Dataman T51Pro

The Dataman T51Pro is a PC based 40-pin MCS51 and AVR programmer with ISP capabilities and USB 2.0 connectivity. The T51Pro is built to meet the demands of development labs and field engineers for specialized programming.

Dataman T51Pro is a small, fast and powerful programmer supporting a huge range of programmable MCS51 and AVR devices. Using the in-circuit serial programming connector (ISP), the programmer is able to program ISP capable chips.

Hardware:

General

- 40 powerful TTL pindrivers provide H/L/pull_up/pull_down and read capability for each pin of the socket. Advanced pindrivers incorporate high-quality high-speed circuitry to deliver signals without overshoot or ground bounce for all supported devices. Pin drivers operate down to 1.8V so you'll be ready to program the full range of today's advanced low-voltage devices
- The programmer performs device insertion tests and contact checks before it programs each device. These capabilities, supported by signature-byte check help prevent chip damage due to operator error
- T51Pro programmer performs programming verifications at the marginal level of supply voltage, which improves programming yield, and guarantees long data retention
- Easily upgradeable to the 40Pro programmer
- Various socket converters are available to handle device in PLCC, SOIC, SSOP, TSOP, TSSOP, TQFP, QFN (MLF) and other packages

Base unit (DAC)

- Two D/A converters for VCCP and VPP, controllable rise and fall time
- VCCP range 2V..7V/350mA
- VPP range 2V..25V/200mA
- USB 2.0/1.1 compatible interface
- Auto calibration
- Self test capability

- 40 pin ZIF socket accepts both 300/600 mil DIP devices up to 40 pin

- Advanced pin drivers allow varying voltages to be applied to any pin delivering signals without overshoot, increasing programming yield

- Pin drivers operate down to 1.8V so you'll be ready to program the full range of tomorrow's advanced low-voltage devices

- USB 2.0/1.1 connectivity allowing fast and easy connection to PC's and laptops

- Upgradeable to 40Pro programmer

ZIF socket pindriver

- 40-pin DIL ZIF (Zero Insertion Force) socket accepts both 300/600 mil devices up to 40-pins
- Pindrivers: 40 TTL pindrivers, specialized GND/VCC/VPP pindriver for MCS51 and AVR devices
- Spare GND, VCC and VPP driver, which add additional made-by-wire GND/VCC/VPP pin capability for future devices
- FPGA based TTL driver provides H, L, CLK, pull-up, pull-down on all pindriver pins; level H selectable from 1.8V up to 5V
- Continuity test: each pin is tested before every programming operation

ISP connector

- 10-pin male type with miss insertion lock
- 6 TTL pindrivers, provides H, L, CLK, pull-up, pull-down; level H selectable from 1.8V up to 5V to handle all (low-voltage including) devices
- 1x VCCP voltage (range 2V..7V/100mA) (*1) and 1x VPP voltage (range 2V..25V/50mA)
- Programmed chip voltage (VCCP) with both source/sink capability and voltage sense

Software:

User Interface

- Programmer is driven by an easy-to-use control program with pull-down menus, hot keys and on-line help. Selecting of the device is performed by class, manufacturer or simply by typing a fragment of vendor name and/or part number
- Standard device-related commands (read, blank check, program, verify, erase) are enhanced by some test functions (insertion test, signature-byte check), and some special functions (autoincrement)
- All known data formats are supported. Automatic file format detection and conversion during loading of file
- The rich-featured autoincrement function enables one to assign individual serial numbers to each programmed device - or simply increments a serial number. The function also enables one to read serial numbers or any programmed device identification signatures from a file
- The software also provides extensive information about programmable devices including detailed drawings of all available packages. The software also provides explanations of chip labelling (prefixes and suffixes) for each of the supported chips
- The software provides full information for ISP implementation: Description of ISP connector pins for the currently selected chip, recommended target design around in-circuit programmed chip and other necessary information
- Keeping your programmer software up to date can be a costly business with some programmers. Dataman offers completely FREE software updates whenever you need them. The latest software is always available from our website

The Dataman T51Pro supports over 6,000 of the most popular MCS51 and AVR devices in use today - with future devices being added monthly. Dataman T51Pro coverage includes the following device types:

Programmer (ZIF socket)

- Microcontrollers MCS51 series: 87Cxxx, 87LVxx, 89Cxxx, 89Sxxx, 89LVxxx, LPC series from Atmel, Atmel W&M, Intel, Philips, SST, Winbond, ... 8-40 pins
- Microcontrollers Atmel AVR: ATtiny, AT90Sxxx, ATmega series (parallel and serial mode), 8-40 pins
- Serial E(E)PROM: 24Cxxx, 24Fxxx, 25Cxxx, 59Cxxx, 85xxx, 93Cxxx series

Programmer (ISP connector)

- Microcontrollers Atmel: AT89Sxxx, AT90Sxxxx, ATtiny, ATmega series
- Microcontrollers Philips: LPC series

Package Includes:

Dataman MCS51 / AVR ISP Programmer

- Dimensions: 160x95x35 mm (6.3x3.7x1.4 inches)
- Weight: 500g (17.65 oz)

Switching Power Supply Adaptor

- Input: 100-240V @ 50-60Hz & 400mA
- Output: 15V @ 0.5A, 7.5W

- Moulded USB Cable
- ISP cable
- Diagnostic POD for self test of the programmer
- Anti-dust cover for ZIF socket
- User manual
- Software
- Optional range of adapters and socket converters also available

Warranty and Support:

- 30 day money back guarantee* - If you don't like it, send it back
- One year guarantee - One year parts and labour warranty, on the T51Pro device programmer
- Life-Time Technical Support - T51Pro technical support is available free via our website and telephone helpdesk for life
- Life-Time Software Updates - T51Pro software updates are available free via our website for life

*Applies to orders from UK/US office only

Available from...