

**keyless<sup>®</sup>**  
STAND ALONE

# Tech Handbook



## Introduction and statement of conditions

Despite the attentive and careful realization, update and integration of the contents and integrations in this handbook, these contents and information may contain typing mistakes, inaccuracies or inconsistencies for whom Keyless® does not provide any guarantee - neither explicit nor implicit - not even by way of reliability or expectation. In particular, we do not guarantee completeness, exhaustiveness and compliance with the current organization, company structure or typology, characteristics, marketability and fitness for purpose of the products, services and activities of Keyless®, who is available to provide any relevant information. Keyless® reserves the right to make adjustments and changes to the information contained in the handbook without prior notice, as well as to vary and to change the products, the services and the activities described herein, without it rising any kind of rights for a third-party. In order to reduce paper consumption, we decided to minimise the description inherent to the use and installation in this manual, whilst maintaining the greatest clarity. It is important to keep this handbook to be able to consult it at any time. In case of sale, disposal or removal of the product, make sure that the handbook is given to the new owner, to inform him about the functioning and the related warnings. Read the instructions carefully: they contain important information about installation, use and security. In the interest of improving the internal design, the operational functionality and/or the reliability, Keyless® reserves the right to make adjustments and changes to the products described in this handbook without prior notice nor notification in written or electronic form. Keyless® accepts no responsibility during the use or the implementation of the products or the circuit diagram described herein.

## Rules and guarantees

All Keyless® products have a 24 months warranty from the date of purchase over the whole European territory.

The warranty is valid for products found to have structural manufacturing or functional defects. Under no circumstances should the warranty be understood as onsite, but offsite. The detecting of defects, the dismantling, the shipment of the damaged product to Keyless® headquarters, as well as the delivery charges regarding the intervention, have to be carried out by the installer. Keyless® guarantees the product and its functioning only if the product is correctly installed without adjustments for its only purpose of use; using the product not as intended invalidates the warranty.

Keyless® is not responsible for damages caused to things or people, for the inappropriate use or installation of the product, nor for damages resulting from non-use due to damages or defects, loss of earning, inactivity or non usability. It is up to the installer to communicate a possible defect as soon as possible via e-mail to the address [assistenza@keyless.it](mailto:assistenza@keyless.it).

After a brief evaluation following the handbooks recommended by Keyless®, the defected or malfunctioning product can be returned to be repaired or replaced. The new or repaired product will not have a new 24 months warranty, but it will be covered by the official warranty given at the time of purchase.

All products damaged by power surges, thunderstorms and adverse weather conditions, earthquakes, floodings or break-in attempts performed through mechanical manipulation, erroneous connections or reversed polarity are not covered by warranty.

**All legal disputes are reserved to the jurisdiction of the Foro of Treviso (Italy).**

## Guidebook for the installation

All Keyless® products are certified and under warranty only if **installed by qualified personnel.**

Before you begin the installation, make sure that the system is highly compatible with your power circuit. Under no circumstance is Keyless® and its retailers responsible for erroneous purchase, incompatibility of the products sold and/or installed by unqualified personnel, loss of earnings or money due to malfunctioning of Keyless systems.

THE INSTALLATION AND THE CONNECTION OF THE PRODUCTS MUST BE CARRIED OUT WITHOUT A/C POWER.

Cut the power from the electrical panel or the counter; it is good to install a thermal magnetic circuit breaker with 6A at least to maintain the system, it also has to conform to the local standards in force.

EARTHING THE POWER SUPPLY IS REQUIRED BY LAW.

Keyless® accepts no responsibility for possible damages suffered by people, things, pets or property, due to non-compliance with the rules described herein. The system downstream of the power supply is low voltage (12V) and it does not constitute a danger for people.

# WARNING!

The Keyless units interact with the **negative** terminal.

Relay, door opener button, Day & Night, sensor, etc.

They are connected or bridged  
EXCLUSIVELY to NEGATIVE (GND).

Incorrect connections (positive + 12V)  
**irreversibly damage** the control unit.

