

Readers / Keyboards & Egress Devices Manual



CARD READERS

Mounting

The ideal mounting position for a card reader will depend on the application and reader type. Choose a position that will be natural for users to be able to swipe a card and then open the door, usually between 1.0 and 1.5 metres from the floor.

- If there is a danger of plaster dust or other contaminants collecting in the slot then the reader should be covered or mounted after such building work has been carried out.
- Magnetic Stripe and Barcode readers should be mounted with the slot in the vertical position so that the card is swiped in a downward direction.

Proximity Reader Special Notes

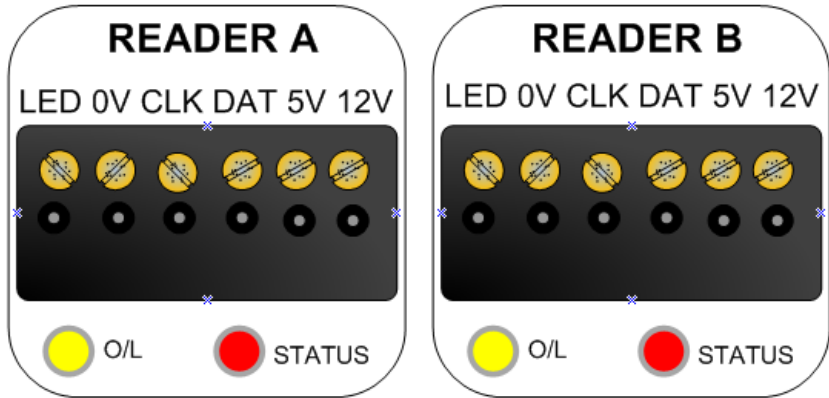
- Do not mount two readers back to back on either side of a wall.
- It is a good idea to fully test the system before attaching the front label. The proximity reader may be mounted internally or externally.
- If the reader is being mounted externally, spread silicon compound over the terminals, after connecting and testing.

Cable

- Always use a screened and non twisted cables (8-core 7/0.02 mm) for card readers.
- Don't exceed the maximum cable length specified for each reader.
- The screen of the cable should be connected to the earth stud of the controller. Keep the pigtail of the screen as short as possible once the cable has entered the enclosure. The inner cores can then make the rest of the journey to the terminal blocks.

Connections

Only one reader may be connected to each reader input of the controller. This is why two reader inputs are provided on Progeny P1 and P3 controllers.



Care of Card Reader

It is recommended that the card reader be cleaned at regular intervals. This is particularly important for the slot readers such as the Magstripe or barcode. General dust can be removed from the outer surface of the reader using a dry lint free cloth. Do not use any waxing or cleaning sprays that may get into a reader slot.

Magnetic stripe reader heads should be cleaned using special cleaning cards. In an office environment, this should be done once every 4000 swipes of the magnetic cards. The cleaning cards are wet and supplied in sealed packets. Swipe the cleaning card through the card reader a couple of times while wet and then again, when the card has dried.

Cleaning cards are available separately in packs of ten. Product Code 2150

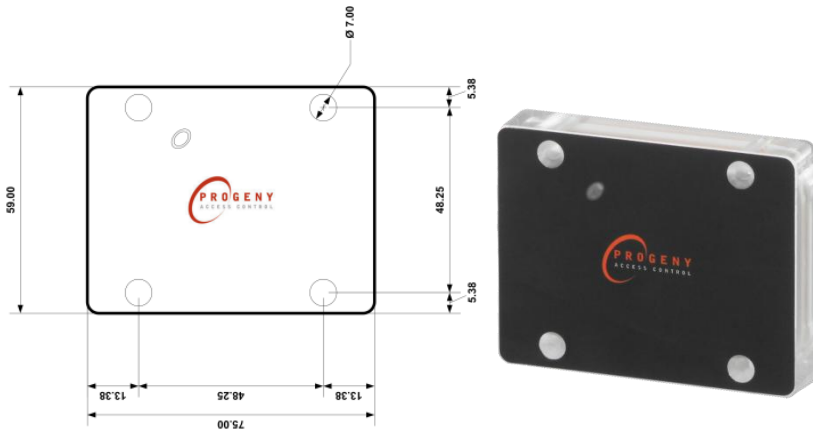
The proximity readers are available with two interfaces: "Wiegand" & "Clock & Data". The most common interface is the Wiegand. Clock & Data Readers are identified with "CD" label. Connect the reader to the controller according to the wiring table below. Check the controller manual for the latest information.

