ZK**T**ECO

QUICK START GUIDE

Water Resistant RFID Access Control Reader
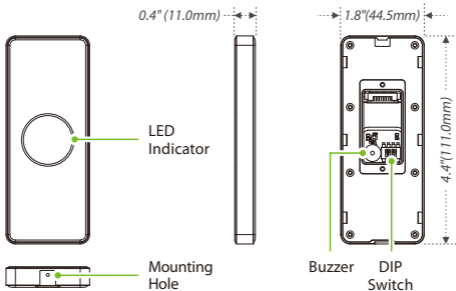
Applicable Model: ProID Series
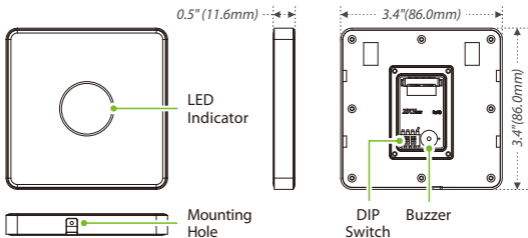
Version: 1.1
Date: March 2023

Green
Label

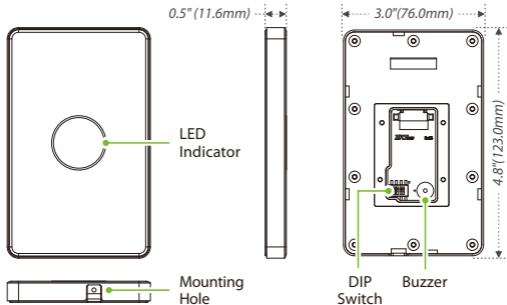# 1. **Product Overview**

ProID101

0.4" (11.0mm)

1.8"(44.5mm)

4.4"(111.0mm)

LED
Indicator

Mounting
Hole

Buzzer

DIP
Switch

ProID102

0.5"(11.6mm)

3.4"(86.0mm)

3.4"(86.0mm)

LED
Indicator

Mounting
Hole

DIP
Switch

Buzzer

ProID103

_0.5"(11.6mm)_

_3.0"(76.0mm)_

_4.8"(123.0mm)_

LED Indicator

Mounting Hole

DIP Switch

Buzzer

Back Plate

_1.4"(36.0mm)_

_4.3"(109.7mm)_

Tamper Switch

_0.5"(12.8mm)_

_3.1"(80.0mm)_

_3.2"(80.3mm)_

Tamper Switch

_2.4"(60.0mm)_

_0.5"(13.0mm)_

ProID101

ProID102

2.9"(73.0mm)

2.4"(60.0mm)

4.4"(11.2mm)

Tamper
Switch

0.5" (13.0mm)
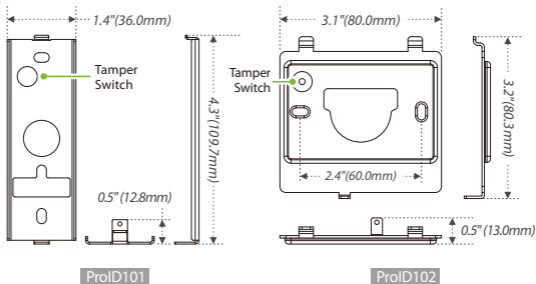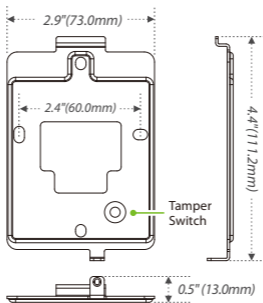
ProID103

2. Terminal Block
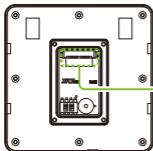
| +12V		Power
GND		
RS485A		RS-485
RS485B		
WD0		Wiegand Out
WD1		
WG26/34		Wiegand 26/34
BEEPER		Beep
RLED		Red LED
GLED		Green LED
TAMPER		Tamper

3. Device Installation

Install on the wall

① Attach the mounting template sticker to the wall, and drill holes according to the mounting paper.
② Secure the back plate on the wall with the wall mounting screws.
③ After passing the wires through the wiring hole and connecting them to the device, and then attach the device to the back plate from top to bottom.
④ Fasten the device to the back plate with a security screw.

