# REMOOTIO))

## Installation Guide
### v3.4 (22.08.2020)

# Thank you for choosing Remootio!

**Step 1: Unboxing**
Unbox the Remootio device and the Remootio power adapter.

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## Step 2: Removing the paper insert
Remove and unfold the paper insert (H)



## Step 3: Removing the parts from the box
Remove all the parts from the bottom of the box and see below their names and abbreviations for reference:



A - Remootio Device
B - *Sensor (with cable)
C - *Sensor (wireless part)
D - *Adhesive for sensors
E - Adhesive for Remootio

Power cable - F
Control output cable - G
Brief instruction manual - H
Bottom part of the box - I
Upper part of the box - J

*: optional extras

## Step 4: Applying the adhesive tapes to Remootio

Remove the release liner on one side of the adhesive tape (E) and apply to the back side of Remootio (A). Do not remove the release liner on the other side yet.
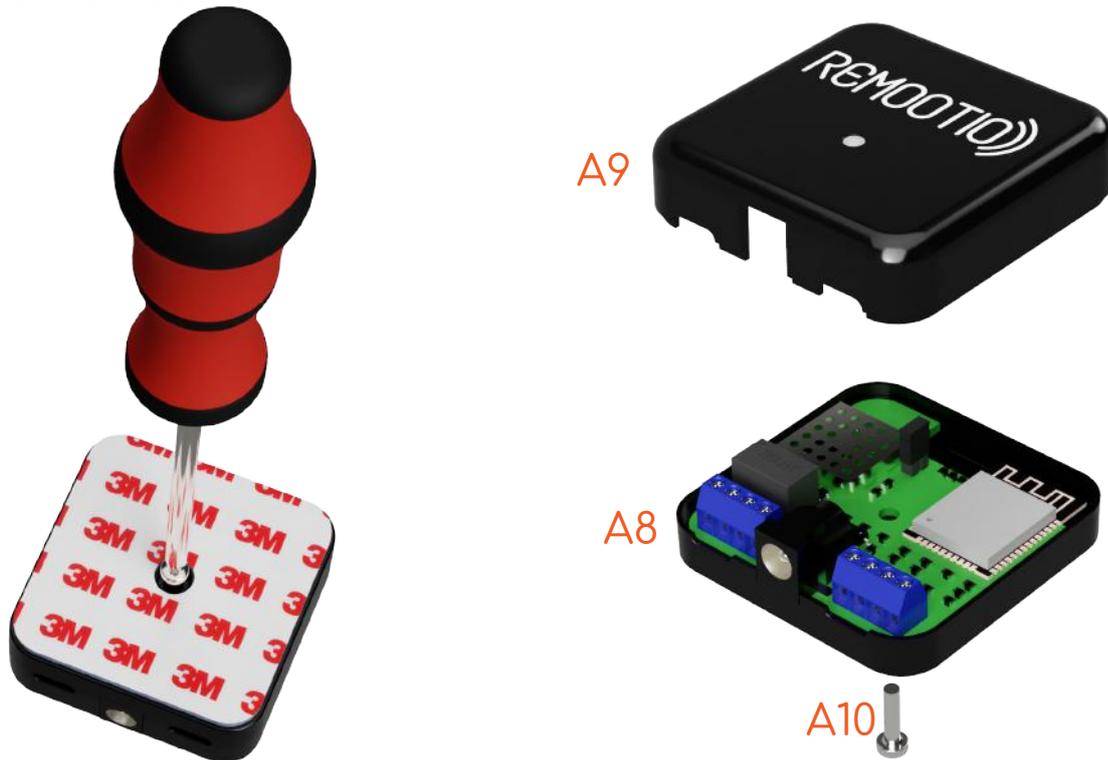


## Step 5: Applying the adhesive tapes to the sensor

Remove the release liner on one side of the remaining adhesive tapes (D) and apply them to the back side of both sensor parts (B and C). Do not remove the release liner on the other side yet.

## Step 6: Removing the screw

Turn Remootio (A) around and remove the screw (A10) and the top part (A9) of Remootio.

A9

A8

A10

## Step 7: Removing the jumper

Remove the jumper (A7) from the reset pins (A6). Keep the jumper as you might need it later when you want to reset the device. For resetting Remootio, leave the jumper (A7) on the reset pins (A6) for 10 seconds while the device is connected to an appropriate power source. Resetting is also possible in the app. See step 23 for more details about resetting Remootio via the app.

