

SUUNTO



QUICK GUIDE



HOW TO TURN THE GPS ON/OFF

In most situations you do not have to worry about turning the GPS on or off since Suunto G9 starts and stops the GPS automatically.

You have to turn the GPS on manually if

- You have not started the Game or Course modes but you want to view the current position coordinates in the Position display
- You have turned the GPS off in the Game or Course modes (for example to save power)

The **GPS is turned off automatically** when

- The QUIT ROUND is selected in the Game mode
- 18 holes have been completed in the Game mode

You have to turn the GPS off manually when

- You have stored course locations in the Course mode, but will not play the game immediately
- The Home Position is stored with MARK HOME but you do not intend to use FIND HOME immediately
- You have returned to the stored Home Position

To turn the GPS on or off:

1. Press ENTER for more than 2 seconds to enter the Function menu
2. Use UP or DOWN button to scroll to GPS On (or Off)
3. Short press ENTER. The On (or Off) word is highlighted
4. Press UP or DOWN button to change the On to Off or vice versa
5. Short press ENTER to accept the selection
6. Press STOP/CANCEL to exit the Function menu

See the backside of this page for information about the display and buttons.

NOTE: Pressing the ENTER button for more than 2 seconds in step 5 accepts the selection and exits the menu.

DISPLAY AND BUTTONS

GPS SIGNAL STRENGTH

- One hollow box: GPS on but no fix
- Bar of filled boxes: GPS has a fix:
Long bar means good signal
- Blinking hollow box: GPS in the sleep mode

START/DATA-button

Short press:

- Starts the stopwatch or the compass
- Displays scores in the Course and Game modes

Long press:

- Activates the backlight

Mode indicator:

TIME

WEATHER

COMPASS
COURSE
GAME

STOP/CANCEL-button

Short press:

- Toggles shortcuts in the main mode
 - Returns to the previous menu/field
- Long press:
- Returns to the mode's main display
 - Resets the stopwatch

The Key Lock

Lock/unlock the keys by first short pressing ENTER and then START/DATA within 3 seconds. Black corners on the display indicate that keys are locked.

UP and DOWN buttons:

- Switch between main modes
- Scroll up and down in menus
- Increase/decrease the selected value

ENTER button

Short press:

- Enters submenus
 - Accepts a selection
- Long press (over 2 sec):

- Enters the Function menu
- Accepts the selection and returns to the main menu

BATTERY LEVEL

- Blinking short bar: low battery
- Climbing bar: charging

ALARM INDICATOR

- Alarm or weather alarm is active



YOUR FIRST ROUND

We recommend that you begin using Suunto G9 in the simplest way: by entering the par values of a course and playing a round. This will get you acquainted with marking the tees, ball positions and pins during a round. With this you will be able to see the distances of each shot.

Once you are familiar with the basics, you can proceed to storing a course in the Course mode, which will give you distances to these stored locations, such as tees, bunkers etc.

The next stage is to start using your clubs and additional statistics to get a deeper understanding of your game.

Your first round

At the clubhouse:

1. Scroll to the Game-mode with UP or DOWN.
2. Long press ENTER to access the Function menu.
3. Scroll to COURSE and short press ENTER.
4. Scroll to NEW and short press ENTER.
5. Modify the par value for the hole 1 with UP or DOWN and short press ENTER twice.
6. Enter par values for all the holes as you did for the hole 1.

NOTE! *If you wish to enter fewer than 18 holes, long press ENTER after the last hole's par value.*

7. *Suunto G9 displays the text 'Course data saved', in which the date is the current date.*
8. *Now you are ready to play a round.*

At the course:

1. In the Game mode, short press ENTER to access the Game menu.
2. START ROUND is highlighted in the Game menu. Short press ENTER to accept it.

NOTE! *To avoid false selections by accidental pressing of the buttons, Suunto G9 returns to the Game mode's main display in 10 seconds if you do not select anything in the Game menu.*

3. The GPS starts automatically. Once the GPS has a position fix, Suunto G9 displays the text 'Mark tee 1'.
4. Proceed to the tee box and short press ENTER to access the Game menu. MARK TEE is highlighted. Short press ENTER to accept it.
6. Strike your opening shot.
7. Proceed to your ball in play.
8. Short press ENTER to access the Game menu.
9. MARK BALL is highlighted in the Game menu. Short press ENTER to accept it. 'Shot 1 marked' is displayed.
10. Repeat steps 8 to 10 until your ball is in the pin.
11. Once in the pin, short press ENTER to access the Game menu and scroll to END HOLE. Press Enter to accept the selection.
12. Suunto G9 displays the number of putts (default 2). Modify the number with UP/DOWN and accept the selection with ENTER.
13. The total score is highlighted. If this is not correct (you have forgotten to mark a ball position), modify it with UP/DOWN and accept it with ENTER.
14. Proceed to the next tee.

More info about:

- Display and buttons, see the sideleaf of the front cover
- Playing the game and penalties, see the Game mode at pages 24-27

NOTE! *The very first time you initiate the GPS, it will take longer than usual for the GPS to start, as it has no reference to its current location. This may also happen if the GPS has not been used for a long time.*

Please activate your new Suunto G9 GPS at least once before going to the golf course. Subsequent GPS starts will take less time. To minimize the GPS initiation time, hold the unit steady in one position with the display facing up and make sure you are located in an open area so that the unit has a clear view to the sky. After starting the GPS (i.e. after it has a fix), the unit can be moved more freely without losing the connection to the satellites. The signal strength bar on the unit's display indicates the fix. (See page 3, Display and buttons.)

THE SUUNTO G9 CONCEPT BRIEFLY

Suunto G9 is designed to help you to measure and understand your game. Only when you understand your strengths and weaknesses, you will be able to focus on your training properly. To gain this, Suunto G9 will provide you with a possibility to

- Measure your strokes so that you know how far you really strike with each club
- Store statistics of each game: number of putts, number of bunker hits, did you have a fairway hit and whether you reached the green in regulation

These are the key features. By storing this information and analyzing it with the Suunto Golf Manager Software, you will be able to learn more about your game, see how your game develops and what you should do to make it even better.

