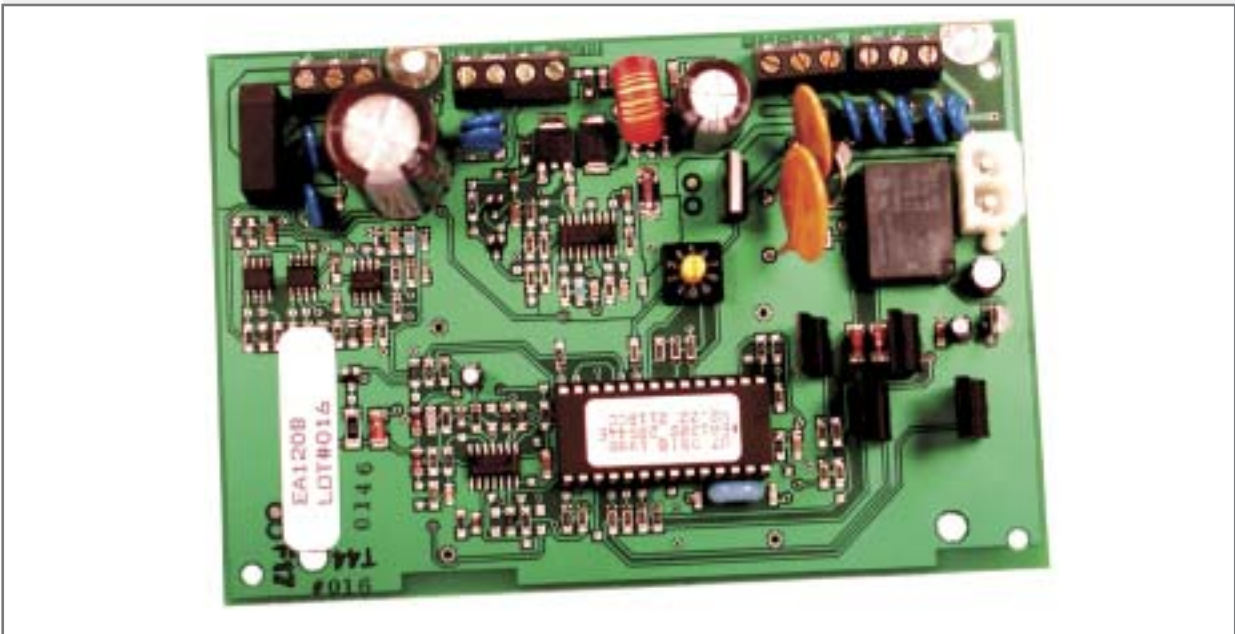


# EA120B



Security Systems

EN | Installation Instructions  
Alert Unit

**BOSCH**

## 1.0 General Information

The alert unit is a driver for output modules such as a horn/strobe. The alert unit should be mounted indoors; however, an outdoor enclosure is available. A horn/strobe should always be mounted outdoors.

The alert unit receives its main power (for horn/strobe activation) from the 18 VAC transformer. Backup power is from a battery. However, the multiplex bus continues to supply the transponder information on status and troubles in the event local power is lost.

## 2.0 Specifications

Table 1: Specifications

<b>Electronics</b>	EA120B
<b>Enclosures (H x W x D)</b>	Indoor: AE1 22 cm x 17.7 cm x 4.4 cm (9 in. x 7 in. x 1.75 in.)  Outdoor: AE101 37.5 cm x 32.4 cm x 8.9 cm (14.75 in. x 12.75 in. x 3.5 in.)
<b>Temperature Range</b>	-40°C to +65°C (-40°F to +149°F)
<b>Power</b>	18 VAC, 50 VA
<b>Battery Backup</b>	12 VDC Lead Acid Battery
<b>Outputs</b>	<ul style="list-style-type: none"> <li>Strobe: 500 mA solid state sink, terminal switches to ground in an alarm condition.</li> <li>Siren: 500 mA solid state sink, terminal switches to ground in an alarm condition.</li> <li>Power: 12 VDC @ 1A, maximum total for all panel outputs.</li> </ul>
<b>Compatibility</b>	EA500B ROM Version 4.00 or higher
<b>Options</b>	<ul style="list-style-type: none"> <li>Batteries: 3 A power (for AE101 Enclosure: E28629B)</li> <li>Battery Cables: C311 (3 A or 7 A spade lug expansion cables)</li> <li>Tamper Switch: CTS1-70 (for AE1 enclosure)</li> <li>Transformer: TR1850</li> </ul>

