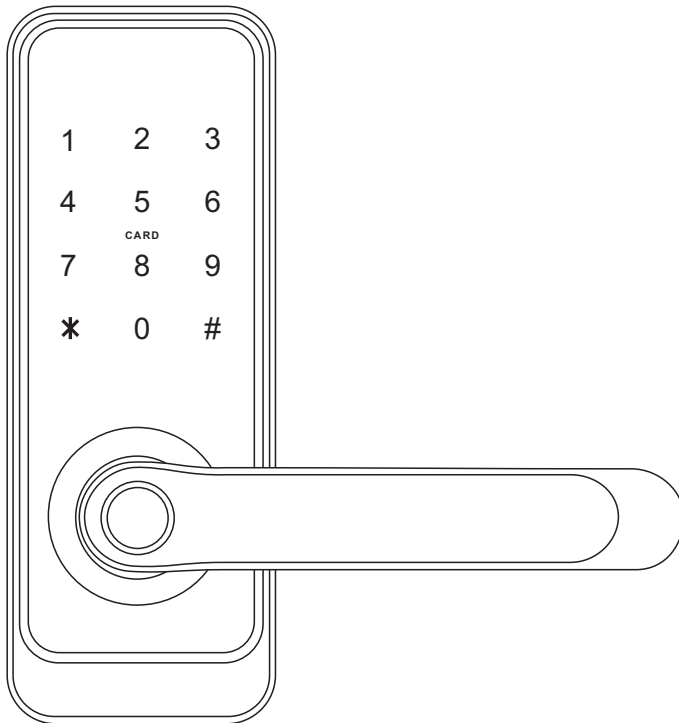




ELECTRONIC HANDLE WITH ACCESS CONTROL

ELH-01H4



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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

The electronic handle with access control provides a simple method of limiting access of unauthorised persons to protected premises. It is designed for both left- and right-sided doors, and the universal distance of fixing screws of 40-45 mm usually allows to use a mortise lock already installed in the door.

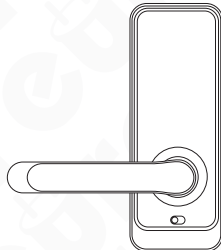
The handle body includes a contactless key fob reader (Mifare 13.56 MHz) and a numeric keypad with a Bluetooth module. A fingerprint reader is additionally installed in the handle, on the access control side.

The bolt inside the lock is released when a key fob is placed close to the reader, the correct PIN code is entered, the mobile application is used or a finger is placed on the fingerprint reader.

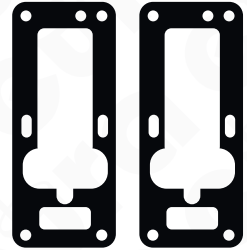
2. SET CONTENTS



electronic handle
with an access control module



handle with an integrated
battery compartment



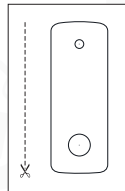
2 anti-slip pads



2 keys for manual door
opening in case of
emergency



Manual



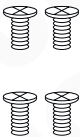
assembly template



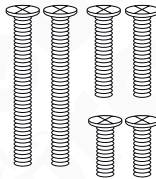
* 2 pins



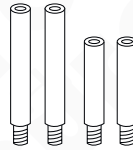
pin locking
split pin



4 screws fixing
the housing base to the
handle with an integrated
battery compartment



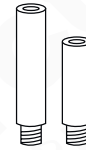
* 6 screws
for mounting
sleeves



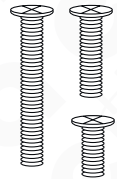
* 4 mounting
sleeves



additional
pin locking
bolt



* 2 locking
sleeves



* 3 bolts for
the locking sleeve

* Note

The relevant accessories - pin, sleeves and tie bolts should be selected according to the door leaf thickness.

Fig. 1.

