



www.WeGolf.com.au

User Manual

A GPS Primer

How does GPS work?

All GPS units whether mobile phones or hand-held devices, work by receiving signals from a number of satellites orbiting the earth. There are a total of 26 satellites, all controlled by The United States Government.

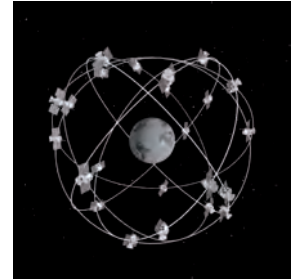


Fig: 1

How accurate is it?

All devices have to acquire an initial fix on 4 satellites to receive GPS data. Once acquired, they can operate with 3 satellites due to triangulation. There are usually 5 – 7 satellites that are always visible in the Southern Hemisphere.

As long as there are 4 or more of these satellites in range then a reasonably accurate position can be calculated that is normally accurate to less than ± 3 meters for every type of device. A lock on 5 or more satellites will improve accuracy.

Once the satellite lock is established, GPS systems can compute the distance to the various hazards and green positions, which are stored in the database for each golf course.

In Australia, as we do not have DGPS (differential GPS) which virtually eliminates satellite tracking errors ($\pm < 0.5m$), we are limited to $\pm 3m$ regardless of the type of device.

Mobile phones that have A-GPS (assisted GPS) start quicker when turned on and are often more accurate than hand-held devices which do not have this as, the Telco streams the GPS data to the phones before a satellite lock is established or when the satellite lock is marginal.

ALL NEW DEVICES READING FROM THE GPS SATELLITES ARE GENERALLY EQUALLY ACCURATE!

New model mobile phones and Bluetooth GPS receivers all feature high quality, very sensitive chipsets capable of connecting to 54 satellites (more than double the number currently available).

What affects the accuracy of the Golf GPS systems?

There are a number of factors that can affect GPS accuracy including the weather but, the most important factors are the number and the position of the GPS satellites in range. Ideally, you want 5 or more satellites spread around in different directions. The more satellites visible; the higher the accuracy of the lock.

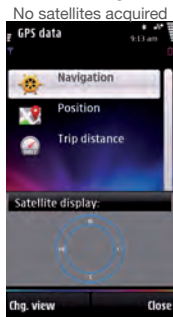


Fig: 2

The most likely cause of poor positional accuracy is either a low number of satellites in range or a situation where the satellites are all in the same segment of the sky rather than being nicely spread out. Most mobile phones that are GPS capable or paired with a Bluetooth GPS receiver have an inbuilt GPS program that shows where the satellites are located and the number of satellites on which you have a lock.

Another cause of poor accuracy is either an out-of-date or missing almanac. This is information that lets all GPS receivers know the position of each of the satellites in the sky. The almanac is downloaded from the GPS satellites when you turn on your mobile or hand-held device. It can take 4 minutes or longer to download the first time (cold boot). Subsequent downloads (warm or hot boot) are a lot quicker.

It's a good idea to expose WeGolf to the sky for a good 5 minutes prior to starting your round.



Fig: 3



How is a course mapped?

The golf courses are mapped by one of three ways:

- Aerial Photography. This provides an accuracy of 12.5cm-1m with a highly accurate position for any point of interest on the course.
- Physical Mapping. A professional walks the course using a high quality survey grade GPS unit to take measurements of all points of interest. This provides an accuracy of about 2 centimetres to any point of interest on the course. This is the most accurate, expensive and time-consuming method of mapping a course.
- Google Maps. The most common method provides an accuracy of 1-3m for any point of interest on the course if a high resolution Google map is available. All companies' use this method as it is by far the least expensive method of providing high quality maps in volume for golf courses. However, not every course can be mapped in this way.

Sometimes the imagery for a course does not exist, e.g., a course that has just been built or a course that has just under gone renovation or the resolution is not sufficient. When this happens, a professional or a device user is required to go to the club and manually do a GPS course mapping.

How accurate are Player Mapped courses?

Player Mapped courses have the same positional accuracy as the Golf GPS units themselves; $\pm 3m$.

Why does my unit have different measurements than the course marker?

When considering the difference in accuracy you have to take into account the accuracy of the points of interest in the golf course database.

