

FIREFLY
INTEGRATIONS



VEGATOUGH
LYRA

Dynamax Isata 3 - V1 **OEM** Manual



Imagination ~ Innovation ~ Integration

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Dynamax Isata 3 - V1 OEM Manual

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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Lyra Screen Overview

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

The screenshot displays the 'HOME' screen of the Lyra control interface. At the top, the word 'HOME' is on the left and '12:00AM' is on the right. A vertical navigation menu on the left side contains icons for Home, AGS, Lights, Climate, Slides, and Settings. The main content area is divided into several sections: a top-left section with 'Water Pump' and 'Inverter' buttons; a top-right section with four battery level indicators labeled 'FRESH', 'GREY', 'BLACK', and 'LP', each with a percentage bar and 'Disc.' below; a middle-left section with 'ON' and 'OFF' buttons for 'Light Master'; a middle-right section with 'Tank Heaters' and a 'DISABLED' button; a bottom-left section showing temperature controls with '70°' and '75°' and a snowflake icon; and a bottom-right section showing '12.2V HOUSE' and '12.2V CHASSIS' battery levels, an 'AGS' status, and 'Start', 'GEN Stopped 0.0', and 'Stop' buttons.

Navigation Menu



Home

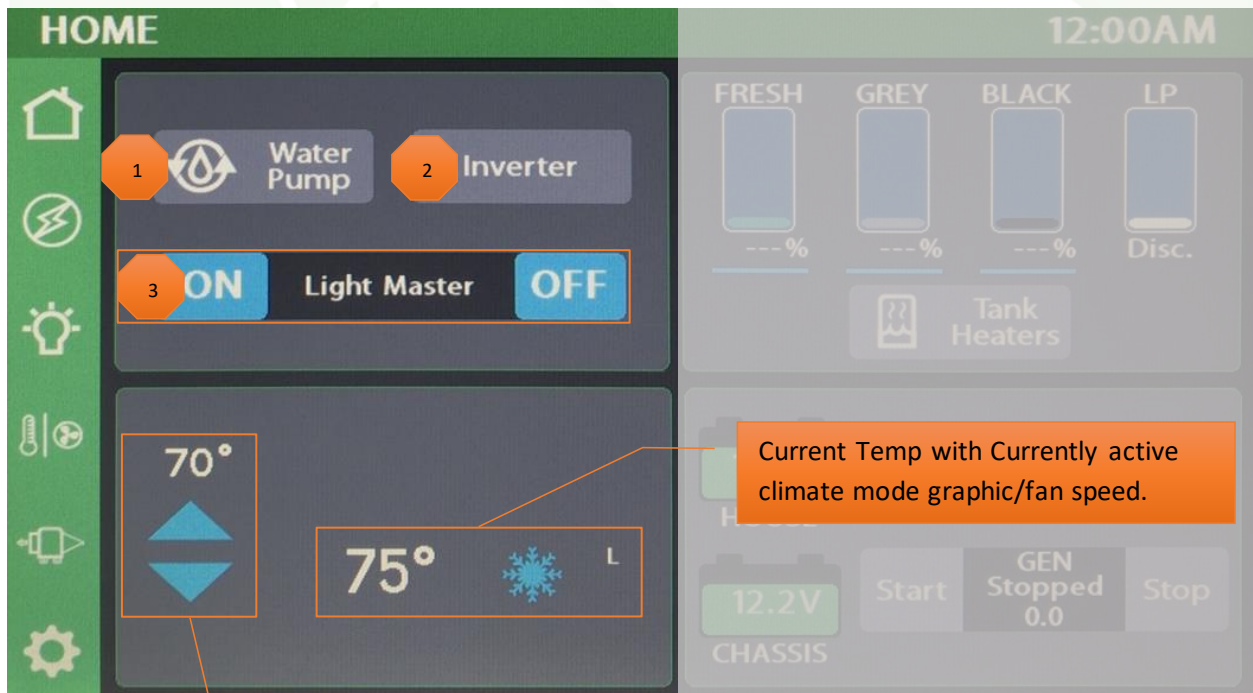
Buttons will turn Blue while a circuit is on and Grey once the circuit has been turned off. This color change is known as showing status.

1 Tap to toggle the Water Pump On/Off.

2 Tap to toggle the Inverter On/Off.

3 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.



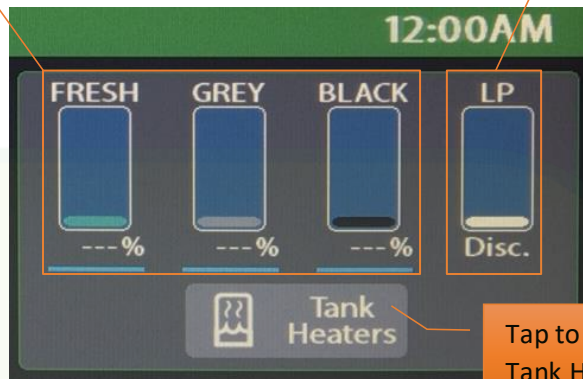
Tap the arrows to select your desired temperature (Set Temp).

Individual tank graphics represent the percentage filled for holding tanks (Currently disconnected).

Propane % remaining (Currently disconnected).

Water Tank Readings:

- Below 10% will read "Empty" and the tank level will show Empty.
- From 11% to 89%, the tank level and percentage will show as normal.
- 90% and above will read "FULL." and the tank shows accurate level.



Tap to toggle the Tank Heaters On/Off.

LP Tank Readings:

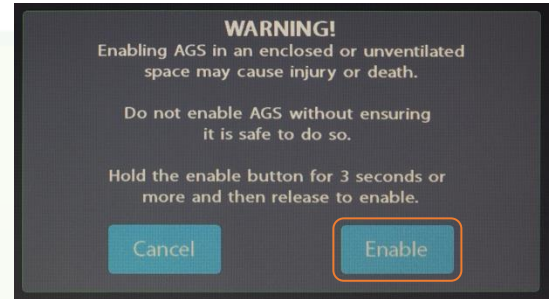
- Below 25% will read "Low" and the tank level will show as normal.
- From 25% to 75%, the tank level and percentage will show as normal.
- From 75% to 96%, will read "Full" and the tank level will show as normal.
- 97% and above will read "Disc." and the tank level will be empty.

House/Chassis DC Voltage Display Graphics. These graphics will turn red when the voltage drops below 12v.



AGS

Tap to Enable/Disable AGS (Action Required).



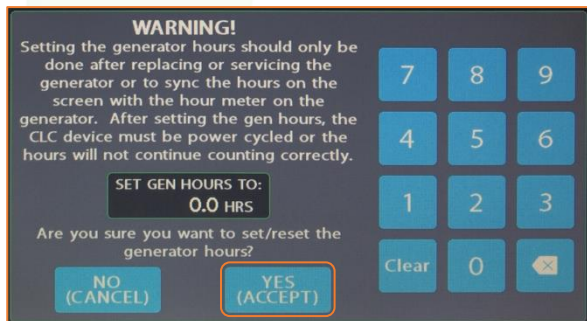
Generator Controls

The Generator display will show the total number of generator hours accumulated as well as the current operating status (running or stopped). Generator hours are saved to the system, not to the generator itself. Press and Hold the hours display for 3 seconds to enter the Set Gen Hours screen. Type in the required gen hours and tap Yes to accept and exit. Power Cycle the coach to ensure that your preference has saved.

Gen Start – Ensure that the red button on the generator remote is depressed before continuing.

Press and Hold to start the generator. Please note that the generator requires a press and hold because it operates on a one-second delay as a safety feature to help prevent accidental generator starts.

Gen Stop – Press and hold to stop the generator.





