

EPIC

CARTS



FX MODEL SERIES

E20FX - E40FX - E60FX

USER MANUAL

7/22/2025

THANK YOU & WELCOME TO OUR EPIC FAMILY!

Thank you for purchasing our Epic FX Model. Before you drive the vehicle, please read this Owner's Guide. This guide contains maintenance and operation information. The illustrations can show items that are optional for your vehicle.

You can do most of the service procedures in this guide with common automotive hand tools. If necessary, contact your service representative for information about how to service the vehicle as shown in the Periodic Service Schedule.

Repair or replacement parts are available from your dealer or Service Parts Department. When you contact about service or parts for your vehicle, the information below is needed.

Vehicle Model: _____

PIN, VIN or Serial Number: _____



Protect Your Investment



Scan To Register Your Warranty or Visit: [EPICCARTS.com](https://www.epiccarts.com)

Read all of this manual to become thoroughly familiar with this vehicle. Particularly important information is emphasized in this manual. The use of non Original Equipment Manufacturer (OEM) approved parts may void the warranty.

Tampering with or adjusting the governor to permit vehicle to operate at above factory specifications will void the vehicle warranty.

USER MANUAL EPIC FX SERIES STARTING MODEL YEAR 2024



- 1.This electric vehicle must be driven by a licensed driver!
- 2.The accelerator pedal and the brake pedal cannot be pressed at the same time, otherwise the control system will be damaged and the motor will burn out!
When the vehicle starts, the parking brake must be released. Otherwise, the brake system may cause permanent damage and damage other parts!
- 3.Vehicles are not allowed to be modified. Modifications may affect vehicle performance, vehicle life, and even affect vehicle safety and may violate regulations. Vehicle damage caused by vehicle modification is not within the scope of “Three Guarantees” policy!
- 4.Unreasonable installation of electrical equipment on the vehicle, such as alarm devices, car phones, etc., may interfere with the vehicle's control system electrical signals, affecting vehicle performance. When installing such equipment, you should consult our company!
- 5.Due to product improvements, the contents of this manual may differ from the actual situation!
- 6.This product is a dedicated motor vehicle in the specific area (factory) specified in the Special Equipment Safety Supervision Regulations!It is strictly forbidden to drive after drinking. It is strictly prohibited to overload!

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SAFETY INFORMATION

Observe these NOTICES, CAUTIONS, WARNINGS and DANGERS; be aware that servicing a vehicle requires mechanical skill and a regard for conditions that could be hazardous. Improper service or repair may damage the vehicle or render it unsafe.

Replace missing, damaged or unreadable safety decals immediately to prevent possible property damage, personal injury, or death. Purchase replacement safety decals from your dealer or distributor.

Know and understand the laws and regulations for vehicle operations in your area. For any questions on material contained in this manual, contact an authorized representative for clarification.

The components of the Save LIVES package are:

Safe vehicles play a critical role in averting crashes and reducing the likelihood of serious injury.

Speed management, Leadership, Infrastructure design, Vehicle safety standards, Enforcement of traffic laws and Survival after a crash.

IMPORTANT SAFETY INFORMATION



The safety alert symbol is used to alert you for possible personal injury hazards. Obey all safety regulations that follow this symbol to prevent possible injuries or death.



A DANGER label identifies hazardous situations which may cause death or serious injuries.



A WARNING label identifies hazardous situations which may cause death or serious injuries.



A CAUTION label identifies hazardous situations which may cause minor or moderate injuries.



A NOTICE label identifies hazardous situations which may cause property damages.

SAFETY INFORMATION

Read all the safety statements carefully before attempting any procedure.



OPERATOR WARNING DECAL



REAR SEAT OCCUPANT WARNING DECAL



WINDSHIELD WARNING DECAL(L)



WINDSHIELD WARNING DECAL(R)

SAFETY INFORMATION

Read all the safety statements carefully before attempting any procedure.



OPERATING INSTRUCTIONS

- Read owner's manual and dash-mounted safety warnings prior to driving.
- Study and understand controls.

TO OPERATE

- Turn wheels to desired direction and ensure path is clear.
- Turn key to ON position.
- While stopped, place Forward/Reverse switch in desired position:
D-Drive N-Neutral R-Reverse(Buzzer will sound) S-Sport
- Press accelerator pedal to release parking brake.
- Slowly press accelerator pedal to increase speed.
- To stop, release accelerator pedal and press brake pedal.

BEFORE LEAVING

- Press parking brake pedal until it locks and holds vehicle.
- Press Forward/Reverse switch in NEUTRAL position.
- Turn key OFF and remove key when not in use.

MOTOR BRAKING

- Electric motor braking provides speed regulation functions.
- Apply brakes to control vehicle speed as required.
- System is activated only when switch is in the DRIVE position.
- When towing this vehicle, switch must be in the NEUTRAL position.

OPERATING INSTRUCTIONS DECAL

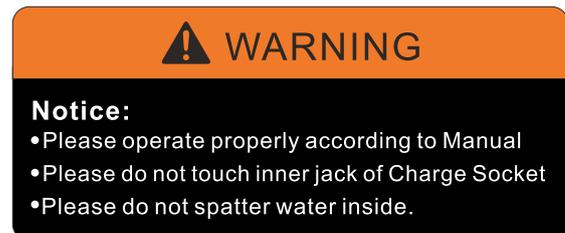


DANGER!

PINCH POINTS

WATCH YOUR HANDS

PINCH POINTS WARNING DECAL



WARNING

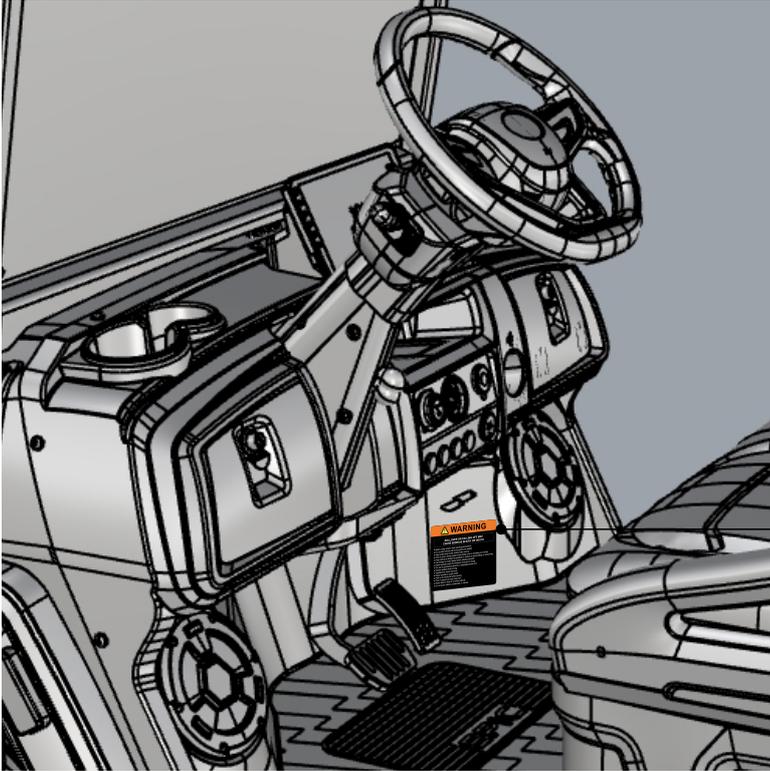
Notice:

- Please operate properly according to Manual
- Please do not touch inner jack of Charge Socket
- Please do not spatter water inside.

CHARGING STAND WARNING DECAL

SAFETY INFORMATION

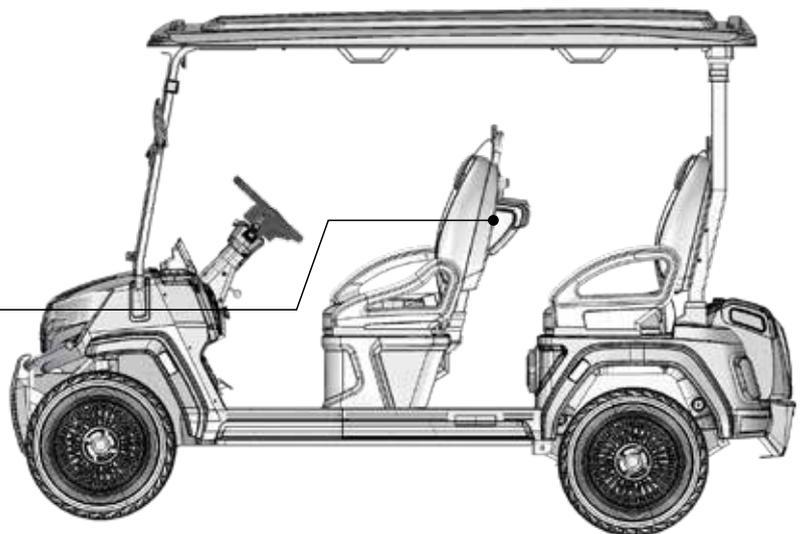
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OPERATOR WARNING DECAL



REARSEAT OCCUPANT WARNING DECAL



SAFETY INFORMATION

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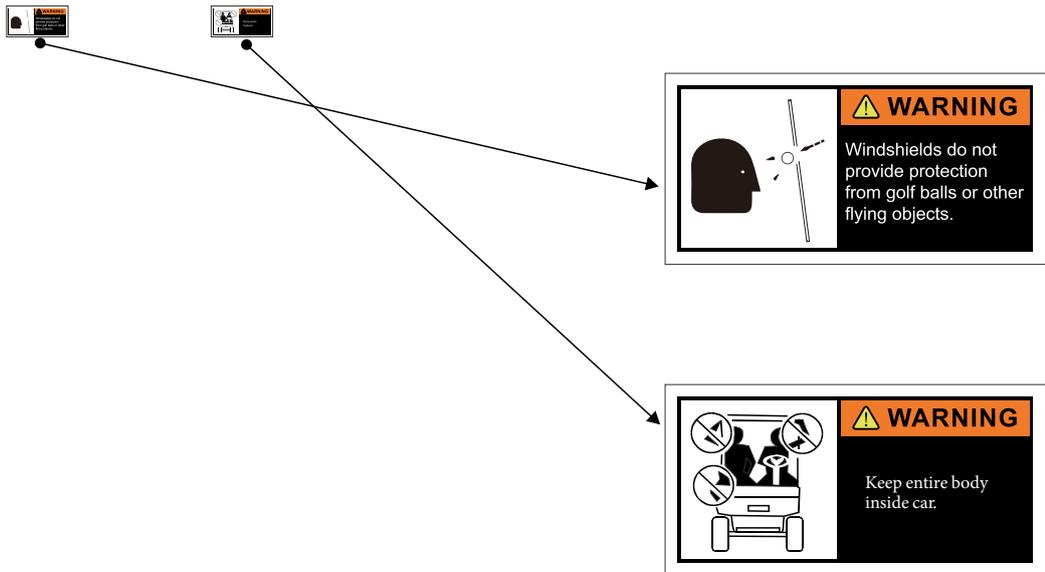
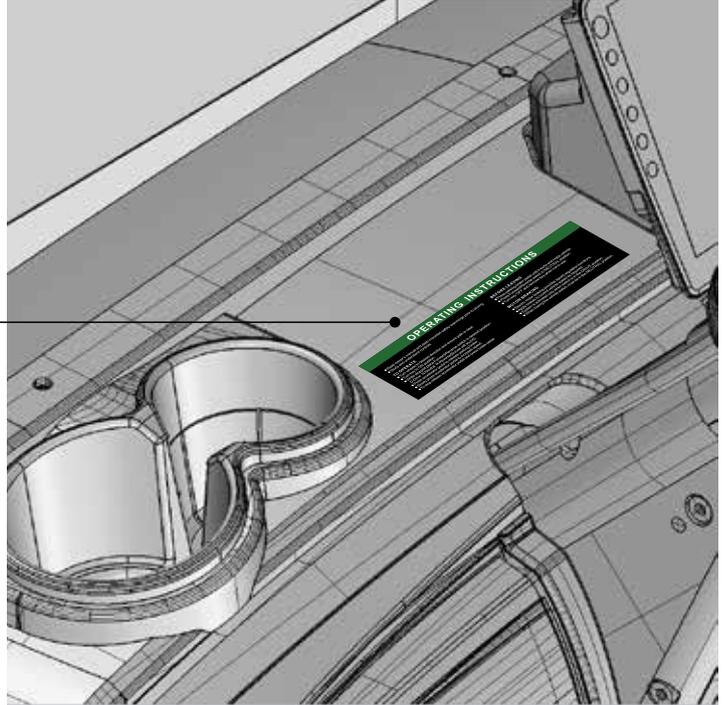
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MOTOR BRAKING

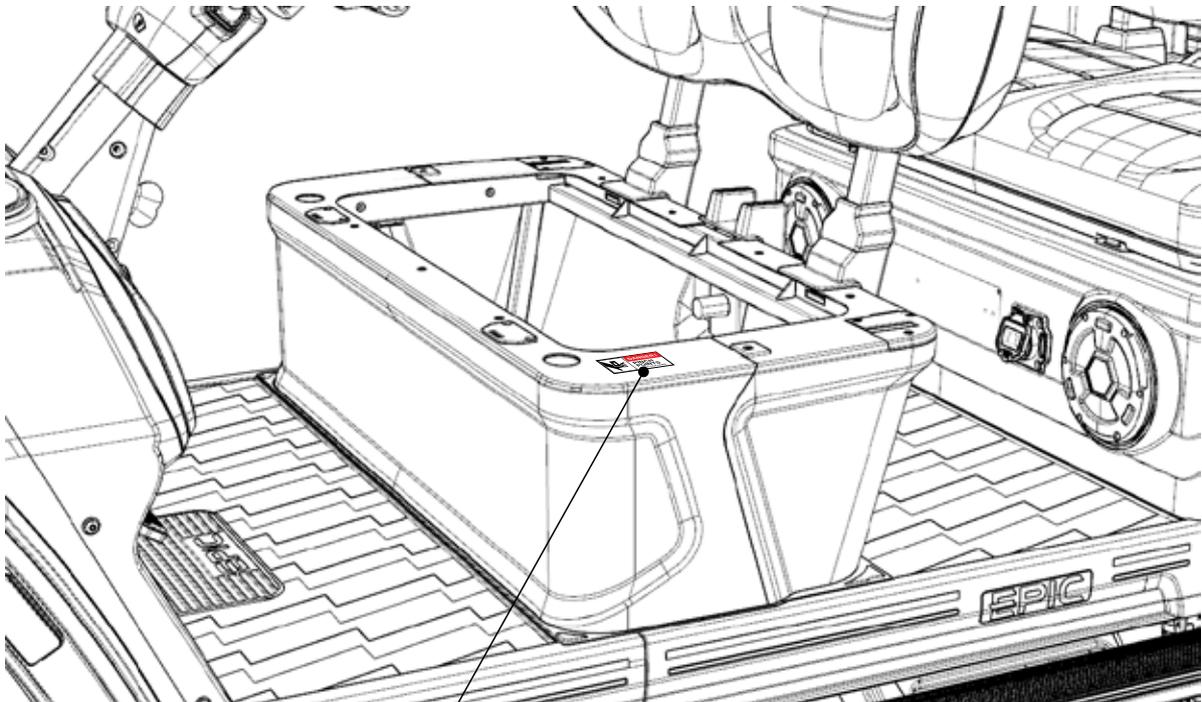
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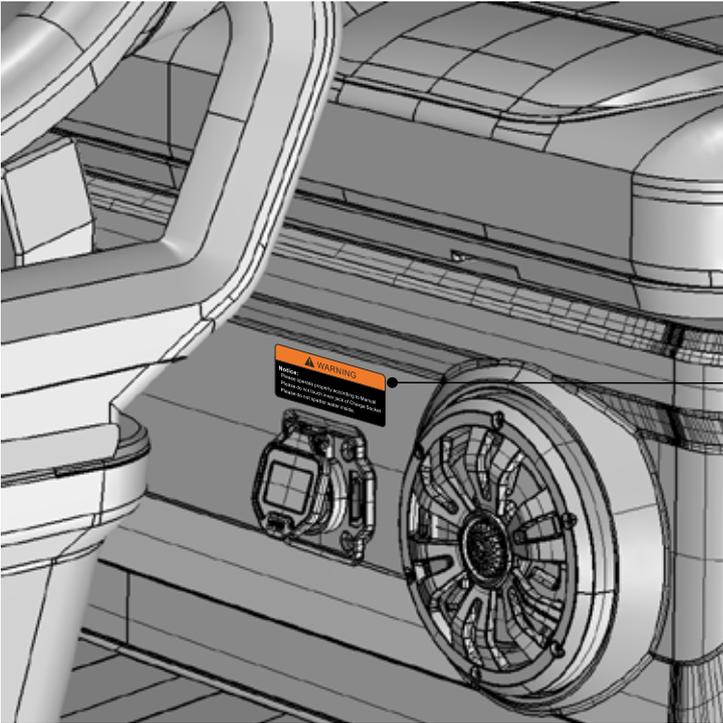
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WARNING

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- Please do not touch inner jack of Charge Socket
- Please do not spatter water inside.

SAFETY INFORMATION

Read all the safety statements carefully before attempting any procedure.

BATTERY SAFETY INFORMATION

Safety and warning labels are on the lithium battery for your protection. Read and comply with the instructions on the labels for avoiding the potential risks or injuries. If any labels shown below is damaged, comes off or becomes illegible, contact your EPIC dealers for replacements.



While working on a li-ion battery wear protective eyeglasses and clothing



Explosion and fire hazard. The terminals of a li-ion battery are always live, therefore do not place metallic items or tools on top of a li-ion battery. Avoid short circuits.



Explosion and fire hazard. The terminals of a li-ion battery are always live, therefore do not place metallic items or tools on top of a li-ion battery. Avoid short circuits.



Batteries must not be mixed with domestic or industrial waste.



Do not open or dismantle the battery. Electrolyte is very corrosive. If the battery casing is damaged do not touch the exposed electrolyte or powder because it is corrosive.



Do not touch any electrical components without any insulation protection.



Batteries marked with the recycling symbol must be processed via a recognized recycling agency.



Observe these instructions and keep them located near the battery for future. Read, understand and comply with all warning and instructions.

SAFETY INFORMATION

Read all the safety statements carefully before attempting any procedure.

LITHIUM-ION BATTERY DISPOSAL



- Lithium -ion batteries are recyclable.
- Lithium-ion batteries must be collected and recycled separately from other waste. Do not discard lithium-ion batteries as municipal waste.
- Speak with your dealer or distributor on returning or recycling used or damaged battery packs.
- Contact local or state environmental department for disposal information.
-



WARNING

Failure to operate the vehicles as instructed can cause collision, loss of control or roll over, resulting in severe injury or death. Follow all safety warnings or labels in this owner manual. All operator must read, understand and comply with these warnings and labels before operating the vehicles. Follow the safety information and operating procedures described.

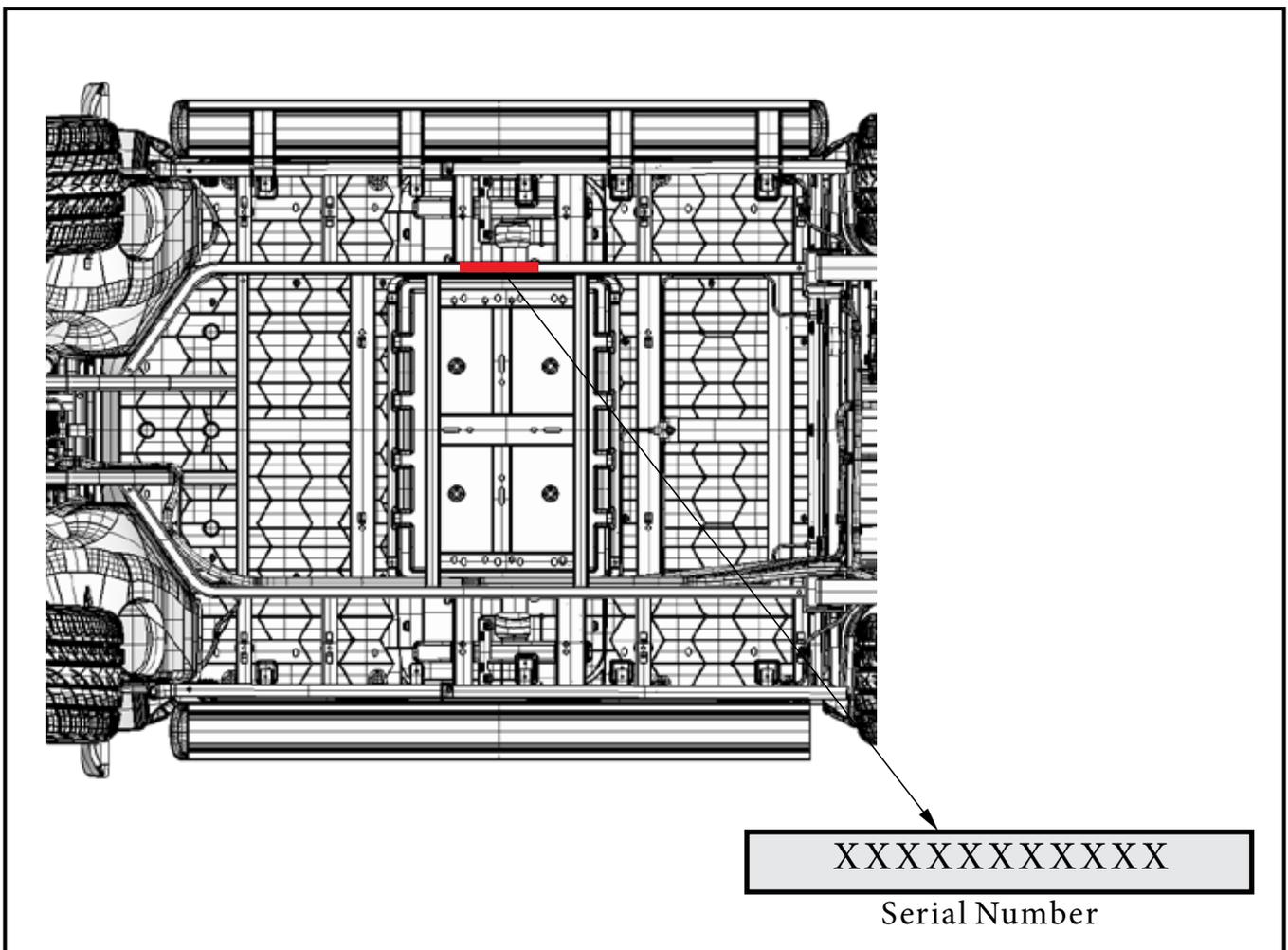
- Operate your vehicle responsibly to prevent dangerous conditions for the operator, passengers and other people in the area of operation
- Operate your vehicle responsibly and keep the vehicle in safe condition of operation
- The driver must keep both hands on the steering wheel and both feet on the floor or pedals.
- Inspect the vehicle before each use to make sure it is in safe operating condition. Perform the daily inspection described in this manual.
- Always have the vehicle checked by an authorized dealer if it is involved in an accident.
- Remove the key when the vehicle is not in use to prevent accidental starting or unauthorized use.
- Drive the vehicle at appropriate speeds for the terrain and conditions. Be aware of environmental conditions that change the terrain and your ability to control the vehicle.
- Do not drive on excessively steep hills. Evaluate the terrain before descending a hill. Drive slowly and deliberately. Use the brake to limit speed and maintain control. Sudden braking or turning can cause loss of vehicle control. Drive straight up or down the hill; do not drive across the hill.
- Operate only in approved areas. Follow all applicable safety rules for the area.