| CONNECTION TABLE (WIEGAND INTERFACE) | | | |
|--|-----------------------|------------------------|-------------------------|
| Connection | Terminal Block | Reader Fly Lead | Controller |
| Supply positive | A | Red | +12 V |
| Supply negative | B | Black | 0 V |
| Data (D1) | D | White | DAT (D1) |
| Data (D0) | C | Green | CLK (D0) |
| LED Control | F | Orange | LED |
| ESD and signal Screen | E | Drain | Earth Stud of Enclosure |
| Sounder Drive | H | Yellow | BUZ |
| CONNECTION TABLE (CLOCK & DATA INTERFACE) | | | |
| Connection | Terminal Block | Reader | Controller |
| Data (Data) | C | White | DAT (D0) |
| Data (Clock) | D | Green | CLK (D1) |
| All Other Connections | | As Wiegand Table | As Wiegand Table |

| PRODUCT SPECIFICATION 2039 | | |
|-----------------------------------|------------|------------|
| Parameter | Min | Max |
| Operating Voltage Range | 5.0 VDC | 16.0 VDC |
| Peak Current @ 12VDC | - | 125 mA |
| Average Current @ 12VDC | - | 35 mA |
| Cable distance to controller | - | 100 m |



2060 Panel Mount Reader



Panel mount reader can be fitted to standard intercom cut outs for proximity readers.

CONNECTION TABLE (WIEGAND INTERFACE)

| Connection | Reader | Controller |
|-----------------------|-------------------|--------------------------|
| Supply positive | Red | +12 V |
| Supply negative | Black | 0 V |
| Data (D1) | White | DAT |
| Data (D0) | Green | CLK |
| LED Control | Orange | LED |
| ESD and signal Screen | Silver drain wire | Earth Stud of Enclosure |
| Sounder Drive | Yellow | BUZ |
| Not Used | Blue | No Connection / Insulate |
| Not Used | Brown | No Connection / Insulate |

PRODUCT SPECIFICATION

| Parameter | Min | Max |
|------------------------------|---------|----------|
| Operating Voltage Range | 5.0 VDC | 16.0 VDC |
| Peak Current | - | 80 mA |
| Average Current | - | 20 mA |
| Cable distance to controller | - | 100 m |



3820 Crystal Mullion Reader

Internal or
External

The Crystal Reader is a passive RFID (Radio Frequency Identification) proximity reader for use with the Progeny P2 & P3 systems. The reader is weather protected and suitable for both indoor and outdoor use.

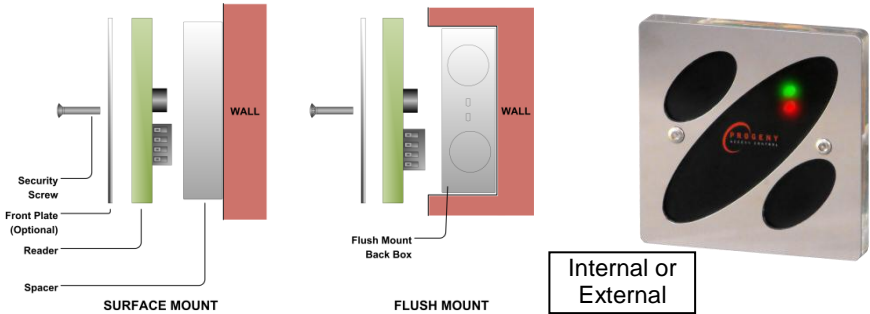
Drill a 6mm hole at the centre point of the mounting position for the cable. The two mounting holes are on a 80mm pitch vertically from that point. Drill and plug the wall for a Number 6 screw. Feed the cable through the 6mm hole and secure the reader / front-plate with the screws provided.

