



# MARS SERIES GOLF CART ⚡

WITH **LITHIUM** BATTERY SYSTEM



# About Us

iEngineering is proud to introduce our latest addition: a diverse range of eco-friendly, high-performance golf carts designed for various industries. Whether you're enhancing customer experience at a golf course, optimizing operations at a resort, or seeking efficient transport solutions for your business, our golf carts offer the ideal solution.

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## **Lifted Golf Cart Series**

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# Mars Series

Ignite your senses, especially your sense of excitement with engineering golf cart series

Choosing stable chassis system with front McPherson independent suspension and non-load bearing design, Mars series gives you an improved comfort to every ride. Featured stylish dashboard, comfortable seats and modern headlights mean you'll have a wonderful journey with Mars series.



## Focus on details



### Comfortable Seats

Enjoy driving journey in ultimate comfort with ergonomic design



### LED Lighting System

All LED headlights and taillights for maximum brightness and durability.



### Functional Dashboard

New designed dashboard with larger cup holders and more storage.



**McPherson independent front suspension** and non-load bearing design improve the ride comfort and operation.



**Lithium battery** delivers the performance to keep your golf car running strongly and provides longer battery life.



**4KW/5KW AC Motor** powers you a efficient ride and longer driving range.

# LITHIUM BATTERY FOR YOUR GOLF CARTS

Perfect match for Mars series golf cart  
High efficiency | Long battery life | Zero Maintenance



**Car Grade LiFePO4 cell**  
Good safety, high consistency, longer life



**Intelligent Management**  
Intelligent management system, Built-in reliable BMS, health status real-time monitoring



**Long Life**  
More than 5000 cycles, 5 years of warranty, 15 years of design life



**High Quality Assurance**  
Automatic intelligent production line, processing information can be traced



**Temperature Range**  
Wide operating temperature range, discharge operating -30°C ~60°C



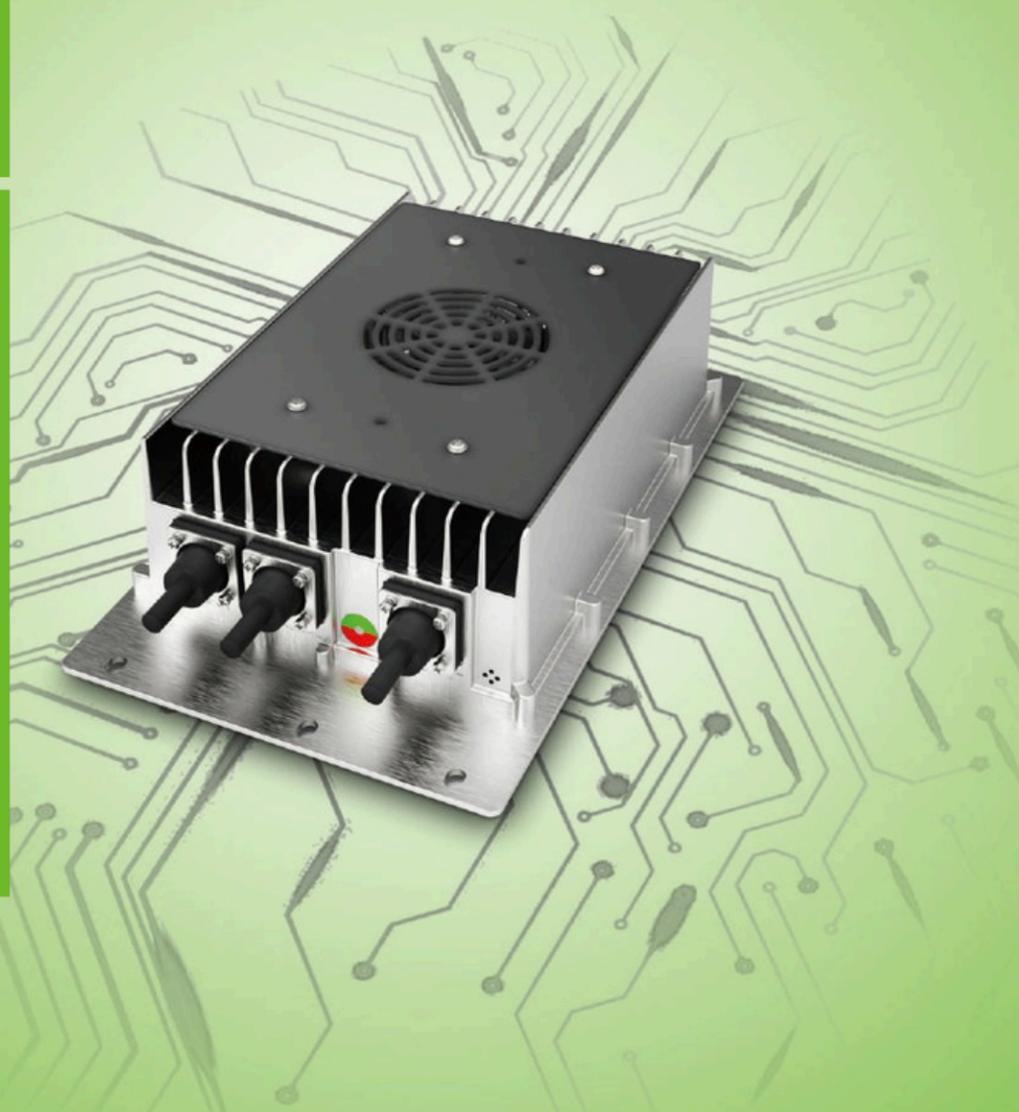
**Efficient Delivery**  
45 days for customized delivery, 30 days for standard product delivery



