DOOR

Scout Setup and Specifications Guide

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Overview

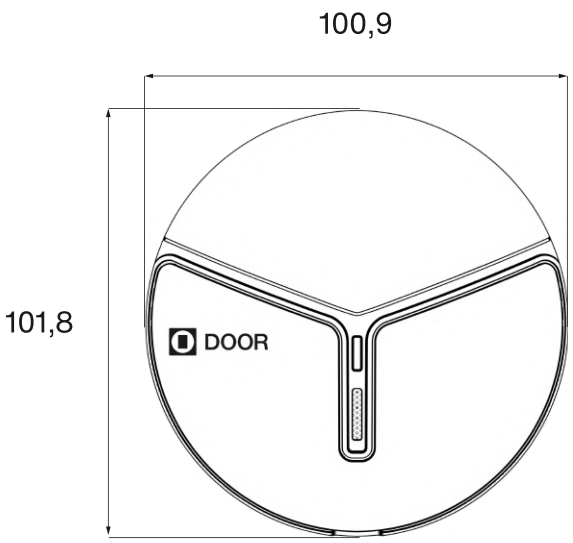
Scout is an indoor smart sensor designed to detect issues in residential environments by leveraging advanced Artificial Intelligence (AI) and Machine Learning (ML) models.

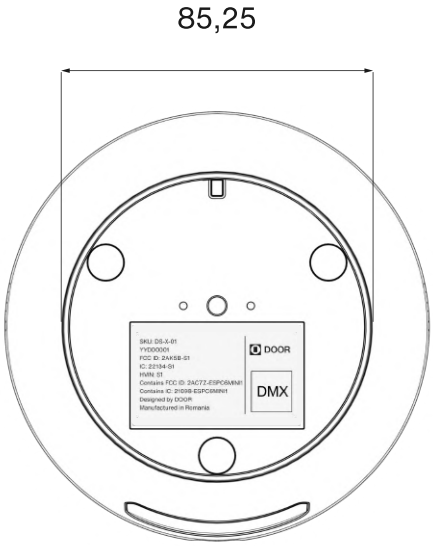
Scout continuously monitors sound patterns using onboard microphone. All audio data is processed locally on the device and immediately discarded after inference, ensuring complete resident privacy and data security. Scout is optimized for indoor deployment, supporting both resident units and shared-use spaces.

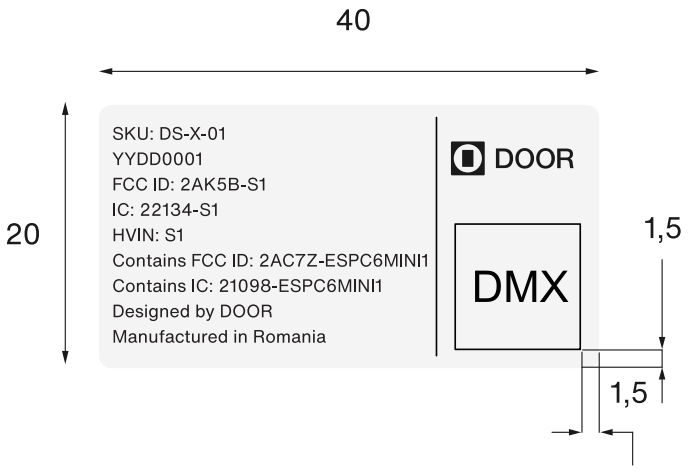
This guide outlines approved placement strategies, environmental requirements, safety constraints, and multi-unit deployment practices.

Dimensions

Product Name: Scout







Communication

Wireless standards	Bluetooth Low Energy (5.3) BLE, LORA US915

Power

Power Supply	4 x AA non-rechargeable alkaline batteries or 5V USB-C Power Adapter

Environmental

Operating Temperature	0° C to 60° C (32° F to 140° F)
Operating Humidity	0-95% relative humidity, non condensing
Ingress Protection (IP)	IP54 - intended for indoor

Certifications and Warranty

Certifications	FCC Part 15, IC RSS
Scout Certification	2AK5B-S1 / 22134-S1
ESP32-C6 (Espressif 32-C6) Certification	2AC7Z-ESPC6MINI1 / 21098-ESPC6MINI1

Key Facts

Power

Operates on four (4) AA alkaline batteries. Batteries are not assembled into the device (batteries are included in the package). It can also be powered using a 5V USB-C power adapter.

