FM RADIO RECEIVER CARD

User's Manual

Version 1.0

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FCC Compliance Statement

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Notice

This equipment has been tested and found to comply with the limits of 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 a residential installation. 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 harmful interference to radio or television 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.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution

To comply with the limits for the Class B digital device according to Part 15 of FCC Rules, this device must be installed in computer equipment certified to comply with the Class B limits. All cables used to connect the computers and peripherals must be shielded and grounded. Operation with non-certified/shielded cables may result in radio/TV interference.

Modification

Any modification not expressly approved by the manufacturer of this device could void the user's authority to operate the device.

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Chapter 1 - Setting up the FM Radio Card

This chapter will guide you through the setting up process of your FM Radio card which includes:

- Installing the FM Radio card into an empty expansion slot on your PC.
- Connecting the wire antenna (supplied) and speakers (if available) to the FM Radio card.

PCs often vary in their physical makeup. Thus, some of the instructions given in this chapter are general in nature and you may need to modify them slightly to accommodate your particular situation.

You will require a Philips-head Screwdriver to complete the installation. You may find it helpful to have with you your PC's user guide for easy reference.

1.1 Basic Safety Precautions

The FM Radio card is delicate and should always be handled with care:

- Make sure you are properly grounded before installing the FM Radio card.
- Do not remove the FM Radio card from its anti-static bag until you are ready to install it.
- Always hold the FM Radio card by its edges and avoid touching any of the electronic components on it.

1.2 Installing the FM Radio Card into your PC

To install the FM Radio card, follow these steps:

1. Turn off the power source to your PC (including any connected peripherals).

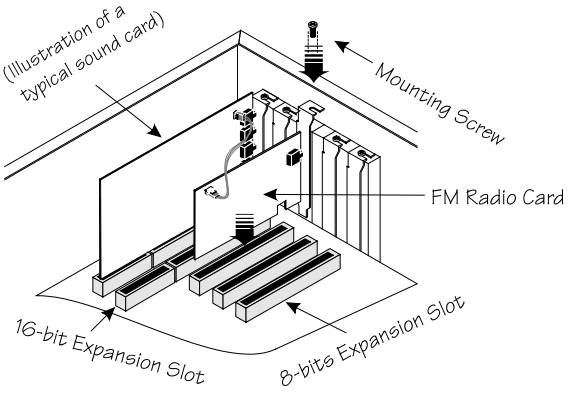
2. Remove your PC's system unit cover and set it aside.

The procedure for removing the PC's system unit cover varies from one computer to another. Please refer to your PC's user guide for specific instructions.

3. Select a suitable expansion slot.

4. Remove the selected expansion slot's cover plate. (Retain the mounting screw to secure the FM Radio card later.)

5. Using a gentle back-and-forth rocking motion, press the FM Radio card firmly into the selected expansion slot.



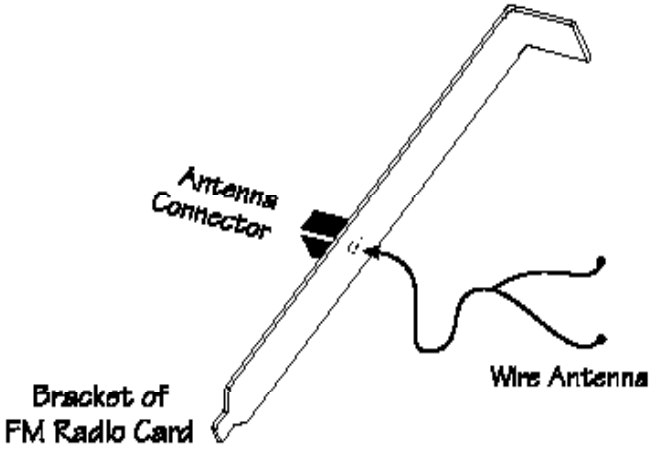
6. Secure the FM Radio card by replacing the mounting screw you removed in step 4.

7. Connect the audio cable from the FM Radio card to the sound card.

8. Replace the PC's system unit cover and fasten it using the mounting screws you removed in step 2.

1.3 Connecting the Antenna

After you have installed your FM Radio card, you can proceed to connect the wire antenna (supplied).



You may have to adjust the wire antenna to obtain optimum reception.

1.4 Installing the FM Radio Utilities

Your FM Radio card comes with two setup program for installing the FM Radio utilities. The DOS-based setup program, INSTALL.EXE, is to install the DOS FM Radio utility. The other Windows-based setup program, SETUP.EXE, is used to install the Windows FM

Radio utility.

