

## MULTI-SERIAL PORT ADAPTER

Your RTA-03C(II) has two serial ports for asynchronous communications. These ports can be used to connect your PC to a serial printer, modem, or other devices which use a RS-232C interface. The RTA-03C(II) interface is a DTE/DCE type with a male DB25P on J4 (primary serial port), a male DB9P on J3 (secondary serial port). An optional tertiary and fourth RS-232C serial port is also available. Two male DB25P connectors via an extension cable, respectively, connect to J1 (tertiary serial port) and J2 (the fourth serial port).

### 1. Configuring your Serial Port

#### 1.1 Selecting the Serial I/O Port

The serial port on your RTA-03C(II) uses the following system I/O ports:

## Port Configuration

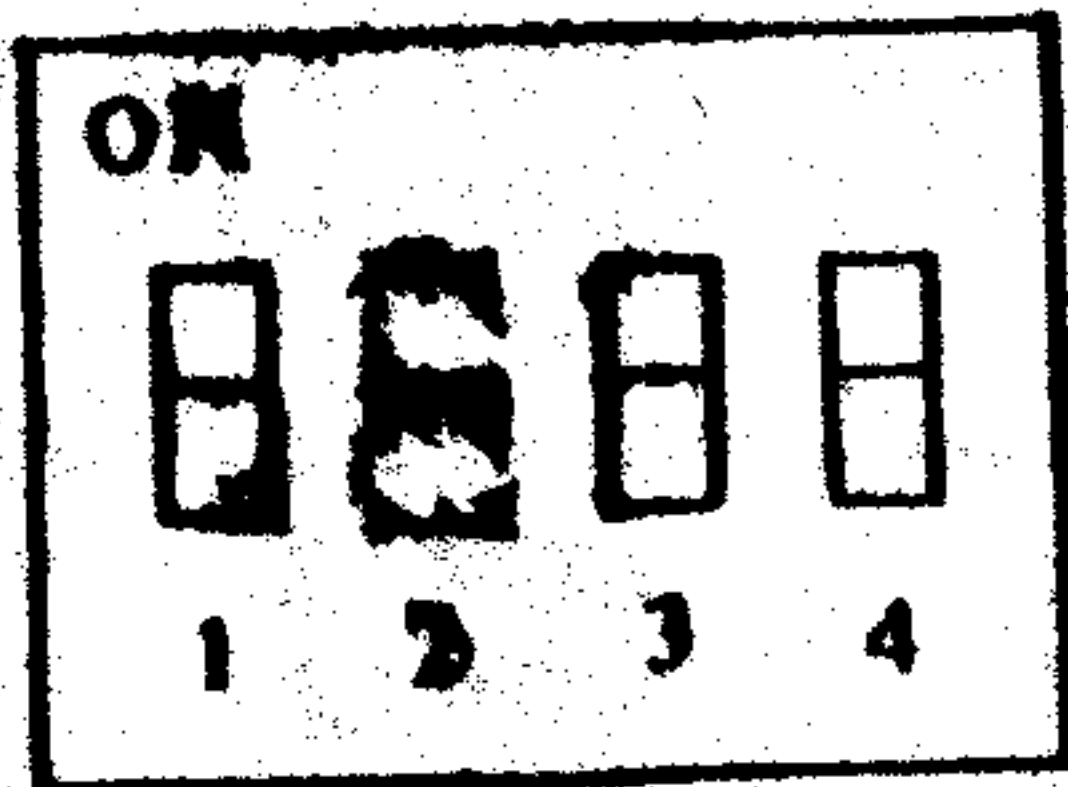
## I/O Ports

COM 1	3F8-3FF	HEX
COM 2	2F8-2FF	HEX
COM 3	3E8-3EF	HEX
COM 4	2E8-2EF	HEX
COM 5	268-26F	HEX
COM 6	3E0-3E7	HEX
COM 7	2E0-2E7	HEX
COM 8	260-267	HEX
COM 9	360-367	HEX

DIP Switch Bank 1 (SW1) is utilized to select the serial I/O port address. Toggle switches 1, 2 and 3 on SW1 as follows:

SW1	Primary Serial Port	Secondary Serial Port	Tertiary Serial Port	The fourth Serial Port
A	COM 1	COM 2	COM 3	COM 4
B	COM 2	COM 3	COM 4	COM 5
C	COM 3	COM 4	COM 5	COM 6
D	COM 4	COM 5	COM 6	COM 7
E	COM 5	COM 6	COM 7	COM 8
F	COM 6	COM 7	COM 8	COM 9
G	COM 7	COM 8	---	---
H	COM 8	---	---	---

SW1 installed	Toggle S1	Switches S2	S3
A	OFF	OFF	OFF
B	OFF	OFF	ON
C	OFF	ON	OFF
D	OFF	ON	ON
E	ON	OFF	OFF
F	ON	OFF	ON
G	ON	ON	OFF
H	ON	ON	ON



