Tracker activation

Activation of the tracker is preferably done with clear skies, and not inside (e.g. factory or warehouse).

Trackers are not activated when delivered to your premises.

Their subscription in the platform will start within six months of purchase.

1

Hold a magnet for about 5 seconds on top of the logo on the tracker.

2

You will first see a red LED. Do not remove the magnet yet.

3

When the green LED is blinking you can remove the magnet. The tracker is ready for use.

Activation troubleshooting

Activating a tracker that communicates over the NB-IoT network can sometimes come with a delay. With a delay we mean that the online status doesn't appear within 5 minutes after holding the magnet to the tracker. This is mostly due to conditions on the network operator site.

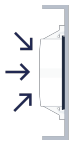
If the activation wasn't successful after 5 minutes the tracker will try again to activate again after waiting 24 hours.

This long period of time is often an obstacle to start installing trackers to assets and makes the timing of the installation of the trackers cumbersome as it is important to only install trackers when they appeared as online on the platform.

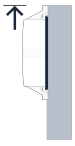
To overcome the 24 hours waiting time, you can do the following:

If after 5 minutes of waiting and the status didn't change yet to "online" hold the magnet again for 5 seconds on top of the tracker to enforce a new attempt for activation. Keep trying every 5 minutes until the Online status appears.

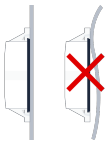
General installation advice



If your asset is handled in a rough environment, you can place the tracker in a protected location, but never with metal or carbonfibre above the tracker.



Place the tracker as high as possible on the asset to ensure good network coverage.



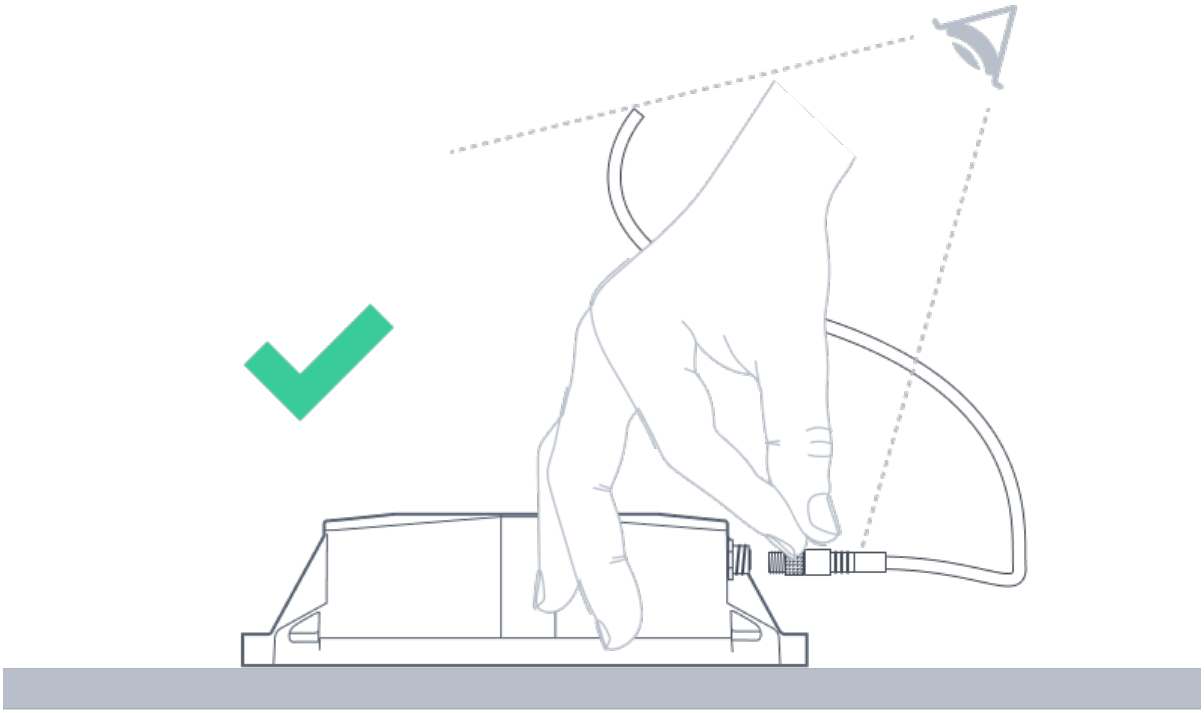
Make sure the mounting surface is flat and clean, for a strong and durable bond.

