

TERRARIUM LOGIC

Terrarium Logic Owner Guide

Setting up, everyday care, alerts, sharing, and how your animal and your data are protected

App and backend 1.1.0 build 162 | ESP firmware 2026.10.26.1 | October 26, 2026

Welcome. This guide walks you through setting up Terrarium Logic, using the app day to day, and what to expect when something needs your attention. The last chapters explain, in plain terms, how the system keeps your enclosure safe and your information private.

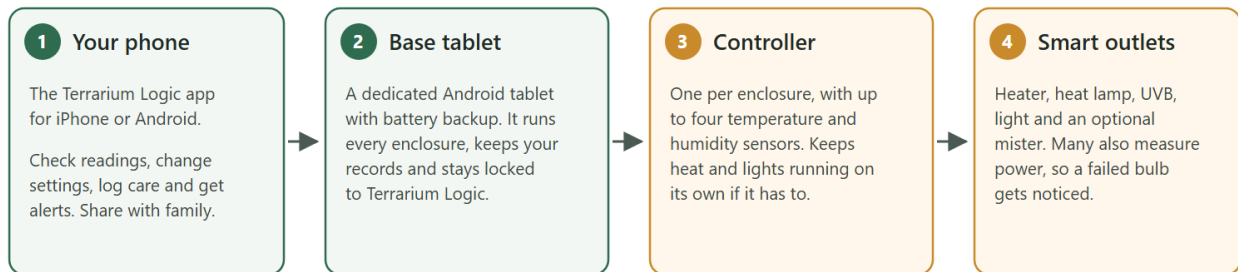
This revision documents build 162. Screenshots illustrate the surrounding workflows; exact labels and layout can vary by device, theme and permissions. The website demo uses fictional sensor data. No real access codes are provided.

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1. Meet your system

Terrarium Logic watches your enclosure around the clock, runs the heat and lights on the schedule you choose, keeps a care log for each animal, and lets you know when something needs attention. It is made of four parts that work together:



The four parts of a Terrarium Logic system.

Part	What it does for you
The app	Your window into the enclosure, on iPhone or Android. Everyone you share with gets their own access.
Base tablet	The heart of the system. It runs all of your enclosures, stores every reading and record, and sends alerts. It has a built-in battery, restarts on its own after a power cut, and is locked to Terrarium Logic so it can't be changed by accident.
Enclosure controller	One small controller per enclosure. It receives wireless sensor readings and switches the outlets. If it ever loses touch with the base tablet, it carries on by itself using your saved settings.
Smart outlets and wireless sensors	Up to four wireless Bluetooth sensors per enclosure measure temperature and humidity in different zones. Smart outlets switch the heater, heat lamp, UVB, light and an optional mister, and many also measure power use.

What works without the internet

Heating, lighting, humidity control, the care log, history and the in-app alarm all work on your home Wi-Fi with no internet connection. The internet adds:

- using the app away from home;
- alerts when the app is closed or you are away;
- following the weather of a real location;
- software updates.

Your plan determines which internet features are included; see terrariumlogic.com for details.

2. Getting set up

2.1 Connect the base tablet

Plug in the base tablet and switch it on. It starts straight into Terrarium Logic. Then open the Terrarium Logic app on your phone and add the base:

- Bluetooth is the primary setup option. On the new phone, search for nearby bases and select the intended base with an open sharing window. Joining completes over an encrypted Bluetooth link without typing a pairing code or scanning a QR. An unowned base can advertise for initial setup; after ownership is established, an owner must explicitly open sharing. If initial setup needs Wi-Fi details, supply them through the setup flow.
- QR is a separate option. Scan a current, single-use invitation displayed by an authorized owner or by the base setup flow to join the base and access its enclosure data. A phone invitation does not also require Bluetooth. A printed kit label is for identifying hardware and is not a current phone-access invitation.
- **By address:** if the base is already on your Wi-Fi, you can add it by its network address.

The first phone to set up the base becomes its **owner**.

2.2 The setup wizard

Next, a short wizard sets up your first enclosure:

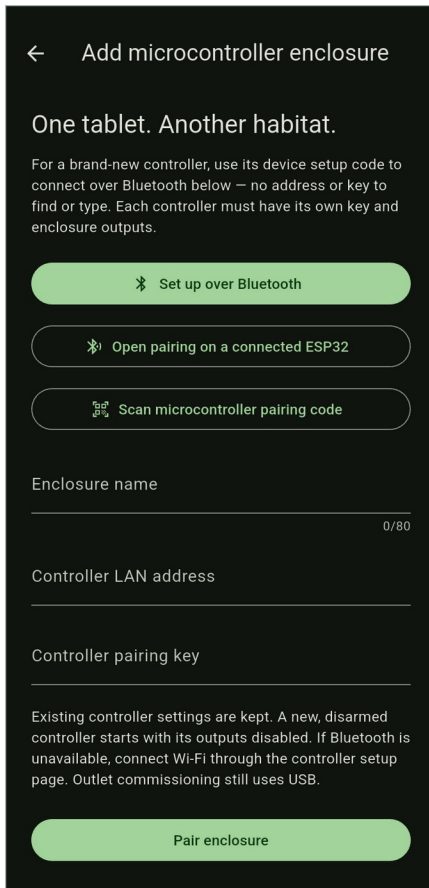
1. **Species.** Choose your animal's species. This sets safe temperature limits that the controls will never go beyond (for example 60–110°F for a leopard gecko), plus sensible starting temperatures, humidity and light hours.
2. **Name your animal** (optional).
3. **Feeding schedule.** What you feed, how many, and how often.

