

PRECISION EV SERIES

OWNERS MANUAL



SERIAL NUMBER _____

DATE OF PURCHASE _____

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GENERAL INFORMATION

The **Precision EV Series** Carts are only available with electric power. This manual, contains important information about the golf cart and its features. It is important that you as the owner / operator read and understand this manual to safely operate and maintain the vehicle.

At **Precision Custom Cart**, we want owning your cart to be a fun and rewarding experience. We are here to help and answer any questions you may have. You can contact us on the web or by phone. All information is on our website at www.PrecisionCarts.net.

OPERATING CONDITIONS

The **Precision K Series** cart is intended to be used as a recreation vehicle on golf courses, paved surfaces, defined paths, and safe offroad conditions. The vehicle is not intended to exceed 25mph and is not intended to drive on streets where local law prohibits golf cart operation. The cart is not intended to drive through water that reaches the rear axle.

SAFETY

The **Precision EV Series** cart owners must use caution in operating this vehicle. This vehicle should only be operated by licensed drivers or persons deemed eligible by local law.

Rules to follow

- Do NOT operate non golf car (2 seat versions) without safety belts. These may be required on all carts by local law. Seat belts are available at no charge on 2 seat versions.
- Do NOT drive through water that reaches the axle of the cart.
- Do NOT adjust the controller for the purposes of increasing speed above 25mph.
- Do NOT take curves at excessive speeds. These carts are much lighter and has a higher center of gravity because of the presence of lighter Lithium batteries.
- Make sure all arms and legs are inside the cart.
- Observe all traffic signs as if you are operating a motor vehicle in accordance with local law.

Do NOT operate on steep inclines.

SERIAL NUMBER IDENTIFICATION

The serial number of the vehicle is located on the aluminum frame under the golf cart (Drivers side).

LOCATIONS / FUNCTION

This section will cover the location and purpose of various components and indicators.

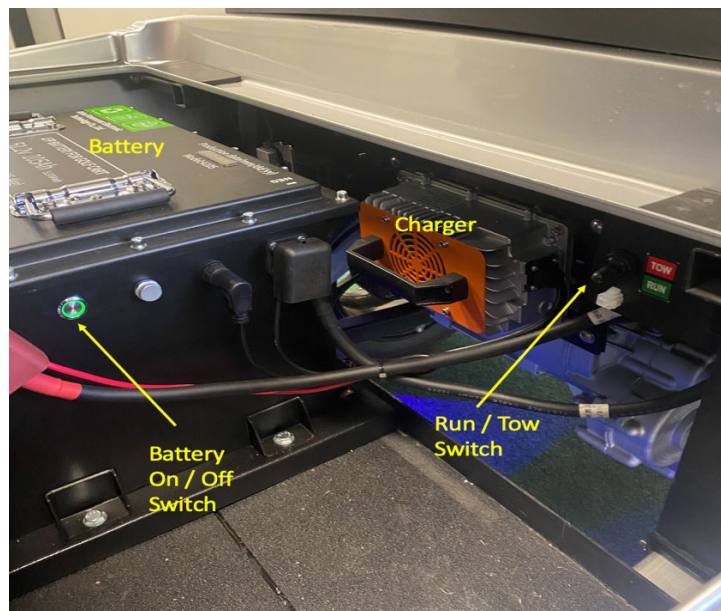


Figure 1 - Battery Compartment

BATTERY SWITCH

Precision EV Carts come with *Lithium ION* Maintenance Free batteries. The battery power switch is located on the side of the battery. To power the battery on, push the power button in for 3 seconds and then release. The battery will power on and the button will remain in the in position. To power the battery off, press and release the power button, the button will release out and the battery will power off. Powering the battery off is a good practice any time work or washing is being done to the golf cart, as well as times when the cart is not intended to be used for over 4 weeks.

Sleep Mode: Some lithium batteries will automatically power themselves off after no use. This time varies by battery manufacturer and can range from 2 hours to 2 days. If your battery auto powers off, on the next use you will need to power it back on by pressing and releasing the power button to get the power button in the off position, and then pressing and holding the power button for 3 seconds to power the battery back on.

