SMART BIN LOCKS

ELECTRONIC LOCK Instruction Manual

Product Description

Lockwaste is an electronic lock made for garbage bins. Its main goal is to keep the lid closed when you don't want it open, for instance, if the bin falls, if someone tries to open it without permission or if animals try to get in.

The lock is designed to keep out water and dirt with seals around the edges and on the battery cover. It's also built to stop rubbish from getting stuck in the locking mechanism.

You can open the bin in four ways and you can set it up to work how you want it. With the app, it can automatically detect when it's time for garbage collection, using a beacon that comes with it, or with a master for beacon for companies.

For different types of bins, there are different ways to open it based on how stable they are and how fast the collections happen. It's suggested to use a softer mode for larger, heavier bins and a mode with adjustable sensitivity for smaller bins.

With all its modes and settings, LockWaste can handle almost any situation you might run into.

Default Settings

Operating mode in reverse opening enable with low sensitivity. Beacon pre-syncronized. When synchronized with the app the default configuration is overwritten.

Usage

Once the product is installed, by default the lock comes pre-configured with the mode for 2-wheel containers - *pickup detection mode with reverse opening enabled.*

To use the different modes, change the settings using either the app or the configuration button found in the battery compartment (See operating modes).

Change Modes using the Button

Use short presses. Each press will change the mode and the lock will notify us by beeping and illuminating the LED. The correspondence between beeps and modes are as follows:

- **1 Beep** Pickup detection with Soft algorithm opening mode *(reverse opening active)*
- **2 Beeps** Pickup detection with reverse opening enabled mode
- **3 Beeps** Pickup detection without reverse opening enabled mode
- **4 Beeps** Pickup detection disabled

To change the sensitivity in Pickup detention with / without reverse opening modes, press and hold the button for more than 1 second, less than 3 seconds.

The correspondence between beeps and sensitivity are as follows:

- **1 Beep** Lowest sensitivity
- **2 Beeps** Low sensitivity
- **3 Beeps** Medium sensitivity
- **4 Beeps** High sensitivity
- **5 Beeps** Highest sensitivity

Change Modes using the App

To sync the LockWaste with the app or other beacon, follow these steps:

1. Put the lock in sync mode by pressing and holding the button for at least 3 seconds. You'll hear the beep to confirm it's in sync mode.
2. Open the app and select "add new lock." Follow the prompts until the new lock appears on the main screen. The lock will make a sound to confirm it's synchronized.
3. To sync a beacon, follow the same procedure as syncing the lock. Press and hold both buttons on the beacon until the LED lights start flashing. They will automatically sync and you'll hear a beep from the lock, while the beacon lights are turned off.

Operating Modes & Functionality

1 BEEP Pickup detection with soft algorithm opening mode *(reverse opening active)*

The default mode for 4-wheel bins is the pickup detection with reverse opening enabled mode. This mode utilizes a highly sensitive lift detection algorithm, specifically tailored for slow lifts typical in 4-wheeled containers.

After detecting a lifting pattern, for safety, the lid won't open until the bin reaches a certain angle of tilt. Therefore. It's not advised for use in 2-wheeled containers with fast collections.

2 BEEPS Pickup detection with reverse opening mode

This mode is used by default in 2-wheel bins. This mode has a pickup detection algorithm that is powered by a sensitivity that can be modified.

There are 5 sensitivities to adapt to each of the collections depending on the place and the company. Normally with a low sensitivity all elevations would be detected. If a lower sensitivity is selected, it is possible that the lock may open on occasions when it should not, so if there are unwanted openings and the sensitivity can be increased, it is advisable to do so.

In this mode, opening is also enable when the container is in an inverted position to ensure that is the algorithm fails, the bin can still be opened without problems.

3 BEEPS Pickup detection without reverse opening enabled mode

This mode is the same as the previous one but with the reverse opening option disabled.

4 BEEPS Pickup detection disabled

In this mode the detection algorithm is disabled. Only if there is a synchronized app or beacon can the lock be opened. It is specially designed for bins where extra security is required and only authorized users can access the bin manually.

Maintenance & Cleaning

The lock is sealed. Requiring no internal cleaning. Regularly check for debris around the closure area.

Troubleshooting

- For Sync issues. Try again or reset by removing and replacing the batteries.
- Replace batteries upon low battery alert. Use physical key if necessary.

Beacon Configuration & Use

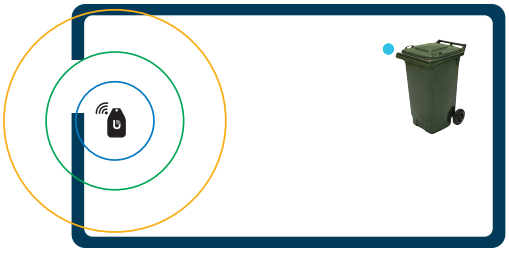
The beacon is designed to make opening and closing easier.

To use it, just place it where you want the checkpoint. When you pass by with the bin, the lock will switch between open and closed states. If you want to sync it with another lock, with the beacon and the lock close together, first press both buttons on the beacon simultaneously until both LEDs flash at the same time. Then, on the lock you want to sync, press and hold the button until you hear two long beeps. Release the button, and both devices will sync automatically.

To adjust the range of the Beacon

- Press the right button to increase the range *(right LED will light up)*, allowing the lock to change state from further away.
- Press the left button to decrease the range *(left LED will light up)*, limiting the distance at which the lock reacts to the beacon.

Example Ranges for Toggle Zones



NFC Configuration and Use

To pair a card with a lock, press and hold the button on the lock until you hear three long beeps. Once done, release the button and bring the tag you want to pair close to the lock. A confirmation beep will sound, tag is now authorized and the lock will open during 15 seconds. If desired, you also can pair additional tags with the same lock to distribute them to different users and also, the same tag could be paired with as many locks as needed, allowing to open multiple locks with only one tag.

Warnings & Precautions

- Use caution when drilling and inserting screws during installation.
- Wear gloves and protective glasses during installation.
- Avoid entrapment inside the container when the lid closes.
- The lock is waterproof, but the beacon is not. Avoid getting it wet