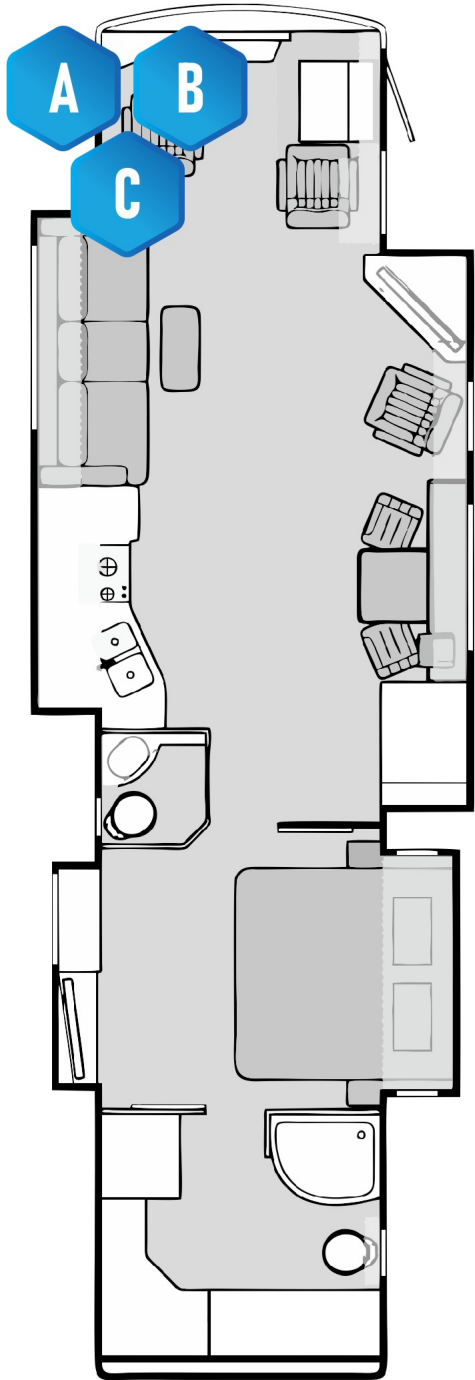
J9

High/Low Current Outputs



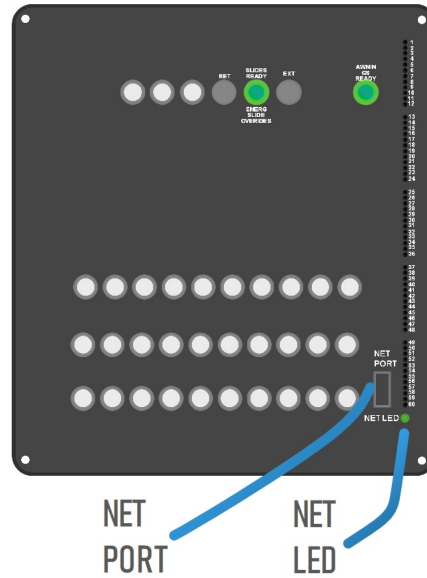
- 1 Electric Water Heater
- 4 Diesel Water Heater
- 7 Engine Pre-Heat
- 10 FR FURN./AQUAHOT
- 11 RR FURN./AQUAHOT
- 12 Door Bell Chime





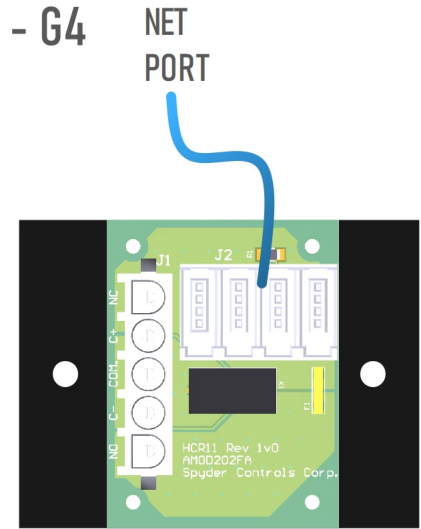
A G6 CHASSIS PANEL

i
 Spyder Part Number
 BENCZ54DJ
 Tiffin Part Number
 5113998
 Dimensions
 10" X 10"



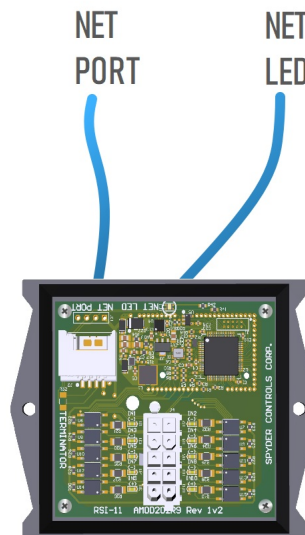
C HCR-11 - G4

i
 Spyder Part Number
 BMODZGAN6
 Tiffin Part Number
 5105426
 Dimensions
 2.5" X 2.0"



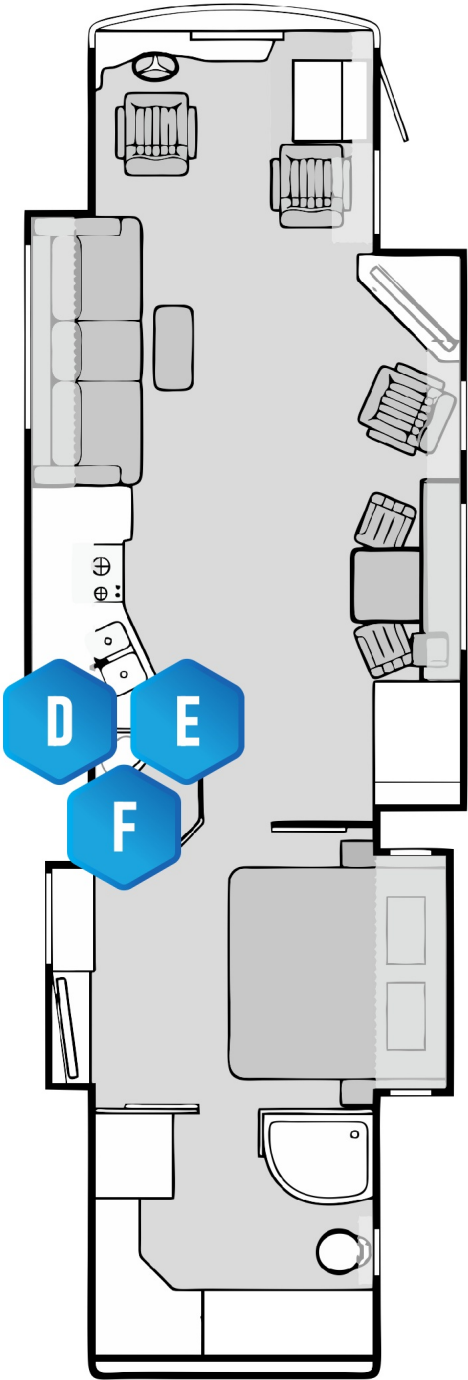
B RSI-11 Module

i
 Spyder Part Number
 BMODZQCA-D
 Tiffin Part Number
 5092109
 Dimensions
 2.7" X 2.7"



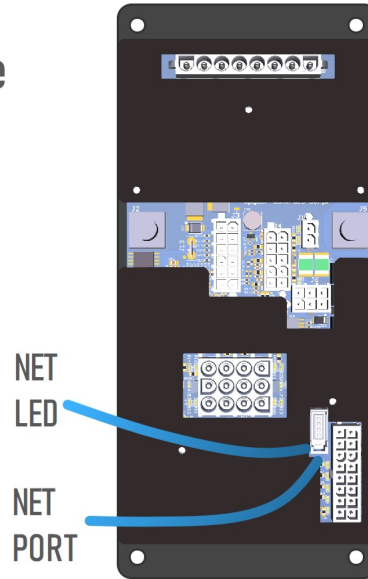
Components A, B, C are located in the front drivers side exterior compartment.

The RSI-11 (B) and HCR-11-G4 (C) are located behind the G6 Chassis Panel (A)



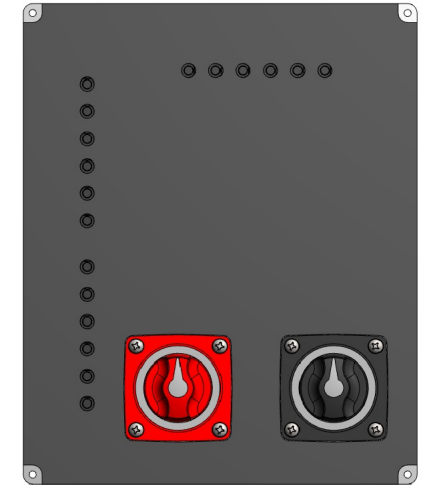
D G8 Module

i
 Spyder Part Number
 BMODZTGVJ
 Tiffin Part Number
 5115794
 Dimensions
 8.5" X 3.8"



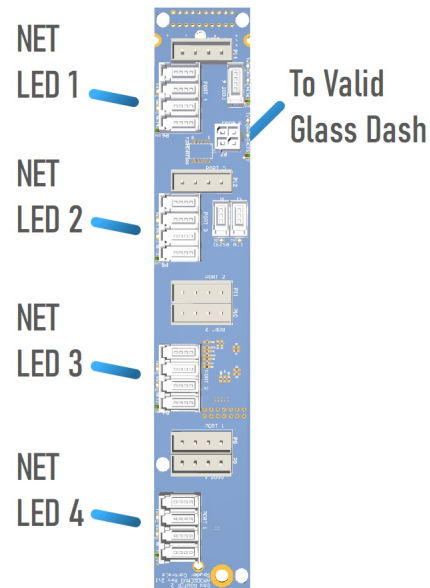
F DCD Panel

i
 Spyder Part Number
 BENCZ38DF
 Tiffin Part Number
 5114012
 Dimensions
 8" X 3"

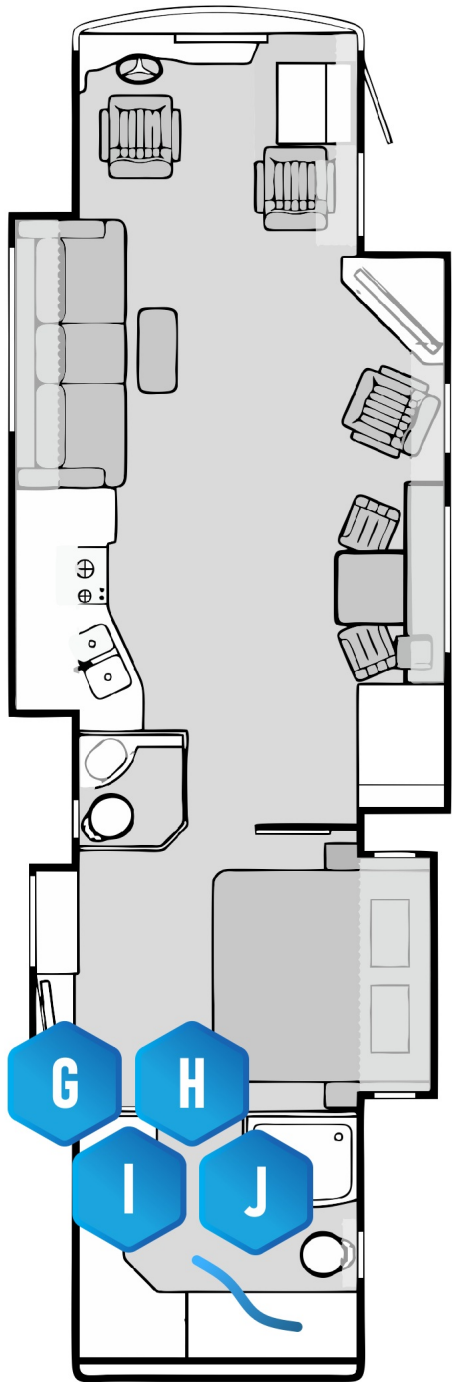


E CAN-Router 2

i
 Spyder Part Number
 BMODZY6Q4-B2
 Tiffin Part Number
 5105677
 Dimensions
 9" X 1.4"



Components D, E, F are located in the inverter bay mounted to the ceiling of the bay.



G6
House
Panel



Spyder Part Number

BMODZXXX

Tiffin Part Number

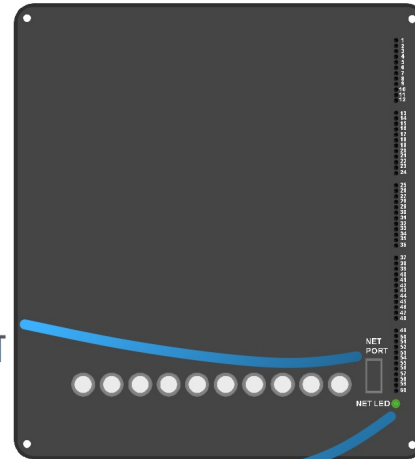
52XXXX

Dimensions

10" X 10"

NET
PORT

NET
LED



HCR-12



Spyder Part Number

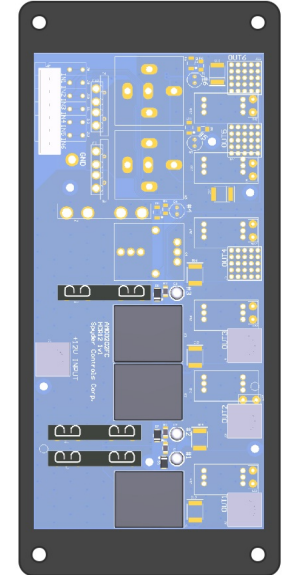
BMODZJ2T0

Tiffin Part Number

5076028

Dimensions

8" X 3"



HCR-15



Spyder Part Number

BMODZQFCM

Tiffin Part Number

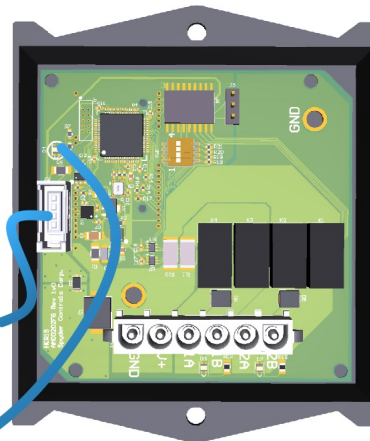
5092297

Dimensions

2.7" X 2.7"

NET
PORT

NET
LED



ACR3



Spyder Part Number

BMODZYACG-A (24")

BMODZYACG-A (60")

