Sounder Options

The Reader will make a short beep after power-up and a short beep whenever card data is sent to the Access Controller. (The LED will briefly turn green during these beeps).

If the BUZZ option is enabled, the buzzer is also controlled by the IND input; whenever IND is low the buzzer will sound. The buzzer will stop after 3 seconds if the IND line is held continuously low for longer, such as during a "free access" situation. (Note: the LED is controlled by the IND line irrespective of the BUZZ option and will not time-out after 3 seconds.)

SIGNAL	SHORTED TO SIGNAL	SIGNAL BUZZER OPTION
ALM	IND + RDA	Buzzer totally disabled
ALM	IND + RDB	IND (ACU) controlled beeps disabled. Short beep on card read only.
ALM	IND + RTE	Buzzer enabled (Default)

RS485 Options

SIGNAL	SHORTED TO SIGNAL	RS485 OPTION
ALM	RDA + RDB	RS485 enabled. Wiegand output disabled
ALM	IND + RDB	RS485 disabled. Wiegand output enabled. (Default)

Reader Operation

The LED will normally be red when the door is locked. When a compatible card/fob is presented within the range of the Reader, the Reader will briefly flash green, give a short beep and transmit to the Access Controller, which will release the door and set the LED to green via the INDicator input while the door is released.

If the BUZZ option is enabled (default setting), the buzzer will also sound while the door is released up to a maximum of 3 seconds. This ensures that the buzzer is not kept running if the door has been put into a permanently unlocked state (Free Access Doors etc).

Two short beeps indicate a Special Function card - no data is sent to the Access Controller and the door will not release.

Three short beeps indicates an invalid encryption key. The card has the correct data format but was encoded with a different encryption key. No data is sent to the Access Controller and the door will not release.

A card that validates against the Reader's encryption key but is not recognised by the Access Controller, will cause a short beep to sound (and the LED to flash green). If the Access Controller recognises the card format but rejects the card due to invalid card number, access rights etc it will not release the door but will flash the LED and beep the buzzer for 10 seconds.

Securefast iet

AEN1060 INNOPROX II Wall-mount Proximity Reader Installation Instructions

The AEN1060 Proximity Reader uses 125kHz type proximity cards and tokens and is a wall mounted reader A panel mount version (AEN1060PM) is also available which can be fitted behind a standard door entry panel.

The technology allows contactless credentials to be read up to 75mm away from the reader (depending on token type and environment) and complements the Entra+ range of controllers and products.

The AEN1060 reader is suitable for indoor or outdoor use and is designed to operate with most access control systems. Connection is via a cable pigtail. An encrypted data stream between the card and reader significantly enhances the system security. Two basic output types are supported; Wiegand (proximity) and Clock & Data (magnetic stripe). The output types and formats are defined by the card or token in use. Many different formats are available. Card data can also be output on an RS485 bus. RS485 output is selected via the option settings described below.

The AEN1060 supports the Reader Direction output option, compatible with Securefast Entra+ Access Controllers. This option allows IN and OUT reader operation with 2 readers on a single card reader port. This option is selected during installation.

The reader has a bi-colour LED strip and internal buzzer to indicate lock status. Several user-selectable options can be set during installation.

Contents

This pack contains the following items - if anything is missing or damaged, contact your supplier:

- AEN1060 Reader
- AEN1060 Reader Mounting Plate
- Two screws
- Two wall plugs
- These instructions

Mounting

When choosing a location for the reader, the following points should be noted:

- If more than one AEN1060 series reader is being used, there should be a minimum of 20cm (8") between them if mounted opposite each other, or 5cm (2") if mounted on the same surface.
- If mounted in the vicinity of another manufacturer's reader, the spacing may have to be much greater than the above.
- Read range may be slightly reduced if mounted on a metallic surface.
- The Reader will not operate behind ferrous metallic material.
- The Reader will not be affected by mounting behind a non-metallic material, although the LED visibility and Buzzer clarity may be affected.

The Mounting Plate has two fixing holes, a hole for the cable and a hole for the tamper switch.

The Mounting Plate can be used as a drilling template. The cable requires a 7mm hole.

The reader hooks on to the Mounting Plate and is secured by a screw at the bottom of the case.

Wiring

The AEN1060 has an 8 core shielded cable pigtail. The cable cores have the following functions:

COLOUR		SIGNAL NAME	DESCRIPTION
RED		+12V	Power supply (positive) (7 - 25 VDC)
YELLOW		* LOCK	Lock output (Not used)
BLACK		GND	Power and signal ground and cable shield
BLUE		* RTE	Request to exit (Not used)
ORANGE		* ALM	Alarm output (Not used)
BROWN		IND / * SEN	Indicator (LED & buzzer) control
GREEN		RDA / TRA	Wiegand data0, Data (clock & data), RS485+
WHITE		RDB / TRB	Wiegand data1, Clock (clock & data), RS485-

* These signals are used with the *Innoprox Lock* versions of this product.

It is recommended that Belden 9535 or equivalent is used for the cable to the controller for wiegand or clock and data, up to a maximum of 400m. The EARTH/SHIELD wire should be terminated with the GND wire at each end.

Belden 9841 or 2401POHP from F & S Cables - www.fscables.com should be used for the RS485 communications.

OPTION SETTINGS

When setting the modes before final installation all terminals except for the power (+12V and GND) must be disconnected from the terminal block and only the links connected as outlined below. After power-up the unit will give two beeps to indicate successful configuration. Next power the unit down and connect it to the Access Controller in accordance with the table above.

Factory Default Option

To reset the unit to factory defaults power up with the following links:

SIGNAL	SHORTED TO SIGNAL	FACTORY RESET OPTION
ALM	REX	Reader direction option disabled. Buzzer option enabled

Reader Direction Options

The Reader Direction feature allows an Access Controller to determine whether the user is entering or exiting an area using only one reader cable and two readers. This feature is only supported by Securefast Entra+, Tower and Integra Access Controllers. In this application the two reader cables are joined together in parallel. Direction information is added to the data stream by each reader to denote an "IN" or an "OUT" read. The "Dual Direction / RDREX" option must be selected in the ACU door configuration menu.
Reader Direction options are set by shorting pairs of signals together during a power-up, as follows:

SIGNAL	SHORTED TO SIGNAL	READER DIRECTION OPTION
ALM	IND	Disabled.
ALM	RDA	Read IN
ALM	RDB	Read OUT