A7

A6

A1
A2 A3

A4
A5

A10
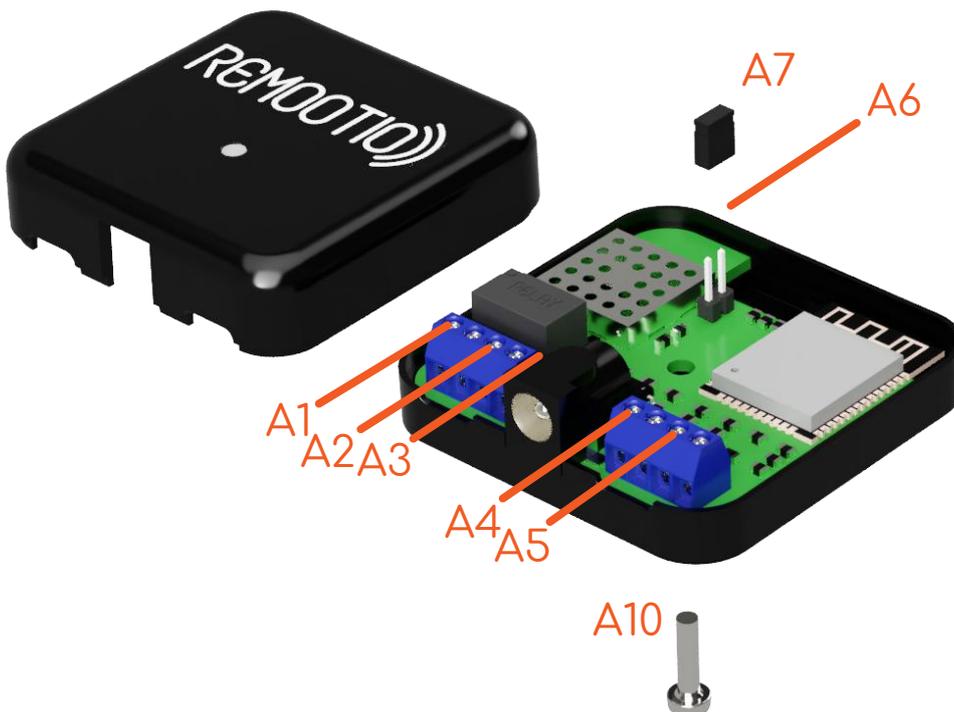
## Step 8: Connecting the control cable

Using the provided cable (G) connect Remootio's control output terminal (A2) to your gate controller's impulse input terminals. This terminal might have many different names depending on the manufacturer of your gate or garage door, such as: "Impulse input", "PP", "Start", "Sequential Control", "Wall Switch", "Key Switch", "Manual Control Button", "Wired Wall Control,, or abbveciations such as "Btn" (stands for button) or "SBC". Please always make sure you connect Remootio to the correct terminal. If you are unsure, please check the datasheet of your gate or garage door contoller or ask a professional to install Remootio for you.



Sample gate controller
(not included)
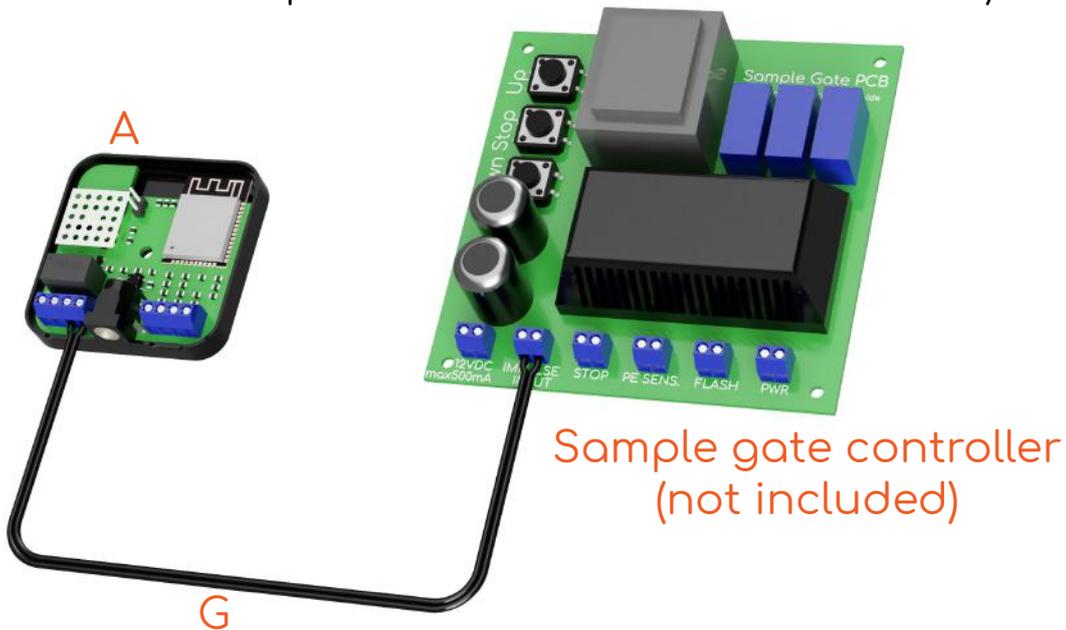
## Step 9: Connecting the sensor and other extras (optional)

