



This guide walks you through a complete GEN 4 installation, from opening the box to powering up and testing the lock.

Tools you'll need

- Phillips screwdriver and a drill, a small flat head screw driver (tweaker) for terminal blocks.
- 5/16" hex head bit and Phillips driver bit

Key terms you'll see in this guide

DPS

Door position switch — the magnet-and-sensor pair that tells the system whether the door is physically closed.

REX

Request to exit — a button or motion sensor that releases the door from the inside.

ACS

Access control system — the customer's panel and software that decides who gets in and when.

DRY CONTACT

A switch with no voltage of its own; the panel uses one to tell the lock what to do.

FAIL-SAFE / FAIL-SECURE

Fail-safe unlocks on power loss (standard). Fail-secure stays locked on power loss (approved uses only).

AHJ

Authority having jurisdiction — local fire marshal or inspector with final say on life-safety questions.

1

SURVEY THE DOOR

Before anything is removed from the box walk through these three checks to ensure a successful install.

1. Material and strength

Identify the door and frame material (wood, metal, or other). Confirm both will hold the lock bracket and latch bracket A with the supplied screws. Hollow, delaminated, rotted, or corroded material will not hold.

2. Mounting surface

You need enough flat, unobstructed surface at the head of the frame, clear of closers, hinges, sensors, and trim. The lock needs at least 1-3/4" of flat surface to mount to. If you don't have that amount of space you may need a spacer plate to give the lock more room.

NOTE: Required surface and alignment can differ between inswing and outswing doors — see Step 4.

3. Fit and gap

Check whether the door closes flush or leaves a gap. Perform this check along the full length of the lock. A gap that looks acceptable at the start of the lock can be too large at the end of the lock.

⚠ If the door is significantly out of alignment, stop. Fix the door first before mounting the lock.

IS A GAP WITHIN TOLERANCE?:

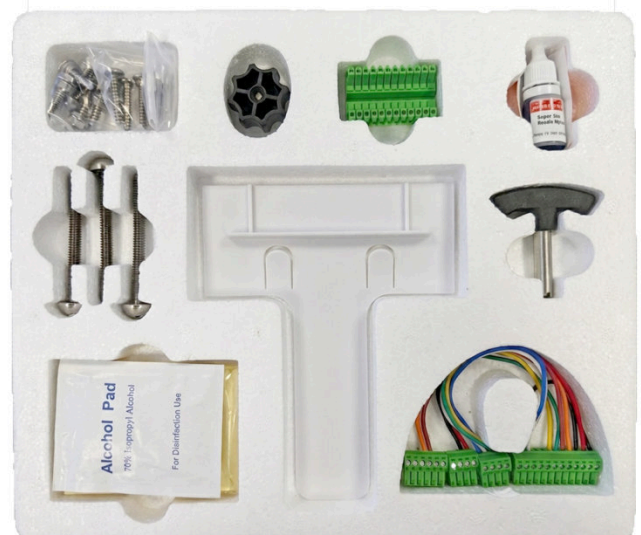
If you can slide a business card through evenly along the full 10" length, it's fine. If the gap changes noticeably from one side to the other, that's a door alignment problem.