VEHICLE SERIAL NUMBERS VEHICLE

Be familiar with vehicle features before attempting any operations.

SERIAL NUMBERS

All vehicles have serial numbers on the left side of the chassis frame. The first four numbers are the manufacturing year of the vehicle, the other five numbers are the vehicle's serial number given by EPIC Carts. All the vehicles are documented. After the vehicles are sold out of the factory, EPIC corporation will track the vehicles by using the vehicle's serial number as identity. Serial numbers are warranty insurance from EPIC corporation. Customers should be aware of the importance of vehicle serial numbers.



Design changes occur on a continuous basis. In order to get the correct components for Vehicles, the correct serial number and vehicle model must be supplied. The warranty might become invalid due to missing serial numbers.

Please contact dealer and provide the adequate purchase documents for warranty and get a new serial number plate as soon as possible.

VEHICLE FEATURES

Be familiar with vehicle features before attempting any operations.

This model is a forward-facing four-seater with a standard floor-to-ground clearance: 485mm (using 23*10.5-14 street tires).

For non-lifted configurations, it uses 20*9-12 tires with a floor-to-ground clearance:440mm.

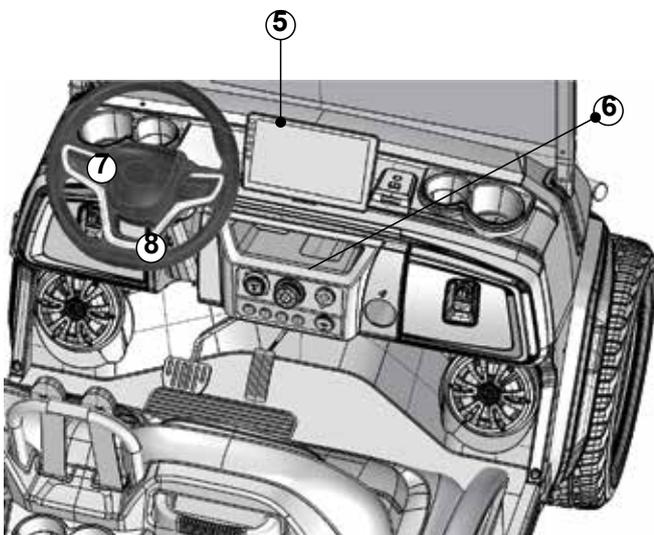
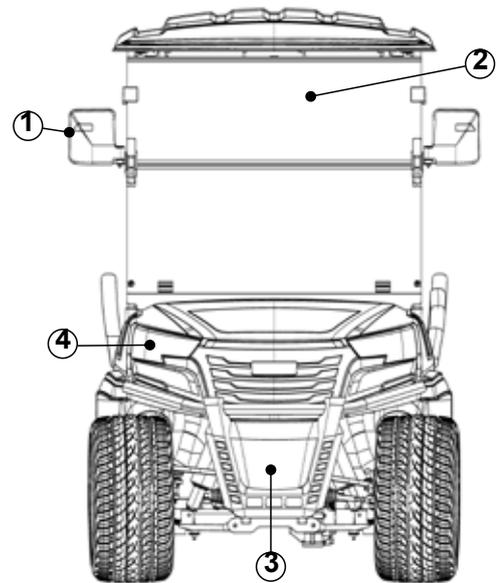
If customers require further lowering, we can achieve a floor-to-ground clearance at:

400mm with the current 20*9-12 tire configuration by adjusting the spindle mounting holes and rear leaf spring mounting holes. This adjustment is recommended to be performed by a dealer. The entire body cover is manufactured using injection molding technology, with six standard color options.

It features four-wheel disc brakes with electromagnetic parking brake.

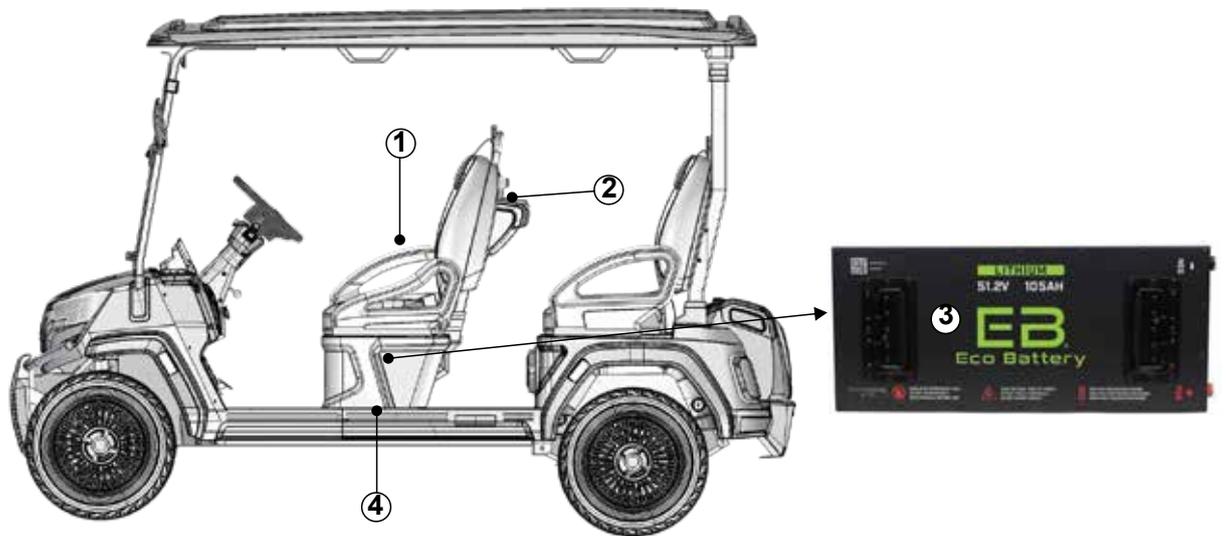
Equipped with Frunk, with ambient lighting on the roof, dashboard ambient lighting, side panel ambient lighting and logo lighting.

1. REAR VIEW MIRRORS WITH TURN SIGNAL
2. INTEGRATED WINDSCREEN
3. INDICATORS FRONT GUARD
- 4 HEADLIGHTS



5. 10.1 INCH MULTI-FUNCTIONAL TOUCHSCREEN
6. MULTI-FUNCTIONAL DASHBOARD
7. AUTOMOTIVE STYLE STEERING WHEEL
8. ADJUSTABLE STEERING COLUMN IN TILTING ANGLE

VEHICLE FEATURES

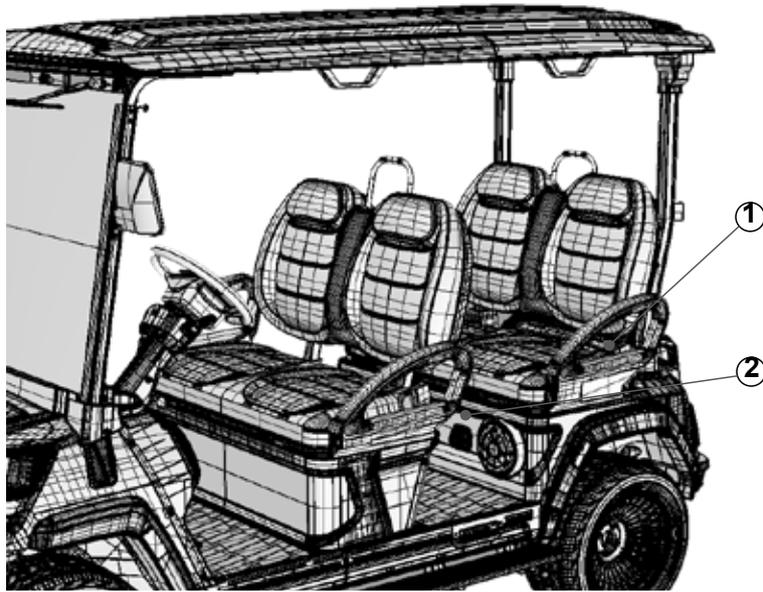


1. LUXURY SEAT WITH ARMREST
2. REAR SEAT CUP HOLDERS, USB PORTS AND STORAGE POCKET
3. LITHIUM BATTERY PACK
4. AUTOMOTIVE E-COAT CHASSIS



5. GOLF BAG HOLDER(OPTIONAL)
6. TAILLIGHTS
 - AUTOMOTIVE STYLE REAR BUMPER
8. BACKUP CAMERA

VEHICLE FEATURES



1. 3-POINT SEAT BELTS FOR EACH SEATS
2. 25A ON-BOARD FAST CHARGER



3. POWER BUTTON
4. DIRECTION SWITCH
5. USB PORT
6. GLOVE BOX WITH LOCKS

OPERATION AND CONTROLS

Be familiar with vehicle features before attempting any operations.



DANGER

OPERATING THE VEHICLE WHILE OCCUPANTS ARE NOT FULLY SEATED CAN CAUSE SERIOUS PERSONAL INJURY OR DEATH. START THE VEHICLE ONLY WHEN ALL OCCUPANTS ARE FULLY SEATED.

FALLING OBJECTS CAN CAUSE PROPERTY DAMAGE, SERIOUS PERSONAL INJURY, OR DEATH.

DO NOT OPERATE THE VEHICLE WHERE THERE IS A RISK OF FALLING OBJECTS. DO NOT LET A PASSENGER HOLD A CHILD ON THEIR LAP WHILE THE VEHICLE IS IN OPERATION. DO NOT LET PASSENGERS RIDE IN THE VEHICLE OR TRAILER BEING TOWED.



WARNING

KEEP AWAY FROM DROP-OFFS, STEEP SLOPES, AND UNSTABLE SURFACES.

SUDDEN STARTS, STOPS, AND TURNS CAN CAUSE PROPERTY DAMAGE AND SERIOUS PERSONAL INJURY. PREVENT SUDDEN STARTS, STOPS, AND TURNS. FAILURE TO CORRECTLY MAINTAIN THE VEHICLE AND MAKE NECESSARY REPAIRS CAN DECREASE VEHICLE PERFORMANCE, CAUSE A FIRE, PROPERTY DAMAGE, SERIOUS PERSONAL INJURY, OR DEATH. IF PROBLEMS ARE FOUND DURING SCHEDULED INSPECTION OR SERVICE, OPERATE THE VEHICLE ONLY WHEN REPAIRS ARE MADE.

MAKE SURE THAT ALL PASSENGERS CAN SECURE THEMSELVES IN THE VEHICLE BEFORE VEHICLE OPERATION. TO PREVENT SERIOUS PERSONAL INJURY, KEEP ENTIRE BODY IN THE VEHICLE DURING OPERATION.

THE VEHICLE IS NOT SPECIALLY EQUIPPED FOR HANDICAPPED PERSONS.

BEFORE VEHICLE OPERATION, MAKE SURE THAT ALL PERSONS COMPLY WITH THE WARNINGS AND OPERATING INSTRUCTIONS. INCORRECT OPERATION OF THE VEHICLE CAN CAUSE DECREASED VEHICLE PERFORMANCE, PROPERTY DAMAGE, SERIOUS PERSONAL INJURY, OR DEATH.

TO PREVENT FALLS FROM THE VEHICLE, PASSENGERS MUST STAY SEATED AND ALWAYS HOLD ON TO HAND HOLDS OR HANDRAILS WHEN THE VEHICLE IS IN OPERATION. THE DRIVER MUST KEEP BOTH HANDS ON THE STEERING WHEEL WHEN THE VEHICLE IS IN OPERATION.

A SHARP TURN AT HIGH SPEEDS CAN CAUSE A ROLL-OVER, FALL, PROPERTY DAMAGE, AND SERIOUS PERSONAL INJURY. OPERATE THE VEHICLE SLOWLY IN TURNS. UNINTENDED VEHICLE OPERATION CAN CAUSE SERIOUS PERSONAL INJURY OR DEATH.

BEFORE LEAVING THE VEHICLE OR DURING VEHICLE MAINTENANCE, DISABLE THE VEHICLE.

THE VEHICLE IS NOT DESIGNED TO MEET CHILD SAFETY SEAT COMPATIBILITY REQUIREMENTS. CHILDREN REQUIRING A CHILD SAFETY SEAT MUST NOT RIDE ON THE VEHICLE. COMPLY WITH STATE AND LOCAL LAWS PERTAINING TO CHILD SAFETY.



CAUTION

OPERATE THE VEHICLE ONLY FROM THE DRIVERS SEAT.

OPERATE THE VEHICLE ONLY IN SPECIFIED AREAS.

ONLY AN AUTHORIZED LICENSED DRIVER CAN OPERATE THE VEHICLE.

ONLY OPERATE THE VEHICLE IN COMPLIANCE WITH LOCAL AND STATE LAWS.

USE CAUTION WHEN OPERATING THE VEHICLE IN THE PRESENCE OF HIGHER-SPEED VEHICLES, IN CONGESTED AREAS, OR ON UNIMPROVED SURFACES.

OPERATION AND CONTROLS

Be familiar with vehicle features before attempting any operations.

PRE-OPERATION SAFETY AND PERFORMANCE INSPECTION

Use the pre-operation checklist to inspect the operational conditions and performance of the vehicle. If bad operational conditions are found on a vehicle, stop operations. Removal from operation can prevent further damages to the vehicle or serious injuries. If the vehicle is not in an operate-able condition, inquire your dealer for maintenance or repairs.

PRE-OPERATION CHECKLIST

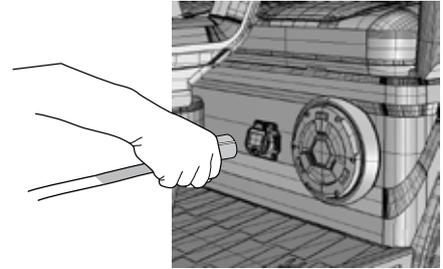
INSPECTION ITEMS	INSPECTION PROCEDURES
BATTERY	Before initiate using vehicle, the batteries should be fully charged, Replace the bad/broken/damaged parts during inspection.
BRAKE	Check the brake pedal , when stepped it should be flexible and feels firm. And it returns to its original position with flexibility when released.
ACCELERATOR PEDAL	Check the accelerator pedal ,when stepped and released it should return to its original position with full flexibility.
TIRES	Check the tires' pressure, pressure is around 20psi. Check tires surface, remove any embedded objects you can find. Be sure no cracks or other damages to the tires ,defective tires may cause accident while driving.
STEERING	Pull the steering wheel up and down ,check the tightness of steering wheel .Rotate the steering wheel right and left. Be sure no excessive free play and rattling sound .
REVERSER WARNING BEEPER	Check the reverse beeper, when the direction selecting switch be set at "REV", it should beep soundly.
LIGHTS	Check the signal lights, the brake lights and turning lights should be in proper working condition.

OPERATION AND CONTROLS

Be familiar with vehicle features before attempting any operations.

PRE-OPERATION SAFETY AND PERFORMANCE INSPECTION

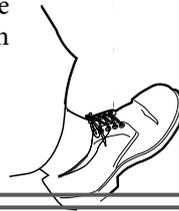
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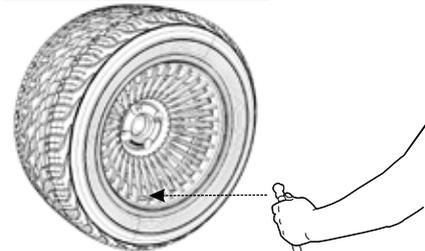
Check the accelerator pedal ,when stepped and released it should returns to its original position with full flexibility.



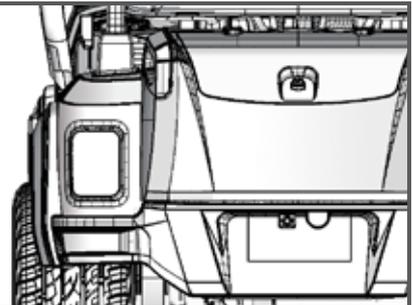
Check the brake pedal ,when stepped it should be flexible and feels firm . And it returns to its original position with flexibility when released.



Check the tires' pressure, it should be inflated until the internal pressure is around 30PSI



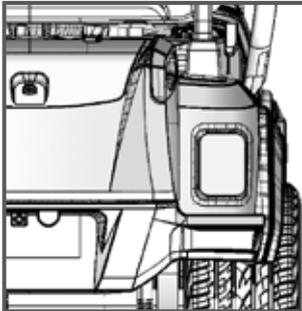
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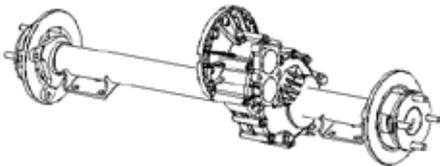
PRE-OPERATION SAFETY AND PERFORMANCE INSPECTION



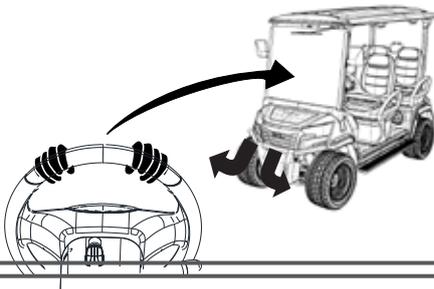
Check the reverse beeper ,when the direction selecting switch be set at “REV”, it should beep soundly.



Check the tires’ surface , remove any embedded objects you can find. Be sure no cracks or other damages to the tires ,defective tires may cause accident while driving.



Check the lubricant capacity the rear axle contains, use a cleaned stick , stick it into the rear axle and reach the bottom , pull it out check the depth. The amount of oil should be around 0.8L.



Pull the steering wheel up and down, check the tightness of steering wheel. Rotate the steering wheel right and left. Be sure no excessive free play or rattling sound.

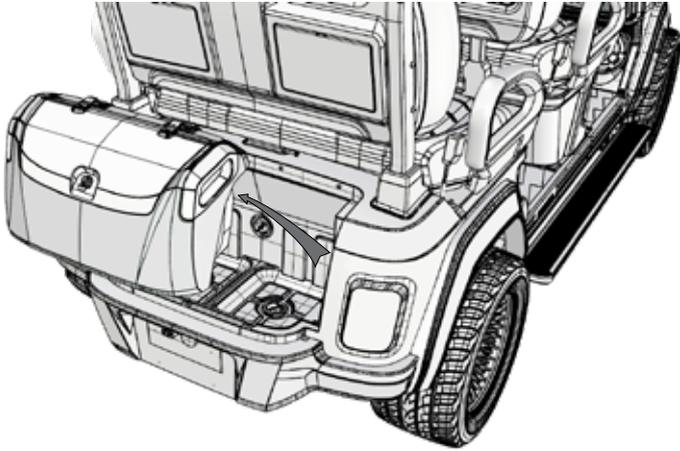


Check the tightness of the battery cables, make sure all the nuts are solidly tight. Loose nuts on the battery will cause sparks while operating.

OPERATION AND CONTROLS

Be familiar with vehicle features before attempting any operations.

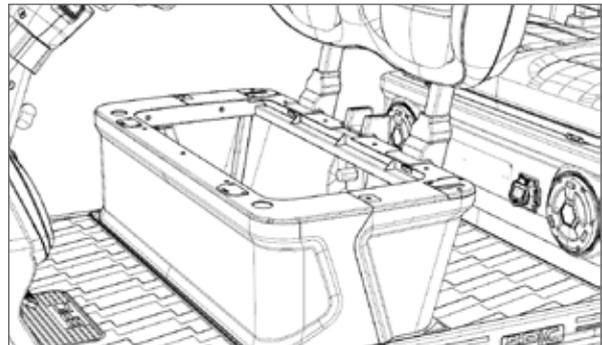
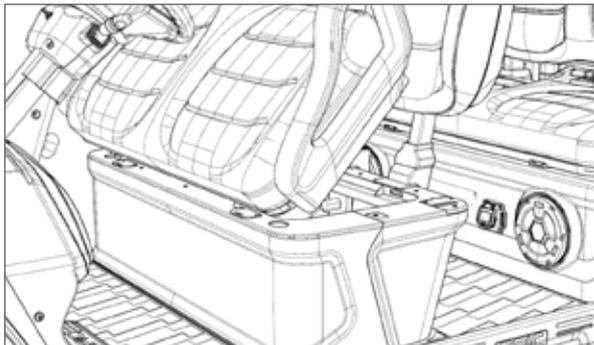
REMOVE THE STORAGE BOX



How to Properly Remove and Install the Rear Trunk

1. Locate the three rotary latches inside the trunk.
2. Turn each latch 90 degrees to release the trunk.
3. Move the trunk as needed.
4. To secure the rear trunk back to its original position, reverse the above steps.

REMOVING AND REINSTALLING THE SEAT:



1. Locate the two hinges at the front of the seat.
2. To remove the seat:
 - Lift the seat from the rear, as the front is secured by hinges.
 - Lift the seat to a certain angle.
 - Slowly pull the seat upwards to separate the male and female ends of the hinges.
 - Note: This action can be done by one person if they have enough strength. If not, it is recommended to have two people to avoid scratching the seat bucket.
3. To reinstall the seat:
 - Align the hinges first.
 - Insert the hinges back in place.
 - Ensure the seat is properly installed and test it after installation.

Be familiar with vehicle features before attempting any operations.

10.1 inches Speedometer

This product is a 10.1-inch multimedia speedometer for vehicles, featuring dynamic data display and multimedia playback capabilities.

The speedometer uses the CAN bus to communicate directly with the controller and the Battery Management System (BMS). It can also collect and control data from peripheral equipment, displaying it on the screen after comprehensive calculations.

It features full-screen touch control, with blue backlit buttons on the left side for quick operation. The external USB port supports multimedia playback and various audio and video formats, such as MP3, MP4, MKV, and AVI files.

Bluetooth connectivity allows for music playback and phone call answering via a mobile phone. The integrated FM radio module, using the included external antenna, can automatically search for radio stations and store up to 40 presets.

