

Parklio™ Gateway

User Manual



Trademarks

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



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Statement of Conditions

In the interest of improving internal design, operational function, and/or reliability, Parklio™ reserves the right to make changes to the products described in this document without notice. Parklio™ does not assume any liability that may occur due to the use or application of the product(s) or circuit layout(s) described herein.

Thank you for the confidence you have shown us by purchasing our gateway.

Please read this manual first!

Dear Customers,

We hope that all your expectations of this product will be fulfilled. Parklio™ Gateway 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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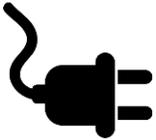
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1. Package Contents

The product package should contain the following items:



Parklio™ Gateway



Waterproof power connector



Ethernet cable waterproof connector



Pole mount bracket



Pole mount hose clamp



4 x M4 screws

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

NOTE

- For the installation a T8 (torx), slotted and cross-slot screwdriver is required

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- An Electric Drill (if mounting to a wall) is required
- RJ45 Crimping Tool
- Parklio™ do not provide a RJ45 connector for the Ethernet port

2. Features

Placed in the middle of the Parklio™ universe, the Parklio™ Gateway enables remote control of Parklio™ products. It serves as an intermediary between Parklio™ products and the end-user. Besides coordinating and managing all the data communication between the products, the Parklio™ Gateway provides real-time parking occupancy information.

It is ideal for the car parks with a larger number of parking spaces and constant flow of users or basically anybody who wants to have remote control of their products. There will be no need that your client controls the products. Person in charge will be able to do it remotely regardless of the distance.

Features

- Real-time information
- Easy and convenient to install
- Controls up to 20 products
- The diameter of up to 100 m



WARNING

Operation of this equipment in the residential environment could cause radio interference!



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3. Hardware Overview



Figure 3.1 - Status And Connection board

| | | |
|---|--|--|
| 1 | Reset Button | Hold to reset the gateway to the factory settings. Short press to enter 'Connection' mode |
| 2 |  Power | Off - Your gateway is turned off Blinking - The gateway is upgrading or the Reset button was pressed Solid - Your gateway is powered properly |
| 3 |  Ethernet | Off - There is no connection Blinking - Your gateway is connecting or is trying to reconnect after lost connection Solid - Your gateway is connected |
| 4 |  Bluetooth | Off - Bluetooth isn't working Blinking - Bluetooth is powering Solid - Bluetooth is working properly |
| 5 |  4G connection | Off - There is no 4G connection or the gateway is connected to the Ethernet Blinking - The gateway is trying to establish 4G connection Solid - The gateway is connected to the 4G network NOTE |

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| | | | |
|---|----------------------|--|--|
| | | | 4G connection available exclusively in case of SIM card embedded by Parklio. |
| 6 | Ethernet port | | LAN port for Internet connection |
| 7 | AC port | | Connector for the power supply |

Table 3.1 - Status and Connection board



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4. Technical Specification

| Parameter | Value |
|----------------------------------|---|
| Input Voltage | 85 VAC - 264 VAC 120 VDC - 370 VDC |
| Frequency | 47 Hz - 440 Hz |
| AC Current (Typ.) | 0.35 A / 230 VAC ⁽¹⁾ |
| Inrush current | 40 A / 230 VAC |
| Working temperature range | -20 °C - +60 °C |
| Working humidity | Up to 90% RH |
| Operating altitude | 1000 m |
| Ingress rating | IP65 |
| Dimensions | 220 mm x 220 mm x 50 mm (H x W x D) |
| Pole mount diameter | ∅ 60 mm - ∅ 125 mm |
| Weight | 750 g |
| LED | 4 status LEDs |
| LAN | 10/100BASE-T with waterproof connector |
| Wireless Connectivity | BLE LTE with 3G/2G fallback |
| Over-the-Air upgrades | Yes |
| Antenna interface | Internal BT and 4G/3G/2G antennas |
| Color | Lava and white grey |
| Max. supported devices | Max. 20 Parklio™ BLE devices can be associated with one gateway |



