

eqWave FAQ's

The eqWave wearable device is used to help employees keep socially distanced at work with additional contact tracing should a COVID-19 outbreak occur. Below you will find a selection of frequently asked questions that may help you with the eqWave.

eqWave device

How many devices are sold as part of one kit?

There are 10 devices per box. Each device has a unique serial ID on the rear label and is supplied with an individual USB charging cable.

Where is the best place to wear the eqWave?

Although the eqWave device can be worn anywhere it can be clipped on the body or on a lanyard, we recommend that the hip is the best site for the device. This ensures the best wireless coverage. Please consider where you find the device comfortable to wear and you feel its vibration.

How long does the battery last?

The battery can last from 12 to 24 hours (3 shifts) in operation. This depends on the use case and number of infringements.

In standby the battery will last up to 10 days.

How do I charge the device?

You can charge the device using the supplied USB-C cable and a USB power supply like a phone charger or purchase one of the eqWave multi-chargers.

Can the device go into water?

It is not recommended that the device be immersed in water, but it does have an IP67 rating.



How do I switch the device on and off?

There is no on/off switch. The device automatically becomes active when removed from USB power.

If an eqWave is entirely motionless for more than 30 seconds it will enter a “snooze” mode which prevents alerts with devices which are not on a person’s body and preserves battery life. The device will wake automatically as soon as movement is sensed.

Snooze mode may also be initiated by a Bluetooth instruction or by triple shaking the device (on F/W Variants where triple shake is not used for muting alerts). Snooze entered by either BT or Shake will not wake with ordinary motion and will need to be woken using the triple shake function, issuing a Bluetooth command to wake or by connecting a USB power

There is a capability to place devices in deep sleep for transport. Devices in deep sleep will not wake until USB power is connected. Please [Contact support](#) if you need to use this function

Please see the table below:-

Device Snooze/Sleep initiated by	Device wakes with			
	Motion	Triple shake	Bluetooth	USB Power
Motionless Snooze	Y	Y	Y	Y
Triple Shake Snooze	N	Y	Y	Y
Bluetooth Snooze	N	Y	Y	Y
Bluetooth Sleep	N/A	N/A	N/A	Y

Will Bluetooth or Ultra Wide Band radio waves impact my other devices that also use Bluetooth?

No, there should be no interference in close proximity to other devices such as your phone.

How much does 1 device cost?

The devices are sold in kits of 10 and they start from £99 per device with excellent volume price breaks available.

What wireless technology does the device use to measure distance?

The devices use a combination of Bluetooth technology and Ultra Wide Band to give highly accurate distance measurements between devices.

What type of battery does the eqWave use?

The eqWave uses rechargeable a 3.7v lithium ion cell. The battery will last many hundreds of charge cycles and no attempt should be made to remove or replace it.

How long does it take to charge an eqWave?

It takes 70 minutes to charge fully. The device shows the charge levels with red, amber and green lights on the front of the device to give you an indication of when you should charge the device. These lights also indicate when the eqWave is fully re-charged.

What is the maximum number of devices 1 eqWave can alert with at the same time?

On the latest firmware the device can track and alert with 25 other devices within the defined range.

Does the eqWave need any infrastructure?

The device does not need any infrastructure. Simply remove from the packaging, charge, and go.

What do the LED's on the front of my eqWave device mean?

There are 3 LED lights on the eqWave device.

The top alert LED light illuminates when two or more devices are in close proximity of one another.

The battery LED uses a traffic light system with a green light indicating that the device is fully charged, amber to show that the device is partly charged and red indicates that you should re-charge the device soon.

The active Bluetooth connection light blinks briefly when eqWaves discover each other and is fully illuminated when the device is connected to a kiosk tablet.



How do I know which version of the eqWave device firmware I am on?

You will see the version of the firmware available for your devices in the admin area on the eqWave Kiosk application.

How do I update my eqWave device for the latest software features?

Use the Android Kiosk APP to scan the QR code on the back of the device and it will automatically update the device for you (if configured to do so by the system admin).

Additionally there is an admin tool which enables bulk firmware updates to be performed automatically on a list of devices.