To install both the FM Radio utilities,

1. Power up the PC.

2. Insert the installation diskette into the appropriate floppy disk drive.

3. At the DOS prompt, change to the drive letter where you have inserted the diskette (e.g. A: or B:) and press [Enter].

4. Type INSTALL at the DOS prompt and press [Enter].

   Once the setup program is started, on-screen instructions will guide you through the installation. Generally, you will press [Enter] to accept the defaults suggested by the setup program.

5. Follow the on-screen instructions to complete the installation.

6. Repeat Step 4; but this time, type SETUP at the DOS prompt instead and follow the on-screen instructions to complete the installation.

Be sure to read the README.TXT file for any latest information not contained in this manual.

Chapter 2 - Using the FM Radio Utilities

Your FM Radio card comes with two utilities that provide you with digital control over tuner-related functions in the DOS and Windows environments.

Both the DOS and Windows FM Radio utilities share an almost identical intuitive interface. All the common features that you would normally find on a conventional FM Tuner have been combined into a single integrated screen.

2.1 Turning On the DOS FM Radio Utility

To run the DOS FM Radio utility,

1. Change to the directory where you have installed the FM Radio utilities (default is C:\FMRADIO).

2. At the DOS prompt, type DOSRADIO and press [Enter].

2.2 Turning On the Windows FM Radio Utility

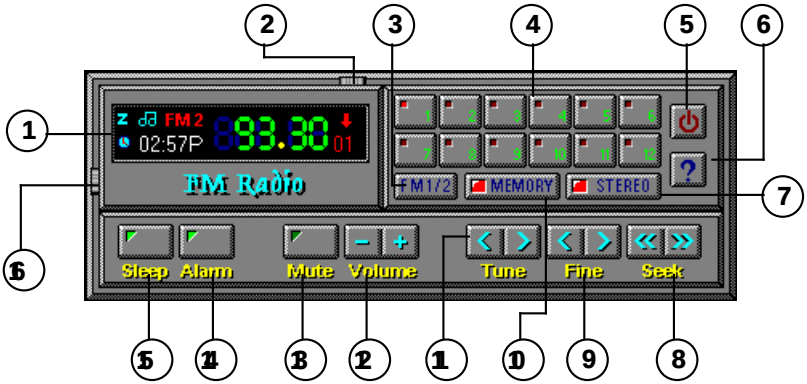
To run the Windows FM Radio utility,

1. Run the Windows application.

2. Double-click the FM Radio icon

in the FM Radio Utilities program group.

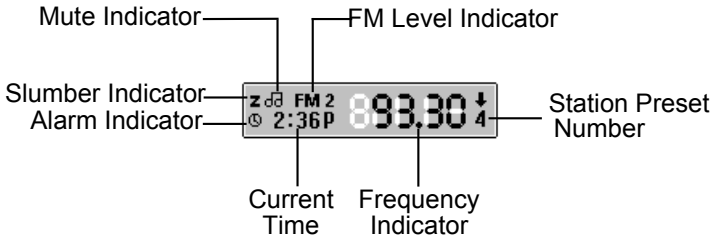
2.3 The FM Radio Utility's Control Panel



1. Indicator Display
2. Horizontal Resize Button (not available for DOS utility)
3. FM Select Button
4. Station Preset Buttons
5. Power Off Button
6. Online Help Button
7. Stereo/Mono Selection Button
8. Automatic Seek Tuning Button
9. Fine Manual Tuning Button (Minutes Setting Button for alarm and slumber modes)
10. Station Preset Memory Button
11. Manual Tuning Button (Hour Setting Button for alarm and slumber modes)
12. Volume Control Button
13. Mute Button
14. Alarm Button
15. Sleep Button
16. Vertical Resize Button

2.4 The FM Radio Utility's Indicator Display

The following figure illustrates the various symbols found in the Indicator Display of the FM Radio utility.



Both the DOS and Windows FM Radio utilities will work better with mouse control. Therefore, it is suggested that you load the mouse driver before running the DOS FM Radio utility. (The mouse driver is automatically loaded when you start Windows.)

For the rest of this chapter, we will use the mouse to execute the functions of the FM Radio utilities. However, if your PC does not have a mouse, you can still operate the FM Radio utilities by using the assigned Short-cut Keys. See Section 2.12 for more details.

2.5 Tuning to a Frequency Setting (Radio Station)

There are basically two methods for tuning the FM Radio utility to a radio station. The procedures for both methods are outlined below:

2.5.1 Manual Tuning

1. Press the Manual Tuning Button and/or Fine Manual Tuning Button to adjust the frequency level to the required setting.

   The Manual Tuning Button will increase/decrease the frequency level by 0.1 MHz. The Fine Manual Tuning Button will increase/decrease the frequency level by 0.05 MHz.

2.5.2 Automatic-Seek Tuning

1. Press the Automatic Seek Tuning Button to activate the automatic station search mode.

   The search operation will stop when an existing frequency setting is detected. Alternatively, you can press any of the buttons on the Front Panel Control to stop the search operation.

