

Full User Manual – Watlaa One



W A T L A A



DISCLAIMER

Watlaa One is a research tool and shall be treated as such. Caution shall be exercised by anyone using it. Watlaa One IS NOT A MEDICAL DEVICE.

Watlaa Limited does not assume any responsibility, or will be liable, for any damage arising from the use of their products.



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1 Opening the box

Inside the box you will find the following items:

- Watlaa One watch
- Metal strap
- Loop strap
- 2 USB charging cables

2 Charging

Remember to charge your watch before taking into use. The battery icon will indicate if the battery is charging. Please charge until lightning icon inside battery turns off. That means that the battery is fully charged.

When the battery shows 100%, charge still for approximately 10-15 minutes in order to the most out of the battery. Lightning icon will disappear when fully charged.

3 Connecting with miaomiao bridge

Please wear Watlaa One on the same arm as where you have your miaomiao. The low energy connection may disconnect if wearing on the other arm.

Before connecting Watlaa One to miaomiao, please reset your miaomiao bridge according to instructions from supplier. Fasten bridge on top of the libre sensor. After this go to Watlaa One watch. Navigate in the following way:

1. Short taps until you reach "CGM"-menu
2. Long press to enter "CGM"-menu
3. Short tap one (1) time until you see "Bridge"
4. Long press → under "Bridge" it should say "search" for a few seconds
5. After this it should display "miaomiao" or "miaomiao2" under "Bridge"
6. Done. Watlaa One will do the rest. Remember to calibrate



If you have used miaomiao with a mobile phone before using Watlaa One, remember to turn your phone's bluetooth off, otherwise the phone will try to establish connection to your miaomiao, and this can make Watlaa One disconnect.

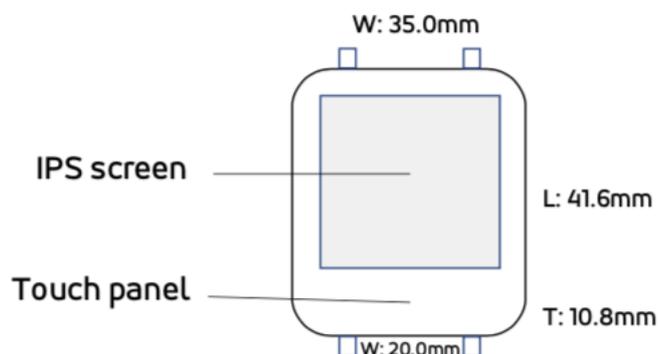
3.1 When changing to new libre sensor (every 2 weeks)

Disconnecting the miaomiao and connecting again will instruct Watlaa One that you might have changed libre sensor. When you change the libre sensor you need to do the following:

1. Disconnect from miaomiao by doing exactly the same steps as in previous chapter. Instead of connecting, you will now disconnect Watlaa One from miaomiao
2. After applying miaomiao to a new libre sensor follow steps 1-6 in previous chapter again. Remember to calibrate

4 Dimension and parameters of the watch

Below you can find the dimensions of the watch.



Item	Type
Display	1.3 inch IPS
Battery	Polymer Lithium
Battery Capacity	230 mAh
Connection Mode	BLE 4.0 Low Power Bluetooth
Working Temperature	0° C – 40° C
Waterproof	IP67 (not for swimming)

