OC1 Manual (EN)

Instructions:

Before using the device, please make sure to read the following instructions:

- Read the entire manual and the safety practices in this manual before operating or repairing the device.
- These INSTRUCTIONS are intended for the user. If you have any questions, please contact the manufacturer. Reading and understanding this manual is mandatory before using the device, as it is necessary to know all aspects of operation, inspection, maintenance, and safety.
- This document is a necessary tool for prior knowledge of the device to be used.
- This device will operate in accordance with the description contained in this manual, the accompanying labels, and the provided instructions.
- Do not install or operate the device until you have completely read these instructions. If you do not understand any part of these instructions, contact the manufacturer for additional information.
- Make sure to read the safety measures before installing or using this device.

ALWAYS READ THE MANUAL AND LABELING.

Safety Warnings

During use, the following precautionary measures should be taken into account:

- Proper operation will be determined by correct startup and usage.
- Do not allow inexperienced individuals to operate or maintain this device.
- This device should be checked periodically.
- Use only spare parts recommended by the manufacturer. If any deficiencies are detected, inform the manufacturer to resolve them.
- Before using the device, ensure that all its components are free from damage caused during transport; otherwise, replace the defective parts.
- Keep away from heat sources. Fire hazard.
- Do not pour liquid on its components.

- Do not drop the device or subject it to impacts.

HANDLE WITH CARE

- The device is not designed to be used by children.
- Do not open the device. If it needs to be repaired, take it to a qualified service technician.
- The user must not modify the design or configuration of the device without consulting the manufacturer or its authorized representative.
- It should not be used with improper maintenance or operation. Broken, missing, worn, or bent parts should be replaced immediately. If such repair or replacement becomes necessary, the manufacturer recommends requesting service by phone or in writing to the distributor from whom it was purchased. This device or any of its parts should not be modified without prior written authorization from the manufacturer.
- Do not move or remove the safety warnings. If they are damaged or lost, they must be replaced.

ANY ALTERATION, REMOVAL, OR REPLACEMENT IN THE CONFIGURATION OF THE DEVICE OR ANY OF ITS SAFETY OR STRUCTURAL ELEMENTS MAY CAUSE MATERIAL DAMAGE AND BODILY INJURY.

THE MANUFACTURER DISCLAIMS ALL LIABILITY FOR DAMAGES OR DETERIORATION CAUSED BY UNAUTHORIZED MODIFICATIONS MADE TO THE DEVICE.

THE MANUFACTURER WILL NOT BE RESPONSIBLE FOR CHANGES MADE TO THE DEVICE'S COMPONENTS THAT HAVE NOT BEEN AUTHORIZED BY THE MANUFACTURER.

During Installation and Maintenance

During the installation or maintenance of the device, the following precautionary measures should be taken into account:

- The use of protective gloves is mandatory for work and maintenance tasks.

- Whenever handling the device, ensure that the power supply is disconnected or without current. This will prevent the risk of electric shock.
- The electrical installation on which the device is to be installed must have the safety elements required by regulations, such as surge protectors, circuit breakers, residual current devices, etc.

THE INSTALLATION WHERE THE DEVICE IS TO BE INSTALLED MUST COMPLY WITH NATIONAL LOW-VOLTAGE INSTALLATION REGULATIONS. THE INSTALLATION MUST HAVE THE NECESSARY PROTECTIONS.

- Ensure that the ground connection is correct.
- As much as possible, please keep the unit away from direct sunlight. The ambient temperature and relative humidity should be as specified according to the type of installation.
- Electrical components can be damaged by corrosion; therefore, this device must be used away from corrosive environments.
- It is necessary to ensure that the device is installed securely to prevent it from falling and subsequently breaking.
- Verify that the electrical system is not exposed to contact with water, dust, or oil. It should be properly insulated.
- Exposed or poorly connected wires and conductors can expose the operator or others to a fatal electric shock.
- Use it only if it is in good condition. Replace broken, damaged, or exposed wires.
- Keep everything dry, including the cables and the power source.

General Device Description

The Operto Controller, model OC1, is a highly versatile and efficient device designed to provide access control and management of opening devices in a variety of applications. This device is powered by 5-24V DC and is installed non-intrusively into existing access control systems, serving as an ideal complement without disrupting their operation.

