



STRIKESMART™ PLUS



USER GUIDE

STRIKESMART™ PLUS CONTROLLER APP & CONTROL PANEL

This manual replaces all editions with an earlier date.

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Introduction

The StrikeSmart™ PLUS system is a next generation control system offered as an optional control feature to our current spreader controllers. StrikeSmart™ Plus boasts an easy-to-use interface with a 8.7" screen, allowing operators of all levels to quickly grasp its functionality.

Hilltip's HTrack™ tracking and control system is the heart of our innovative system in our spreaders & sprayers, designed to provide you with real-time information and control over your spreader fleet.



Main menu



Main menu

Spreading mode

In the spreading mode view you can control your spreader.

Spreading liquid

In the spreading mode view you can control your spreader or sprayer.

HTrack™

This view lets you enable the optional HTrack™ service.

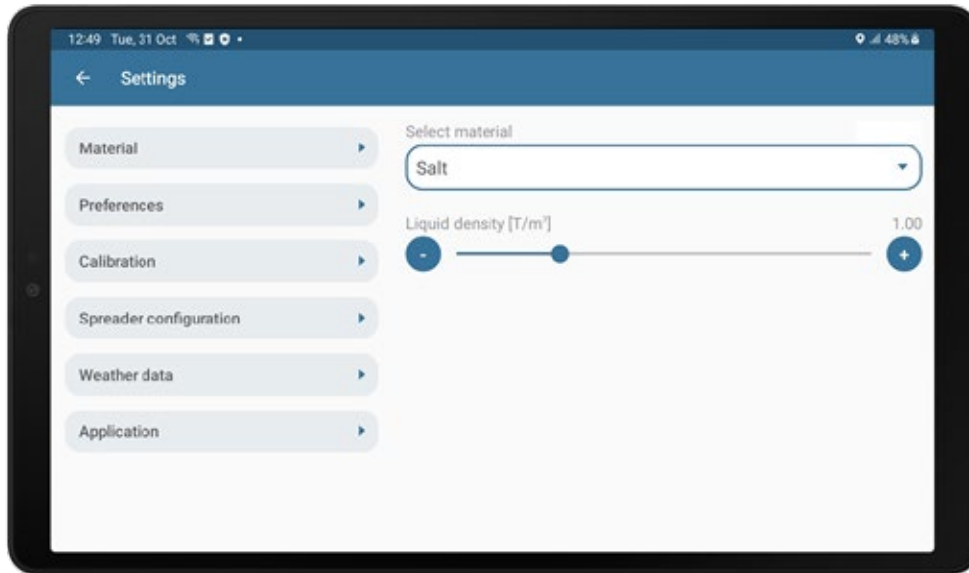
Settings

This menu lets you adjust the settings according to your own spreader, so that you can get an optimized spreading session. Read more in the following sections.

Information

This view shows you information about currently connected device, error codes and information about the application. You can rename your spreaders, or if the HTrack™ is enabled, download the names from the server, to make it easier to identify them. The error code list shows errors related to last connected device, if any detected.