Security Information

1. Ensure the electrical wiring strictly follows the wiring diagram, paying special attention to the polarity and verifying the voltage of the electrical system.
2. If the fault alarm indicator on the speedometer lights up, stop immediately and check the issue.
3. Do not use the multimedia system while driving.
4. Avoid working with live electricity during disassembly to prevent damage to the speedometer and other components.

Home page



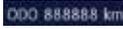
Be familiar with vehicle features before attempting any operations.

Home page function instructions:



1. . . . Volume EPIC: Displays the real-time volume level.
2. USB Display: The USB EPIC will not be displayed if no USB is inserted; it will be displayed when a USB is inserted
3. Bluetooth EPIC: The EPIC is gray when not connected and blue when connected.
4. Brightness Adjustment: Can switch between full brightness and half brightness
5. Return Key: Press this in other interfaces to gradually return to the home page.
6. Lithium Battery Status: The EPIC will be highlighted when in lithium battery status. Clicking this EPIC will display relevant lithium battery information. The EPIC will turn red if there is a lithium battery fault.
7. . . . Left Turn Indicator: Flashes when the left turn signal or hazard lights are on.

Be familiar with vehicle features before attempting any operations.

8.  High Beam Indicator: Displays when the high beams are on (optional feature, not used in some vehicles).
9.  Low Beam Indicator: Displays when the low beams are on (optional feature, not used in some vehicles).
10.  Fault Indicator Light: Lights up when there is a vehicle fault. Clicking the EPIC will display specific fault information.
11. . .  READY Indicator Light: Lights up when the vehicle is fault-free and turns off when there is a fault or the vehicle speed exceeds 2 KM/H.
12. . .  Small light indication is displayed when the small light is turned on (optional function, some vehicles do not use this function)
13.  Right Turn Indicator: Flashes when the right turn signal or hazard lights are on.
14.  Brake Fault Indicator: Lights up when there is no oil in the reservoir (optional feature, not used in some vehicles).
15. Gear Indicator: Displays  Gear Indicator: Displays  when in drive; displays  or enters the reverse camera interface when in reverse; displays  when in Sports gear.
16. Speed Dynamic Bar: Dynamically displays according to speed changes.
17. Speed Value Display: Displays the real-time speed value.
18. Voltage Dynamic Bar: Dynamically displays according to voltage changes.
19. Voltage Value Display: Displays the real-time voltage value.
20.  Parking Indicator: Displays when the foot parking brake is engaged (optional feature, not used in some vehicles).
21. . .  100 % Battery Level Indicator: Turns yellow when the battery level is $\leq 20\%$; turns red when the battery level is $\leq 10\%$.
22. .  . . . Current Indicator: Displays the real-time current value.
23. Charging Prompt: Does not display when the battery level is $> 20\%$; lights up when the battery level is $\leq 20\%$  ; lights up and flashes when the battery level is $\leq 10\%$,  indicating urgent need for charging.
24. .  . . . Trip Odometer Display.
25. .  . . . Total Odometer Display.

Be familiar with vehicle features before attempting any operations.

Button definitions:



1.Mute button: Press this button, the  mute EPIC will be displayed in the volume area. At this time, the speedo is in mute state. Press the increase or decrease volume EPIC to release the mute mode.

2.Home key: Press this button in other interfaces such as radio, Bluetooth, settings, etc. to directly return to the home page, such as playing radio, music, and Bluetooth. Pressing this button supports background playback.

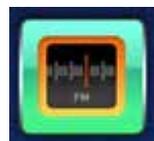
3.Backspace: Press this when in other interfaces, and it will gradually return to the home page.

4.Volume+: Press this to increase the volume. The maximum volume is 30

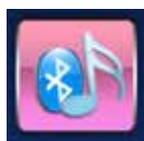
5.Volume-: Press this to reduce the volume. The minimum volume is 0

Be familiar with vehicle features before attempting any operations.

Multimedia



FM



BT Music



Telephone



USB Music



USB Movie



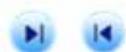
Setting

• Radio



Radio Search: After clicking the search EPIC  ,the instrument will automatically search for radio stations from 87.5 to 108.0 and store the frequencies locally for easy access and management by the user. Up to 40 radio stations can be stored and displayed in the radio area, with 6 stations per page.

Radio Selection: These two buttons can be used to select the previous or next page of preset radio stations.



Frequency Display: Displays the selected frequency in real-time.

Be familiar with vehicle features before attempting any operations.

• Bluetooth music



Bluetooth EPIC: Turns blue when connected, and gray when not connected.

Pause/Play: Click here to play or pause the phone's Bluetooth music.

Previous Track:

Click here to play the previous track on the phone.

Next Track:

Click here to play the next track on the phone.

Connected Device:

When the phone's Bluetooth is successfully connected to the speedometer, the name of the connected device, such as "iPhone," will be displayed here. This name could be the device model or a custom name set by the phone.

Bluetooth Name: The Bluetooth name of the device. The phone or other instruments can search for this Bluetooth name to connect and pair. This is a crucial step in the process of connecting the phone to the speedometer's Bluetooth. The correct name must be searched to pair successfully, and different instruments have different names.

TOUCHSCREEN MANUAL

Be familiar with vehicle features before attempting any operations.

• Phone

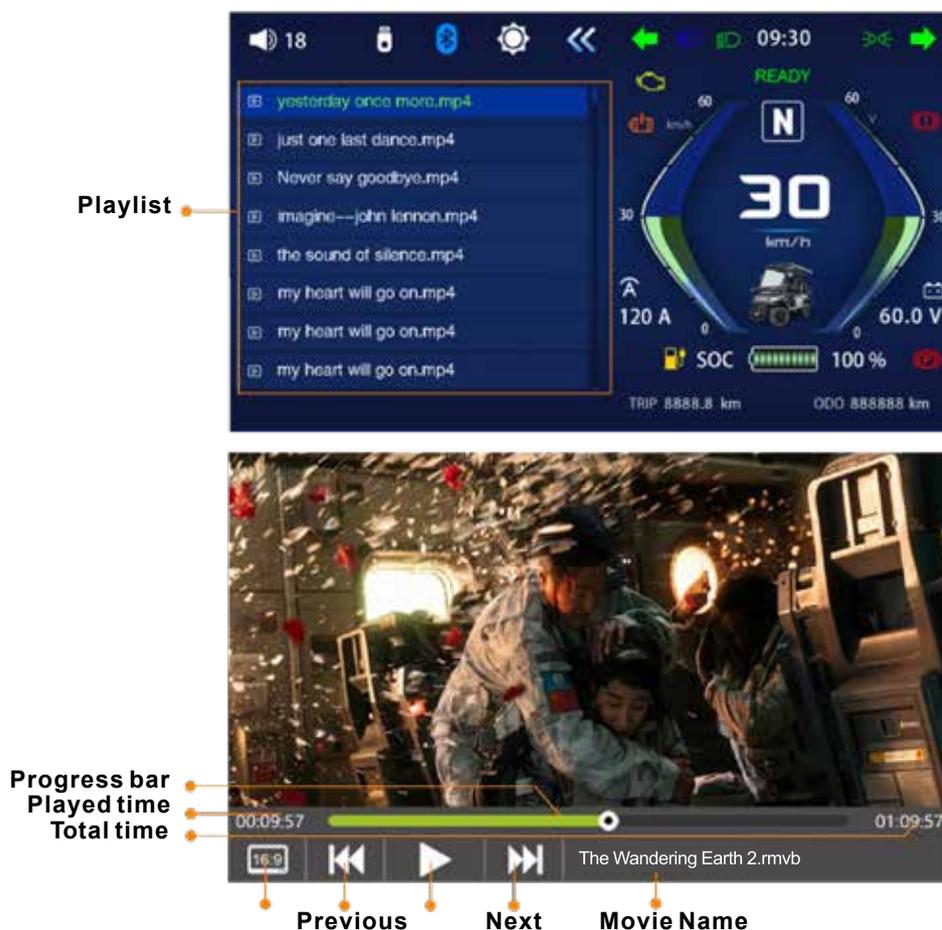


Digital display area:

1. When dialing a number, this area will display the number in real time, and the interface will display a dial EPIC as shown in the figure: Click this button  to make a call, and the interface will display a hang-up EPIC  after making a call. Click this EPIC to end the call.
2.  . Click this button to enter the call recording interface.
3.  . When you enter a wrong number, you can press the delete button to delete it.

Be familiar with vehicle features before attempting any operations.

• Movie



Played time:

You can manually adjust the playback progress bar

Total time:

Show the total duration of the movie

Scale adjustment:

AUTO:  standard mode

Full Screen Mode:  Switch to this EPIC to enter full screen mode

1:1 mode:  switch to this EPIC to enter 1:1 mode

16:9 mode:  switch to this EPIC to enter 16:9 mode

Previous song: Click this EPIC to play the previous video

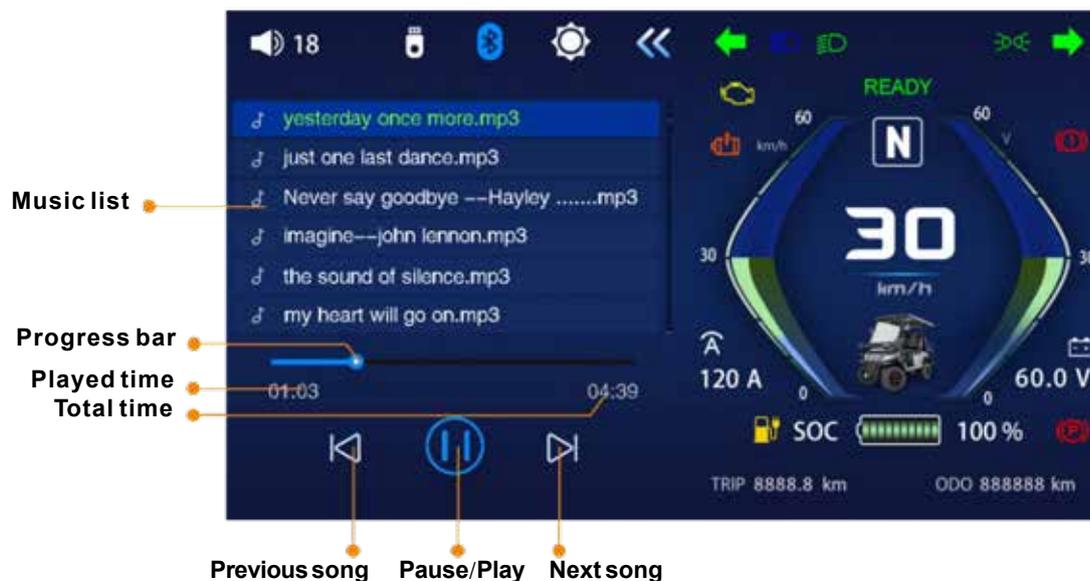
Next song: Click this EPIC to play the next video

Pause/Play: Click this EPIC to play the video or pause it

Movie Name/Format: When the video is playing, the current name and format of the video is shown here.

Be familiar with vehicle features before attempting any operations.

• Music



List of Song:

The music copied from Flash Disk(USB) is displayed in the list here, you can slide up and down to select the music, and the music will be played after selection

Played time:

You can manually adjust the playback progress bar to choose to play

Total time:

Show the total duration of the music

Previous song: Click this EPIC to play the previous song

Next song: Click this EPIC to play the next song

Pause/Play: Click this EPIC to play music or pause playback

Be familiar with vehicle features before attempting any operations.

• Setting



Basic settings:

Language: Chinese/English

Unit: Kilometers/Miles

Restore default settings: Click here to pop up a dialog box



Click **Confirm** to restore the machine to its original upgraded state.

For example: setting Chinese, kilometers and miles, volume, etc. will be restored to the original state. Clicking Cancel will give up the recovery.

Be familiar with vehicle features before attempting any operations.

Vehicle Information



Working Time: The total operating time of the cart.

Trip Odometer: The distance traveled by the carts. Click here to reset the trip odometer. **Motor**

Temperature: Displayed based on data transmitted by the controller.

Controller Temperature: Displayed based on data transmitted by the controller.

Speed Display Adjustment: The reference value is 100. Increasing the reference value will increase the speed, while decreasing the reference value will reduce the speed. (This function is adjustable only when the speed is measured using a pulse signal. When the speed is transmitted via CAN communication, it can only be adjusted through the controller.)

Version Display



Shows the current version number of the speedometer. Click here three times to view the main control version, microcontroller version, and Bluetooth version.

Be familiar with vehicle features before attempting any operations.

BMS



In this interface, you can view relevant information about the lithium battery, including total battery voltage, battery current, battery SOC (State of Charge), highest single cell voltage, lowest single cell voltage, highest single cell temperature, lowest single cell temperature, fault information, number of charge and discharge cycles, and the number of times charging was not done in a timely manner.

SPI RGB LED CONTROL

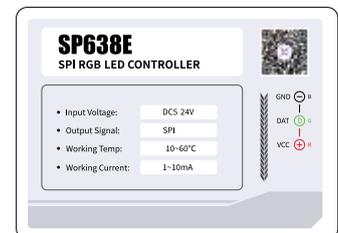


1. Brief:

SPI three-channel addressable RGB LED controller, with unique dynamic, music and DIY effects to meet your lighting and ambiance needs.

2. Features:

1. Support App control, 2.4G touch remote control;
2. Support up to 600 single-wire RZ RGB LED driver ICs;
3. Built-in a variety of music and dynamic effects, support effects pause, multi-parameter adjustable;
4. Capture music through the phone microphone, player streamer and on-board microphone;
5. Support effect collection;
6. support DIY effects;
7. With a variety of ON/OFF animation effects;
8. With sequential channel calibration and ON/OFF timer functions;
9. Support OTA firmware upgrade.



3.APP:



- 1.SP638E supports App control for iOS and Android devices.
- 2.Apple devices require iOS 10.0 or higher, and Android devices require Android 4.4 or higher.
- 3.You can search “BanlanX” in App Store or Google Play to find the APP, or scan the QR code to download and install

Operations

- Open the App, click the + icon in the top right corner of the home page to add device;
- Click the ⚙ icon in the upper right corner of the App to enter the settings page, where you can modify the device name, set the timings, set the on/off effect, OTA firmware upgrade, etc.

Dynamic



Two ways of adjusting parameters

1. Directly slide to adjust parameters.



2. Click and drag to adjust parameters.



Edit favorite effects

1. Display the list of favorite effects.



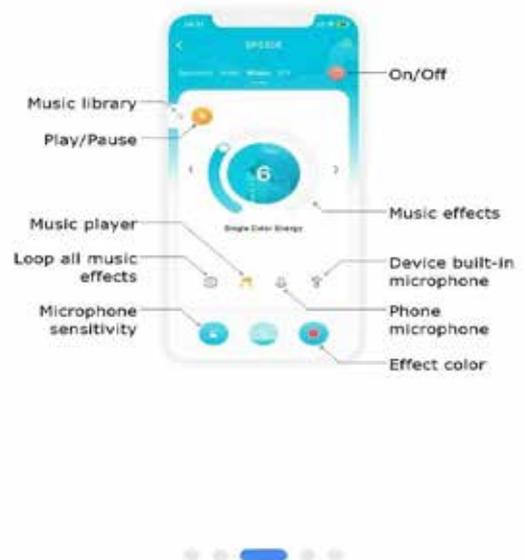
2. Edit the list of favorite effect.



Solid



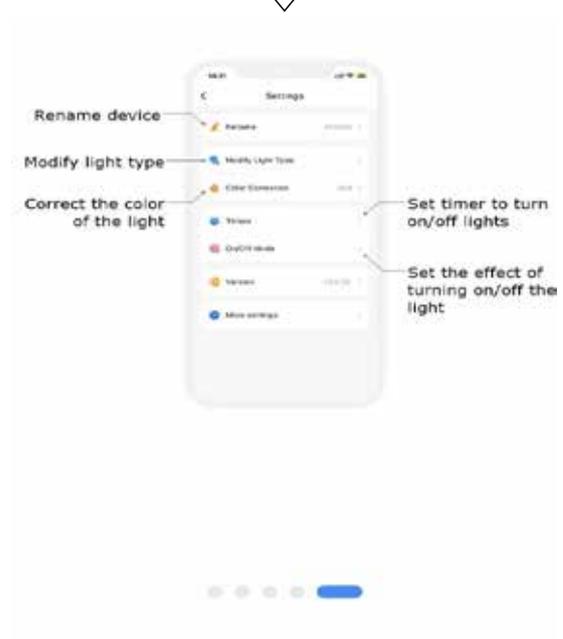
Music



DIY

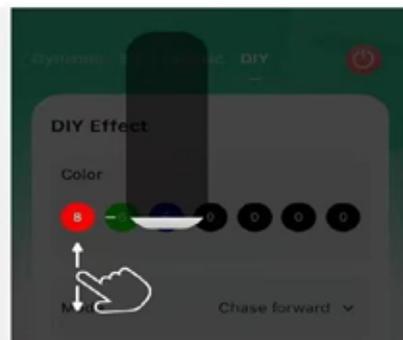


Settings



Methods for setting the color of custom effects

1. Hold down the color and slide up or down to bring up the window for adjusting the number of pixels. At this time, **do not release your finger**, and continue sliding up or down to modify the number of points for the custom effect color.



SPI RGB LED CONTROL

2. Hold down the color and slide left or right to bring up the window for adjusting the color. At this time, **do not release your finger**, and continue sliding up or down to modify the color of the custom effect.



3. Click on the color to bring up a window where you can modify the color and number of pixels for the custom effect.

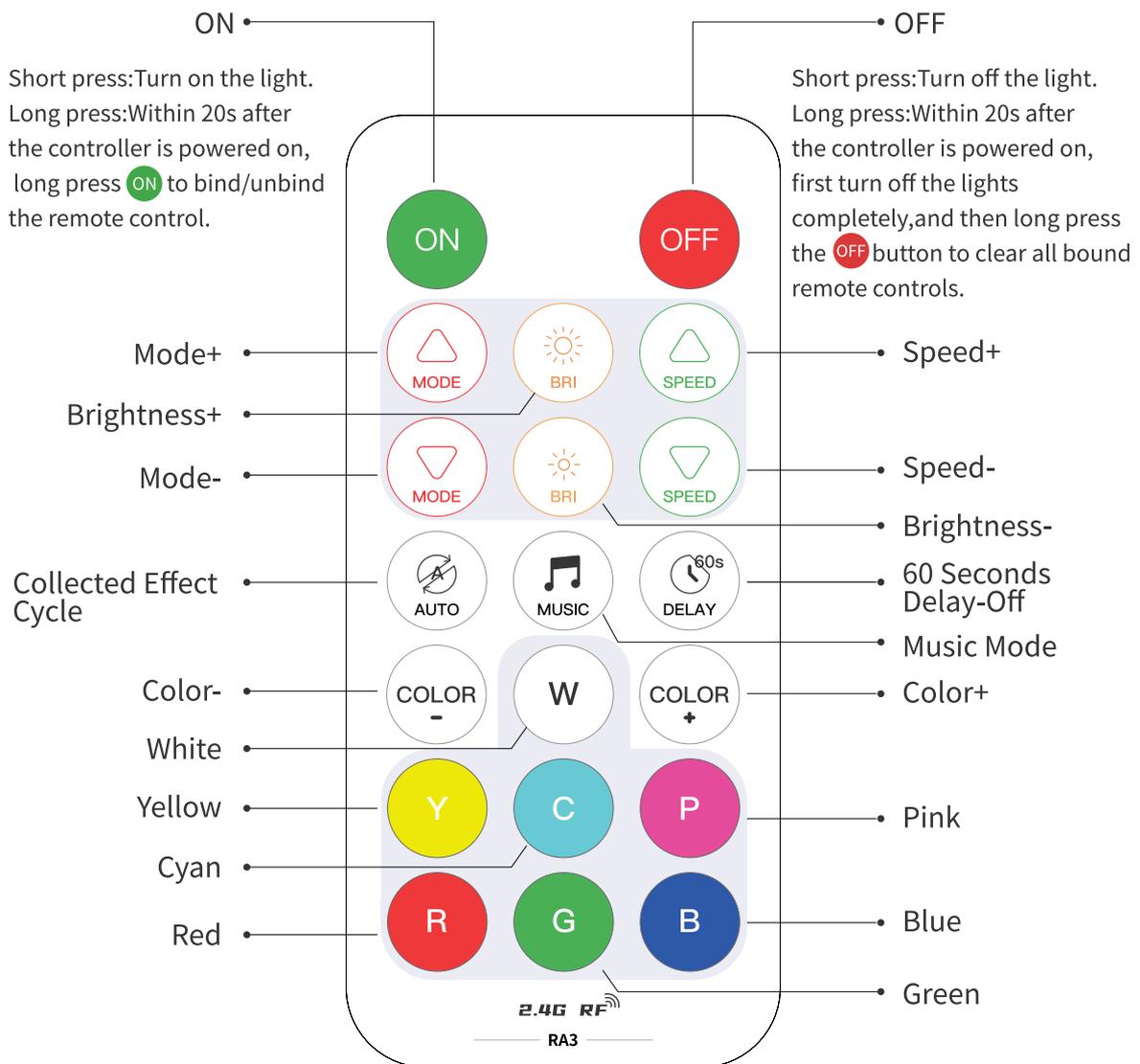


4. Work With 2.4G Touch Remote Control:

The 2.4G touch remote control models (RA3) matched with SP638E are as follows:

- Support one-to-many control, one remote control can control multiple controllers.
- Support many-to-one control, each controller can bind up to 5 remote controls.
- Support unified control and 4-zones control.

