

Satellite Connection

Setup Guide

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Contents

Setting up a satellite connection	2
Add a satellite device	3
Before you start.....	4
Meet RockBLOCK+	5
What you need	6
Position satellite device	7
Prepare satellite device wiring.....	8
Connect satellite device.....	13
Link satellite device	16
Test satellite device connection	17
Install satellite device.....	19
Add satellite service	22
What you need	23
Add a satellite plan.....	24
Test satellite service.....	25
Reference	26
RockBLOCK+ connections.....	27
Related topics	28
Lengthen satellite device cable	29
Remove satellite device plug	30
Legal	31

Setting up a satellite connection

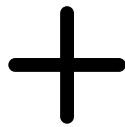
Stay connected when your BRNKL is outside mobile network coverage with a satellite connection.

Set up a satellite connection by adding a compatible satellite device and a BRNKL satellite service plan.



Satellite device

RockBLOCK+ (compatible wiring)



Satellite service

BRNKL satellite plan

Add a satellite device

Add a compatible satellite device to your BRNKL.

Follow these steps:

Before you start

Meet RockBLOCK+

What you need

- 1 Position satellite device
- 2 Prepare satellite device wiring
- 3 Connect satellite device
- 4 Link satellite device
- 5 Test satellite device connection
- 6 Install satellite device

Before you start



Caution

If you're unfamiliar with basic electrical systems, hire a professional installer or a marine electrician.

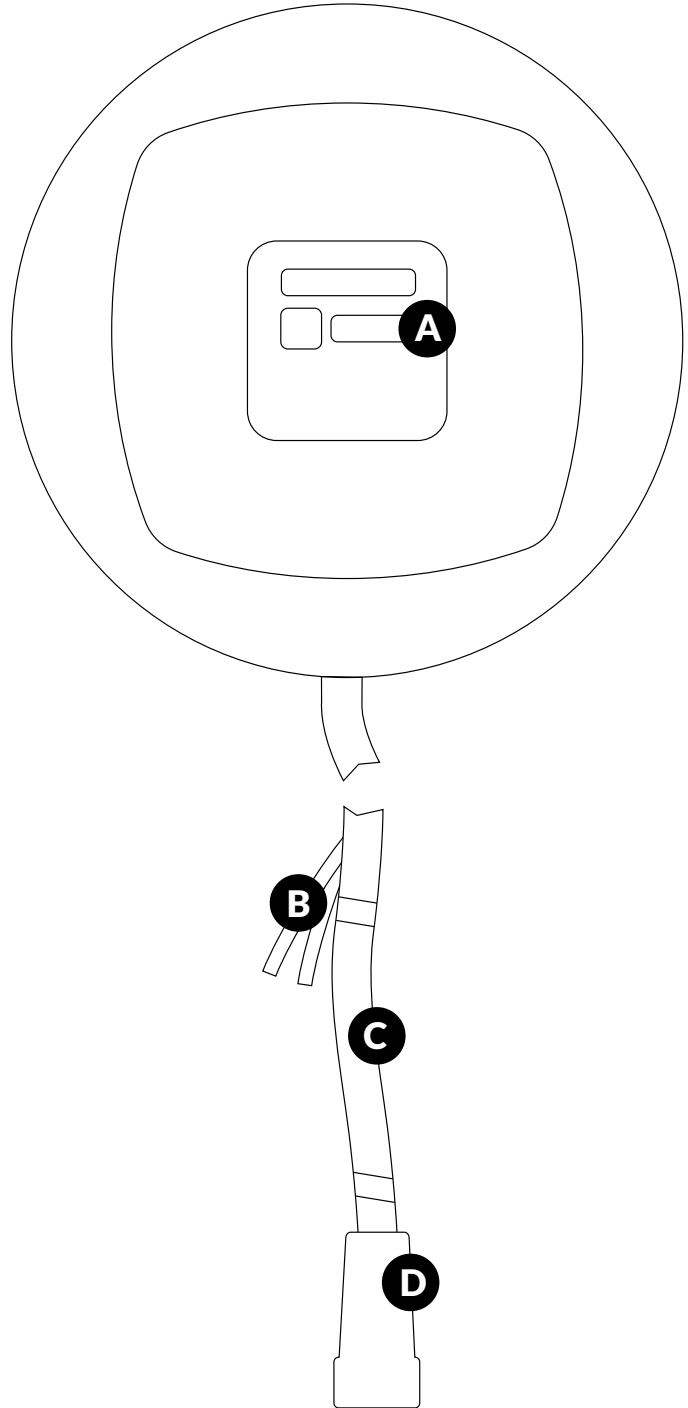


Warning

Disconnect all AC power sources before accessing electrical panels, switches, or devices.

