

MC2000



MC2000 Owner's Manual

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Introduction

Built around a digital network hub, the MC2000 is a whole-house distributed audio communications system complete with multi-source music, door chimes, intercom, paging, and monitoring.

The illustration below shows you the layout of your new MC2000 room station.

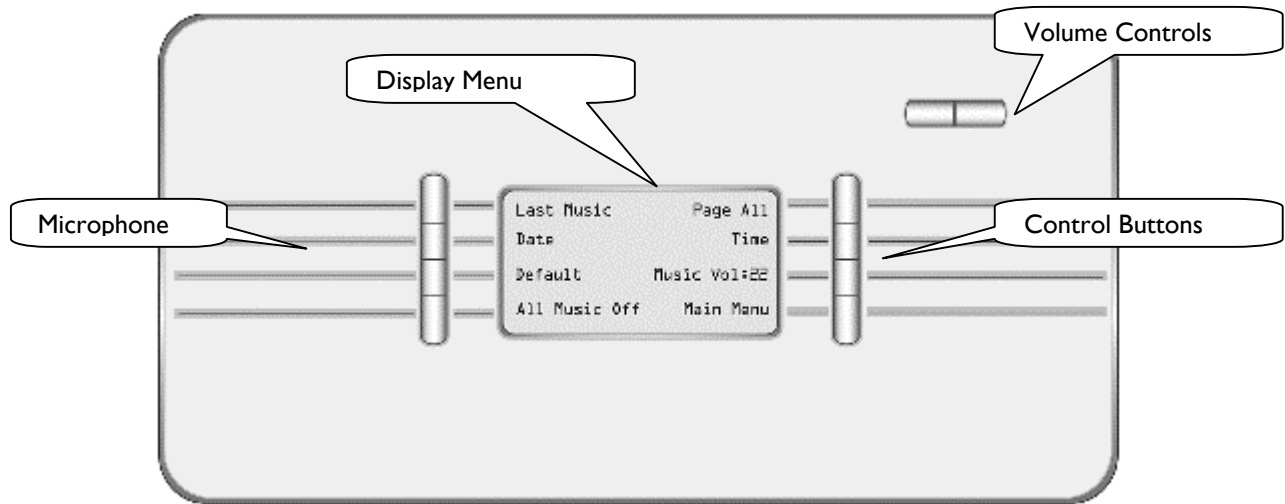


Figure 1 - Room Station Layout

Keep this manual in a safe place for future reference. If you lose the manual, you can download it from the M&S Systems web site (www.mssystems.com). You will need **Adobe Acrobat Reader** (www.adobe.com) to view the file.

System Description and Features

The MC2000 System includes:

- A digital hub installed in an environmentally protected closet or utility area.
- Up to ten room stations installed in rooms throughout the house.
- Up to two door stations for the front and rear doors.
- Two tuners for AM/FM radio listening.
- An optional digital media manager for playing MP3 files.

Although networked together, each room station is independent of every other one in the house. You can play your favorite oldies albums in one room while the kids

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have their favorite rock station blaring in another room. You can even select the music playing in another room to play in the room you're in.

You can program the MC2000 to let you go to sleep with music and to wake up with music. The intercom feature lets you communicate with someone at the front door or talk to someone in another room. The paging feature lets you make announcements (for example, "Dinner is ready. Everyone wash hands and come to the table!"). You can even monitor another room (the baby's room, for example) if you wish.

This manual provides directions and guidelines for using the MC2000 System and programming it to meet your needs.

If you have any questions not answered in this manual please contact the M&S Systems technical support team at 1-800-366-9422 or for online support, go to our web site: www.mssystem.com.



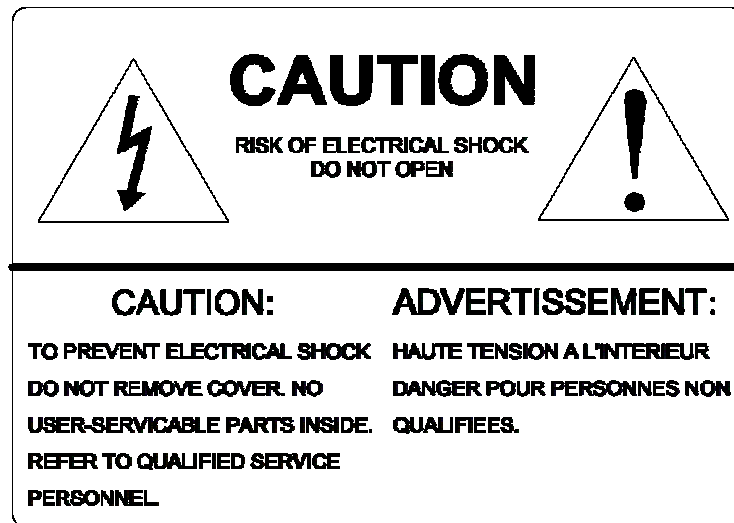
Important Safety Instructions for the MC2000

The MC2000 must be installed by certified M&S Systems dealers or installers, and must conform to all local building and electrical codes.

DO NOT expose the MC2000 to moisture. Doing so can create fire or shock hazards and void the warranty.

DO NOT attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards and will invalidate your warranty. Neither the hub nor the room stations contain any user-serviceable parts.

REFER ALL SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

USE ONLY M&S Systems certified replacement parts and have them installed by an MC2000 certified dealer or installer. Unauthorized substitutions can result in fire, electric shock, or other hazards.

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Unplug the MC2000 from the wall outlet prior to cleaning. Use only a damp cloth to clean the hub cabinet, room stations, and speakers. Do not wipe the LCD with a damp cloth; use only a soft cloth on the LCD screen. Do not use liquid cleaners or aerosol cleaners.

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Getting Started: Set up the System

We recommend you customize your MC2000 prior to using the system. Customizing the system will make the system easier to use and will allow you to access all system features. The Greeting Menu is shown in Figure 2. This is the default MC2000 room station menu. This menu provides you with single button access to several key features. Each of these features will be described later in this document.

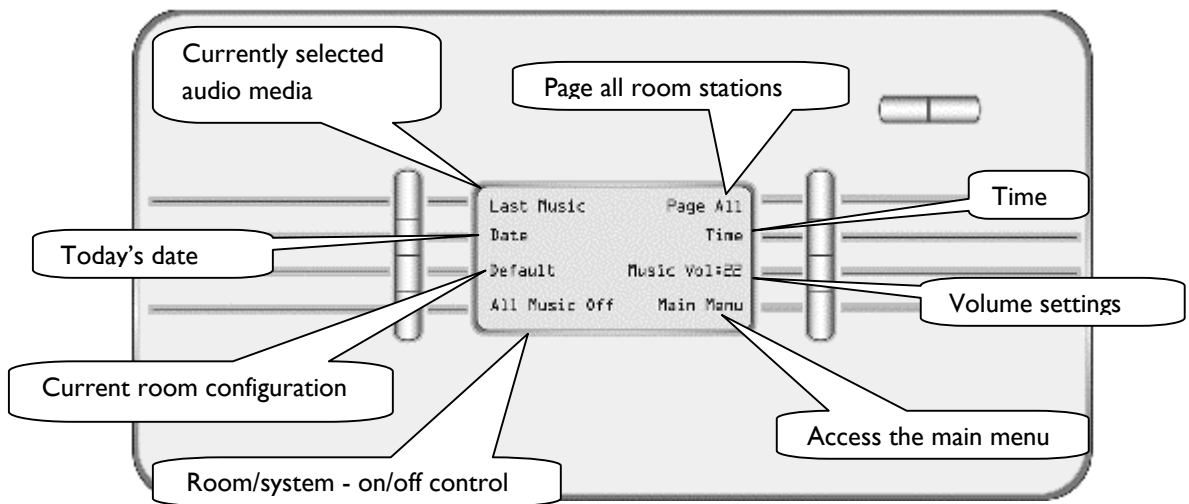


Figure 2 - Greeting Menu

The **Setup Menu** (shown in Figure 5) allows you to configure the basic system and individual room settings. Begin by configuring the MC2000 system through the **Setup Menu**. To get to the **Setup Menu** first press the **Main Menu** button on the room station, as shown in Figure 2. Then follow these steps:

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1. Press the **More** button shown in Figure 3.

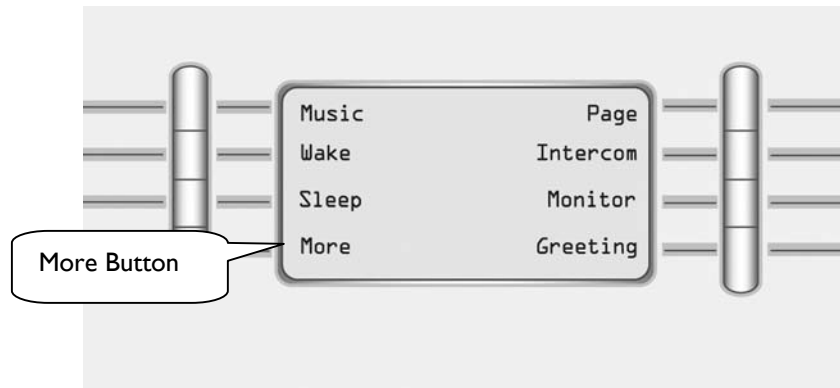


Figure 3 - Main Menu

2. Press the **Setup** button shown in Figure 4.

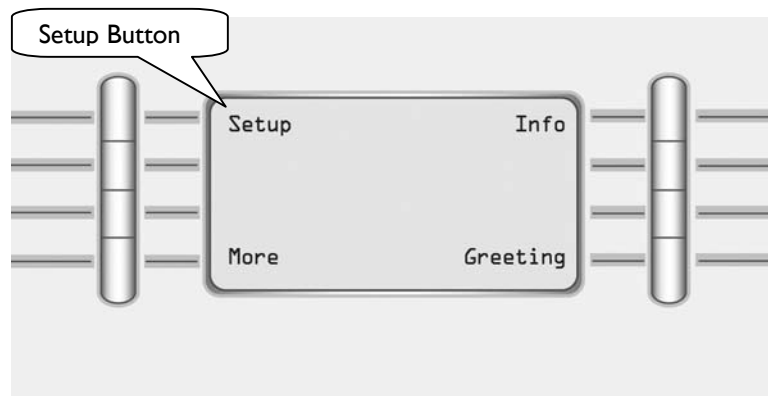


Figure 4 - More Screen

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The **Setup Menu** is where you establish the time, date, and year settings and customize the system to meet your needs for each room with the room station.