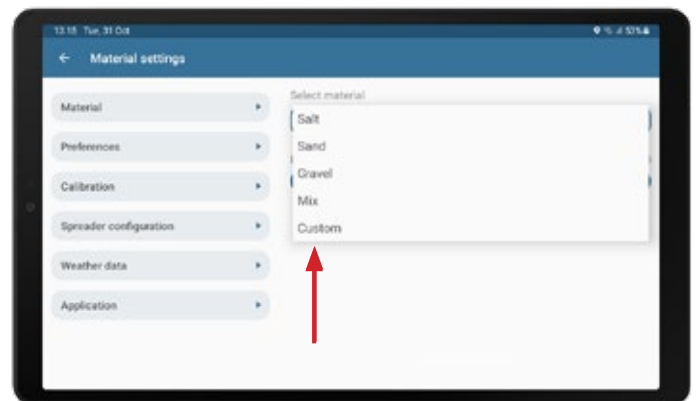
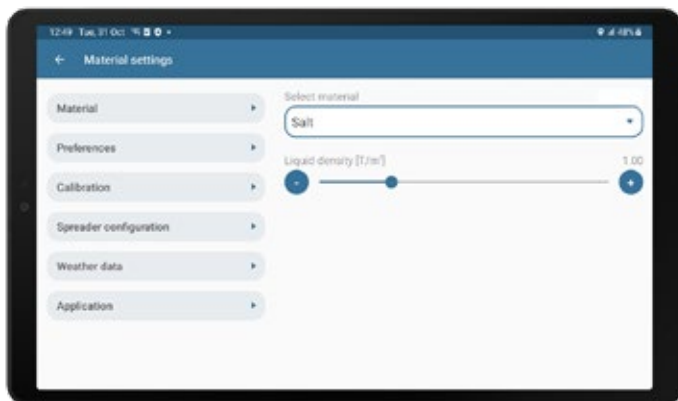
Settings menu



Settings menu

Material

Activate the material selection by clicking the selection box. Click the desired material (Salt, Sand, Gravel, Mix and Custom) to set the spreading material. Press the plus or minus buttons, or drag the round selector on the seek bar to change the liquid density.

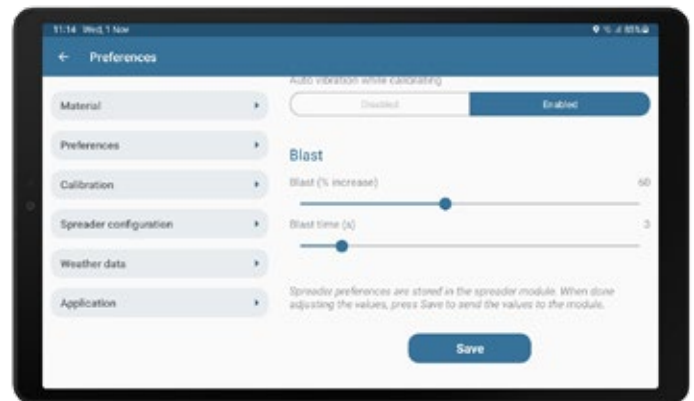
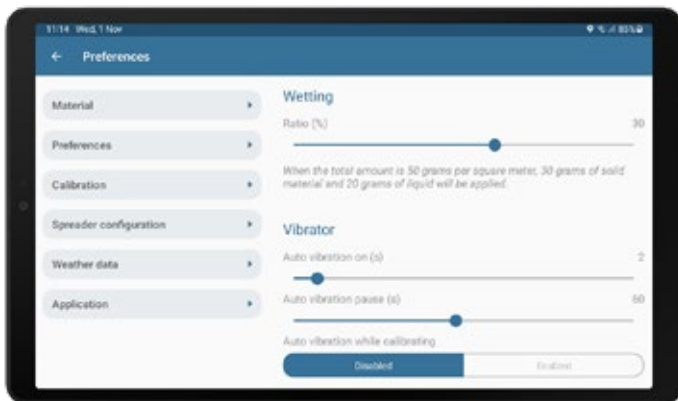


Settings → Material

Preferences

- **Wetting**
Adjust the wetting ratio by dragging the round selector in the seek bar.
- **Vibrator**
 - *Auto vibration on (s)* - Insert how long the vibrator should run.
 - *Auto vibration pause (s)* - Insert how long the vibrator should be paused.
 - *Auto vibration while calibrating* - Enable this setting to use the vibrator automatically during calibration. Adjust the vibrator settings by dragging the round selector on the seek bar.
- **Blast**
 - *Blast (% increase)* - increases the auger speed/intensity (30 to 100 % of current amount).
 - *Blast Time (s)* - sets the blast time in seconds.

