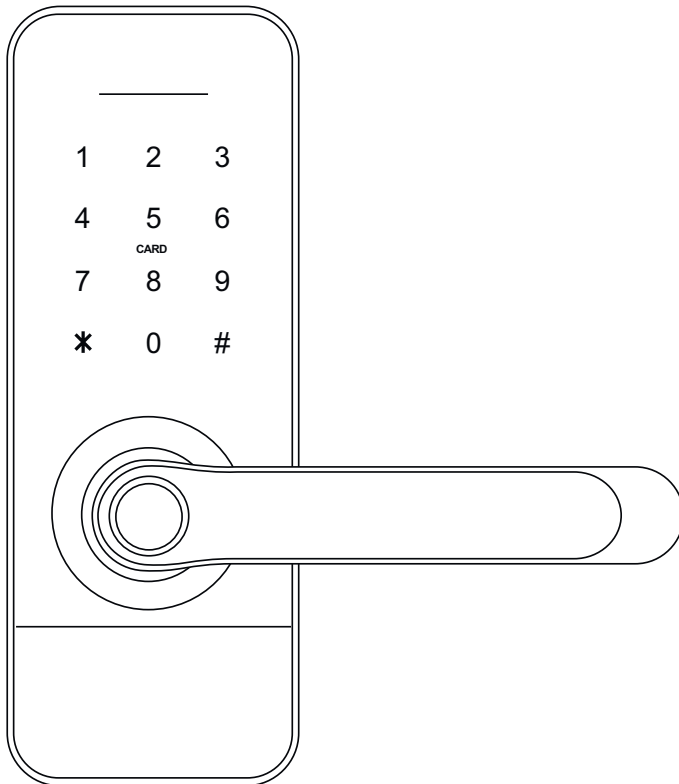




ELECTRONIC HANDLE WITH ACCESS CONTROL

ELH-02H4



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INITIAL NOTES

Please read these operating instructions carefully before installing, connecting and using the unit. In the case of any problems with understanding the content of this document, please contact the device seller.

Installation and start-up of the device by the user are possible if adequate tools are used. Nevertheless, it is recommended to have the device installed by qualified personnel.

Because of the possible damage to the handle with access control:

- the device should never be installed in doors with a door closer,
- the door in which the device is going to be installed should be correctly installed and adjusted along the door frame,
- the door leaf must close easily (without springing) and the maximum operating forces acting on the device should exceed the threshold values specified in the device specification provided in this manual,

Handles with access control should not be installed in saunas, refrigerated warehouses and other premises, where relative humidity and ambient temperature exceed the threshold values indicated in the technical specification of the device.

For added security, it is recommended to install the patented insert, which also acts as an additional emergency entry option.

The manufacturer shall not be liable for damage which may occur as a result of incorrect installation or operation, as well as unauthorised repairs and modifications.

Remember to:

- use the device according to its intended use, keep it away from moisture and fire, do not throw into fire, avoid impacts, do not crush and expose the device to mechanical damage,
- do not clean the device with water, solvents or other chemicals,
- clean the housing only with the power supply cut off, use only a wet cloth for cleaning and wait until the housing is completely dry after cleaning,
- do not carry out unauthorised modifications or repairs,

Caution!

Devices with a protection degree equal to or higher than IP44 may be installed outdoors (e.g. doorbell buttons, outdoor video intercom panels, cameras, etc.). Information about the protection degree is available in the technical specification of the device.

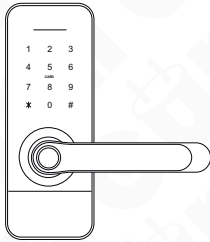
1. GENERAL CHARACTERISTICS AND INTENDED USE

An electronic door handle with access control restricts access to secured rooms for unauthorized individuals in a straightforward manner. It is designed for both left and right doors, and the universal screw hole spacing of 40-45mm allows for the use of an existing embedded lock in most cases.

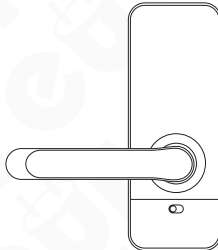
The handle's body features a proximity key reader (Mifare 13.56 MHz) and a touch keypad with a Bluetooth module. Additionally, a fingerprint reader is installed on the access control side of the handle grip.