Meet RockBLOCK+

- A** Serial number
- B** Power leads
- C** Splice area
- D** Serial cable plug



What you need

You need these things to add a satellite device to your BRNKL:

In the box

- BRNKL Satellite Kit
 - > RockBLOCK+ satellite device with BRNKL-compatible cable
 - > Mounting plate

You may need:

- ROKK Rail Mount for RockBLOCK+ (sold separately)

Devices

- BRNKL, setup complete
- iOS or Android™ mobile device, connected to internet
 - > BRNKL app installed

Services

- BRNKL user account, password
- BRNKL subscription

Tools

- Wire stripper and crimper tool
- Heat gun or lighter

You may need:

- Multi-head screwdriver
- Wrench set
- Power drill and bit set

- Non-conductive fish tape
- Flashlight or headlamp

Supplies

- Marine grade wire, 18 AWG (red)
- Marine grade wire, 18 AWG (black or yellow)
- 1 heat-shrink ring terminal, 22–18 AWG (red), sized to fit battery bus terminal
- 1 heat-shrink ring terminal, 22–18 AWG (red), sized to fit common ground terminal
- 1 in-line fuse holder, 18 AWG, ATC/ATO
- 1 2A fuse, ATC/ATO
- 3 heat-shrink butt connectors, 22–18 AWG (red)
- cable ties
- cable tie mounts

You may need:

- Marine grade 4 conductor cable, 22–18 AWG
- 4 #12, 316 stainless steel screws, matched to mounting surface material
- 4 additional heat-shrink butt connectors, 22–18 AWG (red)
- electrical tape

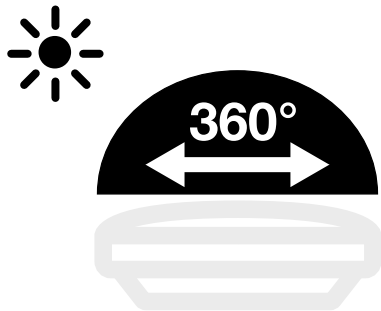
Position satellite device

Select a position to install the RockBLOCK+ satellite device.

To position the satellite device:

Follow these guidelines:

- DO NOT install the device at this stage.
- Place outdoors, facing the sky, with a 360° clear view of the horizon.

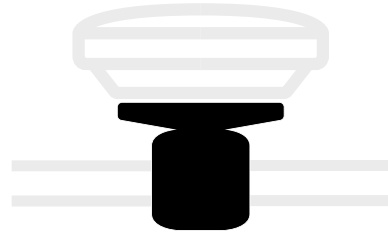


- Provide a stable mounting surface for one the following mounting options:

- > **Surface mount** on a flat horizontal surface with the supplied mounting plate.



- > **Rail mount** on a horizontal railing, 20 - 34mm (0.8 - 1.3") in diameter, with the ROKK Rail mount kit.



- Allow for a discreet cable run to the BRNKL or BRNKL Mate.
- Ensure 1m (3 ft) distance from any GPS antenna.

Prepare satellite device wiring

Prepare RockBLOCK+ satellite device cable and power wiring.

To prepare satellite device wiring, follow these steps:

- ① Run serial cable
- ② Run power wiring
- ③ Prepare power wiring
- ④ Prepare battery bus wiring
- ⑤ Prepare common ground wiring

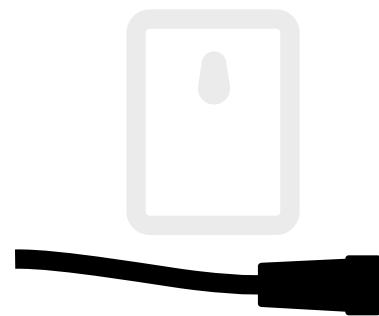
① Run serial cable



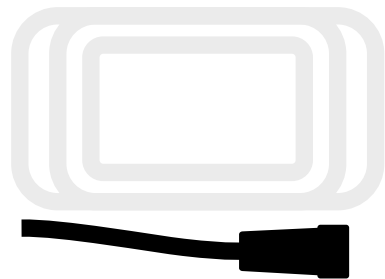
DO NOT plug in the cable at this stage.

From the satellite device, follow these guidelines:

- Do one of the following:
 - > Run the cable to the BRNKL.



- > If the BRNKL is connected to a BRNKL Mate, run the cable to the Mate.



- To make longer cable runs, **lengthen the cable** (page 29).
- Hide the cable in conduit, wall cavities, or wiring channels.

- > To route the cable through small openings, **remove the plug** (page 30).
- Leave 20 cm (8") of extra cable at each end.
- Secure the cable with cable ties and mounts.
- > At the fixable point closest to the mounting position, leave the cable unsecured.

