



# Parklio™ Barrier

USER MANUAL

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## 1. Foreword

Thank you for purchasing Parklio™ Barrier. The Parklio Smart Parking Barrier, made using cutting-edge technology, has passed rigorous quality control methods to guarantee its excellence.

This user manual is intended to provide you with all the necessary information to ensure the proper installation, operation, and maintenance of your parking barrier. Inside, you will find detailed, step-by-step instructions accompanied by illustrations to guide you through the setup process. Additionally, we've incorporated important safety precautions to keep in mind while using the product.

Please be aware that the information in this manual is subject to possible revisions without prior notice. To ensure you have the most up-to-date information, we kindly request that you visit our official website regularly.

### **Attention!**

- **Read the user manual and technical sheet before installing and using the Parklio Smart Parking Barrier.**
- **Always follow the safety instructions.**
- **Keep this user manual at hand for future reference.**



## 1.1. Overview

The Parklio Smart Parking Barrier is designed to secure parking spaces and enable smartphone-controlled access. Suitable for diverse settings, the barrier safeguards valuable parking spots. It seamlessly integrates with other smart systems, offers manual control alongside remote operation, and includes safety features like a breakable pin. Rechargeable batteries ensure flexibility, while the auto-close function enhances security.

## 1.2. Features

Explore the remarkable capabilities of the Smart Parking Barrier as we detail each aspect that sets this product apart.

### Key Features:

- **App-Controlled Operation:** Use the Parklio Connect app to remotely lower or raise the parking barrier, granting access conveniently from your vehicle.
- **Auto-Close Function:** The barrier automatically closes upon departure, ensuring the parking spot remains secure and available for authorized users.
- **Digital Key Sharing:** Easily share virtual keys, allowing controlled access to the barrier. Set specific time frames for temporary access or provide unlimited entry.
- **Solar-Powered Efficiency:** An integrated solar panel enhances battery autonomy, providing sustainable and cost-effective power to the barrier.
- **Power Options:** Choose between a battery-only operation or continuous power supply based on your preferences.
- **Protection for EV Charging Spots:** Besides standard parking spaces, the barrier prevents unauthorized use of EV charging spots, improving accessibility and preventing misuse.
- **Customization:** Personalize the parking barrier with your company's logo and preferred color.



- **Location Navigation:** Utilize the Parklio Connect app for direct navigation to the parking barrier's location, helping visitors locate designated spots.
- **Easy Installation:** The smart parking barrier follows a plug-and-play approach, simplifying installation without additional configuration.
- **Quality Assurance:** Parklio Barrier holds CE, ROHS, and FCC certificates, meeting rigorous quality standards for reliability and safety.

This manual provides factual insights into the features and functionalities of the Smart Parking Barrier, ensuring a comprehensive understanding of its capabilities.





## 2. Warnings and General Precautions

This section offers safety guidelines to keep you safe from harm or property damage. All warranties will be voided if these instructions are not followed.

**PARKLIO (PARKLIO D.O.O.) RESERVES THE RIGHT TO MODIFY THE DEVICE WITHOUT NOTICE. PARKLIO (PARKLIO D.O.O.) DISCLAIMS ALL LIABILITY FOR ANY DAMAGE OR INJURY TO PEOPLE OR THINGS CAUSED BY IMPROPER USE OR WRONG INSTALLATION.**

**THE BARRIER WAS MADE IN ACCORDANCE WITH ALL IMPORTANT SAFETY CRITERIA AND STANDARDS. CHILDREN, PERSONS WITH DISABLED PHYSICAL, MOTOR, OR PERSONAL EQUALITY, AND RELATED PEOPLE WITHOUT PREVIOUS EXPERIENCE OR KNOWLEDGE SHOULD NOT USE THE BARRIER WITHOUT THE REQUIRED HELP AND SUPERVISION.**

**EXCEPTION: DEVICE USE UNDER ADEQUATE SUPERVISION, IF THEY HAVE RECEIVED SAFETY INSTRUCTIONS AND TRAINING, OR IF THEY HAVE BEEN INFORMED ABOUT THE DANGER CAUSED BY IMPROPER USE. THE SAME RECOMMENDATION APPLIES TO JUVENILE USAGE OF THE DEVICE.**

**CHILDREN SHOULD NOT BE ALLOWED TO PLAY WITH THE DEVICE. DO NOT ALLOW CHILDREN TO CLEAN, USE, OR MAINTAIN THE DEVICE.**

## 2.1. Safety Instructions

Do not use the barrier if you have not read and understood the operating instructions.

Check that all of the elements listed in these instructions are still within the original package before using the barrier for the first time.

Only the Barrier's manufacturer's plugs, batteries, chargers, replacement components, and power supply should be utilized. **The use of non-manufacturer-provided components results in warranty termination.**

Ignoring use instructions, as well as inappropriate installation and use of the barrier, may result in barrier damage or user injury. Always have instructions on hand.

**Never expose the inner workings to water.**

Leave the barrier repairs to a professional. Improper repairs may result in an accident or an equipment breakdown.

Charge the battery to full capacity before first use. **Only use the included power adaptor to charge the battery pack.**

Please handle the battery pack with care, as it is delicate. Avoid exposing the battery to direct heat.

The battery pack is only intended for use with Parklio products and should not be used with other goods. Parklio is not liable for any damage caused to the device or the battery pack as a result of improper usage. **Before using the battery pack, be sure to shut off the power input connector to prevent water infiltration.**

**Chemical solvents should never be used on the product since they might trigger an explosion.**

For appropriate installation and connection to the electrical network, strictly adhere to the instructions.

The installer must provide a device (e.g., a magnetothermic switch) that ensures the equipment's omnipolar separation from the power supply. The requirements specify a contact separation of at least 3 mm on each pole (EN 60335-1).

**The warranty excludes consumable device components**, color fading, and chipping, increased noise as a consequence of device age, and other cosmetic impacts that do not impair the product's operation or safety.

## 2.2. Installation Warnings

Because installation includes mechanical and electrical abilities, it should only be performed by competent professionals who can give the Compliance Certificate for the whole installation.

**During installation, maintenance, cleaning, and repairs, the device and external power source must be separated from the power supply.**

The upstream electric system must adhere to current laws and regulations.

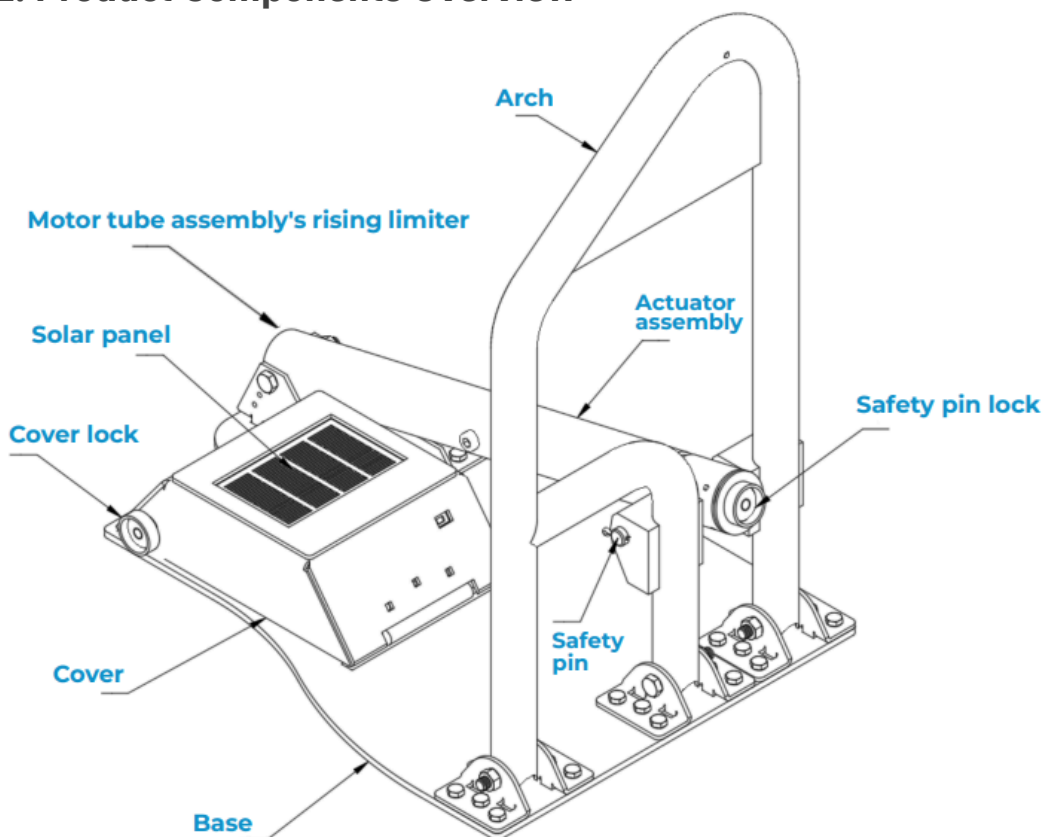
**Install the product only in non-explosive surroundings and atmospheres; the presence of flammable gases or vapors poses a major safety risk.**

The barrier must be exclusively installed on a hard, flat concrete floor.

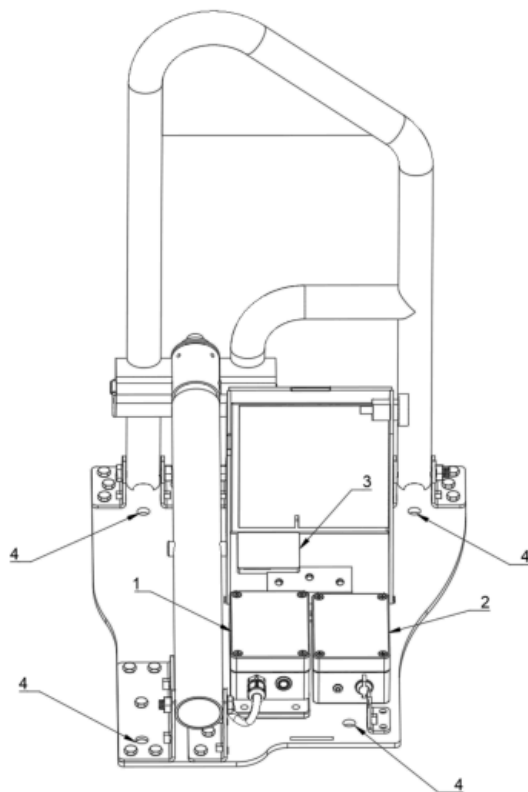
## 3. Product Description

This section provides a complete description of the Smart Parking Barrier's physical characteristics and technical specifications.

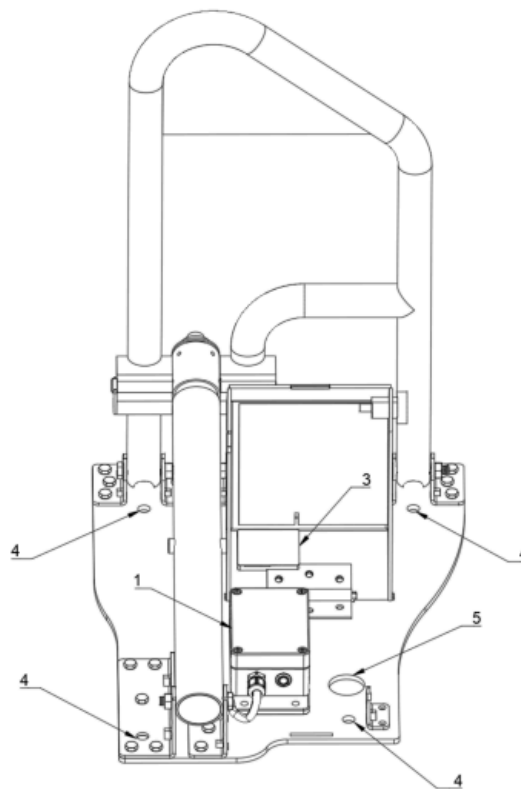
### 3.1. Product Components Overview



**Parking barrier parts**



**Battery powered barrier back view**



**Constant supply model**

1. Control Unit Electronic
2. Battery Pack
3. Laser Sensor Assembly
4. Mounting Holes
5. Cable Hole

[FAQ](#)

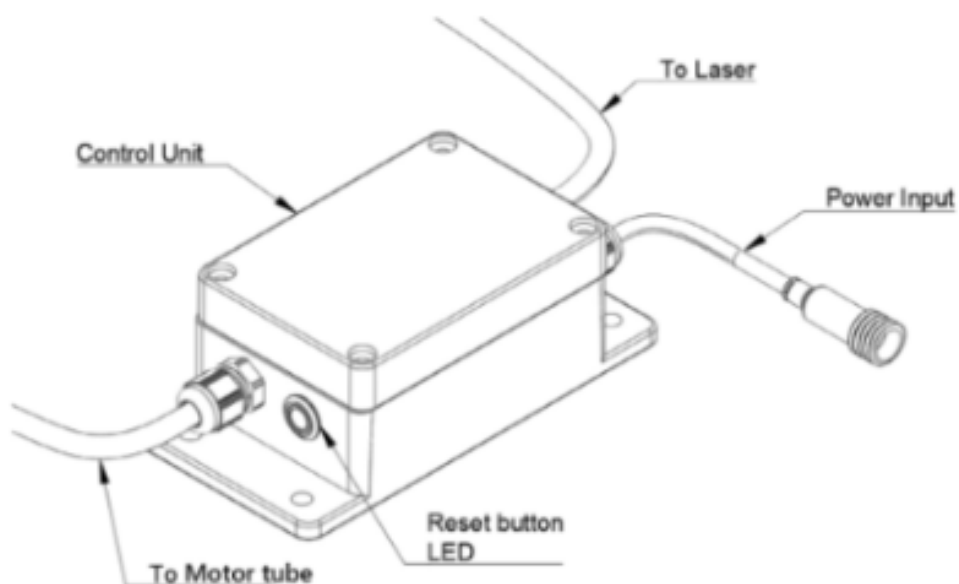
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The control unit houses the BLE radio and is in charge of regulating the Barrier. It is linked to the actuator, the laser sensor, and the battery.



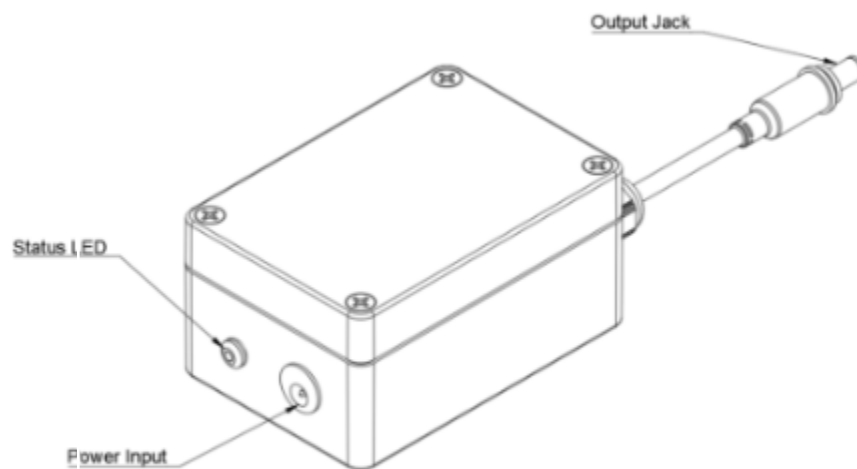
**Control unit**

The Parklio™ Battery Pack is a portable power source for the Parklio Smart Parking Barrier. Parklio Barriers support the use of Parklio Battery Packs and Parklio Double Battery Packs.

For enhanced sustainability and cost-efficiency, the barrier incorporates an integrated solar panel. This panel plays a significant role in increasing the battery's autonomy, offering an environmentally friendly and efficient energy solution for the automated barrier.



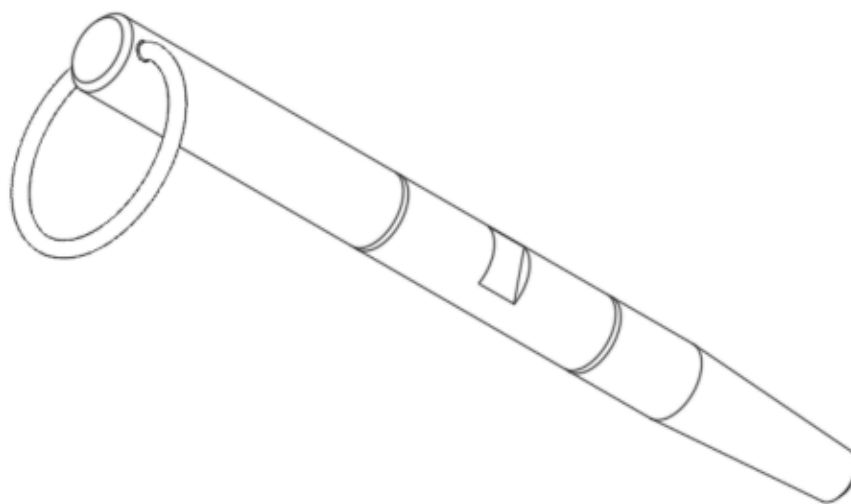
**Regular recharging of the barrier's batteries is necessary to maintain optimal performance and uninterrupted functioning of the barrier, even though the solar panel provides extended battery life.**



**Battery pack**

LED STATE	Description
Off	The battery pack is charged, or the battery pack is not connected to a charger.
On	The battery pack is connected to a charger and charging.
Blinking	There is an error during charging. Stop charging immediately.

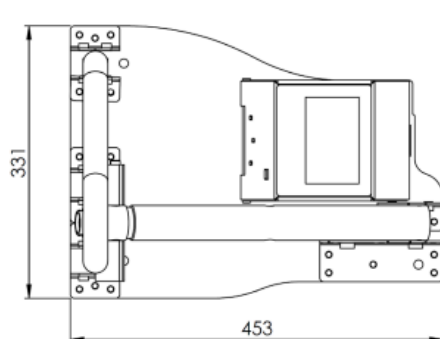
The barrier uses a safety pin to connect the actuator to the barrier arch. The pin serves as a safety measure to safeguard the barrier from excessive force and allows for manual operation by removing it and lowering the barrier. The pin is designed to break into three pieces in case of excessive frontal force to the arch and can easily be replaced by a new one.