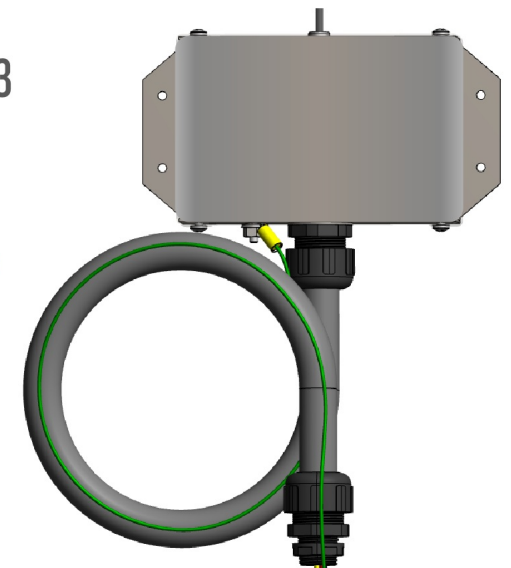
Tiffin Part Number

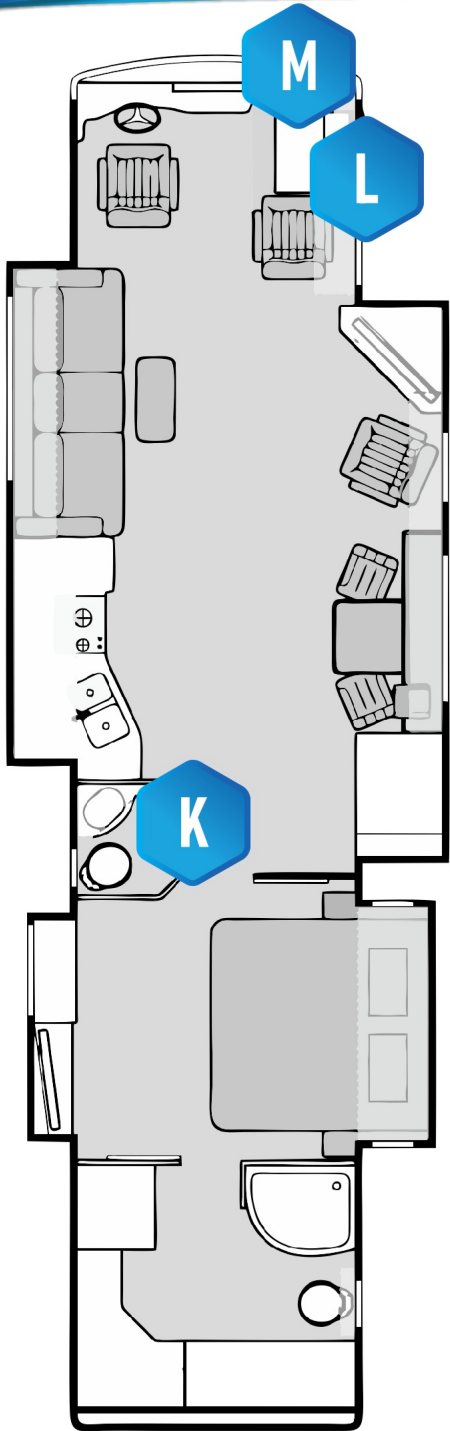
5091113 (24")

5091114 (60")

Dimensions

6" X 4.8"

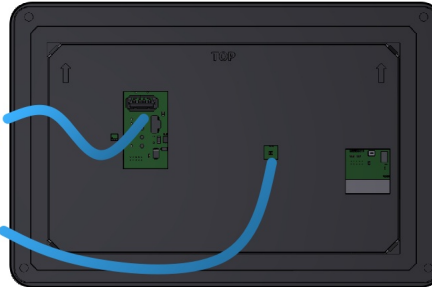




K 7" Lite Color LCD



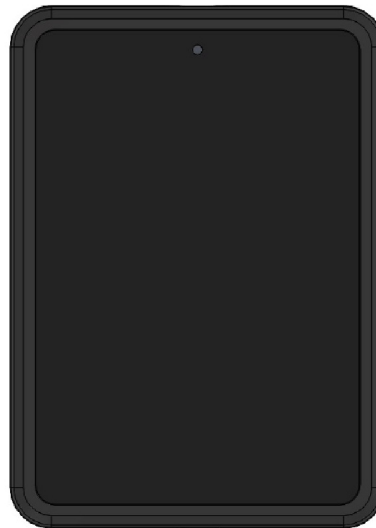
Spyder Part Number
BSSPZZQDX
Tiffin Part Number
5114025
Dimensions
7.6" X 5"



L Exterior 5" LCD



Spyder Part Number
BSSPZZSEA
Tiffin Part Number
5114010
Dimensions
5.9" X 4.0"



M Mira Module



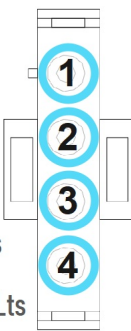
Spyder Part Number
BMODZ56VF
Tiffin Part Number
5114034
Dimensions
4" X 2.5"



CON 4

Dimming Lights

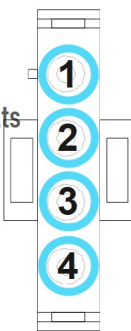
- 1 G6 LED 13 - RR Bath Lts
- 2 G6 LED 14 - Task Lts
- 3 G6 LED 15 - Md Bth Ceil Lts
- 4 G6 LED 16 - Md Bth Vanity Lts



CON 5

Dimming Lights

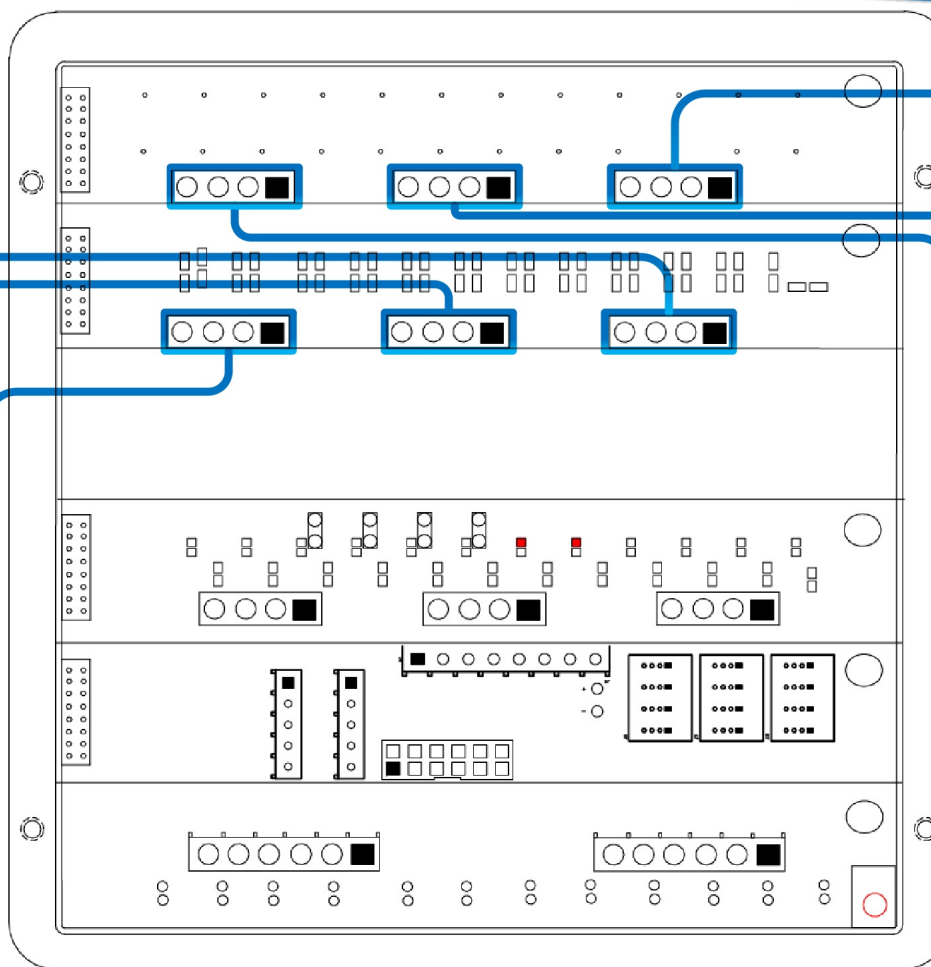
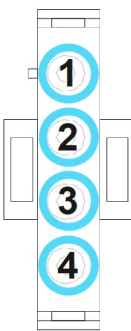
- 1 G6 LED 17 - RR Bth Vanity Lts
- 2 G6 LED 18 - TV Accent Lts
- 3 G6 LED 19 - FR Accent Lts
- 4 G6 LED 20 - FR Accent Lts



CON 6

Dimming Lights

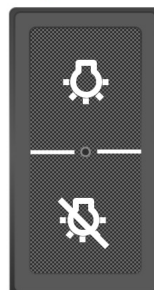
- 1 G6 LED 21 - Bed Accent Lts
- 2 G6 LED 22 - Closet Lt
- 3 G6 LED 23 - RR Accent Lts
- 4 G6 LED 24 - RR Accent Lts



G6 HOUSE PANEL

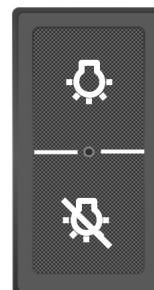
@ Rear Closet

Bedroom Light Switch



Tiffin P/N: 5089762

Closet Light Switch

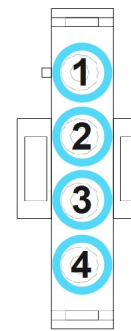


Tiffin P/N: 5089762

CON 1

Dimming Lights

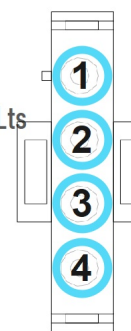
- 1 LED 1 - Main OH Lts
- 2 LED 2 - Entry / Floor Lts
- 3 LED 3 - P/S Ceil Lts
- 4 LED 4 - D/S Ceil Lts



CON 2

Dimming Lights

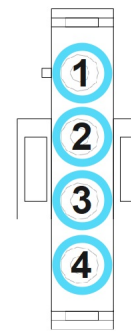
- 1 LED 5 - Hall/Dash AcCnt Lts
- 2 LED 6 - P/S Sld Lts
- 3 LED 7 - Sconce Lts
- 4 LED 8 - D/S Sld Lts

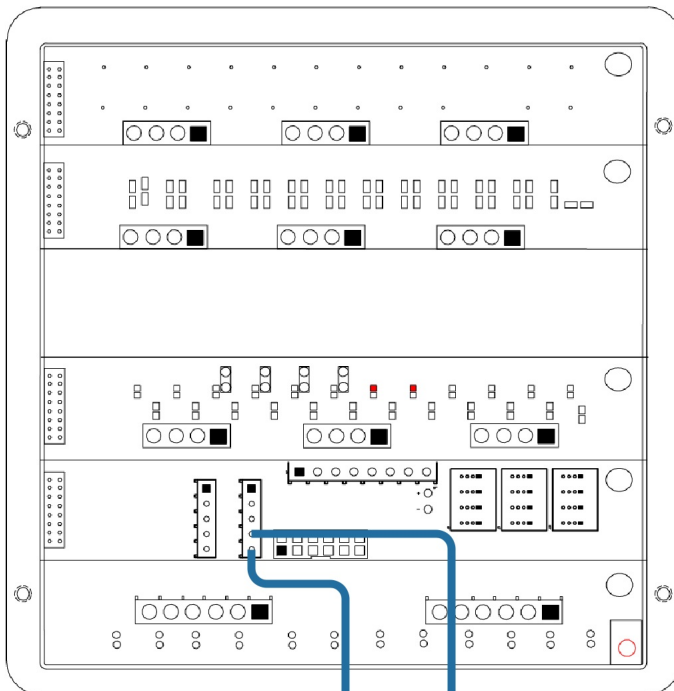


CON 3

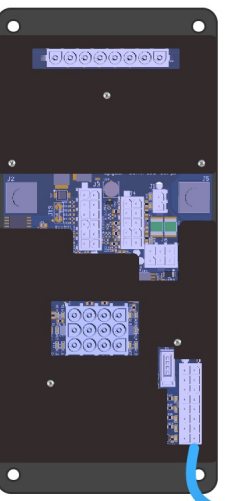
Dimming Lights

- 1 LED 9 - FR Crtsy Lts
- 2 LED 10 - RR Crtsy Lts
- 3 LED 11 - Bed Sconce Lts
- 4 LED 12 - Bedroom Lts





G6 HOUSE PANEL
@ Rear Closet

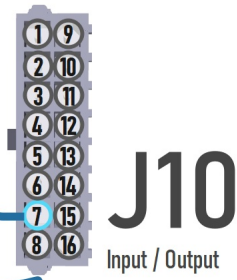


G8 MODULE
@ Inverter Bay

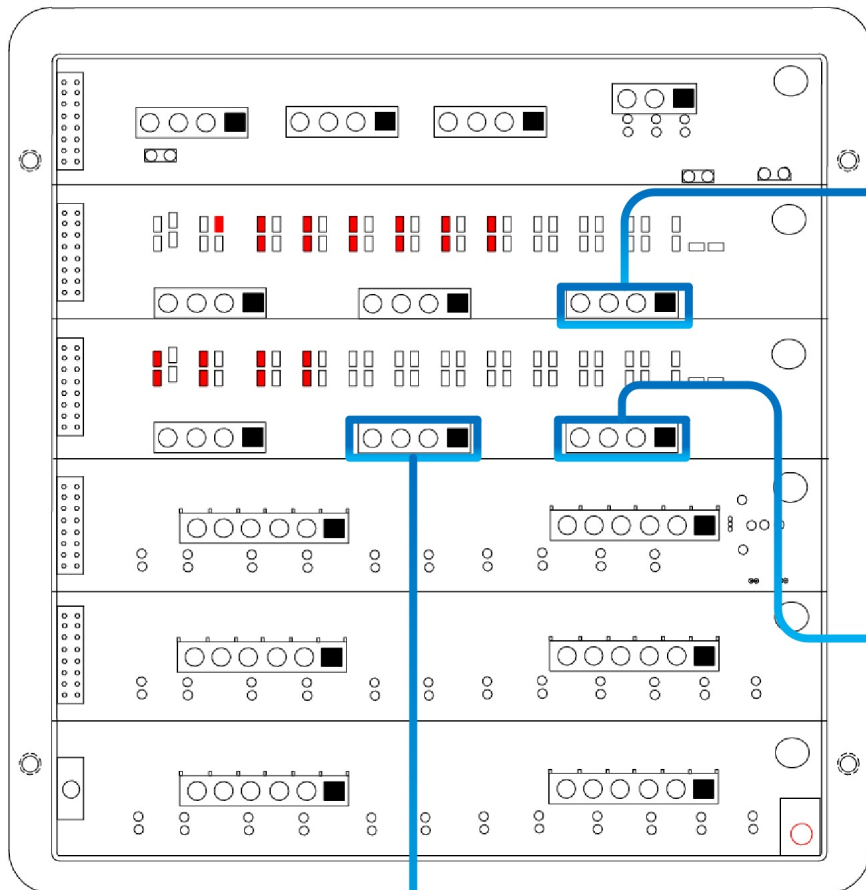
Dash Accent
Rocker Switch

OFF ON

Door Pin Switch



J10
Input / Output



G6 CHASSIS PANEL
@ FR D/S Compartment

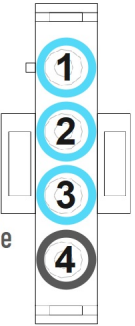
Door Pin Switch

When the door is opened, the Entry Light turns on for 2 minutes, the Door Shade lifts, and panel lights on the Entry switch panel turn on.