Upon approaching the key fob reader, entering the correct PIN code, using a mobile application, or placing a finger on the fingerprint reader, the lock inside the handle is released.

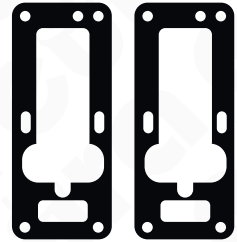
2. SET CONTENTS



Electronic door handle with access control module



Handle with built-in battery compartment



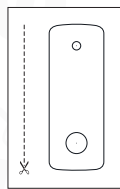
2 anti-slip pads



2 keys for manual door opening in case of emergency



Instruction manual



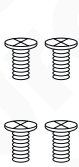
Mounting template



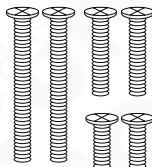
* 2 pins



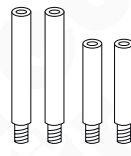
Counteracting pin washer



4 mounting screws for attaching the housing base to the handle with built-in battery compartment



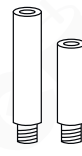
* 6 screws for mounting sleeves



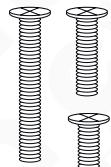
* 4 mounting sleeves



Counteracting screw for additional pin



* 2 counteracting sleeves



* 3 screws for counteracting sleeve.

* Attention

Depending on the thickness of the door leaf, the appropriate accessories - pin, sleeves, and pulling screws - should be selected.

Fig. 1.

