By setting jumpers on the adapter, you can:

*   enable or disable each port

*   have the computer send either a ring indicator signal or +5 volts of power
    to each serial port device.

*   configure the parallel port for either bidirectional (input and output) or
    unidirectional (output only) data transfer

The following table summarizes the functions of the 12 jumpers on the adapter.
Refer to the sections that follow for specific jumper settings and
restrictions.

_____
Serial Port 1 Jumpers

    J5 and J6   Enable or disable the port
      J3   Selects the interrupt request (IRQ3 or IRQ4)
      W1   Selects the power source (5 volts or a ring indicator
                         signal)
_____
Serial Port 2 Jumpers

    J7 and J8   Enable or disable the port
      J2   Selects the interrupt request (IRQ3 or IRQ6)
      W2   Selects the power source (5 volts or a ring indicator
                         signal)
_____
Parallel Port Jumpers

    J9 and J10   Enable or disable the port
      J1   Selects the interrupt request (IRQ5 or IRQ7)
      J4   Enables or disables bidirectional transfer
_____

SETTING UP THE SERIAL PORTS

The serial ports are functionally identical to an IBM Asynchronous Serial
Communications Adapter. By using the proper cable, you can connect any serial
device that supports asynchronous RS232-C communications.

Jumpers W1 (for Serial Port 1) and W2 (for Serial Port 2) provide a feature
not found on many asynchronous adapters. These jumpers determine whether a
ring indicator signal or a +5-volt power supply line is provided to the serial
device connected to the port. Typically, the 5-volt supply is required only
for early generation mouse systems or specialized serial devices.

Jumper J3 selects the interrupt (IRQ3 or IRQ4) used by Serial Port 1. Jumper
J2 selects the interrupt (IRQ3 or IRQ6) used by Serial Port 2. Do not set
both jumpers to select IRQ3. Each serial port must use a unique interrupt.

The following tables show the jumper settings for the serial ports. You can
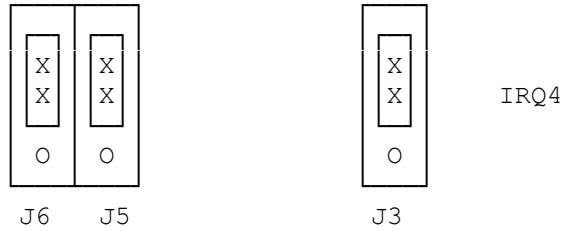enable Serial Port 1 as COM1;, COM2;, or COM3: and Serial Port 2 as COM2;,

COM3;, or COM4:. Port addresses are shown in hexadecimal.

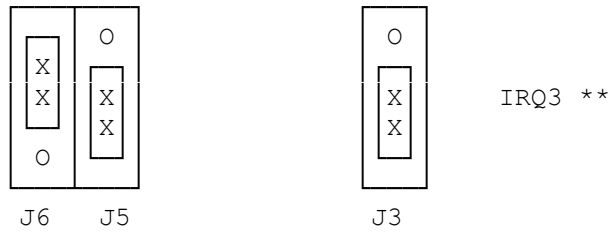CAUTION: Each port in a computer must have a unique I/O address.

NOTE: The MS-DOS operating system limits the total number of serial ports to two. If you are using MS-DOS and your computer already has a serial port, MS-DOS can access only one serial port on the adapter. Some specialized software packages can access up to four serial ports directly.
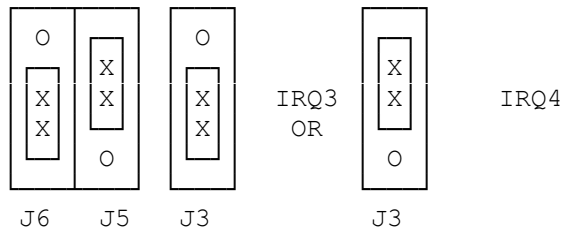
SERIAL PORT 1 JUMPER SETTINGS
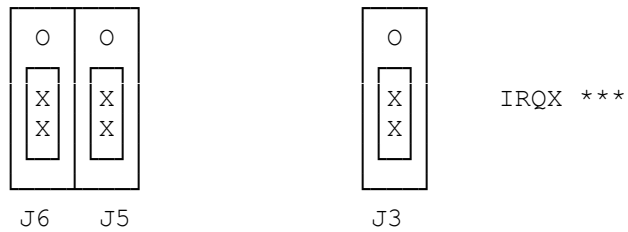
_____

```
Enable port as COM 1: *          ┌───┬───┐        ┌───┐
Address: 3F8 (Hex)               │┌─┐│┌─┐│        │┌─┐│
IRQ4                             ││X│││X││        ││X││         IRQ4
                                 ││X│││X││        ││X││
                                 │└─┘│└─┘│        │└─┘│
                                 │ O │ O │        │ O │
                                 └───┴───┘        └───┘
                                  J6   J5          J3
```

```
Enable port as COM 2:            ┌───┬───┐        ┌───┐
Address: 2F8 (Hex)               │   │ O │        │ O │
IRQ3                             │┌─┐│   │        │   │
                                 ││X│││┌─┐│        │┌─┐│        IRQ3 **
                                 ││X│││X││         ││X││
                                 │└─┘││X││        ││X││
                                 │ O ││└─┘        │└─┘│
                                 └───┴───┘        └───┘
                                  J6   J5          J3
```

```
Enable port as COM 3:          ┌───┬───┐ ┌───┐        ┌───┐
Address: 2E8 (Hex)             │ O │   │ │ O │        │   │
IRQ3 or IRQ4                   │   │┌─┐│ │   │        │┌─┐│
                               │┌─┐││X││ │┌─┐│ IRQ3   ││X││   IRQ4
                               ││X│││X││ ││X││  OR     ││X││
                               ││X││└─┘│ ││X││        │└─┘│
                               │└─┘│ O │ │└─┘│        │ O │
                               └───┴───┘ └───┘        └───┘
                                J6   J5   J3           J3
```

```
Disable port                     ┌───┬───┐        ┌───┐
                                 │ O │ O │        │ O │
                                 │   │   │        │   │
                                 │┌─┐│┌─┐│        │┌─┐│        IRQX ***
                                 ││X│││X││        ││X││
                                 ││X│││X││        ││X││
                                 │└─┘│└─┘│        │└─┘│
                                 └───┴───┘        └───┘
                                  J6   J5          J3
```

