

# PROXIMTY READER PLUS KEYPAD PLUS FINGER PRINT RECOGNITION

Model: BIO 007

Output formats: Prox. Card Wiegand 26 (Factory Default)

Keypad 8 Bit Burst

Power Supply 10 - 24 VDC

Power Consumption: less than 100 mA in stand by

Transmitter/Receiver frequency: 125Khz Mounting: Universal USA and EUROPE Environment: IP68; 100% relative humidity

Operating Temperature: -25 to  $+70^{\circ}$ C ( -15 to 158 F ) Dimensions:  $120 \times 90 \times 20$  ( 4,72'' / 3.54'' / 0.79'' )

Antitamper Optical protection

**Certifications:** 

# **Operation Modes:**

The **BIO 007** is equipped with 3 electronically interlocked devices. The Proximity Reader, the Piezoelectric Keypad and the Finger Print Recognition.

- **1. Prox Pin**. Present Prox card. The unit will read the content and send it over the Data wires to the host. Enter PIN code. The unit will send each digit over the same Data wires to the host. The Keypad and the Prox reader are interlocked so that when one is functioning the other is inhibited until the data is transmitted.
- **2. Prox Only**. The prox electronics is independently communicating via Data wires.
- 3. Prox-Pin-Finger Print Reader

#### Verification

Power up the unit. During the first 2 seconds the unit will activate the buzzer 3 times. In the same time the RED or the Green LED will come ON depending on the Central Computer setup.

Present a valid HID encrypted card at 5 cm distance maximum. The unit will activate the Buzzer once

Each key press will activate the Buzzer and flash the Yellow LED.

#### Wiring

COLOR	FUNCTION	ELECTRICAL FUNCTION	
RED	Input Voltage	10 – 24 VDC	
BLACK	Ground		
GREEN	Data 0	Open collector 1Kohm pull-up to internal +5V	
WHITE	Data 1	Open collector 1Kohm pull-up to internal +5V	
BROWN	LED Input	1 = Red LED ON $0 = Green LED ON$	
GREY	TX		
BLACK/ WHITE	RX		
PINK	GND		

# **26 BIT WIEGAND SPECIFICATIONS**

When the LED control input is pulled low, the GREEN LED will be ON and the RED LED will be OFF. When the input goes high the RED LED is ON and the GREEN LED is OFF. The RED or GREEN LED will flash with each key press. The LED control input is pulled to the internal +5v with a 2.2K resistor.

The data is sent at 2 millisecond. per bit with a pulse duration of 70 µsec. A Buzzer beeps with each key press.

### DATA FORMAT

### PIN data in 8 Bit burst output format:

Each Key press generates the defined 8 bit Output as shown:

KEY	OUTPUT	KEY	Output
0	11110000	6	10010110
1	11100001	7	10000111
2	11010010	8	01111000
3	11000011	9	01101001
4	10110100	*	01011010
5	10100101	#	01001011

# Card data 26 WIEGAND output format.

PSSSSSS NNNNNNNNNNNNNN P

BIT 12 9 10 25 26

BIT 1 is an even parity for the following 12 bits. The sum of bits 1-13 is even.

BITS 2-9 are the F/C the card presented from 000 to 255.

BITS 10-25 this is the card number presented.

Leading 0's are added as required. Bit 10 is most significant.

BIT 26 Odd parity over previous 12 bits. The sum of bits 14-26 is odd.

EXAMPLE: A card code of 123 entered:

1 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 1 1 1 1 0 1 1 1 (F/C 004)

The data is sent at 2 msec per bit with pulse duration of 70 µsec. A Buzzer beeps each time card is presented.

- 1. **Orange Wire** When the Hold Line, Orange wire, is pulled "low", any CARD PRESENTED DATA is stored in the buffer. When the Hold Line is released to logic "high"
- the buffered data is sent

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications to this equipment not expressly approved by the party responsible for compliance Baran Advanced Technologies (86) LTD. could void the user's authority to operate the equipment.