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| Regulatory standards | |
|----------------------|--|
| | EN60950-1:2006 + A1:2010 + A11:2009 + 2:2011 |
| | A1 EN 61000-6-2 |
| | EN 300 328 EN 61000-4-2 |
| | EN 300 440 EN 61000-4-3 |
| | EN 301 489 - 1 EN 61000-4-4 |
| | EN 301 489 - 3 EN 61000-4-5 |
| | EN 301 489 - 17 EN 61000-4-6 |
| | EN 55024 EN 61000-4-8 |
| | EN 55032 EN 61000-4-11 |
| | EN 61000-6-3 EN 61000-3-3 |
| | EN 61000-3-2 |

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

Table 4.1 - Technical specifications

5. Hardware Setup

Before You Begin

- The Placement of the Gateway is very important. Do not place the Gateway in an enclosed area such as a closet, cabinet, attic, or garage if the Parklio products which are meant to be controlled by Gateway positioned outside of the mentioned places.
- Keep the number of obstacles of the Parklio™ Gateway and other Parklio™ devices to a minimum - each wall or ceiling can reduce your Gateway range from 1 to 30 meters (3 to 90 feet). Position your devices so that the connection between Parklio™ Gateway and other Parklio™ devices is handled without problem.

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5.1. Wall mount

The user needs to use anchors with screws for mounting the Gateway on the wall. The user needs to mark and drill the holes as shown on the bottom image.

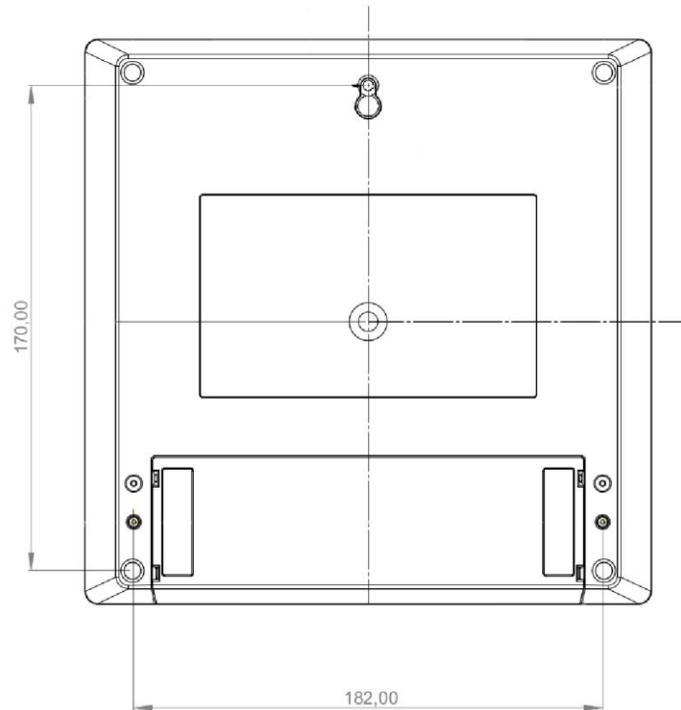


Figure 5.1 - Dimensions for the wall mount

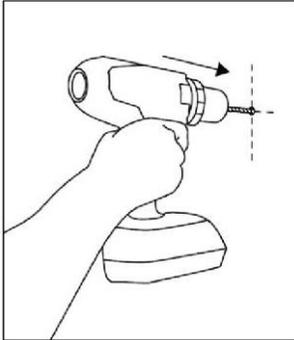


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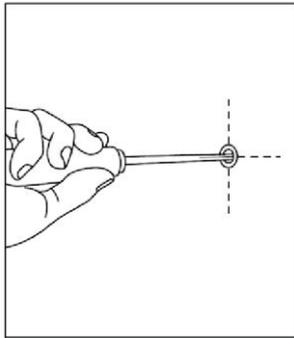
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5.1.1. Installation steps



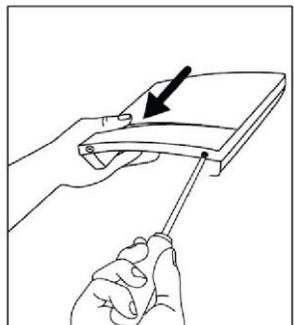
Step 1

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



Step 2

Place the 6mm wall plug into the drilled hole, screw the screw into the plug. The screw should not be completely screwed because the Gateway needs to be hanged over it.