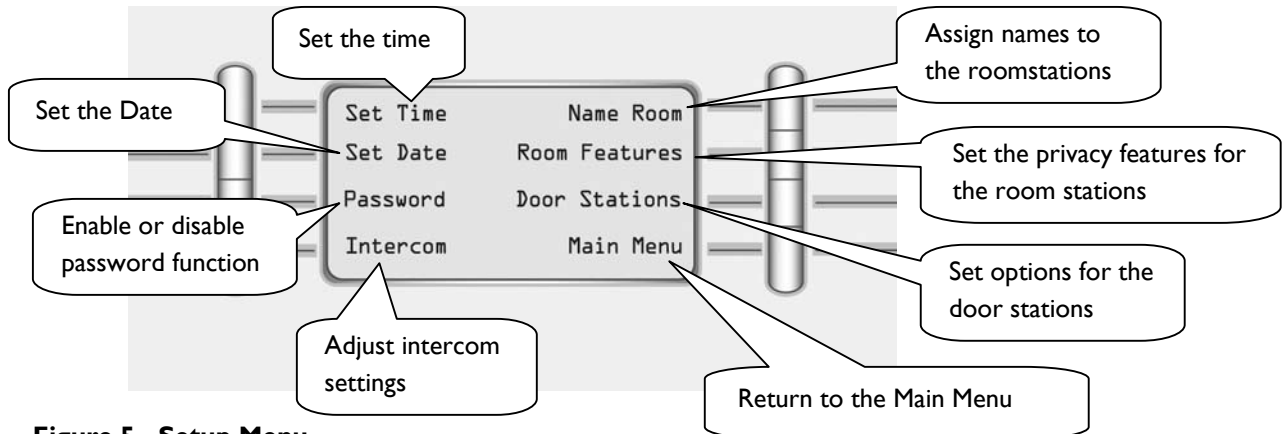


Figure 5 - Setup Menu

Set the Time

The **Set Time** menu allows you to set or change the current system time. To set or change the time on the MC2000 system, follow the steps shown below.

1. Press the **Set Time** button shown in Figure 5.

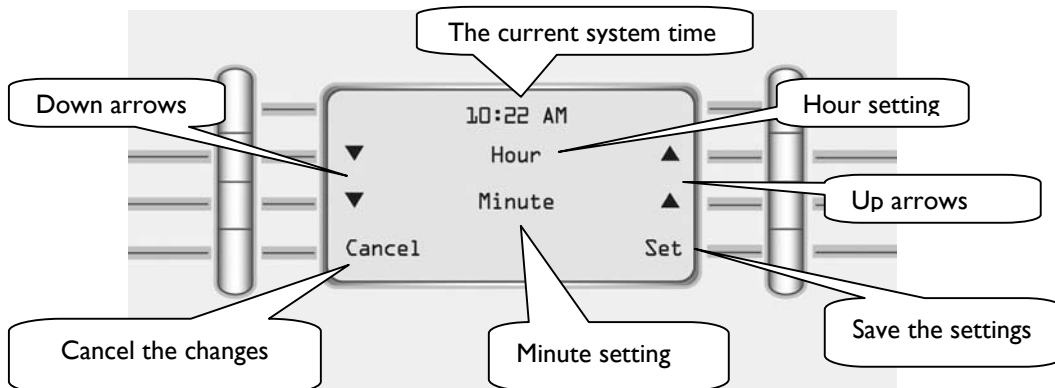


Figure 6 - Set Time Menu

2. The **Set Time** menu shown in Figure 6 displays the current system time. To change the time use the up and down arrow keys to change the hour and the minutes.

3. After you have the time at the correct setting, press **Set** to save the settings or **Cancel** to discard them.

After 30 seconds of inactivity, the room station screen will return to the **Greeting Menu** shown in Figure 2.

Set the Date

The **Set Date** menu allows you to set or change the current system date. Follow the steps below to set or change the date.

1. Press the **Set Date** button shown in Figure 5.

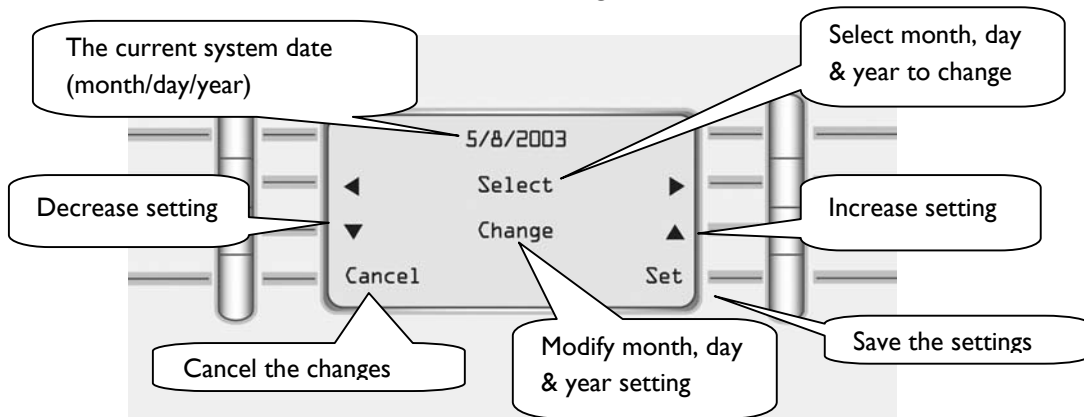


Figure 7 - Set Date Menu

2. The **Set Date** menu shown in Figure 7 displays the current system date. To change the date, use the select arrows to choose between the month, day and year.
3. Once you have the item highlighted use the change arrows to increase or decrease the value of the date.
4. After 30 seconds of inactivity, the room station returns to the **Greeting Menu** shown in Figure 2

Name a Roomstation

The **Name Room** menu allows you to customize each room station's system name. To change the room station name, follow the steps shown below.

1. Press the **Name Room** button shown on Figure 5.

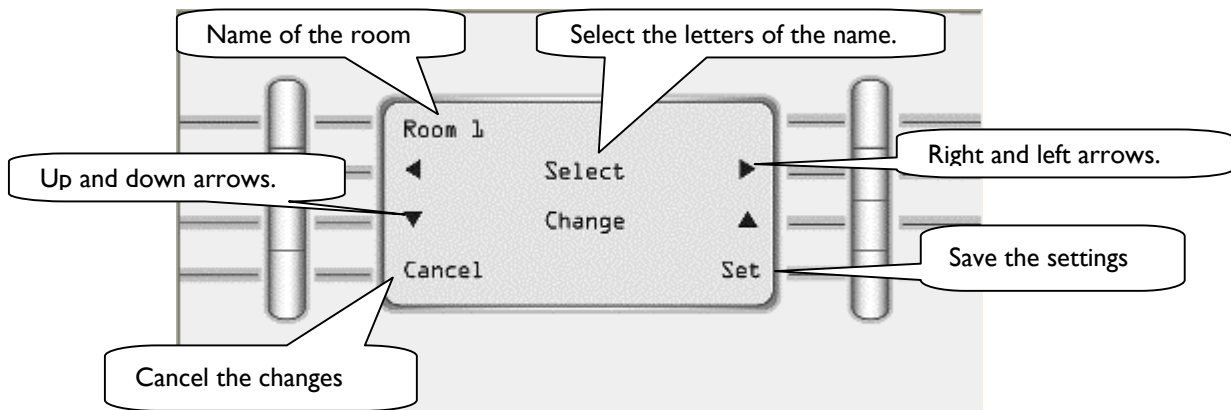


Figure 8 - Name Room Menu

2. To set the room name use the right and left arrows (shown in Figure 8) to select the character to change and the up and down arrows to change the letters or numbers in the room name. The up and down arrows cycle through upper case letters, then lower case letters and finally numbers. The MC2000 system supports room names up to 12 characters long.
 3. Press **Set** to save the changes or **Cancel** to discard them.
- After 30 seconds of inactivity, the room station returns to the **Greeting Menu** as shown in Figure 2.

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Room Features

The Room Features menu allows you to customize each room's intercom, paging and monitoring settings. These settings must be adjusted at each room station on the MC2000 system. To set the options for a room station follow the steps presented below.