3. STRUCTURE

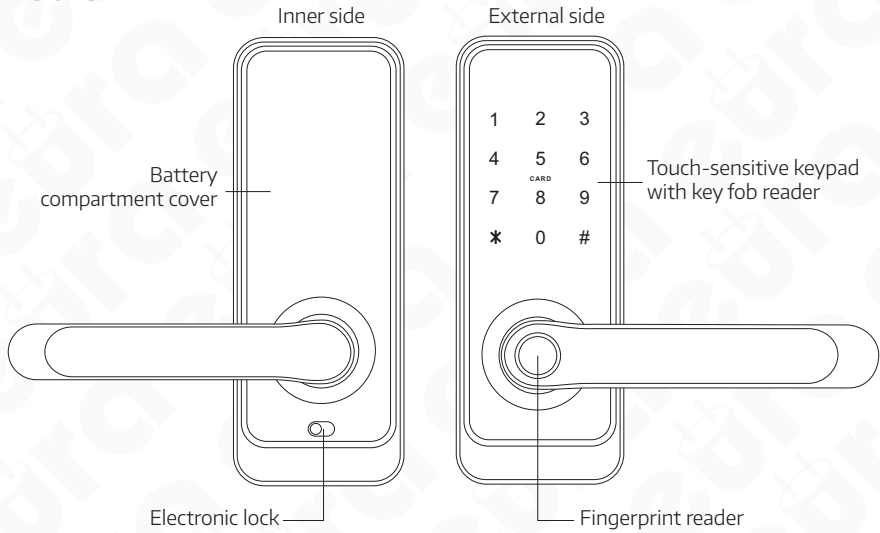


Fig. 2. Structure

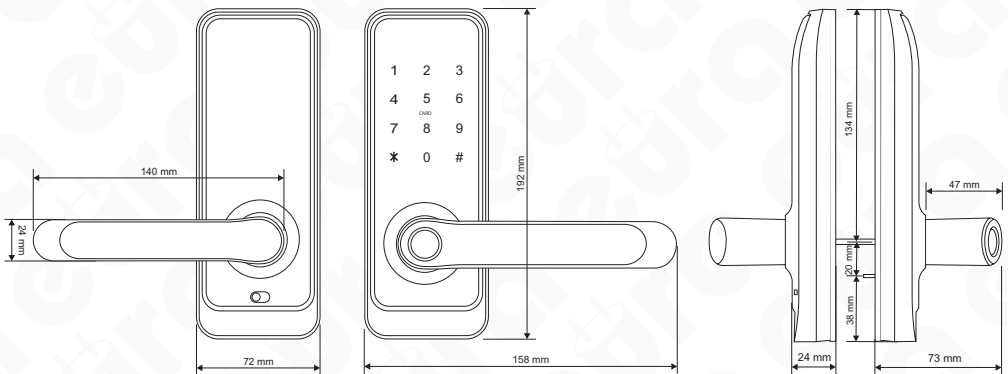


Fig. 3. Dimensions

4. PRINCIPLE OF OPERATION

When a pulse is transmitted from the electronic access control module, the servomotor releases the mechanical gear, thus enabling the door to be opened by pressing the outer part of the handle. The door opening is indicated by a sound. The handle pressing waiting period is factory set at approx. 5 seconds, and after this time the gear is locked again and the lock enters standby mode, awaiting the next pulse from the electronic access control module.

The door can always be opened from the inside (on the premise side) by simply pressing the handle. When the open door is closed, the ratchet mechanism is operated immediately, preventing the door from being open from the outside without a pulse sent from the electronic access control module.

The lock can be open in an emergency using a simple mechanical key, and two such keys are provided in the kit.

The device is additionally provided with an access lock function, which allows the premise only to be entered using the administrator application or the emergency entry key.

5. FITTING THE ELECTRONIC DOOR HANDLE IN A DOOR

The kit is provided with pins, sleeves and bolts enabling handle installation in 35~65 mm thick doors. Select the appropriate length of the provided elements during installation.