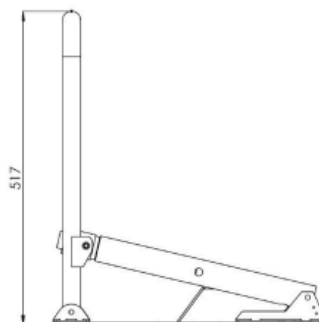
**Safety pin**



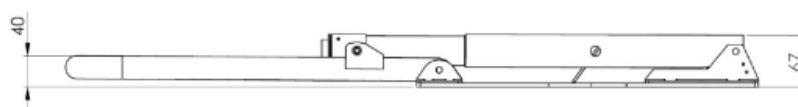
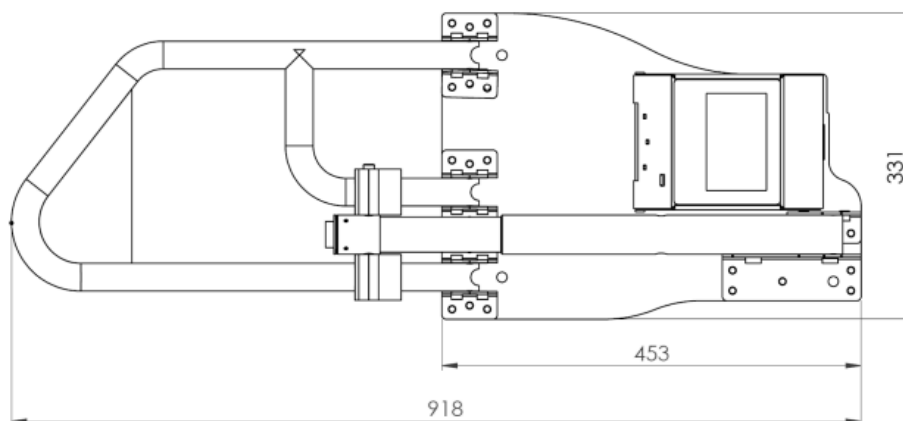
### 3.3. Dimensions



**Barrier Raised - Top View**



**Barrier Raised - Side View**



**Barrier Lowered - Side View**

\*The dimensions depicted in the image are presented in millimeters.

### 3.4. Technical Characteristics

**The figures in this handbook are schematic, acquired in laboratories in compliance with the applicable standards, and might not exactly match the product.**

These numbers may change depending on the operating circumstances and ambient factors. Technical parameters may vary without prior notice due to product quality improvements

Parameter	Value
<b>Dimensions (barrier opened):</b>	918 mm x 331 mm x 70 mm / <b>36.14 in x 13.03 in x 2.76 in</b>
<b>Dimensions (barrier closed):</b>	453 mm x 331 mm x 517 mm / <b>17.83 in x 13.03 in x 20.35 in</b>
<b>Weight:</b>	15.2 kg / <b>33.51 lbs</b>
<b>Working temperature:</b>	-20 °C to 60 °C / <b>-4.0 °F to 140.0 °F</b>
<b>Working humidity:</b>	5 % to 95 % RH, non-condensing
<b>Operating altitude:</b>	2000 m / <b>6561.68 ft</b>
<b>Ingress protection:</b>	IP65
<b>Nominal travel time:</b>	<5 s
<b>Power supply:</b>	Parklio battery pack Parklio double battery pack AC/DC external low voltage power supply (constant supply)
<b>Operating voltage:</b>	6 Vdc – 11 Vdc

<b>Current consumption (operation):</b>	2 A continuous, 8 A peak current
<b>Current consumption (standby):</b>	100 uA average standby current
<b>Wireless connectivity:</b>	Bluetooth LE
<b>Over-The-Air upgrades:</b>	Yes
<b>Antenna interface:</b>	Internal 2.4 GHz antenna
<b>Sensors:</b>	One magnetic sensor and one Class 1 laser sensor for detecting vehicle presence
<b>Protection and coatings:</b>	Cold dip galvanized and lacquered, powder coated Stainless steel

Please refer to the [technical sheet](#) for a complete list of technical features.

## 4. Installation

This section describes the barrier packing contents and provides detailed instructions on how to install the barrier.

### 4.1. Packaging Contents

Please check that the package contains all the necessary parts.

**The packaging should contain the following:**

- 1 x Parklio Barrier
- 1 x Parklio Battery pack (STANDARD MODEL)
- 1 x Power adapter for charging the battery (STANDARD MODEL)
- 1 x AC/DC Power supply (CONSTANT SUPPLY MODEL)
- 4 x Anchor screws
- 2 x Keys
- 1 x Safety pin
- 1 x User manual

If any of the parts are incorrect, missing, or damaged, contact your Parklio™ dealer. Keep the cardboard package, including the original packing materials, in case you need to return the product for repair.

## 4.2. Unpacking the Product

The Parklio Parking Barrier is shipped sealed and folded.

After opening the package, remove the smaller box and lift the barrier arch to remove the safety pin. Pull the barrier out of the box by gripping it by the base with both hands. To prevent damage, never remove the barrier from the box by pulling on the barrier arch. Place it on a flat concrete floor and unfold the barrier arch to the ground.

Please inspect the barrier for damage and test it before securing it to the ground.

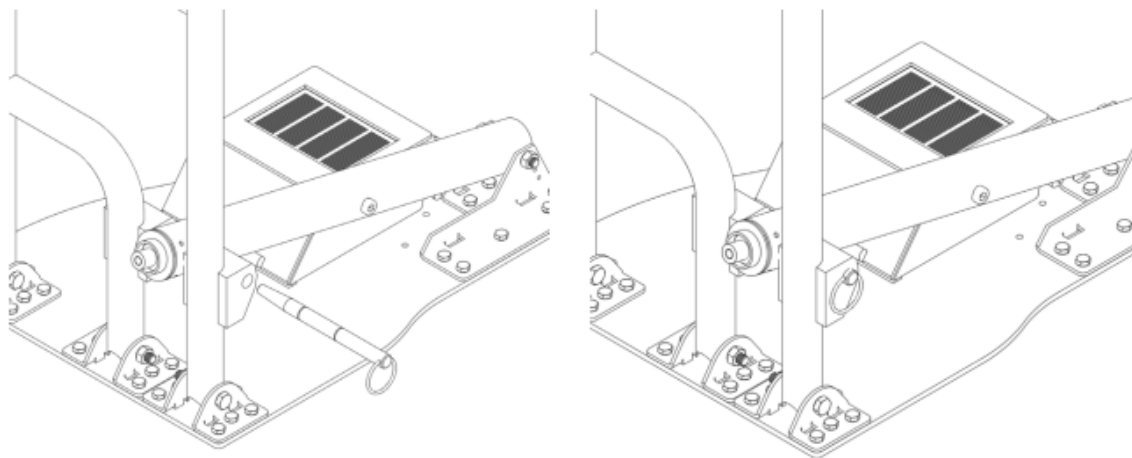


**The motor tube assembly has a rising limiter that prevents you from raising the actuator too high when inserting a safety pin - causing damage to the wiring. Don't force raise it, as it will cause the rising limiter to break and result in a wiring problem that will prevent your barrier from functioning normally.**

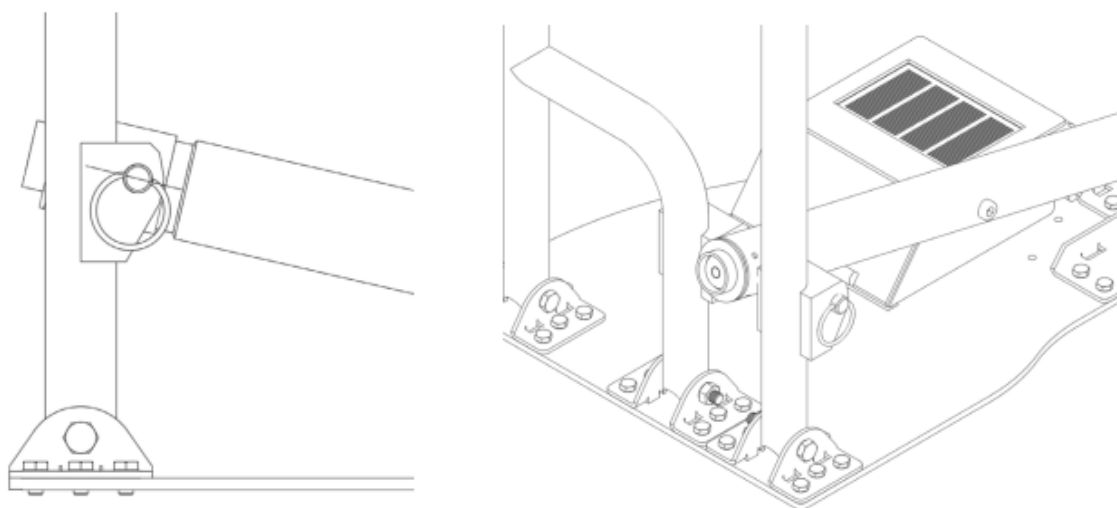
To test the barrier, insert the safety pin that connects the barrier arch to the motor tube.

**STEP 1.** Unlock the motor tube by inserting the key and rotating it. The lock should pop out.

**STEP 2.** Raise the motor tube to the same level as the arch and insert the safety pin through both the arch and the tube.



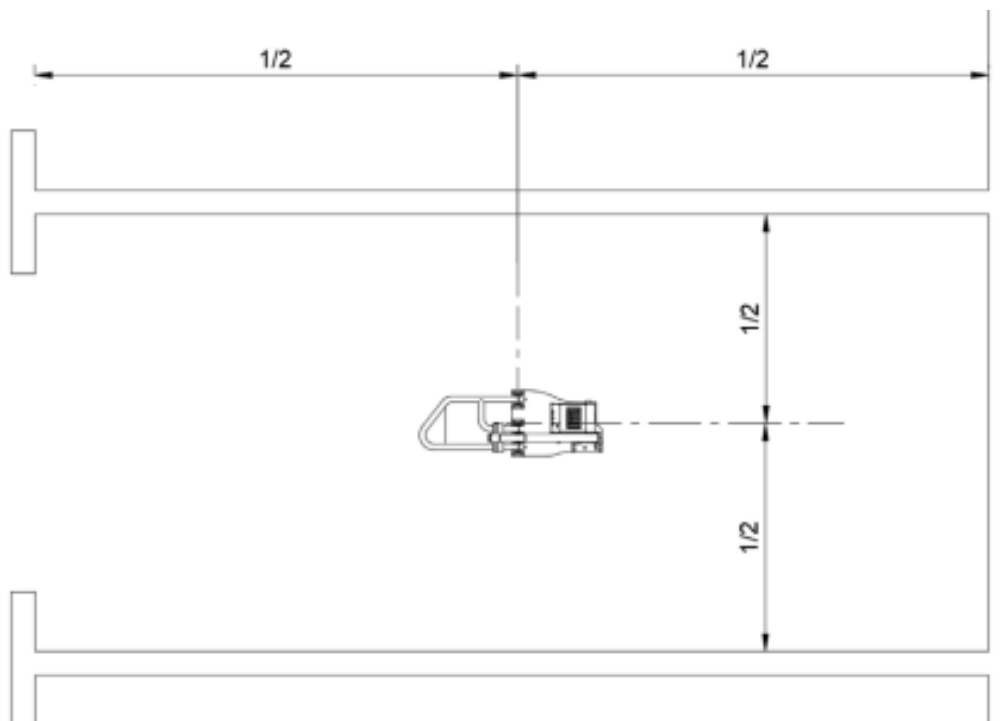
**STEP 3.** Adjust the safety pin so it is positioned in a way that the notch in the safety pin is pointing at the lock. Fully insert the safety pin and slightly rotate it while depressing the lock. Close the lock with the cover.



After that install Parklio Connect app as described in section 7 of the user manual and test the barrier by extending it and lowering it.

#### 4.4. Positioning the Barrier for Installation

The graphic below is just a suggestion on where to position the barrier. We do not condition the user's setup; however, for optimum barrier operation, we suggest positioning it in such a way that the parked car covers the whole barrier while the barrier is in the open position.



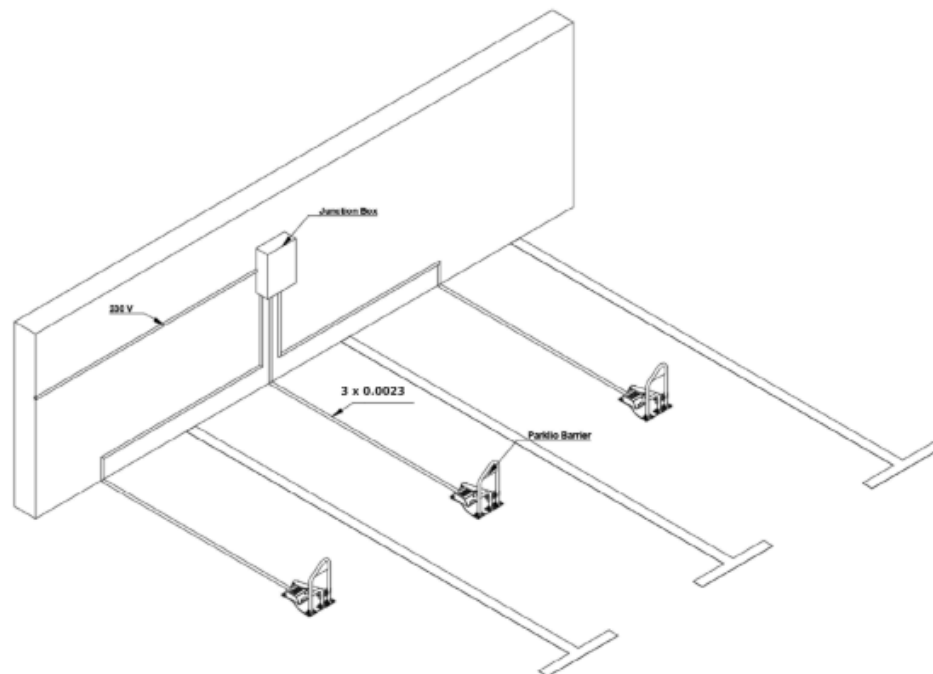
## 4.5. Installation of AC-Powered Barrier Model

The Parklio AC-power supply Barrier model uses an AC/DC low-output voltage supply to power the Barrier. The power supply is powered from the electric line and the supply output is fed to the barrier.

**The power supply replaces the battery pack. The battery pack and power supply cannot be used at the same time.**

**Maximum cable length is 25 m. Use a 1.5 mm cross-section cable for power delivery to the barrier.**

Each barrier must be fed by its own power supply and by a separate cable. One supply cannot be used for multiple barriers.







The illustration above is only an example of installing the barrier with a constant supply. The final used setup is dependent on the environment. Disconnect all power while installing the barrier.

**Required tools and equipment:**

- Drill
- Hammer
- 10 mm masonry carbide drill bit
- 13 mm socket wrench
- PH1 insulated screwdriver
- H0 or 2 mm flat insulated screwdriver



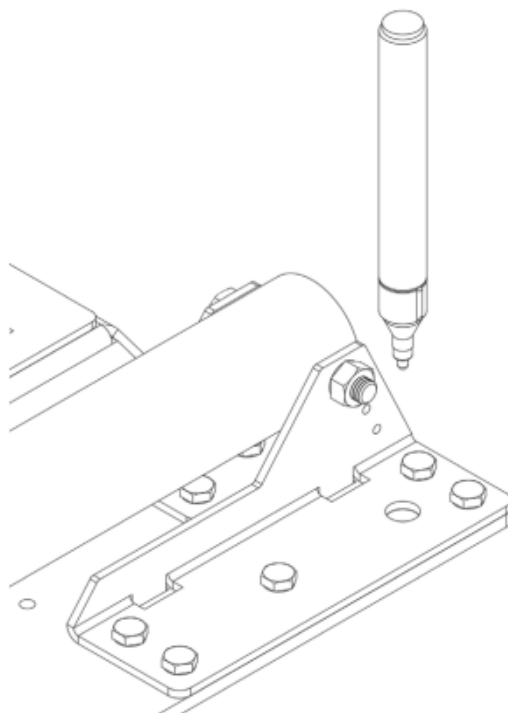
Do not attempt to secure the Parklio Barrier in any other way than described in this user manual because any different kind of securing the barrier (ex. like fixing it to the ground with concrete) can cause problems for the moving parts of the barrier. The Parklio Barrier must be installed on a solid surface by placing anchor screws as outlined here.

### 4.5.1 Mounting the Base

The below steps only apply if you are installing the barrier on a hard concrete surface. If installing the barrier on different surfaces, please advise the manufacturer of the best practices and tools for installation.

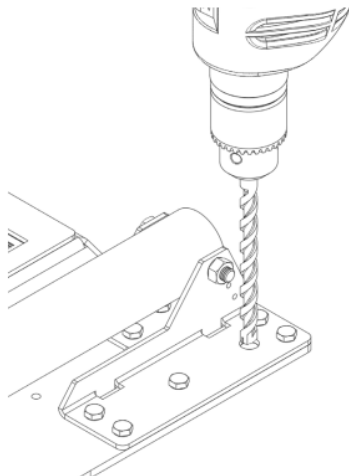
**STEP 1.** Position the barrier in accordance with the above instructions.

**STEP 2.** Mark the four mounting holes.

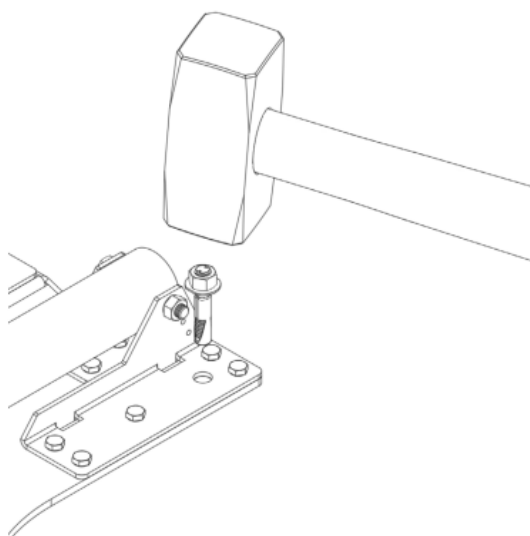


**STEP 3.** Drill the holes for the anchor screws. Clear the holes of any dust.

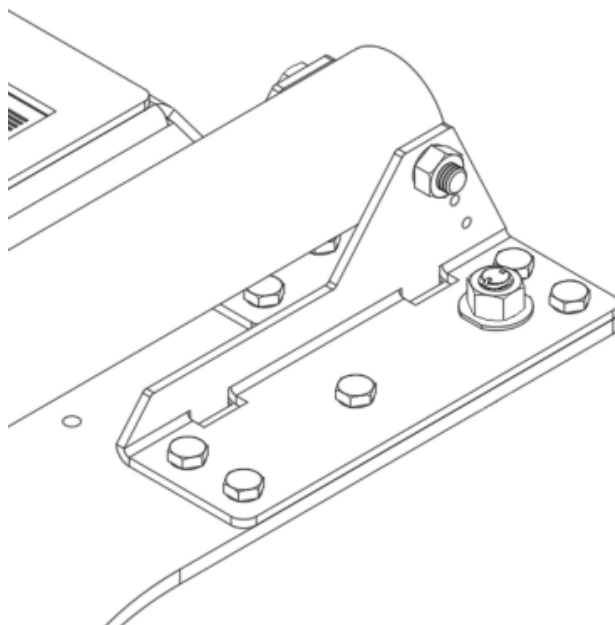
**Tip:** You can skip marking the holes and use the barrier base as the template. Make sure that the barrier base doesn't move while you drill, so you don't damage it.



**STEP 4.** Place the barrier and align the mounting holes with the drilled spots. Insert the anchor screws by tapping them with a mallet.



