



OWNERS INSTRUCTION GUIDE

RoboKaddy

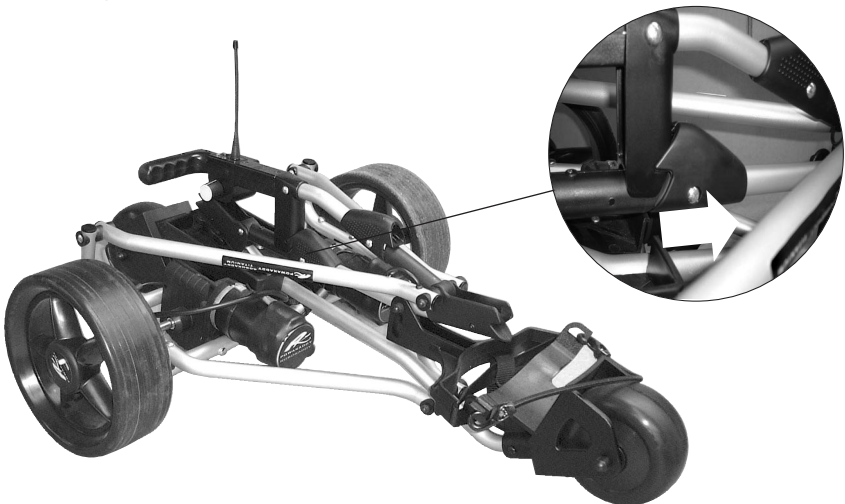
RoboKaddy

Assembly

Thank you for purchasing a PowaKaddy RoboKaddy.

Your RoboKaddy is factory programmed and ready for use. However, please take time to read this manual and practice the various controls before your first game.

- Before you do anything else, please put your battery on charge for at least 24 hours to activate it. To do this, connect your charger to the battery with the special PowaKaddy Interconnect lead. Now plug the charger into the mains and leave for 24 hours to activate it.
- Meanwhile, take time to read this manual and learn about your exciting new purchase. for a “Quick Start” use the card inside the back cover of this guide.
- The PowaKaddy RoboKaddy compromises of a one piece machine that “snaps” into place in two easy moves, an antenna, handset, zero tip wheel, battery and charger.
- With the main section flat on the floor, stand behind the trolley, release the locking catch beneath the handle by sliding it forward as shown and pulling up on the main handle.



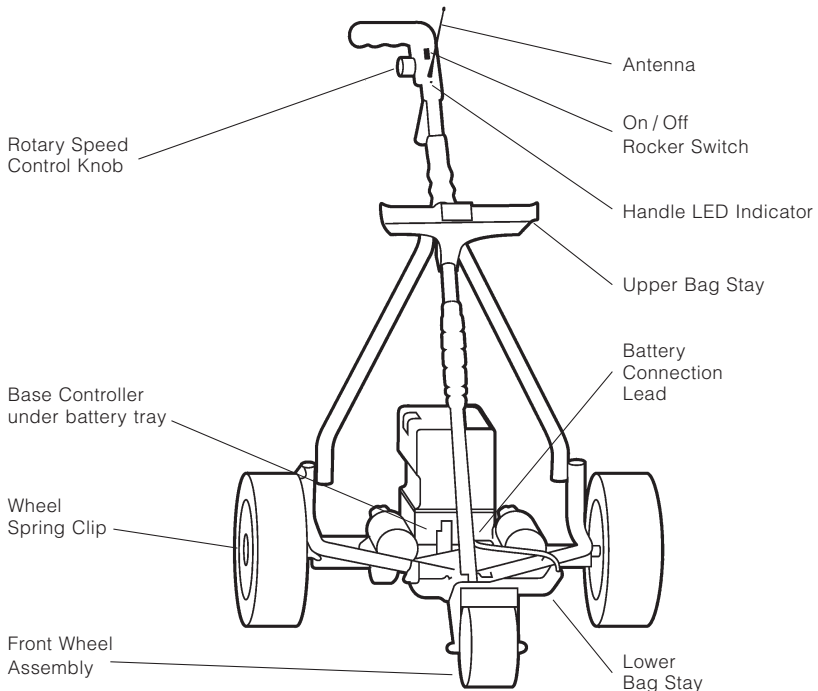
- As the handle reaches the “in use” position the mechanism will “click” and lock into place. Once locked in, lower the upper bag stay into position. Now fit the zero tip wheel by placing the wheel housing on the rear tube and pulling the plunger, allow the plunger to click into place.