2.6 Storing a Frequency Setting (Radio Station)

The FM Radio utility allows you to store 24 different frequency settings into 12 Station Preset Buttons with the FM Select Button (2 levels).

To store a frequency setting,

1. Press the FM Select Button to select the FM level (FM 1 or FM2). The FM level indicator will indicate the FM level.

2. Press the Station Preset Memory Button to activate the station preset mode. The corner indicator on the button will be lit.

3. Select any one of the Station Preset Buttons (1 - 12) to store the current frequency setting.

The current frequency setting in the selected Station Preset Buttons will be overwritten with the new value.

4. Repeat Steps 1 - 4 to store any remaining frequency settings in mind.

2.7 Retrieving the Stored Frequency Settings

After storing your favorite frequency settings (radio stations) in the Station Preset Buttons, you can later retrieve them directly.

1. Press the FM Select Button to select the FM level (FM 1 or FM2). The FM level indicator will indicate the FM level.

2. Select any one of the Station Preset Buttons (1 - 12) to retrieve the frequency setting.

2.8 Setting the Alarm Mode

The Alarm Button activates the alarm mode to restore (if minimized, for the Windows utility) and unmute (if mute is on) the FM Radio utilities at the specified time. When activated, the alarm mode also allows the FM Radio utilities to "jump" directly to a specifed frequency setting.

To set the alarm time,

1. Press the Alarm Button to activate the alarm mode. The corner indicator on the button will be lit. In addition, the Hour Setting Button and Minutes Setting Button will appear.

2. Press the Hour Setting Button and Minutes Setting Button to set the required alarm time. The alarm indicator will appear in the FM Radio utility's display.

3. Set the frequency setting to "wakeup to" with the FM Select Button (FM1 or FM2) and Station Preset Buttons (1 -12).

2.9 Setting the Slumber Mode

The Sleep Button activates the slumber mode to minmize and mute the FM Radio utility at the specified time.

To set the slumber time,

1. Press the Sleep Button to activate the slumber mode. The corner indicator on the button will be lit. In addition, the Hour Setting Button and Minutes Setting Button will appear.

2. Press the Hour Setting Button and Minutes Setting Button to set the required "switch off" time. The slumber indicator will appear in the FM Radio utility's display.

2.10 Controlling the Audio Output

The FM Radio utility allows you to control the volume settings with its Volume Control Button.

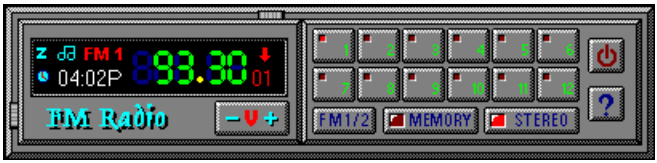
The FM Radio utility's stereo or mono output can be set with Stereo/Mono Selection Button.

You can also momentarily mute the audio output of the FM Radio utility with its Mute Button. The mute indicator will indicate if the FM Radio utility is in the "mute on" or "mute off" mode.

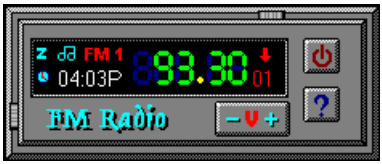
Line-in set in DOS Mixer is different from that set in Windows. If you encounter volume differences after switching from DOS to Windows and vice versa, re-adjust the Line-in level accordingly in the coresponding Mixer Control.

2.11 Resizing the FM Radio Utility Control Panel (for Windows Utility only)

The Windows FM Radio utility allows you to resize its interface with the Vertical Resize, and Horizontal Resize Buttons. The "resized" FM Radio interface will then occupy a smaller display area on your PC's monitor.



FM Radio Utility in Vertical-Resized Mode



FM Radio Utility in Vertical- and Horizontal-Resized Mode

The Vertical Resize Mode must enabled before the Horizontal Resize Mode can be activated.

2.12 Short-cut Keys for the FM Radio Functions

In addition to the buttons on the FM Radio utility's control panel, you can also use an array of keyboard keys to access the FM Radio utility functions. The table below shows all the “short-cut” keys to the various FM Radio utility functions

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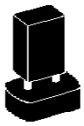
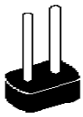
Appendix A - FM Radio Card Jumper Settings

Your FM Radio card contains a I/O Address Selection Jumper. This jumper has been set to its default value and should allow your FM Radio card to work without any problem. You are advised not to change the jumper's setting unless it is absolutely necessary. The settings for the I/O Address Selection Jumper are illustrated as follows:

Jumper JP3



FM Radio Card uses ADDR 350H (default)



FM Radio Card uses ADDR 358H

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