

EXprox²

Specifications

Temperature range	-20°C to +55°C
Humidity range	5-95% non-condensing
Dimensions	102 x 102 x 20 mm
Power	9 - 16V DC 75mA Max
Read Range (cards)	Up to 160 mm
Operating Frequency	126 KHz (nominal)
Interface	Mag-stripe (Clock & Data) Track 2 ABA Wiegand 26-bit

Product References

EXprox² 5002-0395
 EXprox² K 5002-0396
 EXprox² vr 5002-0356
 EXprox² Kvr 5002-0357

Important

The cable screen MUST be connected to ground, either locally or at the ACU.

Overview

EXprox² can be connected to equipment with a magnetic stripe compatible (clock & data) interface using the connection information for TDSi controllers. The card number is output in track 2 ABA format (of which 8 digits are printed on standard cards supplied by TDSi).

EXprox² can also be connected to controllers that require a Wiegand interface. This requires the 26-bit Wiegand cards to be purchased from TDSi. Cards are available showing a 3-digit site code and 5-digit card number this number is output in standard 26-bit format.

The reader is designed to fit in to a standard electrical back-box (not supplied) to allow adequate clearance for the connection terminal block.

Connections

Pin No.	Mag-stripe Interface	Wiegand Interface
1	+9 to 16V DC 75mA Max	
2	0v	
3	Mag data	Data 0
4	Mag clock	Data 1
5	Card present	Hold
6	Green LED on when connected to 0v	
7	Red LED on when connected to 0v	
8	Buzzer on when connected to 0V	

Switch Setup

SW 1	SW 2	Function
OFF	OFF	Mag-stripe (EX-Series and Reader 1 & 2 for MICROgarde)
OFF	ON	Mag-stripe (Reader 3 & 4 for MICROgarde)
ON	OFF	Wiegand 26-bit
ON	ON	Wiegand 34-bit

Connections to TDSi controllers

PIN	Function	MICROgarde Reader 1/3	MICROgarde Reader 2/4	EXcel ² , EXPert ² , EXpander ² Reader 1	EXcel ² , EXPert ² , EXpander ² Reader 2
1	+12V DC	26	26	30	30
2	0V	27	27	29	43
3	Mag data	23	28	24	38
4	Mag clock	24	29	25	39
7	LED	25	30	27	41

PIN	Function	EXcel ⁴ Reader 1	EXcel ⁴ Reader 2	EXcel ⁴ Reader 3	EXcel ⁴ Reader 4
1	+12V DC	17	28	28	44
2	0V	18	29	29	45
3	Mag data	14	25	30	41
4	Mag clock	15	26	31	42
7	LED	16	27	32	43

Configuration of TDSi controllers

In all cases, MAGNETIC reading technology must be selected.

Maximum cable distances to TDSi controllers

Recommended cable: 7/0.2 screened; e.g. Belden 9730

Controller	Max cable distance
MICROgarde	150m
EXcel, EXPert, EXpander	150m

Installation

Fit the electrical back-box into the mounting surface and run a suitable cable to the reader. Make the connections to the reader as detailed in this manual. Install the reader into the electrical back-box and fit the front cover.



If the reader is to be mounted externally, apply a bead of non-caustic sealant between the top and side edges of the reader and the mounting surface before fitting it into the single-gang electrical back-box (shown opposite).

Note: Do not apply sealant between the bottom edge and the mounting surface.

Removal of Front Cover Once Fitted

To remove the vandal resistant cover once it has been fitted, remove the security screws and slide the cover away from the reader.



To remove the plastic front cover once it has been fitted, insert a flat blade such as a screwdriver into the slot as shown and lever the cover away from the base.



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