SHEET 4 OF 6

Start Programming in Composer

Projects, rooms, Add device, scenes, menu editor, Alarm (test mode)

Safety and use

- Composer is the installer tool. It is PIN-locked and it is **not** exposed through the Helix relay. Use it on the home LAN (or an approved support path), at `http://<HUB-IP>:8090`.
- Changes save automatically in Composer. The kiosk and the tablets do not change until you press **Send to tablets**.
- Secrets (Tuya keys, camera credentials, ecobee, Rachio, Tesla, license material) live only in protected files on the hub. Composer should never be used as a place to paste camera URLs into names or notes.
- ▶ **Test** buttons send real commands when the hub is not in demo mode. Only test a device when you can see it, and only test garage, locks, heat, and sirens with the customer present.
- The **Alarm** section described at the end of this sheet is real software, but the native Helix alarm is **not released** for live monitoring. Leave it in test / mock mode. Do not promise police dispatch.

What this sheet covers

How to create the project and rooms, add devices (Add device, Tuya/Smart Life, Shelly, mini-split dongle, thermostats, cameras assigned to rooms), build scenes, use the menu editor and publish to screens, and what is in the Alarm section.

Installing the physical devices (wiring a switch, mounting a camera, hooking up irrigation) is **Sheet 5**. Do that in parallel with the matching Composer steps below.

1. Open Composer and follow the Setup guide

1. On your laptop (Chrome recommended), open `http://<HUB-IP>:8090` or `http://helix-ch01.local:8090`.
2. Unlock with the kiosk PIN.
3. Open **Projects**. Create one project for this house, or start from a template. A template keeps rooms, the device list, scenes, tiles, and yard schedules, and leaves out the client's name, address, device IDs, and passwords.
4. Open the **Setup guide**. It is the checklist for the job, in order: Home details → Rooms → Find & add devices → Put each device in a room → Test → Scenes → Goodnight → Tablets → Send. Each row links to its section and shows status (for example, "3 device(s) have no room yet"). Follow it top to bottom.
5. Export a backup (a `.helix.json` file) after every visit. Backups do not contain secrets. After you import a project onto a new hub, you must enter cloud keys and device credentials again on that hub.

2. Home details

1. Open **Home details**.
2. Enter the client name and address, and the **Home ZIP** code.
3. Press **Look up** to geocode it. The resolved place and location drive Weather, NWS alerts, sunrise/sunset scene triggers, dusk-to-dawn lights, and yard rain-skip.
4. Use Notes for site facts (where the rack is, who to call). Do **not** put gate codes, alarm codes, or passwords in Notes.

3. Create rooms

1. Open **Rooms**.
2. Add every room the family will tap on a tablet. For each room set: - a clear name (`Living Room`, `Kitchen`, `Front Porch`) - an icon - the order (up/down). This is the default home-screen order.
3. Optional: add a background photo. Keep visibility low (default is 35%) and a little blur so tiles stay readable.
4. Removing a room un-assigns its devices. Put devices in a new room first if you need to delete one.

You will also assign devices to rooms as you add them. Cameras are no exception: a camera is shown on a room screen when that camera's device is assigned to the room (`devices[].roomId` in the project / layout). Do not assume a doorbell entry alone will put a camera on the Front Porch screen.

4. Add devices

Beta – steps may change Zigbee, Z-Wave, Shelly, Hue and Kasa device types are not verified in the current Composer. Supported and tested brands today are Tuya, Lutron, WiiM, Sonos and cameras. Steps for the other brands below may change. The device scanner fills an intake list; devices are still added by hand.

There are several ways to get hardware into the project. Use the one that matches the device.

4.1 Add device wizard (Tuya / Treatlife, Zigbee, Matter)

Coming soon Adding new Tuya / Smart Life cloud devices is **Coming soon** (the Tuya cloud service is paused). Devices already working on the local network are not affected. Ask Helix support before promising Tuya devices on a new job.

In Composer, open **Add device**.

