

Installation and User Instructions for S853 Readers

The S853 is a combined contact and contactless smart-card reader, with LCD and keypad, which uses 20mA current loop pseudo-random communications. The S853 is able to read Philips® MIFARE® and Philips MIFARE DESfire smart cards.

For either type of card, the S853 supports the use of unencoded cards (where only the unique card serial number is read), or cards encoded with a card number. Several encoding formats are supported.

The reader can simultaneously support two different card types/formats (e.g. non-encoded MIFARE and smartMAX-encoded MIFARE DESfire, or non-encoded MIFARE and smartMAX-encoded MIFARE). The reader is automatically configured to accept the first two contactless and the first contact card types/formats presented.

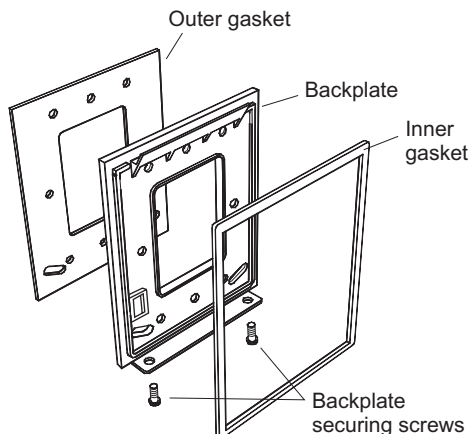


1 Fit the Weatherproofing Kit

When mounting outside, the two-part gasket kit must be fitted:

- Remove the backplate from the reader by releasing the two securing screws.
- Remove the cutouts and backing paper from the two gaskets, then stick them to the backplate as shown.

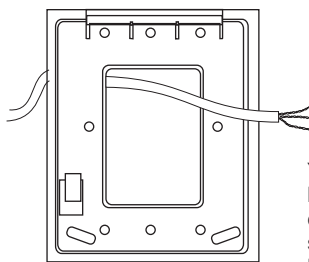
The optional heater kit maintains the reader at the correct temperature when mounted outside. With the backplate off, remove the backing paper from the two elements, then stick them to the inner sides of the reader. The heaters must be connected to a 24V AC supply (min 25VA).



2 Mount the Backplate

With the backplate off (see above), mount the backplate adjacent to the opening edge of the door and at a convenient height. Feed the required cables through the backplate:

- The cable from the controller.
- The cable from the heater, if used (must be a separate cable).
- A cable from a Remote Interface Module (RIM), if used. A RIM can reduce cable lengths to door furniture.



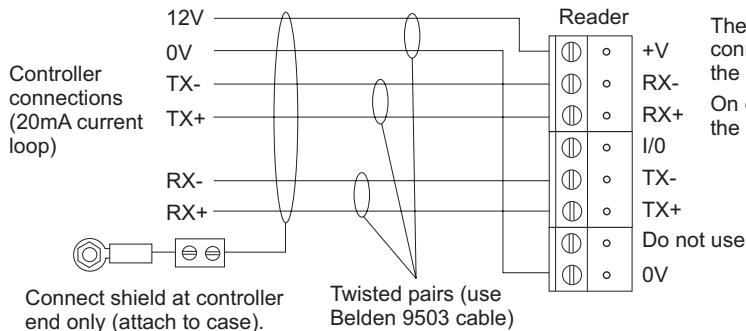
You should find that the backplate has holes for connection to most standard electrical backboxes.

3 Reader Links

Ensure no jumpers are fitted across LK2 (TEST) and LK3 (NODE TERM) and LK4 (HGU TERM). If a jumper is provided, park it across one pin only. LK1 (USER FB) - set to 1 for sound on and 0 for sound off.

4

Reader Connections



The I/O terminal is for connection to a RIM (see the RIM Instructions).
On completion, re-secure the reader to the backplate.

5

Reader Configuration

The reader supports the first two contactless and the first contact card types/formats presented after power-up. For example, encoded MIFARE and encoded MIFARE DESfire (in this example, unencoded cards would not be recognized). The reader enters this configuration mode whenever power is re-applied.

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 contrast and language used for the LCD (default English), and view/clear the three card types/formats programmed. At the prompts, press * for No and # for Yes.

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Using the Reader

For a contactless card, present the card face-on to the reader until you hear "bleep". For a contact card, insert the card (chip upwards and facing you) into the slot at the bottom of the reader until you hear a "bleep". Cards can be presented in rapid succession; there is no need, for example, to wait for "UNLOCKED" to disappear before presenting another.

If the reader has been enabled for user-code mode at the controller, you can gain access by pressing the # key, entering your card number, then pressing the * key.

About the Reader Messages

READY – The reader is waiting for a valid card to be presented.

UNLOCKED – The lock is released and you may open the door.

ACCESS DENIED & LOCKED – You do not have access rights to gain entry, or the reader did not read your card properly (in this case, present it again).

ENTER PIN – Enter your PIN. If you make a mistake, the message INCORRECT PIN is momentarily displayed, followed by ENTER PIN, to prompt you to try again.

CARD PIN AND # – Enter the DESfire card PIN, then press # if the PIN is less than 8 digits.



(Flashing or steady) – These auxiliary indicators can be configured to operate in conjunction with conditional commands.

9600-0348. Installation and User Instructions for S853 Readers, Issue 1.0 5th August 2004. ©Group 4 Technology, 2004.

FCC Notice: 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.

Any unauthorized modification to this device may void the authority of the user to operate it. All trademarks acknowledged. Philips and MIFARE are registered trademarks of Philips Electronics N.V.

Specifications

Input voltage: 9-14Vdc.

Input current (excl. heater): 195mA @ nom. 12Vdc.

Operating temperature: -4 to 158°F (-20 to 70°C) without heater.

Operating humidity: 15 to 90%, non-condensing.

Max. read range (MIFARE DESfire): 1.2" (30mm).

Approvals: EN50133, R&TTE, IP656.