

# Dataman 48XP Intelligent Universal Programmer

## Features

- Printer-port interface with auto-switch power
- Support 5V and 3.3V low voltage devices, 1.8V chip support through low voltage adapter.
- Less then 2 seconds per M bit Programming speed for high-density flash chip.
- No adapter required for DIL chip up to 48-pin
- 48-pin universal pin driver and current limit
- Auto-sense/Self programming with statistical report
- Device insertion/continuity check
- Universal adapter for 44-pin PLCC/QFP/TQFP/PSOP and 40/48 TSOP
- Supports Windows XP, Windows 2000, Windows 95/98 or Windows NT
- Automatic EPROM/Flash ID search
- Serialization for Memory/ $\mu$ P chip
- Memory buffer H/L byte swap
- Project file save/load function
- User-selectable verify Vcc with one or two-pass verify voltage
- Automatic file format detection and conversion
- User-changeable programming parameters
- Pin swapping table provided for all adapters
- 3 years warranty
- [Software update via our website](#)

## Universal pin driver - No adapter required for DIL devices

The Dataman 48XP features universal pin driver, each pin can supply four different voltages, ground or it can be configured as TTL high/low levels with pull-high/pull-low, high-speed clock and high impedance. This advanced pin design lets you program any DIL device of up to 48 pins without needing an adapter.

## Unbeatable programming speed

The Dataman 48XP's on-board intelligence reduces system overhead to a minimum. It is up to 100% faster than its predecessor when programming high density flash devices, it can program an Intel 32 Mbit flash device in under 60 seconds.

	Blank check	Program	Verify	Total
Intel 28F320C3B	18.6 sec	57.5 sec	32.5 sec	108.6 sec
AMD 29DL323DB	18.9 sec	76.2 sec	33.0 sec	128.1 sec

The Dataman 48XP is much faster than its competitors, making it much more productive with today's high density, multi-megabit memory devices.

## Device insertion and contact checks means no mistakes!

The Dataman 48XP performs device insertion and contact checks before it programs each device. It can detect poor pin contact and devices inserted upside down or in the wrong position.

## EPROM and Flash memory ID detection and Search

Many EPROM and Flash memories have a built-in device ID and manufacturer ID. The Dataman 48XP can read the device's ID and compare its database and determine the chip's correct vendor and product number. This feature is especially useful with second hand devices and devices that have had their part number accidentally (or intentionally) removed (this function only applies to 28 pin or 32 pin EPROM and Flash).

### Auto-sensing and self-programming

To meet mass-production requirements the Dataman 48XP has implemented new patented technology in both its hardware and software. After entering the Mass-Production Mode, the production line operator inserts a device into the ZIF socket. An LED on the Dataman 48XP indicates the device is ready and the operator simply removes it and replaces it with a new one. No formal training is necessary adding flexibility and saving time and money. In addition, the Dataman 48XP's auto-sensing feature ensures the device has been inserted correctly and then automatically programs the device. Furthermore, in the mass-production mode the system keyboard is automatically disabled preventing the operator from making any mistakes.

### Project file save and load

User can create and save a project file containing device selection, buffer data and all the programming setup options. This project file can be called upon at any time for future use without having to go through the setup procedure again, your design file can go to the production department without making any mistakes.

### Serialization function

If your memory devices need individual serial numbers with different increment sequence and initial value, the Dataman 48XP has an Auto Increment function. This simply increments the serial numbers in the buffer each time a new device is inserted.

### User-selectable verify voltage, one or two-pass verification

The Dataman 48XP lets you select the verify voltage after you have programmed the device, e.g., Vcc, Vcc  $\pm$ 5%, Vcc  $\pm$ 10%. The Vcc voltage can be 2.0V to 6.5V. This feature ensures that your device has been programmed properly, preventing failures due to programming errors and ensuring data retention.

### Non-DIL device support through versatile converters

The Dataman 48XP's universal pin driver capability lets it program all DIL devices up to 48-pin, including all single-chip Micro-controllers, without DIL-to-DIL adapters. However there are many different packages beside DIL package, such as PLCC, SOP, TSOP, QFP and SDIP. We have developed over 100 different adapters to support these special-package devices.

### 3 Year warranty and software update via web

The Dataman 48XP has additional safety features such as a built-in current limiter and pin continuity check function. This prevents damage from faulty chips during the programming cycle. As a result we provide a 3 year warranty on parts and labour for the Dataman 48XP (limited 50,000-cycle warranty on ZIF socket). Free software updates are also available via our website at [www.dataman.com](http://www.dataman.com)

### Universal 44-pin PLCC, QFP, PSOP and TQFP adapter supports 44-pin devices

The universal pin driver on the Dataman 48XP enables you to support all 44-pin chips such as EPLD, EPROM, Flash, EPLD and Micro-controllers. You need only one 44-pin universal adapter for each package, eliminating the need to buy multiple adapters. Moreover, different packages with 48 pins will only require one adapter.

### Pin swapping table-Build the adapter yourself

The pin swapping tables for all the Dataman 48XP adapters can be found [here](#)

### Low voltage chip support

The Dataman 48XP supports 2.0V~5.0V logic level input/output. It can supply 2.0V~21V analogue voltage (such as VCC). Support for devices lower than 2.7V such as 1.8V is also possible with a special low voltage adapter on top of its 48 pin ZIF socket.

## Specifications

### Socket and pin driver

- 48-pin DIL ZIF socket with support for 8-pin to 48-pin 300 and 600-mil devices.
- Four DACs for Vcc, Vpp1, Vpp2 and Vpp3 with 8-bit resolution. Software controllable rise time and current limit protection.
- Logic driver supports pull-up/pull-down or high impedance on all 48 pins with 2.0V-5V level.

### Device support

- Memory: PROM, EPROM, EEPROM, Flash, Serial PROM, NVRAM
- Logic: PAL, GAL, CEPAL, PEEL, CDLD, EPLD,
- Others: OTP/Flash Micro-controllers

### Device operations

Read, blank check, device insertion/contact check, verify, checksum, EPROM ID check, compare, erase chip, function test, program, memory protect, device configuration setting, device search, edit buffer, mass production mode, modify vector, serialization, H/L byte buffer swap, buffer search.

### PLD vector tester

- Accepts JEDEC test vectors up to 48 pins
- 2500V/usec. rise time
- File format conversion
- JEDEC, POF, Binary, Intel HEX, Intel EXT HEX, Motorola S, HP 64000ABS, Straight Hex and TEKTRONIC Hex, Automatic detection and conversion.

### PC system requirements

- Operating system: Windows XP, Windows 2000, Windows 95/98 or Windows NT
- Processor: 386 and above
- 8 MB RAM minimum, 32 MB recommended
- Hard disk with 16 MB free space
- Parallel port with EPP mode
- CD ROM driver

### General

- Power: 100 to 240 VAC, auto-switching
- Frequent range: 47 to 63 Hz
- Power consumption: 25 W
- Operating temperature: 5 to 45°C (41 to 113°F)
- CE & LVD certified
- Weight 1.8KG

[Download trial software](#)

[View the full device support list for the Dataman 48XP](#)



**For more information, please contact:**

Dataman Programmers Ltd.  
Station Road  
Maiden Newton  
Dorchester  
Dorset  
DT2 0AE

Tel: +44(0) 1300 320719  
FAX: +44(0) 1300 321012  
Email: [sales@dataman.com](mailto:sales@dataman.com)  
Web: [www.dataman.com](http://www.dataman.com)

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Last modified: 01/04/2003