



# SC500/SC500P

81467-3

06-07

## Installation Note

EN



## SC500 - Smart Card Reader

### General

The SC500 is a reader that reads data from Mifare® cards. The default configuration reads the chip serial number from Mifare® cards and provides as default a Wiegand output, but this can be changed to Clock&Data by using a configuration card.

### Installation

#### Mounting

The SC500 Smart Card Reader can be connected to a Granta™ 4422 Reader module, a Entro™ DC12/DC22/DC800<sup>1)</sup> module, or a Bewator 2010™ E2V module. The SC500 is prepared with a fixed 3m cable mounting.

Remove the cover by pushing in the lug on its lower edge using a suitable screwdriver. Choose a suitable position to mount the Reader near the door. The SC500 Reader has a typical range of 2 cm so it must be mounted in a position where the smart card 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 smart card has been read, for example, it is better to mount the Reader near the opening side of the door rather than the hinge side.

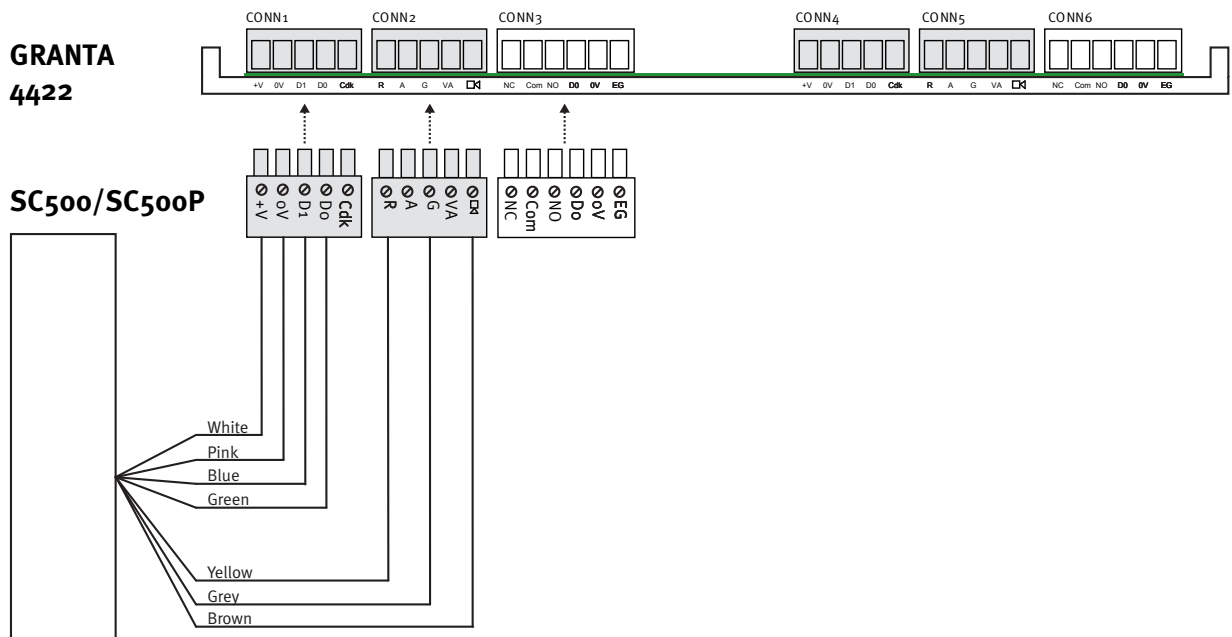
The Reader should be mounted with the LED at the top. Mark out and drill the two mounting holes over the hole for the cable (A drawing is provided on the last page in this document. Note not to scale.) If not this hole is existing make sure to prepare for this as well, do not cut the cable less than 10 cm (4in).

Do not fix the Reader to the wall yet. The holes accept 4mm machine screws or No 8 wood screws (provided with the reader).

Connect the reader according the wiring diagram on the following pages, depending of which system the Reader is connected to.