- Screw the antenna into the screw terminal on the handle.
- Using the carry strap, carefully place a fully charged battery into the RoboKaddy battery tray with the lead connector facing the right hand side of the trolley.

TIP: Place the rear of the battery into the tray first, then tip forwards

Parts Identification



Transmitter Information

IMPORTANT PRACTICE IN AN OPEN SPACE AWAY FROM OBSTRUCTIONS

Study your handset and learn the functions below. Later in this manual you will find some advanced features. The ones below, however, will get you started.

Before you start, check that both the rocker and rotary controls are off. Connect the battery and push the on/off switch to on (I). **NOTE:** If the battery is connected with the rotary speed control turned up the machine will remain stationary until enabled by first winding the rotary speed control back to zero.



Press this key once and the RoboKaddy will start to move in a forward direction. Keeping your finger on the key will take the RoboKaddy to maximum speed. As soon as you release your finger the RoboKaddy will continue at that speed.



Press this key to slow down your RoboKaddy. As soon as you release your finger the RoboKaddy will continue at that speed. Please note that this key will not stop the trolley, it will take it only to the slowest speed.



A gentle push of this key will turn the RoboKaddy left and then continue straight in the new direction. A prolonged push will result in a tighter turn. You may have to practice this to perfect it.



To turn right, the procedure is exactly the same as described in "left arrow". Ensure you practice both ways.

NOTE: By starting the machine with either the left or right keys the RoboKaddy will turn on the spot and stop as soon as you press the brake key. This is ideal for getting out of a tight corner. Please be aware that should the machine hit any obstruction in this mode, you will need to help it out manually. Continuing to attempt the pirouette when the RoboKaddy is stuck will result in damage.

Brake Keys – A single depression of either brake key will bring your RoboKaddy to a halt in less than 1 metre. A prolonged depression (more than 1/2 second) will bring your trolley to an emergency stop. Do not use the emergency stop as a matter of course as this may cause the RoboKaddy to skid.

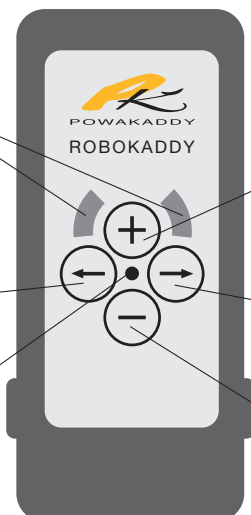
Reverse – Reverse is achieved by pressing the "brake" key and then pressing the minus key. Once in reverse you can steer left and right too. Reverse has only one preset speed. To go into forward mode, you must first press the brake key.

Handset Information

Brake keys, a tap will stop gently, hold down for emergency stop

Left Turn
or Pirouette

LED Indicator
Green = OK
Red = Change
handset battery



Plus key, to go forward
and accelerate.

Right Turn
or Pirouette

Minus key, for reverse
and deceleration.

- Your RoboKaddy handset has been designed for ease of use whether you are left or right handed.
- Take time to practice the difference between a single touch of the key and a prolonged push especially with left and right functions.
- The clip on the back of the handset makes it ideal for clipping to a pocket or belt. Don't store it in your pocket in case you accidentally engage any of the remote modes.
- Never store the handset in a pocket with, for instance, loose change. Never allow the handset to get immersed in water.
- The handset takes a replaceable 9 volt battery, you will need to carefully remove the belt clip and then slide off the battery compartment cover to replace it.

NOTE: Do not use a rechargeable battery in the handset as these batteries do not give sufficient voltage for this handset.

The rate at which course correction, i.e. left/right, is achieved will depend on course conditions, speed and weight of the loaded bag.