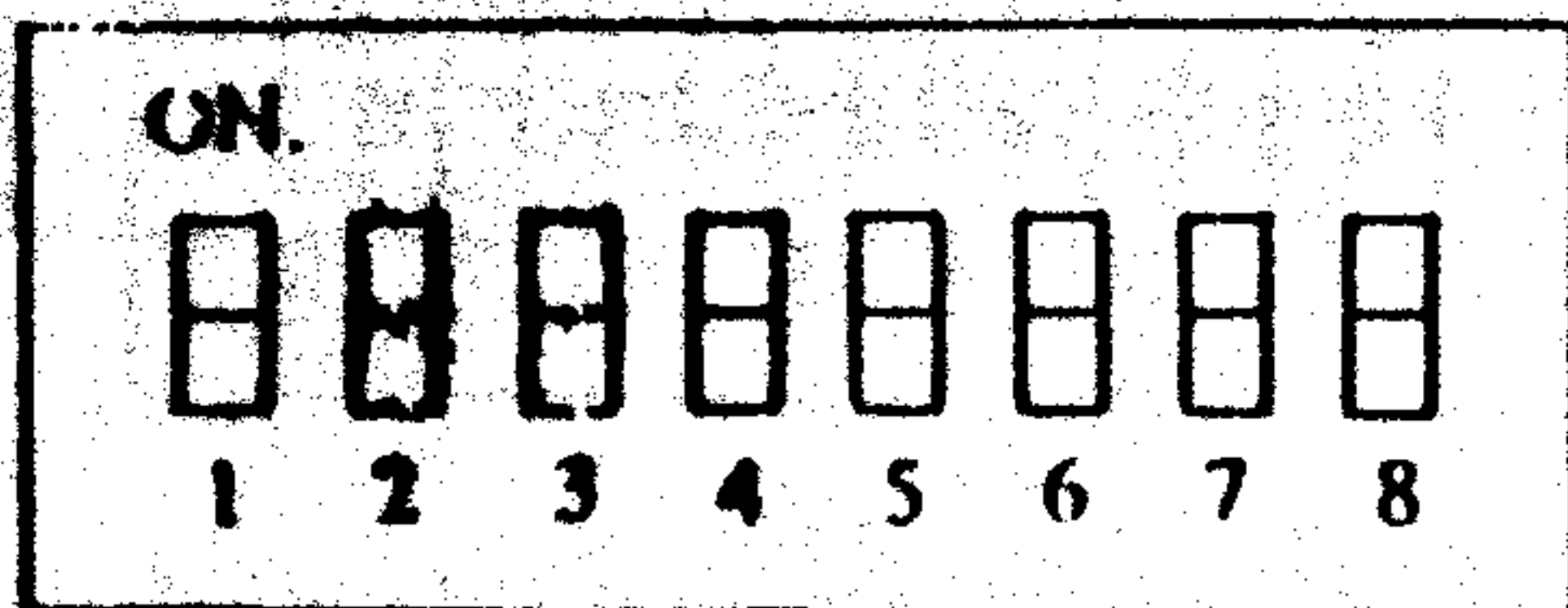
SW1

## 1.2 Setting the Interrupt Request Line

### A. Primary Serial Port Interrupt Request Line Setting

DIP Switch Bank 2 (SW2) is utilized to select IRQ2, IRQ3, IRQ4 and IRQ5 as an interrupt. Toggle switches 1, 2, 3, and 4 on SW2 as follows:

Primary Serial Port	Toggle Switches			
	S1	S2	S3	S4
-----	-----	-----	-----	-----
IRQ2	ON	OFF	OFF	OFF
IRQ3	OFF	ON	OFF	OFF
IRQ4 (default)	OFF	OFF	ON	OFF
IRQ5	OFF	OFF	OFF	ON

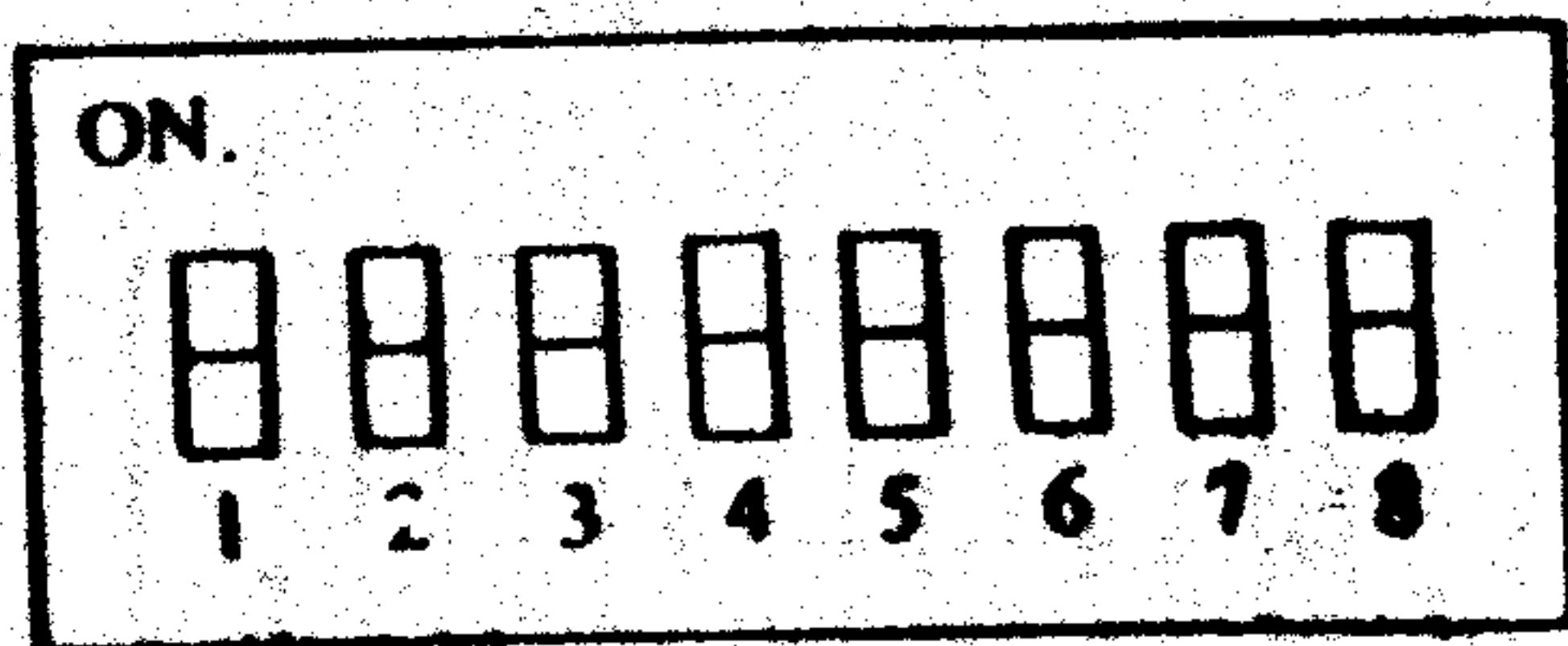


SW2

## B. Secondary Serial Port Interrupt Request Line Setting

DIP Switch Bank 2 (SW2) is utilized to select IRQ2, IRQ3, IRQ4 and IRQ5 as an interrupt. Toggle switches 5, 6, 7, and 8 on SW2 as follows:

Secondary Serial Port	Toggle Switches			
	S5	S6	S7	S8
-----	-----	-----	-----	-----
IRQ2	ON	OFF	OFF	OFF
IRQ3 (default)	OFF	ON	OFF	OFF
IRQ4	OFF	OFF	ON	OFF
IRQ5	OFF	OFF	OFF	ON



SW2

### C. Tertiary Serial Port Interrupt Request Line Setting

DIP Switch Bank 3 (SW3) is utilized to select IRQ2, IRQ3, IRQ4 and IRQ5 as an interrupt. Toggle switches 1, 2, 3, and 4 on SW3 as follows:

Tertiary Serial Port	Toggle Switches			
	S1	S2	S3	S4
-----	-----	-----	-----	-----
IRQ2	ON	OFF	OFF	OFF
IRQ3	OFF	ON	OFF	OFF
IRQ4 (default)	OFF	OFF	ON	OFF
IRQ5	OFF	OFF	OFF	ON

