

DrivenSmart

Smart Control System

User Manual

V1.0



Copyright

This document is copyright 2025 under the Creative Commons agreement. Rights are granted to research and reproduce elements of this document for non-commercial purposes on the condition that DrivenSmart Tech is credited as the source. Electronic re-distribution of the document in any format is restricted, to maintain quality and version control.

Important

DrivenSmart Tech strives to ensure all information is correct at the time of printing. However, the company reserves the right to change without notice any features and specifications of either its products or associated documentation.

Caution: In the event that there is a difference between a translation of this manual and the English version, the English version should be considered the official version.

It is the owner's sole responsibility to install and operate the device in a manner that will not cause accidents, personal injury or property damage.

Use Of This Manual

Copyright © 2025 DrivenSmart Tech. All rights reserved. Reproduction, transfer, distribution or storage of part or all of the contents in this document in any form without the prior written permission of DrivenSmart Tech is prohibited. This manual serves as a guideline for the safe and effective operation, maintenance and possible correction of minor malfunctions of the Smart Control System.

Content

1 General Information	5
1.1 Overview Of The Manual	5
1.2 Guarantee Specifications	5
1.3 Warranty	5
1.4 Validity Of This Manual	6
1.5 Liability	6
1.6 Safety	6
2 Overview	7
2.1 Description	7
2.2 Features	7
2.3 System Example	8
3 Functions Introduction	9
3.1 Homepage	9
3.2 Functions	10
3.2.1 Water System	10
3.2.2 Climate Control	11
3.2.3 Generator	13
3.2.4 Lights System	16
3.2.5 Motors Control	17
3.2.6 Remote Switches	18
3.2.7 Owner's Manual	21
3.3 Infotainment	22
3.4 APPs	23
3.5 Alarm info	24
3.6 System	25
3.6.1 Setting	25
3.6.2 Update	26
3.6.3 Mobile APP	27
3.6.4 Links2 Smart Application Download	30
4 How To Use The APP	31
4.1 Sign in Links2 Smart	31
4.1.1 Sign In To Links2 Cloud	32
4.1.2 Create An Account	33
4.1.3 Forgot Password	34
4.1.4 Continue As Guest	35
4.2 Connect To Control Screen	36
4.2.1 Pair Using Account	36
4.2.1.1 Bluetooth Scan	36
4.2.1.2 QR Code Scan	40
4.2.2 Pair Using Bluetooth	43

4.3 Home	46
4.4 Menu	48
4.4.1 Lights	49
4.4.2 Climate	50
4.4.3 Water	52
4.4.3.1 Water Screen	52
4.4.3.2 Tank Setting	54
4.4.4 Motors	55
4.4.4.1 Motor PIN Code Setting	55
4.4.4.2 Change PIN	58
4.4.4.3 Reset PIN	60
4.4.4.4 Motors Screen	61
4.5 Profile	63
4.5.1 Setting	63
4.5.1.1 Login Activity	63
4.5.1.2 Change Password	65
4.5.1.3 Motor PIN	66
4.5.2 Profile Setting	67
4.5.3 Alarm Info	68
4.5.4 System Info	69
4.5.5 Device Info	70
4.5.6 Unit Switch	72
4.5.7 Version Update	73
5 Troubleshooting	74
5.1 Fault and Solution	74
5.2 Technical Support	75
6 Appendix	76
6.1 Technical Specification	76
6.2 Packet Content	77
6.3 FCC Compliance Statement	79
6.4 Glossary	80

1 General Information

1.1 Overview Of The Manual

This manual provides a comprehensive guide to the operation, configuration, and maintenance of the RV Smart Control System. It is designed to help you understand how to safely and effectively use the system's features for monitoring and controlling various functions of your RV, including water tanks, climate control, generator, lighting, motors, and BLE wireless switch panel.

Before operating the system, please read this manual carefully to become familiar with all features and safety precautions. Proper understanding and operation will ensure optimal performance, prevent damage to the system, and enhance your overall RV experience.

Keep this manual in your RV for future reference. It will be useful when updating software, diagnosing issues, or contacting customer support.

System design and functions may vary depending on the RV model and manufacturer's configuration. The information contained in this manual reflects the current version at the time of publication and is subject to change without prior notice.

1.2 Guarantee Specifications

DrivenSmart Tech guarantees that this model has been built according to the legally applicable standards and specifications. Should work take place which is not in accordance with the guidelines, instructions and specifications contained in this Installation manual, then damage may occur and/or the unit may not fulfil its specifications. All of these matters may mean that the guarantee becomes invalid.

1.3 Warranty

During their production and prior to their delivery, all of our products are extensively tested and inspected. The warranty does not apply to damages which may result from neglect, accidental or intentional damage, normal wear and tear, misuse of product, unauthorized repair, alteration, or abuse of the product. The standard guarantee period is 1 years.

1.4 Validity Of This Manual

All of the specifications, provisions and instructions contained in this manual apply solely to standard versions of the Smart Control System, delivered by DrivenSmart Tech.

1.5 Liability

The manufacturer shall not be held liable for any damage, malfunction, or personal injury resulting from improper installation, misuse, modification, or failure to follow the instructions and safety information provided in this manual.

Any unauthorized repair, wiring change, or software modification may lead to system failure and will void the product warranty.

The user and installer are responsible for ensuring that all components are installed and operated in compliance with applicable safety standards, electrical codes, and local regulations.

The manufacturer is not responsible for losses or damages caused by external factors such as incorrect power supply, improper grounding, lightning strikes, or communication failures within the vehicle's electrical network.

Always consult your authorized dealer or service representative before making any changes to the system.

1.6 Safety

Please read and follow all safety instructions before using the Smart Control System. Proper operation and maintenance are essential to ensure safety and system reliability.

- Please read this section carefully before using the Smart Control System.
- Follow all instructions to ensure safe operation and prevent damage.
- Operate the system only when the RV is parked safely.
- Disconnect all power sources before installation or maintenance.
- Keep the control units dry and away from heat or direct sunlight.
- Do not open or modify any system components.
- Ensure all wiring and grounding are done by qualified personnel.
- Stop using the system immediately if any fault or abnormal condition occurs.

Keep this manual for future reference and follow all safety warnings shown on the display.

2 Overview

2.1 Description

The Smart Control System is the ultimate solution for modern motorhome, travel trailers and marine vessels, bringing comfort and convenience to your journey. Designed with travelers and adventurers in mind, it transforms complex on-board systems into a simple, intuitive experience.

With its powerful integration capabilities, the Smart Control System gives you effortless command over lighting, climate, power, motors and appliances functions, all from one smooth interface. Its intelligent design not only maximizes energy efficiency but also enhances safety and reliability, ensuring peace of mind wherever you go.

2.2 Features

- Compact size ensures ease of installation
- Adapts to various RV's power sources(9-16V)
- Bluetooth, RS-485, LIN, CAN, RV-C— all major protocols supported
- 30A main power and 30A drive inputs
- 26 programmable outputs adapt all control functions
- 5 temperature, 6 water-level, fuel & LPG, voltage sensors plus 14 digital inputs
- 720×1280 QLED high-resolution screen
- Supports Bluetooth music, Apple CarPlay, Android Auto, full audio system control
- Customize all functions you needs with a real-time display and smooth control

2.3 System Example

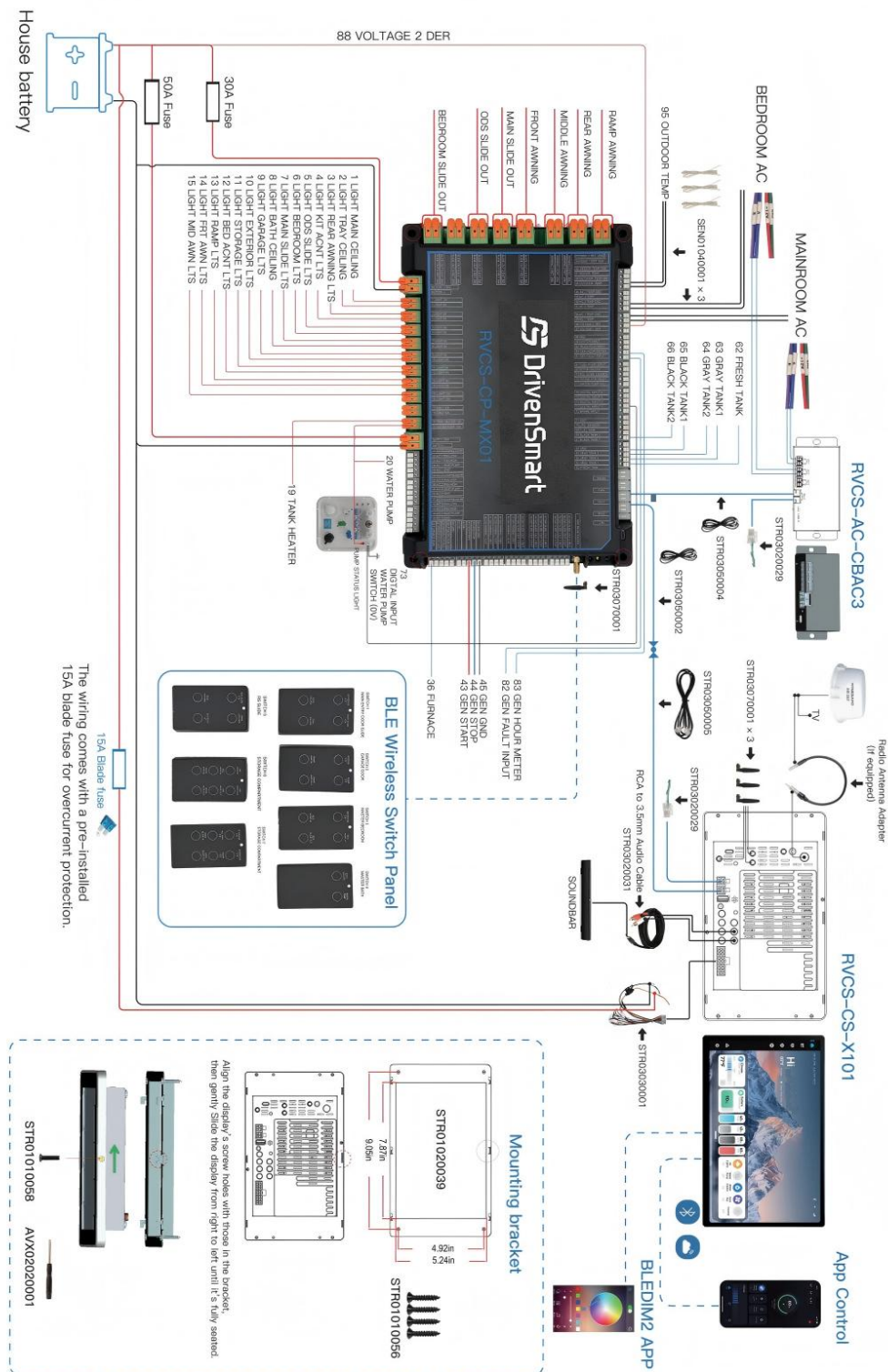


Figure 1:Example For System Layout

3 Functions Introduction

3.1 Homepage

After power up the control system, it will enter Links2 Smart application automatically, the first screen you see is the Homepage.

In the left side of the screen, it is the navigation bar. From top to bottom, there are Homepage, Functions, Infotainment, APPs, Alarm Info and System Setting in sequence.

What we can monitor and control in Homepage:

- A. Current date and time.
- B. Temperature of Indoor, Outdoor and Bedroom.
- C. The switch to turn on/off HVAC in bedroom, the current mode of HVAC, the current setting temperature and you can drag the slider to adjust it.
- D. The voltage of the house battery.
- E. The status of all the water tanks.
- F. The switch to turn on/off all lights.
- G. The switch to turn on/off water pump.



Figure 2: Homepage Screen

3.2 Functions

In Functions interface, there are 7 icons here which stand for 7 different functions, they are Water Systems, Climate Control, Generator, Light Systems, Motor Control, Remote Switches and the Owner's Guide.

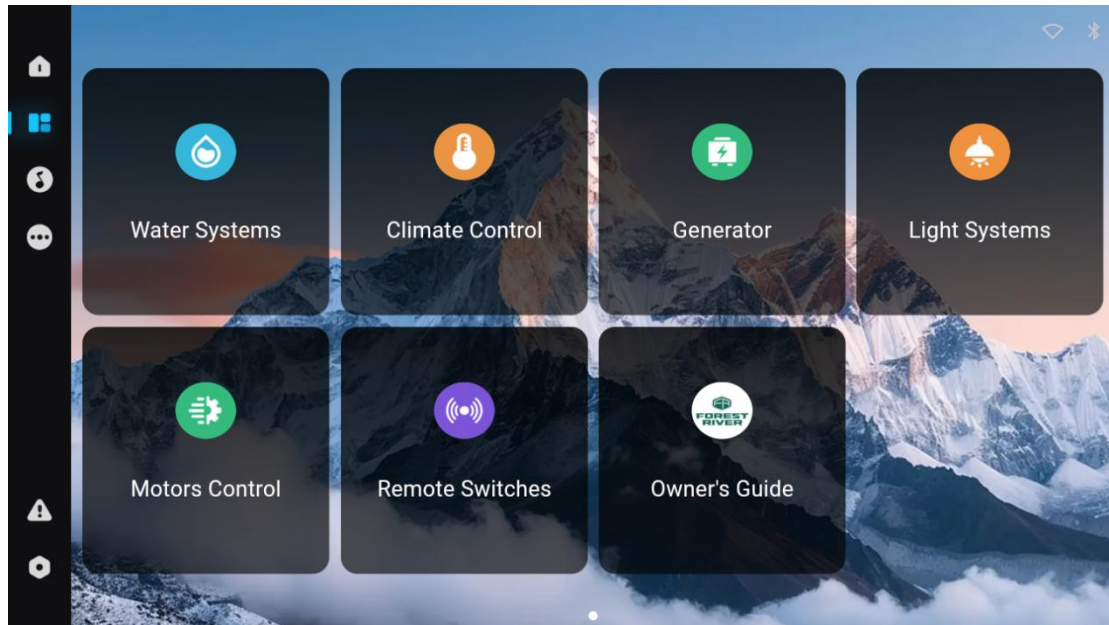


Figure 3: Functions Screen

3.2.1 Water System

In water system, it displays the status of all tanks and you can turn on/off water pump and water heater. Here you can check the tank type, total capacity, and current capacity of each tank.

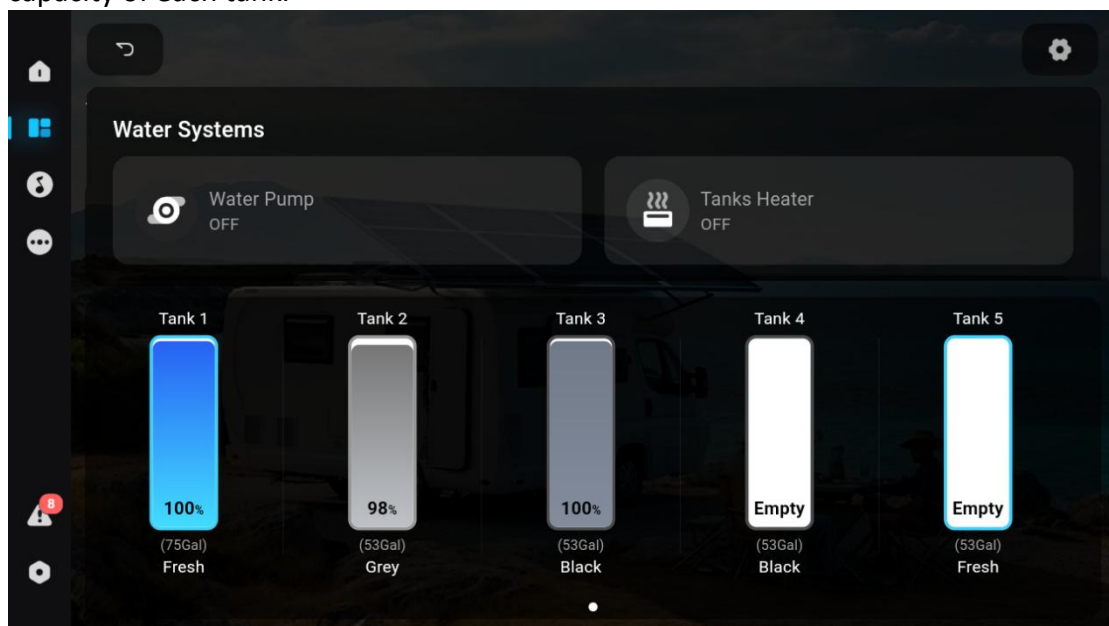


Figure 4: Water System Screen

In Setting, you can set the alarm conditions of each tank.

Tank X: Select tank from 1 -5.

Alarm: Set the lower or upper limit of the tanks for capacity alarm, Grey and Black tank only need to set the upper limit.

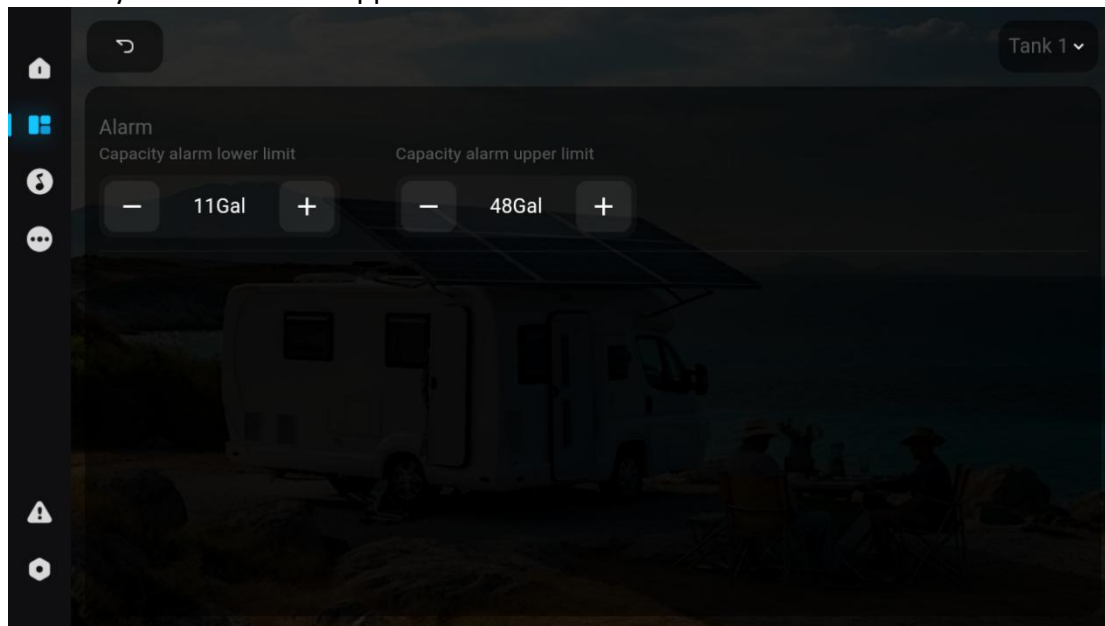


Figure 5: Setting For Water System

3.2.2 Climate Control

Climate Control provides you the display and control of HVAC.

Mainroom Bedroom : The location of the HVAC, tap the location you can check and control the HVAC in that location.

Main Switch: A switch in the right top screen, which is under the icon "HVAC", you can turn on/off the HVAC, the default mode is cool with low fan speed.

Temperature Display: It is in the middle of the screen, showing the current temperature and the temperature that you set up. Tap icon -/+ or drag the slider to adjust the setting temperature.

In cool mode, once the current temperature is higher than the setting temperature, it will automatically start the compressor.

In furnace/heat mode, if the current temperature is lower than the setting temperature, it will automatically start the furnace or heat strip.

MODE: Select different modes of HVAC, including Off, Cool, Dry, Fan (It means only fan runs if you choose it), Furnace, only mainroom has Furnace mode.

FAN: Select different speed for fan, including auto, low, high and off.

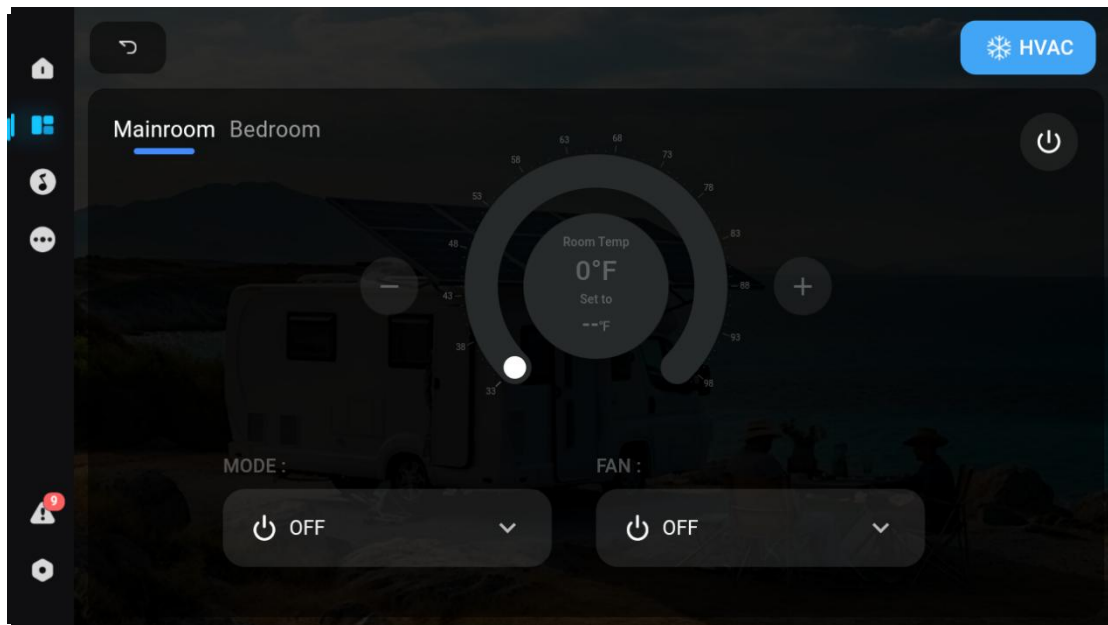


Figure 6:Climate Control Screen-1

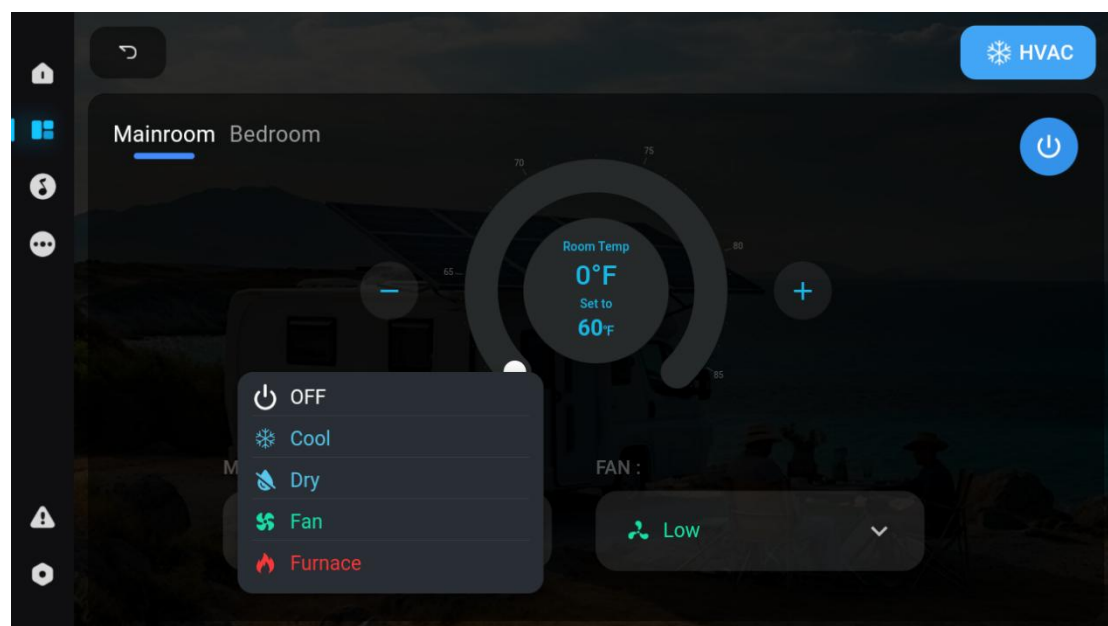


Figure 7:Climate Control Screen-2

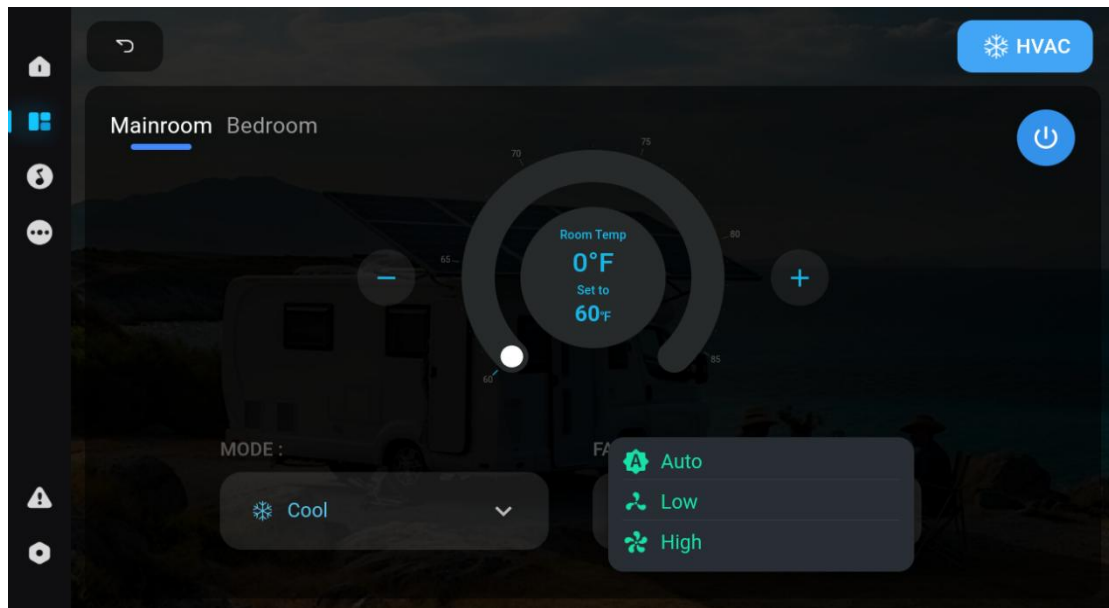


Figure 8:Climate Control Screen-3

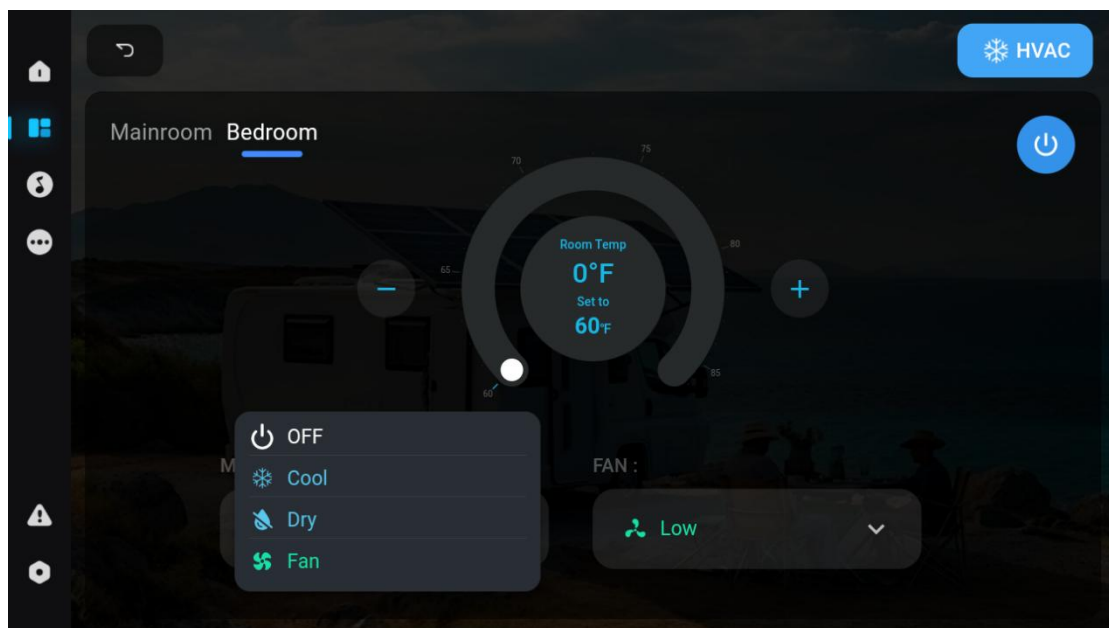


Figure 9:Climate Control Screen-4

3.2.3 Generator

Temperature:Displaying the temperature of mainroom.

House Battery:Displaying the voltage of house battery.

Running Time:Displaying how long the generator has been running.

Start:For starting the generator manually,tap it after you prime the fuel pump.

Stop/Prime: Once you tap this button, the generator will stop; press and hold for 2-3 seconds, it will prime the fuel pump. You can stop the fuel supply when the generator indicator turns green and tap Start button to start generator manually.