It's **Expressly Forbidden** Power third-party equipment  
(Remote controls, electric strikes, electric locks, door opening, relays, etc.)  
with the power supply unit.

Failure to comply with such notice ago  
decaying instantly warranty.



# WARNING!

Lead-acid batteries of the Keyless units  
They must be changed periodically according to their usage status.

Generally a lead-acid battery has a maximum duration of 24 months.  
The duration of time it's determined by the structure of the lead-acid batteries.

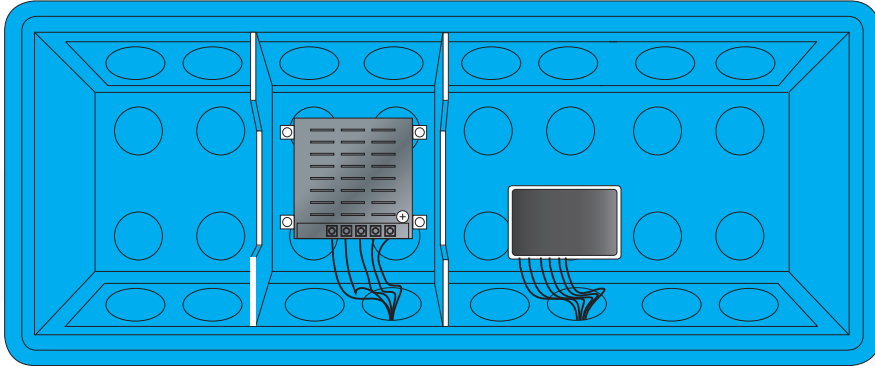
To ensure the continuity of exercise of the Keyless units in case of power failure,  
it's good practice to replace the lead acid battery every 12 months.

**Violation of such notice  
NOT guaranteed the continuity exercise  
in case of power failure to the control units Keyless**



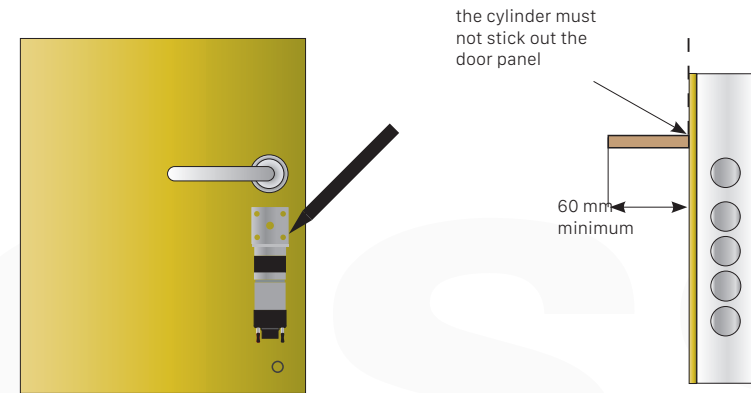
## Position and fix the control unit

The external control unit can be placed anywhere desired, within a maximum distance of 100 meters from the door within an internal wall box.



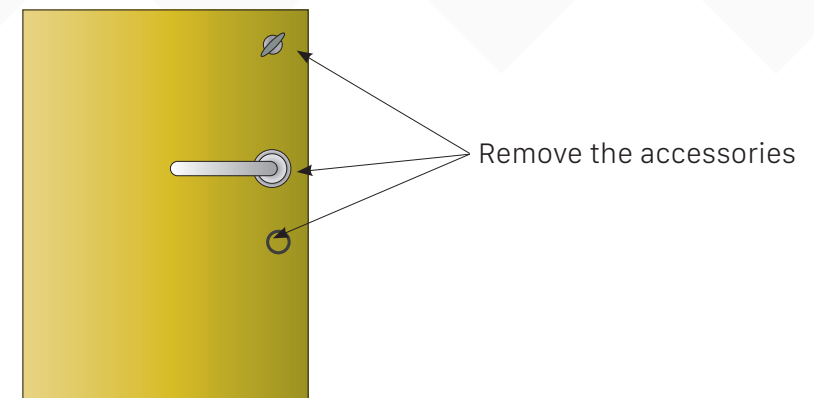
## Position the engine and draw the position

Remove the knob inside the door, place the head of the engine by inserting the shaft of the cylinder/knob in the hole with bushes (THE CYLINDER MUST NOT STICK OUT THE DOOR PANEL, UNLIKE THE SHAFT THAT MUST STICK OUT AT LEAST 60 mm.) Draw with a pencil the perimeter of the engine and the head, and mark also the holes for the screws and for the cables.