You can run the wizard again later from **Config** to change species. If the base already has a profile, the app asks whether to load it or start fresh.

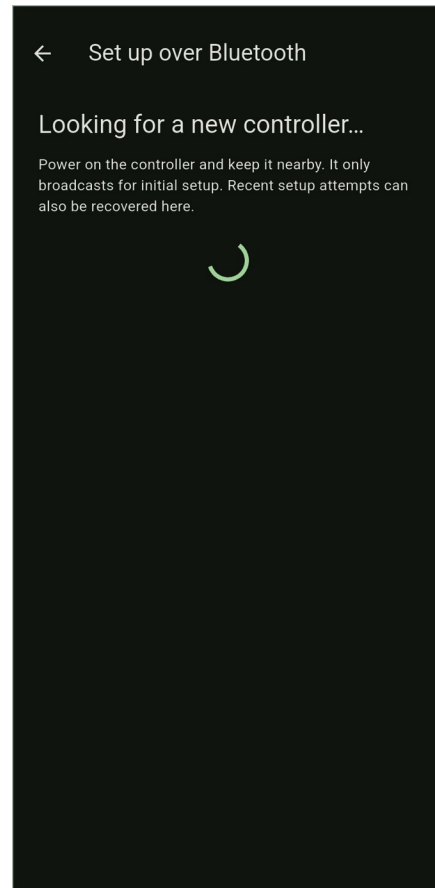
2.3 Add an enclosure controller

Choose + next to Enclosure, then Set up over Bluetooth. A controller opens a 15-minute setup window after physical power-on. Keep the phone nearby and follow the encrypted Wi-Fi setup flow. For an existing controller, use its supported pairing control or the owner action in the app. Software and OTA restarts do not automatically reopen setup. Saved settings and pairing are preserved by normal firmware updates.

A new controller starts **disarmed**: it won't switch any outlets until setup is finished.



Add enclosure: set up a controller over Bluetooth



Searching for a new controller nearby

2.4 Name your sensors

In **Config** → **Sensor Names**, give each sensor a name that says where it is, such as Warm Side, Cool Side or Humid Hide. Everyone who uses the enclosure sees the same names. If a sensor reads a little high or low, use **Temperature Calibration** with a thermometer you trust.

Wireless sensor setup

Supported wireless sensors send temperature and humidity readings to their enclosure controller over Bluetooth. Position the warm-side sensor securely in slot 1, and use the other slots for zones such as Cool Side and Humid Hide. Keep sensors within radio range and within their rated temperature and moisture limits; do not place them against heaters, lamps or water.

Open Settings > Sensors & calibration > Sensor inputs to discover and assign a supported wireless sensor. Use Update sensor when replacing a sensor or moving it between slots. Check the correct enclosure, slot name and readings after a change. Disable unused slots instead of treating an empty zone as a disconnected sensor.

Battery and signal checks

Supported wireless sensors offer up to one year of battery life on replaceable batteries. Actual life varies with temperature, battery quality and use. Check regularly rather than

waiting a full year to inspect them. Follow the sensor manufacturer instructions for battery type, polarity and replacement.

Open Settings > Base station & access > BLE sensors for the list of assigned wireless sensors across this base. Each sensor shows its enclosure, slot, Bluetooth address, battery percentage, signal strength in dBm, temperature, humidity and report ages. A less-negative signal is generally stronger, but placement and obstacles matter.

The list marks battery levels of 20% or less as Low. This is an on-screen indicator, not a dedicated battery push alarm. Battery reports and measurements can arrive separately: check Battery report age and Last measurement. Unavailable means the value was not reported; it does not mean an empty battery or zero signal. A controller that is offline cannot provide current health.

After replacing batteries, allow the sensor to advertise again and confirm a fresh reading in its existing slot. If the address has changed or the sensor was replaced, use Update sensor. Do not reset an enclosure controller or clear its pairing just to replace sensor batteries.

2.5 More enclosures and animals

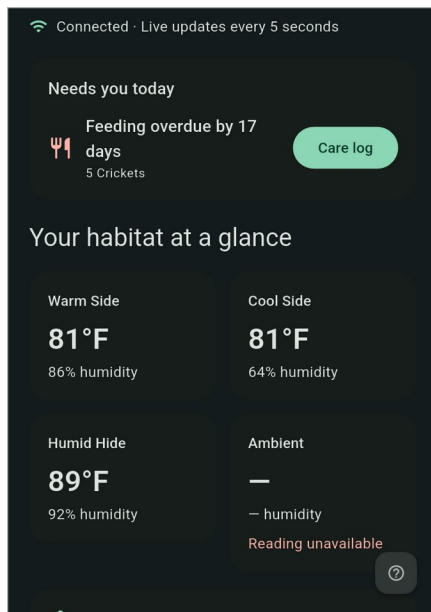
One base tablet can run several enclosures, each with its own controller and sensors. The bar at the top of the app chooses which **base**, **enclosure** and **animal** you are looking at; tap + to add one or the pencil to rename it.