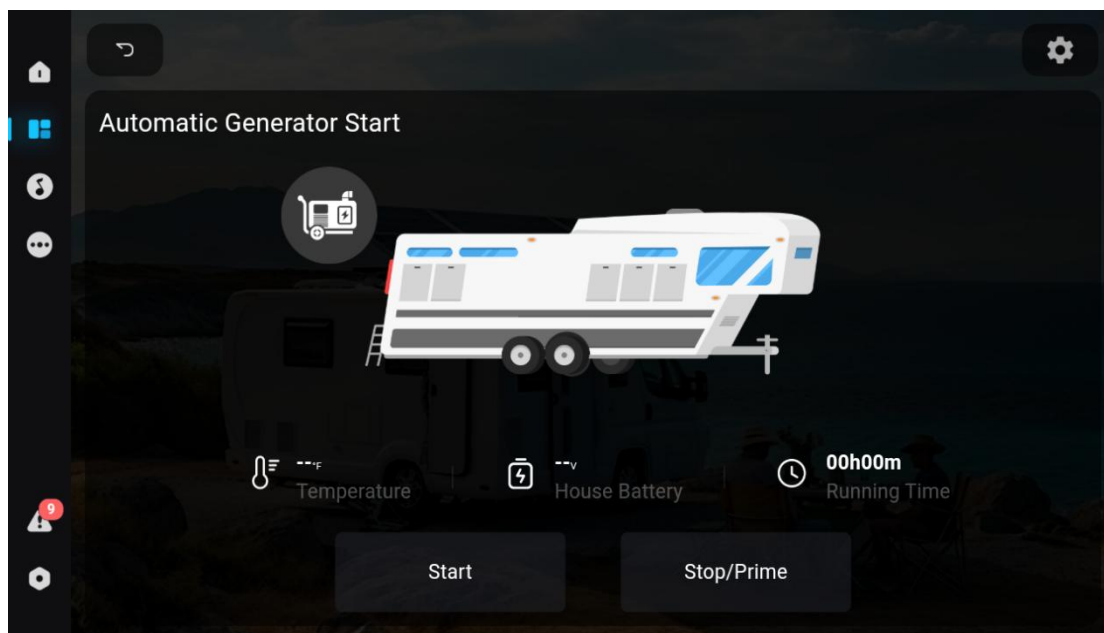


Figure 10: Generator Screen

In AGS Setting, you can set the conditions for Automatic Generator Start, the setting includes Quiet Time, Low Voltage, HVAC Load and General Setting.

AGS Enable: When AGS is enabled, the generator can automatically start or stop based on your settings, such as battery voltage, HVAC load, or scheduled times.

Quiet Time:

Quiet Time Start/Quiet Time Stop: Tap to set a start time point and end time point, the generator will not start automatically during this period even if the trigger conditions occur (such as low battery voltage or the need for the air conditioner to run). Default time setting is 10:00 PM - 06:00 AM.

Low Voltage

Start at Volts: The generator will start when the voltage drops to this set point depending on "Time at Volts" setting.

Time at Start Volts: The generator will start when the voltage drops to the "Start at Voltage" for this specific amount of time.

Stop at Volts: The generator will shut off when the voltage reaches this set point depending on "Time at Stop Volts" setting.

Time at Stop Volts: The amount of time required for the voltage to remain at "Stop at Volts" level before the generator shuts off.

General Setting:

Min Runtime: Set the minimum amount of time that your generator will run once it has started.

Max Runtime: Set the maximum amount of time that your generator will run once it has started.

Gen Start Retries: Select the times that the generator will retry to start if it fails to start on the first attempt. **Note:** If the generator fails to start within the setting number of attempts, the AGS will automatically lock out. You must start the generator manually to clear the lockout.

Run Time: Tap Clear button to clear the run time of generator.

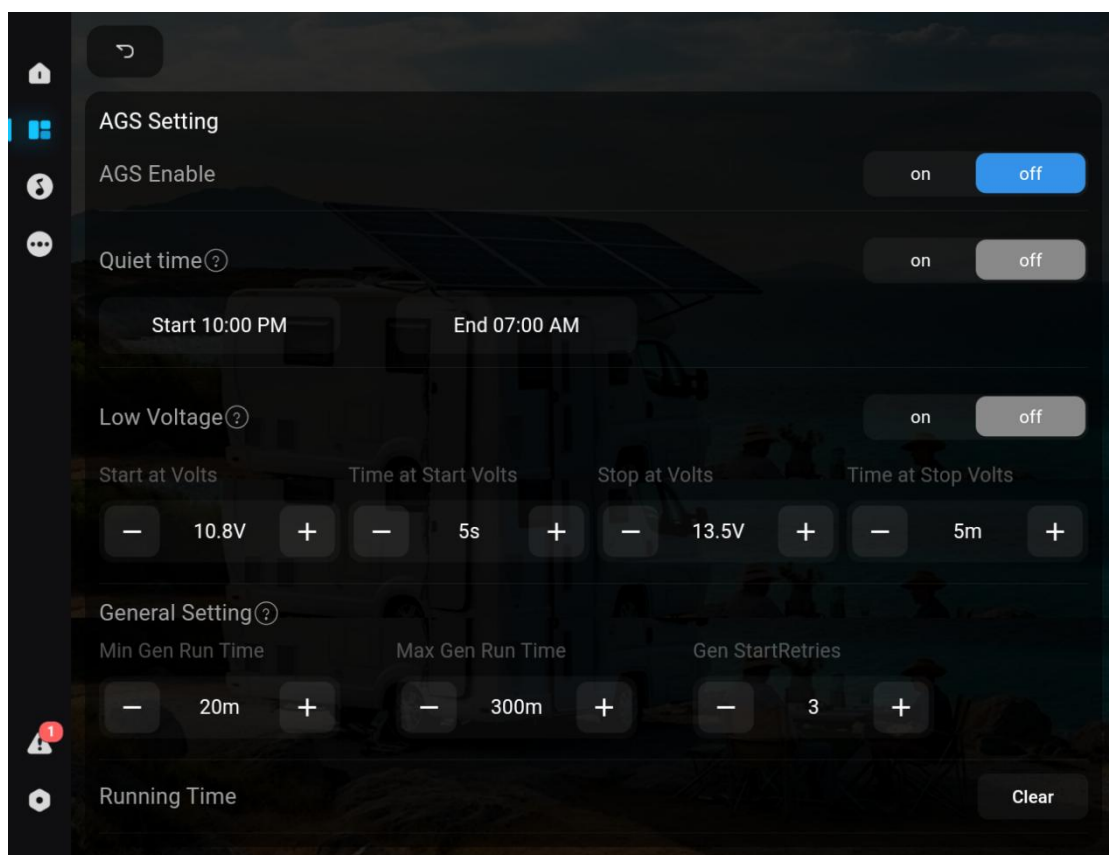


Figure 11: Setting Screen For Generator

3.2.4 Lights System

The Light Systems displays all the status of lights and provides you the control of all lights. It totally has 16 channels of lights. Every light is in a display box with the location name and you can turn it on/off by tapping the box, you can also adjust the brightness of the light by dragging the dimmer. Besides it also supports turning on/off all lights by “All Lights” button.

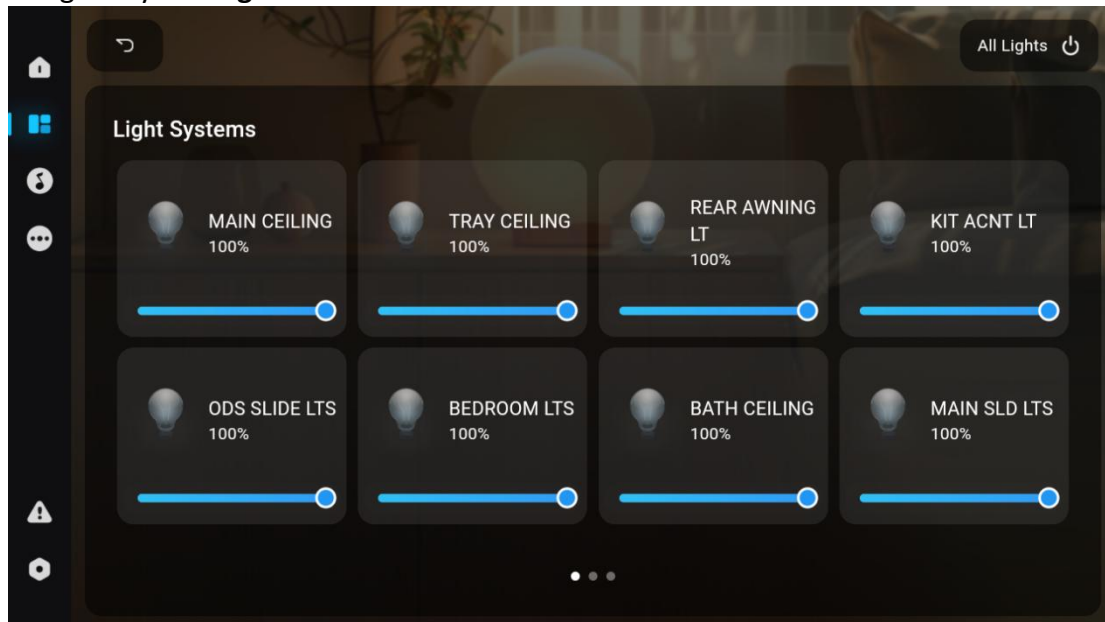


Figure 12: Lights Screen-1

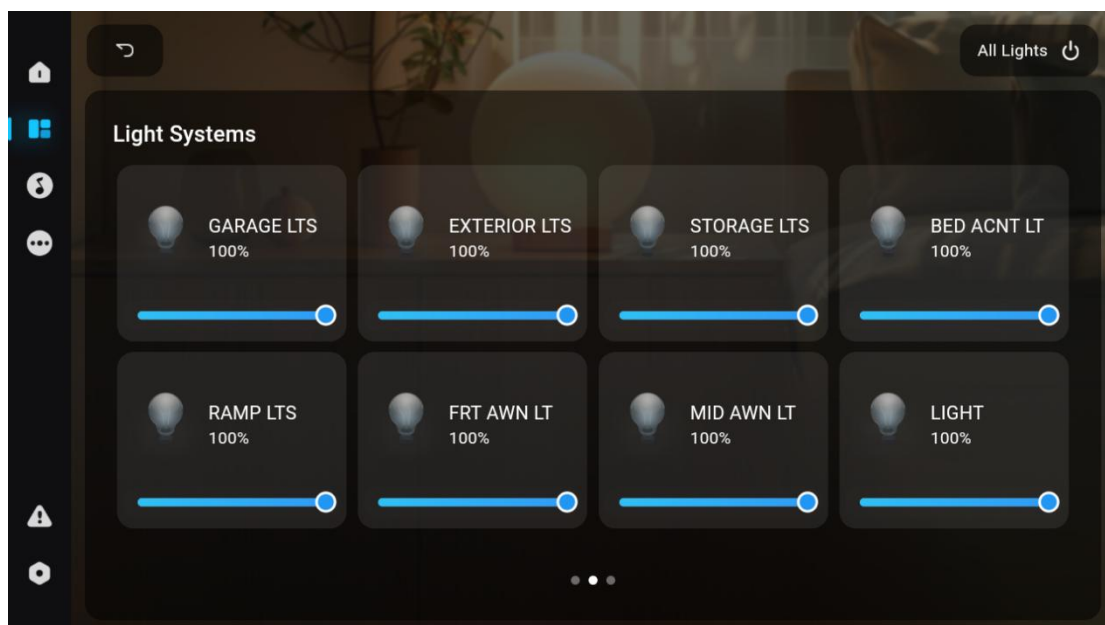


Figure 13: Lights Screen-2

BLEDIM2: This is a third party APP for controlling RGB light, you can tap the icon and it will jump to the application BLEDIM2 so that you can control the RGB light in a third party APP.

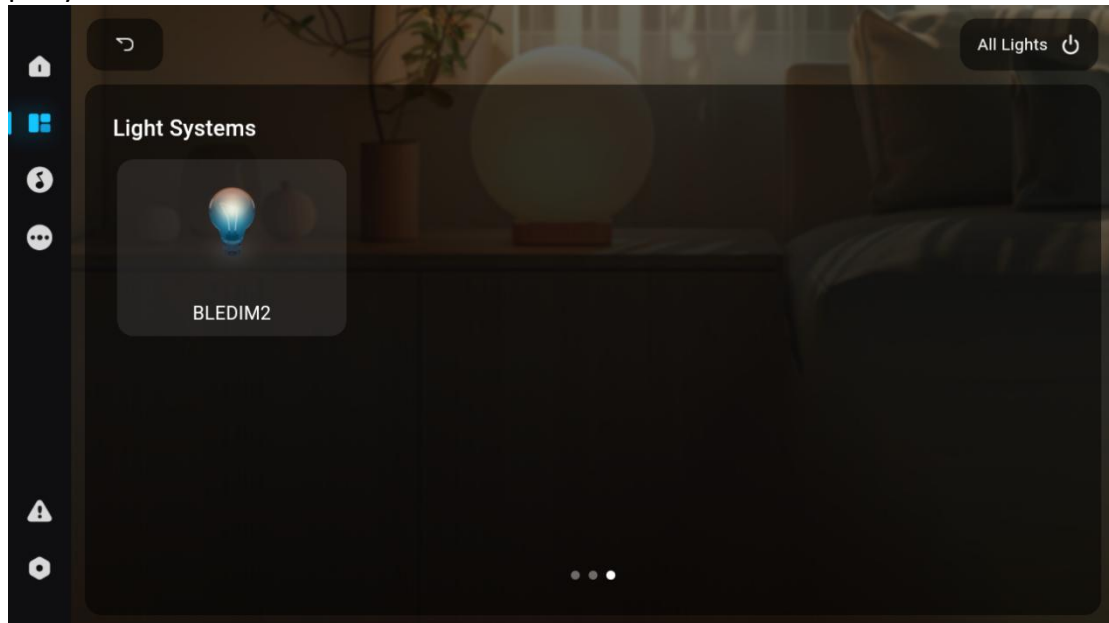


Figure 14: Lights Screen-BLEDIM2

3.2.5 Motors Control

It displays the locations and status of awnings and slide-outs on the floorplan of RV, it also provides the control for awnings and slide-outs, hold and press the “In” or “Out” buttons to control the awnings and slide-outs. When you try to control the awnings and slide-outs, the corresponding action will be displayed on the floorplan.

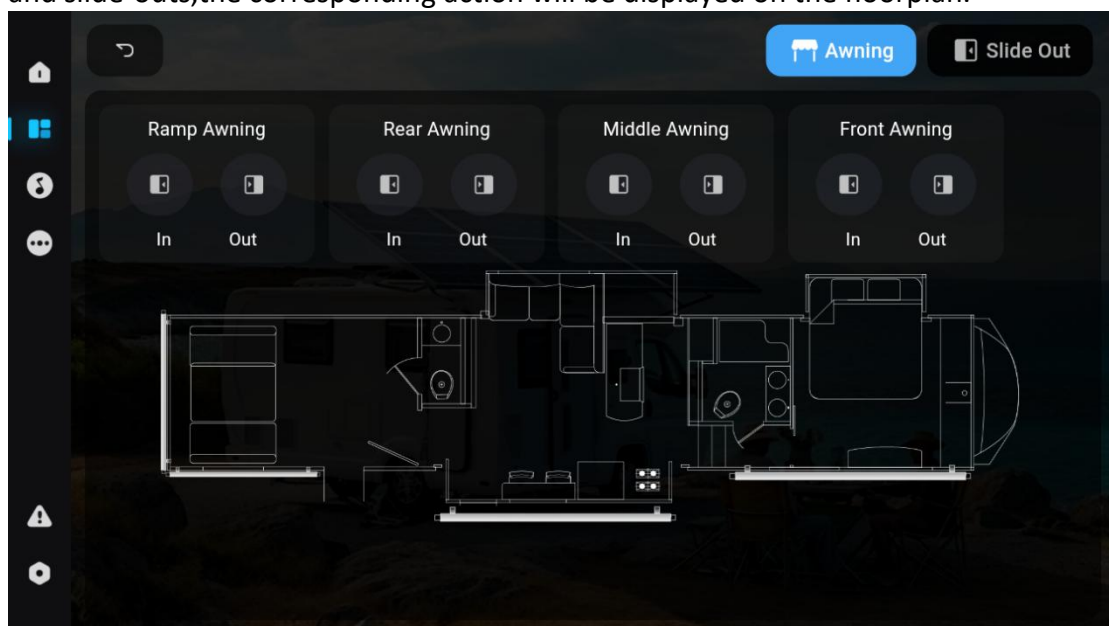


Figure 15: Motors-Awning

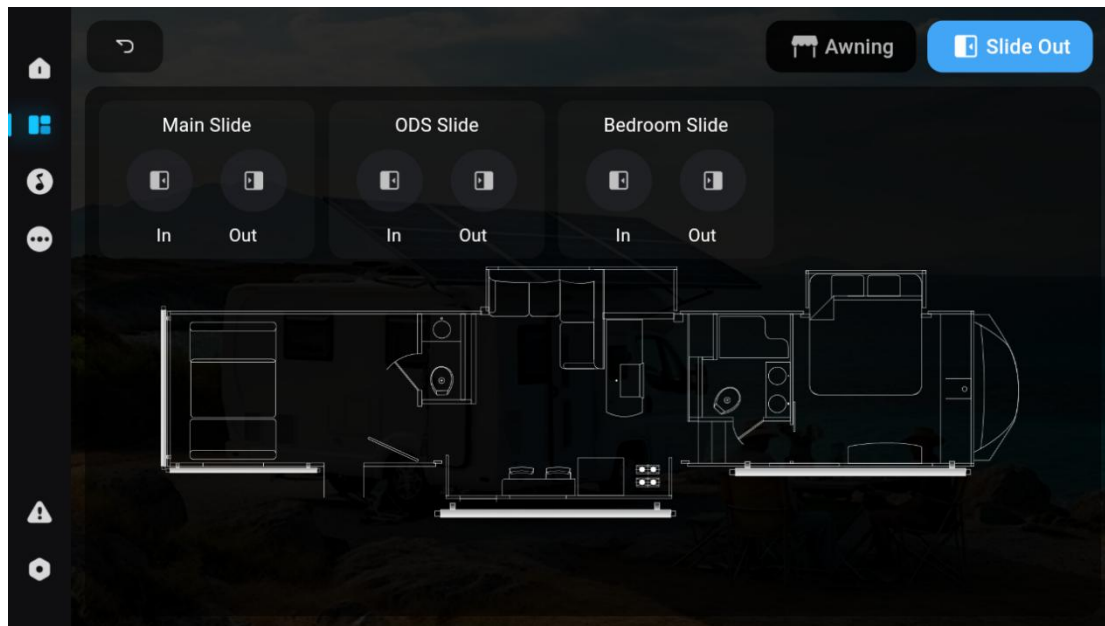


Figure 16:Motors-Slide Out

3.2.6 Remote Switches

Chart:It displays the location,status of the battery and the signal strength on the floorplan for the remote switches.

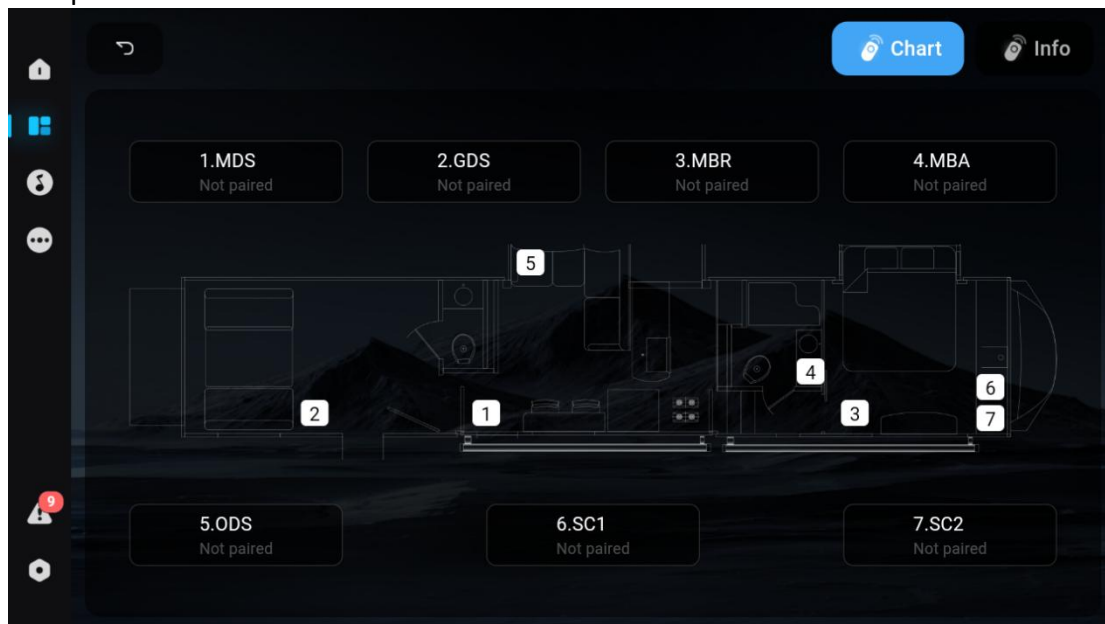


Figure 17:Remote Switches Screen-Chart

Info:It displays all the locations and status of wireless remote switches,also provides you to pair new remote switches or unpair the paired wireless remote switches.

Add:Tap to pair a new wireless remote switch, follow the instructions to select the locations,tap pair and then hold the top 2 buttons of wireless remote switch at the same time to pair it with control screen.

How to add new remote switch?

1. Tap the “Add” button.

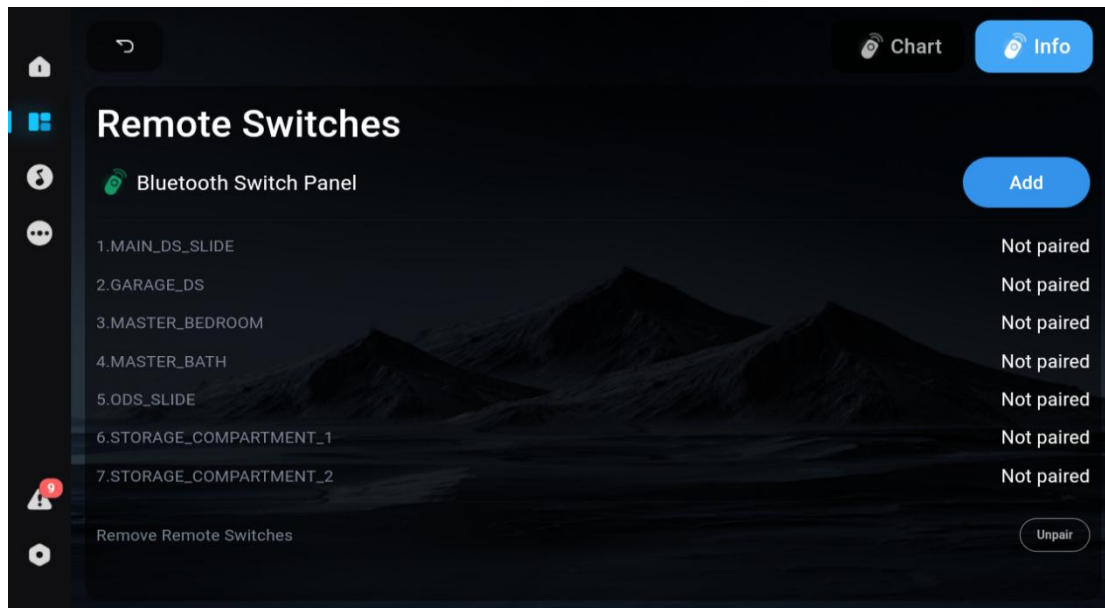


Figure 18:Remote Switches Screen-Info

2. Select locations window pop up,you can select a location that you want to pair with the wireless switch panel.

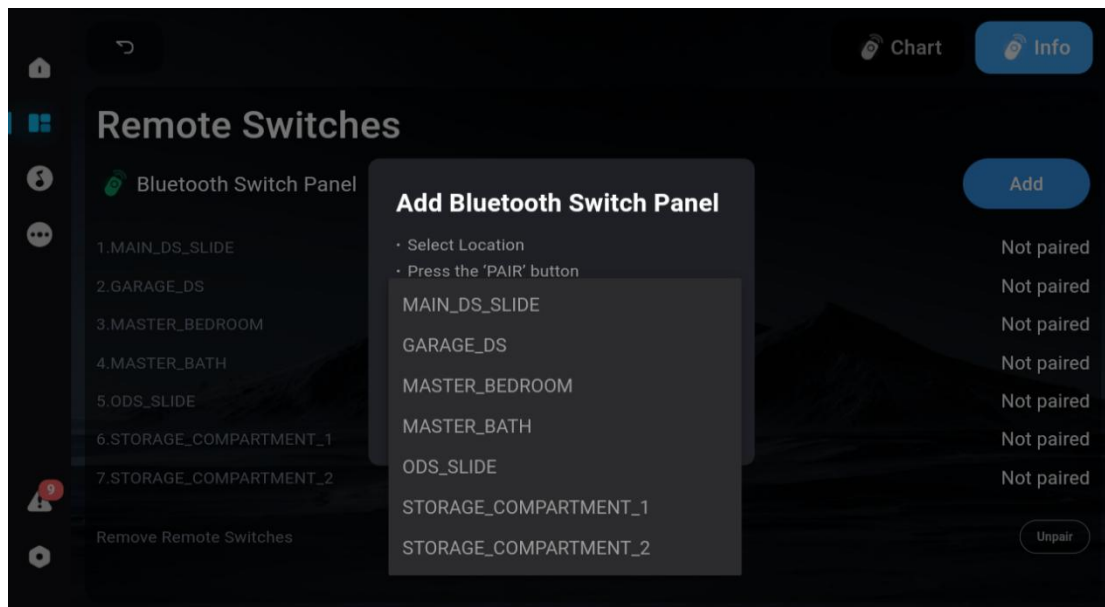


Figure 19:Remote Switches Screen-Select Location

3. After you select a location, tap Pair button to start pairing the wireless switch panel.

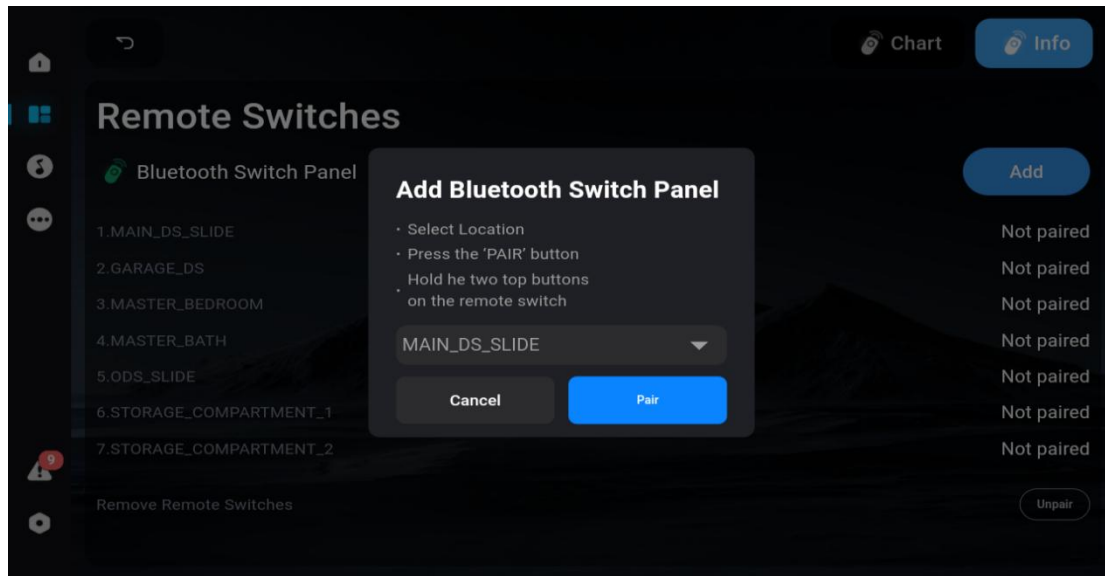


Figure 20:Remote Switches Screen-Pair-1

4. The pairing window pop up and press the 2 top buttons on the wireless switch panel at the same time to, the pairing window will disappear and the MAC address of wireless switch panel will present once the pairing is completed.

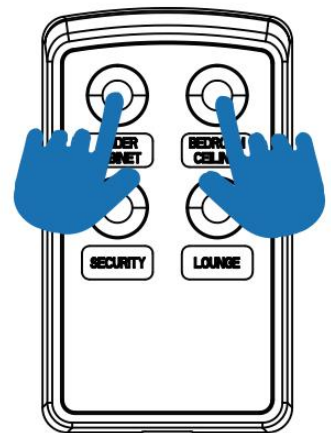
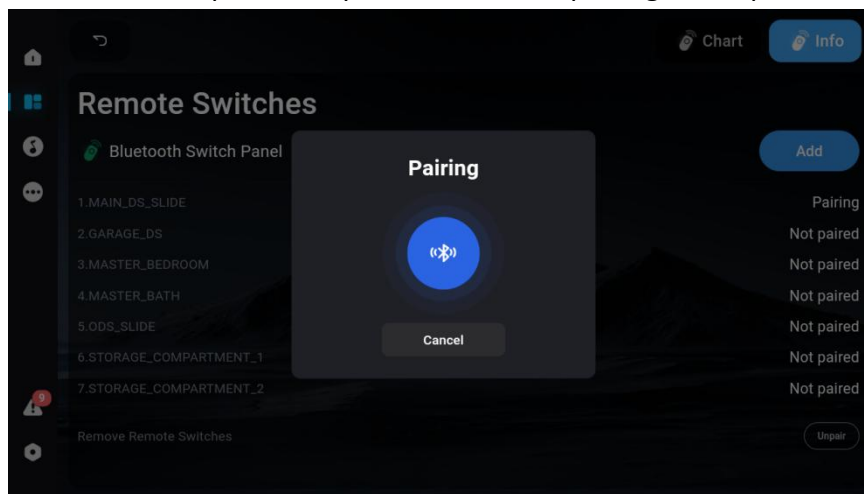


Figure 21:Remote Switches Screen-Pair-2

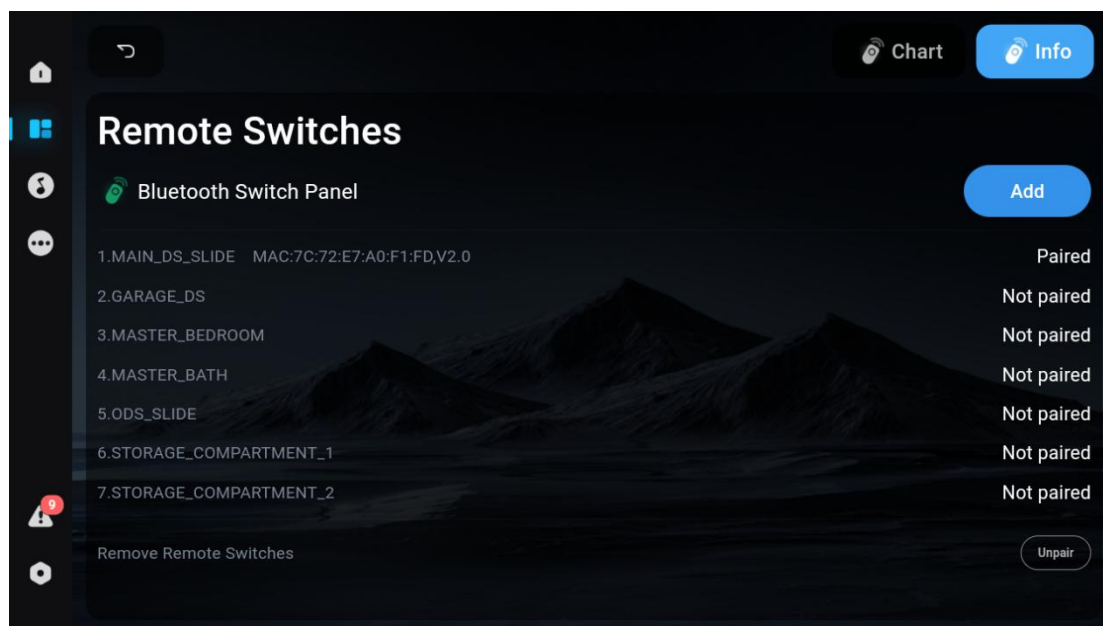


Figure 22: Remote Switches Screen-Pair-3

Unpair: Tap Unpair button to select at least one paired remote switch to unpair it.