Auto Gen Start (AGS)

AGS **Enabled**

Triggers:
Low Volts **HVAC Load**

Gen Hours 44.4Hrs

Quiet Time Start 9:00PM

Quiet Time Stop 7:30AM

Start at 12.2V

Time at Start Volts 15Sec

Stop at 13.2V

Time at Stop Volts 5Min

Min Gen Run Time 10Min

Max Gen Run Time 240Min

Gen Start Retries 5

Tap to Enable/Disable AGS. A warning message will require action to Enable.

Trigger Options – Automatically start the generator using specified voltage settings (Low Volts) or when A/C or Heat Pump starts (HVAC). Select one or both triggers. If no triggers are selected, AGS will not run. Disable HVAC Load while connected to shore power to keep the generator from starting.

Gen Hours Display - The number of hours that the generator has been used. These hours are saved to the system, not the generator itself.

Quiet Time Start - Use the +/- buttons to select the starting point for Quiet Time, the hours that your generator will not run in an effort to reduce noise.

Quiet Time Stop - Use the +/- buttons to select the stopping point for Quiet Time. AGS will work normally at this point.

Start at Volts - The generator will start when the voltage drops to this set point depending on "Time at Start Volts" setting below. (Range 10.5v – 12.5v)

Time at Start Volts - The generator will start when the voltage drops to the Start at Voltage for this specific amount of time. (Range 5 seconds – 1 minute)

Stop at Volts - The generator will shut off when the voltage reaches this set point depending on "Time at Stop Volts" setting below. (Range 13.2v – 14.5v)

Time at Stop Volts - The amount of time required for the voltage to remain at "Stop at Volts" level before the generator shuts off. (Range 5min – 120min)

Minimum Gen Run Time - Use the +/- buttons to set the minimum amount of time that your generator will run once it has started. (Range 10min – 30min)

Maximum Gen Run Time - Use the +/- buttons to set the maximum amount of time that your generator will run once it has started. (Range 120min – 720min)

Gen Start Retries - Use the +/- buttons to set the number of tries that your generator will retry to start. (Range 1-5 retries)



Lights

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



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

LIGHTS 12:02 AM

ON Light Master **OFF**

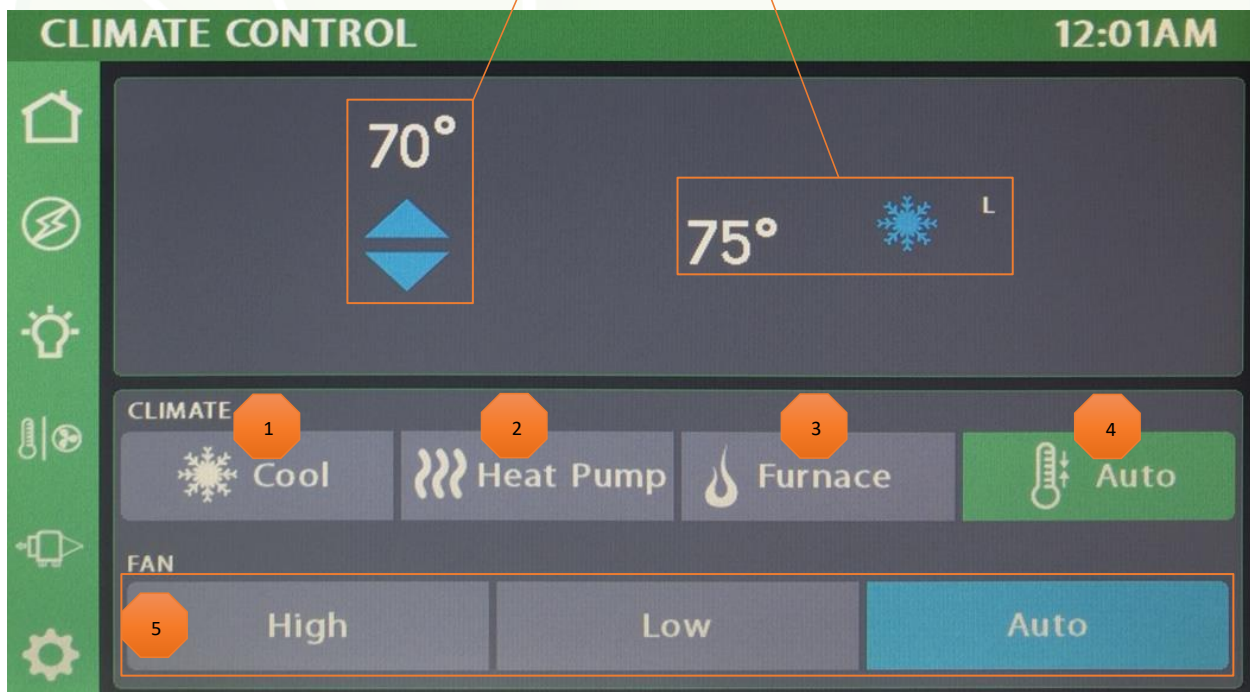
Exterior	Interior			
Porch	Bunk	D/S Ceiling	P/S Ceiling	
Awning	Sofa Ceiling	Kitchen OVHD	Kitchen Accent	
Cargo	Bed Ceiling	Right Reading	Left Reading	Bath Ceiling



Climate Control

Use the Arrows to select your desired temperature by zone.

Current zone temperature, Climate mode graphic and Fan Speed indicator (H or L).



1

Cool – Tap to operate the air conditioning. The A/C will run until the current temp reaches your desired temperature and then shut off. The Climate Mode graphic will only display when the compressor is running.

2

Heat Pump – Tap to operate the Heat Pump. The Heat Pump will run until the current temp reaches your desired temp and then shut off. The Heat Wave graphic will only display when the HP is running.

3

Furnace – Tap to operate the Furnace. The Furnace will run until the current temp reaches your desired temperature and then shut off. The Furnace can be used in conjunction with the Heat Pump and the button will stay engaged until the user taps it off. The Flame graphic will only display when the Furnace is running.

4

Auto – Tap to enable Auto Mode. In this mode, either A/C or Heat Pump will automatically run to keep your desired temperature consistent. Fan speeds will be adjusted automatically.

5

Fan speeds – Fan only mode is available when no other climate mode has been selected. The fan will operate by choosing High or Low. Auto will not only turn off the fan, but also control fan speeds to get the system to the required temp the best way possible.



Slides

The Extend buttons will be locked out until the parking brake has been applied.