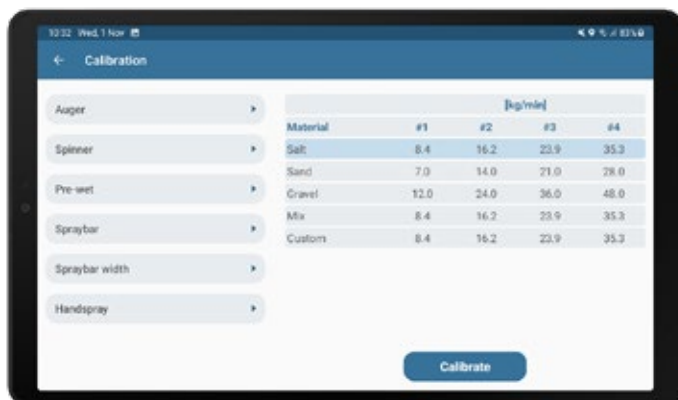
Adjust these values by dragging the round selector left or right in the seek bar. Adjust the blast settings by dragging the round selector in the seek bar. Spreader preferences are stored in the spreader module. Press Save to send the values.



Settings → Preferences

Calibration

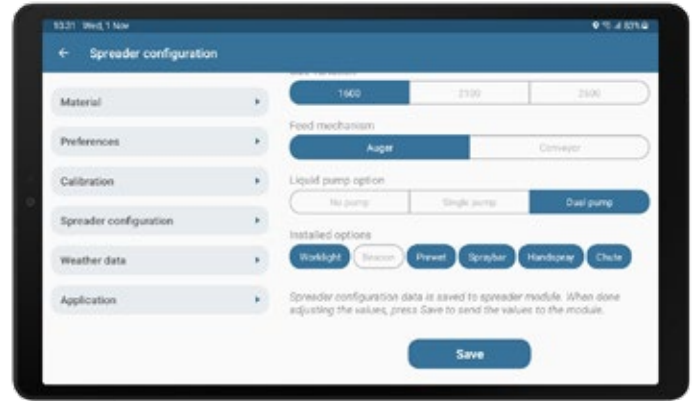
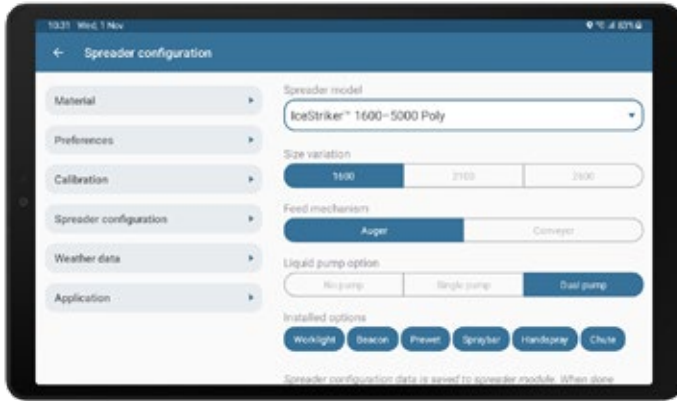
Select the unit you want to calibrate (Auger, Spinner, Pre-wet, Spraybar, Spraybar width or Handspray). Choose a material by clicking a row in the calibration table and click Calibrate. If the HTrack™ is enabled, depending on your settings, you may have to enter a PIN code before starting the calibration. Follow the instructions in the app to calibrate.



Settings → Calibration

Spreader configuration

In spreader configuration view you can select spreader model by clicking the selection box. Select spreader size, feed mechanism, liquid pump options and accessories your spreader is equipped with by pressing the buttons. Press Save to send the values to the spreader module.