<sup>1)</sup> The DC800 will be launched Q2-2006

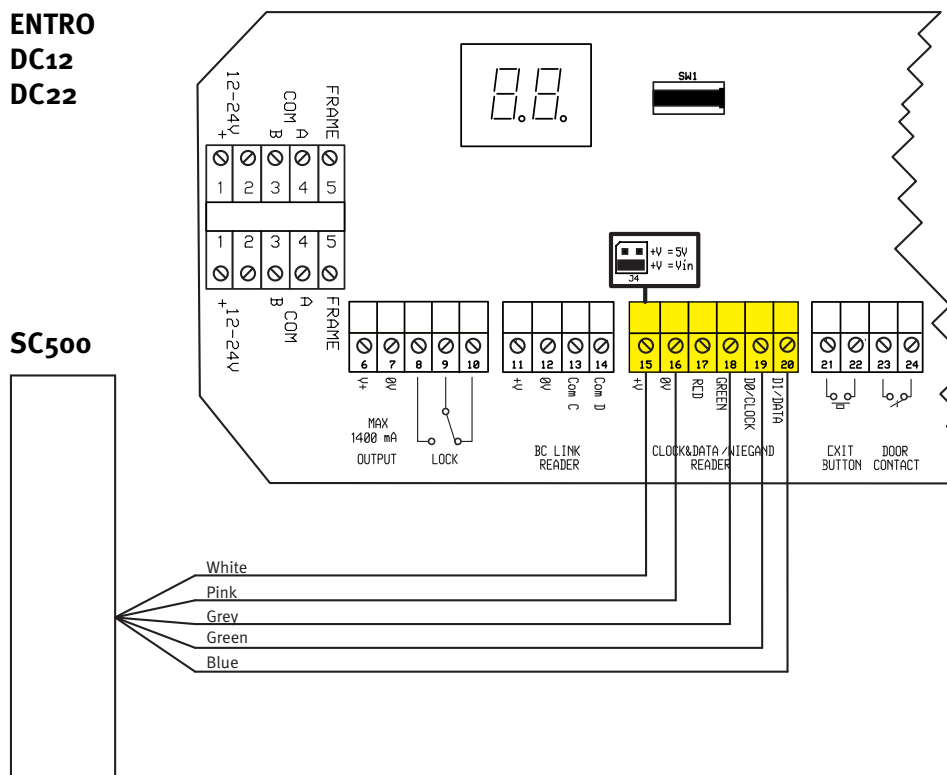
## Connection to Granta



### Configuration

See also the installation note for the Granta™ 4422 Reader Module in order to make necessary settings of the jumpers (Wiegand, +12V and active-low strobe signal). Use interface number 309 for definition of Access Points in Granta SW.

## Connection to Entro DC12 and DC22 (only SC500)

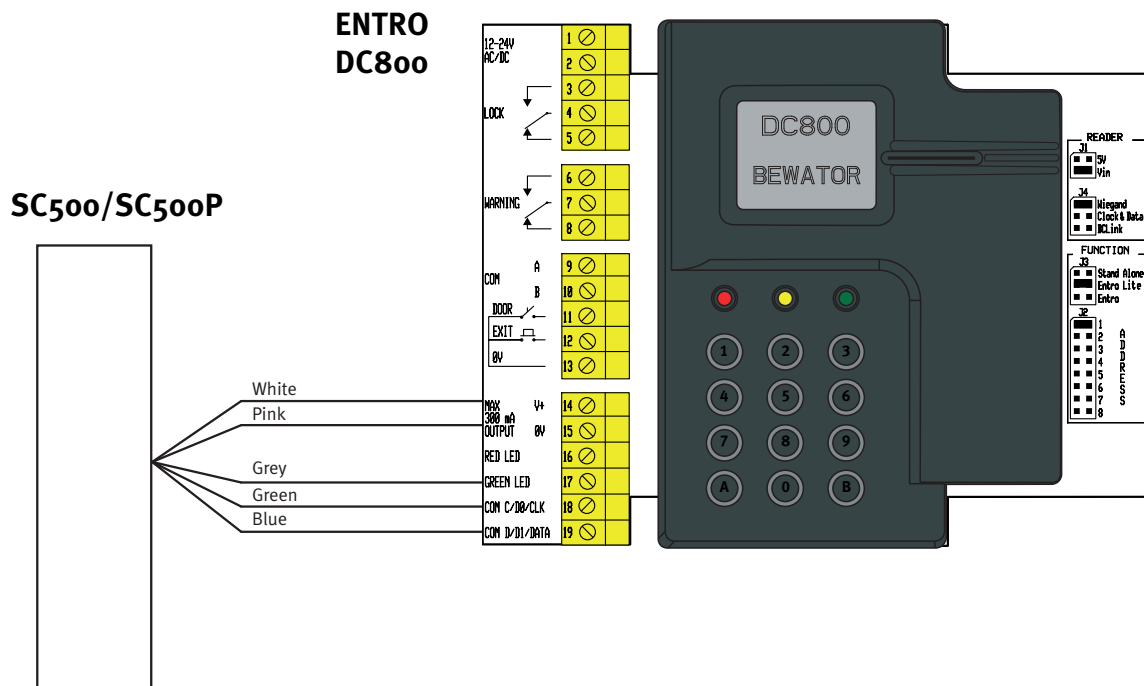


Note that also the **SC500P** (pinpad) will be supported in Entro software version 5.2.