Caution!

For increased safety, it is recommended to install electronic handles with access control in rebated doors. It is also recommended to install the patented insert in a mortise lock, which allows the lock to be open using a key in the case of damage to the electronic handle.

Installation should be performed while carrying the emergency keys which may be required if the door is shut locked with the lock not programmed yet. The lock installation should be performed with the door leaf open and once the installation is done and the lock is programmed, perform a test run of the device, also with the door leaf open.

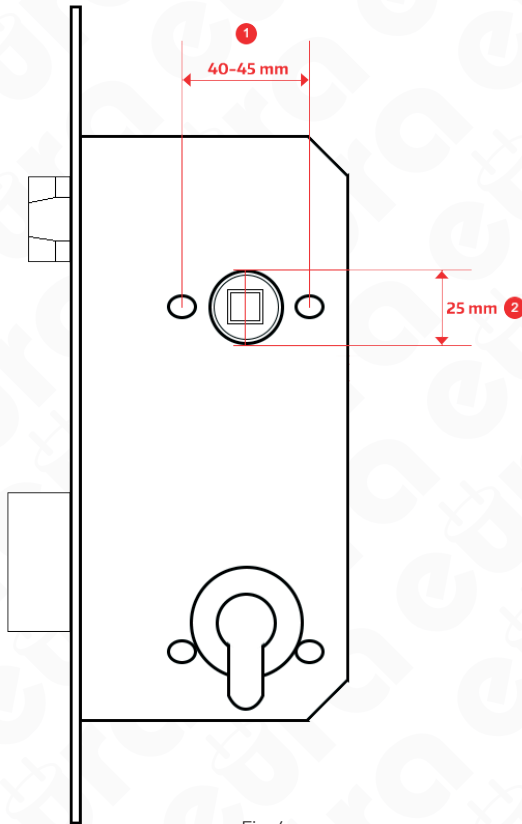


Fig. 4.

Caution!

It is recommended to install the handle using a lock with the following spacing: 72 mm, 90 mm or 92 mm. A part of the hole dedicated for the patented insert may be covered using the appropriate installation mask. Dedicated masks for the relevant distance should be purchased separately.