3. STRUCTURE

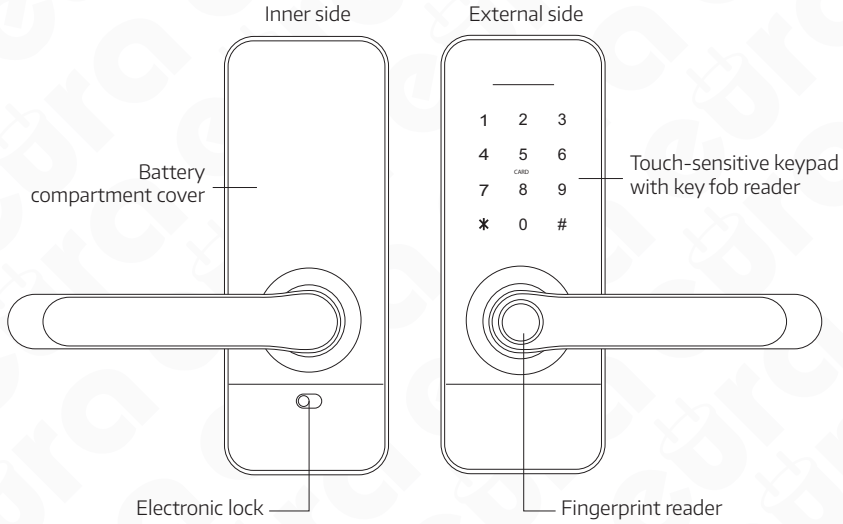


Fig. 2. Structure

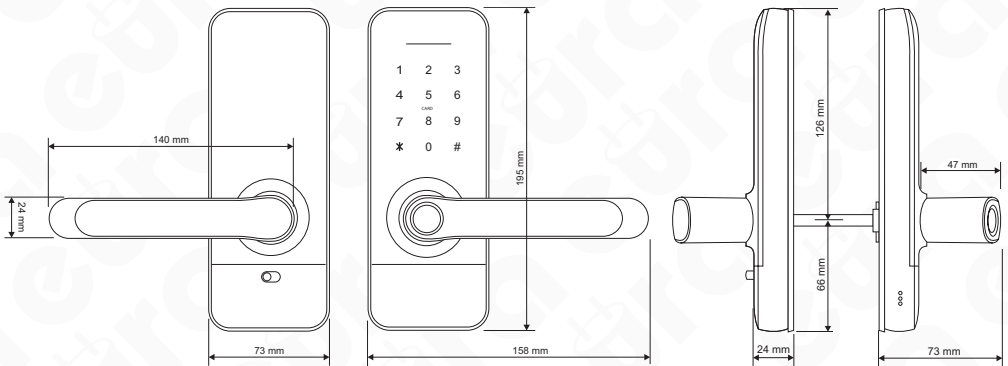


Fig. 3. Dimensions

4. PRINCIPLE OF OPERATION

After receiving a signal from the electronic access control module, the servo motor unlocks the mechanical transmission, allowing the door to be opened by simply pressing the handle on the outside. The opening is signaled by a sound. The waiting period for pressing the handle is factory-set to around 5 seconds, after which the transmission is locked again and the lock is set to wait for another signal from the electronic access control module.

From the inside of the room, the door can always be opened by simply pressing the handle. When the open doors are closed, the latch mechanism immediately engages, preventing the doors from being opened from the outside without a signal from the electronic access control module.

There is also an emergency lock release function that allows the lock to be opened with a regular mechanical key, of which two are included in the kit.

Additionally, the device has an access lock function that only allows access to the room through the administrator application or the emergency entry key.

5. FITTING THE ELECTRONIC DOOR HANDLE IN A DOOR

The kit includes pins, bushings, and screws that enable the installation of handles on doors with a thickness of 35~65 mm. During installation, it is necessary to select the appropriate length of the included components.

Caution!

For increased security, it is recommended to install electronic access control handles in mortise doors. It is also recommended to install a patented insert in the mortise lock, which allows the lock to be opened with a key regardless of the electronic handle's malfunction. During installation, it is necessary to have emergency keys on hand, which may be necessary if the door is locked with an unprogrammed lock. The lock should be installed on an open door leaf, and after installation and programming of the lock, a device operation test should be performed, also on an open door leaf.

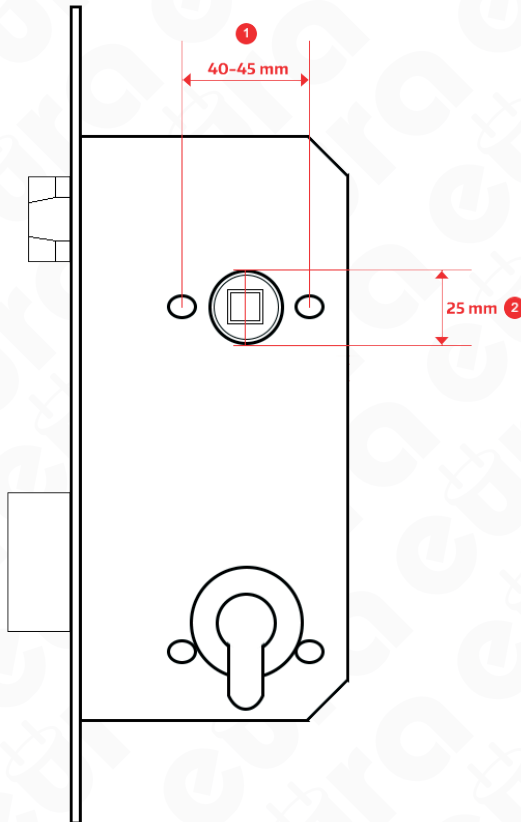


Fig. 4.

Caution!

It is recommended to install the handle using a lock with a distance of 90 mm or 92 mm. In the case of installing the handle in a lock with a distance of 72 mm, it is possible to cover part of the opening dedicated to the patented lock insert by using the appropriate mounting washer. There is also the possibility of purchasing dedicated covers for a lock distance of 90 mm or 92 mm.

