

# Sprint DUAL

M u l t i S y t e   P r o g r a m m e r

## Congratulations on purchasing your new Sprint DUAL

The DUAL<sup>®</sup> is a desktop IC Programmer that can accommodate various devices in two removable TOPs.

The serial number is located on the bottom of the unit.

## This guide describes:

- Parts included with the DUAL
- Assembly Instructions
- System Requirements
- Operating Requirements
- IC Package Support
- Sales and Technical Support

## For more information...

on your Sprint family programmer or using the software, refer to documentation on the "TaskLink™ for Windows<sup>®</sup>" CD.

**Data iO**

## Packaged with this unit you will find:

- TaskLink CD-ROM (software and User Manual)
- DUAL base
- 25 pin, 1:1 parallel cable, 32" long
- OPTIMA Booster
- Power Cord
- DUAL Power supply
- Calibration tool

TOPs and Production Adapters are boxed separately.



DUAL Power Supply



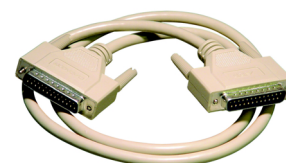
OPTIMA Booster



Calibration Tool



TaskLink CD



Parallel Cable

## Assembly Instructions

**WARNING:** *Electrostatic Discharge (ESD) may damage integrated circuits. Do not touch circuit boards on the unit without a suitable grounding strap (not included). A grounding strap should also be worn at all times while programming devices.*

### Installing a TOP

1. Turn the TOP upside-down and examine the pins to verify that they are straight.
2. Holding the TOP right-side up at a 45 degree angle to the base, hook the plastic tab of the TOP into the notch in the base. See figure 2.
3. Lower the TOP until it rests on the base, rock it gently to ensure it is in place and press down gently (on the TOP rather than the socket).

**WARNING:** *Damage may occur to the connector pins if they are not properly lined up with the pin connector strip on the base. Do not press the TOP if you meet resistance. Remove the TOP and try again.*

4. Turn the unit upside-down and screw the two recessed screws into each TOP. See figure 3.

**Note:** *If you are replacing a TOP, the programming software will need to be restarted for it to recognize the new TOP.*

### Connecting the Cables

Before beginning, ensure that the power is turned off at both the programmer and your computer.

Power Switch

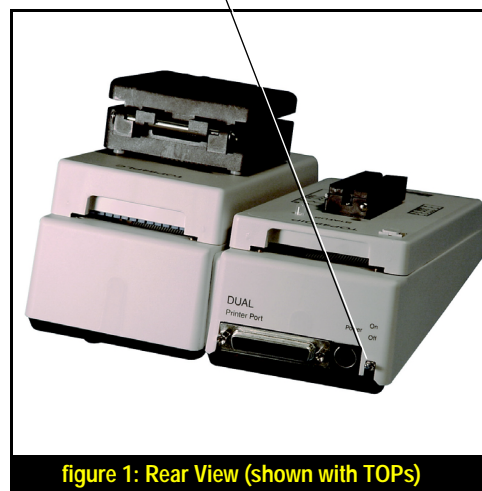


figure 1: Rear View (shown with TOPs)

1. Connect one end of the parallel cable to the port on the back of the programmer. See figure 4.
2. Connect the other end of the cable to the parallel port of your computer. Any empty parallel port on your computer may be used.
3. Install the power supply by inserting the small DIN jack of the power supply into the power socket on the back of the programmer. This jack is keyed and cannot be inserted incorrectly.
4. Connect the power cord between the power supply box and a 100-250 Volt, 50-60 Hz AC outlet.

**WARNING:** *A device may be damaged if it is in a TOP socket during power up. Remove all devices before turning the power switch on.*

You are now ready to install the *TaskLink for Windows* software and begin programming devices. Refer to the *TaskLink for Windows* CD. To install the software see the jewel case front tray liner.