Note: The installation method of ProID103 is the same as that of ProID102. Only ProID102 is used as an example, and will not be repeated here again.
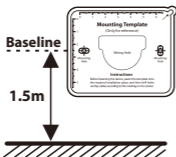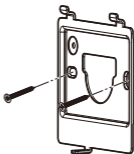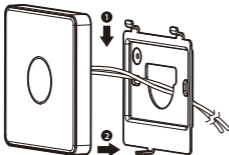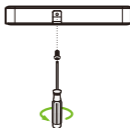
Mounting on the wall through Asian gang box

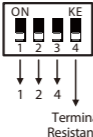① Install the Asian gang box (or single gang box, mullion mount) into the wall.

② Fix the back plate onto the Asian gang box (or single gang box, mullion mount) using two wall mounting screws.

③ Pass the cables through the wire hole.

④ Then insert the device into back plate.

⑤ Use security screw to fasten the device to the back plate.

Note: The installation method of single gang box is the same as that of Asian gang box. Only Asian gang box installation method is illustrated as an example in this quick start guide.

Asian gang box
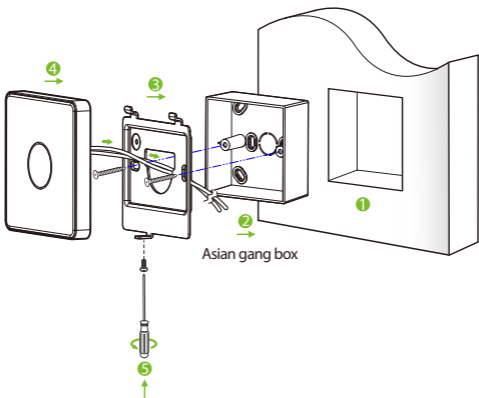
4. DIP Switch Settings

As shown in the table below, places 1-3 of the DIP switch are used to set the device number for RS-485 communication, and place 4 is for setting the RS485 termination resistance. If the RS-485 communication wire is longer than 100 meters, it is needed to set the 4th DIP switch of the last reader to **ON** state, that is parallel a terminal resistance of 120 ohm between 485+ and 485-.

DIP Switch	485 Address	Switch Setting	485 Address	Switch Setting
	1		5	
	2		6	
	3		7	
	4		Terminal Resistance	

5. Standalone Installation
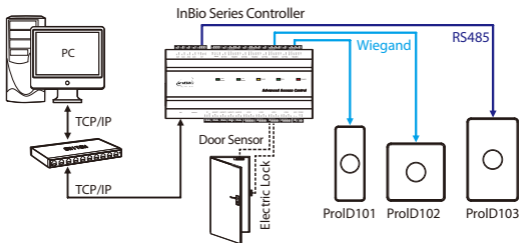
6. Controller Connection

This ProID series reader needs to be connected to a host machine in order to transmit card information via RS-485 or wiegand. The following is an example of the connection to InBio Series controller.

❖ Connect the controller via RS485
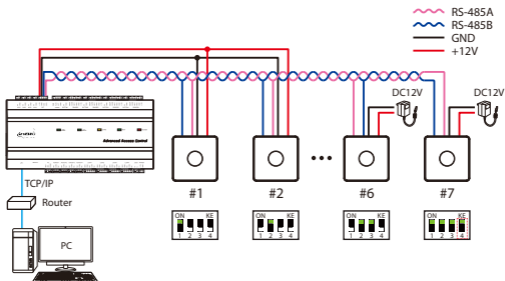
Notes:

1. A maximum of seven readers can be connected to one controller.
2. Before connecting RS-485 readers, open the rear panel of the reader and set the RS-485 address of the reader via DIP switch according to the connection of each reader.
3. If the RS-485 communication wire is longer than **100** meters, it is needed to set the 4th DIP switch of the last reader to **ON** state.
4. The DIP switch needs to be set with the controller powered off and takes effect after restart. After setting, the DIP switch does not need to be set back to its original position.