Do I need to set the time on my eqWave device?

The Kiosk application will automatically update the time on the device when you scan the QR of the device. It's important to scan your device regularly and especially after it has lost its charge so that the eqWave clock is up-to-date and as a result, accurate timestamps are relayed to the web service for further data analysis.

I am seeing inconsistent alerting on my eqWave device. What is going wrong?

All of our testing has shown an accuracy level of up to 20cm's. We use UWB technology to measure the proximity between devices. While it is more accurate than other technologies, the presence of human bodies and metal items may have an impact on the measurements. Please contact support@equivital.com if this continues.

Can I adjust the alerts?

The alerts are designed to stand out from other background noise and visual elements. You can however adjust the alerts according to your needs. Alternative configurations can be enabled via the eqWave kiosk application. Please contact support@equivital.com for more information

Can I adjust the alert distance to more or less than 2 meters?

Yes, the device can be configured to alert at a distance which is different to 2m. Alternative configurations can be enabled via the eqWave kiosk application. Please contact support@equivital.com for more information

eqWave Kiosk application

The Kiosk application enables you to upload the data from the eqWave devices and automatically transmits the data to the eqWave web service.

How do I download the eqWave Kiosk app?

The Kiosk application is available as a free download from the Google Play store. Search for the eqWave in the Play Store or [click here to download the app](#).

On which Android devices can I use the Kiosk app?

The application will run on devices with Android 9 or 10 operating systems. We recommend a **Samsung Galaxy Tab A 10.1 tablet**.

Do you have a Kiosk app compatible with IOS?

Currently, the Kiosk application is only available on an Android device.

Does the eqWave device come with a Kiosk stand?

No, the Kiosk stand is available to buy. Please contact us to find out more on info@equivital.com.

How do I know I am on the latest version of the eqWave Kiosk app?

Ideally, you can set your Android device up to automatically update any applications. This will ensure that your application remains up to date. Alternatively, [visit the Google Play store on your Android device](#). If there is an update available, please install it onto your device. If there is no update available, you know you are on the right version.

How do I download data from my eqWave device using the Kiosk app?

Each device has a unique QR code on the back. Use your Kiosk app and scan the eqWave device QR code with the device camera and wait for the process to complete. Make sure that your Kiosk app is setup to send data to your account on <https://wave.equivital.net>. Further instructions can be found in the user guides or contact support@equivital.com.

I am using custom firmware; how do I load this to the eqWave Kiosk app?

Copy the supplied firmware zip file to the downloads area on your Android device and access the admin area on the eqWave app. Select the menu option: 'Upload firmware file' and select the zip file. You can verify that it has been successfully uploaded in the admin settings page at the bottom of the screen.

I keep seeing the following error message. What should I do?

Data server is not configured. Please contact your admin user.

You need to go to the admin settings and configure the website details so that the app can send data to the website.

Without this, the app will continue to download data and queue it until a connection can be made. Please note this data will only be queued for a maximum of 28 days, depending on configuration.

If you are sending data to the eqWave web service this is the end point address: <https://wave.equival.com>

I keep seeing a GATT error when I scan my devices.

Please can you retry. It may be because there are too many active Bluetooth devices in the vicinity. If you are still encountering problems, please contact support@equival.com.

I am being asked for a password to access the admin area of the Kiosk app. Where can I find this?

This password is the same as your Android device password. If you have not set one, you will need to. It ensures that your data is kept as securely as possible. Contact support@equival.com if you need help setting up your username and password.

I keep getting the following error message. What can I do?

The reason for this error message can include:

- Your device is not powered up. Please plug in your device to a power source and wait until the battery LED shows amber or green.
- There are too many eqWave devices in the vicinity. Please take the device and the tablet away from the remaining devices and try scan it again.



eqWave Kiosk application – Bulk Firmware Update

What is the Bulk Firmware Update (BFU) feature on the eqWave Android application?