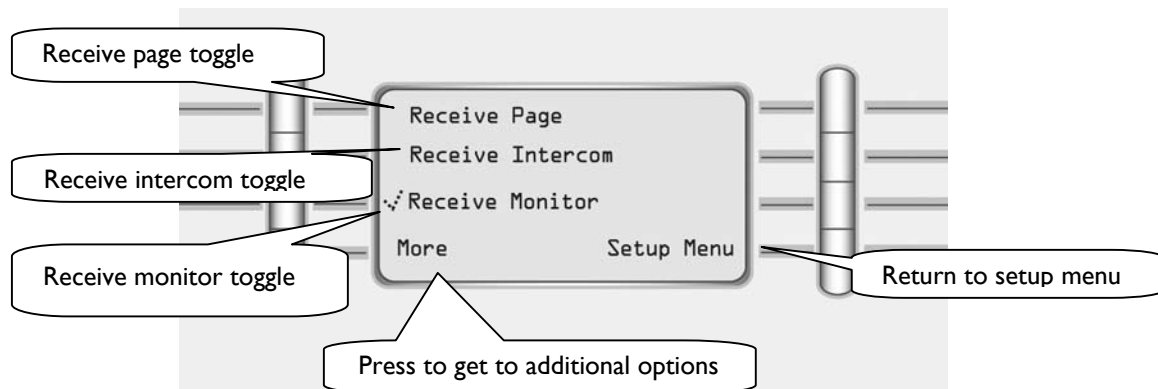


Figure 9 - Room Features Menu

All options are toggles; pressing the button alternates between turning the feature on and off. A check mark (✓) next to an option indicates that the feature is turned on. The features included on your MC2000 System include:

- Receive Page
- Receive Intercom
- Receive Monitor
- Send Page
- Send Intercom
- Send Monitor
- Receive Doorbell
- Wake Control
- Sleep Control
- Mode Control
- Music Control
- Presets Control

These settings can be overridden by changing the room setting on the **Greeting Menu** shown in Figure 2. If **Default** is selected all options are turned on. If **Nap** is selected the following options are disabled; Receive Page, Receive Intercom, and Receive Doorbell. The **Privacy** setting turns off all the receive options (including page, intercom, monitor, and doorbell). The **Custom** setting allows you to pick and choose which options you want active.

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To select one of these room station configurations press the button shown in Figure 2, each button press will toggle between the pre-configured room settings.

After 30 seconds of inactivity, the room station returns to the **Greeting Menu** shown in Figure 2.

Door Stations

The MC2000 system supports two door stations. Once the doorbells are installed, they will ring on all room stations. Whether the doorbells can be heard or monitored from an individual room station depends on how it's been set up. To set up the door station functionality for a particular room station, follow the steps shown below.

Use the same method shown below to establish the defaults for each of the two door stations. To get to the Door Station Menu select **Door Station** on the Setup Menu shown in Figure 5.

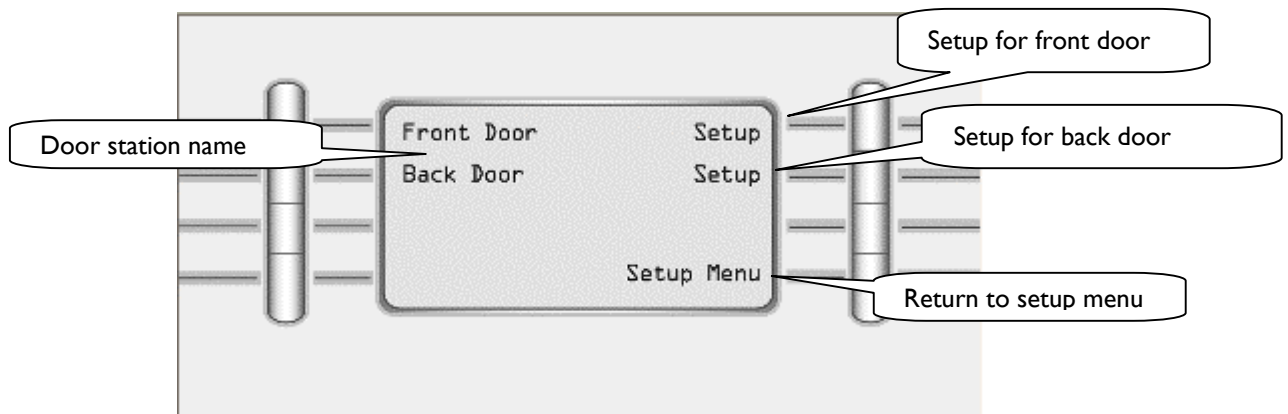


Figure 10 – Door station Menu

1. Press the **Setup** button for the desired door (front door or back door) as shown on Figure 10. The **Door Station Setup** menu is shown in Figure 11.

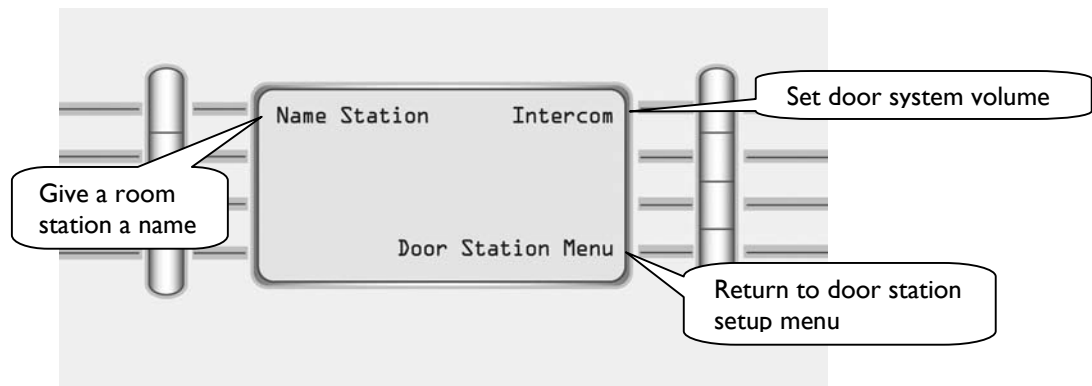


Figure 11 – Door Station Setup Menu

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2. To change the name of a door station, press the **Name Station** button. The default MC2000 settings are “Front Door” and “Rear Door”. The Name Station menu looks like the Name a Room menu shown in Figure 8.
3. To set the microphone volume and acoustic decay press the **Intercom** button shown in Figure 11. These settings allow you to enhance the sound of your MC2000 system and to set the sensitivity of the microphone.

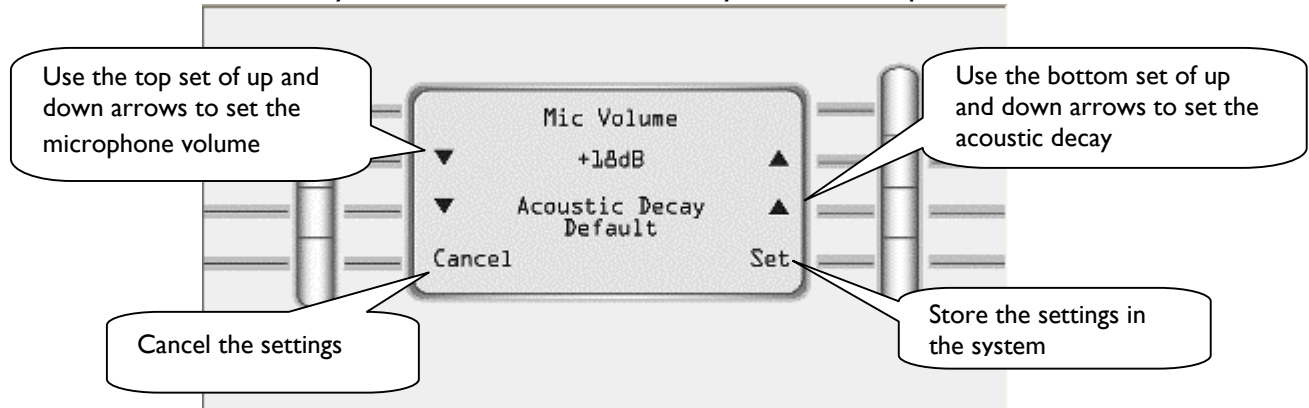


Figure 12 - Microphone Setting Menu

Note: acoustic decay relates to the fact that acoustic echoes decay exponentially with time. The settings below allow the echo canceller in the room stations to perform better with a known decay rate for a particular room.

Setting Name	Actual Value	Usage
None	0 dB/ms	For acoustically live room (good echo/sound reflections)
Slight	.19 dB/ms	For acoustically live rooms (good echo/sound reflections)
Default	.38 dB/ms	For typical rooms with carpet (default setting)
Rapid	.75 dB/ms	For acoustically dead rooms (poor echo/sound reflections)

After 30 seconds of inactivity, the room station returns to the **Greeting Menu** shown in Figure 2.

Setting up a Password

The **Password** menu allows you to establish a four-digit password for your MC2000 system. This password protects your system settings and keeps them from being changed. The MC2000 passwords are numerical (numbers 1 – 8) and are four numbers in length. Once a password is established, it must be entered at the room station before making any changes to the room station. Please record your password and keep it in a safe place.

Establishing a Password

Establishing a password is a two-step process.

1. To get to the Password menu Press the Main Menu button on the greeting screen shown in Figure 2
2. Press the More button shown on the Main Menu in Figure 3
3. Press the Setup button shown on the More Menu in Figure 4
4. Press the Password button shown on the Setup Menu in Figure 5.
5. The **Enable Password** screen appears shown in Figure 13.