**STEP 5.** Tighten the anchor screws with a socket wrench.



#### 4.5.2. Installing the Power Supply

The power supply must be fed by a 230 V / 50 Hz or 120 V / 60 Hz electric line, protected by a differential magnetothermal switch complying with the law provisions in force. Connect the electric line wires to terminals L and N on the power supply. Connect the power supply + and - terminals to the cable leading to the barriers.

**STEP 1.** Bring the necessary infrastructure to the barrier. Feed the supply cable through the barrier base.

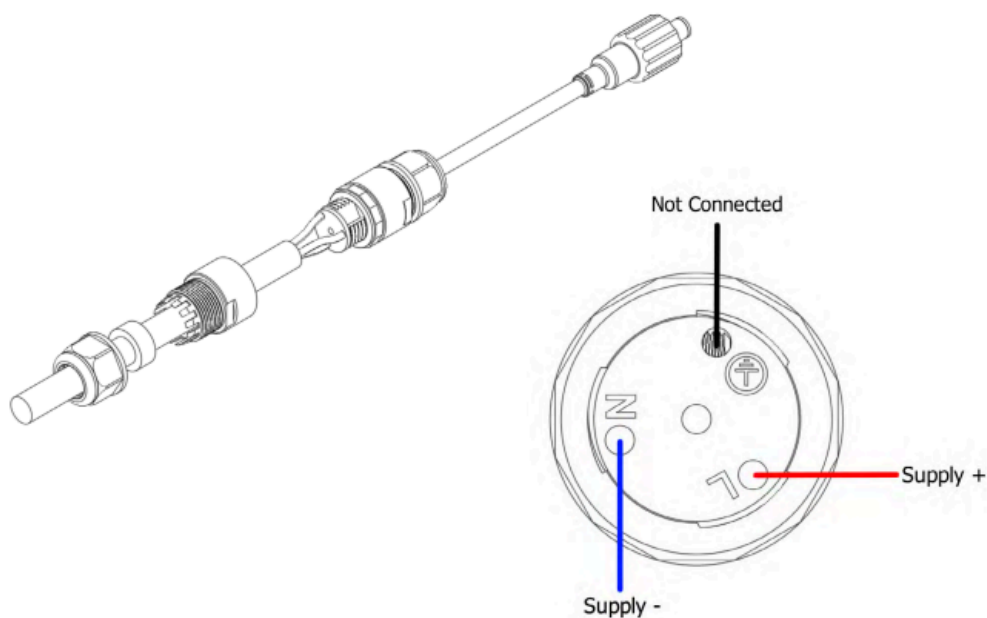
**STEP 2.** The barrier is provided with an adapter cable for connecting it to the constant supply. Disassemble the adapter.



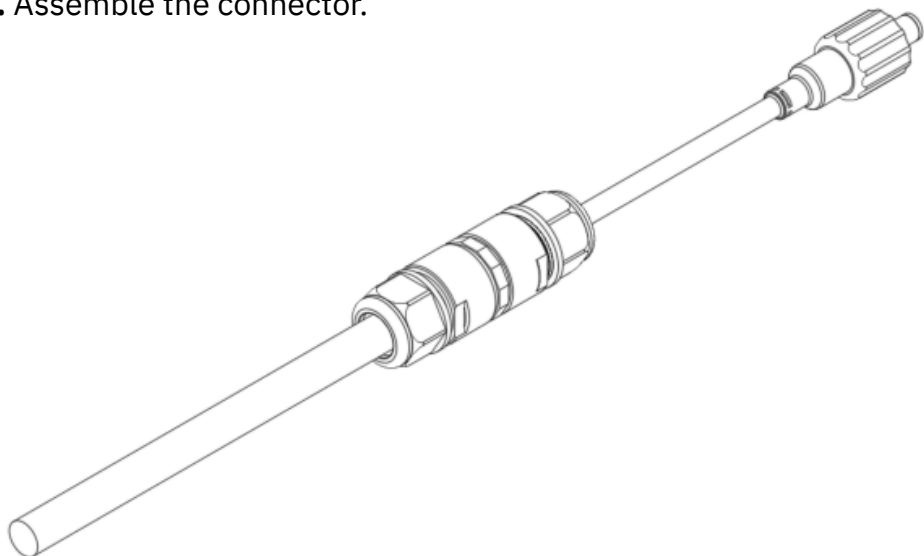
**STEP 3.** Insert the power cable and connect it as shown.

**The supply is polarity sensitive; use caution when connecting the cable to the power supply and connector.**

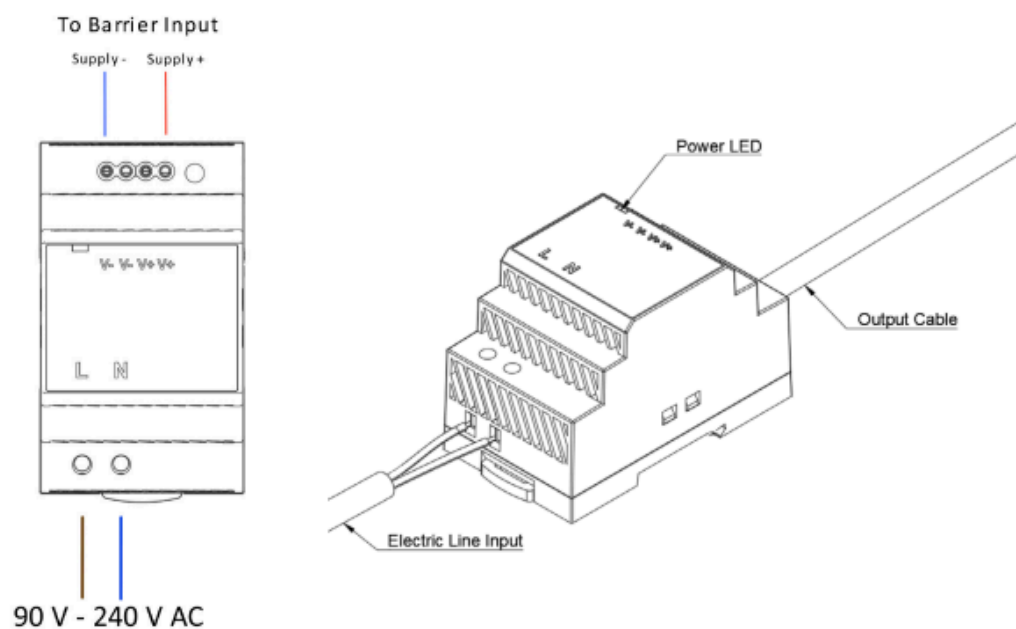
Maintain the same polarity on the connector and the power supply



**STEP 4.** Assemble the connector.



**STEP 5.** Connect the power supply to the cable running to the barrier.



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**STEP 6.** Connect the power supply to the electric line.

**Disconnect all power while installing the barrier power supply. Make sure the electric installation is adequately protected and installed according to the laws in force.**

**STEP 7.** Turn on the power. The LED on the power supply should power on indicating that the supply is functioning.

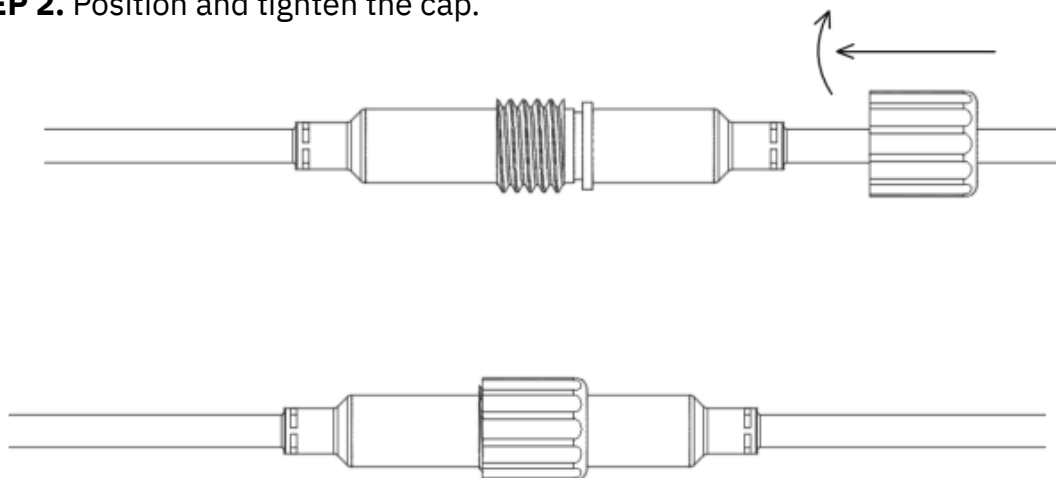
**STEP 8.** Connect the power supply jack to the barrier.

#### 4.5.3. Connecting the Power

**STEP 1.** Plug in the power supply jack to the control unit input.



**STEP 2.** Position and tighten the cap.



#### 4.5.4. Final steps

After connecting the power supply, perform the initial setup of the barrier through the mobile application as described in this manual (Chapter 7). Lower the barrier cover and lock it. The barrier is ready for use.

### 4.6. Installation of Standard Barrier Model

Within this section of the user manual, you'll find comprehensive instructions for configuring your Standard Parking Barrier model.

The inclusion of an integrated solar panel substantially enhances the battery's autonomy within the automated barrier, providing a cost-effective and eco-friendly power source.

#### **Required tools and equipment:**

- Drill
- Hammer
- 10 mm masonry carbide drill bit
- 13 mm socket wrench



**Do not attempt to secure the Parklio Barrier in any other way than described in this user manual because any different kind of securing the barrier (ex. like fixing it to the ground with concrete) can cause problems for the moving parts of the barrier. The Parklio Barrier must be installed on a solid surface by placing anchor screws as outlined here.**

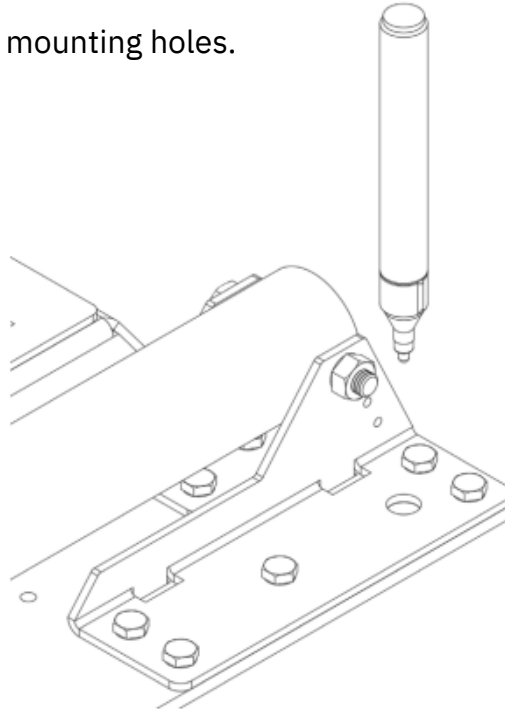


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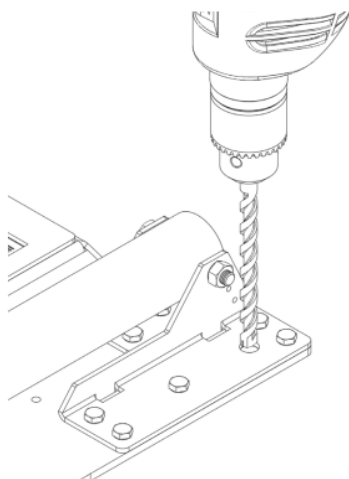
**STEP 1.** Position the barrier in accordance with the above instructions.

**STEP 2.** Mark the four mounting holes.

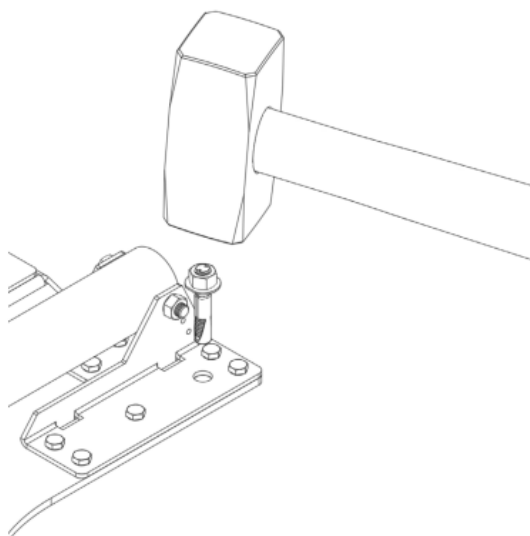


**STEP 3.** Drill the holes for the anchor screws. Clear the holes of any dust.

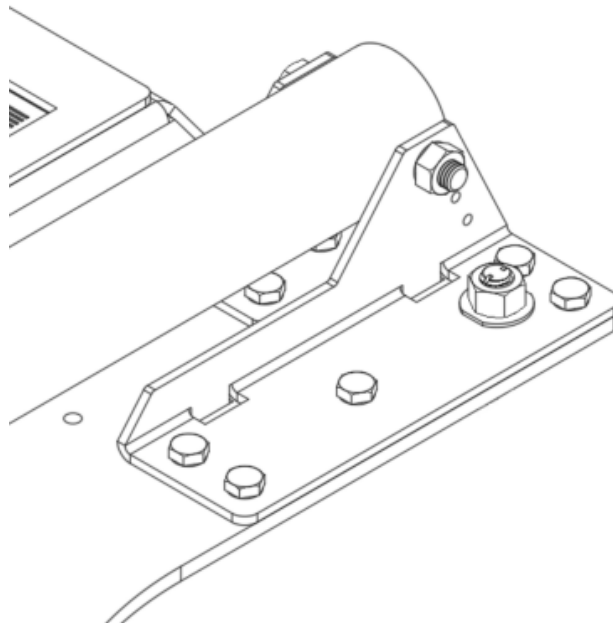
**Tip:** You can skip marking the holes and use the Barrier base as the template. Make sure that the Barrier base doesn't move while you drill, so you don't damage it.



**STEP 4.** Place the barrier and align the mounting holes with the drilled spots. Insert the anchor screws by tapping them with a mallet.



**STEP 5.** Tighten the anchor screws with a socket wrench.



#### 4.6.2 Inserting the Battery

To install the battery pack, align the Parklio Battery Pack with the Control Unit and attach it to the Barrier base using the velcro joint on the bottom of the battery pack and on the barrier.

**Take caution to plug the charging port input to prevent water ingress.**

#### 4.6.2 Final steps

After installing the battery pack, perform the initial setup of the Barrier through the mobile application as described in this manual (Chapter 7). Lower the barrier cover and lock it. The barrier is ready for use.

## 5. Parking Barrier Accessories

This section provides an overview of a range of meticulously designed accessories that cater to various aspects of barrier functionality, security, and customization. Each accessory is designed to complement the Parklio Parking Barrier's advanced features, offering you the flexibility to tailor your parking protection to your unique preferences and needs.



SKU 0179



SKU 0135



SKU 0043



SKU 0242



SKU 0111



SKU 0202



SKU 9895



SKU 0258

COLOR  
SKU 0235  
STICKER  
SKU 0259

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## 5.1. Parklio Keyfob User Manual

This manual provides comprehensive information about the Parklio Keyfob, a compact remote device designed to simplify the control of your parking barrier. By replacing the need for a smartphone app, the Parklio Keyfob offers a convenient alternative for effortlessly managing your parking barrier.

Whether positioned in your vehicle or attached to a keychain, this remote device ensures immediate access to barrier control, enabling you to operate your parking barrier with ease. The manual will guide you through the functionalities and usage instructions of the Parklio Keyfob.

### 5.1.1. Package Contents

Please check that the package contains all the necessary parts.

#### **The packaging should contain the following:**

- 1 x Parklio Keyfob
- 1 x User Manual



If any of the parts are incorrect, missing, or damaged, contact your Parklio™ dealer. Keep the cardboard package, including the original packing materials, in case you need to return the product for repair.

### 5.1.2. Keyfob Overview

**The Parklio Keyfob functions across two distinct modes: "Programming" and "Control."** While in "Programming" mode, the keyfob can store the key information of a designated Parklio parking protection device. During this mode, the flash signal occurs at intervals of 2 seconds. Upon successful programming, the keyfob will emit two consecutive flashes before exiting the programming mode.

In the "Programming mode," the Parklio Keyfob utilizes light signals for feedback every 2 seconds, as detailed in the table below:

Signal	Status / Error meaning
1 blink	CAR ON TOP/ PERMA OPEN
2 blink	Error connecting to the device
3 blink	Keyfob not programmed or the key of the Barrier is reset

In the "operating" mode, each press of the button on the Parklio Keyfob will switch the state of the protection device.

### 5.1.3. Technical Specification

Parameter	Value
<b>Power supply</b>	3VFC CR2031 (Replaceable)
<b>Working temperature range</b>	-20°C to +60°C / <b>-4°F to 140°F</b>
<b>Working humidity</b>	10% to 90%
<b>Ingress protection</b>	IP67
<b>Dimensions</b>	35x60 x12 mm / <b>1.38 in x 2.36 in x 0.47 in</b>
<b>Weight</b>	16g Including battery / <b>0.56 oz Including battery</b>
<b>Wireless connectivity</b>	Ble 4.0+
<b>Frequency range</b>	2.402GHz - 2.480GHz
<b>Receiver sensitivity</b>	-96dBm
<b>Colour</b>	black
<b>Max. supported devices</b>	max. 1 device may be programmed

#### 5.1.4. Controlling the barrier with Keyfob

In addition to the complimentary Parklio Connect mobile application, control over Parklio products is achievable using the Parklio Keyfob remote device. However, it's important to note that the Keyfob necessitates the initial setup of the barrier through the Parklio Connect application, as explained in Chapter 7.2.7. *Setting up the Keyfob*.

The **keyfob can store only one device in its memory**, and it is controlled by pressing the keyfob button.



## 5.2. Gateway User manual

Within this manual, you will gain insight into the Parklio™ Gateway, a pivotal component in the Parklio ecosystem. The Gateway serves as an intermediary connecting your Parklio™ Parking Barriers with remote control functionality.

Its primary role involves facilitating data exchange and communication between the Barrier products while providing real-time updates on parking space occupancy. Tailored for environments with a significant number of parking spaces and a consistent user flow, the Gateway offers effective remote control for both lot operators and users, regardless of their physical location.

One Gateway can control up to 20 Parklio Parking Barriers or 4 Parklio Gates/Chain/Bollards/Brains.








### Key Features:

- **Real-time Parking Information:** Receive up-to-date parking occupancy insights.
- **Simplified Installation:** Streamlined setup process for convenient implementation.
- **Versatile Control:** Capable of overseeing up to 20 parking barriers.
- **Extended Control Range:** Able to manage parking barriers within a diameter of up to 50 meters.

This manual will guide you through the functionalities, installation process, and optimal use of the Parklio™ Gateway, ensuring efficient control and monitoring of your parking Barrier network.

### 5.2.1. Package Contents

The product package contains the following items:

	1 x Parklio™ Gateway
	1 x Waterproof power connector
	1 x Ethernet cable waterproof connector
	1 x Pole mount bracket
	1 x Pole mount hose clamp
	4 x M4 screws
	QR Code stickers (UUID, MAC address and password)





If any of the parts are incorrect, missing, or damaged, please contact Parklio support.  
Keep the original packaging in case you need to return the product.