Charging: Lithium batteries will perform better and last longer if they are charged and remain on the charger after every use, no matter how short the usage was. Trying to get multiple uses or rounds of golf off of a single charge is not good for the battery. The battery charger is mounted onboard the cart on the

back wall of the battery compartment. The battery charging port is located on the front seat body panel wall. Some carts have a charger indicator that the status during charging.



Figure 2 - Charging Indicator and Charge Port

RUN / TOW SWITCH

The Run / Tow switch is located under the seat, driver's side, on the back wall. The Run / Tow switch should be in the Run position for all normal operations. The Run / Tow switch should be placed in the Tow position any time the cart is pushed or towed, or for any maintenance operations. Failure to put the Run / Tow switch in the Tow position when required can damage the Electronic Motor Controller of the golf cart.

BATTERY METER

There are two types of meters used on Precision Carts. A Bar meter or a Coulometer with Display. Both are very accurate on lithium batteries.



Figure 3 - Bar Meter

The bar meter consists of 10 vertical red bars with each bar representing 10% of remaining battery life or remaining amperage for the current charge cycle. Example 7 lighted bars equals 70% battery remaining or 30% Used.



Figure 4 - Coulometer

The coulometer is a more advanced battery meter that will display battery voltage as well as remaining amp hours or battery percentage. This is accomplished because the coulometer will measure and display live actuals of how many amps are being drawn from or charged back into the battery. The top row of the meter displays the battery voltage. The middle row displays to percent of amp hour life remaining for the current charge cycle. The bottom row displays the current amp hour, draw from, or charge into, the battery.

Under the bottom row is a reserved area for error codes. If you ever see an error code, you should have the cart serviced immediately.

NOTE: Lithium batteries have a battery management system (BMS) and the BMS will shut the battery off between 5 and 15% to prevent the battery from being damaged by the charge getting too low. Do not attempt to use the golf cart if the meter is too low at start of use, or if the cart was not charged.

KEY SWITCH



Figure 5 - Key Fob

Precision EV uses a Key Fob remote (Similar to an automobile) to lock or unlock the controller of the golf cart. To power the golf cart on, click on the “Unlock” button on the key fob. The cart will click and the Engine Start / Stop button will light up. Pushing the Engine Start / Stop button will power the cart on.

To power off and lock the cart, press the Engine Start / Stop button and the cart will power off. Note that for a period of time the cart can be powered back on by pressing the Engine Start / Stop button again unless that cart has been locked by clicking on the “Lock” button on the key fob.

The cart will automatically lock after a period of time when the Engine Start / Stop button is pressed to power the cart off or when the lock button is pressed on the key fob.

DISPLAY

The Display Panel displays the current status of the golf cart and has all of the controls for the radio. This will be covered in more detail in the Display and Radio Control Section.

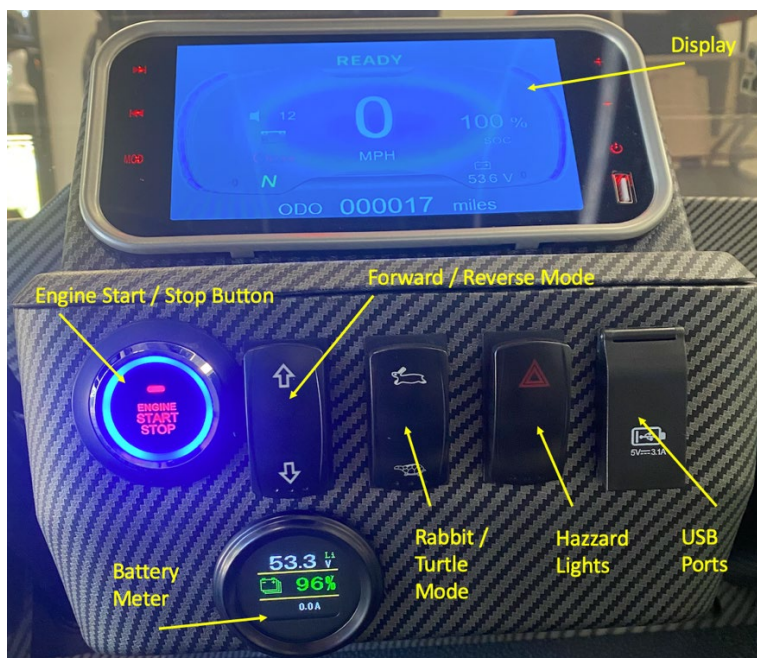


Figure 6 - Display and Control Panel

CONTROL PANEL FUNCTIONS

ENGINE START / STOP BUTTON

This button is used to turn the carts electrical system on and off. Once enabled (Unlock pressed on the Key Fob) It can be used to turn the golf cart on or off.

