Installation and User Instructions for S813 Readers

The S813 is a combined fingerprint and contactless smart-card reader, with LCD and keypad, which uses 20mA current loop pseudo-random communications. The S813 is able to read Philips® MIFARE® and Philips MIFARE DESfire smart cards containing optional biometric data. The reader can simultaneously support both card formats.

The reader is automatically configured to accept the first two card formats presented.

1 Mount the Backplate

NOTE: Correct mounting of the unit is essential. Follow these guidelines carefully.

It is important to ensure that people present fingers at the same height, angle and orientation as presented during fingerprint enrollment. Inconsistencies may cause difficulty in gaining access. For best results:

- Mount the unit flat against a wall.
- The top of the reader must be at a height of 3'7" to 3'11" (1.1m to1.2m) from the floor.
- Ensure that desks or other objects do not obstruct easy access to the reader.
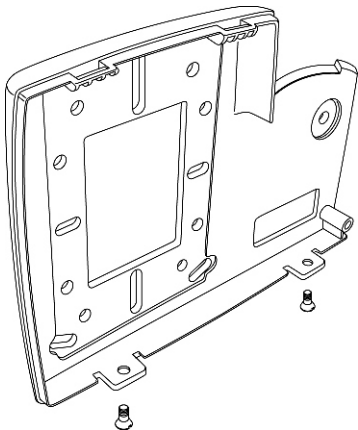
Mounting the reader:

1) Detach the main body of the reader from the backplate by releasing the two securing screws along the bottom edge, swinging the backplate upwards and easing it away from the two top clips.

2) Feed the cable and terminal block through the backplate, then screw the backplate to the wall using the holes provided.
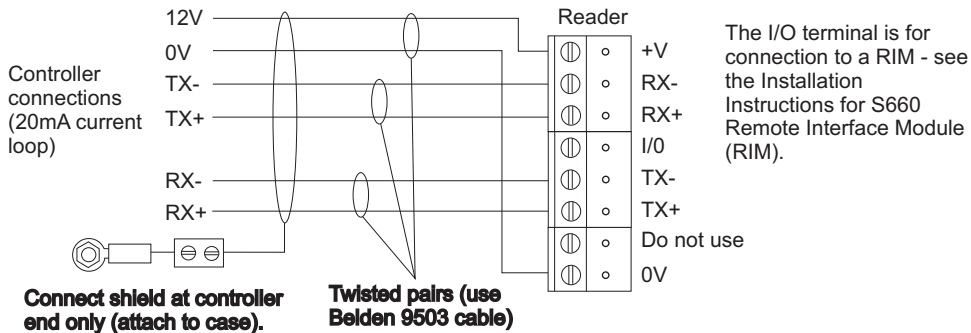
2 Reader Links

The following links are provided on the reader's PCB:

LK1   (Audio feedback) - Set to "0" for sound off. Set to "1" for sound on.

LK3   (Test) - Ensure that this link has been removed.

3   Reader Connections

Controller connections (20mA current loop)

12V		Reader	
0V		+V	
TX-		RX-	
TX+		RX+	
		I/0	
RX-		TX-	
RX+		TX+	
		Do not use	
		0V	

The I/O terminal is for connection to a RIM - see the Installation Instructions for S660 Remote Interface Module (RIM).

Connect shield at controller end only (attach to case).

Twisted pairs (use Belden 9503 cable)

4   Reader Configuration

If the reader needs to read both MIFARE and MIFARE DESfire cards, make sure that one of each card is presented to the reader immediately after the reader has been installed and the cards have been encoded in the Admin/Card Holders screen of the SMS software. The reader supports the first two card formats presented. If the two cards are the same type, only one format is supported.

A reader Setup menu can be displayed by pressing the * and # keys simultaneously while power is applied. You can use the menu to change the language used for the LCD (default English), and view the two card types/formats previously programmed. At the prompts, press * for No and # for Yes.

5   Using the Reader

Present the proximity card face-on close to the reader underneath the finger pad until you hear a "bleep". (No bleep is given if the audio feedback link, LK1, is in the "0" position.)

After presenting your card, you may be prompted to enter a PIN and/or place your finger on the finger pad. Follow the on-screen instructions. For DESfire cards, you may also be prompted for a "CARD PIN". If so, enter the DESfire card PIN, then press "#" if the PIN has fewer than eight digits.

The system can be set up to generate a "duress" transaction if the pre-defined duress finger is placed on the pad. In two-finger mode, the duress finger must be placed first.

✓ **CORRECT**   ✗ **INCORRECT**

Ridge lock

IT IS ESSENTIAL TO PLACE EACH FINGER FLAT AND STRAIGHT ON TO THE SENSOR. Slide your finger into place, so that your finger makes contact with the ridge lock before the sensor. The first joint of your finger must rest on the ridge lock.

For further details of using this reader, refer to the *813 Fingerprint Reader User's Guide*.

Specifications
Input: 310mA max @ 10-14Vdc.
Operating temperature: 32 to 122°F (0 to 50°C).
Operating humidity: 15 to 90%, non-condensing.
Maximum read range: 1" (25mm).
Approvals: EN50133, R&TTE, IP605.
For internal use only.