2

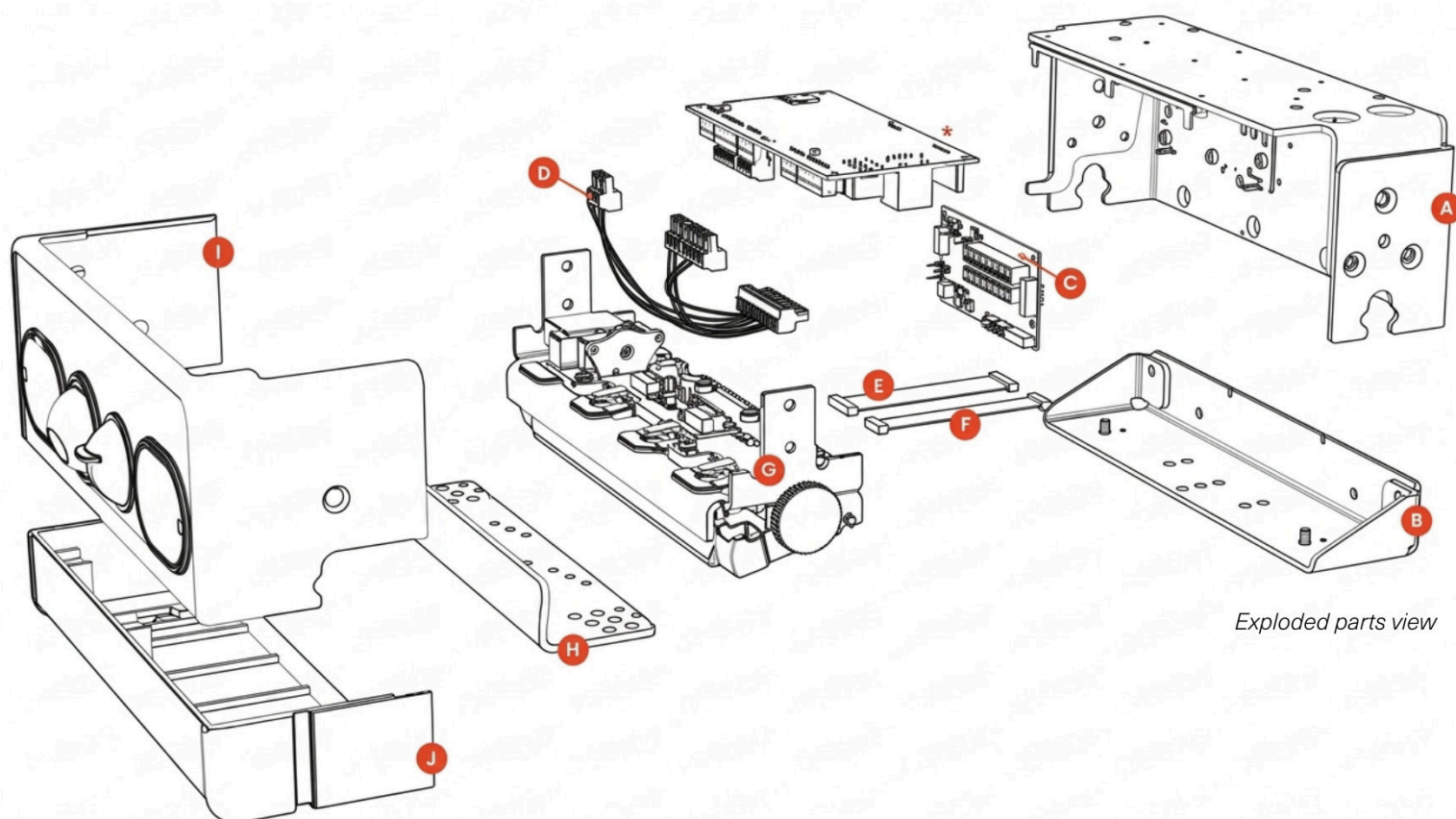
UNPACK AND INVENTORY

Open the carton and remove the lock assembly. Lay everything out and check off each item.

1. Lock bracket assembly
2. Latch bracket assembly
3. Small Phillips screwdriver and T handle (tools)
4. Wiring harness and terminal blocks
5. Thread Lock
6. VHB tape
7. Release bolts (if required)
8. Self-tapping screws and wood screws (included)
9. Alcohol prep pads for cleaning bracket surfaces before taping
10. Plastic spacer tool for aligning latch bracket A



Everything in the box, laid out



Exploded parts view

PARTS REFERENCE

REF	PART
A	Lock Bracket
B	Latch Bracket A
C	Haven Motherboard
D	Wiring Harness to Mercury Board
E	Ribbon To Lock Cover
F	Ribbon to Lock assembly and Haven Motherboard
G	Lock Assembly
H	Lock Bracket B
I	Lock Cover
J	Latch Bracket Cover



3

DISASSEMBLE THE LOCK

TIP: Keep all screws and parts laid out in the order you removed them to simplify reassembly.