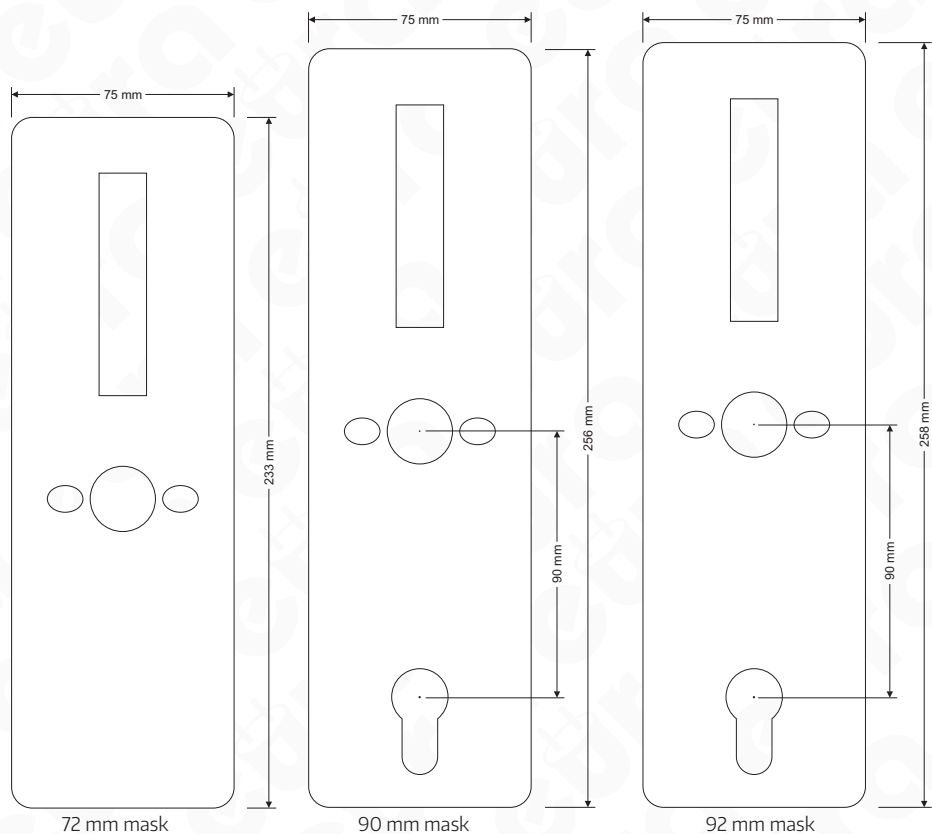


Fig. 5.

5.1. HANDLE ORIENTATION SETTING (LEFT/RIGHT-SIDED DOOR)

All electronic handles are universal, and it is possible to mount them on both left-handed and right-handed doors.

5.1.1. ORIENTATION SETTING - HANDLE FRONT

To determine the direction of opening for a handle with built-in access control, follow these steps:

- Unscrew the 4 screws from the base of the plate holding the cover (fig. 6)
- Remove the cover (fig. 6 position 1-A)
- Unscrew the locking screw (fig. 6 position 2-B)
- Set the handle in the desired opening direction (fig. 6 position 2-C)
- Tighten the locking screw
- Replace the cover and screw in the mounting screws (fig. 6 position 3)

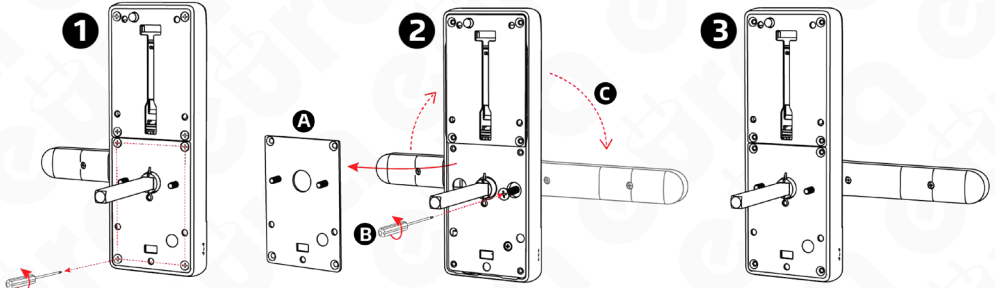


Fig. 6.

5.1.2 ORIENTATION SETTING - BACK OF THE DOOR PLATE

In order to set the opening direction of a handle with a built-in battery compartment:

- Unscrew the locking screw next to the spindle socket (fig. 7, position 1-A).
- Set the handle in the desired direction (fig. 7, position 2).
- Once the direction is set, screw in the direction-setting screw (fig. 7, position 3).

