

FIREFLY
INTEGRATIONS



VEGATOUCH

Promaster Zion V1 Manual



Imagination ~ Innovation ~ Integration

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Roadtrek Promaster Zion V1 Manual (Revision 4)

The information contained in this manual is a general overview of the Firefly system and is subject to change at any time.

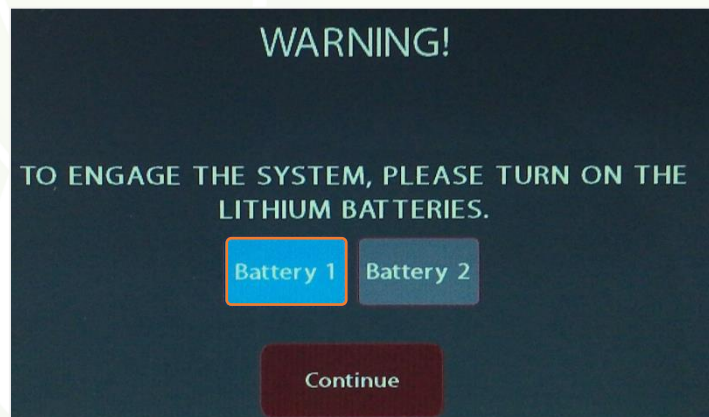
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Touchscreen Overview

Upon system startup, the warning screen below will appear requesting that the batteries be turned on before continuing. If no batteries have been toggled on, the system will be unable to function.



Tap any icon from the vertical navigation menu to select the desired page. The currently selected page will always be listed in the top corner of the screen.



Navigation Menu



Home

Buttons will turn Blue while a circuit is on and colorless once the circuit has been turned off. This color change is known as showing status.

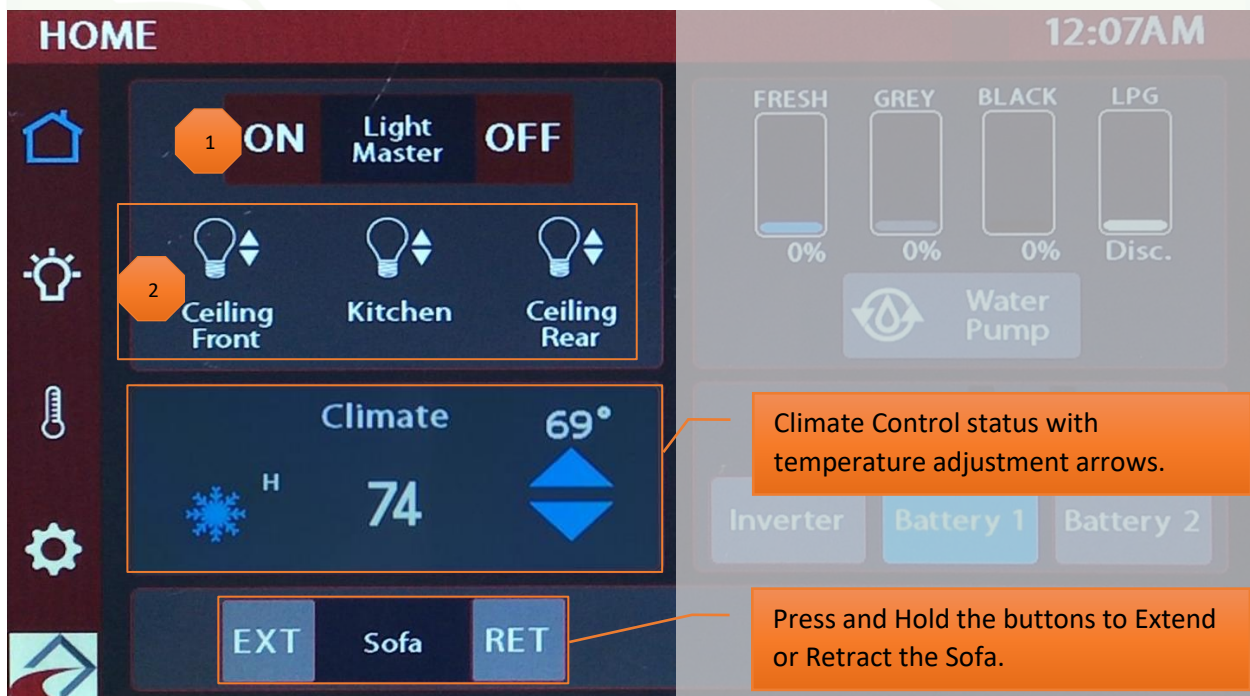
1

Light Master controls all interior lights at once. When Light Master Off is pressed, it will remember which lights were on. Then, when Light Master On is pressed, it will only turn on the lights that are in memory. To turn on all lights again, press and hold Light Master On for at least one second.

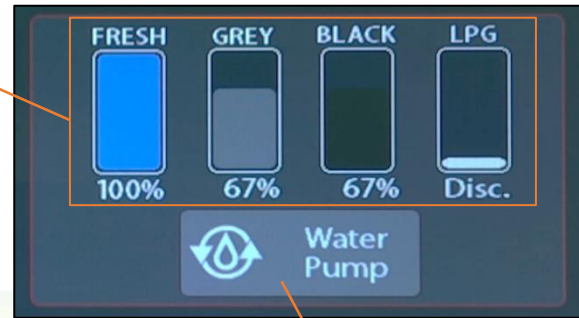
*Troubleshooting – Memory is rewritten each time Light Master Off is pressed. In the case that it is pressed twice in a row, it will remember that no lights were on and just touching Light Master On won't turn on any lights. Press and hold Light Master On to turn the lights back on. Note: Light Master On/Off buttons will always appear red and will not show feedback at any time.

2

Individual light controls.



Individual tank graphics represent the percentage filled for holding tanks.



LP Tank Readings:

- Below 25% will read “Low” and the tank level will show as normal.
- From 25% to 75%, the tank level and percentage will show as normal.
- From 75% to 80%, will read “Full” and the tank level will show as normal.
- 80% and above will read “Disc.” and the tank level will be empty.

Toggle On/Off



House Voltage – the voltage coming from your house batteries. Note: Battery graphics will display Red if below 12V.

Tap to toggle the Inverter or Specific Batteries On/Off.

3

Awning - Press and Hold the Extend or Retract buttons to operate the awning. The EXT button will be locked out whenever the Ignition is active.

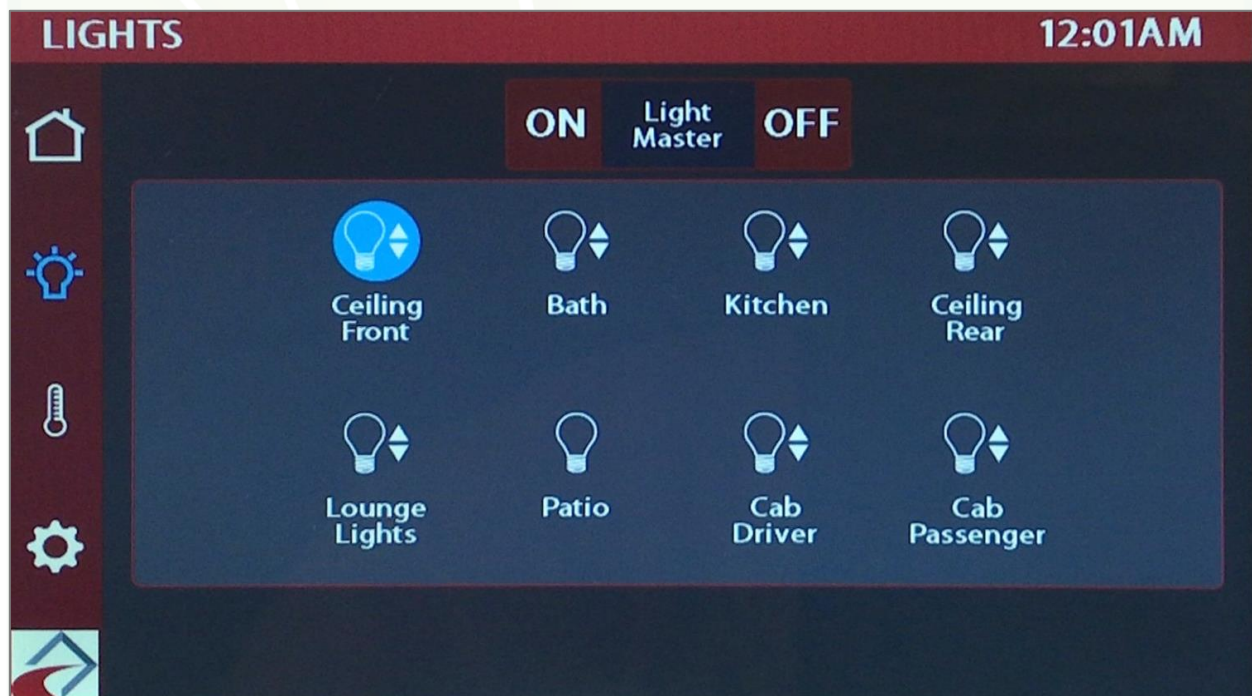


Lights

This screen will control the lighting for the entire coach. Tap any button to turn the desired light On/Off.