**NOTE:** RJ45 connector for the Ethernet port is not provided  
The wall plugs and screws are not provided.

### 5.2.2. Gateway Overview



*Status and connector panel*

1	<b>Reset Button</b>		Hold to reset the gateway. Short press to enter 'Connection' mode. <b>On</b> - The LED ring indicates there is power supply to the gateway. <b>Off</b> - The gateway is powered off. <b>Blinking</b> - The gateway is upgrading or the Reset button was pressed.
2		<b>Power</b>	See gateway status table below for additional information.
3		<b>Ethernet</b>	
4		<b>Bluetooth</b>	
5		<b>4G connection</b>	
6	<b>Ethernet port</b>		LAN port for Internet connectivity
7	<b>AC port</b>		Power supply connector

*Status LED and connector description*

**NOTE:** The Parklio Gateway does not have PoE capability.





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				Description
OFF	OFF	OFF	OFF	The gateway is booting up.
ON	OFF	OFF	OFF	No network connection.
ON	ON	OFF	X	Network connection established. There is no connection to Parklio servers, check network and firewall settings.
ON	ON	OFF	ON	The gateway started up successfully, GSM connection established, there is no connection to Parklio servers.
ON	OFF	OFF	ON	The gateway started up successfully, GSM connection established, there is no internet connection. Check APN settings or mobile network provider.
ON	BLINK	X	X	Network error / connection lost - please check the network connection.
ON	X	BLINK	X	There is an internal error, check error log.
ON	ON	ON	X	Gateway operational.
BLINK	BLINK	BLINK	BLINK	The gateway is in <i>Connection</i> mode.

**ON** - The LED is on.

**OFF** - The LED is off.

**X** - The LED is either ON or OFF.

**BLINK** - The LED is flashing.

The rear side of the Gateway features a label displaying the gateway's UUID (Unique ID / Serial Number), which serves as an identifier for the unit. This serial number plays a vital role in incorporating the gateway into your user account and gaining access to the gateway's web user interface.

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Positioned beneath the QR code on the same label is the gateway's MAC address. A duplicate of this label is enclosed within the gateway's packaging. Alongside the UUID and MAC address, these labels also store the passwords for the gateway's web interface. It is recommended to retain these labels for potential future use.



### 5.2.3. Technical specification

Parameter	Value
<b>Input voltage</b>	85 VAC ~ 264 VAC 120 VDC ~ 370 VDC
<b>Frequency</b>	47 Hz ~ 440 Hz
<b>AC Current (Typ.)</b>	0.15 A / 230 VAC (1)
<b>Inrush current</b>	40 A / 230 VAC
<b>Working temperature range</b>	-20 °C ~ +60 °C / <b>-4.0 °F ~ 140.0 °F</b>
<b>Working humidity</b>	Up to 90% RH
<b>Operating altitude</b>	1000 m / <b>3280.84 ft</b>
<b>Ingress rating</b>	IP65
<b>Dimensions</b>	220 mm x 220 mm x 50 mm (H x W x D)/ <b>8.7 in x 8.7 in x 2.0 in (H x W x D)</b>
<b>Pole mount diameter</b>	ø60 mm - ø100 mm / <b>ø2.4 in - ø3.9 in</b>
<b>Weight</b>	750 g / <b>26.46 oz</b>
<b>LED</b>	4 status LED's
<b>LAN</b>	10/100BASE-T with waterproof connector
<b>Wireless connectivity</b>	BLE LTE with 3G/2G fallback
<b>Software upgrades</b>	Yes, automatic update checking via web
<b>Antenna interface</b>	Internal BT and 4G/3G/2G antennas
<b>Color</b>	Lava and white grey

<b>Max supported devices</b>	Max. 20 Parklio™ BLE devices can be associated with one gateway
<b>Regulatory standards</b>	EN60950-1:2006 + A1:2010 + A11:2009 + A12:2011 EN 300 328 EN 300 440 EN 301 489 - 1 EN 301 489 - 3 EN 301 489 - 17 EN 55024 EN 55032 EN 61000-6-3 EN 61000-3-2 EN 61000-6-2 EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 EN 61000-4-5 EN 61000-4-6 EN 61000-4-8 EN 61000-4-11 EN 61000-3-3

(1) Parklio™ Gateway power supply input is protected with a 0.5 A 250 VAC fuse. The fuse is not user-replaceable.

Please refer to the [technical sheet](#) for a complete list of technical features.

#### 5.2.4. Installation

Optimal placement of the Gateway is very important for correct system functionality. Try to position the Gateway as close to the products as possible.

Do not install the Gateway in an enclosed space such as a closet, cabinet, attic, office, or garage, if the Parklio products to be controlled by Gateway are located outside of these areas.

**The operation of this equipment in a residential environment could cause radio interference!**

The recommended installation height for the Gateway is 3 meters, with a maximum distance of 20 meters between it and other Parklio products and the absence of any



obstructions between them. Keep the Parklio™ Gateway and other Parklio™ devices as free of obstacles as possible - each wall or ceiling restricts your Gateway range by 1 to 30 meters (3 to 90 feet). The Gateway is completely waterproof and resistant to external conditions, with operating temperature resistance in the range from -20 °C to +60.

**Required tools and equipment:**

- Slotted and cross-slot screwdrivers
- Electric Drill ( if mounting to a wall)
- RJ45 Crimping Tool



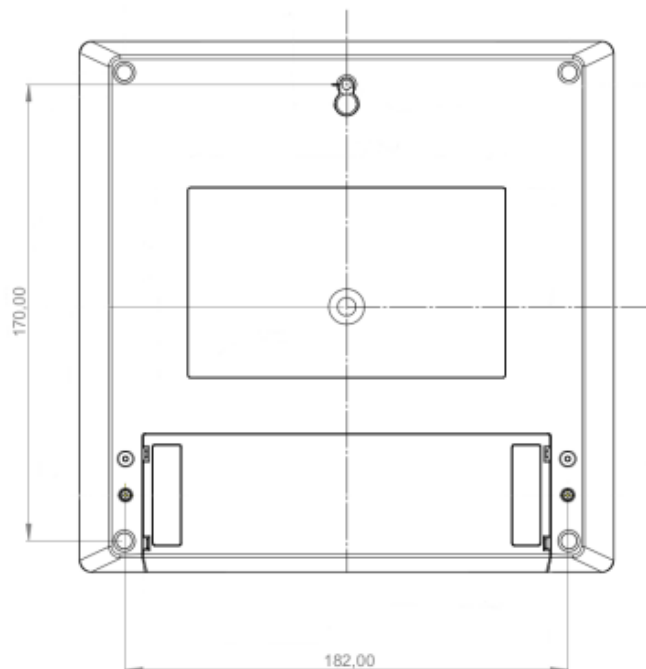
**Do not install the product in explosive environments and atmospheres; the presence of inflammable gases and fumes is a serious safety hazard!**

For mounting the gateway, you can choose either a wall mounting or pole mounting option.



### Wall Mount

Dimensions for the wall mount:

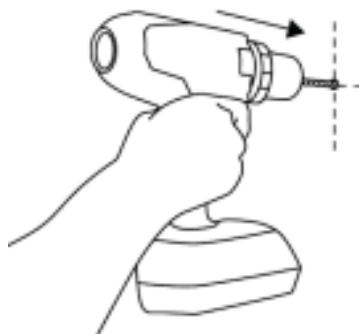


\*The dimensions depicted in the image are presented in millimeters.

To mount the gateway to a wall, please follow the steps below:

**STEP 1.** Drill the top center hole. Use an electric drill with a 6mm masonry bit to drill the hole at the desired spot.

**NOTE:** The drill bit size may vary depending on the type of wall plug used.



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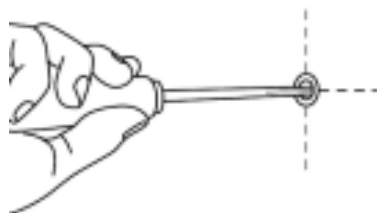
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**STEP 2.** Place the 6mm wall plug into the drilled hole, screw the screw into the plug. Leave the screw head out by 5 mm, because the Gateway needs to be hung over it.

**NOTE:** Make sure to use wall plugs intended for the type of wall or surface you are installing the gateway on.



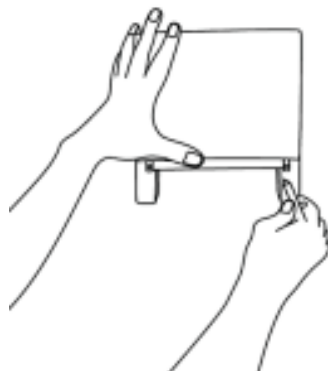
**STEP 3.** Unscrew the bottom cover of the Parklio Gateway and remove it.



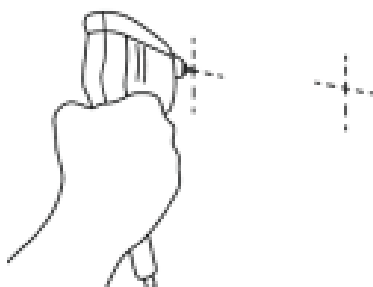
**STEP 4.** Hang the Parklio™ Gateway onto the mounted bolt.



**STEP 5.** Mark the two holes initially positioned under the removed cover.



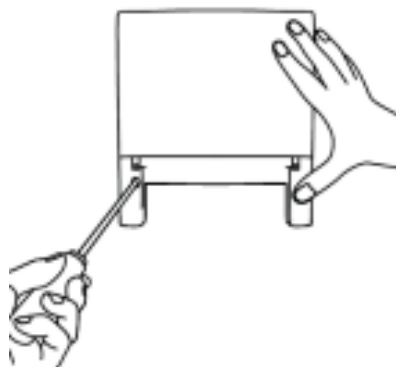
**STEP 6.** Remove the Gateway and drill the previously marked holes. Place the wall plugs into the drilled holes.



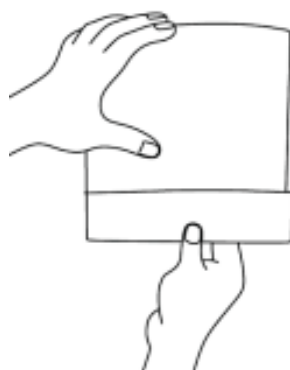
**STEP 7.** Hang the Gateway back onto the first screw.



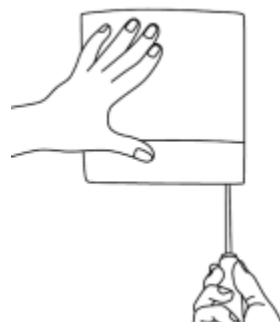
**STEP 8.** Tighten the screw into the wall plugs.



**STEP 9.** Place the plastic cover back.



**STEP 10.** Screw the bottom of the Parklio Gateway so that the plastic cover is fixed.

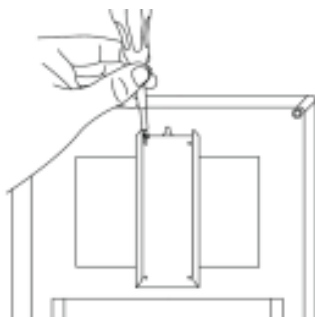


### **Pole Mount**

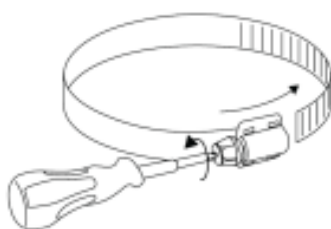
The gateway is mounted to a pole via a single hose clamp. The gateway comes with a clamp holder and four M4 screws for installing a hose clamp carrier to the gateway.

To mount the gateway to a pole, please follow the steps below:

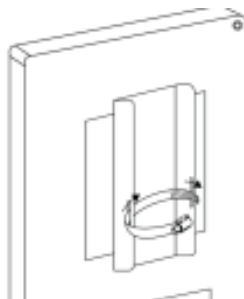
**STEP 1.** Position the pole mount holder so that the holes of the pole mount holder coincide with the holes on the back of the Parklio™ Gateway. Use the screwdriver and the provided M4 screws to fix the pole mount holder.



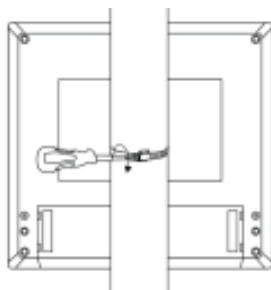
**STEP 2.** Unscrew the hose clamp.



**STEP 3.** Pull the hose clamp through the holes on the sides of the pole mount holder.



**STEP 4.** Wrap the desired spot on the pole with the hose clamp and use the screwdriver to tighten the hose clamp.

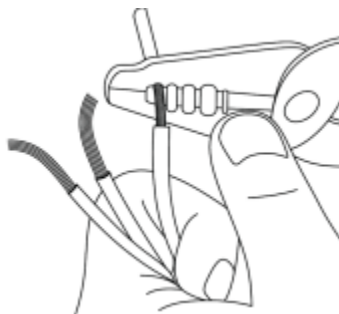


#### 6.2.5. Power Connector

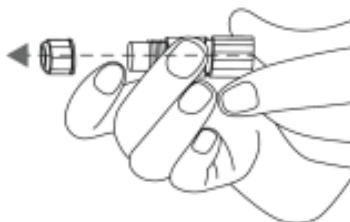
The supply circuit must have an all-pole mains switch (a circuit breaker used as a switch is acceptable). The mains power supply must be protected by a differential magneto-thermal switch complying with the law provision in force.

Before proceeding, ensure that the mains supply is disconnected. Subsequently, follow the steps outlined below:

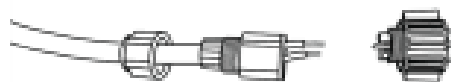
**STEP 1.** Strip the cable.



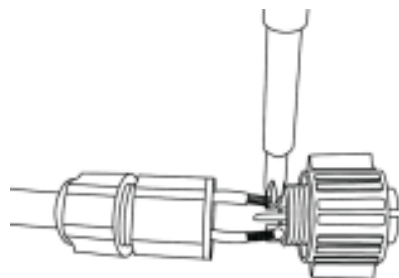
**STEP 2.** Unscrew the provided power connector.



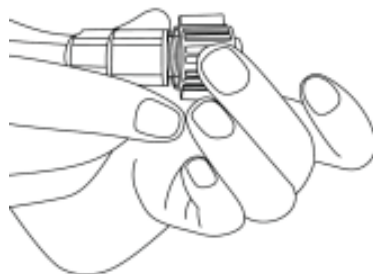
**STEP 3.** Pull the previously stripped cable through the power connector.



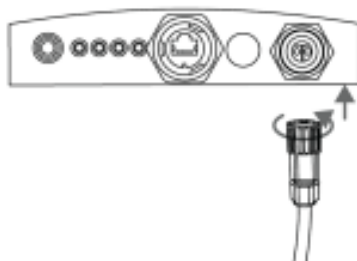
**STEP 4.** Insert the stripped wires into the terminals on the head of the power connector and screw them in place.



**STEP 5.** Tighten the all three parts of the power connectors.



**STEP 6.** Push the power connector into the power socket on the connection board and turn it clockwise to fix it.





### 5.2.6. Ethernet Connector

It is recommended to use a cable with a minimum of Cat5e rating for Ethernet. If the gateway is provided with a SIM card this step is optional. Parklio can embed a SIM card into the Gateway to enable connection to the Parklio server via 4G/3G/2G mobile network.

Follow these steps to properly connect the Ethernet cable:

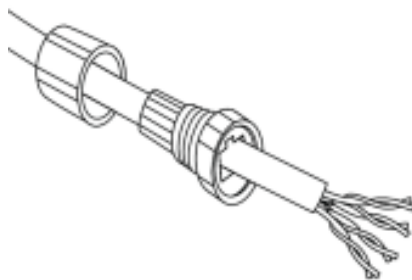
**STEP 1.** Strip the outer shield of the Ethernet cable.



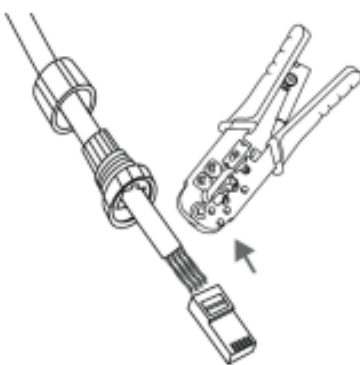
**STEP 2.** Unscrew the provided Ethernet connector.



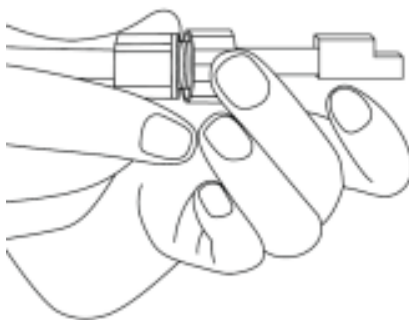
**STEP 3.** Pull the previously stripped ethernet cable through the Ethernet connector.



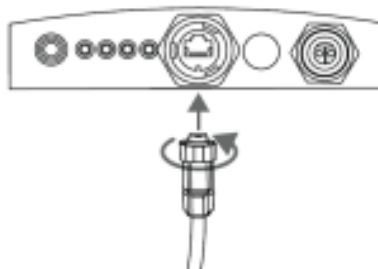
**STEP 4.** Strip the colored wires and organize them in the proper way. Use a crimping tool to crimp the RJ45 connector.



**STEP 5.** Tighten the Ethernet connector parts through which the Ethernet cable is routed.



**STEP 6.** Push the ethernet connector into the ethernet socket on the connection board and turn it clockwise to fix it.



### 5.2.7. Gateway Setup

Your Parklio gateways are factory-set with DHCP enabled, which allows them to configure their IP addresses, default gateways, and DNS settings. For your specific installation site's network connectivity, customer configuration is necessary. Detailed instructions for this process can be found in the Network Configuration chapter. For gateways utilizing SIM-enabled cellular networks, pre-configuration for cellular connectivity will be provided based on your prior arrangement with the Parklio Engineering team.

If your network incorporates a firewall, you might need to enable gateway access to the required remote hosts. The list of services is provided below:

HOST	PROTOCOL / SERVICE	PORTS
api.parklio.com	TCP / HTTPS	443, 80
www.google.com	TCP / HTTPS	443, 80
connectivitycheck.gstatic.com	TCP / HTTPS	443, 80
time.android.com	UDP / NTP	123

**NOTE:** The hosts might correspond to several IP addresses, and these addresses have the potential to change unpredictably.

A set of video instructions is available on YouTube at the following link:

<https://www.youtube.com/watch?v=Mn1Y5POARps>.

### **Powering On**

The Parklio Gateway will start and boot up automatically as soon as power is present. It may take a few minutes for the initial bootup of the device. When the device is booted, the Power LED will turn on.

