

# Installation Note

## PM500-GP Panel Mount Reader

IN00127

The PM500 Reader must be connected to a power supply and to a host access control system.

### Mounting and connecting

1. The PM500 Reader can be mounted within a sheet metal or plastic panel using four screws. If the panel is made of metal, the Reader must be mounted behind a 40mm square cut-out in the panel which must be positioned in the centre of the four mounting holes as shown in the diagram overleaf.

When mounted in a metal panel, the Reader has a range of 5cm to 15cm (2in to 6in) dependent on the type of tag used, so it must be mounted in a position where the card or tag can easily be brought within this distance.

2. The connections required for the Reader are power supply connections (0V and +12V DC or +24V DC), data output connections for Wiegand or Magnetic Stripe (D0, D1, DA) or ASCII/TTL (H, D0, DA), and a connection from the host to the Data Hold input (H) if data lines from two Readers are to be connected in parallel.

To promote EMC compliance we recommend you use 812 Cable as described here. If the Reader is mounted in a plastic panel then connect the screens at the host end only; at the PM500 the screens must be cut back and insulated. If the Reader is mounted in a metal panel then the overall screen must be connected at the host end and also to the metal panel. Do not connect any of the screens to the PM500 itself in either of these situations.

Route the cables into the panel, then make the connections shown in the table below.

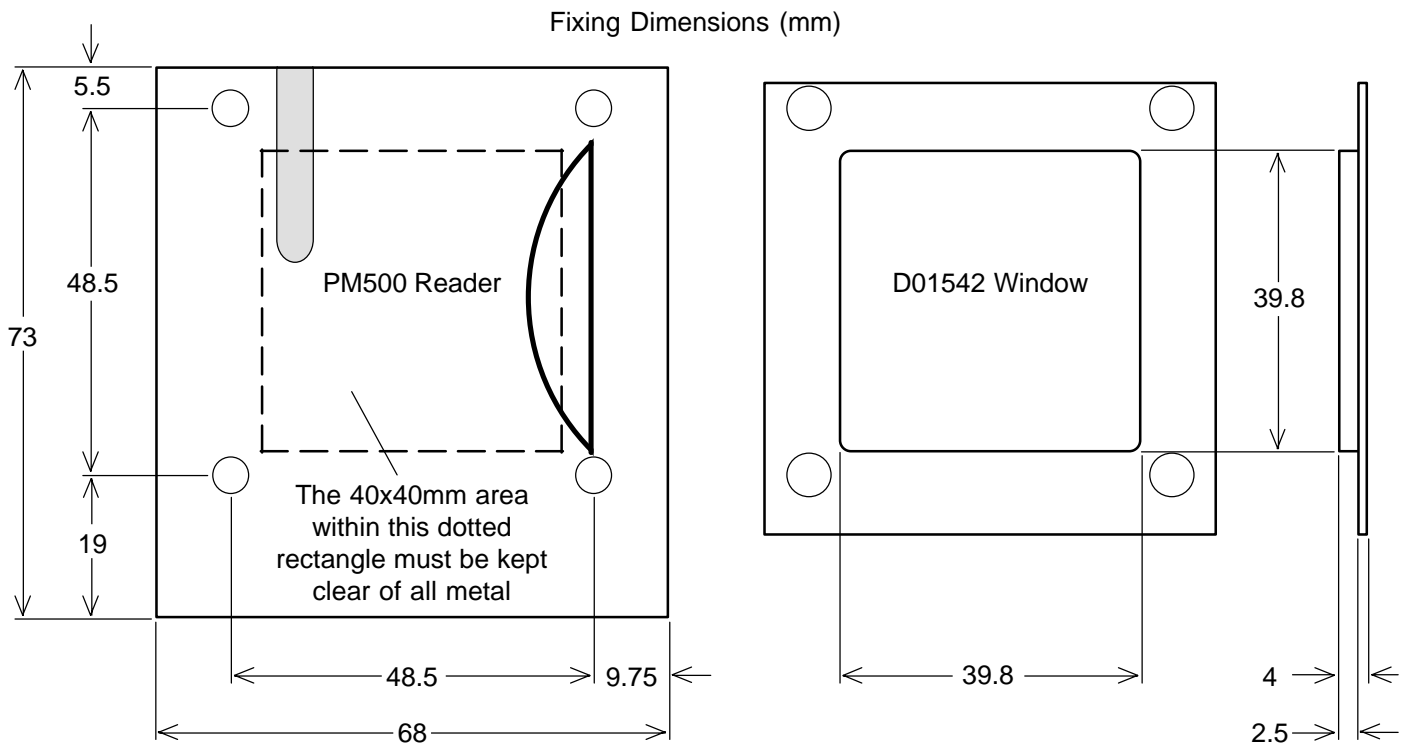
Reader	Function
V+	Power supply +12V unregulated or 24V battery-backed* (absolute max 32V, min 10.6V, 100mA max)
0V	Power supply 0V (-ve) (also ground reference for data output)
H (C)	"Data Hold" for Wiegand and Mag Stripe, "CTS" for ASCII/TTL
D0 (D)	"Data Zero" for Wiegand, "Data" for Mag Stripe, "TXD" for ASCII/TTL
D1	"Data One" for Wiegand, "Strobe" for Mag Stripe
DA	"Data Available" for Wiegand, "Present" for Mag Stripe, "RTS" for ASCII/TTL
HRN (Adr)	Horn - 0V to sound, +5V to turn off
R	Red LED control - 0V for red LED
R/G	Single wire LED control - 0V for green LED, +5V for red LED
TAMPER	Tamper circuit connection (hard wired link)#

\*The PM500 is designed to be operated by 12V unregulated power supplies, or 24V battery-backed power supplies. Operating voltage range is 10.6 to 32.0V. The upper voltage is intended to be compatible with the charging of 24V lead-acid batteries. Charge methods vary, and may be temperature dependent. 32V max is intended to be compatible with commonly used charging methods. If the upper operating voltage is exceeded then permanent damage may be caused. Installers and systems designers should check the max power supply voltage under all conditions. Do not operate the PM500 using unregulated 24V supplies. The PM500 current consumption can be significantly less than 100mA. The unloaded peak voltage from a nominal 24V unregulated supply will exceed the absolute max.

#Two terminals are provided for use with a system 24hour tamper protection circuit.

### 3. Mount the Reader on the panel using four M3 nuts and bolts or self-tapping screws.

If you wish you may fit the transparent window Part Number D01542 which gives a flush finish to the panel across the 40mm square cut-out.



### 4. Configure the Reader and test it (see the Proximity Readers Handbook HB00117).

In order to reduce paper waste we do not ship a handbook with this product.  
You can download a copy of this or any other handbook from our website: <http://www.bewator.co.uk>

#### FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:  
1) This device may not cause harmful interference, and 2) This device must accept any interference received, including interference that may cause undesired operation.