

# MasterSwitch



## Our most powerful serial and parallel data switch

Connects multiple inputs to multiple outputs

Up to 4 Megabyte buffer memory

Combined automatic and code activated switching functions

## Features and Benefits

- Uses standard RS232 serial and parallel Centronics interfaces
- Used for printer sharing, modem sharing, data collection, machine control, and serial networking
- Three model lines to choose from:
  - MS-Series – 5 or 9 ports, all serial, all parallel, or mixed serial and parallel
  - U-Series – 3, 6, or 9 ports, each port programmable as serial or parallel, input or output
  - N-Series – 4, 8, 12, or 16 serial ports and 1 parallel port, supports file transfer at 115.2K
- Dynamically allocated buffer expandable to four megabytes
- Over 20 commands for controlling the flow of data
- Menus for configuration, port connection and access, and job control
- Supplied with MasterLink™ utility disk
- Advanced queue system controls access and priority of multiple inputs to multiple outputs
- From the job control menu you can view all jobs in queue and cancel, hold, or release them
- All configuration parameters can be saved in non-volatile memory
- Made in the USA

## The MasterSwitch™ Advantage . . .

The MasterSwitch is a very versatile product that offers unmatched speed, power, and flexibility for PC and peripheral sharing. The MasterSwitch can manage up to seventeen ports for inter-connecting your computers and peripherals.

The MasterSwitch accepts over 20 commands for controlling the flow of data. It can also be used automatically or controlled by interactive menus.

Switching applications include; office automation, CAD/CAM, machine control, data collection, data communications, telecommunications, retail point-of-sale, and others.

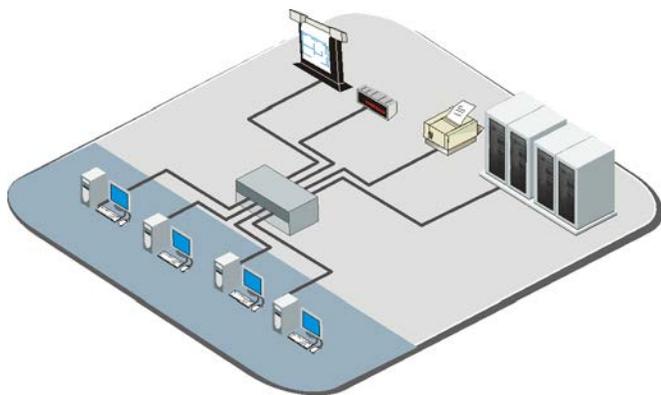
The features of the MasterSwitch make it possible for this intelligent data switch to tackle the most demanding applications. With three model lines to choose from, each chainable for future expansion, there is a unit to meet your needs.

When it comes to managing peripherals and computer access, nothing comes close to the Rose MasterSwitch. Contact our sales department for more information.



Over 20 commands  
Control flow of data

## Typical Application



N-Series MasterSwitch connects up to 17 ports

**Basic Concepts** MasterSwitch interconnects your computers and peripherals using their common serial and parallel interfaces. Any port can connect to another port. By sending a command or accessing a menu, you can choose the destination of your data. MasterSwitch activates port connections as you send data from your application or print program. If the selected destination is busy, the data is queued in the buffer until the destination port is available. The heart of the MasterSwitch is its powerful queuing system, which takes multiple input data and routes it to multiple outputs. Using the job control menu or a simple keyboard entry, you can view the list of jobs at any time, even while printing. You can see where the job originated, its destination, its status, and the amount of buffer used. You can suspend, release, or cancel any of the jobs listed.

**MasterSwitch Models** MasterSwitch is available in three series. The standard, MS-Series are 5 or 9-port models configured as all serial, all parallel, or a mix of serial and parallel. The Universal, MSU-Series models are the most flexible. The 3, 6, or 9-port models are each programmable for serial or parallel operation. The Networking, MSN-Series models are 4, 8, 12, or 16-serial ports, 1-parallel port and support file transfer at 115.2K bits/second.