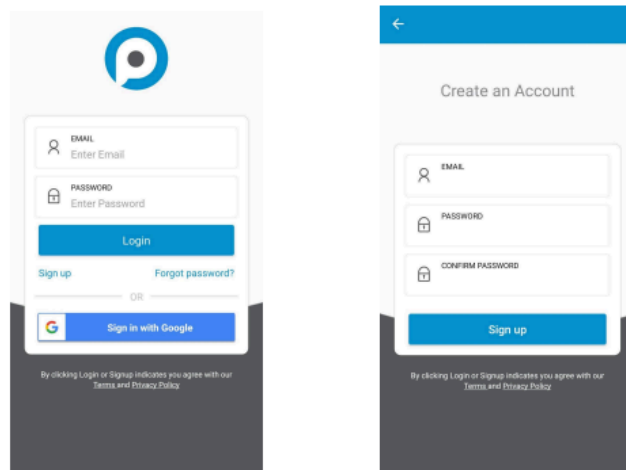
### **Hardware Reboot**

The button on the panel of the Parklio Gateway is dual purpose. To reboot the Gateway press and hold the button until the button LED turns off or in the PMS choose a Gateway that you wish to reboot by clicking on it and go to System Control and click on reboot. The reboot process may take a few minutes.

### **Gateway Assignment to Parklio Account**

To include the gateway in your Parklio account, download the Parklio Connect application, following the instructions outlined in Chapter 6. If you already have the application installed, you can move on to the next step.

To configure the Parklio Gateway using Parklio Connect, the user should be logged in. This can be achieved by signing in with your designated Parklio PMS account credentials. Enter your PMS email and corresponding password into the provided fields, then proceed by clicking the "Login" button.

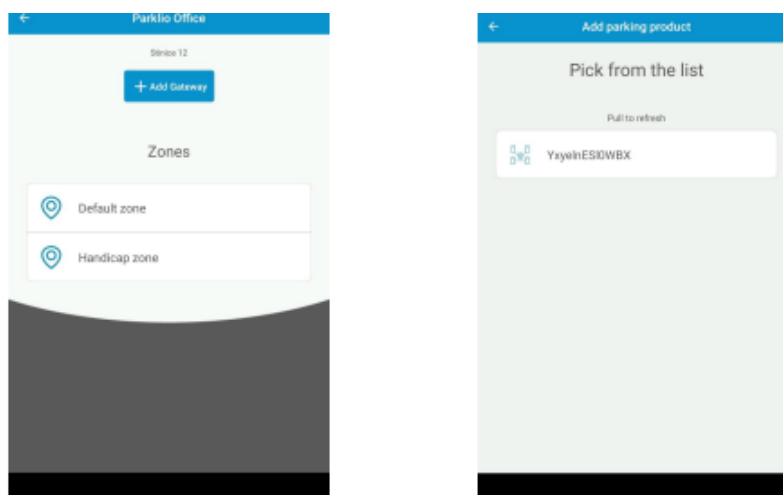


For the addition of the Parklio Gateway via the Parklio Connect mobile application, the Gateway itself must be set to 'Connection' mode.

Begin by selecting the appropriate lot, then tap on the "+ Add Gateway" option. This action opens the "Add parking product" screen, and your smartphone initiates a scan for nearby Gateways.

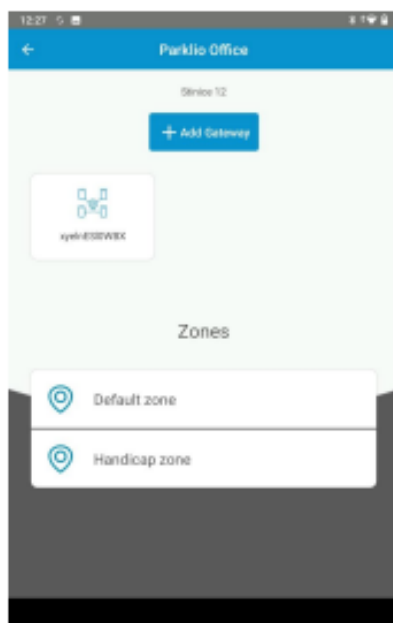
Ensure you are in close proximity to the specific Parklio device you are adding during this step.

**Note:** The recommended sequence is to add the Gateway first, followed by other devices.



Locate the desired gateway from the device list and select it. The device name will be denoted by the capital letter 'Y' followed by the gateway's UUID. For instance, if the UUID is "xyelnESI0WBX," the device will be labeled as "YxyelnESI0WBX."

Upon a successful setup, the device will be visible under the "+ Add Gateway" button within the designated parking lot.



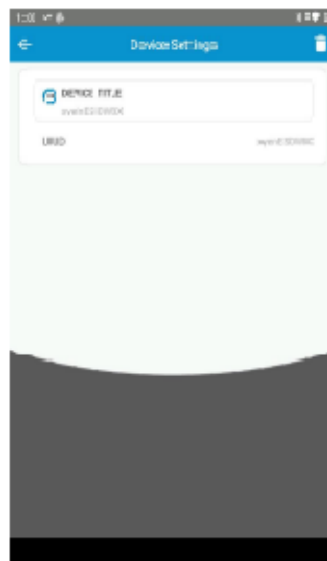
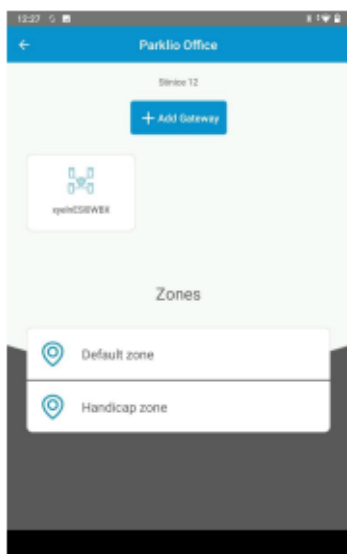
## Unassigning the Gateway

To move the Gateway to a new lot or Parklio account, it must first be disconnected from the present account. The Gateway is originally unassigned and does not have a specific parking lot. However, it's important to note that the Gateway cannot be assigned to a new lot before it has been unassigned from its previous association.

### **There are two options for unassigning the Gateway:**

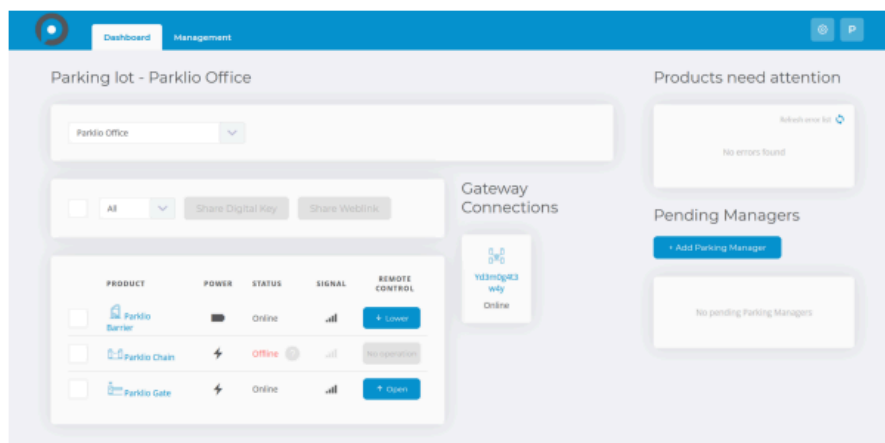
#### **→ Unassigning using Parklio Connect**

To remove the Gateway from a particular lot using Parklio Connect, first start the app and go to the lot where the Gateway was initially added. Access the gateway Device Settings screen by clicking on the respective gateway. Once on this screen, locate and click on the remove icon situated in the upper right corner. After confirming the removal, the Gateway will be successfully removed from the lot and will be available for assignment to other lots.

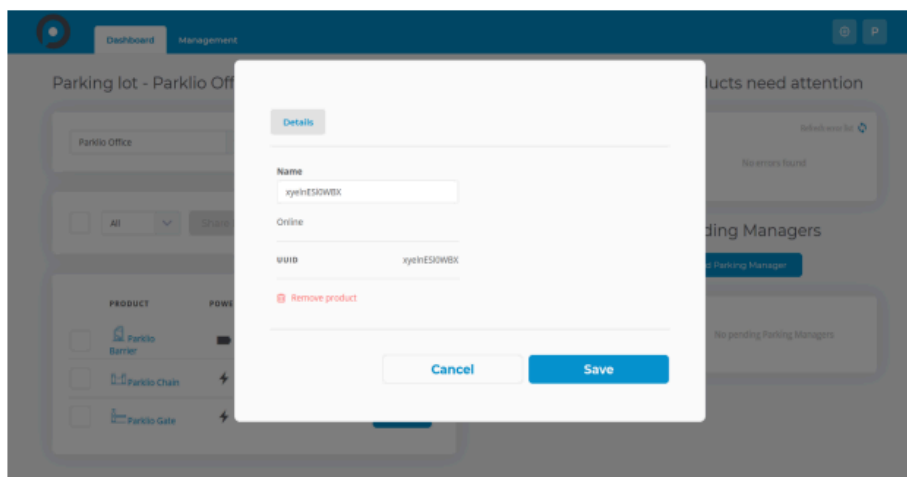


### → Unassigning from the Parklio PMS

If the Gateway is added to a Parklio PMS account it can be unassigned via the PMS interface. Login into the Parklio PMS and select the parking lot with the Gateway you wish to unassign.



Click on the Gateway you wish to remove in the Gateway Connections section. Subsequently, a popup window featuring gateway settings will appear.





Click on the "Remove product" button, followed by confirming your intent to remove the Gateway.



**Do not delete the Parking lot before unassigning the gateway, as it will render the gateway inaccessible until the development team manually resolves the issue!**

### 5.2.8. Web Interface

The Parklio Gateway has a built-in web interface for managing gateway settings.

By default, the unit is set to acquire an IP address from a DHCP server. The Gateway's hostname will be denoted as PGATE\_UUID, with UUID representing the gateway's unique identifier.

In scenarios where the DHCP server is inaccessible, the unit will autonomously configure itself with an internally assigned IP address in the 192.168.0.x/24 subnet.

To access the web interface of the product, simply use a browser to connect to **http://ipAddress:8765** , where ipAddress is the gateway's IP address. When logging in to the gateway interface, an ID and password will be required.

The username corresponds to the gateway UUID, while the password for the web interface can be located on the stickers provided in the packaging.

## Dashboard

The homepage of the web interface displays the gateways status, events log, the hardware and firmware versions.

→ **Gateway status [1]:**

Displays the Bluetooth and server status as well as if the Gateway is online and has its credentials set.

→ **Reboot option [2]:**

Reboot the Gateway to simply press the Reboot Gateway button. This will send the command to the Gateway to reboot.

Note: that during the reboot the web interface will go offline

→ **Upgrade software [3]:**

In the gateway settings tab on the web interface it is possible to manually update the gateways firmware if required. To update the gateway browse to the firmware update file provided by Parklio and click on Upload file.

→ **Gateway Information [4]:**

Contains the hardware, software and application version.

→ **Time [5]:**

Shows Gateways internal date and time with the system time.

→ **Logout [6]:**

This button is placed on all the web interfaces tabs and is used to logout out of the interface.

Note: 15 minutes after logging into the interface the system will automatically logout the user.

→ **Events [7]:**

Contains the list of all the errors and changes made on the Gateway.

---

### [FAQ](#)

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The screenshot displays the Gateway Dashboard with the following sections:

- Gateway Status (1):** Shows the device ID **LtPDjörkU5dN** and a list of status indicators: Online, IP / connection, Server Reachable, Network Connected, Credentials Set, Bluetooth Operating, Bluetooth Scanning, and Bluetooth Advertising.
- Reboot the Gateway (2):** A section with instructions to reboot the gateway and a **Reboot Gateway** button.
- Update software (3):** A section with instructions to update the software and a **Upload File** button.
- Events (7):** A table listing system events:
 

Time	Code	Description
24/11/2023 11:21:52	Code 17 - Admin Login	Web login: 192.168.0.188
24/11/2023 11:22:29	Code 17 - Admin Login	Web login: 192.168.0.188
24/11/2023 11:25:52	Code 17 - Admin Login	Web login: 192.168.0.188
24/11/2023 11:27:44	Code 2 - Socket Connected	Server connected
24/11/2023 11:27:50	Code 4 - Request Fail	Authentication request failed: invalid login request: Code: 400
24/11/2023 11:27:29	Code 1 - Network Up	Network Up
24/11/2023 11:28:27	Code 4 - Socket Disconnected	Server disconnected
24/11/2023 11:28:57	Code 4 - Socket Disconnected	Server disconnected
24/11/2023 11:29:27	Code 2 - Network Down	Network Down
- Gateway Info (4):** A table showing device specifications:
 

Manufacturer	Model
Arduino	Arduino Uno
Hardware Version	1.3
Software Version	1
Firmware Properties	-
Application Version	2.0.5
OS Version	3.14.11-glibc2.28-100-glibc2.28-100
PUID Version	1
Task Version	2.0
- Time (5):** A section showing the current gateway and system times:
 

Gateway Time	System Time
24/11/2023 11:40:12	24/11/2023 11:40:10

## Network

The Network tab is used to set up the Gateways IP address (in case a static network is used), APN configuration (in case a SIM card is used) and the NTP configuration in order to set the NTP server.

The screenshot displays the Network configuration page with three main sections:

- Setup static IP address:** A form with fields for DHCP (checked), IP Address (192.168.0.188), Net mask (255.255.255.0), Gateway (192.168.0.1), and DNS (192.168.0.1). It includes a **Submit** button.
- Setup APN Configuration:** A form with fields for Name (T-Mobile internet), APN (internet.mnc), MCC (219), and MNC (01). It includes a **Set to default APN** link and a **Submit** button.
- Setup NTP Configuration:** A form with fields for Server address (time.android.com), NTP Port (123), and Interval in seconds (86400). It includes a **Submit** button.

**Setup Static IP address [1]:**

1. In order to setup a static IP address the following fields need to be changed:  
Switch the DHCP option OFF as shown in the picture bellow



2. Enter the IP address, Net mask, Gateway and DNS according to the static network the Gateway is being connected to.
3. Submit the changes and change the ethernet cable with the one that is connected to static network

**Note: Alternate DNS is not a necessary field and a static IP address can be set without it.**

**Setup APN Configuration [2]:**

1. Insert the SIM card into the Gateway



**When installing the SIM card make sure to disconnect the Gateway from the power!**

2. Set the Name, APN, MCC and MNC for the SIM card
3. Click on Submit and remove the ethernet cable when the Gateway starts to Reboot.

**Setup NTP Configuration [3]:**

1. Change the server address
2. Submit the changes
3. Reboot the Gateway

**Note: The Gateway can be rebooted through the interface, PMS or by pressing and holding the Reset button until the light turns OFF.**

The screenshot displays the 'Gateway' web interface with the 'Network' tab selected. It features three configuration panels, each with a 'Submit' button and a red number indicating a step:

- Setup static IP address (Red border):** Includes fields for DHCP (checked), IP Address (192.168.0.188), Net mask (255.255.255.0), Gateway (192.168.0.1), and DNS (192.168.0.1). A red '1' is at the bottom.
- Setup APN Configuration (Green border):** Includes fields for Name (T-Mobile Internet), APN (internet.ht.hr), MCC (219), and MNC (01). A red '2' is at the bottom.
- Setup NTP Configuration (Purple border):** Includes fields for Server address (time.android.com), NTP Port (123), and Interval in seconds (86400). A red '3' is at the bottom.

**FAQ**

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## 5.3. I/O Board User Manual

The I/O Board simplifies the process of connecting your parking barrier to a variety of devices and systems while simultaneously collecting real-time parking barrier statuses, offering insight into their operational state – whether open or closed.

This user manual explains the capabilities of the I/O Board, providing you with the information you need to realize its potential in improving system integration and efficiency.

### 5.3.1. Package Contents

Please check that the package contains all the necessary parts.

#### **The packaging should contain the following:**

- 1 x I/O Board
- 1 x user manual
- 1 x power supply input connector
- 2 x configurable relay output
- 3 x digital control input
- configuration jumpers

If any of the parts are incorrect, missing, or damaged, contact your Parklio™ dealer. Keep the cardboard package, including the original packing materials, in case you need to return the product for repair.

### 5.3.2. I/O Board Overview

The I/O Board proves its versatility across a range of scenarios, interfacing with multiple systems and boosting access control capabilities. The I/O Board excels in the following main application areas:

#### Integration with Access Control Systems

The I/O Board enhances both security and operational efficiency within access control scenarios:

→ **RFID card readers**

When connected to RFID card readers, the I/O Board allows smooth access by processing signals from RFID cards.

→ **QR code scanners**

Smartphones and other devices scan QR codes, which the I/O board interprets to grant or deny access.

→ **Push buttons**

The I/O board lowers the barrier when a push button is pressed.

→ **ANPR cameras**

The I/O Board efficiently regulates admission by collecting and analyzing license plate numbers from ANPR cameras.

→ **GSM modules**

The I/O Board's compatibility with GSM modules facilitates access authorization through text messages and ensures seamless integration.

→ **Timers**

By synchronizing with timers, the I/O Board enables precise scheduling and usage control, defining barrier opening times and usage limits for enhanced efficiency.

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#### [FAQ](#)

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### Smart Home & Smart Buildings Integration

The I/O Board provides the capability to centrally control the barrier from a single location, whether within your home, office or any other building. This feature offers exceptional convenience by eliminating the need to physically approach the barrier to grant entry or exit.

### EV Charging Stations Integration

The I/O Board provides real-time information on the status of parked automobiles at EV charging stations, whether they are charging or not. This valuable data facilitates the efficient management of EV charging station reservations. Moreover, the I/O Board possesses the capability to control barriers, allowing seamless entry and exit of vehicles from the EV charging station. This proactive control feature effectively prevents any unauthorized access, ensuring a secure and well-managed environment.

### 5.3.3. Technical Specification

Parameter	Value
<b>Input voltage</b>	9V DC – 13V DC
<b>Maximum power</b>	60 W
<b>Operating temperature</b>	20°C to +60°C
<b>Relay contact N.C.</b>	60V, 50mA, < 100hm Overcurrent and overvoltage protection
<b>Input contacts</b>	40V max input, 2mA pullup current Input active voltage threshold: <2V

Please refer to the [technical sheet](#) for a complete list of technical features.



### 5.3.4. I/O Board Setup

In this section, you will find detailed information on setting up your I/O Board, including an explanation of contact descriptions and their associated functions.

#### I/O Contact Function

Contact (pins)	Description
<b>RLY1 (1 and 2)</b>	N.O. Relay 1 output Configurable OPEN or Vehicle detected
<b>RLY2 (3 and 4)</b>	N.O. Relay 2 output Configurable CLOSED or Vehicle detected
<b>AUX IN (5 and 6)</b>	N.C. Safety device input The current movement is stopped if the pins are opened. No commands are accepted while the contacts are open.
<b>CLOSE IN (5 and 7)</b>	Close command input If the contacts are closed the Barrier will move up (close). The Barrier will remain closed as long as the contacts are closed.
<b>OPEN IN (5 and 8)</b>	Open command input If the contacts are closed the Barrier will move down (open). The Barrier will remain open as long as the contacts are closed.