FORWARD / REVERSE SWITCH

The Forward / Reverse switch is located on the dash and will determine the direction of the cart.

RABBIT / TURTLE MODE SWITCH

The Rabbit / Turtle mode switch is used to set the maximum speed. When the switch is set to Rabbit mode the cart will have full speed (approximately 25 MPH) capability which is optimal for driving on the street. When the switch is set to Turtle mode the cart will have limited speed (approximately 16 MPH) capability which is optimal for the golf course and rugged terrain.

HAZZARD SWITCH

The Hazzard switch is located on the dash and when turned on will activate the emergency flashers for use if the cart is ever disabled on the road.

USB PORTS

There are 2 USB Ports available for Charging / Powering optional devices.

BATTERY METER

This location will have one of the previously described Bar Meter or Coulometer.

HEADLIGHT, TAIL LIGHT, HORN, & BLINKER CONTROLS

The blinker, headlight, and horn controls are located on the steering column. Moving the blinker arm up or down will set the turn signal to right or left turn. The knob on the end of the blinker arm controls the headlights and horn. Turning the knob one click allows you to turn on running lights. Two clicks turns on the headlights. With headlights on, pulling in on the blinker will switch from low beam to hi beam. The button on the end of the blinker arm is the horn.

DISPLAY AND RADIO FUNCTIONS

The display is used to display the current status of the cart as well as to be a display for the backup camera. When in Forward it will be in cart status mode and when in Reverse it will automatically switch to back up camera display.



Figure 7 - Display in Forward or Drive Status

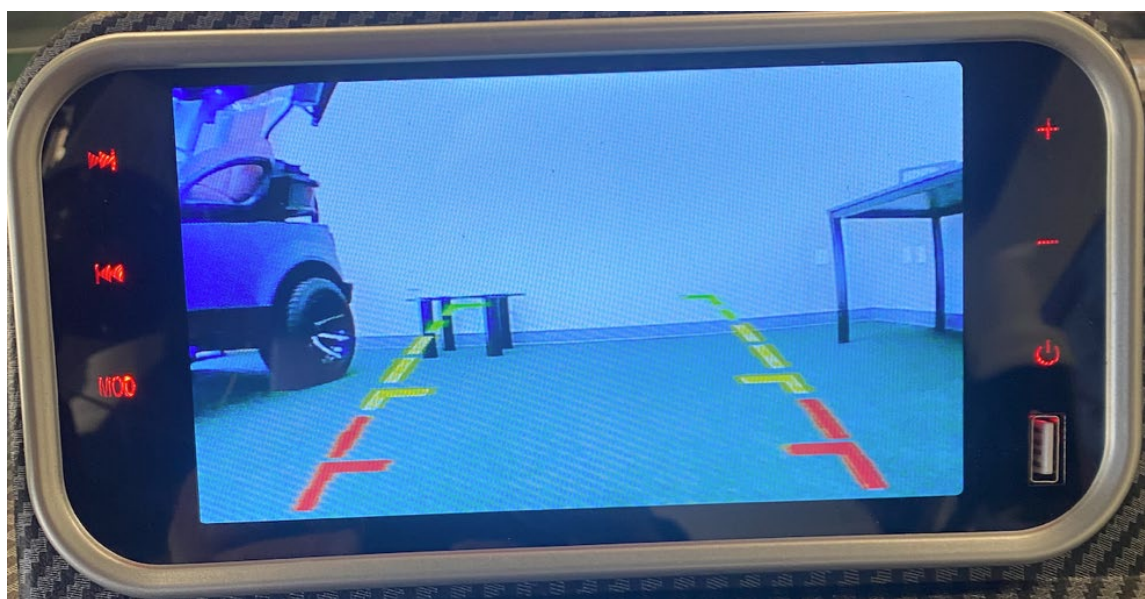


Figure 8 - Display in Reverse Status

RADIO CONTROLS

To connect via Bluetooth, make sure the cart is powered on. Next, turn on Bluetooth on your phone and look for a Device named CAR-BT. Connect to that device and you are ready to play.

