



PARKLIO™ BOLLARD

USER MANUAL



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Other brand and product names are registered trademarks or trademarks of their respective holders.

Statement of Conditions

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**Thank you for the confidence you have shown
us by purchasing our Parklio Bollard.**



Please read this manual first!

Dear Customers,

We hope that all your expectations of this product will be fulfilled. Parklio™ Bollard is manufactured using the latest technologies and has undergone rigorous quality control procedures.

The User Guide will help you use your product quickly and safely.

Read the user manual before installing and using your product.

Always follow the safety instructions.

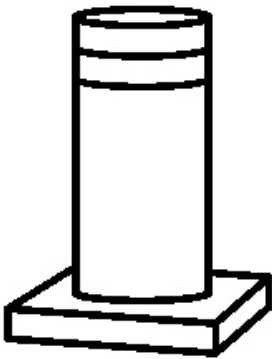
Keep this user manual at hand for future reference.

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1. Package Contents

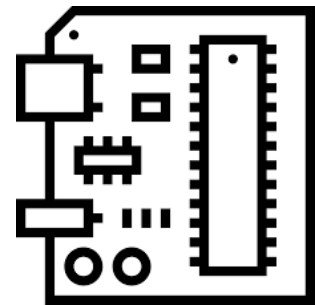
The product package should contain the following items:



Parklio™ Bollard



2.4 GHz Antenna



**Control board with the
embedded Parklio Brain**

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

2. Warning to the Users

CAUTION: It is important for your safety that these instructions are followed. The installation or misuse of this product may cause personal injuries or material damages.





- If you have not read and understood the operating instructions, do not use the Bollard. If you have any questions, please contact our technical support or sales department for further explanations.
- Ignoring use instructions, as well as inappropriate installation and use of the bollard, may result in bollard damage or user injury. Always have instructions on hand.
- This product was designed and produced strictly for the use indicated in this manual. Any other use other than the ones expressly indicated may damage the product and/or be a source of danger, invalidating the warranty.
- Before using the bollard for the first time, ensure that all the parts listed in these instructions are inside the original packaging. Installers should become familiar with the mechanical and electrical requirements for such a system.
- Installers should assume the risk of all injuries that might occur during installation, including, without limitation, the risk of electric shock.
- For the solar model of the bollard, it's important to note that a single photovoltaic module can produce DC voltages greater than 30 volts when exposed to direct sunlight. Contact with a DC voltage of 30 V or more is potentially hazardous.
- Keep children well away from the system while transporting and installing mechanical and electrical components.
- Completely cover the module with an opaque material during installation to keep electricity from being generated.
- Do not wear metallic rings, watchbands, ear, nose, lip rings, or other metallic devices while installing or troubleshooting photovoltaic systems.
- Only plugs, batteries, chargers, spare parts, and power supplies supplied by the manufacturer of the bollard should be used. The use of non-manufacturer-supplied components will result in the termination of the warranty.
- Use only insulated tools that are approved for working on electrical installations.
- Abide with the safety regulations for all other components used in the system, including wiring and cables, connectors, charging regulators, inverters, storage batteries, rechargeable batteries, etc.

- Use only equipment, connectors, wiring, and support frames suitable for a solar electric system.
- Always use the same type of module within a particular photovoltaic system.
- Never touch uninsulated cable ends.
- For the solar model of the bollard, under normal outdoor conditions, the module will produce currents and voltages that are different than those listed in the data sheet. Data sheet values are values expected at standard test conditions.
- The packaging materials (plastic, polystyrene, etc.) should not be discarded in the environment or left within reach of children, as they are a potential source of danger.
- Keep this guide in a safe place for future reference (care and maintenance) and in case of sale or disposal of the modules.
- Never expose the inner workings to water.
- The device is to be exclusively installed on a hard, level concrete floor. If you have any questions, please contact our technical support or sales department for further explanations.
- The device and external supply must be disconnected from the power supply during installation, maintenance, cleaning, and repairs.
- Leave the bollard repairs to a specialist. Improper repairs may lead to an accident or a malfunction in the unit.
- The battery provided for the solar model of the bollard is intended to be used only with Parklio products; use with other products is not recommended. Parklio is not responsible for any damage caused to the equipment or the battery pack when misused.
- The warranty does not cover consumable parts of the device, color fading and chipping, increased noise as a result of the aging of the device, and other aesthetic effects that do not affect its functionality or safety.
- Parklio d.o.o is not liable for the incorrect use of this product, or another use other than the one for which it was designed.
- Parklio d.o.o is not liable if the safety standards were not taken into account when installing the equipment to be automated, or for any deformation that may occur to it.
- Parklio d.o.o is not liable if the safety standards were not taken into account when installing the equipment to be automated, or for any deformation that may occur to it.
- Before the installation, turn off the power supply.
- Parklio d.o.o is not liable for the safety and proper installation of the product when using components that were not supplied by Parklio.
- Do not make any changes to the motor components and/or accessories.
- The installer should inform the customer how to operate the product in emergencies and provide him with a manual of use.

- Keep the remote control out of reach of children, preventing the bollard from operating accidentally.
- The customer shall not, in any circumstance, attempt to repair or tune the bollard. For this purpose, he must call a qualified technician.
- Connect the bollard to a 230V power supply, with ground wire.
- The equipment is designed for outdoor use.

 **DANGERS:**

- Danger of battery explosion from sparking.
- Danger of electric shock.
- Install the product in a heatproof environment. Ensure therefore that there are no chemicals, plastic parts, curtains, or other textiles, etc. near the equipment.
- Ensure that the equipment is used under the correct operating conditions. Never operate it in a wet environment.
- Never use the product at sites where gas or dust explosions could occur.
- Ensure that there is always sufficient free space around the product for ventilation.
- Protect the solar modules from incident light during installation, e.g., cover them.
- This product is designed and tested in accordance with international standards. The equipment should be used for the designated application only.
- Connections must always be made in the sequence described in the Installation chapter of this manual.
- The installer of the product must provide a means for cable strain relief to prevent the transmission of stress to the connections.
- In addition to this manual, refer to the photovoltaic panel manual for detailed instructions and to the battery manual for scheduled maintenance cycles.

Symbol	Name	Meaning
	Danger of electric shock warning	Do not touch the electric connections, there is danger of electrical shock.
	Hot surface warning	Do not touch the surface of the appliance, while it is running, it will get hot.
	Read the manual instruction	Read the product manual before installation and use.
IP43	Ingress protection value	IP43 - The electronic components are protected from tools and small wires greater than 1 millimetre and protected from water spray less than 60 degrees from vertical.
	Double insulation symbol	The appliance is double insulated and does not require a safety connection to electrical earth (ground).

3. Features

This high-quality electro-mechanical security bollard will guarantee the safety and it represents an ideal solution for entrance with high-security requirements. With an intensive operative cycle, Parklio™ Bollard is designed to withstand high car flows thus economically and efficiently securing parking places in just a few seconds. The electro-mechanical movement of this security bollard is the most reliable technology for extremely intense use at all temperatures and weather conditions. Operated via smartphone this bollard has a rise and fall time of just 6-7 seconds.

Besides being smart and resistant, it is also customizable on-demand with every color.

FEATURES

- Smartphone controlled, operated via a free app (Android & iOS)
- Intensive use
- Electro-mechanical motorization
- Made with a special motor to be faster and more durable in time
- Designed for continuous use with 100% duty rating
- Possibility of integration with other systems
- Auto-close option upon departure of the vehicle
- Additional LED lights safety system

