



Kiwi Software Guide

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Kiwi and Skyhawk CE™ App Settings

Changing Kiwi Device Settings

Various device settings can be set using the Skyhawk CE™ App. These deal with sensor types, sensitivity, battery saving/transmission frequency settings, and pause settings. It is important to understand that these settings do not take place immediately; settings download to the Kiwi after a network connection occurs, which is always initiated by the Kiwi's hardware.

Note: App changes do not initiate a Kiwi communication.

Device settings that have been changed in the App but have not been downloaded to the Kiwi hardware are highlighted in Blue. The pending Blue highlighted change can be deleted or changed in the app if it has not yet been downloaded to the device through a connection process.

Example 1: Within the Skyhawk CE™ App, the Kiwi sensitivity setting is set to low. Sensitivity may be changed to a higher level, but this change will not take effect until the next time that the Kiwi connects to the network.

Example 2: Using the Skyhawk CE™ App, Kiwi notifications are paused.. The "Pause On" setting will only take effect the next time the Kiwi connects to the network. If the Kiwi connects due to a sensor activation, a communication cycle will still occur, but notifications will not be sent. During this notification/communication, the Kiwi will accept the "Pause On" setting and will not send additional sensor-activated transmissions for the length of the pause cycle.

Device setting changes that are made on the app will also be downloaded to the Kiwi hardware when a behind-the-scenes heartbeat communication (discussed below) takes place.

[Sleep, Heartbeat, and other Power Savings Features, and How to Make Your Battery Last](#)
The Kiwi is made to last while providing ultra-reliable monitoring solutions, even in remote locations where monitoring was previously not economical, reliable, or easily setup. The long battery life is made possible by the proprietary integration of ultra-low power circuitry, software algorithms, and new cellular based IoT

connection technology. You have control over software features enabling you to use your device for years at a time on one set of batteries with no need to recharge. This can be enhanced by limiting unnecessary connections to the network. Cellular connections are still relatively energy intensive compared to standby operations and sensor monitoring, but by limiting frequent and unnecessary cellular network connections, you can monitor remote locations for an extended period of time, without the need for a local power source.

Most user controllable power settings are available under the “Alert Frequency Setting” tile of the app. The first setting is “Transmission Interval”. The default is 1 minute and can be increased to 10 minutes. The second setting is “Back-off Transmission Interval” and has two settings. The first is the number of alerts, or the “count” that occur in a 24-hour period that will activate the back-off, and the second is the new “Transmission Interval” that becomes effective after the set number of alerts occur. This “count” resets itself after 24 hours, until the alert counter is manually cleared in the app, or until the unit is reset or power cycled.

The “Heartbeat” setting has its own app tile. The heartbeat is a timed automatic check-in that can be set from once every 6 hours to up to 7 days. It ensures that the device connects to the network at least once during that time period, unless a trigger is received which resets the timer. A solid heart symbol in the tile indicates that everything is functioning well, and a broken heart symbol signifies either a potential problem or that the Kiwi is turned off.

The default heartbeat of the Kiwi is once per day, but can be set to every six hours or 4x per day. If the heartbeat is set at 4x perday or 1500x per year, this can have a significant effect on the Kiwi’s battery life, which will potentially be able to support over 2000 cellular connections under normal operating conditions. Extended heartbeat notification of up to once every 7 days will potentially be able to support an extended battery life of up to 3 years.

LED Indicators

Two paired GREEN blinks indicate that a communication cycle has been activated. After about 20 seconds, this should be followed by a **solid green** LED, indicating that the transmission was successful. **Solid red** indicates the transmission was not successful. The unit will make various attempts to connect again to complete the notification.

Two paired RED blinks indicate that a transmission has been initiated, but the battery condition is low. If this is followed by **solid green**, the transmission was successful and a low battery alert will be sent. **Solid red** indicates the transmission was not successful.

Brief GREEN flash every 5 seconds. The Kiwi is in active status and last communication attempt was successful.

Brief RED flash every 5 seconds. Active status but last communication attempt failed.