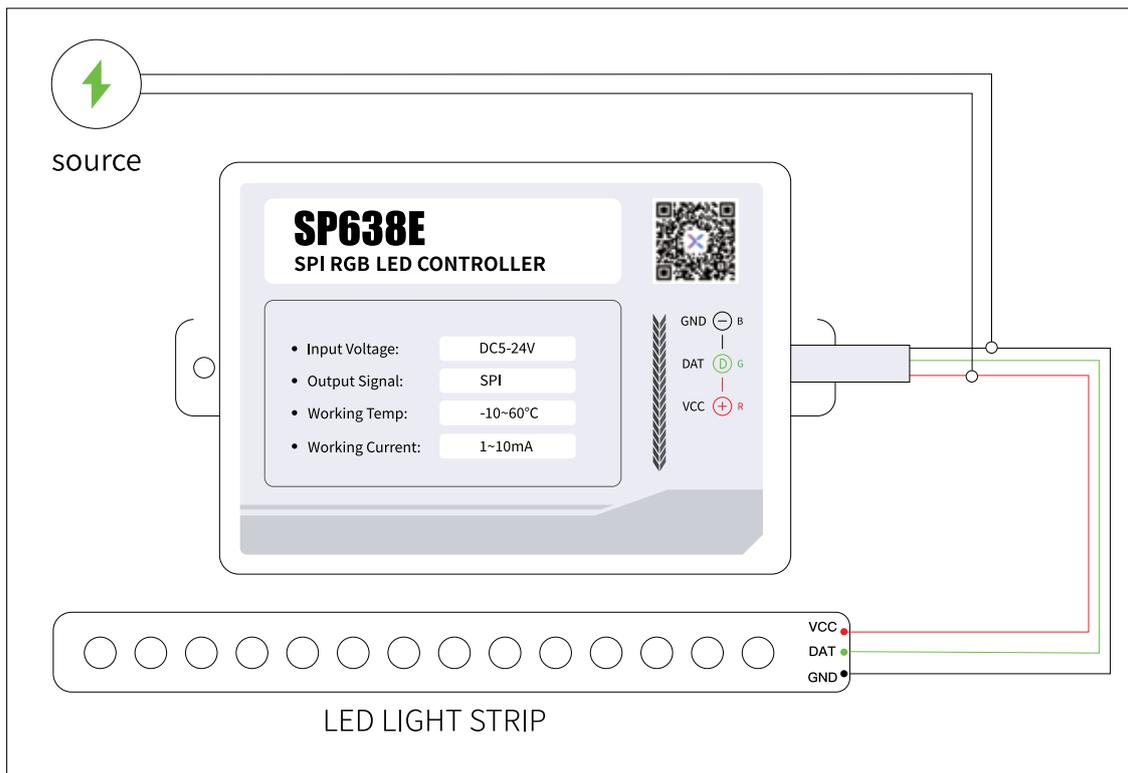
NOTE: For more information, refer to “2.4G Touch Remote Control Instructions”



5. Technical Parameters:

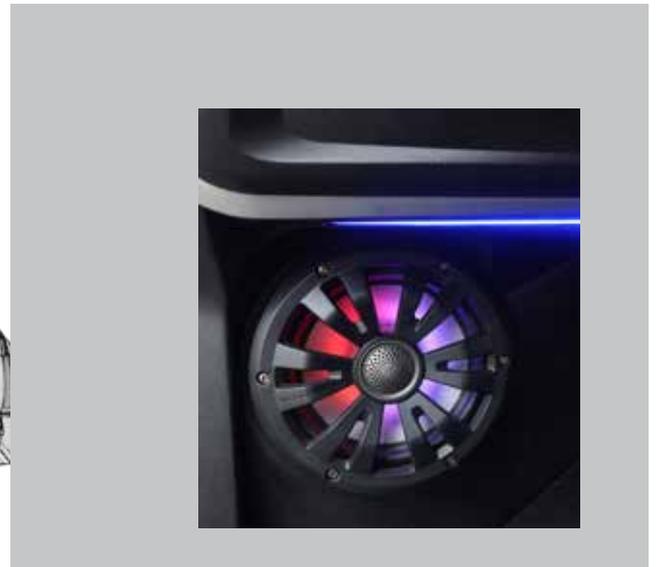
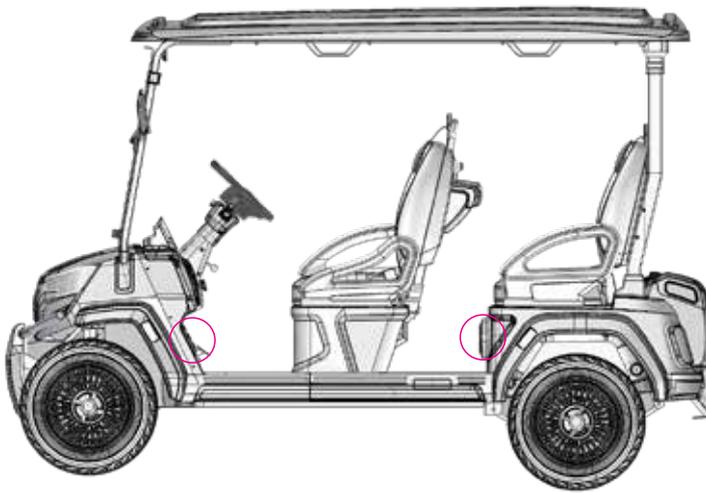
Working Voltage: DC5V~24V	Working Current: 1mA~10mA
Working Temp: -20°C~60°C	Dimension: 86mm*65mm*22mm

6. Wiring



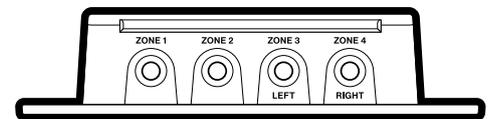
4-ZONE LED CONTROL

LIGHTING CONTROL CONCEPTS



Zones

A Zone corresponds to all of the LED lights that are connected directly to one physical LED Control Output on the ExtremeController. When you change a Zone status (On/Off, Mode, etc.), the LEDs connected to that Zone will change accordingly. You can control one Zone or multiple Zones at a time.



Modes

There are 3 LED Mode categories, totaling in 44 Modes supported by the RF Remote. The SoundExtreme app can support many more Color Modes.

1. Color Mode: Each Color Mode lights up the LEDs in a solid color. There are 8 Color Buttons on the Remote Control: Red, Green, Blue, White, Orange, Yellow, Cyan, and Purple. You can create a custom color by utilizing the SoundExtreme Smartphone App.
2. Party Mode: There are 20 preset Party Modes accessible via the Remote Control and SoundExtreme Smartphone App. The app allows you to customize each of the 20 Party Modes, allowing for nearly unlimited color, cascading, and LED chasing options.
3. Music Mode: There are 16 Music Modes accessible via the Remote Control and SoundExtreme Smartphone App. In order to sync with the music, the ExtremeController must be wirelessly connected to an EcoCast-enabled ECOXGEAR or SoundExtreme audio product. Refer to EcoCast for Music Mode for more information.

4-ZONE LED CONTROL

Scene

A Scene is programmed via the SoundExtreme Smartphone App. You can customize each Zone into a Scene (a preset). Setting the Scenes on the app allows a 1-button press to bring up your desired custom settings for all of the LED products connected to the ExtremeController Lighting Control Concepts. The ExtremeController supports 6 lighting Scenes. Scenes 1-5 are user customizable and programmable. The 6th scene, Street Mode, is for special use and cannot be modified. The default Scene settings are:

Scene 1: Orange for all 4 Zones.

Scene 2: Flowing colors for all 4 Zones.

Scene 3: Patriot 1 for all 4 Zones.

Scene 4: Fading colors for all 4 Zones.

Scene 5: Christmas for all 4 Zones.

Scene 6: Street Mode – Turns all LED lights off but keeps the controller powered on so Zones 3 and 4 will still function as enhanced brake, reverse, and turn signal lights.

Street Mode: Zone 3 and 4 Vehicle Signaling

If you have Integrated the ExtremeController with the Vehicle's Signal Inputs, you can use the Street Mode function.

Under normal operations, when all 4 Zones are turned off, the vehicle signaling in Zones 3 and 4 automatically enters Off Mode. When LEDs in any of the 4 Zones are turned on, as soon as the controller has a vehicle's signal input, Zone 3 and 4 LEDs will light up accordingly. The LEDs will resume their original status (an LED Mode) once the vehicle signal input is gone.

You can also use the RF Remote Control to turn the LED lights in all 4 Zones on or off (when the controller has a vehicle's Remote Turn On Signal Input). Simply press the ALL Button to turn the LEDs in all 4 Zones on or off. When the LEDs in all 4 Zones are turned off, the controller has the following two functions:

- **Off Mode:** When the LEDs in all 4 Zones are turned off, the controller disables the vehicle signaling to the LEDs in Zones 3 and 4, i.e. Zone 3 and 4 LEDs will not light up, even if there is a vehicle signal input. This Off Mode is for users who do not want their LEDs to light up while they are driving.
- **Street Mode:** When the controller is in this Mode, all 4 Zone LEDs are also turned off. However, as soon as the controller has a vehicle's signal input, the LEDs in Zone 3 and 4 will light up accordingly. The LEDs will turn off once the vehicle signal input is gone.

To enable Street Mode, press the Scene Button on the Remote to cycle through to the 6th Scene or use the SoundExtreme Smartphone App and select Scene 6 – Street Mode.

4-ZONE LED CONTROL

When the ExtremeController enters Street Mode, each of the LEDs in all 4 Zones will briefly light up Blue in ascending order to indicate that Street Mode is active.

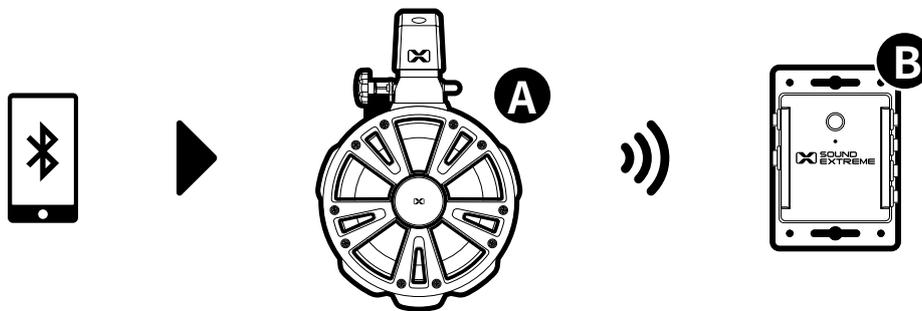
When the ExtremeController is in Street Mode, any Mode change to a Zone (e.g. change Zone 1 Color) or Scene change will bring the controller out of Street Mode and into the selected setting. When the controller exits Street Mode, each of the LEDs in all 4 Zones will briefly light up Blue in descending order.

EcoCast for Music Mode

The ExtremeController is compatible with the ECOXGEAR audio and LED lighting EcoSystem, which includes LEDCast and EcoCast Innovations. Look for the LEDCast and EcoCast logos on the growing family of ECOXGEAR and SoundExtreme audio and lighting solutions. EcoCast-enabled audio products are designed to be paired with one or more EcoCast-enabled products. Simply initiate EcoCast Transmitting Mode in one SoundExtreme or ECOXGEAR speaker and broadcast your music to one or more EcoCast-enabled products in Receiving Mode. Once connected to your controller, select a Music Mode to have all of your LED lights complement the music.

Note: The ExtremeController is always in EcoCast Receiving Mode.

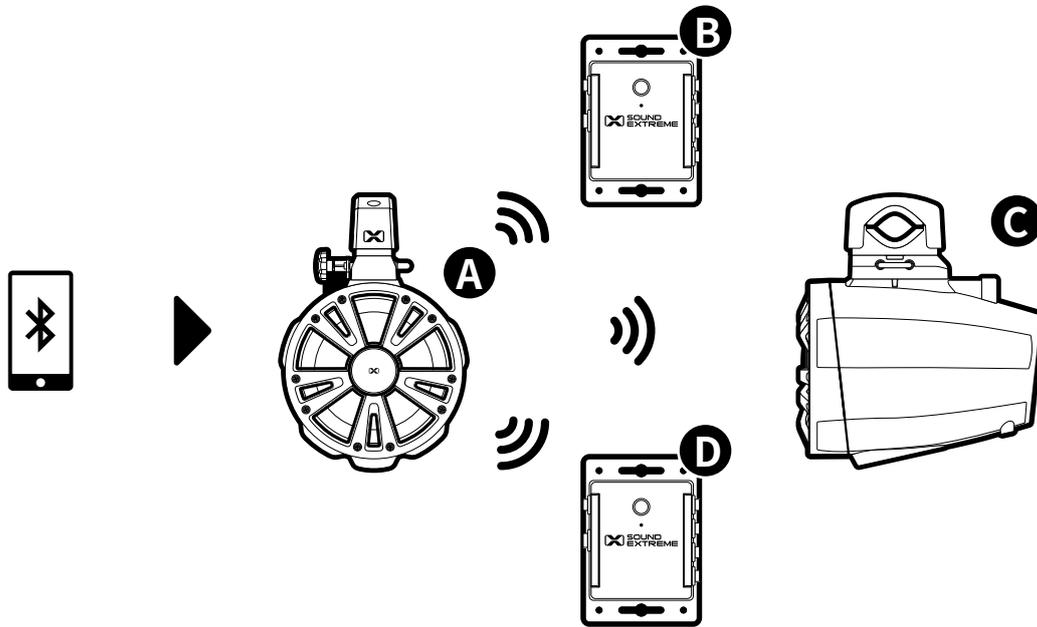
EcoCast: Speaker to ExtremeController



1. Follow the Pairing a Bluetooth Device instructions in your speaker's user guide to connect it (Speaker A) to your Bluetooth device. After your device is connected to Speaker A, you can select a song to play.
2. Initiate EcoCast Transmitting Mode on Speaker A.
3. Power on your ExtremeController (Controller B). It will already be in EcoCast Receiving Mode. The Connection Status LED Indicator will flash Green.
4. Once the connection between the products is successful, the Connection Status LED Indicator on Controller B will shine solid Green. You can now select one of the 16 Music Modes with the Remote Control or the SoundExtreme Smartphone App.

4-ZONE LED CONTROL

EcoCast: Additional Receiving Speakers and / or Controllers

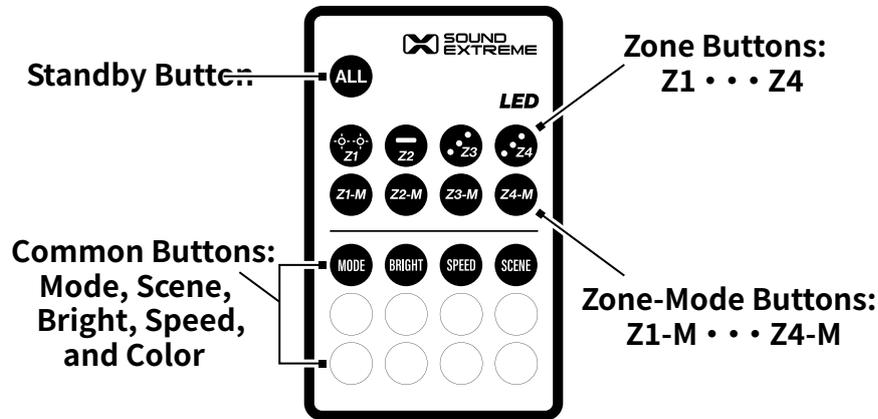


1. Power on the additional EcoCast-enabled products (Speaker C and Controller D) and initiate EcoCast Receiving Mode in SpeakerC (Controller D will already be in EcoCast Receiving Mode). The Connection Status LED Indicator on Controller D will flash Green.
2. Reinitiate EcoCast pairing on Speaker A.
3. Once the connection between the speakers is successful, the Connection Status LED Indicator on Controller D will shine solid Green. You can now select one of the 16 Music Modes.

Notes:

- If all the speakers are turned off, then turned on, the speaker(s) and controller(s) in EcoCast Receiving Mode (Speakers and Controllers B, C, and D) will automatically re-connect to the speaker in Transmitting Mode (Speaker A). If they are not automatically re-connected, please follow the above steps.
- To clear pairing records on an ExtremeController, PRESS AND HOLD  for 3 seconds.
- If the ExtremeController is unable to pair and connect with the speaker, re-enable the EcoCast pairing on the speaker, then PRESS AND HOLD the ALL Button on the RF Remote Control to enable EcoCast pairing on the controller.
- The EcoCast functionality is only available while using Bluetooth as your Audio Source on legacy ECOXGEAR products at a maximum range of 30 feet between speakers.
- While connecting the EcoCast-enabled products, make sure that they are within a few feet of each other.

RF REMOTE CONTROL



The RF Remote Control comes paired to the ExtremeController. If the ExtremeController does not react when you press a button on the Remote Control, check if the battery isolator (clear plastic strip) on the Remote battery compartment is removed (pulled out) completely. Then, power off and power on the ExtremeController.

When the Connection Status LED Indicator on the controller flashes Blue, PRESS AND HOLD the Mode Button on the Remote for 3 seconds. The Status LED Indicator will shine solid Green for 1 second, then flash Green, indicating a successful pair.

Basic Functions

1. Turn on the vehicle ignition switch (or the rocker switch) to power on the ExtremeController.
2. Press the ALL Button to turn on the LEDs in all of the Zones. Each of the LEDs will briefly light up Green in ascending order and then shine solid Orange or a random color pattern.
3. If you don't see the LEDs light up, as a test, short-press the Red Button. The LEDs in all the Zones will shine solid Red.
4. There are three ways to change the LED Mode:
 - Short-press the Mode Button to cycle through the three LED Mode categories for all the Zones.
 - Short-press one of the 8 Color Buttons to light the LEDs in all the Zones in the corresponding color.
 - Short-press one of the Zone-Mode Buttons (Z1-M, Z2-M, Z3-M, or Z4-M) to cycle through the three LED Mode categories for only the corresponding Zone.

Notes: There are 44 distinct LED Modes. Instead of using the Mode Button to cycle through to a desired LED Mode, you can also use the SoundExtreme Smartphone App to find a specific LED Mode.

5. To optimize the LED lighting performance the first time you use the ExtremeController, or you change the LEDs physically connected to a Zone, use the SoundExtreme Smartphone App to select the LED product connected to each Zone. Refer to the SoundExtreme Smartphone App instructions for more details.
6. If you have an ECOXGEAR speaker with EcoCast capability and / or a SoundExtreme speaker with LEDCast technology, you can connect the ExtremeController to either product for Music Mode. If the ExtremeController is unable to pair and connect with the speaker, re-enable the EcoCast pairing on the speaker, then PRESS AND HOLD the ALL Button on the RF Remote Control to enable EcoCast pairing on the controller. Refer to the EcoCast for Music Mode instructions for more details.
7. Short-press the Mode Button to cycle through the multiple Music Modes.
 - When no music is playing the LED will be dark. So, please play music while changing Music Modes to review the various Music Mode effects.

4-ZONE LED CONTROL

- There are 44 distinct LED Modes. Instead of using the Mode Button to cycle through to a desired Music Mode, you can also use the SoundExtreme Smartphone App to find a specific Music Mode.
- 8. Short-press any of the 8 Color Buttons to change the colors in all LED Zones.

Advanced Functions

You can also change the LED lighting effect in only 1 Zone at a time:

1. To activate the Zone you want to change, PRESS AND HOLD the Zone Button. For example, press and hold the Z1 Button for 3 seconds. The LEDs in Zone 1 will flash Green twice, indicating that Zone 1 is selected.
2. You can now PRESS AND HOLD any of the 8 Color Buttons, the Bright Button, or the Speed Button for 2 seconds (instead of a short-press) to modify the LEDs in the selected Zone.
3. To change another Zone, e.g. Zone 3, PRESS AND HOLD the Z3 Button. The LEDs on Zone 3 will flash Green twice, indicating that Zone 3 is selected. Follow step 2 to modify the LEDs in Zone 3.

Note: Anytime you short-press a Common Button on the Remote, it will change the LEDs on all Zones.

REMOTE FUNCTIONS OVERVIEW

BUTTON	ACTION	FUNCTION	
	Short-Press	Turn on / off the LEDs in all Zones.	<ul style="list-style-type: none"> • When turned on, each of the LEDs will light up Green in ascending order. When turned off, the LEDs light up Red in descending order. • Does not turn off the ExtremeController. Only the vehicle ignition switch (or rocker switch) can power off the controller • Refer to Zones, Modes, and Scenes. Note: If you want to turn all of the LED lights off but still want Zones 3 and 4 to function as enhanced brake, reverse, and turn signal lights, use Street Mode (Scene 6).
	Press and Hold (for 3 seconds)	To enable EcoCast pairing.	<ul style="list-style-type: none"> • The  Button on the ExtremeController has the same Action / Function.
	Short-Press	To turn on / off the Zone 1 LEDs. To	<ul style="list-style-type: none"> • When turned on, LEDs in Zone 1 will light up Green in ascending order. When turned off, the LEDs light up Red in descending order.
	Press and Hold (for 3 seconds)	select Zone 1.	<ul style="list-style-type: none"> • The LEDs in Zone 1 will flash Green twice, indicating that the (Bright, Speed, and Color) Common Buttons will only apply to Zone 1.
	Short-Press	To turn on / off the Zone 2 LEDs. To	<ul style="list-style-type: none"> • When turned on, LEDs in Zone 2 will light up Green in ascending order. When turned off, the LEDs light up Red in descending order.
	Press and Hold (for 3 seconds)	select Zone 2.	<ul style="list-style-type: none"> • The LEDs in Zone 2 will flash Green twice, indicating that the (Bright, Speed, and Color) Common Buttons will only apply to Zone 2.
	Short-Press	To turn on / off the Zone 3 LEDs. To	<ul style="list-style-type: none"> • When turned on, LEDs in Zone 3 will light up Green in ascending order. When turned off, the LEDs light up Red in descending order.
	Press and Hold (for 3 seconds)	select Zone 3.	<ul style="list-style-type: none"> • The LEDs in Zone 3 will flash Green twice, indicating that the (Bright, Speed, and Color) Common Buttons will only apply to Zone 3.
	Short-Press	To turn on / off the Zone 4 LEDs. To	<ul style="list-style-type: none"> • When turned on, LEDs in Zone 4 will light up Green in ascending order. When turned off, the LEDs light up Red in descending order.
	Press and Hold (for 3 seconds)	select Zone 4.	<ul style="list-style-type: none"> • The LEDs in Zone 4 will flash Green twice, indicating that the (Bright, Speed, and Color) Common Buttons will only apply to Zone 4.