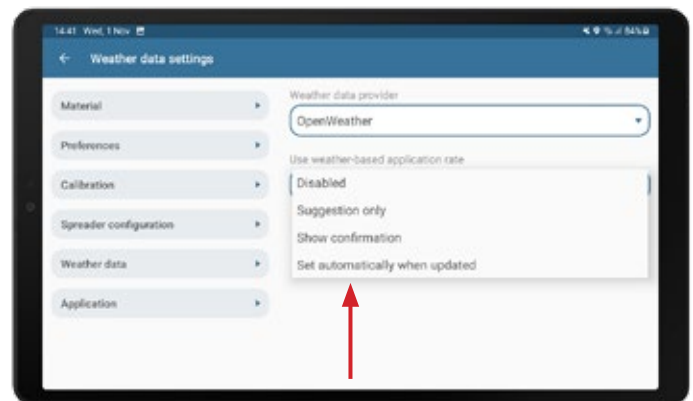
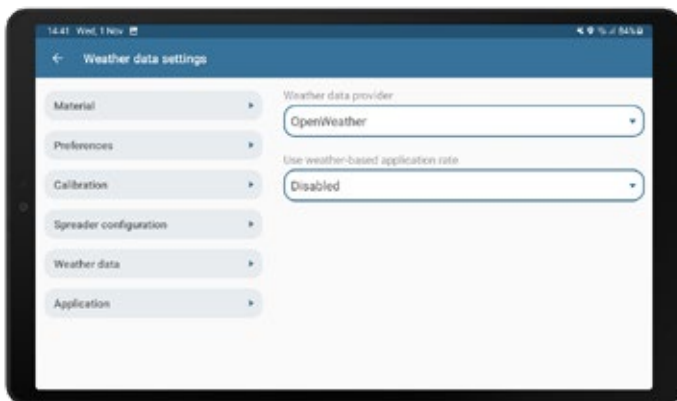


Settings → **Spreader configuration**

Weather data

In the weather data view, you can select a weather data provider and determine how you want to use weather-based application rates.

- *Disabled* - Weather-based application rates are not in use
- *Suggestion only* - View suggested application rate
- *Show confirmation* - Confirm to set the suggested weather-based application rate
- *Set automatically when updated* - Automatically sets the suggested weather-based application rate

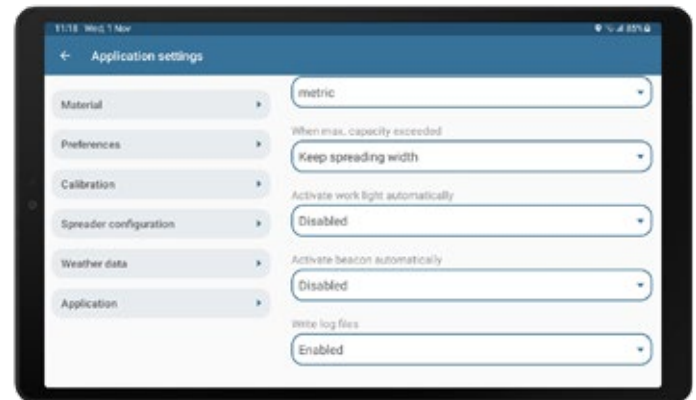
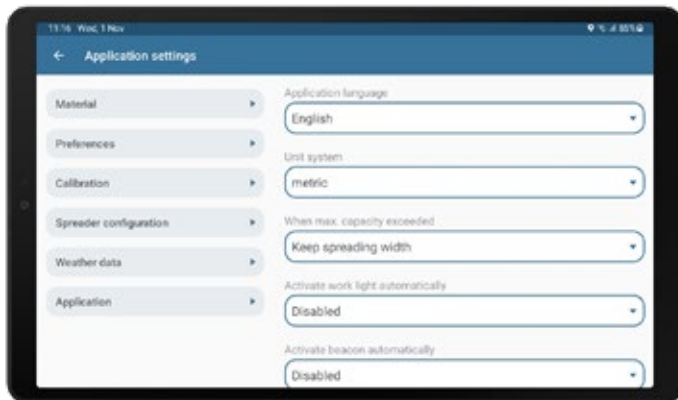


Settings → **Weather data**

Application

In application settings view you can choose following settings by clicking the selection boxes.