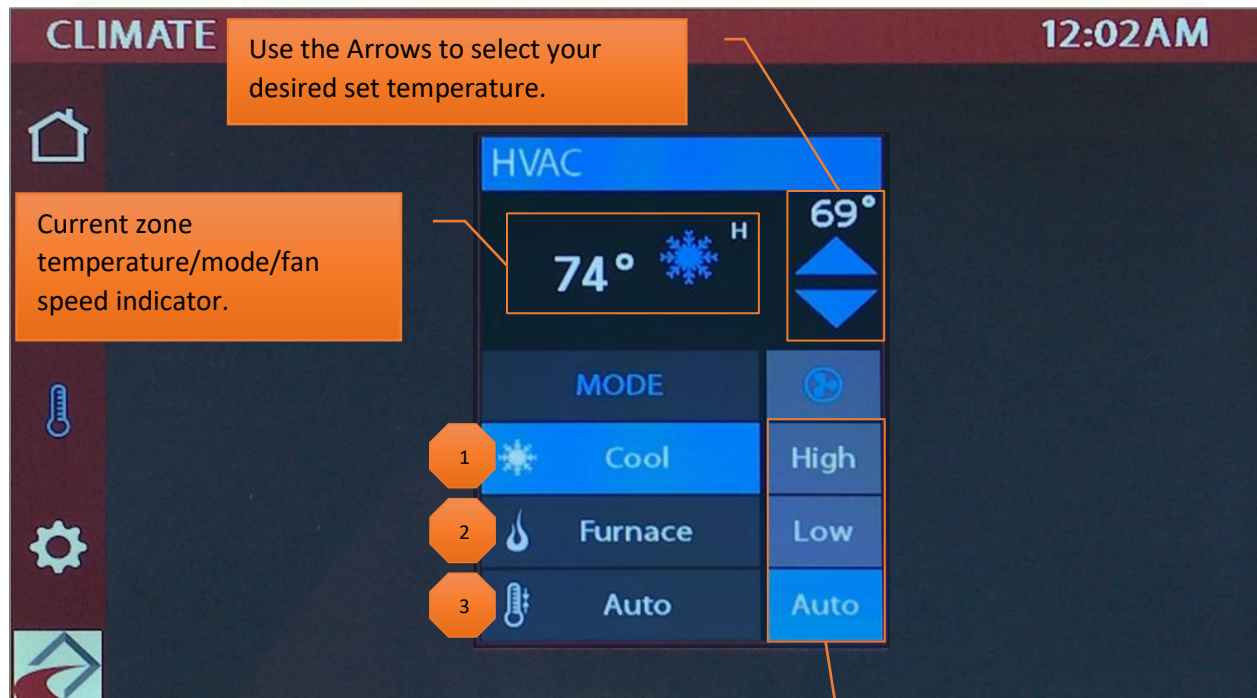


Lights with up/down arrows are dimmable. Press and hold these buttons to bring the brightness up or down. Tap the buttons to toggle On/Off.



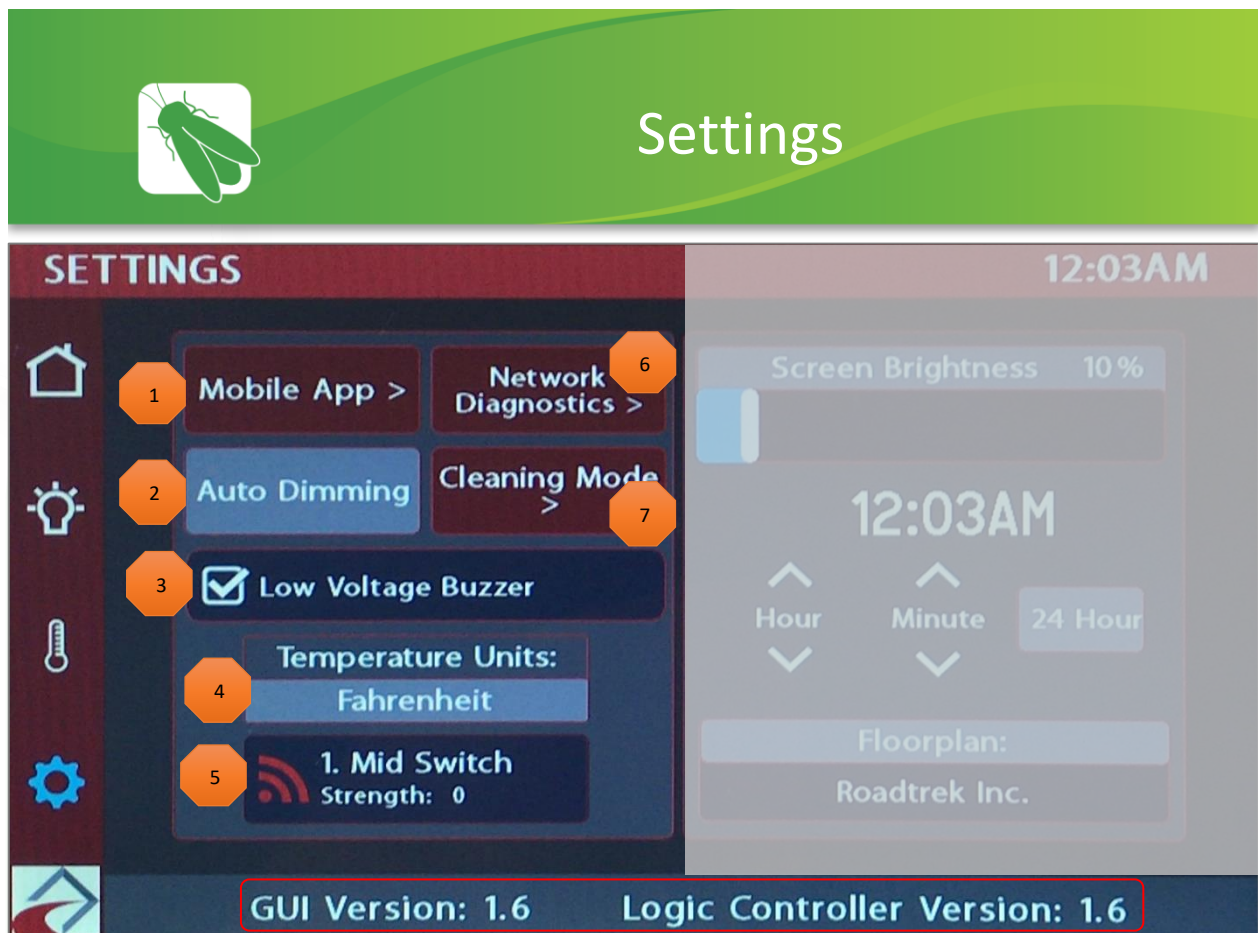


Climate Control



Fan Only Mode – Available if HVAC is off. The fan will operate by choosing High or Low. Auto will turn the fan off.