Step 3

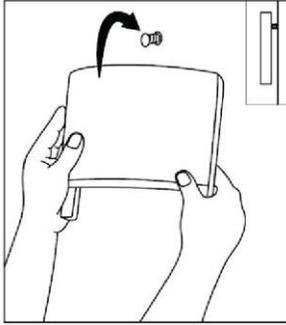
Use the screwdriver to unscrew the bottom of the Parklio™ Gateway and remove the bottom cover.

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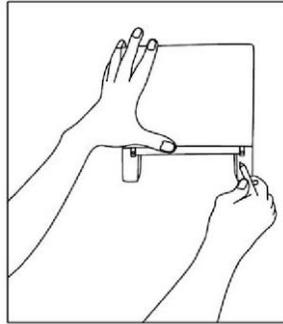


Step 4

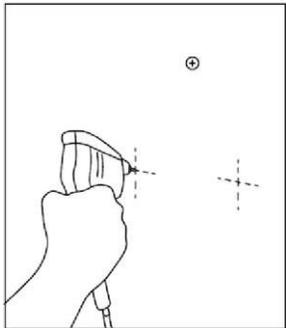
Hang the Parklio™ Gateway onto the mounted bolt from the second step.

Step 5

Mark the two removed cover.

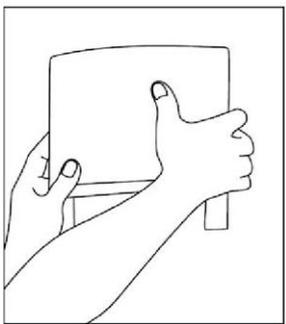


holes initially positioned under the



Step 6

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



Step 7

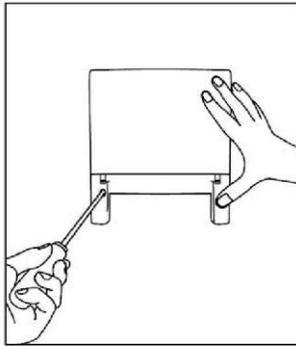
Hang the Gateway back onto the first screw.

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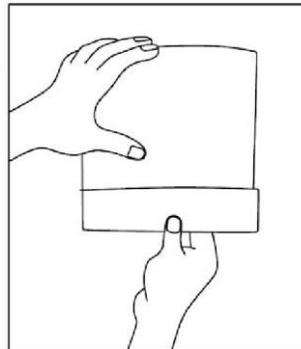


Step 8

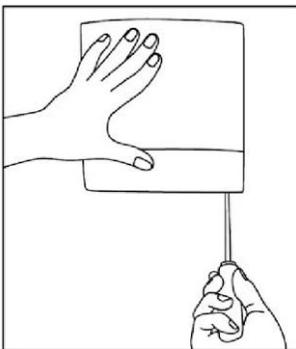
Tighten the screw into the previously placed wall plugs.

Step 9

Place the plastic



cover back.



Step 10

Use the screwdriver to screw the bottom of the Parklio™ Gateway so that the plastic cover is fixed.

5.2. Pole mount

The gateway comes with four M4 screws for installing a hose clamp carrier to the gateway.