| PACKING LIST | |
|--------------|-----------------------------|
| QTY | ITEM |
| 1 | Reader |
| 1 | Stainless Steel Front Plate |
| 2 | Security Screws |

| CONNECTION TABLE (WIEGAND INTERFACE) | | |
|--------------------------------------|-----------|-----------|
| Reader Connection | P2 System | P3 System |
| + | + | +12 V |
| - | - | 0 V |
| X | X | DAT |
| Y | Y | CLK |
| A | RQE | LED |
| B | DR | BUZ |
| C | NC | NC |
| D | NC | 0V |

| PRODUCT SPECIFICATION | | |
|------------------------------|---------|----------|
| Parameter | Min | Max |
| Operating Voltage Range | 8.0 VDC | 14.0 VDC |
| Peak Current | - | 100 mA |
| Average Current | - | 50 mA |
| Cable distance to controller | - | 100 m |

3800 Crystal Switch Plate Reader



The Crystal Reader is a passive RFID (Radio Frequency Identification) proximity reader for use with the Progeny P3 & P2 systems. The Crystal Reader is weather protected and suitable for both indoor and outdoor use.

| PACKING LIST | |
|--------------|-----------------------------|
| QTY | ITEM |
| 1 | Reader |
| 1 | Stainless Steel Front Plate |
| 2 | Security Screws |

| CONNECTION TABLE (WIEGAND INTERFACE) | | |
|--------------------------------------|-----------|-----------|
| Reader Connection | P2 System | P3 System |
| + | + | +12 V |
| - | - | 0 V |
| X | X | DAT |
| Y | Y | CLK |
| A | RQE | LED |
| B | DR | BUZ |
| C | NC | NC |
| D | NC | 0V |

| PRODUCT SPECIFICATION | | |
|------------------------------|---------|----------|
| Parameter | Min | Max |
| Operating Voltage Range | 8.0 VDC | 14.0 VDC |
| Peak Current | - | 100 mA |
| Average Current | - | 50 mA |
| Cable distance to controller | - | 100 m |



3830 Crystal Panel Mount Reader

The Crystal Panel mount reader can be fitted to standard intercom/door entry units, where the cut out is provided. The reader is mounted behind a 40mm square aperture, with the mounting centres spaced at 1.9" (48.25mm).

This reader is suitable for both P2 and P3 systems.

| PACKING LIST | |
|--------------|--------------|
| QTY | ITEM |
| 1 | Reader |
| 1 | Instructions |
| 4 | M3 Nuts |

| CONNECTION TABLE (WIEGAND INTERFACE) | | |
|--------------------------------------|-----------|-----------|
| Reader Connection | P2 System | P3 System |
| + | + | +12 V |
| - | - | 0 V |
| X | X | DAT |
| Y | Y | CLK |
| A | RQE | LED |
| B | DR | BUZ |
| C | NC | NC |
| D | NC | 0V |

| PRODUCT SPECIFICATION | | | |
|------------------------------|---------|----------|--|
| Parameter | Min | Max | |
| Operating Voltage Range | 8.0 VDC | 14.0 VDC | |
| Peak Current | - | 100 mA | |
| Average Current | - | 50 mA | |
| Cable distance to controller | - | 100 m | |

KEYBOARDS

The keyboard interface allows for code or pin to be used for access control and to allow remote programming of the standalone system. The interface uses a binary coded decimal (BCD) scheme to reduce the number of connections required. When a key is pressed the A, B, C, & D terminals are pulled to 12V in a combination representing the key. It useful to note that the keys 1,2,4 & 8 pull A, B, C & D respectively. When a key is pressed the keyboard LED will extinguish.

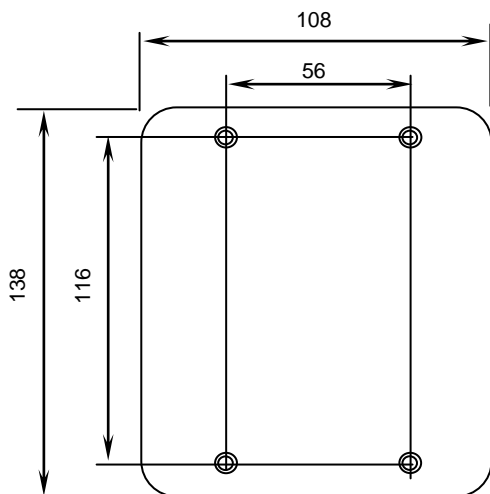


Cable:

Always use a screened non-twisted cable for keyboard. More than one keyboard can be wired in parallel for Code in Code out applications. The screen of the cable should be connected to the earth stud of the controller.

