

FCC ID.: MIBRF60102

## EXHIBIT 4

### User Manual

# **Wireless RS232**

**User's manual**

## FCC Compliance Statement

This equipment has been tested and found to comply with limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in residential installations. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television equipment reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Move the equipment away from the receiver
- Plug the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/television technician for additional suggestions

Only equipment certified to comply with Class B should be attached to this equipment to continuing compliance with FCC emission limit, and must have shielded interface cables.

You are cautioned that any change or modifications to the equipment not expressly approved by the party responsible for compliance could void your authority to operate such equipment.

## Typical Use Application

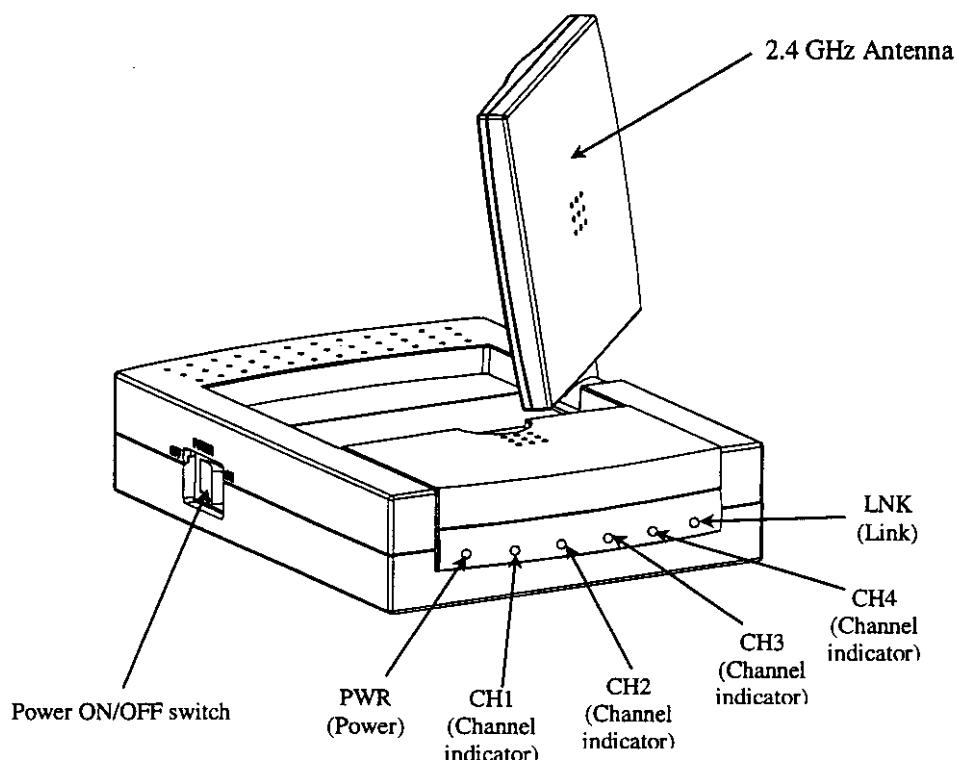
The Wireless RS232 can be used to provide numerous applications including:

- Add portability to your laptop computer enabling you to access the INTERNET
  - ◆ In your bedroom
  - ◆ In your yard or patio
  - ◆ In your living room while watching television
- Share a single modem between two different computer users in the same house
- PC to PC Communication (FTP) (Base unit configure to DCE, remote unit configure to DTE plus null modem)
- PC Surveillance application
- Any communication between two RS232 interface.

The flexibility and convenience of using wireless technology is only limited by your imagination.