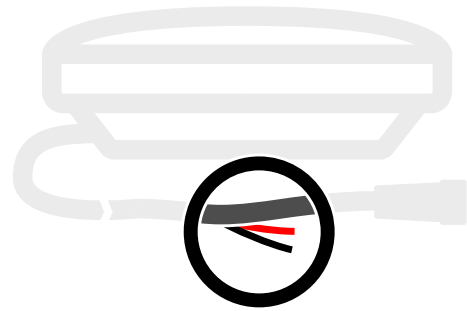
② Run power wiring



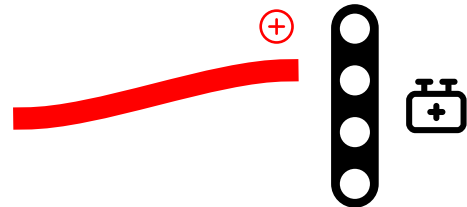
DO NOT connect the wiring at this stage.

Follow these guidelines:

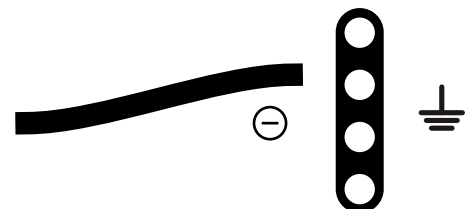
- From the **power leads** on the serial cable, run two wires:



- One **red ⊕ wire** to a **battery bus** (constant 9-30v).



- One **black ⊖ wire** to a **common ground ⊖** terminal.

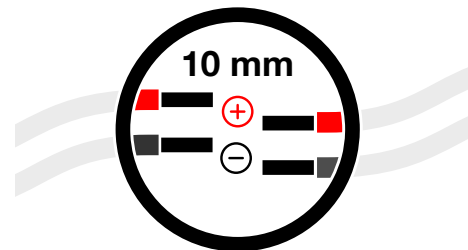


- Leave 20 cm (8") of extra wire at each end.
- Hide the wires in conduit, wall cavities, or wiring channels.
- Secure the wires with cable ties and mounts.

③ Prepare power wiring

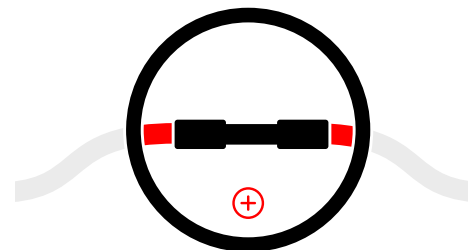
Splice the **power leads** with the power wiring.

1. Trim any extra wire.
2. Strip 10 mm (1/2") of insulation from the ends of:
 - > **red ⊕** and **black ⊖** wires.
 - > **red ⊕** and **black ⊖** power leads.



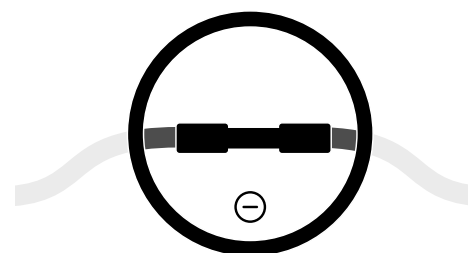
3. Connect and crimp the **red ⊕ wire** and the **red ⊕ power lead** with a heat-shrink butt connector.

Heat seal the connection.



2. Connect and crimp the **black ⊖ wire** and the **black ⊖ power lead** with a heat-shrink butt connector.

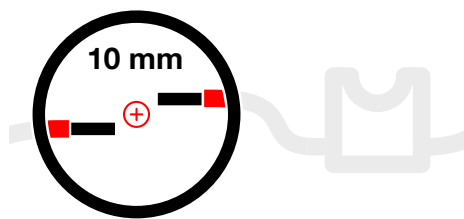
Heat seal the connection.



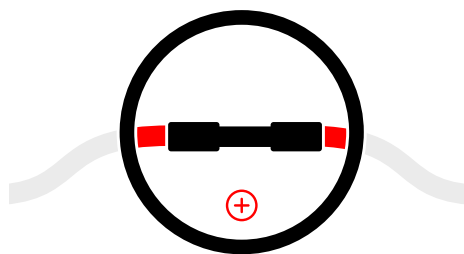
④ Prepare battery bus wiring

Splice an inline fuse holder with the battery bus wiring:

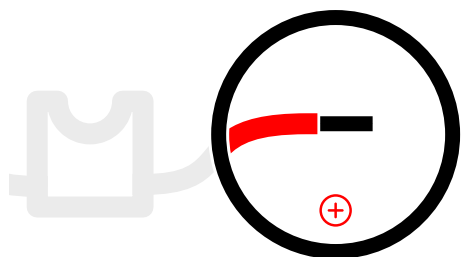
1. Trim any extra **red ⊕** wire.
2. Strip 10 mm (1/2") of insulation from the end of the **red ⊕ wire** and a **fuse holder ⊕** lead.