CON 4

Non-Dimming Lights

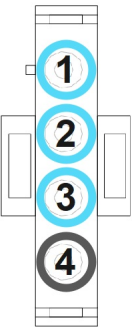
- 1** LED 13 - Awning Lts
- 2** LED 14 - Headlights Flash
- 3** LED 15 - Door/Assist Handle



CON 7

Non-Dimming Lights

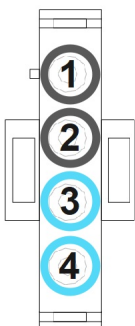
- 1** LED 25 - Undercoach Lts
- 2** LED 26 - Wndshld Acnt Lts
- 3** LED 27 - Map Lt



CON 8

Non-Dimming Lights

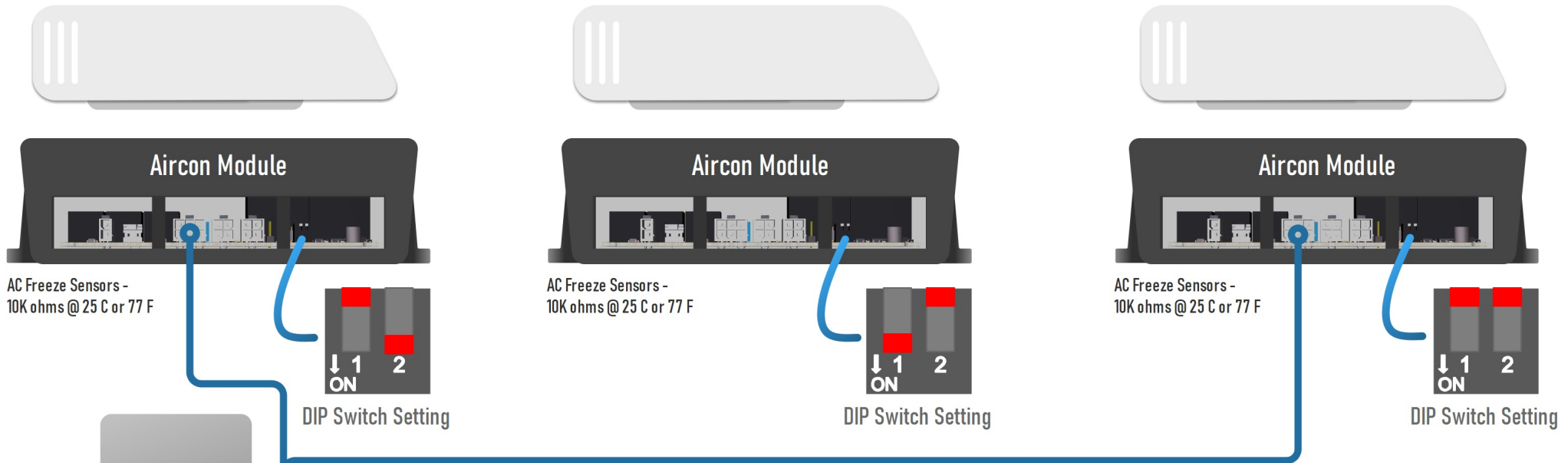
- 3** LED 31 - Road Lt
- 4** LED 32 - Porch Lt



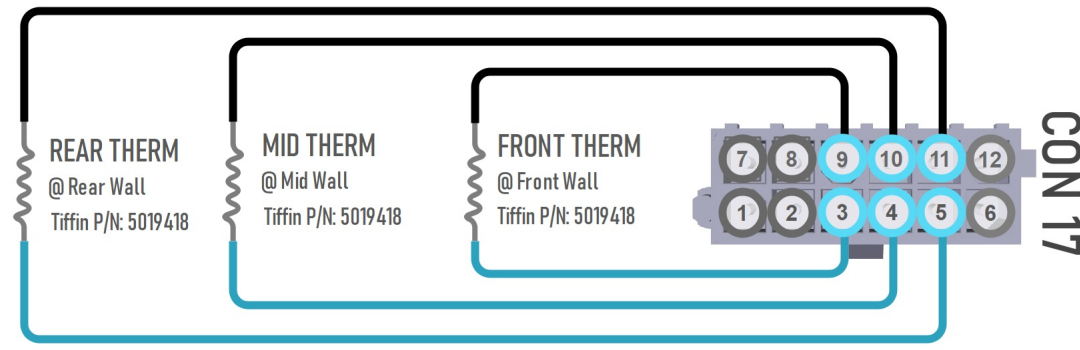
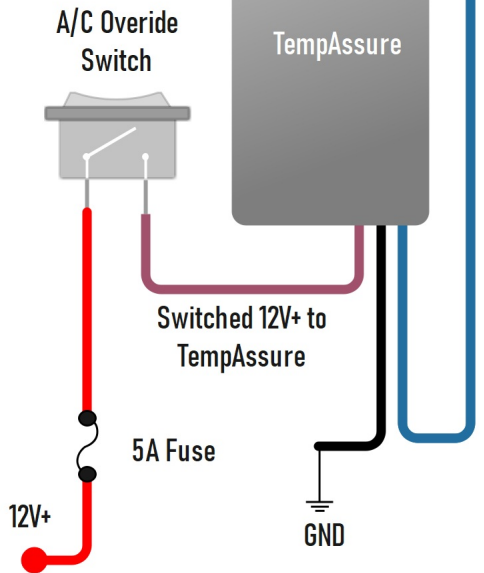
REAR AC
@ Roof

MID AC
@ Roof

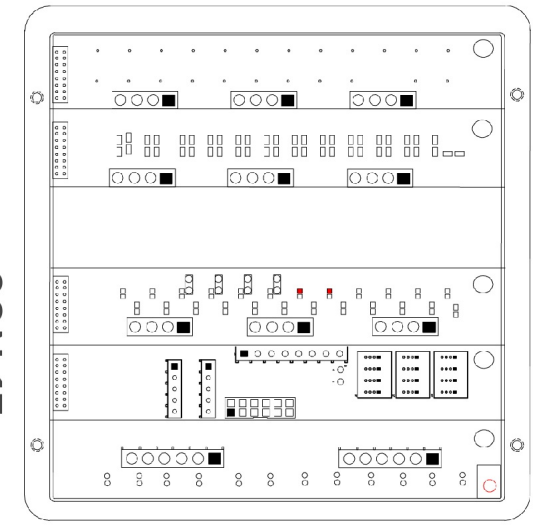
FRONT AC
@ Roof



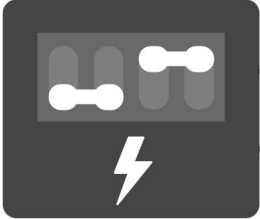
Switched GND to Aircon Override Pin



HVAC thermistors - 100K ohms @ 25 C or 77 F
NOTE: As the temperature increases the resistance lowers

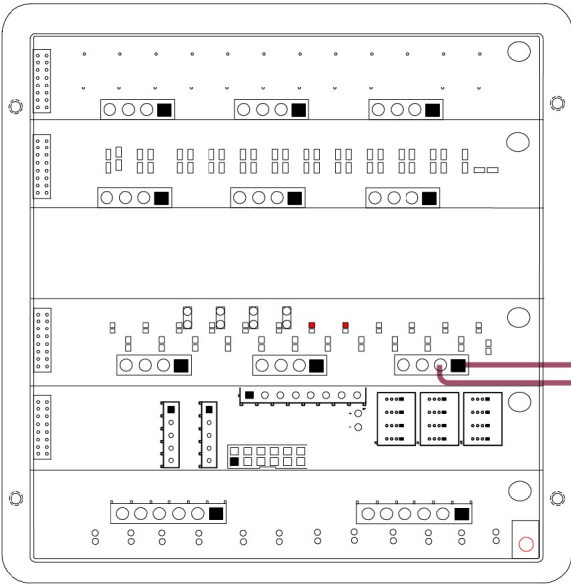


G6 HOUSE PANEL
@ Rear Closet



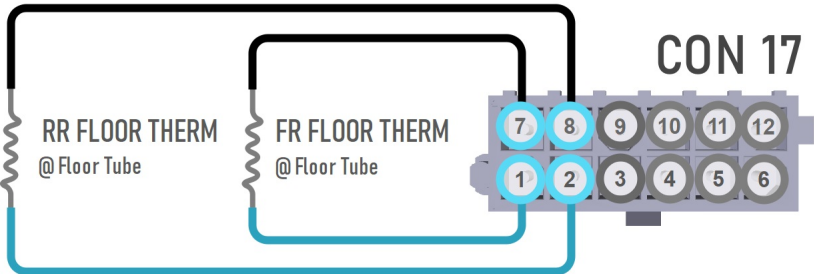
120V BREAKER PANEL

@ Rear Closet



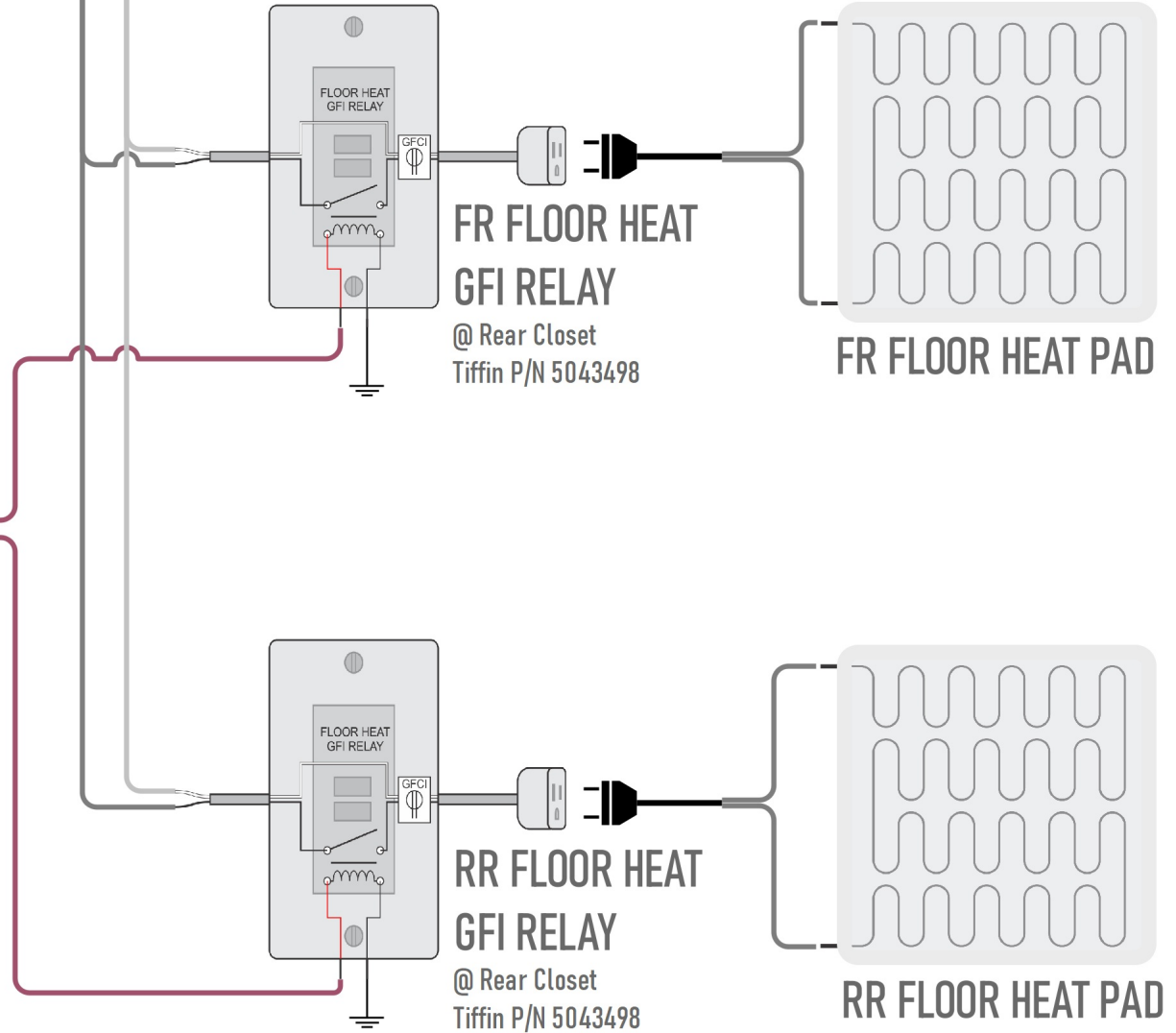
G6 HOUSE PANEL

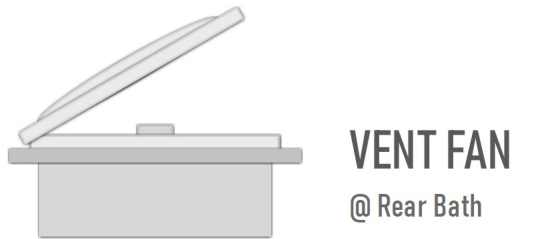
@ Rear Closet



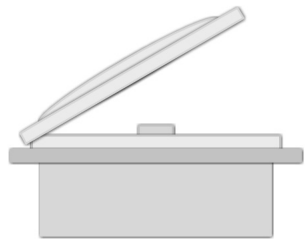
HVAC thermistors - 10K ohms @ 25 C or 77 F

NOTE: As the temperature increases the resistance lowers

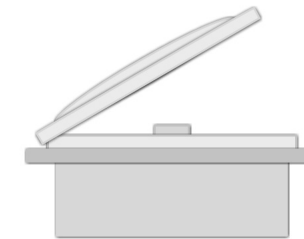




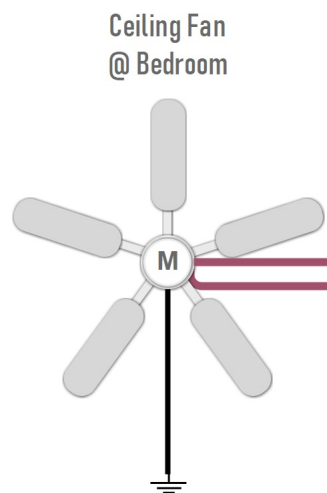
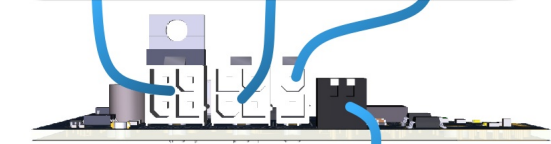
VENT FAN
@ Rear Bath