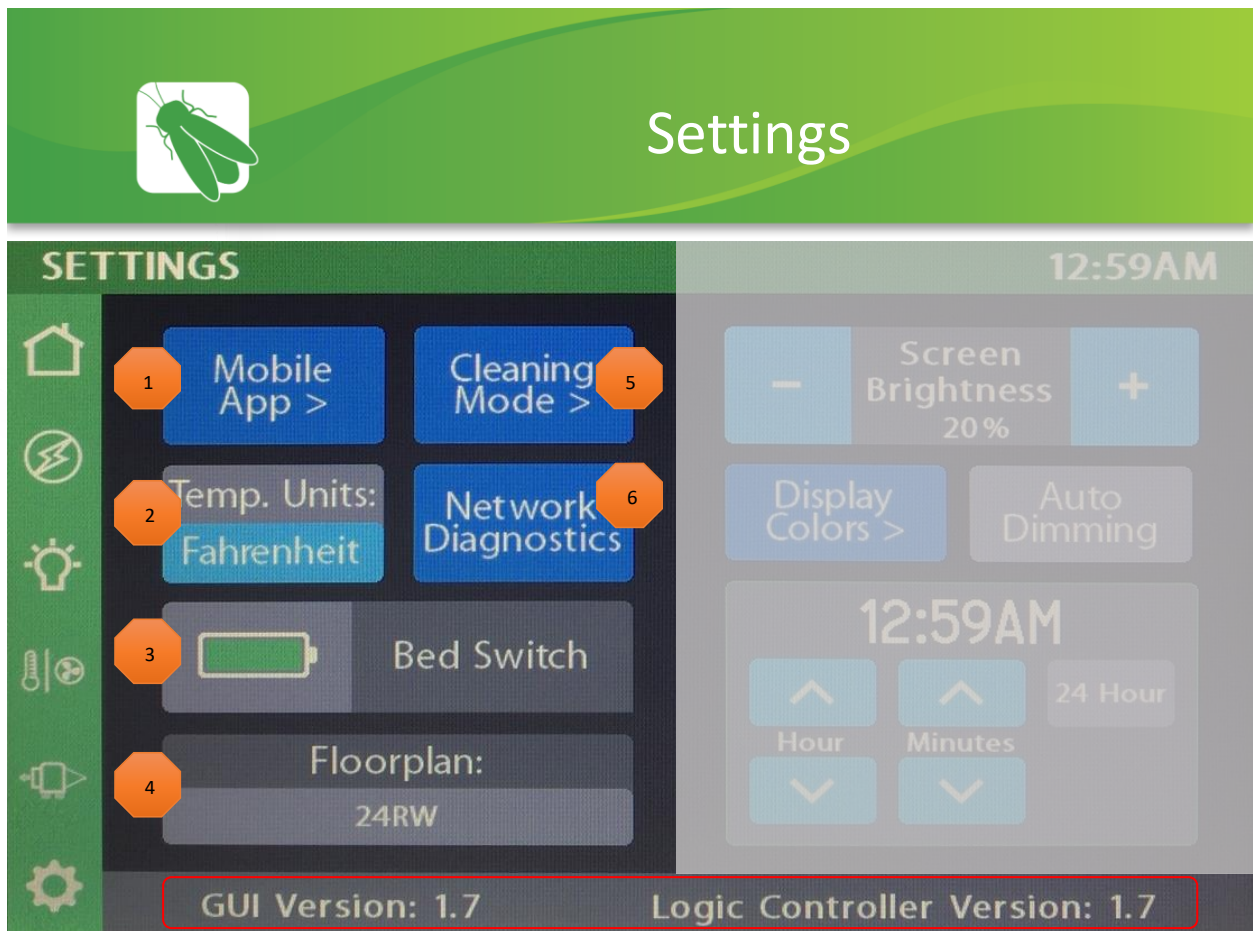
Press and Hold EXT or RET to operate the Slides and Awnings.

SLIDES & AWNINGS

Home | Rear Slide **RET** | D/S Slide **RET** | Awning **RET** | **EXT**

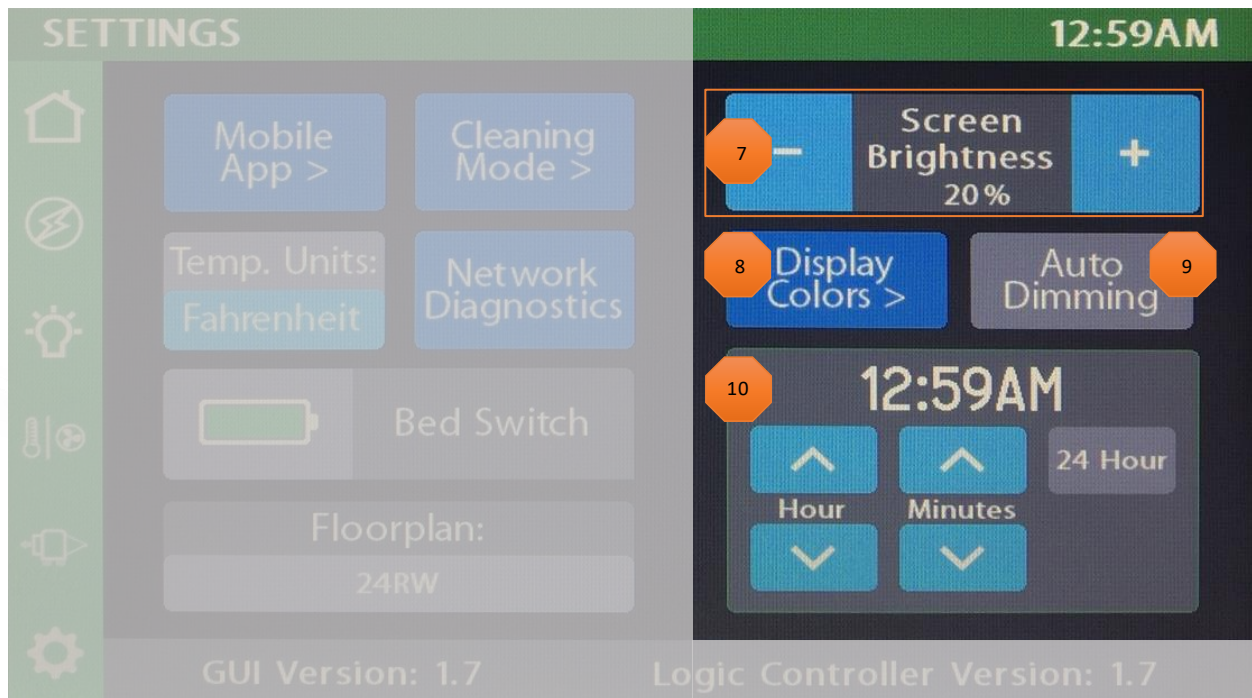
CAUTION!
Park Brake must be set and a power source of either shore, generator, or engine running is required to operate slides.

= Apply Park Brake to unlock



- 1 Tap to navigate to the Vegatouch Mira connection screen.
- 2 Tap to select between Fahrenheit and Celsius.
- 3 Wireless switch status display.
- 4 Floorplan display.
- 5 Tap to disable the touchscreen for 15 seconds for the purpose of cleaning.
- 6 Tap to navigate to the Network Diagnostics page.

Please note the GUI and Logic Controller Versions and have these numbers available before contacting Tech Support.




- 7 Tap the buttons to select between 10 levels of screen brightness and off.
- 8 Tap to visit the Display Colors page to customize the look of your touchscreen.
- 9 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.
- 10 Tap the buttons to set the time or select 24-hour time mode.



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.

MOBILE APP 12:03AM



Download the Vegatouch Mira app from Google Play Store or the App Store.

Mira ID:
Mira: 176695

Mira PIN:
777777

[Reset PIN to Default](#)

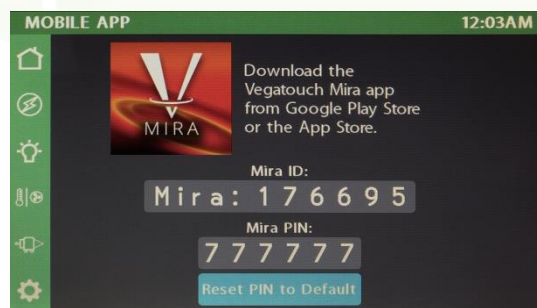


Vegatouch Mira Setup

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.

