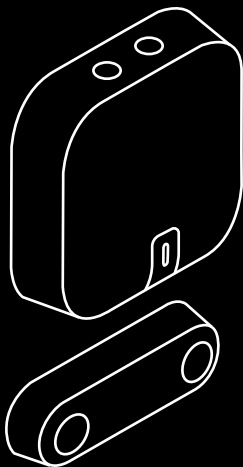


# Door & Environmental Sensor (DES-2)

Installation guide



**motive**

English

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Scan this code or visit [gomotive.com/ag-mini-install](https://gomotive.com/ag-mini-install) for additional support, including step-by-step instructions in multiple languages and tips about mounting and cabling.

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## What's in the box



Sensor



Magnet



Small mounting plate screws (5)



Large mounting plate screws (5)



Mounting plate



Device screws (3)\*



Pin



Spare adhesive



Alcohol wipe

\*Use these screws to secure the device to the mounting plate

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## Assigning using the Fleet App (recommended)

- 1 Install a **Motive Asset Gateway** using cable power and ensure it is receiving power so that it can connect to the **Door & Environmental Sensor**.
  - For Asset Gateway installation instructions, visit: [gomotive.com/ag-mini-install](https://gomotive.com/ag-mini-install)
- 2 Download the **Motive Fleet App** from Google Play Store or Apple App Store and log in as an admin or installer.
- 3 Go to the **Devices** tab.
- 4 Follow the in-app instructions to guide you through installing your DES-2 before pressing the button on the sensor for the first time.
  - Ensure you assign your DES-2 to the same asset as your Asset Gateway.

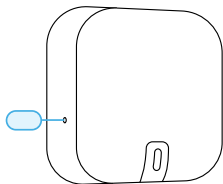
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## Assigning using the Fleet Dashboard

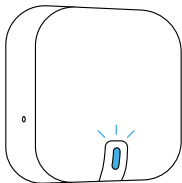
- 1 Install a **Motive Asset Gateway** using cable power and ensure it is receiving power so that it can connect to the **Door & Environmental Sensor**.
  - For Asset Gateway installation instructions, visit: [gomotive.com/ag-mini-install](https://gomotive.com/ag-mini-install)
- 2 Log in to the **Motive Fleet Dashboard** as an admin or installer.
- 3 Go to the Admin section and navigate to **“Assets”**.
- 4 Visit [gomotive.com/ag-mini-install](https://gomotive.com/ag-mini-install) to finish installing your sensor.
  - Ensure you assign your DES-2 to the same asset as your Asset Gateway.

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## Activation



Quickly press and release the pinhole button on the side of the sensor by inserting the pin.



The LED will start blinking blue to indicate that the sensor is beginning the pairing process.

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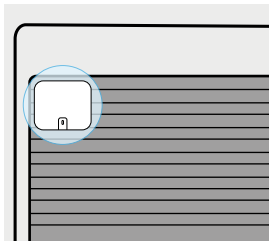
## **Choose your door type**

Your Door & Environmental Sensor can be installed on Roll-up Doors and on Swing Doors. Proceed to the positioning instructions for your door type.



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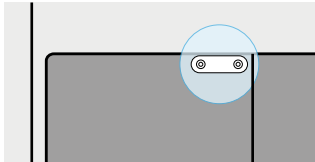
## Positioning on a Roll-up Door



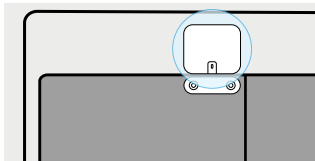
1. Set aside the magnet provided; it is intended for Swing Doors, not Roll-up Doors.
2. Orient the sensor with the LED on the bottom, as shown. Place the sensor on the door in such a position that it will be vertical (perpendicular to the floor) when the door is closed and horizontal (parallel to the floor) when the door is opened.
  - a. If possible, attach the sensor in the interior side of the door.
3. Proceed to mounting instructions.

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## Positioning on a Swing Door



1. Place the magnet on the top edge of the door.



2. Place the sensor on the top edge of the door frame with the LED facing the magnet.

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## Positioning on a Swing Door

3. Ensure sensor and magnet are within the maximum distances below:

### **Metal Surfaces**

12mm (½ inch apart)

### **Other Surfaces**

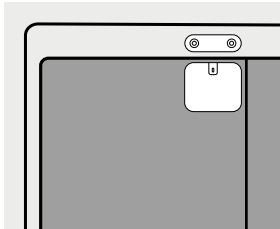
22mm (7⁄8 inch apart)

When the door closes, the sensor blinks green once.  
When the door opens, it blinks white once.