RoboKaddy

PowerKaddy hints and tips

To get the best from your RoboKaddy the following hints and tips should be followed –

- Practice using your RoboKaddy away from obstructions. It is worth practicing with your golf bag fitted and on grass. The machine will react very differently on a car park surface without a bag.
- Do not overload the base pockets of your golf bag. The more weight on the front wheel of the machine the less manouverable it will be and it will use more power from the battery.
- The RoboKaddy is a sophisticated machine and will carry your clubs across most normal golf course terrain. However, it will not operate properly if asked to emulate a mountain goat! Wherever the terrain is difficult, move to manual mode.
- Should the machine get caught against an obstruction, please stop and either reverse or use manual mode. This is particularly important when using the left/right keys whilst stationary. If you keep trying you will overload the motors.
- Do not keep your finger pressed on any key for more than 5 seconds as this could cause damage to your RoboKaddy.



Special Features

Your RoboKaddy is fitted with some special features to give you maximum control and adaptability. You will not need them often. However it is worth reading the instructions now to familiarise yourself with the range of features available to you.

LED Signal Indicators

Your RoboKaddy is fitted with three sophisticated LED signal indicators one on the handset, one on the handle and one on the base controller under the battery tray. These will help you to diagnose any problems with interference or other problems.

The handle LED will blink green in time with your handset LED when all is well and the machine is receiving a signal with the correct frequency and code. Should the machine pick up interference from the same frequency but the wrong code the LED will flash red. If you get the red flashing LED look for possible causes as defined in “trouble shooting”.

On the base controller near the trimmer knob is another LED, this indicates as follows – LED flashing green indicates that all is well and that the machine is working properly. The LED will only stop flashing when the main battery is disconnected. If it is solid green the on/off switch is off (O).

If the LED is flashing red in dashes of 1 second the main battery is below usable voltage when under load. If the LED is solid red this indicates that the base controller is not receiving communication from the handle. Look for a break in the handle cable.

If the LED is giving short red flashes of about half a second the internal thermal cut out has been activated due to some kind of overload. (say by trying to operate the RoboKaddy when it has been stalled). The thermal cut out is re-set by disconnecting the battery and re-connecting.

Please see the trouble shooting guide for further details.



Matching your handset to your machine

If you should ever lose your handset OR you have had the need to re-code it, it will be necessary to match it to your machine in order that they can communicate.

The “code” of your unit is shown next to the serial number label which is located underneath the battery tray, you will need to quote the code when speaking with us. **Serial Number 12345 Code 253**

Should you need to change the code of your handset and receiver you will need some specialist help from Powakaddy. Please call us for details and we will be happy to assist. In the highly unlikely situation that you find yourself and a playing partner on the same code, you will both need to revert to manual operation for that round. Thereafter speak to Powakaddy for assistance.

Left/Right Tracking adjustment

Your machine has been factory set to go in a straight line, however, minor adjustments can be made using the trimmer (see below) or bigger adjustments can be made using the front wheel adjuster. Remove the nut covers on the front wheel and loosen the nut slightly until you can move the wheel left and right within a slot, then re-tighten the bolt. Put the machine into freewheel mode with the wheels in the outer position and push the cart forwards freely, keep adjusting until a straight line on a flat surface like Tarmac or concrete is achieved. Repeat this process until the trolley runs straight. This will take time and practice to perfect.

NOTE: If you have air tyres insure that they are both between 8-12 psi (0.55 - 0.83 bar).

Left/Right trimmer – for fine adjustments

Occasionally, you may find that your cart has a bias to the left or to the right, even on flat terrain. Should this occur, we have provided an adjuster. On the Base Controller under the battery tray is a small rotary knob, this will give left and right bias. Turn gently to the right to give a turn to the right and vice versa when turned left. You will need to experiment to get the perfect line, a bit like golf really!

NOTE – The degree of turn may vary from one side to the other depending on bag load and course conditions.

Powakaddy Customer Care 01795 473 555

Questions and Answers

How do I switch the trolley from manual control to remote control?

- a) Simply start to use the handset with the plus key the trolley will automatically switch to remote mode.

How do I regain manual control from remote mode?