Highlighted Features:

1. **Independent Opening Device Function:** The OC1 can operate autonomously as an opening device, allowing secure access to controlled areas without interfering with the existing access control system. It is compatible with various locking devices, such as electronic locks, access barriers, automatic doors, elevators, and more.
2. **Communication Gateway:** In addition to its standalone function, this device operates as a gateway that facilitates communication between other opening devices and existing control systems. It integrates seamlessly into your current security infrastructure, centralizing access management and monitoring.
3. **5-24V DC Power Supply:** The OC1 is powered through an external **5-24V DC** power source.
4. **Advanced Access Control:** It offers advanced access control capabilities, allowing the management and programming of access permissions for specific users, as well as the configuration of schedules and access restrictions.
5. **Versatile Connection:** The OC1 device connects via a variety of methods, including wireless connectivity (WiFi), facilitating its integration into your existing security system without the need to modify its current operation.
6. **Intuitive User Interface:** The configuration and management of the OC1 are done through an intuitive user interface accessible via a mobile device.
7. **Event Logging:** Keep a detailed log of all access activities, allowing you to track who has entered your building and when, without disturbing the current logging capabilities.
8. **Robust Security:** Access information is stored securely and advanced encryption is used to protect user privacy and data integrity without compromising current security.

Technical Specifications

CONCEPT	DESCRIPTION
WiFi Interface	
Technology	IEEE 802.11 b/g
Frequency Range	2.4 GHz ~ 2.5 GHz (2400M- 2483.5M)
Transmission Power	+20dBm peak maximum
Receiver Sensitivity	-98dBm
Bluetooth Low Energy Interface	
Tecnología	IEEE 802.15.1
Frequency Range	2.4 GHz ~ 2.5 GHz (2400M- 2483.5M)
Transmission Power	+11.9 dBm (EIRP)
Receiver Sensitivity	-97dBm
Physical Characteristics	
Dimensions	80x75x20 mm
Weight	150 gr
Power Supply	
Voltage	Entry: 5-24V DC connection
Consumption	1 A
Environmental Characteristics	
Temperatura de Operación	De -10ºC a +70ºC
Protección	IP20
Humedad	De 5% a 95% sin saturación
Interfaces de Usuario	
Interfaz de configuración	Si
Indicadores de estado LED	Si
Botón de Reseteo	Si
Salida	

Tipo	Relé SPDT (COM, NO, NC)
Potencia del relé	60 W
Características máximas	30VDC, 2A 220VDC, 0.27A 125VAC, 0.5A 250VAC, 0.25A 30VAC, 2A

Installation

Installation of the Operto Universal Controller OC1 is a relatively straightforward process, especially as it is designed to integrate into existing access control systems without disrupting their operation. Here is a step-by-step guide to installation:

> ⚠ **Important Note: Before you begin, make sure you have access to the 5-24V DC power supply and have the user manual provided by the manufacturer for specific instructions. Also, consult a professional if you are inexperienced in installing electrical devices.**

Step 1: Preparation

- Turn off the power supply to the existing access control system and make sure there is no power connected to the location where you want to install the OC1.

Step 2: Location Identification

- Identify the appropriate location to mount the OC1. It should be close to the existing access control system and in a location that allows easy and safe access.

Step 3: Mounting the Device

- Use the tools and screws provided to secure the OC1 in the selected location. Make sure it is level and securely fastened.

Step 4: Power Connection

- Connect the 5-24V DC power cable to the OC1. Be sure to follow the polarity indications if the cable has a specific polarity.
- Connect the other end of the power cable to a 5-24V DC power source. This can be a suitable power outlet or an existing electrical circuit.

Step 5: WiFi Connection Setup (if required)

- If the OC1 connects via WiFi, please refer to the user manual to set up the WiFi connection. You will need to enter the details of the WiFi network you wish to connect the device to.

Step 6: Configuration and Integration with Existing System

- Follow the instructions provided in the user manual to configure the OC1 to your specific needs.
- If the OC1 is used as a gateway to communicate with other opening devices, make sure that these devices are configured correctly and can communicate with the OC1.

