

# Installation Note

## PR500-GP Proximity Reader

IN00119

The PR500 Reader must be connected to a power supply and to a host access control system.

### Removing the cover

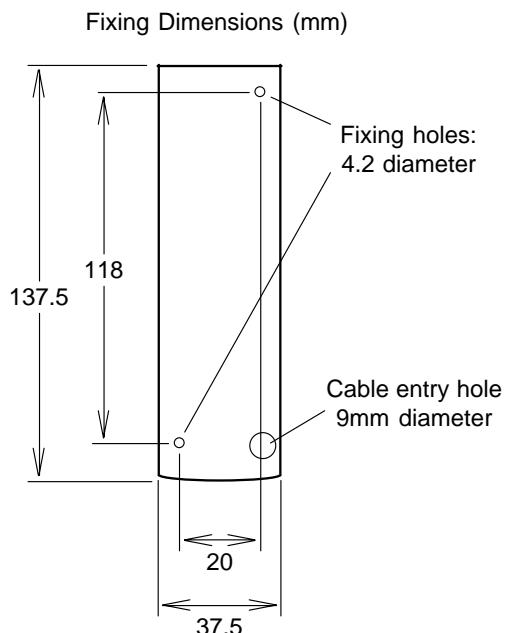
The Reader is supplied with the cover separate. If the cover has been fitted for any reason, remove it by pushing in the lug on its lower edge using a suitable screwdriver.

### Mounting and connecting

1. Choose a suitable position to mount the Reader near the door.

The Reader has a maximum range of 30cm (12in) so it must be mounted in a position where the card or tag can easily be brought within this distance. We recommend it is mounted approximately one metre (3.5ft) above the ground. Also consider ease of access to the door once the card or tag has been read, for example, it is better to mount the Reader near the opening side of the door rather than the hinge side.

2. The Reader should be mounted with the LEDs at the top left. Mark out and drill the two mounting holes. Don't fix the Reader to the wall yet. The holes accept 4mm machine screws or No 8 wood screws.



The cover overlaps the base slightly on all sides so you must allow a little extra room all round.

3. Route the cables into the Reader: you can use either the cut-out in the base or the one in the lower edge at the bottom of the Reader.

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 ( $\bar{H}$ , D0, DA), and a connection from the host to the Data Hold input ( $\bar{H}$ ) 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. Trim back and insulate the screens at the PR500. Connect the screens at the host only: do not connect any of the screens to the PR500.

4. When you have routed the cables into the Reader you can screw it to the wall.
5. Make the connections shown in the following table:

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)
$\bar{H}$ (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
Horn (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

\*The PR500 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 PR500 using unregulated 24V supplies. The PR500 current consumption can be significantly less than 100mA. The unloaded peak voltage from a nominal 24V unregulated supply will exceed the absolute max.

6. **Do not fit the front cover to the Reader until you have configured it and tested 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.