DSI2002019

Adding a door sensor

Install, connect, and configure a door sensor to monitor cabin entry.

45 min

BRNKL ALL-IN-ONE
BRNKL EXTERNAL CAMERA

BRNKL

Before you start

Take a moment to consider
if this guide is for you.

If you’re comfortable handling everyday electrical repair and maintenance tasks on your boat, follow the instructions in this guide.

If your boat electrical system is complex, or you're unfamiliar with basic electrical systems, hire a professional installer or marine electrician.

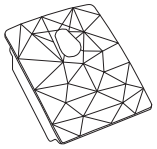
WARNING: Disconnect all AC power sources before accessing electrical panels, switches or devices.

What you need

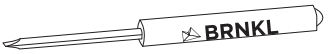
You need these things to add a door sensor to BRNKL:

In the box

- BRNKL
  powered and positioned

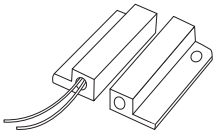


- 2.5 mm flathead screwdriver



Accessories *sold separately*

- Door/Window Sensor
  includes 4 screws



Services

- BRNKL account
- BRNKL subscription

Devices

- mobile device connected to internet (BRNKL installed)

Tools

- wire stripper/crimper tool
- butane torch

You may need:

- #0 Phillips screwdriver
- multi-head screwdriver
- power drill and bit set
- non-conductive fish tape
- flashlight or headlamp

Supplies

- marine grade wire, 18 AWG (black or yellow)
- 2 heat-shrink butt connectors, 22-18 AWG (red)

You may need:

- cable ties
- cable tie mounts

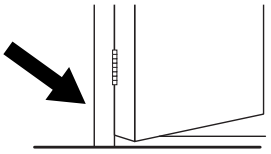
Install door sensor

To install a door sensor, follow these steps:

Ⓐ Position sensor

Follow these guidelines:

- Position on the main cabin entry door.
- Position inside the cabin on hinge edge of the door.



  On a split door, position on the door that must open first.
- Allow for discreet wiring runs.

Ⓑ Prepare wiring

Follow these guidelines:

- DO NOT connect the wires at this stage.
- Run two **black [-]** wires from the BRNKL to the planned door sensor position.
- Leave 20 cm of extra wire at each end.
- Hide the wires in conduit, wall cavities, or wiring channels.
- Secure the wires with cable ties and mounts.

OPTION

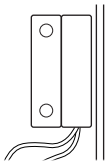
Ground wiring option: Run one **black [-]** wire from the door to any common **ground [-]** terminal. Run the other **black [-]** wire from the door to the BRNKL.

Ⓒ Mount wired sensor part

Inside the cabin, at the door:

1. Remove the self-adhesive backing from the **wired** part of the Door/Window Sensor.
2. Position the part on the **door frame**.

   Align with the inside edge of the frame.



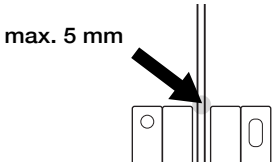
3. Press and hold in place for 5 sec to secure.

Ⓓ Mount unwired sensor part

Inside the cabin, at the door:

1. Close the door.
2. Remove the self-adhesive backing from the **unwired** part of the Door/Window Sensor.
3. Position the part on the **door**.

   Align with the door edge, no more than 5 mm from the wired part.



4. Press and hold in place for 5 sec to secure.

OPTION

Fastening option: Fasten the Door/Window sensor with the supplied screws, using a #0 Phillips screwdriver.

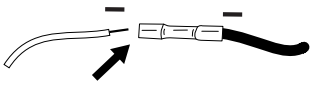
Connect door sensor

To connect a door sensor, follow these steps:

Ⓐ Connect wiring to sensor

At the door end of the wiring:

1. Trim any extra wire.
2. Strip 10 mm of insulation from the end of the two **black [-]** wires and the two sensor **lead [-]** wires..
3. Connect and crimp one **black [-]** wire to each sensor **lead [-]** wire with a heat-shrink butt connector.

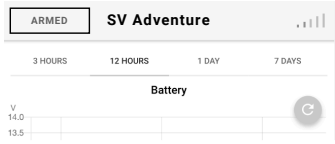


4. Heat seal the connections.
5. Secure the wires with cable ties and mounts.

Ⓑ Disarm BRNKL

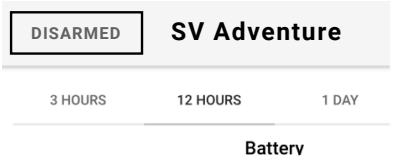
On the mobile device:

1. Open BRNKL.
2. From the **Map**, **Graphs**, **Photos**, or **Alerts** view, go to the status bar.



3. Do one of the following:
   - If the status is **DISARMED**, do nothing.
   - If the status is **ARMED**, select the status bar to disarm.