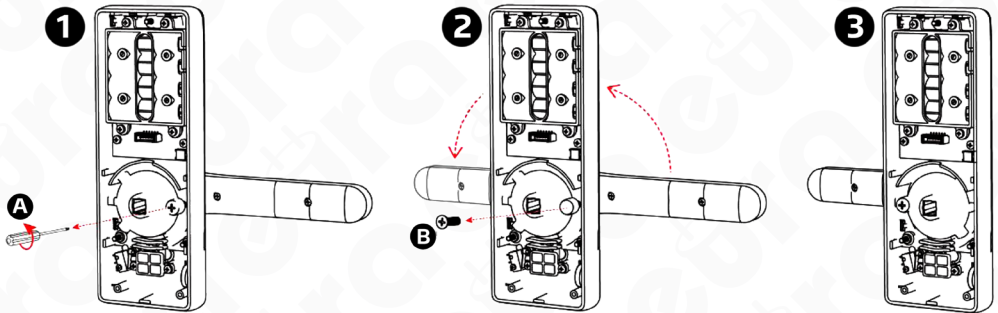


Fig. 7

5.2. PIN FITTING INSIDE THE ELECTRONIC HANDLE

The pin should be placed inside the seat available in the device body, labelled with a triangle, and the locking split pin available in the accessory set should be attached next.

Note !

When installing the pin remember that the element located in the lock body should be directed towards the bottom of the handle.



Fig. 8.

PREPARATION OF A REPLACEMENT PIN

If you wish to use a different pin than the one included in the kit, you should: obtain a pin with dimensions of 8 x 8 mm, then measure the appropriate length and cut the pin.

Note: The pin must be cut to the appropriate length to eliminate the possibility of it moving during use; otherwise, the pin socket will be at risk of damage.

5.3 BATTERY INSTALLATION

To install the battery in the battery compartment, use a screwdriver to pry open the battery compartment cover in the lower left and right corners.

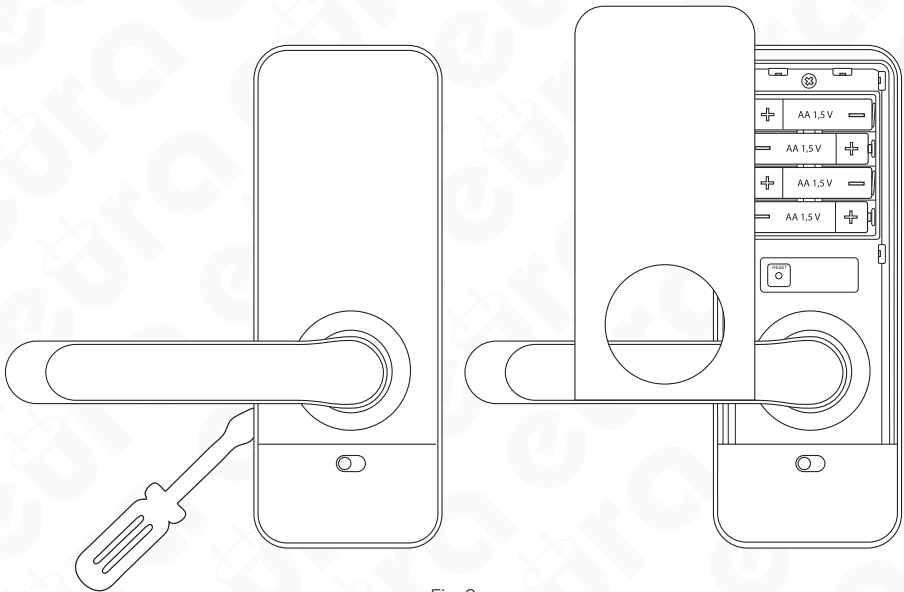


Fig. 9

Attention!

- Proper operation of the device requires the use of alkaline batteries. Do not use rechargeable batteries.
- It is recommended that the installation and programming of the handle be done with the door leaf open. After checking the correct operation, the door can be closed.
- After the first battery insertion, the handle automatically goes into the armed state, so remember to insert the batteries only after mounting the electronic handle in the door leaf. If the batteries were inserted earlier to open the door, use the emergency key, which is recommended to be kept with you during the installation.

