

**Document Name: USER MANUAL for SERIAL Sharer Switch. Model SAM 2011**

**INTRODUCTION**

SAM 2011 has been designed to cater to the requirement of sharing/ offering Redundancy for the serial Ports. It is Protocol independent with all the 3 Ports are RS232, All the serial ports are 3KV optically isolated.

SAM allow 2 inputs from any Serial devices e.g from Controllers / Computers etc to share 1 common Output Serial device. It provides automatic switching on First come First Serve basis. It also provides manual switching for higher priority jobs.

It works on 230V AC. 110V/ 24 V / 48V DC Power supply option are available.

**OPERATION**

SAM has two modes, AUTO & MANUAL respectively. By default the switch enters into AUTO mode. This is indicated by Input Port 1 & Input Port 2 LED's being ON continuously which means SAM is free to use.

**AUTO MODE**

When any of the Port sends a communication request, SAM locks to that port (indicated by continuous glowing of the port's LED) & initiates a data transfers between the Input & Output Ports. During this operation if the other Input also wants to share the output device then Busy status is passed to that port.

After finishing the job of the port in use, SAM still waits to accept requests from the same port for 1 seconds (default factory set). During this period if request comes from the same Input port, the SAM remains locked there.

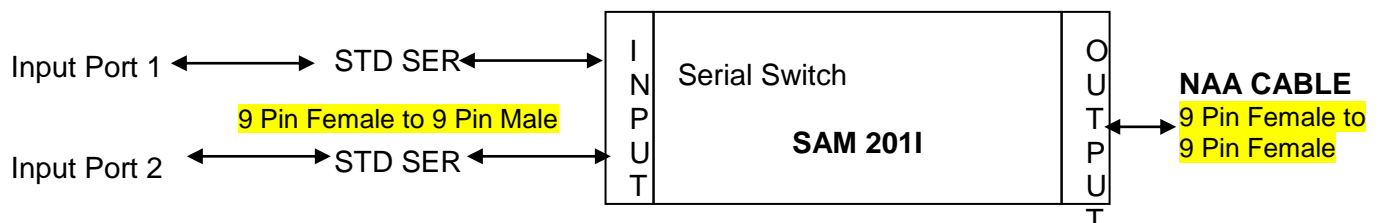
After 1 seconds SAM is again free to use by any one of the ports.

**MANUAL MODE**

In this mode you can force the SAM to select & service desired Input port.

Take the SAM in MANUAL MODE by pressing 'Auto /Manual' Key. Press 'SEL' key to select the Input port manually. Glowing LED of that port indicates selected port. To shift to AUTO MODE, press ' Auto /Manual' key again. Input port 1 & 2 LED become ON.

**Connection Details**





**Standard Serial cable is shown below**

These cables are to be connected from the Multiple Serial Ports to the Input side of the SAM

SERIAL PORT END	SERIAL PORT END		SAM INPUT END
25 pin D Type Female Pin	9 pin D Type Female Pin	Connects to	9 pin D type Male Pin no
2	3	TX	3
3	2	RX	2
4	7	RTS	7
5	8	CTS	8
6	6	DSR	6
7	5	GND	5
8	1	CD	1
20	4	DTR	4
22	9	RI	9

**NULL MODEM CABLE : Details are as shown below**

This cable is to be connected from the Output side of the SAM to the Common Output Serial Device ( PC, Printer, etc ).

SAM END		OUTPUT END	OUTPUT END
9 Pin D Type FeMale Connector		9 Pin D Type Connector	25 Pin D Type Connector
Pin no.	Connects to	Pin no.	Pin no.
2		3	2
3		2	3
4		6	6
5		5	7
6		4	20
7		8	5
8		7	4
9		9	22
1		1	8

**INTERFACE DETAILS**

Input Serial Ports 1, 2, : 9 Pin. Female connectors.  
 Output Common Port : 9 Pin. Male connector.

**Mounting:** Table Top / Din Rail