❖ Connect the controller via Wiegand

InBio Series
Conttroller

BEEP GLED WD1 WD0 GND +12V
READER1

TCP/IP

Router

PC

DC12V

BEEPER
GLED
WD1
WD0
GND
+12V
WG26/34

ProID Series Reader

Note:

When terminal WG26/34 is connected to ground, the number of Wiegand output bits is 26 bits. The default is not grounded, and the number of Wiegand output bits is 34 bits.
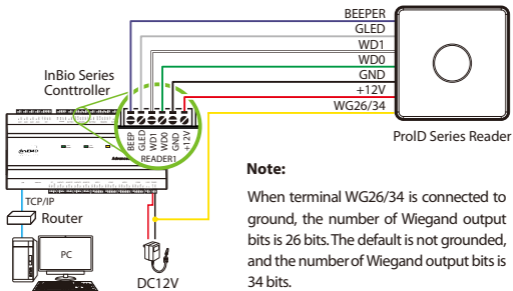
7. Access Control Device Connection

+12V
GND
RS485A
RS485B
WD0 ✖
WD1 ✖
WG26/34 ✖
BEEPER ✖
RLED ✖
GLED ✖
TAMPER ✖

ON KE
1 2 3 4

+12V
GND
RS485A
RS485B

Access Control Device

8
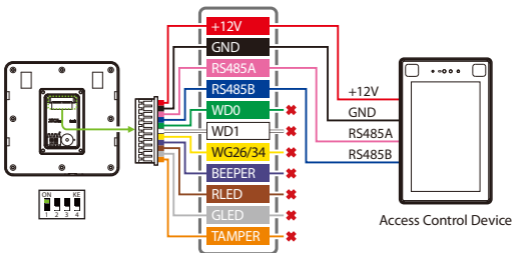
8. Tamper Switch Connection
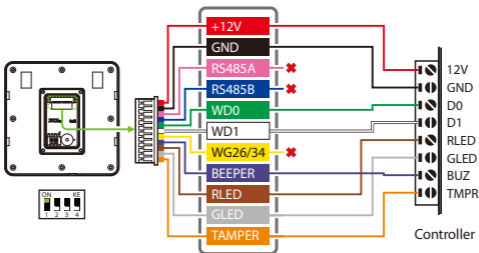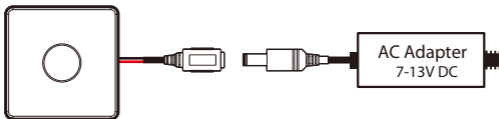
When the tamper switch terminal is successfully connected to the controller, the device will sound an alarm when the back plate of the device is opened, and an alarm signal will be sent to the software side.

Device		Controller
+12V		12V
GND		GND
RS485A	✗	D0
RS485B	✗	D1
WD0		RLED
WD1		GLED
WG26/34	✗	BUZ
BEEPER		TMPR
RLED		
GLED		
TAMPER		

9. Power Connection

AC Adapter
7-13V DC

- Recommended AC adapter: **7 to 13V DC**, Current Draw **> 350mA/5V**.
- Use an AC adapter with a higher current rating to share power with the other devices.

10. Buzzer, Indicator Light Prompt Instructions

When the ProID series reader works normally, the buzzer and indicator prompts are shown in the following table.

Working Status	Indicator Light	Buzzer
When the reader is powered on.	LED bright white light, then switch to white light breathing state after 0.4s.	1 short sound
When punching the card.	LED bright white light.	1 short sound
Card is registered	LED indicator lights green.	1 short sound
Card not registered	LED indicator (red) lights up briefly twice.	2 short sound

Note: In Wiegand communication mode, the status of LED and buzzer is controlled by the host when the card is swiped.

11. Specifications

Operation Voltage	7 to 13V DC
Current Draw	≤350mA 5V
Processor	32-bit ARM Cortex-M0 48MHz
Card Type	ID/IC Card
Read Range	0 to 5 cm
Output Format	Wiegand 26bit or 34bit (Adjustable), RS485
Operating Temperature	-20 °C to 65 °C
Operating Humidity	10% to 90% RH, Non-Condensing
Protection Rating	IP65, IK04
Installation	Asian gang box, single gang box, mullion mount
Color	Black & White
Certfication	ISO9001, ISO14001, CE, FCC

Green
Label