1. Remove both screws from each side of the lock cover.
2. **Be careful removing the lock cover** — a ribbon cable and a battery terminal cable may need to be disconnected.
3. Remove both screws from the lock gate assembly. Make sure all ribbon cables are unplugged.
4. Remove the screws from the Mercury board bracket at the top of the lock bracket.
5. Remove the screws from the Haven motherboard and pull the motherboard out.

Disassemble the latch bracket

1. Remove the two screws from each side of the bracket.
2. Remove the bottom screws from the plastic cover on the bottom.
3. Pull the plastic away from the lock assembly.
4. Remove the three screws from the bottom of latch bracket A to remove latch bracket B.



CHECKPOINT — you should now have:

The lock cover, lock gate assembly, Mercury board bracket, and motherboard all separated, with latch bracket B removed from latch bracket A. Every screw should still be grouped with the part it came from.

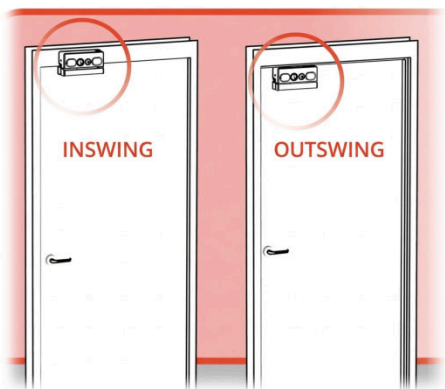
IF THIS HAPPENS:

If a ribbon cable feels stuck, don't pull on the wire itself. Gently rock the connector housing side to side while pulling straight up. Yanking on the cable can tear the ribbon.

4

IDENTIFY DOOR SWING DIRECTION

Determine whether the door is inswing or outswing. This determines where the lock bracket is mounted.



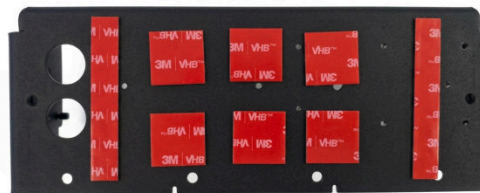
INSWING - mount using the back surface of the bracket, against the face of the frame.

OUTSWING - mount using the top surface, against the underside of the frame head.

5

MOUNT THE LOCK BRACKET

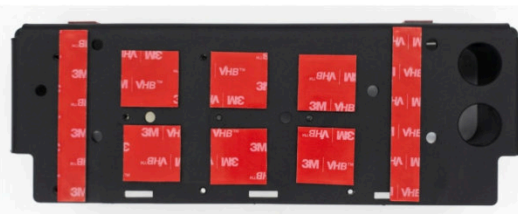
5a. Inswing Door



Back of lock bracket (inswing) — VHB tape placement

After cleaning the mounting surface, apply 3M VHB double-sided tape to the back of the lock bracket surface. Establish an installation location where the lock bracket is at least **1/2"** from the door frame. Set the lock bracket against the door frame and hold it in place for **15 seconds** to make sure the tape takes hold.

5b. Outswing door



Top of lock bracket (outswing) — VHB tape placement

After cleaning the mounting surface, apply 3M VHB double-sided tape to the top of the lock bracket surface. Establish an installation location where the lock bracket is at least **1-1/2"** from the door frame. Set the lock bracket against the door frame and hold it in place for **15 seconds** to make sure the tape takes hold.

NOTE: Pay attention to where the tape goes depending on the door frame — place tape based on the space you have. These photos are a guide for tape placement, not an exact template.

TIP: The tape is holding correctly when the bracket won't budge if you gently try to rock it side to side. If you feel any give, remove the bracket, clean both surfaces again, and reapply with a fresh piece of tape.

6

INSTALL THE LOCK BRACKET

Secure the lock bracket with the self-tapping screws or the wood screws supplied in the box.

Drive with a 5/16" hex head bit for the self-tapping screws. Or Phillips Head driver for wood screws.

NOTE: On an inswing door installation, for the screw locations behind the motherboard bracket, remove the washer the self-tapping screws to ensure the motherboard fits back into the bracket.



7 INSTALL THE MOTHERBOARD

Put the motherboard back into the motherboard bracket.
One screw in the top right and one in the bottom left.