# Intelligent Onboard Charger

A excellent smart charger is crucial to improve the battery performance and extend the lifespan. We adopt the smart charger for Mars series golf cart, which has the following benefits:

- ✓ The charger design adopts the automotive grade, meeting IP67 protection standard.
- ✓ The charger can automatically identify lead-acid and lithium battery based on the BMS, switch selection and charging curve.
- ✓ Works well in the -20 degrees to 50 degrees with the derating fuction to prevent overheating power.
- ✓ Adopted MCU and DSP software control technology, and equipped with CAN communication.
- ✓ Certifications include: TUV, UL, CE, FCC, etc.



## Why Lithium Batteries ?



### Advantages of lithium battery

Lithium battery is half lighter than lead-acid, which can greatly reduce the total weight of the golf cart for easier operation and start-up speed.



### Fast charging

The battery standard charging time is 4-5 hours for fully charged.



### No maintenance

Save labor costs and time for regular water filling and daily maintenance



### Ultra-safe

Lithium battery exhibits higher thermal stability, makes it become a reliable and secure choice for the vehicle.



### Long cycle life

Stable discharge performance and battery cycle life of more than 5000 times.



### Environmentally friendly

Lithium battery is no emission of toxic and hazardous chemicals. Less turf compaction due to the lower weight.



**TECHNICAL SPECIFICATIONS**

DG-M2 Model		
Motor	AC 48V 4KW	
Controller	48V 400A	
Battery	51.2V 105Ah Lithium Battery	48V 150Ah Lithium Battery
Range	60 KM	80 KM
Charging Time	5H	8H
Net Weight	440kgs	450kgs
Charger	On Board Charger 48V 20A	
Wheel Base	1670 mm	
Front Tread/Rear Tread	920mm/960mm	
Speed (km/h)	20 km/h	
Brake System	Rear Mechanical Drum Brake	
Brake Distance	4.5 m	
Turning Radius	3.1 m	
Climbing Capacity	25%	
Ground Clearance	120 mm	
Tire	18*8.5-8 Steel Rim with Plastic Cover	
Dimension	2380*1174*1870 mm	



**TECHNICAL SPECIFICATIONS**

DG-M2+2 Model		
Motor	AC 48V 4KW	
Controller	48V 400A	
Battery	51.2V 105Ah Lithium Battery	48V 150Ah Lithium Battery
Range	60 KM	80 KM
Charging Time	5H	8H
Net Weight	470kgs	480kgs
Charger	On Board Charger 48V 20A	
Wheel Base	1670 mm	
Front Tread/Rear Tread	920 mm/ 960 mm	
Speed (km/h)	25 km/h	
Rear Flip Flop Seats	Foldable with flat bed, carry capacity: 150 KGS	
Brake System	Rear Mechanical Drum Brake	
Brake Distance	4.5 m	
Turning Radius	3.1 m	
Climbing Capacity	20%	
Ground Clearance	120 mm	
Tire	18*8.5-8 Steel Rim with Plastic Cover	
Dimension	3060* 1174* 1960 mm	