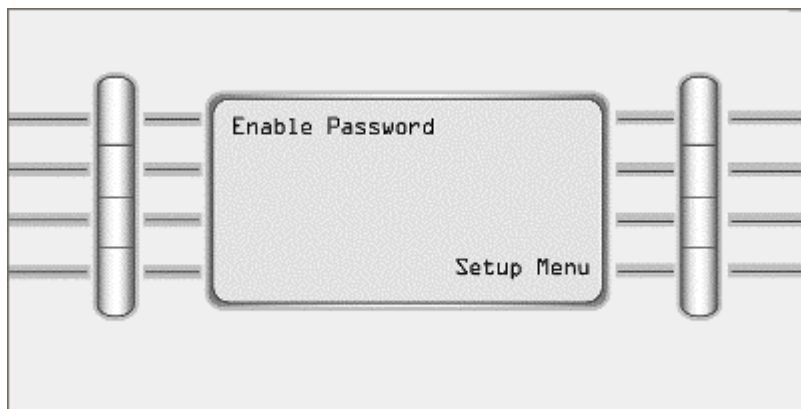


Figure 13 - Enable Password Screen

6. Press the **Enable Password** button. Enter a four-digit number by pressing the buttons next to the desired numbers shown in Figure 14. You may use each number as many times as you wish. Please record your password and keep it in a safe place.

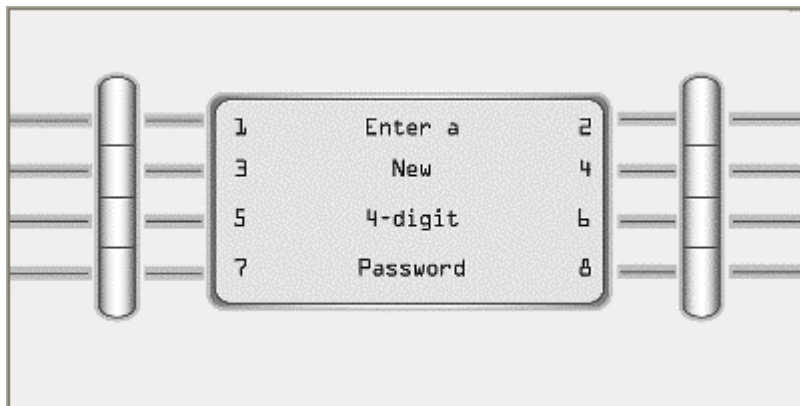


Figure 14 - Enter Password Screen

7. You are required to confirm the password by re-entering the same four numbers. A confirmation screen tells you the password has been set. **DO NOT FORGET THIS NUMBER!** Record it in a safe place for safekeeping. If you forget the password number, you will not be able to make changes to the setup menu (for example, changing the time) and will have to contact M&S Systems technical support team at 1-800-366-9422 to get instructions for resetting your password.



Figure 15 - Confirm Password Screen

After ten seconds of inactivity, the room station returns to the **Enable Password** screen shown in Figure 13.

After 30 seconds of inactivity, the room station returns to the **Greeting Menu** screen shown in Figure 2.

Removing or Changing a Password

Follow the steps below to change or remove your MC2000 password. You will need to have the current password to complete this step.

1. Press **Setup** from the **Main Menu** shown in Figure 3. You will be prompted to enter the password as shown in Figure 16.

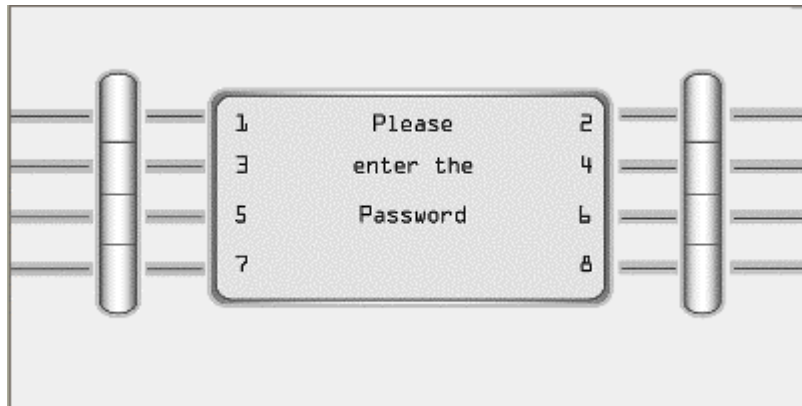


Figure 16 - Enter Password Screen

2. Enter the password.
3. Press the **Password** button shown in Figure 5.
4. To change the password, press the **Change Password** button shown in Figure 17.



Figure 17 - Change or Disable Password Screen

5. Enter the new password following the same steps previously described and as shown in Figure 14.
6. Confirm the password by reentering it. You will receive a password confirmation screen. Please record the new password and keep it in a safe place.
7. To disable the password follow steps 1 – 3, but select the Disable Password button as shown in Figure 17. The password is now disabled.

After 30 seconds of inactivity, the room station returns to the **Greeting Menu** as shown in Figure 2.

Establish Intercom Settings

Pressing the Intercom key produces the same **Microphone Volume** and **Acoustic Delay** menu seen in the **Door Station** option. This allows you to set the volume control and microphone sensitivity for the intercom.

1. To adjust the intercom settings press the **Main Menu** button from the greeting menu shown in Figure 2.
2. Press the **More** button on the Main Menu shown in Figure 3.
3. Press the **Setup** button on the More Menu shown in Figure 4.
4. Press the **Intercom** button on the Setup Menu shown in Figure 5.
5. You will see Intercom adjustment screen shown in Figure 18.
6. Use the arrows to adjust the intercom settings.

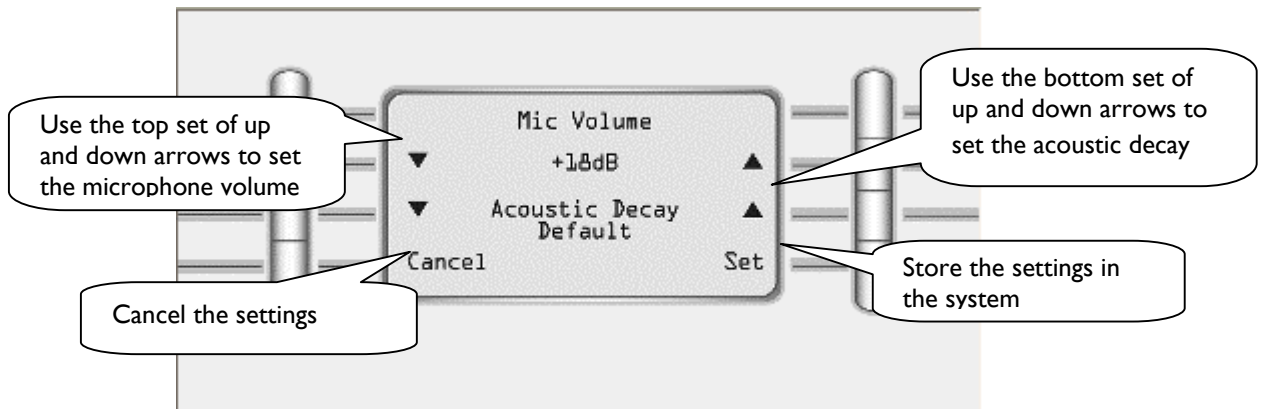


Figure 18 - Intercom Settings Adjustment Screen

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Note: acoustic decay relates to the fact that acoustic echoes decay exponentially with time. The settings below allow the echo canceller in the room stations to perform better with a known decay rate for a particular room.

Setting Name	Actual Value	Usage
None	0 dB/ms	For acoustically live room (good echo/sound reflections)
Slight	.19 dB/ms	For acoustically live rooms (good echo/sound reflections)
Default	.38 dB/ms	For typical rooms with carpet (default setting)
Rapid	.75 dB/ms	For acoustically dead rooms (poor echo/sound reflections)

After 30 seconds of inactivity, the room station returns to the **Greeting Menu**.

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Using the MC2000

The **Greeting Menu** is the default menu for the room station display. Any time a menu is inactive for more than 30 seconds, the display returns to this menu.

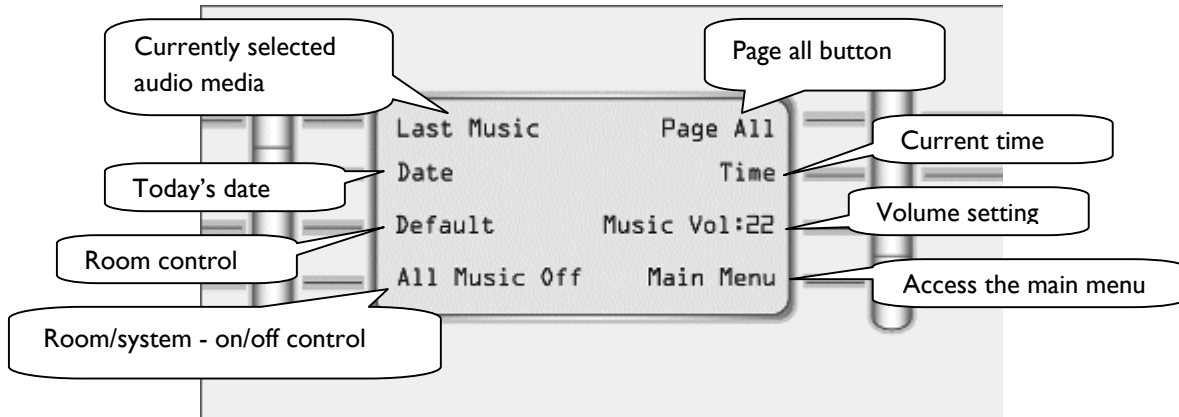


Figure 19 - Greeting Menu

- Currently selected audio media provides access to the current music playing or to the last music played in the room.
 - **Last Music** pressing this button provides quick access to the last music played in the room. When music is playing this location displays the current music source.
 - **FM/AM Radio Station** pressing this button will allow you to scroll through and select preset radio stations configured for this room.
 - **DM** pressing this button takes you to the currently playing DMM song. From this screen you can change or control the song playing.
 - **Local** pressing this button has no effect on the local source.
 - **Remote** pressing this button allows you to choose between the two radio stations currently playing in the home and the remote devices connected to the system
- **Date** shows the month, day of the month, and the year.