Connect the sensor (B) to the status sensor terminal block (A4) of Remootio. (Order of the wires does not matter). If you wish to add a manual control button to Remootio, please connect it to the manual control terminal (A1) of Remootio. If you would like to add a doorbell button, please connect it to the status sensor terminal (A4) of Remootio. Both doorbell and manual control buttons must be normally open buttons. Wiring order of the buttons and the sensor does not matter.
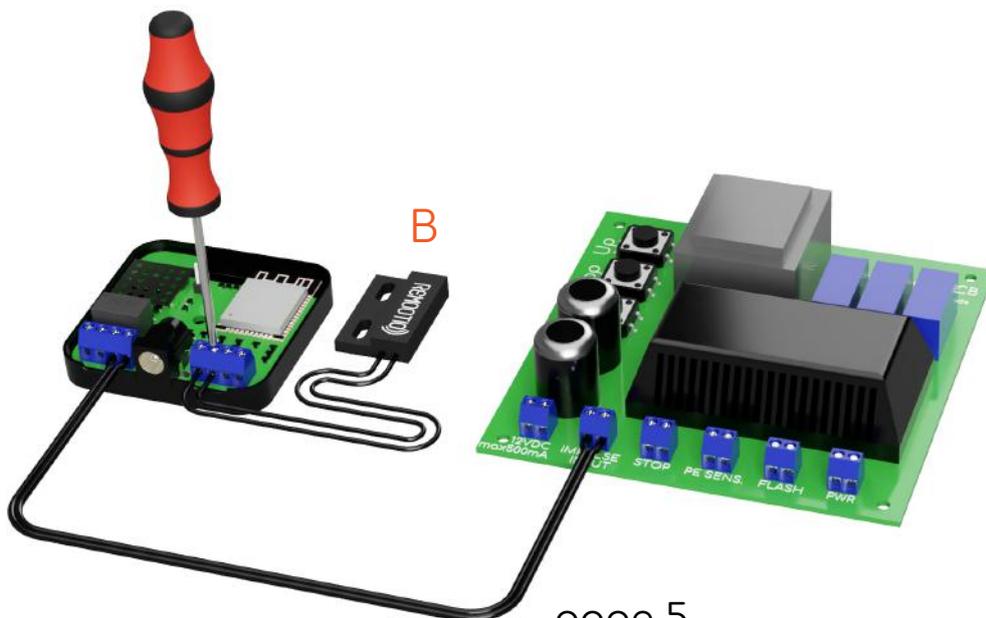
## Step 10: Assembling Remootio

Mount the bottom (A8) and top (A9) parts back together using the screw (A10). Do not over-tigthen the screw and make sure that no wires are pinched as you put the parts together.
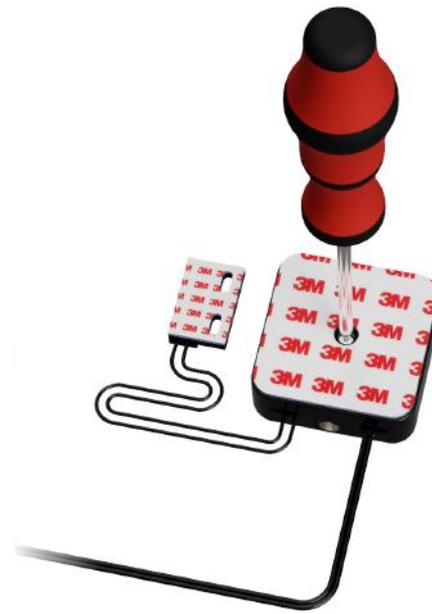
## Step 11: Connecting the power supply

If you have purchased the Remootio power adapter (K), plug it into Remootio's power input socket (A3) and then into the wall socket. If you don't have the Remootio power adapter, find the correct terminals on the printed circuit board of your gate or garage door opener and connect the tinned and stripped end of the provided power cable (F) to these terminals. Remootio 1 (the black one) works from 6-36 VDC and 12-24 VAC.  Remootio 2 (the white one) only works from 5VDC. DO NOT CONNECT HIGHER VOLTAGE TO A REMOOTIO 2 (white) UNIT. The power input of Remootio 1 is polarity independent, so the wires can be connected in any order. Please measure the voltage of the power source before connecting it to Remootio. Connecting voltages higher than 36 VDC or 24 VAC can result in permanent damage to the Remootio 1 device. After checking if everything is connected correctly, plug the barrel jack into Remootio's power input socket (A3). If connected correctly, Remootio's LED should be flashing quickly. If you are unsure, ask a professional to install Remootio for you.
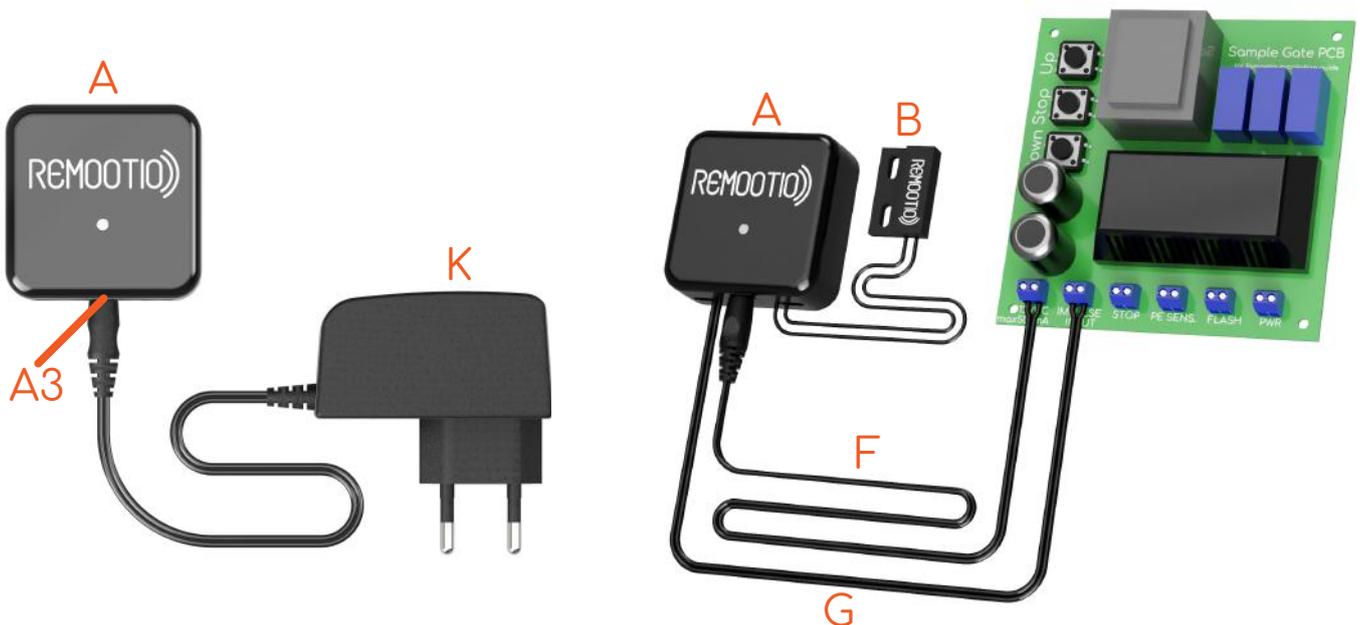
## Step 12: Sensor installation (optional)