Did the person marking the course really stand in the middle of the green if the mark is to the centre of the green? It is doubtful as they simply estimated it. How long has it been since the course markers were updated or replaced? GPS always gives a straight-line measure to the POI and does not measure around the bend as is the case with many course markings. Regardless of the green size, WeGolf calculates the true centre of the green automatically as the distance differential between the front of the green and the back of the green. Typically, the front of the green is defined as 1M onto the green with the back being 1M short of the back; the aim is to hit onto the green and stop before you go over the back. This true centre of the green may be different to what the course marker displays.

COURSE MARKERS ARE ONLY A GUIDE!

How many courses can be stored on a device at one time?

Most hand-held devices hold 10 courses in their memory at one time while the typical mobile phone can store many times this amount since the limiting factor is the internal memory management for programs rather than ram, the hard drive or microSD card capacity.

Is it legal?

Rule 14-3/0.5 of the R&A states:

Q. May a Committee, by Local Rule, permit the use of distance-measuring devices?

A. YES! – WeGolf is distance only GPS software that runs on mobile phones.



Using WeGolf – Frequently Asked Questions (FAQ)

• Will WeGolf run on my mobile?

Check our website (www.WeGolf.com.au) as to phone compatibility. We provide an extensive list that is continually updated.

If your phone is not listed or is a new model which has GPS functionality and the phone brand is listed as one that works, it will work. Contact us if unsure.

WeGolf currently does not run on the Apple iPhone or mobiles using the Windows operating system.

• What do I need to run WeGolf?

A compatible phone and a data plan. Most telecommunication companies offer a basic plan for as little as \$5/mo. This is all you will ever need for Wegolf. Once you have installed WeGolf and downloaded the course(s) you want, you no longer need a data plan. However, if you want to continue to access all the features of WeGolf, get software updates and download additional courses when you require them, you'll need an active data plan.

• Is WeGolf expensive to run on the phone?

No! Downloading WeGolf is covered by your data plan and the file size is approximately 380Kb. Downloading a course is equivalent to sending an SMS. Whenever possible, we suggest that you download three courses at the same time as this is equivalent to one SMS (3Kb).

Once you have downloaded the golf course maps, using GPS is free.

- **How do I download WeGolf to my phone?**

Ensure that you have set up your phone correctly by following the examples in the pictorial guide.

Method 1:

Go to the WeGolf website (<http://www.wegolf.com.au/trial.html#content>) and follow the quick and easy instructions to get your Free Trial copy which lets you trial WeGolf for an unlimited number of rounds for 14-days absolutely free.

Method 2:

Use the SMS service by sending an SMS message with the text “wegolf” to +4790222333

- **Where can I get help?**

Always consult the website first. There is an extensive list of frequently asked questions that will usually solve any problem. If not, contact us; the information is found on the website.



Using WeGolf A Pictorial Guide

Downloading a Golf Course

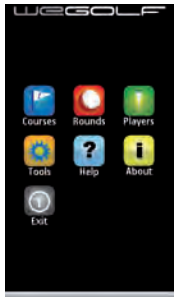


Fig: 4

Main menu
Select Courses

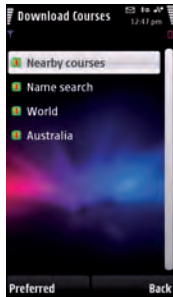


Fig: 5

Nearby courses
Golf courses within 100Km

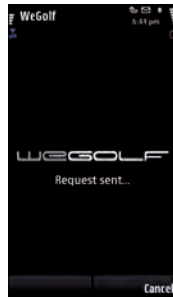


Fig: 8

Internet Access
Database has received connection request



Fig: 9

Internet Access
Database returns list of courses

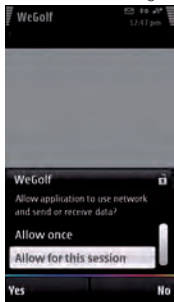


Fig: 6

Internet Access
Select Yes for an Internet connection



Fig: 7

Internet Access
Connecting to golf course database; less than 30 seconds to request & receive

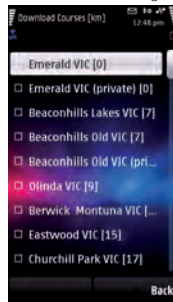


Fig: 10

Nearby courses
Listed by course name with proximity

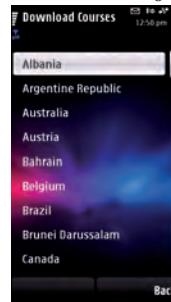


Fig: 11

World courses
Listed in alphabetical order by country

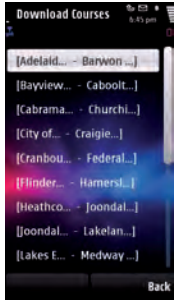


Fig: 12

Course Folders

Courses are listed in alphabetical order by name in folders that contain 25 golf courses each

Playing A Round of Golf

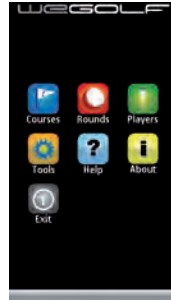


Fig: 13

Main menu

Select Rounds



Fig: 14

Rounds

Select New.