3. Everyday use

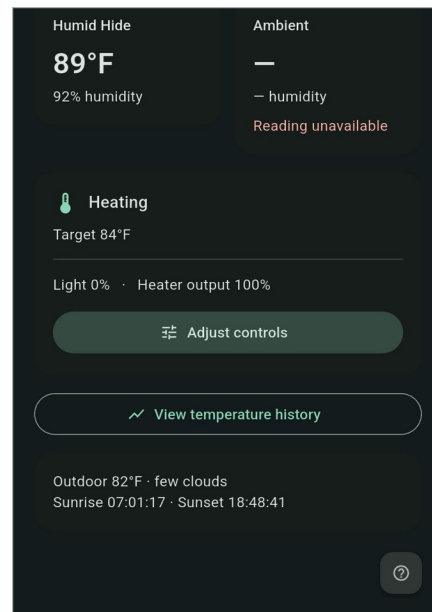
3.1 Home

Home is your quick check-in. You can see that the app is connected, what needs doing today, and the temperature and humidity from each sensor. A sensor that stops reporting shows **Reading unavailable** instead of an old number, so you are never misled. Further down are the heating status, a link to history, and today's outdoor weather.

A red warning card appears if something needs attention, for example the enclosure getting too hot (heating switches off until it cools) or the controller not responding.



Home: connection, today's tasks and live readings

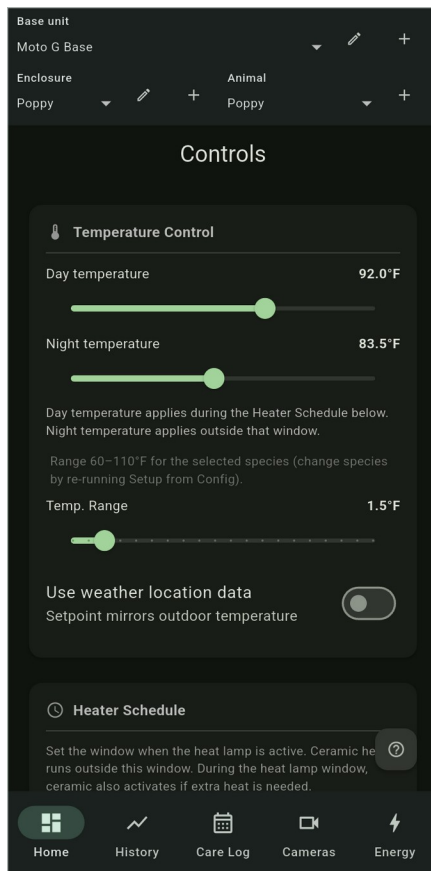


Further down: heating, history and weather

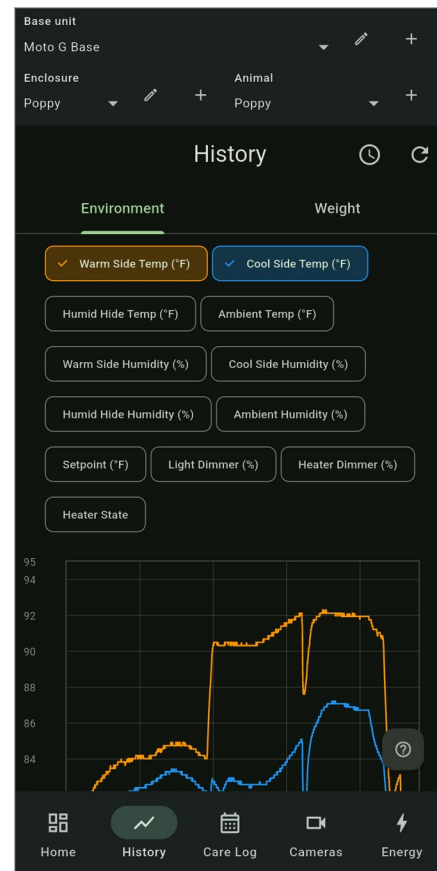
3.2 Controls

- **Day and night temperatures**, within the safe limits for your species.
- **Temperature range**: how far it may drift before the heat switches, so it isn't clicking on and off all day.
- **Heater schedule**: when the heat lamp runs. The ceramic heater keeps things warm outside those hours and helps the lamp if it can't keep up.
- **UVB and light schedules**: follow the heat lamp or set their own times, with gentle sunrise and sunset dimming.
- **Follow a real place**: let temperature and day length track the weather where your species lives, within the limits you set.
- **Humidity**: with a mister on outlet 5, spray when humidity drops below your target.

Changes save on their own a moment after you let go of a slider. Everyone sharing the enclosure sees the same settings.