✓ **CHECKPOINT** — you should now have:
the motherboard seated flat in the bracket with no gap or tilt, held by a screw in the top right and a screw in the bottom left.

8 INSTALL LATCH BRACKET A

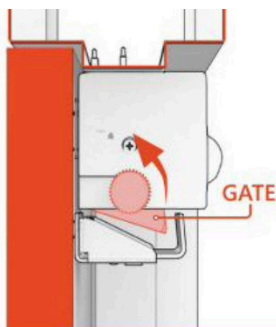
1. Clean the surface of latch bracket A with the alcohol pads provided in the box.
2. Apply 3M VHB tape to the back of latch bracket A.
3. **Use the plastic spacer tool to align it:** hold the tool up to the slots on the lock bracket while holding latch bracket A up to the tool. This sets the correct distance between latch bracket A and the lock bracket.

NOTE: Pay attention to where the tape goes depending on the door frame — place tape based on the space you have. This photo is a guide for tape placement, not an exact template.

TIP: Alignment is correct when the spacer tool sits flush against both the lock bracket slots and latch bracket A at the same time, with no visible gap on either side.

9 MOUNT THE LOCK ASSEMBLY

INSWING — the gate faces **toward** the door.
OUTSWING — the gate faces **away** from the door.



⚠ When assembling the latch assembly, ensure no wires are pinched.

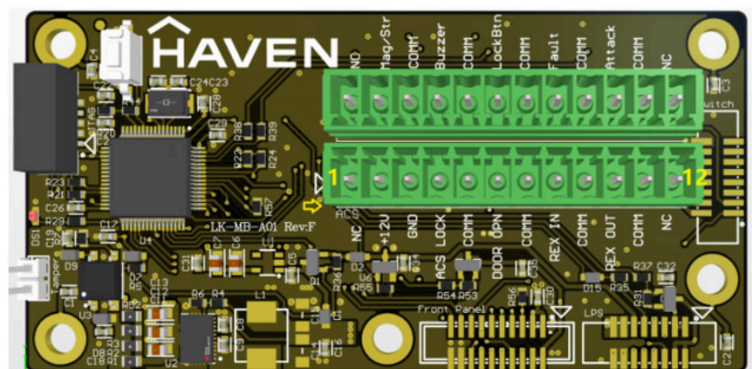
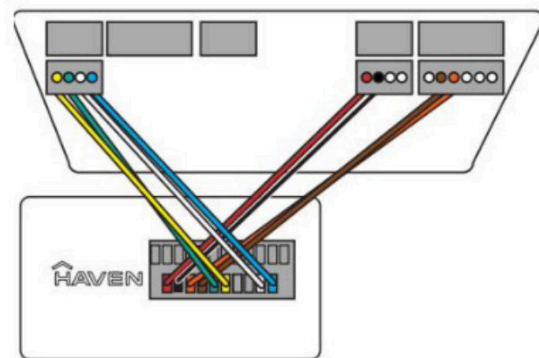
✓ **CHECKPOINT** — you should now have:
the lock assembly seated with the gate oriented correctly for your door's swing, and no wires visible or pinched anywhere around the perimeter.

10 COMPLETE ALL WIRING

Complete and dress all wiring, and set the DIP switches, before the lock assembly is closed up. Wiring, terminal connections, and DIP switch settings are covered below.

For Alarm.com access control platform integration the 1501 Mercury Board will be inserted into its bracket and then wired to the Haven Motherboard using the wiring harnesses provided in the box and consistent with the wiring diagram below.

NOTE: Wiring for all other access control platforms will be directly into the Haven Motherboard.