- Application language
- Unit system (Metric or US units)
- Select how the app handles the spreading when maximum capacity is exceeded in automatic spreading mode. Option “Keep spreading quantity” steps down the width to keep the selected spreading quantity, while option “Keep spreading width” reduces the material quantity to keep the selected spreading width.
- Enable or disable automatic work light
- Enable or disable automatic beacon light
- Enable or disable the application to write log files



Settings → **Application**

Spreading mode



Settings menu

Before starting your basic spreading session, select automatic or manual spreading mode by clicking the selection button. Automatic mode will adjust the amount of spreading material (g/m^2 or $\text{lb}/1000 \text{ sq ft}$) according to your vehicle speed.

1. **Weather data** - Shows road temperature, air temperature, air humidity, weather forecast, and suggested weather-based application rate.
2. **Contract selection area** - When HTrack™ is enabled, a customer and contract selection area is displayed.
3. **Information area** - Shows selected spreading material, current time and velocity.
4. **Buttons** - Activate/inactivate a function by pushing the button on the tab or use the buttons on the control panel. A grey symbol means that the function is inactive. An activated function is represented by a colored symbol. See page 12.
5. **Adjust spreading width** by scrolling the knob in the upper right corner on the control panel or clicking the plus and minus buttons on the tab screen.
6. **Adjust spreading symmetry** by clicking the plus and minus buttons or dragging the round selector in the seek bar.
7. **Shows battery voltage, location accuracy and direction.**
8. **Adjust the amount of spreading material** by scrolling the knob in the lower right corner on the control panel or by clicking the plus and minus buttons on the tab screen

Control panel

When the StrikeSmart™ plus control panel is connected to the tablet, you use the buttons on the panel to control the spreader.

Power and connection to Android device

Red = Power on, no connection
Green = Power on and connected

This button will activate/inactivate the optional **LED-work light and Beacon light**

Pre-wet (not in use for IceStriker™ 120-300)

Press this button to **stop/start spreading**

Vibrator

A: Press this button to **automatically make the unit vibrate according to a certain time interval**. Go to: Main menu → Settings → Preferences → Vibrator, to set the time interval.

M: Press this button to **vibrate manually**.

Connection to spreader module

Spinner (Green light indicates spinner is rotating)

Spinner/Asymmetry

Press the knob to select between width and asymmetry adjustment

Spreading mode

Auger/Conveyor Speed and Mode Selection

Press the button to change the spreading mode (Works only in standalone panel mode)

Auger/Conveyor (Green light when rotating)

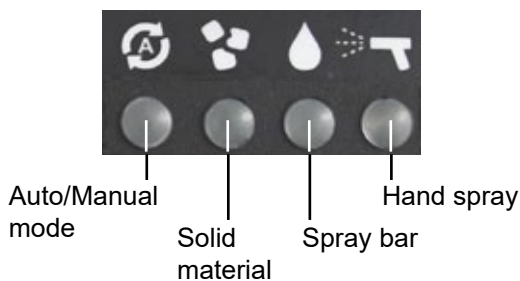
Spreading mode and Blast

A: Press this button to change between **Manual and Automatic** spreading mode
Blast: **Manual blast (On timer Off)**

Buzzer



Spreading modes:



Error codes

In case of an error the LEDs starts blinking.

Error / Warning	LED / Button Indication
Auger jammed	Start/Stop button blinking rapidly
Spinner over current	Spinner button blinking rapidly
Liquid overpressure in spray bar mode	Start/Stop and Liquid LED blinking rapidly
Liquid overpressure in pre-wet mode	Start/stop and pre-wet button blinking rapidly
Liquid level low in spray bar mode	Liquid LED blinking slowly
Liquid level low in pre-wet mode	Pre-wet button blinking slowly
Spreader empty (EOM)	Auger LED blinking slowly

Standalone panel mode (operation without tablet)

If the tablet is missing or broken, it is possible to operate the spreader directly from the panel without using the tablet.