- 1 Cool – Tap to operate the air conditioning. The A/C will run until the current temp reaches your desired temp and then shut off.
- 2 Furnace – Tap to operate the Furnace. The Furnace will run until the current temp reaches your desired temp and then shut off.
- 3 Auto – Tap to put the system into Auto mode. The A/C or Heat will automatically run to keep your desired temperature consistent.



1 Tap to navigate to the Vegatouch Mira connection screen.

2 When Auto Dimming is enabled, the screen will enter sleep mode after 60 seconds of inactivity. Tap anywhere on the screen to wake it up. Please note that even if Auto Dimming has been disabled, the screen will still enter sleep mode after 4 hours of inactivity during daytime hours (5am – 10:59pm) and after 15 minutes of inactivity during night time hours (11pm-4:59am) as the result of a built in screen saver that cannot be disabled.

3 Tap to Enable/Disable the Low Voltage Buzzer (see page 17). The buzzer will always enable after a power cycle.

4 Tap to select between Fahrenheit and Celsius.

5 Wireless Switch status display (Mid Switch)

Green – Over 100 (Strong) Yellow – 85-100 (Medium) Red – Less than 85 (Weak)

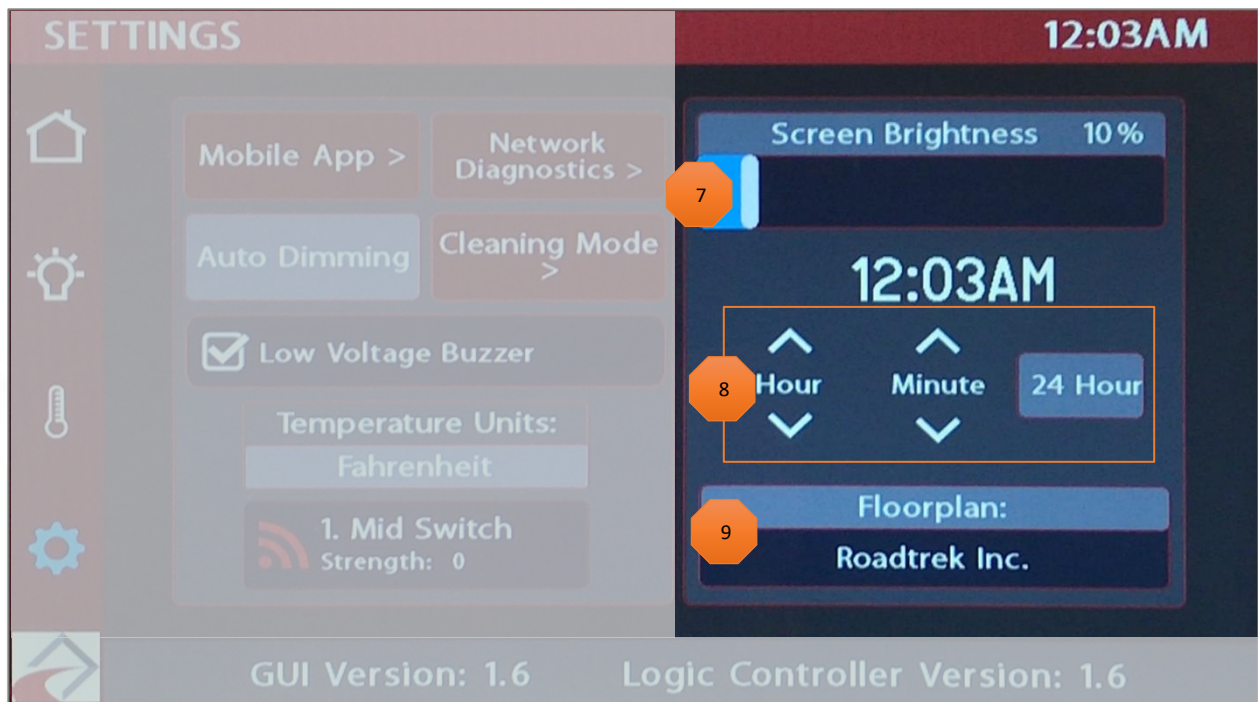


Red Wireless Graphic with a Zero reading – The switch is currently disconnected from the screen. It is likely that the battery inside your switch panel needs replaced. The wireless switch panel in your coach will illuminate a green LED whenever a button is pressed. If the LED on your switch panel does not illuminate when you press a button on your switch, you will need to replace the 2032 coin cell battery. If the LED is illuminating but the switch still won't function, the switch will need to be paired (see page 15).

6 Tap to navigate to the Network Diagnostics page.

7 Tap to disable the touchscreen for 15 seconds for the purpose of cleaning.

Note the GUI and Logic Controller versions at the bottom of the screen. Please have these numbers available before calling technical support.

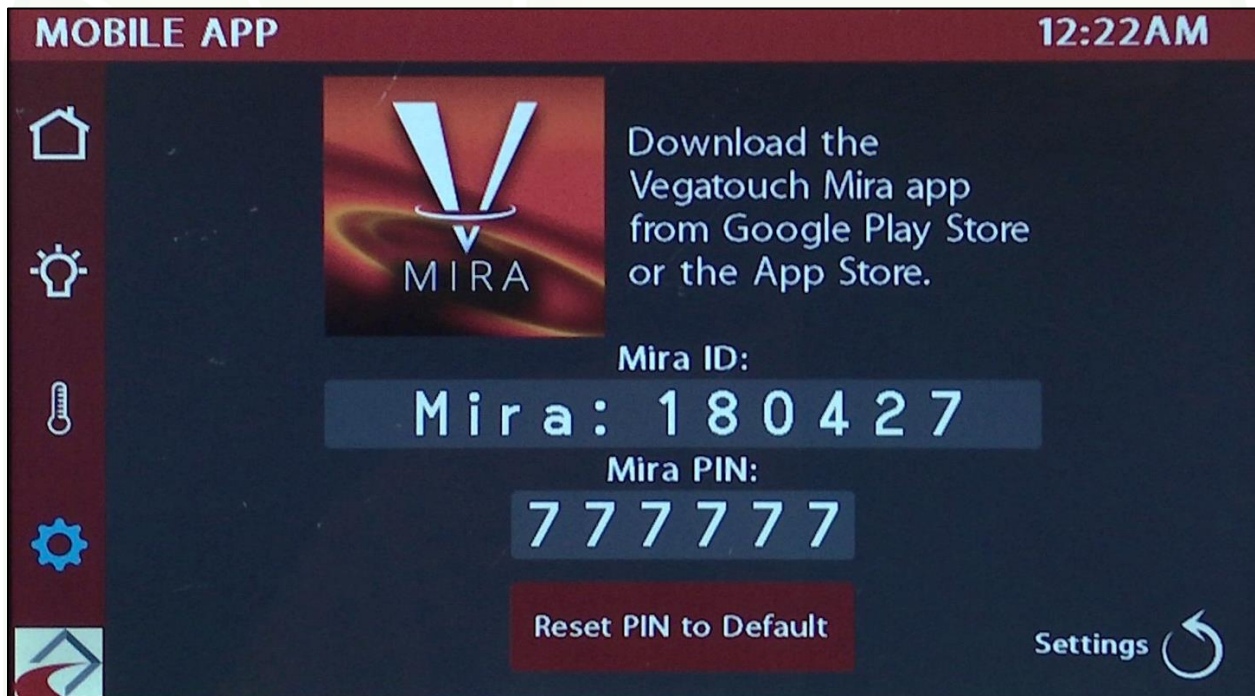


- 7 Drag the slider to adjust screen brightness.
- 8 Tap the buttons to set the time or select 24-hour time mode.
- 9 Floorplan display.



Settings/Mobile App

Vegatouch Mira is a wireless control module that easily connects to any Android or iOS device to give total control to many electrical, electronic and mechanical systems in your coach. Pair any device with the coach's built-in interface to monitor and control many coach components.





Vegatouch Mira Setup

Notice: Make sure that Bluetooth is turned ON in your smart device settings before proceeding.

Locate the Login Information:

The login information can be found by clicking on the Mobile App button on the settings page of the touchscreen or from the Mira module's label.