VENT FAN
@ Mid Bath



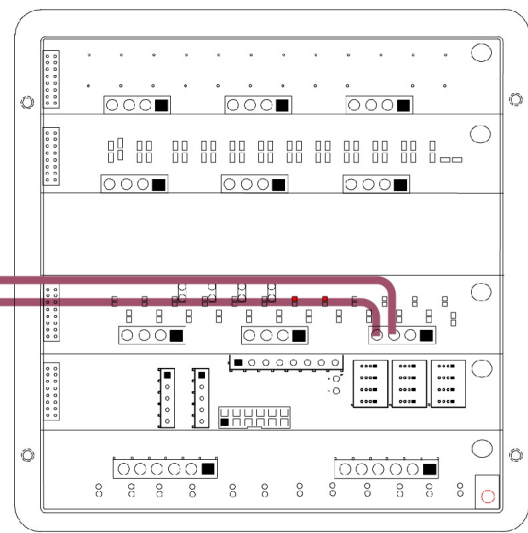
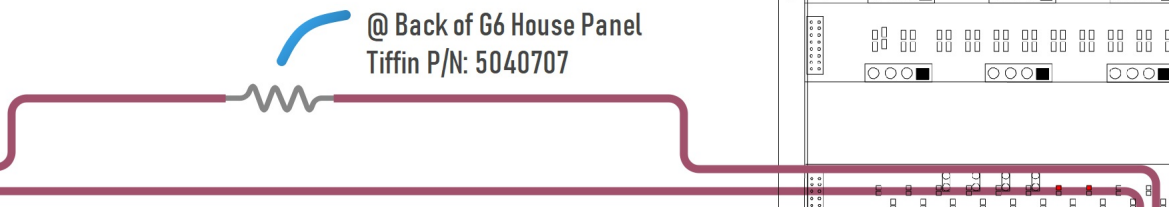
VENT FAN
@ Front Bath



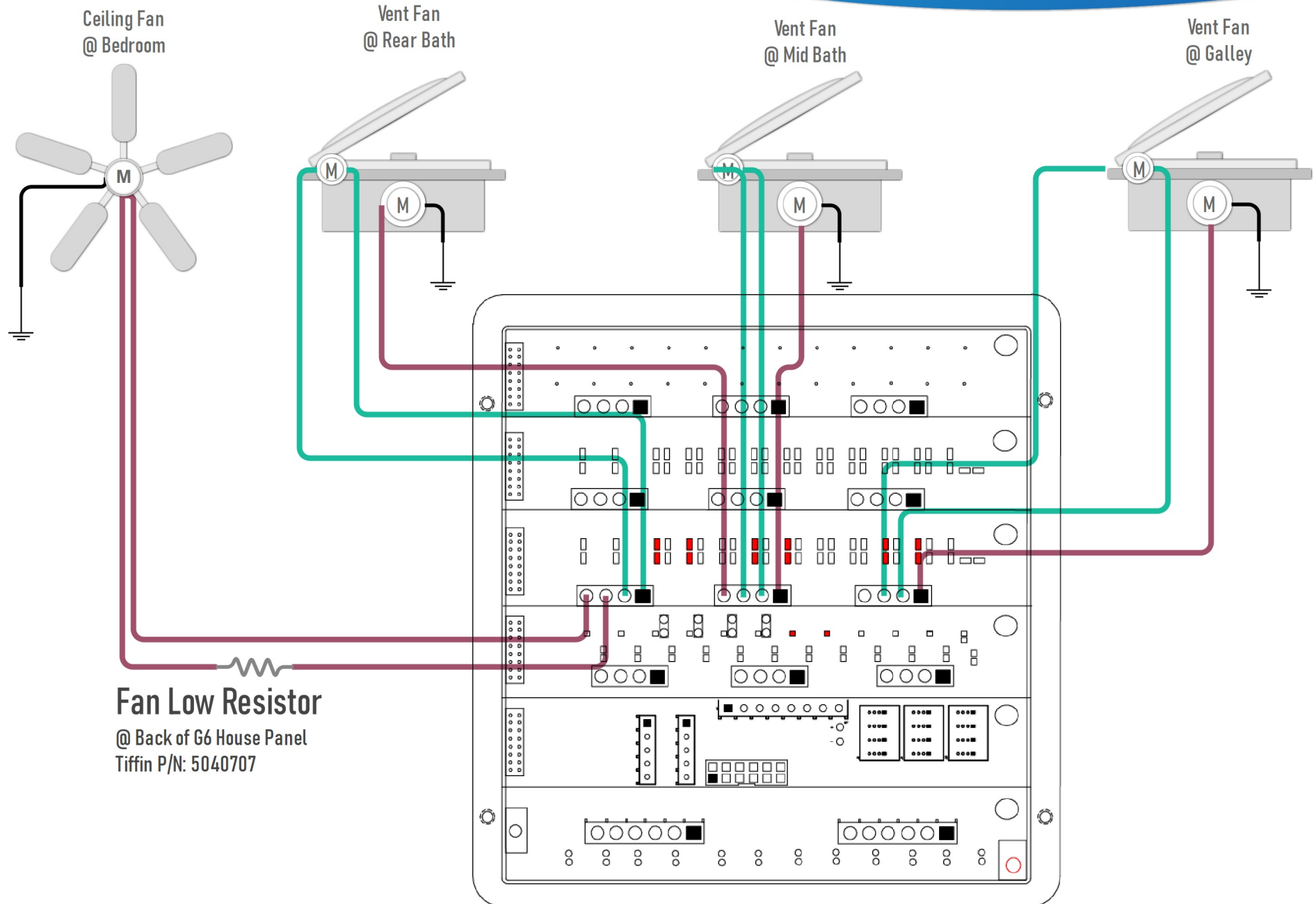
Ceiling Fan
@ Bedroom

Fan Low Resistor

@ Back of G6 House Panel
Tiffin P/N: 5040707



G6 HOUSE PANEL
@ Rear Closet



Fan Low Resistor

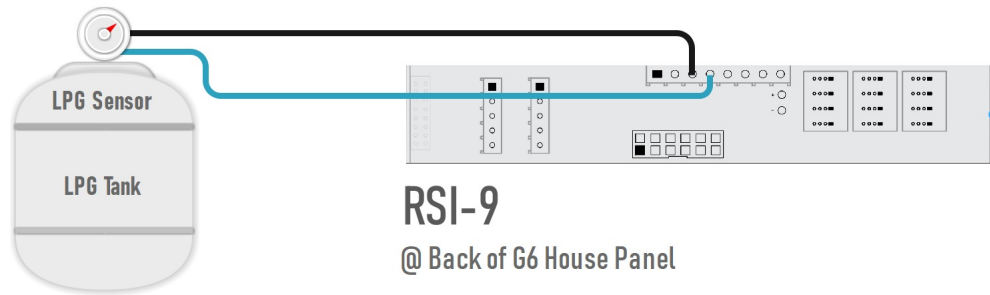
@ Back of G6 House Panel
Tiffin P/N: 5040707

G6 HOUSE PANEL

@ Bathroom Vanity

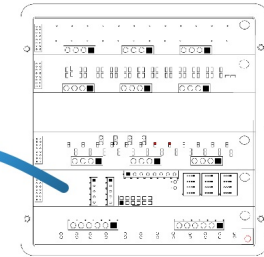
LPG Sensor

LPG Sensor measures LPG level. A full LPG Tank will measure 90+ Ohms a empty tank will measure close to or 0 Ohms.



RSI-9

@ Back of G6 House Panel



G6 HSE
PANEL
@ Rear Closet



All sensor wires and respective grounds are twisted in pairs.

Black Sensor #1 Pair



Black Sensor #2 Pair



Grey Sensor Pair



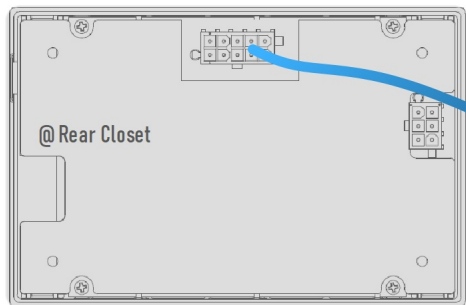
Fresh Sensor Pair



Spyder Tank Sensor

@ Tank

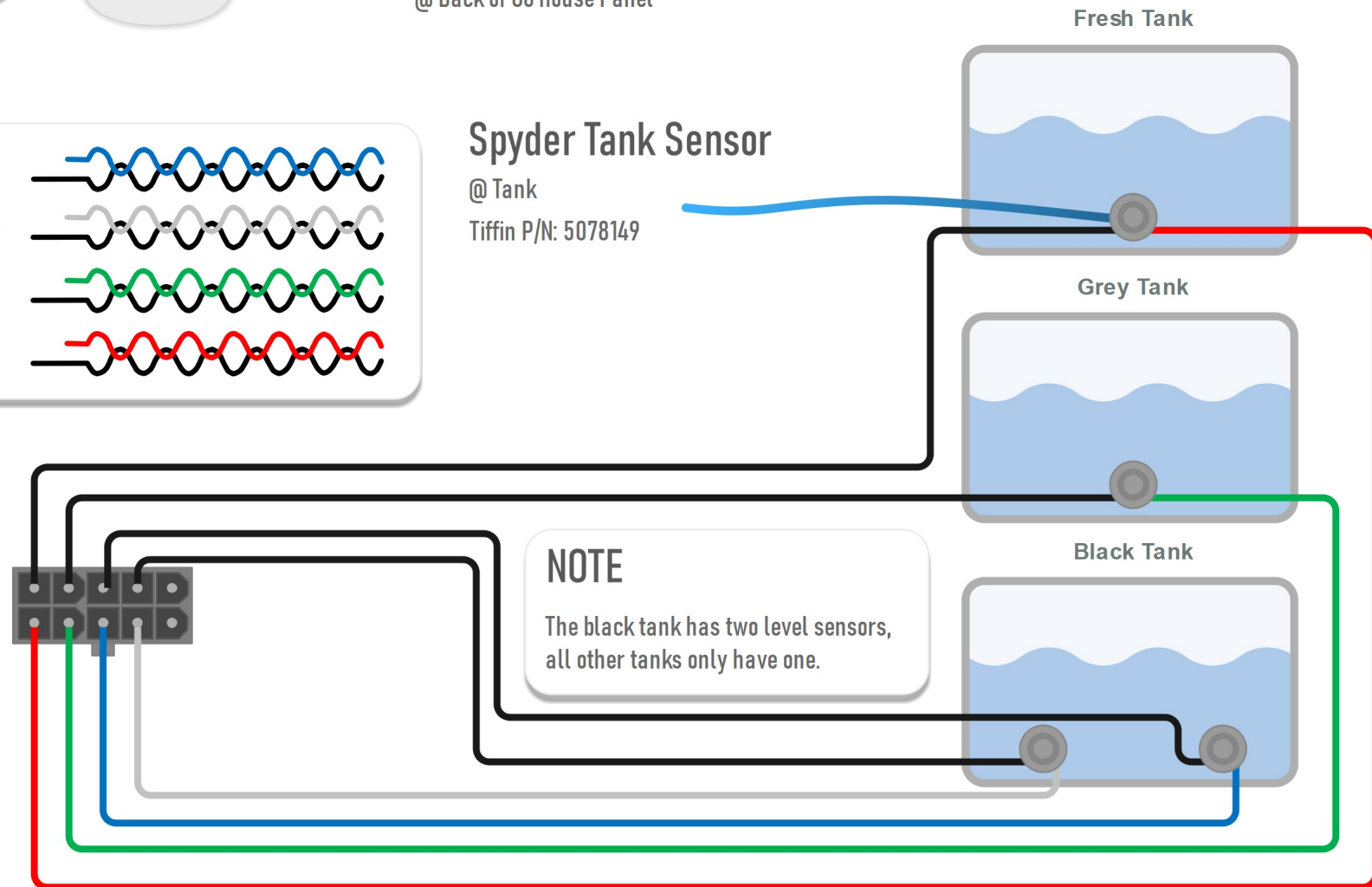
Tiffin P/N: 5078149



Spyder RV-C Tank Monitor

@ Plumbing Bay

Tiffin P/N: 5100797



NOTE

The black tank has two level sensors, all other tanks only have one.

Front Slide Outputs

- Power Input
- D/S Front Slide Retract
- D/S Front Slide Extend
- P/S Front Slide Retract
- P/S Front Slide Extend

Hydraulic Pumps

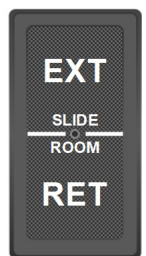
- Hydraulic Pump
- Power Input

Rear Slide Outputs

- Power Input
- P/S Rear Slide Extend
- P/S Rear Slide Retract
- D/S Rear Slide Extend
- D/S Rear Slide Retract

