

# MODEM SHARING DEVICE

**User's Manual**

**MS-1 04**

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MS-104 is a high speed peripheral sharing device, which enables four users to share a Modem or a printer. MS-104 works with any kind of baud rate, data bits, parity & stop bits, and there is no need to select these parameters by DIP switches.

## SPECIFICATION

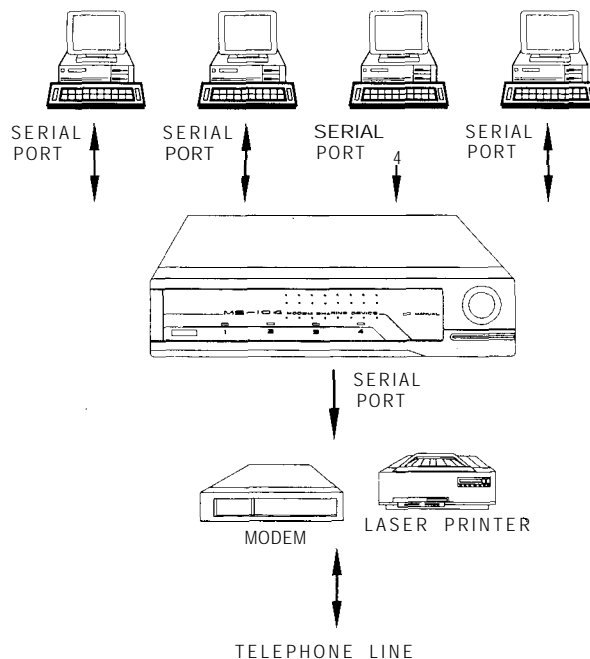
SERIAL (RS-232) MODEL	
FUNCTIONS	SPECIFICATION
Power Consumption	AC 9V 200mA (Spare)
Cable Distance	15M (50 ft. Max)
Input Connector	Four RS-232 (DCE), DB-25 Female
Output Connector	One RS-232 (DTE), DB-25 Male
LED	Four input status & one manual status
Link Selection	Automatic/manual
Timeout Selection	10, 25, 60, 150 seconds
Operation Temperature	5°c ~ 40°c
Stock Temperature	-20°c ~ 60°c
Humidity	0% ~ 80%
Enclosure	Metal housing and plastic panel
Weight	1100gm
Dimension (mm)	225 x 154 x 52

## INSTALLATION

- 1) Turn off the power of all computers and Modem or printer.
- 2) To connect a computer's COM1 (or COM2) port to the MS-104's 'COMPUTER x' port, use a DB-25 female-to-male cable.
- 3) ■ To use a Modem, connect the Modem to the MS-104's 'MODEM/PRINTER' port, by a DB-25 male-to-female cable.

■ To use a serial printer, connect the printer to the MS-104's 'MODEM/PRINTER' port, by a DB-25 male-to-female **null-Modem** cable.

- 4) Set up DIP switches according to desired operation, check OPERATION for DIP switch setting.
- 5) Turn on the power of all computers and Modem or printer.
- 6) The connection example is shown in the figure below.



# OPERATION

When LEDs turn on one by one in **auto mode**, the MS-104 works in first-come-first-served priority; i.e. whichever computer sends data first has the right to use the Modem or printer. To manually select a computer, simply press the button at the right of the panel till the corresponding LED turns on. When button is pressed several times, the MS-104 cycles through 'auto' → 1 → 2 → 3 → 4 → 'auto' → 1, etc. 'MANUAL SELECT' LED turns off when MS-104 is in **auto mode** and on when MS-104 is in manual mode (1,2,3,4).

1) MS-104 **connects to a Modem** (DIP switch 3 & 4 are not ON):

- Back-to-auto feature: (DIP Switch 3 & 4 are OFF & ON)

In **auto mode** : Computer is first-come-first-served when any one originates a call. When the Modem receives a call, MS-104 broadcasts the RING signals to all computers till a computer sends a character to the MS-104 to be served.

In manual **mode** : Only the selected computer has the right to originate and receive a call. After Timeout or a call session, the MS-104 goes back to **auto mode**.

- Non-back-to-auto feature: (DIP Switch 3 & 4 are ON & OFF)

In **auto mode** : Same as that of the Back-to-auto feature's auto mode.

In **manual mode** : Only the selected computer has the right to originate and receive a call. In order to use **auto mode**, the button must be pressed to turn the 'MANUAL SELECT' LED off.

- Last-channel feature: (DIP Switch 3 & 4 are both OFF)

In **auto mode** : Computer is first-come-first-served when any one originates a call. When the Modem receives a call, MS-104 directs the RING signals to the computer which sent data to the MS-104 previously. That computer's corresponding LED is on all the time even in **auto mode**.

In manual **mode** : Same as that of the Non-back-to-auto feature's manual mode.

*Note:* • **It is recommended to set the MS-104's Timeout to at least 25 seconds and the Modem's Ring Number (the SO register) to non-zero.**

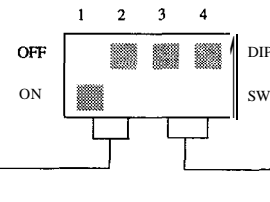
• **When a user initiates a call by sending AT commands (Modem commands) to MS-104, he must make a CONNECTION before Timeout expires. Otherwise, the call may be terminated prematurely.**

2) MS-104 **connects to a printer** (DIP switch 3 & 4 are ON):

MS-104 works as an autoswitch based on the first-come-first-served priority. Timeout setting is used to separate print jobs to the MS-104.

*Note:* \* **It is recommended to set at least 25 seconds Timeout for Windows applications.**

## SWITCH SETTING



Time Out Setting		
1	2	Time Out (sec.)
ON	ON	10
ON	OFF	25
OFF	ON	60
OFF	OFF	150

Mode Setting		
3	4	Mode
ON	ON	Printer: Auto Switch
OFF	ON	Modem: Back-to-Auto
ON	OFF	Modem: Non-back-to-Auto
OFF	OFF	Modem: Last channel