**TECHNICAL SPECIFICATIONS**

DG-M2S Model		
Motor	AC 48V 4KW	
Controller	48V 400A	
Battery	51.2V 105Ah Lithium Battery	48V 150Ah Lithium Battery
Range	60 KM	80 KM
Charging Time	5H	8H
Net Weight	470kgs	480kgs
Charger	On Board Charger 48V 20A	
Wheel Base	1670 mm	
Front Tread/Rear Tread	920 mm/ 960 mm	
Cargo box dimension and carry capacity	600*1120*310 mm 100 KGS* loading capacity	
Speed (km/h)	25 km/h	
Brake System	Rear Mechanical Drum Brake	
Brake Distance	4.5 m	
Turning Radius	3.1 m	
Climbing Capacity	20%	
Ground Clearance	120 mm	
Tire	18*8.5-8 Steel Rim with Plastic Cover	
Dimension	2500*1174*1870 mm	



**TECHNICAL SPECIFICATIONS**

DG-M4 Model		
Motor	AC 48V 4KW	
Controller	48V 400A	
Battery	51.2V 105Ah Lithium Battery	48V 150Ah Lithium Battery
Range	60 KM	80 KM
Charging Time	5H	8H
Net Weight	470kgs	480kgs
Charger	On Board Charger 48V 20A	
Wheel Base	2420 mm	
Front Tread/Rear Tread	920mm/960mm	
Speed (km/h)	20 km/h	
Brake System	Rear Mechanical Drum Brake	
Brake Distance	6 m	
Turning Radius	4.5 m	
Climbing Capacity	20%	
Ground Clearance	120 mm	
Tire	18*8.5-8 Steel Rim with Plastic Cover	
Dimension	3140* 1180* 1870 mm	



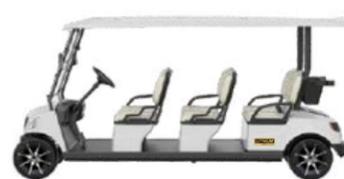
**TECHNICAL SPECIFICATIONS**

DG-M4+2 Model		
Motor	AC 48V 5KW	
Controller	48V 450A	
Battery	51.2V 105Ah Lithium Battery	48V 150Ah Lithium Battery
Range	50 KM	70 KM
Charging Time	5H	8H
Net Weight	500kgs	510kgs
Charger	On Board Charger 48V 20A	
Wheel Base	2420 mm	
Front Tread/Rear Tread	920 mm/ 960 mm	
Speed (km/h)	20 km/h	
Rear Flip Flop Seats	Foldable with flat bed, carry capacity: 150 KGS	
Brake System	Hydraulic brake(Front Disc brake, rear drum brake) Foot Brake for Parking	
Brake Distance	6 m	
Turning Radius	4.5 m	
Climbing Capacity	15%	
Ground Clearance	120 mm	
Tire	12 Inch Aluminium Rim Wheel Low profile Tire 215/35-12	
Dimension	3685*1226* 1941mm	



**TECHNICAL SPECIFICATIONS**

DG-M4S Model		
Motor	AC 48V 5KW	
Controller	48V 450A	
Battery	51.2V 105Ah Lithium Battery	48V 150Ah Lithium Battery
Range	50 KM	70 KM
Charging Time	5H	8H
Net Weight	500kgs	510kgs
Charger	On Board Charger 48V 20A	
Wheel Base	2420 mm	
Front Tread/Rear Tread	920 mm/ 960 mm	
Cargo box dimension and carry capacity	600*1120*310 mm ,Payload: 100 KGS	
Speed (km/h)	20 km/h	
Brake System	Hydraulic brake(Front Disc brake, rear drum brake) Foot Brake for Parking	
Brake Distance	6 m	
Turning Radius	4.5 m	
Climbing Capacity	15%	
Ground Clearance	120 mm	
Tire	12 inch aluminium rim wheel, low profile tire 215/35-12	
Dimension	3300* 1174 *1956 mm	



**TECHNICAL SPECIFICATIONS**

DG-M6 Model		
Motor	AC 48V 5KW	
Controller	48V 450A	
Battery	51.2V 105Ah Lithium Battery	48V 150Ah Lithium Battery
Range	50 KM	70 KM
Charging Time	5H	8H
Net Weight	630kgs	640kgs
Charger	On Board Charger 48V 20A	
Wheel Base	3150 mm	
Front Tread/Rear Tread	916mm/966mm	
Speed (km/h)	20 km/h	
Brake System	Hydraulic brake(Front Disc brake, rear drum brake) Foot Brake for Parking	
Brake Distance	8 m	
Turning Radius	6 m	
Climbing Capacity	20%	
Ground Clearance	120 mm	
Tire	12 Inch Aluminium Rim Wheel Low profile Tire 215/35-12	
Dimension	3860* 1230* 1959 mm	