G6 CHASSIS PANEL

@ EXT D/S Comp



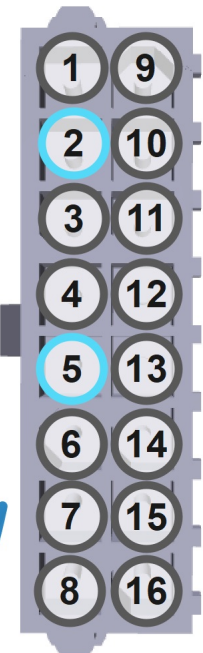
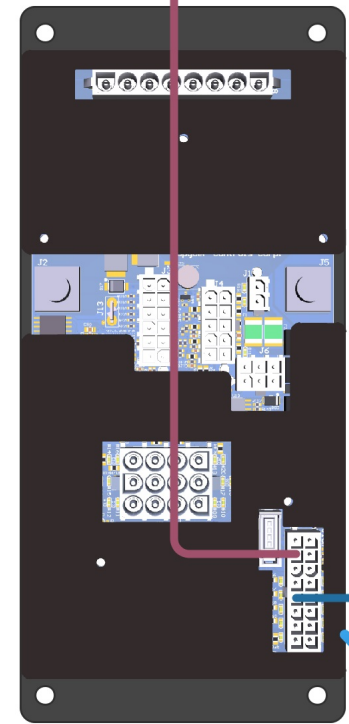
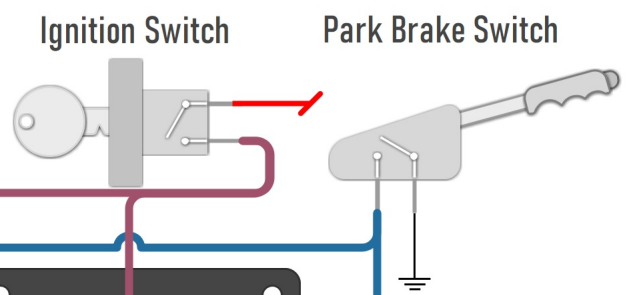
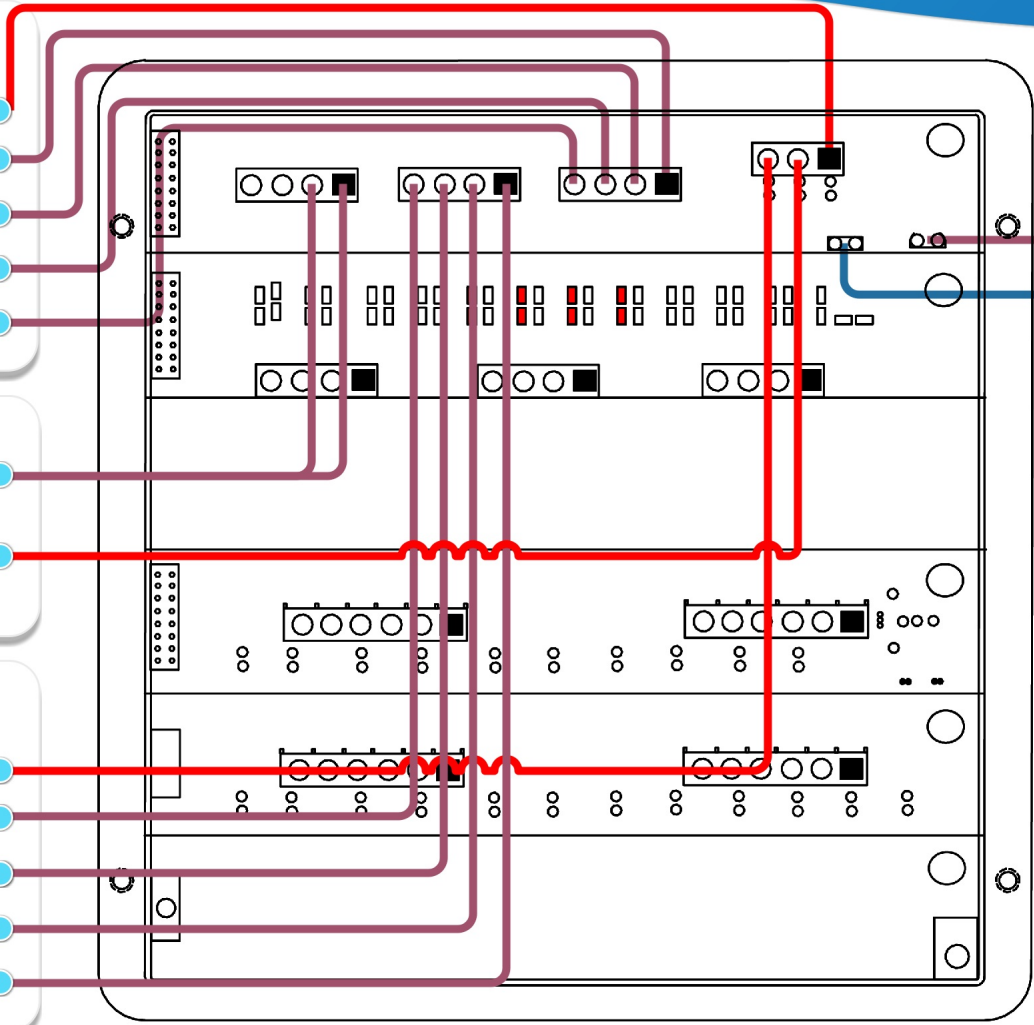
D/S Front Slide Switch
@ D/S Seat



P/S Front Slide Switch
@ P/S Seat

Emergency Override

Park brake and ignition must be on for slides to operate.
In case of a system failure, use manual overrides on front of G6 Chassis panel to operate slides. Engage overrides using a pen or other pointed object.



J10

Input / Output

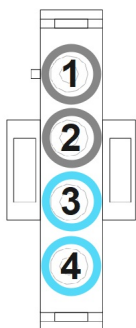
- 2** Ignition (12V+)
- 5** Park Brake (GND)

FRONT TV LIFT COMMON

CON 11

Front TV Lift Outputs

- 3 LED 43 - FR TV Lift Up
- 4 LED 44 - FR TV Lift Down

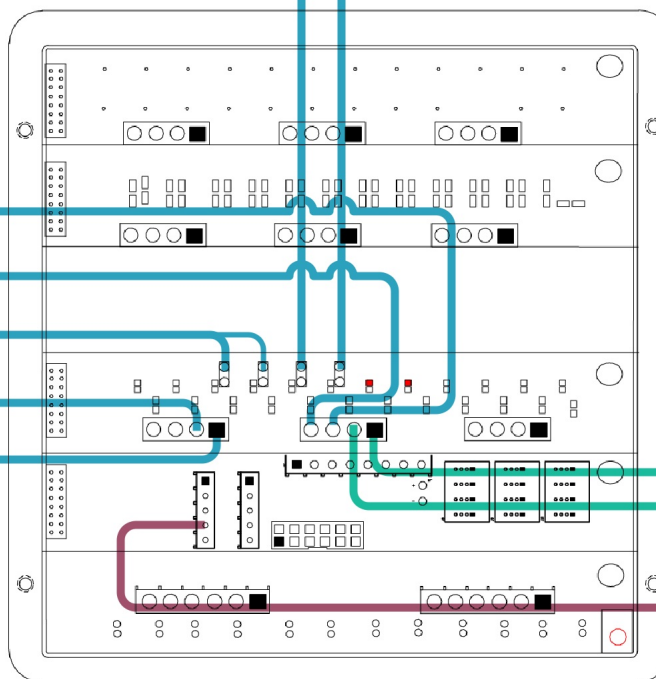
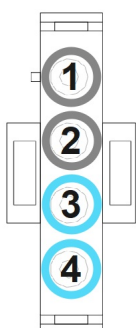


REAR TV LIFT COMMON

CON 12

Rear TV Lift Outputs

- 3 LED 45 - Bed TV Lift Up
- 4 LED 46 - Bed TV Lift Dn



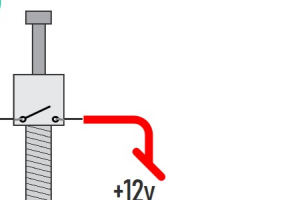
G6 HOUSE PANEL

@ Rear Closet



BED LIFT MOTOR

@ Bed



Bed Lift Plunger

@ Bed

TV Lift Operation

- Press the control to raise the TV lift.
- Press and hold the control to lower the TV lift.

Bed Lift Plunger

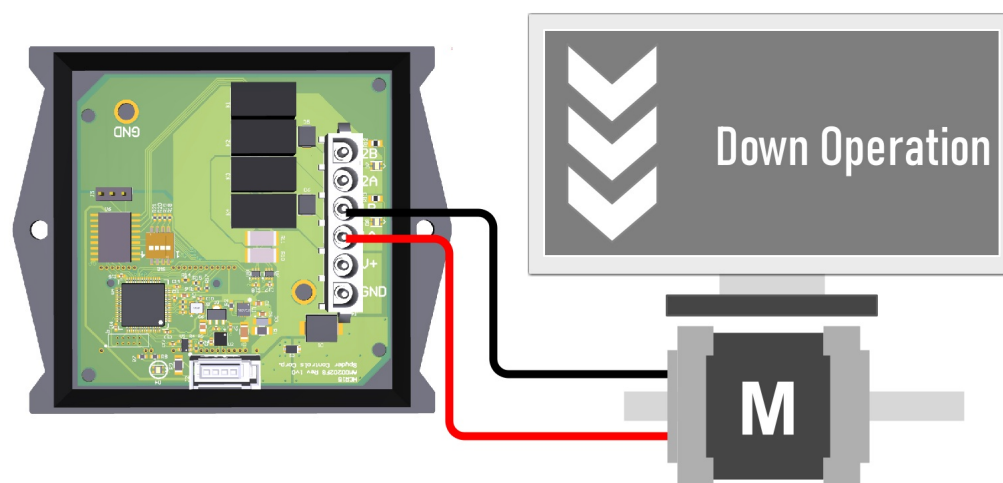
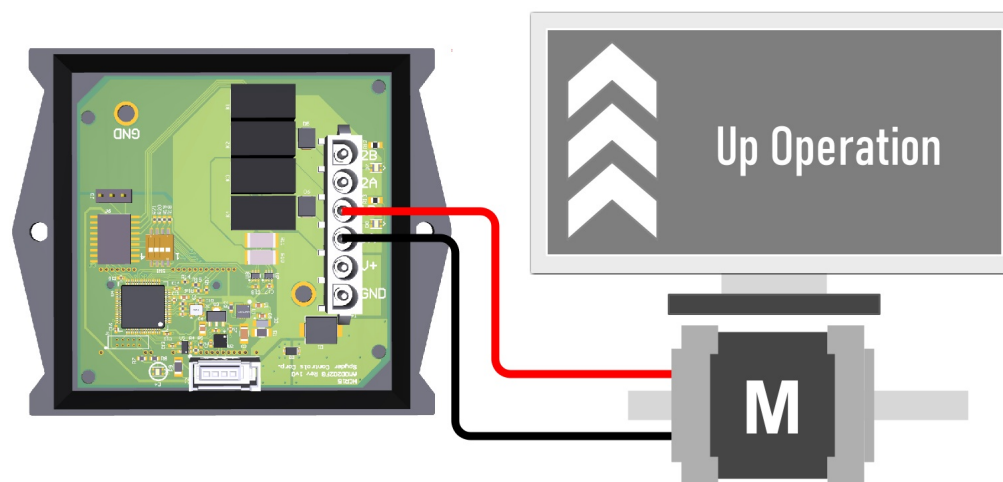
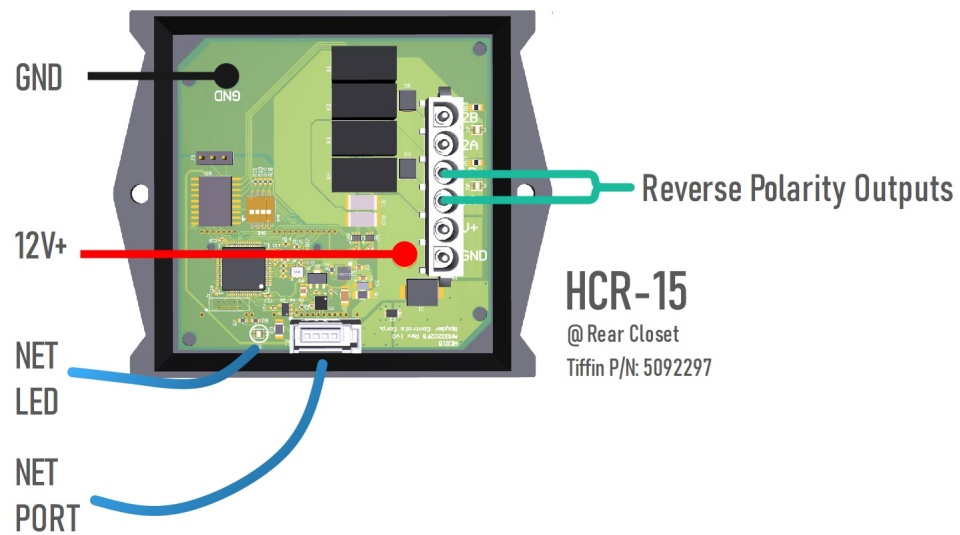
When depressed the bed lift plunger will provide 12V+ to Connector 14 Pin 4 on the RSI-9, allowing the slides to run. If this plunger is not depressed and no 12V+ signal is being received at the RSI-9 input, the slides will not run.

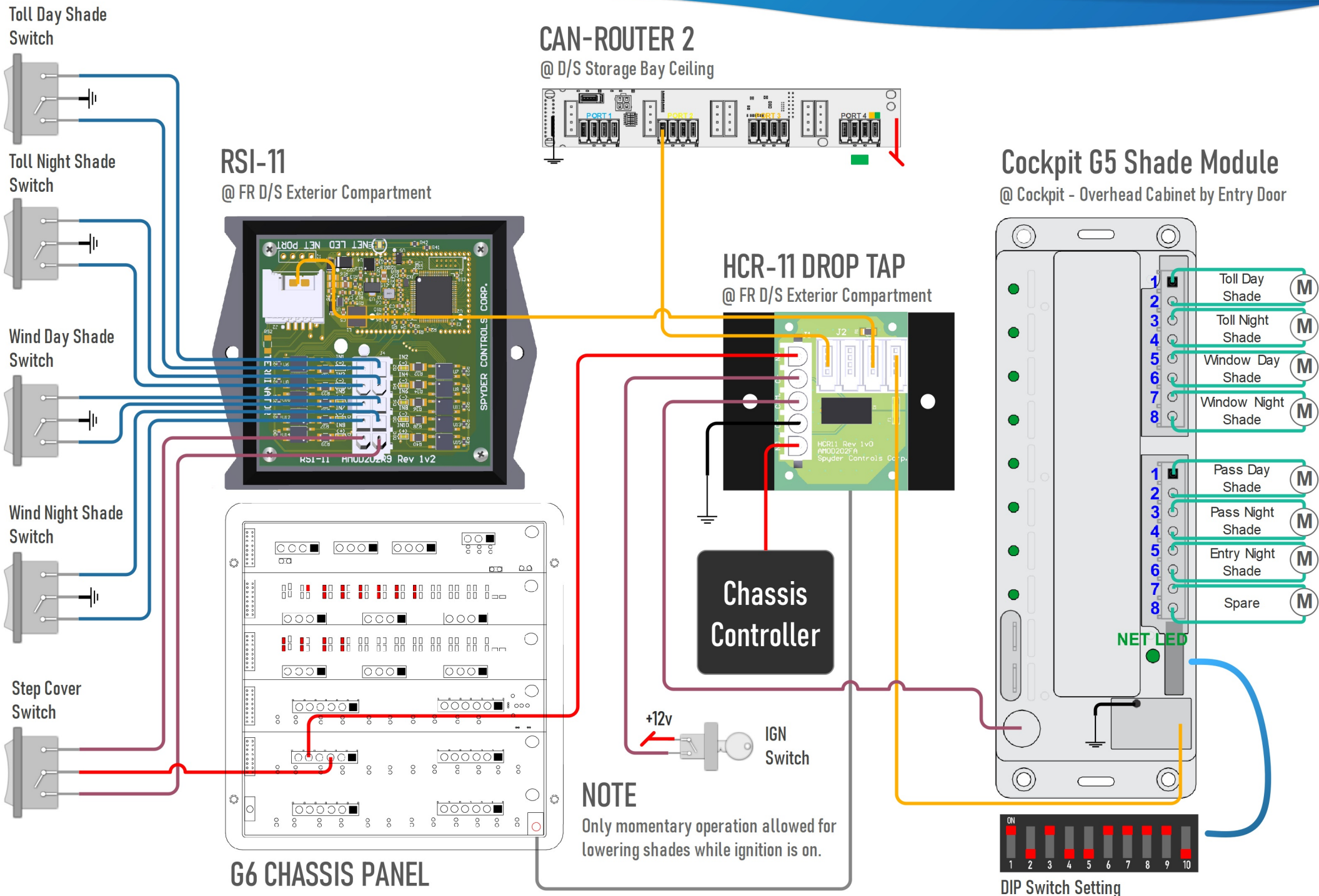
Trouble Shooting

This information is only applicable to coaches with a MORryde TV Lift. The module above is a HCR-15 and is responsible for providing reverse polarity output to the MORryde TV Lift Motor.

If the TV lift is not raising or lowering check to ensure the NET LED on the HCR-15 is on solid green. If it is flashing or off completely there is an issue with network connectivity. If the module is online (solid green LED) and the TV lift still fails to work, use a multimeter to probe the connector.