**Note:** This blinking behavior is for the 1st 30 minutes after activation or button press.

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## Positioning on a Swing Door

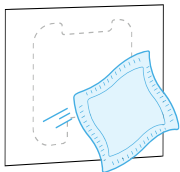


**Note:** If sensor will not fit on the ceiling, it is acceptable to swap the position of sensor and magnet, as long as the sensor's LED continues to face the magnet and within maximum distance of the magnet.

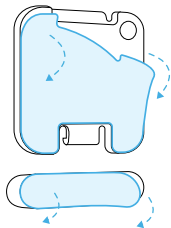
4. Proceed to mounting instructions.

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## Mounting



Use the included alcohol wipe to thoroughly clean the area where you want to attach the mounting plate and magnet.

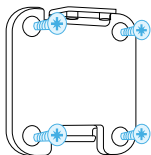


Remove the adhesive backing from the mounting plate and affix the plate to your desired location.

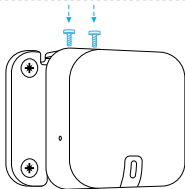
If using the magnet, remove its adhesive backing and affix it to your desired location.

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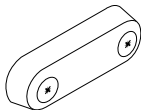
## Mounting (cont'd)



If attaching the plate to a metal surface, use the small mounting plate screws; for wood surfaces, use the large mounting plate screws.

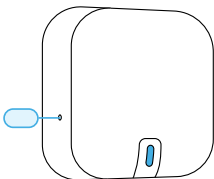


Attach the sensor to the mount and secure it using the device screws.



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## Confirming Pairing

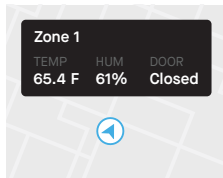


At least 10 minutes after you first pushed the pinhole button, quickly press and release the button again. The LED will turn solid blue if your sensor has successfully paired to your Asset Gateway.

**Note:** If your AG is installing firmware updates, you may need to wait 30 - 60 minutes before your sensor is successfully paired and data appears in your Fleet App or Dashboard.

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## Confirming Pairing (cont'd)



You can now track your asset and sensor telematics in the Motive Fleet Dashboard.



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## Understanding the LEDs

Upon a quick press of the pinhole button, the LED light will behave as follows for the next 30 minutes:



### **Green**

Transition from Door Open to  
Door Closed



### **White**

Transition from Door Closed to  
Door Opened

To save battery, the green/white LED blinking only works for 30 minutes after pressing the pinhole button. If you need more time for installation or testing, press the pinhole button again to turn on the blinking for another 30 minutes.

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## Understanding the LEDs



**Solid blue**

Device is working properly



**Blinking blue**

Pairing to an Asset Gateway



**Solid yellow**

Connectivity to the Asset Gateway is weak



**Solid red**

Low battery

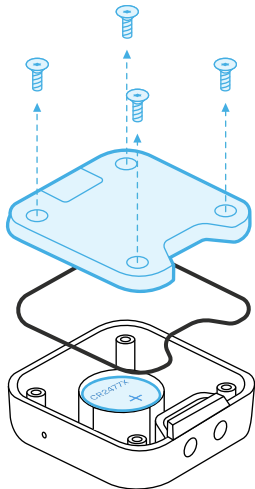


**Solid red**

Low battery

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## Replacing the battery



Flip the device over and use a T6 screwdriver to remove the screws.

Gently remove the battery from the battery holder and replace it with the **Murata CR2477X battery** only.

Ensure that the waterproofing rubber gasket is well seated in the top housing groove before closing and securing the bottom housing.

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# Note

## FCC, ISED Caution Statement

- a. This device contains license-exempt transmitters/receivers that comply with Part 15 of the FCC Rules and with Innovation, Science and Economic Development Canada's License-exempt RSS(s). Operation is subject to the following two conditions:
  - i. This device may not cause harmful interference, and
  - ii. this device must accept any interference received, including interference that may cause undesired operation.  
CAN ICES-3(B)/NMB-3(B)

- b. **Changes or modification warning**

Note: Any Changes or modifications not expressly approved by Motive Technologies, Inc. could void the user's authority to operate the equipment.

- c. **Information to the user**

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment and RSS 102 RF exposure compliance requirements. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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

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## Note (cont'd)

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 disconnecting, then reconnecting the equipment, 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.

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## Troubleshooting

855-434-3564

support@gomotive.com

helpcenter.gomotive.com

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## Resources



For Asset Gateway installation instructions and multilingual step-by-step instructions, scan the QR code or visit: [gomotive.com/ag-mini-install](https://gomotive.com/ag-mini-install)

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**Download the  
Motive Fleet App**