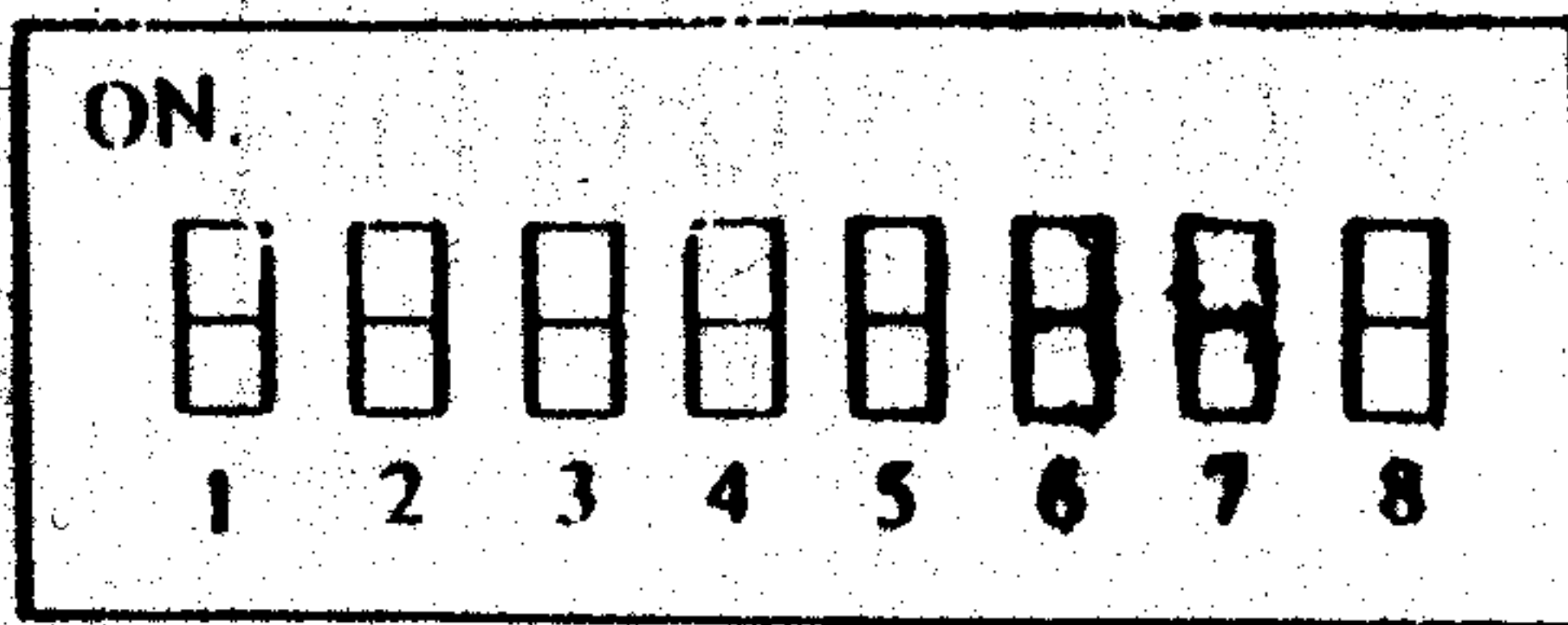


SW3

## D. The fourth Serial Port Interrupt Request Line Setting

DIP Switch Bank 3 (SW3) is utilized to select IRQ2, IRQ3, IRQ4 and IRQ5 as an interrupt. Toggle switches 5, 6, 7, and 8 on SW3 as follows:

The fourth Serial Port	Toggle Switches			
	S5	S6	S7	S8
IRQ2	ON	OFF	OFF	OFF
IRQ3 (default)	OFF	ON	OFF	OFF
IRQ4	OFF	OFF	ON	OFF
IRQ5	OFF	OFF	OFF	ON



SW3

## 2. Configuring the RS-232C Interface Line

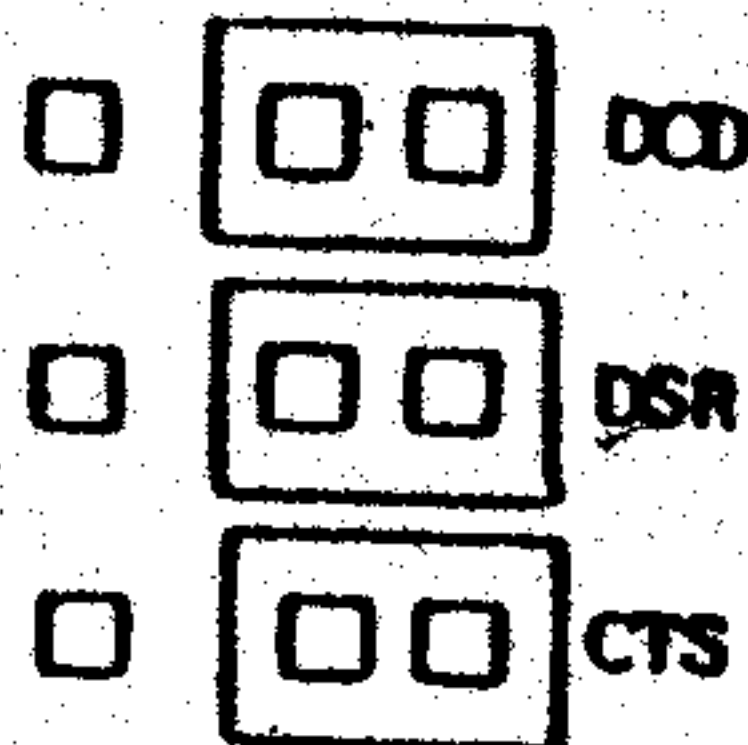
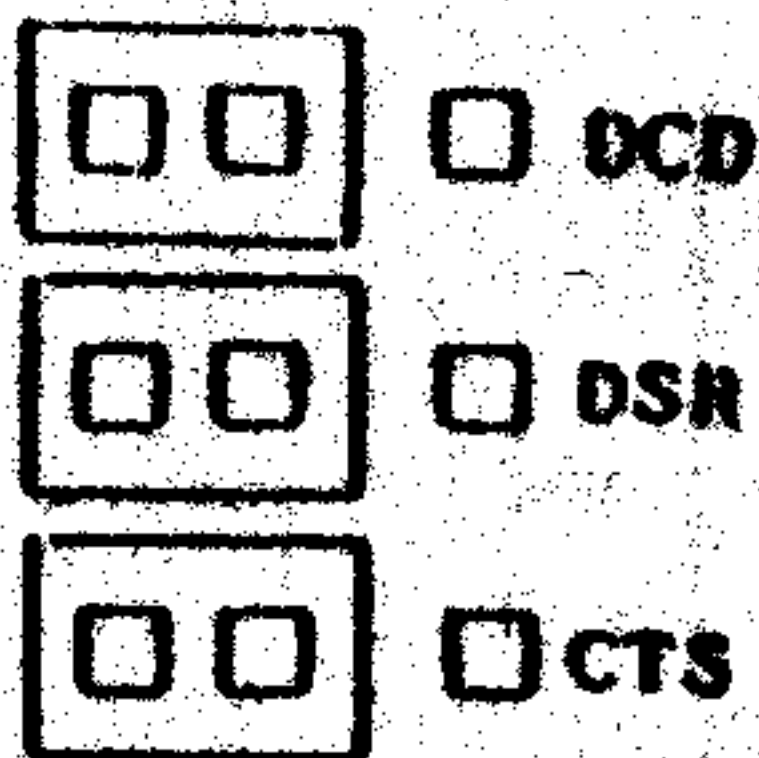
Your RTA-03C(0) Multi-Serial card adheres to RS-232C engineering standards, all inputs to the serial port with the exception of Ring Indicator, Pin 9 must be connected to a signal, even if the device the port is connected to is not using one or more of the interface lines at connector J4, J3, J1 and J2.