Step 7: Operational Testing

- Perform tests to ensure that the device is functioning properly. Attempt to access the access control system using OC1 and verify that the access logs are updated correctly.

Step 8: Verification of Continued Operation

- Verify that the existing access control system continues to operate smoothly after installation of the OC1. Make sure that all opening devices and locks respond properly.

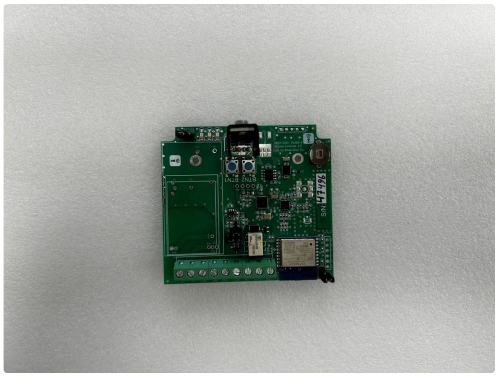
With these steps, you have completed the installation of the Operto Universal Controller OC1. If you have any questions or experience difficulties during installation, please refer to the user manual provided by the manufacturer or contact the manufacturer's technical support for additional assistance.

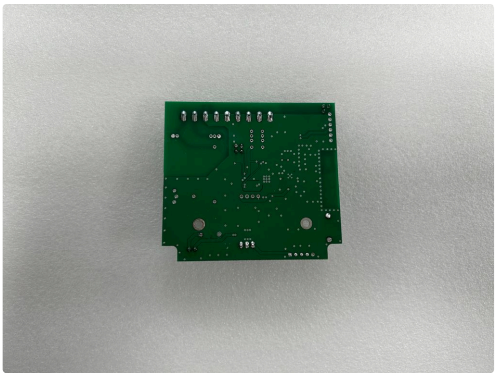
Operation

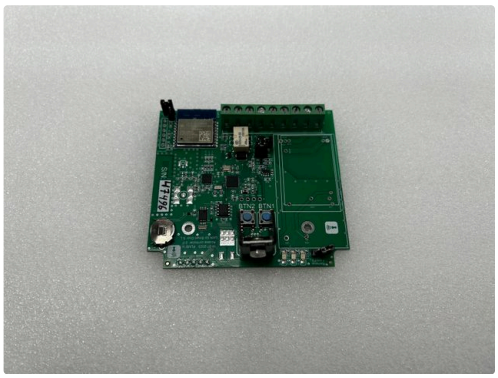
1. **Access Control in the Cloud:** The cloud access control system serves as the backbone of the system. This cloud access control is accessible through an online control panel, which is managed by the system administrator or access manager.
2. **Access Management from the Control Panel:** The access manager, who can be the building administrator or an authorised person, uses the online control panel to manage and administer access to the system. From this panel, the manager can:
   - **Assign Virtual Keys:** The manager has the ability to assign ‘virtual keys’ to users. These virtual keys are codes or authorisations that allow access to specific areas.
   - **Revoke Access:** If necessary, the manager can revoke or modify a user's access permissions.
3. **Sending Virtual Keys to Users:**
   a. Once the manager has configured the access permissions in the online control panel, he/she can send ‘virtual keys’ to the corresponding users through the system.
   b. Users receive these virtual keys in a dedicated mobile application or similar application. This mobile application allows users to view the assigned virtual keys and access them securely.
4. **Access to Corresponding Sites:**
   - When a user attempts to access a controlled area, they open the mobile application and select the corresponding virtual key.
   - The user brings his mobile device close to the Operto Controller OC1 that is installed in the lock or opening device. This can be done via Bluetooth or WiFi connectivity, depending on the configuration.
   - The OC1 verifies the authenticity of the virtual key and, if valid, allows the user access to the corresponding site.
5. **Access Logging and Notifications:**
   - Each successful access is automatically logged into the cloud-based access control system, allowing accurate tracking and auditing of who has accessed which areas and when.