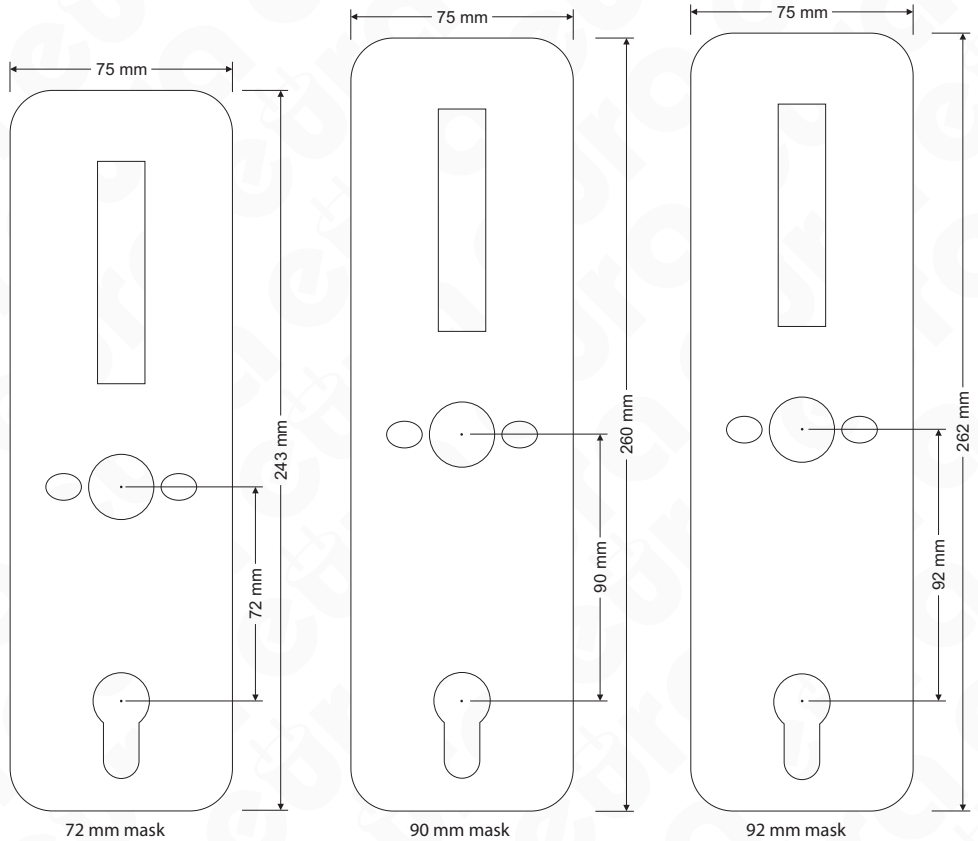


Fig. 5.

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

All electronic handles are versatile and may be installed in doors opened to the left and to the right.

5.1.1. ORIENTATION SETTING - HANDLE FRONT

In order to determine the opening direction of the handle with built-in access control:

- unscrew the 4 bolts from the base of the door plate, holding the cover (Fig. 6),
- remove the cover (Fig. 6, position 1-A),
- remove the locking screw (Fig. 6, position 2-B),
- move the handle to the desired opening direction (Fig. 6, position 2-C)
- tighten the locking screw,
- replace the cover and fasten the fixing screws (Fig. 6, position 3)

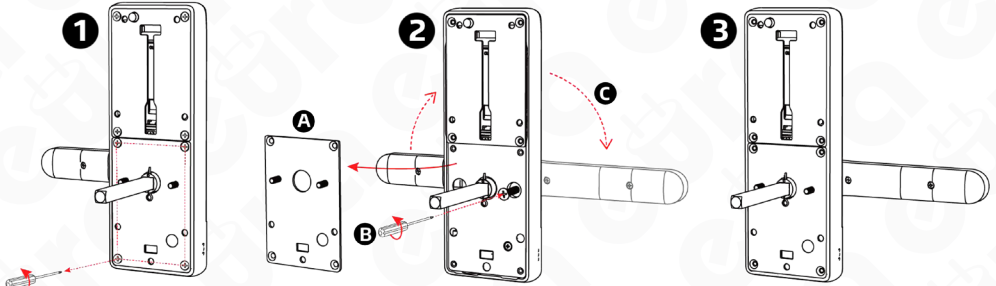


Fig. 6.

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 located next to the pin seat (Fig. 7, position 1-A)
- set the handle grip in the desired direction (Fig. 7, position 2)
- once the direction is set, tighten the screw setting the handle direction (Fig. 7, position 3).

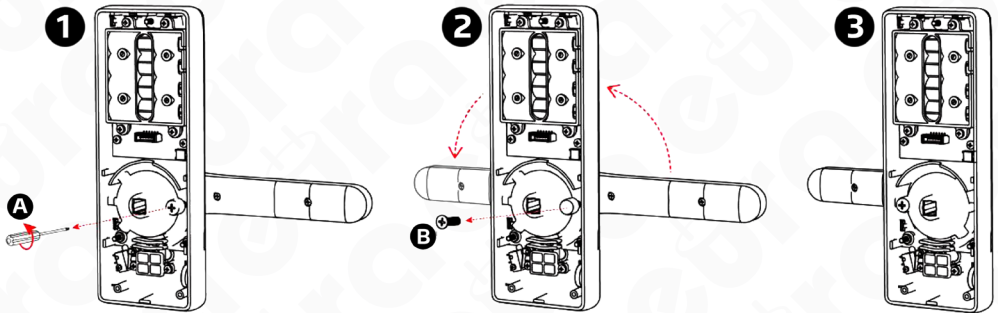


Fig. 7

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 the user wants to use a pin other than the pin provided with the kit: obtain a 8 x 8 mm pin, measure the required distance and cut the pin accordingly.