The serial port interface configuration block JP8, JP6, JP3 and JP4 are provided to allow some signal line inputs such as CTS, DSR, DCD to the "forced true" state. JP7, JP5, JP1 and JP2 are provided to allow these ports to be set in the DTE or DCE configuration. These configuration jumpers are shown as follows:

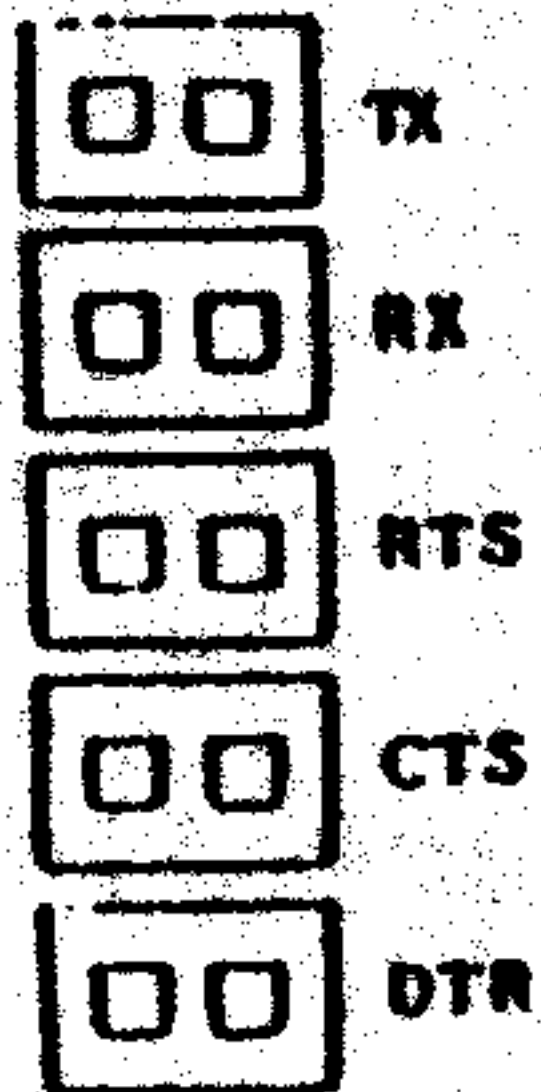