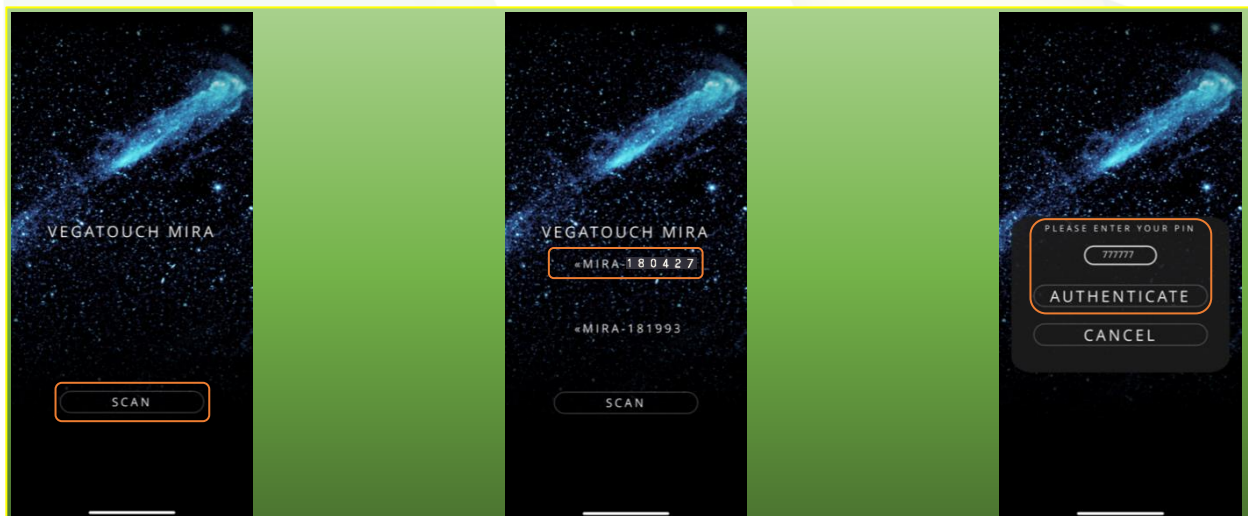


Download:

Download Vegatouch Mira from the Google Play store or the App Store. Once the download has finished, install the app and open it.

Setup:

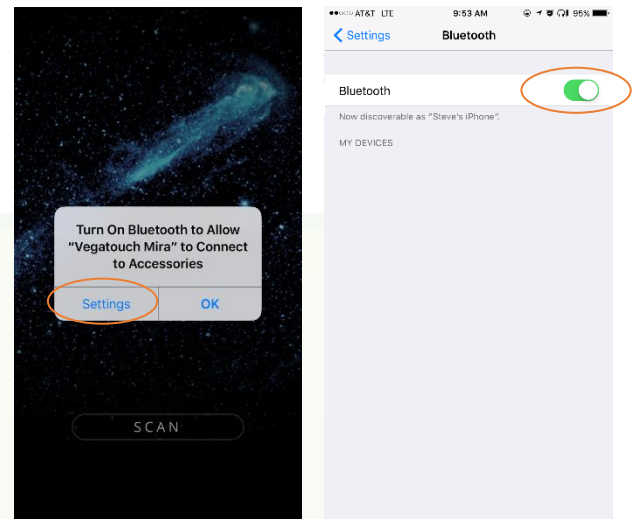
Tap SCAN to find the Mira Module's signal. After scanning, any Mira Module in your area will appear on the screen. Tap the ID # that matches the one on your Mira label. Enter the PIN number from the Mira label and press AUTHENTICATE to connect to the system.



Notice: iOS Setup Tips

Turn on Bluetooth to allow Vegatouch Mira to connect to Accessories.

If you do not have Bluetooth turned ON in your iOS settings you will see this screen. Do not click OK, you must click SETTINGS. Your Bluetooth Settings page will now appear and you should turn Bluetooth ON.



Location Services Required

To enable Location Services on your Apple device:

1. Go to settings/Privacy/Location Services.
2. Make sure that Location Services is ON.
3. Scroll down to find your app.
4. Tap the app and select "Always allow access to your location".

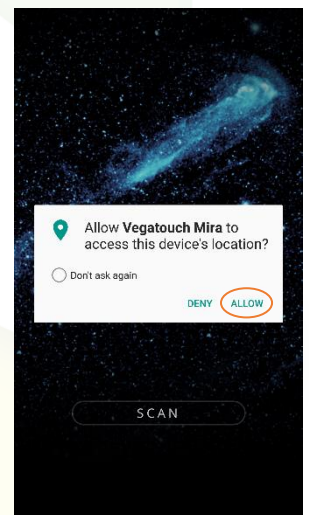
Notice: Android Setup Tips

Allow Vegatouch Mira to access this device's location.

Mira will need to be allowed access to your location. Click ALLOW when you see this screen.

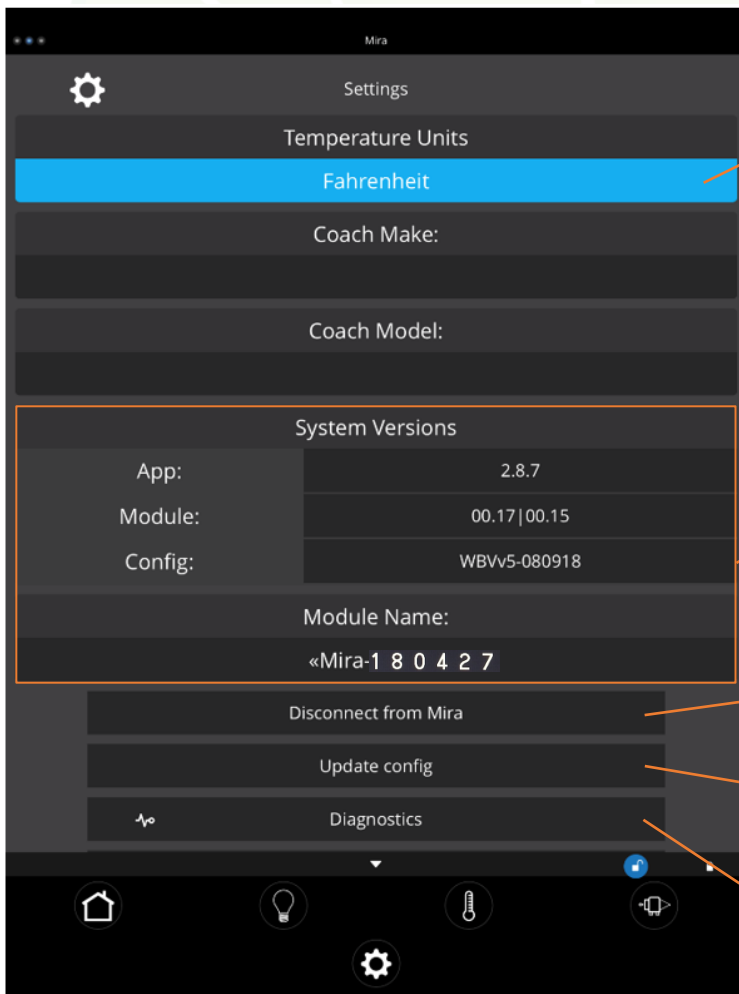
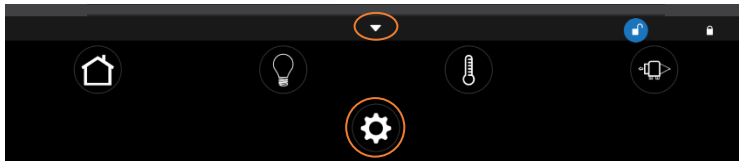
To enable Location Services on your Android device:

1. Open your phone's Settings app.
2. Tap Location/App Permission
 - If you don't see "Location" tap Security & Location/Location.
 - If you have a work profile, tap Advanced/Location.
3. Under "Allowed all the time" and "Allowed only while in use" view the apps that can use your phone's location, tap it, then choose the location access for the app.
4. To change the App's permissions, tap it, then choose the location access for the app.