Networking

Automatically connects to the LoRa network on startup. If a connection cannot be established within a predefined timeout period, the device enters low-power sleep mode to conserve battery life.

Locks

A maximum of eight (8) locks can be associated with a single Scout device.

Scanning

Performs Bluetooth Low Energy (BLE) lock scans at boot, every 24 hours thereafter, and when the device joins the LoRa network for the first time after startup.

Warning

This device is intended for indoor use only and must be operated within an ambient temperature range of 0 °C to 60 °C (32 °F to 140 °F) and a relative humidity below 90% RH, non-condensing.

To ensure reliable operation and prevent false detections, do not place the sensor directly on the floor and maintain a minimum distance of 1.88 m (6 ft) from HVAC units, air vents, or air blowers, as air turbulence may affect performance.

The device should be installed away from heat sources such as radiators, ovens, water heaters, and direct sunlight, as well as from areas with persistently high noise levels.

Avoid proximity to strong magnetic fields or sources of electromagnetic interference, including speakers, induction appliances, motor-driven equipment, microwave ovens, Wi-Fi routers, and cordless phones.

Ensure the sensor is not obstructed by furniture, curtains, appliances, or structural elements, and that sound paths and airflow remain unobstructed to allow proper detection and air circulation.

Warning

USA

FCC ID: 2AK5B-S1
Contains FCC ID: 2AC7Z-ESPC6MINI1

Per FCC 15.19(a)(3) and (a)(4) This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Per FCC 15.21, The user manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Per RSS-Gen, Section 8.4 This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Caution

The Federal Communications Commission (FCC) warns the users that changes or modifications to the unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC §15.105 (b)

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning

Canada

IC: 22134-S1
Contains IC: 21098-ESPC6MINI1

This device contains licence-exempt transmitter(s)/ receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Installation Checklist

01 Confirm access to the floor and identify the locks to be associated by the Scout (maximum of 8 per device).

02 Walk the installation area (hallway or unit) and identify physical barriers that may reduce BLE range, including reinforced doors, elevator shafts, mechanical rooms, or concrete walls.

03 Select a central location location as close as possible to the majority of the target locks.

04 Select an installation location with a clear, unobstructed path to the target locks.

05 Verify the mounting location is away from interference sources such as HVAC vents, air blowers, radiators, microwaves, Wi-Fi routers, and similar equipment.

06 Ensure the device will not be blocked by décor, signage, cabinets, or other fixtures after installation.

07 Confirm adequate space for airflow and unobstructed signal propagation.

08 If more than eight locks are present on the floor, or if coverage is uncertain, plan additional devices and escalate to the project lead before installation.

Installation Steps

Complete the steps below for each floor.

01

Prepare the device

1. Confirm the QR code and serial number (S/N) are readable.
2. Verify the button is accessible when mounted (do not cover it with mounting hardware).

02

Mount the device in the selected hallway & in unit location

1. Use the site-approved mounting method and ensure the unit is secure.
2. Do not install on the floor. Ensure the sensor face is unobstructed and air circulation is not blocked.

03

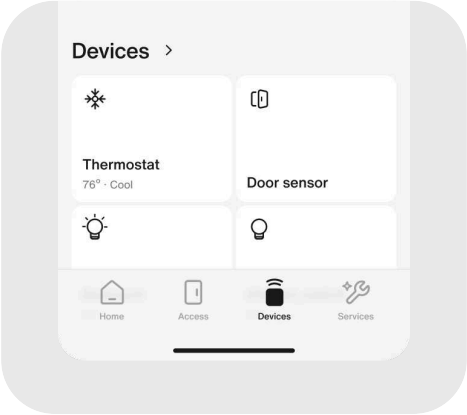
Power up

1. Insert 4xAA alkaline batteries (device ships without batteries inserted) OR connect USB power in the power socket using the original power adapter.
2. On normal boot, the LED shows blue solid for about 2 seconds.
3. When connected to LoRa during start-up, the LED shows green solid for about 2 seconds, then transitions to the next relevant state.