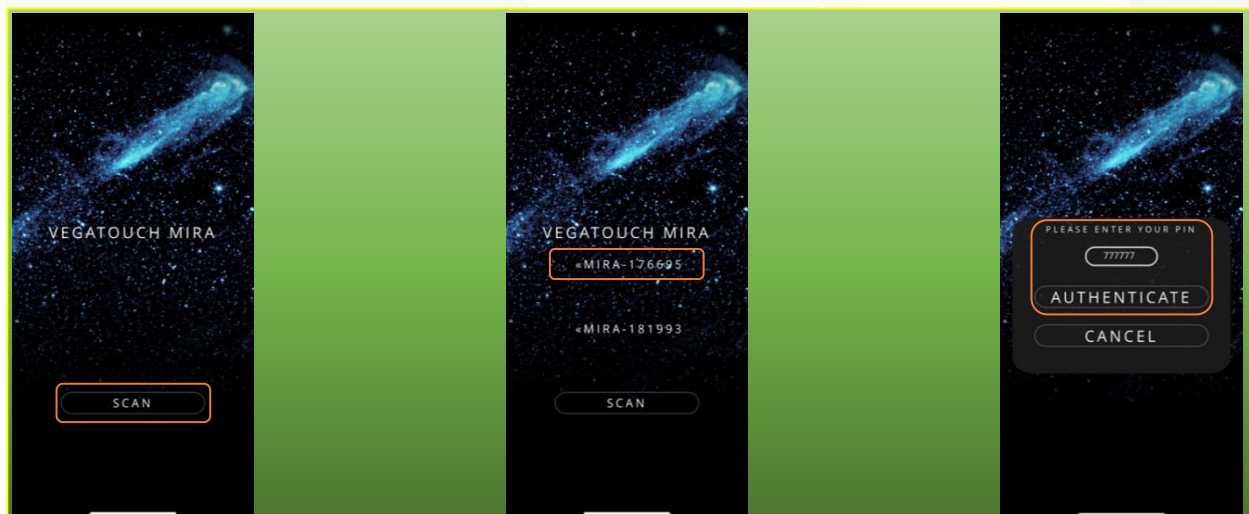


Download:

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

Setup:

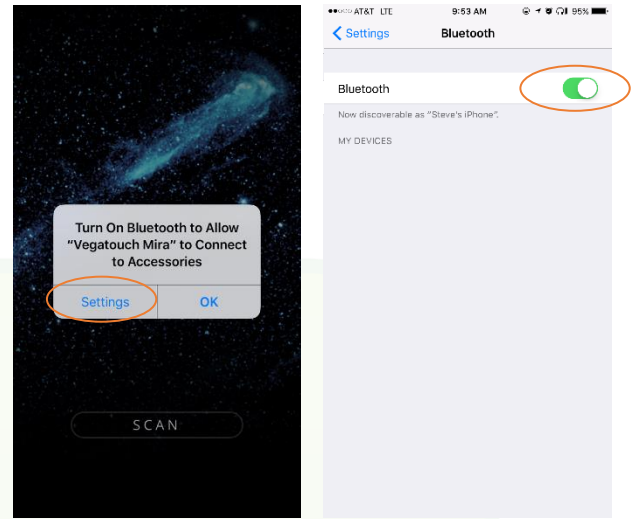
Tap SCAN to find the Mira Module's signal. After scanning, any Mira Module in your area will appear on the screen. Tap the ID # that matches the one on your Mira label. Enter the PIN number from the Mira label and press AUTHENTICATE to connect to the system.



Notice: iOS Setup Tips

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

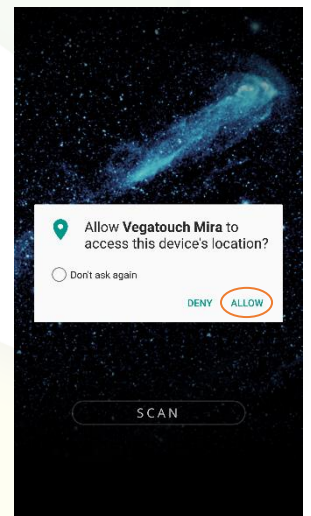
If you do not have Bluetooth turned ON in your iOS settings you will see this screen. Do not click OK, you must click SETTINGS. Your Bluetooth Settings page will now appear and you should turn Bluetooth ON.



Notice: Android Setup Tips

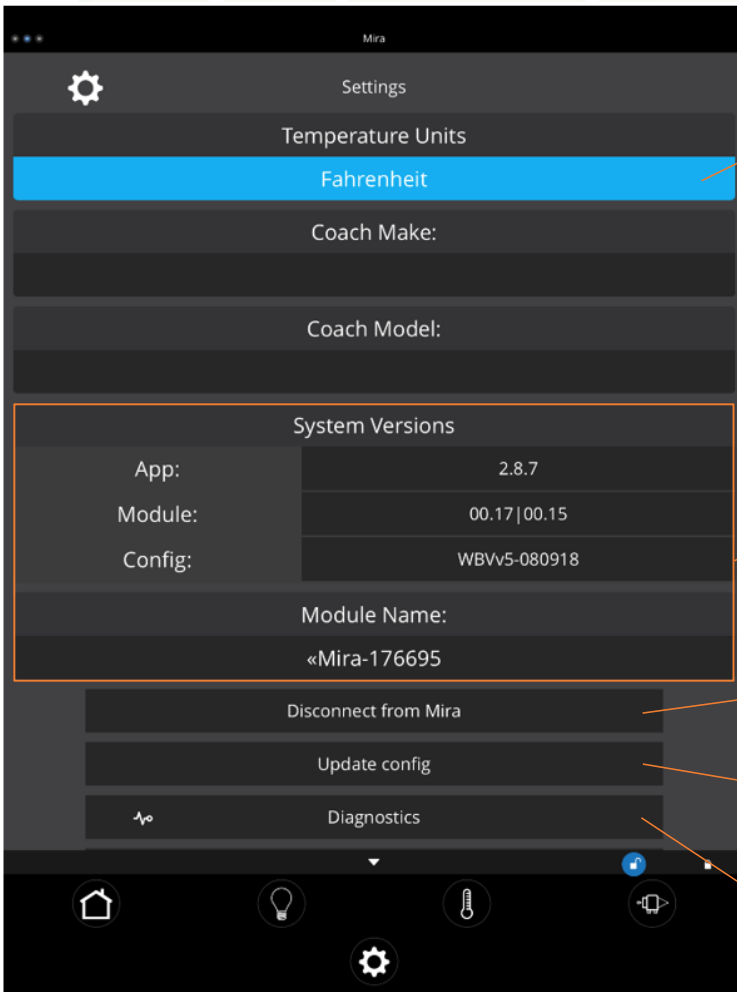
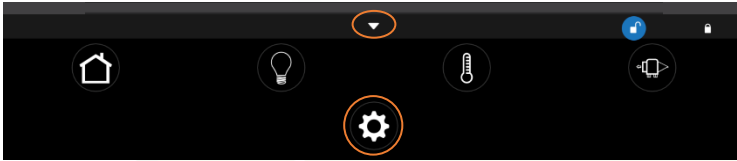
Allow Vegatouch Mira to access this device's location.

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



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 to Temperature Units selection to choose between Fahrenheit and Celsius.

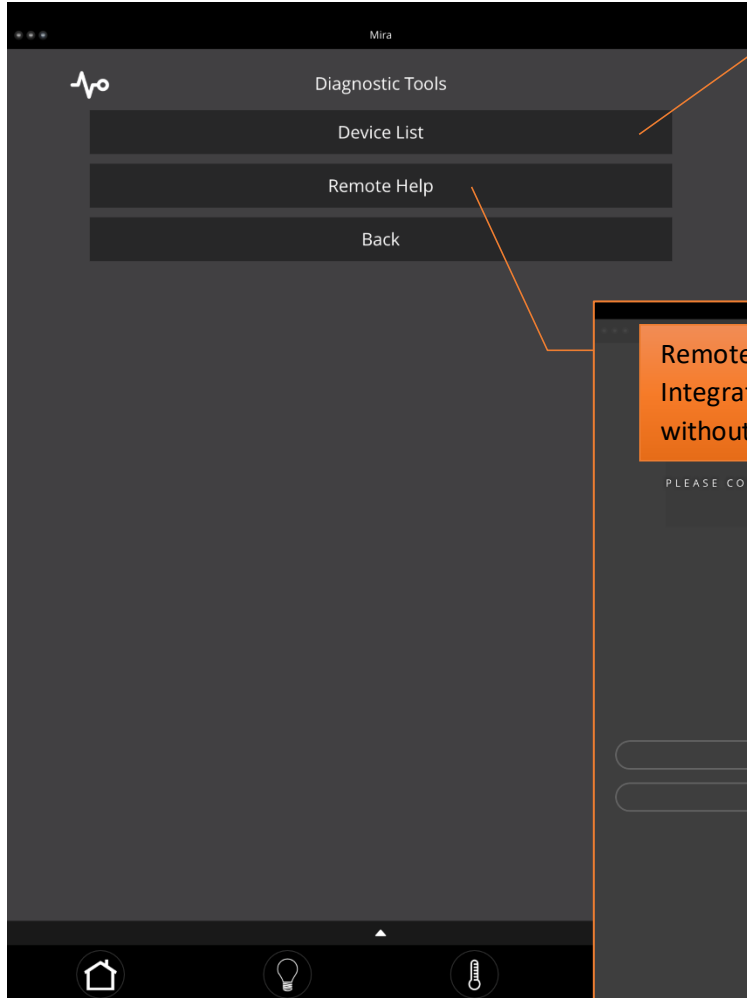
System Information and Mira Name.