- a) Press the brake key to turn off the handset.
- b) Turn the rotary speed control knob to off.
- c) Turn the rocker switch off (O) then on (I).
- d) Turn the rotary speed control knob to the desired setting.

How do I use the trolley in manual mode from the start?

- a) Turn the rotary speed control knob to "off".
- b) Connect the battery.
- c) Turn the rocker switch on (I) then off (O) then (I).
- d) Turn the rotary speed control knob and adjust to the desired setting.

How do I brake the trolley on a downhill slope when in remote mode?

- a) Press the brake key once and the motors will stop. However the trolley can still move forward down the slope against the motors. If an "emergency stop" is required you must press the brake key for more than 1/2 second.
- b) On steep slopes your tyres may slip. In these conditions, as with any trolley, you will need to hold the handle and help the trolley along in manual mode.

Are there any special conditions that I should be aware of?

- a) On steep uphill slopes we recommend that you use manual mode. However, you may like to try either zigzagging up the hill or directing the trolley to a lesser gradient.
- b) On steep slopes down hill ensure that you keep full control of the RoboKaddy. In the most difficult of conditions it is best to hold the handle and walk it down in manual mode.

How do I disengage the wheels for freewheel use?

- a) On each wheel slide the yellow lever on the hub cap and pull the wheel outwards by a couple of millimetres. Now release the yellow lever and pull out again until it clicks into place. The wheel will now freewheel. To re-engage, reverse the instructions above ensuring the pins enter the holes on the inside of the wheels.

Trouble Shooting

PROBLEM	POSSIBLE CAUSE	WHAT TO TRY
My RoboKaddy will not work.	<p>Main battery flat. Handset battery flat.</p> <p>Main battery not connected.</p> <p>Switching from remote to manual.</p>	<p>Fully charge main battery. Check the LED in the centre of the handset, if flashing red when activated replace the handset battery. Try RoboKaddy in manual mode. Check battery connections. Turn the machine off then on with the rocker switch and try again.</p>
My RoboKaddy stops on the course without my command.	<p>Machine is out of range. Batteries are running very low.</p>	<p>Move closer and try again.</p> <p>Recharge main battery/replace. Have the main battery checked/replaced.</p>
I can't push my RoboKaddy.	<p>Have you disengaged the wheels?</p>	<p>Check and follow section on disengaging wheels in Q and A.</p>
My RoboKaddy will not go in reverse.	<p>The trolley must go forward in remote mode first.</p>	<p>Go forward in remote, stop, and then try again.</p>
My RoboKaddy works in remote control mode but is weak or will not move in manual setting.	<p>The main battery is weak.</p> <p>Interference.</p>	<p>Re-charge your main battery fully – if symptoms persist consult your Powakaddy service agent. Check the handle LED, if red when using the handset. Try moving or avoiding the cause.</p>

Trouble Shooting

PROBLEM	POSSIBLE CAUSE	WHAT TO TRY
The LED on the base controller is flashing red rapidly.	The thermal overload has been tripped.	Avoid the obstruction or circumstance that has caused this. Re-set using the on/off rocker switch.
The LED on the base controller is flashing with a short red flash every second.	The main battery has fallen to below 9.5 volts when under load.	If you are at the end of a round, this may sometimes occur. If you have forgotten to charge the battery, this will occur. At any other time speak with your service agent or PowaKaddy for help.
The LED indicator on the base controller is solid red.	The handle is not communicating with the base controller.	Check that the handle connector lead has not come adrift. Otherwise contact your service agent or PowaKaddy for help.
The LED on the base controller is flashing green every 1 second.	All is well and the machine is functioning normally.	No action needed.
My trolley pulls to left or right on a flat surface.	<p>Trimmer knob needs adjustment.</p> <p>Tracking is out of adjustment.</p> <p>Air tyre models, tyre soft on one side</p>	<p>See page 7 for trimmer details.</p> <p>See page 7 for tracking instructions.</p> <p>Ensure tyres are both between 8 – 12 psi (0.55 – 0.83 bar).</p>