Brief BLUE flash every 5 seconds. The unit has been paused and put in sleep mode for a period of time defined in the App.

Continuous BLUE flashing lasting about 15 minutes. The device is undergoing a firmware update. Please be patient while this rare event takes place. The unit will restart and be ready to use as if it has been reset.

Some more details on device status tiles

Pause timer: Stop your device from sending notifications, from 1 minute to 24 hours.

Reed Switch: Enables and disables the Kiwi internal reed switch which works in conjunction with an external magnet.

Last Active: Highlights the last time the device was active.

Device Log: Displays the 30-day history of device activations.

Alert Limiter: We suggest that you become familiar with the features and settings clearly described in the options available by selecting this tile. The purpose of these options is to stop repeated nuisance notifications and helps to extend the battery life of the device by avoiding unnecessary network communication cycles.

Sensitivity: Allows the sensitivity of the device's internal accelerometer to be set on a scale of 1 to 10, with 10 being the most sensitive. The default setting is 10. This setting can often be reduced to reduce false alarm notifications.

Heartbeat: The Kiwi does a check-in background connection, without any notifications being sent to monitor its health. A solid heart symbol indicates good health. The next scheduled heartbeat time is displayed on the tile. A broken heart symbol indicates a potential problem. The last scheduled heartbeat did not occur. This is normal if the device has been powered off. The heartbeat tile displays the approximate time of the next scheduled heartbeat.

Power Status: The Kiwi device can only be powered down using the button on the Kiwi itself. The power status indicator reflects the status of the Kiwi that it reported during its last communication cycle.

Reed Switch Functionality (Optional)

The reed switch is an optional magnetic-based sensor that can be used in place of (or with) the integrated motion detection system inside the Kiwi.

To enable, first tap the Reed Switch tile in the Skyhawk CE™ App. Once the tile is highlighted, tap on the Sensitivity tile next. In the Sensitivity tile, ensure that the “Activate” option is unchecked. The Reed Switch is now functionally ready.

Note: the “Activate” checkbox is only visible in the Settings tile when the Reed Switch tile is activated.

Location Screen

The location screen allows the Kiwi’s location to be marked on a map. This can only be done when the Kiwi is physically deployed. During deployment, select the “Mark Current Location” tab, and the GPS coordinates from your mobile device will be used to locate the Kiwi on a map.

Settings Screen

The settings screen enables the setup of text, e-mail and in-app alerts. It is very important that at least one alert type is enabled. Various rules prevent us from enabling any notifications by default.

This screen also enables a name and description (or location) to be added, along with a picture of where the device is deployed. Swipe left to remove various entries.

Coverage and Connection Information

Coverage Area

The KIWI uses a special radio frequency and communication protocol that offers enhanced signal coverage. Almost the entire populated area of the US is covered. It is suggested that whenever a device is deployed to a new location, the connectivity in that area should be tested by activating a sensor, typically by shaking the device or activating the reed switch. The device should flash green twice followed by a solid green light in about 20 seconds.

Any in-App, email or text notifications subscribed to in the App should also be received. There are no distance limitations between you and the device. Once the device transmits to the local cell tower the notification is fed through a secure internet path. You can be halfway around the world with your mobile phone and still get notifications as long as the KIWI is in the Verizon LTE network coverage area.

Currently there are no roaming agreements in place for this new technology and it only works in the Verizon coverage area, widely considered the most comprehensive coverage in the US. Non-US carrier coverage areas will be announced in the upcoming months.

Special Communications Protocol

Unlike a conventional cellular device, such as a cell phone, that can be reached on demand, this new cellular technology does not permit the Kiwi to be “called into” on demand. The receiver in the Kiwi is normally turned off. This, along with Kiwi’s proprietary ultra-low power circuitry and software, facilitates the Kiwi’s long battery life. The Kiwi’s receiver does turn on and listens for new instructions after the Kiwi itself initiates a connection to the network through a sensor-based activation, a reset action, a power on cycle, or a heartbeat communication that will be discussed later.