Remove the protective liner from the adhesive of the wireless part of the sensor (C) and apply it on the moving part of your gate in such a way that either in fully closed or in fully open position it has to come close (within 12mm) to the wired part of the sensor (B). No batteries are needed for the sensors. In case of overhead garage door openers, it is recommended to place the wireless part (C) on top of the moving carriage and the wired part (B) on the rails. By default, we recommend placing the sensor in such a way that its parts (B and C) are close to each other when the gate or garage door is fully closed. If you can only place them in such a way that they (B and C) are close to each other when the gate or garage door is fully open, you can change the sensor settings from the app by tapping on the "flip logic" button in the sensor menu.
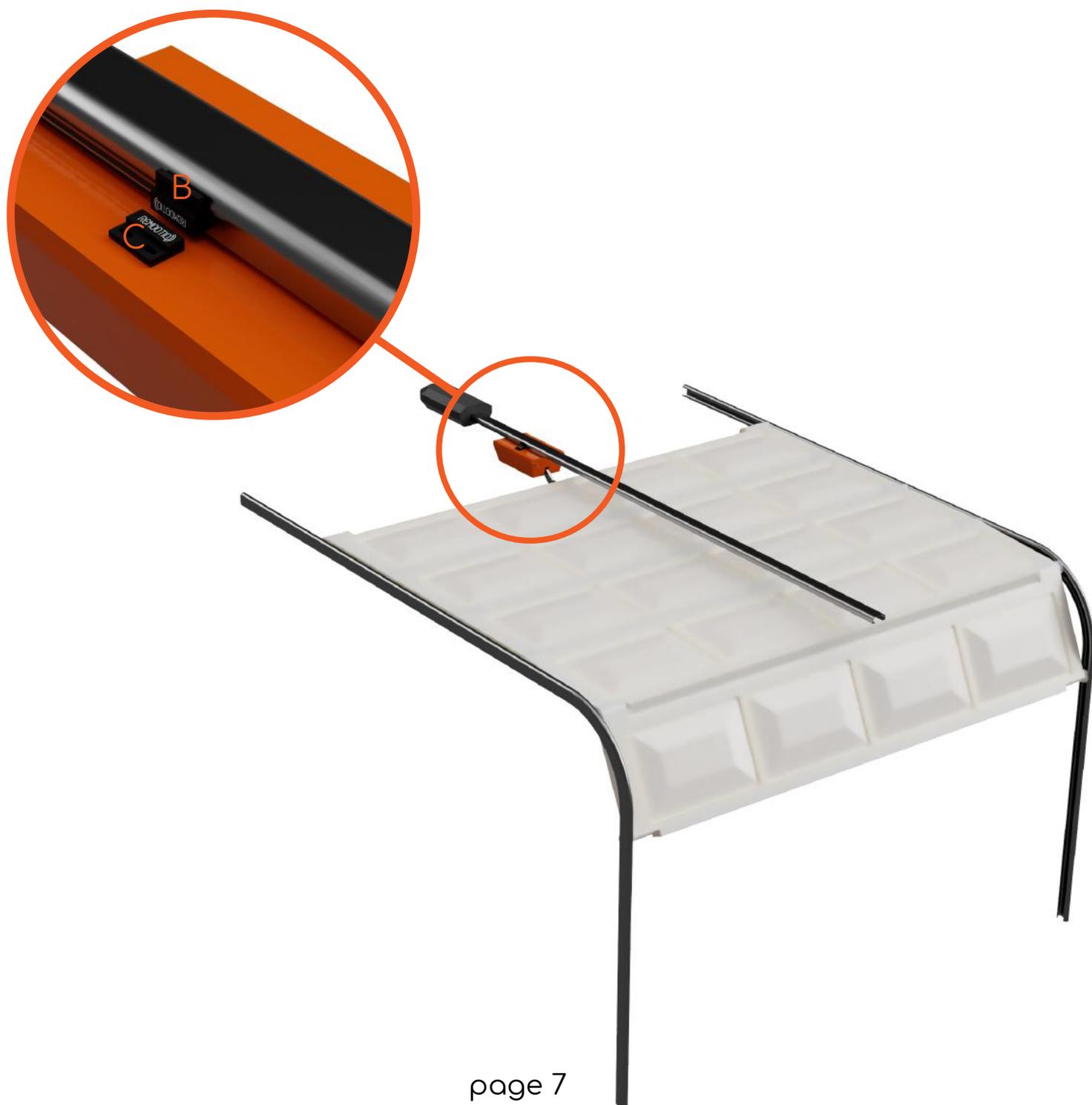
## Step 13: Mounting Remootio