4. Installation of the standard Bollard model

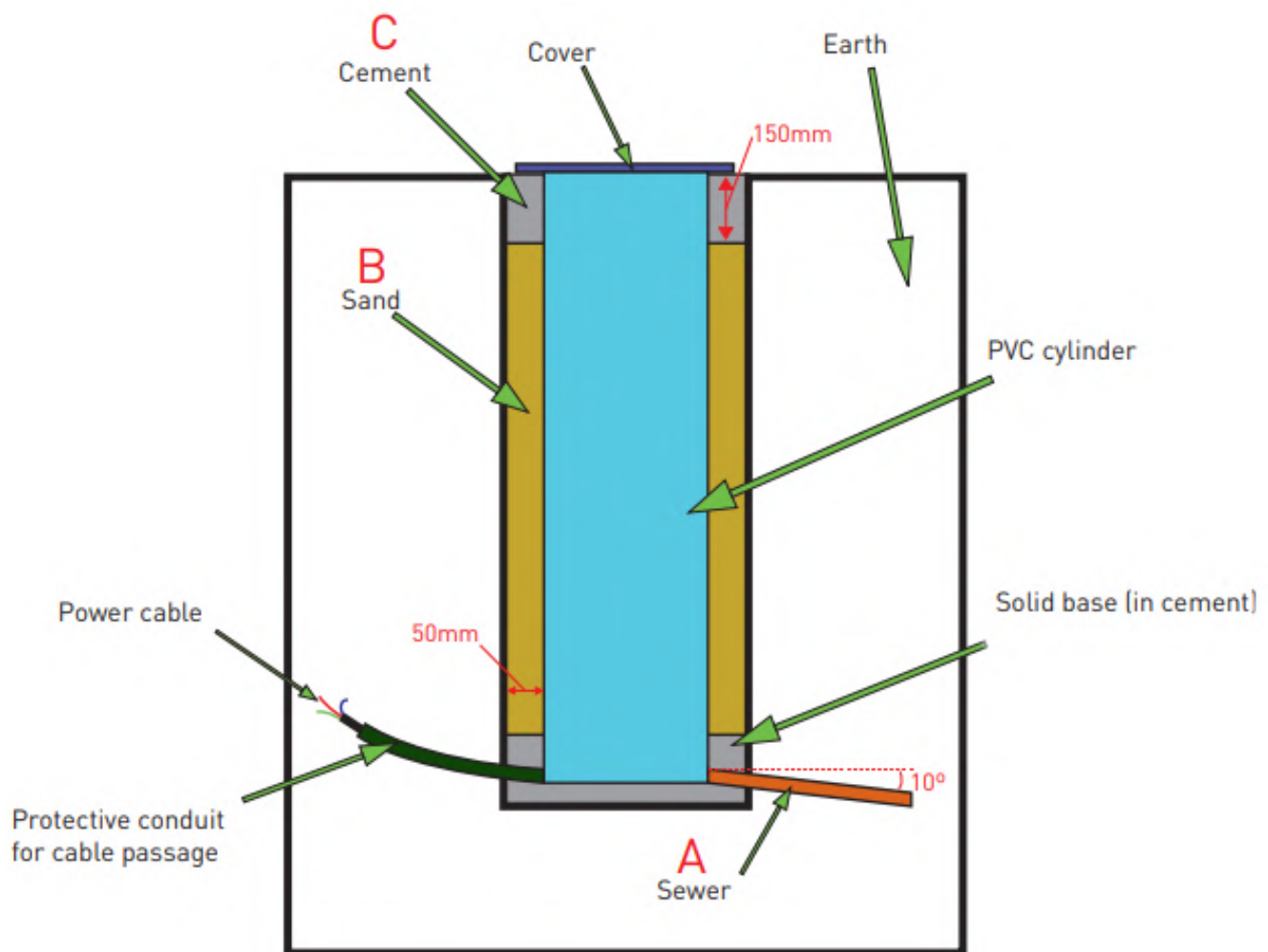


Figure 5.1 - Bollard Scheme

■ 4.1. Power cable insulation



Figure 6.1 - Power cable of the Parklio Bollard

- Power cable of the Parklio Bollard can not be in the direct contact with the soil
- A protective conduit must be used for the underground cable passage!

- 1. IMPORTANT!** Place the sewer (Fig. 5.1, **A**) with a minimum declination of 10°.
2. Make a solid cement base to support Parklio Bollard
3. To install the bollard, you can dismount the cover, making the process much easier. To do that, you must remove the 6 screws furthest from the center, marked at red in Fig. 5.2.

IMPORTANT: Do not touch the screws marked at green!

4. Next, remove the cover as shown in Fig. 5.3 and place the bollard in the hole Fig. 5.4.
- 5.5. Note that no waste or other objects fall into the inside of the bollard protecting the space using a piece of cloth, paper or other material serving as a seal between the stainless steel tube and the PVC pipe (Fig. 5.6) .
5. Put the sand (Fig. 5.1, **B**) around the bollard, for better accommodation.
6. Make a finish with a concrete as shown in Fig. 5.1 **C**.
7. After placing the bollard in the hole and finishing the pavement around it, remove the material used for sealing and place the cover (Fig. 5.3) in the bollard, fixing it with the six screws removed early in the process.
8. The bollard and its cover must be aligned as shown in Fig. 5.4
9. The control box must be installed in a place near the bollard, at a minimum height of 20 cm from the ground.
10. If the distance from the control box to the Parklio bollard is bigger than 10 meters, use a 2.25 mm power cable.

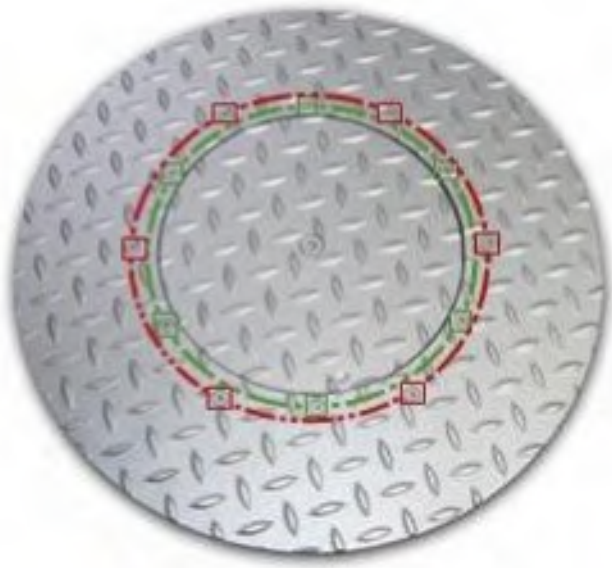


Figure 5.2 - Bollard cover



Figure 5.3 - Removing the bollard cover

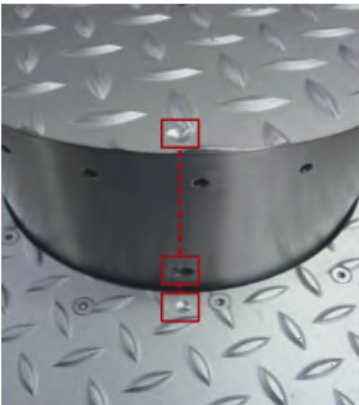


Figure 5.4 - Bollard alignment



Figure 5.5 - Bollard placed in a hole



Figure 5.6 - Sealing the bollard

5. Installation of the Solar bollard model

This section of the user manual offers detailed instructions for the installation of your Solar bollard model. Installing the Parklio Solar Kit and solar photovoltaic systems requires a certain level of skill and expertise. Installation should be performed only by individuals who are trained and qualified to handle the installation process.

■ 5.1. Packaging Contents

Please check that the package contains all the necessary parts.

The Parklio Solar Kit includes:

- › 2 x Photovoltaic panels
- › 1 x Junction box:

The Junction box comes prewired and includes:

- › A battery charger module
- › 2 x 12V 12Ah or 22Ah batteries (depending on customer order)
- › Wiring, Circuit breakers, fuses and connection terminals

Each photovoltaic module comes with a permanently attached junction.



We do not provide cables for connecting the photovoltaic panels to the junction box or for connecting the junction box to the Parklio Bollard. We do not provide poles for mounting the photovoltaic panel.

■ 5.2. Technical specification

JUNCTION BOX PARAMETERS	VALUE
BATTERIES (supplied preinstalled)	2 x 12 V, 12 Ah or 22 A, AGM Deep Cycle Batteries
OUTPUT LOAD FUSE	20 A
OPERATING TEMPERATURE	-20°C +55°C
HUMIDITY	95%, Non-Condensing
CHARGING PEAK EFFICIENCY	98%
DEGREE OF PROTECTION	IP65
DIMENSIONS	400 mm x 300 mm x 200 mm
WEIGHT	8 kg

PHOTOVOLTAIC PANEL	VALUE
TECHNOLOGY	MONO - Si
P _{MAX}	55W
OPEN CIRCUIT VOLTAGE	22.99 V
SHORT CIRCUIT CURRENT	3.22 A
NOMINAL OPERATING CELL TEMPERATURE	55 °C
OPERATING TEMPERATURE	-40 °C to 85 °C
DEGREE OF PROTECTION	IP65
DIMENSIONS	545 x 668 x 25
WEIGHT	4.0 kg

■ 5.3. Photovoltaic module mounting

Solar photovoltaic modules are engineered to transform light energy into direct-current electrical energy, specifically for outdoor applications. These modules can be installed on the ground, rooftops, vehicles, or boats.

Mounting Guidelines

Design Responsibility: The design of the support structures is the responsibility of the system designers and installers.

Mounting Holes Utilization: It is recommended to use the pre-drilled mounting holes in the module frame, as detailed in the subsequent paragraph.

Handling Precautions:

- Do not attempt to disassemble the modules, and do not remove any attached nameplates or components from the modules.
- Use only the pre-drilled holes in the frame for mounting, typically at the four symmetric points near the inner side.
- In high wind or heavy snow conditions, secure the module using all eight mounting holes.
- Do not lift the module by grasping the module's junction box or electrical leads.
- Do not stand, step on, or drop the module. Also, prevent any objects from falling on the module.
- To avoid glass breakage, do not place any heavy objects on the module.
- Do not set the module down hard on any surface to avoid breakage.
- Transport and install the module with caution to avoid damage.

Caution: Improper handling, transport, or installation can result in damage to the module, such as breakage. Ensure all procedures are followed carefully to avoid damage.

Selecting the location

Select a suitable location for installing the modules.