Tap to disconnect your device from Mira.

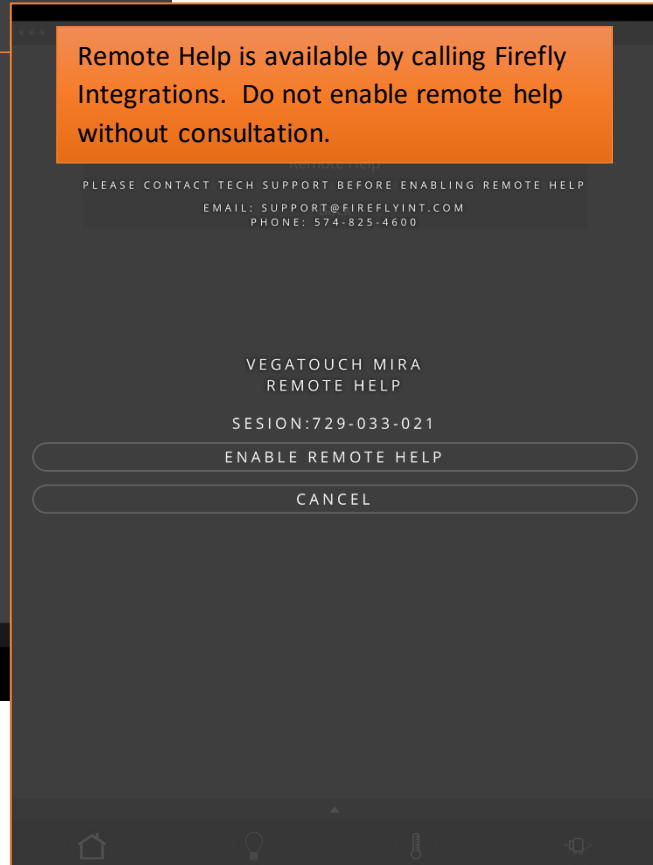
Tapping Update Config will force a download of the config from the cloud.

Tap to enter the Diagnostic Tools screen.

Diagnostic Tools:



Tap to display a list of currently connected devices.





Wireless Switch Pairing

The switch Battery Graphic will identify the status of the wireless switch panel.

Green battery switch indicator – the switch is currently connected to the screen.

Red battery switch indicator - 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 a new battery will not fix the issue, you might need to pair the switch panel to the screen.

- 1 Press and Hold your desired switch graphic for 3 seconds until the pairing screen appears.
- 2 Tap Start Pairing. You'll have 30 seconds to press any 2 buttons on the switch panel at the same time.
- 3 Tap Done once the pairing successful message appears. It may take up to 10 minutes for the wireless switch indicator to turn Green, but the switch should work instantly once paired.

The image displays three sequential screenshots from a mobile application interface, illustrating the wireless switch pairing process.

Screenshot 1 (Settings): Shows the 'SETTINGS' screen with a green header and a sidebar menu. The 'Bed Switch' status is 'Status Unknown!' and is highlighted with a red battery icon. A hand icon is shown pressing the 'Bed Switch' graphic, labeled with a '1'.

Screenshot 2 (Pairing): Shows the 'PAIRING' screen for 'SW2 - Bed' with a green header. The screen displays the 'WIRELESS SWITCH PANEL PAIRING PROCEDURE' and the 'PAIRED WIRELESS ID: 90789D08'. The 'START PAIRING' button is highlighted with a '2'.

Screenshot 3 (Pairing): Shows the 'PAIRING' screen for 'SW2 - Bed' with a green header. The screen displays the 'WIRELESS SWITCH PANEL PAIRING SUCCESSFUL' message and the 'PAIRED WIRELESS ID: D6BF170B'. The 'DONE' button is highlighted with a '3'.



Settings/Network Diagnostics

This screen will show the status of the Lyra screen and the G12. It will also display any current faults the system is experiencing.

NETWORK DIAGNOSTICS 12:03AM

7IN COLOR LCD

- Status
- Firmware Version 1.6
- Config Revision 1.7

G12

- Status
- Firmware Version 1.1
- Config Revision 1.7

G12 INPUTS

- IN1 - Bunk Lights
- IN2 - Bath Ceiling
- IN3 - Cargo Lts
- IN4 - Water Pump
- IN5 - Parking Brake
- IN6 - Inverter Status

G12 OUTPUTS

- 18 - Inverter
- 19 - Gen Start
- 20 - Gen Stop
- 22 - Bunk OVHD Lt
- 23 - Kitchen OVHD Lt
- 24 - Kitchen Accent Lt
- 25 - P/S Ceiling Lt
- 26 - D/S Ceiling Lt
- 27 - Sofa Ceiling Lt
- 28 - Bed Ceiling Lt
- 29 - Bath Ceiling Lt
- 30 - Porch Lt
- 31 - Cargo Lts
- 32 - Awning Retract
- 33 - Awning Extend
- 34 - Bed Rding Right
- 35 - Bed Rding Left
- 37 - Furnace
- 38 - Awning Extend
- 39 - Awning Retract
- 40 - D/S Slide Extend
- 41 - D/S Slide Retract
- 42 - Rear Slide Extend
- 43 - Rear Slide Retract

G12 Outputs / Firmware (highlighted)

AirCons

Green = Online (arrow pointing to G12 Status)

Green = Active (arrow pointing to Bunk OVHD Lt)

NETWORK DIAGNOSTICS 12:04AM

AIRCON 1 OUTPUTS

- Heat Pump
- Compressor
- Fan High
- Fan Low

AIRCON 1

- Status
- Firmware Version 6.11
- Config Revision 1.13

AIRCON 1 FAULTS

- Freeze Sensor

G12 Outputs / Firmware

AirCons (highlighted)

Current Fault (arrow pointing to Freeze Sensor)



Settings/Display Colors

Tap a preset color scheme below to change the color of your touchscreen. Tap apply to save and exit.

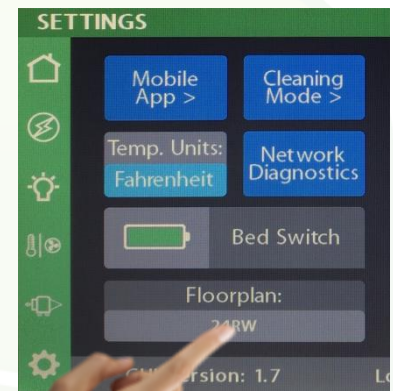




Floorplan and Options

From the Settings page, press and hold the Floorplan display for 3 seconds to enter the Options page. Now, select your required floorplan and Diesel Generator option if required.

Tap apply to save and exit.