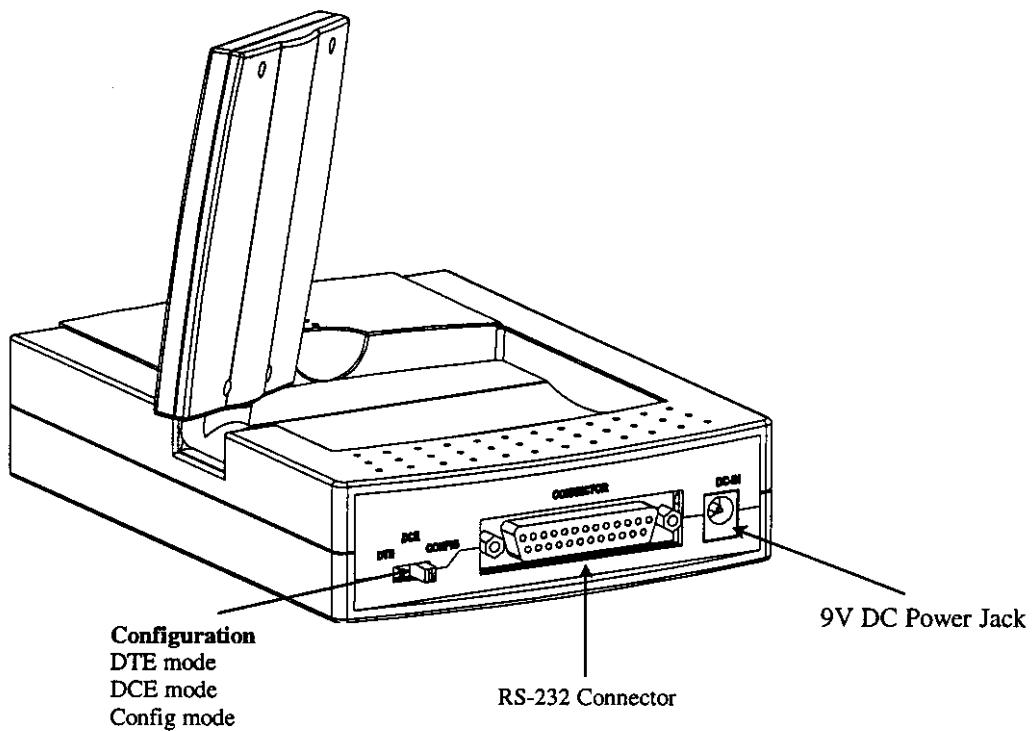
# Getting to Know your Wireless RS232

## Panasonic Wireless Modem base unit front view



LED	Name	Description
PWR	Power	This indicates when the power is on
CH1 CH2 CH3 CH4	Channel indicator	Indicates the unit operating channel from channel 1 to channel 15
LNK	Link	Indicates that the unit is receiving a good signal transmission RED – low input signal level GREEN – high input signal level

