

CRAZYWRITER

Hardware manual

Thanks for choosing SpringCard !

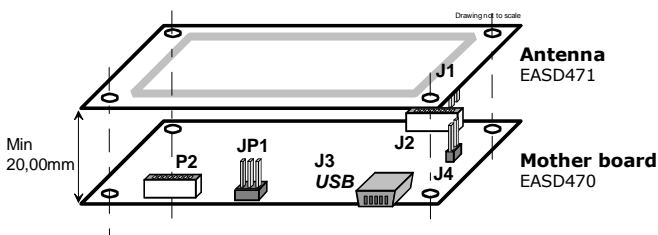
CrazyWriter is an OEM contactless smartcard reader, with 2 μ SIM/SAM slots.

Thanks to its native USB interface, CrazyWriter is PC/SC compliant. The device may also be operated in legacy mode, either on USB or in RS-232 thanks to an optional interface board.

This document is the reference guide to install CrazyWrite in your equipment.

MOUNTING FOR USB OPERATION

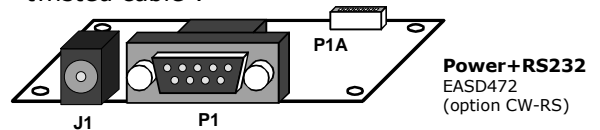
- Install *CrazyWriter Mother Board* (EASD470) in a place where you can access the μ SIM/SAM slots and the USB connector easily.
- Install the antenna (either *CrazyWriter Standard Antenna* EASD471 or any compliant antenna¹) near the "landing zone" of the contactless smartcards (distance between the smartcard and the antenna must be **0,5cm \leq d \leq 1,5cm** for correct operation with most smartcards).
- Connect the antenna to the mother board :
 - Short distance ($d \leq 5\text{cm}$) : use a 2-wire twisted cable (J4 connector)
 - Long distance ($5\text{cm} \leq d \leq 200\text{cm}$) : use a 50Ω coaxial cable.



¹ SpringCard offers various antenna, with different sizes to accommodate most needs. We also offer a custom design service. Don't hesitate to contact us if you need a specific antenna.

MOUNTING FOR RS-232 OPERATION

- Install Mother Board and Antenna following the steps depicted in the above paragraph.
- Install the Power+RS232 board (EASD472)
- Connect P1A to P2 using the included 8-wire twisted cable².

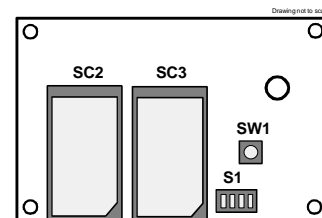


An external power supply is required in this configuration (9 – 12V DC, 500mA)

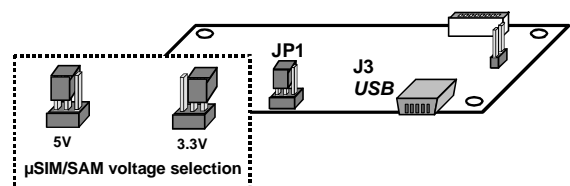
USING THE μ SIM/SAM SLOTS

Install one or two μ SIM/SAM is SC2 and SC3.

- SC2 is "slot 2" in legacy mode (SpringProx API), and "CrazyWriter slot 1" in PC/SC.
- SC3 is "slot 3" in legacy mode (SpringProx API), and "CrazyWriter slot 2" in PC/SC.



Use JP1 to select the μ SIM/SAM voltage³ as follow :



² Use only the cable supplied in the kit (20cm approx) or a shorter one.

³ Both smartcards must accept the same voltage.

Headquarters, Europa

SpringCard
 13 Voie la Cardon
 Parc Gutenberg
 91120 Palaiseau
 FRANCE

Phone : +33 (0) 1 64 53 20 10
 Fax : +33 (0) 1 64 53 20 18

Americas

SpringCard
 694 Fifth Avenue
 Suite 235
 San Diego, CA 92101
 USA

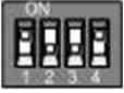
Phone : +1 (619) 544 1450
 Fax : +1 (619) 573 6867

www.springcard.com

PRO ACTIVE SAS EDITOR'S INFORMATION
 company with a capital of 227 000 €
 RCS EVRY B 429 665 482
 Parc Gutenberg, 13 voie La Cardon
 91120 PALAISEAU – FRANCE

CONFIGURING THE SWITCHES

S1



Use a thin screw-driver or a sharp object to configure S1 as follow :

	1	2	3	4
USB PC/SC or Legacy ⁴	ON	OFF	ON	OFF
Serial	ON	OFF	OFF	ON
USB Flash mode	ON	ON	ON	ON
USB Test mode	ON	OFF	ON	ON

DO NOT select the greyed configurations (last 2 lines) in normal operation.

INSTALLING THE DRIVER AND CONNECTING THE PRODUCT

USB operation

Follow the **CSB6 Family Quick Installation Guide** (PMUJ5P) to install the driver before connecting the CrazyWriter to your computer.

Do not connect the Power+RS232 board (EASD472) when operating CrazyWriter on USB

PC/SC driver for CSB6 Family is available at :
www.springcard.com/download/drivers.html

For non-Windows OS, please read :
www.springcard.com/support/pcsclite.html

Serial operation

- Use a DB-9 cable, certified for RS-232 (not provided), to connect the CrazyWriter to the computer (P1 connector).
- Use a 9V to 12V DC power supply, 500mA min. (not provided) to power the CrazyWriter (J1 jack).

SDK for CrazyWriter - Serial / USB Legacy

Microsoft Windows SDK :
www.springcard.com/products/csb-dev.html

Other operating systems, or no OS :
www.springcard.com/products/oem-dev.html

⁴ Choice between PC/SC and Legacy mode is made by non-volatile software configuration. The procedure is depicted at
www.springcard.com/support/csb6legacy.html