Controls: temperatures limited to safe values



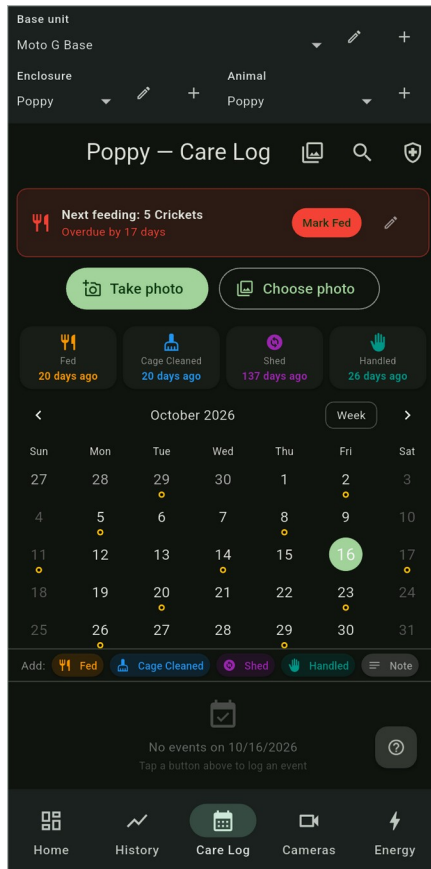
History: pick the readings to compare

3.3 History

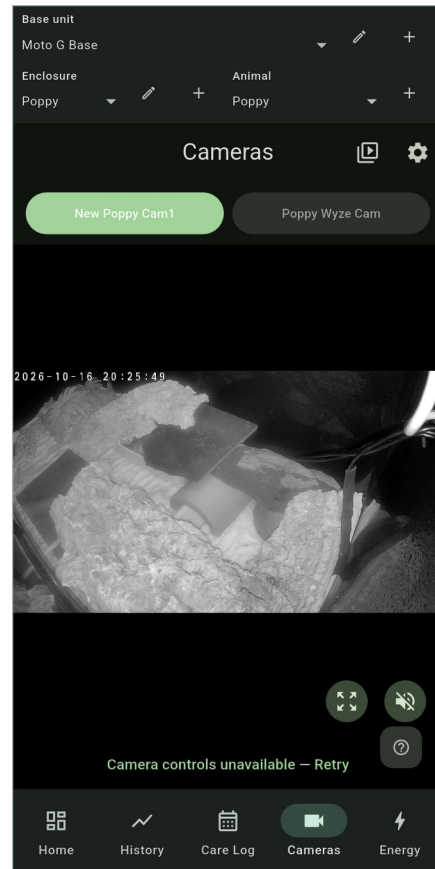
Chart any sensor's temperature or humidity, the target temperature, and light and heater levels over time. The **Weight** tab charts your animal's weight. Gaps in readings are shown as gaps, never as zero.

3.4 Care log

Everything about your animal's routine in one place. The feeding banner turns orange on the day a feeding is due and red when it is late; **Mark Fed** logs it in one tap. Quick cards show how long since the last feeding, cleaning, shed and handling. Use the calendar to look back or add entries, attach photos, search your notes, and keep a health page with weight trend and vet notes. Feeding reminders come from your phone, so they arrive even without a network.



Care log: feeding banner, recent care and calendar



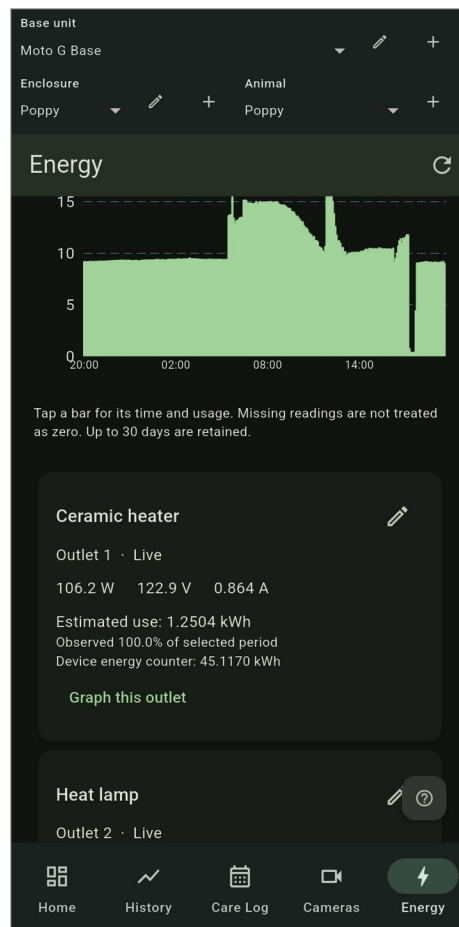
Cameras: live view, even at night

3.5 Cameras

Add up to four cameras per enclosure. Live video plays automatically. The base records a short clip when it sees movement and keeps clips within a storage limit you choose, removing the oldest first.

3.6 Energy

See what each light and heater is using right now, how much energy it has used over time, and a chart of usage. Gaps in readings are never counted as zero.



Energy: usage over time and each outlet's live reading.