The modules should be facing south in northern latitudes and north in southern latitudes.

For detailed information on the best elevation tilt angle for the installation, refer to standard solar photovoltaic installation guides or a reputable solar installer or systems integrator.

The module should not be shaded at any time of the day.



Do not use the module near equipment or in locations where flammable gases can be generated or collected.

Selecting the proper support frame

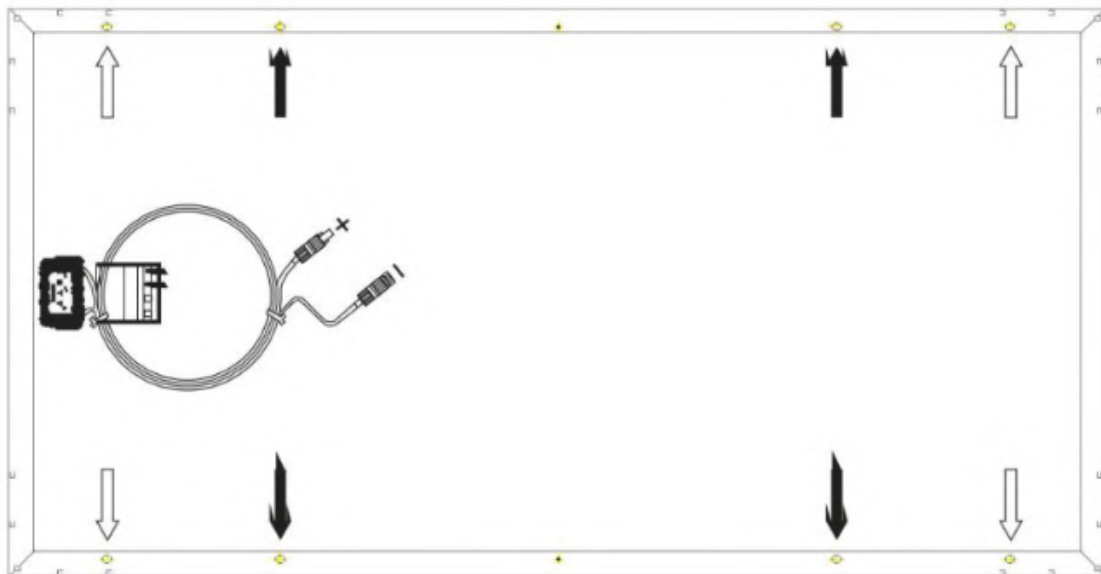
Always observe the instructions and safety precautions included with the support frames to be used with the modules.

Do not attempt to drill holes in the glass surface of the modules, as this action will void the warranty.

Do not drill additional mounting holes in the frame of the module, as this action will also void the warranty.

For standard installations, modules should be firmly fixed to the mount using four designated points. In scenarios expecting higher wind or snow loads, additional mounting points should be utilized, as detailed in the accompanying diagram.

Load calculations are left to the system designers or installers.



Mounting holes for normal installation



For high wind and snow-loads, these mounting holes must be used

Ground mount

Select the height of the mounting system to prevent the lowest edge of the module from being covered by snow for a long time in winter in areas that experience heavy snowfalls.

In addition, ensure that the lowest portion of the module is placed high enough so that it is not shaded by plants or trees or damaged by sand and stone driven by wind.

Roof mount

When installing a module on a roof or building, ensure that it is securely fastened and cannot fall as a result of wind or snow loads.

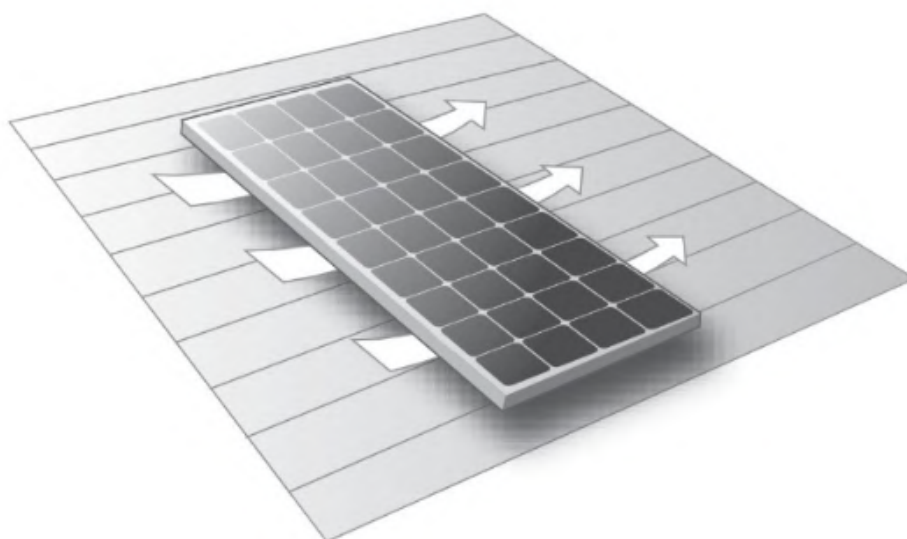
Provide adequate ventilation under a module for cooling (10 cm of minimum air space between the module and the mounting surface).

When installing the module on a roof, ensure that the roof construction is suitable. In addition, any roof penetration required to mount the module must be properly sealed to prevent leaks.

In some cases, a special support frame may be necessary.

The roof installation of solar modules may affect the fire-proofing of the house construction.

The modules are rated fire Class C and are suitable for mounting over a class A roof. To avoid accidents, do not install modules on a roof or building during strong winds.



Pole mount

When installing a module on a pole, choose a pole and module mounting structure that will withstand anticipated winds for the area.



Ground mount

Roof mount

Pole mount

Grounding Instructions

The module frame must be properly grounded. The grounding wire must be properly fastened to the module frame to ensure good electrical contact. Use the recommended type, or an equivalent, connector for this wire.

If the support frame is made of metal, the surface of the frame must be electroplated and have excellent conductivity.

We recommend the lay-in lug when grounding (Cat. No. GBL4-DBT is recommended by the producer).

Assemble the recommended grounding lug to the aluminum frame using a stainless steel M3 or M5 screw and hardware as shown below.

Note: There are two different-sized grounding holes, the smaller of which is being phased out.

Further, the buildups of hardware for mounting the grounding lug are the same—except for the M3 screw, where an added lat washer is mounted directly under the M3 screw head. The star washer is fitted directly under the grounding lug and makes electrical contact by penetrating the anodized coating of the aluminum frame. The screw assembly is further fitted with a flat washer, then a split lock washer, and finally a nut to secure the entire assembly, as shown.

The recommended torque of M3 or M5 screw assemblies is 0.8 NM or 1.5 N

■ 5.4. Junction box mounting

Mount the Junction box vertically on a non-flammable substrate, with the electrical terminals facing downward.

The Dimensions drawings chapter of this manual contains a dimension drawing of the solar panels and Junction box. This drawing also indicates the mounting holes.

Observe a minimum clearance of 10cm under and above the Junction Box charger for optimal cooling.

■ 5.5. Electrical connections

Use flexible, multi-stranded copper cables for the battery and PV connections.

It is recommended to use a 6 mm² / AWG10 cable for connecting the PV panels in series and to the Junction box.

For connecting the Llad output to the Parklio bollard, it is recommended to use at least 2.5m m² / AWG14 wire.

The wire diameter may vary depending on the installation distance of the PV panels to the Junction box and the Junction box to the Parklio bollard.

The diameter of the individual strand of the cable used should not exceed 0.4 mm (0.016 inch) or have a surface area exceeding 0.125 mm² (AWG26).

A 25mm² cable, for example, should have at least 196 strands (class 5 or higher stranding according to VDE 0295, IEC 60228, and BS6360). An AWG2 gauge cable should have at least 259/26 stranding (259 strands of AWG26). Example of suitable cable: class 5 “Tri-rated” cable (it has three approvals: American (UL), Canadian (CSA), and British (BS)).

In the case of thicker strands, the contact area will be too small, and the resulting high contact resistance will cause severe overheating, eventually resulting in fire. See the below image for examples of what cable to use and not to use.



Solar kit connections



Check the polarity before connecting the battery and PV voltage. Follow the correct installation procedure described in this chapter. Torque the battery, load, and PV connections at 0.75 Nm.

The Parklio Solar kit comes with pre-wired batteries and charging circuitry. The installer must connect the PV panels to the Junction box, The load output to the Parklio bollard, and ground the Junction Box and PV.