**TECHNICAL SPECIFICATIONS**

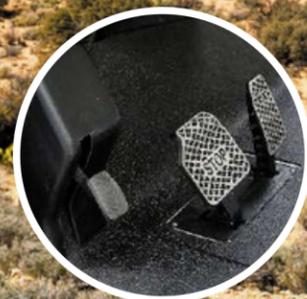
DG-M6+2 Model		
Motor	AC 48V 5KW	
Controller	48V 450A	
Battery	51.2V 105Ah Lithium Battery	48V 150Ah Lithium Battery
Range	45 KM	60 KM
Charging Time	5H	8H
Net Weight	650kgs	660kgs
Charger	On Board Charger 48V 20A	
Wheel Base	3150 mm	
Front Tread/Rear Tread	920 mm/ 960 mm	
Speed (km/h)	20 km/h	
Rear Flip Flop Seats	Foldable with flat bed, carry capacity: 150 KGS	
Brake System	Hydraulic brake(Front Disc brake, rear drum brake) Foot Brake for Parking	
Brake Distance	8 m	
Turning Radius	6 m	
Climbing Capacity	15%	
Ground Clearance	120 mm	
Tire	12 Inch Aluminium Rim Wheel Low profile Tire 215/35-12	
Dimension	4360* 1230*1955 mm	



**TECHNICAL SPECIFICATIONS**

DG-M6S Model		
Motor	AC 48V 5KW	
Controller	48V 450A	
Battery	51.2V 105Ah Lithium Battery	48V 150Ah Lithium Battery
Range	45 KM	60 KM
Charging Time	5H	8H
Net Weight	660kgs	670kgs
Charger	On Board Charger 48V 20A	
Wheel Base	3150 mm	
Front Tread/Rear Tread	930 mm/ 980 mm	
Cargo box dimension and carry capacity	600*1120*310 mm ,Payload: 100 KGS	
Speed (km/h)	20 km/h	
Brake System	Hydraulic brake(Front Disc brake, rear drum brake) Foot Brake for Parking	
Brake Distance	8 m	
Turning Radius	6 m	
Climbing Capacity	15%	
Ground Clearance	100 mm	
Tire	12 inch aluminium rim wheel, low profile tire 215/35-12	
Dimension	4030*1230*1959 mm	

# Lifted Golf Cart Series



## TECHNICAL SPECIFICATIONS

### DH-M2 Model

Motor	AC 48V 4KW	
Controller	48V 400A	
Battery	51.2V 105Ah Lithium Battery	48V 150Ah Lithium Battery
Range	55 KM	75 KM
Charging Time	5H	8H
Net Weight	480kgs	490kgs
Charger	On Board Charger 48V 20A	
Wheel Base	1670 mm	
Front Tread/Rear Tread	950 mm/ 1000 mm	
Cargo box dimension and carry capacity	600* 1200*310mm,100KGS	
Speed (km/h)	30 km/h	
Brake System	Rear Mechanical Drum Brake	
Brake Distance	4.5 m	
Turning Radius	3.1 m	
Climbing Capacity	20%	
Ground Clearance	170 mm	
Tire	10 inch steel rim wheel terrain tire; 22*11-10,Kenda brand tire	
Dimension	2610* 1260 *1970 mm	

## TECHNICAL SPECIFICATIONS

### DH-M2+2 Model

Motor	AC 48V 4KW	
Controller	48V 400A	
Battery	51.2V 105Ah Lithium Battery	48V 150Ah Lithium Battery
Range	50 KM	70 KM
Charging Time	5H	8H
Net Weight	480kgs	490kgs
Charger	On Board Charger 48V 20A	
Wheel Base	1670 mm	
Front Tread/Rear Tread	950 mm/ 1000 mm	
Rear Seat	Rear Flip Flop Seat Plastic Molded	
Speed (km/h)	30 km/h	
Brake System	Rear Mechanical Drum Brake	
Brake Distance	5 m	
Turning Radius	3.1 m	
Climbing Capacity	20%	
Ground Clearance	170 mm	
Tire	10 inch steel rim wheel terrain tire;22*11-10,Kenda brand tire	
Dimension	3160*1260 *2050 mm	



