



Saflec Systems (Pty) Ltd

SSR-202 Wiegand Proximity Card Reader

Revision 1.2 - (June 29, 2009)

Quick Start Guide

Introduction

The SSR-202 is a proximity reader that can connect using the Wiegand wiring standard.

It can read various transponder cards at the industry standard frequency of 125 kHz, including Hitag™ 1, Hitag™ 2 and HT4102.

It includes a tri-color LED for indication of the scanner status, and a Piezo buzzer to indicate a successful card read.

This unit comes with a splash-proof back cover and can be mounted in any orientation using the mounting screw holes.

This reader has been designed to be used with the following devices:

- SDC-510 Single door controller.
- SDC-520 Ethernet controller.
- SEB-720 Remote IO board.
- Any Wiegand standard controller.



Figure 1

SSR-202 proximity card reader

Setup instructions

Connections - Reader to controller

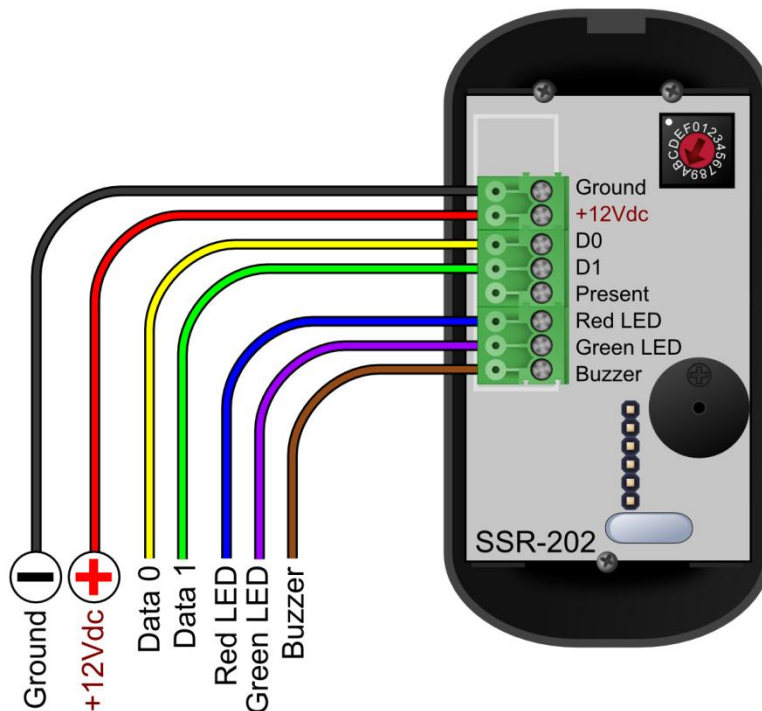


Figure 5

Wiegand wiring diagram

Step 1: Set the reader to 26 bit or 34 bit Wiegand mode (See Fig 6)

The SSR-202 can be set into 26 bit, 34 bit or any bitlength Wiegand – this will affect the number that is read from the proximity cards, so the correct setting must be applied and must be standardised throughout the system to avoid problems.



To set 26 bit Wiegand format (24 bit data length) set the rotary dipswitch on the back of the reader to 'A'.



To set 34 bit Wiegand format (32 bit data length) set the rotary dipswitch on the back of the reader to 'B'.

Figure 6

Bit length settings

Note: The settings 0..9 are used for RS-485 mode and the C to F are reserved for other purposes and should not be set in Wiegand mode.

Step 2: Connect the Wiegand lines (See Fig 5)

When in Wiegand mode the SSR-202 communicates with the Wiegand master device via six signalling lines.

These lines can be broken into two groups:

- The data lines (Data 0, Data 1 and Present). (The Present data line is not always required and can normally be ignored.)
- The indication lines (Red LED, Green LED and Buzzer)

Connect these lines ensuring that the correct cables are used.

Step 3: Connect the power (See Fig 5)

Connect the power lines to the reader making sure that correct polarity is observed.

Note: The power supply must be a 12 Volt DC power supply, capable of supplying 125mA.

When power is supplied to the reader the Piezo buzzer will sound briefly and the LED will begin flashing blue.

Product specifications

Power requirements

Operating Voltage (DC)	10 to 14 Vdc
Maximum Current	125 mA

Environmental characteristics

Operating Temperature	0°C to +70°C
Storage Temperature	-10°C to +80°C
Enclosure Rating	IP54

Digital Outputs (Wiegand)

Specification:	Open collector transistor output with 4k7 Pullup Resistor to 5V DC.
Max Voltage on terminal	-2 to +20V referenced to ground
Max Load	100ma

Digital Inputs (Wiegand)

Specification:	TLL input with 4k7 Pullup Resistor to 5V DC.
Max Voltage on terminal	-10 to +20V referenced to ground
V Input Low	< 1V
V Input High	> 3V

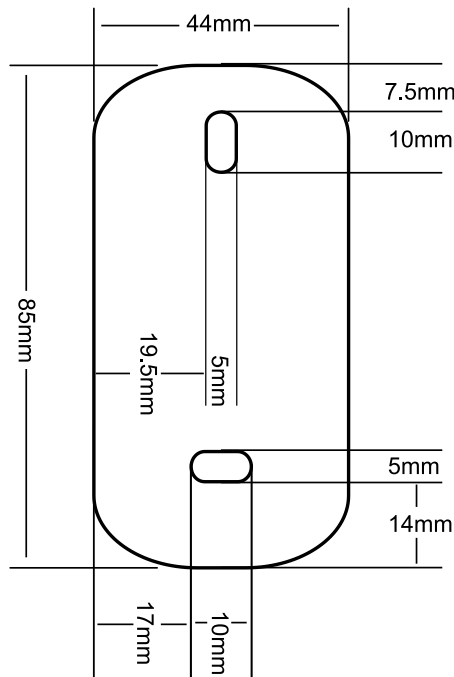


Figure 7

Locations of the drill holes on the SSR-202 back plate.