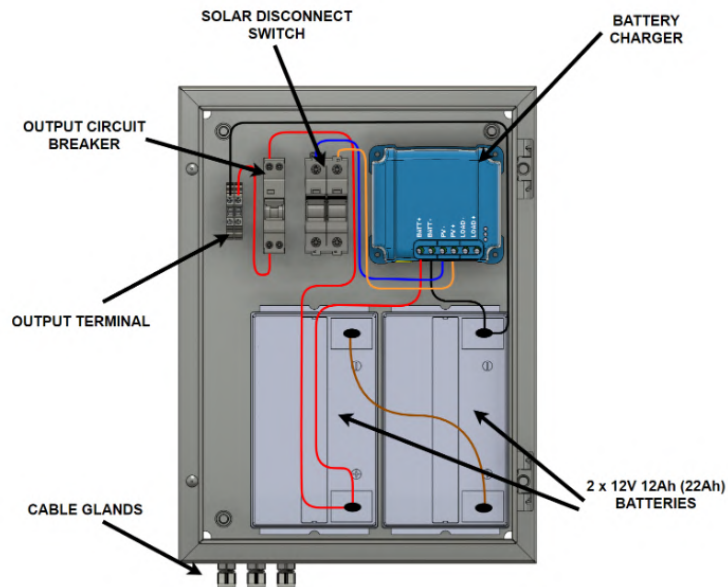


Figure: Junction Box Components

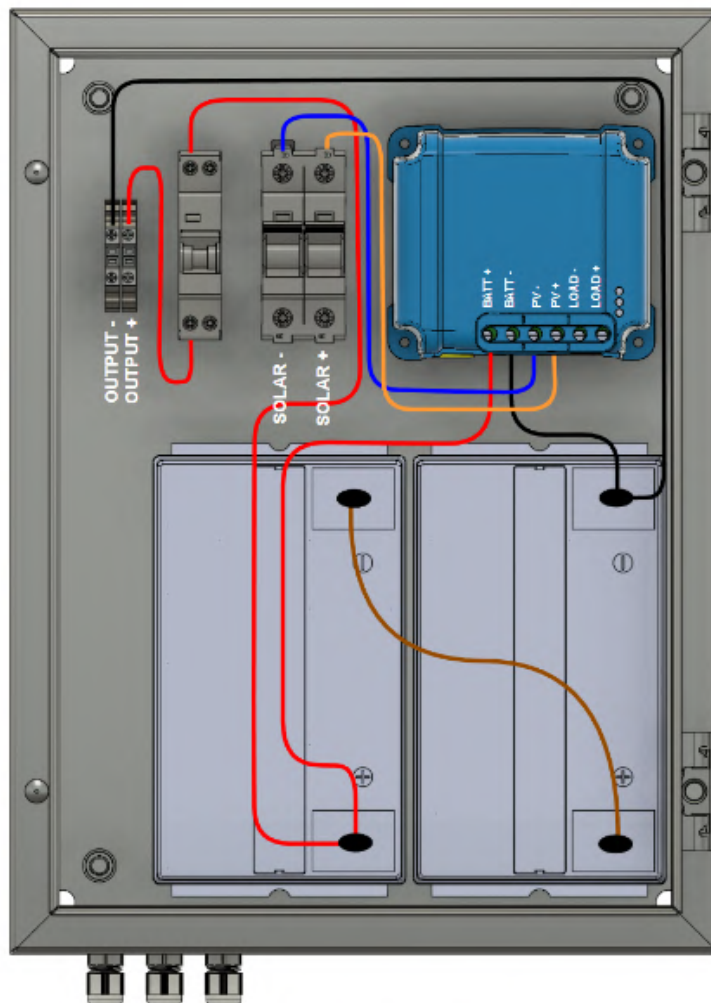


Figure: Junction Box Terminal Locations

Before connecting the Junction box make sure the Solar disconnect switch, the Battery switch, and the Output circuit breaker are in the disconnected position.

First, connect the two provided photovoltaic panels in series: the negative terminal from the first panel should be connected to the positive terminal of the second panel.

Then connect the Photovoltaic panel negative lead to the SOLAR - input of the Junction box and the panel positive lead to the SOLAR + input of the junction box.

Connect the Load of the Junction box to the Parklio Bollard.

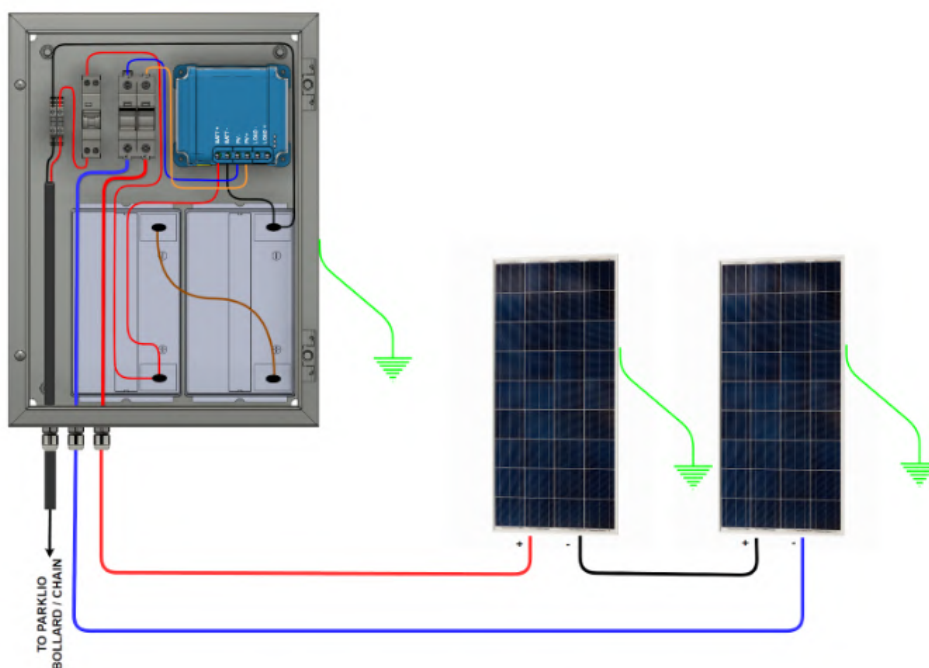
After all connections are made, inspect the connections, then turn on the Battery disconnect switch.

Wait for 10 seconds to allow the charger to power up.

After that, turn on the LOAD output circuit breaker.

Lastly, turn on the SOLAR Disconnect circuit breaker.

The correct connection order is necessary to allow the automatic system voltage detection to set up properly. Not following the correct procedures can disable or damage the charger and/or the installation.



Junction Box Connection Diagram

Parklio Bollard Connection

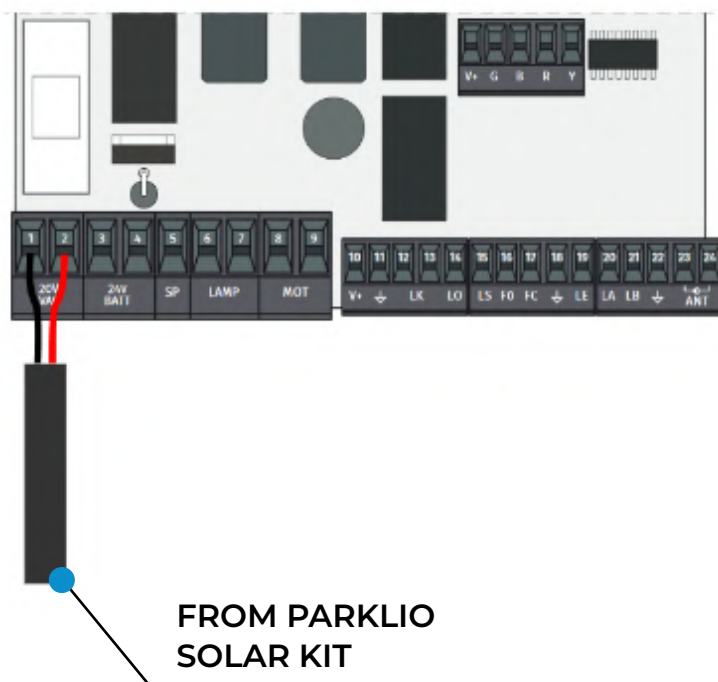
The Parklio Bollard comes with a mains power transformer.

When using the Solar kit, disconnect the power transformer from the “20V VAC” terminals on the control board.

The Solar kit replaces the power transformer. Connect the Solar kit LOAD output from the Junction box to the Parklio Bollard “20V VAC” input on the control board (pins 1 and 2).

The connection polarity is not important.

Connection polarity is not important.



Parklio Chain Connection to the Solar Kit

Grounding Instructions

Grounding each component correctly is crucial for the system's safety and functionality. Follow these specific instructions for each component:

Junction Box Chassis grounding

Ground the frame of the Junction box.

PV array grounding

The positive and negative of the PV array should not be grounded.

Ground the frame of the PV panels to reduce the impact of lightning.

Do not connect the solar charger to a grounded PV array. Only one ground connection is allowed, and this should be near the battery.

Ground fault detection

The solar charger does not have internal ground fault protection.

The USA National Electrical Code (NEC) requires the use of an external ground fault protection device (GFPD).

The system electrical negative should be bonded through a GFPD to earth ground at one (and only one) location.

When a ground fault is indicated, battery terminals and connected circuits may be un-grounded and hazardous.

■ 5.6. Autonomy and battery life

When the solar charger is not able to recharge the battery to its full capacity within one day, the result is often that the battery will continually cycle between a 'partially charged' state and the 'end of discharge' state.