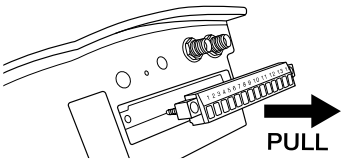
   BRNKL is disarmed when the status is **DISARMED**.



Ⓒ Remove connector

On the BRNKL:

1. Locate the connector on the bottom of the BRNKL.
2. Loosen the screws at each end of the connector.
3. Grasp and pull.



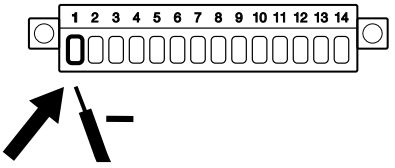
Ⓓ Connect wiring to connector

At the BRNKL end of the wiring:

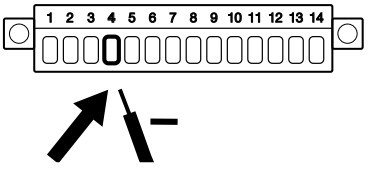
1. Trim any extra wire.
2. Strip 5 mm of insulation from the ends of the two **black [-]** wires.
3. On the connector, loosen the screws above **slot 1** and **slot 4**.

   If slot 4 is connected to another device, use slot 5, slot 6, or slot 7.

4. Insert a **black [-]** wire into **slot 1**.



5. Insert a **black [-]** wire into **slot 4**.



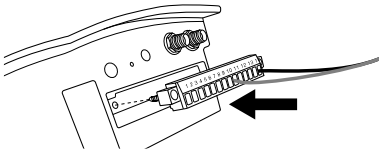
   If slot 4 is connected to another device, use slot 5, slot 6, or slot 7.

6. Tighten the screws to fasten.
7. Secure the wires.

Ⓔ Reattach connector

At the BRNKL end of the wiring:

1. Align the connector and the BRNKL.



2. Insert the connector.
3. Tighten the screws to fasten.

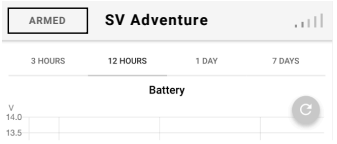
Test and configure door sensor

To test and configure a door sensor connection, follow these steps:

Ⓐ Disarm BRNKL

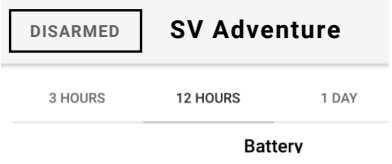
On the mobile device:

1. Open BRNKL.
2. From the **Map**, **Graphs**, **Photos**, or **Alerts** view, go to the status bar.



3. Do one of the following:
   - If the status is **DISARMED**, do nothing.
   - If the status is **ARMED**, select the status bar to disarm.

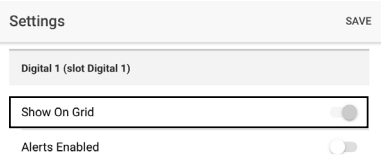
   BRNKL is disarmed when the status is **DISARMED**.



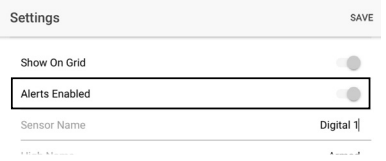
Ⓑ Enable connection

On the mobile device:

1. Open BRNKL.
2. Go to **Settings** > **Sensors** > **Digital 1***.
3. Turn on **Show On Grid**.



4. Turn on **Alerts Enabled**.



5. **Save**.

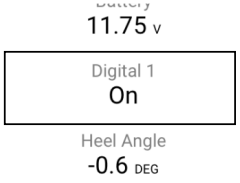
* Go to the sensor number that matches the connector slot connected to the door sensor: slot 4 (Digital 1); slot 5 (Digital 2); slot 6 (Digital 3); slot 7 (Digital 4).

© Check connection

Wait 15 minutes after enabling the door sensor connection to allow BRNKL to sync settings over the mobile data network.

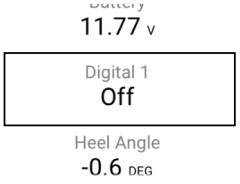
1. Close the door.
2. On the mobile device:
    a. Open BRNKL.
    b. Select grid view, go to **Digital 1***.