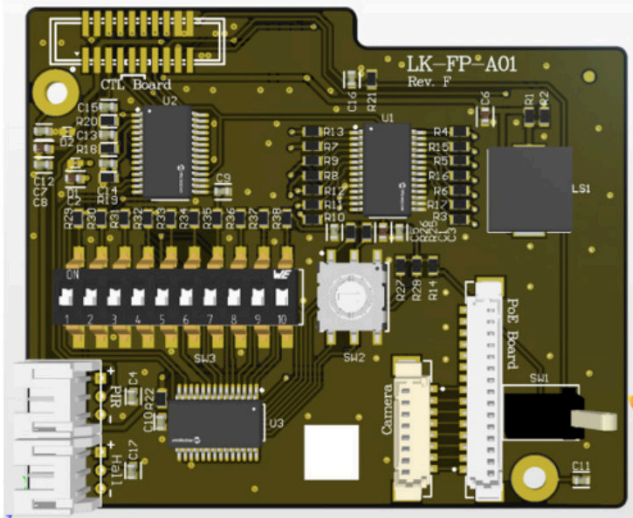


Wiring for non ADC access control platforms will use the following terminals on the Haven Motherboard.

TERMINAL	CONNECTION
2	Positive (+) (18/2)
3	Negative (-)
4 & 5	Dry relay contact from the access control system (command from ACS) (22/4)
8 & 9	REX In (Push to exit button)
10 & 11	REX Out (rex motion activity)



Set the DIP Switches — Standard



Set SW4 and SW9 ON. All other switches OFF.
This is the standard configuration for most installs.

	1	2	3	4	5	6	7	8	9	10
ON				●					●	
OFF	●	●	●		●	●	●	●		●

SW3 LOCK OUTPUT MODE

OFF	Fail-safe - STANDARD. The lock releases on loss of power.
ON	Fail-secure - Approved applications only. Must be permitted by applicable life safety codes (IBC, NFPA 101) and approved by the AHJ. Record the setting on the installation record.

⚠ IF you change any dip switch settings. You **MUST** hit the reset button to confirm changes.

Make sure all wires are secure in the terminal blocks and that no stray strands are shorting against the next terminal.

✓ **CHECKPOINT — you should now have:** All six terminal connections landed, DIP switches set (SW4 and SW9 ON, all others per your fail-safe/fail-secure decision), and no wire pinched anywhere in the housing.

11 ATTACH LOCK BRACKET COVER and INSTALL BATTERIES

Using one screw for each side, reattach the lock bracket cover to the lock bracket. Take the cover off of the battery container and insert two CR123a batteries. Reattach the cover.

12 INSTALL LATCH BRACKET B

Insert latch bracket B into latch bracket A. Determine the correct location of latch bracket B based on minimizing the gap between the locking gate and the latch bracket, so the door has minimal play when opened. Use the micro-adjustments to fine-tune until alignment is correct. Re-install the three screws into latch bracket B to secure it to latch bracket A.

TIP: Aim for the smallest gap you can get without the lock gate binding. The lock should move smoothly through its full motion, with no scraping or resistance.

13 ATTACH LATCH BRACKET COVER

Slide the latch bracket cover onto the latch bracket. Ensure the front portion of the latch bracket cover is directly in line with the cover of the lock bracket so that DPS in the Lock Bracket cover is aligned with the magnet in the Latch Bracket cover. Screw the latch bracket cover in place with screws on both ends.

NOTE: Turn the adjustment screw to move the magnet relative to the sensor until the DPS reads correctly and holds steady.

14 ALIGN THE DPS MAGNET



The DPS indicator light should be on when the door is in the closed position. If it isn't, make adjustments to the latch bracket cover location, and to the position of the magnet inside the latch bracket cover, until the DPS aligns correctly. Turn the adjustment screw to move the magnet relative to the sensor until the DPS reads correctly and holds steady.

TIP: The DPS status LED should read On with the door closed and Off the instant it opens. If DPS doesn't respond right away, the magnet and reed are still too far apart; adjust and recheck.

IF THIS HAPPENS:

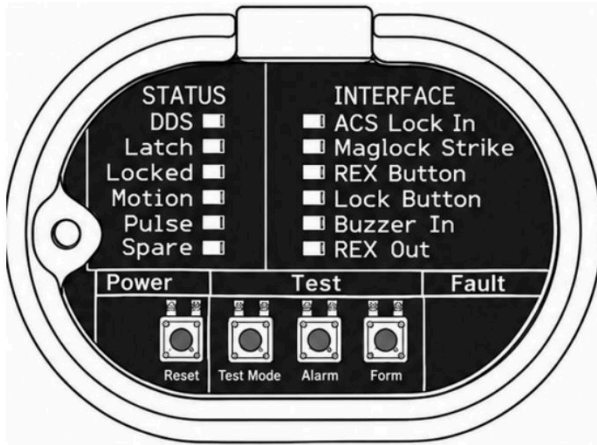
If the door still has noticeable play after alignment, the reed cover may not be fully seated. Remove it, reseat it, and re-tighten the adjustment screw.