This is a new eqWave Android app feature which enables an administrator to update a batch of eqWave devices to the latest firmware version. You will need to upload a list of the devices that are to be updated. Check that the version of firmware is the right one and then start. Ideally you should have all your eqWave devices within Bluetooth discovery range and on continuous charge when you start. If the number of eqWave devices you are updating is high then remember to plug the android tablet in too.

Do I need to be present while the firmware on my devices is being updated?

No it is not required that someone remains present during the firmware update process.

What format must I upload the list of devices in?

The list must be uploaded as a .txt file with a single serial number per line. If you do not have your eqWave device IDs recorded and would like a list of devices your organisation has procured, please contact support@equivital.com.

How will I know if a device has been updated correctly?

The application provides a real time list, and logged record, of all the devices that have been updated so far and those that have not yet been updated. The application will continue to try and update a device until the process is stopped by an administrator.

The application is displaying that 2 of my devices could not be updated. What is the reason for this?

There are many reasons that a device may not have been able to be updated:-

- a. The eqWave device is not within discovery distance – bring the device closer to the tablet
- b. The eqWave device needs to be charged – charge the device
- c. The eqWave device is in transport mode/sleep mode – plug it into USB and then remove, the app will automatically try again
- d. The eqWave device is on a version of firmware that cannot be updated to the latest version

There is an option to put devices to sleep with the BFU. What does this mean?

If you select this option on, then once your eqWave device's firmware has been updated it will be put into sleep mode (no radios on) so that it does not create interference while the rest of the devices are being updated. It is good practice to turn this option on but remember that to disable this mode the devices will need to be plugged into USB and removed again before use.

Is there a maximum number of eqWave devices that can be updated at any one time using the BFU?

Theoretically there is no maximum but we suggest that updating in batches of 50 is very reliable.

How long should it take for me to update 50 eqWave devices with the BFU?

Typically the firmware update will take around 2 minutes per device. Updating firmware is not a regular procedure as we aim not to make releases more frequently than once in 8 weeks.

Do I have to use the BFU to update firmware on my eqWave devices or is there any other way? I cannot easily bring my eqWave devices to a central location?

No, absolutely not. The BFU feature has been released to make it easier for administrators who manage devices centrally to do device updates. If you would like to continue to update firmware individually, when someone scans their device on Kiosk then you can keep this option enabled. As firmware updates are not frequent it will not add time to the scanning process, except during the update itself.

eqWave web service - <https://wave.equivital.net>

The eqWave web service is the website where you can securely access and download your contact tracing data that has been collected from the eqWave devices.

How many versions of the web service do you have?

There are two versions of the eqWave web service. eqWave which is included with your devices as a 12-month subscription and eqWave+ which is a premium subscription service.

What additional capabilities does the eqWave+ subscription provide me?

The eqWave+ web subscription is a licensable service which provides contact tracing capability for an organisation. This premium package makes it easy for you to identify who has been in proximity of an employee who has received a positive COVID-19 test result.

How secure is my data on the eqWave web service?

No personal data is collected on the device. Each device has a unique QR code and the data is correlated with the individual device code and not a personal profile. If a positive COVID-19 case occurs and where contact tracing is then applicable, operational staff would need to pair the devices used by employees in a separate file outside of the eqWave solution and analyse the data accordingly.

Is the eqWave web service GDPR compliant?

Yes, both the eqWave and eqWave+ web services are fully GDPR compliant and no personal data is stored.

How do I receive my username and password for the web service?

You should receive an email when you set up your service with your username and password. If this has not arrived, please contact support@equivital.com for assistance.

I would like a different report that is on the eqWave web service? Can you do this?

Yes, simply speak to your Equivital account manager or email the support team at support@equivital.com.

Is the eqWave web service compatible with Android and IOS devices?

Because the eqWave web service is accessed via an internet browser it may be used on most operating systems

How do I add a new user?

Please login to the web service with your username and password. Go to the user tab where you will be able to create a new user.

How do I allocate devices to people?

There is no personal data stored on the web service or devices. Each device has a unique code on the back. External to the eqWave system, you'll need to keep a record of which device is being used by each person so that you can accurately associate data from the device to the applicable wearer should you need to conduct in-depth analysis.