Remove the protective liner from the adhesive of the Remootio (A) and mount it on a clean, flat surface. Make sure Remootio is facing outwards (see image below for reference) so that Remootio has good signal reception even if you are connecting to it via Bluetooth from outside your garage. Any metal objects near Remootio can block signals and reduce the range of both Wi-Fi and Bluetooth connectivity. Arrange and fix the cables neatly using zip ties. Make sure Remootio and its sensor are not obstructing the way of the gate during operation and the cables are not pinched or cut by moving parts of the gate as it can lead to serious damage or loss of functionality.

## Step 14: Downloading the app
Download the Remootio app from the App Store or Play Store depending on whether you use iOS or Android.

## Step 15: Setting up Remootio
Make sure your Remootio device is powered up (LED on the front is flashing quickly) and your smartphone's Bluetooth is turned on. During the setup process keep your phone as close as possible to Remootio but not further than 3 meters. Start the Remootio app and click on "Set up new device". Do not close the app or go out of Bluetooth range until the setup process finishes.
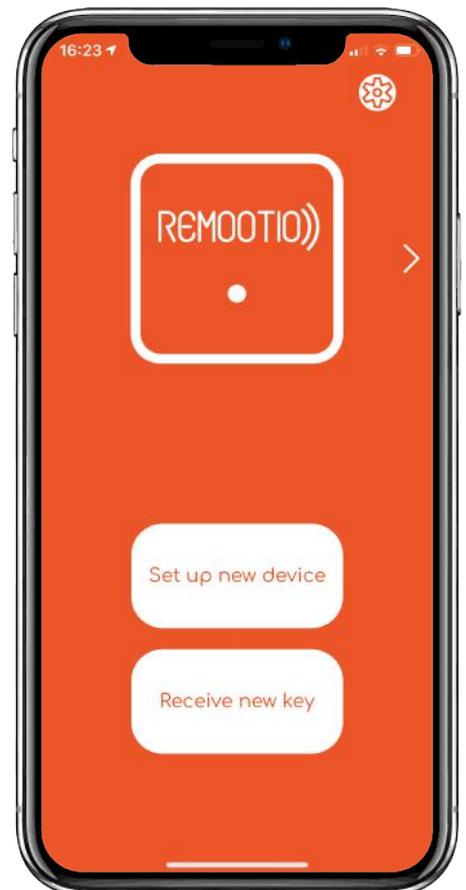
## Step 16: Testing and customizing

It's time to test if your Remootio is connected correctly. After a successful setup, you will see a big white button in the middle of the screen. After making sure that there are no objects in the way of your gate or garage door, tap the "Remootio" button and see if your gate or garage door starts moving.

If your gate is not moving as a result of the button push, you can try to increase the width of the impulse (duration of the relay being pulled in). You can change the impulse width from the "Settings menu".

If it still doesn't work, please check the connections.

## Step 17: Customizing your app (optional)

Long press the name of the device (e.g. "My Garage Door") to change its name.

Long press the "Remootio" button to take a photo of your gate or garage door and replace the white background of the button.

Go down two pages and tap on the "palette"

icon and choose a background color for the Remootio device. If you have more devices installed, you can set a different color for each device so that you can easily find the one you are looking for just by looking at its background color.
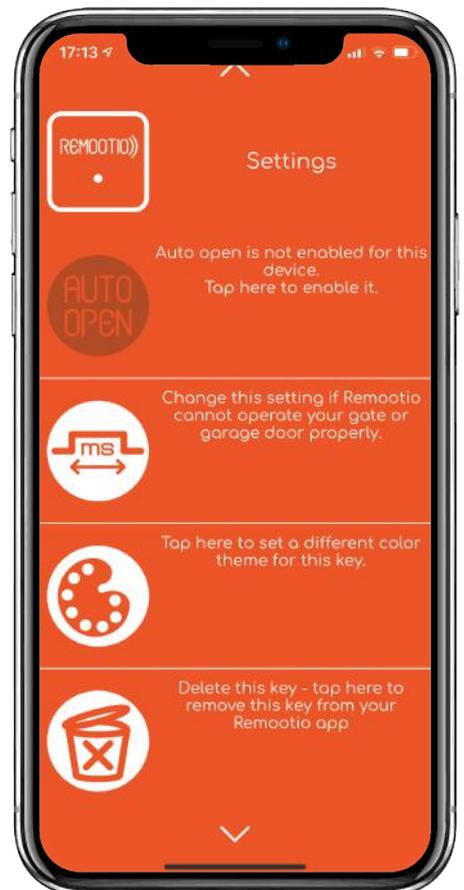
## Step 18: Setting up Wi-Fi connection (optional)

Make sure your Wi-Fi signals are available where Remootio is installed. Swipe up four pages in the app and click on the Wi-Fi icon.