## Dismantle the door panel and the accessories

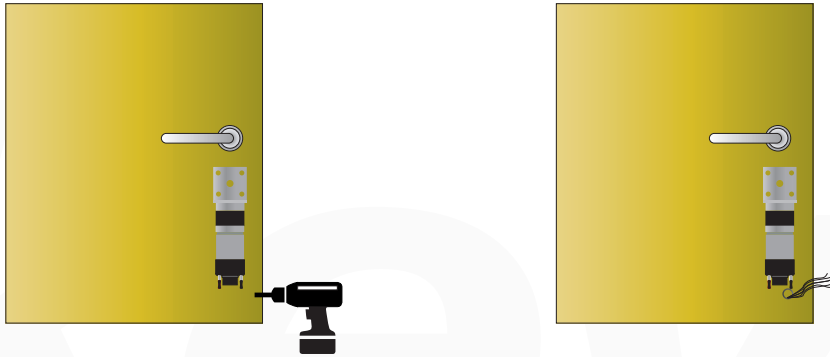
Unscrew the peephole and the knob of the door chain, remove the handle through the specific fastenings (grub screws, fasteners), take off the tab inside the cylinder. Unscrew the frames of the panel and the possible fastenings ad hoc (it depends on the version of the door), remove the door panel.



## Reassemble the door panel

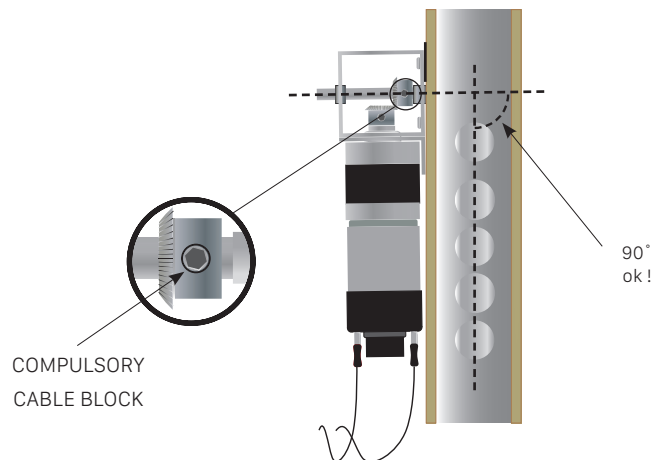
**Warning !! Before you close the control unit, see the scheme "Settings and special controls" on page 15**

Drill with a 10mm diameter bit the internal door panel where drawn with the pencil. Reassemble the door panel and its components (peephole, handle, knob, door chain), connecting the cables to the engine through the 10mm hole.



## Place and fix the engine

Insert the cylinder head on the shaft. Fix the head of the screws on the door panel being careful NOT to change the perpendicularity of the shaft to the cylinder. If it does not fit, add volume on the head with paper or plastic inserts. Then fix the screws, and BEFORE you tighten the grov screw of the bevel herical gear with a 2,5mm socket wrench, test if the shaft FREELY ROTATES through the knob.