4-ZONE LED CONTROL

BUTTON	ACTION	FUNCTION	NOTES
Z1-M	Short-Press	To cycle through the three LED	
	Click	Mode categories for Zone 1. Double- To cycle back to the previous LED Mode for Zone 1.	
Z2-M	Short-Press	To cycle through the three LED	
	Click	Mode categories for Zone 2. Double- To cycle back to the previous LED Mode for Zone 2.	
Z3-M	Short-Press	To cycle through the three LED	
	Click	Mode categories for Zone 3. Double- To cycle back to the previous LED Mode for Zone 3.	
Z4-M	Short-Press	To cycle through the three LED	
	Click	Mode categories for Zone 4. Double- To cycle back to the previous LED Mode for Zone 4.	
MODE	Short-Press	To cycle through the three LED Mode categories for all the Zones.	There are 44 distinct LED Modes: 8 Color Modes, 18 Party Modes, and 16 Music Modes. You can also use the SoundExtreme Smartphone App to find a specific LED Mode.
	Double-Click	To cycle back to the previous LED Mode for ALL Zones.	
	Press and Hold (for 3 seconds)	To enter Pairing Mode with the ExtremeController.	• The RF Remote Control comes paired to the ExtremeController. This feature is meant to be used if the connection is lost or a replacement Remote is purchased.
SCENE	Short-Press	To cycle through the 5 defined Scenes for all the Zones.	• Scene 6 (Street Mode) turns all the LED lights off but Zones 3 and 4 will still function as enhanced brake, reverse, and turn signal lights.
	Press and Hold (for 3 seconds)	To set all Zones to shine Orange, at 100% brightness and 80% speed.	
BRIGHT	Short-Press	To cycle through 5 levels of Brightness for all the Zones.	
	Press and Hold (for 2 seconds)	To cycle through 5 levels of Brightness for the selected Zone.	This feature is only available when one of the Zones has been selected via one of the Zone Buttons. (Press and hold Z1, Z2, Z3, or Z4 for 3 seconds).
SPEED	Short-Press	To cycle through 5 levels of Speed for all the Zones.	
	Press and Hold (for 2 seconds)	To cycle through 5 levels of Speed for the selected Zone.	This feature is only available when one of the Zones has been selected via one of the Zone Buttons. (Press and hold Z1, Z2, Z3, or Z4 for 3 seconds).
COLORS	Short-Press	To select the corresponding Color for all the Zones.	There are 8 Color Buttons on the Remote Control: Red, Green, Blue, White, Orange, Yellow, Cyan, and Purple. You can also use the SoundExtreme Smartphone App create a custom color.
	Press and Hold	To select the corresponding Color for the selected Zone.	This feature is only available when one of the Zones has been selected via one of the Zone Buttons. (Press and hold Z1, Z2, Z3, or Z4 for 3 seconds).

SOUNDEXTREME APP

The ExtremeController can be operated via the SoundExtreme Smartphone App. **Download and Install**

For iPhones, download the app from the following URL:

<https://apps.apple.com/us/app/soundextreme/id1670708941>

For Android phones, download the app from the following URL:

<https://play.google.com/store/apps/details?id=com.cchip.ecoxgear>

Alternatively, use the following QR Codes to download the SoundExtreme Smartphone App.



iOS



Android

App Overview

Password Secured: The app is password protected so others cannot gain access and control your ExtremeController. The default password is 0000.

Name Your Devices: You can change and customize the name of your devices and Zones, such as Rear speakers, Soundbar, Subwoofer, Cabin Lights, Underglows, Roof Lights, Whips, etc.

Set Up Modes: Use the app to set up the LED Mode for each of the 4 Zones on your ExtremeController. You can also change the Brightness and Speed.

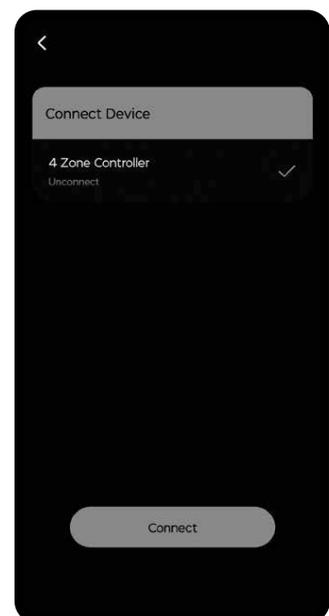
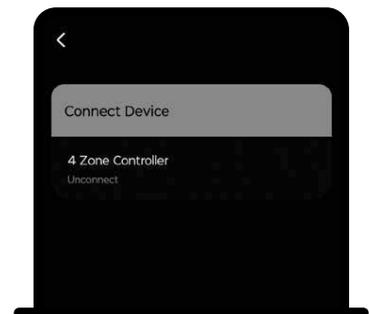
Create and save Scenes: A Scene is a preprogrammed light show that you can save for later quickaccess. We have created 5 default Scenes that are fully customizable and programmable.

Set Up a Group: Create and set up a group of devices (multiple ExtremeControllers, or other Sound Extreme products with LEDCast built-in). This will allow all the LED lights connected to different devices to be controlled by the SoundExtreme Smartphone App at the same time.

Bluetooth Low Energy: The SoundExtreme Smartphone App relies on a BLE (Bluetooth Low Energy) connection between your phone and the ExtremeController. Make sure you turn on Bluetooth on your smartphone.

Initial App Connection and Device & LED Setup

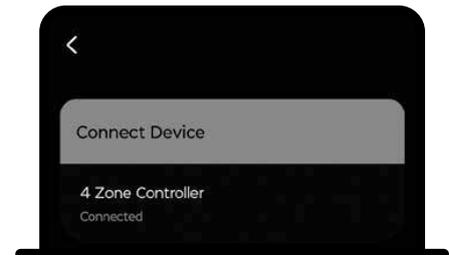
1. Launch the SoundExtreme App on your smartphone or other BLE-enabled device.
2. On the SoundExtreme App homepage, tap Refresh List.
3. If your ExtremeController is powered on, it will show up as 4 Zone Controller on the app's Connect Device screen. Tap the device name on the screen. A checkmark will appear on the right. Tap the Connect button.
4. A dialog window will popup asking you to enter a password. The ExtremeController default password is 0000.
5. If the app connects to your ExtremeController successfully, a popup message will appear, showing the Device & LED Settings for the 4 Zones on your controller and ask you if you want to change the settings. On the bottom of the message there is a checkbox to ask if you want this message to be displayed the next time the app connects to your controller
6. If you choose to change the Device & LED Settings, the app will bring you to the Device & LED Set Up menu for you to choose the LED device from the pull-down list.



4-ZONE LED CONTROL

7. Once the Device & LED Settings are completed, the app will bring you to the Device screen.

8. Select your controller. It will take you to the Scene Screen. There are 6 predefined Scenes on the controller. You can turn on one of first 5 Scenes to light up the LEDs. For example, click the On/ Off button at the right for Scene 1, the Speaker LEDs will light up Orange, which is the LED lighting mode defined for Scene 1.



4-ZONE LED CONTROL

Set Up Zones

1. Select your ExtremeController on the Device list, and the app will bring you to the Zone screen.
2. Tap one of the 4 Zones, and you will go to the Zone LED Mode Settings screen. There are 3 tabs: Color, Party, and Music, which allow you to select a solid Color, a Party Mode, or a Music Mode.



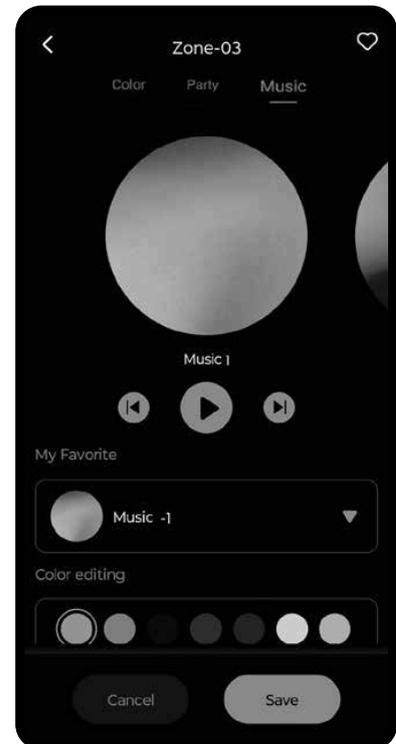
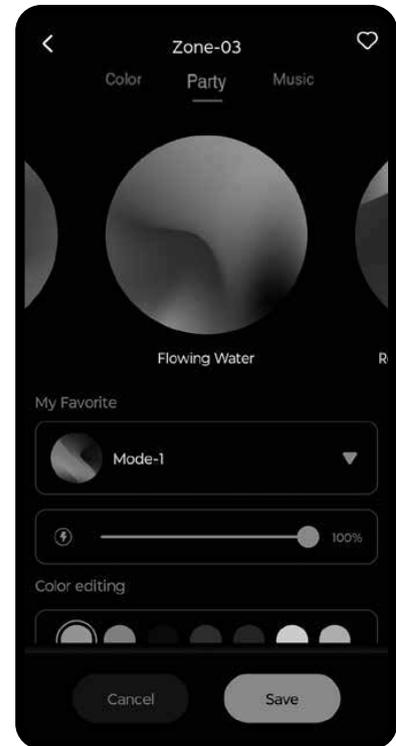
4-ZONE LED CONTROL

When you choose a Mode, the LEDs connected to the Zone you selected will light up accordingly, giving you a preview.

If you tap the Save button on the screen, the app will save your setting for the selected Zone.

If you tap the Cancel button or exit the LED Mode Settings screen, your Mode selection will not be saved and LEDs connected to that Zone will display the previously selected LED Mode.

3. After you set up the Modes for each of the Zones, the controller setup is complete.



4-ZONE LED CONTROL

Set Up Scenes

1. Select your Extreme Controller on the Device list, and the app will bring you to the Zone screen. Tap the Scene tab. The app will show 6 pre-defined scenes on your controller. As previously mentioned in Zones, Modes, and Scenes, Scene 6 is designed for Street Mode and not editable. Street Mode turns all the lights off but keeps the controller on. If you have the controller connected to your vehicle's turn signals, brakes and / or reverse wires, the connected LED devices in Zones 3 and 4 will still light up when applicable.

2. You can change a Scene's LED settings by selecting any of the first 5 Scenes. When you select the Scene you will go to the LED Mode Setting screen. You can use the same procedure as in the Set Up Zones section to set up each Zone and save the Scene's new LED settings.

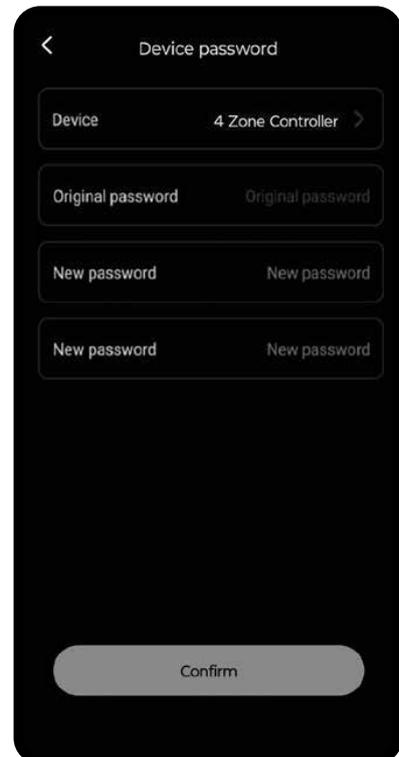
3. After you set up LED Modes for all the Zones, the setup is complete for the selected Scene.



Change Password

To add extra security, you can change the default password of 0000 to your desired 4-digit numeric password. Please note that the password is stored in your ExtremeController, not the SoundExtreme app. So, after you change the password, please make a note in case you forget your password. The password won't be reset by reinstalling the app or changing to another smartphone. The only way to reset your password is to conduct a factory reset on your ExtremeController.

1. Select the MenuEPIC  at the top-right corner of the screen.
2. Select  Device Password from the menu.
3. Once at the Device Password screen, select the device that you want to change the password to
4. Enter the current password, the new password, and re-enter the new password. Then tap the Confirm button.
5. If the change is successfully saved, the app will display a confirmation message. This is a one-time event. You do not have to enter in your password every time you launch the app, as your app will remember your password.



4-ZONE LED CONTROL

SPECIFICATIONS

Factory Reset

If you forget the password, you will need to do a Factory Reset on the ExtremeController so that the password is reset to its default value: 0000.

•Turn off the power to the ExtremeController by turning off the ignition switch (or the rocker switch), then turn it back on.

•While the Status LED Indicator flashes Blue, PRESS AND HOLD the  Button for 3 seconds. The indicator will flash Yellow to show that the reset is successful.

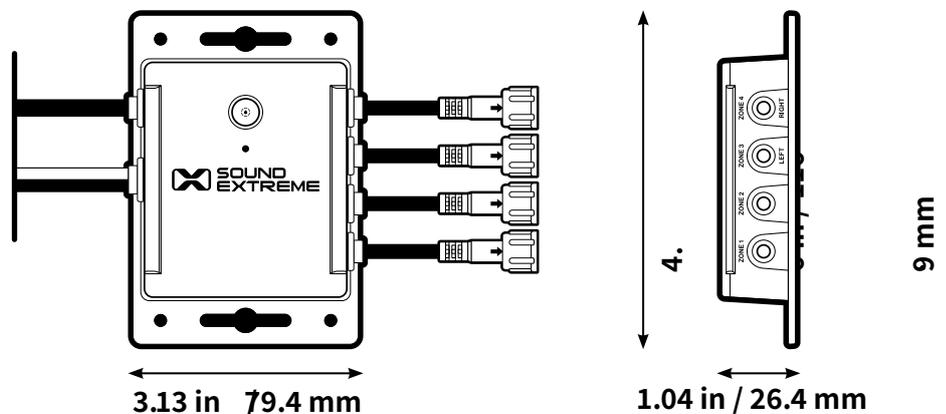
Note: Besides the password reset, a Factory Reset will also configure the ExtremeController to the following factory settings:

•The LED Device Type is set to 6' ExtremeWhip for all 4 Zones.

•The LED Mode is set to solid Orange Color with 100% Brightness and the Speed is set to 80%, for all the 4 Zones.

•All 5 customer configurable Scenes are set to the Factory Default Scenes.

Dimensions



Unit Weight
0.44 lbs (0.2 kg)

Power Input
12V, 20A

Remote Turn-on Input
12V - 56V

Vehicle Signal (Left, Right, Brake, Reverse) Input: 12V

Blade Fuse
25A, 32V

Bluetooth Frequency Band
2.402~2.480GHz ISM Spectrum

Bluetooth Compliance
BluetoothR 5.1

EcoCast Range
30 ft / 9.1 m between Casting speaker
and ExtremeController

LED Control Output on Each Zone 5A

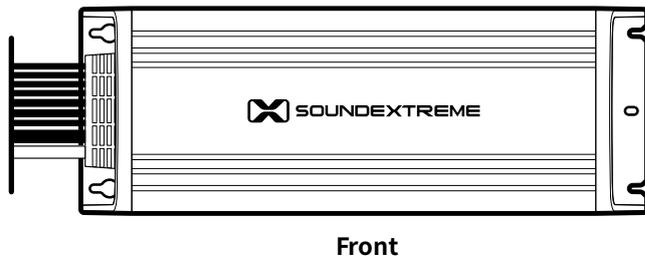
Storage Temperature

-40°F to 122°F / -40°C to 50°C

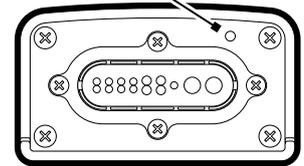
Operating Temperature
23°F to 95°F / -5°C to 35°C

4 Channel Amplifier

Amp Layout



LED Status Indicator



Connectors Panel

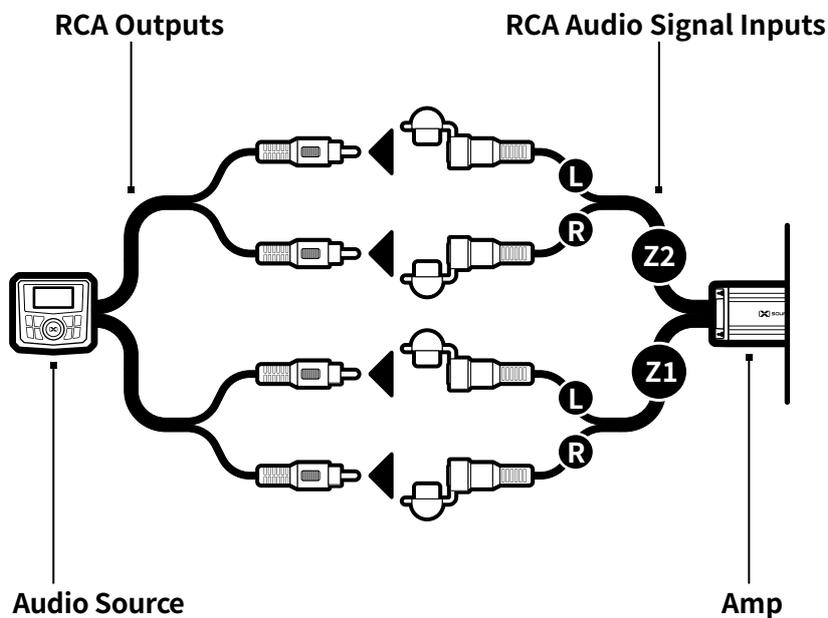
4 Channel Setting

The 4 Channel Setting allows you to set up a 2-Zone stereo audio system. As there is no Bridging, wiring is straightforward:

Channel Mode

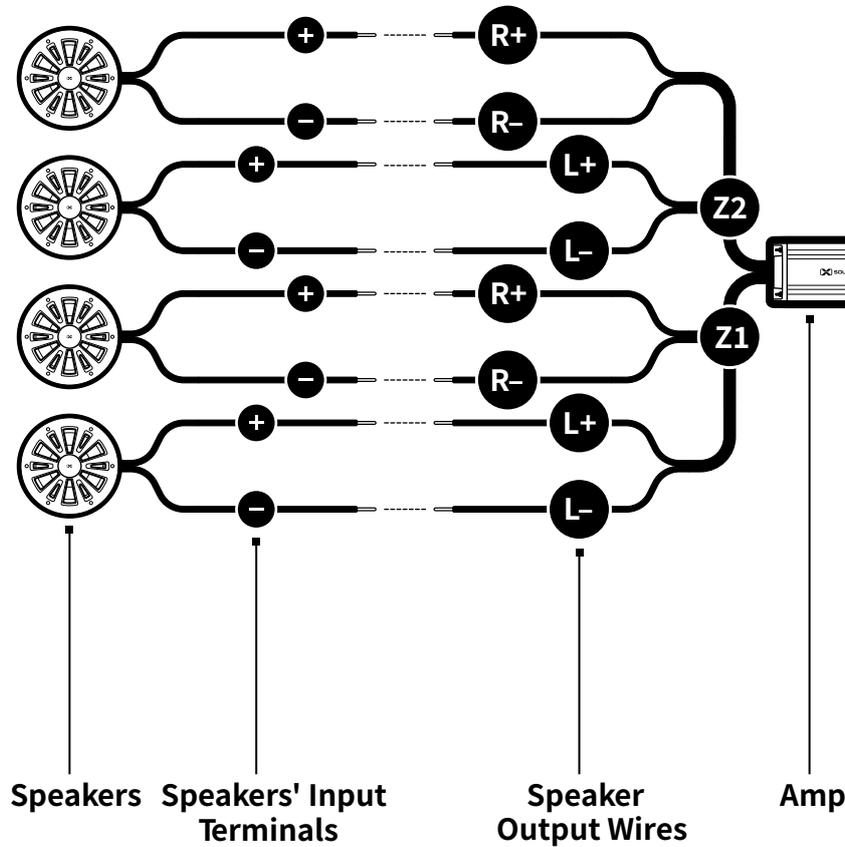


2CH/3CH/4CH



1. Connect the left and right RCA outputs from your audio source (e.g., the SoundExtreme Marine Gauge Radio) to the Amp's Left and Right RCA Audio Signal Inputs.

4 Channel Amplifier



2. Connect the Left Speaker Output wires to the left speakers' positive and negative terminals and the Right Speaker Output wires to the right speakers' positive and negative terminals.

4 CHANNEL SETTING AND WIRING 2 ZONES - EACH IN STEREO	
Channel Mode Switch	Set to 4CH
Signal Range & Crossover	Independent Settings for 2 Zones
Amp Audio Output	Zone 1 - Stereo (Left and Right) Zone 2 - Stereo (Left and Right)
Audio Signal Inputs	Zone 1 - RCA (Left and Right) Zone 2 - RCA (Left and Right)
Speaker Outputs	Zone 1 - L Speaker (L+ L-), R Speaker (R+ R-) Zone 2 - L Speaker (L+ L-), R Speaker (R+ R-)
RMS Power	75W x 4 @ 4 ohms, THD+N < 2%

INSTALLATION AND WIRING SAFETY

Wiring Considerations

IMPORTANT: BEFORE installation, disconnect any and all negative leads from the battery's negative (-) terminal to prevent damage to the unit, fire, and/or possible injury.

BEFORE wiring and connecting the Amp, disconnect the device(s) you are connecting to from their respective power source(s) to ensure no damage is done to the amplifier or audio source devices. Failure to do so could result in permanent damage to the audio system, amplifier, or connected speaker(s).

For easier assembly, it is recommended you run all wires prior to mounting your unit in place.

Plan out your system layout and best wiring routes to save installation time. Carefully route all system wiring away moving parts and sharp edges; secure with cable ties or wire clamps and use rubber or plastic grommets where appropriate to protect from sharp edges.

To avoid short-circuiting, cover any disconnected leads with electrical tape. It is important to insulate any unused wires, which, if left uncovered, may cause a short circuit.

Route the RCA cables close together and isolated from the Amp's power cables and any highpower / high-current wires and auto accessories, especially electric motors. This is to prevent coupling the noise from radiated electrical fields into the audio signal.

When connecting two wires, make sure to seal the connection either by using electrical tape or heat shrink tubing. Failing to do this may result in long-term corrosion on the connection and cause a premature malfunction.

Use high-quality, audio cables and connectors to minimize signal or power loss.

Do NOT connect the Power Cable to your Vehicle's battery until all the installations and wirings are completed.

Mounting Considerations

Mount the Amp in a dry, well-ventilated location, not in a spot exposed to direct sunlight or excessive heat.

Be sure that the Amp's Control Panel will be easily accessible if future adjustments are desired. Securely mount the amplifier so that it does not come loose due to severe conditions or sudden stops.

4 Channel Amplifier

Input Voltage and Cross Over Frequency Considerations

Before you connect your audio source's outputs into the Amp's inputs, you need to check what the audio source's output voltage level is in order to set the Input Voltage Switch to the correct position.

If your audio source's output voltage is between 250mV and 4V, set the switch to the Low position.

If the voltage is between 750mV and 15V, set the switch to High. If you don't have your audio source's output voltage information, you can follow the guidance below.

Note: Set your audio source volume level to a mid-range level when performing these tests. A high volume level may destroy your speakers and a low volume level may be difficult to hear.

If you connect the audio source's RCA/Preamp outputs into the Amp's input, set the Input Voltage Switch to Low.

If you find that the Amp's speaker output signal is distorted, then change the Switch setting to High.

If you connect the audio source's speaker outputs into the Amp's input, set the Input Voltage Switch to High.

After you select the Input Voltage settings, you will need to adjust the Crossover Frequency settings based on the type of speaker you want the Amp to drive in each Zone:

Set the X-Over Mode Switch to Off. This will disable the Low and High Pass filters. Therefore, the full frequency range (20 – 20kHz) will pass through, no matter the X-Over Freq Dial setting.

Set the X-Over Mode Switch to High and turn the X-Over Freq Dial to a selected Crossover Frequency between 20Hz and 6kHz. This will filter out the audio signals with frequencies below the selected Crossover Frequency. These outputs are normally utilized for midrange speakers or pro audio tweeters.