Accept the terms and conditions and click on "Scan for Wi-Fi network". When prompted, enter the password and wait until Remootio gets an IP address from the network. If it didn't get an IP address, you might have entered an incorrect password or the WiFi signal is not strong enough.

## Step 19: Setting up Internet connection (optional)

Make sure your Remootio is successfully connected to your Wi-Fi network and your smartphone is connected to the same Wi-Fi network. Tap on "Network setup" and tap on the Wi-Fi icon. If it becomes bright white, your Remootio device is successfully connected. Tap on the bigger Internet icon

(the one below the Wi-Fi icon) and tap on "EasyConnect" and wait until the setup process is finished. If the setup was successful, the internet icon will become bright white.

## Step 20: Setting up smart home access (optional)

Make sure Remootio is connected to the Internet. Tap on the smart home icon and then tap on "Register Remootio account". Enter an e-mail address that you want to use for connecting Remootio to your smart home hub. Enter and confirm your password (must contain at least 8 characters, a number, a lowercase and an uppercase letter) and accept the Terms and Conditions and the Privacy Policy by tapping on "I agree". Within a few minutes you will receive an e-mail with a confirmation link. Click on the confirmation link to activate your account. Go to your smart home settings again within the Remootio app and tap on "Login" and enter the e-mail address and password. After successfully logging in, tap on "Link device".

You have to use the same e-mail address and password to successfully link Remootio to your smart home hub (such as Alexa).

To operate your gate or garage door via Alexa try saying things like:

"Hey Alexa, lock the garage door" or "Unlock the garage door" or "Is the garage door locked?". Please also check the Alexa skill description in the Alexa app for more details.

## Step 21: Enabling Auto-open (optional)

Tap on the Auto-open icon.

Tap on the "Enable auto open" button and accept the Terms and Conditions. As an admin, you can turn off the feature for all the people you have shared a key with.
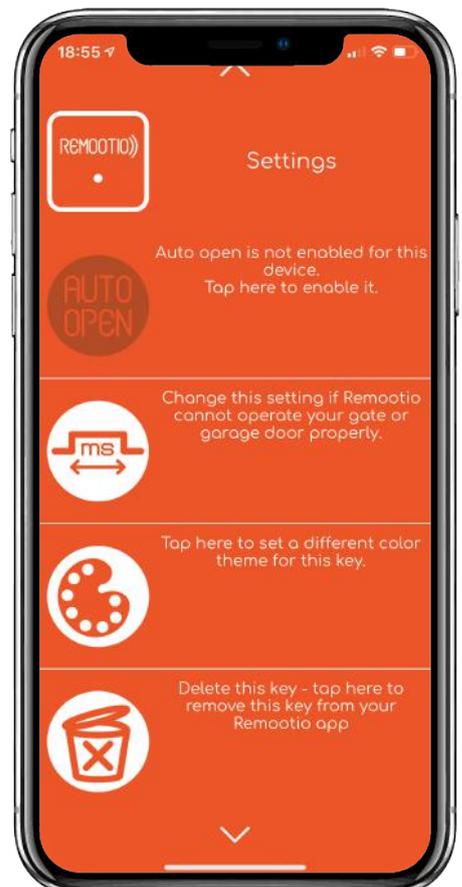
## Step 22: Setting up the add-ons (optional)

Tap on the lock icon



in the "Add-on settings" menu and then tap on "Enable sensor interface".

Depending on where you installed the sensor (at the fully closed or fully open position), you might have to tap on the "Flip logic" button so that the Remootio app shows the correct status of your gate.

If you wish to get notifications when you left your gate open for more than 5 minutes, tap on "Notify if left open".

If you would like to be notified when the gate or garage door was opened or closed, tap on "Notify if operated".

If you have connected a doorbell button, tap on the doorbell icon



and then tap on "Enable doorbell interface". You will get notifications on your smartphone when someone rings your doorbell.

If you have also connected a manual open button, you can enable the same by tapping on the manual open button



and then tapping on "Enable manual control". Note: anyone who presses the button will be able to operate your gate or garage door until you disable the button. If you wish to receive notifications, when someone operates the gate or garage door by the manual control button, tap on "Notify me if operated".
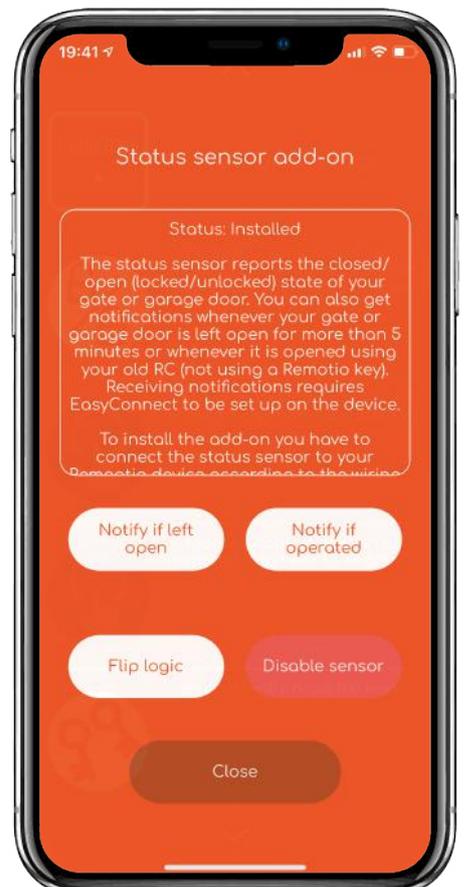
## Step 23: Sharing keys

Go down to the second page from above. You have unlimited Guest keys, which you can manage (revoke, set access rights) together. By default, you also have 20 unique keys, which you can manage one by one. To share the guest key, simply tap on the "Guest key" button and show the QR code to the person you want to share the key with. The recipient of the key has to start the app and tap on "Receive new key" and then hold his or her smartphone above yours. The whole QR code has to be visible within the frame of the screen of the recipient.