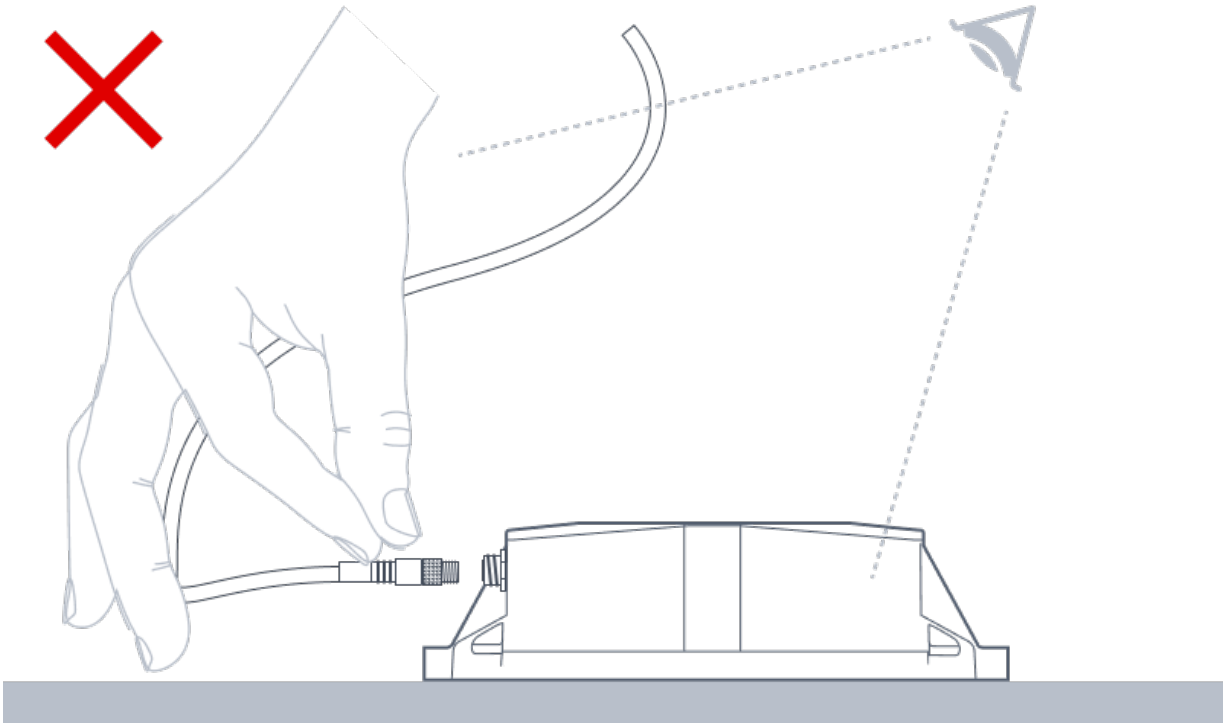
Do not install the tracker on parts that receive frequent shocks or vibrations.

Avoid placing the tracker in a place that can collect water.

Mount the tracker onto the vehicle

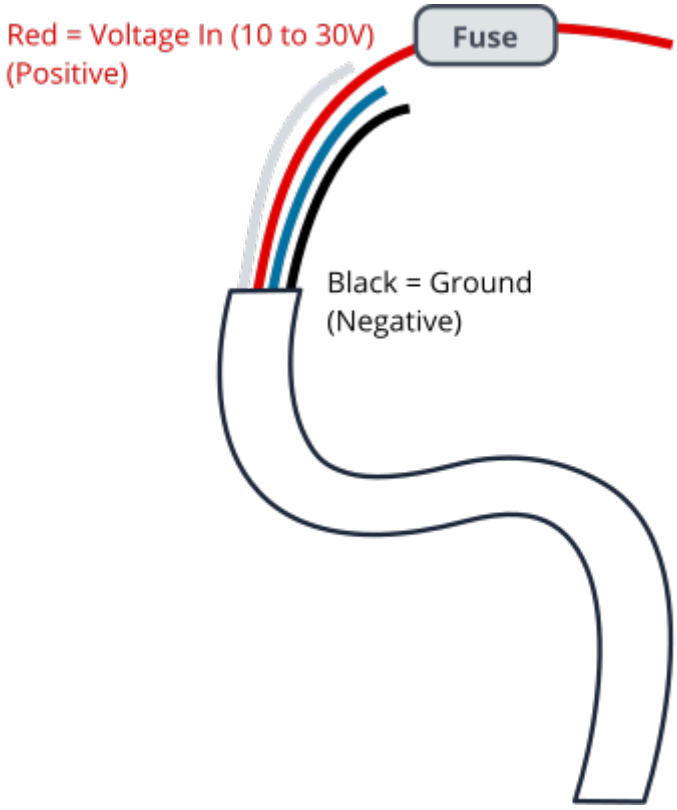
Guidelines how to mount the tracker can be found here. Mount the tracker in such a way you have good access and a good view to the power plug of the tracker.





