

IGX9297

Quick User Guide



iGEARX

A Company of Xingtel Group

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This Quick User Guide (Guide) is to demonstrate the main features of IGX9297, including the new vision AI-based Auto Follow feature.

This Guide will walk you through basic operations of main features of IGX9297.

For detailed technical specifications of IGX9297, see **Technical Specifications** at the end of this Guide.

The smart golf cart may not be employed for the operation of toys. Operation onboard an aircraft, a ship or a satellite is prohibited.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

MPE Requirements

To satisfy FCC RF exposure requirements, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation.

To ensure compliance, operations at closer than this distance is not recommended.

Introduction of IGX9297

The IGX9297 is the new generation of Foresight's long-acclaimed ForeCaddy smart club cart series.

The IGX9297 comes with a brand-new design inside out than its predecessor. Engineered with the latest technologies, the IGX9297 is built upon the cutting-edge vision artificial intelligent technology (patent-pending). Once activated, IGX9297 will auto follow the golfer, without any user intervention.

Packed all the latest technologies into the IGX9297, IGX9297 makes the golf game even more pleasant.



Highlights

- Sleek Light-Weight Design
- Foldable Structure
- Robust Alloy-Made and IP-65 Water-Proof
- Engineered for Golfer's Needs
- Cutting-Edge Vision AI Technology
- Multiple Modes of Operation (Auto Follow, Remote Control, Power Assist, Manual)
- Auto Following (based on the patent-pending vision AI technology)
- Auto-Sensing in Localization (in Auto Follow mode)
- 1-Button Recall
- Built-in 6D Gyro and Accelerometer
- Auto Acceleration/Brake System (in Auto Follow and Remote-Control mode)
- Auto Slope Detection
- Built-in High-Speed Wi-Fi
- High-Power Electric Motors
- Easy-to-Use Remote
- High-Capacity Battery Pack
- Over-the-Air Firmware Upgrade (via Wi-Fi hotspot)
- Complete Accessories Set

What's Included

1. A IGX9297
2. A Rechargeable Remote Unit & Storage Box
3. A Rechargeable Main Battery Pack
4. An External Power Recharger (for recharging the main battery pack)
5. Sand Bottle Holder and Sand Bottle
6. Umbrella Holder
7. Cup Holder
8. Data cable

Preparation

Expanding/Folding the IGX9297

The IGX9297 is designed to be foldable during the transportation or to save the space when not in use. IGX9297 inherits the same way of its predecessor to expand or fold.

Knowing the Remote

The IGX9297 can be operated by using the Remote unit.
Always make sure the Remote is fully charged before using it.



Power On/Off

To power on or power off the Remote, press and hold the On/Off button till all LEDs lit up.

Direction Buttons

Use these buttons to remotely control the movement of IGX9297 (in Remote Control mode).

Buttons

Use the Remote to start the Auto Follow or Remote-Control mode.

D: Remote Control Mode

F: Auto Follow Mode/1-Button Recall

Stop: Stop the current operation mode

At any time, you can stop the current operation mode by pressing “**Stop**” button or the individual mode button. For maximum safety, the IGX9297 will stop moving immediately.

Charging the Main Battery Pack and the Remote

IGX9297 requires the external battery pack and the remote to work.
Always fully charge the battery pack and the remote before using IGX9297.

Powering On/Off IGX9297

To power on or power off the IGX9297, follow the instructions listed below.

1. Connect the fully charged main battery pack to the IGX9297. Ensure the main battery pack is well installed.
2. Press the **Master Power** button on the IGX9297.

Selecting A Mode of Operation

IGX9297 has 4 modes of operation, including **Auto Follow**, **Remote Control**, **Power Assist**, and **Manual**, to best assist you during the golf game.

Auto Follow mode and Remote-Control mode can be activated by using the remote.
Power Assist mode can be activated from the button on the handle of IGX9297.

Direction of IGX9297 Movement

IGX9297 is carefully designed to make the use of it easier than ever.
The direction of its movement is shown in the following picture.



Auto Follow Mode

IGX9297 is designed with a patent-pending cutting-edge vision AI system guiding itself to auto follow the golfer when the golfer is walking on the fairway.

Read the following important notes before you start Auto Follow.

- Do NOT block the AI camera with anything at any time.
- Do NOT activate Auto Follow Mode when you're not on the fairway.
- When in an emergency, press the Stop button on the Remote or press the Power Assist button on the ForeCaddy.
- Never activate Auto Follow mode when walking; when to the side of the unit or when behind the unit.
- Always activate Auto Follow mode when 3-4' directly in front of the unit and when standing still.
- When in Auto Follow, the IGX9297 might auto accelerate.
Do NOT try to cut in between the IGX9297 and the person being followed by ForeCaddy.
- When IGX9297 is moving, for other golfers, always keep a safety distance of 10 feet/3 meters away from IGX9297.