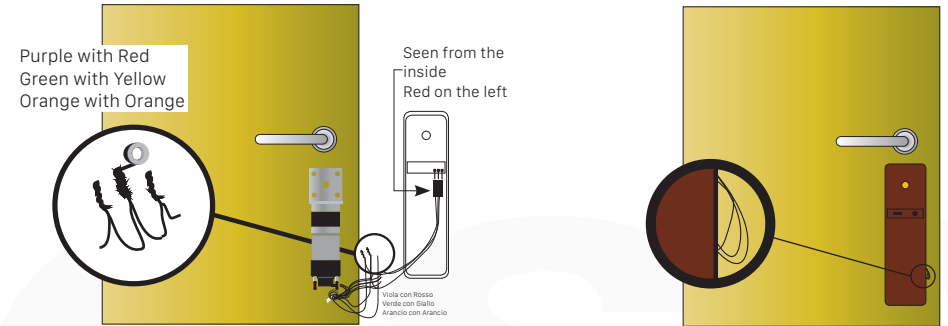


## Place, connect and fix the cover with buttons

Connect the two wires (2x0,50mmq) on the provided Fastons.

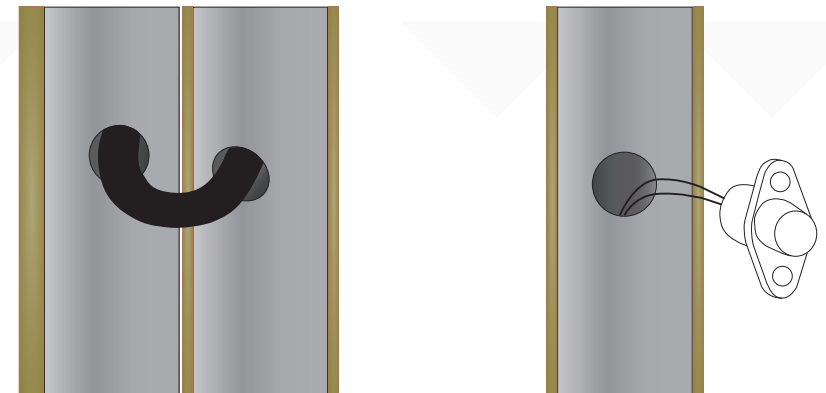
Fasten with duct tape the control wires of the Cover with the same colors of the ones on the control unit.

Insert the Cover on the engine and fix the provided screw being careful NOT TO PINCH THE WIRES by placing them on the back of the engine. Then fix the knob on the cylinder shaft.



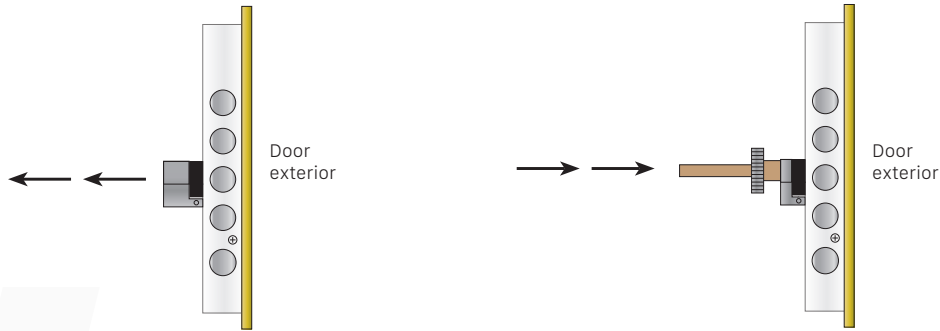
## Position and fix the cable gland and the sensor

Pierce the door stop and the hinge frame to place and fix the cable gland. Install the door sensor and check if it works when the door is closed; if it does not, adjust it with frames.



### Install the special half cylinder

Unlock the cylinder block screw (if any), extract the cylinder.  
Insert and lock the special half cylinder.



### Place and fix the Inside motor plate

The Inside motor plate, to place the engine in the internal part of the armoured door, is to be fixed with the two screws of the defender with a 38mm interaxis distance.