3.7 Make it yours

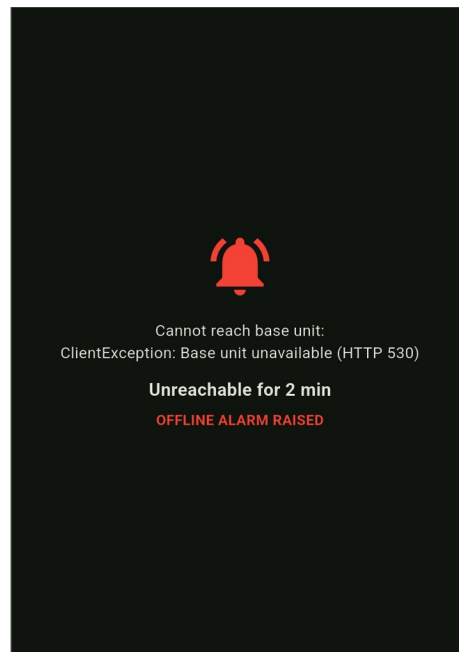
The palette icon opens **Appearance**: choose a home layout, what the app opens on, what shows when the phone is idle (for example a full-screen camera), and light or dark colours. These choices only affect your phone.

4. Alerts

Terrarium Logic tells you when something needs attention, in two ways.

4.1 While the app is open

Your phone checks the base every few seconds. If it can't reach the base for the time you choose, or the base loses touch with a controller, it sounds a loud alarm. This works with the screen off while the phone charges. Use **Test Alarm Notification** in Config to make sure you can hear it.



The offline alarm on a phone that can't reach its base.

4.2 With the app closed, or when you're away

Turn on **Push Notifications** in Config. Our alert service then checks your base every minute and notifies you when:

- the base or a controller stops answering (and again when it is back);
- a temperature or humidity reading goes outside the limits you set for that sensor. Reminders repeat after 5, 15 and 30 minutes, then hourly, until it is back in range;
- a sensor stops reporting, and when it reconnects;
- a heater or light is switched on but drawing almost no power for a minute, which often means a failed bulb, heating element or loose plug.

Missing or out-of-date readings never trigger a false climate or power alarm. If the base stops sharing readings for a while you get an **Alerts paused** message, so silence never looks like "all is well."

Set alert limits for each enabled wireless sensor in Settings > Temperature & Humidity Alerts. Leave a limit blank to turn it off.

5. Sharing and ownership

5.1 Owners and restricted users

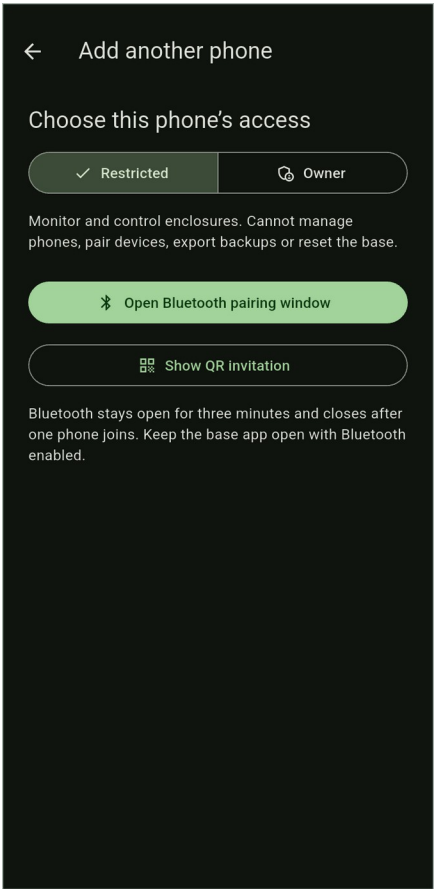
Access	Can
Owner	Everything, including inviting and removing phones, backups, updates and transferring the base. You can have more than one owner.
Restricted	Monitor and control enclosures. Restricted users cannot manage phones, pair devices, export backups or reset the base.

Each phone receives its own revocable access credential when it joins. An owner can remove a lost phone without changing access for everyone else.

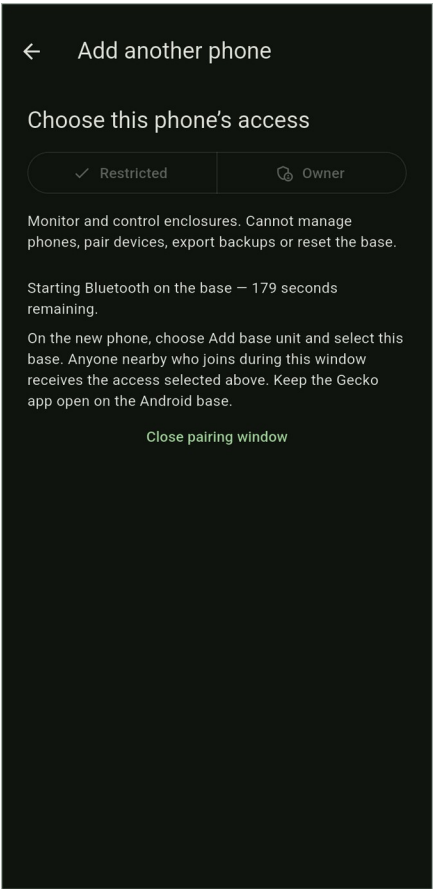
5.2 Invite someone

Open Settings > Base station & access > Owner and phone access > Add another phone, choose Restricted or Owner, then choose Bluetooth or QR. Either method is sufficient to join and access the base data.