#### Output configuration

The functions of RLY1 and RLY2 outputs are configured via jumpers J1 and J2. The available output functions are described in the table below.

J1	J2	RLY1	Value
<b>Open</b>	Open	Barrier opened	Barrier closed
<b>Open</b>	Closed	Barrier opened	Vehicle present
<b>Closed</b>	Open	Vehicle present	Barrier closed
<b>Closed</b>	Closed	Not used	Not used

## 5.4. Double Battery Pack User Manual

This manual provides comprehensive information about the Parklio Barrier Double Battery Pack, an advanced power solution designed to enhance the longevity and convenience of your parking barrier. With its rechargeable double-capacity battery, the Parklio Barrier can last up to a year on a single charge, significantly extending the operational life of your barrier.

The manual guides you through the functionalities and usage instructions of the Parklio Barrier Double Battery Pack, allowing you to make the most of this barrier accessory.

### 5.4.1. Package Contents

Please check that the package contains all the necessary parts.

#### **The packaging should contain the following:**

- 1 x Double Battery Pack
- 1 x Double Battery Charger
- 1 x User Manual

If any of the parts are incorrect, missing, or damaged, contact your Parklio™ dealer. Keep the cardboard package, including the original packing materials, in case you need to return the product for repair.

### 5.4.2. Double Battery Pack Overview

The Double Battery Pack is designed to optimize the lifespan of your barrier.

By adhering to these charging guidelines, you can ensure long-lasting and reliable power:

**Charge with Double Battery Charger Only:** To maintain peak performance and safety, always charge the Double Battery using the charger delivered for this purpose in the Double Battery Pack box.

**Regular Charging:** For best results, recharge the Double Battery every 4 months when it reaches 50% of its nominal capacity, which is in the range of 3.7 to 3.8 volts (V). This routine charging practice ensures uninterrupted power supply and extended operational life.

### 5.4.3. Technical Specification

Parameter	Value
Nominal voltage	7,2 V
Nominal capacity:	3350 mAh
Discharge current:	5 A max.
Standard charge:	CC/CV 670mA/8,4 V +/-1%
Over charge detection voltage:	4,25 V/cell
Over discharge detection voltage:	2,4 V/cell
Discharge current:	5 A
Over current detection:	12 A

Short circuit protection:	yes
Operating temperature range:	-40,+85 °C / <b>-40.0°F to 185.0°F</b>

#### 5.4.4. Inserting the Double Battery Pack

To install the double battery pack, align the Double Battery Pack with the Control Unit and attach it to the barrier base using the velcro joint on the bottom of the battery pack and on the barrier.

**Take caution to plug the charging port input to prevent water ingress.**

## 5.5. Constant Power Supply Module User Manual

In this user manual, we provide you with detailed information about the Constant Power Supply Module, a vital component designed to ensure uninterrupted power for your barrier system.

Please read this user manual completely before using the Constant Power Supply Module to guarantee a safe and effective setup.

### 5.5.1. Package Contents

Please check that the package contains all the necessary parts.

**The packaging should contain the following:**

- 1 x Constant Power Supply Module
- 1 x User Manual

If any of the parts are incorrect, missing, or damaged, contact your Parklio™ dealer. Keep the cardboard package, including the original packing materials, in case you need to return the product for repair.

### 5.5.2. Constant Power Supply Module Overview

The Constant Power Supply Module comes equipped with an external AC/DC power supply. This power supply is designed to be connected to your electric line, providing a stable and adjustable voltage output to your barrier system. The default preset voltage

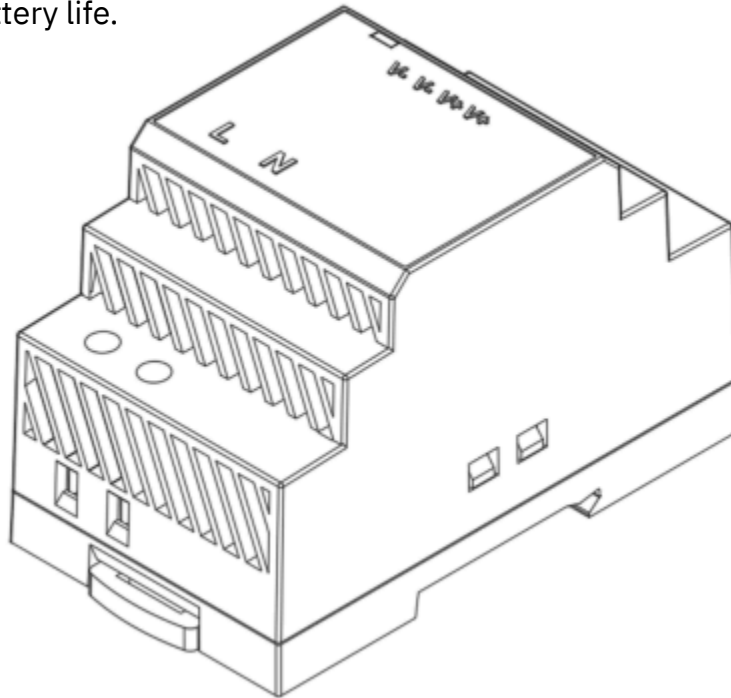
output is 10.2V, and it can be adjusted within the range of 10.2V to 13.4V to suit your specific requirements.

## Key Features

**Stable Power Source:** The Constant Power Supply Module guarantees a continuous and reliable power source for your barrier, eliminating the need for frequent battery replacements.

**Adjustable Voltage:** You have the flexibility to fine-tune the voltage output within the range of 10.2V to 13.4V to accommodate various barrier models and operational needs.

**Battery Pack Replacement:** The Constant Power Supply Module serves as a direct replacement for the battery pack, ensuring consistent power delivery without the limitations of battery life.



## Important Considerations

**Maximum Cable Length:** The maximum cable length for power delivery to the barrier is 25 meters. We recommend using a 1.5 mm cross-section cable for optimal performance.

**Single Barrier Power:** Each barrier must be connected to its dedicated power supply via a separate cable. Do not attempt to power multiple barriers with a single supply, as it may compromise their operation.

**Voltage Limit:** It is crucial to ensure that the voltage supplied to the barrier never exceeds 11V. Exceeding this limit can result in damage to the barrier system.

### 5.5.3. Technical Specification

Parameter	Value
<b>Input voltage:</b>	85 Vac to 264 Vac
<b>Input voltage frequency:</b>	47 Hz to 63 Hz
<b>Efficiency:</b>	83 %
<b>Input current:</b>	1.2 A (115 Vac) 0.8A (230 Vac)
<b>Inrush current:</b>	30A (115 Vac) 60A (230 Vac)
<b>Output voltage:</b>	10.8 Vdc - 13.8 Vdc
<b>Continuous output current:</b>	4.5 A
<b>Rated power:</b>	54 W
<b>No load power:</b>	0.3 W

<b>Output ripple voltage:</b>	120 mVpp
<b>Operational temperature:</b>	-30 °C to 70 °C / <b>-22.0°F to 158.0°F</b>
<b>Operational humidity:</b>	20 % to 90 %, non-condensing
<b>Operational altitude:</b>	2000 m / <b>6561.68 ft</b>
<b>Protection:</b>	Over voltage Current limiting Overload Short circuit Overcurrent
<b>Dimensions:</b>	52.5 mm x 90 mm x 54.5 mm / <b>2.1 in x 3.5 in x 2.1 in</b>
<b>Mounting:</b>	DIN rail

#### 5.5.4. Installing Constant Power Supply Module

You can find a comprehensive and detailed explanation of the installation procedure for the Constant Power Supply Module in Chapter 4.5, which specifically focuses on the installation of the AC-powered Barrier Model. This chapter provides step-by-step guidance to ensure a thorough understanding of the installation process.



## 5.6. Extension User Manual

This user manual is your thorough guide to utilizing the Barrier Extension to improve the visibility and safety of the barrier in your parking area.

In the following sections, we will provide you with comprehensive instructions on how to efficiently and seamlessly install the extension, ensuring it's securely attached to your barrier.

### 5.6.1. Package Contents

Please check that the package contains all the necessary parts.

**The packaging should contain the following:**

- 1 x Extension
- 1 x User Manual
- 2 x M5 Hex Bolt (DIN 933 M5 x 10)
- 2 x M5 Self Locking Nut ( DIN 985 M5 )

If any of the parts are incorrect, missing, or damaged, contact your Parklio™ dealer. Keep the cardboard package, including the original packing materials, in case you need to return the product for repair.

### 5.6.2. Extension Overview

The Barrier Extension accessory is specifically designed for drivers of high-profile vehicles to improve their visibility of barriers, greatly reducing the chances of any vehicle collision. When driving larger vehicles like SUVs or trucks, it can be challenging to spot parking barriers, resulting in accidental bumps and scrapes. The barrier extension raises the height of the barriers, ensuring they are within the driver's natural field of vision.

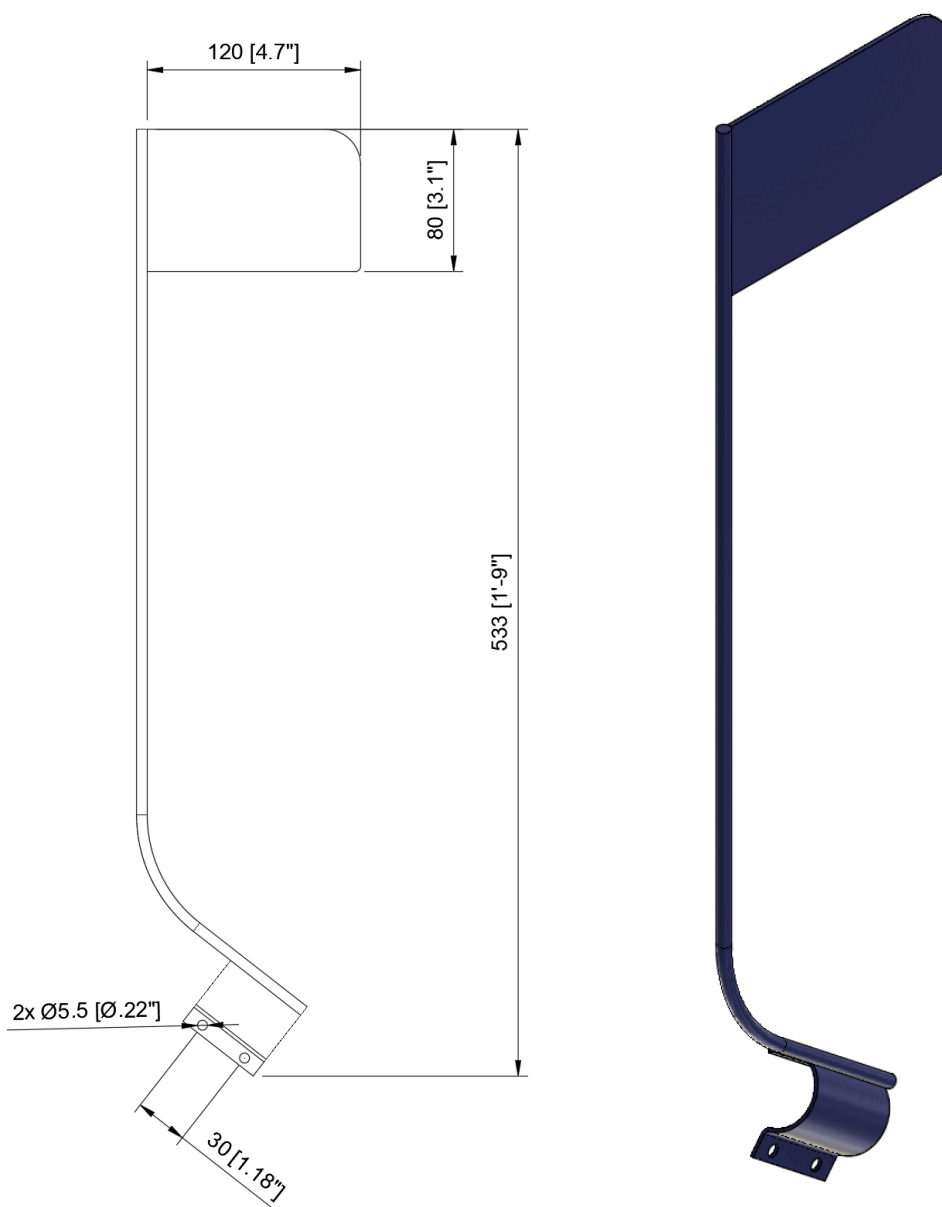
#### Key Features

**Built to Last:** Produced with the same high standards as the Parklio™ barriers, the extension accessory is durable and fully compatible, ensuring a long-lasting addition to your parking barrier.

**Effortless Installation:** The extension is easily and securely attached, perfectly aligning with the user-friendly setup of Parklio™ products.

**Collision prevention:** With the extension in place, the probability of collisions is significantly reduced, protecting the vehicle and barrier from being damaged.

### 5.6.3. Technical Specification



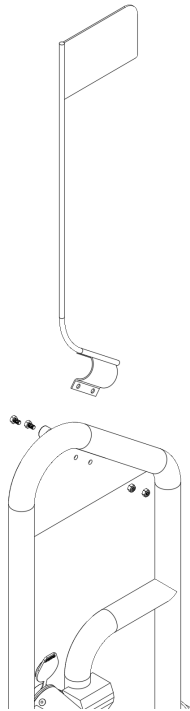
#### 5.6.4. Installing Barrier Extension

Before beginning the installation process, make sure you have all the necessary tools and materials. Here's a list of what you'll need, in addition to the contents of the Parklio extension package :

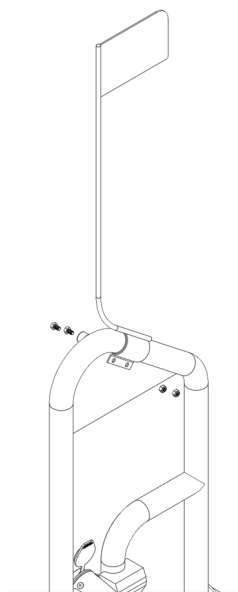
→ Two 8mm (5/16") wrenches / drivers

**STEP 1.** Examine the package contents for completeness.

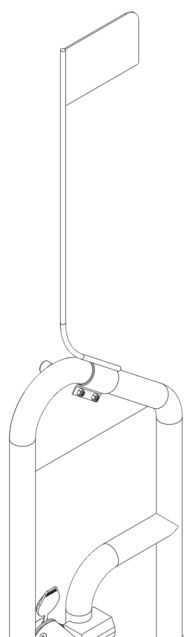
**STEP 2.** Inspect for any damage to the components.



**STEP 3.** Align the extension pole as illustrated. (Ensure that when facing the barrier, the flag is oriented to the left.)



**STEP 4.** Fasten the assembly using the provided bolts and nuts.



## 5.7. Security Post User Manual

The purpose of this user manual is to provide you with clear instructions on how to install and use security posts. By following these guidelines, you can create a safer parking environment and minimize the chances of accidents occurring.

Please explore the following sections to ensure that your Security Posts are installed correctly and effectively enhance security.

### 5.7.1. Package Contents

Please check that the package contains all the necessary parts.

#### **The packaging should contain the following:**

- 1 x Security post
- 4 x Anchor screws
- 1 x User Manual

If any of the parts are incorrect, missing, or damaged, contact your Parklio™ dealer. Keep the cardboard package, including the original packing materials, in case you need to return the product for repair.

### 5.7.2. Security Post Overview

Installing rubber security posts is an efficient way to enhance the safety of your parking space. These posts have been carefully designed to discourage unpredictable parking practices and provide protection against vehicle impacts.




## Key Features:

**Prevents Unconventional Parking:** This post serves as a deterrent, discouraging cars from participating in risky parking activities that jeopardize order and safety.

**Rubber Construction:** Our driveway security posts are made of strong rubber and are designed to endure car impacts without being damaged.

**Enhanced Visibility:** To enhance nighttime visibility and safety, parking posts are equipped with reflective material. This feature ensures that the post remains visible even in low-light conditions, reducing the risk of accidents and providing added security during nighttime parking.

### 5.6.3. Technical Specification

Parameter	Value
Model	UT2519
Material	Plastic
Height	750 mm / <b>29.53 in</b>
Top-base $\Phi$	80 / 200 mm / <b>3.15 in / 7.87 in</b>
Weight	0,9 kg $\pm 0,1$ / <b>1.98 lbs <math>\pm 0.22</math> lbs</b>
Colour	#314E82  with reflective stripes

#### 5.6.4. Installing Security Post

Before beginning the installation process, make sure you have all the necessary tools and materials. Here's a list of what you'll need, in addition to the contents of the Parklio safety post package :

- Rubber mallet or sledgehammer
- Core Drill with appropriate drill bits
- Measuring tape
- Chalk

**STEP 1.** Determine the exact placement of the security post.

**STEP 2.** Mark the positions for the drill holes using chalk.

**STEP 3.** Utilize a core drill with the right size bit to create holes at the marked locations.

**STEP 4.** Secure the security post to the ground by inserting anchor screws into the prepared holes.

**STEP 5.** Use a rubber mallet or sledgehammer to be confident that the security post is as secure as possible.

**STEP 6.** Thoroughly test and inspect the installation.



## 6. Controlling the Barrier

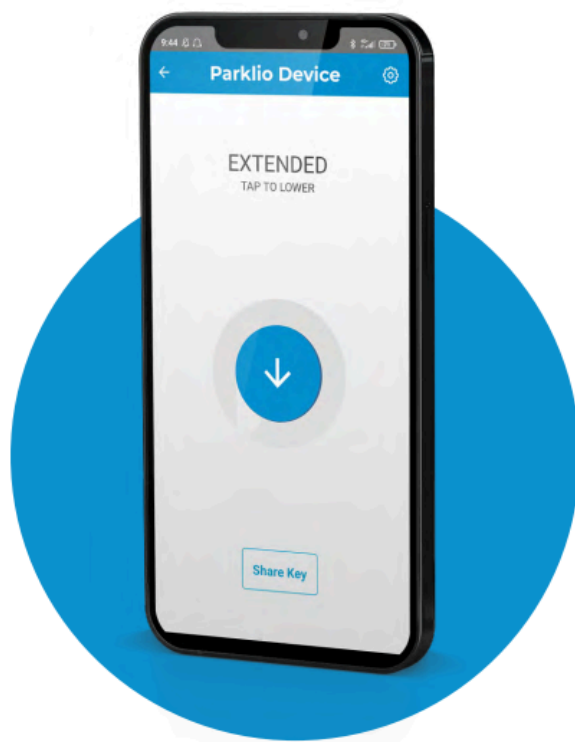
This section explains how to connect the mobile application to the barrier and how to control the barrier using the free Parklio Connect mobile application.