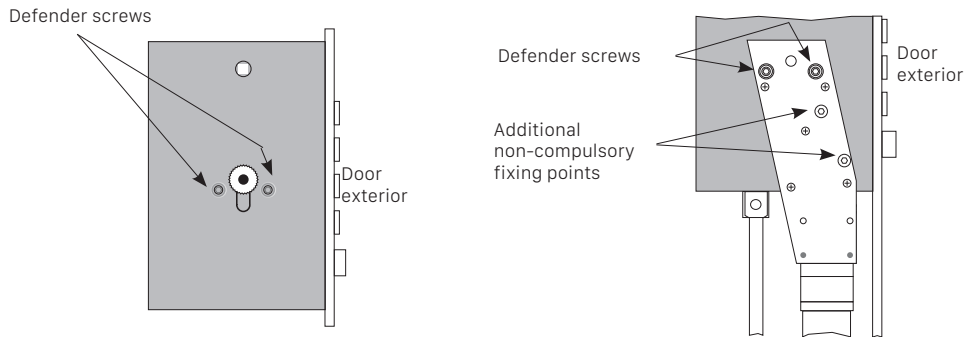
Unscrew and remove the screws of the defender.

Place the motor plate being careful to wedge the teeth of the gear wheel into the cylinder, insert the screws of the defender, fix all the elements.

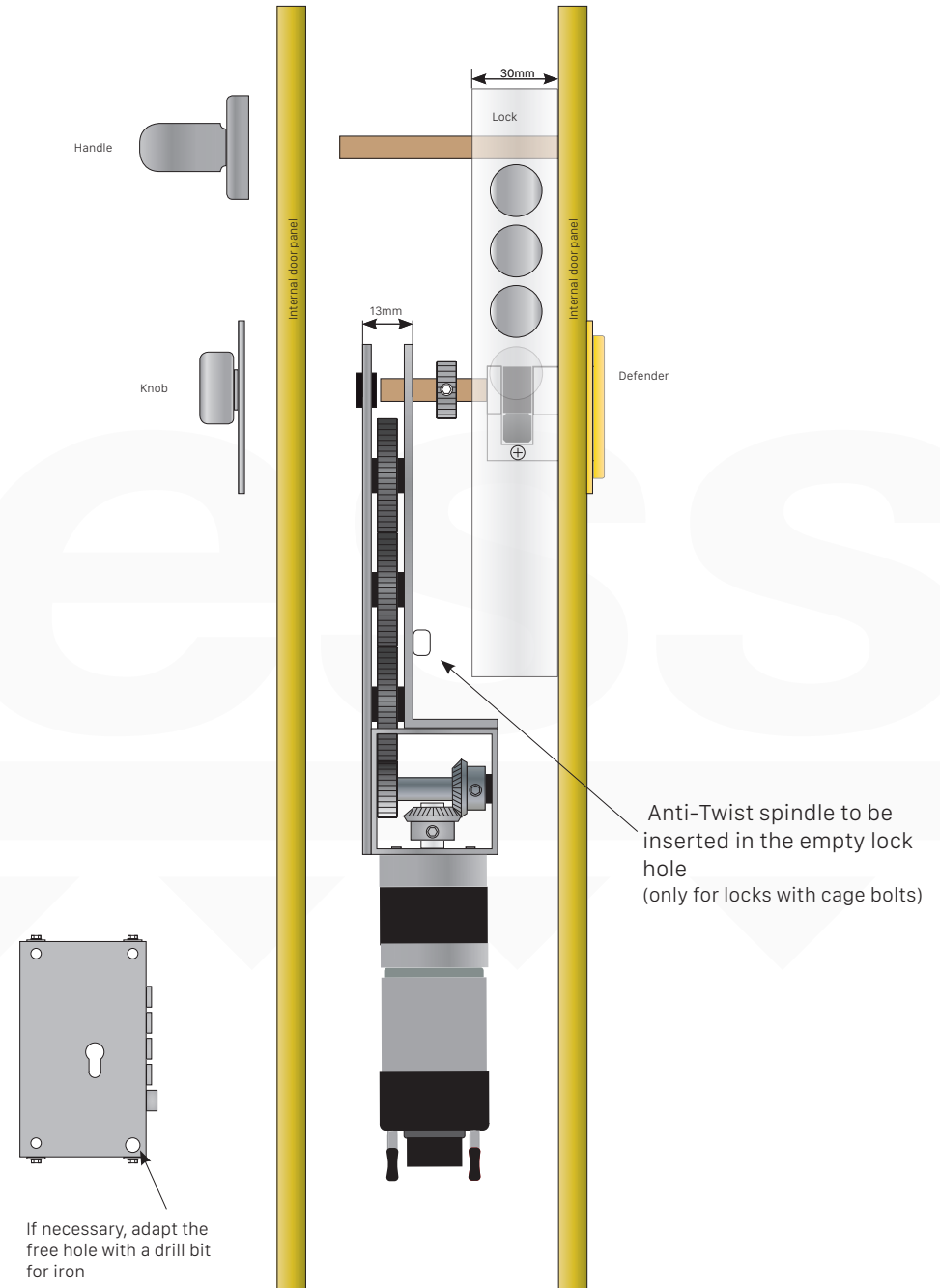
The plate is also suitable to be fixed on a third point (according to the version of the locks). In case there are cage bolts, fix the third point in as herein described.