This mode of operation (no regular full recharge) will destroy a lead-acid battery within weeks or months.

The charger algorithm will monitor the state of charge of the battery and, if needed, day by day slightly increase the load disconnect level (i.e., disconnect the load earlier) until the harvested solar energy is sufficient to recharge the battery to nearly the full 100%. From that point onward, the load disconnect level will be modulated so that a nearly 100% recharge is achieved about once every week.

6. Controlling the bollard

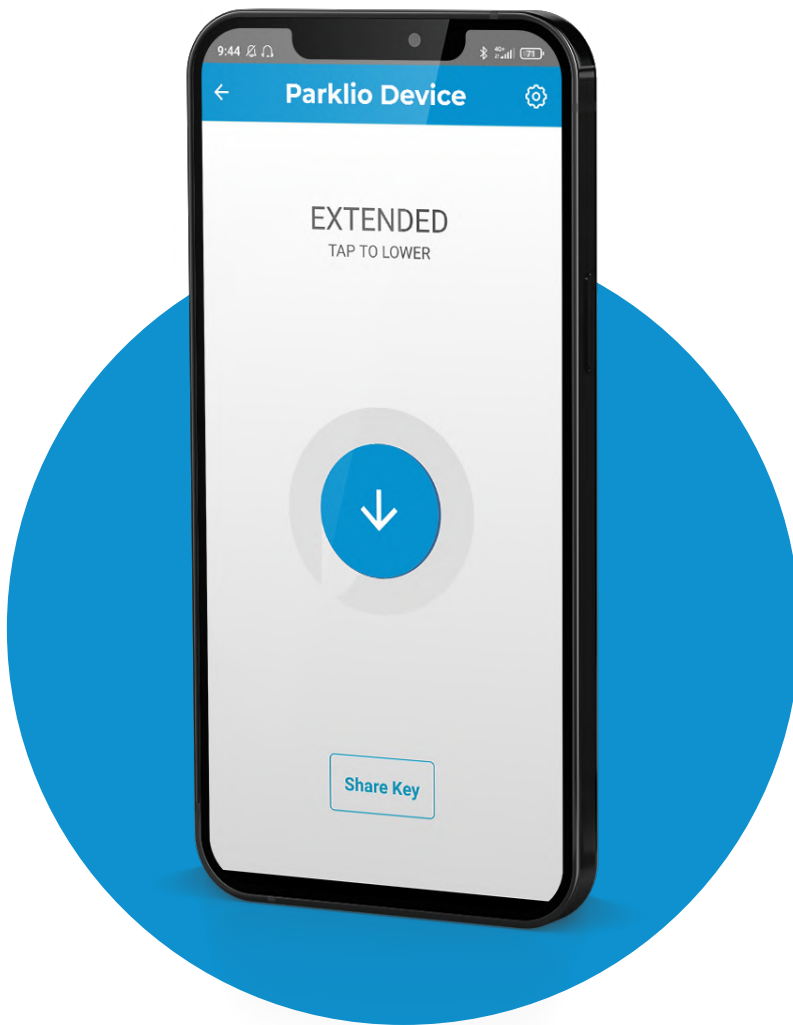
This section will provide detailed instructions on how to connect the mobile application with the bollard and how to control the bollard using the free Parklio Connect mobile application.



Please note that internet connectivity is required for the bollard'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. Register and login

To use Parklio Connect the user needs to be logged in. An user may login with an existing Google account, an Apple account, or the user may create and use a Parklio account with their email.

EMAIL
Enter Email

PASSWORD
Enter Password

Login

Sign up Forgot password?

OR

Sign in with Google

By clicking Login or Signup indicates you agree with our [Terms and Privacy Policy](#)

Parklio™ © 2021

Create an Account

EMAIL

PASSWORD

CONFIRM PASSWORD

Sign up

By clicking Login or Signup indicates you agree with our [Terms and Privacy Policy](#)

Parklio™ © 2021

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

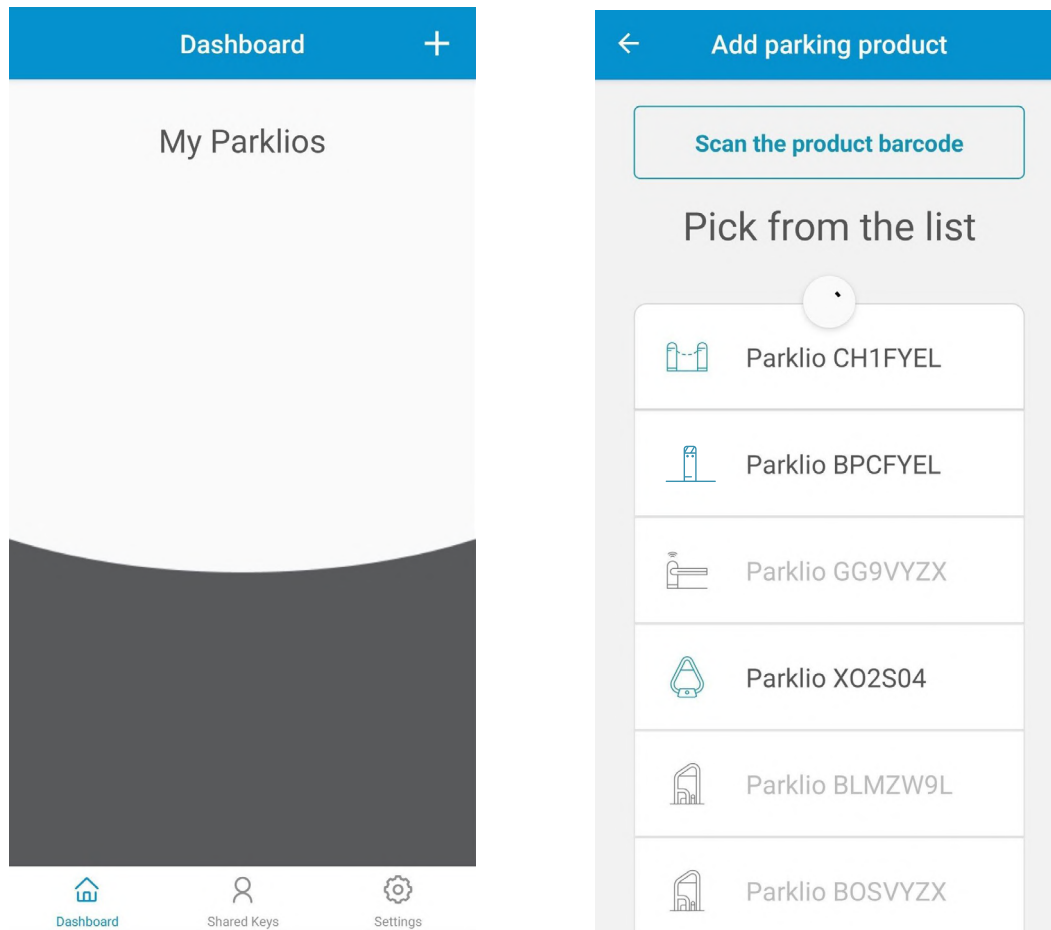
To login via Apple account simply press the *Sign in with Apple ID* button.

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 bollard to your account

After logging in the dashboard containing all your parklio devices will be displayed.



To add a bollard 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 devices. This step should be done in close proximity to the Parklio device you are adding.