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- **Room Control** toggles between Default, Privacy, Nap, and Custom (see **Setup**, page 12, for detailed information):
 - **Default:** Someone in another room can monitor this room; send a page to a person in this room, establish an intercom conversation with this room, and the doorbell will ring over the speakers in this room.
 - **Nap:** The room can be monitored, but the paging, intercom and doorbell functions are inactive.
 - **Privacy:** This is the equivalent of a “Do not disturb” sign: the room will not hear the doorbell and it cannot be monitored, paged, or accept an intercom call.
 - **Custom:** Allows you to adjust the custom settings to meet your needs, for example, receive pages and monitor the room, but deactivate the intercom.
- The **room/system** control toggles between Room Music Off and All Music Off. **Room Music Off** turns off the music in just this one room. **All Music Off** turns off all the room stations in the house.
- **Page All** is a quick one-button command that allows you to send a page that is broadcasted to all the room stations.
- **Time** shows the hour, the minutes, and whether it is AM or PM.
- The **Volume** setting toggles between music, doorbell chimes, and intercom and shows the actual volume level for each. Use the volume control buttons on the upper right of the room station to adjust the actual volume for each. The plus button increases the volume, the minus button decreases the volume.
- Use the **Main Menu** button to access the main and additional menus.

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Main Menu

The **Main Menu** provides easy access to all MC2000 functions:

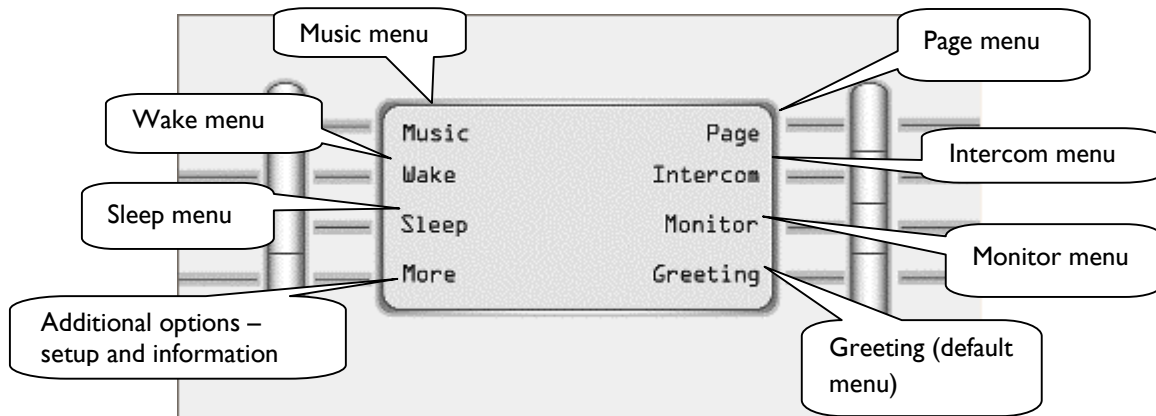


Figure 20 - Main Menu

- **Music:** Select music sources.
- **Wake:** Set the time you want the music to come on.
- **Sleep:** Set the time you want the music to go off.
- **More:** Shows two additional functions:
 - **Setup:** Set up all the system preferences for this room and the door stations.
 - **Info:** Used in diagnosing problems with the system.
- **Page:** Broadcast a message to another room station or to all room stations.
- **Intercom:** Establish an intercom conversation with a person in another room.
- **Monitor:** Listen to another room, such as the baby's room.

Greeting: Returns you to the default room station display menu.

To select a menu option press the button next to the desired option. If the menu is inactive for more than 30 seconds, it returns to the **Greeting Menu** shown in Figure 19.

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Music Menu

The **Music** menu contains the options for personalizing and managing your music choices.

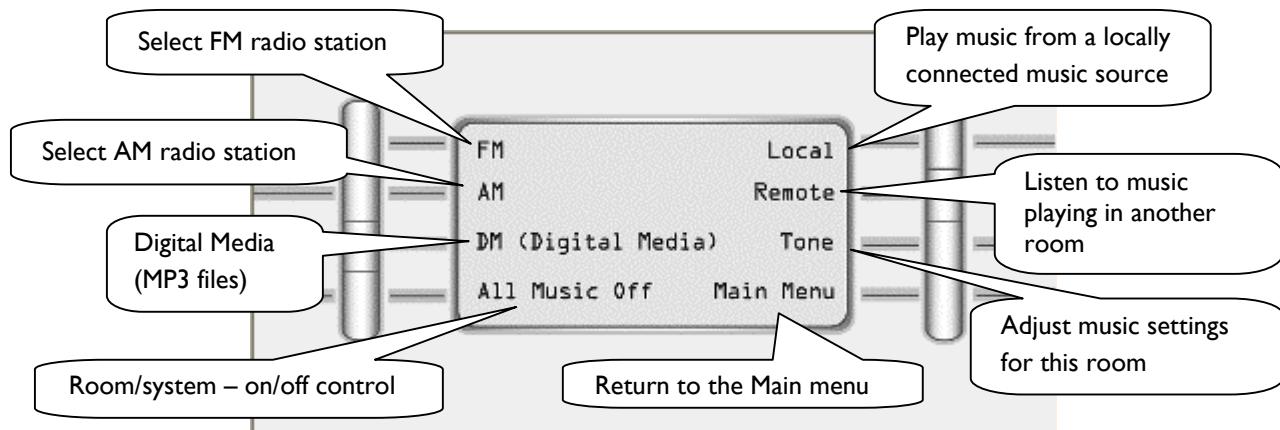


Figure 21 - Music Menu

- **FM/AM**: Select FM or AM radio frequency bands or preset stations.
- **DM (Digital Music)**: Play MP3 music files stored on the optional Digital Media Manager. If your MC2000 System does not have the Digital Media Manager this space will be empty.
- **Room Music Off/All Music Off**: Turn music off in the room or on the entire system. Room Music Off turns off the audio in the room off. All Music Off turns off all music though out the house.
- **Local**: Play music from a locally attached device in the room. This requires having a line level input (RCA) wall jack installed near the room station. To play music from, for example, a portable CD player, plug it into the wall jack. When you press the **Local** button, you can listen to music playing on the connected device. You must have music playing on the connected device to listen to it.
- **Remote**: Listen to music playing on a connected device in another room. Press the button to see a list of all rooms on the system. Select the room you want to listen to. The connected device in the other room must be playing music for you to hear it.
- **Tone**: Adjust the sound quality for the room. This includes balance, treble, loudness and bass settings.
- **Main Menu**: Return to the main menu shown in Figure 20.

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After 30 seconds of inactivity, the room station returns to the **Greeting Menu** shown in Figure 19.

Select and Set a Radio Station

Select a Radio Station

NOTE: You must have the AM and FM antennas installed before you can select radio stations (the antennas should have been installed by your dealer when the MC2000 system was installed).

1. Select the frequency (AM or FM) from the music menu show in Figure 21. The room station display shows (see Figure 22) the stations programmed into the system for the selected frequency with the currently selected station highlighted. (The system allows for ten FM and ten AM preset stations).
2. Select **Tune/Presets** as shown in Figure 22.

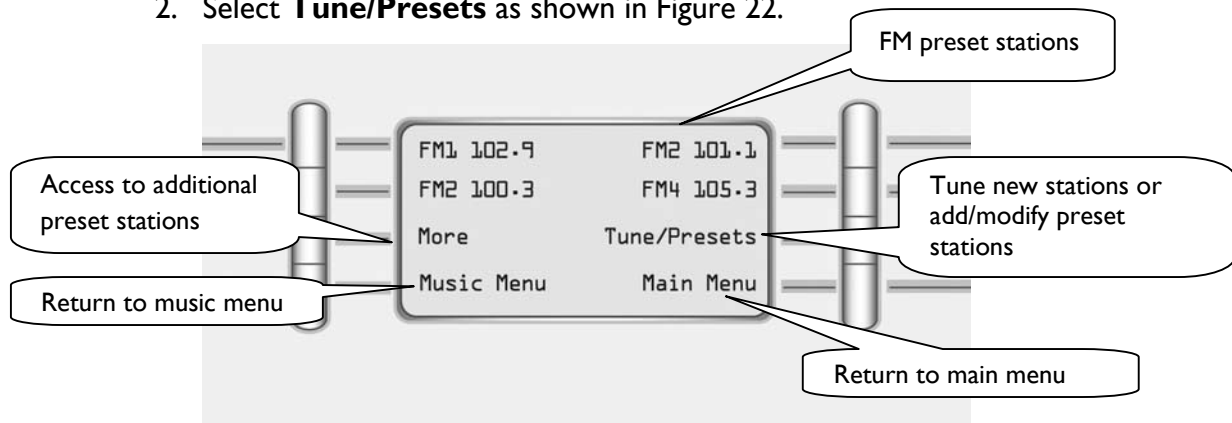


Figure 22 - FM Menu

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3. Use the **Tune** up and down arrows shown in Figure 23 to move incrementally through the radio band. Use the **Seek** buttons to find the station you want. Select FM (or AM if you are programming an AM station) to store the station in the system memory.