Remove the white 6 position header and insert one probe into 1A and the other probe into 1B. Correct function would have the module output 12V+ one direction and ground the other direction. If this is not occurring please call Spyder Controls.





What is EMS?

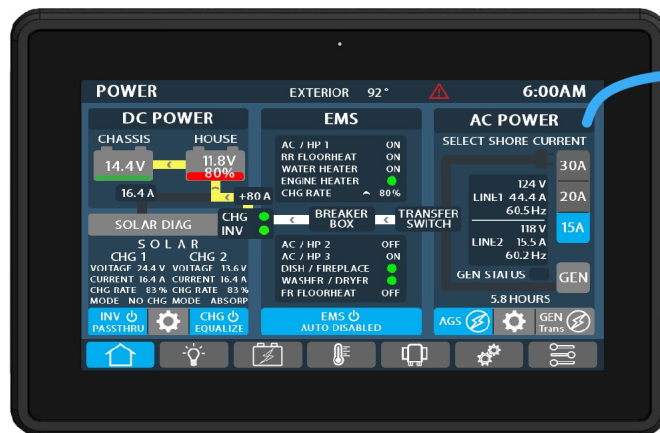
The EMS or Energy Management System is designed to keep your coach from tripping the shore or generator breaker while using shore or generator power.

How does it work?

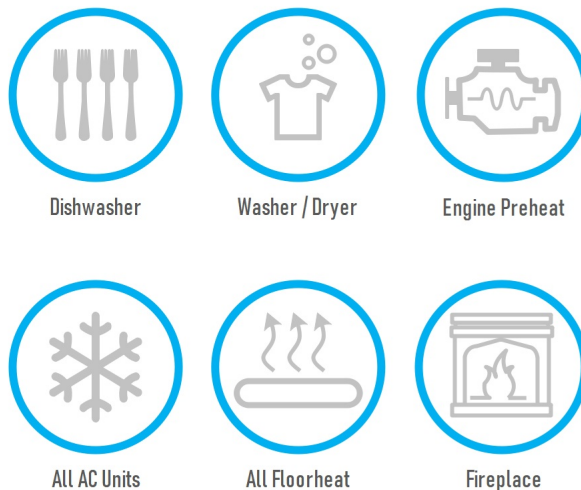
The EMS works by allowing or disallowing AC power to specific loads. Keep in mind that not all AC loads are controlled by the EMS. All loads that can be controlled by EMS are displayed in the center column of the Power Page on the main hall LCD. EMS must be enabled to view this page.

What does "SHED" mean?

When EMS has disallowed AC power to a load we consider that load "SHED". This simply means that there currently is not enough AC power available for the load and the EMS will provide power when it is available.



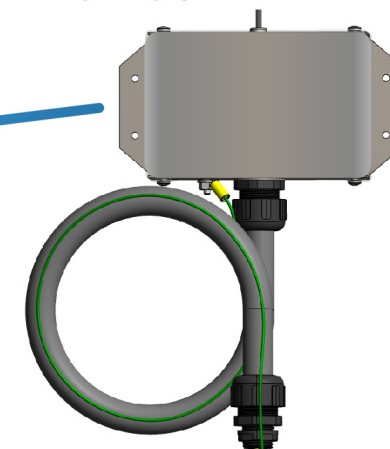
Loads that can "SHED"



TRC TRANSFER SWITCH

@ Exterior Compartment

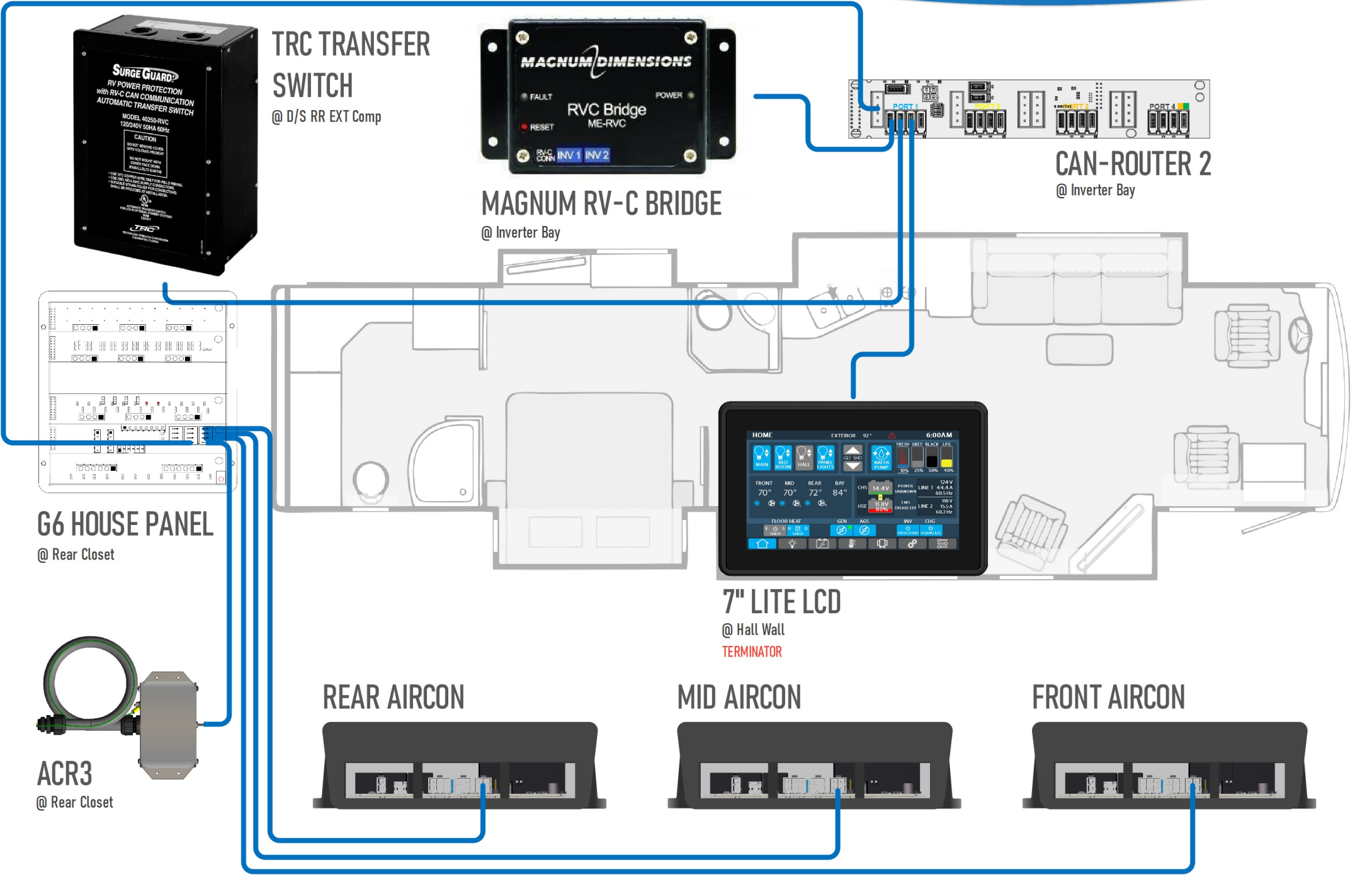
The TRC Transfer switch provides the AC power readings found on the power page.



ACR3

@ Rear Closet

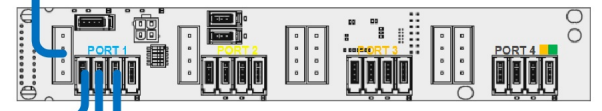
The ACR3 allows the EMS to "SHED" the washer/dryer, dishwasher, fireplace and the engine preheat when required.



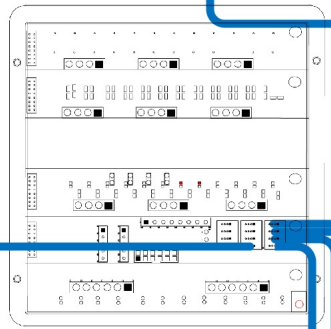
TRC TRANSFER SWITCH
@ D/S RR EXT Comp



MAGNUM RV-C BRIDGE
@ Inverter Bay



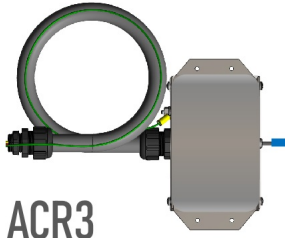
CAN-ROUTER 2
@ Inverter Bay



G6 HOUSE PANEL
@ Rear Closet



7" LITE LCD
@ Hall Wall
TERMINATOR



ACR3
@ Rear Closet

REAR AIRCON

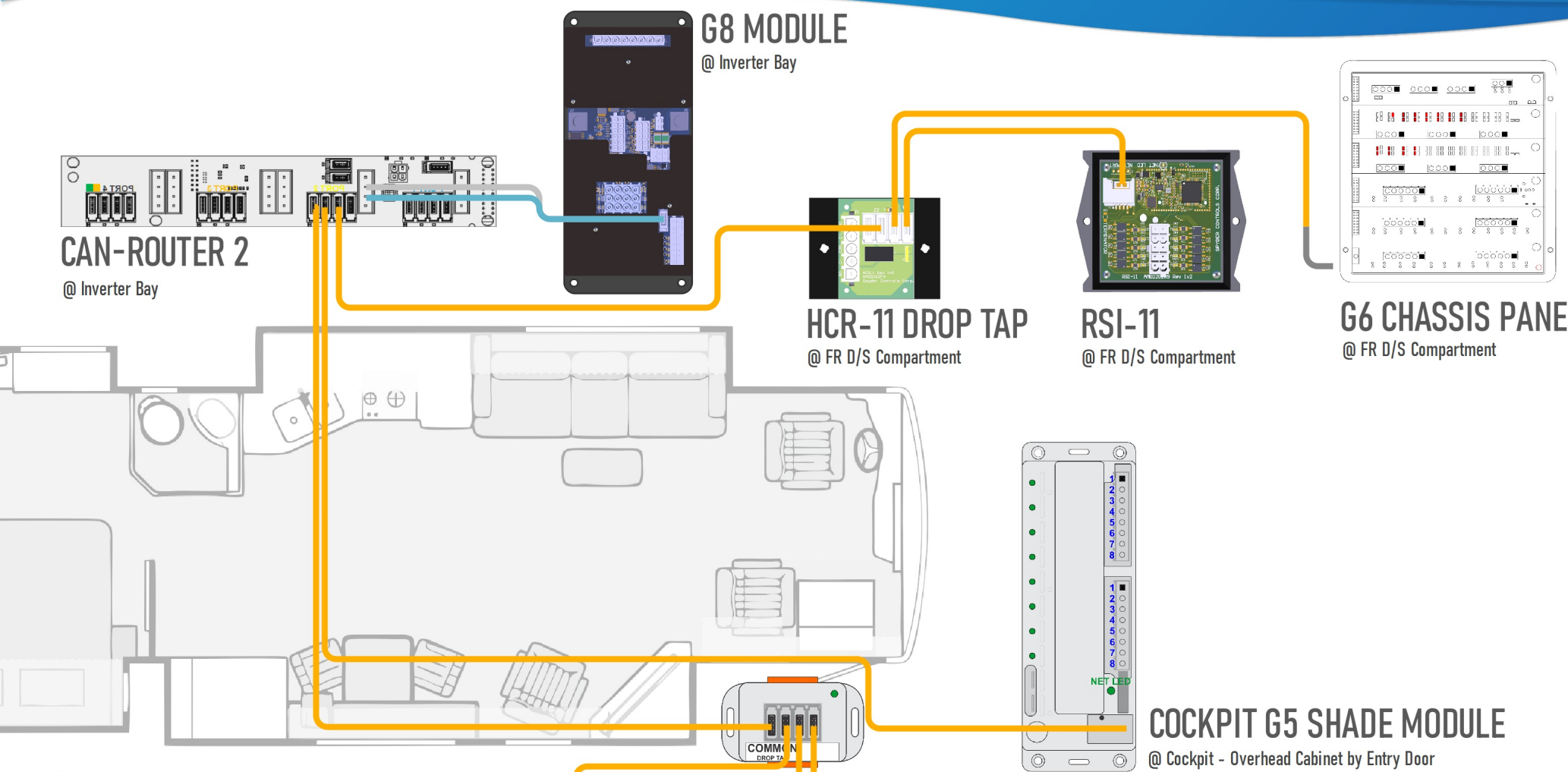


MID AIRCON



FRONT AIRCON





CAN-ROUTER 2
@ Inverter Bay

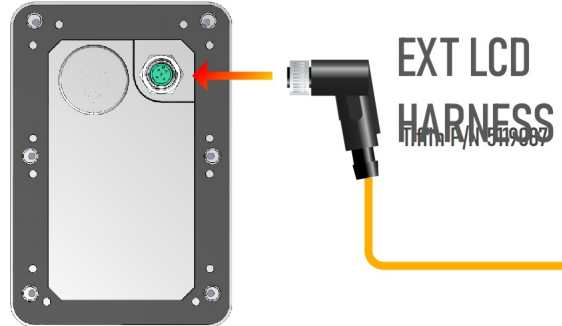
G8 MODULE
@ Inverter Bay

HCR-11 DROP TAP
@ FR D/S Compartment

RSI-11
@ FR D/S Compartment

G6 CHASSIS PANEL
@ FR D/S Compartment

COCKPIT G5 SHADE MODULE
@ Cockpit - Overhead Cabinet by Entry Door



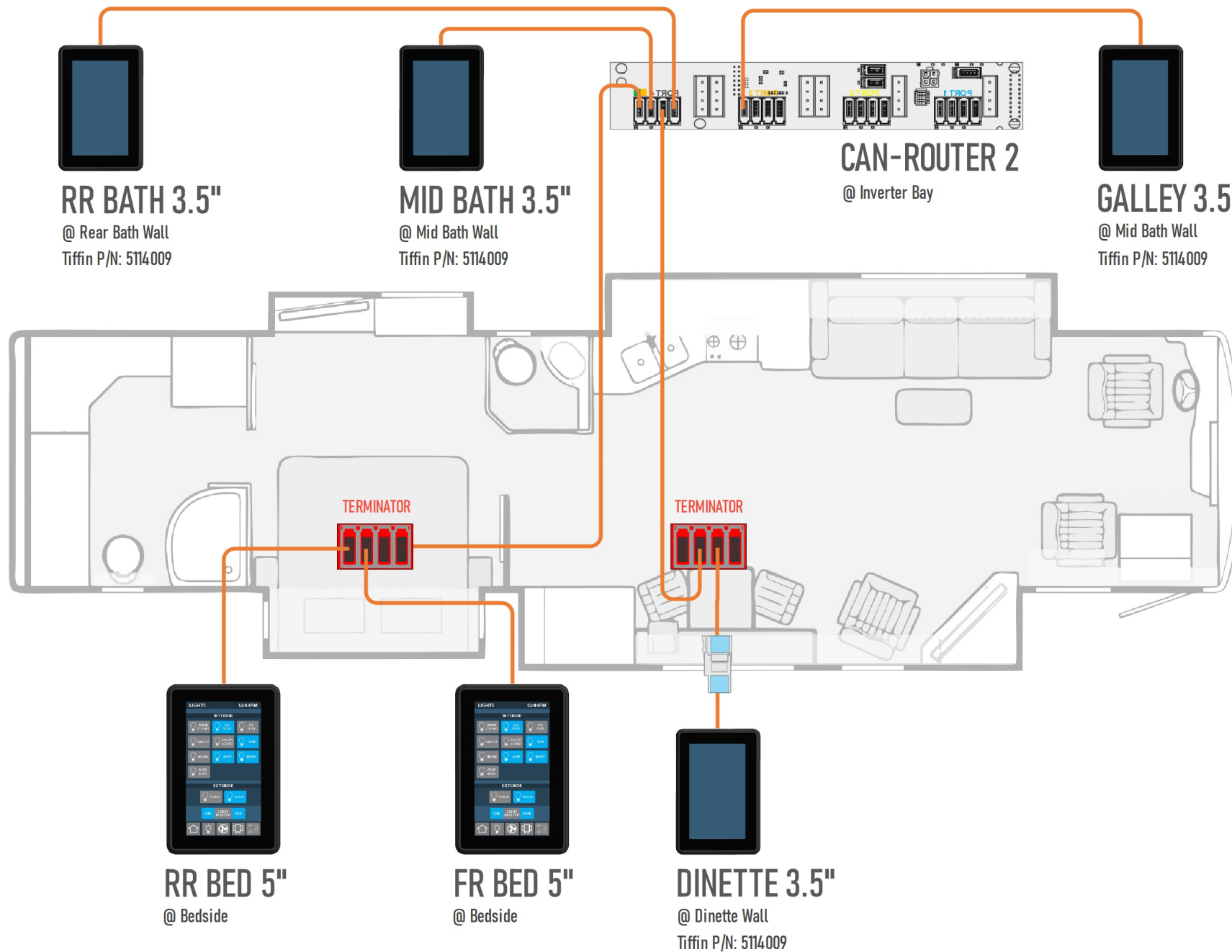
EXTERIOR 5" LCD
@ Outside Entry Door (Backside Shown)