### Configuration

The interface used is Wiegand. Ensure that the power jumper is set to **VIN**.

## Connection to DC800 in Entro Lite



### Configuration

Following jumper selections must be done:

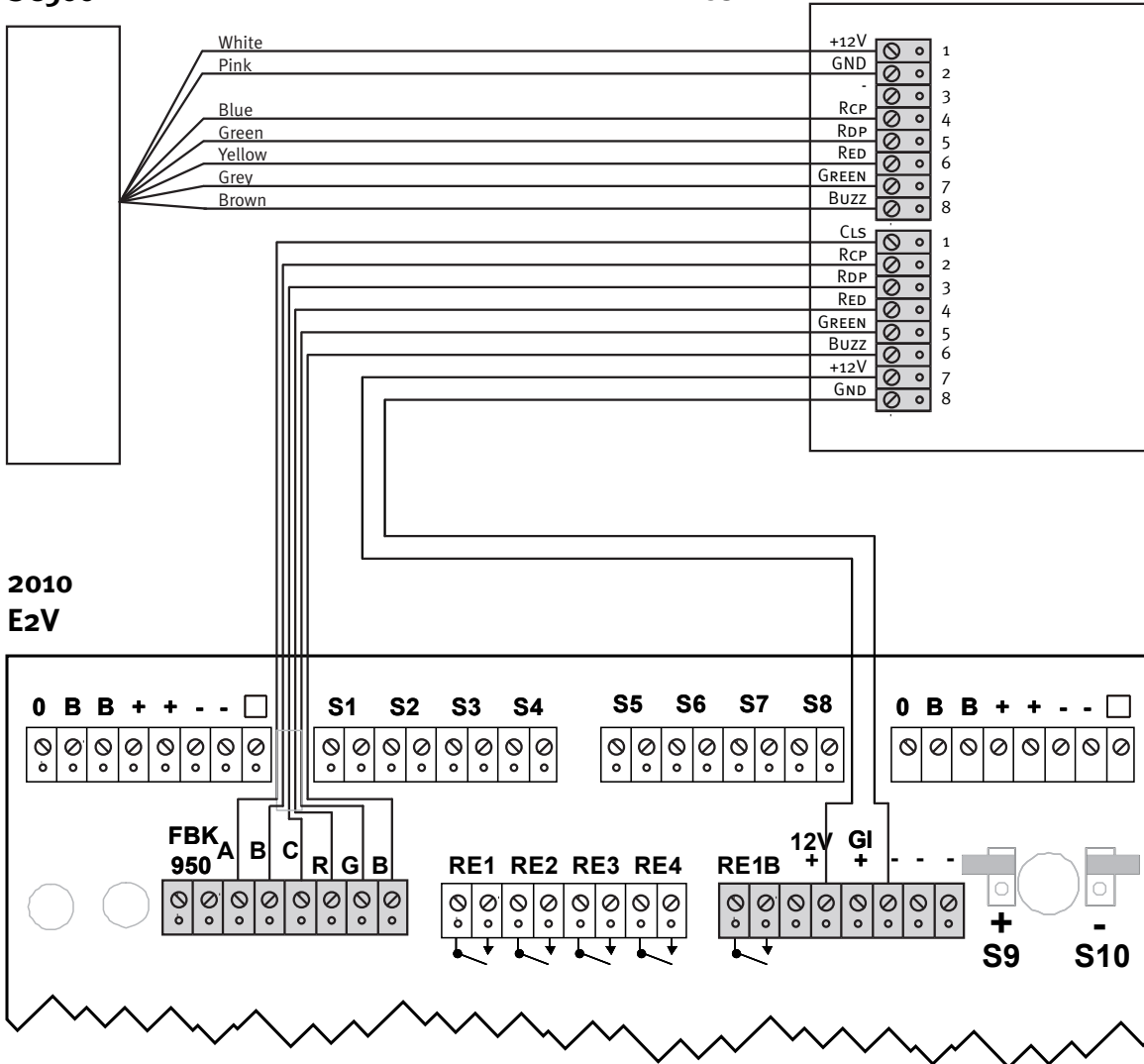
- Reader type (J4) must be put on the **WIEGAND**
- Voltage jumper (J1) to **VIN**.
- Function jumper (J3) to **ENTRO LITE**.  
(Note - if the DC800 is used in Entro - set J3 to Entro).