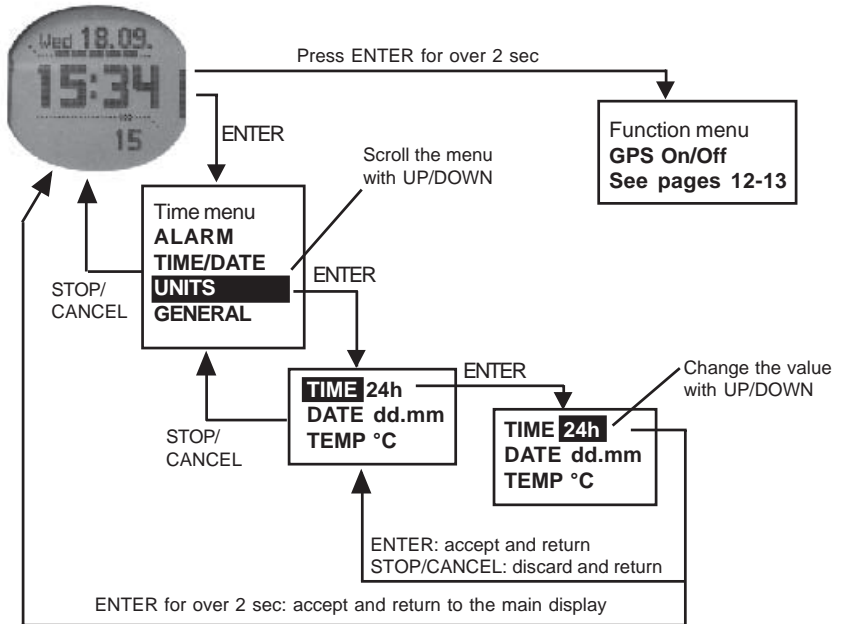
In addition to this you can store your favorite courses or check from the Suuntosports.com whether someone else has stored them and download them to your Suunto G9. Having the course key points stored, Suunto G9 will give you distances and directions to tee, green, pin and other obstacles such as water or bunkers on each fairway.

By keeping your club database in Suunto G9 and Suunto Golf Manager Software updated, you can easily select the most suitable club for each strike.

Suunto G9 also includes a chronometer with time sync from the GPS satellites, a barometer, an altimeter, a compass, GPS position display and a practical Mark home/Find home function.

NAVIGATING THE MENUS

Each main mode in Suunto G9 has a submenu, which can have one or more submenus. You navigate in the menus with the ENTER, UP/DOWN and STOP/CANCEL buttons.



BEFORE YOU START

Before you start using your new Suunto G9, you should do the following:

- Charge the unit
- Read through this manual

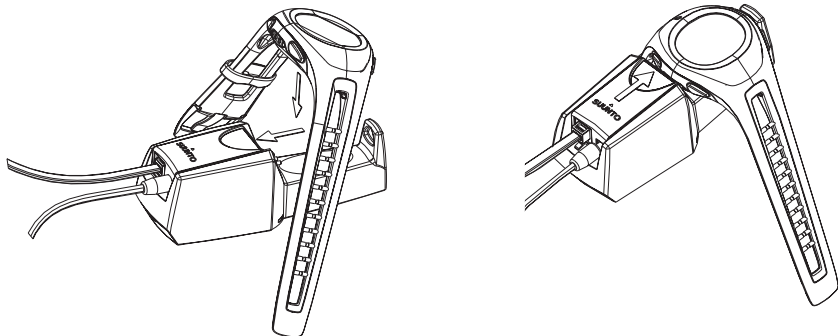
To get the most out of your Suunto G9, you should also install the included Suunto Golf Manager software. The Suunto Golf Manager CD includes a more detailed manual of all features.

CHARGING THE BATTERY

Suunto G9 is equipped with Li-Ion rechargeable battery. You can charge it from the mains outlet with the included charger, from a 9V battery or from your car's cigarette lighter (optional).

To charge the unit, place the Suunto G9 on the docking station as shown in the picture and connect the charger to the docking station. During charging, the battery level indicator will continuously climb from bottom to top. When the battery is full, the battery level indicator is fully displayed.

To connect the docking station to your PC, connect the telephone modular jack of the interface cable to the docking station and the 9-pin D-connector to a free serial port in your PC. (If your PC does not have a serial port, you have to purchase a USB to serial port -adapter separately.)



CARE AND MAINTENANCE

Only perform the procedures described in this manual. Never attempt to disassemble or service your Suunto G9. Protect your Suunto G9 from shocks, extreme heat and prolonged exposure to direct sunlight. If not in use, your Suunto G9 should be stored in a clean, dry environment at room temperature.

Suunto G9 can be wiped clean with a lightly moistened (warm water) cloth. If there are stubborn stains or marks, you can apply mild soap to the area. Do not expose Suunto G9 to strong chemicals such as gasoline, cleaning solvents, acetone, alcohol, insect repellents, adhesives and paint, as they will damage the unit's seals, case and finish. Keep the PC interface pins clean with e.g. a toothbrush. Make sure the area around the sensor is kept free of dirt and sand. Never insert any objects into the sensor opening.

WATER RESISTANCE

Suunto G9 is water resistance-tested up to 10 bar (equivalent to 100 m/330ft depth) according to ISO 2281 standard (www.iso.ch). However, it is not a diving instrument and therefore it should not be used to obtain data under water. Do not push the buttons under water.

NOTE! *Lots of water or dirt under the cover of Suunto G9 may disturb the satellite signal reception.*

MEMORY

The data memory in Suunto G9 is non-volatile i.e. data is not lost even if the battery runs out.

UNDERSTANDING GPS

OVERVIEW

Suunto G9 uses Global Positioning System (GPS) in determining the user's position. GPS incorporates a set of satellites orbiting the Earth at an altitude of 20 000 km at the speed of 4 km/s. The satellites send relatively weak radio signals at power levels comparable to normal household light bulbs. So, the GPS reception gets disturbed much more easily than, for example, cellular phone signal reception because the GPS signals that reach the Earth are thousands of times weaker than cell phone signals. However, due to the extreme sensitivity of the built-in GPS radio receiver, even the faintest signals can be picked up.

The GPS system is run by the United States Department of Defense and has been fully operational since 1995. At least 24 operational satellites circle the globe every 12 hours in 6 orbital planes with 4 satellites per plane to provide a true global coverage. A worldwide ground control network monitors the health and status of the satellites. The system works 24 hours a day regardless of the weather. It can provide service to an unlimited number of users and it is free of charge.

LINE-OF-SIGHT NEEDED

To ensure a good position measurement, there must be a line-of-sight connection between the satellites and the receiver. This means that the objects or materials between the satellites and the GPS receiver must not excessively attenuate the signal. In practice, water-containing objects, such as people, trees or other dense vegetation, can cause problems. The signals will not penetrate rocks or buildings or any metallic materials. However, the receiver typically works well under relatively thin plastic, fabric or wooden covers, e.g. inside boats.

ACCURACY

To calculate a position, a GPS receiver usually requires simultaneous reception from at least four satellites. The position accuracy typically increases with the number of satellites being tracked but the most important factor is actually the relative geometric position of the satellites. The best position estimate is obtained when satellites from different directions and angles can be tracked. In other words, the less obstructed the receiver's view of the sky, the better the accuracy.

