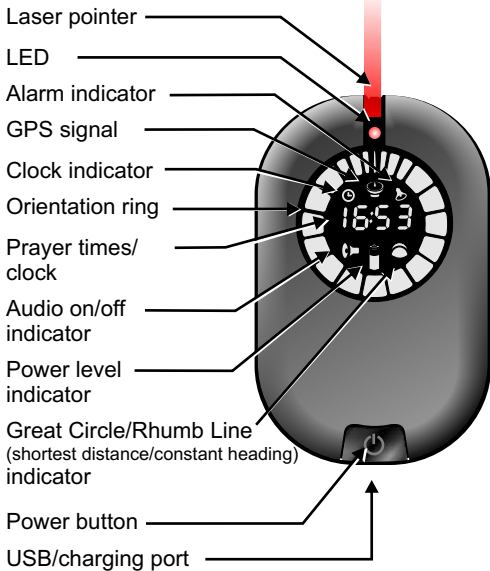


QibSat[®]

User Guide





Overview

Qibsat is a compact, handheld, device with integrated GPS engine, electronic compass, clock and laser pointer. It allows you to align yourself precisely towards the Ka'aba in Mecca from any location in the World. You can also view the exact prayer times for your location and set an alarm to sound 5 minutes before each prayer.

STEP 1: When you first use Qibsat or whenever you change geographical location, you will need to get a GPS fix. Take your Qibsat outside and follow the procedure described on page 4.

STEP 2: With an accurate GPS fix, your prayer times will be correct for your location and you can now use Qibsat to find Qibla (see page 6).

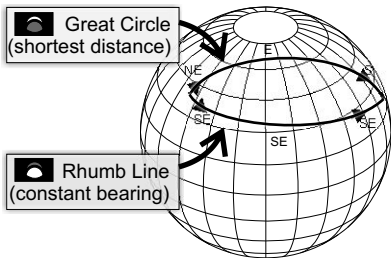
The Qibsat will retain and use the latest GPS location in its memory. You only need to get a new GPS fix when you change location significantly.

You can customise your Qibsat (see page 10): enable or disable sound and laser functions, change the method of Qibla and prayer calculations, set your time zone, set the prayer alarm and adjust the sensitivity of the intelligent compass.

Great Circle vs Rhumb Line

It is a simple task to determine Qibla from a location within a few hundred miles of Mecca. However, at greater distances, the spherical nature of the Earth causes a problem: the shortest line over the globe (the Great Circle method) does not have a constant bearing whereas a line of constant bearing (the Rhumb Line) will be longer and in a different compass direction.

The device uses the Rhumb Line method to calculate Qibla but you can change to the Great Circle method through the Settings mode (see page 10).



Getting a GPS Fix

The Qibla direction and prayer times will vary from town to town so carry out this procedure if the device is new or if you have changed location.

- 1) Find a location with a clear view of the sky.
- 2) Press and hold the power button for 2s. Release the button when "GPS" is shown. The Qiblat starts searching.
- 3) Qiblat shows if a GPS fix has been obtained:

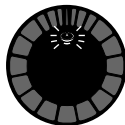


Searching (may take up to 1 minute)



Search finished and successful

OR



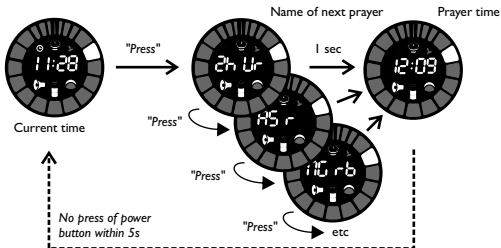
Search finished no GPS signal

Note. If the device fails to get a GPS fix, move to another location away from obstructions such as buildings or trees. If you are unable to get a GPS fix, the previous GPS location will be retained in the memory and used in the Qibla calculation. Please try to get a new fix at the earliest opportunity so that the direction and prayer times will be accurate again.

See www.qiblasat.com for further support.

Displaying Prayer times

When Qibsat is turned on, or whenever you press the power button with the clock displayed, Qibsat shows the name and then the time of the next prayer. With repeated presses of the power button, as shown below, you can cycle through the names and times of all the prayers for the current day.



Note. Through the settings menu (see page 10), the Fiqh can be changed between Shafi (default setting) and Hanafi. You can also choose your calculation method from the following options:

- Muslim World League (default)
- Umm Al-Qura University
- Islamic Society of North America
- University Of Islamic Sciences, Karachi
- Egyptian General Authority of Survey

Finding Qibla

If the device is new or if you have moved to a new location you should follow the procedure on page 4 to get a **GPS** fix before trying to find Qibla.

- 1) Place the device on a flat surface or hold it horizontal.
- 2) Press the power button briefly (if you hold it down for too long [$>2s$] the device starts to search for satellites - see page 4).