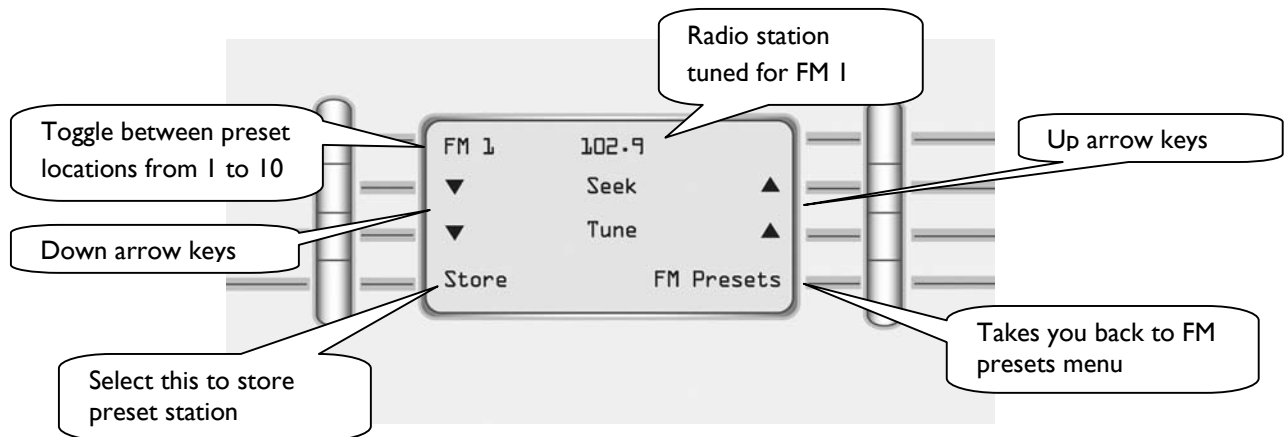


Figure 23 - Tune/Presets Menu

Set a Preset Station

1. Toggle between the FM 1 – FM 10 (see Figure 23) locations to find an empty location or to modify an existing preset station. Each time you press this button it will advance one preset location.
2. Select the preset location and tune in the radio station you would like to save using seek and tune and the up and down keys. **Seek** takes you to the next radio station and **Tune** allows you to manually advance through the radio frequency locations.
3. Select **Store** to add the station to the system. After you select store the FM/Preset menu will look as shown in Figure 24.

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Figure 24 - Tune/Presets Menu - Stored Station

If the menu is inactive for more than 30 seconds, it returns to the **Greeting Menu** shown in Figure 19.

Playing from Local and Remote Devices

The MC2000 lets you play music from a locally attached device such as a portable CD player. You can even listen to an attached device in another room. Before you can listen to an attached device, you must have a line level input line run from the room station to a jack installed in the room.

Listen to a Local Device

1. Attach the device to the jack.
2. Select **Main Menu** on the room station and then select the **Music Menu**.
3. Select **Local**. You should hear the media in the attached device immediately.

Note: The connected local device must be playing for music to be heard over the MC2000 system.

Listen to a Remote Device

1. Make sure the device with the selected media is attached to the jack in the other room.
2. Select **Main Menu** from the Greeting Menu shown in Figure 19 on the room station and then select the **Music Menu** from the Main Menu shown in Figure 20.
3. Select **Remote** from the Music Menu shown in Figure 21.

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4. Select the room name playing the remote device you want to hear as shown in Figure 25. You should hear the media playing from the remote device. You may also select one of the radio stations displayed. These are stations currently tuned to on the MC2000's two tuners.

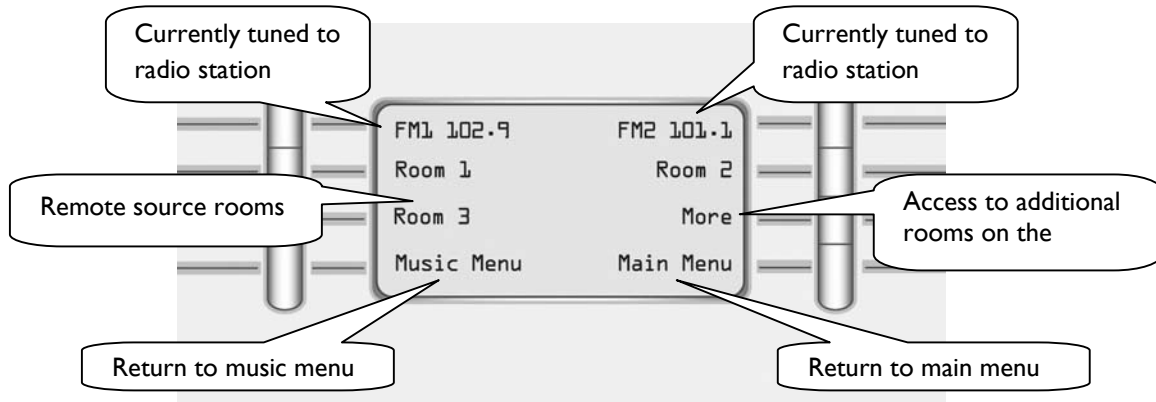


Figure 25 - Remote Menu

NOTE: The device must be playing music for you to pick up the audio stream. The MC2000 cannot control the remote device. If the music does not play when the remote device is selected, check the remote device to see if it is currently playing music.

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Wake Menu

The wake feature allows you to program the MC2000 room station to begin playing music at a specific time, much like an alarm clock, or clock radio. You can store up to five events, or wake times. The wake function works only with the AM or FM source. To select the Wake Menu see Figure 20.

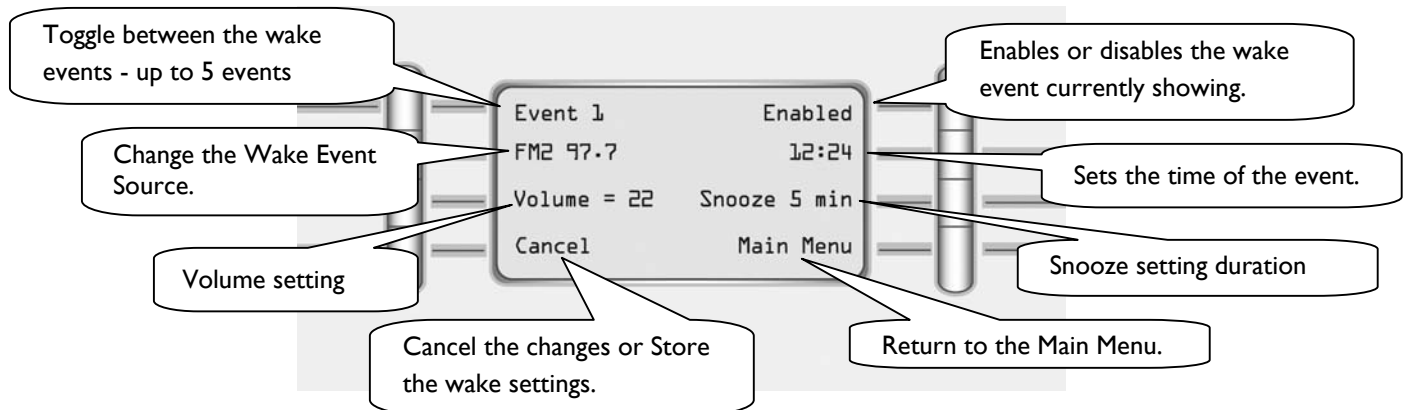


Figure 26 - Wake Menu

- **Event:** The currently selected wake event. The MC2000 allows you to preset up to 5 unique wake events per room on the system.
- **Advance the Wake Event Source:** It advances in this sequence: FM1, FM2, FM3 (etc.), AM1, AM2, AM3 (etc.), Then back to FM1.
- **Volume control.** It is set at 06 for the lowest, and 34 for the highest. To change the volume, press the button until it reads the desired volume.
- **Cancel:** Cancels all the changes and they will not be saved on the system.
- **Enabled/Disabled:** A toggle activating or deactivating the current event. If the room station displays "Enabled" the wake even is scheduled. If the display says, "Disabled" the wake event is not scheduled.
- **Time setting:** Press to access the time set menu. Use the up and down arrow keys to set the hour and minute. Be sure and press **Set** to save the time in the system.
- **Snooze** – This feature allows you to establish a preset snooze time of an additional 5, 10 or 15 minutes. After the wake event is triggered, you can hit snooze for the preset snooze time. The music will go off until the desired number of minutes has passed then the music will start playing again.

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- **Store:** Changes do not occur unless you press the **Store** button and then press **Yes** on the **Overwrite Wake Event** menu. You get a confirmation message for both saving and canceling an event. If you do not press **OK**, the menu times out after five seconds and returns to the Wake menu.
- **Main Menu:** Return to the Main Menu.

After 30 seconds of inactivity, the room station returns to the **Greeting Menu** shown in Figure 19.

Sleep Menu

Use the Sleep menu to program the room station to play your selected music for a specific amount of time. If you aren't playing any audio when you enter the Sleep menu, pressing the **Sleep** button (third button on the right) starts the last Sleep audio source and initializes the timer at five minutes (the default time).