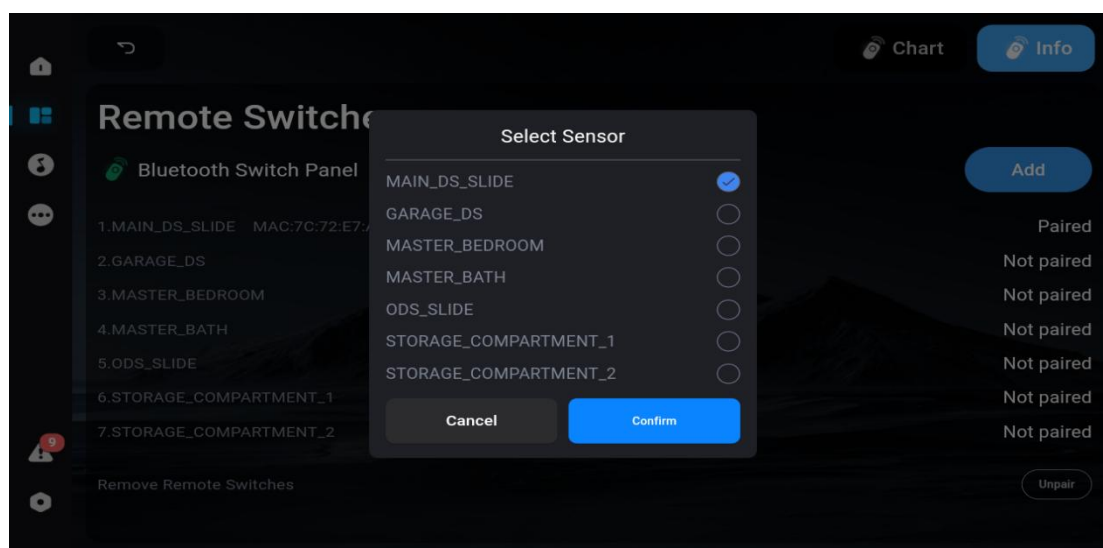


Figure 23: Remote Switches Screen-Unpair

3.2.7 Owner's Manual

This is the owner's manual for your vehicle, you can enter the apps and select the type and model of your vehicle to check all the details, such as user manual, the introduction of all the components in your vehicle, troubleshooting Tips, and FAQ etc..

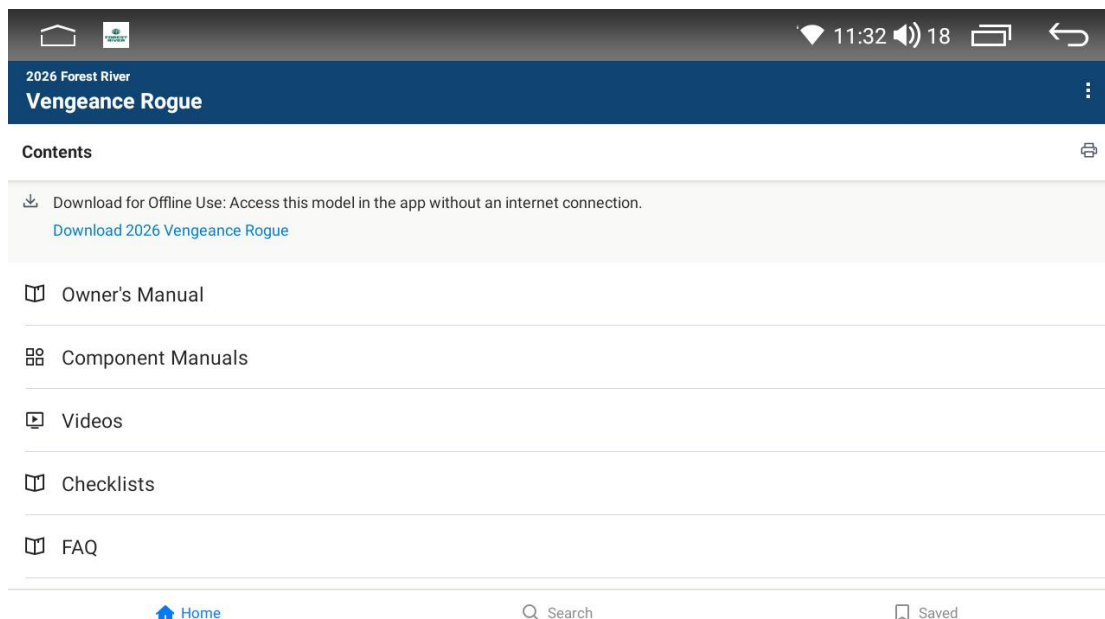


Figure 24: Owner's Manual Screen

3.3 Infotainment

Infotainment provides you the infotainment APPs in common use, including Radio, Spotify, YouTube Music, Pandora, iHeart Radio etc..

Note: Please turn on the Sound Bar when using these apps so you can hear the audio.

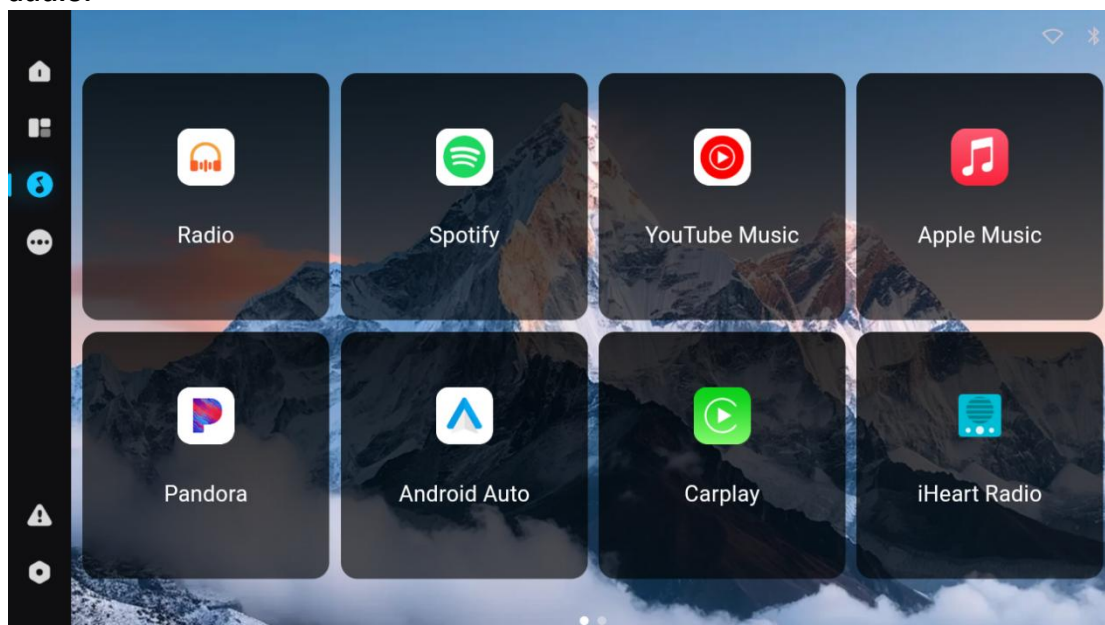


Figure 25: Infotainment Screen-1

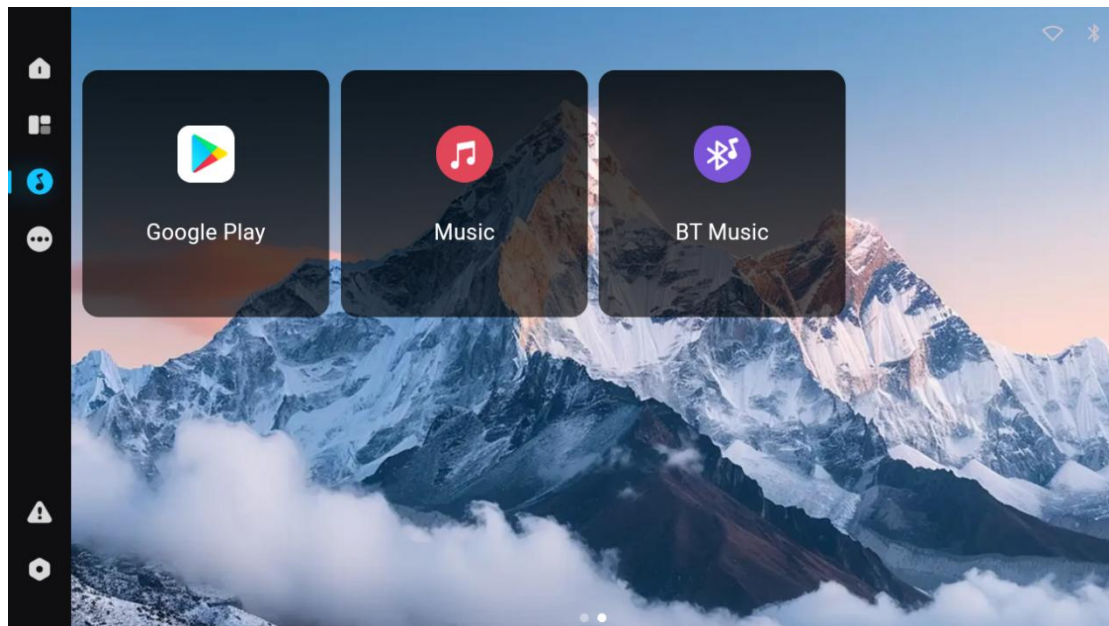


Figure 26:Infotainment Screen-2

3.4 APPs

In APPs there are the APPs that have been installed in control screen,you can also find the system setting and some built-in APPs here.

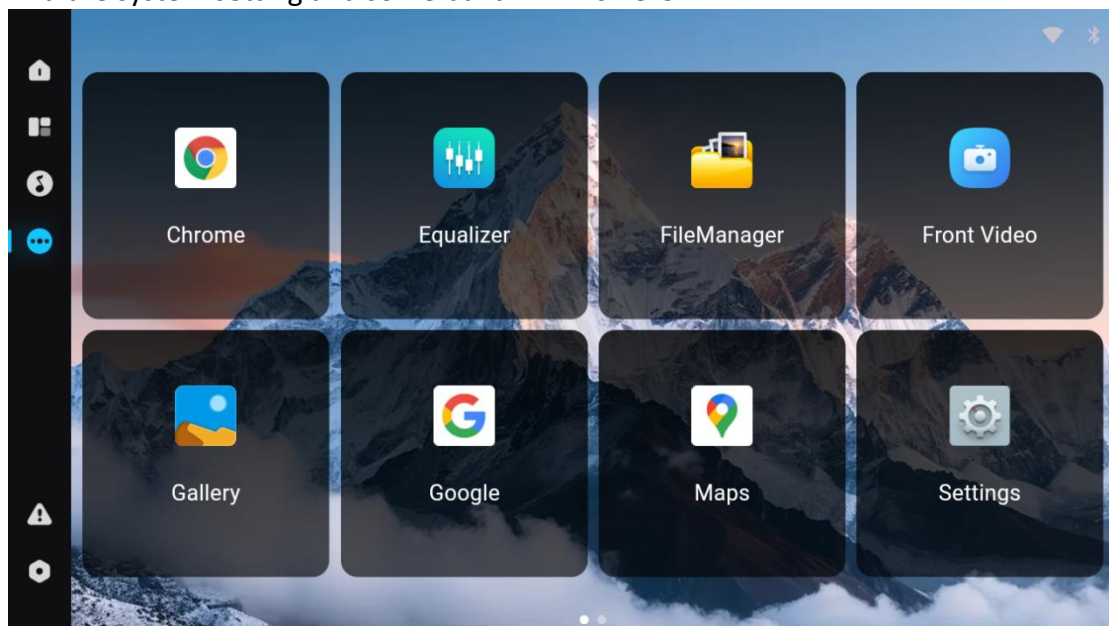


Figure 27:APPs Screen-1

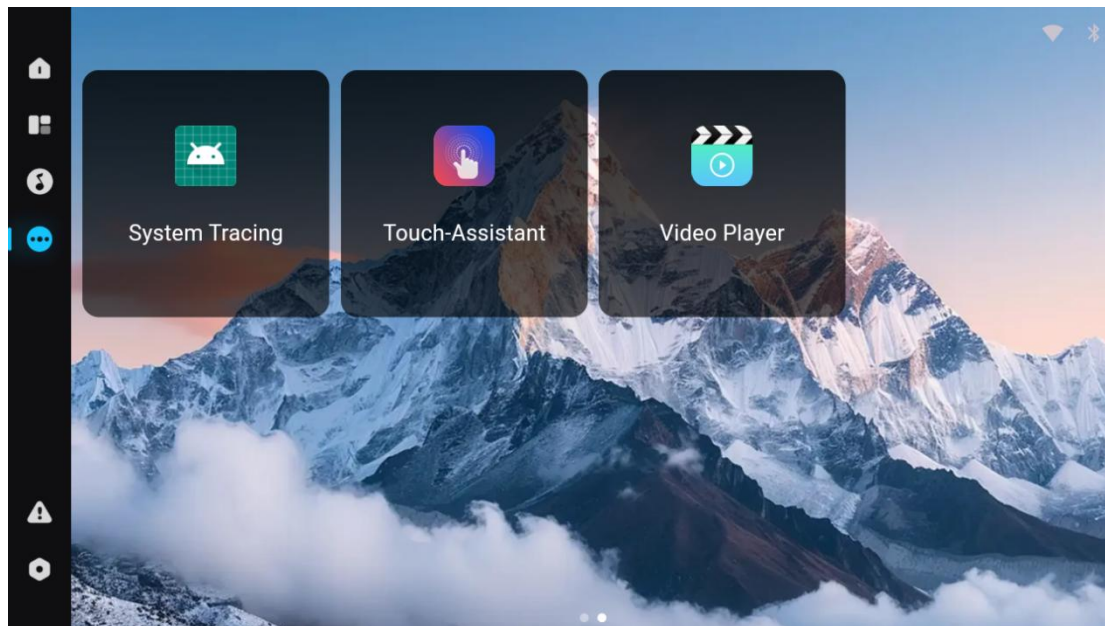


Figure 28: APPs Screen-2

3.5 Alarm info

The Alarm Info function is designed to monitor the operating status of all major RV systems and provide timely alerts when abnormal conditions occur. It helps users identify potential issues, perform corrective actions promptly, and ensure safe and reliable operation of the vehicle.

When a fault or abnormal event is detected, the system automatically records the alarm information and displays a warning message on the screen. Depending on system configuration, an audible alert or mobile notification may also be triggered.

Alarm categories include but are not limited to:

Water System: Fresh water tank low level, grey or black water tank full, water pump overload or malfunction.

Motors Control: Low voltage, overcurrent, safety lock, timeout, or communication lost failure.

Temperature & Environment: High or low temperature warning; over-temperature protection; sensor communication error.

Vehicle Status: Parking brake not engaged, door or step open while ignition on, communication failure between modules.

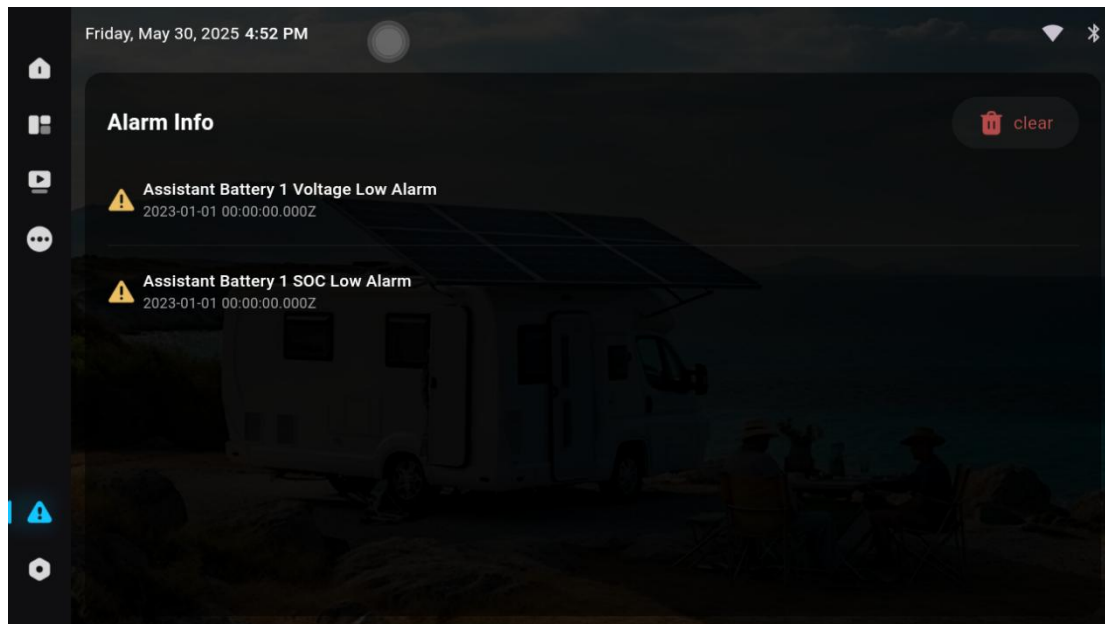


Figure 29: Alarm Info Screen

3.6 System

3.6.1 Setting

Temperature Unit: This is for global temperature unit switch, you can choose °C or °F, default setting is °F.

Volume Unit: This is for global volume unit switch, you can choose L or Gal, default setting is Gal.

Parking Brake Detection: Ensures certain motorized components such as slide-outs, awnings, or steps can only be operated when the parking brake is engaged. This safety interlock prevents accidental movement of these components while the vehicle is in motion and provides visual or audible warnings if a user attempts to operate them without engaging the brake.

Background Setting: You can select a picture in internal storage of Control Screen for your homepage's background.

Restore Default Setting: It will clear the whole current setting and will restore to factory setting.

RV Configuration: This is to select the brand and model of RV, need password to access.

Factory Mode: This mode needs to be entered with password, in factory mode you can modify some electric devices of your vehicle, such as add/delete/rename certain

electric devices.

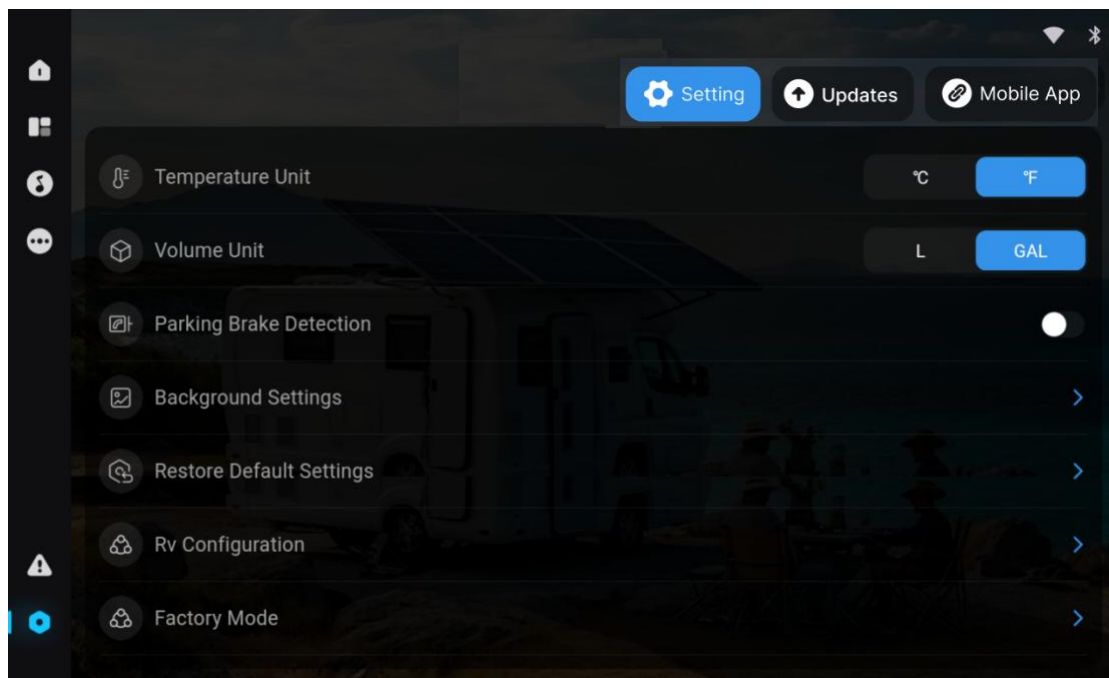


Figure 30: System Screen-Setting

3.6.2 Update

This displays all the versions info of the devices including control panel, control screen, Links2 application and HVAC module. You can also check update version here and update the latest version for each device.

Check Updates: This is for checking the latest version of Control Panel, Control Screen, Links2 Smart APP and HVAC module. The Current Version of each device is presenting in the screen, once you tap Check Updates, if Latest Version presents below Current Version, an Update button with cloud icon will show up, tap it you can update the latest version through OTA. The other Update button with USB icon is for RV-C update, you can update the latest version without internet.



Update: This is for OTA update, when you tap Check Updates, if a new version is available, this button will present; if not, this button will not present.



Update: This is for RV-C update and it is always there, you need a USB drive with the update files, then you can update the version with USB drive.

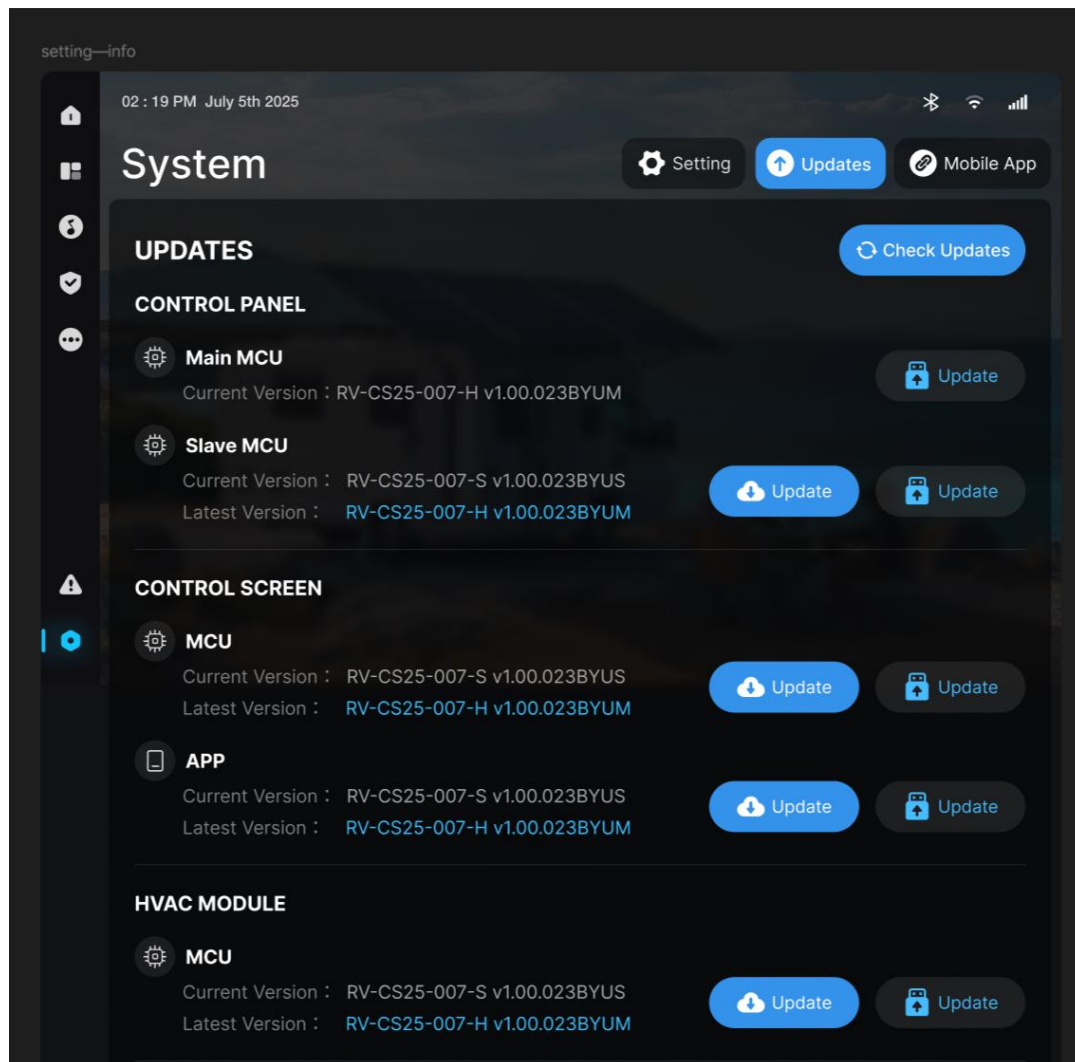


Figure 31: System Screen-Update

3.6.3 Mobile APP

In Mobile APP you can scan the QR code to download Links2 Smart application in Google store or Apple store.

Remote Connection: Remote Connection allows you to use your phone that has Links Smart APP to connect control screen via internet, so that you can monitor or control your vehicle in your phone.

Bluetooth Connection: Bluetooth Connection allows you to use your phone that has Links Smart APP to connect control screen via Bluetooth, so that you can monitor or control your vehicle in your phone.

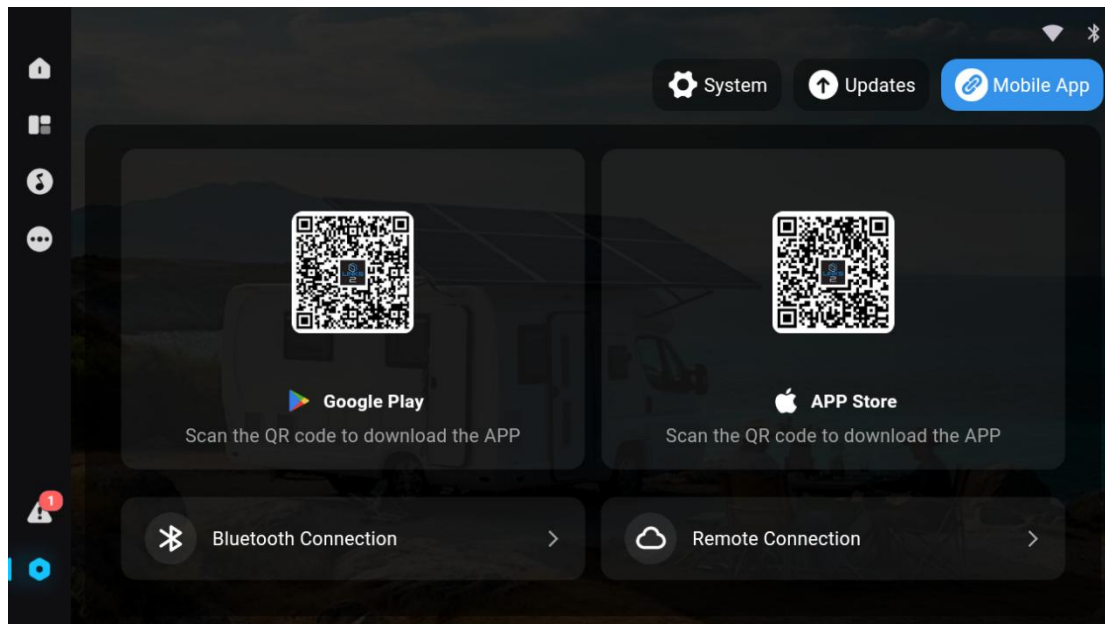


Figure 32: System Screen-Mobile APP

Remote Connection:

Device: It displays the android device ID and tap the edit icon, you can rename the control screen's name to help you identify your device.

Smart Connection Status: This indicates the status if the screen has connected to the cloud successfully.

Linked Device: You can check the device list that had been connected to control screen and the current device that is connecting to control screen.

QR Code: You can scan the QR code with the built-in scan function in Links Smart APP, then your phone can connect the control screen automatically.

Linking QR Code: In Links Smart APP, you can use the code to connect to control screen.

Refresh: Tap to refresh the Linking QR Code.