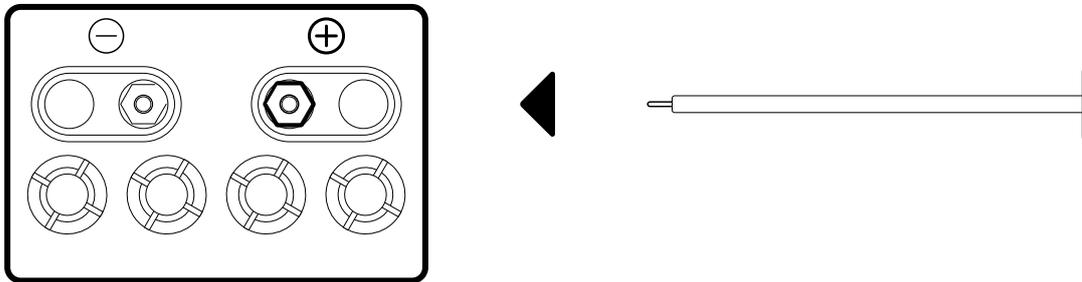
Set the X-Over Mode Switch to Low and turn the X-Over Freq Dial to a selected Crossover Frequency between 20Hz and 6kHz. This will filter out the audio signals with frequencies above the selected Crossover Frequency. These outputs are normally utilized for midrange speakers or subwoofers.

System Wiring

1. BEFORE connecting any wires / cables, turn off all the audio devices (powered speakers, amplifier, and audio source), then disconnect any and all negative leads from the battery's negative (-) terminal to prevent damage to the unit, fire, and / or possible injury. Secure the disconnected cables to prevent accidental reconnection during installation.

2. Grounding: Locate a proper ground point on the vehicle's chassis and remove all paint, dirt or debris to reveal a bare metal surface. Attach the ground wire (not included) to that contact point. Connect the opposite end of the ground wire to the Amp's BLACK Power Input GND wire. If no metal chassis ground is available, it may be necessary to make this connection to the NEGATIVE (-) battery terminal. All ground connections (audio source unit and amplifiers) should be made at the same location.

4 Channel Amplifier

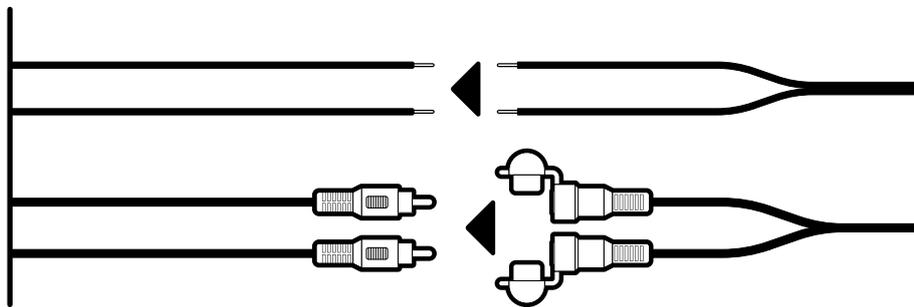


3. Connect the Amp's RED Power Input wire to the POSITIVE (+12V) battery terminal. An 8 AWG (or higher) extension cable is recommended. (Extension cable not included).



4. Connect the TURQUOISE Remote Turn-On wire to the audio source unit's positive (+12V) amplifier-on or remote turn-on output. If your audio source unit does not have a dedicated amplifier-on or remote turn-on output, the Amp's Remote Turn-on Input cable can be connected to a +12V input via a switch that derives power from an ignition-switched circuit.

5. Based on your audio system configurations, audio input level, and speaker type, do the following:
Set the Input Voltage Switch to Low or High, depending on the audio source.
Set the Channel Mode Switch to 2CH, 3CH, or 4CH.



Make the audio input and speaker output connections, per the selected Channel Setting and wiring as described under Channel Mode and Bridge.

TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
Amp LED off	No power at Remote Turn-On Wire	Supply +12V to terminal
	No power at Power-In Wire Insufficient Ground connection	Supply +12V to terminal Check Ground connection Check the
	Blown power fuse	root cause and replace fuse
	Audio source volume is off	Increase audio source volume
Amp LED on, but no Audio Output	Speaker connections incomplete	Complete Speaker Output connections
	Input Voltage level too low	Turn the Input Voltage Dial counterclockwise to increase the volume
	Audio source volume set too high	Lower audio source volume
Distorted Audio Output	Amp Input Gain set too high	Turn the Input Voltage Dial clockwise to lower the volume
	Speaker output short-circuit	Check speaker output wiring and fix if connections are wrong Lower audio source volume
Amp output current too high		
LED Status Indicator flashing Orange and Green	Amp is overheated	

PRODUCT FUNCTION

No harness 5557 port design

PKE induction keyless start function

Direction light flashing function

Learning remote control

remote control low power indicates product parameters

PRODUCT PARAMETERS

1. Basic parameters

- (1) Operating frequency: 433.92MHz (frequency stabilization)
- (2) Remote control distance: 50 meters (under open conditions, the remote control is 1.5 meters from the ground, the main engine is 1 meter from the ground)
- (3) Working voltage range: 48V
- (4) Static current: 10mA (test voltage 85V)
- (5) Maximum continuous electric starting current: 5A
- (6) Operating temperature range: -30 -80

2. PKE induction parameters

- (1)induction frequency: 125KHz (automotive low-frequency induction)
- (2)induction distance: 1.5 meters
- (3)Induction direction: X,Y,Z three-axis induction

REMOTE CONTROL INSTRUCTION

Host function description

1. Vehicle starting and extinguishing

(1) Vehicle start:

1, carry the intelligent remote control near the vehicle (within 1 meter), click the one-button start button to release, the vehicle detects the existence of legal remote control, the direction light flashes twice, the vehicle starts.

(2)Vehicle shutdown:

1. When the vehicle is in the starting state, click the one-button start button to release, the direction light flashes, and the vehicle is turned off.

2. Smart remote control low battery warning

In the intelligent remote control launch or induction launch, if the remote control battery is low, the red LED light is shining, the remote control battery must be replaced at this time; If the power is sufficient, the blue LED lights shine.

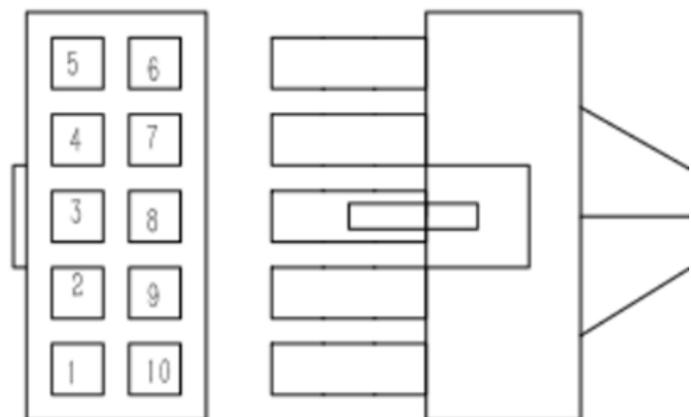
3. 48V signal detection function (New function)

After the switch is opened, the host begins to detect the 48V signal line. If the voltage of the line is detected to be lower than 20V for 20 minutes, the switch is closed. During the period, the voltage is higher than 20V, the time is cleared.

4. remote control pairing learning mode

- 1 Disconnect the vehicle battery B+ and wait 5 seconds.
- 2 Press and hold the "Start/Stop" button to switch on battery B+.
- 3 Release the one-key start button and press the one-key start button four times, the direction light flashes, and enter the learning mode.
- 4 Press the lock button of the smart remote control and the remote control within 5 seconds.
- 5 the remote control flashes 1 red light and the direction light flashes, indicating success in learning.

- 1.48v+ Input
- 2.48v- Input
- 4. Left turn
- 5. Right turn
- 6.48V+ Output
- 8.12V+ Input
- 10.48V+ Signal detection



OPTIONAL ACCESSORIES

Be familiar with vehicle features before attempting any operations.

OPTIONAL ACCESSORIES

HORN COVER
FOLDABLE WINDSCREEN

BATTERY CHARGER

Be familiar with vehicle features before attempting any operations.



INCORRECT CONNECTION OF THE AC CORD CAN CAUSE A FIRE OR AN ELECTRICAL SHOCK. DO NOT USE AN ADAPTER TO CONNECT THE AC CORD INTO A TWO-PRONG POWER SOURCE. CONNECT THE AC CORD TO AN APPROVED POWER SOURCE. CONNECTION OF THE AC CORD TO AN INCORRECT RECEPTACLE CAN CAUSE A FIRE, ELECTRICAL SHOCK, PROPERTY DAMAGE, SERIOUS PERSONAL INJURY, OR DEATH. CONNECT THE AC CORD TO AN APPROVED POWER SOURCE AND RECEPTACLE. DO NOT LET THE BATTERY CHARGER BECOME WET. KEEP THE BATTERY CHARGER DRY.

CHARGER SPECIFICATION

Battery pack rated voltage	51.2V
Maximum charger output	• 58.4V
AC input voltage range	• 100-240VAC, 50-60Hz
AC input current value	11.5A@120VAC, 6.1A@220VAC
Power factor	0.99
Charger efficiency	95%
Noise	• 45dB
IP Class	• IP67
Weight	9.3lb (4.2kg)
Operating temperature	-86
Storage temperature	

BATTERY CHARGER

Be familiar with vehicle features before attempting any operations.

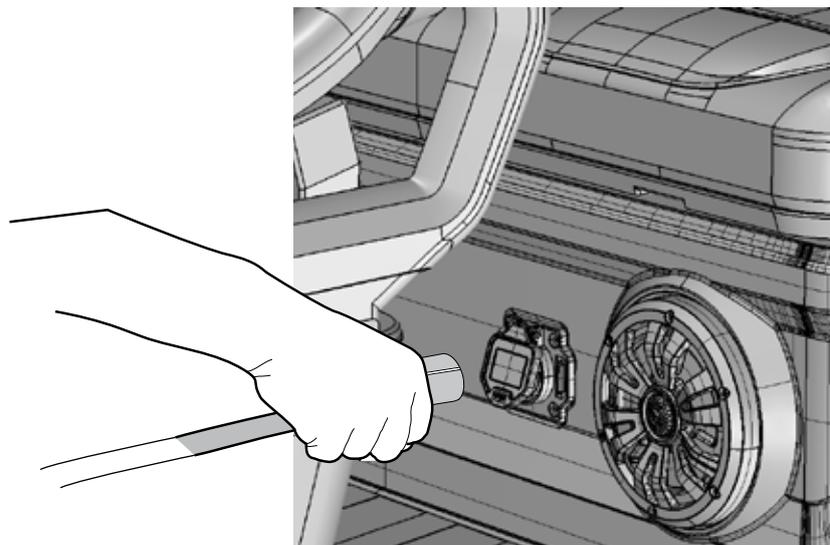
HOW TO USE CHARGER



WARNING

TO DECREASE THE POSSIBILITY OF ELECTRICAL SHOCK OR ELECTROCUTION, MAKE SURE THE CHARGER PLUG IS NOT DAMAGED. THE POWER AC CORD HAS A PLUG WITH GROUND POST. DO NOT MOVE, CUT OR BEND THE GROUND POST.

1. Inspect the charger cord to check if there is broken or damaged on the power AC cord and cable. Replace the broken AC power cord.
2. Plug the AC charge handle into the vehicle receptacle completely.
3. Plug the Power AC cord into the ground power completely.
4. The charger will automatically start in several seconds after plugging in the AC power cord.
5. The charger will automatically stop when the batteries are fully charged.
- 6- Remove the AC charge cord before operating the vehicle.



CHARGER MAINTENANCE

Be familiar with vehicle features before attempting any operations.

CHARGER MAINTENANCE



IF THE PLUG PINS ARE BENT, SPEAK WITH YOUR LOCAL DEALER OR DISTRIBUTOR FOR REPLACING. DO NOT TRY TO REPAIR THE AC CORD PLUG OR PINS. ELECTRICAL CORDS

Examine electrical cords for wear and damage before use. Immediately replace electrical cords for:

- Cracks

- Cuts
- Frayed wiring
- Insulation damage
- Loose connections
- Splices

Examine electrical plugs for wear and damage before use. Immediately replace electrical plugs for:

- Bent pins

- Corrosion
- Cracks
- Loose connections
- Missing pins

ELECTRICAL PLUGS AND RECEPTACLES

CLEAN THE ELECTRICAL PLUGS AND RECEPTACLES

1. Disconnect the AC cord from the power source.
2. Disconnect the AC cord from the battery charger.
3. Disconnect the DC cord from the vehicle charger receptacle.
4. Apply electrical contact cleaner to the electrical plugs and receptacles. Refer to the manufacturer instructions.
5. Clean the electrical plugs and receptacles.
6. Lightly lubricate the electrical plugs and receptacles with WD-40®.

Be familiar with vehicle features before attempting any operations.

WHEELS & TIRES



DO NOT OVER INFLATE THE TIRES. EXCESS PRESSURE CAN CAUSE THE TIRE EXPLODE. TO DECREASE THE RISK OF TIRE EXPLOSION, ADD SMALL AMOUNTS OF AIR TO THE TIRE AT INTERVALS TO SEAT THE TIRE BEADS. OVER INFLATION OF SMALL TIRES CAN OCCURS IN A FEW SECONDS.

PROTECT FACE AND EYES WHEN REMOVING THE TIRE VALVE CORE.

USE ONLY SOCKETS MADE FOR IMPACT WRENCHES TO DECREASE THE RISK OF INJURY CAUSED BY A BROKEN SOCKET.

DO NOT USE TIRES THAT HAVE INFLATION PRESSURE LESS THAN THE TIRE PRESSURE RECOMMENDED.

Always follow the cross-sequence pattern when you install the lug nuts to make sure the wheel is evenly seated against the hub.



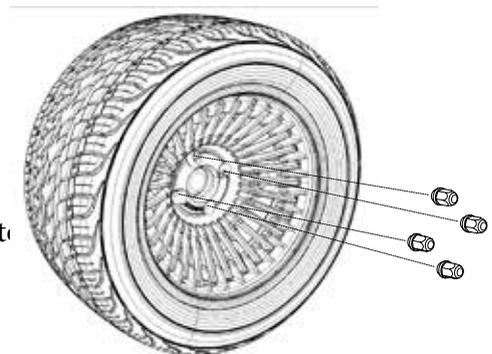
Tools list

- Lug Wrench, M12 1
- Impact Wrench 1
- Impact Socket, M12 1
- Torque Wrench 1

The general recommended tire inflation pressure is 30 psi, but the tire inflation pressure can be changed according to the specific terrain condition.

All four tires must have the same pressure for the best control qualities. Always put the valve stem cap back after checking or inflate the tires.

Use a tire plug to repair small holes in the thread part of the tires. For large holes or cuts, replace the whole tire.



LIFT AND LOWER THE VEHICLE

Be familiar with vehicle features before attempting any operations.

LIFT AND LOWER THE VEHICLE

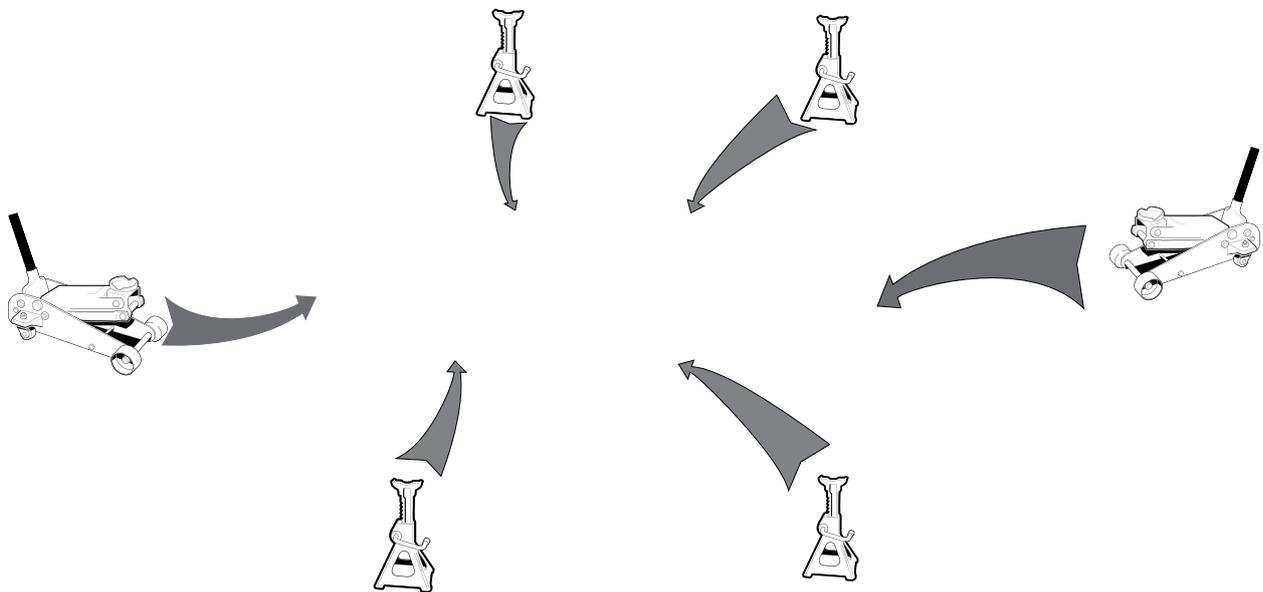


WARNING

LIFTING AND LOWER THE VEHICLE WITH CARGO CAN CAUSE PROPERTY DAMAGED, SERIOUS PERSONAL INJURY, OR DEATH. REMOVE ALL CARGO AND HAVE THE PERSON OUT FROM THE VEHICLE BEFORE THE VEHICLE IS LIFTED.

Steps For Lifting The Vehicle:

- > Ensure the vehicle is powered down via the push-button start system before lowering it.
- > Choose the jacks and jack stands rated for the vehicle.
- > Engage the parking brake.
- > Place the jack in the center of the lift point.
- > Lift the front and rear of the vehicle.
- > Put the Jack stands under the frame rails.
- > Lower the vehicle onto the jack stands.



Steps For Lower The Vehicle:

- > Before the vehicle is lowered, turn off key switch of the vehicle.
- > Choose the jacks and jack stands rated for the vehicle.
- > Place the jack in the center of the lift point.
- > Lift the vehicle off from the jack stands.
- > Remove the Jack stands under the frame rails.
- > Lower the vehicle on the ground.
- > Remove the Jacks.

VEHICLE MAINTENANCE

Be familiar with vehicle features before attempting any operations.

VEHICLE MAINTENANCE



UNINTENDED VEHICLE OPERATION CAN CAUSE SERIOUS PERSONAL INJURY OR DEATH. BEFORE LEAVING THE VEHICLE OR DURING VEHICLE MAINTENANCE, DISABLE THE VEHICLE.

ONLY TRAINED TECHNICIANS SHOULD SERVICE OR REPAIR THE VEHICLE.

ANYONE DOING EVEN SIMPLE REPAIRS OR SERVICE SHOULD HAVE KNOWLEDGE AND EXPERIENCE IN ELECTRICAL AND MECHANICAL REPAIR. THE APPROPRIATE INSTRUCTIONS MUST BE USED WHEN PERFORMING MAINTENANCE, SERVICE, OR ACCESSORY INSTALLATION. FAILURE TO CORRECTLY MAINTAIN THE VEHICLE AND MAKE NECESSARY REPAIRS CAN DECREASE VEHICLE PERFORMANCE, CAUSE A FIRE, PROPERTY DAMAGE, SERIOUS PERSONAL INJURY, OR DEATH. IF PROBLEMS ARE FOUND DURING SCHEDULED INSPECTION OR SERVICE, OPERATE THE VEHICLE ONLY WHEN REPAIRS ARE MADE.

DO NOT WORK ON THE VEHICLE POWER TRAIN WHEN THE VEHICLE IS LOADED.

DO NOT WEAR LOOSE CLOTHING OR JEWELRY SUCH AS RINGS, WATCHES, CHAINS, ETC., WHEN SERVICING THE VEHICLE OR BATTERY CHARGER. LIFT ONLY ONE END OF THE VEHICLE AT A TIME. USE A SUITABLE LIFTING DEVICE WITH 1000 LB (454 KG) MINIMUM LIFTING CAPACITY. DO NOT USE THE LIFTING DEVICE TO HOLD THE VEHICLE IN THE LIFTED POSITION. USE APPROVED JACK STANDS OF PROPER WEIGHT CAPACITY TO SUPPORT THE VEHICLE AND CHOCK THE WHEELS THAT REMAIN ON THE FLOOR.

IF WIRES ARE REMOVED OR REPLACED, MAKE SURE THAT THE WIRING AND WIRE HARNESS ARE CORRECTLY ROUTED AND ATTACHED. FAILURE TO CORRECTLY ROUTE AND ATTACH THE WIRING COULD RESULT IN VEHICLE MALFUNCTION, PROPERTY DAMAGE, SERIOUS PERSONAL INJURY, OR DEATH.



WEAR SAFETY GLASSES OR APPROVED EYE PROTECTION WHEN YOU DO THE SERVICING OF THE VEHICLE. WEAR RUBBER GLOVES WHEN NEAR THE BATTERY.

VEHICLE MAINTENANCE

Be familiar with vehicle features before attempting any operations.

VEHICLE SCHEDULED MAINTENANCE CHART

Regular maintenance is required for the best performance and safe operation of the electric vehicle . Periodic maintenance need to perform accordingly .								
ID-per day	1W-per week	1M-per month	1Q-per quarter	1Y-per year	Item	Descriptions	1D 1W	
1M	1Q			1Y				
Battery	1. Check the damages may occur on battery surface .					v		
	2. Charge the battery .					v		
	3. Tighten the nut on the battery cable .					v		
	4. Fasten the nut of the battery terminal .					v		
	5. Check whether the battery is over-charged .					v		
	6. Check the SOH (state of health of the battery .)					v		
	7. Check whether the battery is fully charged .					v		
	8. Clean the surface of battery .					v		
Charger	9. Observe the charging status, check if the charger plug becomes hot.					v		
	10. Clean the surface of charger . Do not let water enter into charger .					v		
Motor and controller	11. Check whether all terminals are tightened properly(Turn off the power).						v	
	12. Clean the surface of the controller.							v
	13. Check whether the solenoid is in order, checking the touching point.							v
	14. Check whether there is water get into motor.					v		
	15. Check whether all the connectors of motor & controller are tightened					v		
	16. Check whether the accelerator pedal works well .					v		
Chassis and body	17. Check whether the brake pedal is firm and can be released freely .						v	
	18. Check whether the brake drum and brake shoe need to be replaced or not							v
	19. Check the hand break function.						v	
	20. Check the break liquid tank liquid level .						v	
	21. Check tire pressure and tire surface .					v		
	22. Check Whether the shock is leaking or not .						v	
	23. Fasten the bolt of shaft .						v	
	24. Check whether there is sufficient oil inside of rear axle gear box .							v
	25. Add grease to front hub and steering gear box .							v
	26. Adjust the front and rear suspension .							v
	27. Clean the body and seat .					v		

VEHICLE MAINTENANCE

Be familiar with vehicle features before attempting any operations.