## Connection to 2010 (only SC500)

**2010**

**SC500**

**2010  
CS1**



Note that also the **SC500P** (pinpad) will be supported by the 2010 if the firmware in the E2V have firmware version 4.0.5 or version 3.0.7.

### Configuration

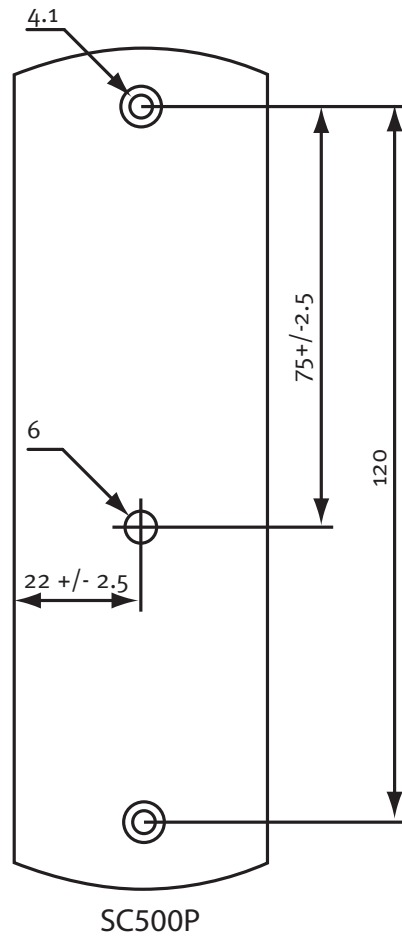
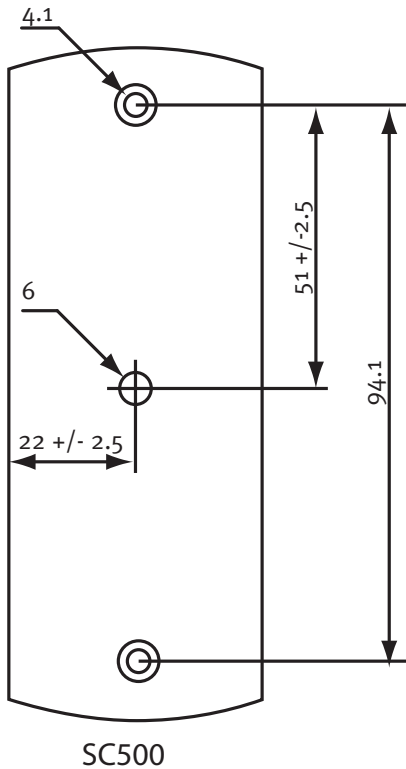
Use the configuration card to change the mode of the reader from Wiegand to Clock & Data. The card can be ordered from Bewator.

## Operation

When the reader is powered the LED is flashing for 5 seconds. After these 5 seconds the LED flashes by the sequence red, yellow and green before the LED is switched off and the reader is ready for use.

When a smart card is provided within the reading sector of the SC500, and the card is accepted, the yellow LED is lit for approximately 0.5 seconds at same time as a message is sent out. The yellow LED is only lit when a message is sent out from the reader. After this the reader goes back to wait state, code from the same card is not sent again before a time of 3 seconds has been elapsed provided the card has been out of the reading sector.

## Hole pattern drawing SC500/SC500P



## Technical Specifications

<b>Power supply</b>	+10...+30 VDC
<b>Current consumption</b>	SC500: 130 mA (max) SC500P: 200 mA (max)
<b>Temperature (ambient)</b>	- 40° till +55° C
<b>Enclosure</b>	Plastic
<b>IP rating</b>	SC500: IP67 SC500P: IP47
<b>Size (H x W x D) mm</b>	SC500: 110 x 44 x 24 SC500P: 138 x 44 x 24

**Interface** Wiegand, RS232,  
Clock and Data

**Connection** 3m cable

**Carrier frequency** 13.56 MHz

**Read range<sup>1</sup>** 70 mm

**Optical indicator** Tri-colour

<sup>1</sup>Supports Mifare® Standard transponders and Multi-application transponders