**TECHNICAL SPECIFICATIONS**

**DH-M4 Model**

Motor	AC 48V 5KW	
Controller	48V 450A	
Battery	51.2V 105Ah Lithium Battery	48V 150Ah Lithium Battery
Range	50 KM	70 KM
Charging Time	5H	8H
Net Weight	613kgs	620kgs
Charger	On Board Charger 48V 20A	
Wheel Base	2420 mm	
Front Tread/Rear Tread	950 mm/ 1000 mm	
Cargo box dimension and carry capacity	600*1200*310 mm 100 KGS	
Speed (km/h)	20 km/h	
Brake System	Hydraulic brake(Front Disc brake, rear drum brake)Foot Brake for Parking	
Brake Distance	6 m	
Turning Radius	4.5 m	
Climbing Capacity	20%	
Ground Clearance	170 mm	
Tire	12 inch aluminium wheel all terrain tire,22*11-12	
Dimension	3560* 1310*1980 mm	



**TECHNICAL SPECIFICATIONS**

**DH-M4+2 Model**

Motor	AC 48V 5KW	
Controller	48V 450A	
Battery	51.2V 105Ah Lithium Battery	48V 150Ah Lithium Battery
Range	50 KM	65 KM
Charging Time	5H	8H
Net Weight	653kgs	660kgs
Charger	On Board Charger 48V 20A	
Wheel Base	2420 mm	
Front Tread/Rear Tread	950mm/1000mm	
Rear Seat	Rear Flip Flop Seat Plastic Molded	
Speed (km/h)	20 km/h	
Brake System	Hydraulic brake(Front Disc brake, rear drum brake Foot Brake for Parking	
Brake Distance	6 m	
Turning Radius	4.5 m	
Climbing Capacity	20%	
Ground Clearance	170 mm	
Tire	12 inch aluminium wheel,all terrain tire 22*11-12	
Dimension	3774*1260 *2075 mm	





## TECHNICAL SPECIFICATIONS

### DS-A2-2 Model

Motor	AC 48V 4KW	
Controller	48V 450A	
Battery	51.2V 105Ah Lithium Battery	48V 150Ah Lithium Battery
Range	60 KM	80 KM
Charging Time	5H	8H
Net Weight	470kgs	480kgs
Charger	On Board Charger 48V 20A	
Wheel Base	1670 mm	
Front Tread/Rear Tread	910mm/980mm	
Speed (km/h)	40 km/h	
Brake System	Hydraulic brake(Front Disc brake, rear drum brake and Foot Brake for Parking)	
Brake Distance	4.5 m	
Turning Radius	3.1 m	
Climbing Capacity	30%	
Ground Clearance	120 mm	
Tire	12 inch aluminium wheel, low profile tire 215/40R-12 with Emark	
Dimension	2400*1174 *1950 mm	

# Utility Vehicle

**NEW**



Rear cargo bed:  
loading capacity 500 KGS  
Dimension: 1500\*1150\*310 mm



## TECHNICAL SPECIFICATIONS

### DU-CA500 Model

Motor	AC 48V 5KW	
Controller	48V 450A	
Battery	51.2V 105Ah Lithium Battery	48V 150Ah Lithium Battery
Range	70 KM	90 KM
Charging Time	5H	8H
Net Weight	670kgs	
Charger	On Board Charger 48V 20A	
Wheel base	2450 mm	
Front Tread/Rear Tread	960 mm/1010 mm	
Speed (km/h)	28 km/h	
Brake System	Hydraulic brake(Front Disc brake, rear drum brake and electromagnetic Brake for Parking)	
Brake Distance	6m	
Turning Radius	4.5 m	
Climbing Capacity	20%	
Ground Clearance	170 mm	
Tire	12 inch aluminium wheel street tire, 225/55B12 ,DOT & Emark Certificated	
Dimension	3500*1290*2010 mm	