3. Connect and crimp the two wires with a heat-shrink butt connector. Heat seal the connection.



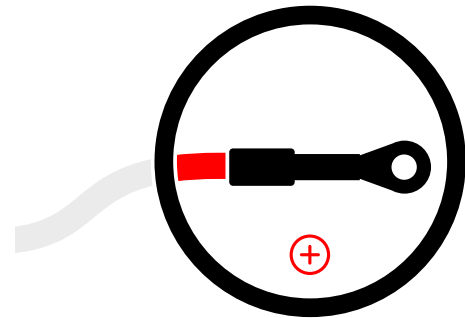
4. On the **unattached fuse holder ⊕** lead, trim any extra wire.
5. Strip 10 mm (1/2") of insulation from the end of the lead.



6. Connect and crimp a ring terminal to the lead.

Size the ring terminal to fit the battery bus terminal.

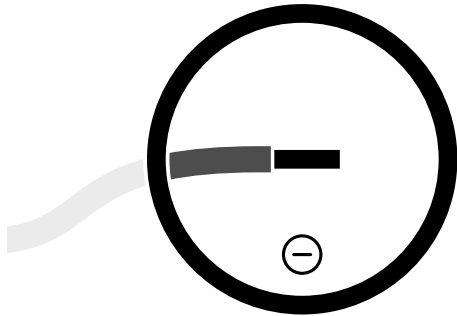
Heat seal the connection.



⑤ Prepare common ground wiring

At the common ground terminal:

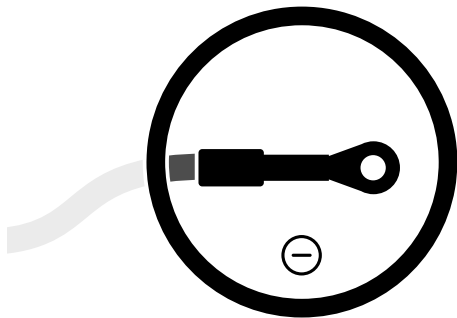
1. Trim any extra **black** ⊖ wire.
2. Strip 10 mm (1/2") of insulation from the end of the wire.



3. Connect and crimp a ring terminal to the wire.

Size the ring terminal to fit the common ground terminal.

Heat seal the connection.



Connect satellite device

Connect a compatible RockBLOCK+ satellite device to power and your BRNKL device.

To connect a satellite device, follow these steps:

- ① Connect to battery bus
- ② Connect to common ground
- ③ Insert fuse
- ④ Connect to BRNKL device

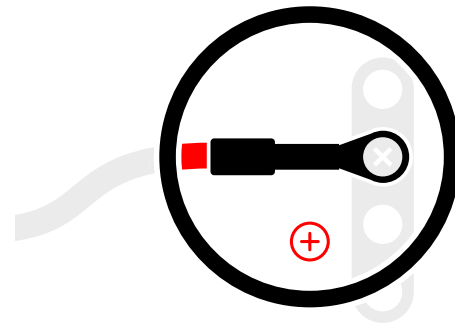
① Connect to battery bus



DO NOT insert a fuse at this stage

On the battery bus:

1. Attach the **fuse holder** ⊕ ring terminal to a **positive** ⊕ terminal on the battery bus.

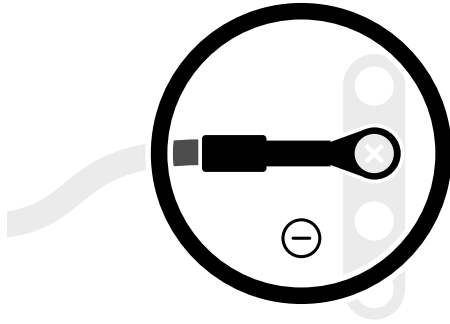


2. Secure the wire with cable ties and mounts.

② Connect to common ground

On the common ground terminal:

1. Attach the **black ⊖ wire** ring terminal to the **common ground ⊖ terminal**.

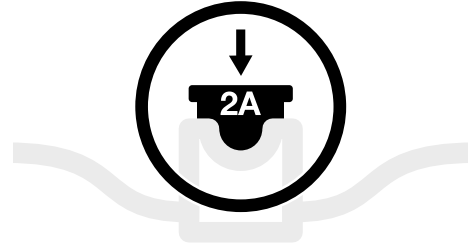


2. Secure the wire with cable ties and mounts.

③ Insert fuse

At the battery bus end of the wiring:


Insert a **2A fuse** into the fuse holder.



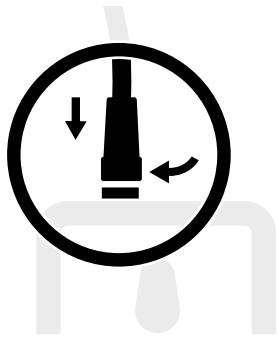
④ Connect to BRNKL device

On the BRNKL device, do one of the following:

Connect to BRNKL


1. If connected, unplug the camera.
2. Plug the serial cable into the **device port** .

Turn the collar to fasten.