The accuracy also improves with the number of measurements made on the same spot, as some errors will be averaged out. Under all-in-view satellite conditions a global average horizontal positioning error is 7.8 meters (95% confidence level). However, depending on the satellite constellation and the distortion the GPS signal experiences when traveling through the ionosphere, the instantaneous accuracy can vary from a couple of meters to over ten meters. The vertical position estimate is roughly two times more inaccurate than the horizontal. Because of this inevitable vertical inaccuracy of GPS positioning, Suunto G9 encases a separate altimeter sensor with a 1-meter resolution that should be used instead of the GPS estimate when measuring small changes in altitude.

GPS USAGE

When you turn on the GPS, the receiver starts searching for radio signals from the satellites and as soon as one is found, data starts flowing from the satellite to the receiver. The data includes a list of the satellite positions and the GPS time. The GPS time is highly accurate because each satellite has an atomic clock on board.

The data flows quite slowly and usually a little less than a minute is needed for the calculation of the first position estimate. To minimize the duration, you should maintain an unobstructed view of the sky right after turning on the GPS. Keeping the receiver stationary will also improve the initialization. You need the satellite positions and the GPS time before the receiver can perform the actual position calculation and before the GPS becomes functional. After the first position fix has been established, it still takes additional 10 minutes before all relevant data has been received from the satellites. The position estimate accuracy improves during this time as more satellites can be used for calculation.

The downloaded data is valid roughly for the next four hours during which the receiver starts more quickly, typically in less than 10 seconds if it was turned off in between.

You should turn off the GPS when, for example, you have a longer break. This is because satellite tracking consumes large amounts of power. Suunto G9 uses the lowest power consuming GPS technology available but you should still turn off the GPS when you do not need it.

FUNCTION MENU

The function menu is almost identical in all the main modes. It is always accessed from the mode's main display by pressing ENTER for more than 2 seconds. In the Function menu you can:

- Turn the GPS on or off manually (**GPS On/Off**)
- Create, activate or modify a golf course (**COURSE**)* *see the Course mode-section.*
- Select which bag to use and view the clubs of both bags (**CLUBS**)*
- Mark your home position (**MARK HOME**)
- Guide back to the stored home position (**FIND HOME**)
- View position information (**POSITION**)
- Turn the GPS power save on or off (**PWRsave On/Off**)
- Turn the statistics query on or off (**STATS On/Off**)

(Functions marked with * are displayed only when the menu is accessed from the Course or Game modes.)

MARK HOME

GPS starts automatically and your current position is stored as your home position.

FIND HOME

GPS starts automatically and a guidance display will show the direction and distance to your stored home position.

NOTE! *If you move faster than 5 km/h (3,2 mph), the direction guidance is based on GPS heading. At lower speeds and at standstill a compass direction is shown.*

PWRsave On/Off

If the power save is turned on, the GPS is set to sleep for one minute after you mark each tee, and for two minutes after you select END HOLE in the Game mode. You can modify these times in the Suunto Golf Manager.

You should turn this feature on if you play slowly or if there are many players in your group.

POSITION

When the GPS is on, the position display shows:

- Map datum in use (default is WGS84)
- Number of satellites used in fix/number of satellites visible (SAT)
- Estimated position error (epe)
- Your current position coordinates, latitude and longitude in degrees or in degrees and minutes
- Your current altitude measured by the GPS or the time to the first fix (toggle with START/ DATA button)

You can change the coordinate presentation in the Time mode (General settings). The map datum is changed in the Position display with the UP/DOWN buttons. Available datums and their numbers are listed in the end of this manual. The coordinates are updated in the selected datum in a few seconds.

NOTE! *Selecting a datum affects only the Position display. All position logging and measurements are made with WGS84.*

CLUBS

You can have two bags of clubs stored in your Suunto G9. In CLUBS you can select which bag to use, and view clubs of each bag and their average distances. You can modify the bags in the Suunto Golf Manager.

When you select a club for a shot, the contents of the bag in use are displayed and the stroke distances are updated for this bag.

STATS On/Off

If the STATS are set to On, Suunto G9 will show/prompt for additional statistical information after you have selected END HOLE in the Game mode. This information includes:

- GIR (Green In Regulation)
- Fairway hit (Yes/No)
- Bunker hits (number of)

TIME MODE

THE STOPWATCH

START/DATA

- Starts the stopwatch
- When the stopwatch is on, it stores lap times

STOP/CANCEL

- Stops the stopwatch
- After the stopwatch is stopped, it reviews lap times
- Long press (more the 2 sec) resets the stopwatch



The Time settings menu can be accessed by short pressing ENTER. This menu contains functions for setting the alarms (ALARM), setting the time and date (TIME/DATE), setting the units (UNITS) and for adjusting general settings (GENERAL).

ALARM

You can set 3 different daily alarms. Alarms can be acknowledged by pressing any button.

TIME/DATE

TIME/DATE	for setting the time and date manually
DUAL TIME	for setting the dual time displayed on the lowest field of the display
SYNC	for setting the GPS time synchronization to ON/OFF/AUTO:
OFF	GPS does not affect the time settings
ON	GPS adjusts the time and date to the time zone specified in the Suunto Golf Manager (your local time zone) when the GPS is activated
AUTO	Suunto G9 calculates the time zone based on the rough time set manually and adjusts the time from the GPS to this time zone.

UNITS

TIME	time is shown in 24h or 12h format
DATE	date is shown in dd.mm or mm.dd format
TEMP	temperature is shown in Celcius or in Fahrenheit
PRES	pressure is shown in hPa or InHg
ELEV	altitude is shown in meters or feet
DIST	distance is shown in meters or yards
POSITION	position coordinates are shown in degrees (deg) or in degrees and minutes (dm)

GENERAL

LIGHT	sets the backlight to On/Off/Night. When set to night use, pressing any button activates the backlight. NOTE! <i>Unnecessary use of the backlight consumes a lot of power.</i>
BRIGHT	sets the backlight brightness. NOTE! <i>Higher brightness consumes more battery. Default setting is 3.</i>
CONTRAST	sets the LCD contrast. NOTE! <i>High contrast consumes more battery. Default setting is 4.</i>
TONES	Sets the button tones On/Off

WEATHER MODE



The Weather mode gives you practical information on:

- Sea level air pressure (derived from the absolute air pressure based on the current altitude)
- Air pressure trend
- Temperature
- Absolute air pressure
- Altitude (barometric)

The barometric trend display shows changes in air pressure during the last 6 hours in 15-minutes intervals.

The Weather settings menu is accessed short pressing ENTER:

ALTITUDE

- Allows you to set the reference altitude (your current altitude) manually or from the GPS
 - MANUAL modify the altitude with UP/DOWN button, accept with ENTER
 - SYNC ON: reference altitude is set from the GPS every time the GPS is started (average of several GPS fixes).
 - OFF: manually set reference altitude is used.

BARO MEM allows you to view the barometric trend for the last 7 days. The trend is stored in 1-hour intervals, so each display shows 24 measurements. On the lower section of each display, maximum and minimum air pressures for that the day are shown.