Fuse installation and wiring

An additional fuse (> 500mA and < 1A) can be installed. Install the fuse on the voltage in red cable in series. The tracker has an internal fuse, see specsheet for details.



The external cable is composed of 4 internal wires:

- Black: GND / Ground. Connect to black battery terminal (negative, minus sign).
- Red: VIN External voltage in. Connect to red battery terminal (positive, plus sign).
- Blue: Digital In / Analog In (not in use currently; pending a future firmware release).
- White: Digital Out (not in use currently; pending a future firmware release).

  1. Install connectors on the vehicle wiring: Install the female spade connectors on the installed wires on the inside of the truck.

  1. Install connectors near the power source: Install the fork connectors to the end of the 2 wired cable near the power source. Do not attach to the battery yet.

  1. Install connectors on the tracker cable: Install the male spade connectors on the tracker cable.

Connect tracker to the vehicle power source

1

Put the cable onto the connector. Only the black plastic piece will go into the connector. Do not force this.

→

2

Tighten the connection by gently screwing the cable into the connector. Do not force this.

→

3

Check if the power cable is connected well.

Force new configuration download on the tracker

A firmware can be uploaded on the tracker. Queue the firmware in the Sensolus platform first.

1

Hold a magnet for about 5 seconds on top of the logo on the asset tracker. You will see a green LED.

→

2

You will see a red and green LED. Now remove the magnet.

→

3

Green LED is blinking for minimum 30 seconds. Your tracker is checking for new configurations.

→

You see a red LED: No new configuration received.

You see a green LED: New configuration setting received.

Troubleshooting

1. Put the magnet on the tracker for less than 5 seconds
2. The possible LED feedback options are:

 Red LED: Tracker is not activated	 Green LED: Tracker is activated and working properly	 No LED: Tracker is not functioning (probably dead battery -> contact support)	 Red LED is blinking: Tracker is busy

Regulatory Information

Federal Communication Commission Interference Statement

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.

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 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This equipment is not suitable for use in locations where children are likely to be present.

Industry Canada Statement

This device complies with ISED's licence-exempt RSSs.

Operation is subject to the following two conditions:

This device may not cause harmful interference, and

This device must accept any interference received, including interference that may cause undesired operation.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada.

To reduce potential radio interference to other users, the antenna type and its gain should be chosen so that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

RF Exposure Requirements:

This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

Le présent appareil est conforme aux CNR d' ISED applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes:

1. le dispositif ne doit pas produire de brouillage préjudiciable, et
2. ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada.

Dans le but de réduire les risques de brouillage radio électrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements du Canada établies pour un environnement non contrôlé.

Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

Safety advice – device subjected to strong mechanical impact

Risk of delayed battery failure and chemical hazard

If a device has been hit, crushed, or struck by a heavy object (for example a forklift, container, pallet, or falling load), the internal components and battery may be damaged even if no external damage is visible. Such damage can result in delayed overheating, leakage, or failure.

If a device has been subjected to a strong mechanical impact, the following mandatory safety actions must be taken:

#	Action	Details
1	Do not touch the device	Do not move, lift, open, shake, or inspect the device immediately after the impact. Internal damage may cause delayed reactions.
2	Keep a minimum safety distance	Maintain a clear distance of at least 5 meters from the device. Keep all personnel away during this period.
3	Wait at least 10 minutes	The device must remain untouched and undisturbed for a minimum of 10 minutes following the impact. This waiting time allows potential delayed thermal or chemical reactions to become evident.
4	Observe from a safe distance	Watch for warning signs: smoke, vapor, or unusual odor; heat generation; fluid leakage; hissing, cracking, or popping noises.
5	After the waiting period	If any abnormal condition is observed, isolate the area immediately and notify responsible safety or supervisory personnel. The device must be quarantined and handled according to battery safety and disposal procedures. The device must not be used.

A device may appear undamaged and still be unsafe. Normal operation after impact does NOT mean the device is safe. Failure to follow this safety advice may result in serious injury, fire, or chemical exposure.