Note: The pin must be cut to the appropriate length such that the pin cannot move during use, otherwise the pin seat will be susceptible to damage.

5.3 BATTERY INSTALLATION

In order to place a battery inside the battery compartment, lift the battery compartment cover in the middle, at the top, using a screwdriver.

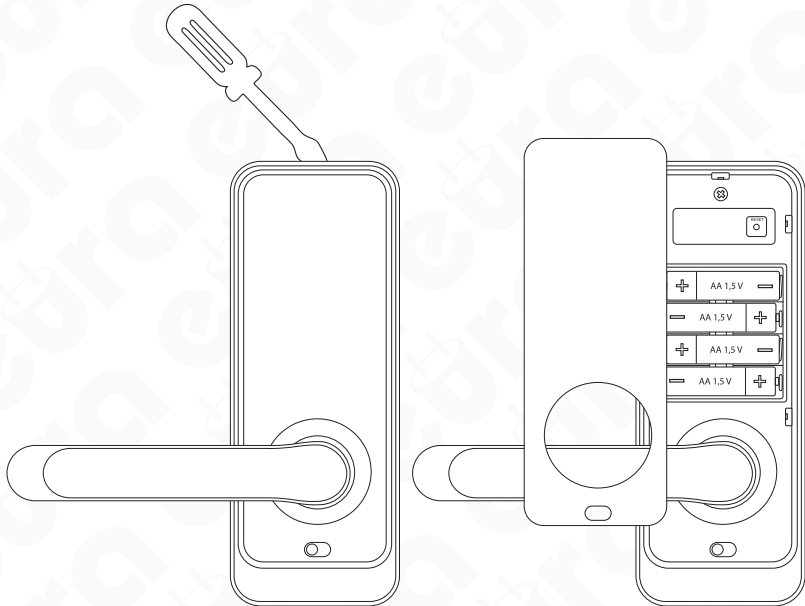


Fig. 9

Caution!

- Alkaline batteries are required to ensure correct operation of the device, do not use rechargeable batteries.
- It is recommended to carry out the handle installation and programming with the door leaf open, the door leaf may be closed once the correct operation of the handle is verified.
- When a battery is inserted for the first time, the handle will be armed automatically, thus remember to place the batteries only once the electronic handle is installed in the door leaf. If batteries were inserted prior in order to open the door, use the emergency key, which should be available during the installation.

The electromechanical handle is supplied using 4 DC 1.5 V AA type alkaline batteries and can operate for approximately 1 year using one set of batteries. The battery charging status may be reviewed in the application, after periodic synchronisation with the handle (via Bluetooth) or in real time (if Wi-Fi gates are used in the system).

5.4. INSTALLATION DIAGRAM

In order to install the electronic handle in the door:

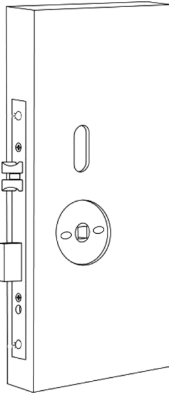


Fig. 10.

Use the existing holes or prepare the installation holes according to the jig provided in the kit.

In order to drill the installation holes, remove the lock from the door, make sure it complies with the standard indicated in Fig. 3 and next drill the holes:

- two ca. 12 mm diameter holes used to screw the internal and the external part of the handle together.
- one 25 mm diameter hole used to hide the pin seat, including the locking split pin.
- the third, longitudinal hole (see the jig) is made in order to pass the cable connecting the front part of the door plate with its rear part and for the possible use of the locking pin.