App Settings:

Access the App Settings page by tapping the triangle (at the bottom of the screen) to expose the Settings button. Tap the gear to visit the settings page.



Tap the Temperature Units selection to choose between Fahrenheit and Celsius.

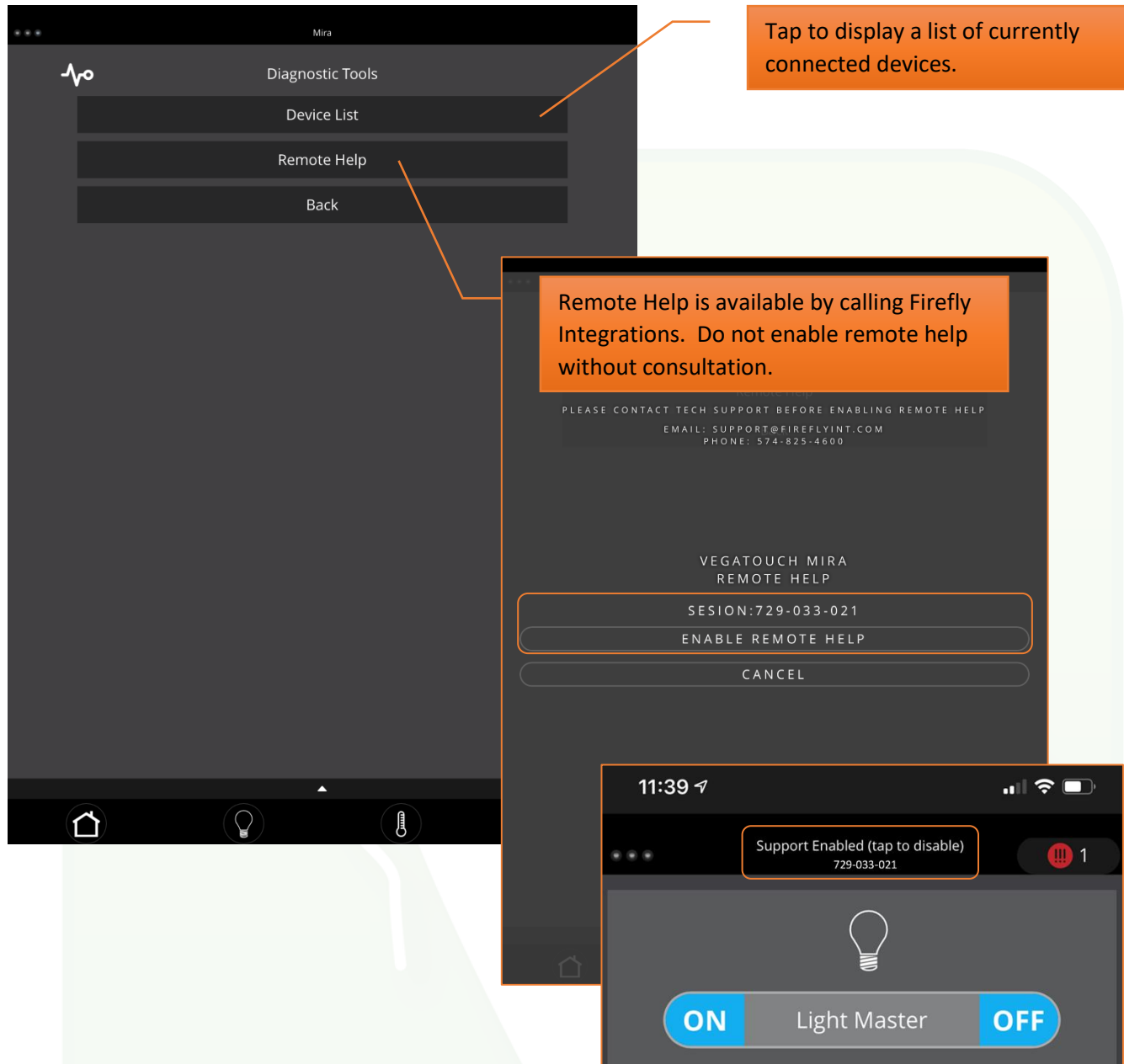
System Information and Mira Name.

Tap to disconnect your device from Mira.

Tapping Update Config will force a download of the config from the cloud.

Tap to enter the Diagnostic Tools screen.

Diagnostic Tools:



Remote Help:

If instructed by Firefly, tap Enable Remote Help for advanced technical support. Once enabled, provide the Session ID to allow Firefly to remotely connect to your Mira app (internet connection required). To disable Remote Help, simply tap the Session ID number from the Home page of your Mira app.



Wireless Switch Pairing

The wireless Mid Switch will need to be paired to the touchscreen before first use.

- 1 Press and Hold the switch graphic for 5 seconds.
- 2 Tap Start Pairing. You'll have 30 seconds to press and hold both buttons on the switch panel at the same time for 5 seconds.
- 3 Tap Done once the pairing successful message appears. It may take up to 10 minutes for the battery switch indicator to turn Green, but the switch should work instantly once paired. If at this point the switch still fails to work, press and hold the Clear button (not pictured) for 3 seconds and repeat the pairing procedure once again.

POWER
SOFA
EXTEND

POWER
SOFA
RETRACT

The screenshot shows the 'SETTINGS' screen with a red header bar. The time is 12:03AM. A hand is pointing to the '1. Mid Switch' option under 'Temperature Units: Fahrenheit'. A red circle with the number '1' is next to it. A blue box with the title 'WIRELESS SWITCH PANEL PAIRING PROCEDURE' is overlaid on the screen. It contains the text: 'PAIRED WIRELESS ID: FFD8070B' and 'TO PAIR THE WIRELESS SWITCH PANEL INDICATED AT THE TOP OF THIS PAGE TO THE SCREEN, PRESS THE START PAIRING BUTTON AND INSTRUCTIONS WILL FOLLOW. TO KEEP CURRENT PAIRING, PRESS THE CANCEL BUTTON. TO CLEAR THE PAIRING, HOLD THE CLEAR BUTTON FOR 3 SECONDS.' A blue button labeled 'START PAIRING' is at the bottom right of this box, with a red circle with the number '2' next to it. Another blue box with the title 'WIRELESS SWITCH PANEL PAIRING PROCEDURE' is overlaid on the screen. It contains the text: 'PAIRING ACTIVE FOR: 19 SECONDS' and 'TO PAIR A WIRELESS SWITCH PANEL TO THE SCREEN INDICATED ABOVE, PRESS AND HOLD ANY TWO BUTTONS ON THE WIRELESS PANEL FOR 5 SECONDS.' A third blue box with the title 'WIRELESS SWITCH PANEL PAIRING SUCCESSFUL' is overlaid on the screen. It contains the text: 'PAIRED WIRELESS ID: 0FD8070B' and a blue button labeled 'DONE' at the bottom, with a red circle with the number '3' next to it. The background settings screen shows options like 'Mobile App >', 'Network Diagnostics >', 'Auto Dimming', 'Cleaning Mode >', 'Low Voltage Buzzer', 'Temperature Units: Fahrenheit', and '1. Mid Switch Strength: 0'. The bottom of the screen shows 'GUI Version: 1.6' and 'Logic'.



Settings/Network Diagnostics

Screen/G12:

This screen will show the status of the Lyra screen and G12 panel. It will also display any currently active inputs and outputs.