04

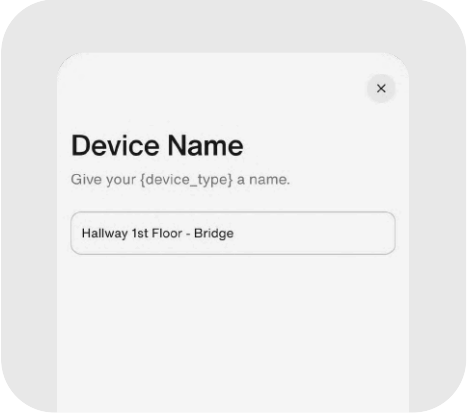
Onboard the device in the DOOR mobile app

1. Open the DOOR mobile app and log in.

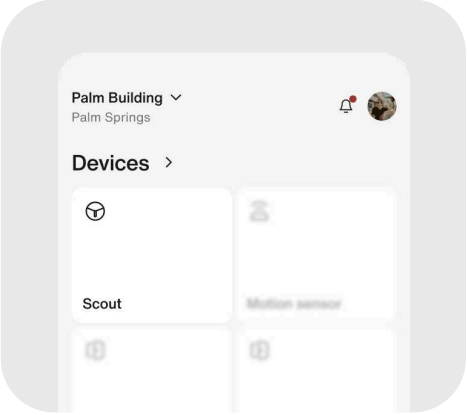


2. Go to Devices (or the main dashboard) and tap Add New Device.

3. Scan the QR code on the Scout, or enter the S/N manually.



4. Assign the Scout using the standard naming convention (example Hallway 1st Floor - Bridge).



5. Confirm the device appears Online in the app.

05

Firmware upgrade (if prompted by the app)

1. Enable Bluetooth (BLE) on the phone.
2. Press and hold the physical button for 3 seconds to enable OTA via BLE.
3. Follow the in-app upgrade instructions. While the device applies the new version, the LED is yellow solid.
4. Wait for confirmation in the app before continuing.

07

Functional checks (technician validation)

