NuTone®
RADIO INTERCOM SYSTEM
MODEL IM-3003 SERIES
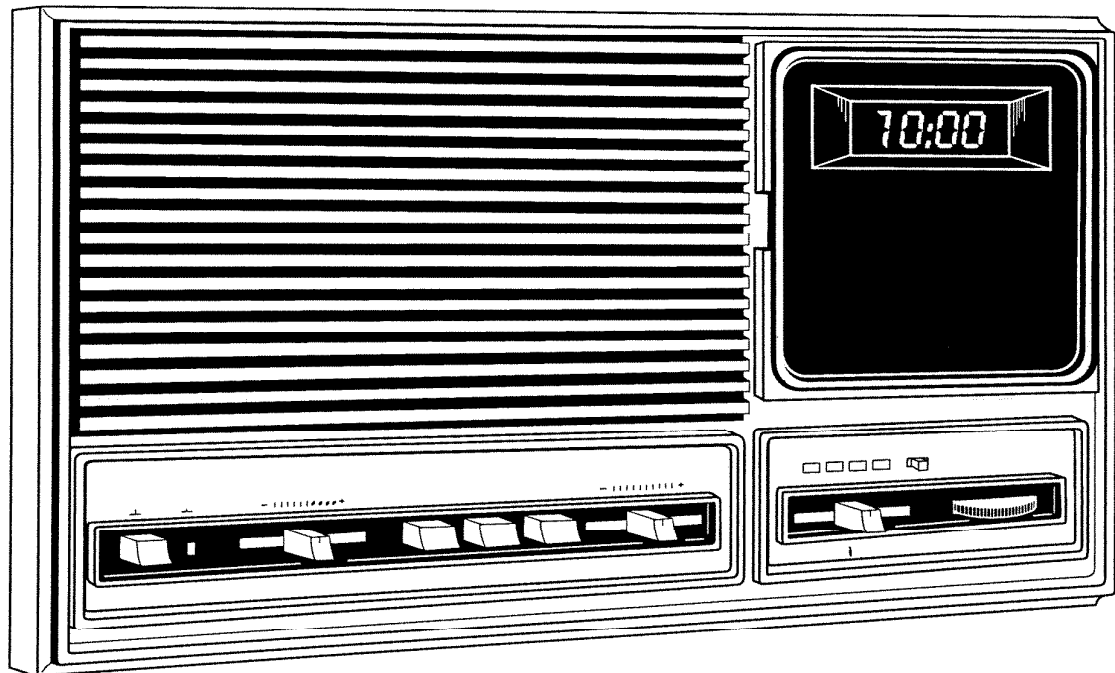
HOMEOWNER'S
OPERATING
INSTRUCTIONS

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System Operating Controls

Radio and Program Controls

RADIO ON/OFF PUSHBUTTON – Press the **RADIO ON/OFF** button to the **ON** (⊥) position to supply power to the radio. The red **RADIO INDICATOR LIGHT** will illuminate. Press and release the button to the **OFF** (⏧) position to turn off the **RADIO**. The **POWER** button must be in the **ON** (⊥) position to operate the radio. The intercom is constantly powered.

PROGRAM SELECT SWITCH – Use this switch to select the program source: **AM, FM, PHONO, TAPE.** The red indicator light will illuminate above the selected program source.

TIME/FREQUENCY SWITCH – Use this switch to set the function of the digital display. When tuning the radio, set the switch to the **FREQUENCY** position and the digital display will show you the radio frequencies as you tune the radio.

**TUNING WHEEL** — Turn the **TUNING WHEEL** to tune the radio.

DIGITAL AM/FM FREQUENCY DISPLAY – When the **TIME/ FREQUENCY** switch is in the **FREQUENCY** position, the digital display shows you the **AM** or **FM** frequencies to which you have tuned the radio.