Scroll between days by pressing the UP/DOWN buttons

NOTE! *Since the barometric altimeter is affected by changes in weather i.e. changes in the air pressure, you should set the reference altitude each time you start using the altimeter feature. If SYNC is set to On, start the GPS before starting to use the altimeter.*

BARO AL sets the barometer alarm on or off. The barometer alarm warns you when the air pressure drops faster than 4 hPa (0,118 inHg) in 3 hours, which is typical in situations when a storm is arising. If you do not acknowledge the weather alarm, it is repeated in 10 minutes.

COMPASS MODE

**Starts the compass
after time-out.
Locks the bearing
in the bearing mode**

**Cardinal or half
cardinal point
abbreviations**

**Bearing in
degrees**

**Time/Locked bearing/
Bearing to a course point
Toggle with STOP/CANCEL**



The Compass mode utilizes the Suunto 9-series 3D compass, which allows reading the compass reliably even if the unit is held tilted up to 30 degrees from horizontal to any direction.

Since the compass feature consumes a lot of power, the compass is automatically turned off after 45 seconds, after which it can be restarted with START/DATA.

The compass shortcuts are:

- Standard compass mode (with time in the lowest field)

The first row displays the cardinal and half-cardinal point abbreviations

The second row displays the bearing in degrees

- Locked bearing

In this mode you can lock the compass to any bearing by pointing the unit to the desired direction and pressing START/DATA. The locked bearing is displayed in the lowest field. By turning the unit so that the small circle is between the lines, the unit points to the locked bearing. If the circle is not visible, a small arrow shows where the unit has to be turned.

- Bearing to a course point

Once you have started a round and have selected a stored course point in the Course mode (for example a bunker), this shortcut in the Compass mode shows you the direction to this course point. This is very practical when the course point is not directly visible.

The Compass settings menu is accessed by short pressing ENTER. Here you can:

- Set the declination (**DECLINATION**)
- Calibrate the compass (**CALIBRATE**)

DECLINATION

You can set the declination to:

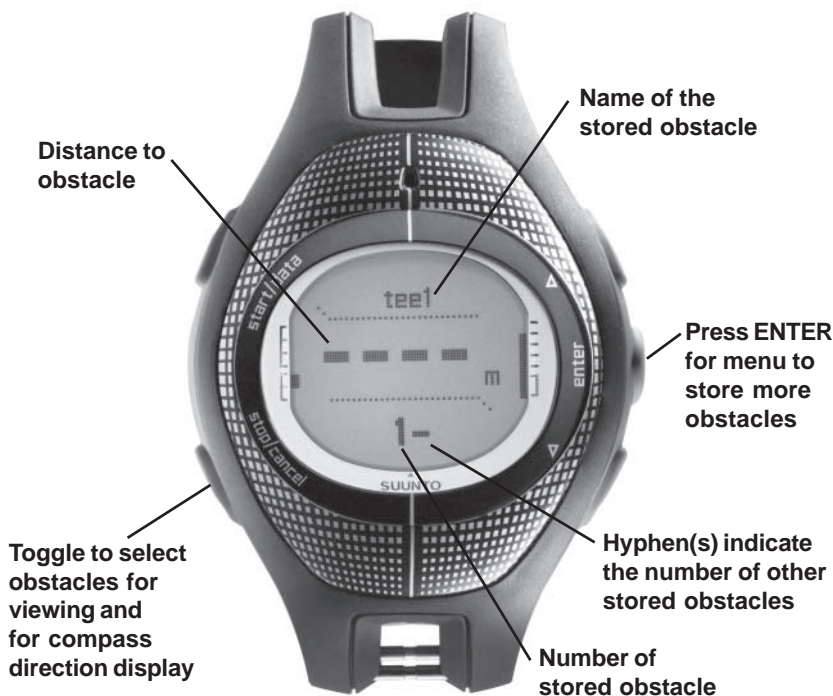
Off The compass points to the magnetic north

On You can set the declination manually

Auto Declination is set from the declination grid based on your current position.
The globe is covered by a 4-degree grid (45 x 90 declination values)

CALIBRATION (see page 34)

COURSE MODE



The Course mode is used for storing, modifying and displaying information about different points or obstacles on the course. Once a point such as a green or bunker is stored, it can be selected for distance information by pressing STOP/CANCEL in the Course mode until its name appears on the top field of the display.

The procedure for storing a course is explained on the next page.

The menu for storing obstacles is accessed by short pressing ENTER in the Course mode. This menu includes items for TEE, BUNKER, WATER, LAY-UP, ROUGH, GREEN and PIN. The last item DONE activates the next fairway.

You can store 9 points for each fairway. You can have several bunkers, waters or roughs, but you can only have one tee, lay-up, green and pin for each fairway. If you store tee, lay-up, green or pin twice, the new one replaces the first marking.

NOTE! *If you store more than one water for example, the waters are named water 1, water 2 etc. so the number refers to the obstacle number. The numbers after tee, lay-up, green and pin, for example pin 1, indicate the number of fairway.*

The direction to any stored obstacle can be viewed by selecting the obstacle for display in the Course mode and pressing the UP button for the Compass mode and selecting the bearing to the course point shortcut in the Compass mode. (See section Compass mode)

The Function menu in the Course and Game modes

In these modes, the Function menu includes additional features:

COURSE allows you to:

- Create a new course (**NEW**)
- Select a course from the Suunto G9 memory as the active course (**ACTIVATE**) or modify a course in the Suunto G9 memory (**MODIFY**)
- Clear all rounds and courses from the Suunto G9 memory (**ERASE ALL**)

NOTE! *EMPTY in the Course menu indicates a free course memory location and is replaced by a course name when a course is stored.*

CLUBS

USE **Manual/Prompt** to select, whether G9 prompts for clubs or not

CLUB SET 1./2. selects the active bag

The club sets are also displayed by name. You can view clubs of each set by scrolling to the set name and pressing ENTER.

STORING A COURSE

You can go through steps 1 to 3 at home or at the clubhouse.

1. In the Course mode, long press ENTER. Select COURSE-NEW.

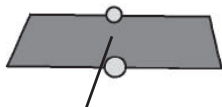
2. Enter the PAR value and the hole length by pressing UP/DOWN buttons and accept the selection with ENTER for each hole.

NOTE! The hole length is optional. It is used only for the scorecard in Suunto Golf Manager.

3. After you have completed all holes, long press ENTER. Course is saved with current date as the name. You can modify the name in Suunto Golf Manager.

NOTE! If you only enter 9 holes, Suunto G9 assumes that you will play the 9 holes twice, so after the 9th hole Suunto G9 assigns hole 1 for the 10th the hole etc.