Remote Control Detail

- Your RoboKaddy complies with all current telecommunications regulations.
- Your RoboKaddy is designed to operate within a range of 50 metres, depending on atmospheric conditions, such as damp and foggy weather and/or wet ground. Additionally overhead cables, hills and trees can affect range.
- We strongly recommended not Exceeding 50 metres while operating in remote control mode. The greater the distance between you and the RoboKaddy, the greater the chance of losing contact with it. Should this happen however, the RoboKaddy will stop automatically after about 30 seconds.
- Interference can take many forms. Nearby high voltage power lines, cellular phones or CB radios are all typical sources. Certain obstructions such as mounds, clusters of trees etc. will reduce the distance of transmission.
- The replaceable battery contained in the handset must be replaced periodically depending on frequency of use. The battery in the handset must be replaced when the LED on the handset is red. Do not use re-chargeable batteries as they do not give sufficient voltage for this handset.
- In car parks, confined spaces, down steep hills or where there are lots of people, we recommend that you only use manual mode.

SAFETY NOTES: The RoboKaddy is more safely used when you select manual mode to go across bridges, narrow paths, steep slopes or between trees. Avoid directing the RoboKaddy around cars or buildings using remote mode and never direct the machine at people, animals or other trolleys.

NOTE: Your handset LED may be green at the start of a round, then change to red. This indicates that you should change the handset battery as soon as possible.

Battery Care

The battery supplied with your PowaKaddy RoboKaddy is one of the most advanced of its kind. However, it is worth remembering that all cart batteries work on the same fundamental principles. Because of this, a battery begins to age the day it is made. You cannot stop this process; but you can prolong it's life. Conversely, incorrect treatment can cause irreversible damage.

This is how you prolong its life:

1. When you get your brand new battery, put it on charge for 24 hours to "activate" it.
2. For the first three outings you may find that your RoboKaddy is a little tired at the end of the round, this is normal and will be fine once the battery has reached full power, normally after three rounds.
3. Always recharge your battery as soon as possible after use but certainly within 24 hours.
4. Always keep your battery on charge between games.
5. Never leave your battery connected to the charger with the mains switched off, or during prolonged power failures, your battery may be irretrievably discharged.
6. Never play more than 18 holes without fully recharging – you will discharge the battery below its designed minimum voltage and damage it.
7. Never drop the battery or charger. Avoid the battery "rolling" in the boot of your car.

On rare occasions manufacturing faults do occur, they generally show up in the first couple of months use. Your local PowaKaddy service agent has special equipment to test for this. If it is a manufacturing fault and the battery is within the warranty period, then the test will be free and your battery replaced. If, however, no manufacturing fault is found, you may be charged for the test.

Maintenance

- Wipe your PowaKaddy RoboKaddy after each outing to ensure it runs smoothly and keeps it's good looks.
- To keep the cart clean, use a mild detergent and warm water. Do not use any high pressure jet washers since the contents of the handset, the handle and the base controller will be damaged by water ingress. Remove the main wheels every few months and remove any debris that might cause the wheels to drag. Clean the spindle and lightly grease before replacing the wheels.
- The screws in the battery tray are sealed in the factory to prevent water getting into the controller underneath. If you loosen these screws for any reason, you MUST re-seal them with silicone sealant.
- A four hour round of golf played once a week for 12 months is equivalent to, say, four years use out of a lawnmower. So once a year, at least, thoroughly inspect your cart, and if you notice any symptoms of wear, consult your local PowaKaddy service agent.
- It is advisable to have your charger checked periodically, particularly when buying a new battery. This will ensure that your charger is still charging correctly and ensure maximum life of your new battery.
- Always put your machine together before connecting the battery.
- If you prefer not to leave your battery on charge, as you know that you will not be playing for at least a month, you can store the battery. Fully charge the battery, remove from the charger and store in a place where the ambient temperature is above 10 degrees Celsius (+10°C) and less than 30 degrees Celsius (+30°C). Recharge every 3 months for 24 hours and before your next round.

Please use this space to record your date of purchase, serial number and code.

RoboKaddy Serial Number: _____

RoboKaddy Code: _____

Battery Serial Number: _____

Charger Serial Number: _____

Date of purchase: _____

Quick Start Guide
If missing please call
PowaKaddy Customer Care
01795 473 555



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