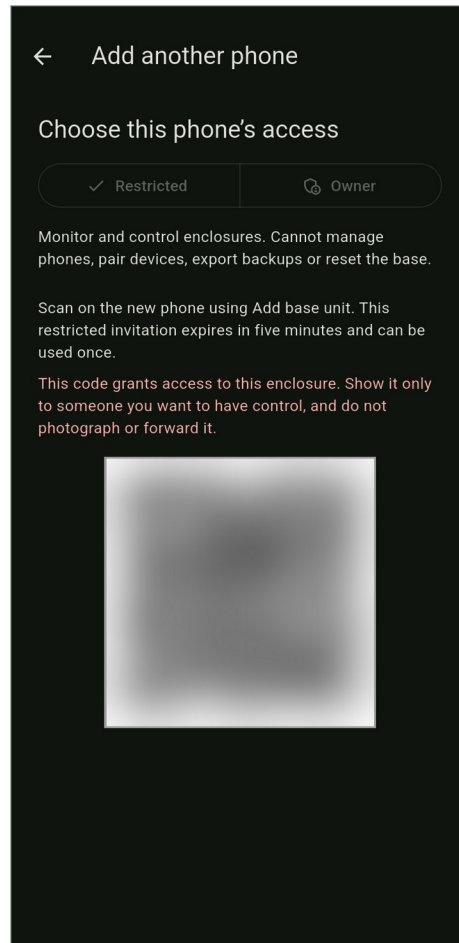
- **Bluetooth:** the owner opens a three-minute sharing window. On the new phone, search for nearby bases and select this base. It joins without a typed code or QR scan. The window closes after one phone joins, on cancellation, or when the invitation screen is left. Anyone nearby may attempt to join while it is open, so open it only when the intended phone is ready.
- **QR invitation:** show the current code to the intended person. Scanning it joins the base independently of Bluetooth. It works once and expires after five minutes. Keep it private and do not photograph or forward it.



Choose the new phone's access, then Bluetooth or QR



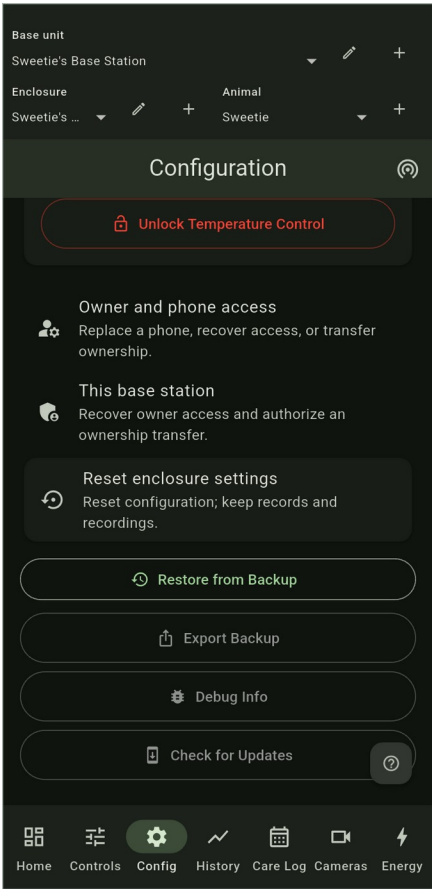
A three-minute Bluetooth window for one phone



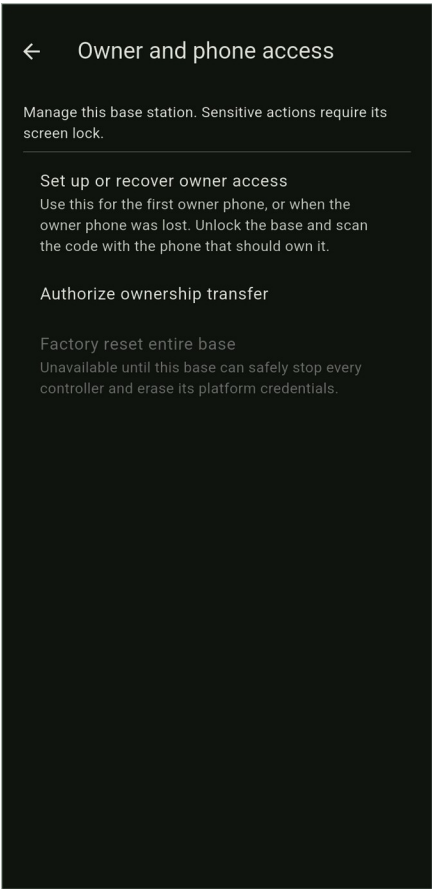
A QR invitation (blurred here, because each code grants access).