Tuya / Smart Life / Treatlife (EZ or AP mode) — pairs a Wi-Fi switch or similar without standing in the Smart Life app for every device:

1. Choose the house **2.4 GHz** Wi-Fi network. The wizard can fill the SSID from this laptop or from the SSID saved for the project. The password stays in the form and in the start request; it is not written into the project file.
2. Choose **EZ** (device is in fast-blink pairing) or **AP** (device has opened a setup Wi-Fi such as `SmartLife-XXXX`).
3. For a live house, confirm you mean to use a real device (the wizard asks you to type a confirmation phrase). Do not do this against the wrong house Wi-Fi.
4. Put the switch into pairing mode, then start pairing. Keep it powered. The wizard waits until the device joins, then lets you name it and pick a room.
5. If EZ mode times out, start over in AP mode.

Pair every Tuya/Smart Life device that this hub will own to the **Helix Tuya account linked to this kiosk**. Devices on a different Smart Life account will not appear.

Zigbee — pairs straight to the hub. No cloud account and no Wi-Fi password:

1. In Add device, choose **Pair Zigbee device**.
2. This needs the hub's USB Zigbee radio and Zigbee2MQTT running. If the wizard says the Zigbee bridge is not running, stop. **Beta – confirm with Helix support** Whether your hub includes the USB Zigbee radio depends on how it was ordered. Ask Helix support.
3. Reset the device now (bulbs: off/on 5–6 times; switches and plugs: hold the button about 5 seconds until the LED blinks).
4. The hub opens the network (permit-join, about 120 seconds). When the device appears, name it and assign a room.
5. Use **Pair more** if you have another device ready.

Matter — choose **Add Matter device**, then scan the Matter QR code or type the 11-digit setup code. Wi-Fi Matter devices join over Bluetooth and then the house Wi-Fi. Thread devices also need a Thread border router. **Beta – confirm with Helix support** Helix has not named a recommended Thread border router.

4.2 Find Shelly devices

In **Lights & devices** (or the Shelly finder on the Setup guide):

1. Use **Find Shelly devices**. The hub discovers Shelly Gen1–Gen4 relays, dimmers, plugs, covers, and sensors by mDNS.
2. If a Shelly is on another VLAN or mDNS is blocked, type its IP.
3. Control is local (RPC). If the Shelly has a password, add that password on the hub, not in a project note.
4. Name the device, set the type, assign a room, and use ▶ **Test**.

4.3 Load Tuya lights and other cloud-already-paired devices

If the devices are already on the Helix Tuya account:

1. Set the kiosk address if Composer asks for it (`http://<HUB-IP>:8080`).
2. Use **Load Tuya lights** / **Find Tuya devices**. Composer reads the list through the kiosk. It does not see the cloud keys.
3. Place each device in a room. Set dimmable or not. Pick a fixture icon (bulb, pendant, chandelier, recessed, sconce, strip, lamp, fan, outlet) or add a fixture photo.
4. Optional: dusk-to-dawn per light (needs the home location from Home details).

4.4 LAN scan

Scan LAN (enter the customer's subnet, for example `<SUBNET>`) can find WiiM/LinkPlay, Tuya devices on the LAN, a Lutron Caséta bridge, and RTSP cameras. **Discover ONVIF cameras** is also available. Run this while your laptop is on the customer's network.

Beta – confirm with Helix support Lutron Caséta may be discovered, but control support is not confirmed. Do not promise Caséta control.

4.5 Thermostats and mini-splits

In **Heating & cooling**:

1. Add a **Thermostat** or a **Mini-split** card, name it, and assign a room.

2. Pick the brand. Supported for real control today: - Thermostats: **ecobee** (credentials in the hub secrets file; use **Find ecobee** / **List ecobee**), and **Tuya / Smart Life** thermostats. - Mini-splits: **Tuya / Smart Life AC** for units that already appear in Smart Life. Other brands may be listed as **beta** (for example Midea-protocol units such as some Senville and Pioneer, Gree / Cooper & Hunter, Daikin BRP adapters) or **not connected yet** (catalog only).
3. **ESPHome dongle (local)** — for many Midea-based indoor units you can replace the stock USB Wi-Fi stick with a local dongle (for example a pre-flashed SLWF-01pro):
4. Flash or buy the dongle with ESPHome (midea climate + web_server).
5. Join it to the house 2.4 GHz Wi-Fi and give it a DHCP reservation.
6. Plug it into the indoor unit's USB port **instead of** the stock stick.
7. In Composer, pick **ESPHome dongle (local)**, then **Scan** (mDNS) or type its IP, and **Test**. This path is marked **beta** in Composer (untested on some units). Power, mode, setpoint, fan speed, and room temperature are what the driver exposes.
8. Brands marked **not connected yet** (Nest, Honeywell Home, Sensi, and others in the list) can be saved and shown, but they cannot be controlled until a driver exists. Mark those `[planned]` on the job sheet and do not sell them as working.
9. Set units to °F or °C to match the house.

4.6 Cameras and the doorbell, assigned to rooms

1. Add each camera in **Lights & devices** or the cameras section. Use a kiosk camera ID that will match the hub's camera list.
2. Assign `roomId` (the room dropdown) so the camera appears on that room's screen. A Front Door camera that should show on the Front Porch screen must be assigned to Front Porch.
3. You can also pin a camera to the All Rooms front page, or long-press the camera on a tablet (PIN required) to choose rooms.
4. Camera credentials are saved server-side (**Save credentials**). The UI should only show masked placeholders. Never paste a live stream URL into a name or a note.
5. For the doorbell: in **Doorbell & intercom**, add the doorbell and choose its camera. **Test ring** should pop up on every tablet. The doorbell event and the room camera tile are related but not the same setting — still set the camera's room.

4.7 After any add: name, room, test

For every device:

1. Give it the name the family will recognize (`Kitchen island`, not `switch_3`).
2. Set the room, and "also show in" if it should appear in more than one room.
3. Press ▶ **Test**. Confirm the real device reacts and the live state (on, brightness, offline) is right before you leave that room.
4. Fix any device that still has "no room yet" in the Setup guide.

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5. Scenes and automations

1. Open **Scenes**. You can start from a preset (Goodnight, Movie, Away, Good Morning). Presets prefill from the project's devices.
2. Steps can include: light on/off/level, shade, IR button or IR macro, thermostat, lock/close, matrix route, security arm, and wait. Scenes can **lock / close**, but they must not unlock or open doors.

3. Add triggers as needed (time of day, sunrise/sunset, or the options shown for that scene). Sunrise and dusk-to-dawn need Home details / ZIP.
4. Use **Goodnight** as its own section too: it pre-checks lights, locks, garages, shades, and TVs, then **Secure the house** can turn lights off (or to a night level), lock, close garages, optionally close shades, turn TVs off, and optionally arm. Only enable arming if the alarm path for this job is actually in use and approved.
5. Test each scene from Composer and from a tablet, standing where you can see the result.

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6. Menu editor and publish to screens

Composer includes a **Menu editor** (under Rooms & screens) so you can arrange what the family sees on the kiosk.

1. Open **Menu editor**.
2. Arrange tiles (type, label, icon, size, order). This is a draft until you publish. The draft is saved with the project.
3. Preview the layout.
4. When it looks right, press **Publish to screens**. This sends the menu to the hub. Tablets pick it up within a few seconds (they listen for a layout update, and otherwise poll).
5. If you need to go back, use **Undo** on the published menu (PIN required). The hub keeps a short history of published menus.
6. Then also use **Send to tablets** (next section) when rooms, devices, or scenes have changed. Publish and Send do different jobs: one publishes the menu layout, the other pushes the project layout (rooms, devices, scenes, tablet profiles).

Beta – confirm with Helix support The Menu editor may not be on your hub's Composer build. If a hub's Composer has no Menu editor, use **Home screen**, **Kiosk tabs**, and **Tablets** to control what appears, then Send to tablets.