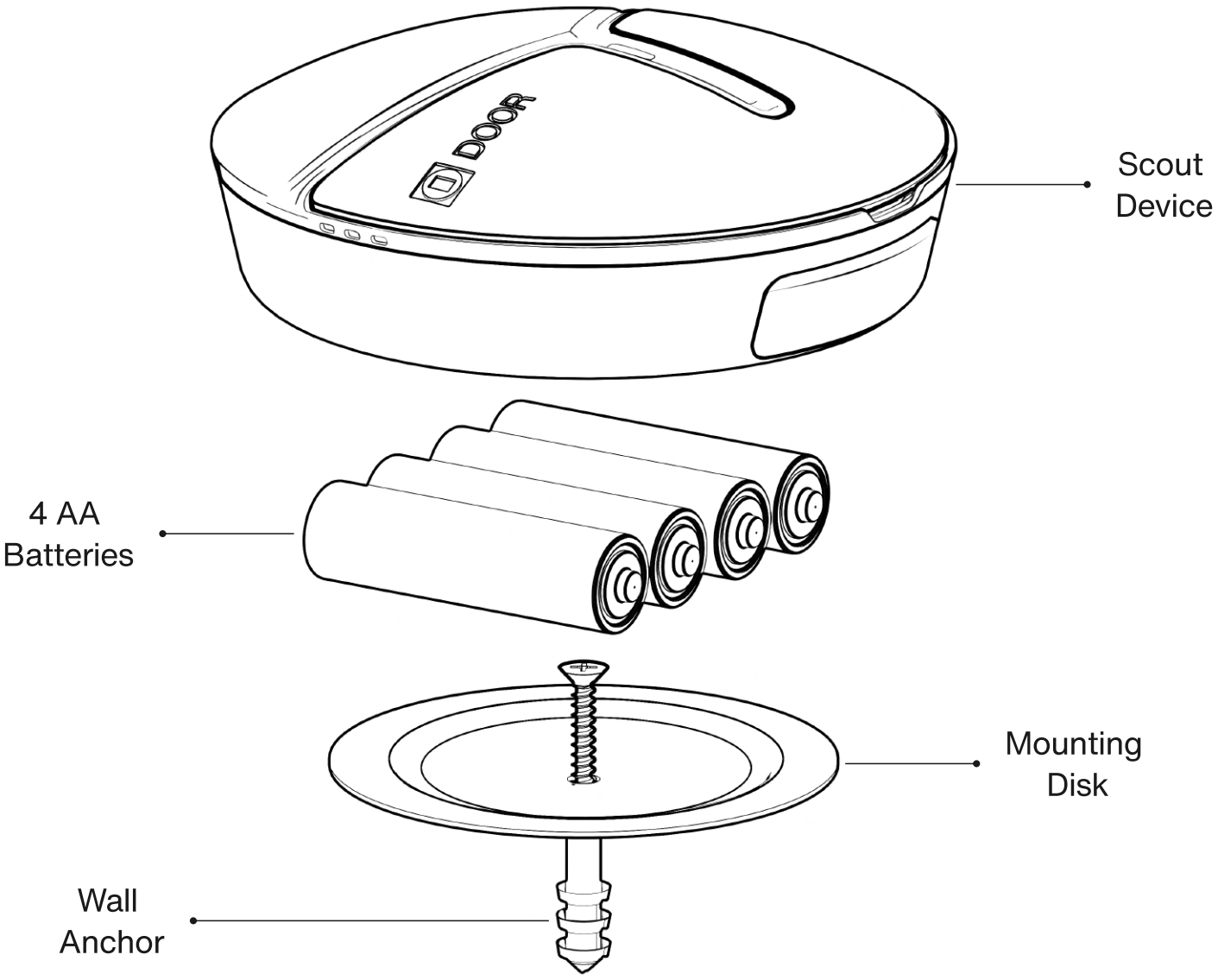
1. Short press the button (less than 1 second) to check LoRa state: Green solid for 2 seconds indicates connected; Yellow solid for 2 seconds indicates no LoRa connectivity.
2. If no LoRa connectivity is indicated, press and hold the button for 10 seconds to initiate LoRa reconnection.
3. Verify the device returns to an Online state in the app.

06

Lock discovery and association check (target: up to 8 locks)

1. Allow the system to complete its initial BLE scan (performed at boot / first LoRa join after boot).
2. In the Scout settings, open Linked Locks to confirm the expected locks are detected and associated (up to 8).
3. If some locks are missing, verify hallway placement (obstructions/interference), then power-cycle the device to trigger a fresh scan (remove power briefly and restore). Re-check Linked Locks.
4. Record the final associated lock list for the installation report.

Parts List



Physical Installation Guide

Room-Specific Placement

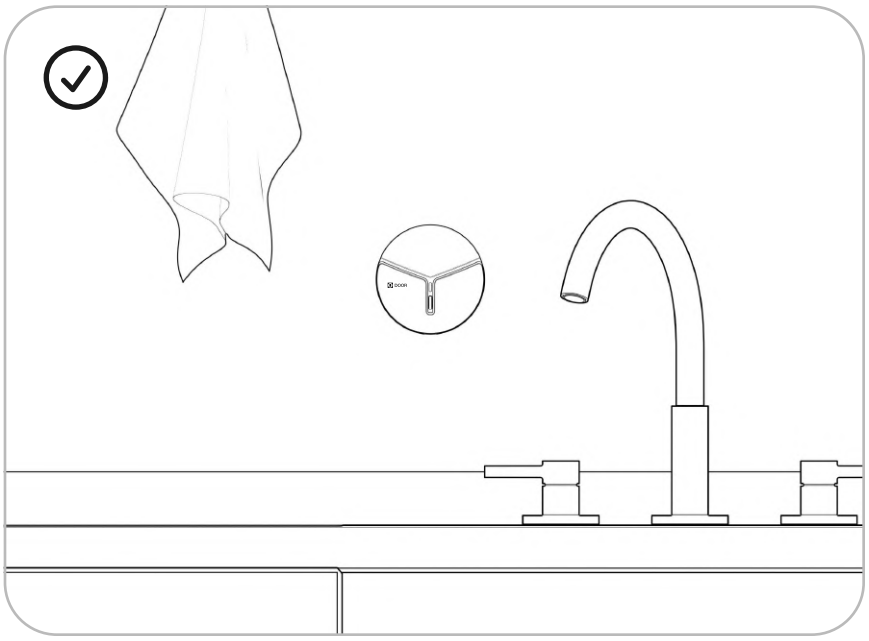
Open Concept Areas: Place in central, high-visibility locations such as Hallways, Living Rooms, or Kitchens.

