Control iD

iDProx

Thank you for purchasing the iDProx proximity card reader! Check out our online guide at:

www.controlid.com.br/userguide/idprox-en.pdf

Necessary Materials

In order to install your iDProx, you will need the following items: drill, wall plugs and screws, screwdriver, 12V power supply capable of supplying at least 1A and an electronic lock.

Installation

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

• Install in a place that is not exposed to direct sunlight and that is protected from rain and other natural phenomena
• Install iDProx 1,5m above the floor.
• Before securing the equipment in place, ensure all connecting cables are correctly routed towards the equipment.

The equipment installation process is simple and should follow the sequence below:

1. Remove the plastic lens from the iDProx with a screwdriver that is at least 3 mm wide (to avoid damaging the plastic):
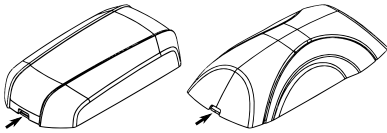
2. Use the reference pattern on the back of this guide to drill the 2 holes
3. Insert the wall plugs completely into the holes made
4. Route all of the cables required for the operation and connect them to the iDProx cables
5. Secure the iDProx using two screws
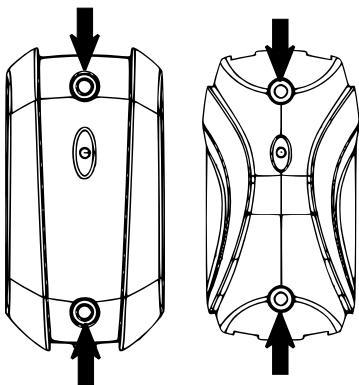
6. Place the plastic lens positioning it properly and securing the top first and then the bottom

Connection Pins

⚠ Warning: The Green, Green with White and Blue wires depend on the operating mode that is set up on the equipment (Wiegand or ABA Track II).

Power Supply

+12V	Red	Power supply +12V
GND	Black	Power supply ground

⚠ Connection to a +12V power supply capable of supplying at least 1A is fundamental for the correct operation of the equipment

Led Control and Buzzer

LED-IN	Orange	Led control
MODE/BZ	Yellow	Buzzer control

By connecting the LED-IN pin to ground, the internal LED turns red.
By connecting the MODE / BZ pin to the ground, the buzzer is activated.
The MODE / BZ pin is also used for configuring the operating mode (Wiegand or ABA Track II)

Wiegand Output

D0	Green	Wiegand output - DATA0
D1	Green/Wh	Wiegand output - DATA1
GND	Black	Common ground

⚠ Warning: The Green, Green with White and Blue wires depend on the operating mode that is set up on the equipment (Wiegand or ABA Track II).

Output ABA Track II

CLK	Green	Clock input
DATA	Green/Wh	Data output
CARDPRES	Blue	Card verification
GND	Black	Common ground

⚠ Warning: The Green, Green with White and Blue wires depend on the operating mode that is set up on the equipment (Wiegand or ABA Track II).

RS232 Output

TX	Green	RS-232 TTL output
GND	Black	Common ground

Operating Mode Selection

The reader's operating mode can be selected as Wiegand or ABA Track II. To do this, you must perform a simple procedure:

1. Turn the iDProx off
2. Connect the MODE / BZ (Yellow) cable to D0, D1 or CARDPRES according to the table.
3. Turn the iDProx on. The buzzer will sound and the LED will light up according to the selected configuration.
4. Turn the iDProx off and reconnect all cables normally: D0, D1, MODE / BUZZER etc.
5. Turn the iDProx on. The device will work according to the mode previously selected.

Connection	Mode	LED
MODE/BZ + D0	Wiegand 26	Green
MODE/BZ + D1	Wiegand 34	Yellow
MODE/BZ + CARDPRES	ABA	Red

Communication Protocols

In order for the iDProx to work properly, it must be connected to a controller that can communicate with the reader in one of the three supported protocols.
This controller will be represented in this guide as depicted below:
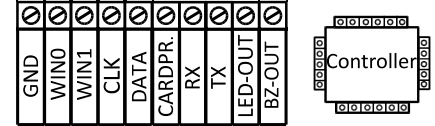
The WIN1 and WIN0 inputs are used for the Wiegand protocol; CARDP, CLK and DATA inputs are used for ABA Track II and the RX and TX inputs are used for communication via RS232.

⚠ The names of the inputs may vary according to the controller.