### A. Primary serial port

JP8 Normal Setting

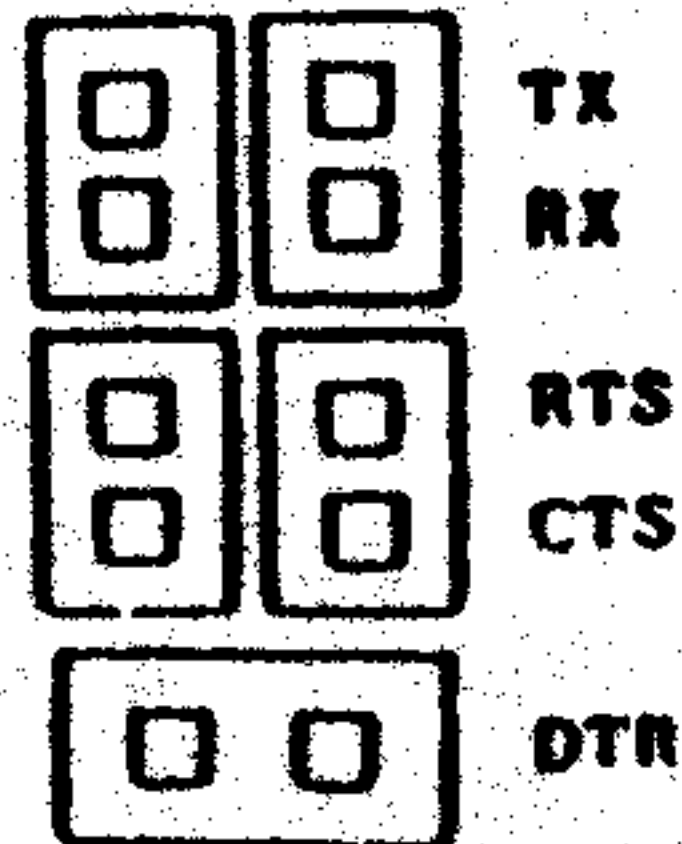
JP8 Forced True Setting



### JP7 DTE Setting

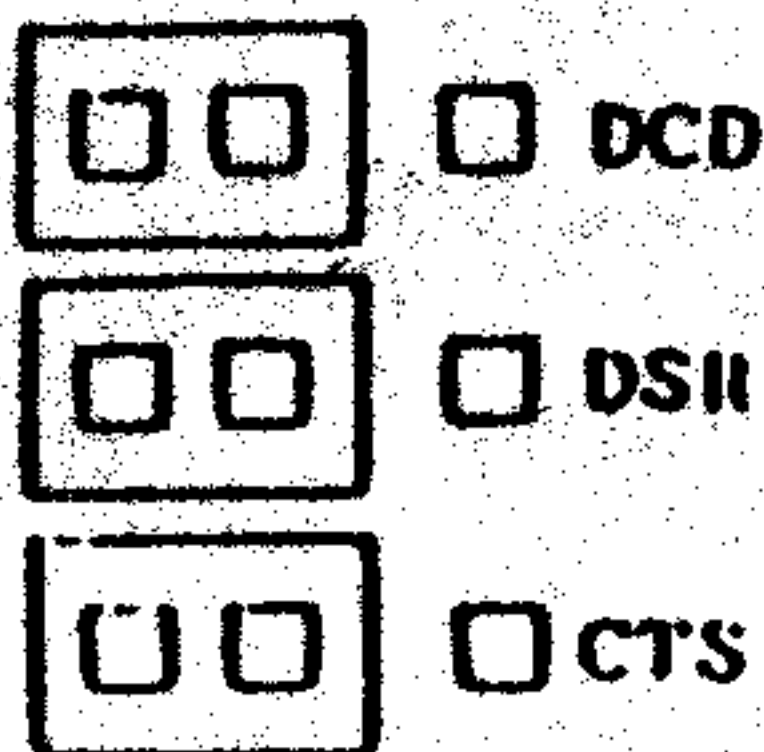


### JP7 DCE Setting

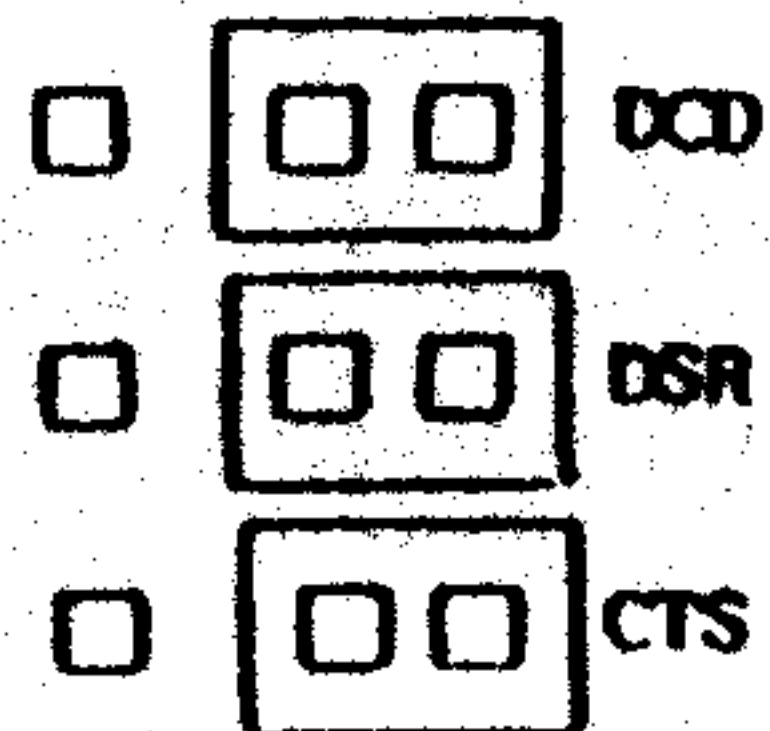


### B. Secondary Serial Port:

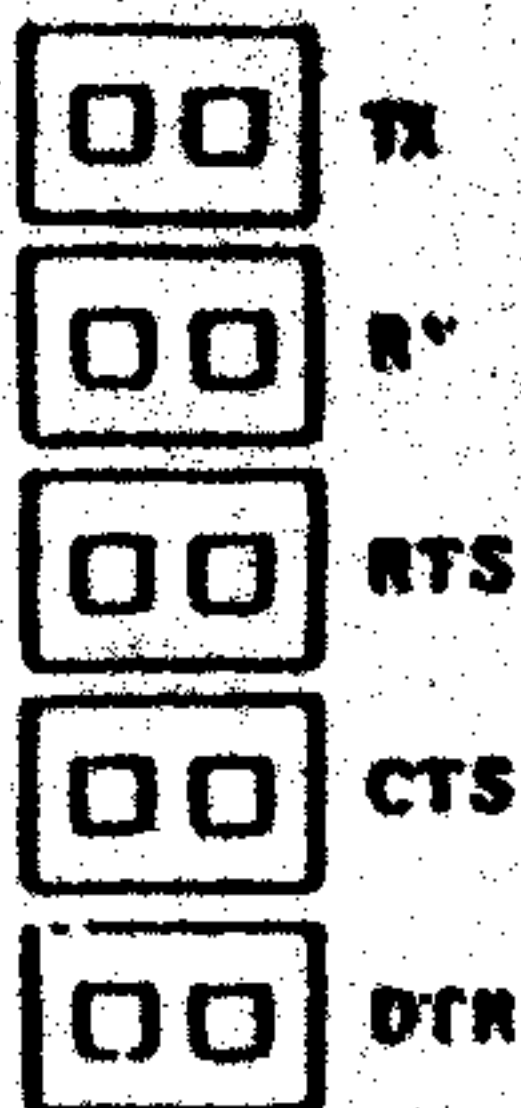
