

iDBox – Quick Guide

Thank you for purchasing the controller iDBox!
For more information, please check the link:

<https://www.controlid.com.br/docs/idbox-en/>

1. Necessary Materials

In order to install your iDBox, you will need the following items: drill, wall plugs (internal diameter 3.5mm) and screws, screwdriver or Philips, 12V power supply with at least 1A and electronic locks (according to your projects).

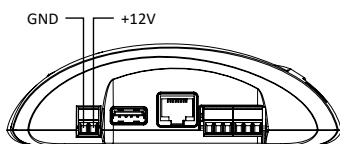
2. Installation

For the correct operation of your iDBox, the following precautions should be taken:

- Install in a place that is not exposed to direct sunlight, rain or any other natural phenomena.
- Before securing the device in place, ensure all connecting cables are correctly routed towards the device.

The device installation process is simple and should follow the diagram below:

1. Use the reference pattern in the back of this guide to drill the 4 holes required to install the iDBox and fit in the wall plugs.
2. Insert the wall plugs of number 5 (internal diameter 3.5mm) in the drilled holes.
3. Place the device in the wall using the screws.
4. Connect the iDBox to a 12V power supply.



⚠ The iDBox must be energized by a 12V/1A power supply using the 2-way connector located in the side of the product.

3. Description of the Connection Terminals

On the sides of the controller iDBox, there are several terminals that can be connected to locks, push buttons, sensors, and readers. Moreover, the equipment has a network port (Ethernet) and a USB port to allow communication with other devices. Please check the following diagrams in order to identify the connectors and their respective functionalities.

iDBox – 2 pins connector (GND + Power supply)

GND	Power supply ground
+12V	Power supply +12V

⚠ The connection to a +12V power supply with at least 1A is fundamental for the correct operation of the device .

iDBox - 3 pins connector (Serial)

GND	Power supply ground
RX	Serial Input
TX	Serial Output

iDBox – 3 pins connector (RS485)

GND	Power supply ground
485A	RS485 Communication (Pin A)
485B	RS485 Communication (Pin B)

⚠ The pins 485A and 485B are indicated to the serial communication using the standard RS485.

iDBox – 6 pins connector (Card Readers)

+12V	Power supply +12V
GND	Power supply ground
DATA 0	Wiegand input
DATA 1	Wiegand input
BEEP	Trigger for iDProx's buzzer
LED	Trigger for iDProx's LED

⚠ External wiegand card readers must be connected to the inputs DATA0 e DATA1.

iDBox – 6 pins connector (Door Control)

GND	Power supply ground
BT	Push button input
DS	Door sensor input
COM	Common contact
NC	Normally closed contact
NO	Normally open contact

⚠ The push button and door sensor inputs can be configured as NO or NC and must be connected to dry contacts (switches, relays etc.) between the GND and respective pin

4. iDBox Settings

The configuration of all the parameters of your new iDBox can be set through the LCD display (Graphic of user Interface – GUI) and/or through a standard internet browser (as long as the iDBox is connected to an Ethernet network and has this interface).

In order to configure for example the IP address, subnet mask and gateway, through the touch screen, follow these steps: **Menu** → **Settings** → **Network**. Update the information as you wish and connect the device to the network.

5. Web Interface Settings

First, connect the device directly to a PC using an Ethernet cable (cross or direct). Next, set a fixed IP on your computer for network 192.168.0.xxx (where xxx is different from 129 so that there is no IP conflict) and mask 255.255.255.0.

To access the device settings screen, open a web browser and enter the following URL: <http://192.168.0.129>

The login screen will be shown. The default access credentials are:

- Username: **admin**
- Password: **admin**

⚠ Through the web interface you can change the device's IP. If you change this parameter, remember to write down the new value so that you can connect to the product again.

6. Tipos de Fechaduras

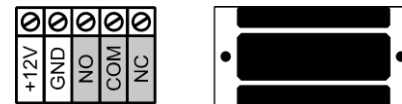
iDBox is compatible with almost all of the locks available in the market.

Magnetic lock

The magnetic or electromagnetic lock consists of a coil (fixed part) and a metal part (armature plate) which is attached to the door (mobile part). While there is a current passing through the magnetic lock, the fixed part will attract the mobile part. When the distance between these two parts is small, ie. when the door is closed and the dock is on top of the fixed part, the attraction force between the parts can reach over 1000kgf.

Thus, the magnetic lock is normally connected to the NC contact of the activation relay, as we normally want for the current to go through the electromagnet and, if we want the door to open, the relay must open and interrupt the current flow.

In this guide, the magnetic lock will be represented by:

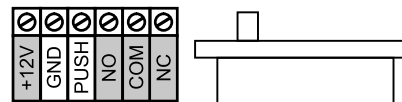


Electric bolt

The electric bolt lock, also known as solenoid lock, consists of a fixed part with a mobile pin connected to a solenoid. The lock normally comes with a metal plate that will be attached to the door (mobile part).

The pin on the fixed part enters the metal plate preventing the door from opening.

In this guide, the solenoid pin lock will be represented by:



⚠ The gray terminals may not be present in all locks. If there is a power supply connection (+ 12V or + 24V), it is essential to connect it to a source before operating the lock.

Electromechanical Lock

The electromechanical lock or strike lock consists of a latch connected to a solenoid through a simple mechanism. After opening the door, the mechanism returns to its initial state allowing the door to be closed again.

Thus, the electromechanical lock typically has two terminals connected directly to the solenoid. When current passes through the lock, the door will be unlocked.

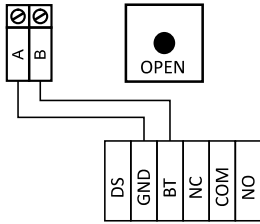
In this guide, the electromechanical lock will be represented by:



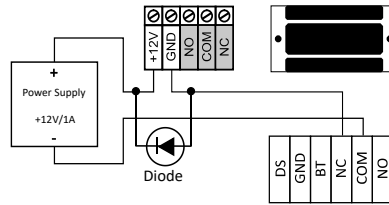
⚠ Confirm the operating voltage of the lock before connecting it to the iDBox! Many electromechanical locks operate at 110V/220V and must therefore use a different wiring set up.

7. Wiring Diagrams

Push Button

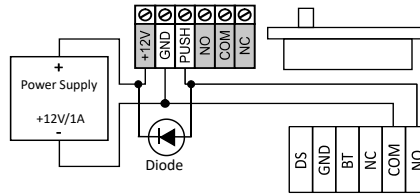


Magnetic Lock



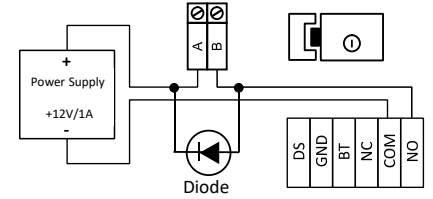
⚠ It is important to use a diode in the installation of a magnetic lock. Please connect the diode's cathode to the positive terminal of the magnetic lock and the anode to the negative (ground).

Solenoid Pin Lock (Fail Safe)



⚠ We recommend the use of a dedicated power supply source to power the Solenoid Lock.

Electromechanical Lock (Fail Secure)



⚠ We recommend the use of an exclusive power supply source to power the Electromechanical Lock.

⚠ If the electromechanical lock is energized by a AC power supply, please do not use the diode.

Reference pattern installation