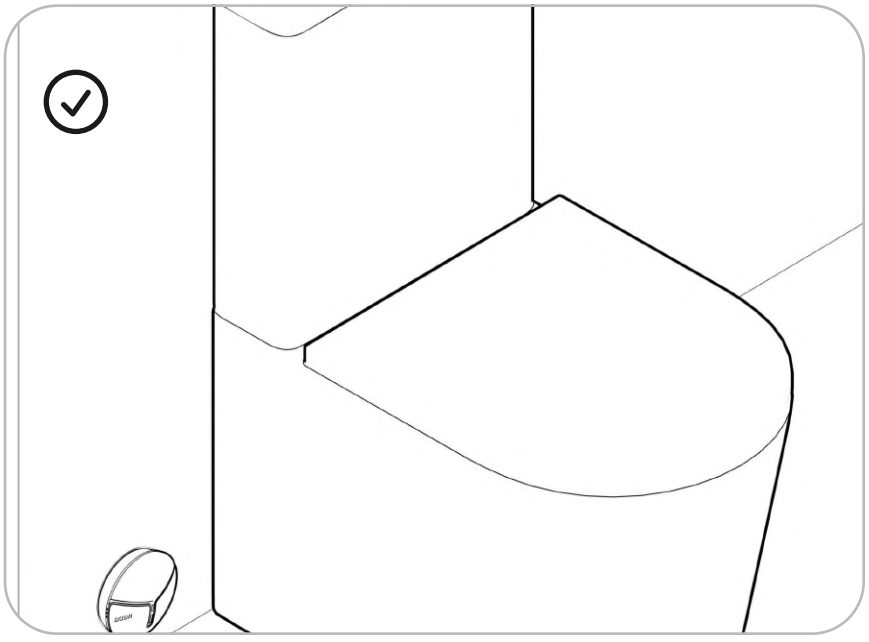
Vertical Surfaces: Mount on walls or above door frames to maximize range.

Furniture Tops: Place on top of sideboards or media consoles.

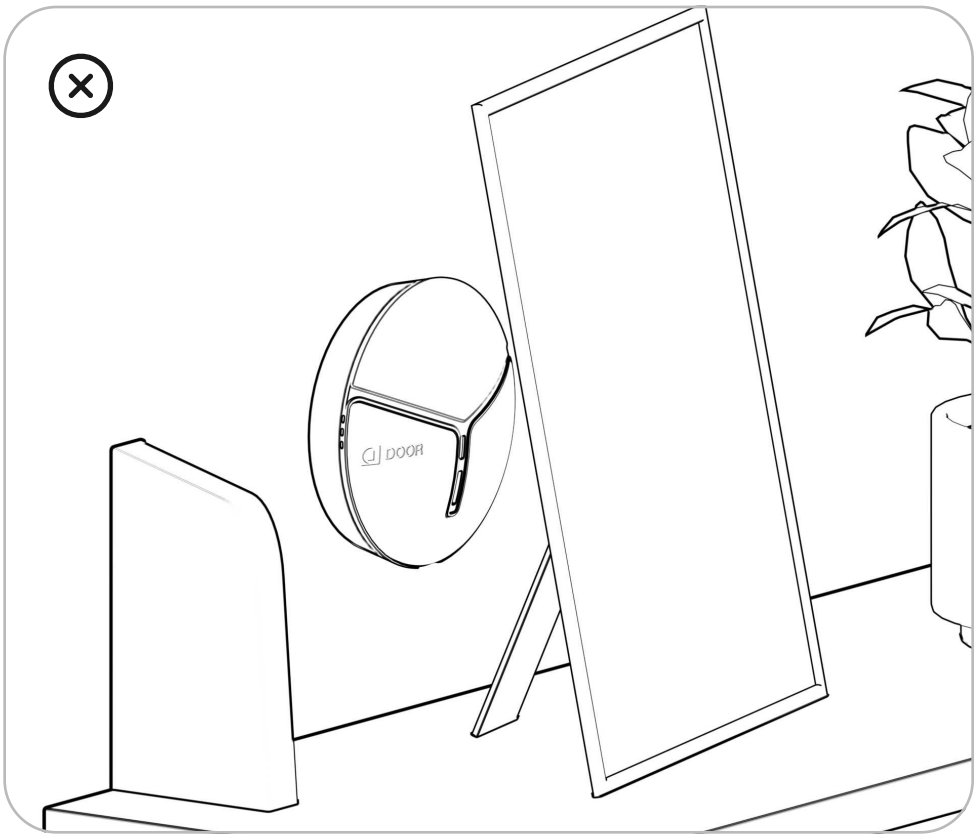
Note: Do not place inside cabinets or drawers; clear line-of-sight is required for signal strength.