WARNING!!

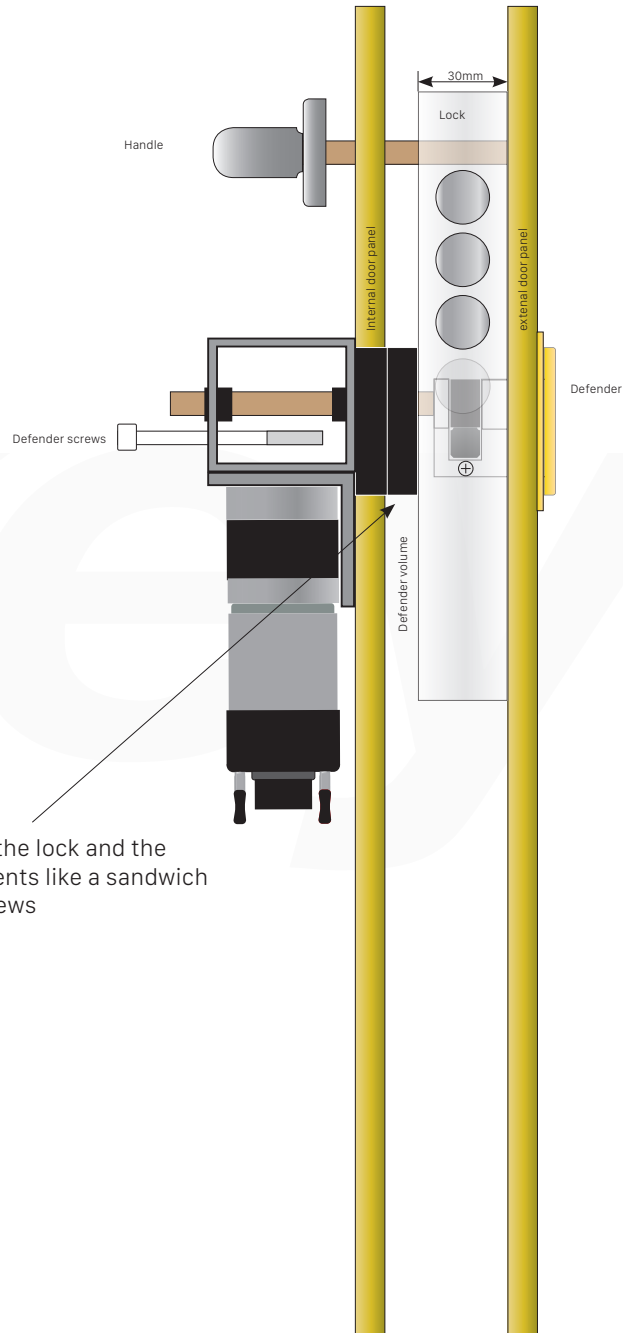
**DO NOT use any kind of lubricant for the gears.**