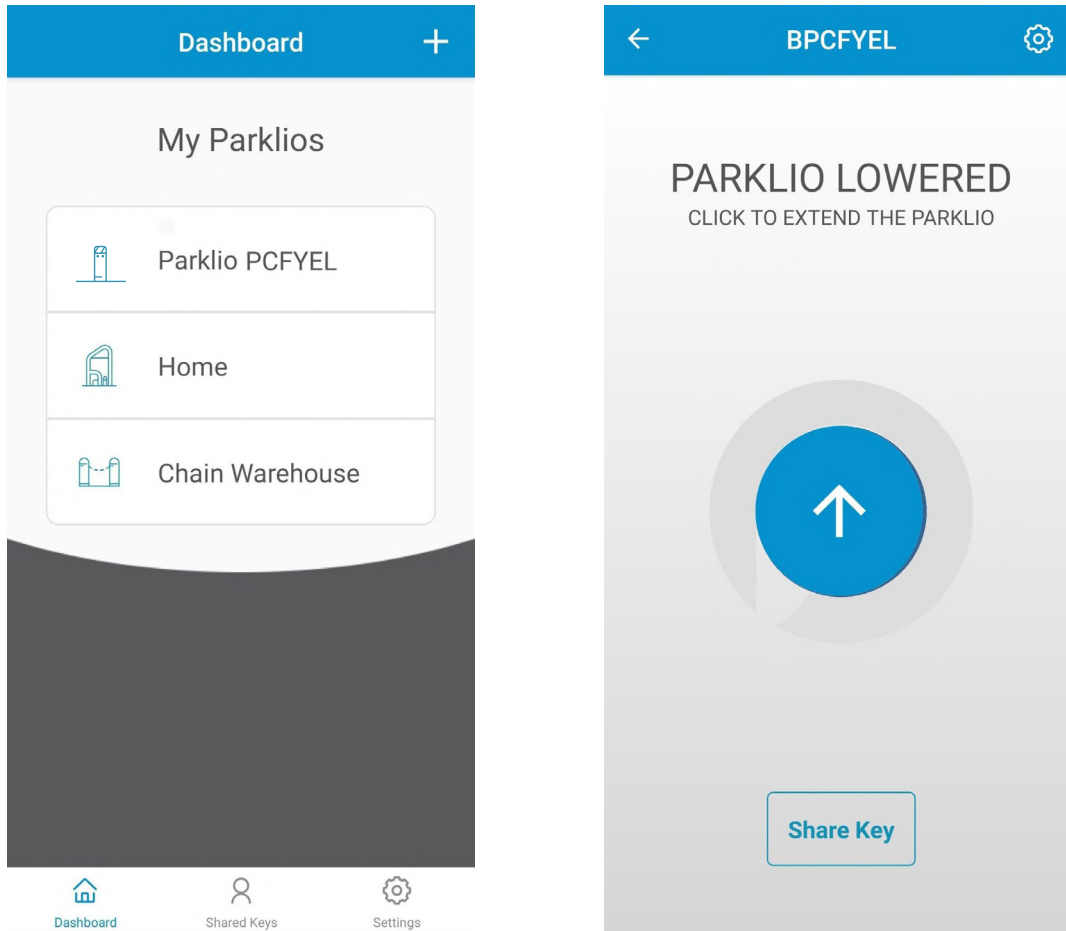
Grayed out devices represent Parklio devices that are already set up. When the scanning is complete select the device you wish to add from the list of available devices. The device will be set up automatically and added to the users account.

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

■ 6.4. Connecting to the bollard

To be able to operate the bollard, view the state and change the bollard settings it is necessary to connect to the bollard.

This is done by going to the Dashboard and clicking on the bollard to connect to.



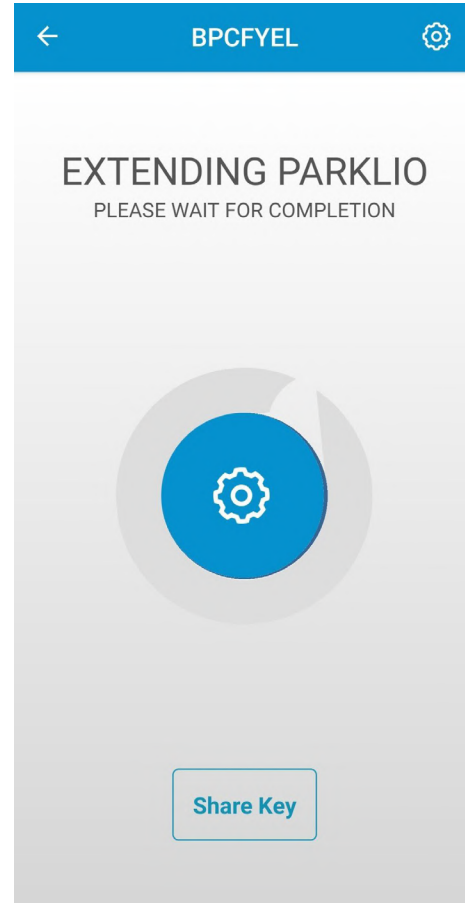
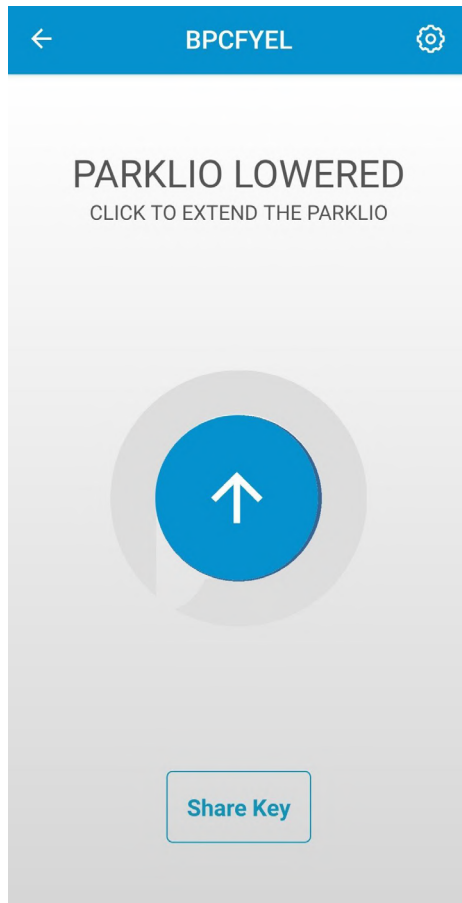
After a successful connect the screen will show the bollard status:

- **PARKLIO LOWERED** - Indicates the bollard is down (open)
- **PARKLIO EXTENDED** - Indicates the bollard is up (closed)
- **PARKLIO EXTENDING** - Indicates the bollard is moving up (closing)
- **PARKLIO LOWERING** - Indicates the bollard is moving down (opening)
- **BOLLARD JAMMED** - The bollard jammed while moving up or down, check for any obstructions
- **AUTHENTICATION FAILED** - There was an error with communication to the bollard or with the bollard digital key, the key was probably reset

■ 6.5. Opening and closing the bollard

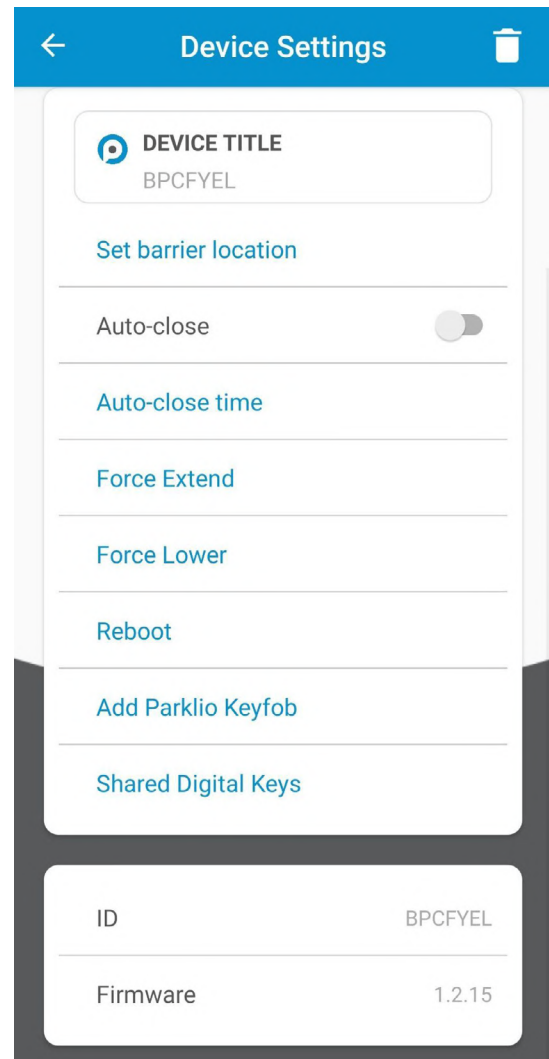
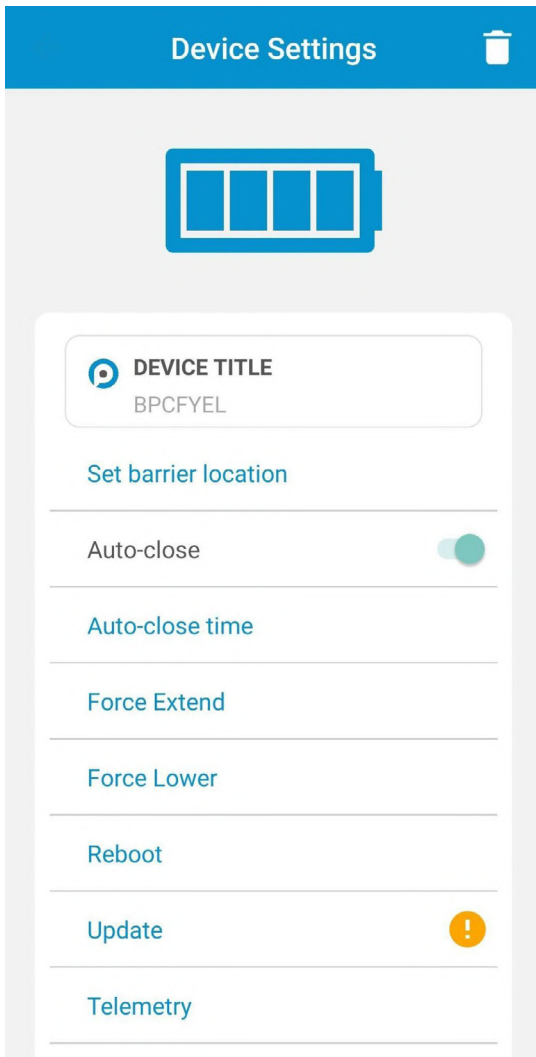
Opening and closing of the bollard is possible only when the user is connected to the bollard and while the bollard is in the EXTENDED or LOWERED state.