5.3 Lost phones, new phones and new owners

If you want to...	Do this
Remove a lost or old phone	In Owner and phone access, tap the remove icon next to that phone. Other phones are unaffected.
Move ownership to your new phone	Replace my owner phone. Scan the code with the new phone. Your records and other phones are kept.
Recover after losing the owner phone	On the base tablet, open This base station → Set up or recover owner access , confirm on the base, and scan the code with your new phone.
Give the base to someone else	Transfer to another person. Every existing phone loses access, and you choose whether care records and recordings go with the base. Heating carries on unchanged throughout.
Stop using a base on this phone only	Tap the pencil next to the base and choose Remove from this phone . The base and its records are untouched.



Config: ownership, base station, reset and backups



On the base tablet: owner recovery and transfer

6. Keeping your animal safe

Safety is built in layers, so that no single failure, whether the app, the Wi-Fi, the internet, the base tablet or one sensor, leaves the heat running unchecked.

If this happens...	Terrarium Logic...
The internet goes down	Carries on as normal. Heat, lights, humidity and the in-app alarm work on your home Wi-Fi.
The base tablet stops responding	The enclosure controller takes over within 15 seconds, using your saved temperatures, schedules and time zone.
The controller or Wi-Fi stalls	Heaters are only ever switched on for up to 30 minutes at a time and renewed each minute while everything is healthy. If renewals stop, the outlet turns itself off.
A sensor reads wrong or falls off the warm side	Every sensor is checked. If any one reaches 5°F above your species' safe maximum, all heat switches off until it cools.
A sensor fails	Heat stops straight away rather than guessing. If only the warm-side sensor fails, the cool-side sensor can keep a gentle heat going, and you are told.
The power goes out	The base tablet keeps running on its battery. When power returns, it restarts by itself and opens straight into Terrarium Logic. The controller only turns heat back on once it has fresh readings and knows the time.
A bulb or heater fails	Power monitoring notices an outlet that is on but drawing nothing, and alerts you.

Good to know

The base tablet's battery powers the base only. Controllers, heaters, lights and your Wi-Fi router need their own power, and backup power if you want them to keep running during an outage.

Terrarium Logic adds protection; it doesn't replace good husbandry. Check your animal and enclosure regularly.

7. Privacy and security, in plain terms

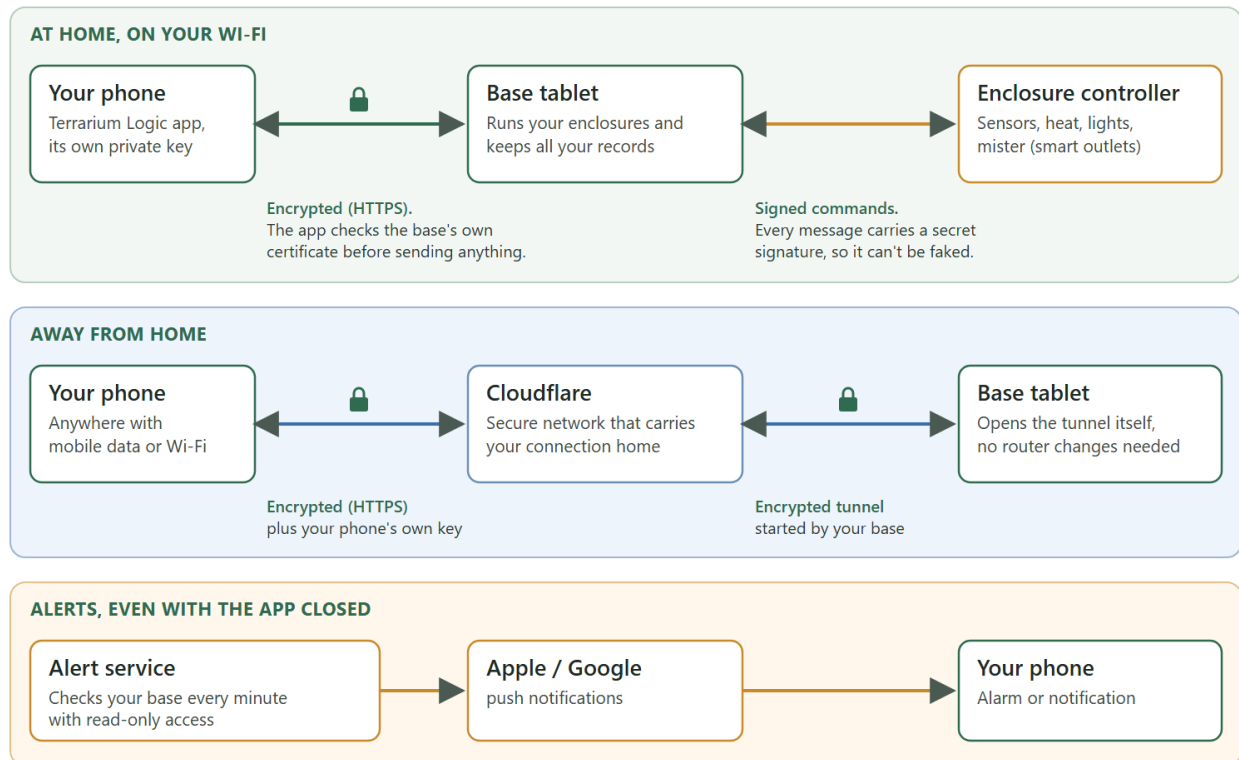
We built Terrarium Logic so your enclosure and records stay yours, and so nobody else can control your equipment. Here is how your information moves and how it is protected.