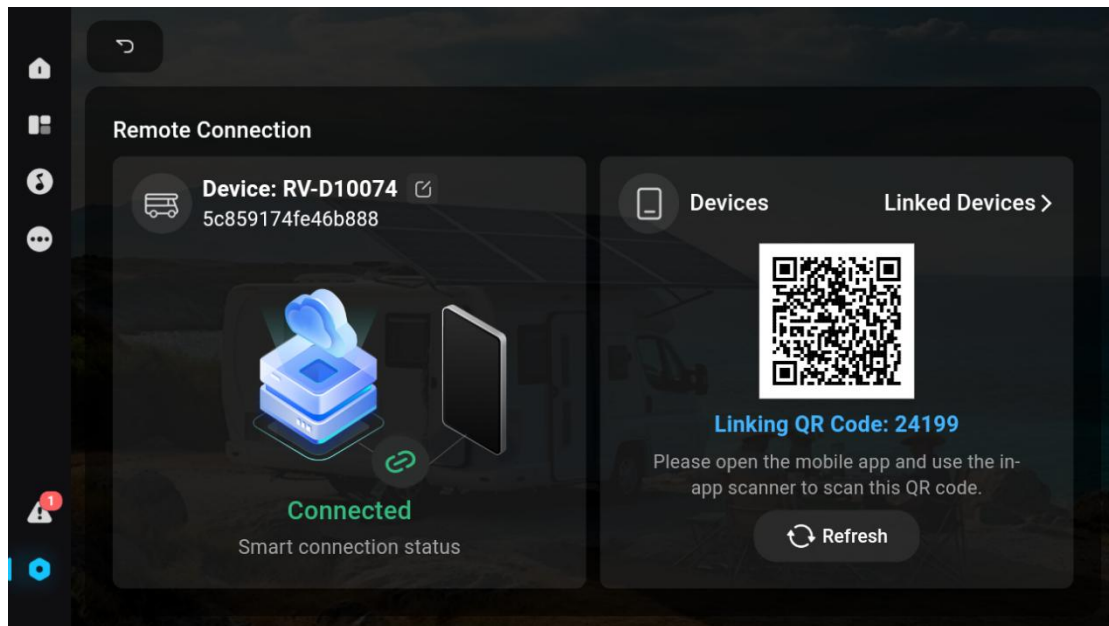


Figure 33: System Screen-Remote Connection

Bluetooth Connection: This screen displays the name of the Bluetooth and the password of the Bluetooth. You can also change the 4-digit password by tapping the edit icon.

Linked Devices: You can find the current device that is connecting to the control screen and the history list of the devices.

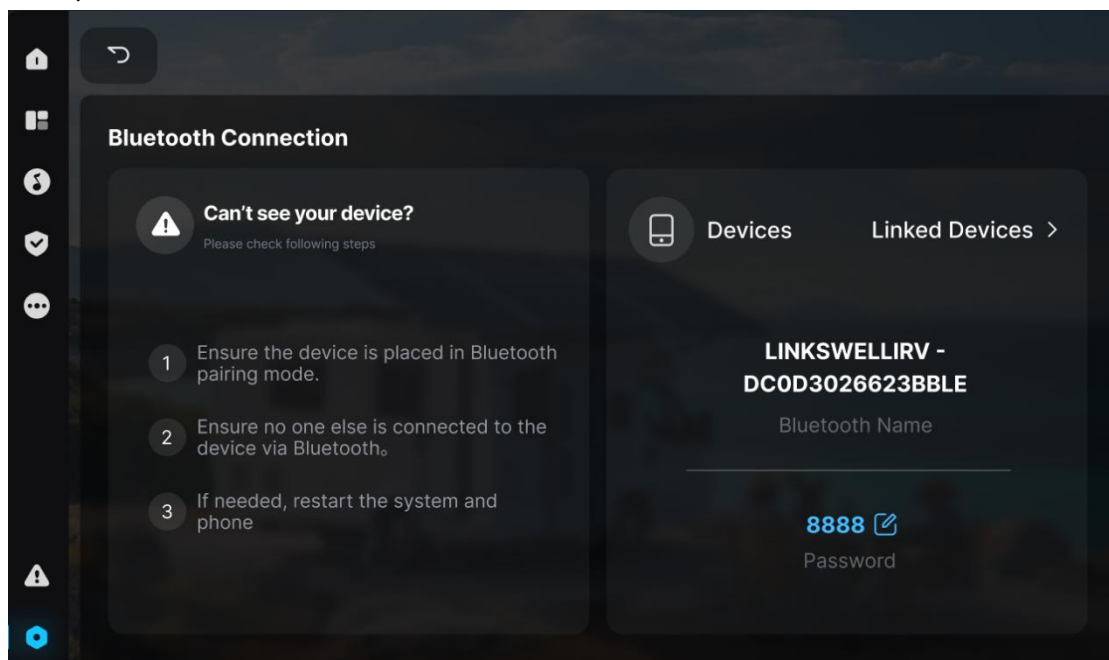


Figure 34: System Screen-Bluetooth Connection

3.6.4 Links2 Smart Application Download

Please scan the QR code below to download Links2 Smart Application, or you can search “Links2 Smart” in Apple Store or Google Store to download it.



iOS



Android



4 How To Use The APP

4.1 Sign in Links2 Smart

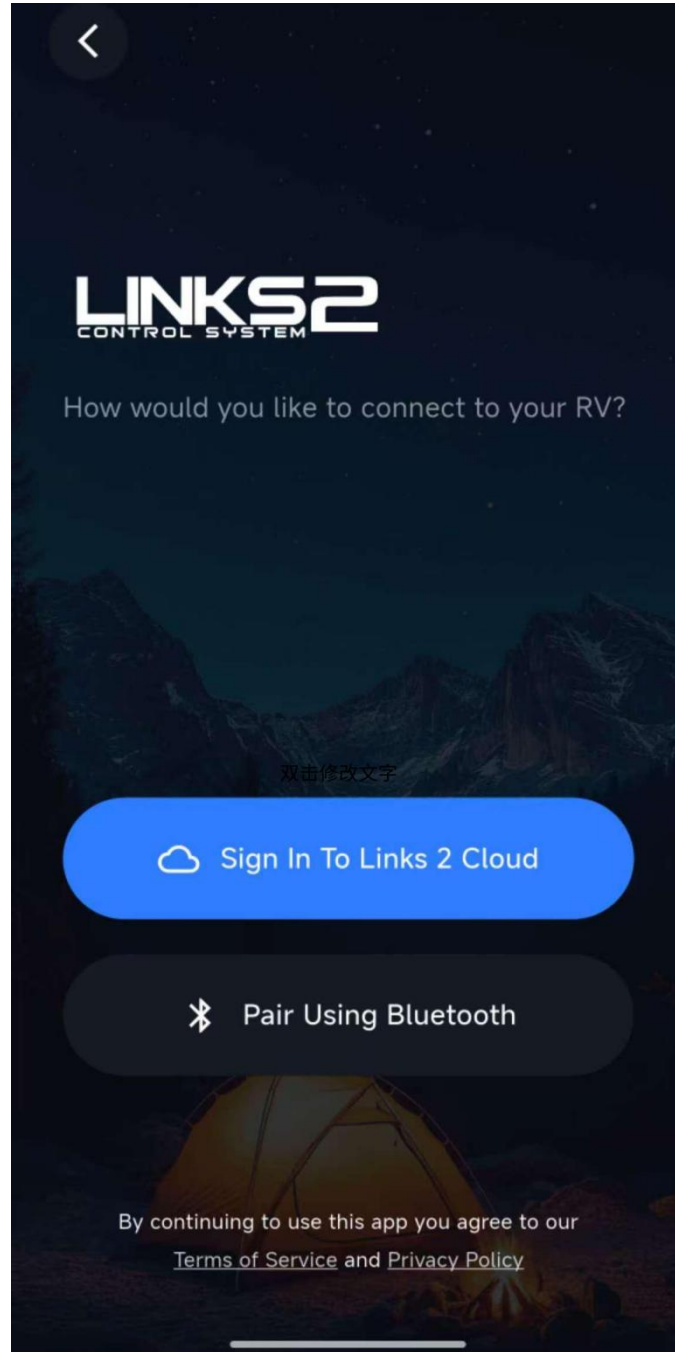


Figure 35:Login screen-1

Sign In To Links2 Cloud:Tap it you can use your phone to connect to control screen via network.This needs an account of Links2 Cloud to enter Links2 Smart.

Pair Using Bluetooth:Tap it you can use your phone to connect to control screen via Bluetooth.This allows you enter Links2 Smart without account of Links2 Cloud.

4.1.1 Sign In To Links2 Cloud

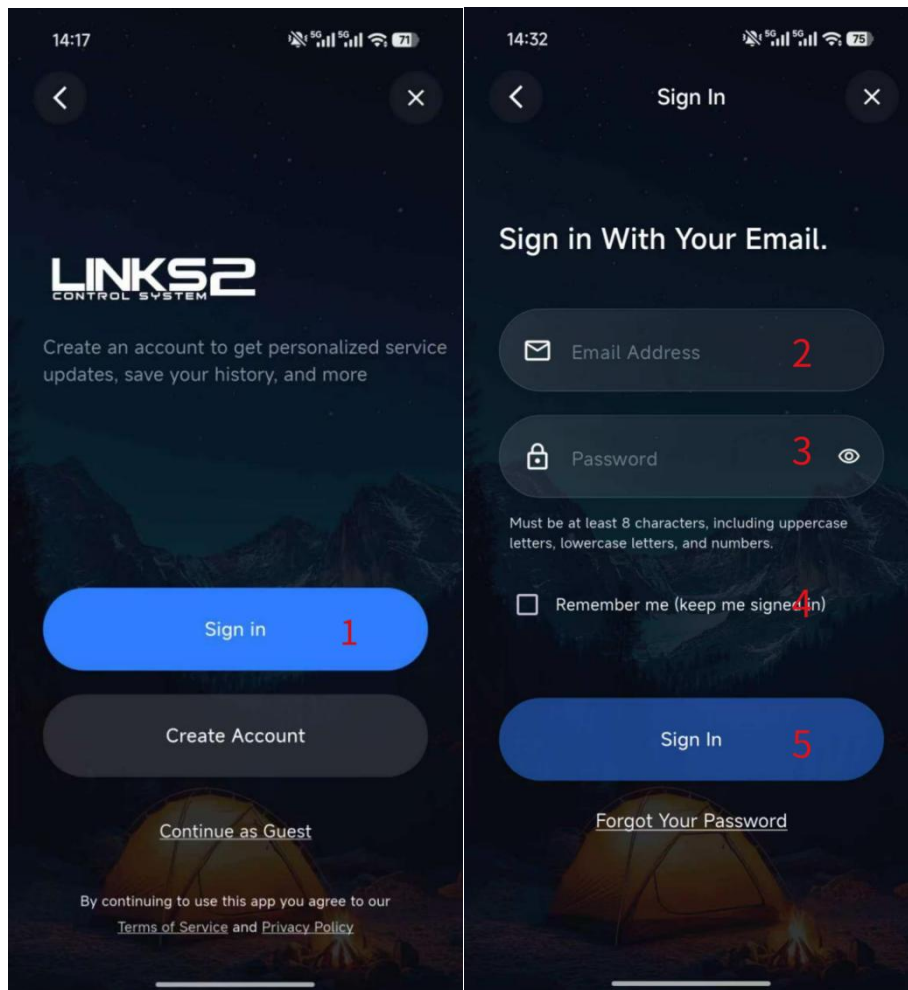


Figure 36:Login screen-2

Figure 37:Login screen-3

- 1:Tap Sign in to enter sign in screen.
- 2: Enter your registered email address.Note:If you don't have an account,refer 4.1.2 to create an account first.
- 3:Enter your password.
- 4:Check this if you want to keep you stay signed in.
- 5:Tap Sign in to enter Links2 Smart.

4.1.2 Create An Account

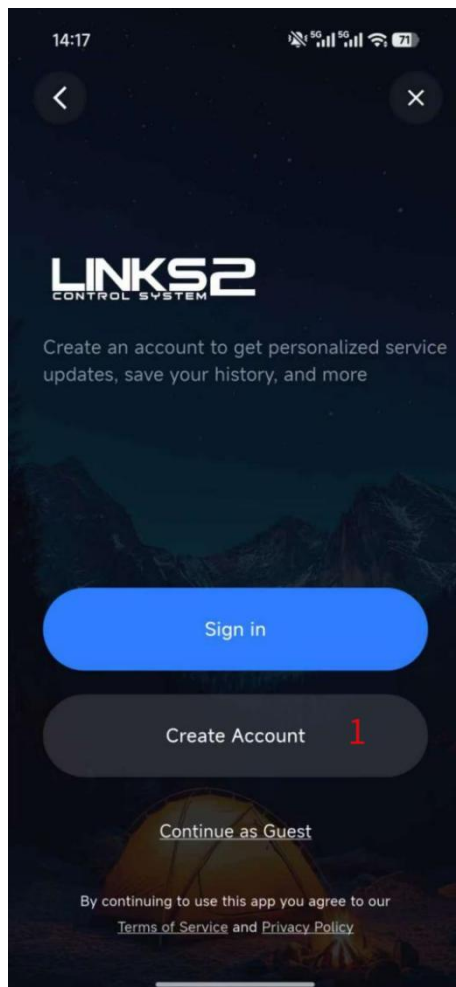


Figure 38:Create Account-1

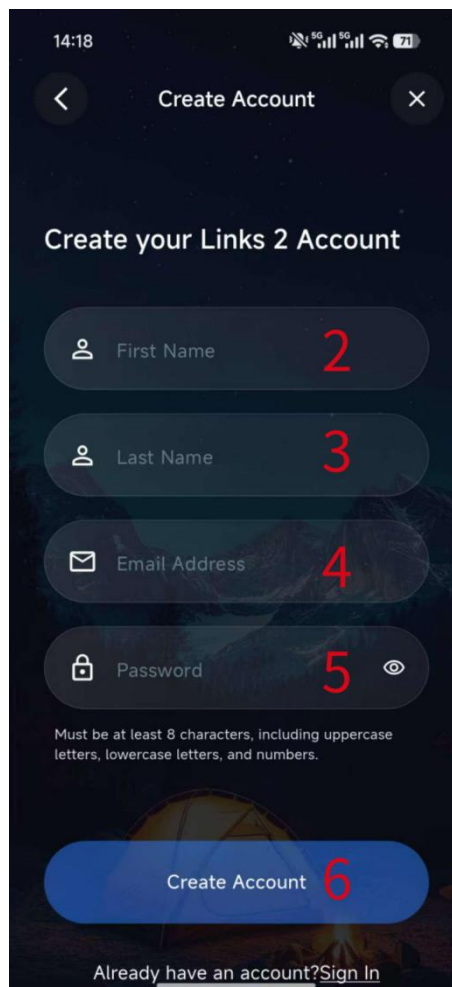


Figure 39:Create Account-2

- 1:Tap Create Account to enter create account screen.
- 2:Enter your first name.
- 3:Enter your last name.
- 4:Enter your email Address.
- 5:Enter your password.
- 6:Tap Create Account to create your account.

4.1.3 Forgot Password

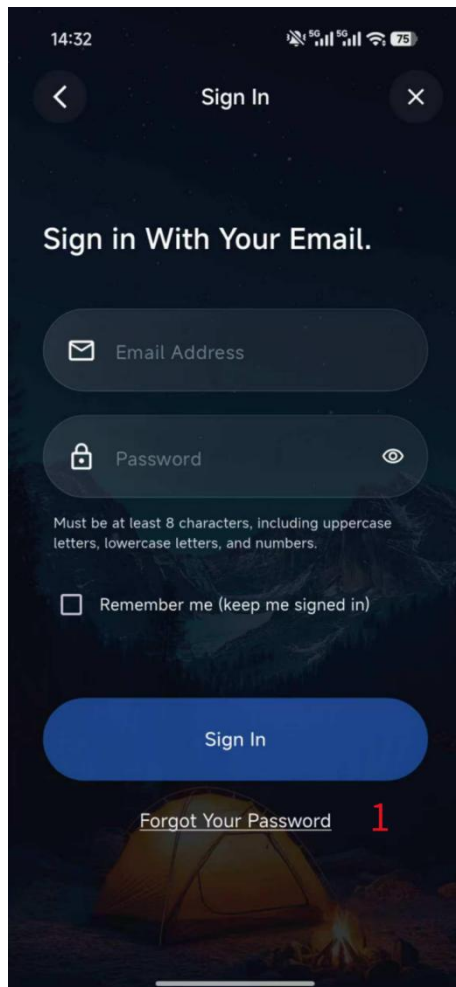


Figure 40:Forgot Password-1

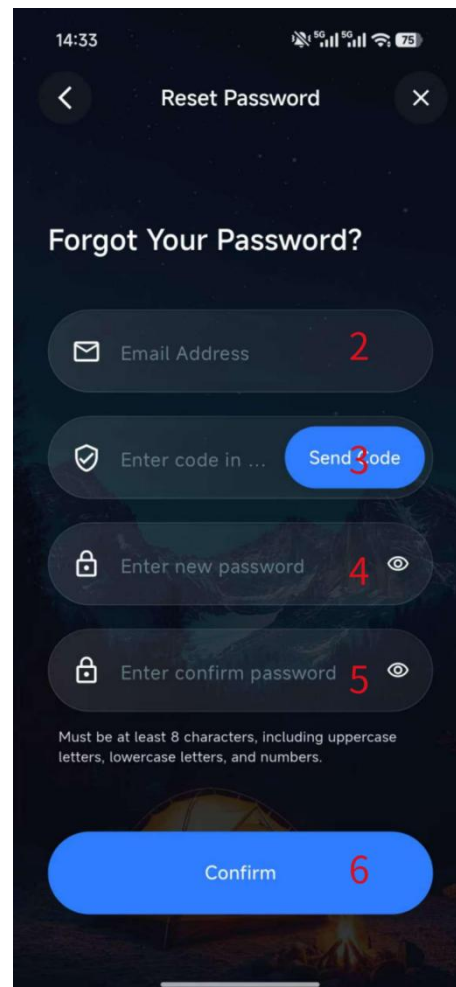


Figure 41:Forgot Password-2

- 1:Tap Forgot Your Password to enter Reset Password screen.
- 2:Enter your email address.
- 3:Tap Send Code,the Verification Code will be sent to your email,enter the code you get from email.
- 4:Enter your new password.
- 5:Enter your new password to be confirmed.
- 6:Tap Conform to active the new password.

4.1.4 Continue As Guest

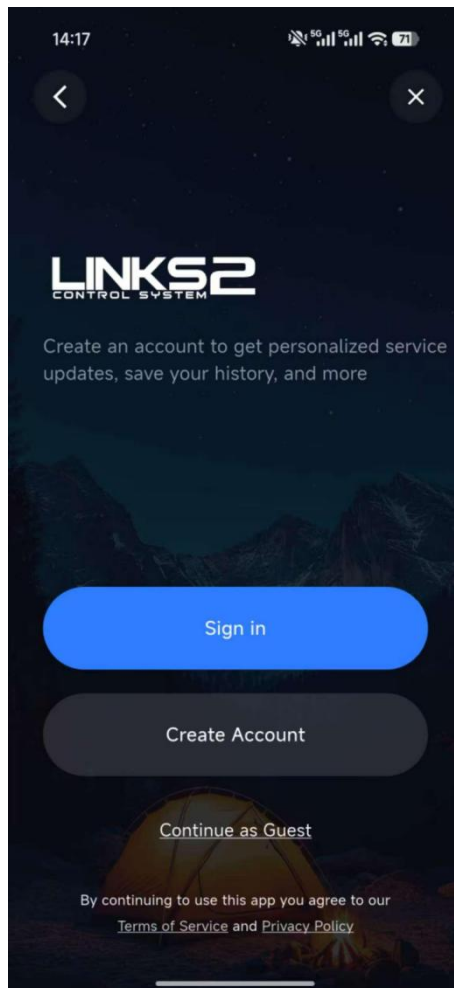


Figure 42:Continue As Guest -1

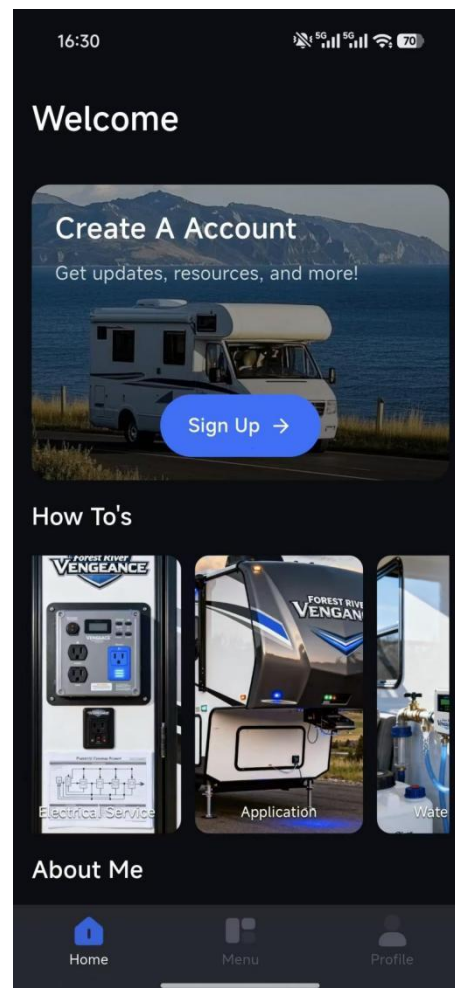


Figure 43:Continue As Guest -2

Continue as Guest: Tap Continue as Guest, you will enter welcome screen.

Sign Up: Tap you will go back to Sign in screen.

How To's: You can find some tips about pairing to RV and the introductions about the RV's components.

4.2 Connect To Control Screen

4.2.1 Pair Using Account

4.2.1.1 Bluetooth Scan

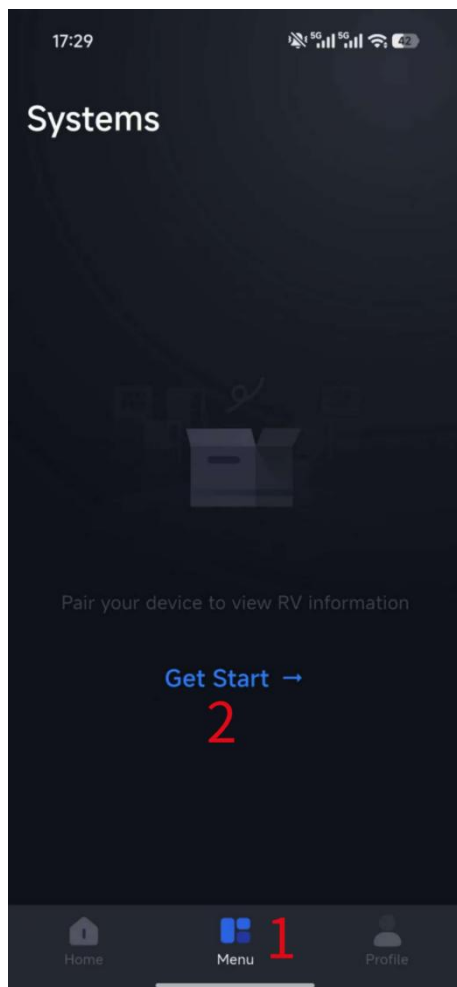


Figure 44: Get Start Screen

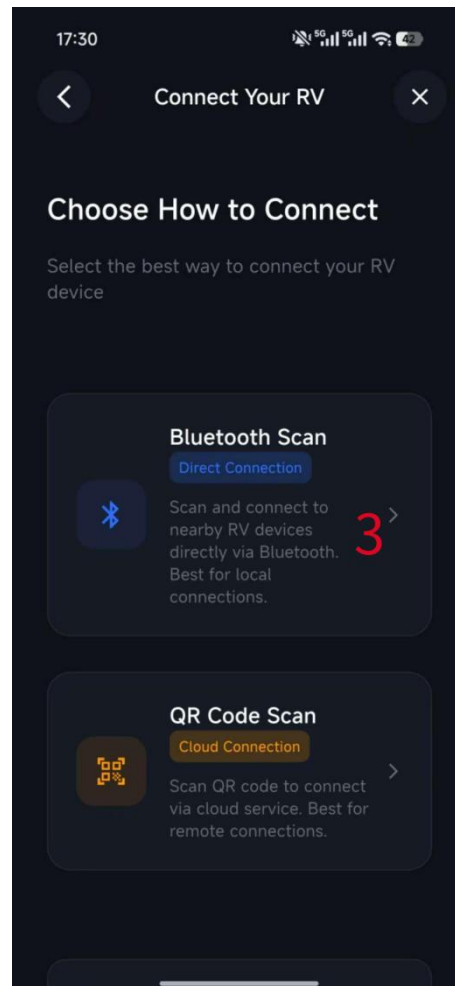


Figure 45: Connect Your RV

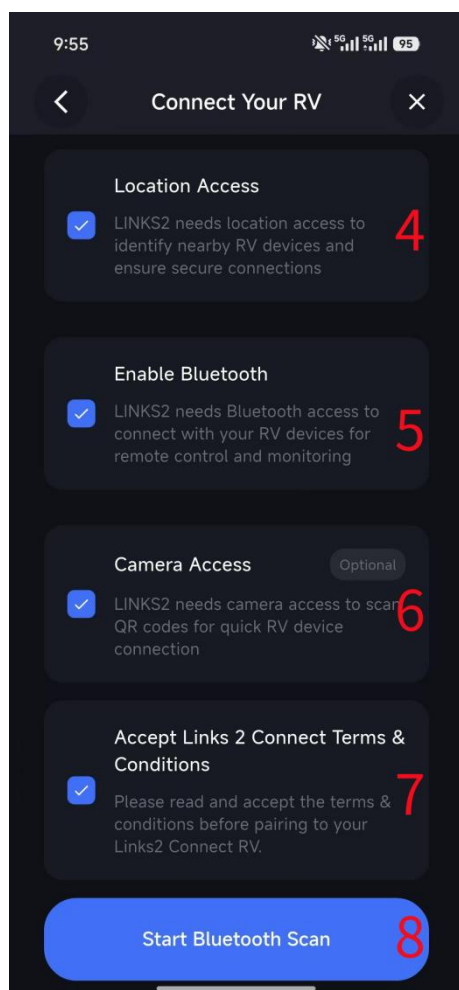


Figure 46:Authorize Permissions

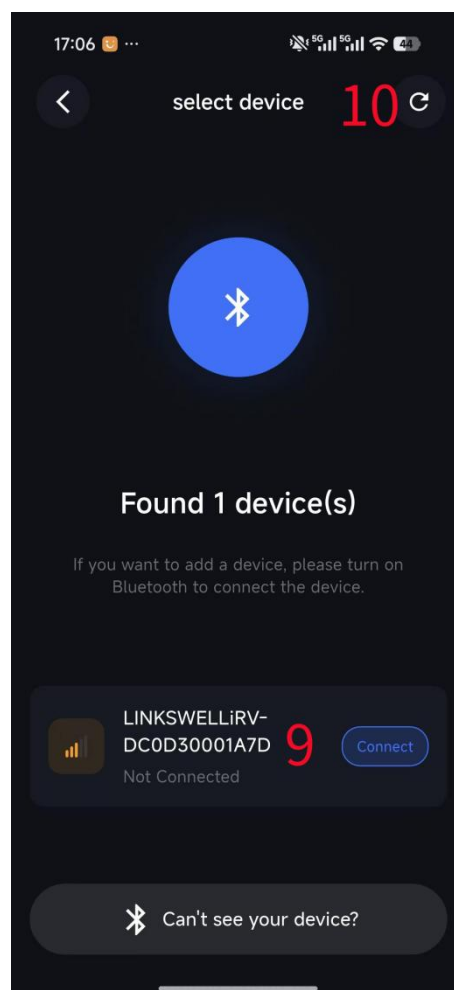


Figure 47:Select A Screen

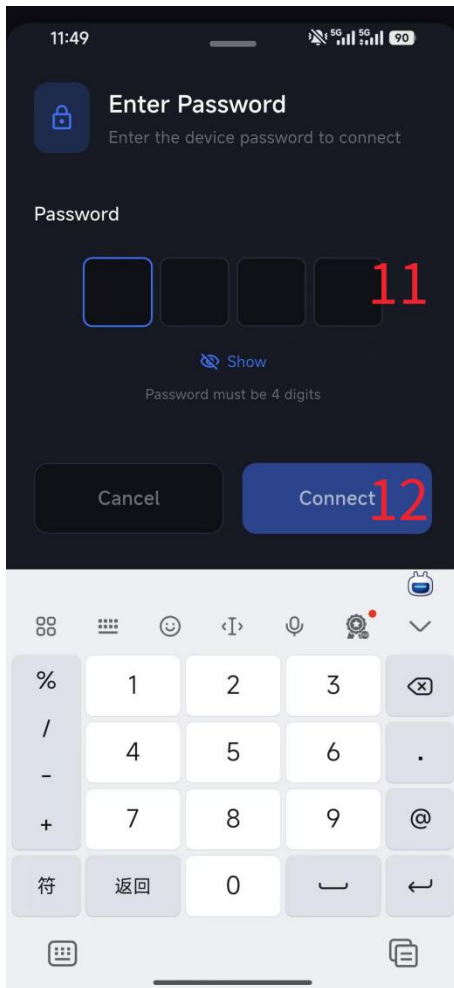


Figure 48: Enter Password

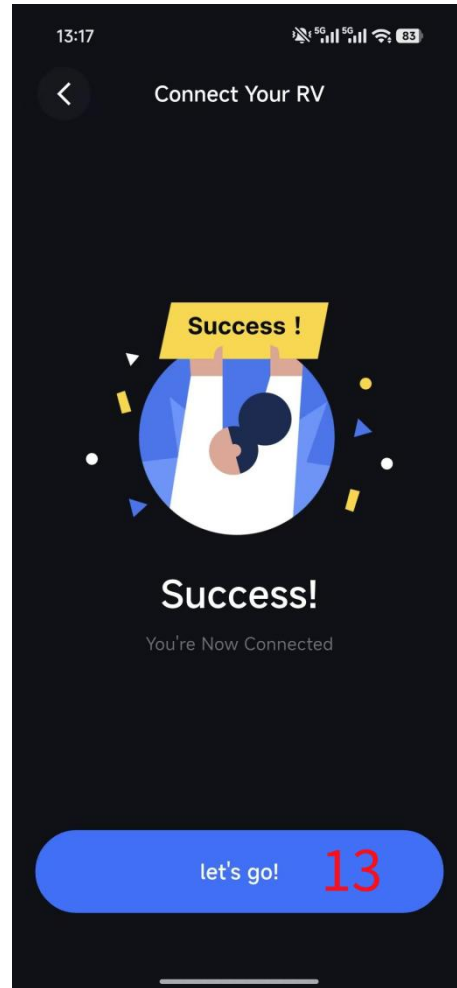


Figure 49: Successful Connection

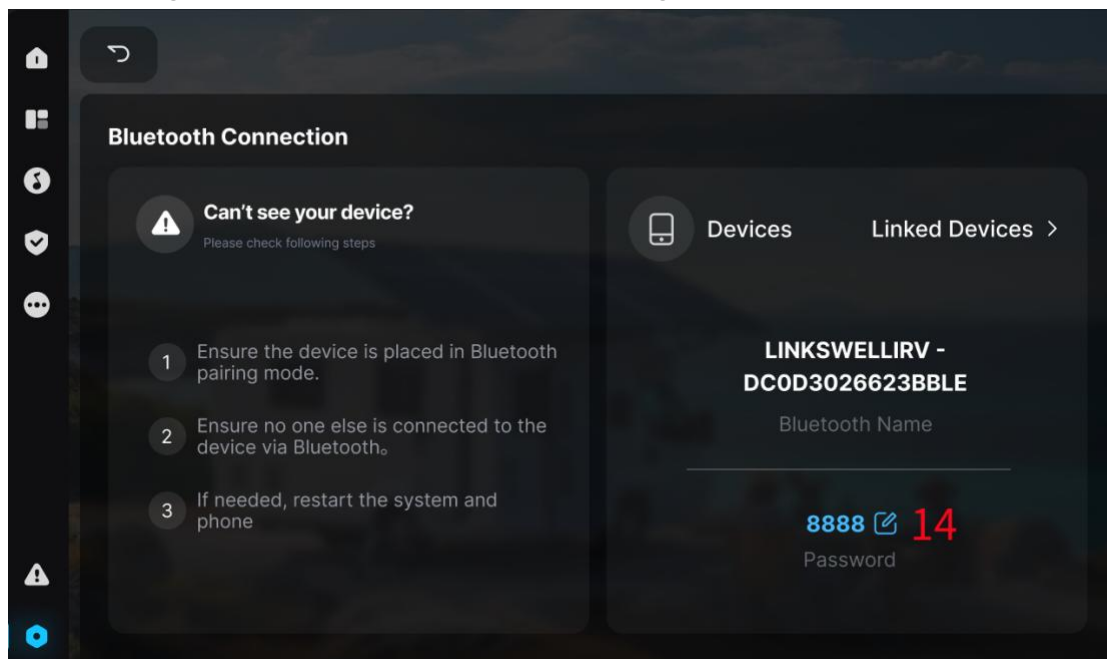


Figure 50: BLE Password In Control Screen

- 1:After signing in Links2 account,go to Menu.
- 2:Tap Get Start to go to Connect Your RV screen.
- 3:Tap Bluetooth Scan.
- 4-7:Check all the options to authorize permissions,make sure you have turned on Bluetooth on your phone.
- 8:Tap Start Bluetooth Scan to start to scan screens around you.
- 9:Tap Connect to connect control screen you would like to connect.Note:To identify the control screen you can find the name of the Bluetooth in Info of System setting in control screen.
- 10:If you can not find the screen in the device list,tap fresh button to refresh the list.
- 11:Enter PIN code of Bluetooth in control screen.
- 12:Tap Connect to connect to control screen,will go to Success screen if connect successfully.
- 13:Tap Let's Go to start monitoring and controlling your vehicle.
- 14:PIN code of Bluetooth in control screen.