ENTRY 5" LCD
@ Stairwell **TERMINATOR**



PASSENGER 5" LCD
@ Passenger Console

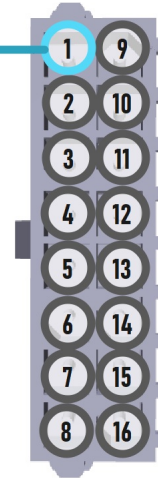
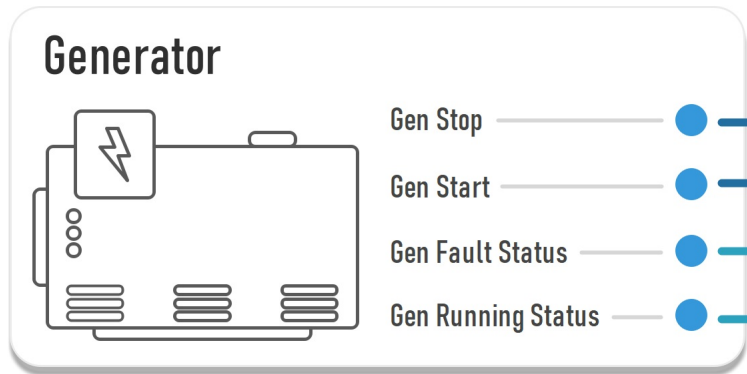
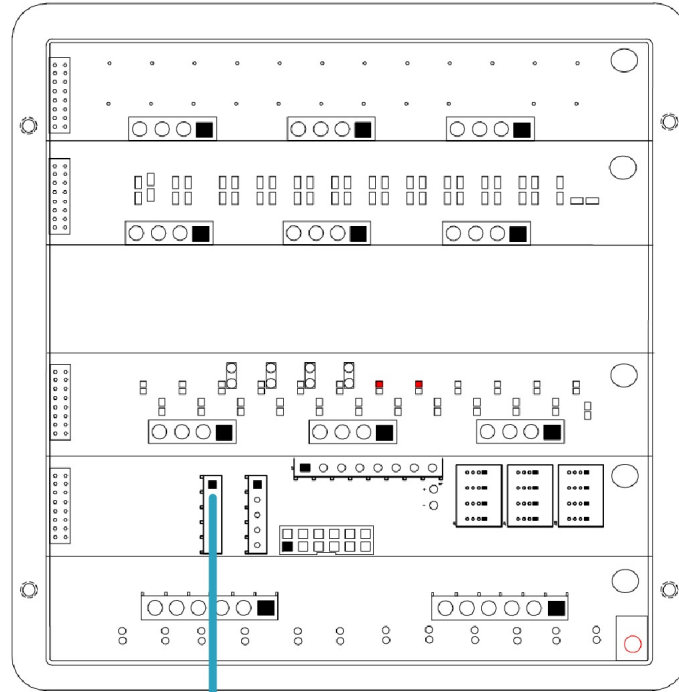
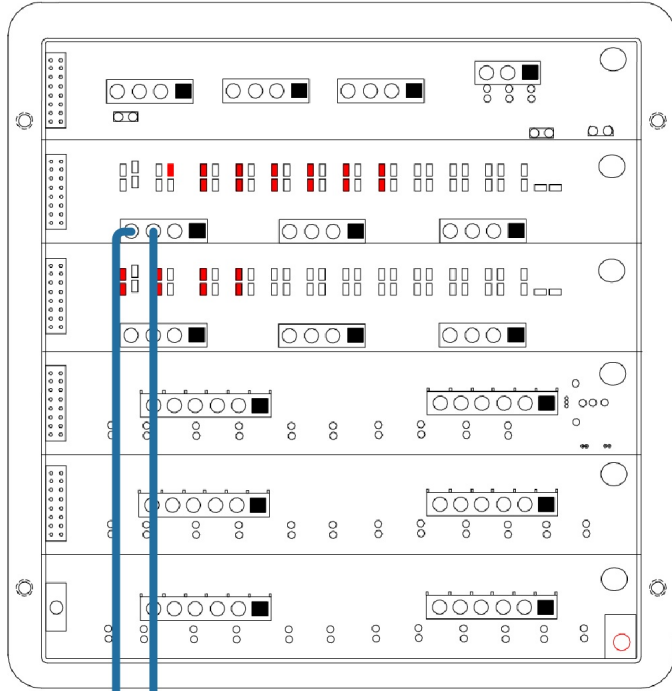


G6 CHASSIS PANEL

@ FR D/S Compartment

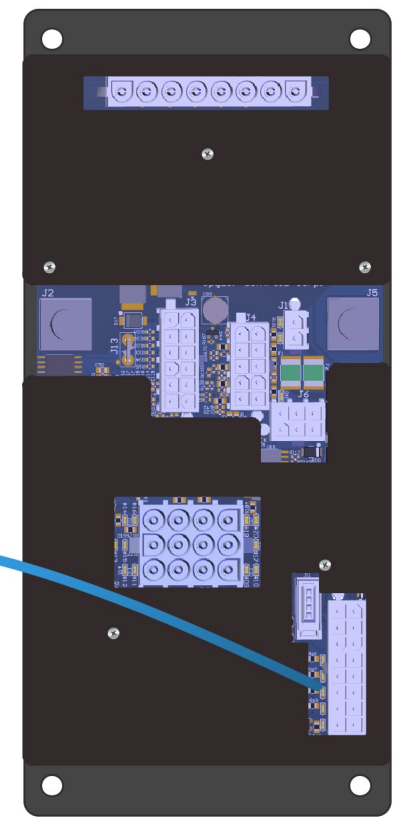
G6 HOUSE PANEL

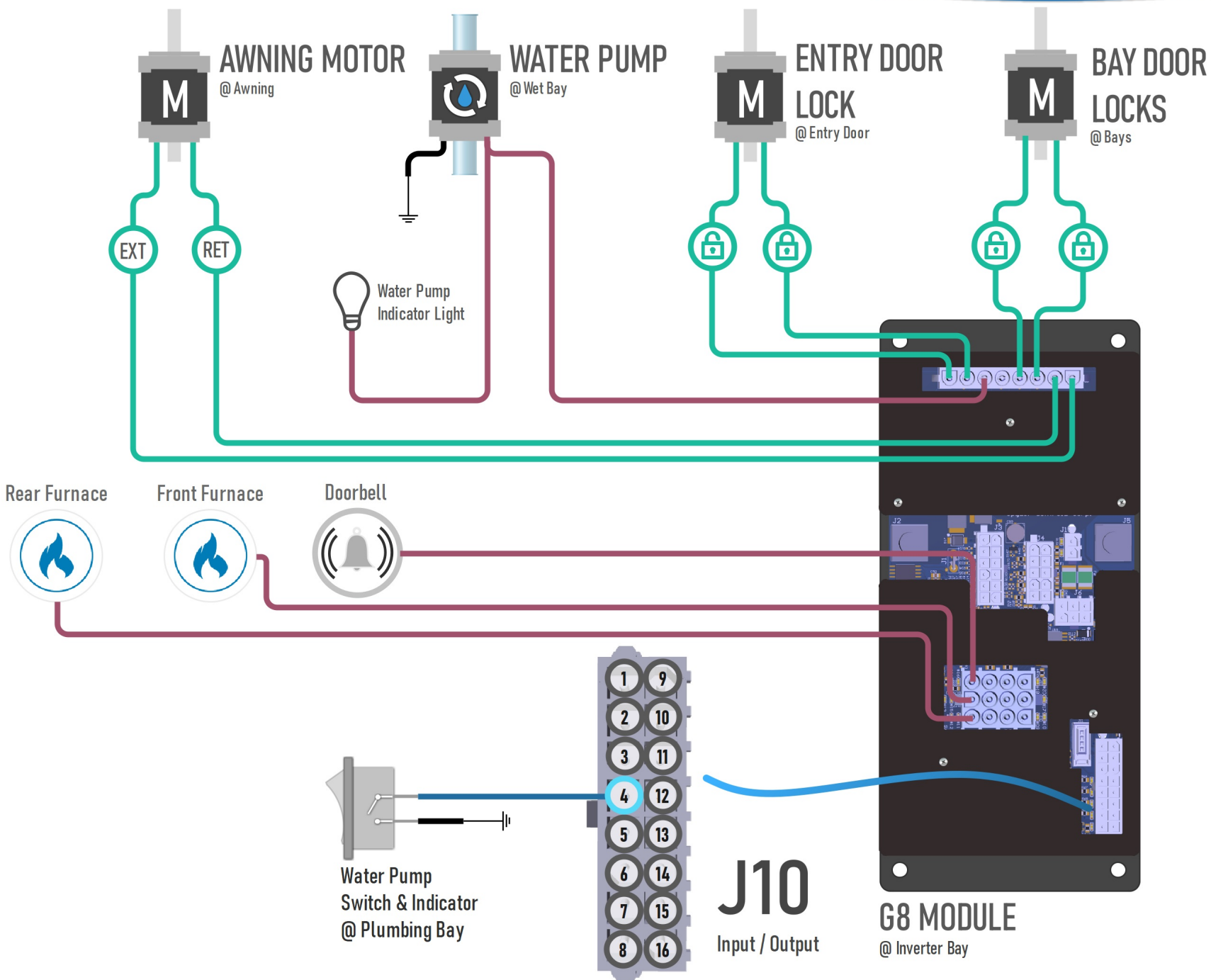
@ Rear Closet



G8 MODULE

@ Inverter Bay





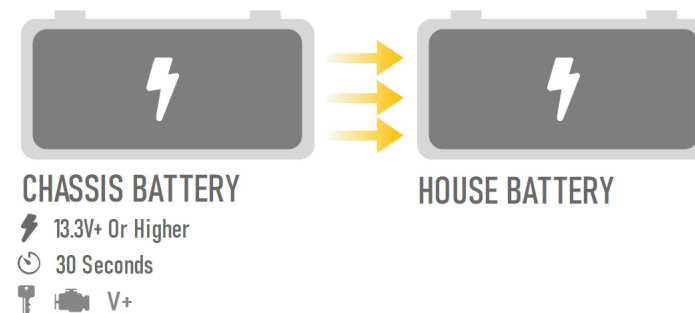
MERGE LOGIC - CHASSIS CHARGING HOUSE

The merge solenoid will engage if the following conditions are present:

- Engine run or ignition signal is present and chassis voltage is above 13.3V (charging) for 30 seconds

The merge solenoid will disengage under either of the following conditions:

- Engine run or ignition signal is removed
- Chassis voltage drops below 12.6V for more than 30 seconds (unmerge until the engine is shut off and started again)



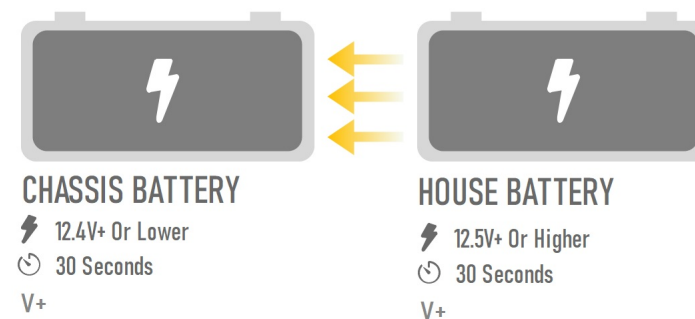
MERGE LOGIC - HOUSE CHARGING CHASSIS

The merge solenoid will engage if the following conditions are present:

- House voltage is above 12.5V (charging) and chassis voltage is below 12.4V (low battery voltage) for 30 seconds

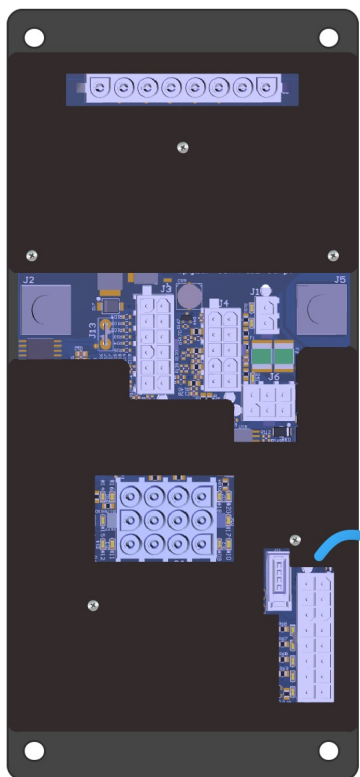
The merge solenoid will disengage under either of the following conditions:

- House voltage drops below 12.2V for more than 30 seconds, OR
- 60 minutes timed battery merge period expires. Re-merge will occur again if the merge conditions are still present



MERGE LOGIC - NOTE

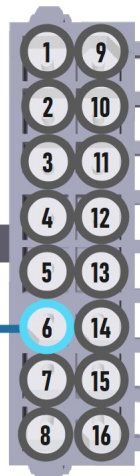
Note: The voltages used in this spec are what are read directly at the MergeMan which is installed at the DCD panel and may vary from the voltages displayed on the LCD screens for general informational purposes.