We generally play a new round of golf. If available, an option to continue a round will be displayed.

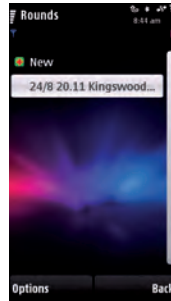


Fig: 15

Rounds

Image shows the Distance and Score Option to continue playing an unfinished round. Available only when using Distance and score.



GPS Distance

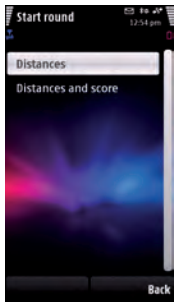


Fig: 16

Distances

Select Distances

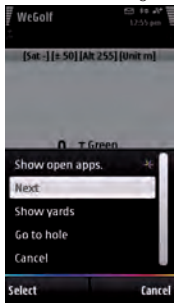


Fig: 18

GPS Options

Select Options

- **Next:** go to next hole
- **Show yards:** change from metres
- **Go to hole:** start on any hole
- **Cancel:** end GPS distance



Fig: 17

GPS display

Green bar at top of screen shows GPS connected (a yellow bar indicates no GPS connection). Display shows 3 points of interest (POI) on the green and a layout to water (999 means that we are more than 1Km from the POI).

Gray bar at the bottom of the screen shows the hole info: hole 2, par 4, handicap 14

GPS Distance and score

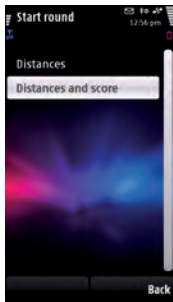


Fig: 19

Distances and score

Select Distances and score

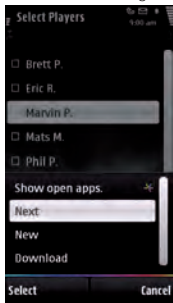


Fig: 21

Players

Select Options / Next

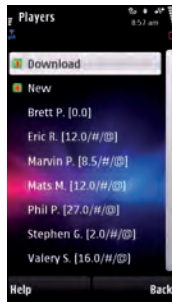


Fig: 20

Players

Select at least one player to keep score for

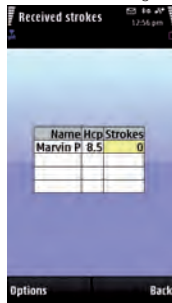
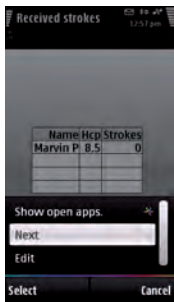


Fig: 22

Received strokes

Select Options to edit the player's handicap and tees (note colour of stroke box)



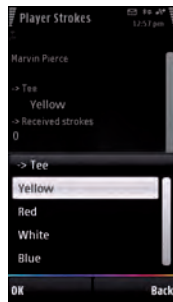
Received strokes
Select Options / Edit to edit a player's handicap, received strokes and tees to hit from

Fig: 23



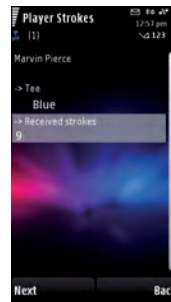
Player Strokes
Press enter on any item to open it to edit

Fig: 24



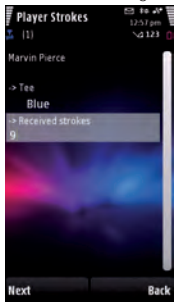
Player Strokes
Press enter on any item to open it to edit

Fig: 27



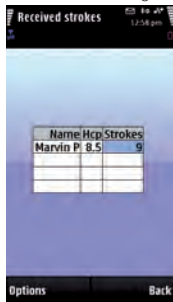
Player Strokes
Select Next after editing.