At the golf course:

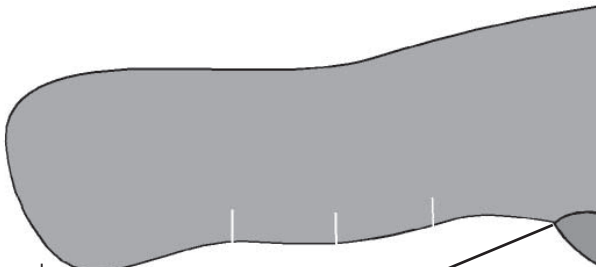


AT TEE:

Press ENTER in the Course mode.

If the GPS is not on, it will start automatically. Select TEE

G9 displays the message: Marking tee 1.

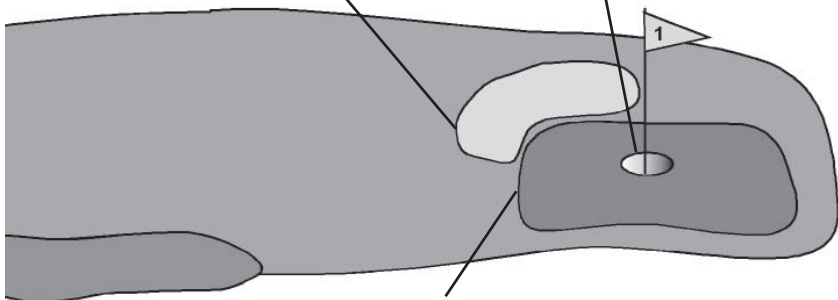


AT WATER:

Press ENTER in the Course mode Select WATER

AT BUNKER:
Press ENTER in the Course mode
Select BUNKER

AT THE CENTER OF GREEN:
Press ENTER in the Course mode
Select PIN



AT THE FRONT OF GREEN:
Press ENTER in the Course mode
Select GREEN

NOTE! 9 points can be marked for each hole including TEE, LAY-UP, GREEN and PIN. You can, for instance, store several bunkers and they are named Bunker 1, Bunker 2 etc, but you can only mark one PIN, LAY-UP, GREEN and TEE. If you mark the TEE again, the previous marking is replaced.

When you have marked all points,
select DONE to proceed to the next hole.

GAME MODE

Enter/Exit the round statistics display.
In the display use ARROW buttons to scroll.

Tee/Pin number or a prompt depending on the situation



Before a round:
Number of holes

During a round:

- Hole score vs. hole par
- Game score vs. sum of the played hole pars
- GPS sleep

Toggle with STOP/CANCEL.

Name of the course or the stroke distance or the distance to green (changed automatically)

The Game mode is the mode for playing a round of golf. In this mode you:

- Mark the actual tee positions (to get the stroke distances as accurate as possible)
- Store the positions of the ball in play on fairways and greens
- Select which club you use for each shot
- Add possible penalties such as water, drop, rule violations etc.
- Review your score for each hole (and modify if needed)
- Enter additional statistics

The Game menu is accessed by short pressing ENTER in the Game mode. This menu contains:

START ROUND	starts a round on the active course
QUIT ROUND	quits the round (a round ends automatically after 18 holes have been played)
MARK TEE	marks the current tee position
MARK BALL	marks the ball's position on fairway or green
SELECT CLUB	for selecting a club for the next shot
END HOLE	marks the ball into the pin
QUIT HOLE	there are days when the ball just will not go into the pin (no score)
Undo	removes the last marking

NOTE! Before you can play a round, you have to have an active course. This can be selected or created in the Function menu (access by pressing ENTER for more than 2 sec in the Game or Course mode main display)

If you have a course stored, select COURSE in the Function menu and select the desired course from the list.

If you do not have the course stored, select COURSE in the Function menu and NEW in the Course menu.

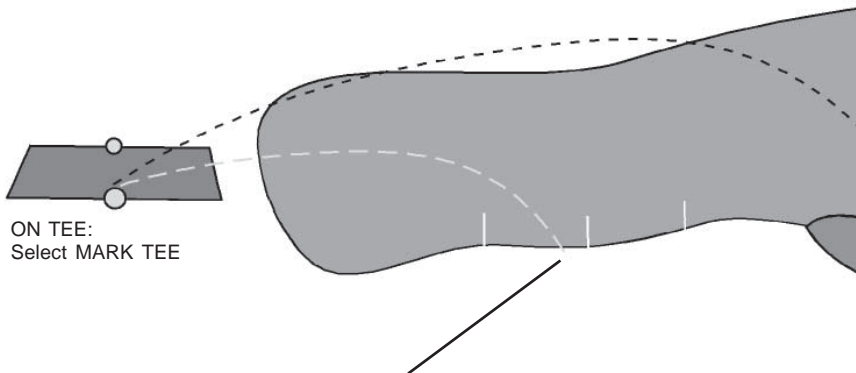
The minimum requirement for a course is the PAR values. When you have entered the PAR-values for the desired number of holes, press ENTER for more than 2 sec and Suunto G9 displays the message: 'Course date stored'.

All courses created with Suunto G9 are named using the current date. You can later modify the name in the Suunto Golf Manager. Once a course is saved, it is automatically selected as the active course.

NOTE! When the GPS sleep shortcut is selected for more than 3 seconds, the GPS is set to sleep. You can re-activate the GPS by selecting any other shortcut. If your game is delayed for any reason, you should set the GPS to sleep to save the battery.

PLAYING A ROUND

This is a typical procedure for playing a hole.

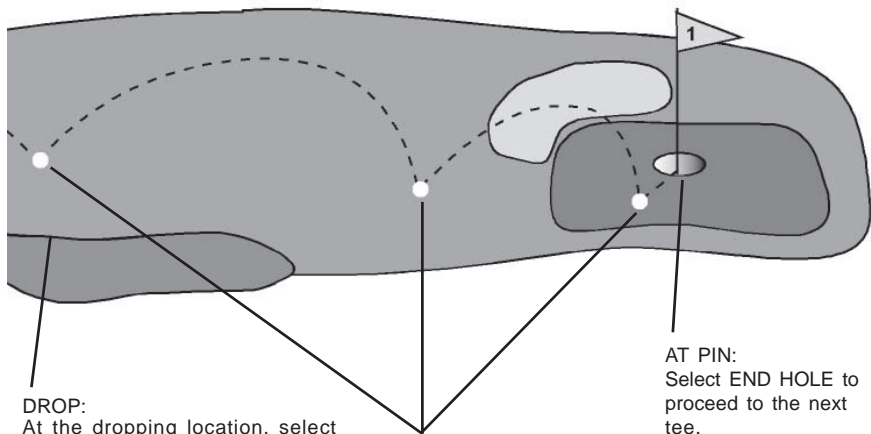


ON TEE:
Select MARK TEE

NOTE! If you start your round from any other hole than 1, you can select the hole number with UP/DOWN buttons when Suunto G9 displays the message 'Tee 1 marked' and accept the modified number with ENTER.