⚠ The controller inputs depend on the model and brand.
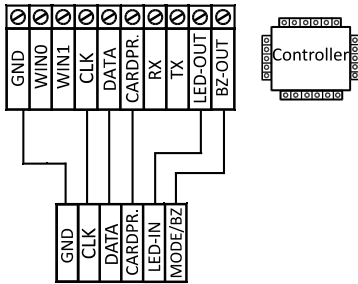
Wiegand

The Wiegand protocol uses 3 wires: DATA0, DATA1 and GND. When there is no data to be received, both DATA0 and DATA1 remain in logical level 1, ie. it is possible to measure 5V between the cables and GND. When a 0 bit is received, DATA0 will go to logical level 0 (which means that you can measure 0V between this cable and GND) and DATA1 will remain at logical level 1. When a bit 1 is received, DATA1 will go to logical level 0 and DATA0 will remain at logic level 1.

The necessary connections to use this protocol are presented below:
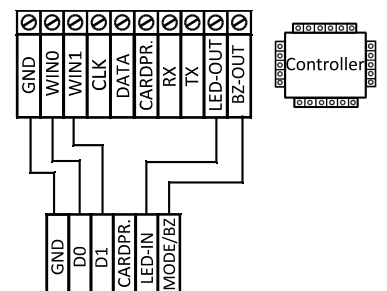
ABA Track II

The ABA Track II protocol uses 4 wires: CARDPRES, CLK, DATA and GND. The CARDPRES output remains at the logical level 1 while there is no card to be read. When a card is close to the reader, the CARDPRES output goes to logical level 0 and the data is read from DATA each time the CLK input goes from the logical level 1 to logical level 0. When all the data is sent, the CARDPRES output goes back to the logical level 1 and data is not read anymore. The wiring diagram for this case is presented below:

⚠ Warning! The Wiegand protocol is faster and the most efficient option

⚠ You cannot use this protocol with the iDBox controller.

RS-232

The RS232 protocol usually uses 3 cables: RX, TX and GND.
Data is transmitted by the TX output and received by the RX input. No synchronization signal is required in this case.
The output of this protocol, through this reader, is TTL, i.e. a logical level 1 is represented by 5V and logical level 0 is represented by 0V, with no negative voltage.
The wiring diagram is presented below:
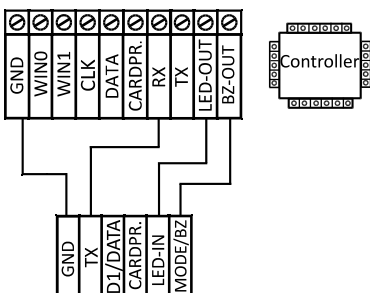
Technical Specifications

Power Supply

External power supply 12VDC /1A (not included).

1.2W nominal consumption.

Identification

Proximity card: ASK, FSK, PSK or Mifare.

⚠ The type of card must be defined before purchasing.

Range

ASK: 15cm | FSK: 10cm | PSK: 10cm | Mifare: 6cm

Communication

Wiegand output, may be configured for ABA Track II.

RS232 TTL shared output

Interface

Yellow, green and red LED controlled by an input.

4kHz and 70dbA Buzzer @100mm controlled by an input.

Dimensions and weight

Slim Model
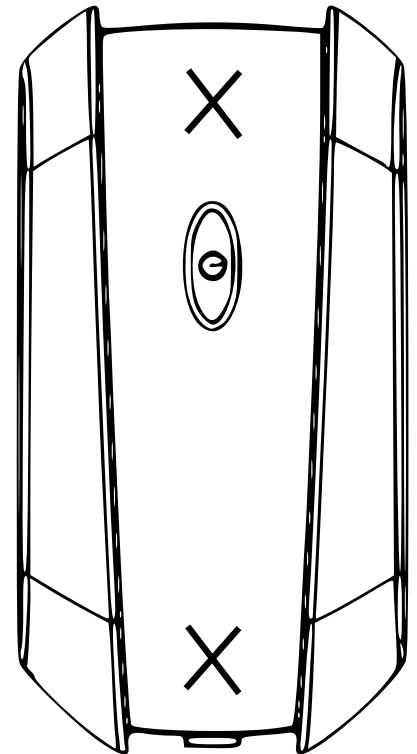
20mm x 95mm x 51mm (H x W x L)

103g

Compact Model

22mm x 130mm x 55mm (H x W x L)

102g

Assembly Instructions

iDProx Compact

iDProx Slim