Fig: 28



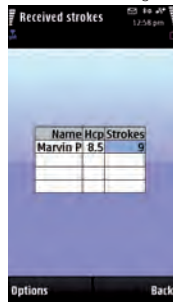
Player Strokes
Select Next after editing.

Fig: 25



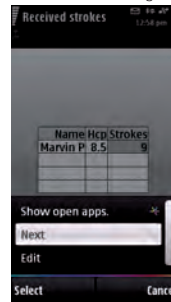
Received strokes
Select Options / Next

Fig: 26



Received strokes
 The player is now receiving 9 handicap strokes and playing from the blue tees (note colour of stroke box)

Fig: 29



Received strokes
Select Options / Next

Fig: 30



Fig: 31

Scorecard

Select starting hole; hole 8 shown



Fig: 32

GPS Display

Press enter to see the POI for the hole (GPS must be operational or Score Entry Screen will be displayed)

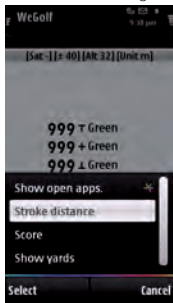


Fig: 33

Score

Select Options / Score to enter your score for a hole



Fig: 34

Score Entry Screen

Press enter on a highlighted square to enter hole score and number of putts (Use * if you pick up without scoring. Pressing # will show distance to green. Pressing # again will give you a statistics snapshot.)

Statistics

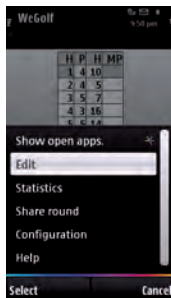


Fig: 35

Statistics

Select Options/ Statistics: a round summary can be displayed at any time.

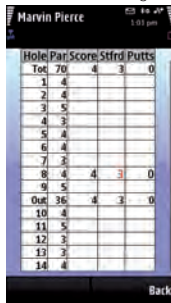


Fig: 36

Summary

Example shows the 8th hole, cumulative total, stableford points and putts (PS – no putt, 4th shot chip in)

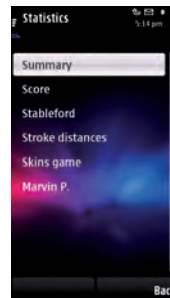


Fig: 36

Statistics view

Scroll up or down the list to choose the type of round stats that you want to see.

Tools

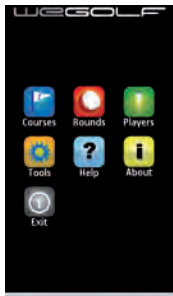


Fig: 38

Main Menu

Select Tools

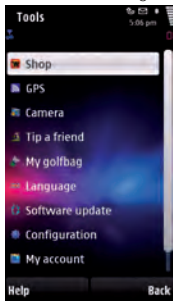


Fig: 40

Shop

Select Shop in the Tools Menu if you have purchased a WeGolf CD or purchased WeGolf online to enter your license code or activation key

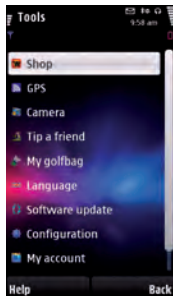


Fig: 39



Fig: 41

Tools

Configure WeGolf the way you want it to operate on your mobile, check your account, share with a friend, get the latest news or get a new version of WeGolf.

Shop – License Key

Enter your online purchase or CD activation key and press send

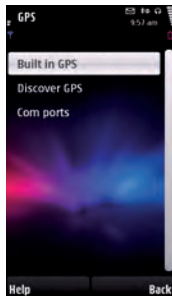


Fig: 42

GPS

WeGolf will automatically use Built in GPS. If you need to use a separate Bluetooth device, pair it with your phone and use Discover GPS.

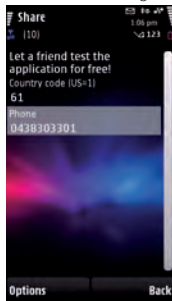


Fig: 44

Tip a Friend

Select Tip a Friend to share WeGolf with your friends via an SMS message:

- Select Country code and enter it (Australia is 61);
- Select Phone and enter the mobile number

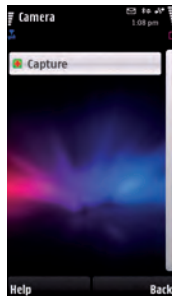


Fig: 43

Camera

Select Camera to capture those memorable moments while playing

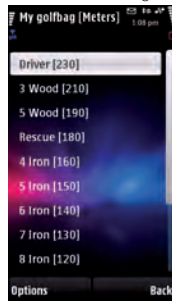


Fig: 45

My golfbag

Select My golfbag to set up how far you hit each individual club (for use with WeGolf Live Score feature)