- When operating the panel without an Android tablet, the system will use predefined values. These values can be adjusted when the tablet is connected. Pressing the “Save” button will permanently store the updated values in the panel (see image 1 and 2).



Image 1

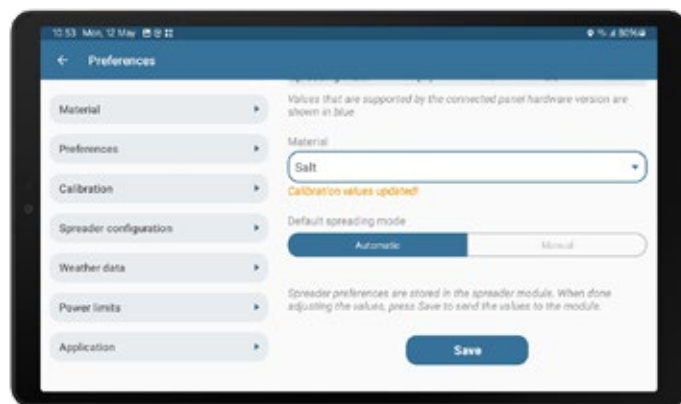


Image 2

- The “Min” and “Max” values define the range within which parameters can be adjusted by turning the rotary knob on the panel. Both the spinner and auger/conveyor speeds can be adjusted in 8 steps using this knob.
- For older panel versions without LEDs and a buzzer, the system will rely on the default values.
- The spreading material must be selected while the panel is connected to the tablet.
- When using the spray bar, all nozzles are activated simultaneously. Individual nozzle selection is not supported. Note: Spray bar mode is not yet available for all spreader models.
- It is not possible to adjust the chute asymmetry in standalone panel mode. The chute will be centred.
- No HTrack™ logging data is created in standalone panel mode.

Buttons



This button will activate the optional LED-work light



This button will activate the optional beacon light



This function automatically makes the unit vibrate according to a certain time interval. Go to: Settings → Preferences → Vibrator, to set the time interval

MANUAL | AUTOMATIC

Press this button to change between manual and automatic spreading mode



Press this button to temporarily increase the spreading amount to max, or “blast”. Adjust blast settings under: Settings → Preferences → Blast



Activate the vibrator while pushing and holding this button



Press this button to activate the optional pre-wet function



Press this button to stop or start spreading



Press this button to activate handspray



Press this button to activate the electrical end nozzles (left)



Press this button to activate the electrical end nozzles (right)

Update the control panel to the latest firmware

1. Make sure you have internet connection on the StrikeSmart™ adroid device
2. Switch off the panel and shut down the app
3. Press and hold buttons for light and prewet on the panel while switching on the panel
4. Open up the StrikeSmart™ app
5. A pop-up asking to allow StrikeSmart™ to open the app is displayed. Select “OK”
6. The “Control panel configuration” pop-up is displayed (image 1)
7. Press “Install latest firmware” (image 1)
8. Press “Start install” (image 2) and wait until install is done (image 3)
9. Press “Back” (image 4) and then “Exit”
10. Done