**Please note that internet connectivity is required for the barrier's first connection and setup.**

### 6.1 Installing the Application

The application can be downloaded by scanning the following QR codes:



Android



ios



Huawei



Or on the following links:

**Android** - <http://bit.ly/2iMkIn5>

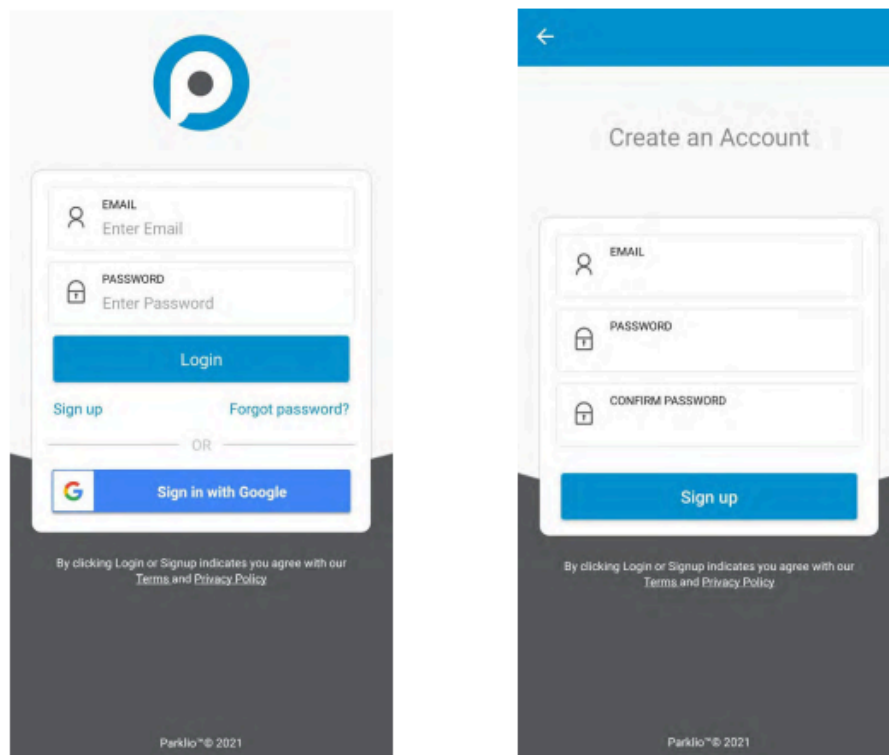
**iOS** - <https://apple.co/2iaV7aA>

**Huawei** - <https://urldre.cloud.huawei.com/mCe8Pn0uD6>

## 6.2. Registration and Login

To use Parklio Connect the user needs to be logged in.

App users can log in using their existing Google or Apple accounts, or alternatively, they can create and use a Parklio account with their email address.



To login via Google simply press the Sign in with Google button.

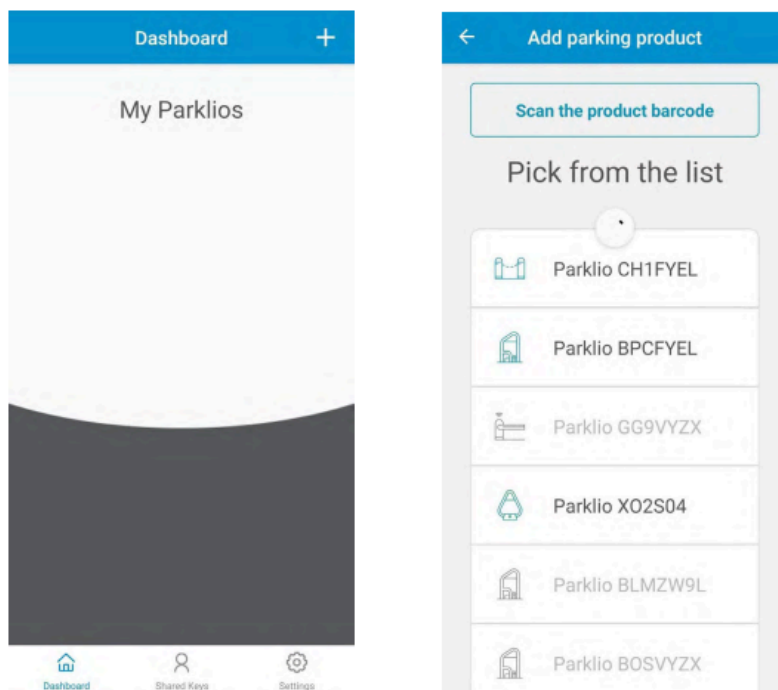
To login via your Apple account simply press the Sign in with Apple ID button.

If the user has an existing Parklio account enter your email and password associated with the account into the corresponding fields and press Login.

In case a Parklio account has not been created previously press the Sign Up button which will open a new screen. There the user may input his email and password to create an account. After an account has been created the user may use his credentials to login into the application.

### 6.3. Adding the barrier to Your Account

After logging in, the dashboard will display all of your Parklio devices.



To add a barrier to the account **press the + button on the top right corner** of the dashboard. The **“Add Parking product”** screen opens and the smartphone starts

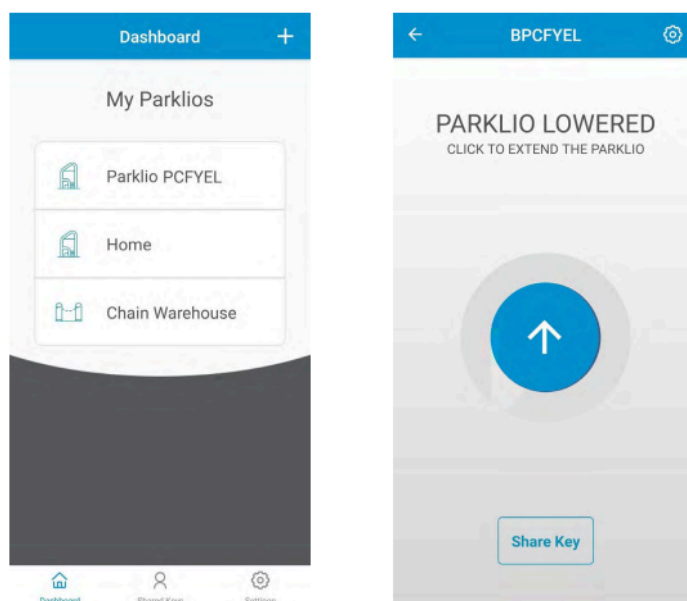
scanning for nearby Parklio Barriers. **This step should be done in close proximity to the Parklio Barrier you are adding.**

Grayed-out devices represent Parklio devices that are already set up. When the scanning is complete **select the barrier you wish to add** from the list of available parking protection products. The barrier will be set up automatically and added to the user's account.

In the above example screenshot by clicking on Parklio BPCFYEL the application starts the process of setting the barrier up. The process is automatic and the user is notified at the end.

## 6.4. Connecting to the barrier

It is necessary to connect to the barrier in order to operate it, see its status, and alter its settings. This is done by going to the Dashboard and clicking on the barrier to which you want to connect.



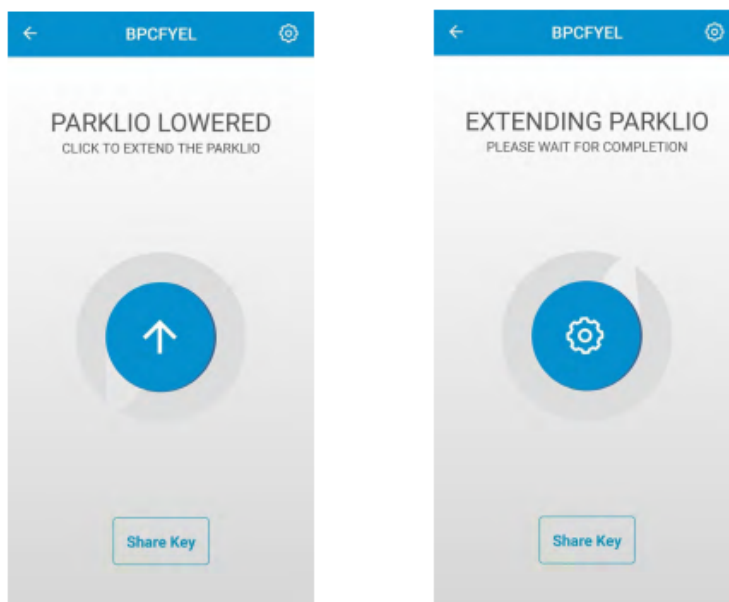
After a successful connection the screen will show the barrier status:

- **PARKLIO LOWERED** - Indicates the barrier is down (open)
- **PARKLIO EXTENDED** - Indicates the barrier is up (closed)
- **PARKLIO EXTENDING** - Indicates the barrier is moving up (closing)
- **PARKLIO LOWERING** - Indicates the barrier is moving down (opening)
- **CAR ON TOP** - The barrier is lowered and there is a vehicle above the barrier
- **BARRIER JAMMED** - The barrier jammed while moving up or down, check for any obstructions
- **AUTHENTICATION FAILED** - There was an error with communication to the barrier or with the barrier digital key, the key was probably reset

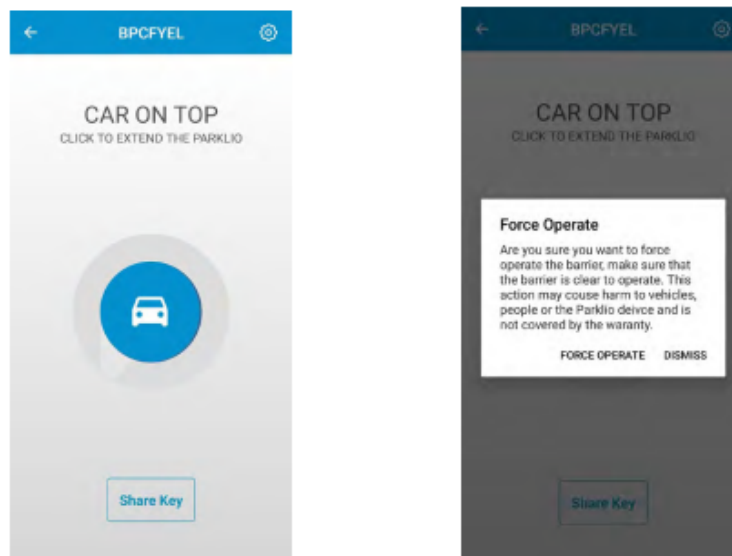
## 6.5. Opening and Closing the barrier

Opening and closing the barrier is possible only when the user is connected to the barrier and while the barrier is in the **EXTENDED** or **LOWERED** state.

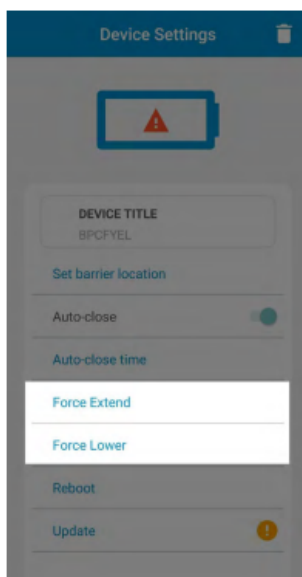
By clicking the button in the center of the main screen the barrier will lower or extend.



If the Barrier detects that the vehicle is parked too close to or above the Barrier, the message CAR ON TOP will be displayed. In this case, it is possible to raise the Barrier by clicking on the car icon and pressing FORCED WORK in the dialog box. Only the administrator/owner of the Barrier can do this.



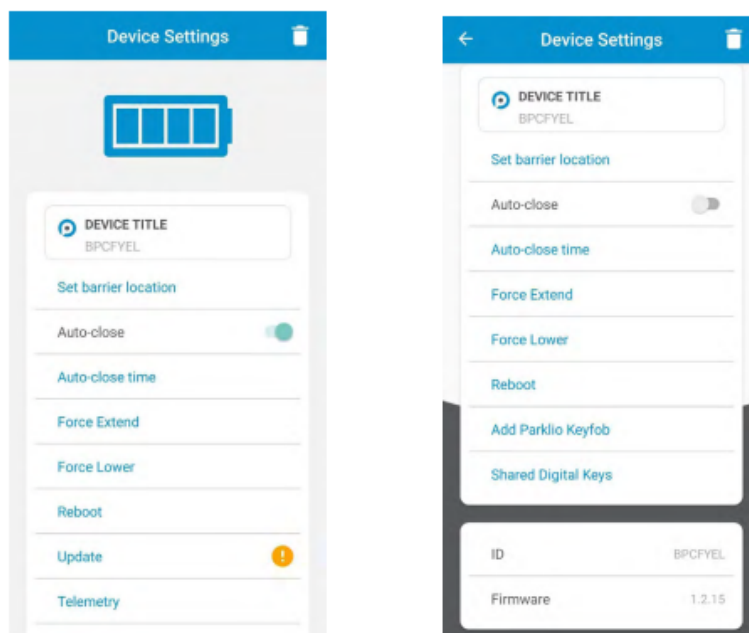
The Barrier will ignore all obstacles, so make sure the Barrier path is clean before clicking FORCE OPERATE.



It is also possible to use Force Lower and Force Extend from the Device Settings menu.

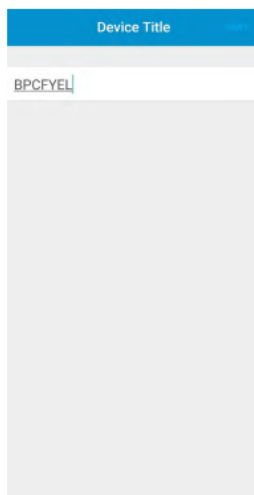
## 6.6. Barrier Settings and Information

Clicking the gear icon in the top right of the Barrier screen will bring up the Barrier settings. In the settings screen it is possible to view battery status, device information like the firmware version and ID, set the auto/close option, and use the force extend and lower options.



### 6.6.1. Change the device name

Parklio devices allow the user to change their name, so they can be more easily identified. To change the device name click on the DEVICE TITLE in the settings. Change the name of the device and click SAVE. The new name will then be displayed.



### 6.6.2. Auto Close Settings

To enable automatic Barrier closure, follow these steps:

- Toggle the auto-close button to activate Barrier auto-closure. A warning message will appear to confirm your selection.
- Adjust the Auto-Close Time by pressing the 'Auto-Close Time' button. You can set the auto-close interval to any duration between 5 to 120 seconds.

**The auto-close feature enables automatic Barrier closing when the vehicle parked over the Barrier departs.** A set of sensors on the Barrier detects the presence of a vehicle. The auto-close function is activated once the car remains parked over the open Barrier for more than 60 seconds.

However, please note that the Barrier won't close immediately. It will wait until the vehicle exits the parking area in a continuous movement and moves to a distance of about 3-4 meters from the Barrier before initiating closure. The system then waits for



the user-defined time interval (between 5 to 120 seconds) before automatically closing the Barrier.

### 6.2.3. Key Sharing and Blocking

A key feature included in all Parklio products is the ability to easily share digital keys and, when necessary, promptly revoke access via the Parklio Connect app.

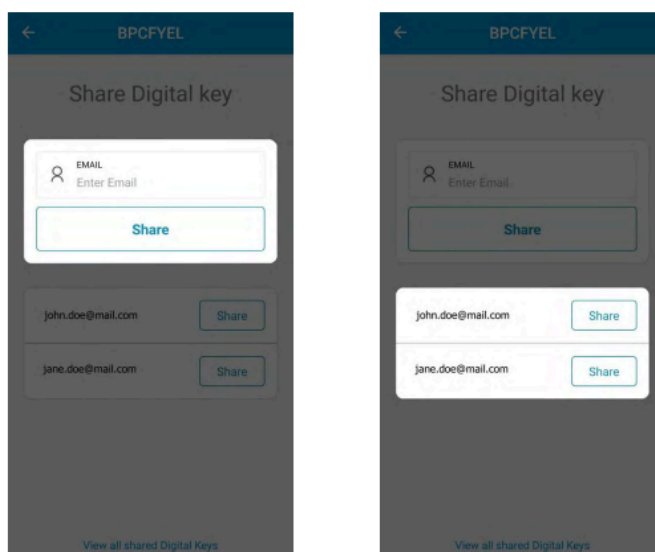
**To use this feature an internet connection is required. It is not required to be connected to a Barrier via Bluetooth.**

#### Digital Key Sharing

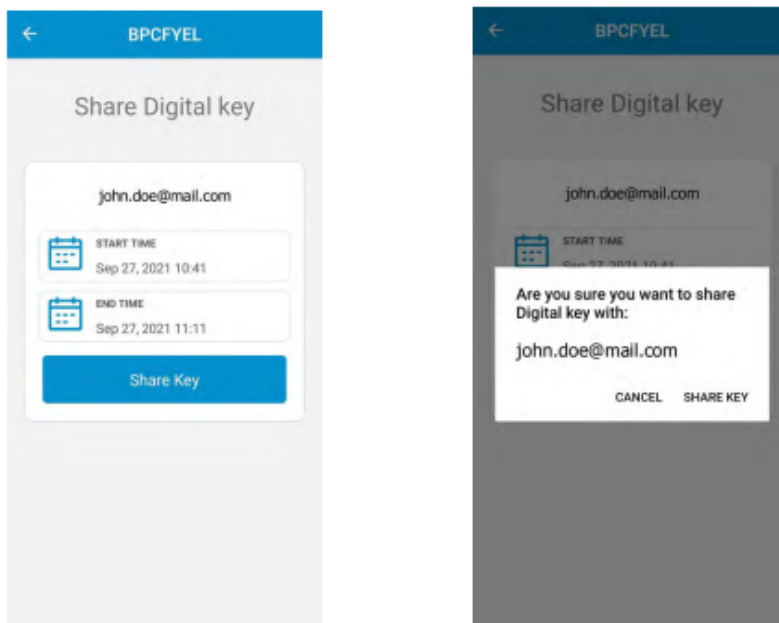
**All digitally shared keys have a validity period.** The key becomes active at the start date and is valid until the end date.

**A key may be shared to multiple users and multiple keys may be sent to one user.**

In order to share a key press the **Share Key button** on the main Barrier screen. Then enter the email of the user to whom the key will be shared or choose from the list of previously shared users.



Next, it is required to select the key START TIME and END TIME using the calendar. After the start and end times are set press the Share Key button and confirm.



## Digital Key Blocking

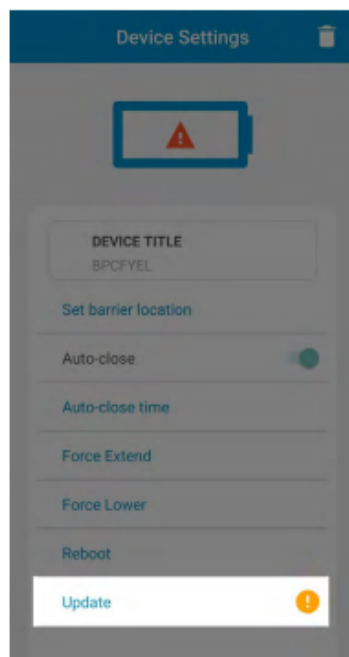
If you need to revoke access go to Device Settings > Share Digital Key screen, and press the View all shared Digital Keys at the bottom of the screen. All keys shared for the selected Barrier are displayed. To block a certain user **click on the Block button** next to the user. Share keys can also be viewed from the Device Settings screen by clicking on Shared Digital Keys.