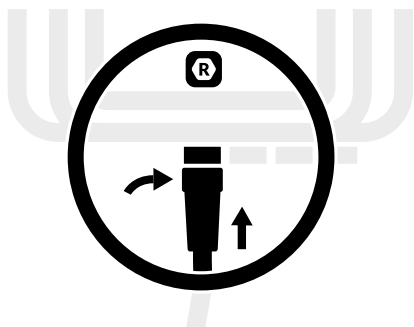


3. Secure the cable with cable ties and mounts.

Connect to BRNKL Mate

1. Plug the serial cable into the **red port** .

Turn the collar to fasten.



2. Secure the cable with cable ties and mounts.

Link satellite device

Link a RockBLOCK+ satellite device with your BRNKL.

To link a satellite device:

With the satellite device at hand:

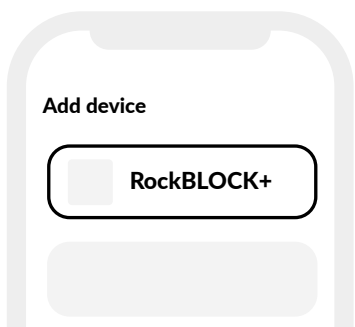
1. On your mobile device, open **BRNKL**.



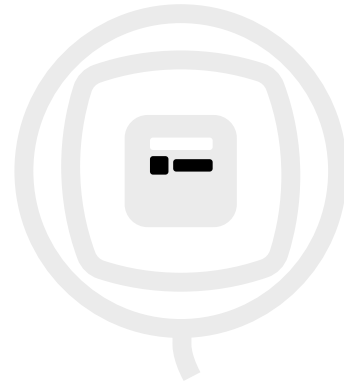
2. From **Settings**, select **+ Add device**.



3. Select **RockBLOCK+**.



4. On the bottom of the satellite device, scan the **QR code** or enter the printed **serial number**.



5. Follow the instructions.
6. **Settings**, select **BRNKL**, then check for **Satellite** settings..
BRNKL shows **Satellite** settings when linked with a satellite device.



Test satellite device connection

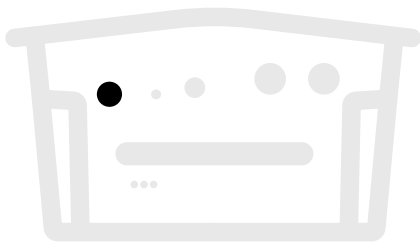
Test the satellite device connection to your BRNKL or BRNKL Mate.

Do one of the following:

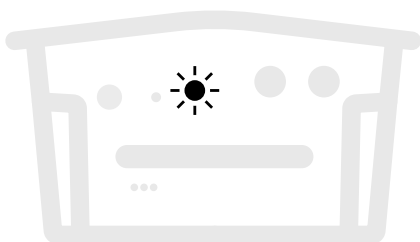
Test connection to BRNKL

If the satellite device is connected to the BRNKL **device**  port:

1. On the bottom of the BRNKL, press and release the **Connection test** button.
2. Check the **blue** indicator light:



- > If the light is **pulsing**, the BRNKL is testing the connection.
- > If the light is **solid**, the satellite device is connected.



- > If the light is **flashing**, the satellite device isn't connected. Check the cable connection, then repeat the test.

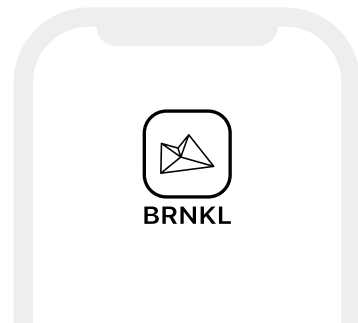
Test connection to BRNKL Mate

If the satellite device is connected to the Mate **red**  port:

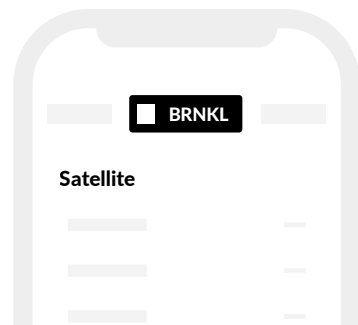
1. On your mobile device, make sure that **Bluetooth**[®] is turned on.



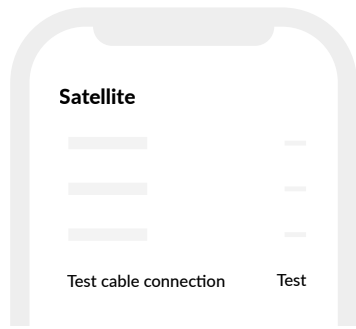
2. Open **BRNKL**.



3. From **Settings**, select  **BRNKL**, then go to **Satellite** settings.



4. In **Test cable connection**, select **Test**.



5. Wait for the result:

Connected: the satellite device is connected.