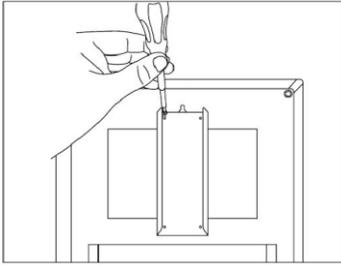
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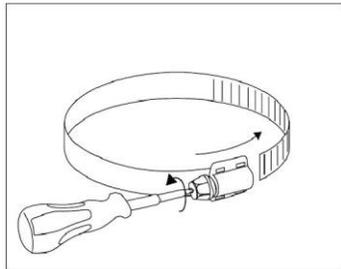


5.2.1. Installation steps



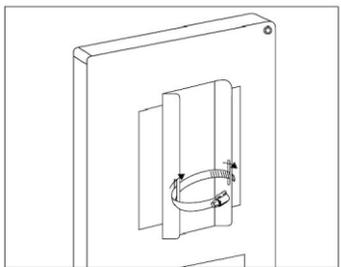
Step 1

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 bolts to fix the pole mount holder.



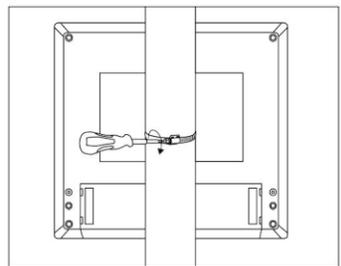
Step 2

Use the screwdriver to 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.

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6. Connecting the Gateway

6.1. Power connector

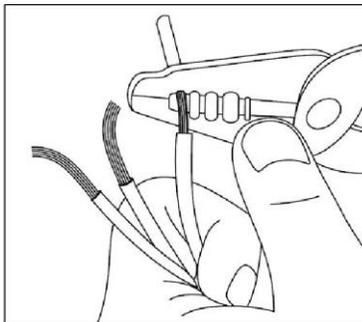
NOTE

Supply circuit must have an all-pole mains switch (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. Disconnect the mains supply before proceeding.

| | |
|-------------------|---------------------------------------|
| Input Voltage | 85 VAC - 264 VAC 120 VDC - 370 VDC |
| Frequency | 47 Hz - 440 Hz |
| AC Current (Typ.) | 0.35 A / 230 VAC ⁽¹⁾ |
| Inrush current | 40 A / 230 VAC |

Table 6.1 - Power connector specifications

6.1.1. Installation steps



Strip the cable

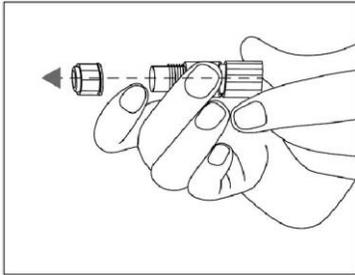
Step 1



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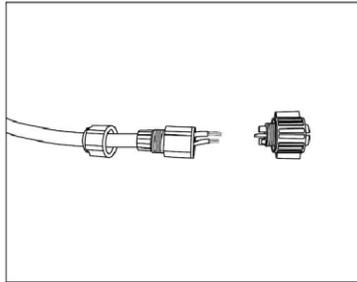
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Pull the previously power connector.

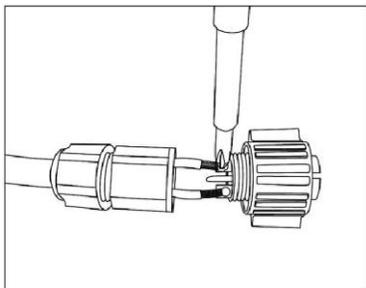
Step 2

Unscrew the provided power connector.



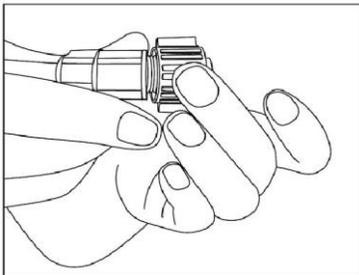
Step 3

stripped cable through the



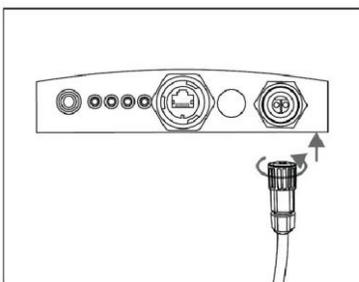
Step 4

Insert the stripped wires into the terminals on the head of the power connector and use the screwdriver to fix them.