**Buffer Memory** The buffer memory is dynamically allocated and is available to all ports. The basic unit has 64K, expandable to 4 MB. The amount of buffer needed depends upon the application. If there is a lot of data coming in simultaneously, you are sending large jobs, or your outputs are slow devices, throughput can be increased by expanding the buffer size.

**Cables** MasterSwitch ports use commonly available serial and parallel cables. Cables are ordered by length and connector type.

**Configuration** To configure the MasterSwitch, access its configuration menu, select the types of devices you are connecting, and choose their communication settings. Serial port settings are individually programmable and all ports can be defined as input or output. You can also program initialization strings, default destinations, time-out settings, port groupings, menu access, priority, and port names. Configuration settings are stored in the switch's non-volatile memory.

**Commands** MasterSwitch offers maximum job control, accepting over 20 commands via simple keyboard commands or pop-up menus. You can easily change a device's destination port or access the job control menu. Commands can be sent in several other ways such as from a batch file or an application program. Extensive features are supported for printer, plotter, and modem sharing, port contention and data collection.

**MasterLink** Each unit comes with MasterLink, a pop-up PC program that makes it easy for you to send commands and access menus. MasterLink also has a terminal emulator program that provides pop-up interactive communication with the switch.

## Part Numbers

### Standard models MS-Series

MS-5S	5-serial ports
MS-9S	9-serial ports
MS-5P	5-parallel ports
MS-9P	9-parallel ports
MS-7S2P	7-serial, 2-parallel ports

### Universal models U-Series

MSU-3SP	3-ports, programmable as serial or parallel
MSU-6SP	6-ports, programmable as serial or parallel
MSU-9SP	9-ports, programmable as serial or parallel

### Networking models N-Series

MSN-4S1P	4-serial, 1 parallel port
MSN-8S1P	8-serial, 1 parallel port
MSN-12S1P	12-serial, 1 parallel port
MSN-16S1P	16-serial, 1 parallel port

### Buffer options, expandable to 4 megabyte

/2X	256K buffer	/5X	512K buffer
/10X	1MB buffer	/20X	2MB buffer
/40X	4MB buffer		

## Specifications

### Serial Ports

Electrical	Asynchronous RS232 -9 to + 9 volts
Protocol	DTR/DSR, X-ON/X-OFF flow control
Baud Rate	50-19,200 baud (115,200 for MSN Series)
Word Length	5, 6, 7, or 8
Parity	odd, even, mark, space, or none
Stop bits	1 or 2

### Parallel Ports

Electrical	TTL Levels
Protocol	Centronics compatible STB/ACK/BUSY

### Other

Dimensions	10.5" W x 5.0" D x 3.9" H 26.7 W x 12.7 D x 9.9 H (cm)
Weight	3-5 port 6 lbs (2.7 kg) 9-port 7 lbs (3.2 kg) 13-17-port 8 lbs (3.6 kg)
Power	Auto Switching, 90 - 240 VAC, external adapter MSN Series: 110VAC/16.5VAC, 1.45A MS parallel models: 110VAC / 9VDC, 1.0A 220VAC / 9VDC, 1.0A MS/MSU serial models: 110VAC / 17VAC 700ma 220VAC / 17VAC 750ma
Connectors	MS Series: Ser-DB25F; Par-Centronics 36F MSU/MSN Series: Ser-RJ45 jack; Par-DB25F
Signal Lines	Serial: 4 signals (XMIT, RCV, DSR, DTR) Parallel: 12 signals switched/inputs 5 signals steady or unused
Rack Mount	19" or 23"
Chassis	Beige powder coated, steel enclosure
Indicators	Port select LEDs: 0-8 Status LEDs: Power, Buffer, Data, Busy
Environment	32° - 131°F / 0° - 55° C - 0%-80% non-cond. RH



Rear view of models MS-9S, MSU-9SP, MSN-16S1P

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