OPTIONS

12:04AM

Floorplans:

24FW

24RW

Options:

Diesel Generator

Apply



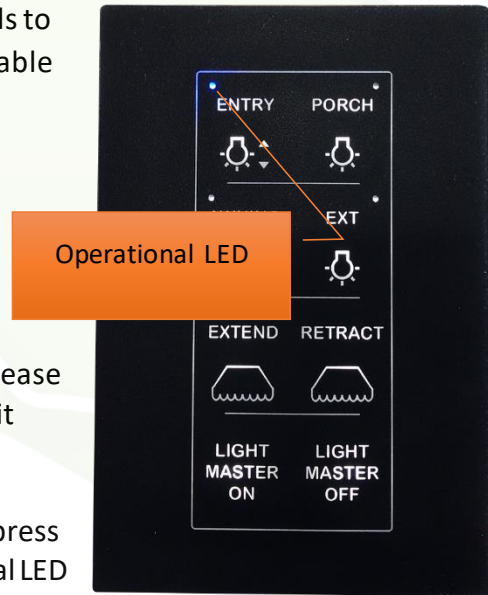
SSP17 Switch Panels

Your coach uses two different styles of SSP17 switch panels to control lighting and other functions. Lights that are dimmable will have Up/Down arrows next to the icon. Press and hold these buttons to ramp the brightness up and down. Each time that a button is pressed, the Operational LED (Blue on wired switch panels) will illuminate to indicate that the command has been sent to the touchscreen.

Your Wireless SSP17 switch panel use wireless RF technology to communicate with the Lyra touchscreen. Please note that your wireless switch panel will not feature backlit buttons.

This switch is powered by a 2032 coin cell battery. If you press a switch panel button and fail to see the Green operational LED (at the bottom of the switch), 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.



Slide the battery up to remove (Wireless switch panels only).



G12 DC Panel

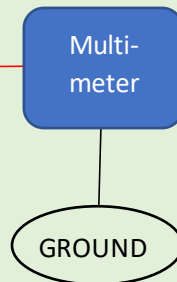
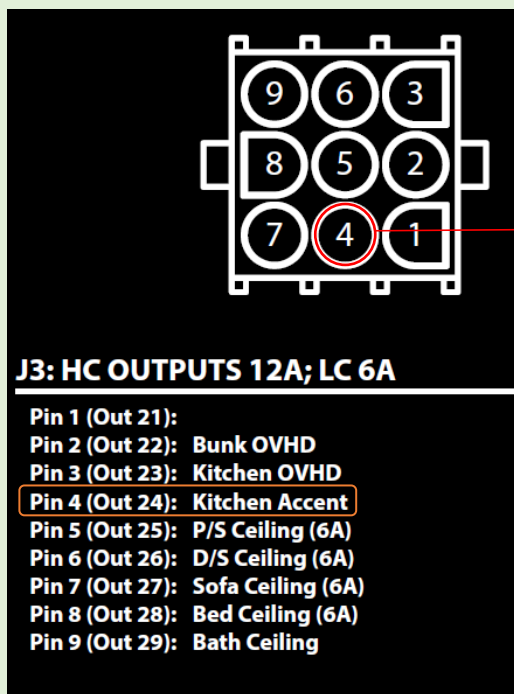
Your G12 control panel is the power distribution center for the coach. This panel receives the signals sent from your touchscreen/switch panels and performs the actions that have been requested by activating and deactivating the required circuits.

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 Kitchen Accent 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 lights don't come on (Fig 1).



Figure 1

Test **Positive** Output Channels as shown:

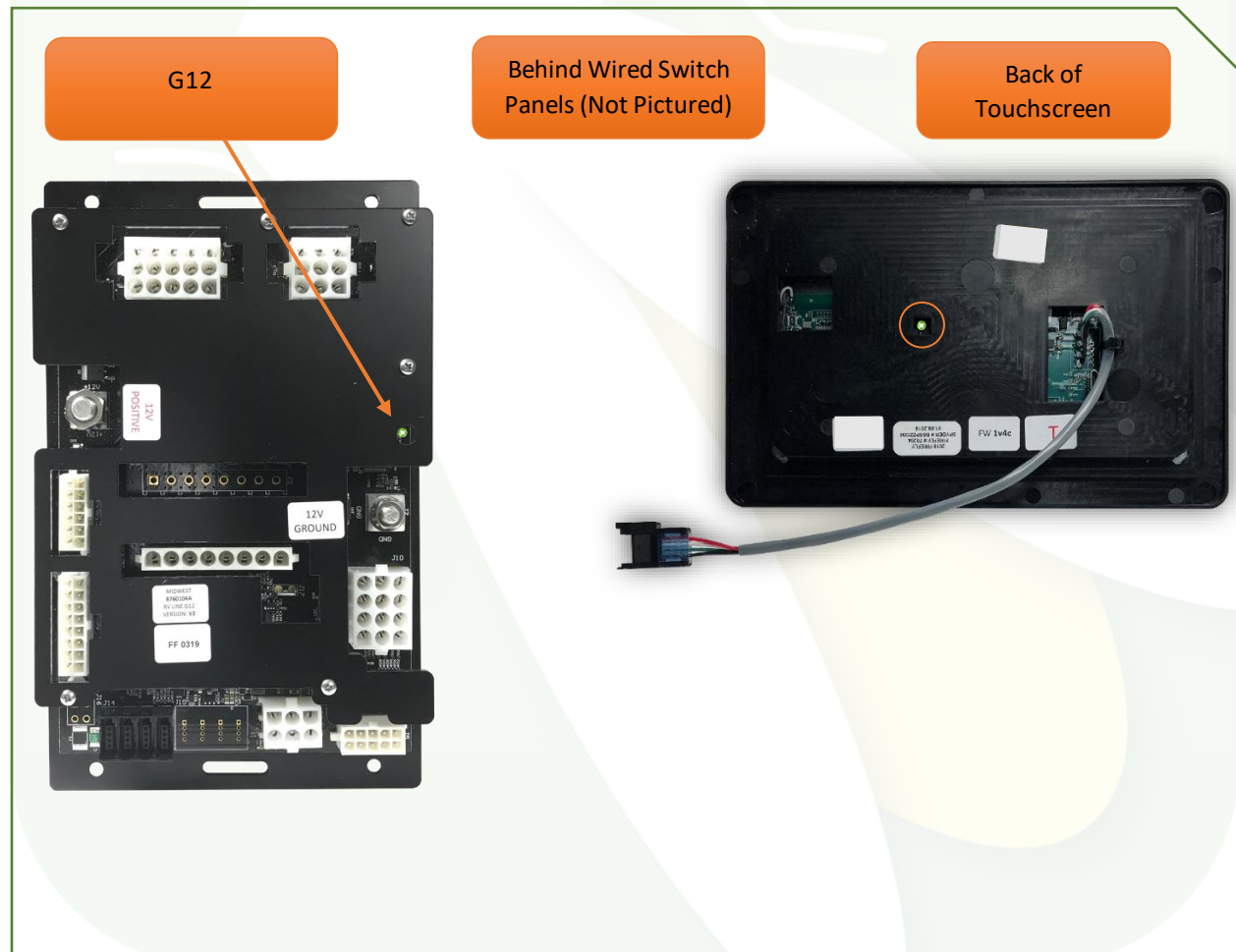




Networking

Your distribution panel and touchscreen are connected 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 contact your manufacturer for Technical Support.

Net LED Locations:















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: The NET LED for Mira and Eclipse Modules will blink green when the device is communicating properly.

