BOSCH

Invented for life

EA500B Transponder

▶ **Sends alarm and test signals from the receiver to the central console**

▶ **Supports a combined total of 64 receivers and alert units**

▶ **Uses AC power with battery backup for all receivers**

▶ **Provides power to SE485 interface and spread spectrum radio**

▶ **Monitors receivers and alert units ten times per second for alarms, tests, tamper notification, and power loss**

▶ **Reports alarms, tests, tamper notification, AC power loss, and backup battery status**

The EA500B Transponder is a device controller for up to 64 devices, any combination of receivers and alert units. Its primary function is to monitor the receivers and alert units and report conditions and events to the central console over wire or ProxLink radios. It also provides power to certain devices.

Functions

Function During Alarm

- When a receiver or alert unit detects an alarm, it goes into an Off-Normal state. To quickly locate any devices which might be in the Off-Normal State, the transponder issues global commands that are interpreted simultaneously by all of its devices approximately ten times per second.
- The transponder sends commands to specific devices to determine the nature of the Off-Normal condition. During an alarm or test, the transponder sends commands to obtain the transmitter identification number, transmitter battery condition, and received signal strength.
- The information is then sent to the central console either by wire or through ProxLink radios, where it graphically shows the identity and location of the subscriber (user) sending the alarm.

Configuration

The transponder identifies each receiver and alert unit by a multiplex address. The address is set during system installation using a multi-position switch on the receiver or alert unit circuit board. Transponders communicate on the data bus with individual multiplex devices by issuing commands, which contain the receiver or alert unit's multiplex address.

Setup and Testing

Each transponder and the devices connected to it are set up and can be tested remotely from the central console. Also, each transponder reports any problems, such as low battery, immediately upon detecting them.

Installation/Configuration Notes

Installation

The transponder is for indoor use only. The transponder mounts in one of two different sized enclosures. Connect devices such as receivers, alert units, or combinations of both to the transponder using eight four-wire multiplex buses, two wires for power and two wires for data. Each bus can support up to eight devices for a combined total of 64 devices. A Security Escort System supports up to 255 transponders and a total of 16320 devices.

Compatibility Information

Alert Units:	EA120B
Central Console Software:	SE2000 Series
Interfaces:	Selectable SE485 or RS-232
Receivers:	EA102A-304
Transmitters:	SE2 Series, SE3 Series, SE3401, SE88 Series

Ordering Information

D126 Standby Battery (12 V, 7 Ah) Sealed lead-acid standby and auxiliary rechargeable power supply.	**D126**
TR1850 Transformer	**TR1850**

Technical Specifications

Transmission

Alarm Output	2 (1 for the strobe and 1 for the siren)
Keyswitch Input	Requires optional, supervised loop, 47 kΩ EOL resistor
Mounting	Indoor only
Tamper Output	NC; optional (CTS1-70)
Trouble Output	Through central console

Electrical

Battery Backup:	12 VDC 7 Ah lead acid
Power Output:	9 VDC output for SE485 or for Prox-Link Radio Module power
Primary Power Requirement:	18 VAC, 50 VA

Environmental

Operating Temperature Range:	-40℃ to +65℃ (-40℉ to +149° F)

Ordering Information

EA500B Transponder Controls receivers and alert units. Relays alarm and test signals from the receivers to the central console.	**EA500B**

Accessories

AE1 Standard Enclosure (Gray) Standard gray enclosure with keyed lock. Measures 35.6 cm x 31.8 cm x 7.6 cm (14 in. x 12.5 in. x 3 in.).	**AE1**
AE3 Large Enclosure (Gray) Large gray enclosure with keyed lock. Measures 52.7 cm x 38.1 cm x 10.8 cm (20.7 in. x 15 in. x 4.25 in.).	**AE3**
CTS1-70 Tamper Option Tamper option for the Security Escort EA500B Transponder.	**CTS1-70**