

2:1 & 4:1 Bi-Tronics Auto Switch

Introduction

The Ni-Tronics AutoSwitch allows more than one computer to share a IEEE 1284 / HP Bi-Tronics printer. The AutoSwitch has a built-in microprocessor and a 64-pin ASIC for the ultimate in reliability and high efficiency in a printer sharing device.

The AutoSwitch has two modes for communicating with the host computers:

- Centronics Mode: The computer sends the job to the printer.
- IEEE 1284 / HP Bi-Tronics Mode: The computer requests information from the printer, such as printer type, configurations and print status, and allows you to access this information from your computer. The AutoSwitch also permits the printer to send information to the computer, such as; Printer ready, clear paper jam, and other printer warning and status messages.

Quick Start

- Turn off power to computers and printer.
- Connect parallel port of computers to input ports of AutoSwitch.
- Connect printer port on AutoSwitch to parallel printer using IEEE 1284 cable.
- Make sure all connections are secure.
- Turn on power to computers and printer.
- You are now ready to print.

Power Adapter

Normally the AutoSwitch does not need a power adapter, but if you have a very long printer cable, and the AutoSwitch needs more power, use a 9 volt, 300 mA, positive tip power adapter.

Cable Setup Guide

Because cables have different pin-out or wiring configurations, it is important to use the correct setup.

Cable No.	Cable Description Connector Ends	Part #
1	10' IEEE 1284 Switchbox cable, DB25 M - M	CIB-088-10
2	6' IEEE 1284 Parallel printer cable, DB25 M to Centronics 36 M	CIB-087-06

Technical Specifications:

	SA-21FB	SA41FB
Computer connections	2	4
Printer connections	1	1
Cable distance (max.)	3 meters	3 meters
Transfer rate (max.)	2M bytes/sec	2M bytes/sec.
Computer connector	2 DB 25-female	4 DB 25-female
Printer connector	1 DB 25-female	1 DB 25-female
Computer LEDs	2	4
Computer port selection	Auto	Auto/Manual
Auto Form Feed	On/Off	On/Off
Timeout selection (secs.)	5,10,20,40	5,10,20,40
Dimensions (mm)	156x93x26	90x76x21
Weight (grams)	110	225
Operation Temperature	5-40 deg. C	5-40 deg. C

Switch Settings (2:1 only)

Form Feed - Switch 1
On= Form feed enabled
Off= Form feed disabled

Most software applications have a "Form-Feed" function as part of their printing function. At the end of a print job, they automatically add a command telling the printer to eject the last page. Some programs lack this function. If the last page of a print job isn't filled with text, it stays in the printer. In this situation, you should enable the Auto Form Feed (Turn Switch 1 on), which will automatically tell the printer to eject the last page.

Timeout - Switches 2 & 3

Set the timeout setting*.
If Switch 2 is On & Switch 3 is On, Time-out=5 sec.
If Switch 2 is On & Switch 3 is Off, Time-out=10 sec.
If Switch 2 is Off & Switch 3 is On, Time-out=20 sec.
If Switch 2 is Off & Switch 3 is Off, Time-out=40 sec.

*In a shared printing environment, the time-out value is how long the printer waits in between print jobs. The timer starts to count after the computer finishing sending the job to the printer. Once the timeout period elapses, the printer is free to accept input from another computer.

Suggestion: If your files are large or have graphics (which taken longer to print), then you should use a longer timeout time.

Reset - Switch 4

Turning switch 4 off and then back on will reset your switch box.

Note: First time installations require use of the reset button after powering up computers and printer.

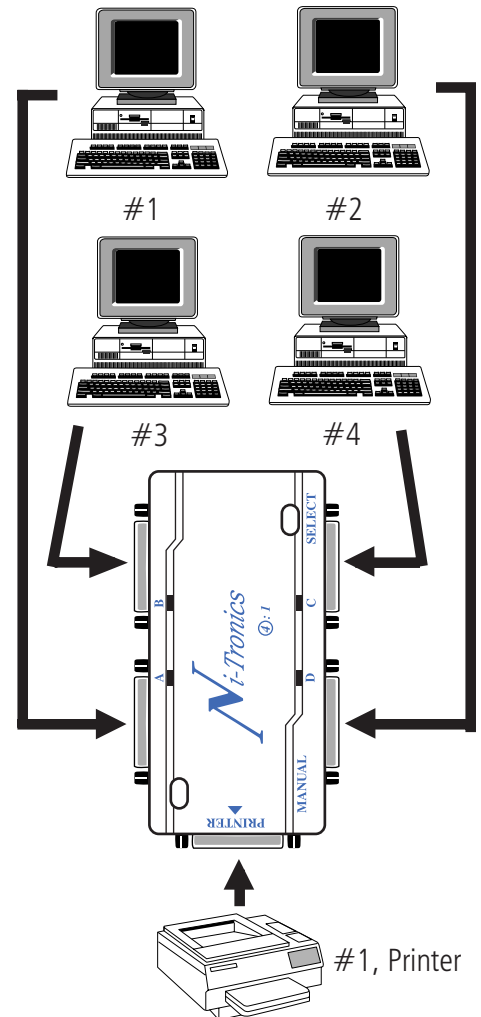
How the AutoSwitch works:

Because the printer can handle only one query from a computer each time the computer asks for status, it cannot broadcast it's status to other computers at the same time.

The AutoSwitch can adjust these queries and relieve the congestion caused by multiple status requests.

The switch also solves traffic problems between "printer busy" and status readback requests, or between long printing jobs and status readback.

Four-Computer Setup (4:1)



Two-Computer Setup (2:1)