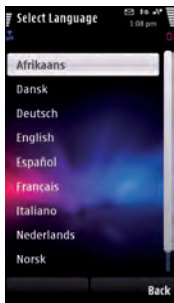


Fig: 46

Language

Select Language and scroll up or down the list to select the language you want to use

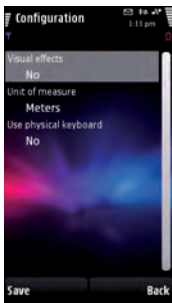


Fig: 47

Configuration

Select Configuration: Select meters or yards, visual effects and keyboard for touch screen phones

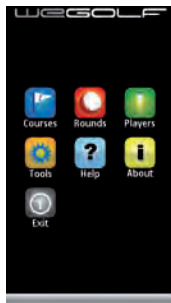


Fig: 50

Main Menu

Selecting Help or About

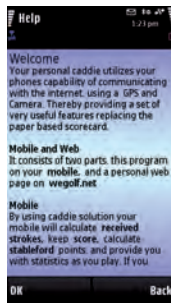


Fig: 51

Help

Select Help to view a localised help screen. Help is always available and is found in all major WeGolf menu sections or in the Options menu



Fig: 48

My account

Select My account to view your license number which is unique to your phone, expiry date and password



Fig: 49

News

Select News to see the latest release notes about WeGolf



Fig: 52

About

Select About: to see which WeGolf version you are using and phone info compatibility.

Proxy Settings



Fig: 53

Internet Access

WeGolf has to have unrestricted Internet access to function on your mobile. Just like your PC, networking has to be correctly setup. We have provided these screenshots as a guide only; consult your user manual. These settings are usually found in Phone settings on your mobile



Fig: 54

Access Points

Nokia N97 can connect to the Internet via one of three access points

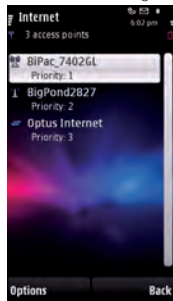


Fig: 55

Which Access Point?

This phone has 2 WiFi access points and an Optus teleco access point. This is the internet access point for WeGolf. If in doubt as to which point to use, consult your user manual or call your teleco

GPS Settings

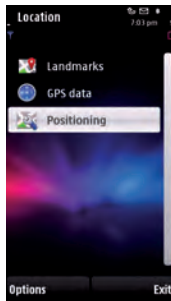


Fig: 56

Positioning

GPS positioning is different for every phone model. We have provided these screenshots as a guide only; consult your user manual.

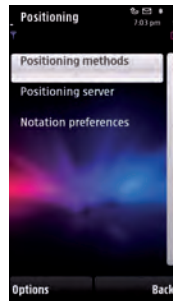


Fig: 57

Positioning Methods

Select Position methods for obtaining GPS on your mobile

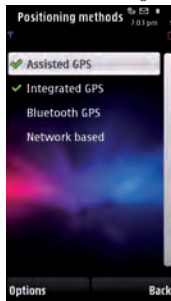


Fig: 58

Positioning Methods

Assisted GPS and Integrated GPS are all you need. Using Network based will incur a modest data charge but results in quicker access for connecting to the GPS satellites. Use Bluetooth GPS if you are using a separate device. If in doubt, consult your phone user manual. (PS-charge is covered by your dataplan)

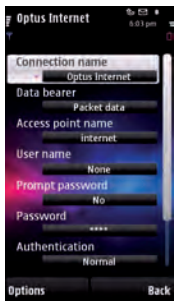


Fig: 59

Configuring Access Point

Your configuration may differ from this screen but Data bearer using Packet data is key

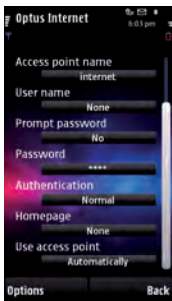


Fig: 60

Configuring Access Point

If available, Use access point Automatically

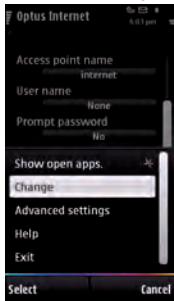


Fig: 61

Configuring Access Point

Select Options / Advanced settings



Fig: 62

Configuring Access Point

The two critical settings are:
 •set Proxy server address to None
 •set Proxy port number to 0
 You now have unrestricted Internet access. Restart your mobile to use WeGolf!