#### JP6 Normal Setting



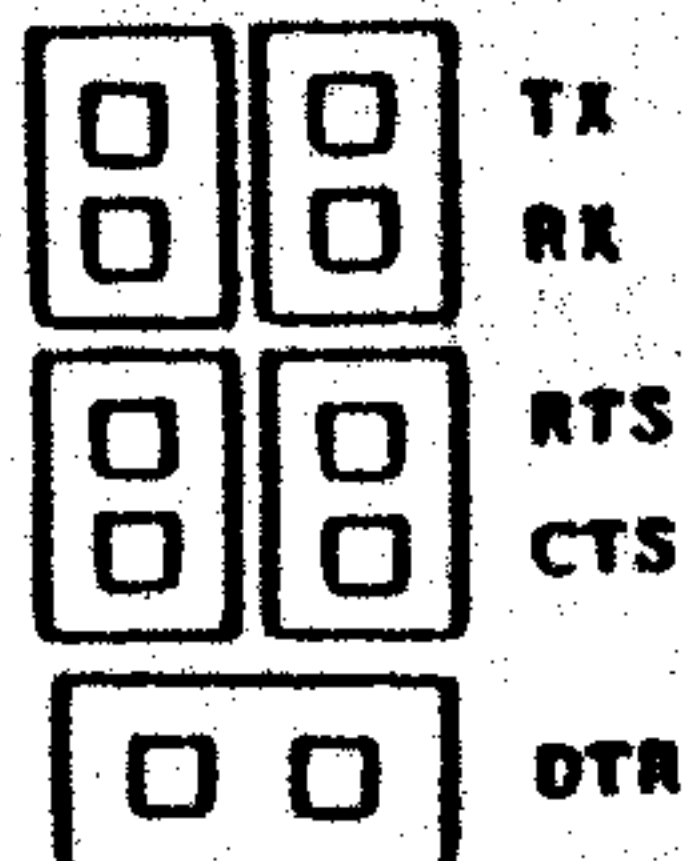
#### JP6 Forced True Setting



### JP5 DTE Setting



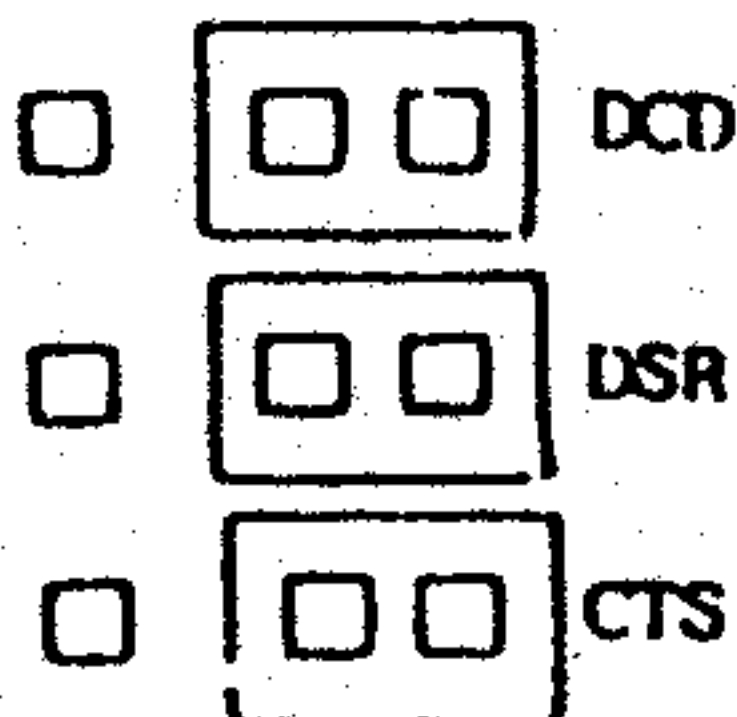
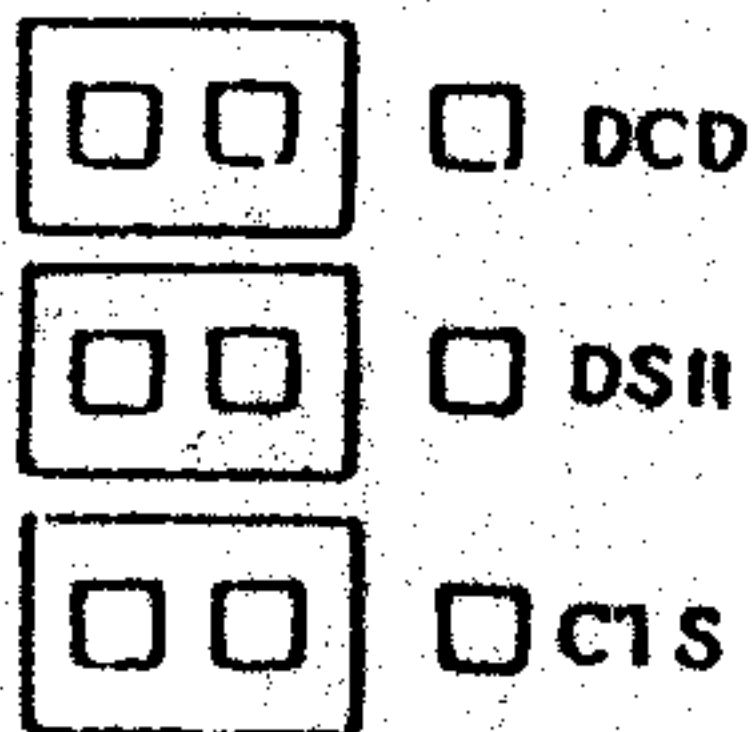
### JP5 DCE Setting



### C. Tertiary Serial Port

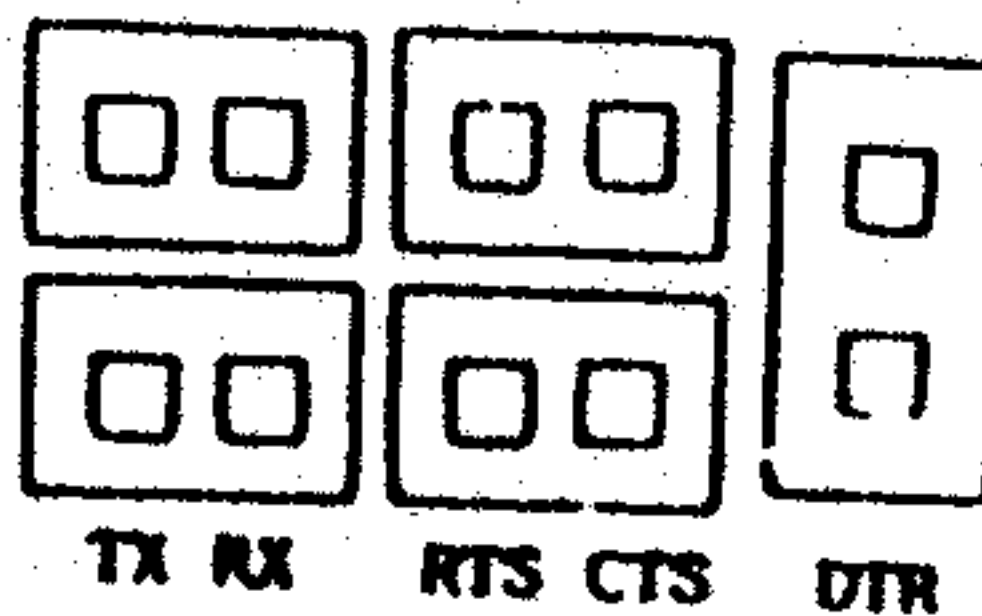
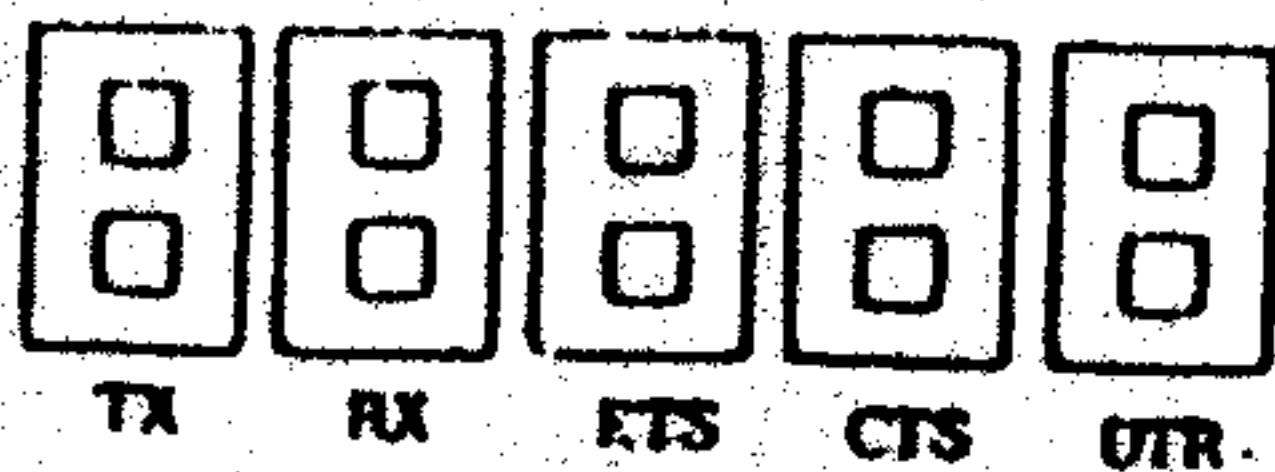
JP3 Normal Setting