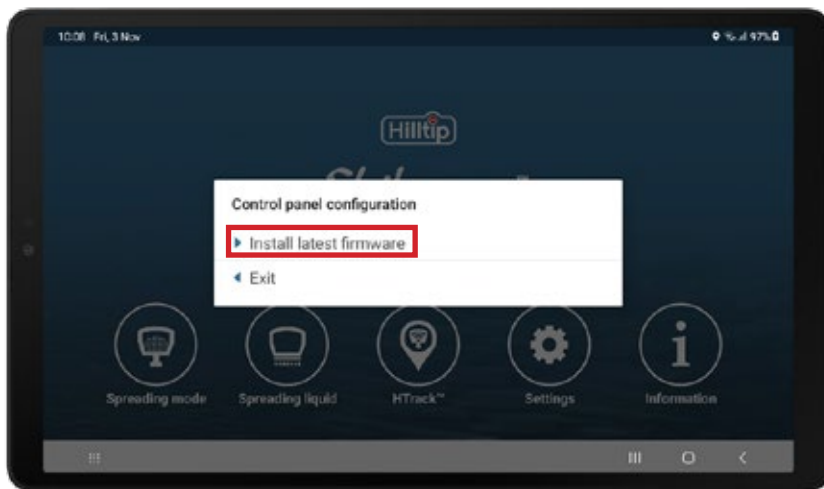


Image 1



Image 2

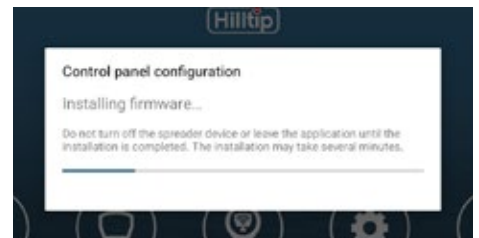


Image 3



Image 4

Spreader module firmware installation

1. Make sure you have internet connection on the StrikeSmart™ android device.
2. Open StrikeSmart™ app
3. Go to **Information view** (image 1)
4. Select **"Firmware installation"** (image 2)
5. You will see a pop-up with info about the installed version and the available version.
6. Press **"Start installing"**
7. A progress bar is shown. Wait until installation is done.
8. The message **"Firmware installed"** is displayed when installation is done (image 3). Press **Close**.
9. Done



Image 1

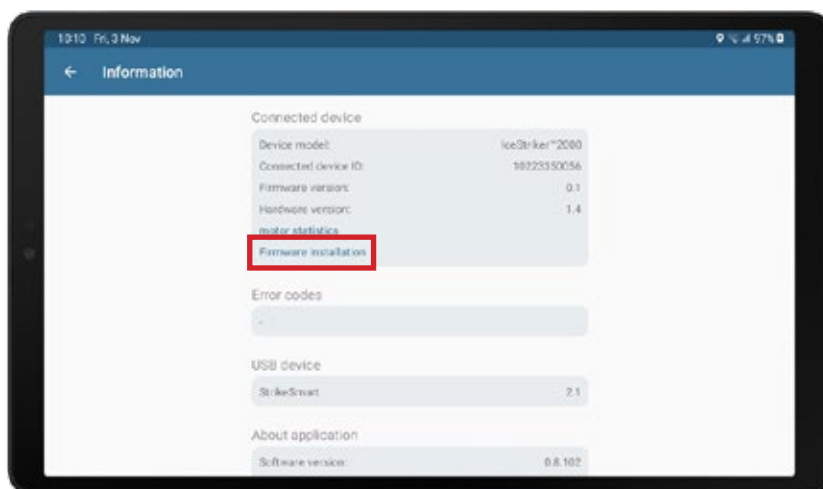


Image 2

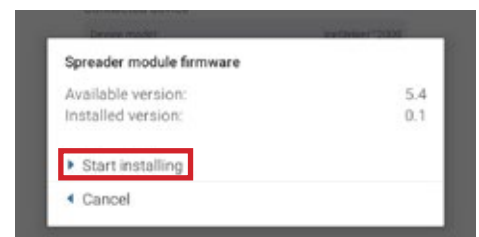


Image 2

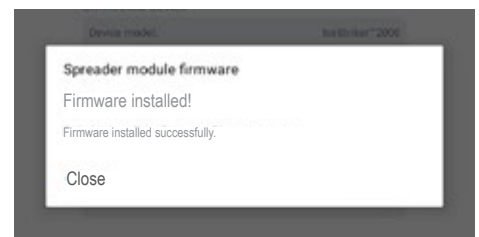


Image 3

Update to latest app version

Go to Information view and click “**check for updates**” to see if you have the latest version.