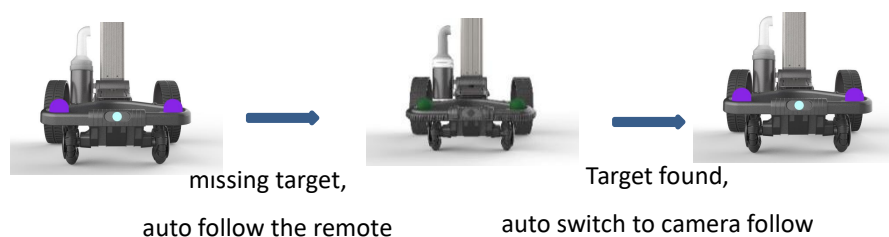
Follow the instructions to operate the Auto Follow.

Auto Follow mode comes with two settings:

- 1) AI Camera Follow (manufacture setting)
 - 2) AI Camera Follow Plus
1. To Switch the setting, press the “F” button on the remote till you feel a vibration and wait 30 seconds for the system to re-configure. The “F” button flashes indicating the system is configured as AI Camera Follow Plus.
 2. To activate auto follow, press the "F" button on the remote. Once you hit the button the globe lights will turn purple indicating the follow mode is activated and that the unit can see you through the camera. You are now safe to walk and the ForeCaddy will follow.
 3. If the Ai Camera Follow function, for the reason the camera cannot see you, stops following, please observe the lights:
 - 1) The lights turn blue (the caddy is configured as AI Camera Follow): Let the camera see you and press the “F” button to reactivate the auto follow



- 2) The lights turn green (the caddy is configured as AI Camera Follow Plus): green indicating the ForeCaddy is following the remote instead of person. During this time, there may be more of a swerve in the ForeCaddy because the camera cannot track the remote for extra stabilization. Once the ForeCaddy resumes the visual of the person, it will automatically establish a connection, and you will see the globe lights turn purple again.



4. To de-activate follow mode; press the “D” or the power button on the remote to make the Forecaddy stop, and the lights will change from Purple to Blue.
5. IGX9297 auto stops when you stop walking.

Note:

When in Auto Follow mode, auto forward stop is activated when an uphill exceeding 18° is detected.

Emergency Stop

When in Auto Follow mode or Remote-Control mode, to emergently stop the IGX9297 at any time, press the **“Stop” button** on the remote.

Remote Control Mode

IGX9297 can be remotely controlled to approach your location when it is away. In addition to manual control the ForeCaddy to approach to you, you can recall the IGX9297 to approach to your location by using “1-Button Recall” via the Remote.

Manual Control

1. Press “D” button once on the remote.
2. Use the direction buttons on the Remote to make the IGX9297 move forward, backward, or turn around.

To Move Forward:

- Press Forward once, the IGX9297 keeps moving forward, starting with the slowest speed. When moving forward, the IGX9297 has 6 speed levels.
- When the IGX9297 is moving at the slowest speed, press Backward once, the IGX9297 will stop.

To Accelerate or Reduce the Speed:

- To accelerate the IGX9297 to the next speed level, press Forward once.
- To slow down the IGX9297, Press Backward once. Keep pressing Backward, the ForeCaddy will reduce the speed until it comes to a complete stop.

To Move Backward:

- Press Backward once, the IGX9297 will start moving backward at the slowest speed.
- To stop IGX9297, press Forward once.

To Turn Around:

- To turn left or right the IGX9297, press Left or Right on the remote.

3. To turn off the Remote-Control mode, press Stop once.

Note:

When in Remote Control mode, the IGX9297 will auto sense the slope (uphill or downhill).

- Auto forward stop is activated when an uphill exceeding 15° is detected.
- Auto backward stop is activated when a downhill exceeding 10° is detected.

1-Button Recall

IGX9297 can be recalled to auto approach to you by pressing just 1 button on the remote.

Follow the instructions to recall the ForeCaddy to auto approach to your location.

Note: To use Auto Approaching, the max distance between the remote and IGX9297 must be within 55 feet/17 meters.

1. Press “F” button on the remote to start the 1-Button Recall. If the Forecaddy is not successfully recalled, you will feel a tremble on the remote.
2. IGX9297 will auto approach your location and stop 6 feet/2 meters away.
If you keep moving forward when IGX9297 is approaching, IGX9297 will continue to follow without stopping itself.

Emergency Stop

When in Remote-Control mode, to emergently stop the IGX9297 at any time, press the Stop button on the remote.