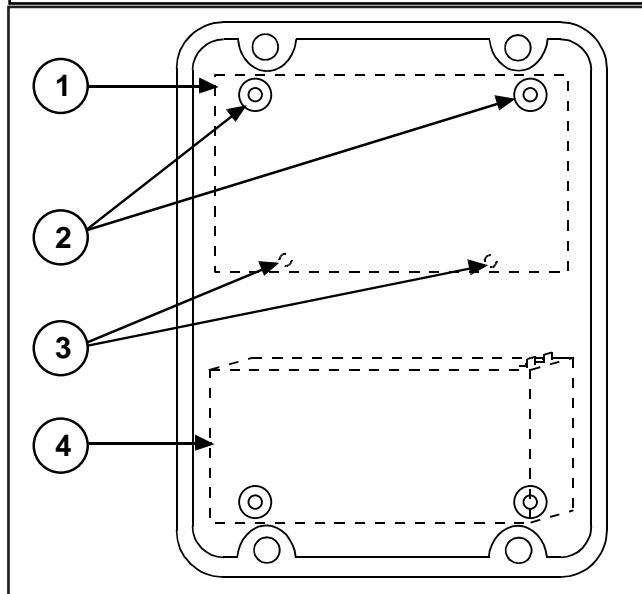
## 3.0 Mounting

Normally, the enclosures are mounted first and all the wiring is run. Then the electronics are mounted, wired, and tested.

The enclosures include the necessary electrical and mechanical mounting hardware.

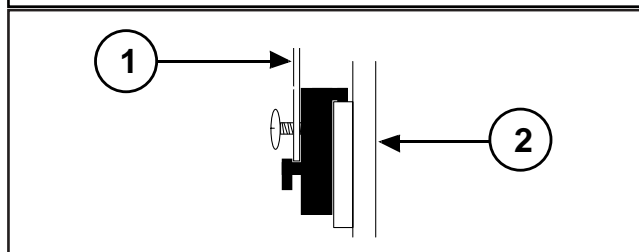
Mount the circuit board to the enclosure as indicated in *Figure 1*, *Figure 2*, and *Figure 3*.

Figure 1: Inside of AE101 Enclosure



- 1 - Outline of where to mount the circuit board.
- 2 - Use the two plastic screws here.
- 3 - Insert the two short standoffs into these holes. Then stick the circuit board inside the enclosure.
- 4 - Outline of where to place the battery (only 3 Ah battery fits).

Figure 2: Support Post Assembly



- 1 - Circuit board
- 2 - Enclosure

## 4.0 Wiring

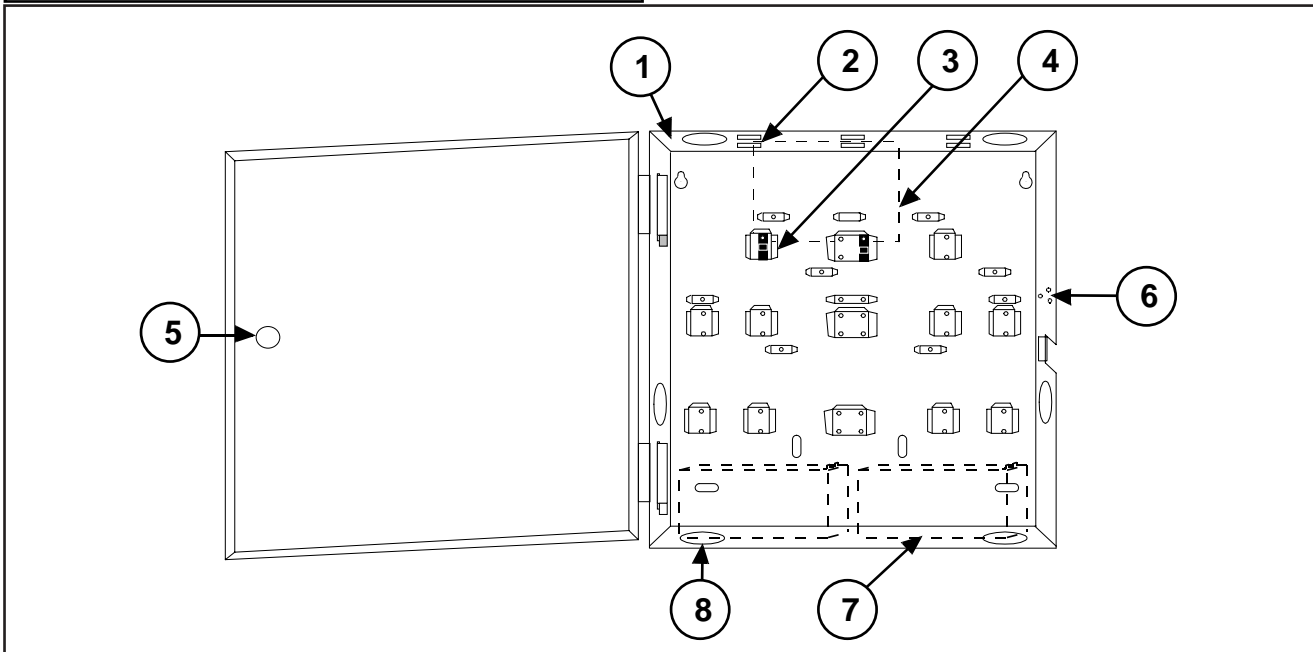
Wire the EA120B Alert Unit (refer to *Figure 4*).