_____

```
Select
power                                 ┌─────┐              ┌─────┐
source                W1             │┌───┐│      W1      │ O O │
                                     ││X X││              │┌───┐│
                                     │└───┘│              ││X X││
                                     │ O O │              │└───┘│
                                     └─────┘              └─────┘
                                  Ring indicator *        + 5 volts
```
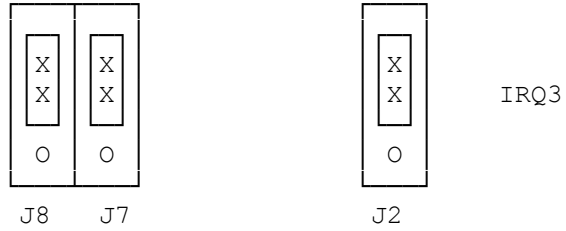
_____

*   Factory setting
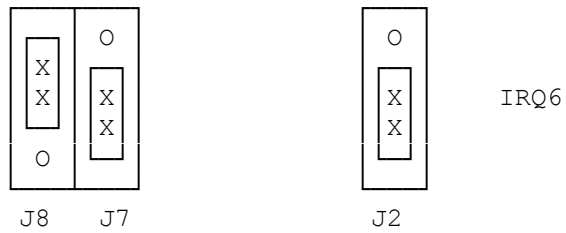
** Do not select IRQ3 for both serial ports
*** The J3 jumper setting has no effect when Serial Port 1 is disabled
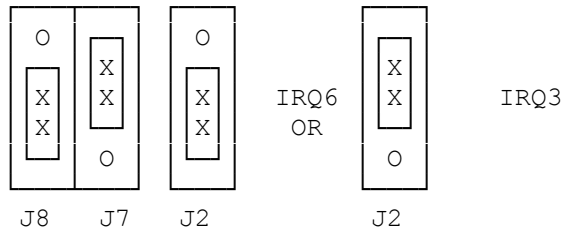

SERIAL PORT 2 JUMPER SETTINGS
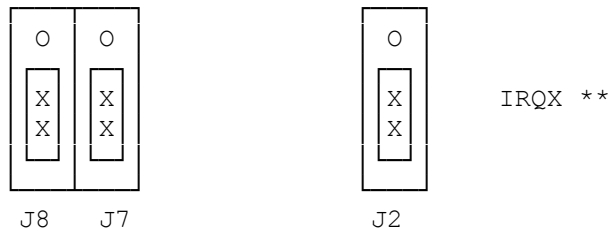
_____

```
Enable port as COM 2: *        ┌───┐┌───┐        ┌───┐
Address: 2F8 (Hex)             │ X ││ X │        │ X │
IRQ3                           │ X ││ X │        │ X │      IRQ3
                               │ O ││ O │        │ O │
                               └───┘└───┘        └───┘
                                J8   J7            J2
```


```
Enable port as COM 3:          ┌───┐┌───┐        ┌───┐
Address: 2E8 (Hex)             │   ││ O │        │ O │
IRQ6                           │ X ││   │        │   │
                               │ X ││ X │        │ X │      IRQ6
                               │ O ││ X │        │ X │
                               └───┘└───┘        └───┘
                                J8   J7            J2
```


```
Enable port as COM 4:          ┌───┐┌───┐┌───┐          ┌───┐
Address: 268 (Hex)             │ O ││   ││ O │          │ X │
IRQ3 or IRQ3                   │   ││ X ││   │   IRQ6   │ X │   IRQ3
                               │ X ││ X ││ X │   OR     │   │
                               │ X ││ O ││   │          │ O │
                               └───┘└───┘└───┘          └───┘
                                J8   J7   J2             J2
```


```
Disable port                   ┌───┐┌───┐        ┌───┐
                               │ O ││ O │        │ O │
                               │   ││   │        │   │
                               │ X ││ X │        │ X │    IRQX **
                               │ X ││ X │        │ X │
                               └───┘└───┘        └───┘
                                J8   J7            J2
```