Step 5

Tighten 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.

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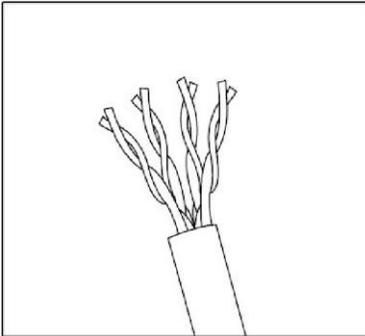


6.2. Ethernet Connector

NOTE

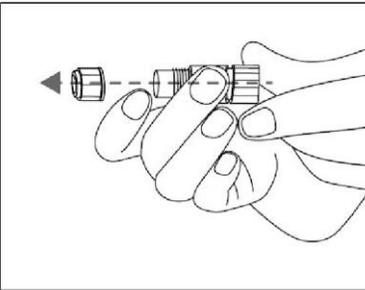
It is recommended to use a cable with a minimum of Cat5e rating for Ethernet.

6.2.1. Installation steps



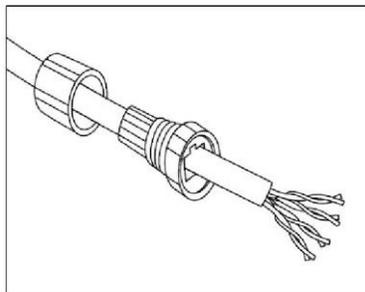
Step 1

Strip the outer shield of the Ethernet cable.



Step 3

Unscrew the provided Ethernet connector.



Step 3

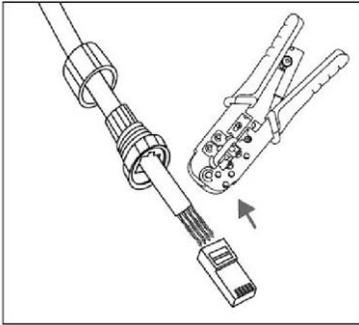
Pull the previously stripped ethernet cable through the Ethernet connector.

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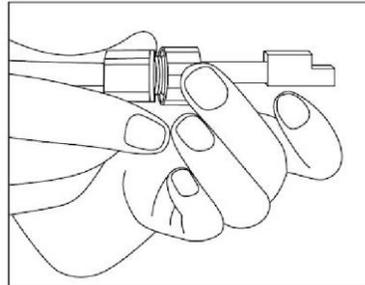


Step 4

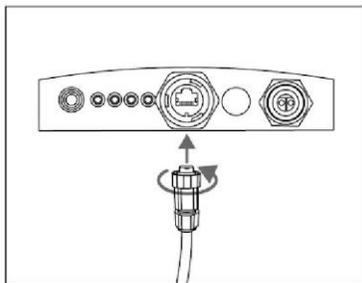
Strip the colored wires and organize them in the proper way. Insert them into the RJ45 connector and use a crimping tool to fix the inserted wires with the mentioned connector.

Step 5

Tighten the Ethernet which the Ethernet



connector parts through cable is routed.



Step 6

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

NOTE Parklio as the manufacturer can embed the SIM card so that connection between the Parklio server and Parklio Gateway can be obtained via 4G/3G mobile network.

7. Reset and Add Gateway

To reset the Gateway Press and hold a Reset button on the connection board of the Gateway.

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To be able to add Parklio Gateway through the Parklio Connect mobile application, a Parklio Gateway needs to be in the 'Connection' mode. To turn the Gateway into 'Connection' mode, shortly press the reset button. After that the LEDs on the status board start to blink.

NOTE:

Please refer to the Parklio PMS user manual to see how to connect Parklio Gateway with PMS (Parking Management System) account (<https://parklio.com/assets/support/pms/Parklio-pms-usermanual.pdf>)



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