G8 MODULE
@ Inverter Bay

J10

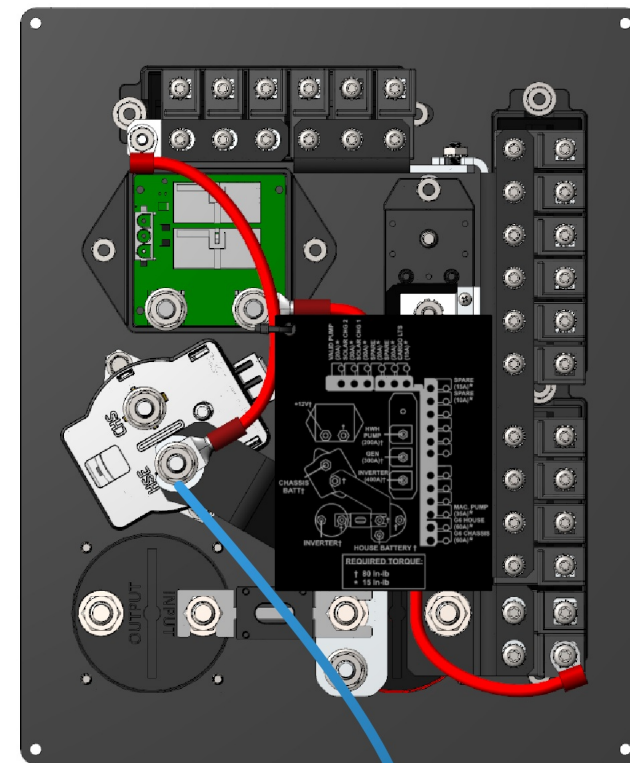
Input / Output



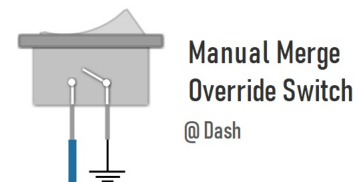
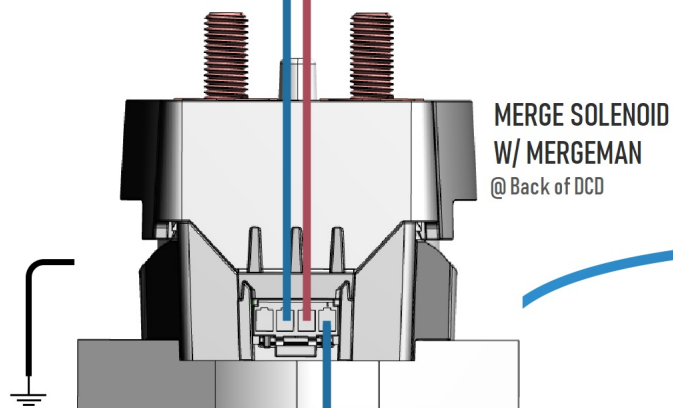
COACH RUNNING INPUT

Depending on the chassis used in the coach the coach running input will either come from the engine (switched GND) or from the ignition (switched 12V+)

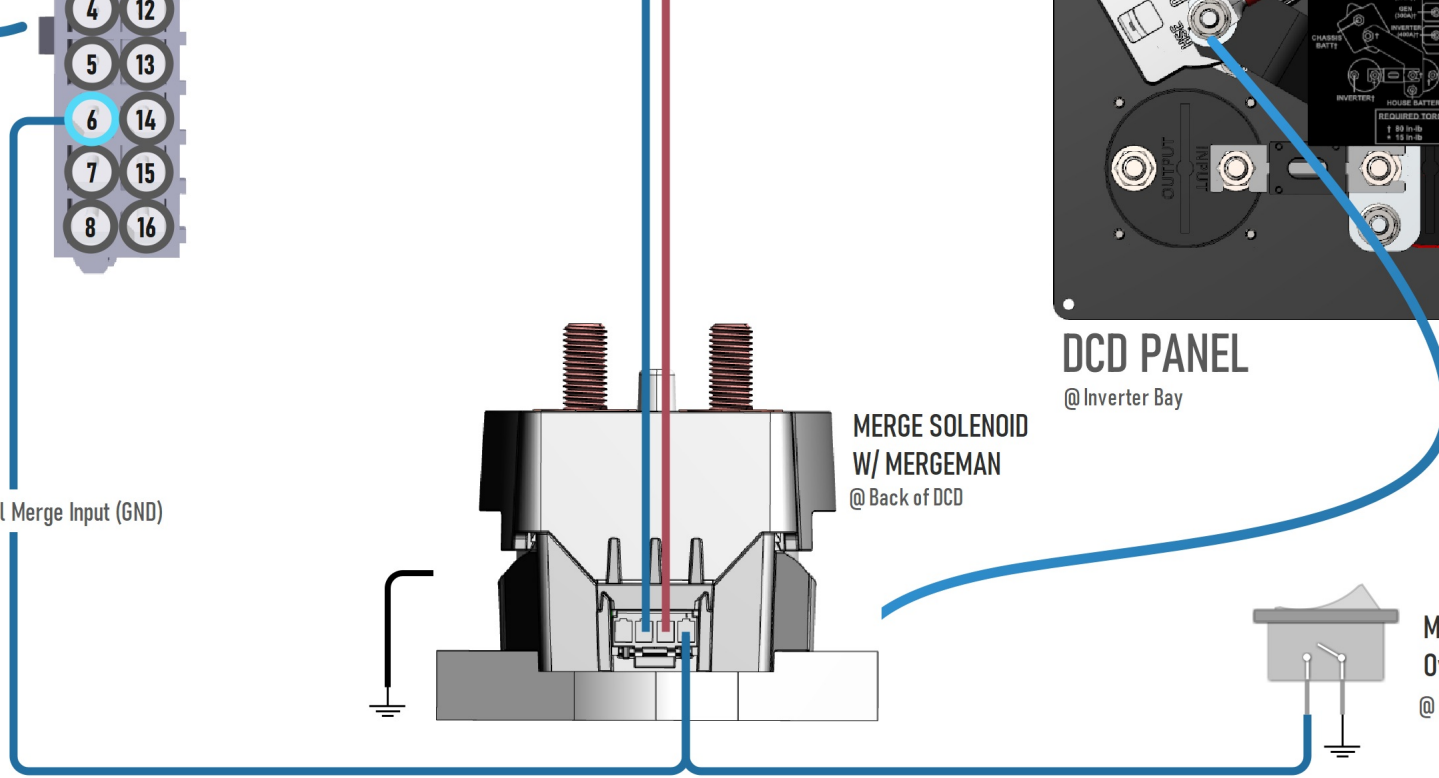
A diagram showing two circular icons: one with an engine symbol and one with a key symbol. Blue and red lines connect these icons to the main wiring diagram below.



DCD PANEL
@ Inverter Bay

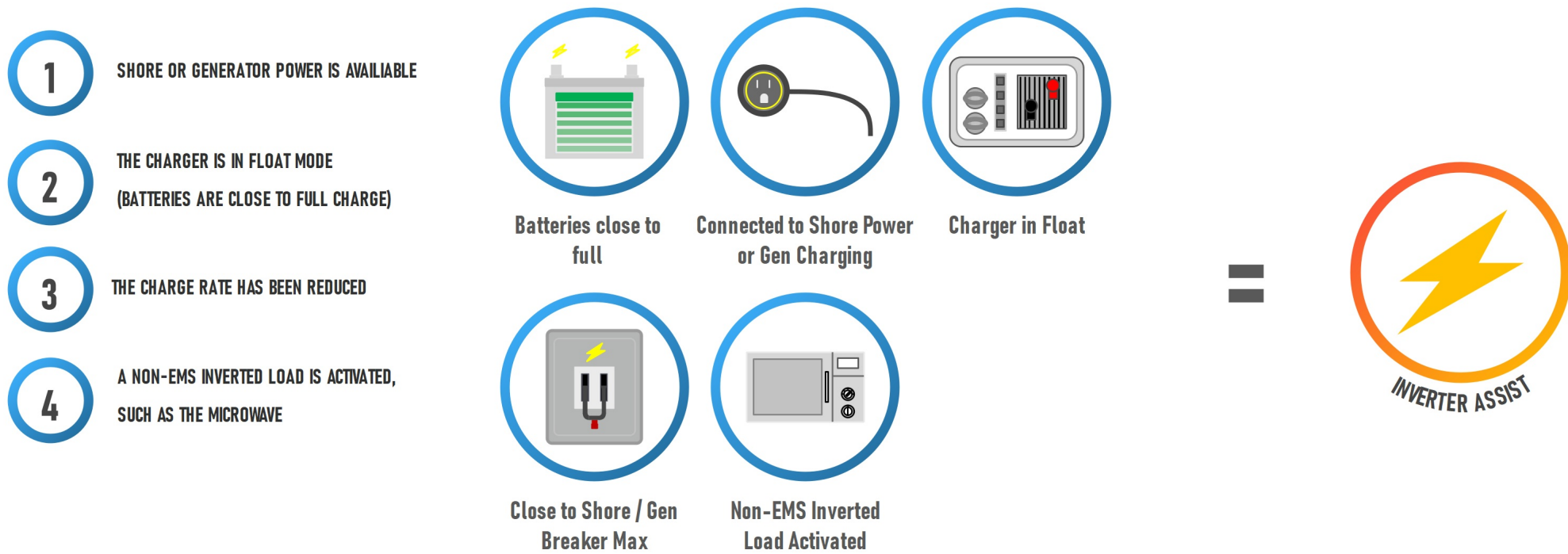


Auto / Manual Merge Input (GND)



IF ENABLED INVERTER ASSIST WILL ACTIVATE IF THE FOLLOWING CONDITIONS ARE TRUE

Inverter assist is a state in which power is temporarily drawn from the batteries to keep EMS loads from shedding.



! If the conditions above are true. To keep any EMS load from shedding the inverter will go from passthrough to inverting to temporarily invert for 5 minutes. Please note inverter assist will temporarily decrease your battery voltage. This is normal the voltage will stabilize relatively quickly once the inverter assist period has expired. Please note inverter assist can only occur once every charge cycle. Therefore, the coach will not frequently be in inverter assist mode.

! Inverter assist can be enabled or disabled from the inverter settings page. On you main LCD navigate to the power page > inverter settings > advanced battery settings > inverter assist.

To Replace The Battery

To replace the battery firmly grasp the outside edge of the wireless rocker switch. Pull to the left or right until the switch snaps off the wall. Use a pen or other thin object to push the coin cell out of the retaining clip. Insert new battery with the + symbol facing upwards, ensure battery is seated into retaining clip all the way.

Use the up arrows on the back of the switch panel to orientate placement back onto the mounting bracket. Snap the wireless rocker switch back into place.

Test the switch and dispose of the old battery responsibly.

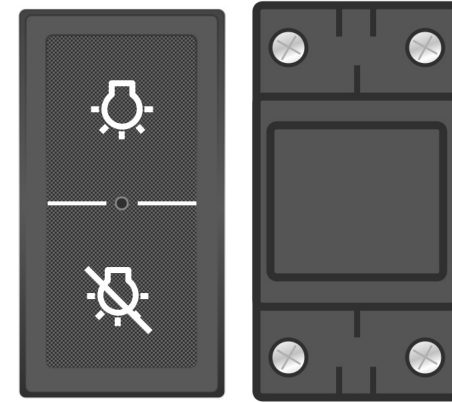
WARNING

ONLY REPLACE THE COIN CELL BATTERY WITH A **CR2032**. DOING OTHERWISE WILL VOID THE PANEL WARRANTY AND COULD DAMAGE THE PANEL



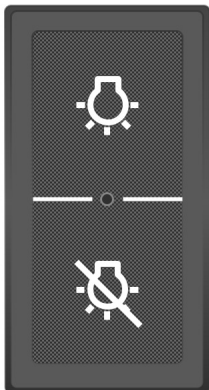
Insert Battery with + sign facing up.

Snaps on and off wall bracket

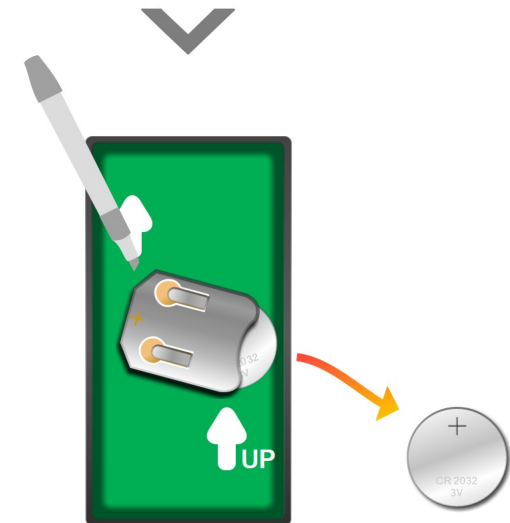
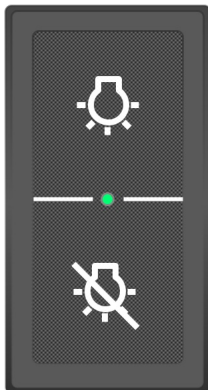


A green LED will turn on when a button is pressed. This is the transmit LED and confirms that the switch panel is transmitting information. This LED will flash occasionally indicating the switch panel is transmitting it's battery status.

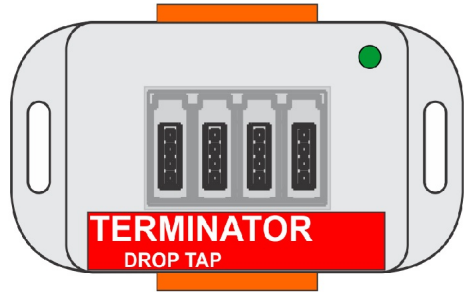
Not Transmitting



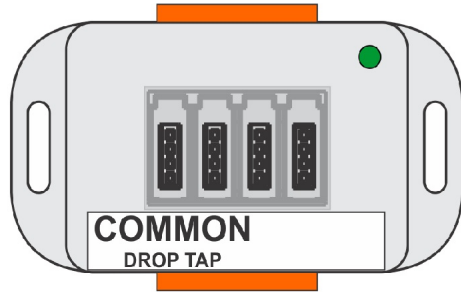
Transmitting



G3 Terminator Tap
Tiffin P/N: 5051935



G3 Common Tap
Tiffin P/N: 5027834



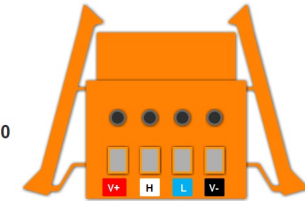
G4 Common Drop Tap
Tiffin P/N: 5016592



G4 Terminator Drop Tap
Tiffin P/N: 5051936



4 Pos Wago Connector
Tiffin P/N: 5015508



Wago Hook Tool
Wago P/N: 231-131



Mini-Clamp Plug
Tiffin P/N: 5066157
3M P/N: 37104-2165-000 FL 100



Mini-Clamp Socket
Tiffin P/N: 5066158
3M P/N: 37304-2165-000 FL 100

