

Dark Crystal MIFARE Readers

4231 UID, 4270 Classic, 4825 DESFire

These MIFARE readers for use with the P4 & C4 access control systems. The reader is intended for indoor or outdoor use

This reader range uses a simple 4 wire interface for all power, data and signalling between Controller and Reader.

P4 Controllers (Firmware V4.5 +) and Doors Enterprise (V8 +) both support the following additional features:

- Alarm Volume Control (Engineers functions 33 & 35)
- Feedback Sound Volume Control (Engineers functions 32 & 34)
- Running Light Brightness Control (Engineers functions 58 & 78)



Installation

The reader can be fitted directly to a standard UK light switch back box (with 60mm fixing centres). It is supplied with M3.5 screws for this purpose.

It may also be surface mounted: Drill a 6mm hole at the centre point of the mounting position for the cable. The two mounting holes are 30mm horizontally left and right of this hole. Drill and plug the wall for the screws being used. Make a 10mm deep rebate for the speaker at the back of the reader. Feed the cable through the 6mm hole and connect to the reader terminal block. Secure the reader with two screws.

Always use a screened cable (4 core 7/0.2 non-twisted) and connect the screen to earth at the controller. The maximum cable length is 100m.

CONNECTION TABLE			
	Cable Core	P4 Controller	C2 Controller
	Red	+	+12V
	Black	-	0V
	White	X	X
	Green	Y	Y
	Screen	Earth	Earth



PRODUCT SPECIFICATION		
Parameter	Minimum	Maximum
Operating Voltage	8.0 V DC	14.0 V DC
Peak Current	-	100 mA
Average Current	-	50 mA
Cable Distance to Controller	-	100 m
Dimensions		W 90, H 90 D 19 (mm)

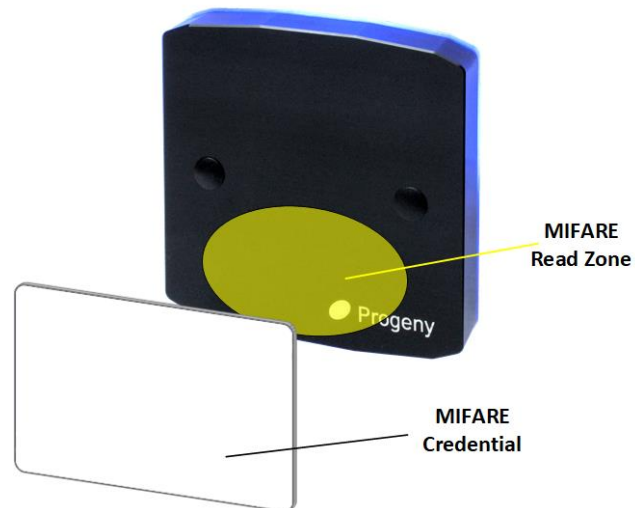
Using the MIFARE Readers

The MIFARE antenna is located in the lower half of the reader body. Maximum read range will be achieved if the MIFARE credential is presented in this area.

Switch Plate with Pigtail

The switch plate style use M3.5 mm screws mount to any standard single gang back box, which makes first fix possible.

The switch plate reader can be surface or flush mounted.



Compatibility List

The readers are available in three main types.

UID

The UID reader will work with just about any MIFARE cards that conform to the ISO/EN 14443 protocol standard. This reads the manufactured UID number (sometimes referred to as Card Serial Number CSN). The UID is presented “Little Endian” but can be “Big Endian” on request. The reader also emulates the 16 + 16 decode model as standard. However, 8 + 16 is available on request. The read range with this type of credential is typically 45mm for a CR80 card.

Card Type	Reader Type		
	UID	Sector	DESFire
Classic 1K	Yes*	Yes	-
Classic 4K	Yes*	Yes	-
Ultralight	Yes	Yes	-
Plus 1K	Yes*	Yes	-
Plus EV1	Yes*	Yes	-
DESFire EV1	Yes	-	Yes
DESFire EV2	Yes	-	Yes

Classic / Sector

The Sector Reader is preconfigured to use a specified encryption key to read data from a sector on the MIFARE Card. Read range with this type of credential is typically 45mm for a CR80 card.

DESFire

The DESFire Reader works with the Crystal DESFire credentials. This offers the highest of all security. Crystal DESFire credentials are available as a CR80 ISO thickness card or as a Key Fob to go on a keyring. Read range with this type of credential is typically 20mm for a CR80 card.

Product Codes



<i>Dark Crystal MIFARE Readers</i>	<i>Code</i>
MIFARE UID (CSN) Reader	4231
MIFARE Classic Sector Reader	4270
MIFARE DESFire Reader	4825
<i>MIFARE Credentials</i>	<i>Code</i>
Progeny Encoded Crystal MIFARE DESFire EV2 ISO Card	4806

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