15

POWER UP & TEST

Power up the unit and check the front left panel. If the door is closed, the lock is powered and the back-up batteries are installed the status panel should have the following LEDs illuminated.



Front left panel — status LEDs, interface LEDs, and test buttons

STATUS	INDICATION
DPS	On door closed · Off door open
LATCH	On door locked and latched · Off door open
LOCKED	On lock locked · Off lock unlocked
MOTION	On motion at REX motion sensor · Off none
PULSE	Flashing normal operation — if dark, treat it as a power/board problem first
SPARE	Not Used

INTERFACE	INDICATION
ACS Lock In	On locked · Off unlocked
Maglock/Strike	Not used
REX BUTTON	On REX button pushed · Off normal
LOCK BUTTON	<i>Pending test</i>
BUZZER IN	Lit when the siren wire is landed
REX OUT	On REX tripped · Off nothing active
POWER	On unit powered · Off no power
FAULT	On fault detected · Off normal

Latch, Locked, and ACS Lock In all report lock state and are expected to track together — seeing all three lit is normal, not a fault.

Run Test Mode

1. **Hold RESET**, then press **TEST MODE**.
2. **Release RESET** while continuing to hold **TEST MODE** until all LEDs illuminate. The unit is now in test mode.
3. **Press LOCK** to test the lock function — lock and unlock.
4. **Press ALARM** to test the buzzer — on and off.
5. **Press RESET** to restore normal operation once testing is complete.

TIP: Put the unit in test mode and press LOCK. If it locks and unlocks correctly, the lock hardware is good — any remaining issue is upstream in the access control panel, its wiring, or its programming.



FINAL CHECKLIST

CONFIRM BEFORE POWER UP

- ☐ Door and frame will hold the supplied screws
- ☐ Wiring complete, DIP switches set, no pinched wires
- ☐ Latch bracket B aligned to the DPS with minimal gap
- ☐ Access control panel wired and programmed

PROGRAMMING & SUPPORT



All remaining programming is done on the access control system, whatever platform is in use.

For questions, refer to the FAQ pages and the AI help desk. Scan the code for the most current installation manual on your phone.



SAFETY NOTICES

1. Read, follow, and keep these instructions. 2. Heed all warnings. 3. Only use accessories specified by the manufacturer

WARNING : Maintain ventilation clearance to prevent fire hazard.

WARNING : Do not expose this product to rain or moisture.

WARNING : Avoid use during electrical storms due to risk of electric shock.

WARNING : Do not install the latch bracket using the alignment tool while the lock assembly is seated in the lock bracket.

Doing so prevents correct latch spacing and can create a safety hazard - the lock may not secure or release as intended.

Remove the lock assembly before using the alignment tool to set the latch bracket

Indoor use only : Do not install on outdoor-exposed doors or in damp locations.

Door compatibility: Install only on solid-core or metal doors. Installation on hollow-core doors degrades performance and may cause damage not covered by the warranty

Risk of disengagement / falling parts : Improper installation, maintenance, inspection, or use may cause the lock, bracket, or hardware to disengage and fall, causing serious bodily injury or property damage.

Do not modify hardware : Do not modify the lock or install unapproved bracket mounting hardware — can create a false holding feel or loss of holding force.

Mounting / header caution : Use the correct brackets, templates, VHB tape, and fasteners for the header/frame type (concrete-filled vs. hollow). Improper mounting can cause loss of holding force or collapse.

VHB tape and fasteners : VHB tape is required for maximum holding force and proper fit.

Tighten included fasteners per HavenLock instructions to prevent loosening or failure.