The electromechanical handle is powered by 4 AA type alkaline batteries with a voltage of 1.5V, and can operate for approximately 1 year on one set of batteries. Battery charge status can be viewed periodically in the application after synchronizing with the handle (using Bluetooth) or in real-time (when using WiFi gateways in the system).

5.4. INSTALLATION DIAGRAM

In order to install the electronic handle in the door:

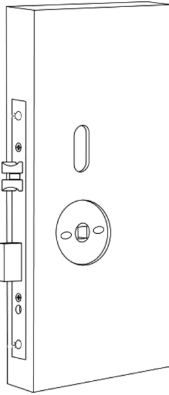


Fig. 10.

Use existing holes or prepare mounting holes according to the template included in the set.

To make the mounting holes, remove the lock from the door, make sure it complies with the standard indicated in Fig. 3, and then drill the following holes:

- two holes with a diameter of approximately 12 mm for screwing the internal and external parts of the handle.
- one hole with a diameter of 25 mm for concealing the pin socket with a locking pin.
- the third longitudinal hole (see template) is made for passing the wire connecting the front part of the escutcheon with the rear part and for the possible use of a counter pin.

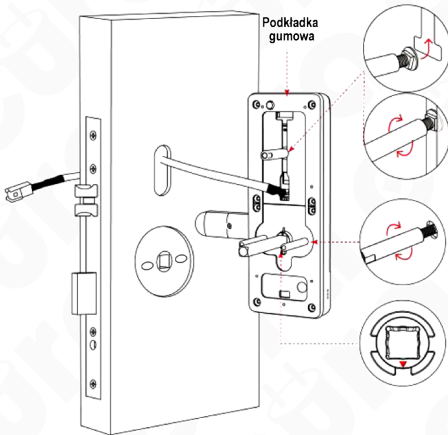


Fig. 11.

d. install the rubber washer and screw the bushings into the front body of the handle according to the diagram.

e. route the connecting wires that exit from the outer part of the escutcheon plate above the mortise lock.

f. insert the outer part of the handle along with the connecting bushings through the door panel and connect them to the previously mounted lock.

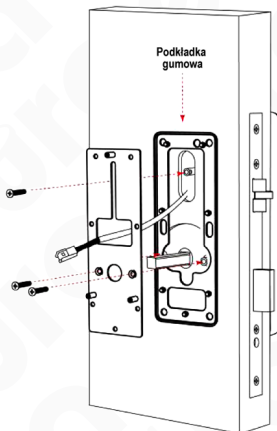


Fig. 12.

g. Unscrew the mounting base from the outside part of the handle, put a rubber washer on the mounting base,

h. Then pass the connecting wires through,

i. and then screw the mounting base using the sleeves of the inside part of the handle.

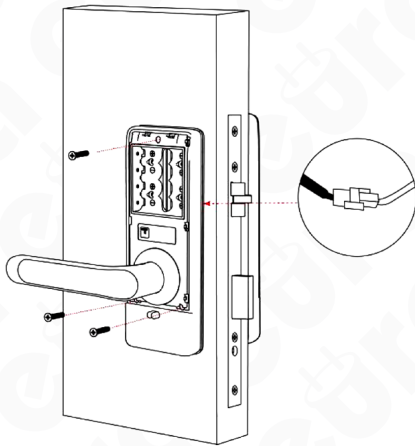


Fig. 13

- j. connect the wires that connect both sides of the handle.
- k. remove the cover of the battery compartment, then attach the rear body to the mounting base.