If you need to strike provisional ball(s), strike the ball(s) and walk to the ball. Mark the **new ball in play** by selecting PROV BALL. Suunto G9 displays the message 'Prov ball 1 marked'. If you strike more than 1 provisional ball, you can modify the number during this display.

NOTE! Distance to the green is shown by default. If the green does not exist in the course data, pin is shown instead if data for it exists.



DROP:

At the dropping location, select DROP or WATER according to the situation. This marks the ball position and adds a penalty.

ON FAIRWAY AND GREEN:

Select MARK BALL in the Game menu as you arrive to the ball. Suunto G9 firts displays the shot length and then the remaining distance to green/pin, if the stored course data is available.

AT PIN:

Select END HOLE to proceed to the next tee.

SUUNTO GOLF MANAGER

View courses

View rounds

View player

Transfer wizard

G9 settings

G9 memory manager

Create a new course

View rounds-window: Double-click any round to view scorecard

Date	Course	Score
2.9.2002	Amer Golf	69
3.9.2002	Amer Golf	84
18.8.2002	Peuramaa Golf	82

Player:		Toni Lahtinen				
Date:		3.9.2002				
Marker:		-				
Bag		Default				
Hole	295	245	4	11	11	0
1	295	245	4	11	11	0
2	170	125	3	15	6	0
3	480	395	5	1	11	0
4	325	225	4	9	10	0
5	440	400	5	3	8	0
6	370	355	4	5	10	0
7	365	350	4	7	10	0
8	145	115	3	17	1	4
9	275	255	4	13	0	0
Out	2865	2465	36		67	4

The PC-connection (see page 4) enables you to transfer and store your courses, rounds or bags from Suunto G9 to your PC. Suunto Golf Manager allows you to view, organize and modify your data.

INSTALLING SUUNTO GOLF MANAGER

Place the Suunto Golf Manager CD into your PC's CD-ROM drive.

If the installation does not start automatically, select START-RUN in Windows. Select BROWSE and select SETUP.EXE at the Golf Manager CD. Follow the instructions of the Setup-program.

TRANSFERRING DATA

Once you have installed the software and connected the PC-interface cable between your PC and the docking station, place the Suunto G9 on the docking station. Suunto G9 goes automatically into PC-interface mode (the text PC-INTERFACE is displayed).

Start the Golf Manager by double-clicking the Golf Manager icon on your desktop.

Select Transfer in the View menu to start the Transfer Wizard. The Transfer Wizard will guide you through the transfer.

Golf Manager features

- Create new course:
 - Allows you to manually create a course, which you can then upload to Suunto G9
- View Player:
 - Allows you to create your user profile (Details-tab). You can have several user profiles. Create, view and modify your club sets. You can have 2 bags of clubs on your Suunto G9.
- View Rounds:
 - Allows you to view your rounds stored with Suunto G9
- View Courses:
 - Allows you to view and modify the courses
- Suunto G9 settings
 - Allows you to modify all Suunto G9 settings
- Suunto G9 memory manager
 - Allows you to view and clear the Suunto G9 user memory

SuuntoSports.com is an Internet site for all Suunto wristop computer users. In SuuntoSports.com you can share experiences and data collected using your Suunto G9. As a Suunto G9 owner, you can register and have access to all golf related services at SuuntoSports.com. These services help you to get the most of your golf and your Suunto G9.

System requirements

- Internet connection (minimum requirement 56k modem)
- Internet Explorer 4.0 or newer, Netscape 4.7x or newer
- Display resolution: minimum 800x600 (1024x768 recommended)

SuuntoSports.com categories

SuuntoSports.com includes three different categories for each sport: MySuunto, Communities and Sport-specific pages.

MySuunto

MySuunto is intended for your own data. Here you can store information about yourself, your Suunto G9, your hobby and your favorite ways of training. When you transfer your logs (for example a played round) to MySuunto, they are displayed among your data. With MySuunto you can maintain the data and decide who is allowed to view your data.

In MySuunto you have more statistical tools to analyze your logged data. You can also publish the logs for others to see and compare them to logs of other Suunto G9 users.

MySuunto also includes a personal calendar where you can make notes of your training.

Communities

In communities category several Suunto G9 users can form and maintain user groups. For example you can form a user group with your friends and share your scores and hints and plan future rounds. The user groups can either be open or closed. You can only become a member of a closed group by applying for membership from the users that formed the group.

Each user group has its own homepage at SuuntoSports.com. This page can be used for news, group calendars, bulletin boards etc.

Sport-specific pages

Each sport category has its own sport-specific pages in the SuuntoSports.com. They include sport-specific news, bulletin boards and discussion groups. Users can propose good sport-related links to be added and upload information of the sport and devices related to the specific sport.

Users can also publish their own travel diaries.

Users can describe, recommend or comment travel destinations.

How to get started

Start your Internet connection and move to www.suuntosports.com. When the start page opens, click on the Register-symbol and register yourself and your Suunto G9. You can update your personal MySuunto profile at this stage or you can do it later.

After you have registered, you are automatically transferred to the SuuntoSports.com homepage, which presents the structure of the pages and the principle of operation.

NOTE! *SuuntoSports.com is developed continuously and therefore the contents may change.*

HINTS AND TROUBLESHOOTING

GPS does not take fix

Do you have a clear visibility to the sky? Try holding the unit in an open area with clear visibility to sky. Do not hold the unit against your body. Do not hold your hand or head above the unit. Turn the GPS off and then on again.

NOTE! *When you arrive at the course, turn the GPS on manually and place the unit on the roof of your car while you unpack your gear from the car. This helps the GPS to download the satellite data.*

Suunto G9 displays the message *No GPS fix* when you mark the ball

The visibility to the sky is not good enough. Suunto G9 marks the score but does not mark the position. You can retry it by selecting Undo in the Game menu and selecting the MARK BALL again.

Suunto G9 displays the message *Memory full*

This is caused by defragmentation in the file system. Save your data with Suunto Golf Manager and clear the Suunto G9 memory with the Suunto Golf Manager Memory Manager or by selecting ERASE ALL in the Course mode's Function menu. Restore the courses with Suunto Golf Manager.

Why does Suunto G9 sometimes increase the hole's total score when I increase the number of putts?

The Suunto G9 starts to increase the hole's total score when the number of putts is equal to the total score -1. For example, your total score is 5. You increase the putts to 4 and G9 does not increase the total score. If you still increase the number of putts, Suunto G9 increases the total score because you must have at least one stroke to arrive to the green.

What if I forget to mark the tee?

If you forgot to mark the tee and are already at the fairway, you do not have to return to the tee. Simply select MARK BALL (or PROVISIONAL BALL, DROP or WATER depending on the situation). If you are playing on a stored course, Suunto G9 will use the stored tee position for the distance display. If you play on an unknown course, you do not get the distance for the first stroke.

I typically play very slowly. How can I make the battery last the longest?

Make sure that the battery is full when you start. Check that the backlight is set to *On* or *Off*, not to *Night* because the *Night* setting uses the backlight every time you press a button.