4.2.1.2 QR Code Scan

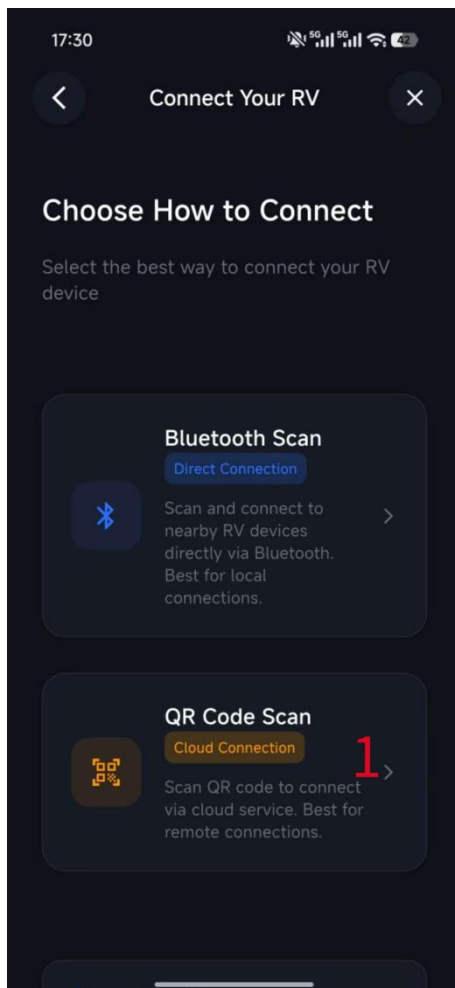


Figure 51: Connect Your RV

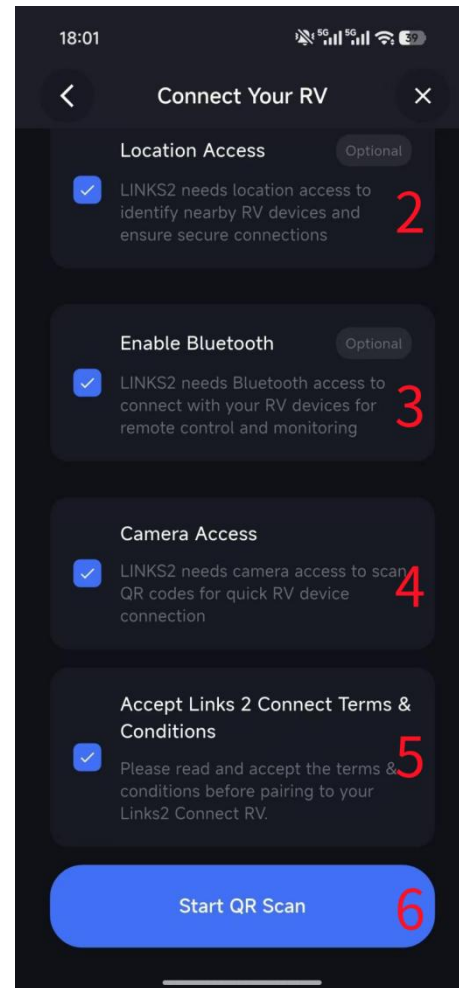


Figure 52: Authorize Permissions

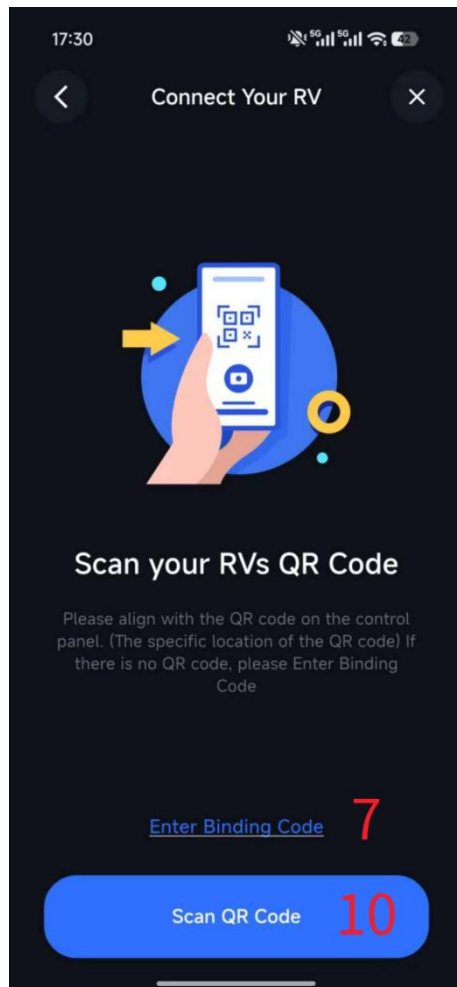


Figure 53:Scan Screen

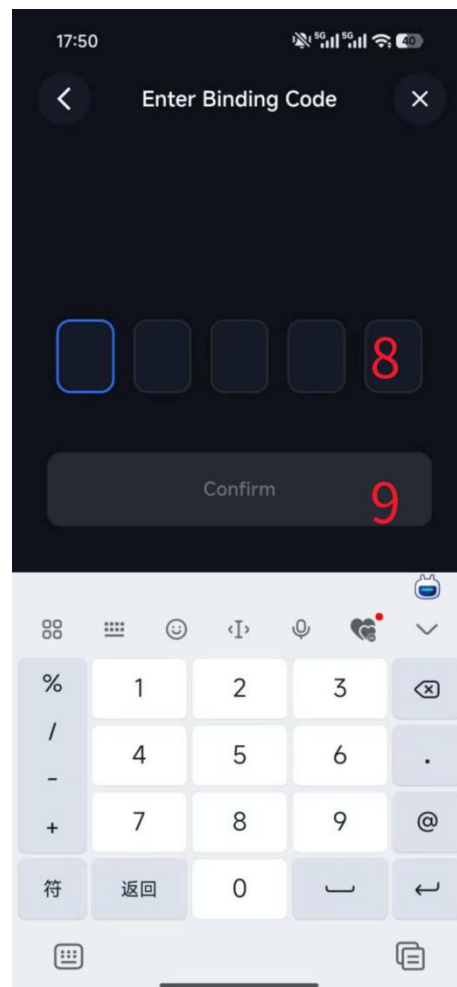


Figure 54:Enter PIN Code

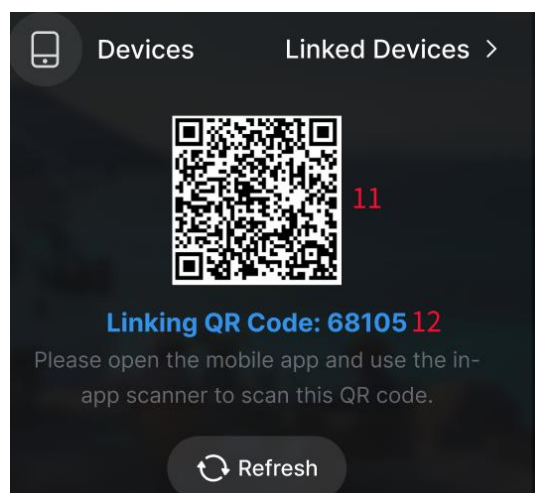
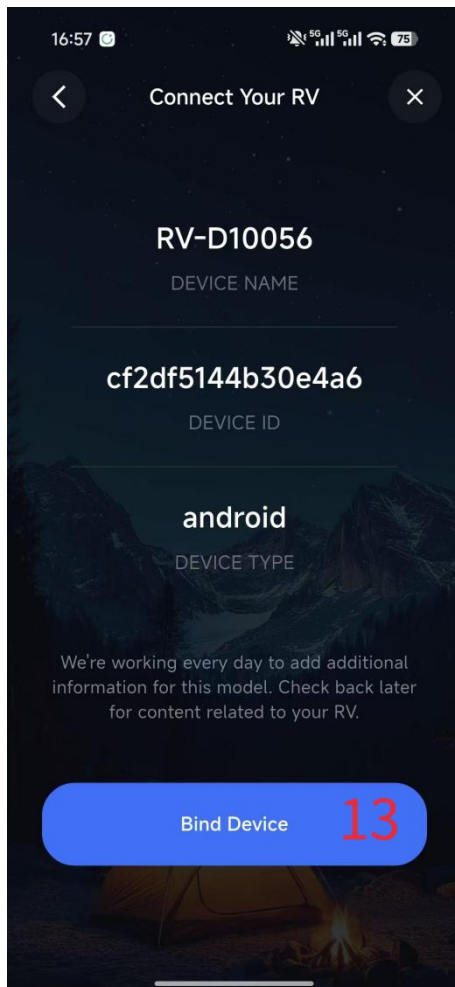
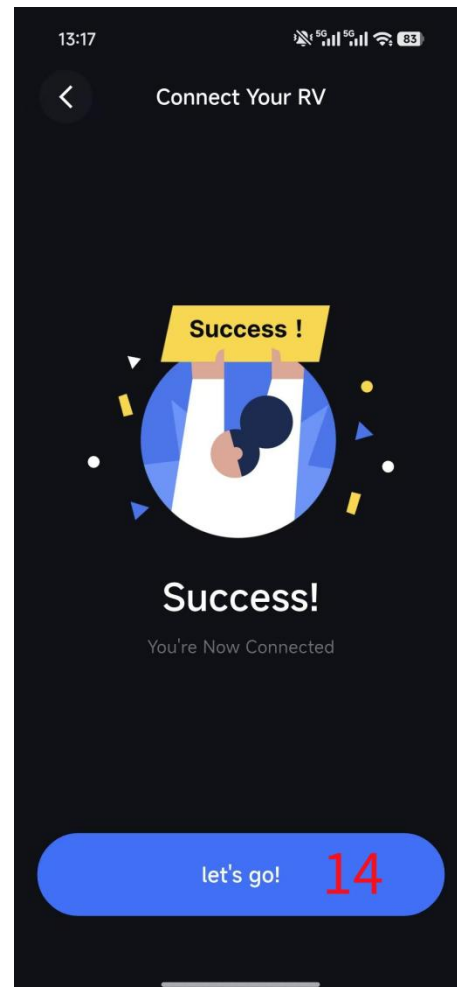


Figure 55:QR Code In Control Screen

**Figure 56:Bind Device****Figure 57:Successful Connection**

- 1:Tap QR Code Scan.
- 2-5:Check all the options to authorize permissions,make sure you have turned on Bluetooth on your phone.
- 6:Tap Start QR Scan.There are 2 ways to connect to control screen,Enter Binding Code and Scan QR Code,choose one of them to connect to control screen.
- 7:Tap Enter Binding Code,you need to enter PIN code in Share Link in control screen.
- 8:Enter PIN code.
- 9:Tap Confirm to connect the screen.
- 10:Tap Scan QR Code you can scan the the QR code in Share Link to connect to control screen.
- 11:QR Code in Share Link.
- 12:PIN code in Share Link.
- 13:No matter you use Scan QR Code or Enter Binding Code,we will go to Bind Device screen,tap Bind Device to finish the connection.

14: Tap Let's Go to start monitoring and controlling your vehicle.

4.2.2 Pair Using Bluetooth

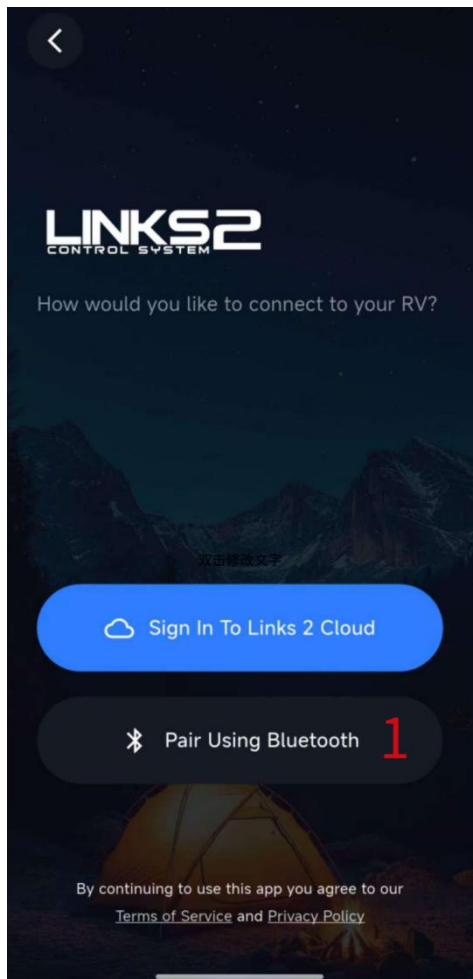


Figure 58: Sign In Screen

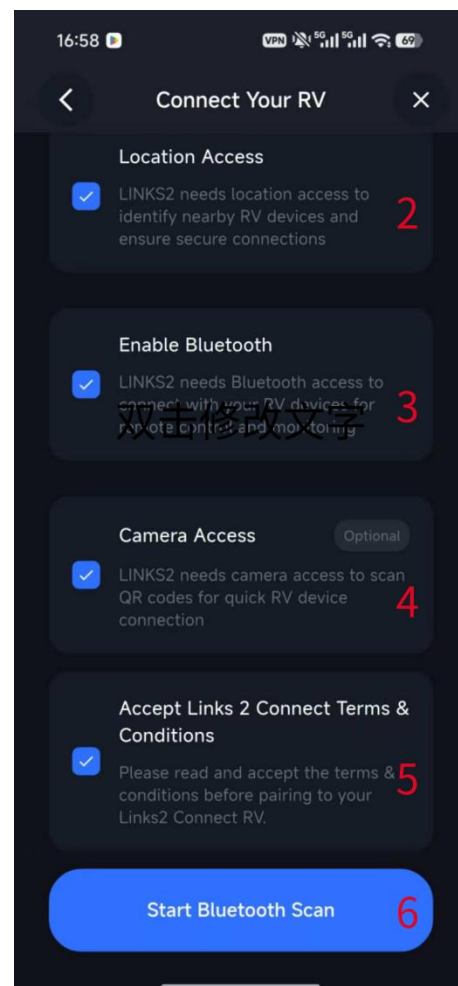


Figure 59: Authorize Permissions

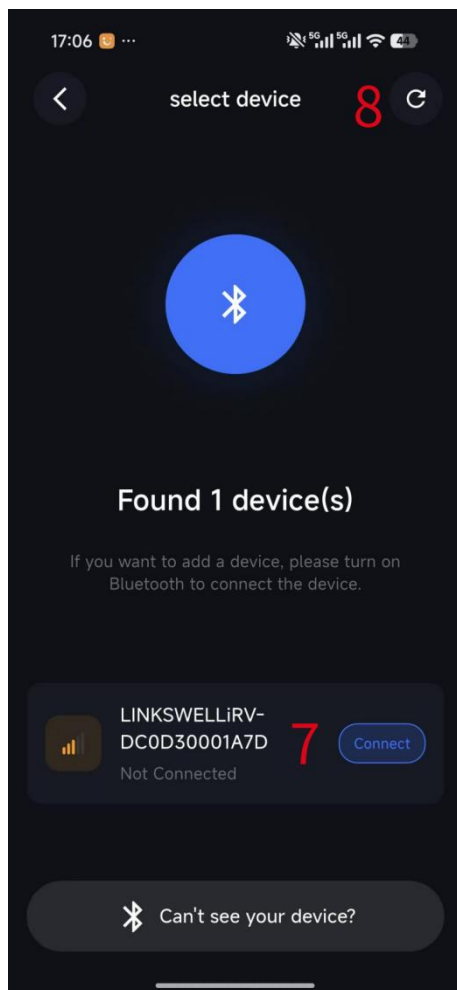


Figure 60:Device List

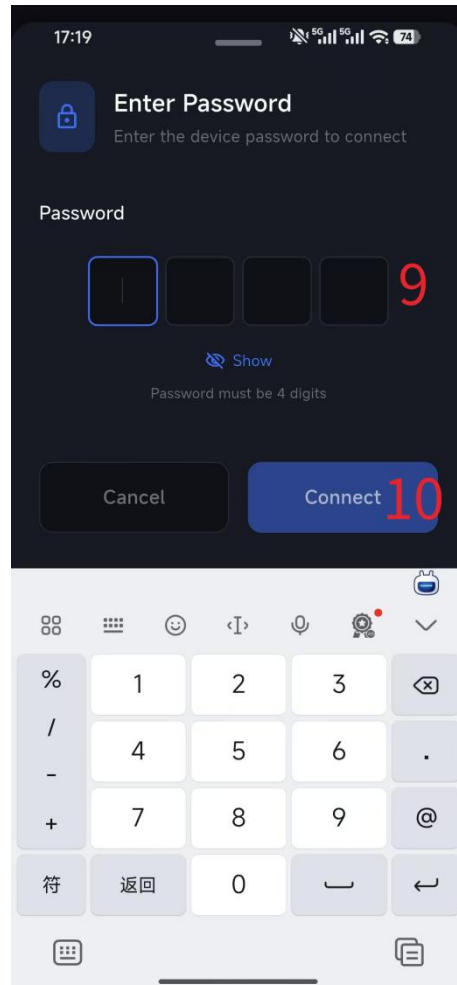


Figure 61:Enter PIN Code

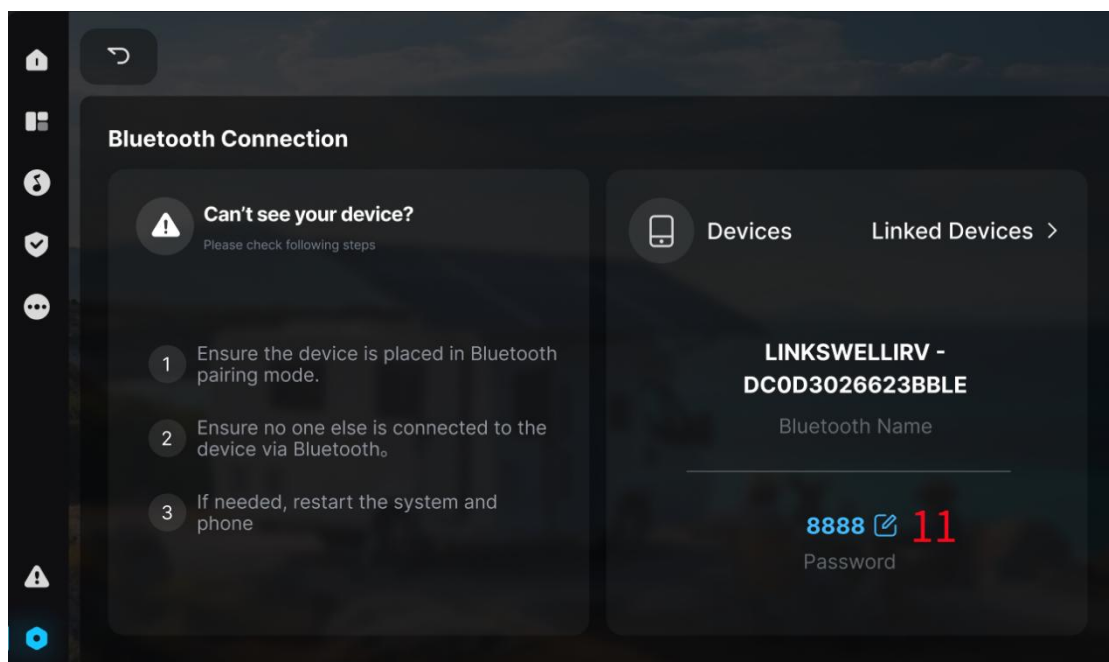


Figure 62:BLE Password IN Control Screen

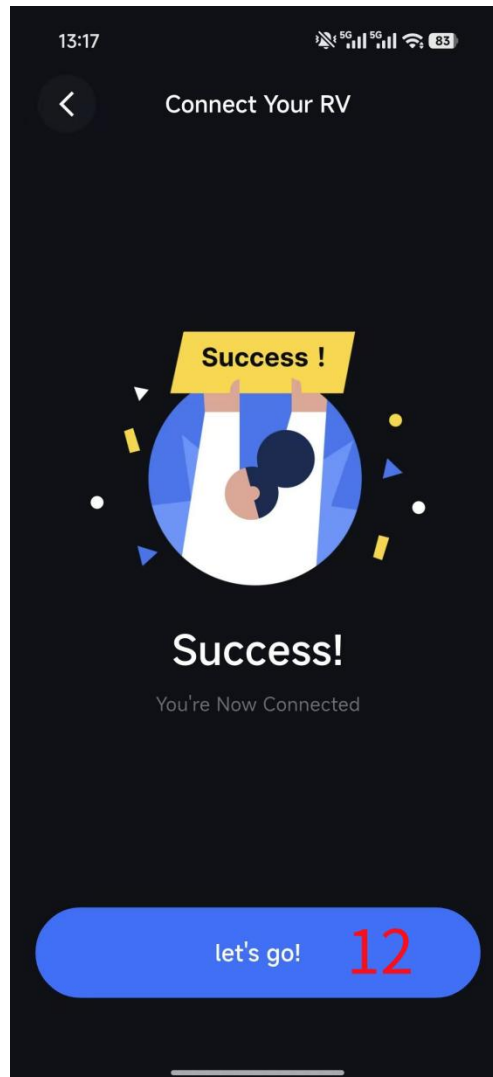


Figure 63:Successful Connection

- 1:Tap to start pairing the Bluetooth of control screen.
- 2-5:Check all the options,turn on Bluetooth in phone,allow to access the permission of the phone.
- 6:Tap to scan and search the control screen.
- 7:Tap Connect to connect a control screen you would like to connect.
- 8:Tap fresh button to refresh device list if the device is not found.
- 9:Enter PIN Code in control screen.
- 10:Tap Connect to finish the connection.
- 11:PIN Code in control screen.
- 12:Tap Let's Go to start monitoring and controlling your vehicle.

4.3 Home

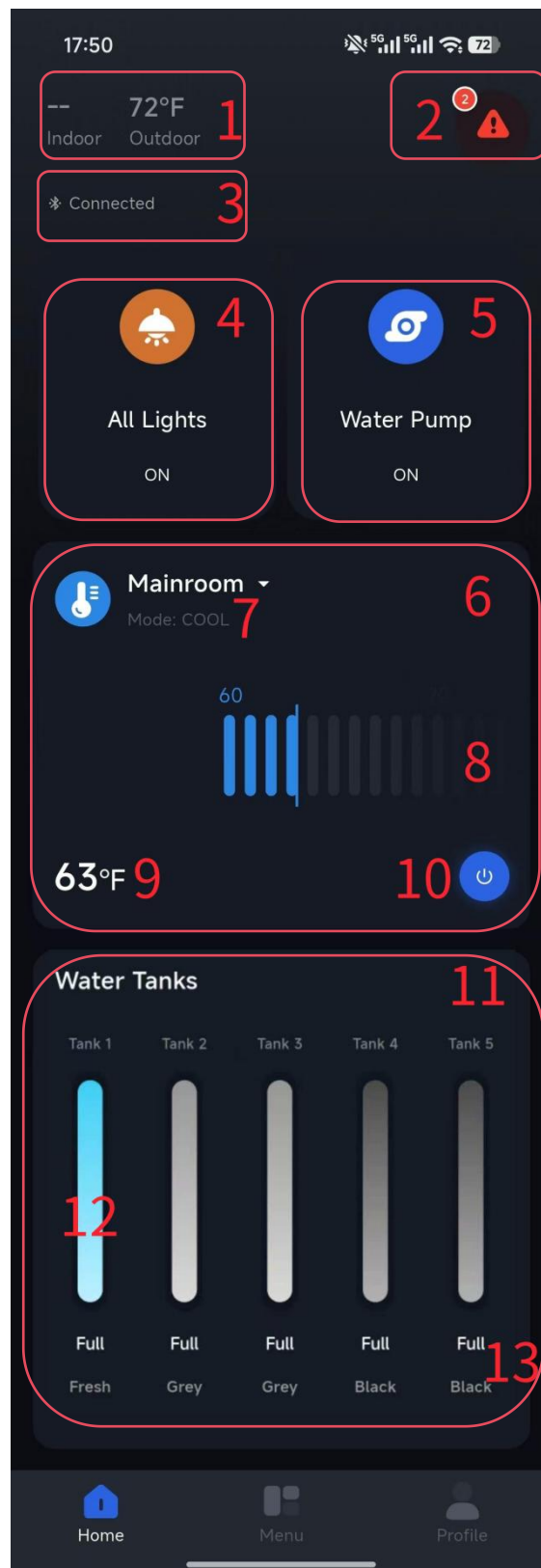


Figure 64: Home Screen

- 1: Display of Indoor and Outdoor temperature.
- 2: Alarm info, display the number of alarm info, you can tap alarm icon to enter detail screen.
- 3: Display the status that your phone connects to control screen or not.
- 4: A quick switch to turn on/off all lights.
- 5: A quick switch to turn on/off water pump.
- 6: This section is for the quick switch of air con and the shortcut entry of Climate. Tap the blank area in the section, you can enter Climate interface.
- 7: Location that the air con locates in, you can select Mainroom or Bedroom to control the corresponding air con. Here also displays the current mode of the air con.
- 8: The slider for adjusting setting temperature, you can drag the slider to set the setting temperature.
- 9: The value of setting temperature.
- 10: A quick switch to turn on/off air con.
- 11: This section is for monitoring water tanks, including tank's capacity and tank type. Tap the blank area in the section, you can enter Water interface.
- 12: A bar graph that simulates the tank capacity, allowing you to visually see the real-time tank level.
- 13: The capacity and type corresponding to each tank.

4.4 Menu

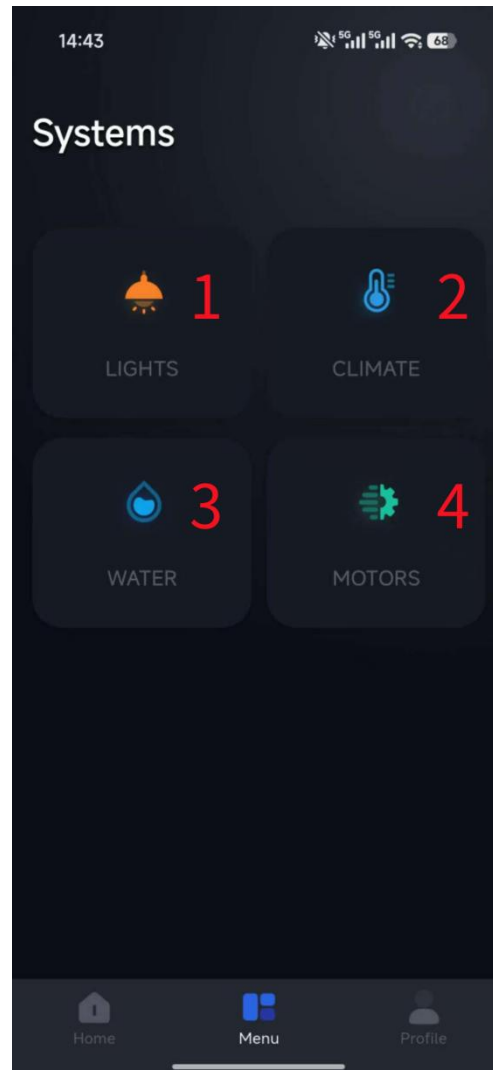


Figure 65: Menu Screen

- 1: The entry to control all lights of your vehicle.
- 2: The entry to control HVAC in your vehicle.
- 3: The entry to monitor or control devices related to water system.
- 4: The entry to control the motors in your vehicle.