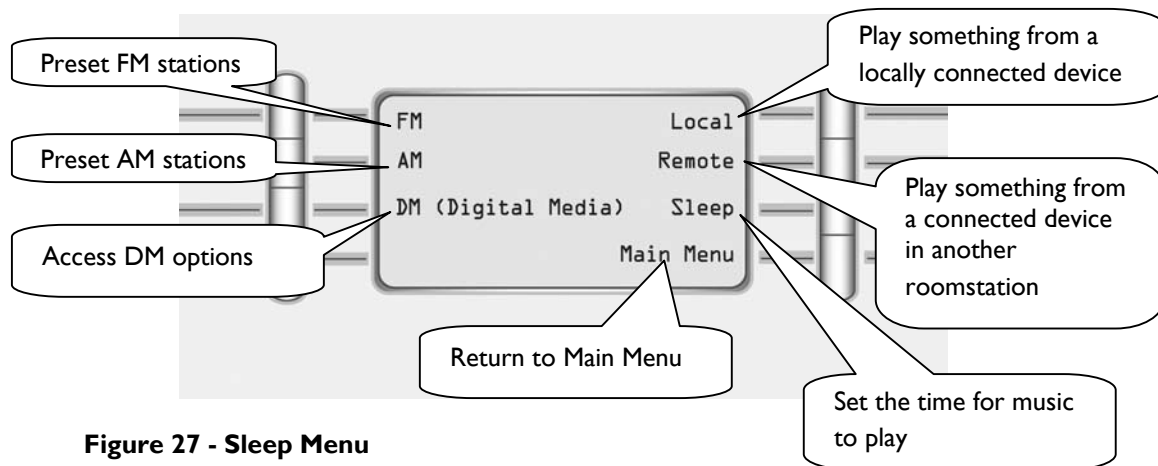


Figure 27 - Sleep Menu

1. Use the buttons to select the media:
 - **FM or AM radio stations:** to select a station (either FM or AM), press the appropriate button, and then select **Tune/Presets**. You can either select one of the preset stations or another one (see *Select and Set a Radio Station*, page 25, for detailed instructions).
 - **DM:** accesses the Digital Media Manager display
 - **Local:** Play music from a connected device (or example, walkman). The music must be playing on the connected device.
 - **Remote:** Play music from a connected device in another room station. The music must be playing on the connected device.

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2. Press the **Sleep** button to start the audio, either the last audio played, or a currently selected audio. Press the button again to increase the time. The increments are 5, 10, 15, 30, 45, 60, 75, and 90 minutes.

After 30 seconds of inactivity, the room station returns to the **Greeting Menu**.

Page Menu

The **Page** function allows you to send an announcement to a particular room or to broadcast a message to all room stations on the system. To send a page to all rooms on the system you can select the Page All button on the Greeting Menu (see Figure 19) and begin talking. To send a page to individual or a combination of rooms follow the steps below:

1. Press **Main Menu** on the **Greeting Menu** shown in Figure 19.
2. Press **Page** on the **Main Menu** shown in Figure 20.
3. Select the room (or combination of rooms) you wish to page. To select a room press the button next to that room (as shown in Figure 28), the room name will be highlighted when it is selected. Continue to select rooms if you want to send the page to more than one room.

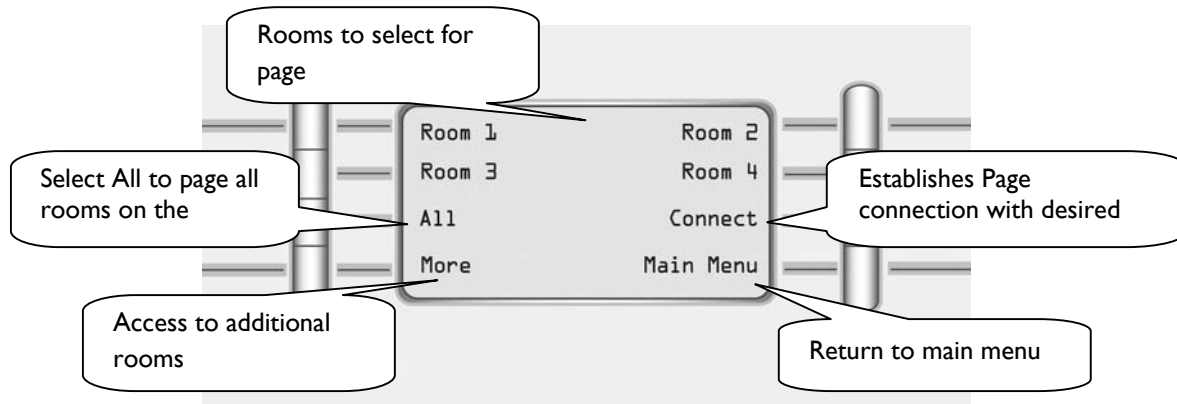


Figure 28 - Page Menu

4. Press the **Connect** button shown in Figure 28 to initiate the page.
5. Begin speaking.
6. To conclude the page, press **End**.

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After 30 seconds of inactivity, the room station returns to the **Greeting Menu** shown in Figure 19.

Intercom Menu

The **Intercom** function allows you to establish a private conversation between two room stations on the MC2000 system. The intercom connection will continue for 15 minutes or until the **End** button is selected. The intercom connection is “hands free” once it is established. Note: if a room has the intercom function disabled you will not be able to establish an intercom connection with that room.

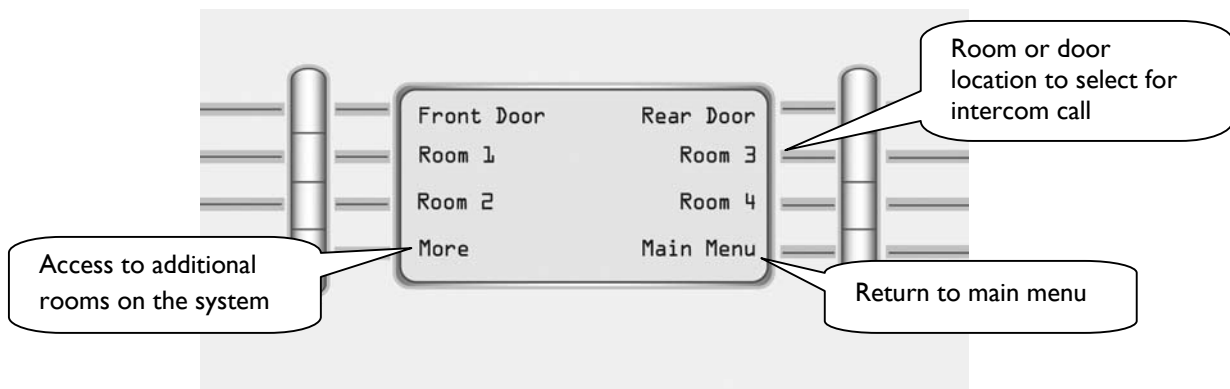


Figure 29 - Intercom Menu

1. To get to the Intercom Menu, select **Main Menu** from the **Greeting Menu** shown in Figure 19.
2. Select **Intercom** from the **Main Menu** shown in Figure 20.
3. To initiate an intercom call, select the room you want to speak with. To select a room just press the button next to the room name on the screen. The screen will indicate if a connection is established.
4. If a room has intercom functionality disabled the screen will display an “unable to establish connection with room X” message.
5. The party receiving the intercom call can just speak to reply to the call, they do not have to go to the room station or press any buttons to reply.
6. Once the call is established the initiating room can walk away from the room station and continue the conversation in a “hands free” mode.
7. To end the call, press **End**. The intercom connection times out after 15 minutes.

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After 30 seconds of inactivity, the room station returns to the **Greeting Menu** shown in Figure 19.

Monitor Menu

The **Monitor** function allows you to monitor a particular room on the MC2000 system. A room can only be monitored from one room station at a time. A room cannot be monitored if the monitor function is disabled or if it is in Privacy mode. To monitor a room follow the steps below:

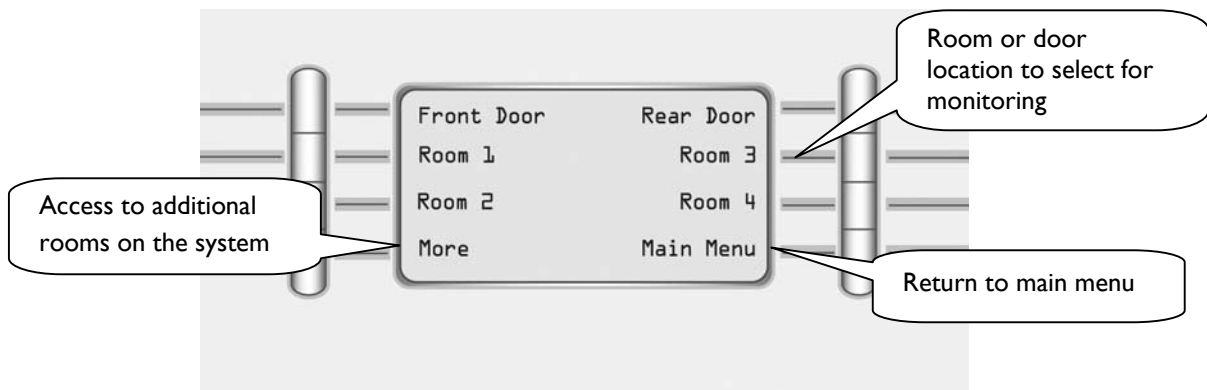


Figure 30 - Monitor Menu

1. To get to the Monitor Menu, select **Main Menu** from the **Greeting Menu** shown in Figure 19.
2. Select **Monitor** from the **Main Menu** shown in Figure 20.
3. To monitor a room, select the room you wish to monitor. To select a room just press the button next to the room name on the screen. The screen will indicate if a connection is established.
4. If a room has monitor functionality disabled the screen will display an “unable to monitor room X” message.
5. The room station in the room being monitored will display “Being monitored by room X” on its screen.
6. To stop monitoring a room, press the **End** button.