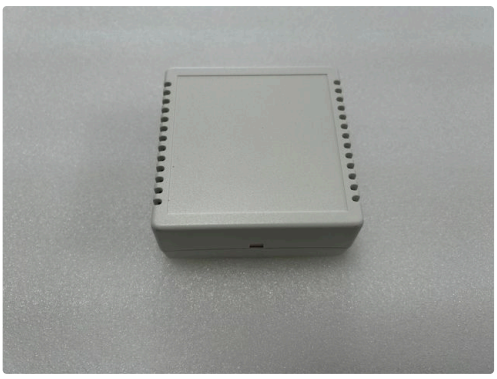
This system provides secure and efficient access control, allowing access managers to centrally manage access permissions and users to conveniently access specific areas via their mobile devices. In addition, the ability to manage the entire system from the cloud adds flexibility and ease of administration.

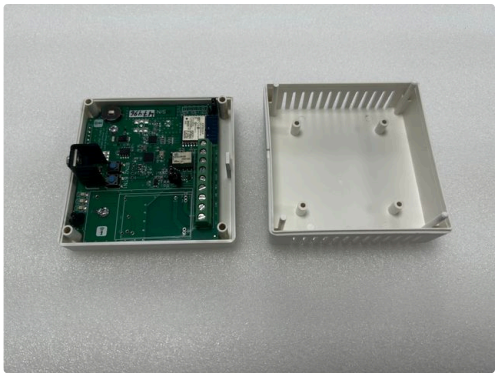
Pictures











Maintenance and storage

Repairs, cleaning and interventions must be carried out with the device completely disconnected from its power supply.

Defective or poorly maintained device may cause damage. Therefore:

- Do not carry out any electrical work unless you are qualified to do the work.
- Disconnect the power supply from the electricity supply.
- Keep the cables, earth wire, connections, primary cable in good condition. Do not operate any component in poor condition.
- Keep the device away from things that generate heat such as ovens, also damp places such as puddles of water, oil or grease, corrosive atmospheres and inclement weather.
- Use the device only for its intended purpose.

Cleaning

No special cleaning equipment is required for cleaning, no aggressive or toxic cleaning equipment may be used.

The user should follow the following recommendations for maintenance and cleaning:

- It is recommended to clean the device periodically depending on the place where it is located to avoid dust and consequently malfunction.
- The use of any chemical device is not recommended.
- Once any cleaning operation has been carried out, it is necessary to check all the components.

Tasks for a correct maintenance

The inspections shall mainly cover the following aspects:

- Existence of deformations, especially in the areas where the components are joined.
- Correct condition of the connecting elements.
- Condition of the safety elements installed.

Any anomalies must be rectified

Regularly check the fasteners.

Replace any damaged or misplaced warning stickers.

The only maintenance task required is the replacement of the button cell battery (CR927 or CR1025) which maintains the time of the device's real time clock, and is located on the printed circuit board. This battery should be checked every 3 years to ensure that it still has the correct voltage, otherwise it should be replaced with a new battery.

Mode of use

The device itself has no direct use or interaction, once installed it is not touched again except for maintenance work. The device is used with a mobile application that communicates with it via Bluetooth. Once the application (STAYmyway) has been downloaded and the access reference has been obtained, the system is activated by simply pressing the button on the application.

Warranty

The manufacturer guarantees the original purchaser a three-year warranty. During the warranty period, the purchaser or his authorised personnel will be responsible for the maintenance and replacement of any device where a problem is found upon inspection.

IMPORTANT: Scratches, knocks or falls, etc... ARE NOT INCLUDED IN THE WARRANTY.

The warranty does not include the following items:

- Accidents caused by irregular use, or mistreatment of the device by not following the instructions defined by the manufacturer.
- Any device that has been modified or whose maintenance has been carried out by personnel not authorised by the manufacturer.

The device requires, for warranty service, to be sent with proof of purchase, a detailed description of the problem and the serial number of the device obtained from your local service.

The device is warranted for three years from the date of delivery. This warranty does not include consumables. If the device uses unauthorised parts or is serviced by persons not qualified or authorised by the manufacturer, the warranty will be void. In addition, the use of unsupported materials or improper servicing may adversely affect the performance of your device and violate aesthetic device management regulations. If you have any questions about the particular device or service provider, contact the manufacturer or service representative.

Regulations

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC ID: 2BB7MOC1-EXT

IC: 30937-OC1EXT

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 one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

This device complies with the MPE limit at 20 cm as specified in 47 CFR §1.1310.