G12 Master

Customer: DYNAMAX

Model: ISATA

Revision: 1V8 LB/NP/CT

Raw Part: 7000701 G12 w/TruTank

Custom Part: 22990006

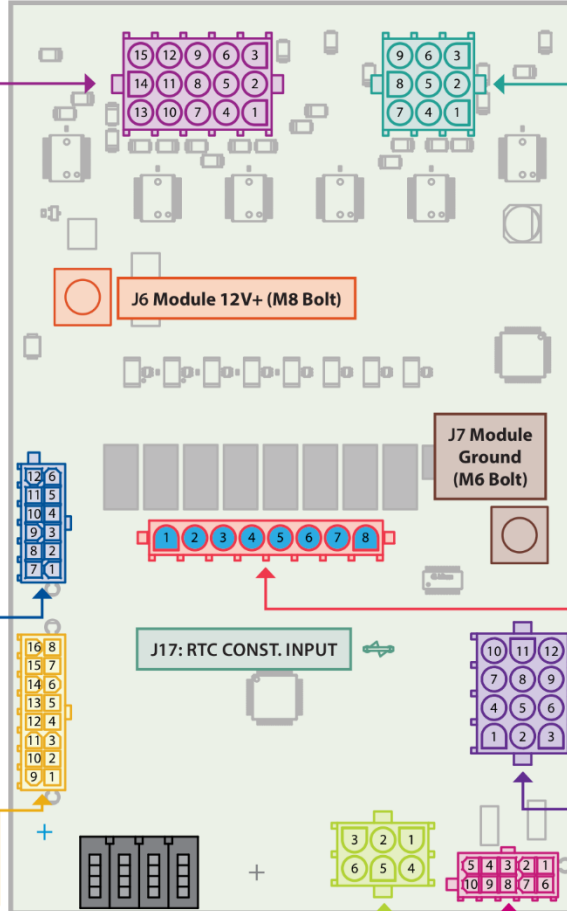
Date: 5/15/2019

Outputs: 1-44

J4: HIGH CURRENT OUTPUTS 12A; LOW CURRENT 6A				
Pin	Out	Load	AMP	O/C
1	30	PORCH LIGHT	4A	.27s
2	31	CARGO LIGHTS	4A	.27s
3	32	AWNING LIGHT (DIM)	6A	.27s
4	33	WATERPUMP	12A	2.1s
5	34	BED READING RIGHT (DIM)	4A	.27s
6	35	BED READING LEFT (DIM)	4A	.27s
7	36		4A	.27s
8	37	FURNACE	6A	.27s
9	38	AWNING EXTEND (PULSE)	4A	.27s
10	39	AWNING RETRACT (PULSE)	4A	.27s
11	40	D/SLIDE EXTEND	4A	.27s
12	41	D/SLIDE RETRACT	4A	.27s
13	42	REAR SLIDE EXTEND	4A	.27s
14	43	REAR SLIDE RETRACT	4A	.27s
15	44		4A	.27s

J12: THERMISTORS	
Pin	Load
1	THERMISTOR1
2	
3	
4	
5	
6	
7	THERMISTOR1 (GND)
8	
9	
10	
11	
12	

J11: TANKS	
Pin	Load
1	FRESH TRUTANK
2	GREY TRUTANK
3	BLACK COMP 1 TRUTANK
4	BLACK COMP 2 TRUTANK
5	
6	
7	
8	
9	FRESH TRUTANK (GND)
10	GREY TRUTANK (GND)
11	BLACK COMP 1 TRUTANK (GND)
12	BLACK COMP 2 TRUTANK (GND)
13	
14	
15	
16	



J3: HIGH CURRENT OUTPUTS 12A; LOW CURRENT 6A				
Pin	Out	Load	AMP	O/C
1	21		4A	.27s
2	22	BUNKOVHD (DIM)	4A	.27s
3	23	KITCHEN OVHD (DIM)	4A	.27s
4	24	KITCHEN ACCENT (DIM)	4A	.27s
5	25	P/S CEILING (DIM)	6A	.27s
6	26	D/S CEILING (DIM)	6A	.27s
7	27	SOFA CEILING (DIM)	6A	.27s
8	28	BED CEILING (DIM)	6A	.27s
9	29	BATH CEILING (DIM)	4A	.27s

J8: HIGH CURRENT RELAYS (20A MAX)				
Pin	Out	Load	AMP	O/C
1	1	TANK HEATERS	20A	1.0s
2	2		15A	.26s
3	3		15A	.26s
4	4		15A	.26s
5	5		15A	.26s
6	6		15A	.26s
7	7		15A	.26s
8	8		15A	.26s

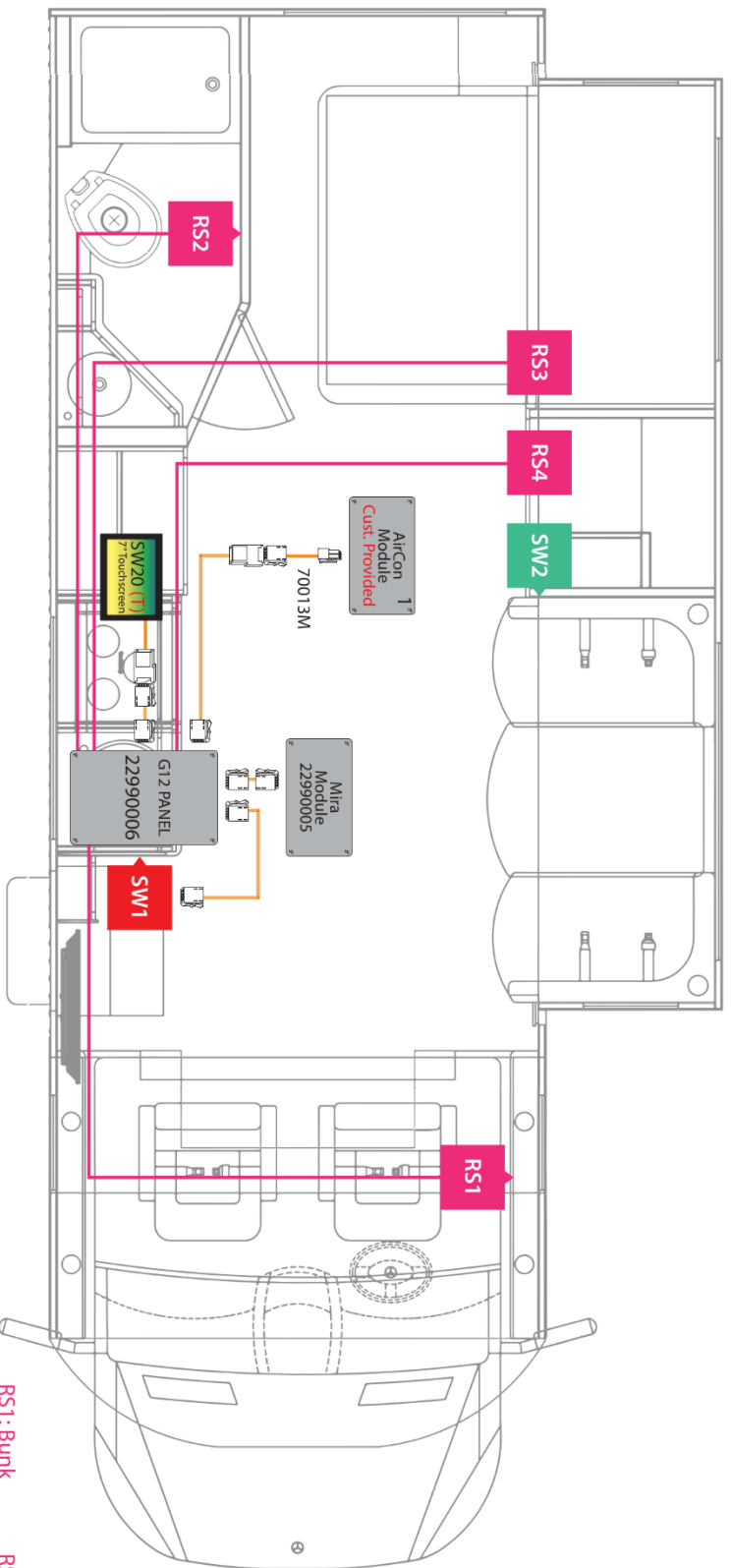
J10: HALF BRIDGES 1A (PROGRAMMABLE POLARITY)				
Pin	Out	Load		+/-
1	9			+
2	10			+
3	11			+
4	12			+
5	13			+
6	14			+
7	15			+
8	16			+
9	17			+
10	18	INVERTER (1 SEC PULSE)		+
11	19	GEN START/DIESEL RUN		+
12	20	GEN STOP		+