Power Assist Mode

IGX9297 comes with a Power Assist mode to help you walk through an uphill. In Power Assist mode, IGX9297 has a few levels of speed from 3.3KMH/2MPH to 6.7KMH/4MPH when pressing “+” button to accelerate. Press “-” to decelerate. The slowest speed is 3.3HMH/2MPH.

Emergency Stop

When in Power Assist mode, to emergently stop the IGX9297 at any time, press the “Stop” button on the remote, or press “Power Assist” button on the Handle.

Important:

For maximum safety, when the IGX9297 detects the remote is 19 feet/6 meters away from it, IGX9297 will auto stop.

Important:

- Always hold the handle when in Power Assist mode.

Follow the instructions to activate the Power Assist Mode.

1. Press and hold the Power Assist mode button on the handle of IGX9297.
2. Press “+” button to accelerate IGX9297.
Press “-” button to reduce its speed.

Manual Mode

IGX9297 comes with a Manual Mode for you to freely control its movement during the golf game.

To operate the IGX9297 in Manual Mode, there are two ways to enter the mode:

1. make sure the Master Power button of IGX9297 is off.
2. Press “-” button at any time when the IGX9297 stops.

You are now ready to operate the IGX9297 freely.

Upgrading the Firmware of IGX9297

The firmware of ForeCaddy is upgrade-able via Over-to-Air (OTA) connection.

1. Power on the IGX9297. Wait till it's completely powered on.
2. Use the Foresight Sports mobile APP- Performance Fitting to scan the QR code located at the battery compartment and your mobile phone should now be connected to the IGX9297's WIFI hot spot.
3. You will be prompted to enter the SSID and the password of the internet connecting device, which provides internet service for the IGX9297. This device can be a mobile phone or the router you are able to access in your facility.

You might be charged for the use of internet bandwidth and connection.

4. Follow the instructions and proceed with firmware upgrade.

Important:

- DO NOT turn off the power of IGX9297 or turn off the internet service device during the firmware upgrade process.

Technical Specifications

Dimensions	Extended size: 82x60x110 cm/32x24x43 inch Folded size: 82x60x35 cm/32x24x14 inch
Total Weight	17 kg/35.98 lbs (with the Lithium-Ion Battery Pack)
Main Body	Aluminum Alloy Frames, Industrial-Grade Forged Plastics
Max Weight Load	30Kg/66Lbs
AI Processor	High-Performance Vision AI SoC
AI Camera	1920 x 1080 Full HD
Modes of Operation	Auto Follow, Remote Control, Manual, Power Assist
Levels of Speed (in Power Assist Mode)	6 speeds from 3.3 kmh/2 mph to 6.7 kmh/4 mph when pressing "+" button to accelerate. When pressing "-" to decelerate, the slowest speed is 3.3 kmh/2 mph
Max Speed	6.7 kmh/4 mph per hour
Safety Stop Distance	Stop distance varies depending on the speed of the IGX9297 at that moment
Max Distance for Auto Follow	17 meters/55 feet
Accuracy for Auto Follow	+/-1.5 meters/4 feet
Max Distance for Remote Control	19.8 meters/65 feet
Anti-Collision Mitigation	Yes
Auto Slope Detection	Auto Follow mode 1. Auto forward stop when a slope is $> 18^{\circ}$ Remote-Control mode 1. Auto forward stop when a slope is $> 15^{\circ}$ 2. Auto backward stop when a slope is $> 10^{\circ}$
Main Battery Pack	Li-Ion rechargeable, 14000mAh, 21.6V DC
Recharge Time of Battery Pack	Approx. 6 hours
Battery Management System (BMS)	The battery pack is designed to have the following protection: 1. Over charging 2. Over discharging 3. Over current 4. Over Voltage 5. Short circuit

Input and Output of Power Adapter (for Recharging Main Battery Pack)	Input: 100V ~ 240V AC, 50/60Hz Output: Max 25.2V DC
Battery of Remote	Li-Polymer rechargeable, 1000mAh, 3.7V DC 1. Recharge Port: Mini USB Type-C 2. Recharge Time: Approx. 1.5 hours 3. Power Input: 5V DC, max 1A
Wireless Radio Frequencies	1. 802.11n, 2.4GHz 2. Ultra-wide Band (UWB), 6GHz
Wireless Antennas	Built in
Gyroscope and Accelerometer	Built-in, 6D
Firmware Upgrade	Over the Air (via Wi-Fi)
Electric Motors	Type: DC Motors Input: 24V DC Idle: 222rpm, +/-10% With 170rpm, +/-10% Gear Ratio: 8:1
Certifications	FCC/CA65/RoHS (To be completed in July 2023)