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7. Tablets, home screen, and Send to tablets

1. In **Tablets**, add each wall panel and iPad (Sheets 2 and 3). Set the default room and any per-tablet tiles.
2. In **Home screen** / **Kiosk tabs** / **Tiles**, choose what appears on All Rooms and in the Helix menu.
3. Open **Send to tablets**. Read any warnings (devices with no room, camera IDs that still need to be added on the kiosk).
4. Press **Send to tablets**. This writes the layout on the hub. Tablets update in a few seconds; if they do not, refresh or reopen the home-screen app.
5. Optional: download a copy of the generated layout for the job folder (it still must not include secrets).

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8. Alarm section (test mode — not released)

Beta – steps may change The Helix alarm is not released for live use. Nothing in this section is a monitored alarm.

Composer has an **Alarm** section for a full Helix alarm: Away, Home (Stay), and Night, entry and exit delays, PIN disarm, a duress code, zones, sirens, and a hook for a future professional monitoring service.

Status you must honor: this work was built and tested in a staging / mock environment. It has **not** been released to live customer hubs as a monitored alarm. Do not enable production monitoring. Do not tell the customer that police will be dispatched.

If the section is present on this hub and you are only preparing a future job:

1. Add **sensor zones**: door, window, motion, glass-break, smoke/CO, water. Pick the driver (Zigbee, Shelly, or Tuya), the device, and whether the zone has its own entry delay. Smoke, CO, and water are 24-hour zones. Open zones are bypassed when arming.
2. Set exit delay and entry delay (seconds). Night can be set to instant (no entry delay).
3. Add **user codes** (4–8 digits) and an optional duress code. Codes are sent to the kiosk and stored hashed there. They are **not** saved in the Composer project. Saving replaces the existing list. Until codes are added, the kiosk PIN disarms. Never put codes in Notes or in a screenshot.
4. Add **sirens** (Zigbee, Shelly, or Tuya). Leave **Live** off unless you are doing a planned, in-person test. A siren test is short (a few seconds) and stays in mock mode unless the "allow the test button to sound live sirens" box is ticked.
5. Leave professional monitoring **off**. Monitoring is not part of a normal install today.
6. Push the alarm configuration to the kiosk only on a test system, or when Helix has approved a live trial with the customer present.

Older Composer builds also describe a **Tuya / Smart Life alarm hub** (category `mal`) with Away / Stay and PIN disarm. If that is what this hub shows, document the path you actually used, and still do not promise professional monitoring.

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9. Other Composer sections you will hit early

These have their own install steps in Sheet 5. In Composer, you will also use:

- **Audio** — WiiM and Sonos by IP or from the LAN scan, assigned to rooms.
- **TV & AV remotes (IR)** — IR blasters (often Tuya/Smart Life) and macros.
- **Locks & garage** — Tuya locks (enable remote unlock in Smart Life); garage via Tuya, and other drivers marked beta (Genie / Aladdin Connect, Meross, Shelly, ratgdo / Konnected, generic relay + sensor). Unlock / Open always needs the kiosk PIN. Every garage action asks for confirmation.
- **Shades** — Tuya curtain/blind motors or Shelly covers.
- **Energy** — Tuya meters / CT clamps marked Solar, Grid, or Load.
- **My Yard** — sprinkler zones (Tuya valves or Rachio), soil sensors, pond pump, outdoor dusk-to-dawn lights, gates. Rachio's API key goes in the hub secrets file, never in Composer.
- **Outdoor** — infrared patio heaters (with a safety auto-off) and pond pumps (also in My Yard).

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10. Commissioning checklist (short)

1. Every device has a room and a clear name.
2. ▶ Test passed in the room for lights, shades, climate, and audio.
3. Cameras appear on the rooms they should, including Front Porch / Front Door if used.
4. Scenes and Goodnight were tested in person.
5. Each tablet is registered and opens on the right room.
6. Menu published (if this Composer has the editor) and **Send to tablets** succeeded.
7. Secrets are on the hub only. No stream URLs or PINs in notes.
8. Alarm remains in test / mock mode unless Helix has approved a live trial.
9. Export a `.helix.json` backup to the job folder.

Next: install and wire the physical devices (Sheet 5), using the matching Composer steps in this sheet as you go.