Keep the pigtail of the screen as short as possible once the cable has entered the enclosure. The inner cores can then make the rest of the journey to the terminal blocks.

2011 Scramble Keyboard



INTERNAL
ONLY

INTRODUCTION

The scramble keyboard interfaces to any Progeny access controller in much the same way as any other Progeny keyboard, but provides much greater security by ensuring that only the person using the keypad can see which numbers are being entered. In addition, the numbers behind each key are moved randomly each time the keyboard is used.

| PACKING LIST | |
|--------------|------------------------------------|
| QTY | ITEM |
| 1 | Manual |
| 1 | Scramble Keyboard |
| 1 | Back Box (Surface Mount Only) |
| 1 | Panel Mount Kit (Flush Mount Only) |
| 4 | Tamper resistant screws |
| 4 | Anti tamper rings |
| 1 | Special assembly tool |

2011 Scramble Keyboard

| MOUNTING INSTRUCTIONS (Surface) | |
|---------------------------------|---|
| Step | Description |
| 1 | Determine an appropriate mounting location. (Approximately 1.6 m from floor) |
| 2 | For Wood & Metal: Drill four 2 mm holes approximately 1 inch deep for mounting the keyboard. For Brick Plaster etc: Drill and plug four holes for mounting the keyboard. |
| 3 | Drill a 16 mm hole for the cable. |
| 4 | Secure the keyboard back box to the mounting surface. |
| 5 | Route the cable from the keyboard to the controller. |
| 6 | Test the operation of the keyboard. Assemble the keyboard into the surface box Fit the tamper resistant screws using the special tool provided with the keyboard. Fit the plastic anti tamper rings over the four mounting screw heads. |

| MOUNTING INSTRUCTIONS (Flush) | |
|-------------------------------|---|
| Step | Description |
| 1 | Determine an appropriate mounting location. The vertical panel to which the keyboard is to be mounted may be anything up to 45mm thick but must also be strong enough to take the weight of the keyboard and the heaviest of key pushing that may occur |
| 2 | Cut an accurate aperture for the keyboard. An escutcheon plate is available to cover roughly cut edges Select the required lug from the table below: |
| 3 | Fit the screws through the keyboard enclosure and using the special tool provided screw them into the lugs. Rotate the lugs anti-clockwise to position the lugs against the sides of the keyboard |
| 4 | Route the cable from the keyboard to the controller. |
| 5 | Insert the keyboard through the aperture in the panel. Then tighten the screws using the special tool provided. This rotates the lugs in to position behind the panel. |
| 6 | Test the operation of the keyboard. |
| 7 | Fit plastic anti tamper rings |

2011 Scramble Keyboard

| Min Panel Thickness (mm) | Lugs |
|--------------------------|--------|
| 40 | Short |
| 22 | Medium |
| 4 | Long |

Connect the reader to the controller according to the wiring table below. Check the controller manual for the latest information.

| CONNECTION TABLE | | |
|------------------|----------|----------------|
| Connection | Keyboard | Controller |
| Supply positive | 2 | Keyboard +12 V |
| Supply negative | 1 | Keyboard 0 V |
| Data (Value 1) | 6 | A |
| Data (Value 2) | 5 | B |
| Data (Value 4) | 4 | C |
| Data (Value 8) | 3 | D |
| Sounder Drive | 9 | BUZ |
| LED Control | 7 | LED |

To begin with, no key numbers will be displayed. Press any key to light up the display behind the keys. It is a good idea to locate visually all the digits, you will need to enter the access code, first. Then enter the access code as normal.