5 Navigation

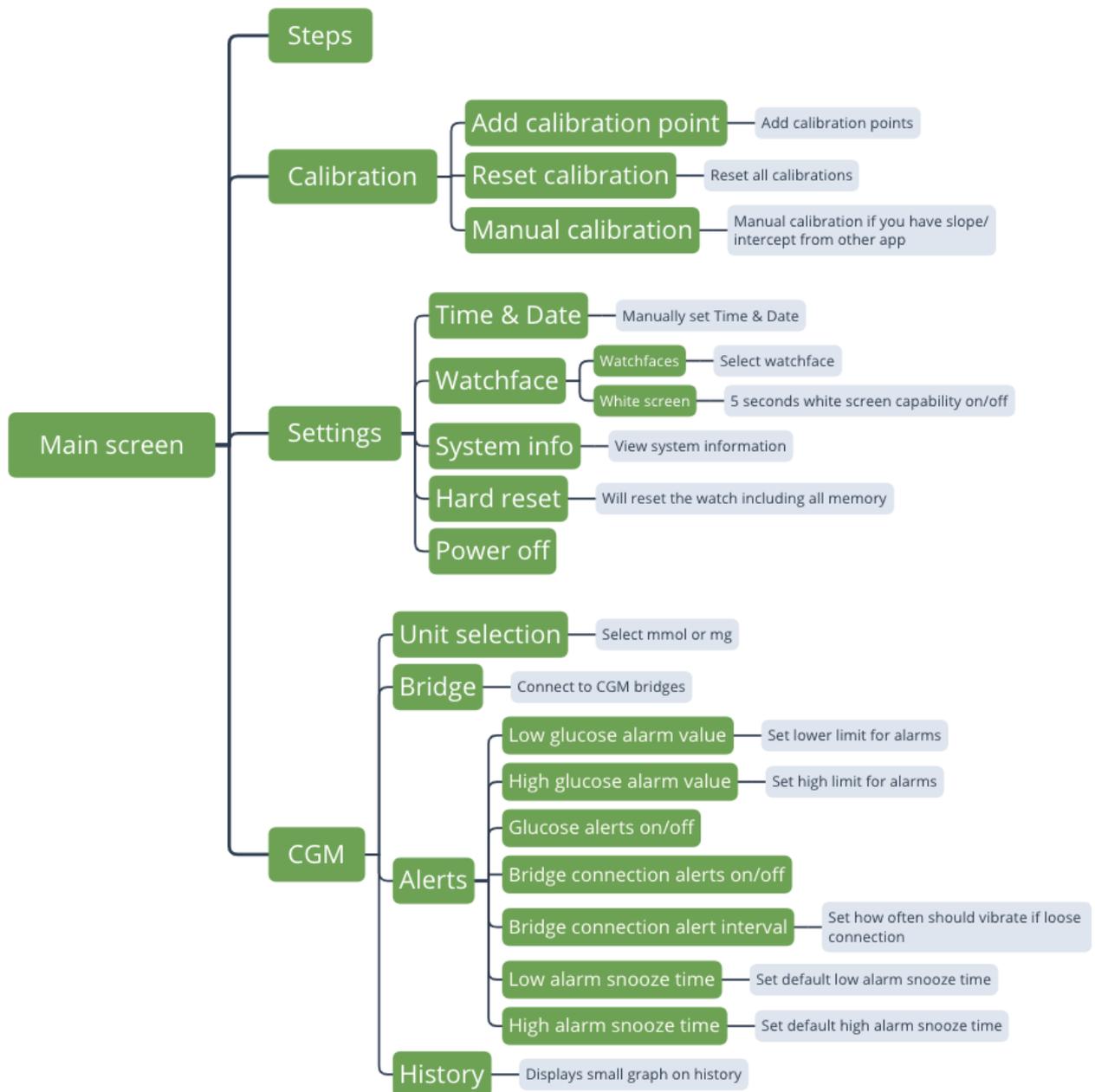
You can navigate the menu by short tap and long press.

Short tap – when tapping the bottom of the screen (touch panel) you will enter the menu. Short tap will either bring you forward in the menu or increase a selection. For instance, selecting minutes when setting time.

Long press – will enter desired menu item. Long press also confirms selections. For instance, when setting time and date.



6 Menu structure of Watlaa One



7 Calibration

Watlaa One supports calibrations in 2 ways:

1. Enter calibration points based on medical device or finger prick
 - a. If you toggle past the value you want by mistake, in order to erase simply don't confirm via long press. Wait for 5 seconds and you will be taken back to main screen without saving.
 - b. If you save a wrong value the only option is to erase calibrations.
Remember this will then erase all calibrations
2. Enter slope and intercept from 3rd party application (we will soon have integrations with different applications ready and then slope and intercept can be synced from those apps also automatically)

The calibration algorithm will use calibration points from last 4 days. In case only older calibration points than 4 days, then those will be used. A maximum of 20 calibration points can be used.

NOTE: Calibration is the most important part for getting accurate readings on your Watlaa One. If you are not familiar with the concept, please ask a friend, ask on a facebook group, or read the article [here](#).

<https://bionicwookiee.com/2018/11/15/cgm-accuracy-calibration-is-king/>

The glucose readings will only be as accurate as your calibrations.

Calibration reminders will be displayed every 24h. User can decide to dismiss or enter calibration from the reminder.



8 Setting time and date

You can change date and time in the Settings menu. Alternatively, you can download the Watlaa application (android only) from Google play [here](#). After connecting the application to the watch, the time and date will be set automatically to the same as the setting on your phone.

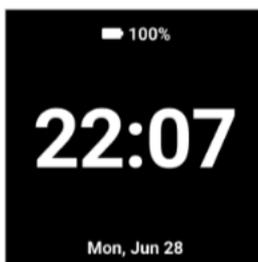
Watlaa One's communication protocol supports time & date update so in the future, also other applications will update the time & date automatically to Watlaa One.

Use short taps to select hour, minute, year, month, date, and then confirm with long tap in between each parameter. Remember to confirm with long tap after setting last parameter, otherwise selections will not be saved.

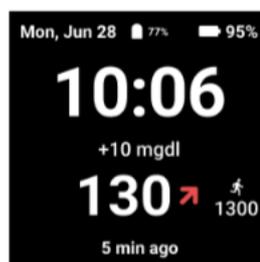
For now, maximum year is set to 2050, so if you toggle too far either don't confirm or tap more to come back around.