J13: LPG	
Pin	Load
1	LP POSITIVE
2	
3	CHASSIS
4	LP GAS GROUND
5	
6	GEN RUN SIGNAL

J5: INPUTS	
Pin	Load
1	BUNK LIGHTS (CH 22) (GND)
2	BATH CEILING (CH 29) (GND)
3	CARGO LIGHTS (CH 31) (GND)
4	WATERPUMP (CH 33) (GND)
5	PARKING BRAKE (GND)
6	INVERTER STATUS (12V)
7	
8	
9	
10	

Add Placeholders

Pin Legend: ■ Reverse Polarity



RS1: Bunk
Cust Supplied
BUNK LIGHTS



22

RS2: Bathroom
Cust Supplied
BATH LIGHTS



29

RS3: Cargo
Cust Supplied
CARGO LIGHTS



31

RS4: Water Pump
Cust Supplied
WATER PUMP LIGHTS



33

SW1 (T): Entry

25	ENTRY	PORCH	30
32	AWNING	EXT	31
38	EXTEND	RETRACT	39
LIGHT MASTER ON		LIGHT MASTER OFF	

22990001

BATTERY DISC 70355R

STEP 70354B

SW2: Bed

28	CEILING	BATH	29
35	LEFT READING	RIGHT READING	34
19	GEN START	GEN STOP	20
LIGHT MASTER ON		LIGHT MASTER OFF	

22990003

SW20 (T): 7" Lyra

Lights
Awning
Slides
HVAC
Tanks
AGS

22990004

Dynamax - 24FW Kit: 22980001A

Network Wiring Diagram and Switch Panel Layout

SSP-17 RVC/RFB, Lyra

NWD REV 1v5 05/01/19

DI: MD

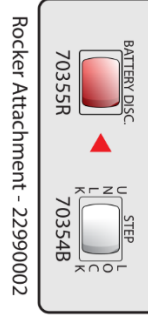
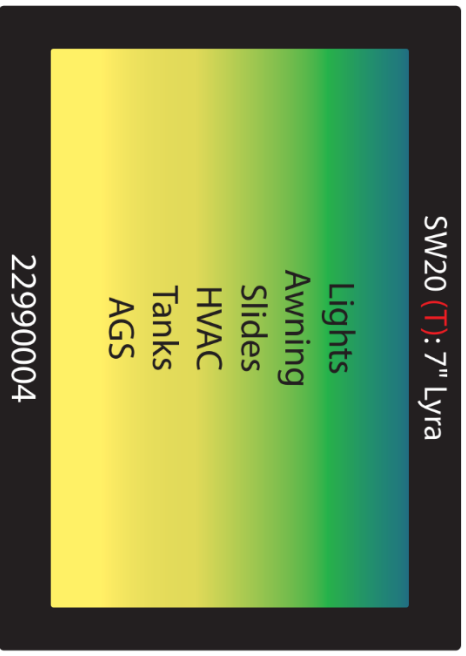
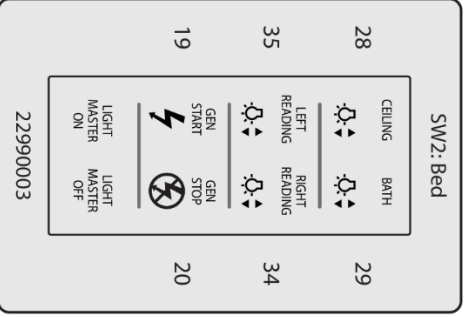
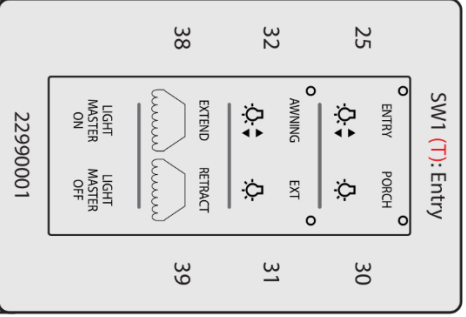
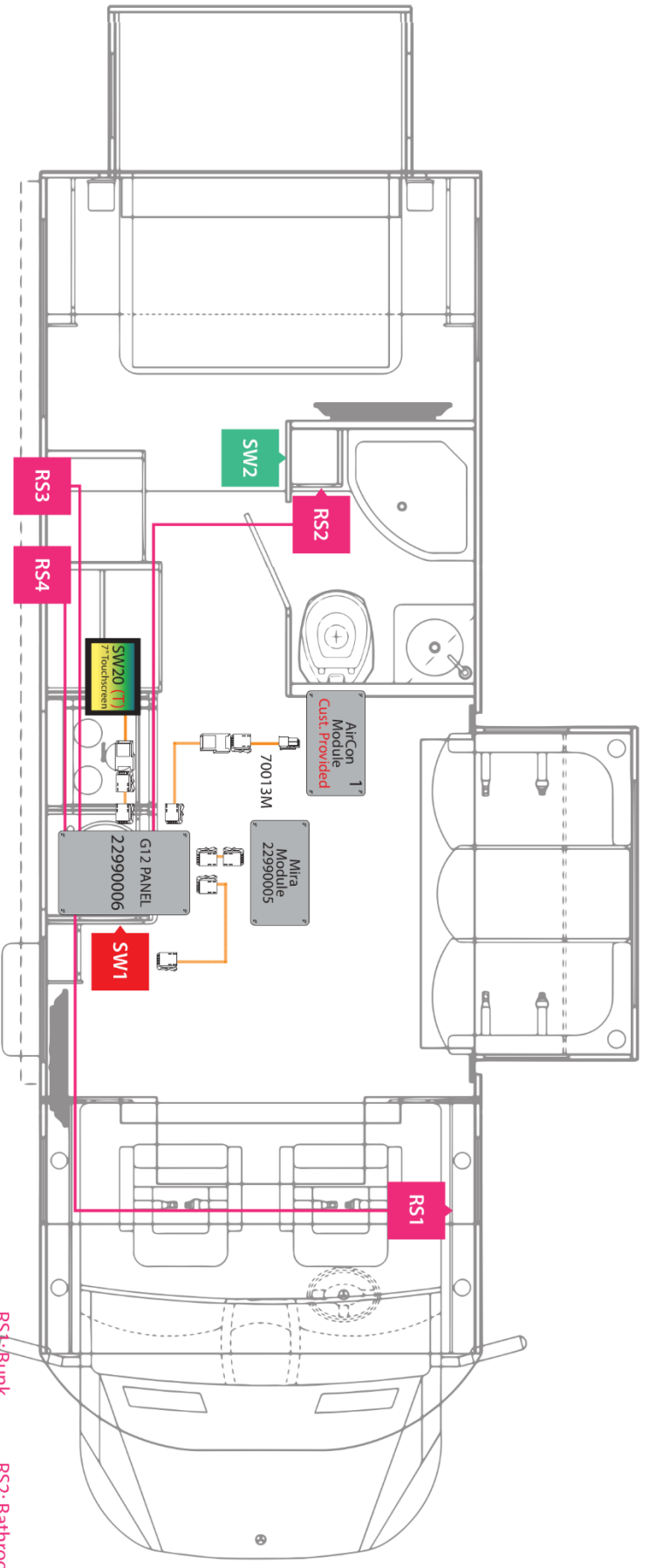
Pl: CT/NP

Network Legend

Trunk Cable
Drop Cable
Switch Position

Drop Cable Connectors
Black
Blue
White

Rocker Attachment - 22990002



Dynamax - 24RW Kit: 22980001A
 Network Wiring Diagram and Switch Panel Layout
 SSP-17 RVC/RFB, Lyra
 NWD REV 1v3 05/01/19

DI: MD
 Pi: CT/NP

Network Legend

Trunk Cable (Blue line)
 Drop Cable (Red line)
 Switch Position (Red square with 'T')

Drop Cable Connectors
 Black Field
 Blue Field
 White Field