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



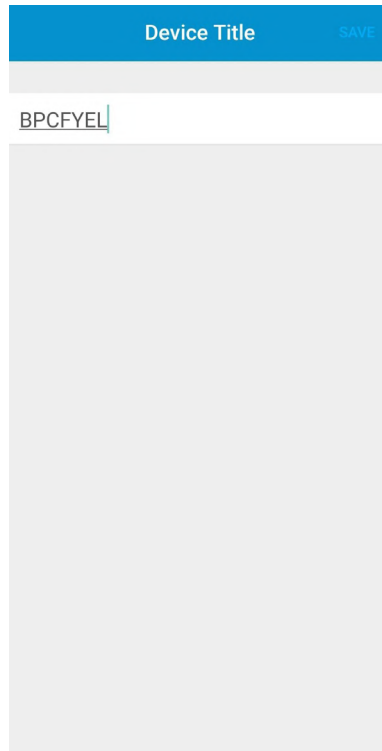
■ 6.6. Bollard settings and information

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



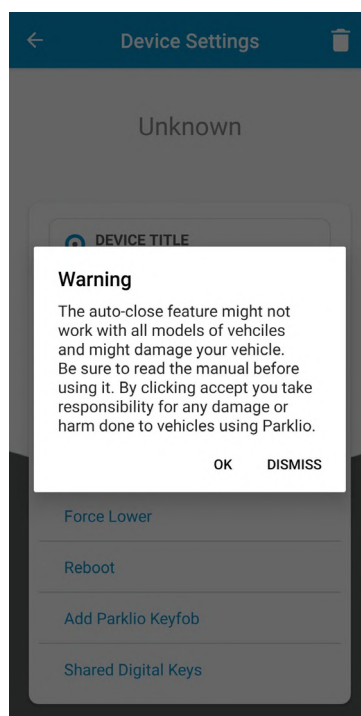
Change the device name

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 now be displayed.



Change auto-close settings

To enable bollard auto-close toggle the auto-close button. A warning message will be displayed. To change the auto-close interval press the *Auto-close Time* button. The user may choose an auto-close time interval from 5 s to 120 s.



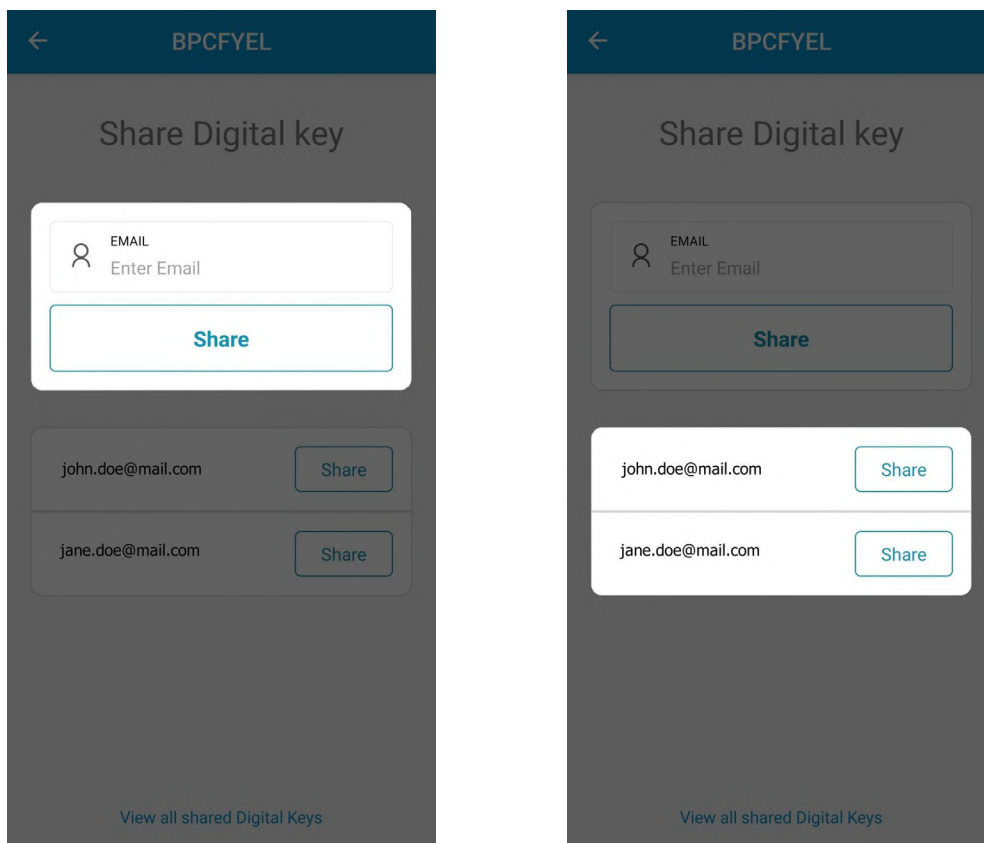
Key sharing

An important feature of all Parklio products is the option for key sharing. The application allows the owner of the device to share the digital key of his device.

To use this feature an internet connection is required. It is not required to be connected to a bollard via bluetooth.

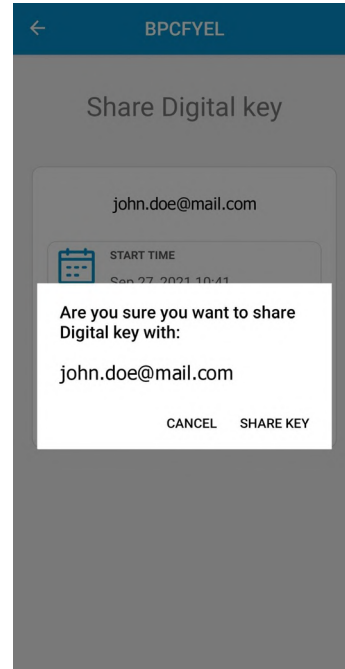
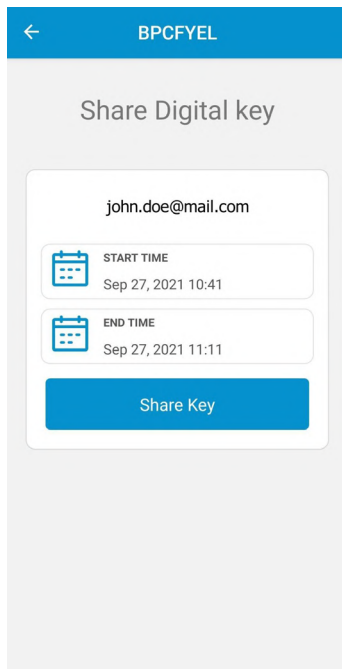
All keys have a validity period, the key becomes active at the start date and is valid until the end date. A key may be shared to multiple users and multiple keys may be sent to one user.

In order to share a key press the Share Key button on the main bollard screen.



The first step is to enter the email of the user to whom the key will be shared or to 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 time are set press the Share Key button and confirm.

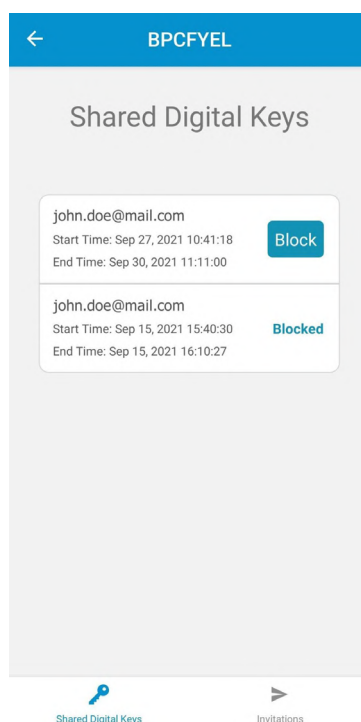


Blocking shared keys

If it is necessary to remove access from a user to whom a key was shared it is possible to do this from the Parklio Connect application.

To use this feature an internet connection is required. It is not required to be connected to a bollard via bluetooth.

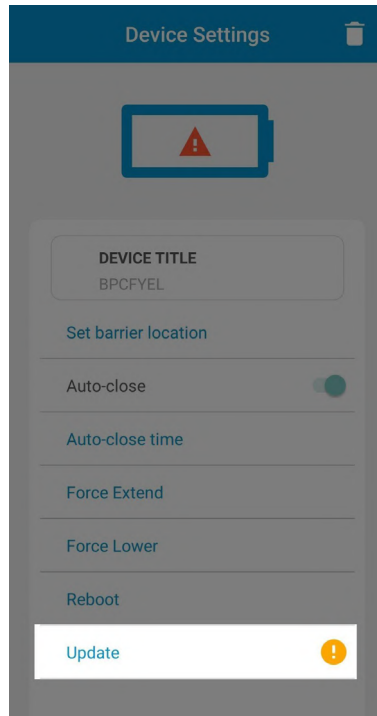
In the *Device Settings* > *Share Digital Key* screen, press the *View all shared Digital Keys* at the bottom of the screen. All keys shared for the selected device are displayed. To block a certain user click on the *Block* button next to the user. Share keys can also be viewed from the *Device Settings*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



Updating the bollard

Parklio Smart Parking Bollard get 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 bollard make sure there is no vehicle located on top of the barrier. Please stay close to the bollard for the whole duration of the update.