Not connected: check the cable and power connections, then repeat the test.

Install satellite device

Install the RockBLOCK+ satellite device with selected mounting hardware.

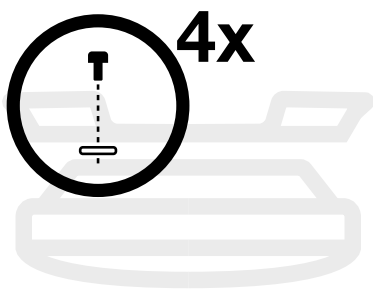
Do one of the following:

Install with mounting plate (included)

1. Place the mount on the bottom of the device.

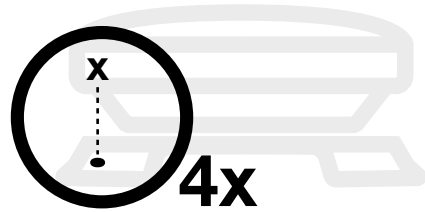


2. Attach the mounting plate using the supplied 8 mm hex screws and plastic washers.



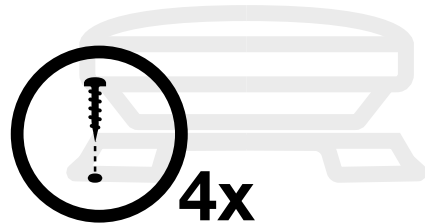
3. Align the device/plate assembly in the selected position, then mark the mounting plate screw holes.

On hardened surfaces, drill pilot holes as required.



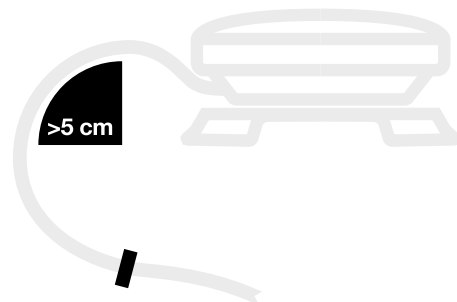
4. Secure the assembly with four #12, 316 stainless steel screws (not supplied).

Match the screw to the surface material.



5. At the fixable point closest to the device, secure the cable with cable ties.

Allow a 5 cm (2") radius bend to reduce cable strain.

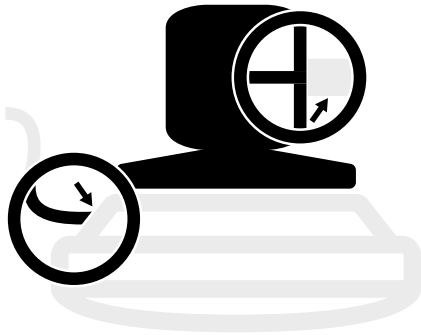


Install with ROKK Rail mount (not included)

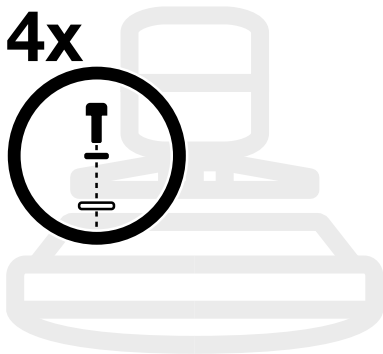
On the bottom of the device:

1. Place the mount on the device.

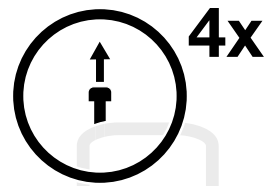
Orient based on the direction of the railing and the cable route.



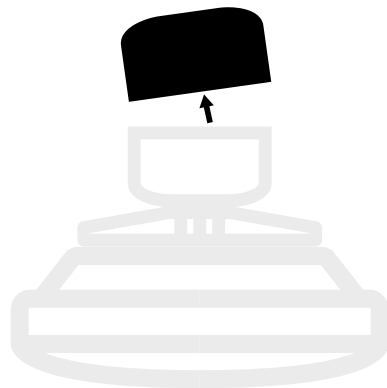
2. Attach the mount using the supplied 12 mm hex screws, metal washers, and plastic washers.



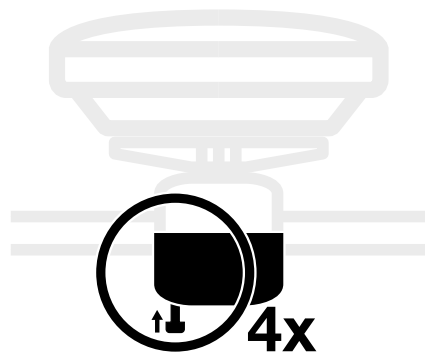
3. On the bottom of the mount, loosen and remove the 35 mm hex screws.