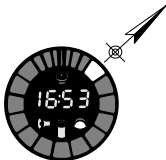


Based on the current GPS location, the display scrolls through:

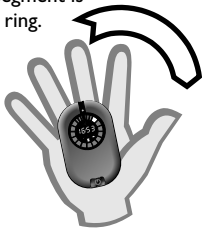
- The name of the next prayer
- The time of this prayer
- The current time



- 3) The device calculates Qibla from the GPS location and indicates its approximate direction with a lit segment.



- 4) Turn the device until the lit segment is at the top of the orientation ring. When you are within 10° of Qibla, the device emits a pulsing tone, increasing in frequency as your alignment improves.



- 5) When you are facing the correct direction, the laser and LED illuminate for 10 seconds and the device emits a continuous tone.

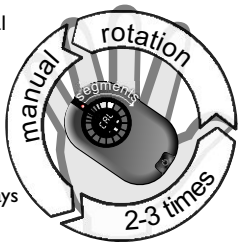


Note. If the segments, LED and laser flash, there is magnetic interference; try a position away from machines and metallic objects. If this persists, adjust the sensitivity of the intelligent compass (see pages 10-11). It may also be necessary to recalibrate the compass (see page 8).

Compass Calibration

If your Qibsat displays the message "CAL" when you switch it on, or after you have carried out a GPS fix, it has detected that the compass requires calibration.

- 1) Find a location away from machines and metal objects.
- 2) Place the Qibsat horizontal on the palm of your hand.
- 3) As the segments on the display light one after the other, rotate the Qibsat with your other hand so that the lit segment is always facing the same direction.



Complete 2-3 full rotations.

- 4) Qibsat shows if the calibration has been successful:



Calibration finished
and successful

OR



Calibration finished
and unsuccessful

The intelligent compass relies on accurate and regular compass calibration and your Qibsat will warn you ("CAL" appears on the display) if the compass needs recalibrating (see page 8). This will happen if you have changed location significantly or if your Qibsat has not been calibrated recently.

Note. *If the intelligent compass is not performing accurately and you are unable to improve it by adjusting the sensitivity, you may choose to recalibrate your Qibsat. Manually select Calibration (see Changing Settings on page 10), then follow the above procedure.*

Charging

The device is powered by an internal rechargeable battery. The battery level is shown by the symbol:



When the battery is fully charged, the 3 segments within the battery icon are all illuminated. The device is supplied with a USB cable and an optional mains adapter.

Using these, you can recharge the device from a mains supply or from a PC with a USB port. During charging, the red LED will be lit; when charging is complete, the LED will go out.



Changing Settings

To change a setting, press and hold the power button, releasing it after 2, 6, 10, 14, 18, 22, 26, 30, 34 or 38 seconds. Press the button again until the correct value is shown; the device switches itself off after 5 seconds. The displayed value will be retained.

Press and hold

Release
after

2s



Getting a GPS Fix



See page 4.

Release
after

6s



Prayer Alarm



Alarm icon flashes.

Display scrolls between:

Off → -0.05 (On)

Release
after

10s



Clock Adjust



Hour digit flashes. Press power button until correct for current timezone.

Time advances in 30 minute intervals.

Release
after

14s



Audible Alerts On/Off

Speaker icon flashes.



On



Off

Release
after

18s



Laser On/Off

LED flashes.

If the LED is lit, laser is active; if the LED

is off and top segment is lit, laser is disabled.

Release
after

22s



Great Circle/Rhumb Line

(Shortest distance/constant compass)

Great Circle/Rhumb Line icon flashes.



Rhumb Line
selected



Great Circle
selected

Release
after

26s



Fiqh Setting



Shafi



Hanafi

Release
after

30s



Religious Organisation

Display scrolls between:



Muslim World League (default)



Umm Al-Qura University



Islamic Society of North America



University Of Islamic Sciences, Karachi



Egyptian General Authority of Survey

Release
after

34s



Intelligent Compass Sensitivity



Most
sensitive



Least
sensitive

Release
after

38s



Compass Calibration

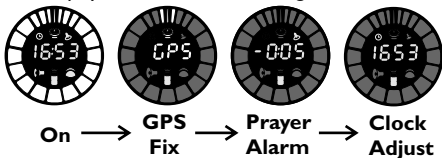


See page 8.

Changing Settings – an example

To advance the hour of the clock by 1 hour (for example, if you have changed time zones or want to change to summer time), follow this procedure:

- 1) Press and hold the power button; the display will show the following screens:



- 2) Release the power button... the hour digit flashes.



- 3) Press the power button twice... the time will advance by 30 minutes with each press.



- 4) When the desired value is shown, leave the device to power off.

The setting will be changed to the value that is displayed when the device powers off.