Use Suunto Golf Manager to adjust the sleep times for after the opening shot and after End Hole to suit your game rhythm. Make sure that the PWRsave setting is set to on.

If you have a snack break or wait for the tee to be free, select the *GPS sleep* shortcut in the Game mode to save the battery.

Will the average club distances be correct if I do not use the *Select club*?

No. Suunto G9 needs to know which club was used for each stroke to maintain the club distance database.

How will poor strokes affect the club distances?

Strokes shorter than 30 m are not included in the club distance calculation. They are considered failures or intentionally short.

CALIBRATING THE COMPASS

You should calibrate the compass if it does not seem to work well, for example, when it displays the wrong compass heading or the heading changes too slowly. Strong electromagnetic fields, such as electric lines, loudspeakers and magnets, can affect the compass operation. Therefore it is advisable to calibrate the compass if your Suunto G9 has been exposed to these fields.

NOTE! Calibrate the compass before using it for the first time, and before you leave for an extended outdoor activity.

To calibrate the compass, select CALIBRATE in the Compass menu.

Hold the unit horizontally and rotate it slowly around the vertical axis until the down counter reaches zero.

Turn the unit vertically and rotate it slowly around the vertical axis until the down counter reaches zero.

After this the unit calculates a while after which the compass is calibrated and Suunto G9 displays the message 'COMPLETE'. Press Enter to return to the main display.



TECHNICAL SPECIFICATIONS

General

- Operating temperature -20 °C to +60 °C/-5 °F to +140 °F
- Storage temperature -30 °C to +60 °C/-22 °F to +140 °F
- Weight 76 g
- Water-resistant to 10 bar (ISO 2281 standard)
- Mineral crystal glass
- Rechargeable battery
- PC interface with a serial connector

Charger

- 240V or 110V depending on area of purchase
- Cigarette lighter charger 12V (optional accessory)

Memory

- 3 Courses with 9 points/fairway
- 4 rounds, maximum 255 strokes/round

Barometer

- Display range 300 to 1100 hPa / 8.90 to 32.40 inHg
- Resolution 1hPa / 0.05 inHg

Altimeter

- Display range -500m to 9000m/-1600ft to 29500ft
- Resolution 1m/3ft

Thermometer

- Display range -20°C to +60°C/-5°F to +140°F
- Resolution 1°C / 1°F

3D Compass

- Resolution 1°
- Tilt compensated to +/- 30 degrees from horizontal plane

GPS

- Resolution 1m / 3 ft
- 12 channels

DISCLAIMERS

GPS system

Since the GPS satellites and delivery system are neither owned nor maintained by Suunto Oy, Suunto Oy takes no responsibility of possible malfunctions, changes in positioning quality or discontinuity of the GPS service in the future. Suunto will not reclaim products because of changes in the GPS service.

Player's responsibility

All information delivered by Suunto G9 must be considered as advice only. Naturally, the player is still responsible for striking the ball in golf and for the game of golf in general. The player must take notice of other players and obstacles and decide when it is safe to strike the ball.

CE

The CE mark is used to mark conformity with the European Union EMC directive 89/336/EEC.

Limits of Liability and ISO 9001 Compliance

If this product should fail due to defects in materials or workmanship, Suunto Oy will, at its sole option, repair or replace it with new or rebuilt parts, free of charge, for two (2) years from the date of its purchase. This warranty is extended only to the original purchaser and only covers failures due to defects in materials and workmanship that occur during normal use while in the period of the warranty.

It does not cover battery replacement, damage or failures resulting in accident, misuse, neglect, mishandling, alteration or modifications of the product, or any failure caused by operation of the product outside the scope of its published specifications, or any causes not covered by this warranty. There are no express warranties except as listed above.

The client can exercise the right to repair under the warranty by contacting our Customer Service department to obtain a repair authorization.

Suunto Oy and its subsidiaries shall in no event be liable for any incidental or consequential damages arising from the use of or inability to use the product. Suunto Oy and its subsidiaries do not assume any responsibility for losses or claims by third parties that may arise through the use of this device.

Suunto's Quality Assurance System is certified by Det Norske Veritas to be ISO 9001 compliant in all SUUNTO Oy's operations (Quality Certificate No. 96-HEL-AQ-220)

GPS DATUM LIST

000	ADI-M	Mean Solution (Ethiopian and Sudan)	041	AIN-B	Saudi Arabia
001	ADI-E	Burkina Faso	042	BAT	Sumatra
002	ADI-F	Cameroon	043	EUR-H	Iran
003	ADI-A	Ethiopia	044	HKD	Hong Kong
004	ADI-C	Mali	045	HTN	Taiwan
005	ADI-D	Senegal	046	IND-B	Bangladesh
006	ADI-B	Sudan	047	IND-I	India and Nepal
007	AFG	Somalia	048	INF-A	Thailand
008	ARF-A	Botswana	049	ING-A	Vietnam
009	ARF-H	Burundi	050	ING-B	Con Son Island (Vietnam)
010	ARF-B	Lesotho	051	INH-A1	Thailand (1997)
011	ARF-C	Malawi	052	IDN	Indonesia
012	ARF-D	Swaziland	053	KAN	Sri Lanka
013	ARF-E	Zaire	054	KEA	West Malaysia and Singapore
014	ARF-F	Zambia	055	KGS	Korean Geodetic System
015	ARF-G	Zimbabwe	056	NAH-A	Masirah Island (Oman)
016	ARS-M	Mean Solution (Kenya and Tanzania)	057	NAH-B	United Arab Emirates
017	ARS-A	Kenya	058	NAH-C	Saudi Arabia
019	PHA	Djibouti	059	FAH	Oman
020	BID	Guinea-Bissau	060	QAT	Qatar
021	CAP	South Africa	061	SOA	Singapore
022	CGE	Tunisia	062	TIL	Brunei and East Malaysia
023	DAL	Guinea	063	TOY-M	Mean Solution (Japan, Okinawa and South Korea)
024	EUR-F	Egypt	064	TOY-A	Japan
025	EUR-T	Tunisia	065	TOY-C	Okinawa
026	LEH	Ghana	066	TOY-B	South Korea
027	LIB	Liberia	067	AUA	Australia and Tasmania (Australian Geodetic 1966)
028	MAS	Eritrea	068	AUG	Australia and Tasmania (Australian Geodetic)
029	MER	Morocco	069	EST	Estonia
030	MIN-A	Cameroon	070	EUR-M	Mean Solution (Europe 1950)
031	MIN-B	Nigeria	071	EUR-A	Western Europe (1950)
032	MPO	Gabon	072	EUR-E	Cyprus
033	NSD	Algeria	073	EUR-G	England, Channel Islands, Scotland and Shetland Islands
034	OEG	Old Egypt	074	EUR-K	England, Ireland, Scotland and Shetland Islands
035	PTB	Mean Solution (Burkina Faso and Niger)	075	EUR-B	Greece
036	PTN	Congo			
037	SCK	Namibia			
038	SRL	Sierra Leone			
039	VOR	Algeria			
040	AIN-A	Bahrain Island			