## 5.0 Set the Address

Every module on each multiplex bus of the transponder must have its own address. Set the address on the alert unit using the address switch (see *Figure 4*).

Use only address numbers 0 through 7. **Do not use address numbers 8 and 9.**

**Figure 3: Inside of AE1 Enclosure**



1 - Flip-up view to show retainer tabs.

2 - Slide board in between retainer tabs.

3 - Place board over support posts. Secure with two shorter screws.

4 - Outline of where to mount the circuit board.

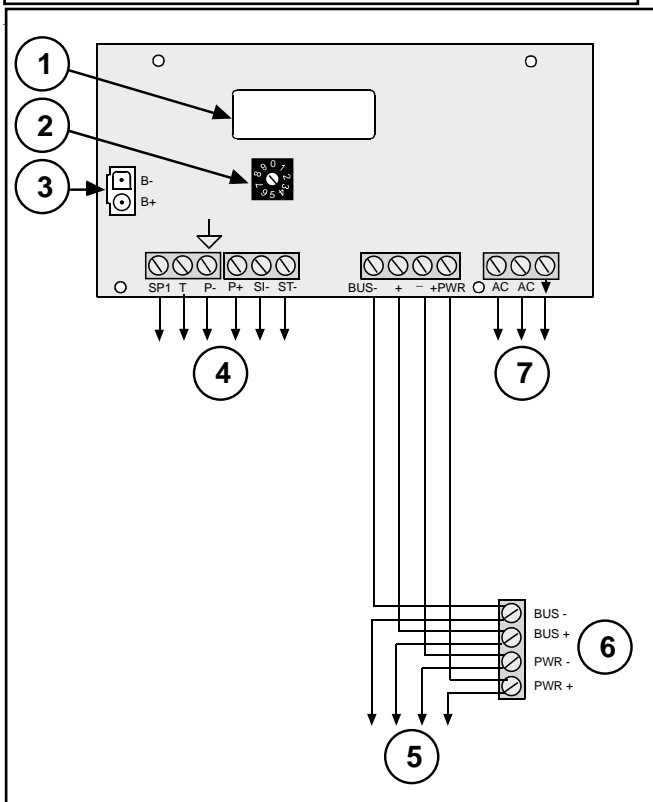
5 - Hole for lock and key assembly.

6 - Place tamper switch here. Secure with three larger screws.

7 - Outline of battery location (1 or 2).

8 - Wire entrances (6).

**Figure 4: Wiring the EA120B**



1 - Microprocessor

2 - Address switch

3 - Battery connector (use cable)

4 - SP1 = Switch spare

T = Tamper switch (NIC)

P- = Power (Common)

P+ = Power +

SI- = Switch siren -

ST- = Switched strobe -

Note: Tamper switch wired to [T] & [P-] terminals

5 - To next device

6 - Transponder

7 - Transformer:

AC = Transformer

AC = 18 VAC, 50 VA max

↓ = Earth Ground

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