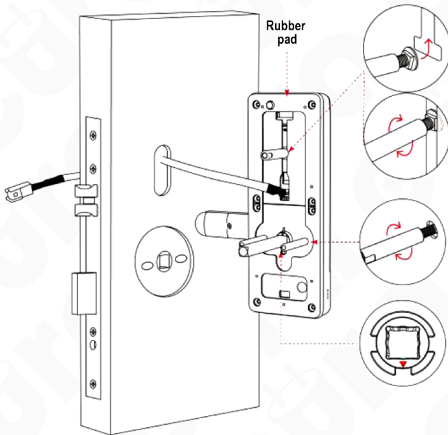


Fig. 11.

- place the rubber pad according to the drawing and screw the sleeves to the front body of the handle,
- pass the connecting cables exiting the external part of the door plate above the mortise lock,
- pass the external part including the connecting sleeves through the door leaf with the previously installed lock

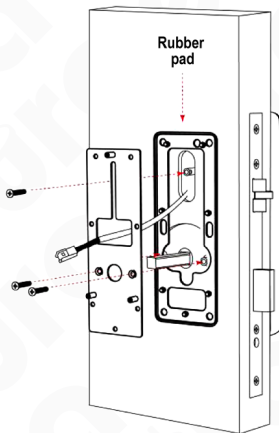


Fig. 12.

- unscrew the fixing base from the external part of the handle and place a rubber pad on the fixing base,
- next, pass the connecting cables,
- finally, tighten the fixing base using the sleeves of the internal part of the handle

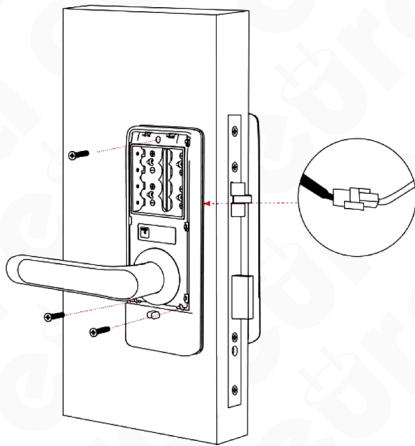


Fig. 13

- j. connect the cables connecting both sides of the handle,
- k. remove the battery compartment cover, tighten the rear part of the body to the fixing base

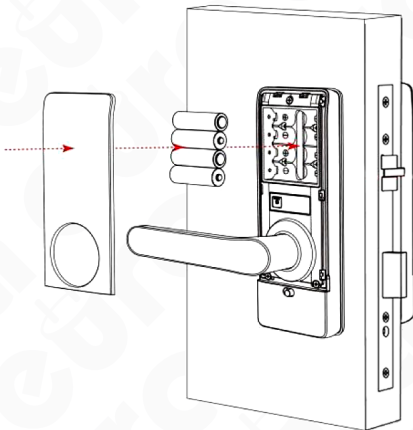


Fig. 14

- l. insert 4 1.5 V AA type alkaline batteries into the power supply compartment,
- m. close the battery compartment,

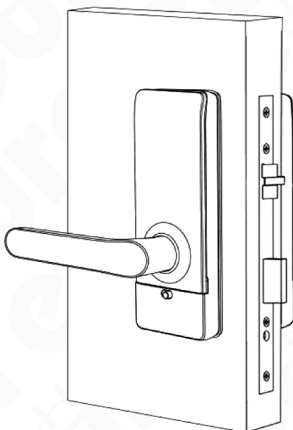


Fig. 15

- n. program the electronic handle.