Environmental : Not for outdoor environments. Circuit-board operating temperature **14°F to 122°F (-10°C to 50°C).**

NOTE : Specifications may change without notice.

ELECTRICAL SAFETY INFORMATION

- The HavenLock Gen 4 (Model HL1-CNT-001-LDM) operates on **12–24VDC, 1A. Standby Power Level IV.**
- Field-configurable for fail-safe or fail-secure operation:
- **Fail-safe:** power required to maintain the locked state; loss of power automatically releases the door for free egress.
- **Fail-secure:** power required to unlock; the door remains secure if power is lost (high-security applications).
- An internal battery system provides power during outages, enabling a controlled unlock sequence, event reporting, and system health monitoring.
- **WARNING:** Use only approved UL batteries of the specified type and rating. Improper replacement or handling may cause malfunction or reduce safety performance. Dispose of removed batteries per local laws and recycling regulations.
- **Electrical / polarity / power:** Use only the specified voltage and power source. Ensure wiring, supply, and fuse protection meet HavenLock specifications. Refer to product datasheets for required voltage and current ratings.
- **Improper wiring / installation:** Improper installation, wiring, handling, maintenance, or use may cause lock failure. HavenLock expressly disclaims liability for injury or damage resulting from improper installation, testing, wiring, and maintenance performed by others.
- The power source must be regulated, filtered, and properly fused to prevent overcurrent, short-circuit, or surge damage.
- All wiring shall comply with **UL 294** and **NFPA 70 (NEC)** for Class 2 low-voltage circuits. Use copper conductors only; size wiring to minimize voltage drop on long runs.
- Observe correct polarity on DC inputs; reversed polarity may damage internal circuitry.
- **Third-party controllers:** Integration must follow HavenLock's published wiring diagrams and control-interface guidelines. Improper connection, miswiring, or non-approved controllers may cause unsafe operation, malfunction, or permanent damage. **Damage caused by improper connection, miswiring, or non-approved controllers is not covered by warranty.** HavenLock is not responsible for failure, damage, or hazard caused by a third-party controller or by improper installation by a technician or contractor.
- Power connection: Powered by regulated low-voltage DC. **Do not connect directly to AC mains.**
- **Approved batteries:** CR123A cells meeting **UL 1642** are approved for use and replacement.
- **Battery disposal:** Do not dispose of with household waste. Return to an authorized e-waste/battery recycling center in accordance with local e-waste and battery recycling laws.

CAUTIONS

- **CAUTION:** Sheet-metal bracket edges are sharp and the unit is heavy and awkward. Handle with care.
- **CAUTION:** Locate concealed wiring and conduit before drilling, and wear eye protection.
- **CAUTION:** Verify the door's fire rating and permitted modifications before drilling. Do not exceed listed hole sizes.
- **CAUTION:** Follow the manual-knob backdrive procedure. Do not force the knob.
- **CAUTION:** Use only the specified battery. Do not mix old and new batteries.
- **CAUTION:** The gate and wedge move during operation. Keep clear to avoid pinch and crush injury.



WARNINGS

- **WARNING:** Installation must comply with all applicable local life-safety and electrical codes (NFPA 101, IBC, UL) and the AHJ. Non-compliant egress hardware can trap occupants.
- **WARNING:** Support the unit until it is fully fastened per the installation manual and instructions.
- **WARNING:** Drilling or modifying a fire-rated door or frame beyond listed allowances voids the fire rating and compromises life-safety.
- **WARNING:** Risk of electric shock. Takeover wiring may include line-voltage conductors. De-energize at the source and verify the absence of voltage before contacting any conductor. Line-voltage work must be performed only by a qualified or licensed person.
- **WARNING:** Risk of occupant entrapment and loss of emergency egress. Map the fire-alarm control panel (FACP) release so the lock releases on alarm. Severing, interrupting, or miswiring these circuits can lock an egress door, trap occupants, or defeat the door-release-on-alarm loop. Verify the full circuit path before commissioning.
- **WARNING:** Disconnect and verify power is off before wiring. Installation by a qualified installer only.
- **WARNING:** Power-fail and critical-battery settings must match the applicable egress code and the AHJ. Misconfiguration can leave an egress door locked.
- **WARNING:** Occupants must be able to exit at all times during lockdown, per the system design. Verify egress behavior before placing the lock in service.
- **WARNING:** Overhead projection. Risk of head strike from the overhead leading edge and underside.
- **WARNING:** Disconnect power before removing the cover. The tamper cover exposes live terminals.
- **WARNING:** Install batteries with correct polarity and type. Reversed or mismatched cells can overheat, leak, or rupture.
- **WARNING:** Do not manually lock the unit with the door open. Locking against an open door can back-drive and damage the mechanism and can lock you out.
- **WARNING:** Install latches and align the gate per the installation materials. Misalignment can crack components and destroy the gate over time. Damage of this kind is not covered.