## TECHNICAL SPECIFICATIONS

### DH-UCA500 Model L7e Street legal

Motor	AC 48V 5KW	
Controller	48V 450A	
Battery	51.2V 105Ah Lithium Battery	48V 150Ah Lithium Battery
Range	50 KM	65 KM
Charging Time	5H	8H
Net Weight	570kgs	580kgs
Charger	On Board Charger 48V 20A	
Wheel Base	2440 mm	
Front Tread/Rear Tread	950 mm/1010 mm	
Speed (km/h)	20 km/h	
Windshield	DOT laminated glass front windshield with wiper	
Seat Belt	Emarked three points seat belts	
Brake System	Hydraulic brake(Front Disc brake, rear drum brake and Foot Brake for Parking)	
Brake Distance	6 m	
Turning Radius	4.5 m	
Climbing Capacity	20%	
Ground Clearance	170 mm	
Tire	12 inch aluminium wheel street tire, 225/55B12 ,DOT & Emark Certificated	
Dimension	3460*1305*1900 mm	

Rear cargo bed: Aluminium profile silver color, loading capacity 500 KGS  
Dimension: 1400\*1200\* 310 mm

# Mars Series



## CUSTOMIZE YOUR MARS GOLF CART

Choose your wheel



10 inch aluminium alloy rim tire  
(Optional for 2-4 seats)



12 inch aluminium rim wheel with low profile  
tire 215/35-12  
(Optional for 2-4 seats, standard for  
4 seats with cargo box and 6 seats)



12 inch aluminium alloy rim with all terrain tire  
(For Lifted Golf Cart)



14 inch aluminium alloy rim,  
all terrain tire: Tire dimension: 22"10-14  
(For Lifted Golf Cart)

Pick your car color



Dark Blue



Metallic Black



Dark Gray



Metallic Silver



Metallic Light Red



White



Front head lights



Side View Mirror



8 inch steel wheel with wheel cover,  
Turf tire, dimension 18\*8.5-8



Rear golf bag holder



Inner View Mirror



Rear lights



AC Motor



Marxon Controller



On Board Charger



Marxon Lithium Battery  
Enclosed the Technical Spec



Dashboard Layout



Foldable Front Windshield

# OPTIONAL ACCESSORIES

## Body Kits



Side View Mirror  
(With Lights | W/O Lights)



Inner View Mirror,  
Arc Shade, Extra Wide



Seat Belts:  
(Lap Belts, two points)



Seat belts(Three points)



DOT Front Windshield  
Glass with Wiper



Carbon Fiber Steering  
Wheel, New Style



Premium Seats  
(Micro-Fiber Leather)



Rear Licence Plate  
with lamps



Hydraulic brake  
(Front Disc + Rear Drum)



Rear Flip Flop Seats

## Electric Accessories



7 inch speedometers  
with back-up camera



Stereo System  
(Player+ Speakers)



Sound Bar: Not Available  
for North America +  
Australian Market



7-pin electric coupling



EPS



Leoch LDC Free  
Maintenance battery



48V 80Ah Lithium Battery



48V 210Ah Lithium Battery



51.2V 150Ah Lithium Battery

## Cargo and Storage



Rear Cargo Tray  
Dimension: 600\*1120\*310 mm  
loading capacity: 100 KGS



Rear Box



Dashboard front  
basket: Steel Mesh



Locked Door on  
gloved box

## Covers and Enclosures



Golf Bag Rain cover



Carts Rain Cover



Weather Enclosure  
(Dust Cover)

## Golf Accessories



Sand Bottle



Ball Washer



Tow bar with ball coupling



Cooler



Four Golf Bag holder



Refrigerator



Caddy Plate



Caddy Plate Handrail

# CUSTOMER CASE



## Driving Tips

1. Always drive responsibly; arm's and legs should always remain in the vehicle and, if your cart is equipped with them, seat belts should always be fastened.
2. Only carry passengers that you have seats for. Do not try to squeeze in extra passengers.
3. Never drive recklessly or joy ride. Be courteous to other drivers and obey vehicle traffic laws and the rules of the road.
4. Never drive intoxicated or under the influence of any drug or narcotic.
5. Never allow anyone to stand in the vehicle or on the platform located in the back of the vehicle and never put the vehicle in motion until all passengers are safely inside the vehicle and buckled in.
6. Always use hand signals to indicate upcoming turns as well as your turn signals. Turn signals may be small or go unnoticed by vehicles behind you so it's always a good idea to use hand signals as well.
7. Use caution while turning and look behind your golf cart before backing up.
8. Avoid excessive speeds, sudden starts and stops, and avoid sharp turns at fast speeds.
9. Reduce speed depending on the driving conditions and driving environment. Reduce speed on hills and inclines or declines, blind corners, and yield to pedestrians.
10. Use extreme caution in inclement weather. Golf carts may be prone to lightning strikes. Avoid driving in inclement weather if you can.