5.5 EMERGENCY ENTRY

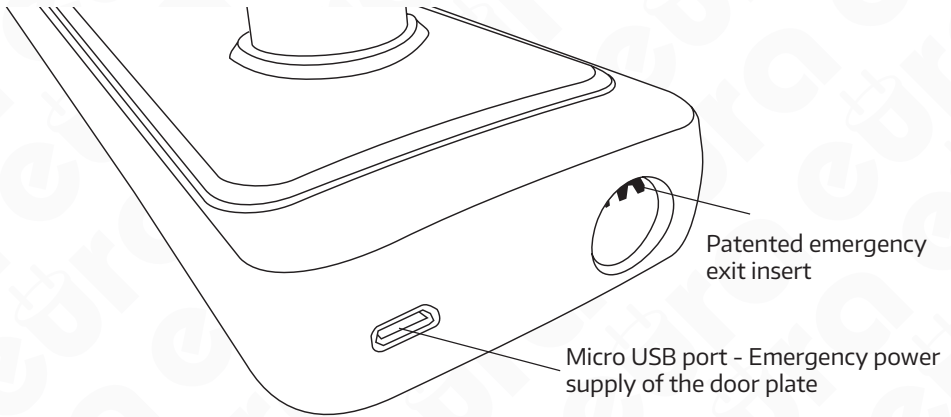


Fig. 16.

If it is necessary to enter the premise using the emergency key, insert the emergency key into the insert present at the bottom of the device, on the side of the access control panel and turn the key clockwise until resistance is felt. The premise can then be entered by pressing the handle.

Note!

The handle may be provided with emergency power supply if the batteries are discharged. To do this, use the micro USB port (DC 5 V) available in the bottom part of the external handle.

6. ELECTRONIC LOCK

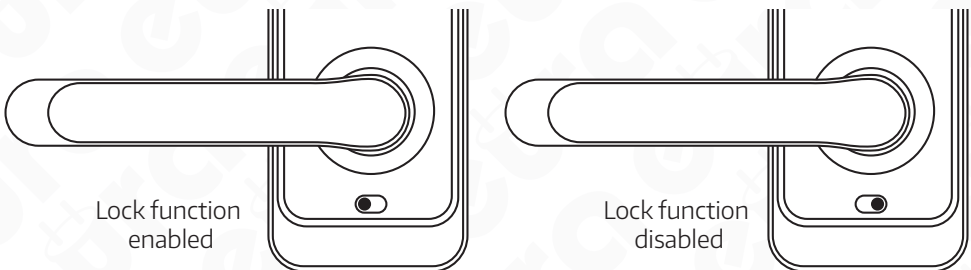


Fig. 17.

1. In order to activate the electronic lock function, activate the 'privacy lock' function in the application;
2. Once the button is located at the red position, the system is locked and may be unlocked only using the administrator application or a 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.

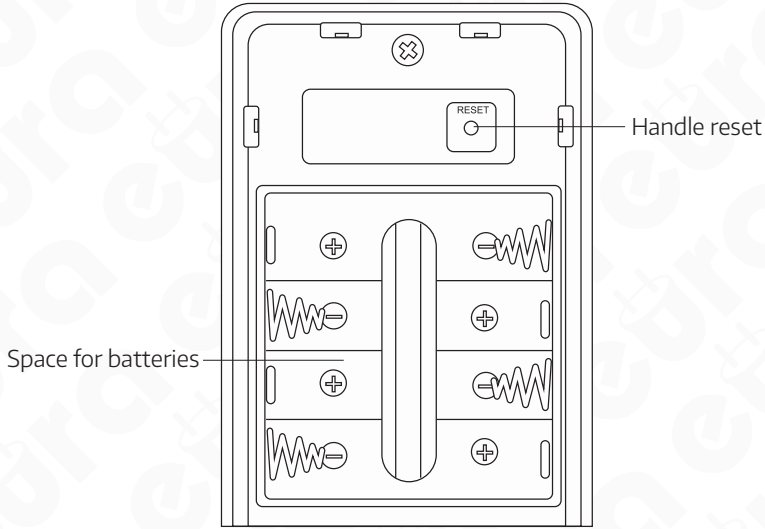


Fig. 18.

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

In order to program the ELH-01H4 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-01H4 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



11/2022

EURATECH Sp. z o.o.

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