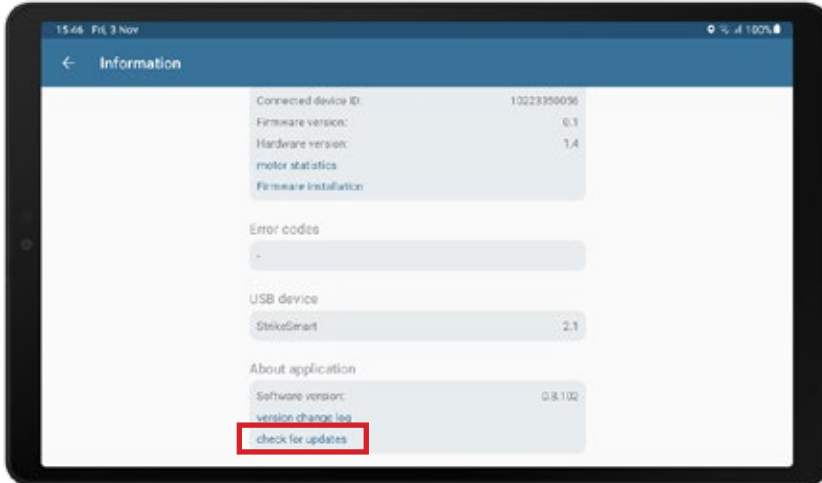


Image 1

Steps to update to the latest version:

1. If an important update is available, the app will show “**New app version available**” (Image 2). Click “**Download**”.
2. You may need to allow the installation (Image 3 & Image 4). Click “**Install**” on the application installer window (Image 5).

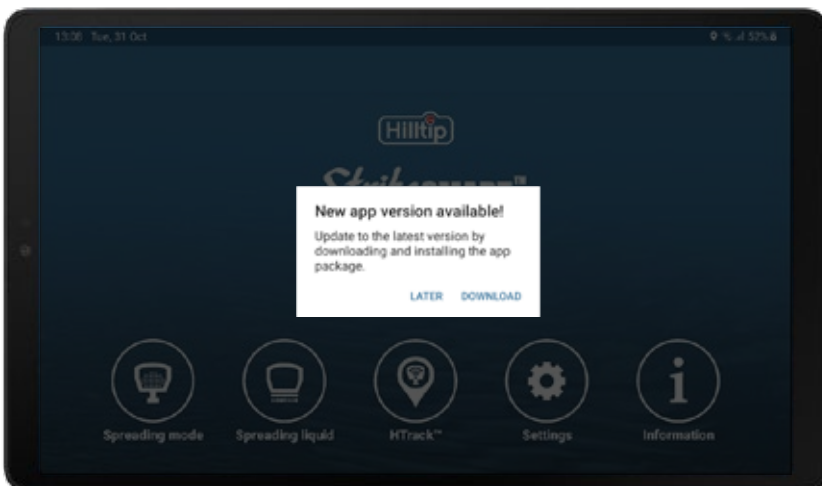


Image 2

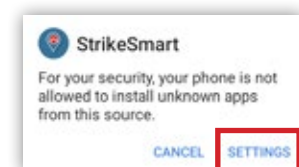


image 3

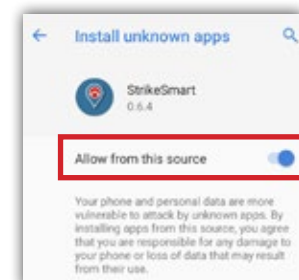


image 4

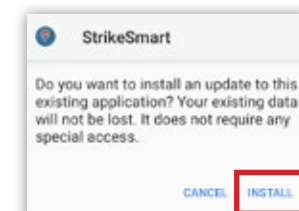


image 5



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Construction, specifications and other details are subject to change without notice.