GPS DATUM LIST

076	EUR-I	Italy (Sardinia)	114	NAS-P	Caribbean
077	EUR-J	Italy (Sicily)	115	NAS-N	Central America
078	EUR-L	Malta	116	NAS-T	Cuba
079	EUR-C	Finland and Norway	117	NAS-U	Greenland (Hayes Peninsula)
080	EUR-D	Portugal and Spain	118	NAS-L	Mexico
081	EUS	Mean Solution (European 1979)	119	NAR-A	Alaska (excluding Aleutian Islands)
082	HJO	Iceland	120	NAR-E	Aleutian Islands
083	IRL	Ireland	121	NAR-B	Canada
084	OGB-M	Mean Solution (England, Isle of Man, Scotland, Shetland Islands and Wales)	122	NAR-C	CONUS
085	OGB-A	England	123	NAR-H	Hawaii
086	OGB-B	England, Isle of Man and Wales	124	NAR-D	Mexico and Central America
087	OGB-C	Scotland and Shetland Islands	125	BOO	Columbia
088	OGB-D	Wales	126	CAI	Argentina
089	MOD	Sardinia	127	CHU	Paraguay
090	SPK-A	Hungary	128	COA	Brazil
091	SPK-B	Poland	129	PRP-M	Mean Solution (Bolivia, Chile, Columbia, Ecuador, Guyana, Perua and Venezuela)
092	SPK-C	Czechoslovakia	130	PRP-A	Bolivia
093	SPK-D	Latvia	131	PRP-B	Northern Chile (near 19deg S)
094	SPK-E	Kazakhstan	132	PRP-C	Southern Chile (near 43deg S)
095	SPK-F	Albania	133	PRP-D	Colombia
096	SPK-G	Romania	134	PRP-E	Ecuador
097	CCD	Czechoslovakia	135	PRP-F	Guyana
098	CAC	Mean Solution (Florida and Bahamas)	136	PRP-G	Peru
099	NAS-C	Mean Solution (CONUS)	137	PRP-H	Venezuela
100	NAS-B	Western USA	138	HIT	Southern Chile (near 53deg S)
101	NAS-A	Eastern USA	139	SAN-M	Mean Solution
102	NAS-D	Alaska (excluding Aleutian islands)	140	SAN-A	Argentina
103	NAS-V	Aleutian islands (East of 180deg W)	141	SAN-B	Bolivia
104	NAS-W	Aleutian islands (West of 180deg W)	142	SAN-C	Brazil
105	NAS-Q	Bahamas (excluding San Salvador Island)	143	SAN-D	Chile
106	NAS-R	San Salvador Island	144	SAN-E	Colombia
107	NAS-E	Canada Mean Solution (including Newfoundland)	145	SAN-F	Ecuador (excluding Galapagos Islands)
108	NAS-F	Alberta and British Columbia	146	SAN-J	Baltra, Galapagos Islands
109	NAS-G	Eastern Canada	147	SAN-G	Guyana
110	NAS-H	Manitoba and Ontario	148	SAN-H	Paraguay
111	NAS-I	NW Territories and Saskatchewan	149	SAN-I	Peru
112	NAS-J	Yukon	150	SAN-K	Trinidad and Tobago
113	NAS-O	Canal Zone	151	SAN-L	Venezuela
			152	ZAN	Suriname

GPS DATUM LIST

153	AIA	Antigua, Leeward Islands	191	JOH	Johnston Island
154	ASC	Ascension Island	192	KUS	Caroline Islands, Fed. States of Micronesia
155	SHB	St. Helena Island	193	LUZ-A	Philippines (excluding Mindanao Island)
156	BER	Bermuda Islands	194	LUZ-B	Mindanao Island
157	DID	Deception Island, Antarctica	195	MID	Midway Islands
158	FOT	Nevis, St. Kitts, Leeward Islands	196	OHA-M	Mean Solution (Old Hawaiian)
159	GRA	Faial, Graciosa, Pico, Sao Jorge and Terceira Islands (Azores)	197	OHA-A	Hawaii
160	ISG	South Georgia Islands	198	OHA-B	Kauai
161	LCF	Cayman Brac Island	199	OHA-C	Maui
162	ASM	Montserrat, Leeward Islands	200	OHA-D	Oahu
163	NAP	Trinidad and Tobago	201	PIT	Pitcairn Islands
164	FLO	Corvo and Flores Islands (Azores)	202	SAE	Espirito Santo Island
165	PLN	Canary Islands	203	MVS	Viti Levu Island (Fiji Islands)
166	POS	Porto Santo and Madeira Islands	204	ENW	Marshall Islands
167	PUR	Puerto Rico and Virgin Islands	205	WAK	Wake Atoll
168	QUO	South Greenland	206	BUR	Bungka and Belitung Islands
169	SAO	Sao Miguel, Santa Maria Islands (Azores)	207	CAZ	Camp McMurdo Area, Antarctica
170	SAP	East Falkland Island	208	EUR-S	Iraq, Israel, Jordan, Lebanon, S. Arabia and Syria
171	SGM	Salvage Islands	209	GSE	Kalimantan (Indonesia)
172	TDC	Tristan Da Cunha	210	HEN	Afghanistan
173	ANO	Cocos Islands	211	HER	Former Yugoslavia
174	GAA	Republic of Maldives	212	IND-P	Pakistan
175	IST	Diego Garcia	213	PUK	Russia
176	KEG	Kerguelen Island	214	TAN	Madagascar
177	MIK	Mahe Island	215	VOI	Tunisia/Algeria
178	REU	Mascarene Island	216	VOI-2	Tunisia/Algeria
179	AMA	American Samoa Islands	217	YAC	Uruguay
180	ATF	Iwo Jima	254	KKJ	Kartta Koordinaatisto Järjestelmä, Finland
181	TRN	Tern Island	255	WGS84	
182	ASQ	Marcus Island			
183	IBE	Efate and Erromango Islands			
184	CAO	Phoenix Islands			
185	CHI	Chatham Islands (New Zealand)			
186	GIZ	Gizo Island (New Georgia Islands)			
187	EAS	Eastern Islands			
188	GEO	New Zealand			
189	GUA	Guam			
190	DOB	Guadalcanal Island			

CHECKLIST

After purchasing this instrument, make sure the package contains the following items:

- › Suunto G9
- › Docking Station
- › Charger
- › PC-interface cable
- › CD containing the Suunto Golf Manager software and the Suunto G9 instruction manual
- › Suunto G9 Quick Guide

Should any of these be missing from the package, contact the resale agent who sold you the package.

www.suunto.com

Made in Finland