4.4.1 Lights

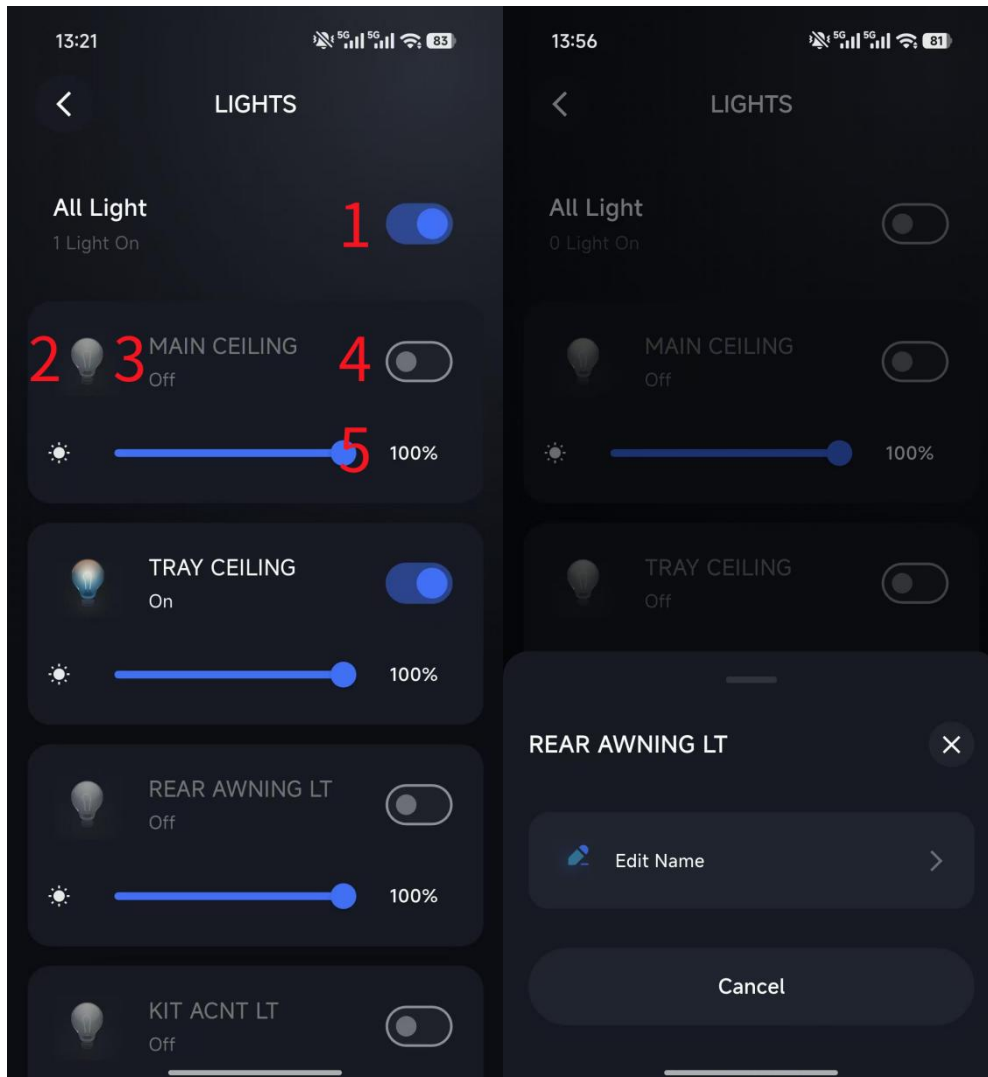


Figure 66: Lights Screen

Figure 67: Edit Name

1: Quick switch to turn on/off all lights. The button will turn to On even if you only turn on 1 light. There are 16 dimmable lights totally.

2: Light icon, it will be gray when the light is off, the color will change once it is on.

3: The name or the location of lights, along with the status of lights (On / Off). You can edit the name by long pressing the section.

4: Quick switch to turn on/off certain light, each light has a corresponding quick switch.

5: Slider for adjusting the brightness of light, each light has a corresponding slider.

4.4.2 Climate

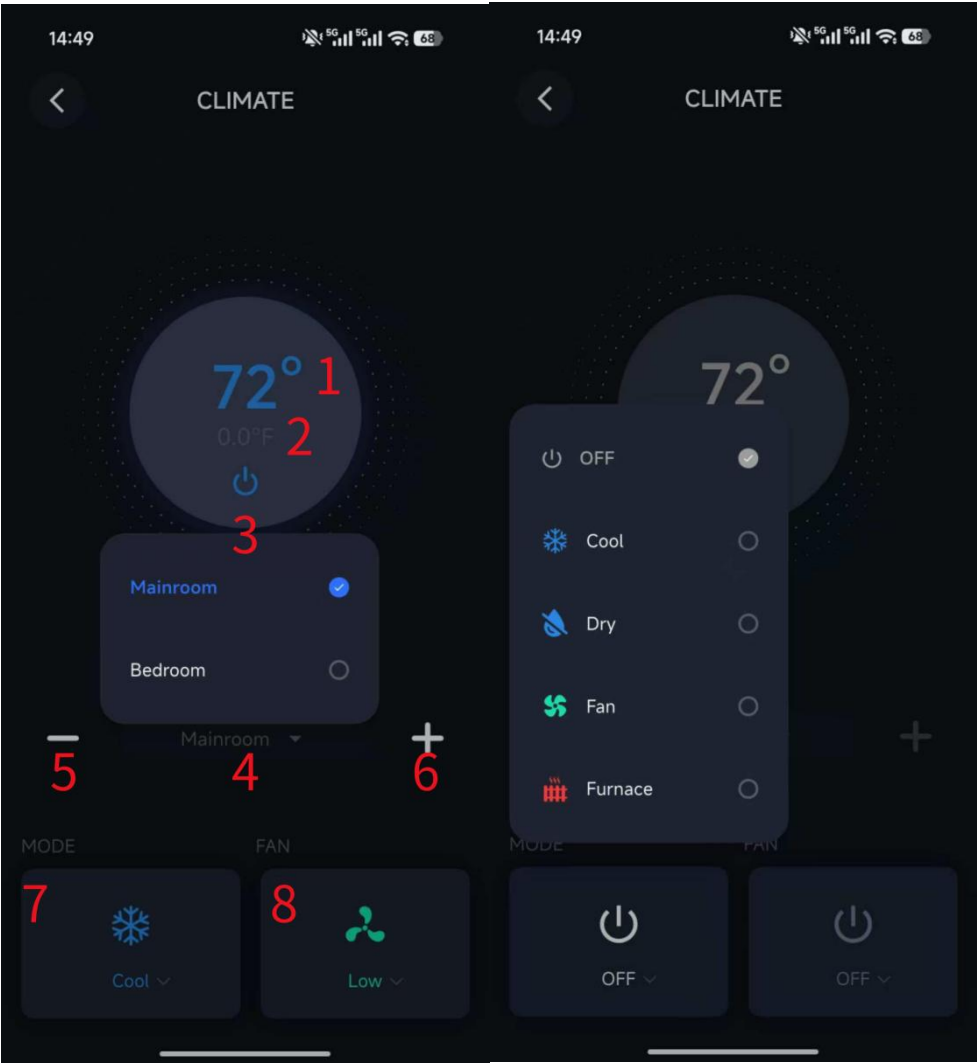


Figure 68:Climate Screen

Figure 69:Mainroom-Mode

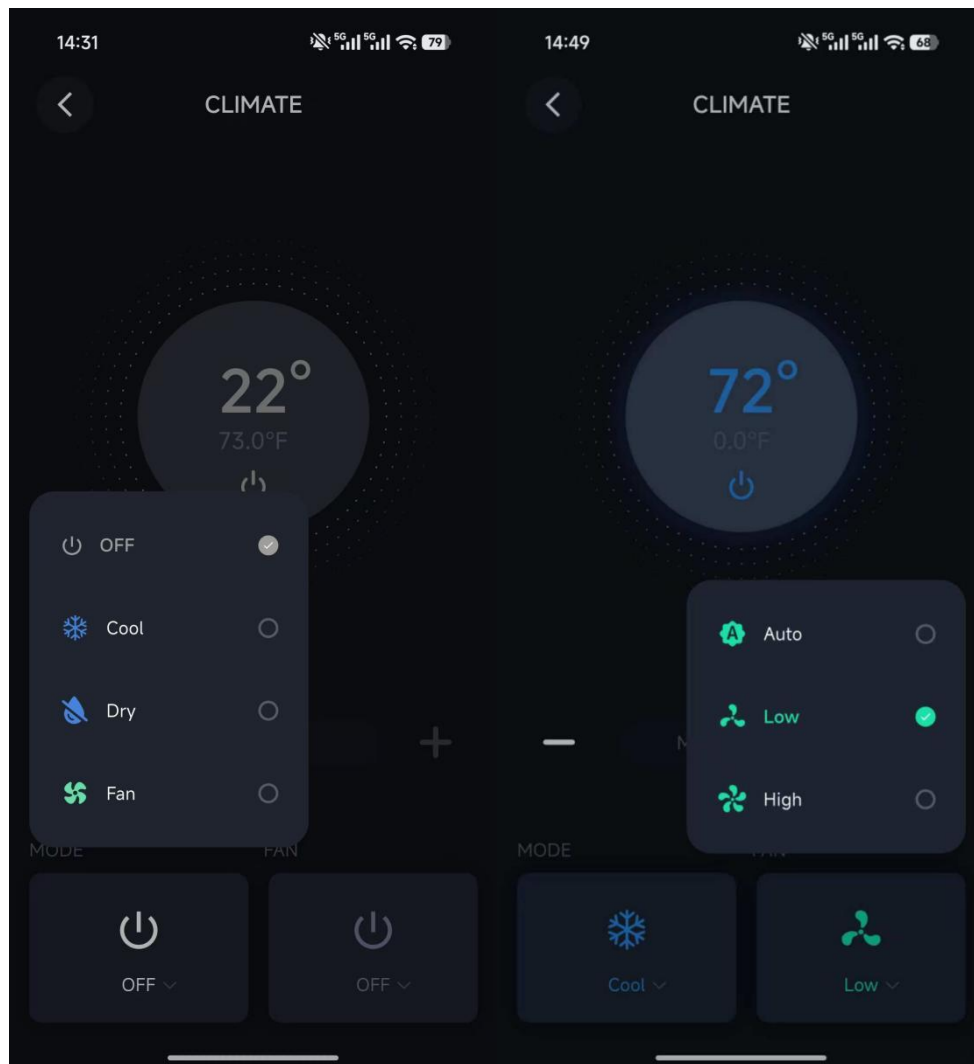


Figure 70:Bedroom-Mode

Figure 71:Fan Speed

- 1:Current temperature.
- 2:Setting temperature.
- 3:Switch to turn on air con.
- 4:Location that the air con locates in,you can select Mainroom or Bedroom to control the corresponding air con.
- 5:Minus button,tap to decrease the value of Setting temperature.
- 6:Plus button,tap to increase the value of Setting temperature.
- 7:Tap to choose the mode of air con.For air con in Mainroom,it has 4 modes:Cool,Dry,Fan and Furnace(Figure 69);for Bed room,it only has 3 modes:cool,dry and fan(Figure 70).
- 8:Fan Speed,it has 3 options:Auto,Low and High(Figure 71).

4.4.3 Water

4.4.3.1 Water Screen



Figure 72:Water Screen

- 1:Bar graph of tank capacity.It displays different color with different type of tank.
- 2:Tank Setting button.Tap to enter Tank Setting screen.
- 3:Display of tank's level,including high,medium and low level.
- 4:Tank 1-5,total 5 tanks,you can check all the details of tank x in this section.

- 5: Tank Type, Fresh, Gray or Black.
- 6: Current capacity status of tank.
- 7: Current capacity value/Total capacity value.
- 8: Device name, along with the status of the device.
- 9: A switch to turn on/off the corresponding device.
- 10: Device name, along with the status of the device.
- 11: A switch to turn on/off the corresponding device.

4.4.3.2 Tank Setting

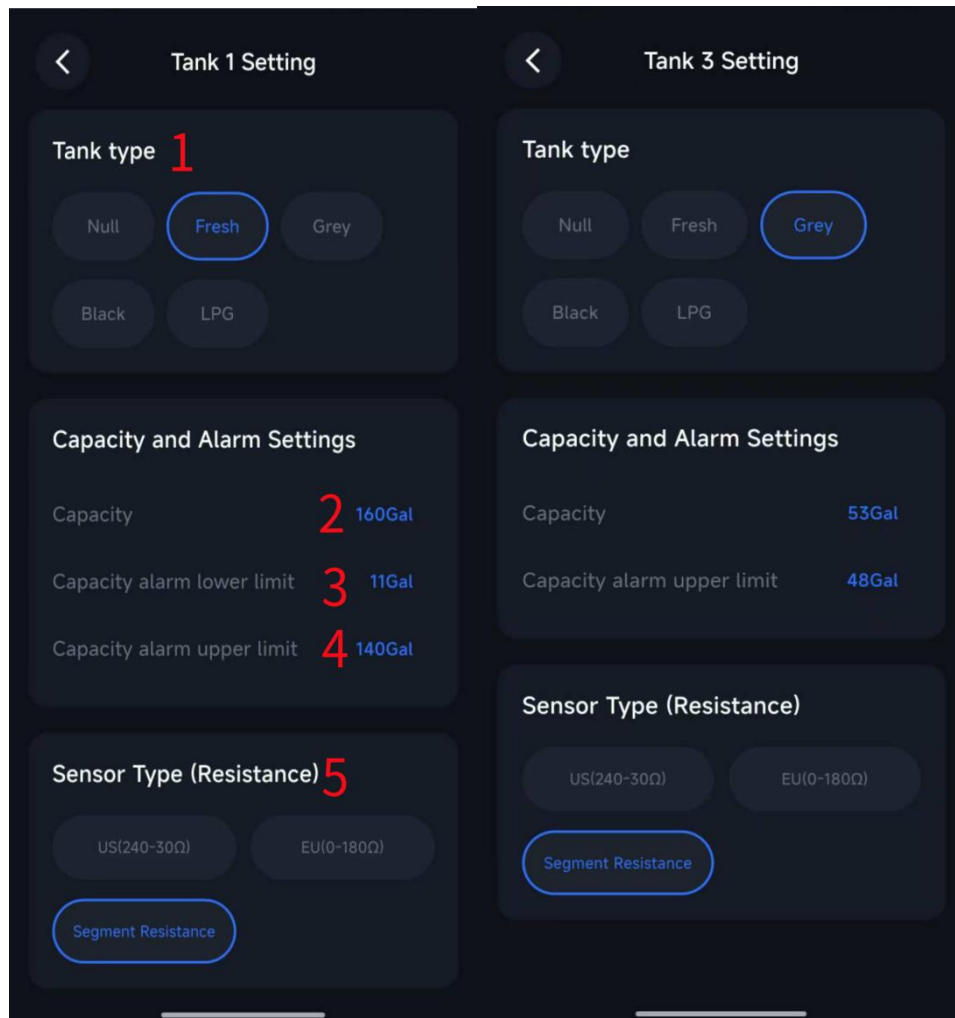


Figure 73: Tank Setting-Fresh

Figure 74: Tank Setting-Grey

- 1: Tank type selection. There are 5 types: Null, Fresh, Grey, Black and LPG. Null means you do not use this tank.
- 2: Set the total capacity of tank, the default setting of fresh tank is 160 Gal, grey tank and black tank are 53 Gal.
- 3: Capacity alarm setting, this is for setting the minimum alarm value, only fresh and LPG tank have this setting, the default value is 11 Gal; grey tank and black tank do not have this setting.
- 4: Capacity alarm setting, this is for setting the maximum alarm value, the default setting for fresh tank is 140 Gal, for grey and black tank is 48 Gal.
- 5: Tank sensor type selection. Only support resistance sensor now, including US(240-30 Ω), EU(0-180 Ω) and Segment Resistance.

4.4.4 Motors

4.4.4.1 Motor PIN Code Setting

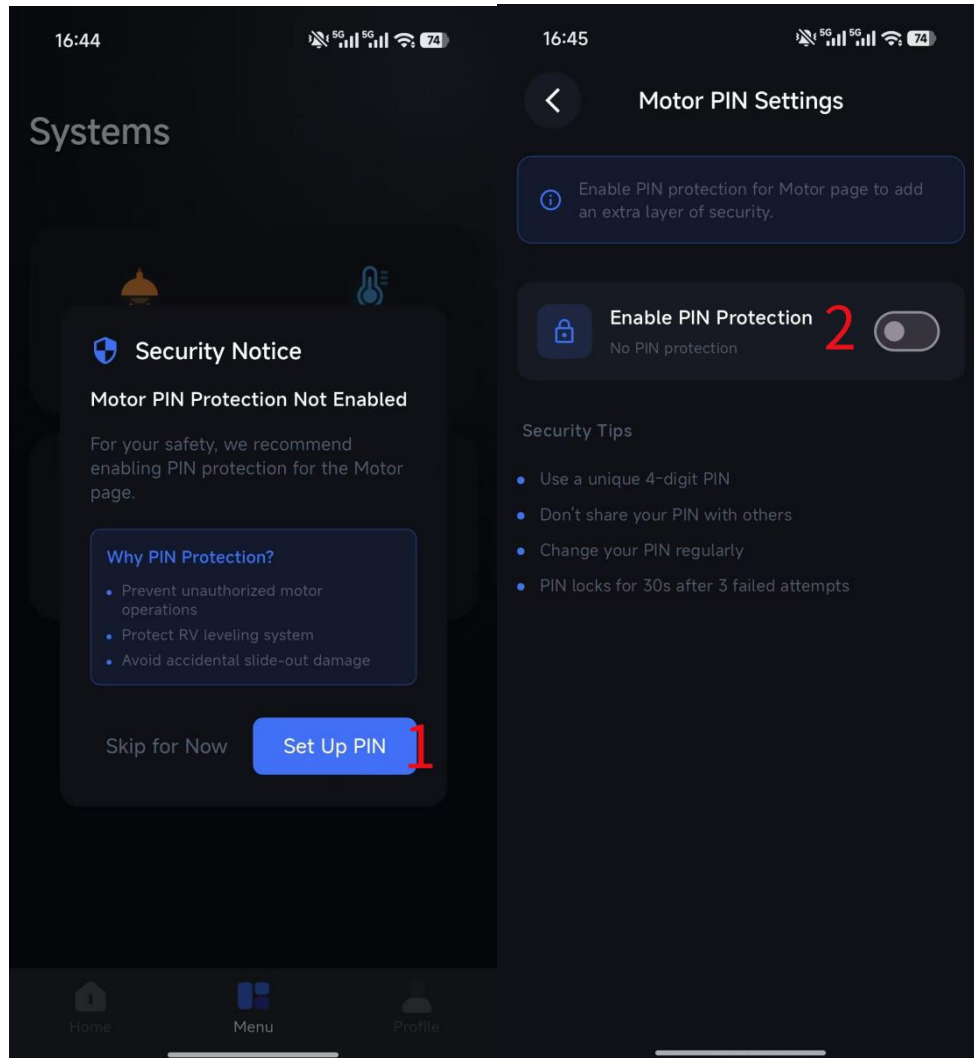


Figure 75:PIN Protection

Figure 76:Motor PIN Setting

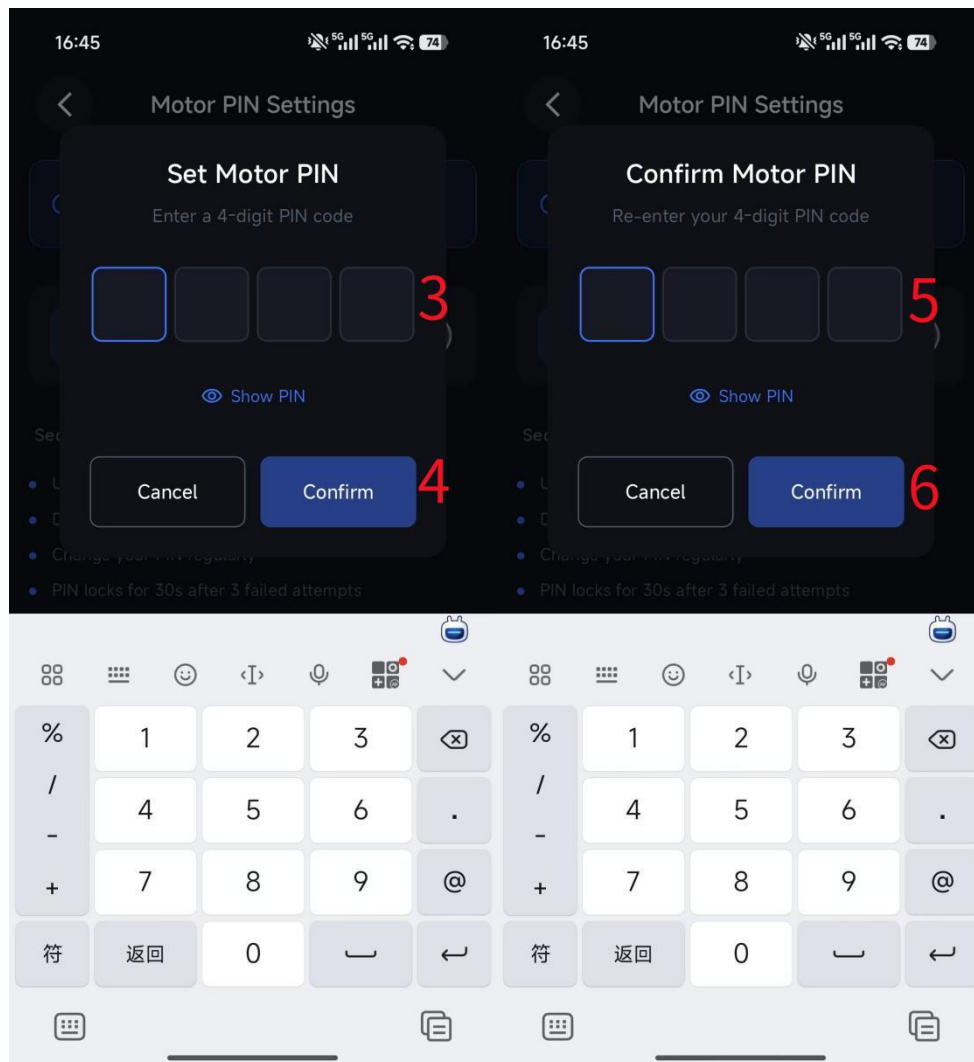


Figure 77:PIN Code Setting

Figure 78:Confirm PIN Code

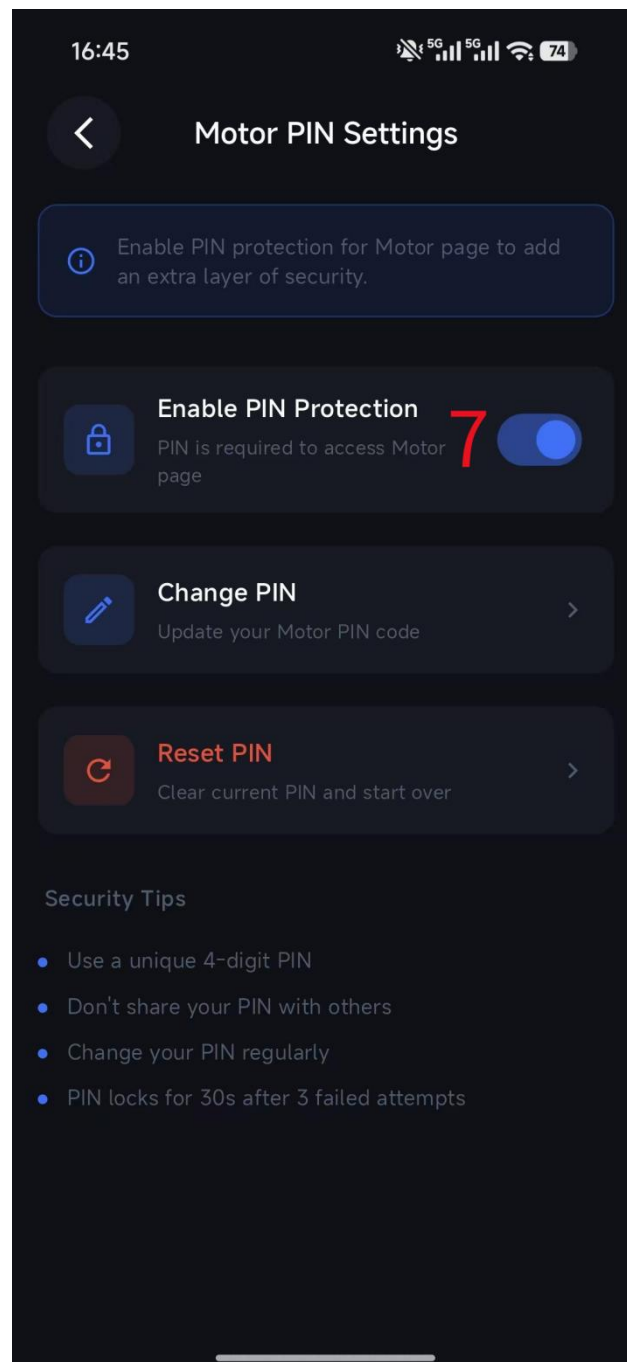


Figure 79:PIN Protection Enable

1:At the first you enter Motors screen,a notice will pop up,you can tap Set Up PIN to set the PIN Code or you can tap Skip For Now to skip it.It is suggested to set a PIN Code for your safety.

2:Tap the button to enable the PIN protection.

3-4:Enter 4-digit PIN code and tap Confirm to move to next step.

5-6:Repeat to Enter PIN code to confirm your PIN code,tap Confirm.

7:The button is turned on,that means the protection PIN code is set successfully.

4.4.4.2 Change PIN

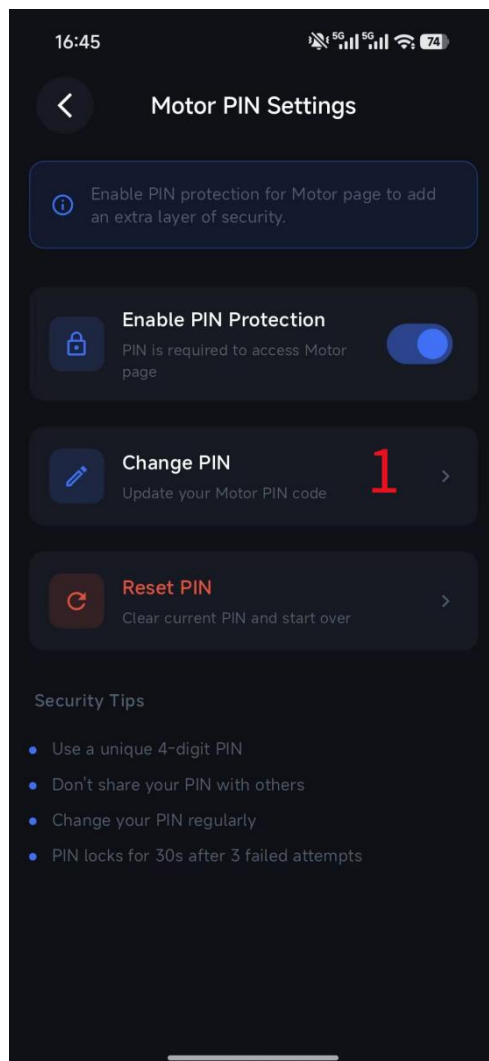


Figure 80:Change PIN

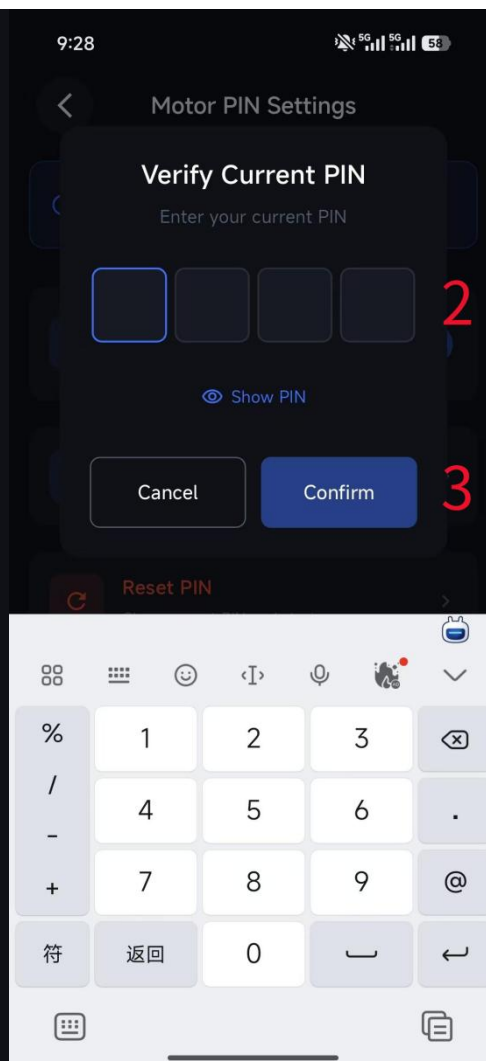


Figure 81:Verify Current PIN

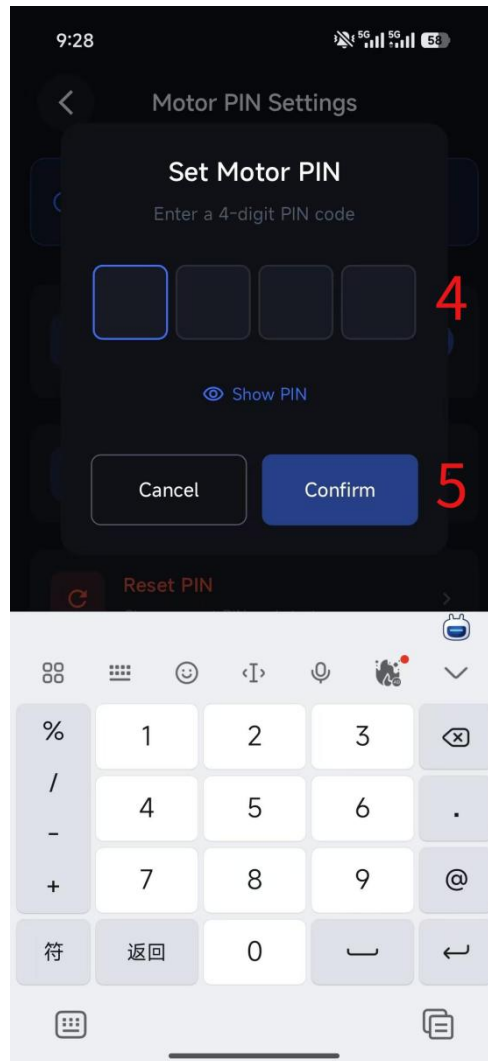


Figure 82: Enter New PIN

- 1: Tap Change PIN.
- 2-3: Enter your current PIN code and tap Confirm.
- 4-5: Enter new PIN code and tap confirm to change the PIN code.