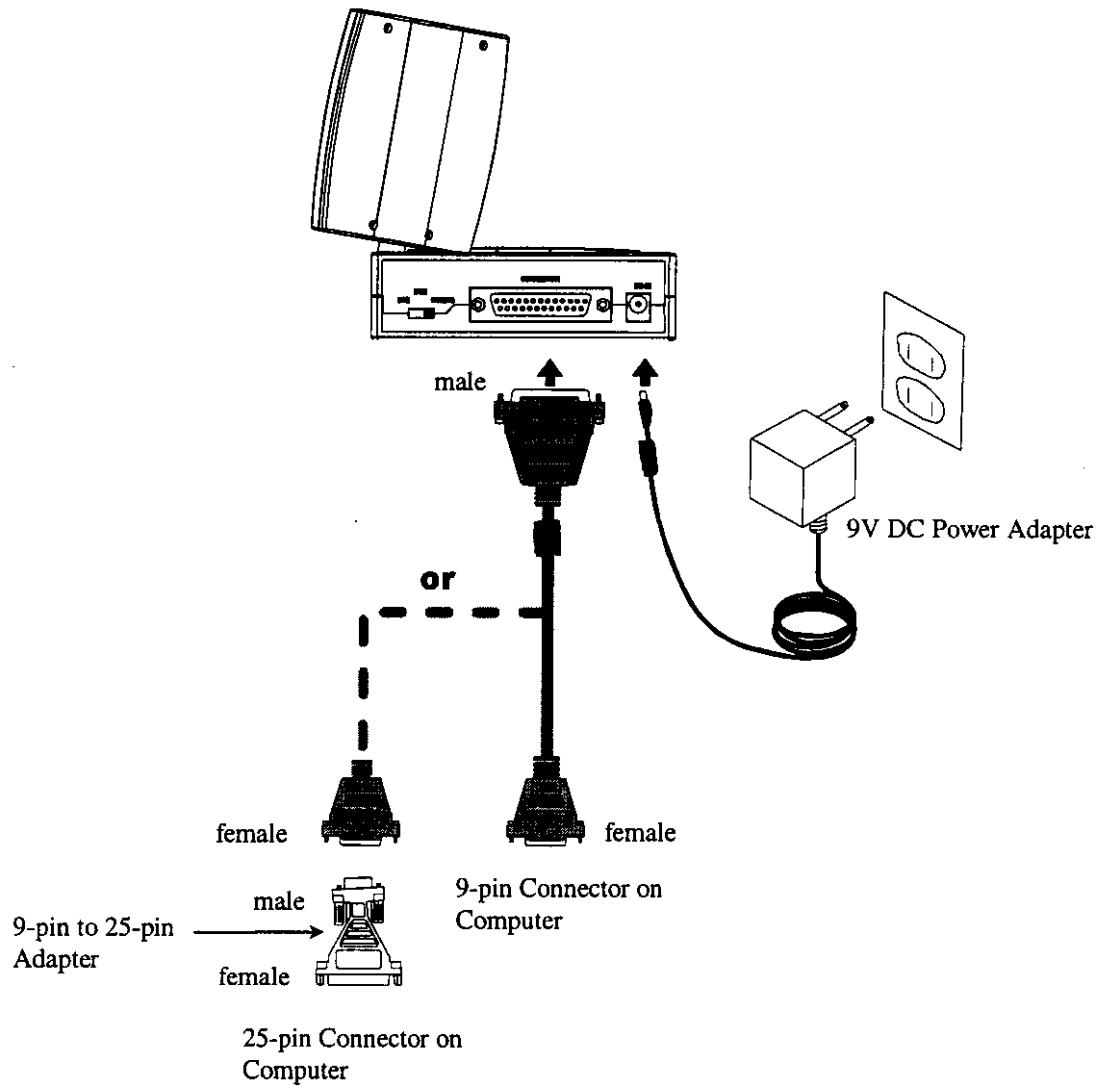
## Wireless RS232 base unit rear view



The Base Unit is connected to the computer through the standard RS-232 (COM1 or COM2) port on the computer.

Check to make sure that the DCE/DTE/Config switch is in the DCE position.

## Connections between computer and Base Unit



## Software Installation

The two floppy disks that come with the Wireless RS232 contain the configuration application that will allow you to change channels and security codes used by the system. To install the software application, follow the steps below:

1. Turn on the computer and enter Windows.
2. Insert the first floppy disk into your computer floppy drive
3. From Windows 95 or 98 start bar, select the “Run ...” command
4. Enter <drive>:setup. For example, if the Setup disk is in drive A, enter a:setup
5. Follow the directions provided by the installer

## System Configuration

The configured parameters are shown in the table below:

Parameter	Setting
Call Code Address	default
Channel	Channel 1
Base Unit baud rate	115.2 kbaud
Modem Unit baud rate	115.2 kbaud

If additional security or customized baud rate settings is required, the user can access the system configuration through the configuration application installed earlier. Some of the benefits of a custom configuration include:

- Customized personal address for added security
- Multiple channel to allow the use of more than one unit in the same room
- Slower interface baud rate to connect with older software programs (DOS, Windows 3.x, or America Online)

## Changing Remote or Base Unit Configuration

To change the Wireless RS232 base unit or remote unit configuration, connect the unit to your computer.

Start the Wireless RS232 configuration application. When you start this application you should see the following user interface.

- Both the remote unit and the base unit must use the same address in order to operate correctly. If the two units do not have the same address the Wireless RS232 will not operate properly.
- For best performance (fastest data rate), it is recommended that the baud rates for both the modem and base units be set to 115200 baud.
- Both the remote unit and the base unit must use the same channel number. If the two units do not have the same channel number the Wireless RS232 will not operate properly.

Once you have correctly set your desired settings in the configuration window, click “SAVE” to save your settings and exit the application. Click “EXIT” to exit the application and not change the configuration of the unit and will exit the application.

You can now change the Config switch settings back to the original position and reinstall the modem unit in the L-shaped bracket. The Config switch should be set as follows:

- Base Unit – “DCE”
- Remote Unit – “DTE”

## Operating Conditions

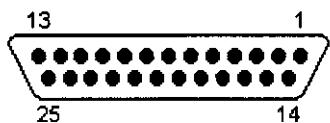
Parameter	Value
Operating temperature	
High	40 °C
Low	0 °C
Storage temperature	
High	60 °C
Low	-10 °C
Relative Humidity	85%

## RS-232 Interface

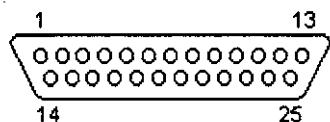
25-pin (DB-25) connector	9 pin (DB-9) connector	Pin name	Pin name abbreviation	Direction for DTE	Direction for DCE
1	-	Protective Ground	GND	-	-
2	3	Transmit Data	TXD	Input	Output
3	2	Receive Data	RXD	Output	Input
4	7	Ready to Send	RTS	Input	Output
5	8	Clear to Send	CTS	Output	Input
6	6	Data Set Ready	DSR	Output	Input
7	5	Signal Ground	GND	-	-
8	1	Data Carrier Detect	DCD	Output	Input
20	4	Data Terminal Ready	DTR	Input	Output
22	9	Ring Indicator	RI	Output	Input

## RS-232 Pin location

### DB-25 female



### DB-25 male



### DB-9 male