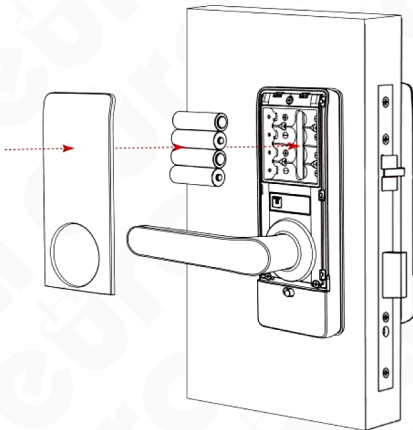


Fig. 14

- l. insert 4 AA alkaline batteries into the power compartment with a voltage of 1.5V,
- m. close the battery compartment,

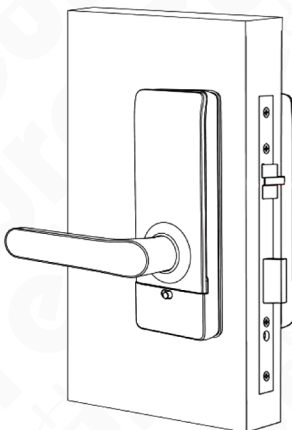


Fig. 15

- n. program the electronic door lock.

5.5 EMERGENCY ENTRY

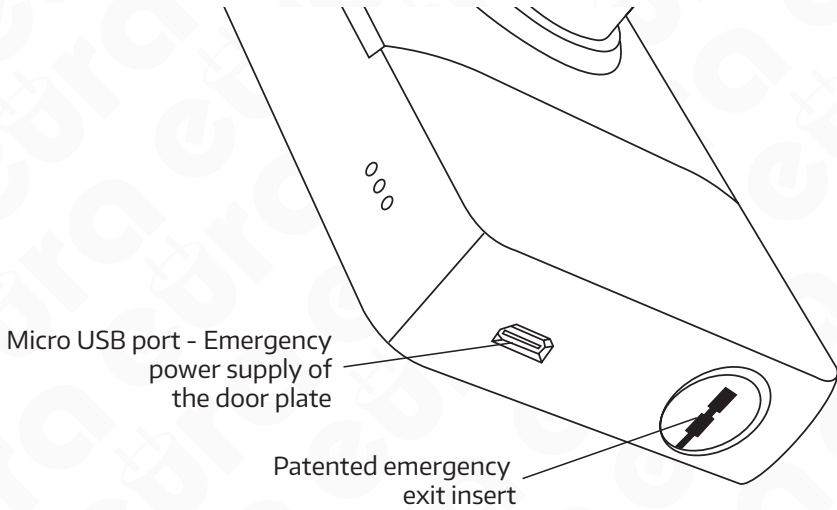


Fig. 16.

In case of need to enter the premises using the emergency key, insert the emergency key into the insert located at the bottom of the device from the access control side and turn the key to the right until a noticeable resistance is felt. Then, by pressing the handle, you can enter the room.

Note !

There is a possibility of emergency power supply of the handle in case of battery discharge. To do this, use the micro USB socket (DC 5V) located at the bottom of the external handle.

ELECTRONIC LOCKOUT

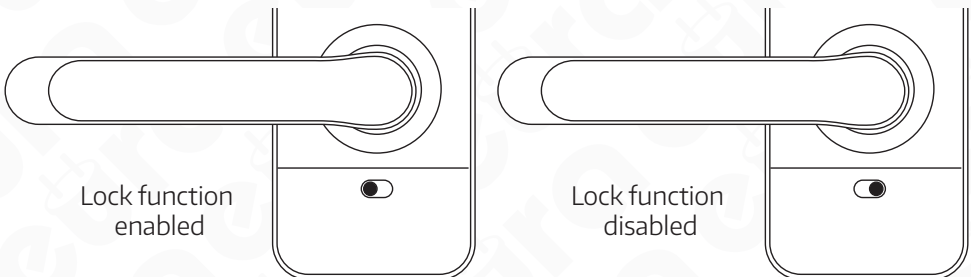


Fig. 17.

1. To activate the electronic lockout function, activate the "privacy locks" function in the application;
2. When the button is in the red color position, it is in a locked state and can only be unlocked by the administrator application or mechanical key.

7. HANDLE RESET

The handle reset button is located under the battery compartment cover. In order to reset the handle, press and hold the reset button for 5 seconds and enter the 000# code using the key code unit panel. Once the reset procedure has been performed, the factory settings of the lock are restored.