#### 6.2.4. Updating the Barrier

Parklio Smart Parking Barrier gets feature improvements by using OTA (Over-The-Air) updates. These updates are carried out manually by the user. An orange icon near the update button in the Barrier settings is shown if an update is available.

**When updating the Barrier make sure there is no vehicle located on top of the Barrier. Please stay close to the Barrier for the whole duration of the update.**



To update the Barrier click the Update button in the Device Settings screen and press Start. Stay close to the device while the update is downloading.

#### 6.2.5. Battery Status

Barrier battery status is displayed in 5 levels with the battery icon at the top of the Barrier settings. Each level corresponds to roughly 25% of the battery charge.



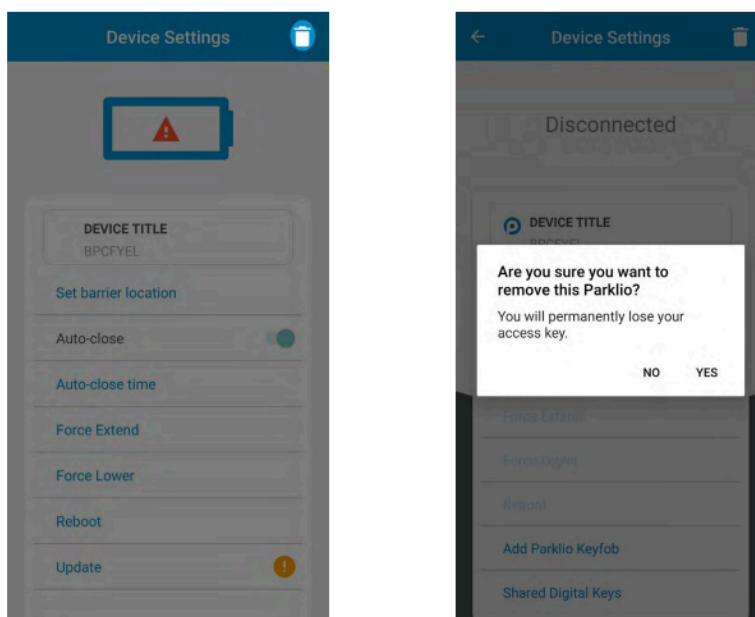
If the battery is near empty a warning icon will appear. Please charge the battery.



### 6.2.6. Removing the product

In order to remove the Barrier from your account or to delete a key that was shared to you enter the Device Settings screen and **press the garbage can icon**. A confirmation will pop up, press Yes.

**When a device is deleted from your account all sent guest keys are still valid. They can only be invalidated by performing a Barrier key reset or when the Barrier is added to another account.**



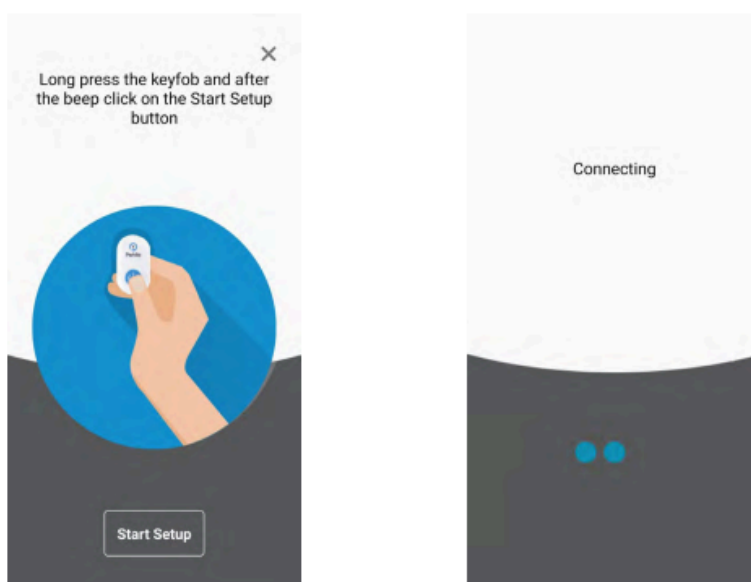
### 6.2.7. Setting up the Keyfob

To use the Keyfob, you need to set up your Barrier using the Parklio Connect application as explained in Chapter 7.4. *Connecting to the Barrier*.

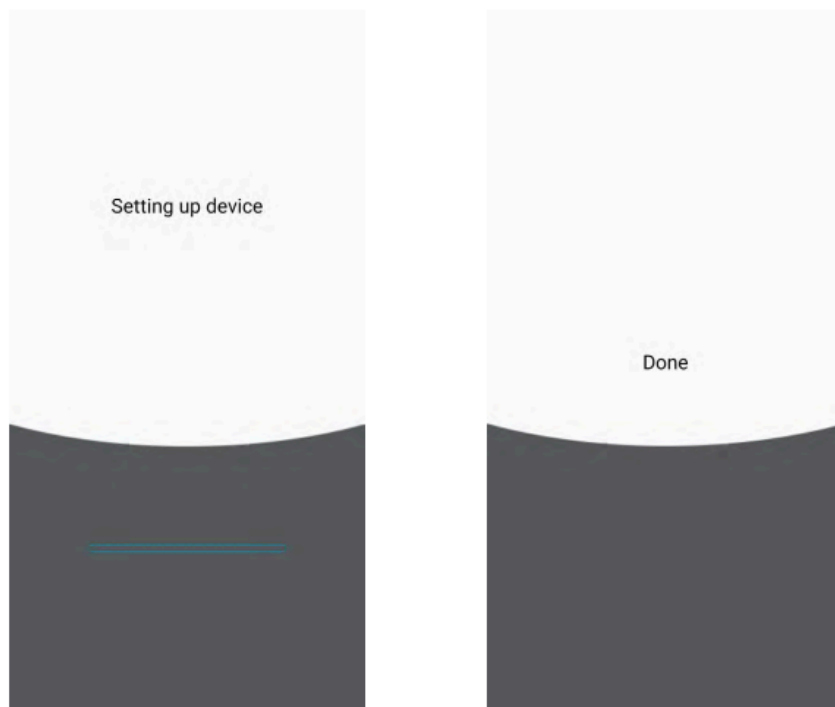
**Direct Bluetooth connection with the Barrier is not required for programming the Keyfob.**

Once your Barrier is configured in Parklio Connect App, follow these steps to program the Keyfob from the Device Settings menu:

- Access the Device Settings menu of the device you want to control with the Keyfob.
- Select "Add Parklio Keyfob."



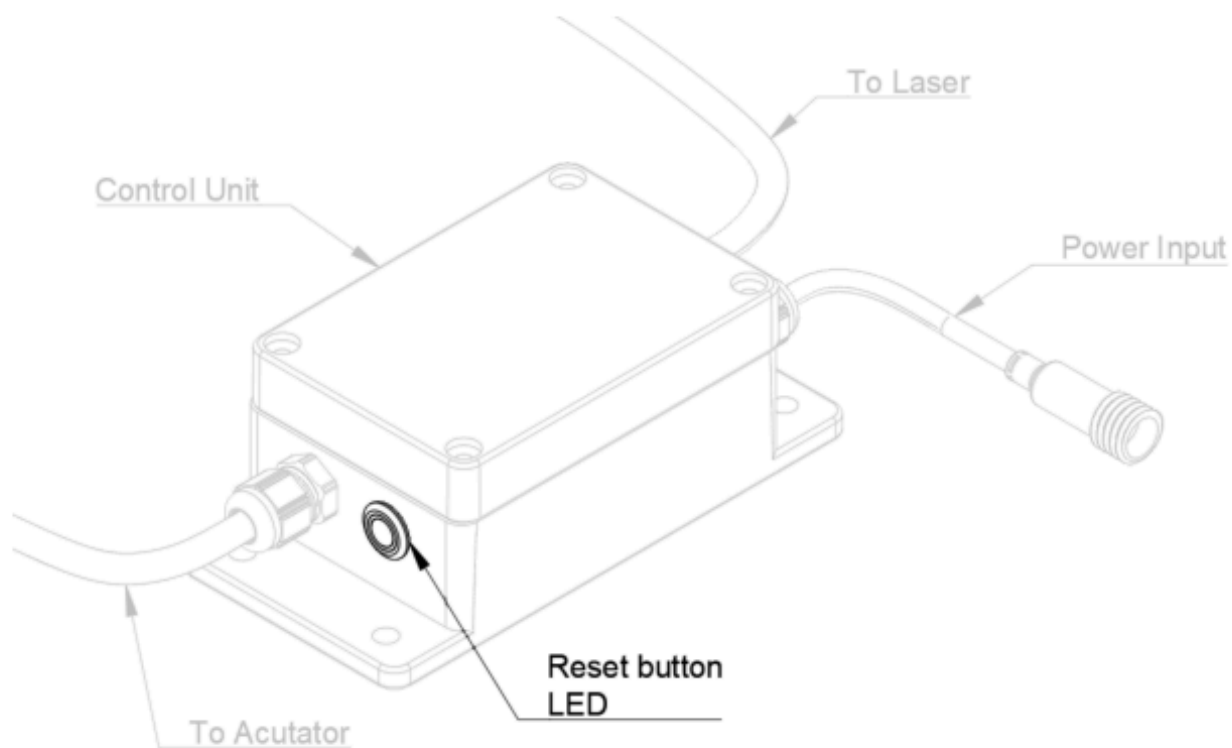
- To initiate programming mode for the Keyfob, press and hold the Keyfob button for three seconds until you see a light signal.
- In the "Add Parklio Keyfob" screen, press "Start Setup." The application will display "Connecting" and guide you through the device setup process.



- Upon successful setup, the Keyfob will emit two beeps, indicating that it's ready for use.
- The keyfob can store only one device in its memory and it is controlled by pressing the keyfob button.

## 6.7. Barrier Key Reset

The Barrier digital key is set once the Barrier is added to a user account. This key can only be removed by resetting it. **The reset is done by pressing and holding the Reset button for 3 seconds until the green LED lights up.** When the Barrier is in the reset state it can be added again to a user account via the Parklio Connect application.



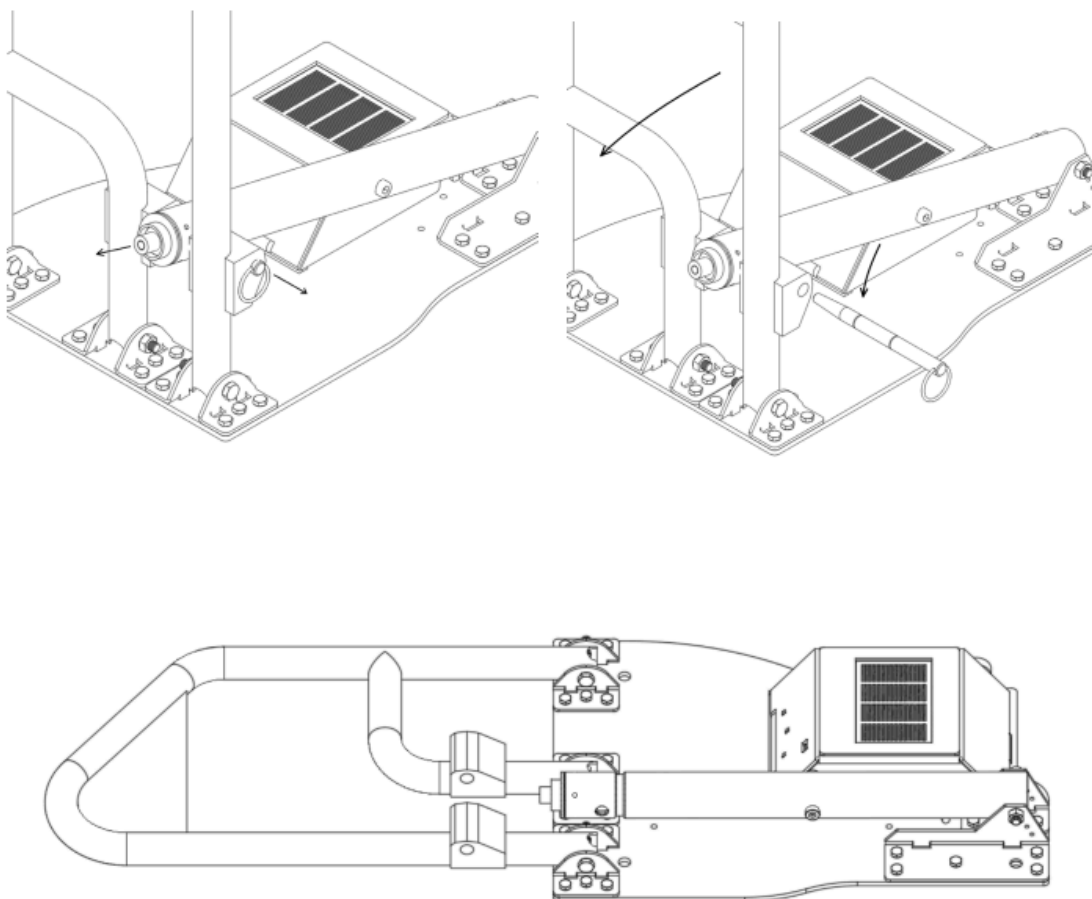
**Resetting the Barrier digital key will cause all the shared guest keys and the owner key to be unusable. It will be necessary to resend all guest keys individually.**

## 6.8. Manual Barrier Control

To manually open the barrier, unlock the safety pin lock using the provided key, afterer that remove the safety pin while holding the barrier arch and actuator in place. Gently lower the actuator and the barrier arch.

To restore normal functionality just install the safety pin back.





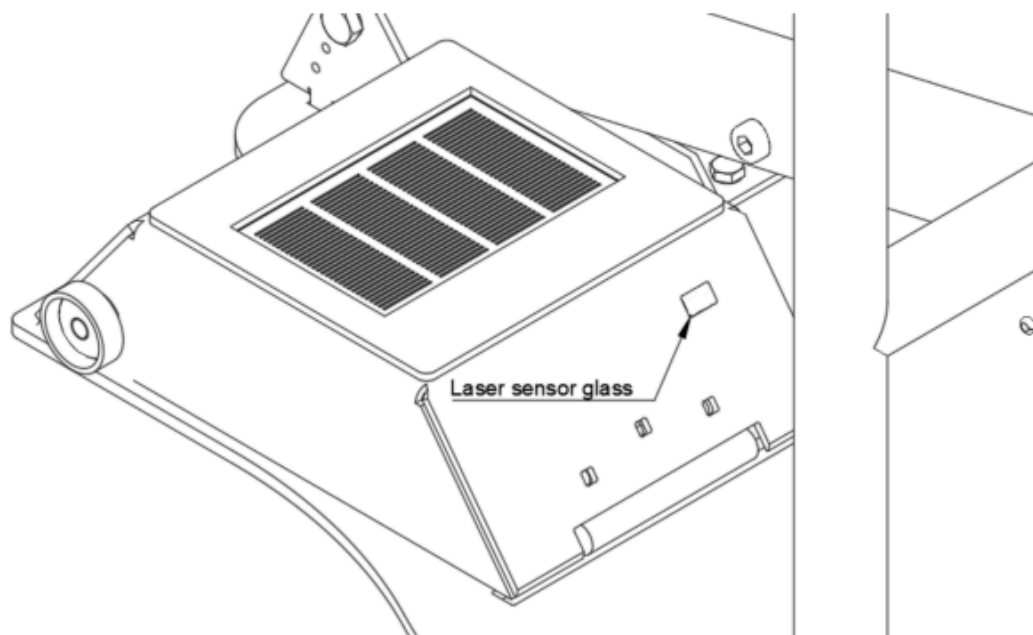
## 7. Cleaning and maintenance

Prior to initiating any cleaning or maintenance procedures for the device, it is essential to disconnect the power supply.

Children should not clean nor maintain the barrier without proper supervision.

### 7.1. Cleaning the laser sensor

Continued use of the device may result in the accumulation of dirt particles, mud, water stains, and other impurities that can obstruct the laser sensor's view. This may lead to undesired product behavior. To clean the laser sensor remove any obstructions by hand and clean the laser sensor glass cover with a clean cloth. You may use isopropyl cleaning alcohol (IPA) to clean the glass of any stains.



## 7.2. Cleaning the inside of the barrier cover

The inside of the barrier cover should only be cleaned with a clean dry cloth and a dust brush.

## 7.3. Cleaning the barrier exterior

The outside of the barrier may be cleaned with water, and in the case of bigger stains with a detergent without abrasive properties. Remove any obstacles around and from the barrier that may obstruct normal functioning, like clumps of leaves or branches.

## 7.4. Replacing the Safety Pin

In case of excess force, the Parklio Smart Parking Barrier has a safety pin to prevent damage to any other parts. The pin is designed to break into three parts.

In the case of a broken safety pin, a replacement pin is needed for the barrier to operate normally.

To replace the safety pin, first unlock the safety pin lock, after that remove any broken pieces of the old safety pin. Insert the new safety pin as already described in the manual (Chapter 4.3. Preliminary Checks and Testing).

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### FAQ

[www.parklio.com](http://www.parklio.com)

[info@parklio.com](mailto:info@parklio.com)

+385977247276



## 8. Disposal of the device

We use environmentally friendly materials for packaging that can be recycled, deposited, or destroyed without any hazard to the environment. For this purpose, the packaging materials are appropriately labeled.

The symbol on the product or on its packaging signifies that this device should not be handled like ordinary household waste. Take this product to a suitable collection point for electrical and electronic equipment recycling.

Take out the worn battery from the barrier and dispose of it at a suitable place. The proper way of disposing of the barrier will help you to prevent possible negative consequences and impacts on the environment and human health that could occur in the event of improper disposal of the barrier. For more detailed information on disposing and processing the barrier, contact your local waste disposal service, utility company, or the store where you purchased the barrier.

## 9. Declaration of Conformity to EMC, LVD and ERM Directives

<b>Declaration of Conformity</b> With regard to EMC, LVD and ERM Directives		
Declare under our sole responsibility that the following product(s):  <p style="text-align: center;"><i>Parklio Smart Parking Barrier Model X</i></p> Fulfills the essential requirements of the EMC, LVD and ERM Directives  The following standards were applied: EN 55016-2:3:2017 EN 61000-4-3:2006/A2:2010 EN 301 489-1 v2.1.1.(2017-02) EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013+AC:2015 EN 60950-22:2017 IEC 60950-1:2005+A1:2009+A2:2016, IEC 60950-22:2016		
Address:       Stinice 12, 21000 Split, Croatia Manufacturer:   Parklio d.o.o. I, the Manufacturer, hereby declare that the equipment as tested is representative manufacturing tolerance limits	 Authorized Signature 	

## 10. Declaration of Conformity to FCC

This device complies with Part 15 of the FCC Rules. The 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 taking 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 or TV technician for help.

Changes or modifications to this product not authorized by the manufacturer could void the electromagnetic compatibility (EMC) and wireless compliance and negate your authority to operate the product.



This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.



## 11. Declaration of Conformity to ISED

**This device complies with Industry Canada license exempt RSS standard(s). 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.

**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 so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.**

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 radioélectrique 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.