_____

```
Select
power
source                 W2  ┌─────────┐        W2  ┌─────────┐
                           │  X   X  │            │   O O   │
                           │         │            │ ┌─────┐ │
                           │  O   O  │            │ │ X X │ │
                           └─────────┘            │ └─────┘ │
                                                  └─────────┘
                           Ring indicator *         + 5 volts
```

_____
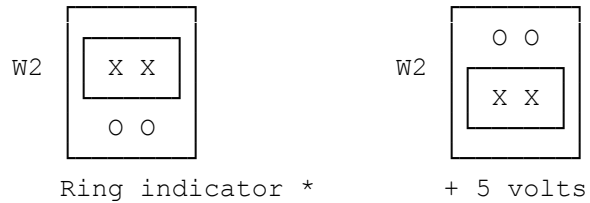
*   Factory setting. Do not select IRQ3 for both serial ports.
** The J2 jumper setting has no effect when Serial Port 2 is disabled.

SETTING UP THE PARALLEL PORT

You can enable the parallel port as either LPT2: or LPT3:, as shown in the
jumper settings table. You can enable it as LPT1: (3BC Hex) because most
computers have a built-in parallel port already enabled as LPT1:.

If your computer does not have a built-in parallel port and you are using
either MS-DOS or OS/2, the operating system will designate the parallel, port
on the adapter as LPT1:. Refer to the port as LPT1: when giving commands to
the software.

The parallel port functions like an IBM PS/2 bidirectional parallel port if
you enable bidirectional transfer.

CAUTION: Each port in a computer must have a unique I/O address.

TANDY 1000 USERS

Tandy 1000 series computers support two parallel ports. Because the first
parallel port is already enabled as LPT2: (Address 378), you must enable the
second parallel port as LPT3: (Address 278). when accessing the ports,
however, refer to them as LPT1: and LPT2:. The BIOS names the parallel ports
according to the order in which they are found, not according to their
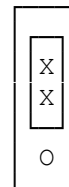hardware addresses.

OS/2 USERS

In an OS/2 environment, do not chose the LPT2: setting for the parallel port
on this adapter. Use the LPT3: setting. The built-in parallel port will be
designated LPT1:. When giving commands to the software, refer to the built-in
parallel port as LPT1: and the parallel port on the adapter as LPT2:.

PARALLEL PORT JUMPER SETTINGS

_____
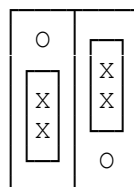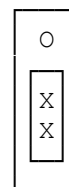
Enable port as LPT2: *
Address: 378 (Hex)
IRQ7

```
  ┌───┬───┐        ┌───┐
  │ X │ X │        │ X │
  │ X │ X │        │ X │    IRQ7
  │   │   │        │   │
  │ O │ O │        │ O │
  └───┴───┘        └───┘
  J10  J9           J1
```
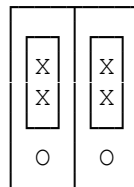
Enable port as LPT3:
Address: 278 (Hex)
IRQ5

```
  ┌───┬───┐        ┌───┐
  │ O │   │        │ O │
  │   │ X │        │   │
  │ X │ X │        │ X │    IRQ5
  │ X │   │        │ X │
  │   │ O │        │   │
  └───┴───┘        └───┘
  J10  J9           J1
```

Disable port

```
  ┌───┬───┐        ┌───┐
  │ O │ O │        │ O │
  └───┴───┘        └───┘
```
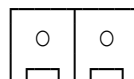
```
                    ┌─┐ ┌─┐            ┌─┐
                    │X│ │X│            │X│   IRQ5 **
                    │X│ │X│            │X│
                    └─┘ └─┘            └─┘
                    J10  J9             J1

Enable/disable      ┌───┐              ┌───┐
bidirectional       │ O │              │ X │
transfer            │┌─┐│              │ X │
                    ││X││              │ O │
                    ││X││              └───┘
                    │└─┘│
                    └───┘
                    J4                 J4
                    Bidirectional      Bidirectional
                    Transfer           transfer disabled *
                    Enabled ***
```
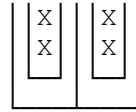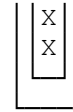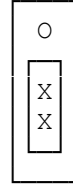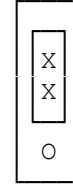
_____

*   Factory setting.
**   The J1 jumper setting has no effect when the parallel port 2 is disabled.
*** You need special software to use bidirectional transfer.

(smm 08/03/93)