CHASSIS MAINTENANCE

Check the tires every time one uses the vehicle, remove embedded objects or metal items away from tire surface. If the tire have embedded objects on surface, it will lead to excessive noises from tire while driving or tire air leakage.

Check the tires every time one uses the vehicle. the tires should be inflated with sufficient air The air pressure should with normal level . Check the tire chapter for more specific information of tire inflation.

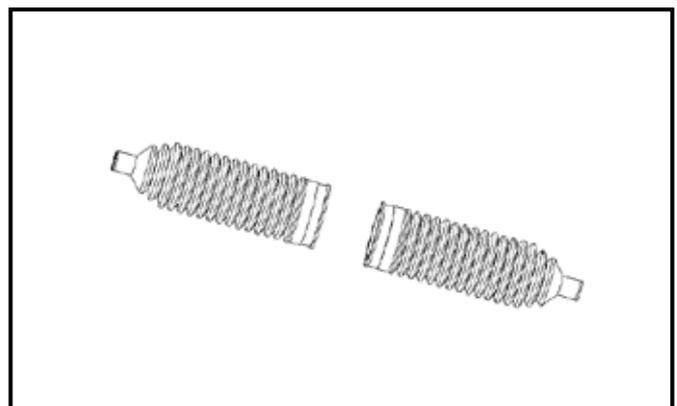
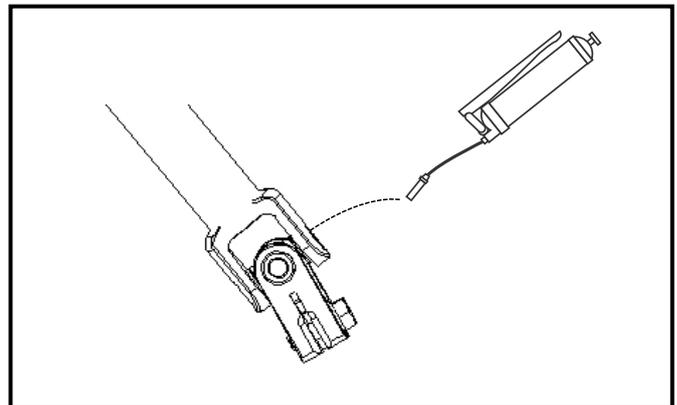
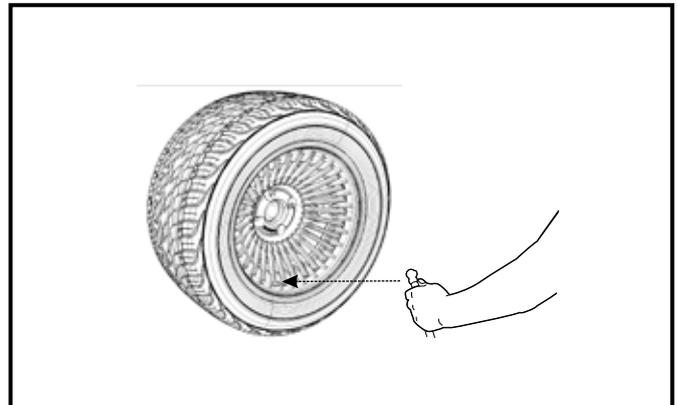
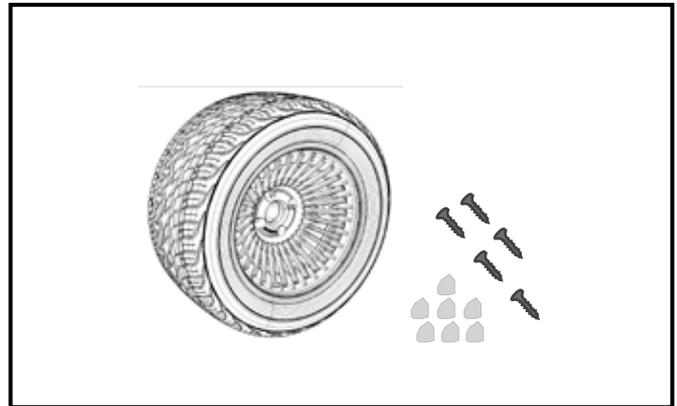


DANGER

FLAT TIRE MAY CAUSE UNSTABLE STEERING FUNCTION WHILE DRIVING.

Add lubricant to mechanical joint parts , the vehicle should be kept in good turning and operating functions. To acquire that one should add lubricant to needed parts every one month.

Check the dust-proof cover on steering gear box, the covers are supposed to be tightened on the two terminal ends . Loose cover will let water and dust into the gear box, cause the gears rusting .



VEHICLE MAINTENANCE

Be familiar with vehicle features before attempting any operations.

VEHICLE MAINTENANCE



MOISTURE CAN CAUSE ELECTRICAL COMPONENT DAMAGE. DO NOT USE A PRESSURE WASHER OR STEAM CLEANER TO CLEAN THE VEHICLE ELECTRICAL SYSTEM. OTHERWISE IT WILL CAUSE ELECTRICAL FAILURE PERMANENTLY.

Before cleaning the vehicle:

1. Move the vehicle to a solid, flat surface.
 2. Apply the parking brake.
 3. Turn off the vehicle using the push-button start system.
 4. Remove the key fob (if applicable).
 5. Set the circular directional control to 'N' (Neutral).
-
- Use only commercially available automotive cleaners with a sponge or soft cloth for normal cleaning. A garden hose at normal residential water pressure is sufficient.
 - Use a commercially available aluminum cleaner paste and fine grade (No. 00) steel wool to remove oxidation or discoloration from aluminum.
 - Use non-abrasive wax products. Fertilizers, asphalt, creosote, paint, or chewing gum should be removed immediately to prevent possible stains.
 - The seats of the vehicle will last longer with proper cleaning. Use a solution of 10% liquid soap and warm water applied with a soft cloth. Use a soft bristle brush to remove embedded dirt.
 - Use mild soapy water and a micro-fiber cloth to clean the windshield to minimize the risk of scratching. Avoid using glass cleaners or paper towels as these increase the chances of scratching or scuffing the windshield.

VEHICLE MAINTENANCE

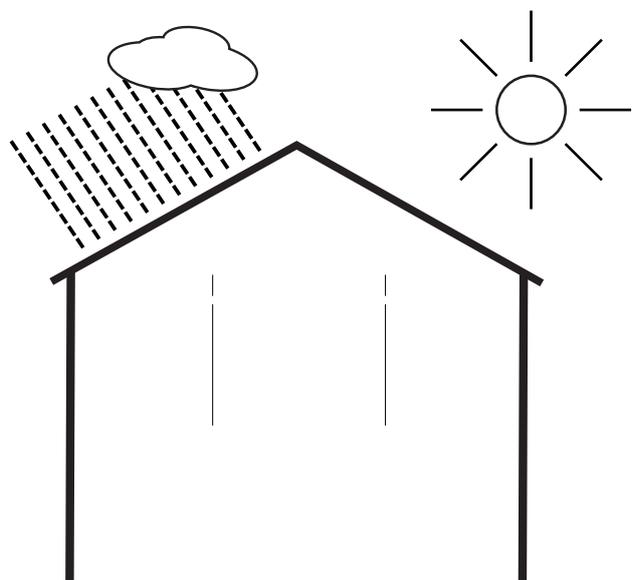
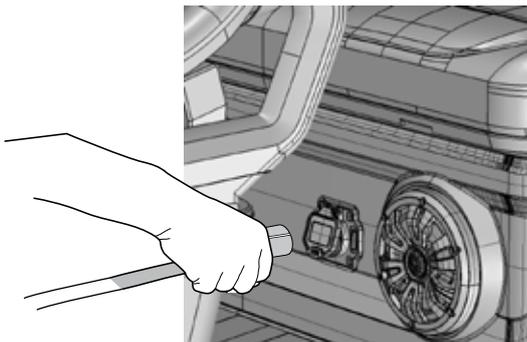
Be familiar with vehicle features before attempting any operations.

TASKS TO BE COMPLETED PRIOR TO STORAGE

- >Temperature and Shelter: Place the golf cart under shelter, keeping it in a dry and ventilated space. Optimal storage temperature is 14°F to 95°F (-10°C to 35°C). Maximum storage temperature should not exceed 122°F (50°C).
 - >Keyless Ignition System: Ensure the vehicle is in “Park” mode before shutting down. Turn off the engine by pressing the start/stop button. Remove the key fob from the vehicle to prevent accidental startup .
 - >Power Down Accessories: Turn off all accessories to prevent battery drain.
 - >Semi-Annual Lubrications: Perform all required semi-annual lubrication tasks.
 - >Thorough Cleaning: Thoroughly clean the front and rear body, seats, battery compartment, and underside of the vehicle.
 - >Electromagnetic Parking Brake: Do not engage the parking brake. Instead, secure the golf cart from rolling by using wheel stoppers or similar devices. Electromagnetic parking brakes should be disengaged to prevent battery drain and potential brake damage during long-term storage2.
 - >Tire Pressure: Check tire pressure and inflate the tires to the standard pressure level as indicated on the tires.
 - >Final Cleaning: Ensure the vehicle is thoroughly cleaned again, focusing on the front and rear body, seats, battery compartment, and underside.
- By following these steps, you can ensure that your golf cart is properly prepared for storage and remains in good condition

BRING THE VEHICLE BACK TO SERVICE FROM STORAGE

1. Fully charge the battery.
2. Set the Forward /Reverse control (DNR) to N.
3. Adjust the pressure in each tire to the recommended tire pressure.
4. Have a trained technician lubricate the vehicle.
5. Do a daily pre-operation safety checklist.
6. Do a vehicle performance inspection.



VEHICLE MAINTENANCE

Be familiar with vehicle features before attempting any operations.

VEHICLE TRANSPORTATION AND TOWING



DO NOT RIDE ON OR ALLOW OTHER PEOPLE ON A VEHICLE BEING TRANSPORTED ON A TRAILER OR BEING TOWED WITH ANOTHER VEHICLE.
DO NOT CARRY PASSENGERS ON GOLF CART WHILE TOWING THE VEHICLE.
APPLY BRAKE TO LIMIT SPEED WHEN TOW THE GOLF CART ON UNEVEN TERRAIN. TURN ON THE HAZARD LIGHTS IF VEHICLE WAS CONFIGURED WITH.
APPLY BRAKE TO LIMIT SPEED WHEN COMMIT SHARP TURNS.
SECURE THE SEATS/WHINSHIELD /OTHER LOOSE ITEMS BEFORE TOWING GOLF CART.
DO NOT TOW MULTIPLE GOLF CARTS IN SERIES FORMATION.
DO NOT TOW THE GOLF CART ON HIGHWAY ROADS.
ABORT TOWING WHEN ABNORMAL PHENOMENONS BEING DETECTED.

The following steps can help you to tow an EPIC golf cart safely without any damage.

Turn off key switch.

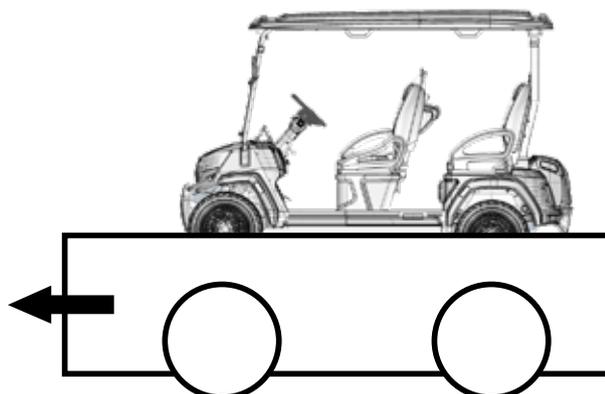
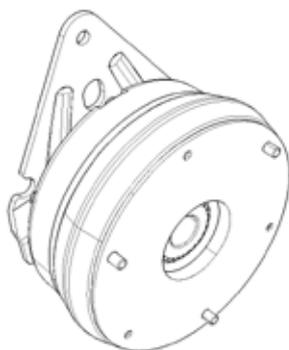
Keep the Forward/Reverse switch in a neutral position.

If you need to tow the golf cart for long distance ,remove the battery connections from battery pack terminals. This is done to ensure that the Rear axle/Motor/Controller/Batteries do not get damaged during the towing process.

Move the golf cart at a slower speed (Optimally Between 5-15MPH)or the same speed that you would generally move it if it has power. Exceeding the speed limit can over-spin the motor and ruin it.

Pulling your golf cart faster than designed to go can over-spin the motor. Possible slinging the internal parts into pieces and ruining the motor.

Unlock the EM brake on your golf cart motor, make sure to unlock it mechanically before towing the golf cart.



Be familiar with vehicle features before attempting any operations.

Guidelines for Using the Electromagnetic Parking Brake Handle

The standard electromagnetic parking brake does not require this handle. We designed this handle as a tool for users to conveniently release the electromagnetic parking brake when the battery is depleted.



1. As shown in the image, hold the handle with your hand.



2. Press the top button down with your thumb.



3. Observe the arrow; when the stopper block disengages from the gear, you can pull the handle upwards with your four fingers.



4. Observe the gap at the arrow on the motor's rear; it should be $\leq 2\text{mm}$.



5. First, release your thumb, then release your palm. At this point, the handle will self-lock, and the vehicle can be pushed.

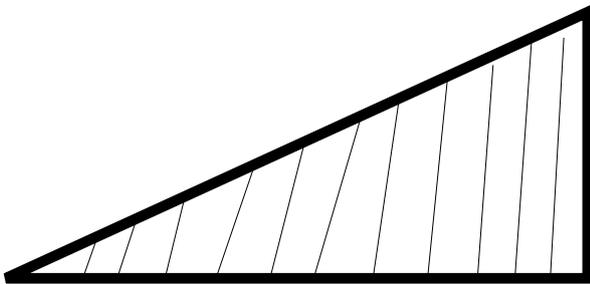


6. As shown in the image, gently pull the handle upwards, press the top, and slowly lower your palm to release the handle to the lowest point. The electromagnetic parking brake will return to normal.

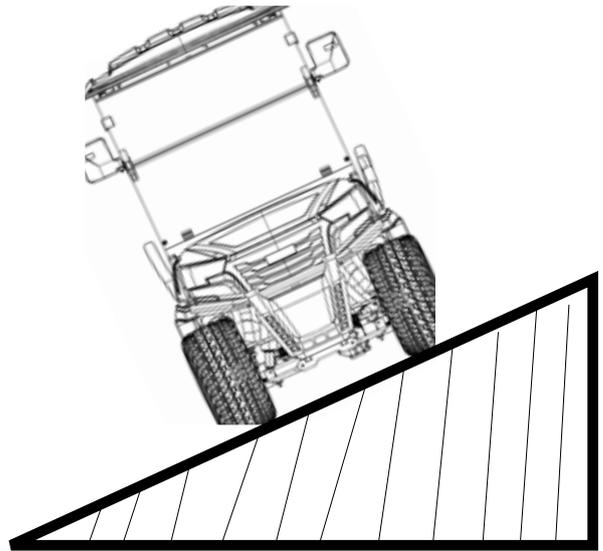
VEHICLE MAINTENANCE

Be familiar with vehicle features before attempting any operations.

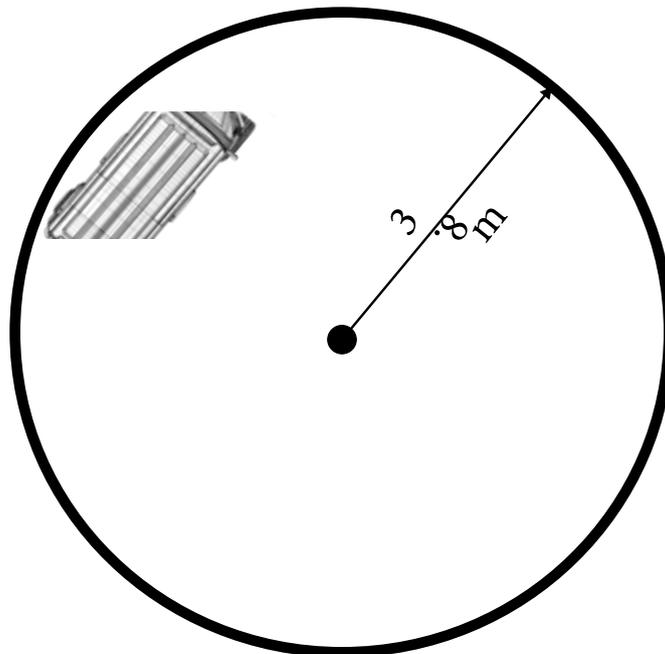
VEHICLE GENERAL SPECIFICATIONS



**Recommended Max Ramp
25% Grade**



**Recommended Max Side Tilt
25% Grade**



Minimum turning radius

California Proposition 65



Warning: Operating, servicing and maintaining a passenger vehicle or off-highway motor vehicle can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your vehicle in a well-ventilated area and wear gloves or wash your hands frequently when servicing your vehicle. For more information go to www.P65Warnings.ca.gov/passenger-vehicle.



Warning: Battery posts, terminals and related accessories contain lead and lead compounds, a chemical known to the State of California to cause cancer and reproductive harm. Wash your hands after handling.

Seatbelts



Fastening and Unfastening the Seatbelts

Fastening the Seatbelts

Insert the tongue into the buckle.

Pull the seatbelt tight to remove any slack.

Unfastening the Seatbelts

Press the red button on the buckle to release the seatbelt.

Hold the seatbelt tongue and let it retract completely and smoothly to its stowed position.

 **Warning:** Each seating position in your vehicle has a specific seatbelt assembly made up of one buckle and one tongue designed to be used as a pair. Use the shoulder belt on the outside shoulder only. Never wear the shoulder belt under the arm. Never use a single seatbelt for more than one person.

 **Warning:** Even with advanced restraint systems, properly restrain children 12 and under in a rear seating position. Failure to comply could seriously increase the risk of injury or death.

 **Warning:** Seatbelts and seats may be hot in a vehicle that is in the sunshine. The hot seatbelts or seats may burn a small child. Check seat covers and buckles before you place a child anywhere near them.

 **Warning:** If your vehicle is involved in a crash, have the seatbelts and associated components inspected as soon as possible. Failure to follow this instruction could result in personal injury or death.

 **Warning:** This system will only provide protection when you use the seatbelt correctly.

 **Warning:** Do not use cleaning solvents, bleach or dye on the vehicle's seatbelts, as these actions may weaken the belt webbing.

 **Warning:** Do not make any alteration to any seatbelt that is part of your vehicle, as any alteration may lead to serious injury or death.

Seatbelt Precautions

 **Warning:** Always drive and ride with your seatbelt upright and the lap belt snug and low across the hips.

 **Warning:** Children must always be properly restrained.

 **Warning:** Do not allow a passenger to hold a child on their lap when your vehicle is moving. Failure to follow this instruction could result in personal injury or death in the event of a sudden stop or crash.

 **Warning:** All occupants of your vehicle, including the driver, should always properly wear their seatbelts, even when an airbag supplemental restraint system is provided. Failure to properly wear your seatbelt could seriously increase the risk of injury or death.

 **Warning:** It is extremely dangerous to ride in a cargo area, inside or outside of a vehicle. In a crash, people riding in these areas are more likely to be seriously injured or killed. Do not allow people to ride in any area of your vehicle that is not equipped with seats and seatbelts. Make sure everyone in your vehicle is in a seat and properly using a seatbelt. Failure to follow this warning could result in serious personal injury or death.

 **Warning:** In a rollover crash, an unbelted person is significantly more likely to die or suffer severe &/or permanent injury or disfigurement than a person wearing a seatbelt.



Towing

Towing Warnings

Do not tow with this vehicle.

Warning: Your vehicle is not approved for trailer towing. Never tow a trailer with your vehicle.

*Refer to our commercial line of vehicles if towing capability is needed.



Brakes

Be sure the brakes function properly. When brake pedal is pressed using moderate pressure, the vehicle should come to a smooth, straight stop. If the vehicle swerves or fails to stop, stops abruptly, or makes a grinding or squeaking noise, have the brake system checked and adjusted as required. Continued, moderate brake pedal pressure should be able to lock the wheels, but using lesser pressure should also permit a slow, gradual deceleration.

Brake Precautions

Warning: Do not use fluid other than the recommended brake fluid as this will reduce brake efficiency. Use of incorrect fluid could result in the loss of vehicle control, serious personal injury or death.

Warning: Only use brake fluid from a sealed container. Contamination with dirt, water, petroleum products or other materials may result in brake system damage or failure. Failure to adhere to this warning could result in the loss of vehicle control, serious personal injury or death.

Warning: Do not allow the fluid to touch your skin or eyes. If this happens, rinse the affected areas immediately with plenty of water and contact your physician.

Warning: The brake system could be affected if the brake fluid level is below the **MIN** mark or above the **MAX** mark on the brake fluid reservoir.

Warning: The user or dealer must use an air compressor - based bleeding system. Traditional bleeding methods are not recommended.

Magnetic Brake

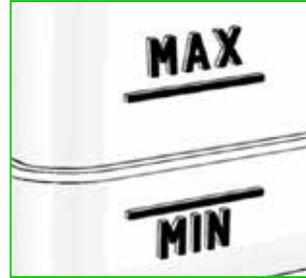
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Your vehicle is equipped with a magnetic parking brake, and there are several things you need to be aware of.

01. The magnetic parking brake engages automatically every time your vehicle comes to a complete stop.
02. The magnetic brake is disengaged by stepping on the accelerator pedal.
03. In the event you need to manually push your vehicle, you can use the MANUAL EMB function.
In the battery compartment under the seat, flip the main switch to the MANUAL EMB position.
This sends electrical current to the magnetic brake, disengaging it, and allowing the cart to be manually pushed. Once the vehicle has been pushed to its desired location, flip the switch to either the OFF position, or the AUTO EMB position.
04. While the vehicle is in the MANUAL EMB setting, the vehicle will have no parking brake, and the vehicle will freely roll. Do not leave a vehicle unattended in the MANUAL EMB setting as the vehicle may roll and injure someone.
05. DO NOT LEAVE THE SWITCH IN THE MANUAL EMB SETTING FOR AN EXTENDED PERIOD OF TIME. This may result in damage to the magnetic brake.
06. If your vehicle has had a catastrophic battery or other failure and does not have the necessary 48 Volts required to disengage the magnetic brake, you may disengage it manually. Instructions on manually disengaging the magnetic brake are as follows.