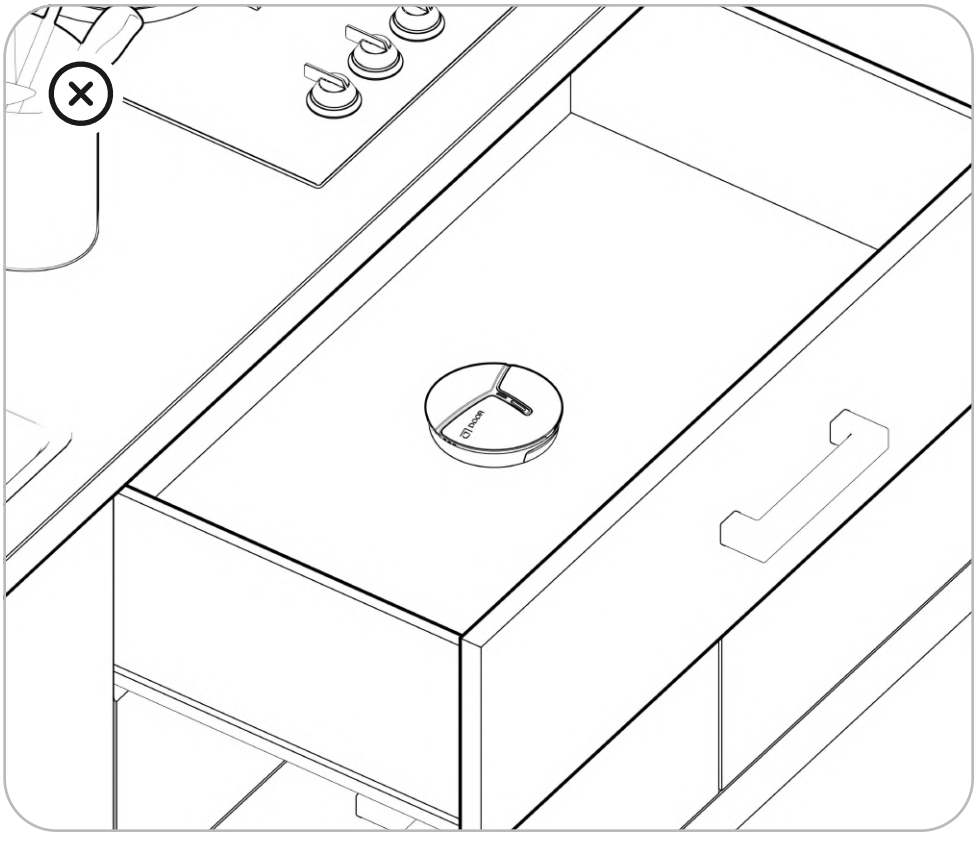
Ceiling Mounting: Install on the ceiling for an unobstructed "bird's-eye" connection.