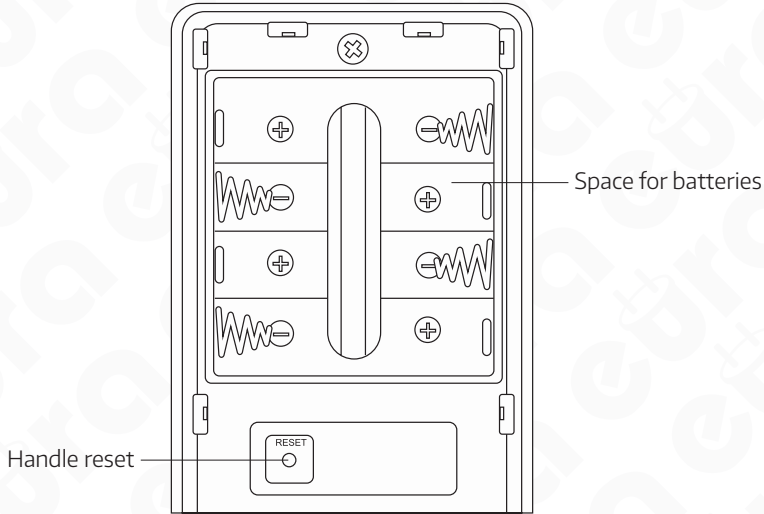


Fig. 18.

Note !

Performing a factory reset disables handle support in all applications, to which the device has been added. At the same time, the devices will continue to display the handle as an added device.

8. PROGRAMMING AND OPERATION OF THE ELECTRONIC HANDLE WITH ACCESS CONTROL

To program the ELH-02H4 electronic handle with access control, download the TTlock or TTHotel applications from GooglePlay for Android system devices or from AppStore for iOS system devices.



Comprehensive user manuals for the TTlock and TTHotel mobile applications are available at www.eura-tech.eu.

NOTE

In the case of a malfunction, if the device has to be sent to a service station, remove the handle from the mobile application first.

9. TECHNICAL SPECIFICATION

PARAMETR			
Supply voltage	6 V DC		
Power supply type	Alkaline batteries (4 x AA 1.5 V)		
Current consumption - standby mode / operation	<18 uA / 200 mA		
Max. number of users	Cards - 200, fingerprint - 200, PIN codes - 200, E-Key - no limit		
Intended use in doors	left-/right-sided		
Housing material	Zinc alloy		
Release pulse duration	5-900 sec.		
Bluetooth	Yes		
Max. radiated power (Bluetooth)	<10 mW		
Operating frequency (Bluetooth)	2.4 GHz		
Key code unit	Yes, tactile		
Max. radiated power (RFID)	<5 mW		
Operating frequency (RFID)	Mifare 13.56 MHz		
Permissible relative humidity	0-95%		
Operating temperature range	-35°C ~ +55°C		
Recommended installation location	internal and external		
Protection factor	IP55		
Maximum operating forces acting on the door plate	closing force or force required to initiate movement of the leaf		10 N
	manually operated fittings	maximum torque (Nm)	1 Nm
		maximum force	10 N
Dimensions of the external door plate (H x W x D)	195x73x72 mm		
Dimensions of the internal door plate (H x W x D)	195x73x72 mm		
Unit weight	1200 g		

Note: The manufacturer reserves the right to make technical changes without prior notice

WARRANTY

As the only distributor of the Eura products, Eura-Tech is obliged to ensure efficient warranty and post-warranty service. In the countries where Eura-Tech has neither its own service network, nor DOOR-TO-DOOR service, the quality claims are dealt with by authorised distributors of the Eura products on the basis of the signed distribution agreements. Within the framework of such agreements, Eura-Tech will ensure financing of the possible repairs and delivery of spare parts.



Any used up electrical or electronic device must not be utilized or thrown away with other waste produced by household. In order to avoid harmful effect on natural environment and human health, the device must be utilized in places that are destined to do it. To get more information about place and method of safe utilization you should turn to local authorities or company specialized in recycling.

nr rej. BDO 000015700

Eura-Tech Sp. z o.o. hereby declares that the radio device type - ELH-02H4 electronic door handle with access control - complies with the Directive 2014/53/EU.
Find the full text of the EU declaration at: www.eura-tech.eu



2022/11

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The EU Declaration of Conformity can be found at <http://www.eura-tech.eu>