        BRNKL displays **On** when connected.



3. Open the door, then wait 2 minutes.
4. On the mobile device:
    a. Open BRNKL.
    b. Select grid view, go to **Digital 1***.

        BRNKL displays **Off** when connected.



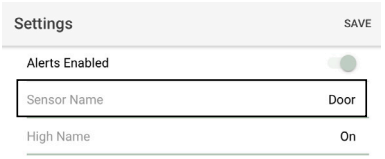
* Go to the sensor number that matches the connector slot connected to the door sensor: slot 4 (Digital 1); slot 5 (Digital 2); slot 6 (Digital 3); slot 7 (Digital 4).

Ⓓ Name sensor

On the mobile device:

1. Open BRNKL.
2. Go to **Settings** > **Sensors** > **Digital 1***.
3. Select the **Sensor Name** text area, then enter a sensor name.

   Example: Door



4. **Save**.

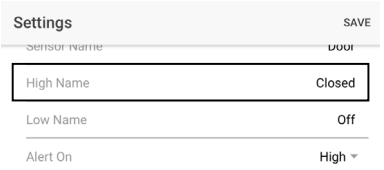
* Go to the sensor number that matches the connector slot connected to the door sensor: slot 4 (Digital 1); slot 5 (Digital 2); slot 6 (Digital 3); slot 7 (Digital 4).

Ⓔ Name high/low states

On the mobile device:

1. Open BRNKL.
2. Go to **Settings** > **Sensors** > **Door***.
3. Select the **High Name** text area, then enter a high name.

   Example: Closed



4. Select the **Low Name** text area, then enter a low name.

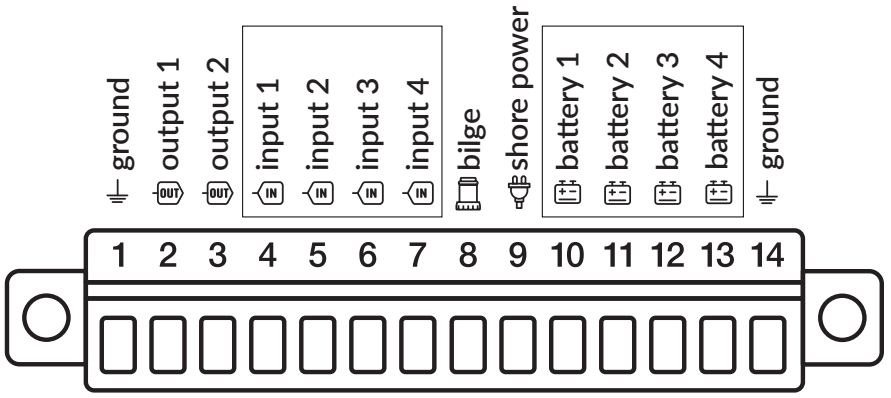
   Example: Open

5. **Save**.

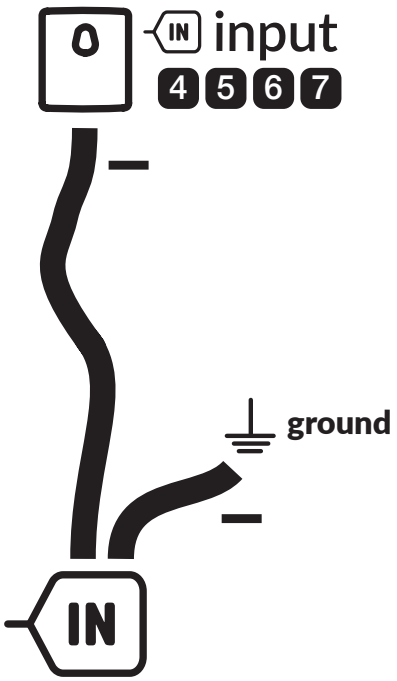
* Use renamed sensor name.

Wiring reference

Connector



Door sensor | Digital input



BRNKL

For warranty, terms and conditions:

brnkl.io/terms

For technical support, troubleshooting and more information:

help.brnkl.io

1-877-552-BRNKL (7655)

FCC / Industry Canada Notices

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. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class A 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.

This device complies with Industry Canada's licence-exempt RSSs. 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.

Le présent appareil est conforme aux CNR d'Industrie 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, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

CAN ICES-3 (A)/NMB-3(A) – This Class A Digital Apparatus Complies with Canadian ICES-003. Cet Appareil numerique de la classe (A) est conforme a la norme NMB-003 du Canada.