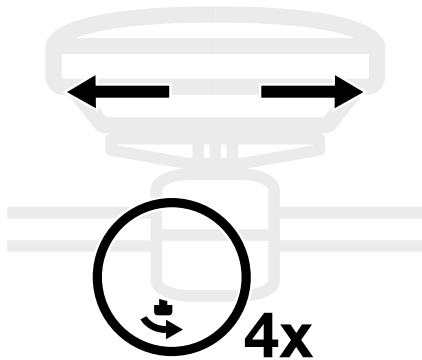
4. Remove the bottom bracket.



5. On the rail, hold the assembly in place and loosely reattach the bottom bracket with the 35 mm hex screws.

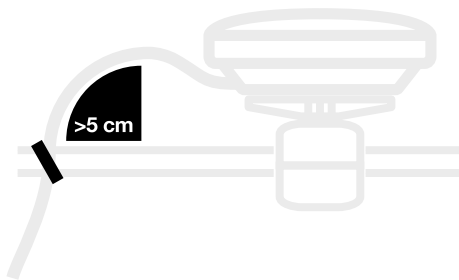


Before tightening the screws, align the sides of the device with the horizon.



6. At the closest fixable point to the device, secure the cable with cable ties.

Allow a bend with a 5 cm (2") radius to reduce cable strain.



Add satellite service

Add satellite service to your BRNKL account.

Follow these steps:

What you need

- 1 Add a satellite plan
- 2 Test satellite service

What you need

You need these things to add satellite service to your BRNKL:

Devices

- BRNKL, setup complete
- Satellite device, BRNKL-compatible, setup complete
- iOS or Android™ mobile device, connected to internet
 - > BRNKL app installed

Services

- BRNKL user account and password
- BRNKL service subscription
- Credit card

Add a satellite plan

Select and purchase a BRNKL satellite plan.

To add a plan:

On your mobile device:

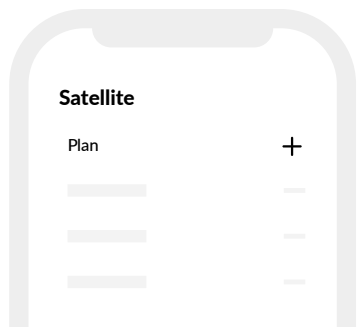
1. Open **BRNKL**.



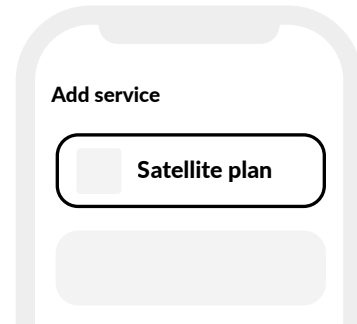
2. From **Settings**, select **BRNKL**, then go to **Satellite** settings.



3. In **Plan**, select **+**.



4. Select a plan, then follow the instructions for payment.




Test satellite service

Make sure that your BRNKL can connect to the Iridium® satellite network.

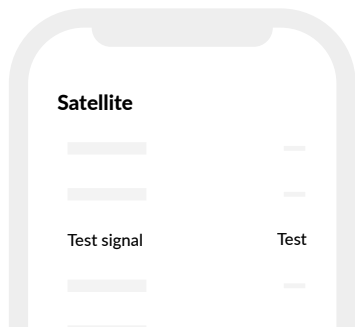
To test satellite service:

On your mobile device:

1. Open **BRNKL**.
2. From **Settings**, select  **BRNKL**, then go to **Satellite** settings.



3. In **Test signal**, select **Test**.



4. Wait 5 minutes, then check **Last signal**.

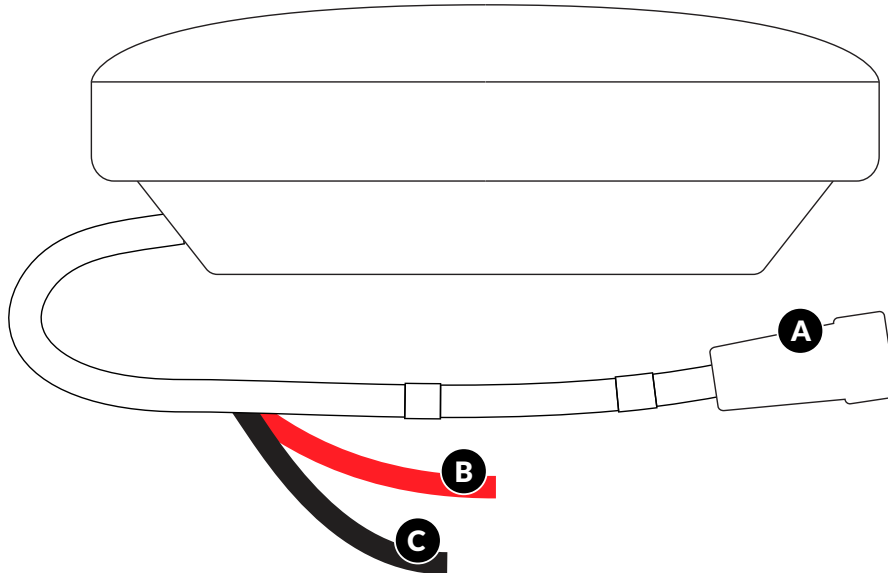




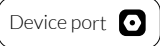





BRNKL updates the signal time if it connected to the satellite network.