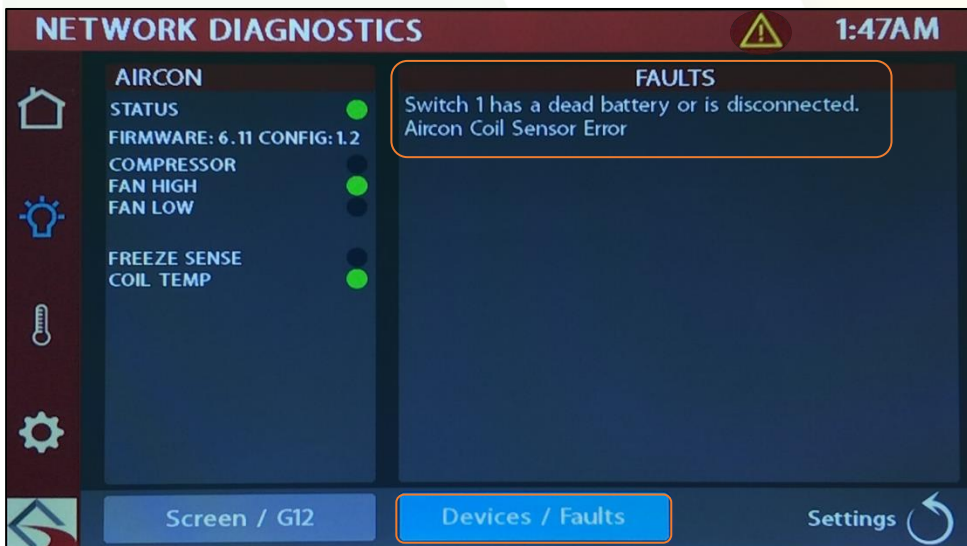


Devices/Faults:

This screen will display the status of the Aircon and list any faults the system is currently experiencing.



A triangle will appear at the top of the screen whenever a fault condition is present. Tap the triangle to visit the Network Diagnostics screen.





Low Voltage

Your system will sound an alarm and show this screen whenever system voltage is low.

The system will alarm at 3 different voltage levels for specific amounts of time depending on your battery type:

Lithium

- 12.7V – 12.6V (15 second alarm)
- 12.5V – 12.4V (30 second alarm)
- 12.3V and under (45 second alarm)

AGM (Lithium deselected)

- 12V – 11.8V (15 second alarm)
- 11.7V – 11.6V (30 second alarm)
- 11.5V and under (45 second alarm)

Adjust the buzzer's volume by rotating the dial to Open/Close the grille.



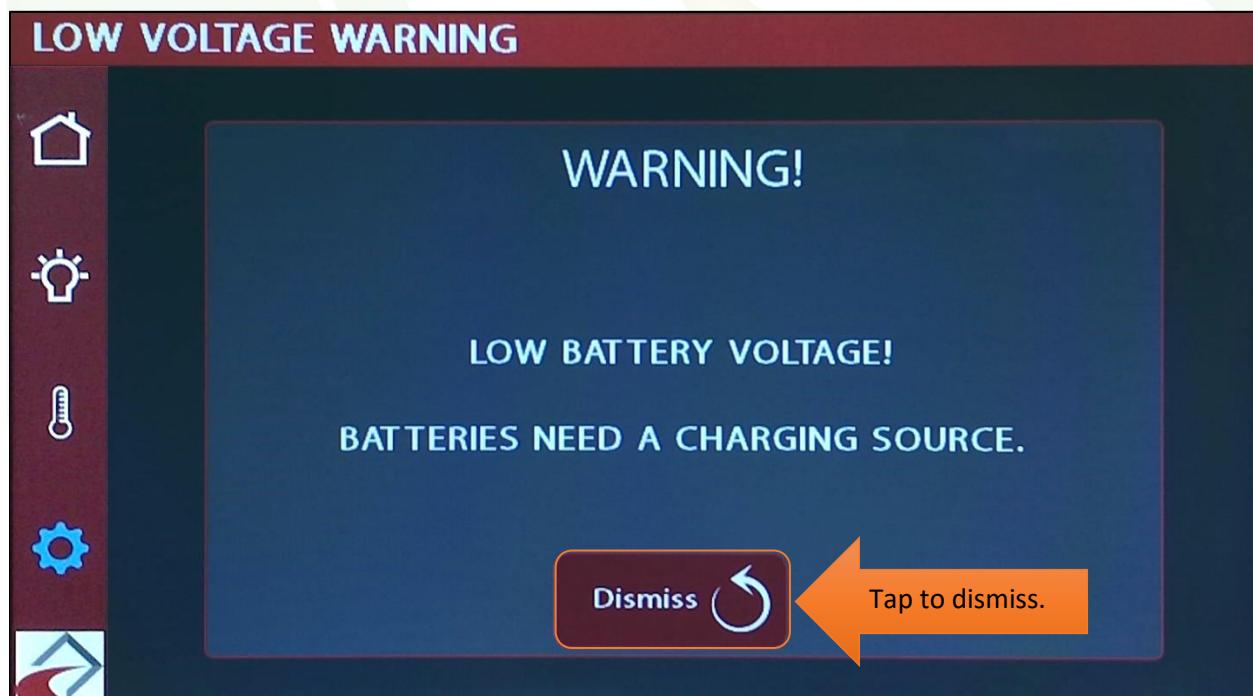
Open



Closed

If the system boots at 12.3V (11.5V AGM), it will trigger every alarm in order, separated by 30 seconds.

Low voltage alarms will reset when the system voltage goes above 12.7V (12V AGM).

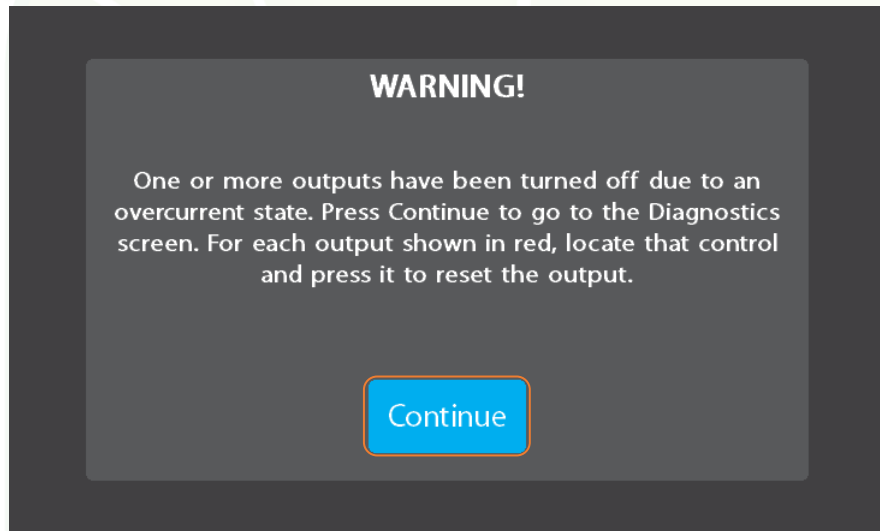




Overcurrent Detection

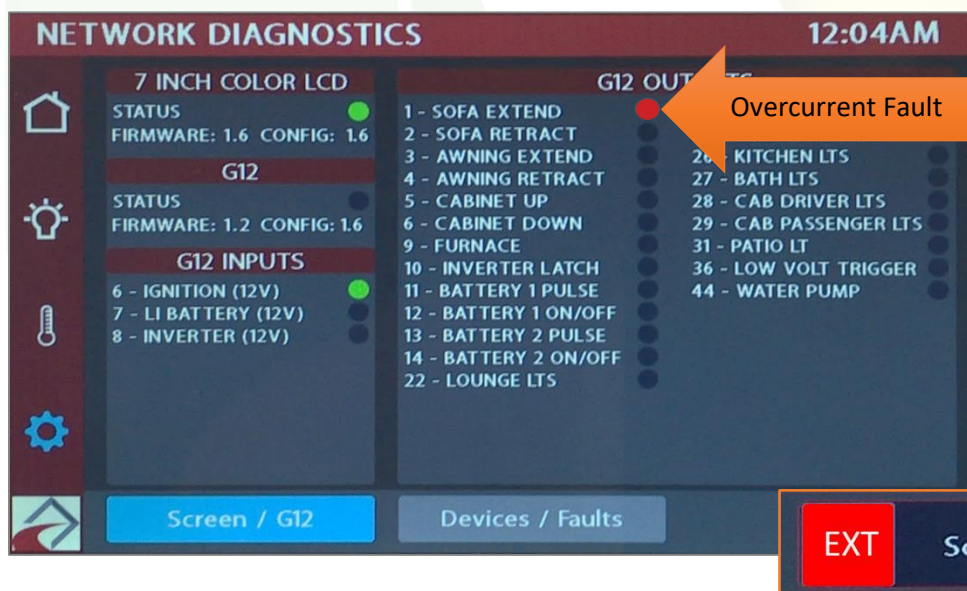


If an output on the G12 experiences an overcurrent fault, a lightning bolt graphic will appear at the top of the screen. Tapping the Lightning Bolt graphic will result in a Warning screen with a brief set of instructions. From this screen, tap Continue to navigate to the Diagnostics screen.