To share a unique key, tap on the "Share unique key" button on the bottom of the screen. A QR code will be shown on your screen that you can show the person you want to share the key with. You can also share the key via messaging applications of your preference by tapping on "Share link" and selecting the app you wish to use for sending the key. Note: sharing unique keys instead of the "Guest key" is recommended.
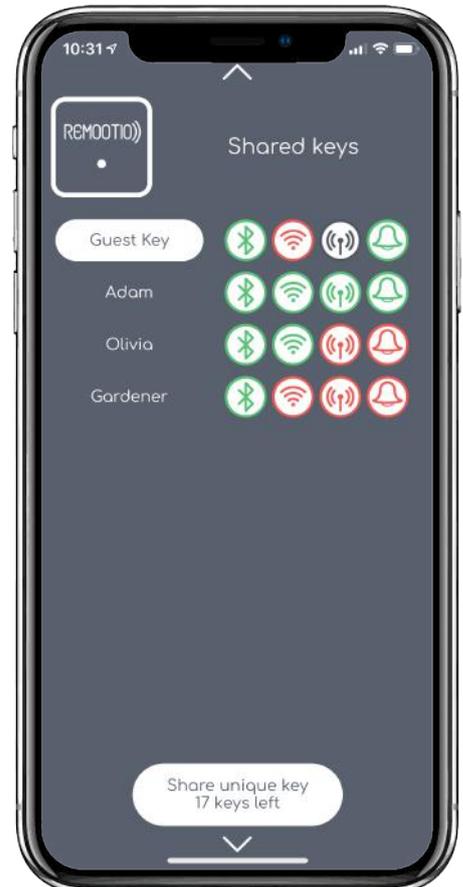
Meaning of different key management icons:

### The keyholder is granted:

🔵 Bluetooth access

🔴 no Bluetooth access

🔵 Wi-Fi access

🔴 no Wi-Fi access

🔵 Internet access

🔴 no Internet access

### If the keyholder operates the gate:

🔔 you get a notification

🔔 you don't get a notification

## Step 24: Enabling the API (optional)

If you would like to control or monitor Remootio using a system it is not compatible with yet, you may do so using its API (Application Programming Interface). Go down to the last page and tap on the API icon.

Tap on "Enable Websocket API" to turn on the API feature. You will be prompted to choose between API with logging and API without logging. API with logging provides more detailed information about your gate or garage door, such as which key was used to operate the device, etc. Tap on "Copy API keys" and send it to yourself via the messaging platform of your preference.

For example codes, please visit our GitHub and npm pages:

https://github.com/remootio/remootio-api-client-browser
https://www.npmjs.com/package/remootio-api-client

## Step 25: Firmware update (optional)

You can check if there are any firmware updates available for your Remootio device. Tap on the download icon

to check if your firmware version is up-to-date. If there is a newer version available and you wish to update, tap on "Update firmware".

If you would like to reset Remootio's firmware to the factory default software, tap on "Advanced options" and select "Reset to default software".

Note: Remootio's memory consists of three main partitions:
•Factory default software
•Updated software version
•Free space for new versions

## Step 26: Resetting Remootio

To remove admin rights from your phone, make sure you are connected to your Remootio device via Bluetooth and tap on the "Reset setup" icon

By resetting the setup, your Remootio can be set up again by you or someone who is within Bluetooth range of your Remootio device.

Note: for setup, Bluetooth connection will be required even if the Remootio device was previously connected to your Wi-Fi network. The reset deletes all previous settings and keys. None of the previous keyholders will be able to control or monitor this device until it is set up again and a key is shared with them.

If you have lost the admin phone, or deleted the app from the admin phone, you can reset the device by placing the jumper (A7) over the pin headers (A6) and keeping it there for at least 10 seconds. Please see "Step 7" for more details.
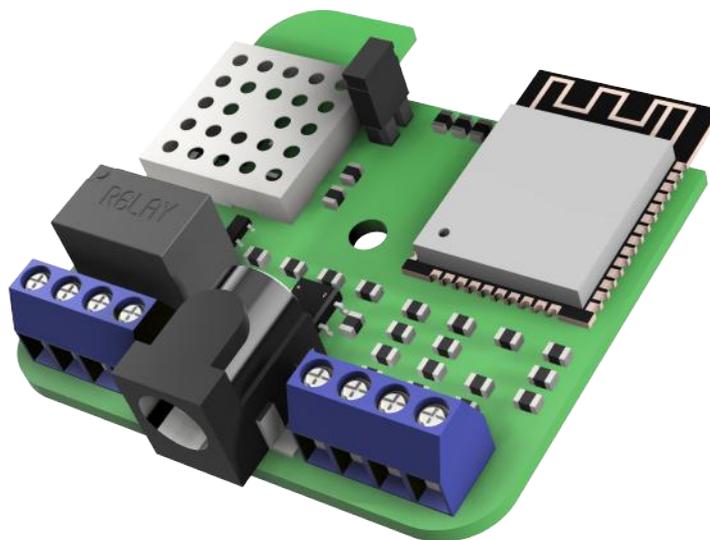
# Appendix 1: Remootio Pinout Diagram