To power the radio on, touch and hold the Radio Power ICON on the display until the radio comes on. Note that the radio always comes on in radio mode first. You can change the radio mode by touching the MOD (Radio Mode) ICON. Each touch will change the radio mode ie... Radio, Disk, Bluetooth, etc.

Note that this radio does not have the capability for an external antenna which may limit radio reception depending on where you live. The preferred method for this radio is to Bluetooth to your favorite device and play all music through an app on your device. Most phones have a music app for music on your phone, or you can use your favorite music application, such as Pandora, Apple, Android, or others, to stream music or radio stations.

Note that the display on the cart has additional radio controls to switch songs or stations as well as volume up and down controls.

UNDERCARRIAGE LIGHTING

The **Precision EV** comes equipped with Undercarriage Lighting. You can control various lighting functions (Light Color, Pulsing, Flashing, Blinking, or Music Mode using an application called “*Happy Lighting*”. Download the *Happy Lighting* App from your APP STORE.

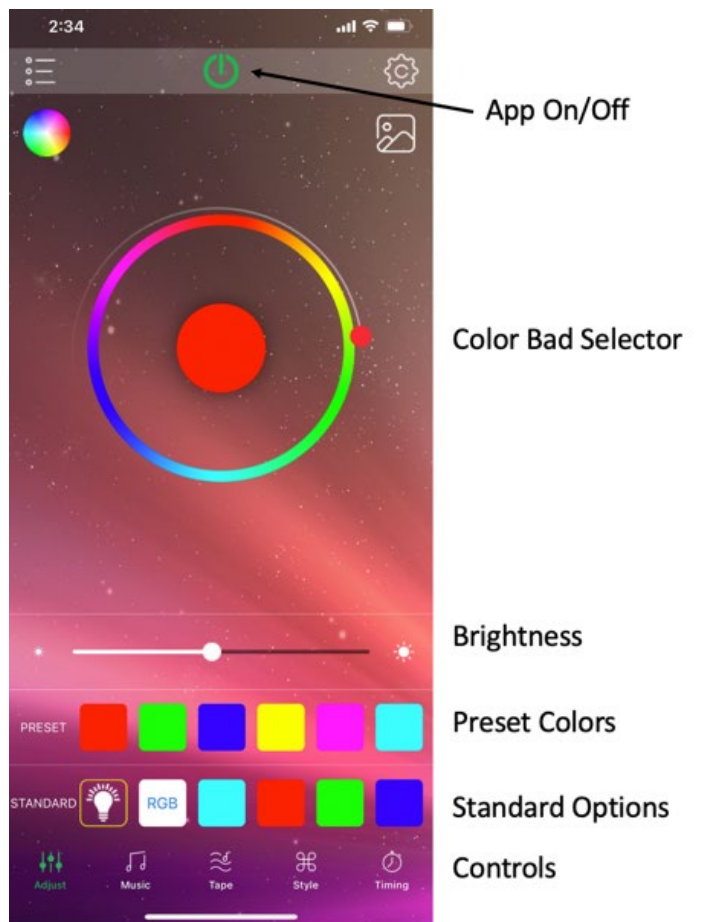


Figure 9 - Happy Lighting App

To use HappyLighting:

Make sure your phone is Bluetooth connected to the cart.
Open the HappyLighting app on your phone.
The app should automatically connect.

More information and detailed user manuals can be found at <https://happylightingapp.com>



Basic Functions:

App On/Off – Turns the App control on or off (Green is On)

Color Band Selector – Used to select a solid color

Brightness – Sets the brightness of the Undercarriage lights

Preset Colors – Used to select basic colors

Standard Options – Used to select standard options

Controls:

Adjust – Basic screen functions

Music – Allows selection of music on device for lights to match beating to

Tape – See detailed user manual link above

Style - Used to select various color pulsing, color flashing, color jumping, and speeds

Timing – See detailed user manual link above

Acceleration and Breaking

The **Precision EV** come standard with Rear Drum Brakes.



To Accelerate, step on the pedal labeled “GO”.