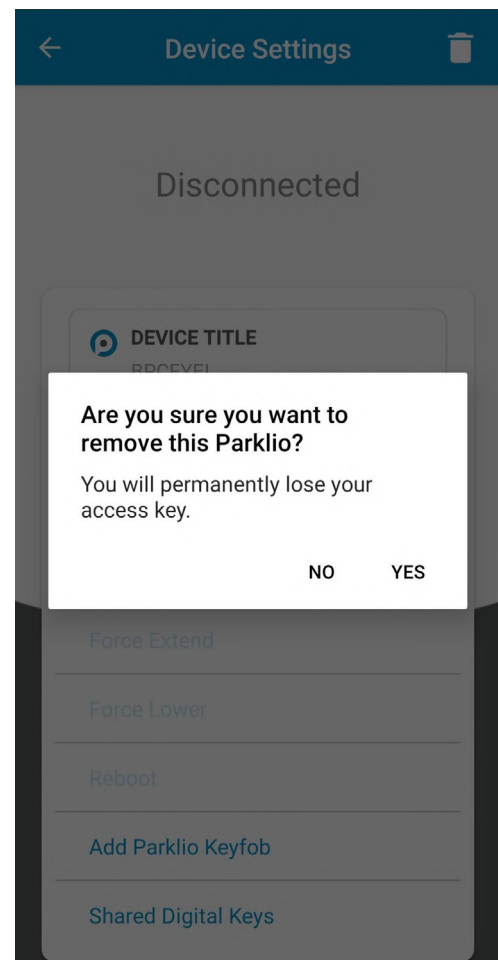
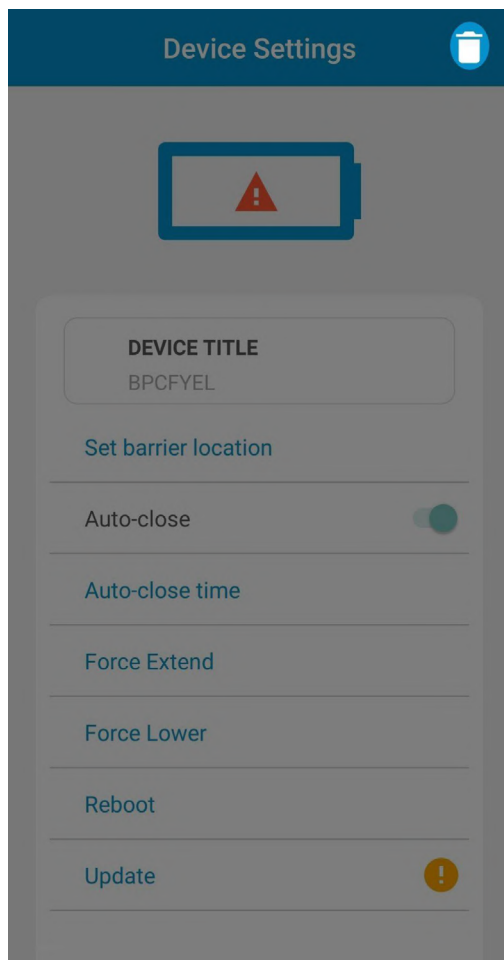


To update the bollard click the *Update* button in the *Device Settings* screen and press Start. Stay close to the device while the update is downloading.

Removing the bollard

In order to remove the bollard from your account or to delete a key which 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 bollard key reset or when the bollard is added to another account.



7. Dimensions

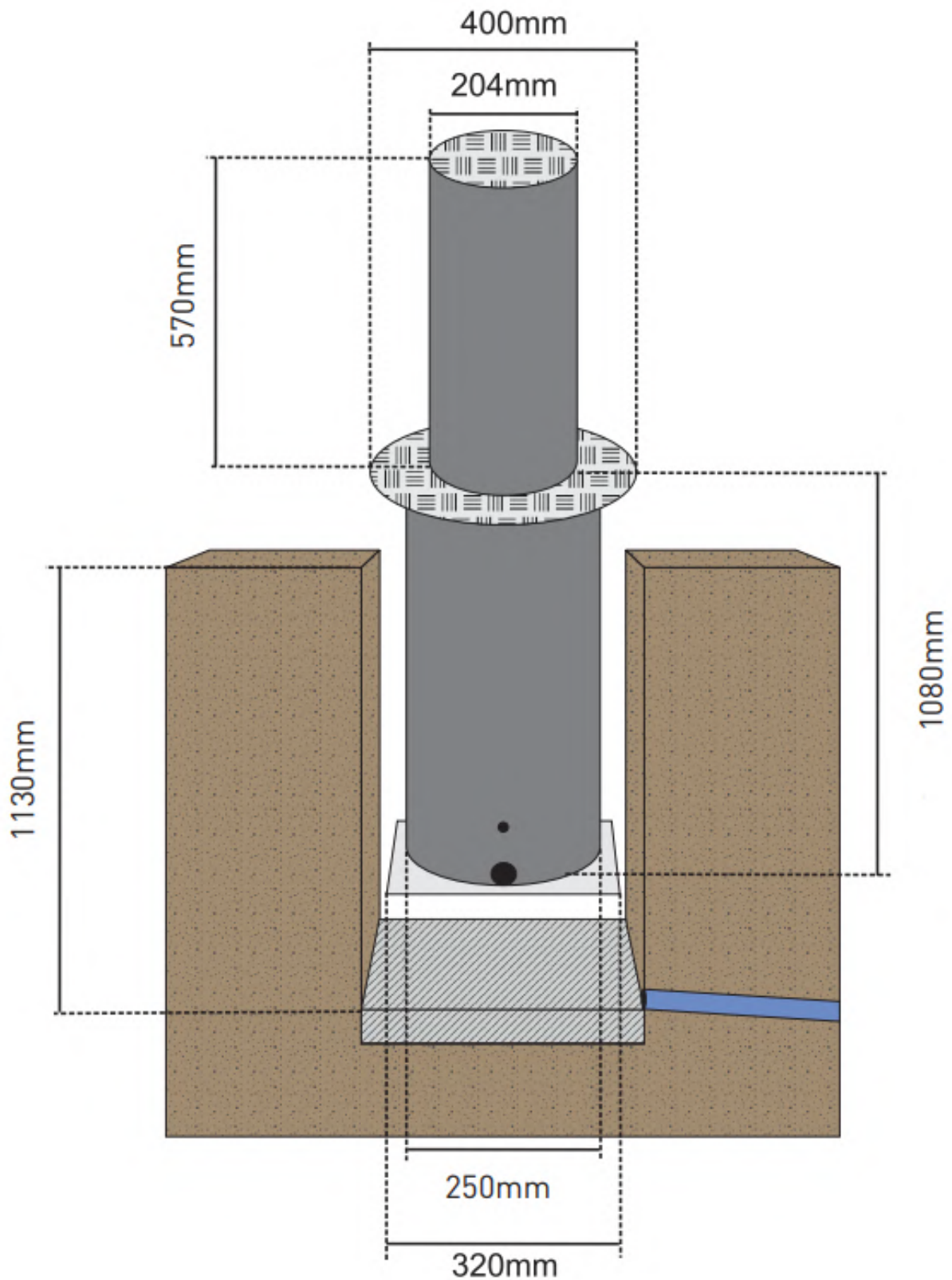


Figure 7.1 - Parklio Bollard Dimensions

8. Unlocking the bollard

Unlocking the bollard in case of an emergency, power outage or malfunction.



Figure 8.1 - Slot for manual release



Figure 8.2 - For manual release, turn the key in clockwise direction

IMPORTANT

- After unlocking, the Parklio Bollard will descend automatically.
- In case of power outage, the bollard is prevented by a battery that has enough power to make one maneuver (open or close). You shall not use the bollard anymore until there is a power supply at 230V because the battery was designed for emergencies only.
- In case you use the bollard more than 1 time powered only by the battery, it may not have enough energy and an incomplete maneuver may occur.
- In case of malfunction of the equipment, you shall call a qualified technician.

9. Declaration of conformity

CONFORMITY:

Parklio d.o.o. declares, the Parklio bollard follows the European norms and directives:

2006/95/CE-Low voltage electrical equipment; 89/336/CEE-Electromagnetic compatibility. EN 60335-1, EN 55014-1, EN 55014-2, EN 61000-3-2, EN 61000-3-3

Parklio d.o.o. declares, the control board follows the directive 95/05/EC (R&TTE).



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