## PINOUT DIAGRAM



```
        6 ▯

  1  2        4  5
        3
```
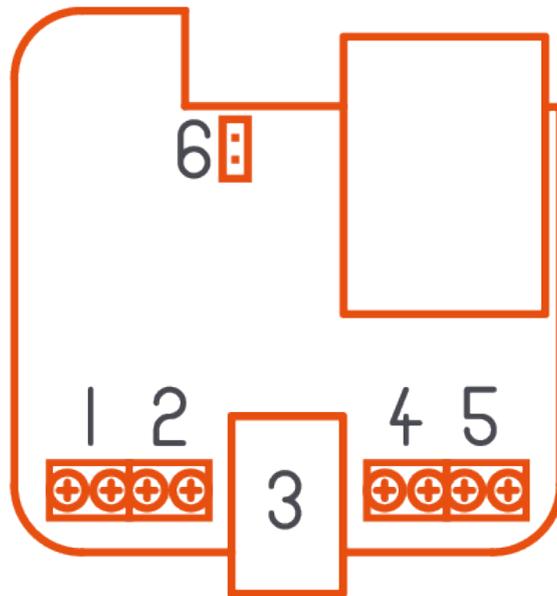
1 – MANUAL OPEN INPUT
2 – CONTROL OUTPUT
3 – POWER INPUT

GATE STATUS INPUT – 4
DOORBELL INPUT – 5
RESET PINS – 6

# Troubleshooting

| #Nr. | Topic | Problem | Solution |
|------|-------|---------|----------|
| #1 | Powering up | LED not flashing after installation | Make sure that you are using the original Remootio power adapter or your gate opener's supply voltage is between 6-36 VDC (hardware version v7.3 or below) or  6-36 VDC / 12-24 VAC (hardware version v7.4 or above) while the power source you are using can supply at least 3 Watts of power. |
| #2 | General | Some features not working properly | Make sure that you are using the latest version of the smartphone app and that your Remootio device also runs the latest software. You can update Remootio's software version by clicking on the ⬇ icon in the device software menu. Tap on "look for updates" and update firmware if there is a newer version available. |
| #3 | Auto-open | The auto-open feature returns "not performing auto-open ..." and does not open the gate | Update your Remootio app and the software of your Remootio device. |
| #4 | Setup | After resetting Remootio, my phone cannot find it during setup | Try closing your app and make sure it's also not running in the background and then turn off your Bluetooth. Wait a few seconds, turn Bluetooth back on and  restart the app. |
| #5 | Setup | The Remootio app doesn't find my Remootio device during the first setup. | Make sure your phone is as close as possible to the Remootio device before tapping on "set up new device". Keep the phone close to Remootio during the setup process. |
| #6 | Key sharing | Just received a new key, but I cannot connect via Bluetooth. | The first connection via Bluetooth takes longer. During first usage, move your smartphone closer to Remootio. |
| #7 | Key sharing | Cannot scan the QR code of the shared key. | Share the key as a link/text from the admin's phone and tap on "paste code" in the "Receive new key" menu of the receiver's phone. |
| #8 | Key sharing | Cannot change access rights | Make sure your smartphone are connected to Remootio via either Bluetooth, Wi-Fi or Internet. Note: only the admin smartphone (the one that set up Remootio) can manage access rights. |
| #9 | Sensor | Cable not long enough | The cable can be extended to around 10 meters. |
| #10 | Sensor | The app doesn't detect status changes. | Place the the two parts of the sensor closer to each other. |
| #11 | Sensor | The app shows incorrect status of the gate | Click on this 🔁 icon in the Add-on settings page in the app and then tap on "Flip logic". |
| #12 | Wi-Fi | Cannot connect via Wi-Fi | Make sure your smartphone is on the same Wi-Fi network and try again. Try closing the app (make sure it's not running in the background) and try again. You can also try switching between connection modes. |

# Troubleshooting

| #Nr. | Topic | Problem | Solution |
|------|-------|---------|----------|
| #13 | Wi-Fi | Remootio doesn't get an IP address after selecting the SSID and entering the password | Make sure the password is correct |
| #14 | Wi-Fi | Remootio cannot find my Wi-Fi network after scanning for networks | Make sure that there is a strong enough Wi-Fi signal at Remootio. Note: Remootio only works with 2.4GHz Wi-Fi networks. |
| #15 | Internet | Cannot connect to Remootio via Internet | Make sure your smartphone has Internet connection. Try closing the app (make sure it's not running in the background) and try again. You can also try switching between connection modes. Try setting up the Internet access again. |
| #16 | Admin phone lost | Lost admin phone | Remove the screw from the back of Remootio and remove the top part. Place the jumper on pin header "A6" |

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