4.4.4.3 Reset PIN

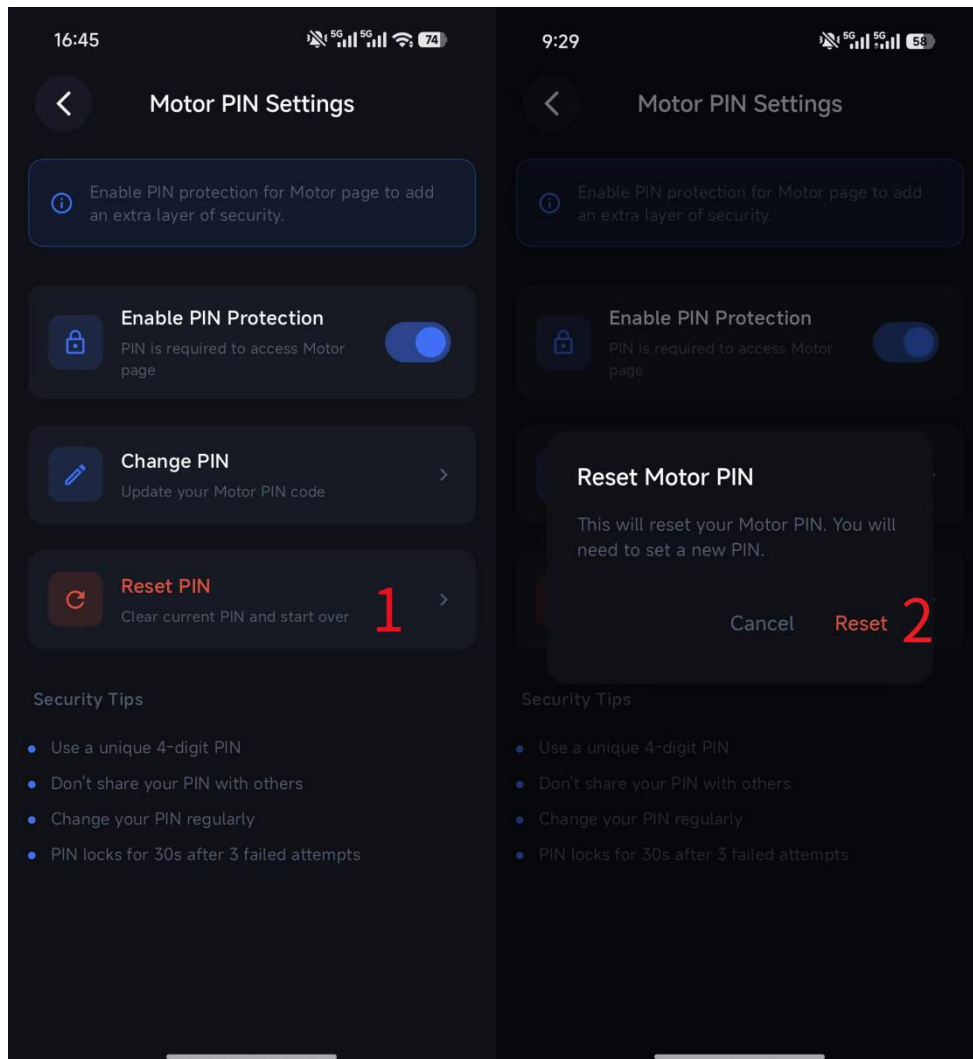


Figure 83:Reset PIN-1

Figure 84:Reset PIN-2

1-2:Tap Reset PIN,then tap Reset to confirm to reset PIN code,the PIN code will be cleared and the PIN protection will be disabled.Need to follow the steps in 4.4.4.1 to set a new PIN code and enable PIN protection.

4.4.4.4 Motors Screen

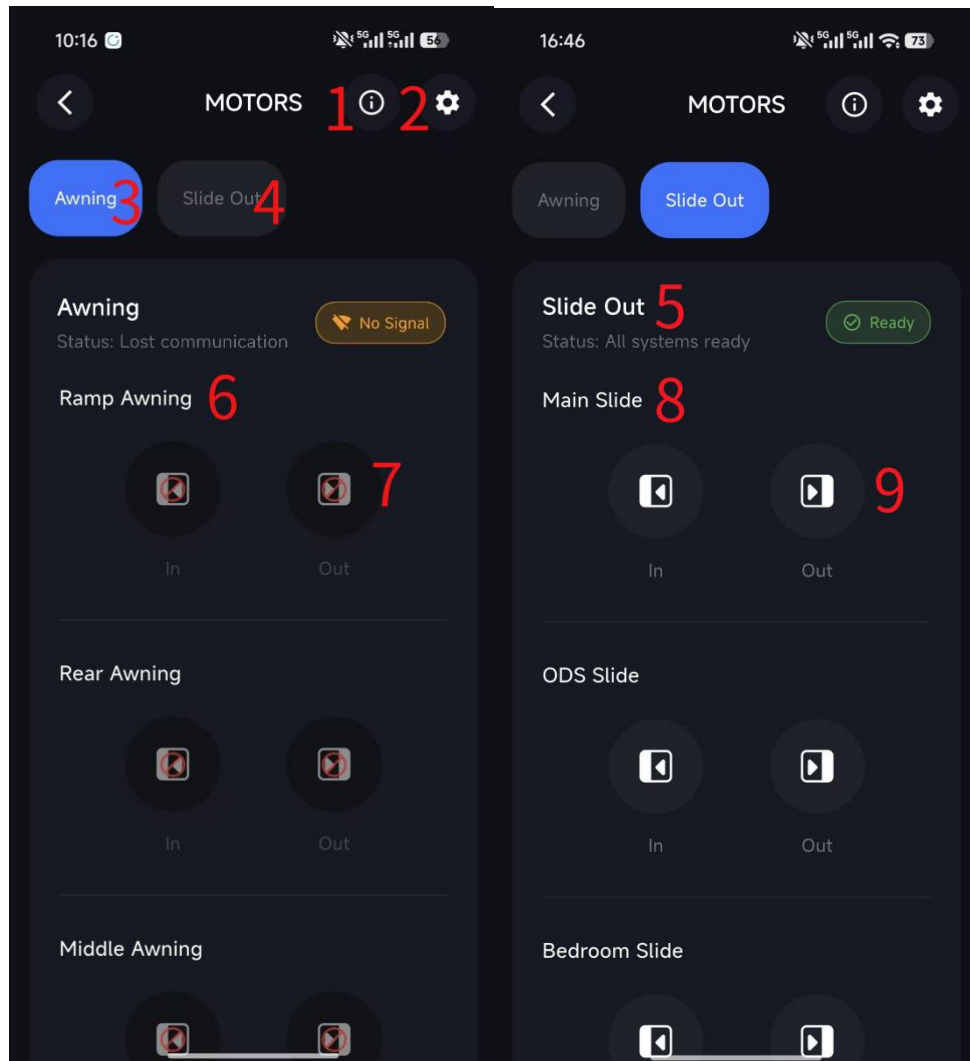


Figure 85:Awning

Figure 86:Slide Out

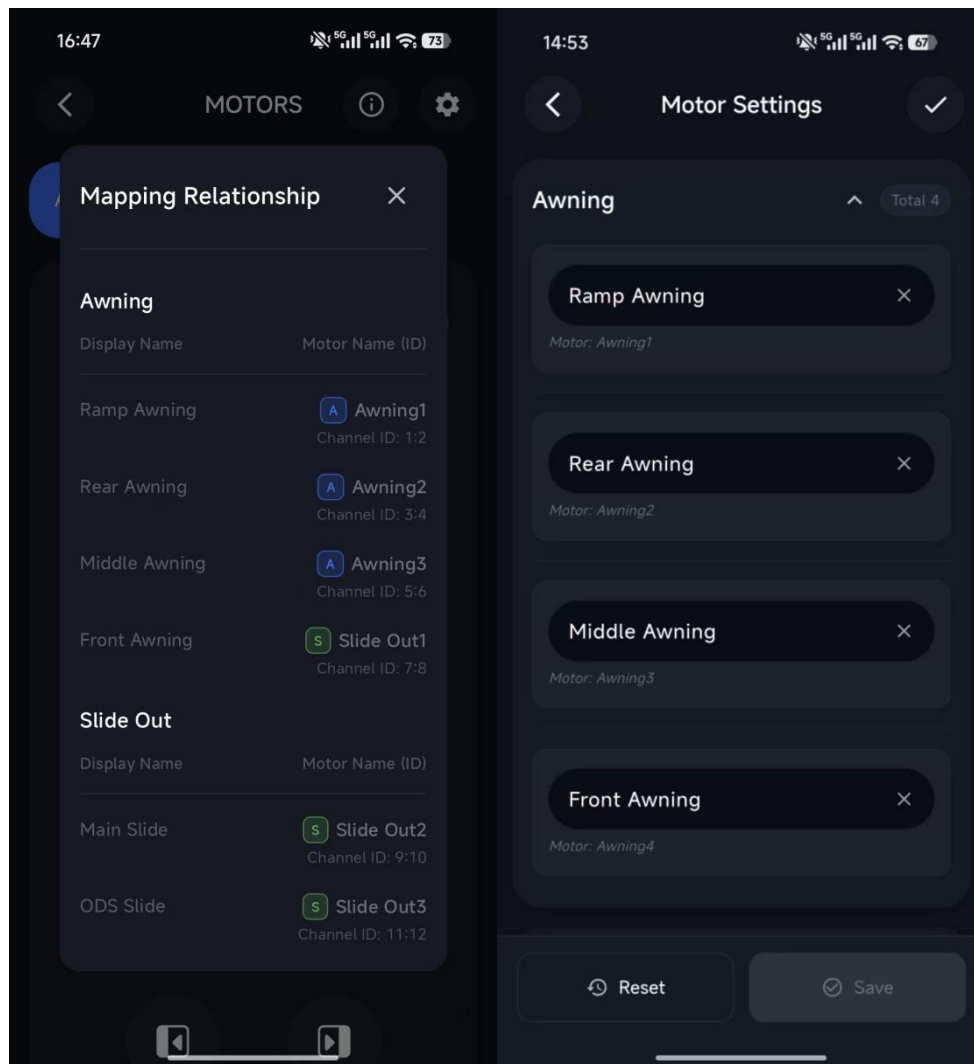


Figure 87: Mapping Relationship

Figure 88: Edit Motor's Name

1:Map Relationship(Figure 87).Tap the icon you can enter Map Relationship screen.This shows you that each motor connects to corresponding channel of control panel.

2:Motor Setting(Figure 88).Can edit the name of each motor in this screen.

3-4:Awning button and Slide Out button,tap to enter corresponding screen to control.

5:Status of motors.when it displays Ready,you are free to control the motors;if it displays No Signal,the control is lost.

6:The name of awning,total 4 awnings you can control.

7:Button to control Awning.When it turn to gray and the prohibited icon shows,you will lose the control. Tap In button,the motor will retract,tap Out button,the motor will extend.

8:The name of slide out,total 3 slide outs you can control.

9:Button to control Slide Out,this is normal and you can control them.

4.5 Profile

4.5.1 Setting

4.5.1.1 Login Activity

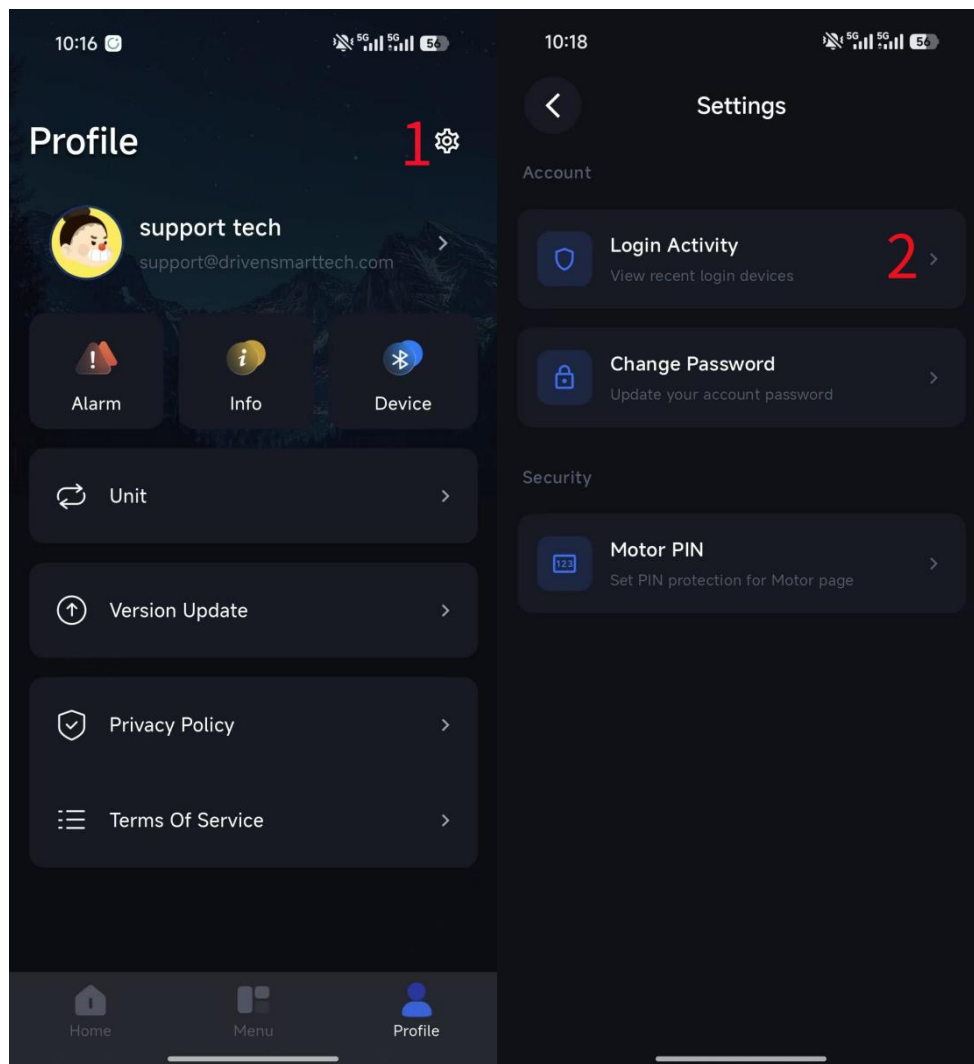


Figure 89:Profile Screen

Figure 90:Setting

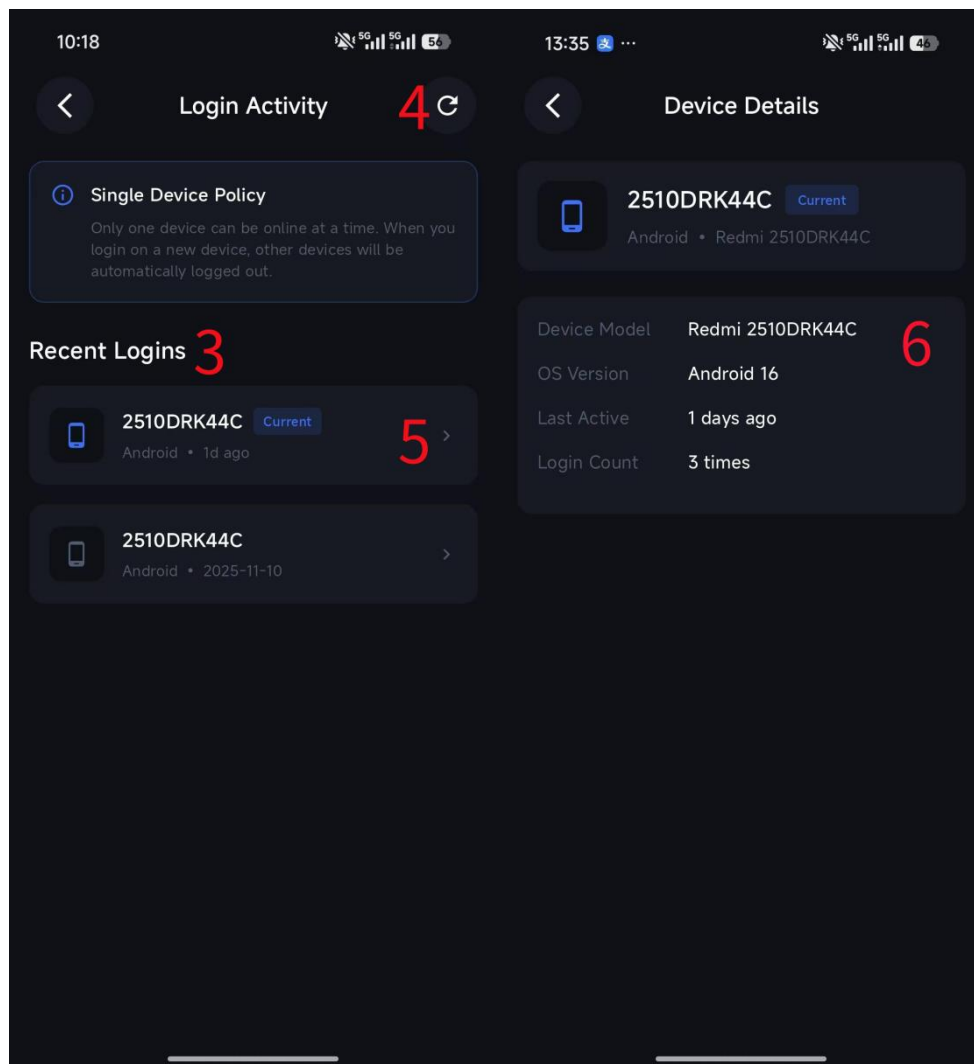


Figure 91:Login Activity

Figure 92:Devices Details

- 1:Tap Setting icon to enter Setting screen.
- 2:Tap Login Activity.
- 3:Check in Recent Logins,you can find the your phone's login history.
- 4:Refresh button.Tap the button to refresh the history.
- 5:Tap you can enter devices details.
- 6:Detail info is including Device Model,OS Version,Last Active time and Login Count.

4.5.1.2 Change Password

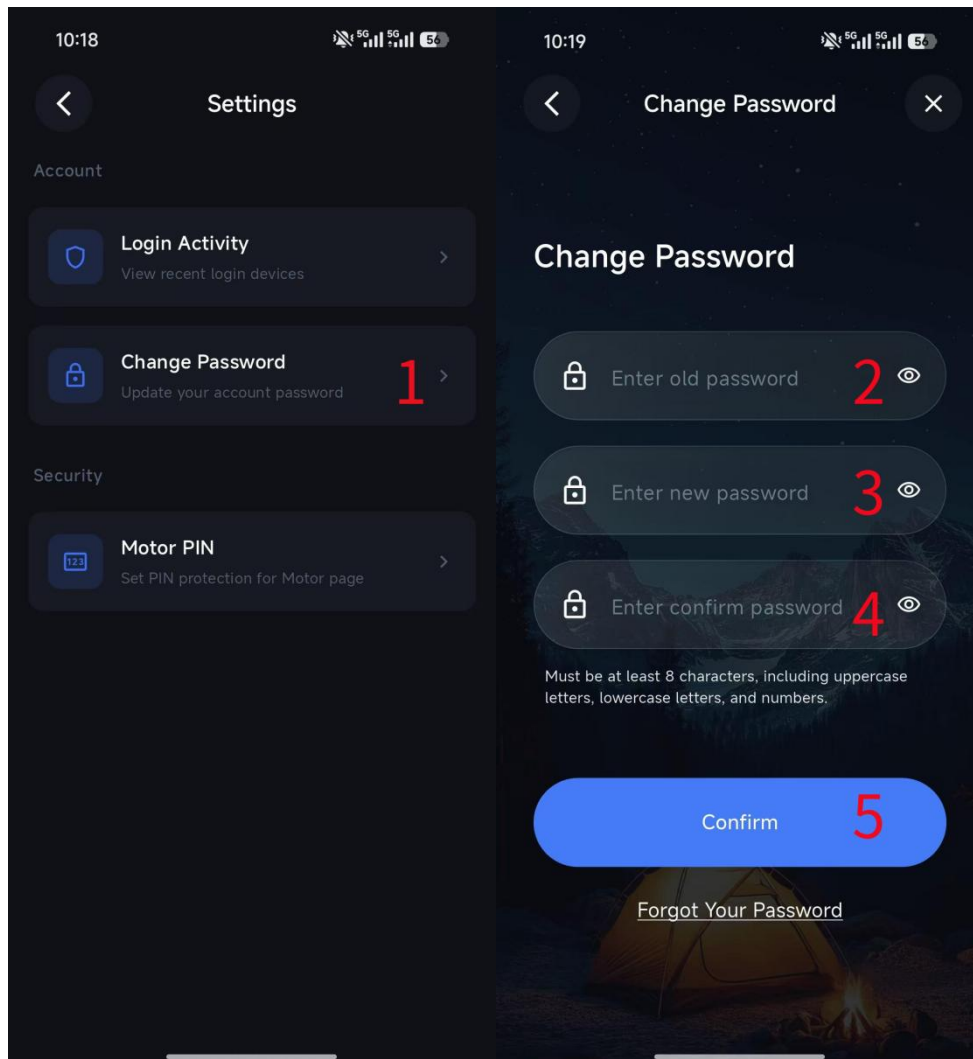


Figure 93:Setting

Figure 94:Change Password

- 1:Tap Change Password in Setting to enter Change Password screen.
- 2:Enter your current password.If you do not remember the password,tap Forgot Your Password to reset password.
- 3:Enter your new password.
- 4:Enter new password to confirm your password.
- 5:Tap Confirm to finish changing your password.

4.5.1.3 Motor PIN

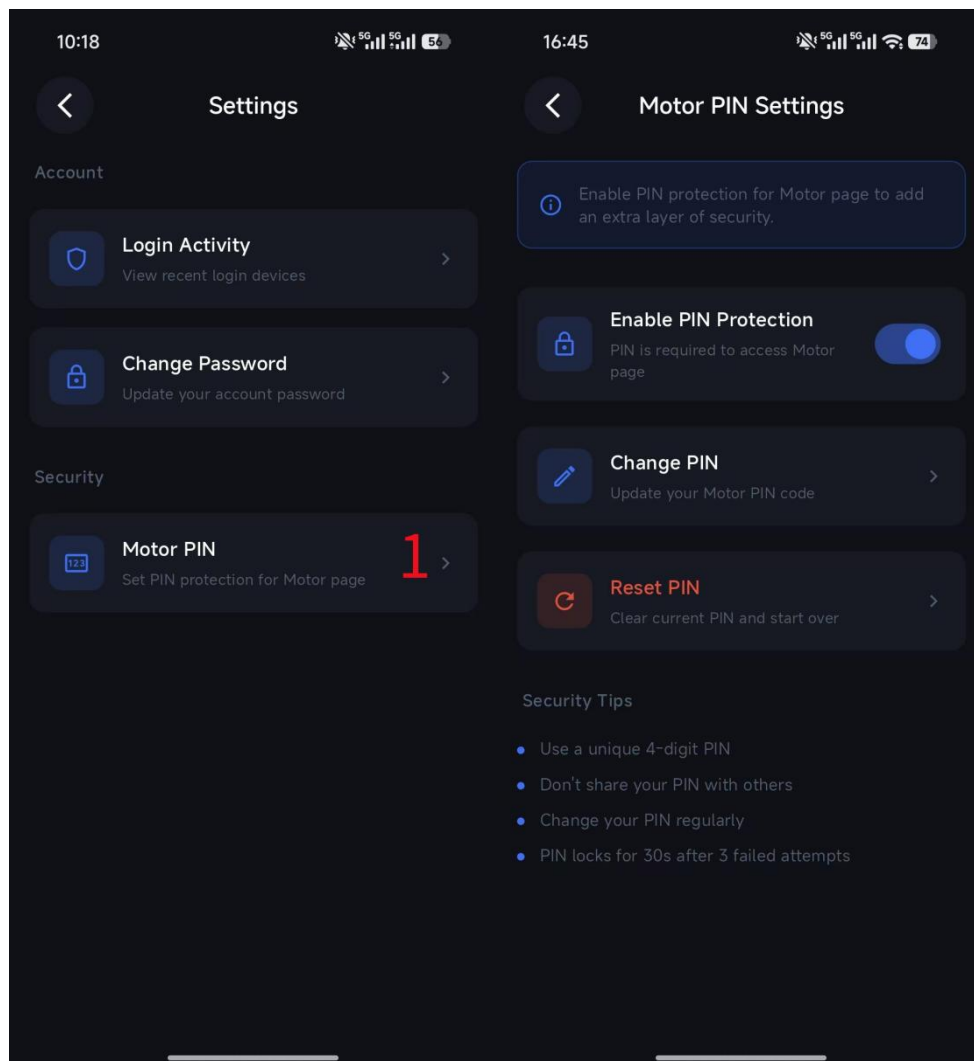


Figure 95:Motor PIN In Setting

Figure 96:Motor PIN Setting Screen

1:Tap Motor PIN it will enter Motor PIN Setting screen.You can change the motor PIN in this screen referring the steps in 4.4.4.2.

4.5.2 Profile Setting

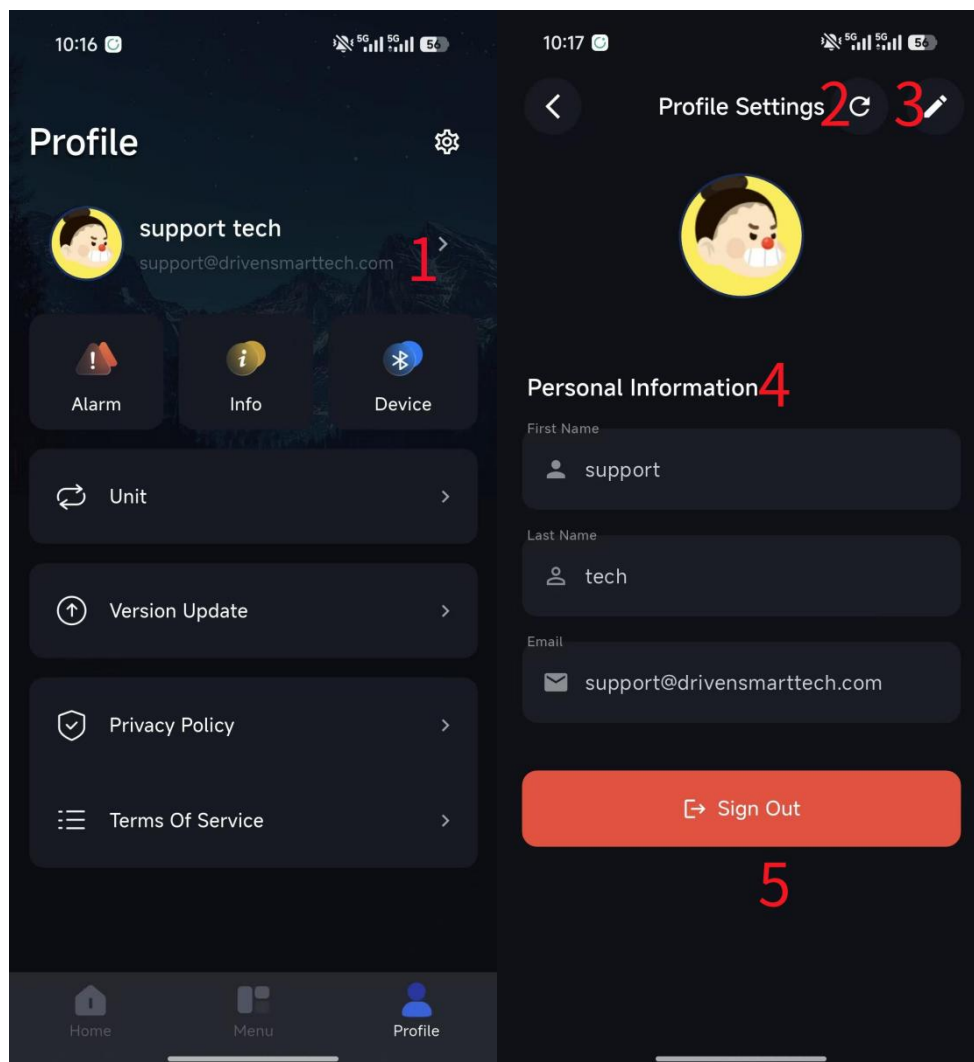


Figure 97:Profile Screen

Figure 98:Profile Setting

- 1:Tap to enter Profile Setting.
- 2:Refresh button,tap to refresh your account info.
- 3:Edit button,tap to edit your account info,you can edit your first name and last name.
- 4:Personal Information,display your first name, last name and email address.
- 5:Sign Out button,tap to sign out your Links2 account.