JP3 Forced True Setting



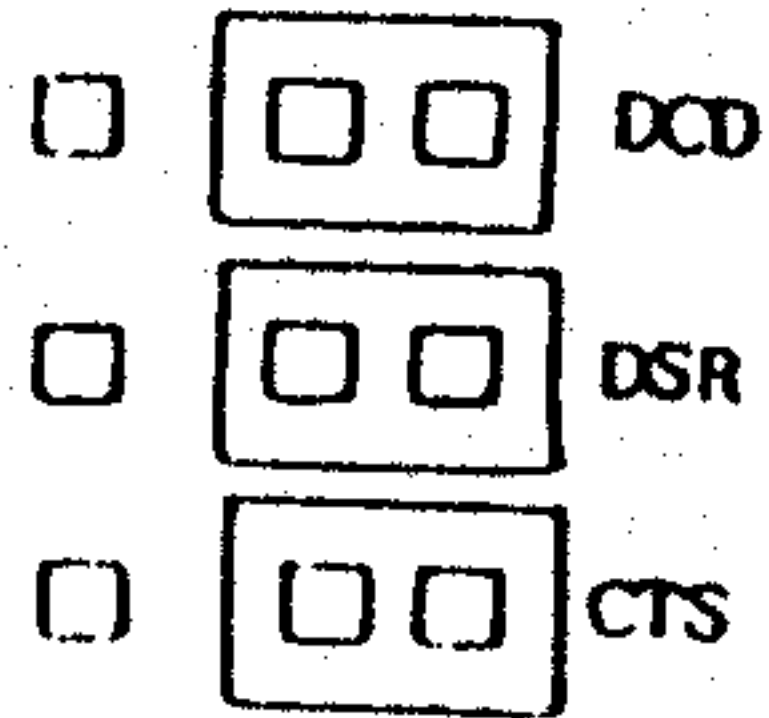
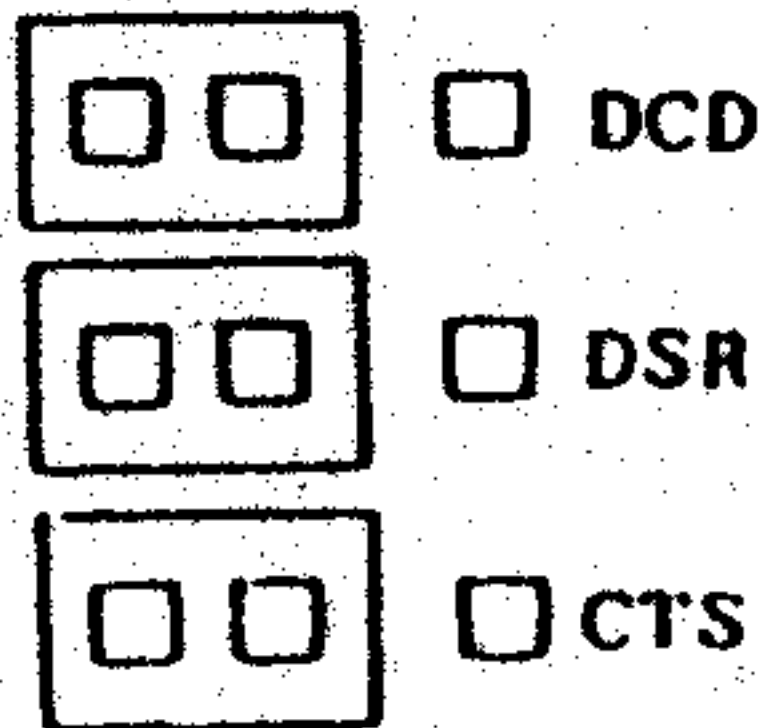
JP1 DTE Setting

JP1 DCE Setting



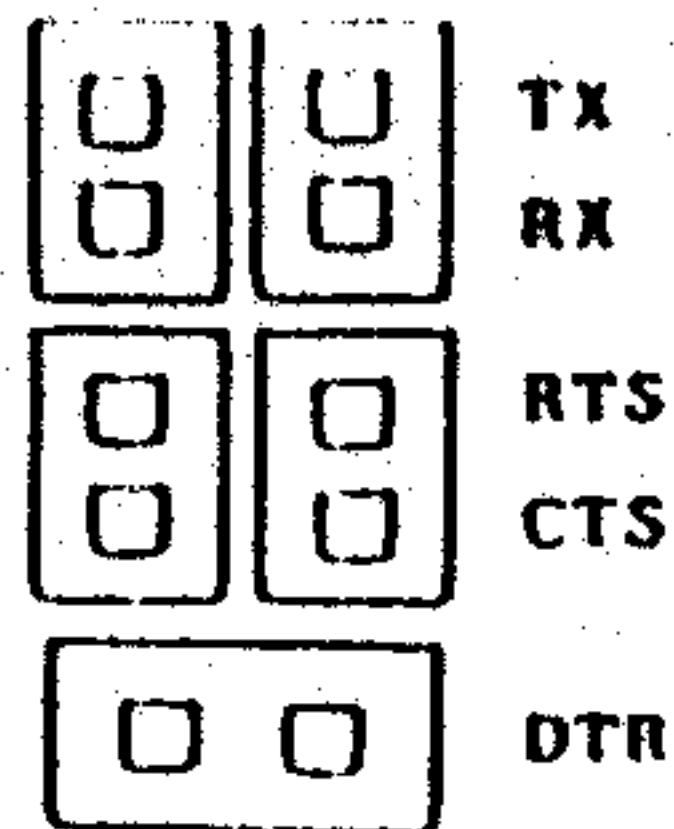
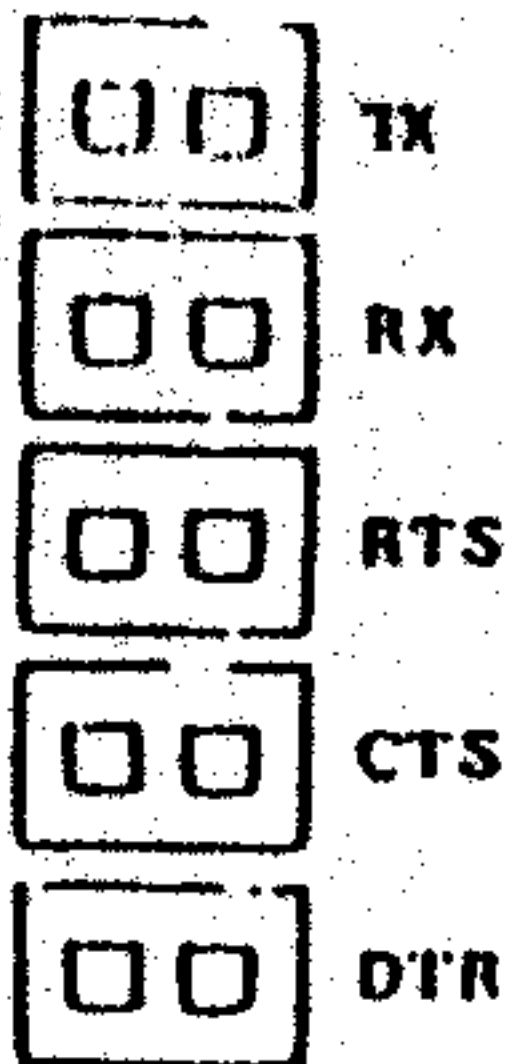
### D. The fourth Serial Port:

JP4 Normal Setting      JP4 Forced True Setting



JP2 DTE Setting

JP2 DCE Setting



### 3. Serial I/O Port Pinouts.

A. The serial port pinouts at connector J4 on your RTA-03C(II) are as follows:

RS-232C Name	J4 Pin No.	Signal Name
AA	1	Classis Ground
BA	2	TX (Transmit Data)
BB	3	RX (Receive Data)
CA	4	RTS (Request to Send)
CB	5	CTS (Clear to Send)
CC	6	DSR (Data Set Ready)
AB	7	SG (Signal Ground)
CF	8	DCD (Data Carrier Detect)
CD	20	DTR (Data Terminal Ready)
CE	22	RI (Ring Indicator)

B. The pinouts for the serial port connector J1, J2, and J3 are follows:

RS-232C Name	J1, J2, J3 Pin No.	Signal Name
CF	1	DCD (Data Carrier Detect)
BB	2	RX (Receive Data)

BA	3	TX	(Transmit Data)
CD	4	DTR	(Data Terminal Ready)
AB	5	GND	(Signal Ground)
CC	6	DSR	(Data Set Ready)
CA	7	RTS	(Request To Send)
CB	8	CTS	(Clear To Send)
CE	9	RI	(Ring Indicator)

#### 4. Connecting your Serial Port to a Device With DB25S Connector.

A. Your RTA-03C(II) Serial Port has a DB9P 9 PIN connector at J3. This connector must connect to a 9 pin female (DB9S) connector. Most devices use a DB25S connector rather than a DB9S connector. There are no functional differences between them. Most of the pins on DB25 are not used. If you should use a DB25 connector, purchase an adapter cable from your dealer that has a DB9S on one end and a DB25P on the other end. The model number is AC9S25P.

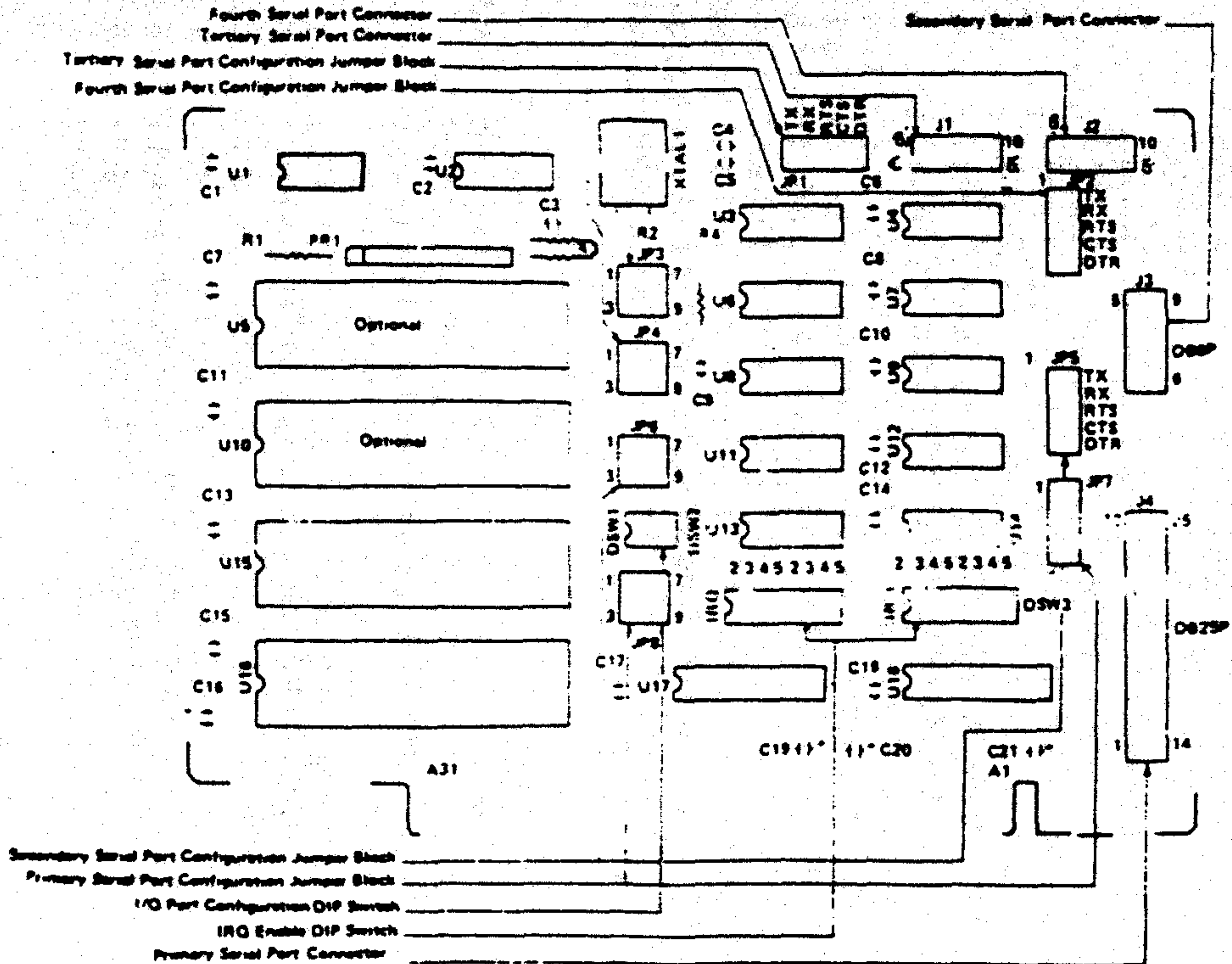


Figure 1 SERIAL PORT CONFIGURATION DESCRIPTION