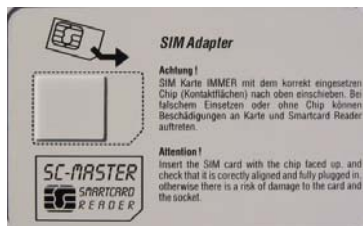


SC-Master DRAGON

the new active

Mega All-in-One Programmer



Inclusive RS232/PS2 connection cable and GSM/SIM-Adapter

Made in Germany



SC-Master DRAGON is an active Smartcard-Programmer having 9 different modes. Control is taken by an ATMEL AVR processor and a reprogrammable XILINX CPLD (Complex Programmable Logic Device). With the help of a PC-software it is possible to change the modes automatically or manually by pressing the push-button.

Features:

- 9 different modes for nearly every kind of chipcard and card program and a new card copy mode for Atmel AT90S8515As cards (FUN 2 to FUN 4) (more modes are possible through firmware update).
- Casing beautifully shaped with brief description of the elements.
- Easy to handle via 'Up' and 'Down' push-bottoms.
- PC-software control of the modes und additional features.
- Indication of the adjusted mode and additional information via a background lighted 2x16 character LCD display.
- Supply current and voltage of the Chipcard can be shown in the LCD display.



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- 2 LED's (light emitting diodes) for DATA (green) and RESET (red or orange).
- Atmel ATmega8 processor (with 8 Kbyte Flash, 512 Byte eeprom, 1 Kbyte SRAM) Reprogrammable, updateable by a PC program via serial access port for future modes
- 2 x 256Kbit eeprom Memory on board (for storing card data and eeprom loaders)
- CLONE Mode. The DRAGON can copy (write) Chipcards (ATMEL (FUN) without connected PC!! (PIC (GW, Silver) processor cards will come soon)
- Free programmable clock frequency of the Chipcard (within 80 KHz and 166 MHz)
- Reprogrammable XILINX CPLD (Complex Programmable Logic Device), updateable via serial access port for future modes!
- Optimal card protection.
Signals will be activated with time deceleration, about 60 ms after the insert of the card and about 20 ms after the change of the modes, and if drawn out or changed, they will be deactivated immediately, respectively. Additional protective resistors are integrated in the signal data lines.
- PS2 power connector optional to the external power supply.
- Optional power by 9 Volt Battery (useful for Clone Mode)
- PS2/RS232 special cable included in delivery (No extra RS232 cabel and external power supply are necessary. (see picture above)
- GSM/SIM card adapter included in delivery.
- Comfortable PC-program to read and write processor cards are free downloadable from the SC-Master homepage (www.sc-master.com) (for Windows9x/NT/2K/XP only).
- Compatible to the new Titanium smartcard
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Power Supply:

SC-Master Dragon can powered with the RS232/PS2 Cable or optional with a simple external stabilized power supply 7,5 - 9 Volt, >200 mA. It is protected against pole change. The plus pole of the power supply has to be in the middle of the plug..Optional can also be used a 9 Volt Battery

RS-232-Cable:

The necessary RS232/PS2 cable are included.

Select a free COM access port at the PC (mostly COM1 or COM2), no other software should access the selected COM Port.

Operating instructions:

After connecting the RS-232 cable and PS2 Plug into the PC (or the external Power supply) the SC-Master DRAGON is on mode 0. By pressing the push-button the SC-Master DRAGON will change the operating mode. Please take care when inserting the Smartcard: the contact surface has to be upwards. If the card is inserted and the mode is activated, the point of the decimal 7 – segment indication is on.

The LCD Display shows the information if the cards is in (,Card in') or out (,Card out').

The modi:

- 0** Mouse Mode with a clock frequency of 6.00 MHz
- 1** Mouse Mode with a clock frequency of 3,58 MHz
- 2** PICprog (Ludipipo)-Mode.
Please use Smartcards with PIC members ONLY.
Other cards may be damaged by the high tension while programming!
- 3** I2C-EEPROM-Mode. For programming of EEPROMS on 8 poles SMD
WAFER/PIC/TwoStone© cards.
- 4** AVR-Programming-Mode. For programming of the Atmel (AVR-Controllers) on Jupiter
1/TwoStone© and FUN cards (the EEPROM has to be loaded in the Mouse Mode after
the termination of AVR programming).
- 5** I2C-EEPROM-Mode. For programming of EEPROMS on 8-poles SMD Jupiter cards.
- 6** „Easy-Check“ Emulation (©ELV). On this mode operates the reading program for
chipcards of GSM-, telephone-, health insurance-, or pay cards. You will get the
program among <http://www.teledata-update.de>
- 7** Phoenix Mode with a clock frequency of 6.00 MHz
- 8** Phoenix Modus with a clock frequency of 3,58 MHz
- 9** Mouse Mode with 3,68 MHz default clock frequency. You can change this frequency
with our SC-Master PC software (free adjustable within 80 KHz and 166 MHz).

The clone modi:

Please press both push-button together to change in the clone mode an back.

- C1** AT90S8515 / 24C64 (FUN 2) card with Atmel Processor and 64Kbit Eeprom
- C2** AT90S8515 / 24C1284 (FUN 3) card with Atmel Processor and 128Kbit Eeprom
- C3** AT90S8515 / 24C256 (FUN 4) card with Atmel Processor and 256Kbit Eeprom

Short description of the clone mode:

By pressing the ‚UP‘ push-button the clone mode can be changed. The Clone process can be started with the ‚DOWN‘- push-button.

‚C/Ex‘ on the display means, ‚CONTINUE‘ with the left push-button and ‚EXIT‘ with the right push-button.

‚Y/N‘ on the display means, ‚YES‘ with the left and ‚NO‘ with the right push-button

More modi are possible via software update!

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The GSM Chipcard software runs under following operating systems:

Windows 9x, -ME, -NT, -2000, -XP

Downloadable from <http://www.teledata-update.de>

Note:

From the day of purchasing on, the producer gives guarantee for 24 months on the SC-Master DRAGON In case of defect please return the Programmer back to the trader, where it has been bought.

Defects at Smartcards or at the PC can not be warranted by producer or trader.

Further information and software at <http://www.sc-master.com>