Tips & Tricks

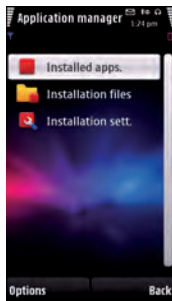


Fig: 63

Phone Application Manager

Optimising: WeGolf is a Java application and can perform better on your phone by adjusting its configuration settings.

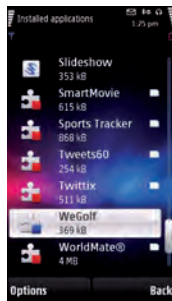


Fig: 64

Installed applications

Phone User Manual: most phones allow you to modify these settings but you must consult your user manual for additional information.

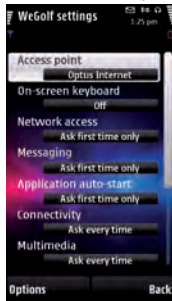


Fig: 65

WeGolf settings

Select access point to always use the default access point that we previously set up

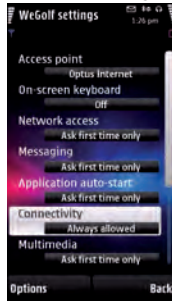


Fig: 66

WeGolf settings

Select Connectivity and if possible Always allow it from the list of choices that will be presented as menu options when you press enter

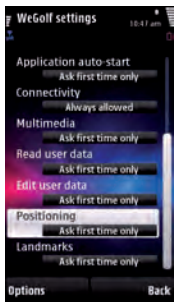


Fig: 67

WeGolf settings
Select (GPS)
Positioning to Ask
first time only

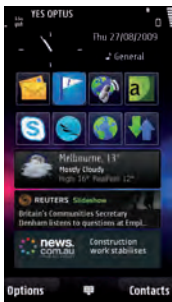


Fig: 68

Home screen Access
 Assign WeGolf to a shortcut key or an icon on your home screen for fast access. Consult your user manual for how

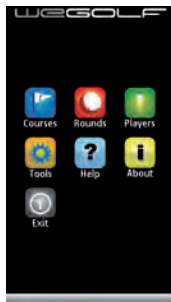


Fig: 69

Main Menu
 It is possible to view satellite images of the course you are playing from within WeGolf. In order to use this feature, you must be using WeGolf, version 5.9.1 or newer.

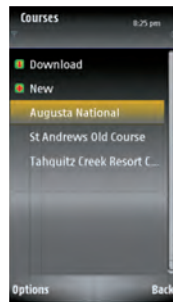


Fig: 70

View Your Hole
Select Courses /
Select your course

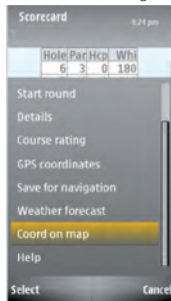


Fig: 71

View Your Hole
Select Coord on
map from the
Options menu





Fig: 72

View Your Hole
You can drag the image up or down, right or left as well as, zoom in for a closer view.



Fig: 73

View Your Hole
You can zoom in or out to get a closer look at the green

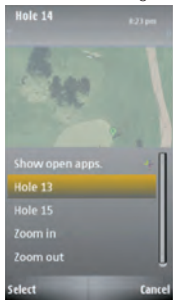


Fig: 74

View Your Hole
To go to another hole *Select another hole*

Understanding GPS Symbols

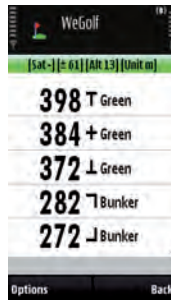


Fig: 75

GPS Symbols

WeGolf uses seven basic symbols with text to explain what and where a POI is. If there are additional POI's on a hole, a small arrow will be displayed in the bottom right hand corner of the screen to allow you to scroll up or down.

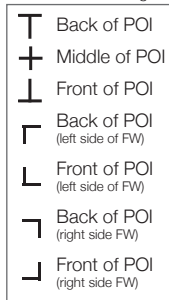


Fig: 76

Symbols

Symbols can be used to define water, trees, greenside or fairway bunkers, etc. When defining a POI, a drop down menu list gives you the options to name it. The symbol used will be determined when you select where the POI is located in respect to the fairway, i.e., right, left or middle.