Locating the Brake Fluid Reservoir

Checking the Brake Fluid



01. Park your vehicle on a level surface.
02. Look at the brake fluid reservoir to see where the brake fluid level is relative to the MIN and the MAX marks on the reservoir.

Note: To avoid fluid contamination, the reservoir cap must remain in place and fully tight, unless you are adding fluid. Location of reservoir is typically under the cup holder.

Brake Fluid Specification

Use fluid that meets the defined specification and viscosity grade. (DOT4)

If you do not use fluid that meets the defined specification and viscosity grade, it could result in:

- Component damage that your vehicle warranty does not cover
- Reduced brake performance, which could result in loss of control of the vehicle, serious personal injury or death.

Brake Dust Cover

Your EPIC is equipped with 4-wheel disc brakes. In order to protect the rotors, brake dust shields have been added to the cart's brake system. Please ensure they remain clear of contact with the rotors. This contact can result in damage to the rotor, or, at a minimum, can result in a slight, annoying grinding sound.

How to Manually Disengage the Magnetic Brake

01. Locate the magnetic brake assembly behind the right rear wheel.
02. Of the (5) screws on the magnetic brake assembly, locate the (2) smaller ones.
03. With a #4 Allen wrench, lightly tighten the (2) smaller bolts. (DO NOT over-tighten).
04. Once the smaller (2) bolts are tightened, the vehicle may be manually pushed.
05. The magnetic brake will NOT be able to re-engage until the (2) small bolts are loosened back up.
06. When the vehicle has had the (2) small screws on the magnetic brake tightened, the vehicle will have no parking brake and will freely roll. Do not leave a vehicle unattended in the MANUAL EMB setting as the vehicle may roll and injure someone. Leaving the vehicle in MANUAL EMB can result in overheating of the EMB resulting in premature failure, damage to batteries, and risk of burn injuries.



Reporting Safety Defects

Reporting Safety Defects in the US

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying EPIC Carts.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or EPIC Carts.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153): go to www.NHTSA.gov; or write to:

Administrator

1200 New Jersey Avenue,

Southeast Washington, D.C. 20590

You can also obtain other information about motor vehicle safety from www.safercar.gov.

Reporting Safety Defects in Canada

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform Transport Canada and EPIC of Canada.

Notice

EPIC Carts is not liable for errors in this manual or for incidental or consequential damages that result from the use of the material in this manual.

Your vehicle conforms to all applicable Federal Motor Vehicle Safety Standards in effect on the date of manufacture.

Thank you for choosing EPIC Carts. Please protect your investment and ensure that your EPIC vehicle provides years of reliable, superior performance by reading and following the maintenance instructions in this manual.

Your comfort and safety are important to us as well, so we urge you to read and follow the step-by-step operating instructions and safety precautions in this manual. These instructions must be followed in order to avoid the risk of severe personal injury. If you rent or loan your vehicle to others, we recommend that you ask them to read this manual before they operate the vehicle.

EPIC products are backed by a customer support system designed to offer you fast, courteous service. In the event that your vehicle needs repairs or service, please contact EPIC Carts we will be able to provide technical advice, perform warranty work, and sell parts and service manuals. For the name and address of the EPIC dealer or distributor nearest you, call 866-426-6380.

We hope you will consider this owner's manual a permanent part of your vehicle. If you sell the vehicle, please include the manual so that the next owner will have the important operating, safety, and maintenance information it contains.

Maintenance

Warning: Caution should be used when performing maintenance or repairs on your EPIC vehicle. Failure to take proper precautions may increase the risk of damage to the vehicle, mechanical failure, and/or personal injury, disfigurement, or death.

Prepare for Emergencies:

Be prepared for possible injury, fire, or other emergencies when servicing and storing your EPIC. It is recommended to keep the following items available and readily accessible:

- First aid kit
- Fire extinguisher or fire blanket
- Emergency phone numbers

Prior to beginning vehicle maintenance, service, or repairs on your EPIC, please heed the following recommendations:

- Remove all jewelry.
- Ensure your hair is pulled back and secure to avoid contact with moving parts.

- Ensure clothing is not loose to avoid entrapment.
- Confirm that your work area is well-ventilated.
- Ensure you are familiar with and closely follow all safety precautions discussed in the “Practice Safety” section of this manual.

While performing vehicle maintenance, service, or repairs, please heed the following recommendations:

- Do not touch hot objects.
- Use only the proper tools discussed throughout this manual.
- Maintain constant awareness that some components are heavy, corrosive, explosive, and subject to cause high amperage and/or extreme heat.
- Keep your hands, face, and body away from any area that can expose them to injury if an unexpected situation occurs.

After performing vehicle maintenance, service, or repairs, test the vehicle in a safe area, free from vehicular and pedestrian traffic.

Wheel Replacement

To remove and install a wheel on your vehicle:

01. With the wheels blocked to prevent the vehicle from moving, loosen the wheel nuts.
02. Elevate the vehicle with a jack and remove the wheel nuts and the wheel.
03. Reverse the removal steps when installing the wheel.
04. Set to 60 to 80 ft. lbs of torque.

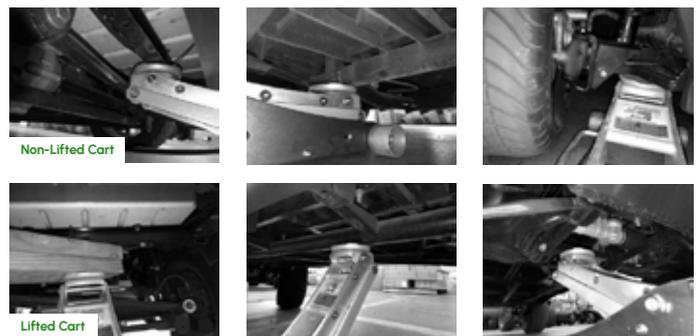
Warning: Before performing wheel or brake maintenance, verify that the main switch is in the “OFF” position.

Accidental starting of the vehicle could cause the vehicle to move, causing death or serious personal injury.

Brake Adjustment

Before you operate the vehicle, press down on the brake pedal several times to make sure the brakes are functioning properly.

Warning: Consult your EPIC dealer before using your vehicle if you suspect brake problems. Brake failure could result in a serious accident. Death or serious personal injury can result from failing to comply with the safety instructions in this manual.



Jacking Points

On non-lifted carts there are several lifting points to safely lift your cart.

01. Rear of cart-cross brace of frame just behind the rear bumper.
02. Behind the front wheels on either side of the frame.
03. Front lower control arm mounting points on both sides.

On lifted carts there are several lifting points to safely lift your cart.

01. Rear of cart-cross brace of frame just behind the rear bumper.
02. Anywhere along the side of the frame as long as there is a stable contact point.
03. The center frame directly behind the steering rack.

Practice Safety

About This Publication

Thank you for your purchase of an EPIC Carts. This Owner's Manual contains information you will need to read and understand for proper operation, maintenance, and care of your new EPIC. A thorough understanding of this information will help you achieve the maximum use and enjoyment of your new EPIC. If you have additional questions, or do not completely understand anything about the operation or maintenance of your new EPIC, please contact your EPIC dealer, or feel free to email us at questions@iconev.com.

Note: Use and operate your vehicle within all applicable laws and regulations.

Note: Pass on all printed owner's information when selling this vehicle.

 **Warning:** Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

Illustrations

Some of the illustrations in this manual may display features that are exhibited on different models, and can appear different to you on your vehicle.

About This Manual

By reading this manual you will have a thorough understanding of your EPIC vehicle.

Important Information

 **WARNING:** The safety alert symbol means attention! Be alert! Your safety is involved!

Failure to follow all WARNING instructions could result in severe injury or even death to the vehicle occupants or bystanders.

CAUTION: Messages with this heading describe special precautions that should always be taken to avoid damaging your vehicle.

Note: EPIC Cartss continually strives to produce the highest quality possible. Although this manual contains the latest product information available at the time of printing, there may be slight differences between this manual and your particular vehicle. Should you have any questions, please contact your EPIC dealer or email us at questions@iconev.com.

Safety Considerations

Safety Precautions During Maintenance

When performing maintenance, follow all safety instructions contained in the manufacturer's operation and service manuals, as well as the following safety procedures:

- Properly immobilize vehicle before beginning any maintenance to avoid any unexpected vehicle movement.
- Properly block chassis before working underneath vehicle to avoid any unexpected vehicle movement.
- When working on the fuel system or the battery, do not smoke, or allow any sparks or open flames near the vehicle, to avoid any fires or explosions.
- Before working on an electric vehicle, disable its electrical system in accordance with the manufacturer's instructions to avoid electrical shock or damage to the electrical system.
- Use only properly insulated tools when working on electrically powered vehicles or around batteries to avoid electrical shock or damage to the electrical system.
- Use roof handles only for assisting entry and exit, or for stabilizing yourself while sitting. Handles are not load bearing.
- No hanging off cart nor roof handles.
- Do not operate cart while not seated.
- Maintain all safety devices, including brakes, steering mechanisms, warning devices, and governors in a safe operating condition. Do not modify these safety devices as supplied by the manufacturer. Modification of these safety devices may result in serious injury or death.
- After each maintenance or repair, the vehicle must be driven by a qualified, trained, and authorized person - in an area free of pedestrian traffic - to ensure proper operation and adjustment.
- Record all maintenance performed in a maintenance record log by date, name of person performing maintenance, and type of maintenance. Periodically inspect maintenance log to ensure accurate and complete entries.
- Provide operator comment cards to assist in identifying non-periodic maintenance needs for specific vehicles.
- Maintain in a legible condition all nameplates, warnings, and instructions provided by the manufacturer.

Operator Safety

Warning

Operator Safety

- Read this manual and safety instructions labels on the vehicle before driving.
- Be sure that passengers are seated and belted.
- Turn key on.
- Select “forward” or “reverse”.
- Push the accelerator to start moving and use the parking pedal to stop.
- Drive responsibly and in compliance with all local traffic laws and regulations.
- Drive safely according to the terrain, visibility, and driving conditions; drive carefully in crowded and slippery conditions.

 **Warning:** Do not attempt to cross a deep or flowing body of water, or any body of water that is deeper than 1/2 the height of your wheels. Failure to follow this instruction could result in the loss of control of your vehicle, personal injury or death. Do not drive the vehicle through excessive rain or large areas of standing water which may cause water flooding to the undercarriage or battery. The vehicle should be covered to avoid water entering the battery compartment.

 **Warning:** If you are driving in slippery conditions that require tire chains or cables, then it is critical that you drive cautiously. Keep speeds down, allow for longer stopping distances and avoid aggressive steering to reduce the chances of a loss of vehicle control which can lead to serious injury or death. If the rear end of your vehicle slides while cornering, steer in the direction of the slide until you regain control of your vehicle.

 **Warning:** Do not operate while under the influence of alcohol or drugs as this could affect your vision and judgement, resulting in damage to your vehicle, personal injury or death.

 **Warning:** Only one passenger should be allowed per seat/seatbelt.

 **Warning:** Only allow individuals to drive who are age 16 or older, or are legally permitted to operate your vehicle. Check your local and state traffic laws and driver regulations.

 **Warning:** Do not allow a passenger to hold a child on their lap when your vehicle is moving. Failure to follow this instruction could result in personal injury or death in the event of a sudden stop or crash.

 **Warning:** Do not attempt to boost your child's height by using pillows, books, towels, or any item not certified to use in a vehicle. Properly installed NHTSA-approved car seats or booster seats are the only authorized methods of height adjustment. Failure to follow this instruction could result in personal injury or death.

 **Warning:** Do not put the shoulder section of the seatbelt or allow the child to put the shoulder section of the seatbelt under their arm or behind their back. Failure to follow this instruction could reduce the effectiveness of the seatbelt and increase the risk of injury or death in a crash.

 **Warning:** Do not leave children or pets unattended in your vehicle. Failure to follow this instruction could result in personal injury or death.

Warranty Exclusion

Exclusions:

Specifically EXCLUDED from this Limited Warranty are:

- Routine maintenance items, normal wear and tear, cosmetic deterioration, or electrical components damaged as a result of fluctuations in electrical current.
- Damage to or deterioration of a vehicle resulting from inadequate maintenance, neglect, abuse, accident, or collision.
- Damage resulting from installation or use of parts or accessories not approved by EPIC.
- Warranty repairs made by other than an EPIC Factory Service Center or an authorized and qualified Dealer or designee. Warranty repairs made by other than an EPIC Factory Service Center or an authorized and qualified Dealer or designee shall void the Limited Warranty.
- Installation of any software not explicitly recommended by or installed by EPIC Carts or an authorized EPIC service technician will void the warranty.
- Damage or loss resulting from acts of nature, weather events, vandalism, theft, war or other circumstances over which EPIC has no control.
- Any and all expenses incurred in transporting the Vehicle to and from EPIC or an authorized Dealer, technician, or designee for warranty service.
- Storing vehicle outside 24/7.

Disclaimer: This limited warranty is the sole and exclusive warranty provided for the vehicle and is made in lieu of all other warranties, expressed or implied, including but not limited to the implied warranties of merchantability or fitness for a particular purpose, all such other warranties being explicitly disclaimed.

Liability Limitations: In no case shall EPIC be liable for indirect, incidental, special, punitive or consequential damages, including but not limited to death, personal injury or property damage arising from or related to any alleged failure in a vehicle or battery charger, or any damage or loss to the purchaser or any third party for lost time, inconvenience or any economic loss, whether or not EPIC was apprised of the foreseeability of such damages or losses. The right of purchaser to recover damages within the limitations set forth in this section is purchaser's exclusive alternative remedy if the limited remedy of repair or replacement of the vehicle fails essential purpose. The parties agree that this alternative remedy will be enforceable even if the limited remedy of repair or replacement fails of its essential purpose. Any legal claim or action arising that alleges breach of warranty must be brought within three (3) months from the date the warranty claim arises. This limited warranty gives you specific legal rights and you may have other rights that vary from state to state. Some states do not allow the exclusion of incidental damages or limitations on how long an implied warranty may last, so the above exclusions and limitations may not apply to you.

Warning: Any modification or change to the vehicle or battery charger which alters the weight distribution or stability of the vehicle, increases the vehicle's speed, or alters the output of the battery charger beyond factory specifications, can result in property damage, personal injury or death. Do not make any such modifications or changes. Such modifications or changes will void the limited warranty. EPIC disclaims responsibility for any such modifications, changes, or such alterations that would adversely impact the safe operation of the vehicle or battery charger.

Seats



Front Seats

The front seats are designed for a maximum of two occupants. The driver and front seat passenger must use safety belts when the vehicle is in motion.



Rear Seats

The rear seats are designed for a maximum of two occupants. The driver and front seat passenger must use safety belts when the vehicle is in motion.



Warning: Allowing more than two people to occupy a single seat could result in serious injury or death in certain circumstances.

Battery Service Warnings

Battery Pack Service Warnings

 **Warning:** This battery pack should only be serviced by an authorized electric vehicle technician. Improper handling can result in personal injury or death.

 **Warning:** Improper connection of the electrical outlet grounding conductor might result in a risk of electric shock. Check with a qualified electrician if you are uncertain whether or not the electrical outlet is properly grounded. Do not modify the plug provided with the product if it does not fit in the outlet. Have a proper outlet installed by a qualified electrician.

 **Warning:** It is recommended that electrical outlets for use with your charger be installed by a licensed, qualified electrician. To avoid serious injury or death, installation must comply with the provisions of the National Electric Code (NEC) and all local codes. In cases of conflict between local codes and the NEC, local codes shall take precedence.

 **Warning:** Do NOT DROP the control box or coupler.

 **Warning:** Do NOT use if stored outside temperature range specified.

 **Warning:** If the cable becomes separated from the control box or the charger coupler, DO NOT ATTEMPT TO REPAIR THE CABLE YOURSELF. Contact your dealer for assistance.

 **Warning:** See warnings on charger cord label. Read warnings before operating the unit the first time. Read all instructions in this guide before using this product.

 **Warning:** NEVER USE the charger with an extension cord.

 **Warning:** Shock hazard - make sure the plug is fully inserted into the wall outlet so that there are no exposed blade surfaces, which can lead to serious injury or death in extreme circumstances.

 **Warning:** Children should be supervised when in the vicinity of the charger while plugged in to ensure safety

 **Warning:** Do not put fingers into the electric charge coupler.

 **Warning:** To reduce the risk of fire, connect only to a circuit provided with 40 Amps maximum branch circuit over current protection installed in accordance with NEC and local electrical code.

 **Warning:** Do not expose the charge cord to flammable vapors while in use as an explosion could result.

 **Warning:** Be sure to have proper ventilation in your space, especially when charging batteries.

Load Carrying

Keep your loaded vehicle weight within its design rating capability. Properly loading your vehicle provides maximum return of vehicle design performance. Before you load your vehicle, become familiar with the following terms for determining your vehicle's weight rating, from the vehicle's Safety Compliance Certification Label.

 **Warning:** The appropriate loading capacity of your vehicle can be limited either by volume capacity (how much space is available) or by payload capacity (how much weight the vehicle should carry). Once you have reached the maximum payload of your vehicle, do not add more cargo, even if there is space available. Overloading or improperly loading your vehicle can contribute to loss of vehicle control and vehicle rollover, which could result in serious injury or death.

 **Warning:** Exceeding the Safety Compliance Certification label vehicle weight limits can adversely affect the performance and handling of your vehicle, cause vehicle damage, and can result in the loss of control of your vehicle, serious personal injury or death.

 **Warning:** Do not use replacement tires with lower load carrying capacities than the original tires because they may lower your vehicle's GVWR and GAWR limitations. Replacement tires with a higher limit than the original tires do not increase the GVWR and GAWR limitations.

 **Warning:** Do not exceed the GVWE or the GAWR specified on the certification label.

 **Warning:** Exceeding any vehicle weight rating can adversely affect the performance and handling of your vehicle, cause vehicle damage, and can result in the loss of control of your vehicle, serious personal injury or death.

 **Warning:** When loading the roof racks, we recommend you evenly distribute in the load, as well as maintain in a low center of gravity. Loaded vehicles, with higher centers of gravity, may handle differently than unloaded vehicles. Take extra precautions, such as slower speeds and increased stopping distance when driving a heavily loaded vehicle.

 **Warning:** Do not exceed ~150 lbs per handle.

 **Warning:** Do not exceed more than 300 lbs in the rear of the cart.

Fuses



Fuses

01. A fuse block for the 12 V circuits is located under the dash.
02. A single inline fuse is located approx. 12" under the dash.
03. A single inline fuse is located inline before the 12V receiver.
04. Each 12V audio cable has an inline fuse.

Fuse Precautions

 **Warning:** Always disconnect the battery before servicing high current fuses. Failure to do so could result in serious injury or death.

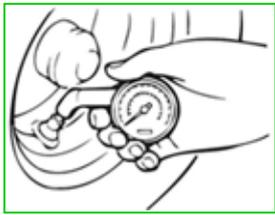
 **Warning:** To reduce risk of electrical shock, always replace the cover to the power distribution box before reconnecting the battery or refilling fluid reservoirs.

 **Warning:** Always replace a fuse with one that has the specified amperage rating. Using a fuse with a higher amperage rating can cause severe wire damage and could start a fire.

Wheels & Tires

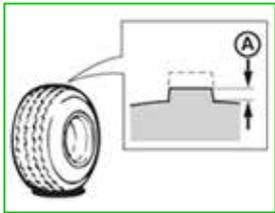
Tire Conditions

Tire Air Pressure



Check the tire air pressure before operating the vehicle.

Tire Wear Limit



Check the tire surface for damage, cracks, or embedded objects. When tire tread wears down to 1 mm (0.04 in.), replace the tire.

- Wheel nut tightening torque:
- 80 Nm, 8.0 m•kg (58 ft•lb)
- Tire pressure is set to: 137 kPa, 1.4 kgf/cm² (25 psi).

Tire Precautions

 **Warning:** Tires degrade over time depending on many factors such as weather, storage conditions, and conditions of use (load, speed, inflation pressure) that the tires experience throughout their lives.

In general, tires should be replaced after six years regardless of tread wear. However, heat caused by hot climates or frequent high loading conditions can accelerate the aging process and may require tires to be replaced more frequently.

You should replace your spare tire when you replace the road tires or after six years due to aging even if it has not been used.

 **Warning:** Under-inflation is the most common cause of tire failures and may result in severe tire cracking, tread separation or blowout, with unexpected loss of vehicle control and increased risk of injury. Under-inflation increases side wall flexing and rolling resistance, resulting in head build-up and internal damage to the tire. It also may result in unnecessary tire stress, irregular wear, loss of vehicle control and accidents. A tire can lose up to half of its air pressure and not appear to be flat!

 **Warning:** When you install a wheel, always remove any corrosion, dirt or foreign materials present on the mounting surfaces of the wheel, wheel hub, brake drum or brake disc that contact the wheel. Make sure to secure any fasteners that attach the rotor to the hub so they do not interfere with the mounting surfaces of the wheel. Installing wheels without correct metal-to-metal contact at the wheel mounting surfaces can cause the wheel nuts to loosen and the wheel to come off while your vehicle is in motion, resulting in loss of vehicle control, personal injury or death.

* If you still have questions about installation after reading the instructions above, bring your EPIC to an authorized EPIC service technician to have wheels installed.

Safety Measures

 **Warning:** Caution should be used when performing maintenance or repairs on your EPIC vehicle. Failure to take proper precautions may increase the risk of damage to the vehicle, mechanical failure, and/or personal injury, disfigurement, or death.

Prepare for Emergencies:

Be prepared for possible injury, fire, or other emergencies when servicing and storing your EPIC. It is recommended to keep the following items available and readily accessible:

- First aid kit
- Fire extinguisher or fire blanket
- Emergency phone numbers

Prior to beginning vehicle maintenance, service, or repairs on your EPIC, please heed the following recommendations:

- Remove all jewelry.
- Ensure your hair is pulled back and secure to avoid contact with moving parts.

- Ensure clothing is not loose to avoid entrapment.
- Confirm that your work area is well-ventilated.
- Ensure you are familiar with and closely follow all safety precautions discussed in the “Practice Safety” section of this manual.

While performing vehicle maintenance, service, or repairs, please heed the following recommendations:

- Do not touch hot objects.
- Use only the proper tools discussed throughout this manual.
- Maintain constant awareness that some components are heavy, corrosive, explosive, and subject to cause high amperage and/or extreme heat.
- Keep your hands, face, and body away from any area that can expose them to injury if an unexpected situation occurs.

After performing vehicle maintenance, service, or repairs, test the vehicle in a safe area, free from vehicular and pedestrian traffic.