Reference

- RockBLOCK+ connections (page 27)

RockBLOCK+ connections



Terminal	Connection
A 	 BRNKL  Device port 
B 	 Constant 9-30V DC fuse-protected power
C 	 Common ground

Related topics

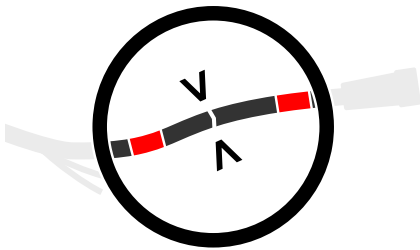
- [Lengthen satellite device cable \(page 29\)](#)
- [Remove satellite device plug \(page 30\)](#)

Lengthen satellite device cable

Lengthen the RockBLOCK+ satellite device cable to make longer cable runs.

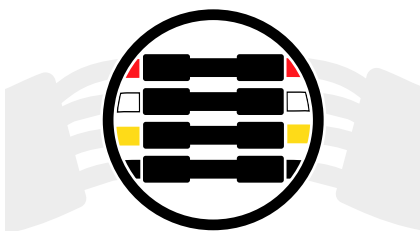
To lengthen the cable:

1. Cut the satellite cable between the **red splice marks**.

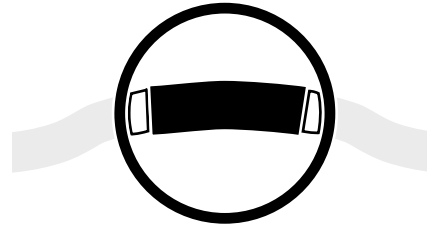


2. Splice extra cable with the cut ends:
 - > Add a length of marine grade 4 conductor cable, 22-16 AWG.
 - > Connect the **red, black, white,** and **yellow** wire pairs with heat shrink butt connectors.

Heat shrink the connections.



3. Wrap the connection with electrical tape.

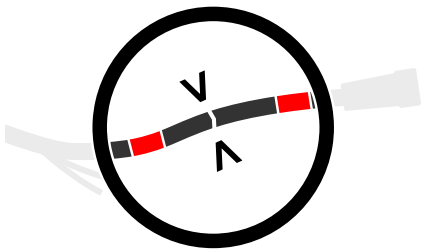


Remove satellite device plug

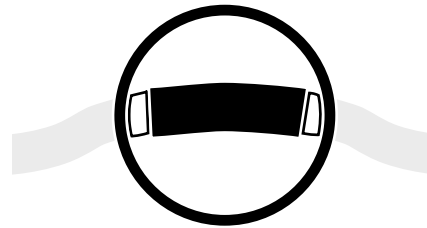
Remove, then reattach, the plug from the RockBLOCK+satellite device cable to route the cable through small openings.

To remove the plug

- Cut the satellite cable between the **red splice marks**.



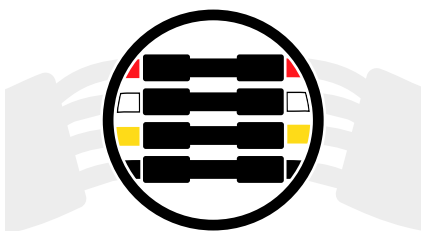
2. Wrap the connection with electrical tape.



To reattach the plug

1. Splice extra cable with the cut ends:
 - > Add a length of marine grade 4 conductor cable, 22-16 AWG.
 - > Connect the **red, black, white,** and **yellow** wire pairs with heat shrink butt connectors.

Heat shrink the connections.



Legal

- RockBLOCK+ Warranty (page 32)
- Notices (page 32)

RockBLOCK+ Warranty

This RockBLOCK+ device was designed, developed and manufactured in the United Kingdom by Rock Seven Mobile Services Limited (Rock Seven).

A two-year warranty is provided with your device, starting on the purchase date. This does not affect your statutory rights. The first year is a full parts and labour warranty, the second year is labour only.

Should you encounter a problem with your device, we agree to remedy the defect either by repair or replacement (at our option). Please contact us directly in order to arrange this. An original receipt is required for any warranty claims.

The warranty is void if:

- Any component has been subject to misuse or improper installation.
- The casing of the unit has been opened or tampered with in any way.



DO NOT service devices yourself.

Attempting to service devices on your own voids your warranty. We also won't be able to accept these devices for repair, even if they are out of warranty.

Notices

This device complies with Part 15 of the FCC Rules. 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.



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