Each time the key is pressed an internal sounder will bleep. When complete and the door is released. Press the # key to hide the displayed digits again before leaving the keyboard. If you forget then the display will turn off automatically, ten seconds after the last key press.

| PRODUCT SPECIFICATION | | |
|------------------------------|-----------------------------|------------|
| Parameter | Min | Max |
| Operating Voltage Range | 8 VDC | 15 VDC |
| Operating Temperature | 0 Deg C | + 40 Deg C |
| Supply Current (Display Off) | 100 mA | 240 mA |
| Supply Current (Display On) | 280 mA | 350 mA |
| Cable distance to controller | - | 100 m |
| Cable Type | 7/0.2 (.22mm ²) | - |

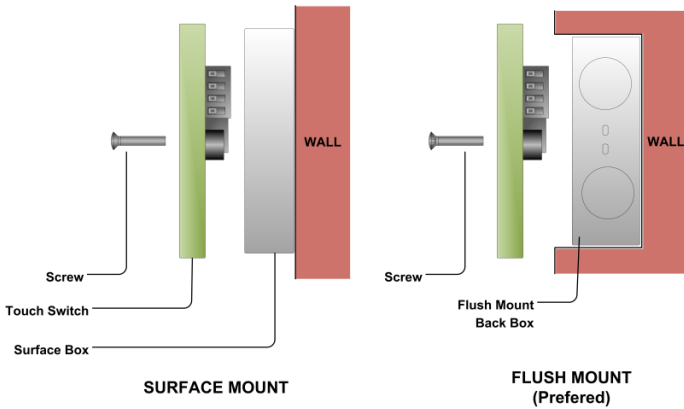
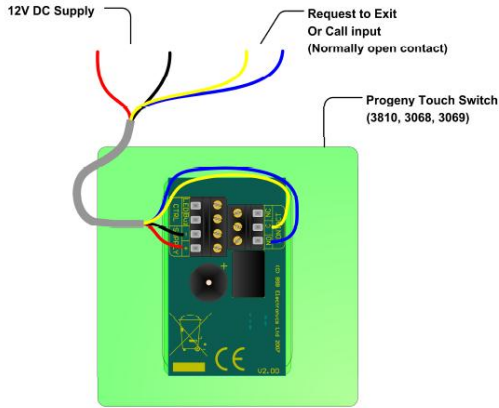
3068/3069/3810 Touch Switch



| PACKING LIST | |
|--------------|--|
| QTY | ITEM |
| 1 | Manual |
| 1 | Touch Switch |
| 1 | UK standard surface mount single gang back box |
| 2 | Screws |

| CONNECTION TABLE | | |
|------------------|--------------|------------|
| Connection | Touch Switch | Controller |
| Supply positive | + 12V | +12 V |
| Supply negative | 0 V | 0 V |
| Contact | C | 0 V |
| Contact | NO | RQE |

| PRODUCT SPECIFICATION | | |
|-----------------------|---|--------|
| Parameter | Min | Max |
| Operating Voltage | 8 VDC | 15 VDC |
| LED | Will light the top Green LED when shorted to 0V | |
| BUZ | When shorted to 0V inbuilt sounder will beep. | |
| Contact | The relay contacts changeover when the surface of the switch is touched. This change over is timed, so that it will not hold even if the triggering object is not removed from the surface. | |
| Cable to controller | 100m maximum distance. | |



| MOUNTING INSTRUCTIONS | |
|-----------------------|---|
| Step | Description |
| 1 | Determine an appropriate mounting location. |
| 2 | The touch switch is designed to mount using standard UK light switch back box |
| 3 | Test the operation of the touch switch. |

3068-mull / 3069-mull / 3810-mull

Touch Switch Mullion Style



| PACKING LIST | |
|--------------|--------------|
| QTY | ITEM |
| 1 | Manual |
| 1 | Touch Switch |
| 2 | Screws |

| MOUNTING INSTRUCTIONS | |
|-----------------------|---|
| Step | Description |
| 1 | Determine an appropriate mounting location. |
| 2 | There is no back box required. |
| 3 | Drill a small hole to accommodate the cable from the back of the touch switch and feed the pigtail through. |
| 4 | Then screw in place using the two screws provided. |
| 5 | Test the operation of the touch switch. |

| Cable Colour | Connection | Function |
|--------------|---------------|--|
| White | - | No Connection |
| Violet | - | No Connection |
| Blue | Switch Common | Switch Common (0V) |
| Brown | Switch NO | Normally Open Transistor collector. Switches to 0v when activated. |
| Black | 0V | Supply -ve |
| Green | BUZ | Buzzer sounds when connected to 0V |
| Yellow | LED | LED shows green when connected to 0V |
| Red | +12V | Supply +ve |

For further information on any of our product range, contact the Support Department via:



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(excluding public holidays)**