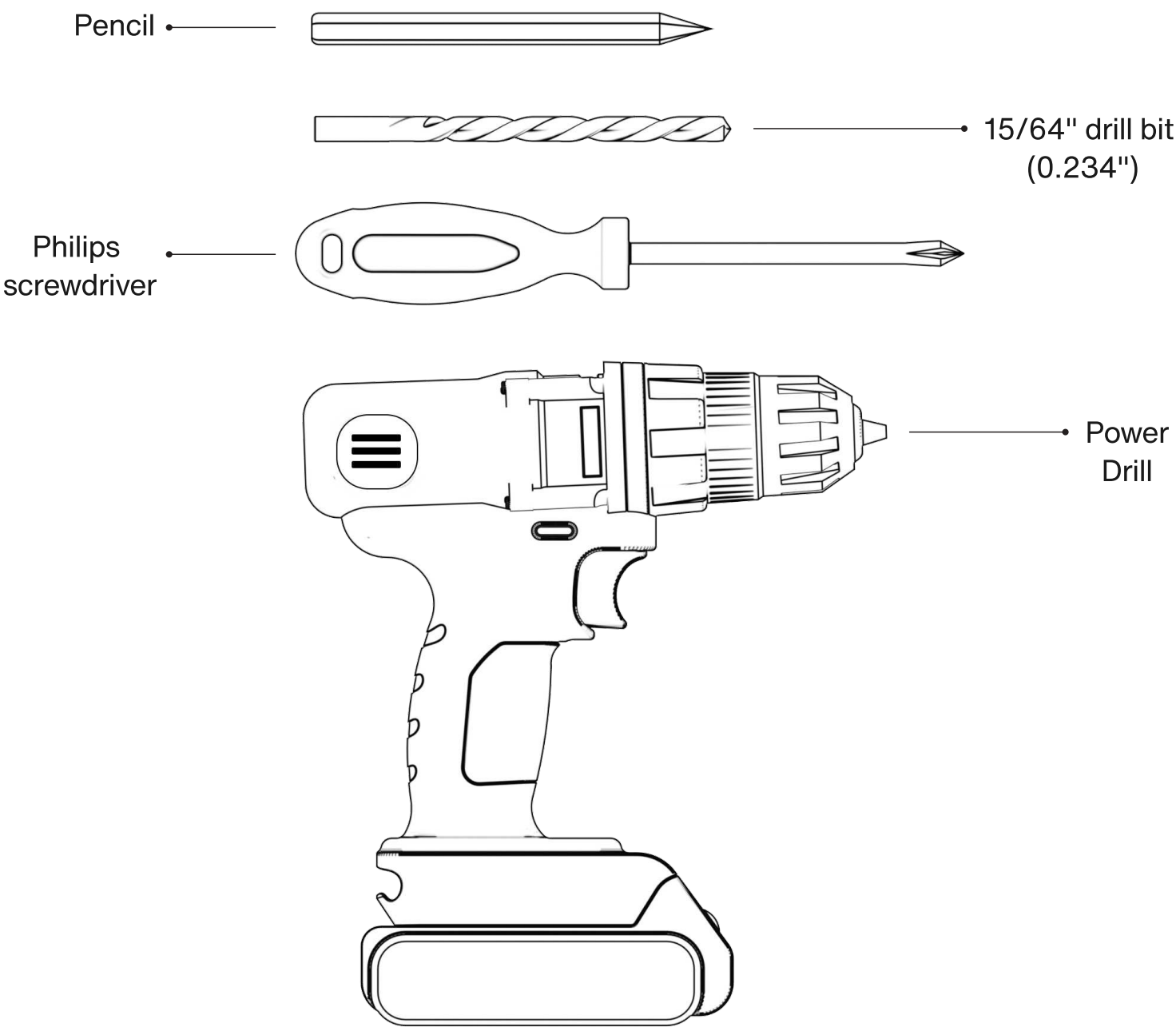


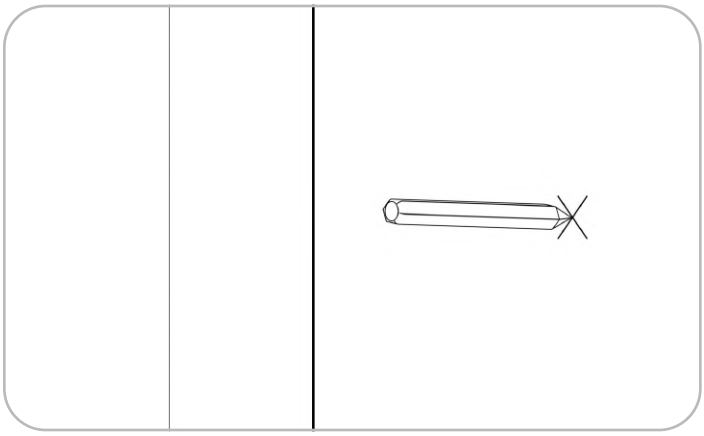
Avoid these placements



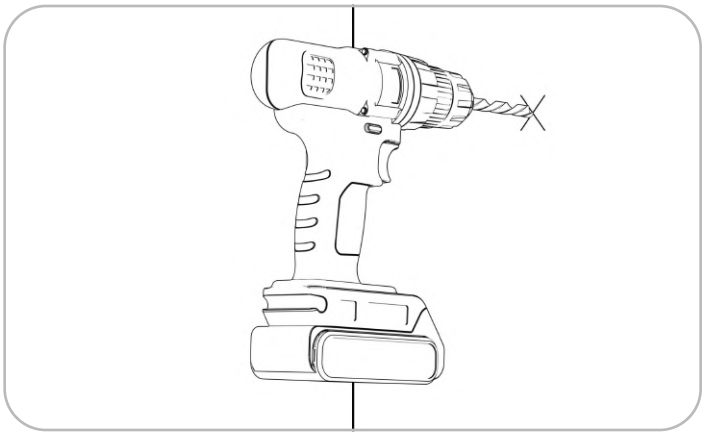


Installation

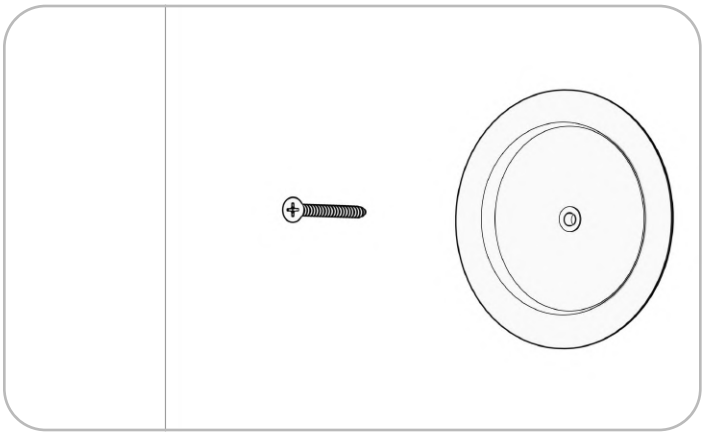




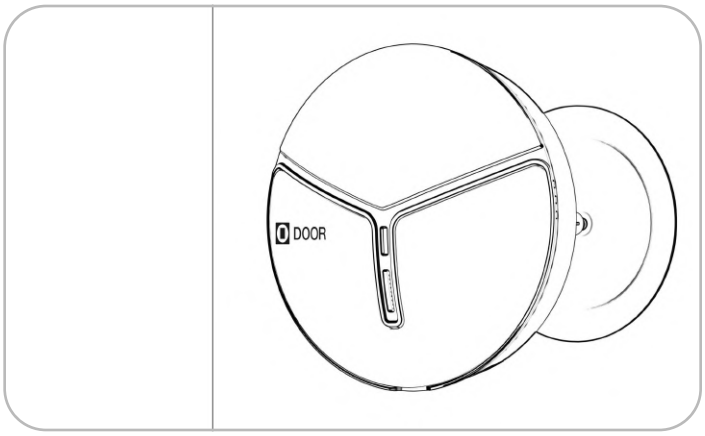
01 Mark the drill point on the wall.



02 Drill a hole at the marked location.



03 Insert the wall anchor and secure the metal mounting disk with the screw.



04 Align and attach the Scout device to the mounting disk.