The Diagnostics screen will use red lights to alert you of overcurrent detections. To clear the faults, navigate to each faulted control and tap them to reset. Note – you'll notice that their buttons have turned red and will remain that way until cleared.

If the fault persists, there is likely a fault in the wiring or load on the circuit that must be resolved.



The following outputs have this implementation:

Ch 1 – Sofa Extend

CH 2 – Sofa Retract

Ch 3 – Awning Extend

Ch 4 – Awning Retract

Ch 5 – Cabinet Up

CH 6 – Cabinet Down



SSP17 Switch Panel

SSP17 switch panels use wireless RF technology to communicate with the Lyra touchscreen. These switches are powered by a 2032-coin cell battery. If you press a switch panel button and the operational LED does not illuminate, you'll need to change the battery. Simply use your fingers to pry the switch panel away from the wall-mounted backplate to access the battery compartment on the back of the switch.

Once you replace the battery, line the switch panel up with the backplate and apply pressure to snap the switch panel back into place.



POWER
SOFA
EXTEND

POWER
SOFA
RETRACT

Operational LED



Slide the battery up
to remove.



G12 DC Panel

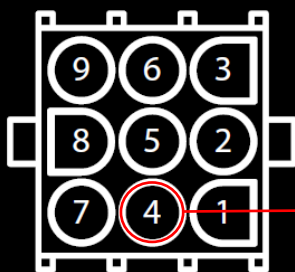
Your G12 control panel is the power distribution center for the coach. This panel receives the signals sent from your touchscreen/switch panels and performs the actions that have been requested by activating and deactivating the required circuits.

Every circuit controlled by the G12 is numbered and listed on a black label (load list) which is usually mounted next to the G12 panel. Note: The G12 will not have individual illuminated NET LED's for each channel. For instance, if you press the Ceiling Front light button on your touchscreen, there will be no illuminated GREEN LED to show that it is currently operational. Check the Network Diagnostics Page to see if the output shows status. If it does, you will want to check output voltage on that pin if the light doesn't come on (Fig 1).



Figure 1

Test **Positive** Output Channels as shown:



Multi-meter

GROUND

J3: HC OUTPUTS 12A; LC 6A

- Pin 1 (Out 21):
- Pin 2 (Out 22): Lounge Lights (6A)
- Pin 3 (Out 23):
- Pin 4 (Out 24): Ceiling Front**
- Pin 5 (Out 25): Ceiling Rear
- Pin 6 (Out 26): Kitchen Lights
- Pin 7 (Out 27): Bath Lights
- Pin 8 (Out 28): Cab Driver Lights
- Pin 9 (Out 29): Cab Passenger Lights



Networking

Your distribution panel and touchscreen connect via your coach's RV-C network. Each component will have a NET LED that is used to show network status. If a NET LED is displaying anything other than solid green and some of the panel's functions are not working, please use the keys below to determine the network status of your hardware.

Net LED Locations:

G12 Panel



Back of
Touchscreen





Network Status Indicators

Every component of the Firefly system uses an LED to communicate network status. Use the key below to determine the network status of your hardware. *

Panel Network Status Indicator – Applies to any device with a network indicator:

-  /  Fast flashing Green Light (4 times/sec) – Device is attempting to make initial connection.
-  /  Slow flashing Green Light (1 time/sec) – Device was online but has been offline for at least 5 sec.
-  Solid Green – Device is connected to network and is communicating properly.
-  Solid Red – Device has gone offline and is not connected to a network.
-  /  Alternating Red & Orange – Device has gone offline and is trying to re-connect (within 30 sec).
-  /  Alternating Green & Orange – Device is currently online but has gone offline 2 or more times

*Note: Mira modules use a different networking key. Please see the next page.



Mira NET LED Status Key

The NET LED on your Mira module can change color in different situations. Use the following key to determine the operational status of your module.

	Off	Device has no power or has completely failed
	Fast flashing green (4 times/sec)	Device is attempting to make initial connection to the CAN network and good files
	Solid green	Device is operating correctly and has seen a CAN message in the past 5 seconds and good files
	Slow flashing green (1 time/sec)	Device was active on the CAN bus but has not seen a valid message in 5 seconds and good files
	Alternating red and yellow	Device has not seen CAN messages in 30 seconds and good files
	Alternating yellow and green	Device is currently active on the CAN bus but has not seen a CAN message within a 30s interval 2 for more times since the last power cycle and good files
	Solid red	Device has not seen a CAN message in the past 60 seconds and good files
	Fast alternating green and blue (4 times/sec)	Device is attempting to make initial connection to the CAN network and corrupted files
	Solid blue	Device is operating correctly and has seen a CAN message in the past 5 seconds and corrupted files
	Slow alternating green and blue (1 time/sec)	Device was active on the CAN bus but has not seen a valid message in 5 seconds and corrupted files
	Alternating red and blue	Device has not seen CAN messages in 30 seconds and corrupted files
	Alternating yellow and blue	Device is currently active on the CAN bus but has not seen a CAN message within a 30s interval 2 or more times during a power cycle and corrupted files
	Solid purple	Device has not seen a CAN message in the past 60 seconds and corrupted files
	Flashing white	Device pin is being reset
	Solid yellow	Device pin has been reset
	Flashing blue	Device does not have a valid application
	Flashing red (2 seconds)	Factory test: Red LED
	Flashing green (2 seconds)	Factory test: Green LED
	Flashing blue (2 seconds)	Factory test: Blue LED

G12 Master

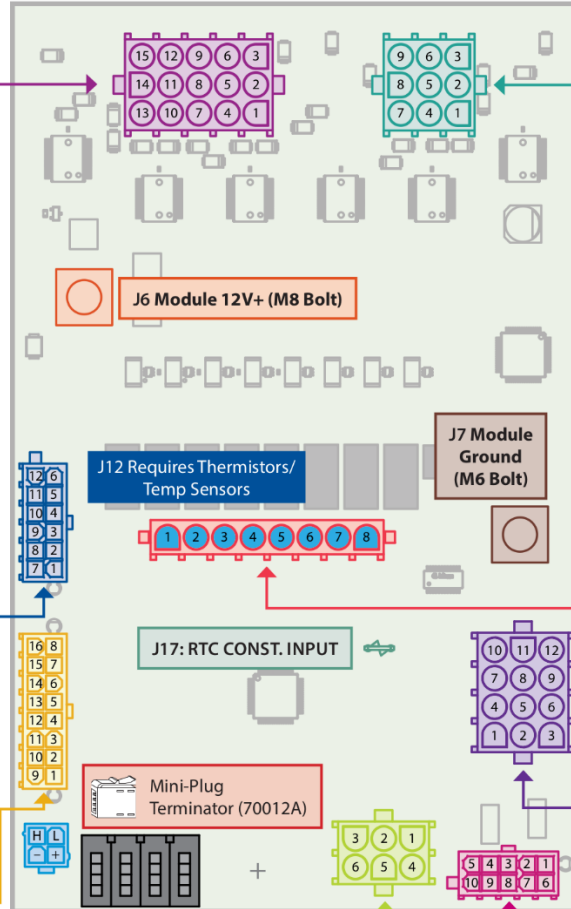
Log In:

Customer: ROADTREK **Model:** PROMASTERZION/SRT **Revision:** 1V11
Raw Part: 7000700 G12 w/Probe **Custom Part:** **Date:** 01/05/21 AG
Outputs: 1-44 **Program Version:**