**Note:** *Some parallel ports have hardware characteristics that may cause problems communicating with the programmer. If you see the message "Found slow printer port" during installation, install the OPTIMA Booster supplied with your programmer. Follow the instructions "Installing the OPTIMA Booster for a Slow Printer Port" found on the "TaskLink for Windows" CD.*

### System Requirements

- Microsoft Windows 95, Windows 98 or Windows NT
- 75MB hard disk space
- CD-ROM drive
- Bus or serial mouse
- Parallel port

### Operating Requirements

- Operating voltage: 100-240 V ~ ±10%
- Frequency range: 50-60 Hz
- Power consumption: 24 Watts

### IC Package Support

With the addition of TOPs or Production Adapters the DUAL Programmer supports packages: DIP, PLCC, LCC, SOIC, TSOP, PGA, QFP,  $\mu$ BGA and others.

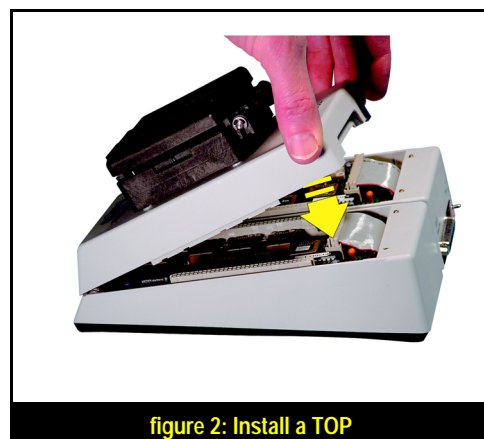


figure 2: Install a TOP

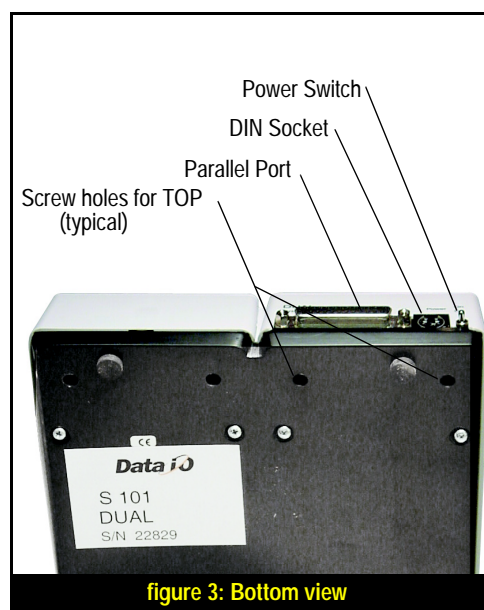


figure 3: Bottom view

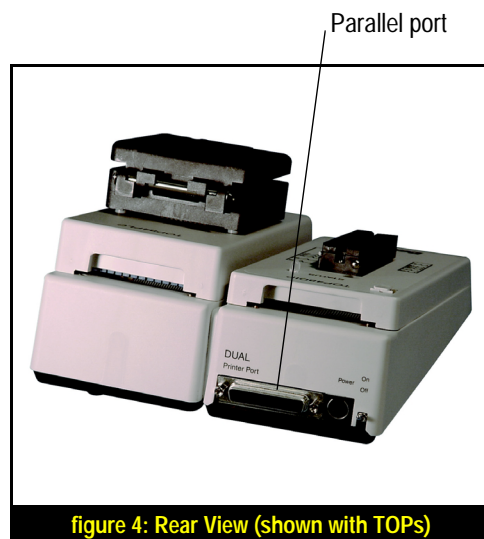


figure 4: Rear View (shown with TOPs)

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## Sales and Technical Support

Contact your local Data I/O representative or see the contacts below. To find your local representative on our Web site go to <http://www.dataio.com/RepSearch.asp>

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### When calling or writing, please provide the following information:

- Serial number
- Interface—"TaskLink for Windows" or "Sprint Windows"
- Software Version
- Detailed description of the problem you are experiencing
- Error messages (if any)
- Device manufacturer, part number, package style and number of pins (if device-related)
- Name, address and telephone number

On the World Wide Web, contact us at <http://www.dataio.com>

or at our Germany Web site at <http://www.dataio.de>

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