NOTICES

- **NOTICE:** Place the unit on a clean, non-marring surface for unboxing and assembly.
- **NOTICE:** Verify all packed components against the contents list and inspect for shipping damage before starting.
- **NOTICE:** Scan the QR code and watch the installation video before beginning.
- **NOTICE:** Do not drop the lock or cover. Impact can disconnect internal wiring or damage the circuit boards.
- **NOTICE:** Internal electronics are sensitive to electrostatic discharge (ESD).
- **NOTICE:** Confirm the door swing. Mounting orientation and the override thru-bolt path differ.
- **NOTICE:** This unit requires 12–24VDC to operate properly. Do not overload the lock.
- **NOTICE:** Connect the lock to the Haven board before setting the final mounting screws.
- **NOTICE:** On exterior outswing doors, door slamming shocks the lock and door-position sensor. Set the sensing gap and secure the bracket accordingly.
- **NOTICE:** Before opening the unit or modifying wiring, identify the existing system topology. Low-voltage (Class 2/3) conductors may remain energized and tied to other building systems.
- **NOTICE:** Apply blue (removable) threadlocker to door-position-sensor hardware and mounting fasteners to resist loosening from door slam.
- **NOTICE:** Set the latch-bracket depth and door-position-sensor gap correctly.
- **NOTICE:** Do not pull the cover off abruptly. Internal ribbon and harness cables are attached. Lift and disconnect carefully.
- **NOTICE:** Use the door-position-sensor alignment LED to confirm the magnet/reed gap is sensing correctly before closing up.
- **NOTICE:** Confirm every internal connector is fully seated and matched per the harness labels. A partially seated connector causes intermittent operation.
- **NOTICE:** Run a full lock/unlock and door-position fitment test before installing covers. Covers block adjustment access.
- **NOTICE:** Secure the override key or tool with the facility manager or in the exterior facility secure box.
- **NOTICE:** Re-tighten all cover housing screws after configuration. Retain the packaging for returns.
- **NOTICE:** Confirm and observe the use-environment rating for this unit. Do not paint over or remove safety or rating labels.

UL, NFPA / ICC Life Safety & Egress Compliance

Access control (UL 294) listed by **SGS**, file 800596. Fire-door classification (UL 10C) for use on non-rated doors and fire-rated door assemblies rated **20 and 45 minutes** by **Guardian Fire Testing Laboratories**. Code-evaluated for conformance with NFPA 80, NFPA 101, NFPA 252, and applicable ICC building and fire codes by **NFPA Global Solutions** (code evaluation; not a certification). Documentation available on request. Install per NFPA 101, NFPA 80, NFPA 72, IBC/IFC, and the local AHJ.

- Approved for non-rated and 20- and 45-minute fire-rated door assemblies when installed per listing.
- Allows free egress without special knowledge or effort.
- Supports both fail-safe and fail-secure configurations depending on installation.
- Internal backup, standby, and standalone battery enables controlled release or continued secure operation during power loss.
- Fire-alarm interface: unlocks automatically upon alarm or sprinkler activation when connected to an approved system.
- Manual override: labeled release lever or push button within **5 ft (1.5 m)** of the door.
- Mounting must not alter the door or frame beyond NFPA 80 limits or void the door's fire label.

When installed on a fire-rated door, the overall rating is based on the lowest-rated component. The HavenLock device can still be used if installed per approved guidelines.