J4: HIGH CURRENT OUTPUTS 12A; LOW CURRENT 6A				
Pin	Out	Load	AMP	O/C
1	30		4A	.27s
2	31	PATIO LIGHT	4A	.27s
3	32		4A	.27s
4	33		4A	.27s
5	34		4A	.27s
6	35		4A	.27s
7	36	LOW BATTERY BUZZER	4A	.27s
8	37		4A	.27s
9	38		4A	.27s
10	39		4A	.27s
11	40		4A	.27s
12	41		4A	.27s
13	42		4A	.27s
14	43		4A	.27s
15	44	WATERPUMP	6A	1.1s

J12: THERMISTORS	
Pin	Load
1	THERMISTOR 1 (R/P OPTION)
2	
3	
4	
5	
6	
7	THERMISTOR (GND) (R/P OPTION)
8	
9	
10	
11	
12	

J11: TANKS	
Pin	Load
1	FRESH KIB PROBE
2	GREY KIB PROBE
3	BLACK KIB PROBE
4	
5	
6	
7	
8	
9	TANK SENSOR GROUND
10	
11	
12	
13	
14	
15	
16	



J13: LPG	
Pin	Load
1	LP SENSOR+
2	
3	
4	LP GROUND
5	
6	

J3: HIGH CURRENT OUTPUTS 12A; LOW CURRENT 6A				
Pin	Out	Load	AMP	O/C
1	21		4A	.27s
2	22	LOUNGE LIGHTS (DIM)	6A	.27s
3	23		4A	.27s
4	24	CEILING FRONT (DIM)	4A	.27s
5	25	CEILING REAR (DIM)	4A	.27s
6	26	KITCHEN LIGHTS (DIM)	4A	.27s
7	27	BATH LIGHTS (DIM)	4A	.27s
8	28	CAB DRIVER LIGHTS (DIM)	4A	.27s
9	29	CAB PASSENGER LIGHTS (DIM)	4A	.27s

J8: HIGH CURRENT RELAYS (20A MAX)				
Pin	Out	Load	AMP	O/C
1	1	SOFA EXTEND (RP) (MOM)	20A	2.0s
2	2	SOFA RETRACT (RP) (MOM)	20A	2.0s
3	3	AWNING EXTEND (RP) (MOM)	15A	.26s
4	4	AWNING RETRACT (RP) (MOM)	15A	.26s
5	5	CABINET UP (RP) (OPTION)	15A	1.0s
6	6	CABINET DOWN (RP) (OPTION)	15A	1.0s
7	7		15A	.26s
8	8		15A	.26s

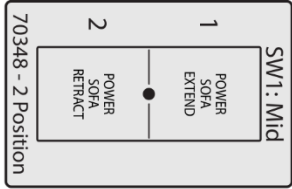
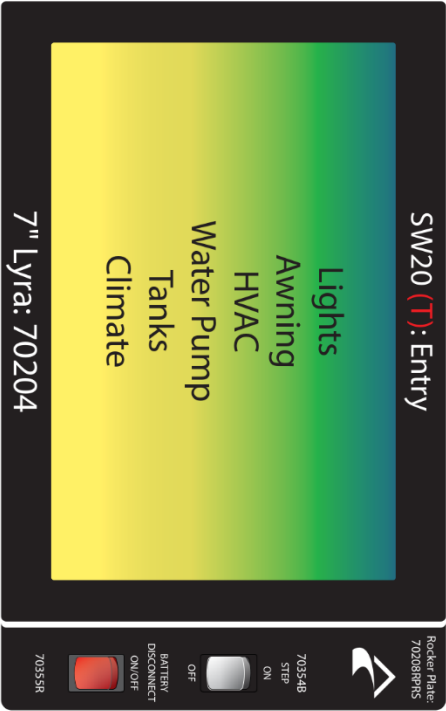
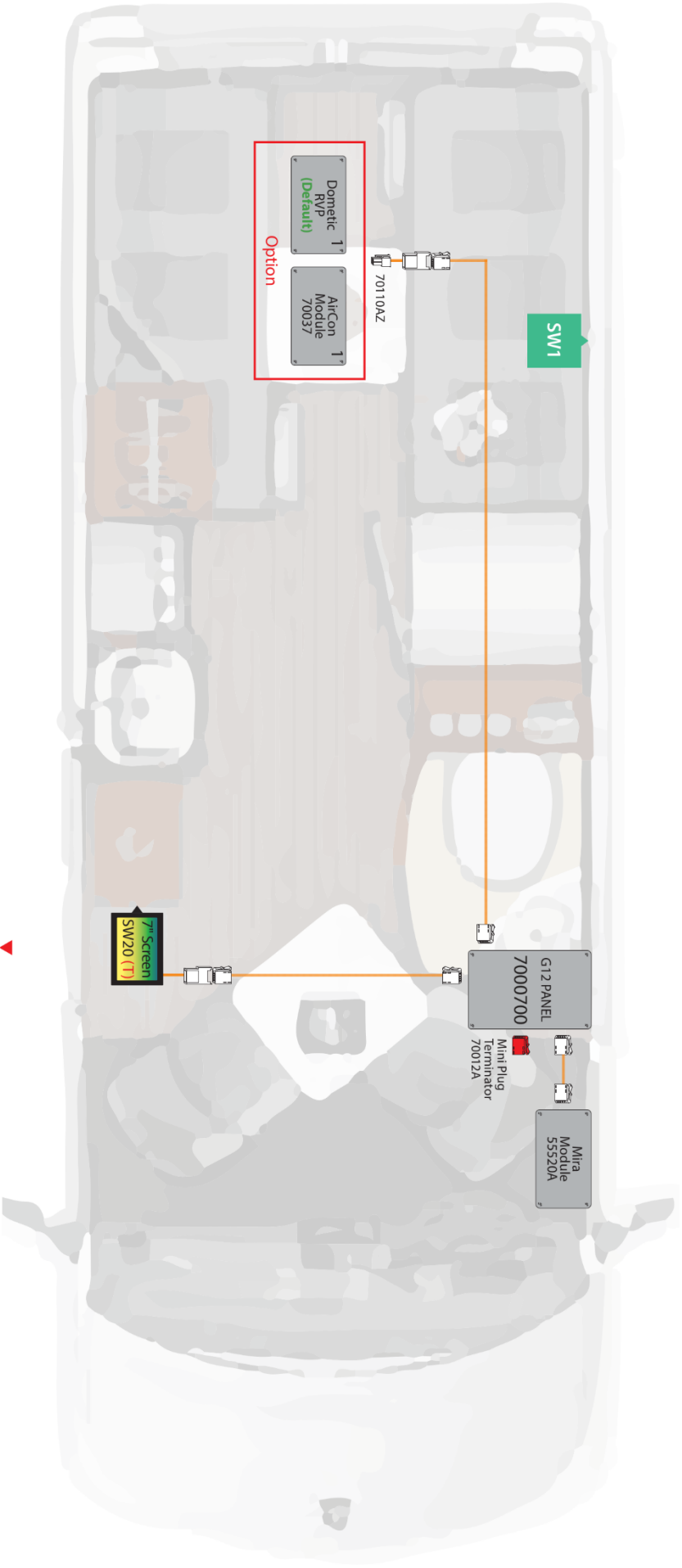
J10: HALF BRIDGES 1A (PROGRAMMABLE POLARITY)				
Pin	Out	Load		+/-
1	9	FURNACE		+
2	10	INVERTER ON/OFF (LATCHING)		+
3	11	BATTERY 1 (MOM)		+
4	12	BATTERY 1 ON/OFF (LATCHING)		+
5	13	BATTERY 2 (MOM)		+
6	14	BATTERY 2 ON/OFF (LATCHING)		+
7	15			+
8	16			+
9	17			+
10	18			+
11	19			+
12	20			+

J5: INPUTS			+/-
Pin	Load		
1			-
2			-
3			-
4			-
5			-
6	IGNITION		+
7	LITHIUM BATTERY POWER		+
8	INVERTER LATCH		+
9			+
10			+

Add Placeholders

Pin Legend: ■ Reverse Polarity

G12 Master 1v3 Updated 12/17/2019



RoadTrek - Zion Promaster			
Network Wiring Diagram and Switch Panel Layout		DI: MD	Network Legend
SSP-17 RF / Lyra	NWD REV 1v6	PI: **	Drop Cable Connections
			Mini Molex Connections