### Detail for installation with spindle for cage bolts



**Detail for external installation for armoured doors with defender interaxis distance 31/38**



Add volume between the lock and the panel, fix all the elements like a sandwich with the defender screws

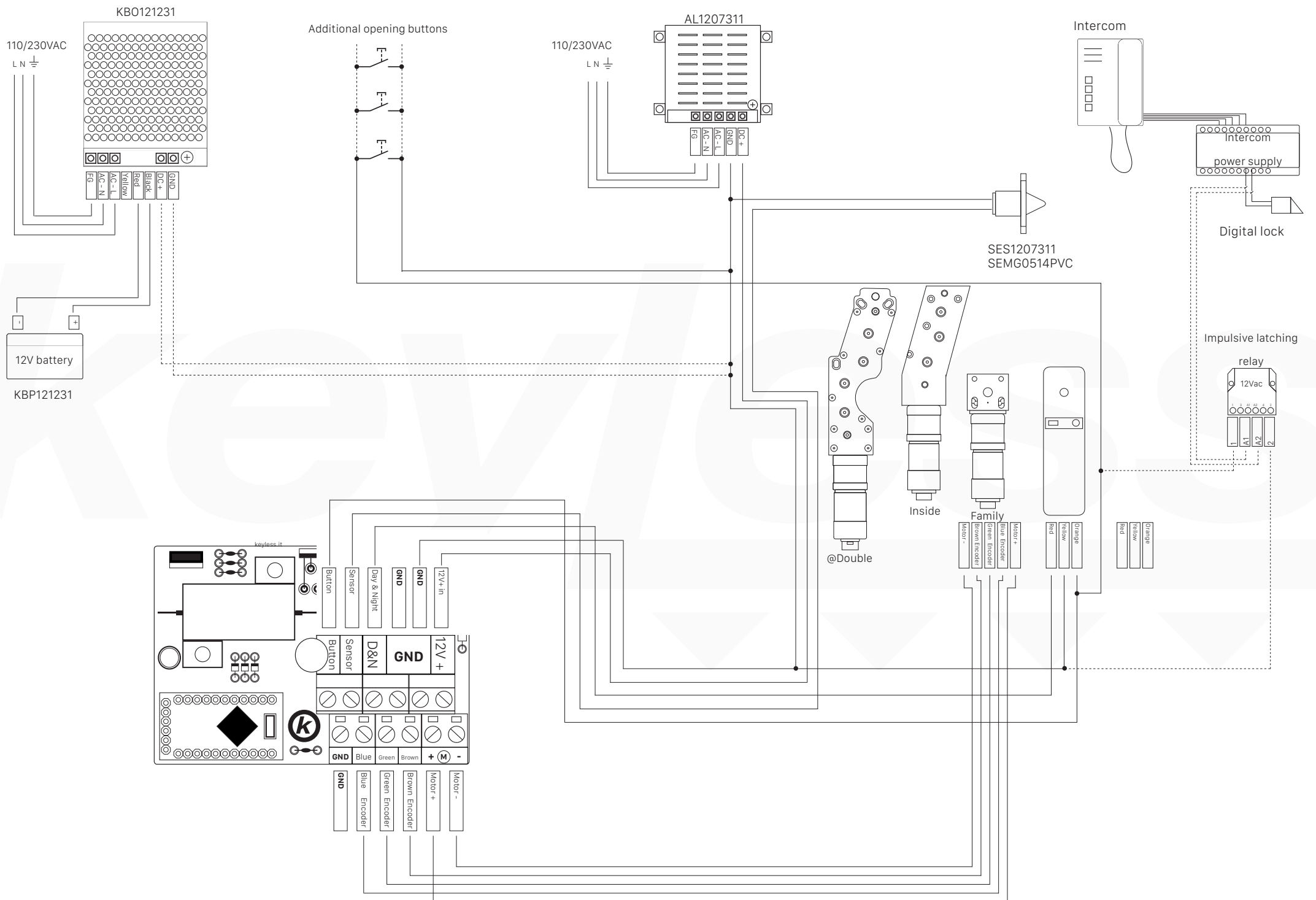
**Cable and connection**

Connect the Central unit with the appropriate cable various components (keyboard, sensor, motor commands), taking care to follow the legend colors and not reverse the polarity.