After 30 seconds of inactivity, the room station returns to the **Greeting Menu** shown in Figure 19.

Answering a Doorbell

When either of the doorbells ring, all room stations on the system will show the message shown in Figure 31. The doorbell ring will interrupt any music playing or intercom calls in progress.

If a room station has the doorbell function disabled or is in Nap or Privacy mode, the doorbell will not ring over its speakers.

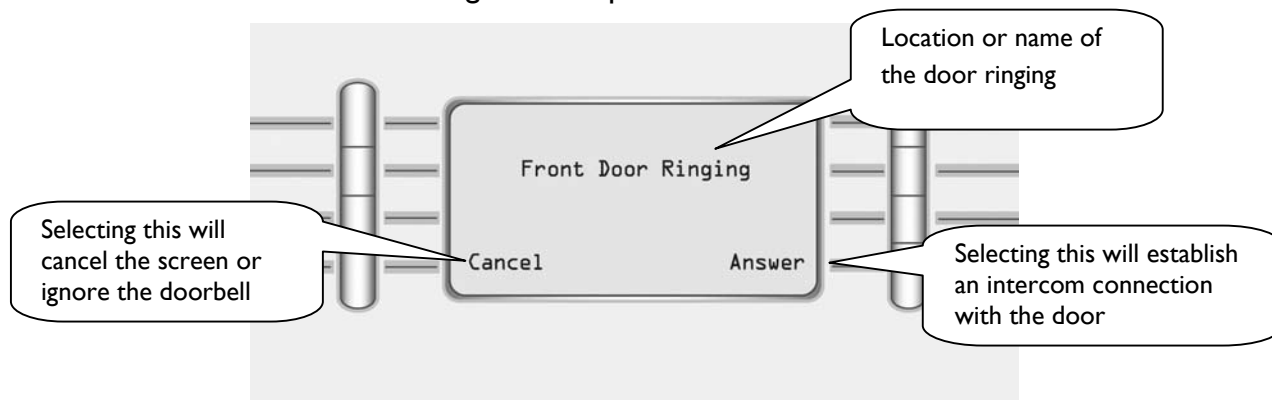


Figure 31 - Doorbell Ringing Menu

To answer the doorbell:

1. Select the **Answer** button (shown in Figure 31) to establish an intercom conversation with the door.
2. If you do not want to speak with the party at the door select **Cancel** as shown in Figure 31)

After 30 seconds of inactivity, the room station returns to the **Greeting Menu** shown in Figure 19.

Info Menu

The information menu provides access to diagnostic and software version information. You should only access this menu if you need to provide your dealer with system information or if you need to reset a room station on the system.

1. To get to the **Info Menu** (shown in Figure 32) select the **Main Menu** option from the Greeting Menu shown in Figure 19
2. Select **More** from the Main Menu shown in Figure 20
3. Select **Info** from the Setup Menu shown in Figure 5

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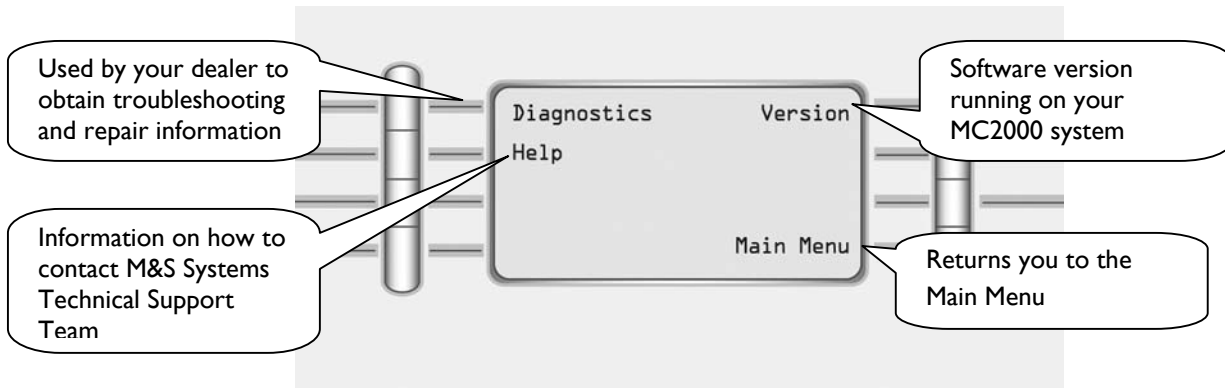


Figure 32 - Info Menu

If you are in need of assistance with your MC2000 system please contact our technical support team at the number shown in Figure 33.



Figure 33 - M&S Technical Support Information

Troubleshooting

If you need assistance with your MC2000 System please contact our technical support team at 1-800-366-9422. You can also obtain system information, software upgrades and technical support on our web site: www.mssystems.com.

Prior to contacting your dealer or M&S Systems refer to the table below for systems assistance. If the actions described in the table below do not correct your problem please contact the M&S Systems technical support team or your dealer for assistance.

MC2000 Problem	Corrective Action
The room station indicates on the menu that it is music but no music can be heard over the speakers	<ol style="list-style-type: none"> 1. Verify that the volume is set properly. 2. If using a remote or local device, make sure music is playing on those devices. 3. Cycle power at the MC2000 hub by turning the power switch off and then back on.
You experience a power failure or brown-out and the system does not operate properly after power is restored.	<ol style="list-style-type: none"> 1. Cycle power at the MC2000 hub by turning the power switch off and then back on.
A page or intercom connection cannot be heard over the speakers in a particular room	<ol style="list-style-type: none"> 1. Make sure the room station is configured to receive page or intercom calls
The doorbell cannot be heard in a particular room	<ol style="list-style-type: none"> 1. Make sure the room station is configured to receive the door bell

Warranty

M&S Systems Limited 2-Year Warranty

M&S Systems warrants its products to be free of defects for 2 years. Except for the AirVac Gold power units (See below). The warranty period begins on either (a) the date of purchase or installation date of this product or (b) the date of closing on a new residence in which this product was originally installed.

The warranty extends to the original user of the product and to each subsequent owner of the product during the term of the warranty. M&S will repair or replace, at its option, parts and materials at no charge. Parts supplied under this warranty may be new or rebuilt at the option of M&S Systems.

If during the warranty period the product appears to have a defect, please call our toll free service number (800-366-9422) prior to dismantling. Dismantling the product prior to calling our service number may void the warranty. Before returning any product to M&S Systems, obtain a Return Authorization Number (RAN) from our service department. M&S Systems will return the repaired product freight prepaid within the continental United States. ANY PRODUCT RETURNED TO M&S SYSTEMS WITHOUT A RAN NUMBER WILL BE REFUSED.

This limited warranty is in lieu of any other warranties, express or implied, including any implied warranty of merchantability or fitness for a particular purpose or otherwise, and of any other obligations or liability on the seller's part. This limited warranty does not cover damage caused by improper installation, acts of God, criminal acts, the violation of applicable building or electrical codes or the use of non-M&S wire, cable (excluding CAT5 and RG-6) or wall housings.

Under no circumstances shall M&S Systems be liable for consequential, incidental or special damages arising in connection with use, or inability to use this product. In no event shall M&S Systems liability hereunder exceed the cost of the product covered hereby. No person is authorized to assume for us or obligate us for any other liability in connection with the sale of this product. Some states do not allow the exclusion or limitation of consequential, incidental or special damages, so the above limitation or exclusion may not apply to you. This limited warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

M&S Systems Limited 10-Year Warranty for AirVac Gold Power Units

M&S Systems offers a 10-Year Warranty on our AirVac Gold power units. This warranty is identical to the M&S Systems 2-Year Warranty, with the exception that

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this warranty covers the AirVac Gold power units for 10 years instead of 2. The M&S Systems 10-Year Warranty applies **ONLY** to the AirVac Gold power units and to no other M&S Systems, M&S or AirVac products.

Definitions

Category 5 (CAT5): Four twisted pairs of copper wire enclosed in an outer jacket used for telephone, fax, modem and high-speed digital computer transmissions.

Digital Jukebox Software: A program that provides the ability to copy CDs onto the computer in MP3 format. This software can also be used to generate playlists.

DMM: The Digital Media Manager is an internal storage device that provides the ability to play 4 simultaneous digital music streams.

Ethernet: A network protocol that uses hubs or switches as the central connection method.

- Ethernet: transfers data at up to 10 megabits (1.25 megabytes) per second
- Fast Ethernet: up to ten times faster
- Gigabit Ethernet—up to 100 times faster

IP Number/IP Address (Internet Protocol): A unique number consisting of 4 parts separated by dots. Every machine on the Internet has a unique IP number.

LAN (Local Area Network): A computer network limited to the immediate area, usually the same building including a home.

Modem: A device that you connect to your computer and to a phone line that allows the computer to talk to other computers through the phone system.

MP3: A standard format for compressing large sound files such as songs into a small file while preserving the original level of sound quality. MP3 files can be generated by using a digital jukebox software program such as Real Audio.

Network: A collection of connected devices that share information with each other. Can include computers, printers and scanners and other household appliances.

RG6: Coaxial cable with an insulated center wire and four layers of shielding that is used for cable television, digital satellite, cable modem and high-speed interactive video services.

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