7.1 Where your information lives

Your enclosure settings, sensor history, care log, animal records and camera recordings are stored **on your base tablet, in your home**. They are not uploaded to a Terrarium Logic database.

A few things do leave your home, only when you use the features that need them:

Feature	What is sent, and to whom
Using the app away from home	Your app's requests and the base's replies travel, encrypted, through Cloudflare's secure network (see 7.2). Your records are not stored there.
Alerts with the app closed	Our alert service keeps what it needs to notify you: your alert limits, the name you gave your base, and a notification address for your phone. Each minute it reads your base's current status to compare against your limits. It can read; it can never change a setting or switch an outlet.
Weather and sunrise times	The base asks a weather service for the conditions in the location you chose.
Software updates	The base checks for and downloads official Terrarium Logic updates.



How your information travels. Every link that leaves your phone is encrypted.

7.2 How it's encrypted

- **At home:** your phone talks to the base tablet over an encrypted connection, the same kind of protection a bank website uses. Each base has its own certificate issued by Terrarium Logic, and the app checks it before sending anything. If the check fails, the app refuses to connect rather than falling back to an unprotected connection.
- **Away from home:** the connection is encrypted from your phone to Cloudflare, a secure network used by millions of websites. From there it travels home through an encrypted “tunnel” that your base opened itself. You never need to open ports or change router settings, and nothing on the internet can reach your base directly. As with any website it serves, Cloudflare handles the traffic as it passes through, but your records stay on your base.
- **Base to controller:** every command and reading carries a secret signature that only your base and that controller know, so nobody else on your Wi-Fi can fake a command or replay an old one. This link relies on your Wi-Fi's own encryption for privacy, so keep a strong Wi-Fi password.
- **Bluetooth setup:** pairing a controller or inviting a phone over Bluetooth is encrypted, and only works during a short window that you open.
- **Cameras:** cameras stream to the base over your home network. Video only leaves the base over the encrypted connections above.

7.3 Who can get in

- Every phone has its own private key, kept in the phone's secure storage. The base keeps only a scrambled fingerprint of it, never the key itself.
- Owners decide who gets access and at what level, and can remove any phone at any time.
- Sensitive actions, like recovering ownership or transferring the base, have to be confirmed on the base tablet itself.
- Each base has its own identity and its own connection credentials. One base never holds anything that could unlock another customer's base.

7.4 A locked-down base tablet

Your base tablet isn't an everyday tablet. It is professionally managed and set up for one job:

- it opens straight into Terrarium Logic and can't be switched to other apps or settings;
- USB file access is blocked, so plugging it into a computer doesn't expose your data;
- its storage is encrypted, and its operating system is checked at startup;
- only approved Terrarium Logic software can be installed or updated on it.

7.5 Updates

Check for Updates in Config installs new base software from official Terrarium Logic releases only. Each update is checked before anything is replaced. If the new version doesn't start properly, the base automatically goes back to the previous one. Your records and settings are never overwritten by an update. Controller updates are delivered by the base and keep the controller's settings.

8. Backups, resets and help

8.1 Back up your records

Use Base unit > Edit > Base backups to export all registered enclosures on that base. The base backup includes enclosure settings, animals, care events, feeding schedules, weights and care photos; sensor history is optional. Keep the backup somewhere safe. Credentials and pairings are not exported as ordinary care data. The maintenance restore option remains available for older enclosure-only backups.

8.2 Resets

Option	What it does
Run setup again	Changes species, default temperatures and feeding plan. Records are kept.
Reset enclosure settings	Returns an enclosure's configuration to defaults. Records and recordings are kept.
Remove from this phone	Removes the base from your phone only.
Factory reset	A service procedure for repairing, replacing or retiring a base. Contact support and make a backup first.

8.3 Troubleshooting

You see	Try this
Cannot reach base unit	Check the base tablet has power and your Wi-Fi is working. If the base has just restarted, give it a minute: the app keeps retrying on its own.
Reading unavailable on a sensor	Check the sensor is plugged in and in place. Readings return by themselves once it reconnects.
An outlet is on but drawing no power	Check the bulb or heating element, the plug, and the device's own switch or thermostat.
No alerts with the app closed	Turn on Push Notifications in Config and allow notifications for Terrarium Logic in your phone's settings.
Settings change says it's pending	The controller keeps its last confirmed settings until it can save the change. Check the controller has power and Wi-Fi.

8.4 Getting help

In Settings > Debug Info, include app version, base and enclosure names, and what happened when contacting support. Keep passwords, invitations and pairing codes private.