FOLLOW THE SCHEME







## Settings

### First start

Connect the power supply to the control unit and switch the power on.

turn off the jumper **RESET**  
**the green LED flashes quickly**

Close the door and keep pushing it to set the interlock limit (**opens all / closes all**)

**turn on the jumper RESET**  
**the GREEN LED flashes**  
**(once every 10 seconds)**

### RESET

sets the interlock limit

jumper on  
jumper off

normal functioning  
sets the interlock limit  
(LED flashing quickly)

### How to proceed

open the door and turn the jumper off  
Close the door (keeping it pushed)  
Wait the setting cycle (interlock limit)  
Turn on the jumper  
(LED flashing slowly)

### error yes

set the reopening of the lock if there is an obstacle in the closing  
(as notification of the problem)  
**for obstacles before 50% of the complete locking**

jumper on  
jumper off

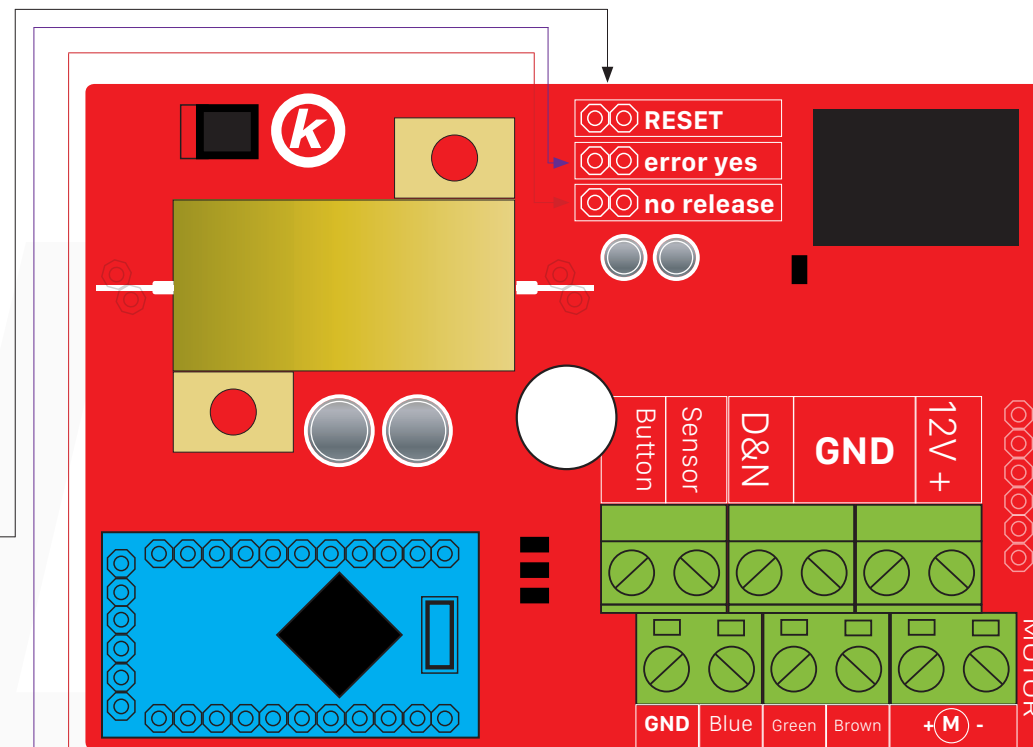
no reopening (**no** obstacle notification)  
reopens 3 times (obstacle notification)

### no release

setup the release lock partial

jumper on  
jumper off

release lock partial  
DON'T release lock partial



### WARNING

when closing the door  
(sensor closed),  
the engine locks the door  
after 3 seconds.

**(fixed time, it is not possible to change it)**