To Stop, step on the pedal labeled “Stop”.

To lock the parking brake, step on the small pedal labeled “Park”. Note that you can release the parking brake by stepping anywhere on the stop pedal or the parking brake will release automatically when you step on the pedal labeled “Go”.

The **Precision EV** also has an option for front DISC brakes. If your cart has this option, you will have improved braking, but will occasionally need to check the brake fluid level in the reservoir which is located under the seat. Use on DOT 3 Brake Fluid.

MIRRORS

The Precision EV X has 2 lighted side mirrors that are illuminated both on the mirror side and on the back side and are synchronized to the blink indicators in the front headlights and rear taillights. There is also a rearview mirror mounted on the front center of the roof.

OTHER INCLUDED ITEMS

- -Custom Wheels and Tires
- Folding Front Windshield
- Bag Cover (optional on golf versions)
- Sand Bottles (golf versions)
- Hi Performance Controller
- Hi Performance AC Motor
- 12 Volt Converter For Accessories
- Ball / Club Washer (golf versions)
- Ice Chest (golf versions)
- Front Basket (4 and 6 seat options)
- Brush Guard

AVAILABLE OPTIONS

- Additional Center Front Headlight
- Track Enclosure
- Fender Flares

WARRANTY

LIMITED WARRANTY

Precision Custom Carts and Service, LLC, hereby warrants to the original purchaser or lessee, subject to the provisions, limitations and exclusions in this limited warranty, that its new vehicle or new component purchased from Precision Custom Carts or an Authorized Dealer or Distributor shall be free from defects in material and workmanship under normal use and service for a period of 1 Year, subject to the provisions, limitations and exclusions in this limited warranty.

Note: Lithium Battery warranty is 5 Years.

This limited warranty covers material, workmanship and repair labor cost as to those items specifically listed below for the periods specified. Such repair labor shall be performed only by Precision Custom Carts, its Authorized Dealers or Distributors, or a service agency approved by Precision Custom Carts.

INCLUSIONS

The **Precision EV** warranty includes everything on the cart from bumper to bumper.

EXCLUSIONS

Excluded from any Precision Custom Cart warranty is damage to a vehicle or component resulting from a cause other than a defect including poor maintenance, neglect, abuse, accident and collision, maintenance adjustments, unreasonable or unintended strain or use, improper installation of accessories, installation of parts or accessories that are not original equipment, non-approved alteration, and acts of God. Also excluded from any Precision Custom Cart warranty are items that deteriorate, fade or fail due to exposure or ordinary wear and tear.

VOIDING OF WARRANTY

This and any other warranty shall be void if the vehicle or component is damaged, involved in an accident, abused or used in an unintended manner or shows indications that it has been altered in any way, including, but not limited to, modification of the speed governor, braking system, steering, transaxle, or other operating systems of the car to cause it to perform outside original specifications.

MAINTENANCE

Like all carts, the ***Precision EV Series***, routine maintenance and care is required.

Tires – Check routinely for tread depth, uneven wear, and air pressure. Check lugs routinely and torque all lugs to 75psi. Rotate tires once a year.

Alignment – check to make sure the steering wheel is centered. Check tires for uneven wear. This is an indication of poor alignment.

Brake Fluid – Check fluid levels before operating v(if applicable).

Electrical Safety Devices – check headlights, tail lights, brake lights, blinkers, horns, and hazards before operating.

Front and Rear Bushings – check for wear annually.

CARE

A clean cart is more fun and safer to operate. Cleaning allows the owner to visually inspect the cart for loose hardware and structural cracks.

Painted Surfaces – Use non-abrasive cleaning agents typically used on automobiles. Wash with non-abrasive soap, water, and a soft rag. Dry with a soft towel. Wax maybe applied to gloss finishes.

Battery Compartment – Use a vacuum or air pressure to remove dirt. A damp rag may be used to wipe surfaces. Do not use direct water pressure in this area.

Windshield – Use non-abrasive soap, water, and a soft cloth to clean the surfaces.

Seats – Wipe seats with a damp cloth.

SERVICE

If you are in need of warranty, routine, or non-routine service, please contact your dealer or you may contact us on the website at www.PrecisionCarts.net. You may also call us at (281) 612-3034 to schedule an appointment or to find a service provider near you.