9 Watchface

We have currently implemented 3 different watchfaces. An illustration of them can be found below.



Watch type



Light type



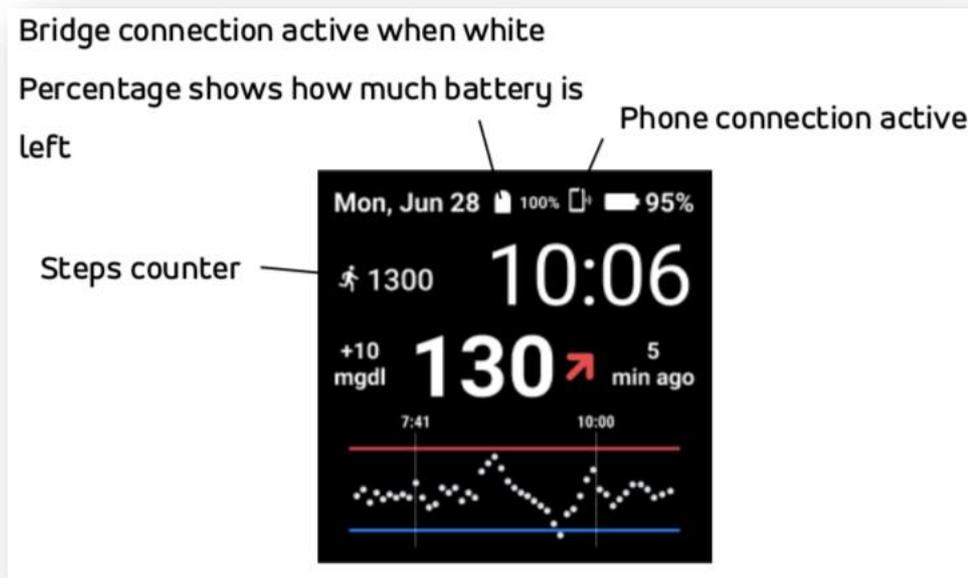
Full type



The symbols on the watchface is illustrated here:

The red line has the same value as High glucose alarm value. This can be modified in the “CGM” menu. The blue line is Low glucose alarm value.

10 Hard reset



Hard reset will erase the memory of the watch. Use this when changing sensor and you want to start fresh.

11 Bridge connection

When pressing this menu with long press the watch will search for CGM bridges it can connect to. At the moment we support miaomiao 1 and 2. Bubble, droplet, and blucon will be added later.

11.1 Reconnection

If the bluetooth connection is lost, the Watlaa One will try to reconnect for approximately 3 hours. When losing connection, the interval of reconnection attempts follows this schedule:



Reconnection attempt #	Cumulative seconds after disconnection	Cumulative minutes after disconnection	Interval between reconnection attempts (s)
1	10		10
2	40	0,5	30
3	100	1,5	60
4	160	2,5	60
5	220	3,5	60
6	340	5,5	120
7	640	10,5	300
8	940	15,5	300
9	1240	20,5	300
10	1840	30,5	600
11	2440	40,5	600
12	3640	60,5	1200
13	4840	80,5	1200
14	6040	100,5	1200
15	7240	120,5	1200
16	8440	140,5	1200
17	9640	160,5	1200
18	10840	180,5	1200

12 Alarms

Watlaa One will alarm in the form of vibrations. Alarm in the form of sound can be enabled via phone/tablet connection.

12.1 Alarm behaviour

- Short vibration → Low glucose alarm
- Long vibration → High glucose alarm
- Two short vibrations → bridge connection alarm

You can set high and low alarm value in the “CGM” menu. See chapter 6 for navigation.

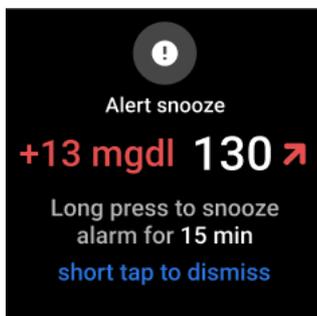


12.2 Bridge connection alarm

Bridge connection alarm interval has a default value of 10 minutes. This means that Watlaa One will vibrate 10 minutes after disconnection has occurred. You can change it to 5-30 minutes, in 5-minute intervals.

12.3 Low and high glucose alarm snooze

You can set separate low and high alarm snooze times. When you decide to snooze an alarm, it means that no alarms will be given during the snooze time. **Please use this function with care.** When your glucose goes out of range the following display



will be shown, giving you the option of snoozing or simply dismiss:

Low and high alarm snooze can be set between 5-120 minutes, in 5-minute intervals.

12.4 Alarm sound

Watlaa One does not have an in-built speaker. It is, however, possible to get alarm sound from a phone or tablet. We enabled a protocol that will give alarm notification to connected devices and therefore you can also hear the alarm in the form of sound. This can be useful during night.

13 Data storage

Data can be stored for up to 30 days in Watlaa One. This data can later be exported through Watlaa application and other applications.