4.5.3 Alarm Info

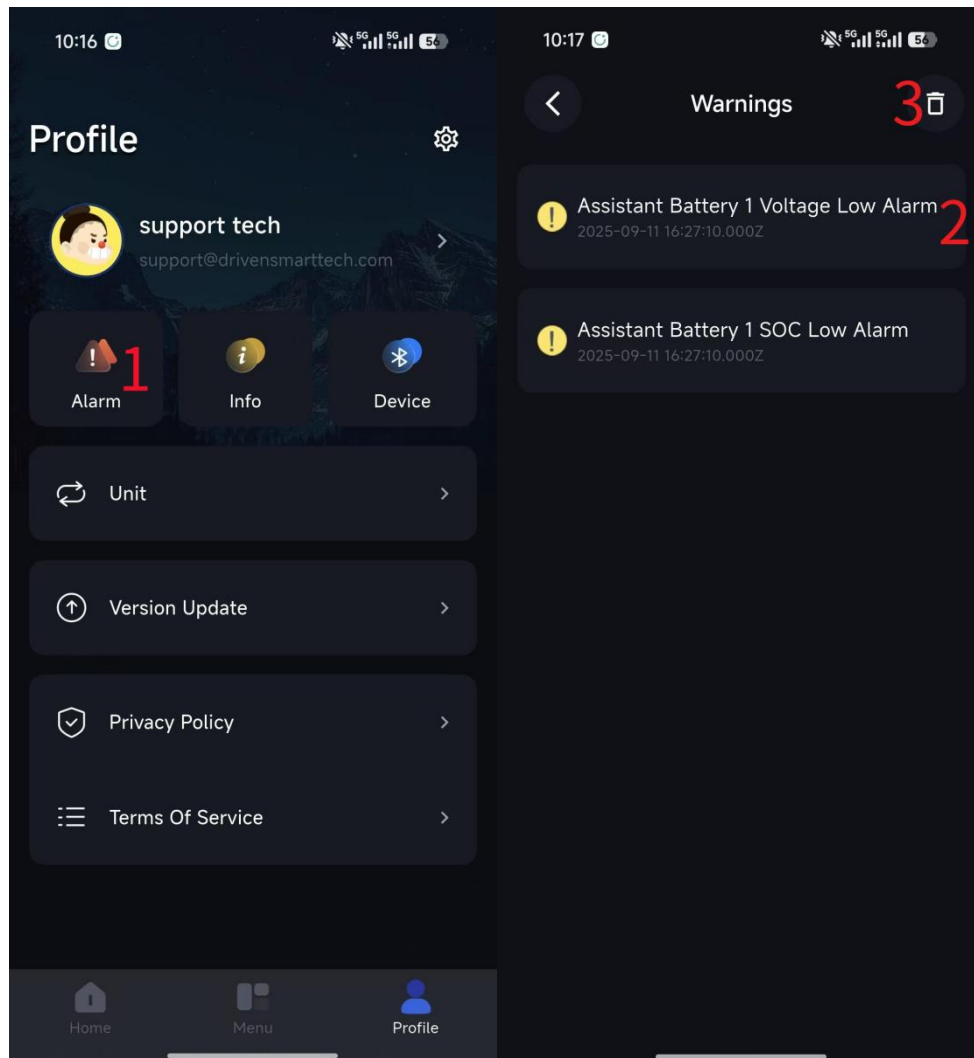


Figure 99:Profile Screen

Figure 100:Alarm Info

- 1:Alarm button.Tap to enter alarm info screen.
- 2:Alarm info,including device,issue description and occurred time.
- 3:Clear button,tap to clear all the alarm info in current screen.

4.5.4 System Info

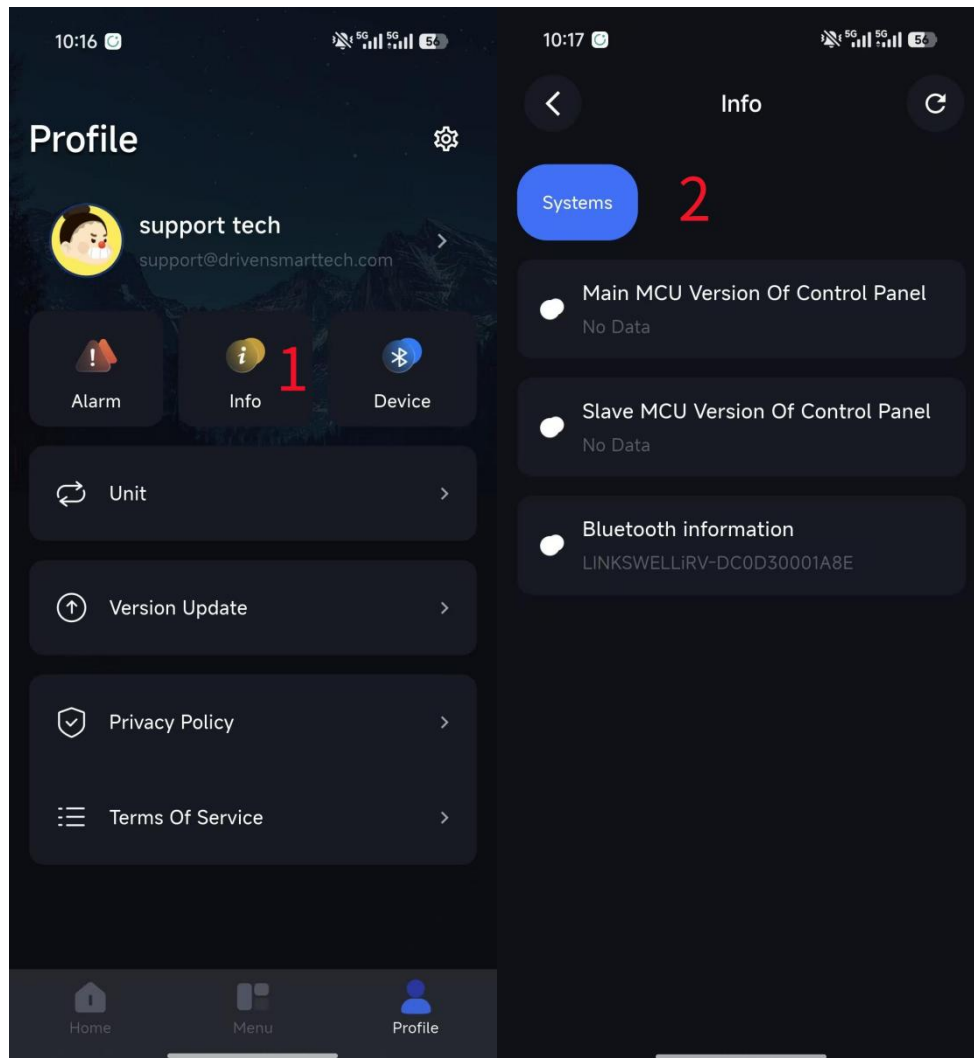


Figure 101:Profile Screen

Figure 102:System Info Screen

1:Info button,tap to enter System Info screen.

2:System Info screen,including main MCU version info of control panel,slave MCU version info of control panel and Bluetooth info.

4.5.5 Device Info

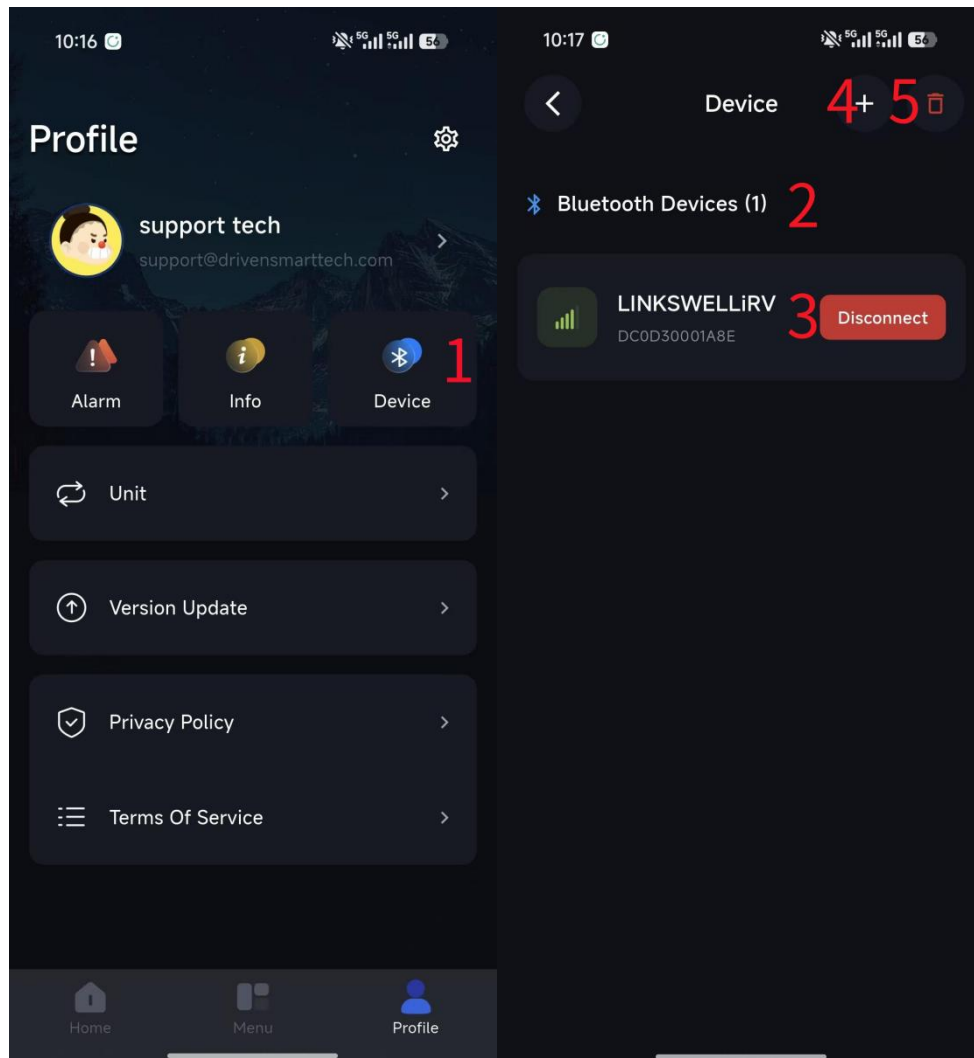


Figure 103:Profile Screen

Figure 104:Device Info

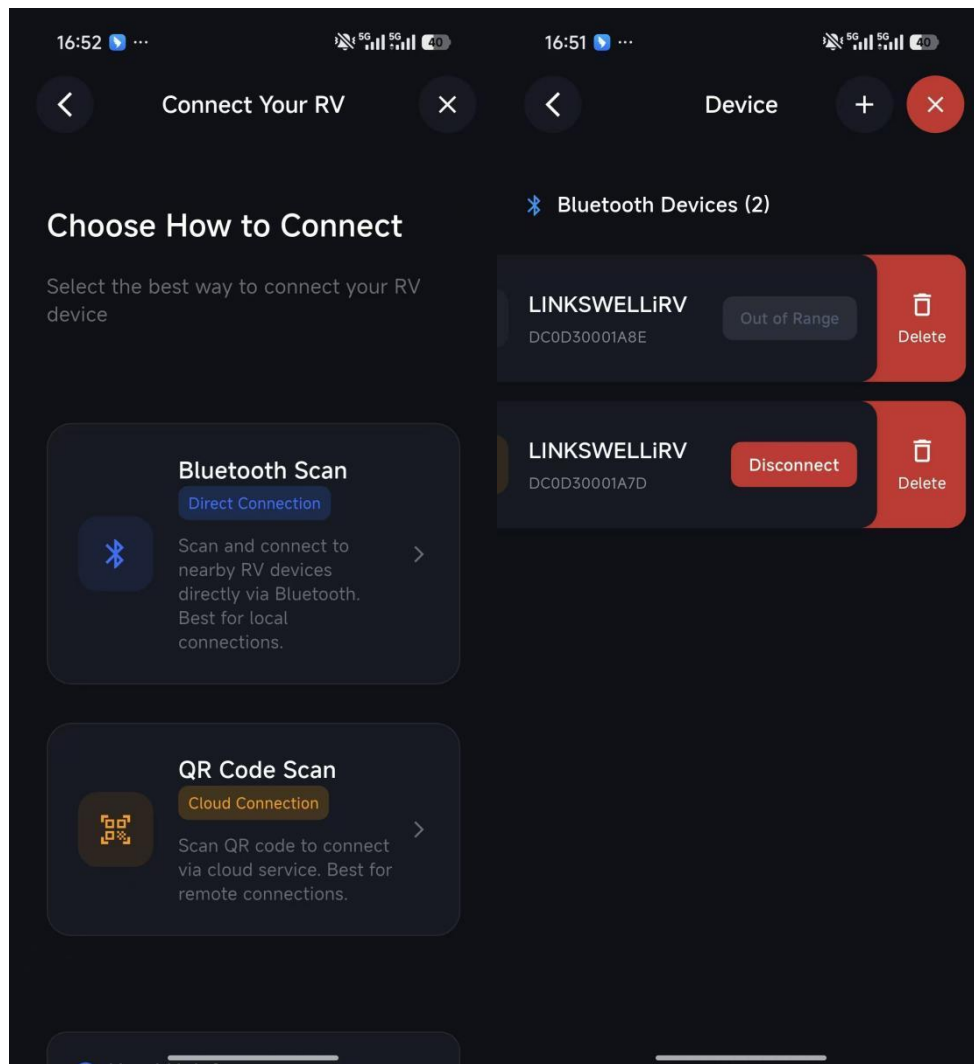


Figure 105:Connect Your RV

Figure 106:Clear Devices

- 1:Device info button,tap to enter Device Info screen.
- 2:Bluetooth devices list,display how many devices your phone can search.
- 3:Display the devices that your phone has searched and connected.You can tap Disconnect button or Connect button to disconnect or connect the control screen.
- 4:Tap + button you can enter Connect Your RV screen to connect new control screen if your phone do not connect any devices now.
- 5:Tap clear button you can delete the devices on the devices list,you will lost the connection with the device you have connected,you need to connect the device again or connect a new device.

4.5.6 Unit Switch

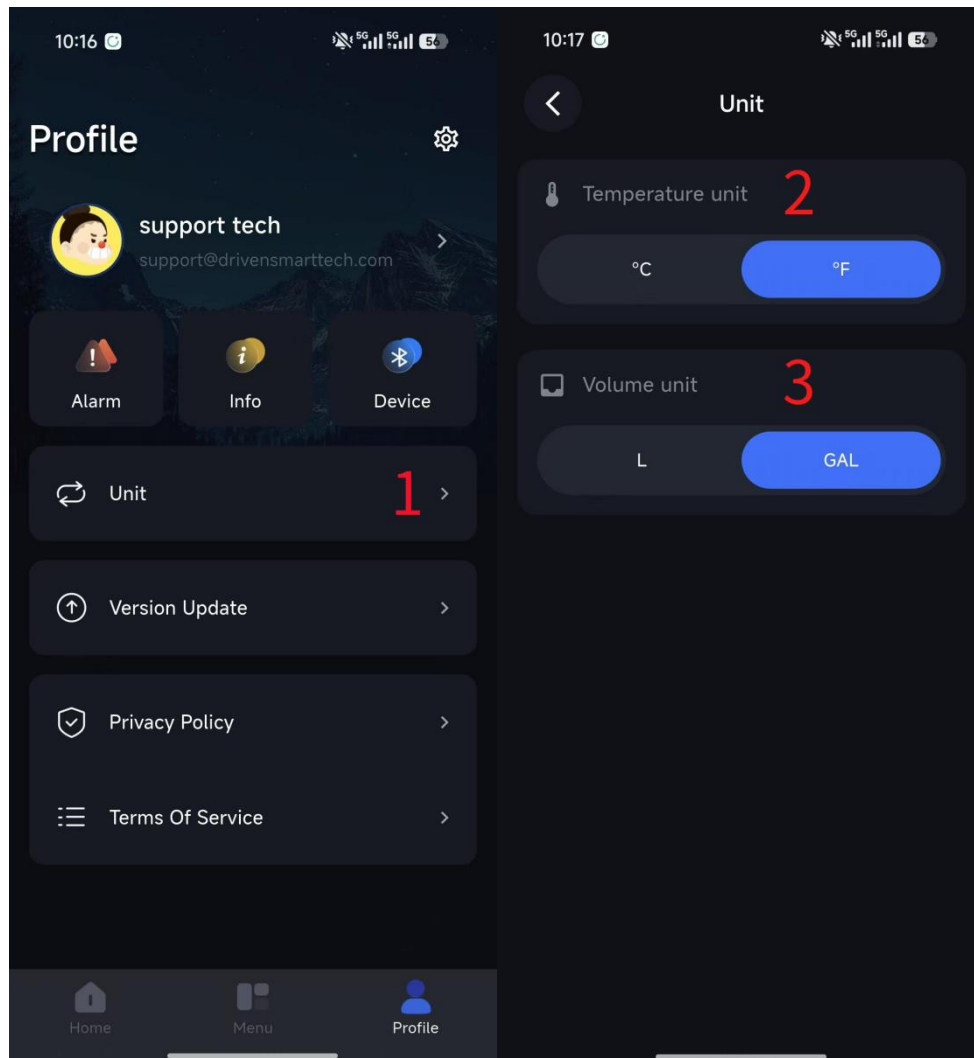


Figure 107:Profile Screen

Figure 108:Unit Switch

1:Tap to enter unit switch screen.

2:Temperature unit switch,tap the unit you want to use,you are using this unit if it is blue.

3:Volume unit switch,tap the unit you want to use,you are using this unit if it is blue.

4.5.7 Version Update

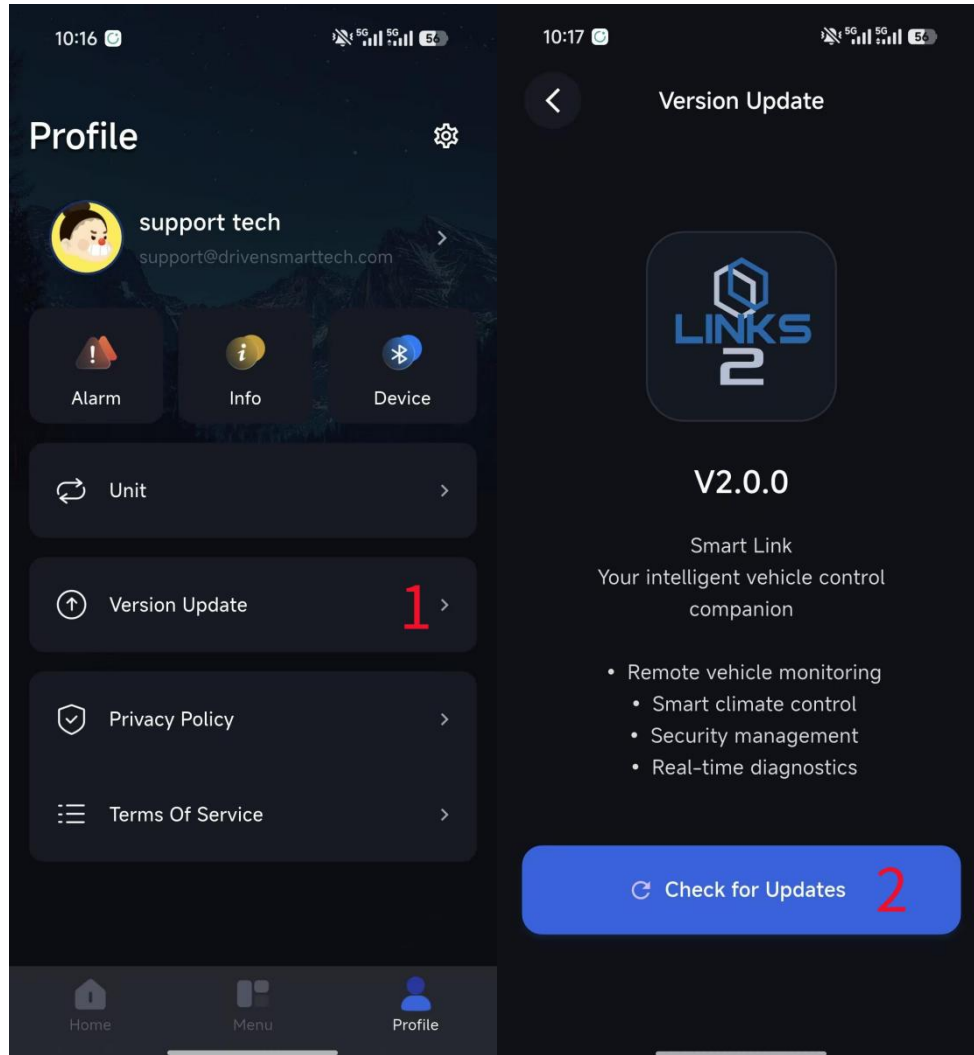


Figure 109:Profile Screen

Figure 110:Check For Updates

- 1:Tap version update to enter Check For Update screen.
- 2:Tap Check For Update to check if Links2 Smart application has a new version.If a new version is found,it will lead you to download the new version application in store.

5 Troubleshooting

5.1 Fault and Solution

Issue	Possible Cause	Solution
Control screen does not power on	No DC supply / blown fuse / loose connection	Check 12V power supply; verify fuse; ensure connectors are firmly plugged in
Touchscreen unresponsive	System freeze / firmware error	Restart system by disconnecting and reconnecting power; check for firmware updates
App cannot connect to control box	Bluetooth/Wi-Fi not enabled / distance too far	Enable Bluetooth/Wi-Fi; move closer; restart app and control box
App connects but status not updating	Communication delay / network congestion	Refresh app; check router (if Wi-Fi); ensure system firmware is up to date
Lights not turning on/off	Loose wiring / blown fuse / channel not assigned	Check fuse; verify wiring; confirm channel assignment
Dimmer not working properly	Incompatible light type / wiring fault	Ensure lights are dimmable; check wiring polarity
One zone works, another doesn't	Channel overload / config error	Reassign channels in ; check if load exceeds rated current
Slide-out does not move	Low battery voltage / motor protection triggered	Check battery voltage (must be >12V); wait and retry; inspect motor wiring
Awning only extends or only retracts	Limit switch / motor relay fault	Inspect relay wiring; reset system; if persists, contact service
Motor stops midway	Overcurrent protection / obstruction	Remove any obstruction; reset by turning power off/on; avoid overloading
AC not responding to control	IR communication failure / wrong zone selected	Check remote receiver; ensure correct zone chosen
HVAC turns off unexpectedly	Low DC power / system protection	Verify battery/shore power; check the wire/fuse
Temperature not accurate	Sensor misplacement	Ensure sensor is placed away from direct sunlight
Battery voltage not displaying	Loose shunt connection / misconfigured input	Check shunt wiring; verify settings

System shuts down unexpectedly	Low voltage cutoff / overload protection	Recharge batteries; reduce load; check inverter/charger settings
Pump not working	No water / pump fuse blown / air lock	Fill tank; check fuse; prime pump
Pump runs continuously	Leak in system / pressure switch failure	Check for leaks; inspect pressure switch
Tank level shows wrong reading	Sensor wiring loose / sensor calibration off	Verify wiring; recalibrate sensor in system settings
System resets randomly	Voltage drop / loose power connector	Ensure stable 12V supply; tighten connectors
Multiple functions not responding	Control box fault / communication bus error	Restart system; inspect CAN/RV-C bus connections
Firmware update fails	Interrupted power / weak connection / wrong or damage update file	Ensure stable power; retry update with strong signal; make sure update file is right and complete

Table 1: Troubleshooting

5.2 Technical Support

Our technical support service is dedicated to assisting authorized installers and service personnel with advanced diagnostics, configuration, and repair procedures.

Before contacting support, please ensure:

- All installation steps have been followed according to the manual
- Wiring and fuses have been checked
- The latest firmware/software is installed
- A log of error codes, test results, or system behavior has been recorded

When requesting support, please provide:

- Product model and serial number
- Firmware/software version
- Detailed description of the issue and steps already taken
- Diagnostic data, error logs, or test measurements
- Photos/videos of the installation site if applicable

Contact channels:

Contact channels:

Technical Email: support@drivensmarttech.com

Support Portal: <https://www.drivensmarttech.com/>

6 Appendix

6.1 Technical Specification

Product Model	RVCS-CP-MX01
Operating Voltage	9 ~ 18V
Max Input Current (Power System)	50A
Max Input Current (Motor System)	30A
Output Channel	5*30A (H-Bridge)
	3*20A (H-Bridge)
	6*10A
	14*5A (Dimmable PWM)
Communication	Bluetooth/RS485/LIN/CAN/RV-C
Water Sensor	Support 6 PCS
Temp Sensor	Support 5 PCS
Fuel Sensor	Support 1 PCS
LPG Sensor	Support 1 PCS
Voltage Detection	2
Digital Input	14
Interface	1*RS485
	1*LIN
	1*CAN
	2*RV-C
	1*Bluetooth Antenna
Operating Temperature	-20 ° C to 70 ° C , -4 ° F to 158 ° F
Storage Temperature	-40 ° C to 80 ° C , -40 ° F to 176 ° F
Dimensions	344*229*50 mm
Weight	1.44Kg

Table 2: Specification Of Smart Control Panel

Product Model	RVCS-CS-X101
Operating Voltage	9 ~ 16V
Operating Current	810mA(No Load)&510mA(Screen Off)
Rated Output Power	30W@14.4V
Operating Temperature	-30℃ ~ +70℃
Operating System	Android 10
Resolution	720x1280
Orientation	Landscape/Portrait
Memory & Storage	2GB+32GB
Communication	RV-C
WLAN	5G
WIFI	Single band 2.4GHz,support 802.11b/g/n

Bluetooth	Specification v2.1 + EDR, v4.2 Low Energy (LE), Phonebook Sync(Optional External Bluetooth: Realtek 8761)
Navigation	GPS, BeiDou, GLONASS
Video Input	4(CVBS/AHD)
Video Playback	1080p@30fps/50Mbps(H.264) 1080p/30fps/40Mbps(MPEG-4/VP8/H.263DIV X4/DIVX5/DIVX6/XVID) 1080p@30fps/10Mbps(MPEG-2) 720p@30fps/1.6Mbps(VP9) 720p@30fps/4Mbps(H.265)
HDMI	USB-to-HDMI
Audio Input	4(with DSP)
Audio Output	1(AO)
USB	2
SD Port	1(SD 3.0)
Dimensions	256 × 151 × 55mm / 10.07 × 5.94 × 2.17in
Weight	1.4kg / 3.08lb

Table 3: Specification Of Control Screen

6.2 Packet Content

Caption	Product	Part Number	Description	Qty
Control Panel	Control Panel	RVCS-CP-MX01	Multiplex Control Panel	1
	Wi-Fi/Bluetooth Antenna	STR03070001	External Wi-Fi/Bluetooth Combo Antenna	1
	Pan Head Phillips Square Drive Screw	STR01010055	#8 x 1-1/4"(M4 x 30mm), Black	4
	Termination Resistor	STR03020029	4-Pin RV-C Termination Resistor	1
	Temperature Sensor	SEN01040001	Temperature Sensor	3
	Installation Manual	PAC02050004	Installation Manual for Forest River VENGEANCE 4413	1
Control Screen	Control Screen	RVCS-CS-X101	10.1-inch Smart Control & Infotainment System	1
	Mounting Bracket	STR01020039	Mounting Bracket	1
	Communication	STR03050002	4-Pin RV-C	1

	Cable		Communication Cable, 10 ft (3 m)	
	Termination Resistor	STR03020029	4-Pin RV-C Termination Resistor	1
	Wi-Fi/Bluetooth Antenna	STR03070001	External Wi-Fi/Bluetooth Combo Antenna	3
	Power Cable	STR03030001	16-Pin Power Cable	1
	Flat Head Phillips Square Drive Screw	STR01010056	#8x 1 1/4" (M4 x 30mm) ,Black	4
	Flat Head Phillips Screw	STR01010058	#2 x 1/4" (M2 x 6mm), Black	1
	Mini Phillips Screwdriver	AVX02020001	Mini Phillips Screwdriver, #2 (M2)	1
Wireless Switch Panel	BLE Wireless Switch Panel-1	FGD010009-1	BLE Wireless Switch Panel(4-Button) SWITCH 1-MAIN ENTRY DOOR SLIDE	1
	BLE Wireless Switch Panel-2	FGD010009-2	BLE Wireless Switch Panel(4-Button) SWITCH 2-GARAGE DOOR	1
	BLE Wireless Switch Panel-3	FGD010009-3	BLE Wireless Switch Panel(4-Button) SWITCH 3-MASTER BEDROOM	1
	BLE Wireless Switch Panel-4	FGD010009-4	BLE Wireless Switch Panel(2-Button) SWITCH 4-MASTER BATH	1
	BLE Wireless Switch Panel-5	FGD010009-5	BLE Wireless Switch Panel(4-Button) SWITCH 5-RS SLIDE	1
	BLE Wireless Switch Panel-6	FGD010009-6	BLE Wireless Switch Panel(6-Button) SWITCH 6-STORAGE COMPARTMENT	1
	BLE Wireless Switch Panel-7	FGD010009-7	BLE Wireless Switch Panel(6-Button) SWITCH 7-STORAGE COMPARTMENT	1
	Pan Head Phillips Square Drive Screw	STR01010057	#8 x 5/8" (M4 x 16mm), Black	14

HVAC Module	HVAC Module for Furrion	RVCS-HVM-FR01	HVAC Module for Furrion	1
	Pan Head Phillips Square Drive Screw	STR01010057	#8 x 5/8" (M4 x 16mm), Black	2
	Communication Cable	STR03050004	4-Pin RV-C Communication Cable, 3 ft (1 m)	1
	Termination Resistor	STR03020029	4-Pin RV-C Termination Resistor	1
Optional Accessories	Extension Cable	STR03050005	4-Pin RV-C Extension Cable, 33 ft (10 m)	1
	Extension Cable	STR03050003	4-Pin RV-C Extension Cable, 6.5ft (2 m)	1
	Audio Cable	STR03020031	RCA to 3.5mm Audio Cable	1

Table 4: Packet Content

6.3 FCC Compliance Statement

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

Warning: Changes or modifications to this unit not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

FCC Radiation Exposure Statement

This equipment complied with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

6.4 Glossary

Terminology	Explanation
AC Power	Alternating Current. Standard household electricity used in RVs when connected to shore power or a generator.
DC Power	Direct Current. Supplied by the RV's battery system.
House Battery	The DC battery that powers the RV's living systems, such as lights, water pumps, climate control, and electronics, separate from the engine starting battery.
RV-C	A communication protocol specifically designed for RVs, enabling devices to communicate over a CAN bus network.
CAN Bus	Controller Area Network. A communication protocol for electronic modules in vehicles and RVs.
Control Screen	The user interface for operating the smart control system, typically a touchscreen or wall-mounted panel.
Dimmer	A device that adjusts the brightness of lighting fixtures.
Firmware	Built-in software that controls the smart control system's functions.
Ground	A safety connection to prevent electrical shock and ensure proper circuit operation.
Load	The total electrical demand placed on the RV's power system.
Fuse	A safety device that protects electrical circuits by breaking the connection if the current flow exceeds a safe level.
Sensor	A device that detects physical properties (e.g., temperature, pressure, motion) and converts them into signals that can be read by the control system.
Voltage Drop	The reduction in voltage as electricity flows through wiring and connectors.
Zone	A defined space in the RV (e.g., bedroom, living room) where systems such as lights or HVAC can be independently controlled.
HVAC	The system that heats, cools, and ventilates the RV's interior.
Water Pump	A device that pressurizes the freshwater system to supply water to faucets, showers, and appliances.

Slide-out	A movable section of the RV's living space that extends outward to increase interior room when parked.
-----------	--

Table 4:Glossary