



Tel: 1-800-622-5625

Model: EPS-341X-AA

Output formats - Prox: Card Wiegand 26 with Programmable site code
- Keypad: Wiegand 26

Power Supply: 5 to 12 VDC

Power Consumption: Max 150 mA

Transmitter/Receiver frequency: 125Khz

Mounting: Universal USA and EUROPE

Environment: IP68; 100% relative humidity

Operating Temperature: - 30°C to + 70°C, -22°F to +158°F

Dimensions: 120mm x 90mm x 20mm (4.72in x 3.54in x 1in)

Optical Antitamper protection

Certifications: Complies with FCC Part 15

Operation Modes:

The **EPS-341X-AA** is equipped with 2 electronically interlocked devices. The Proximity Reader and the Piezoelectric Keypad.

EPS-341X-AA supports the following operational modes:

- 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 following by ES key. The unit will send the PIN code 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 are independently communicating via the Data wires.
- 3. Keypad only.** The keypad electronics are independently communicating via the Data wires.

Verification

Power up the unit. During the first 5 seconds it is possible to reprogram the Site code (see instructions). The unit will activate the buzzer and the Yellow LED 3 times. In the same time the RED or the Green LED will be ON for the first 5 sec.

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

Enter any combination of PIN code up to 65534 followed by ES. The unit will activate the Buzzer and the Yellow Led once.

Wiring

COLOR	FUNCTION	ELECTRICAL FUNCTION
RED	Input Voltage	5 to 12 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	
BLUE	CCTV output	Open collector 0.250 A activated with each key for 30 sec
VIOLET	Housing Ground	
ORANGE	Buffered Input	
GREY	Tamper Output	Open collector 0.100 A “Low” when light sensed

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.

WIEGAND DATA FORMAT

IN data in Wiegand output format:

the following WIEGAND output is sent each time the PIN number followed by ES (enter) key is pressed.

```
P S S S S S S S S N N N N N N N N N N N N N N N N N N P
|IT 1 2          9 10                25 26
```

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

|ITS 2-9 are the programmable SITE CODE. (Pressing * during the first 5 sec the RED or the Green LED will ON)

|ITS 10-25 this is the PIN number entered prior to pressing ES (enter).
Leading 0's are added as required. Bit 10 is most significant.

|IT 26 Odd parity over previous 12 bits. The sum of bits 14-26 is odd.
The site code can be any number from 000 to 255.

EXAMPLE: A code of 123 entered from site code 004:
1 00000100 0000000001111011 1

Card data WIEGAND output format.

```
P S S S S S S S S N N N N N N N N N N N N N N N N N N P
|IT 1 2          9 10                25 26
```

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

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

|ITS 10-25 this is the card number presented.
Leading 0's are added as required. Bit 10 is most significant.

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

EXAMPLE: A card code of 123 entered:
1 00000100 0000000001111011 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.

Example to set site code to 100. Disconnect the power supply for a minimum of 10 seconds. Connect the power supply, the unit will start beeping. During the first 5 seconds perform the following:

- Enter ★ The keypad enters programming mode, the red LED flashes
- Enter 100ES The site code 100 is assigned

- 1. Blue Wire - PRESSING** any key on the keypad will generate a 30 second 0.25 amp intermittent duty grounding output.
- 2. Orange Wire -** When the Hold Line, Orange wire, is pulled “low”, any codes entered on keypad are stored in the buffer. When the Hold Line is released to logic “high” – the buffered card data is sent.
- 3. Gray Wire -** When the photodiode senses ambient light the wire is pulled “LOW”
An error code is generated by any of the following: a) Pressing the ES key with no preceding digits; b) Pressing number of only zero's prior to pressing the ES key, or; c) Pressing 65,535 or any number above 65,535. An Error Code will send all binary 1's to your panel.

Do **Not** Program your panel to accept code number 65,535.

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 (Advanced Technologies (86) LTD) could void the user's authority to operate the equipment.