MASTER SPEAKER VOLUME CONTROL – Use this slide control to adjust the **MASTER SPEAKER VOLUME.** Slide the control from left to right to increase volume at the Master Station.

PROGRAM VOLUME – Use this slide control to set the **PROGRAM VOLUME** for all speakers in the system. Slide the control from left to right to increase volume level. This control governs the volume level for the entire system.

TONE CONTROL – Turn the control clockwise to increase treble (high range); counterclockwise to decrease treble.

REMOTE SPEAKER STATUS – These switches set the function of individual remote stations. For a remote station to receive program material, the switch that controls that station must be set to **RADIO INTERCOM.** See "Speaker Status Switches," page 5.

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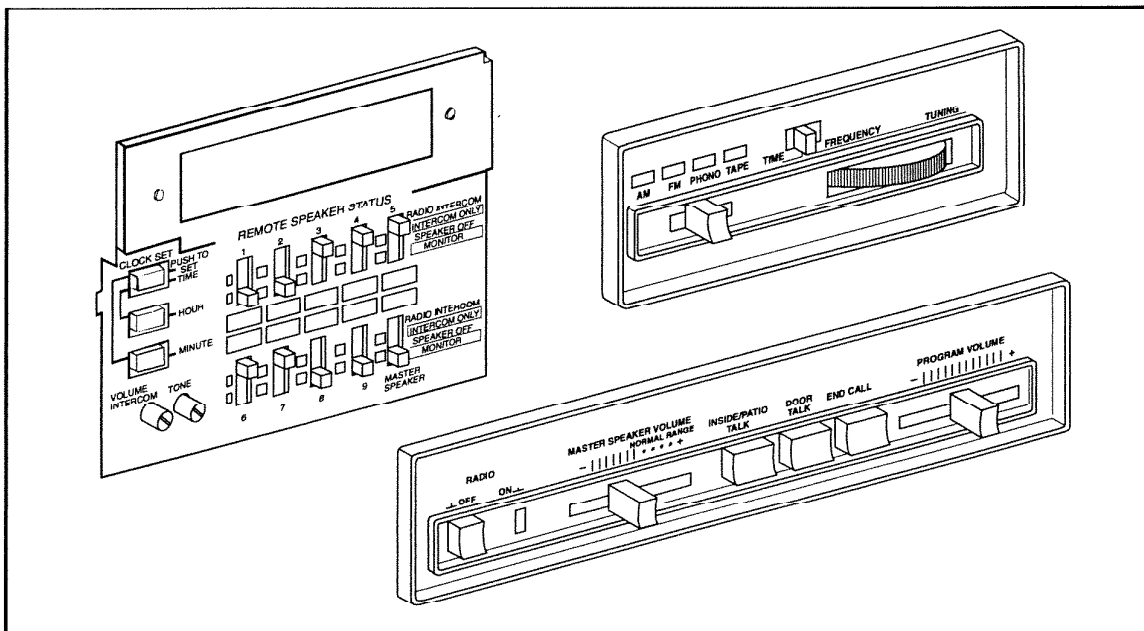
Intercom Controls

MASTER SPEAKER VOLUME – Slide this control from left to right to increase intercom volume at the master station.

INSIDE/PATIO TALK – Press this button to make a call to other stations – except the door speakers. Release the button to hear the reply.

DOOR TALK – Press this button to make a call to the door speaker. To hear a reply, release the button. The call and reply will be heard at all stations.

END CALL – Press this button to end an intercom call. When you press **END CALL** the system will automatically return to playing the program source.

END CALL TIMEOUT – You can end a call and return the system to the program source in two ways:

(I) Push the **END CALL** button.

(2) Allow the **END CALL TIMEOUT** function to return the system to playing the program source. This timeout period – factory set at approximately 30 seconds—begins each time you release a **TALK** button.

VOLUME INTERCOM – Turn this control clockwise to increase intercom volume. Set **VOLUME INTERCOM** control at ¾ to maximum for normal intercom use.
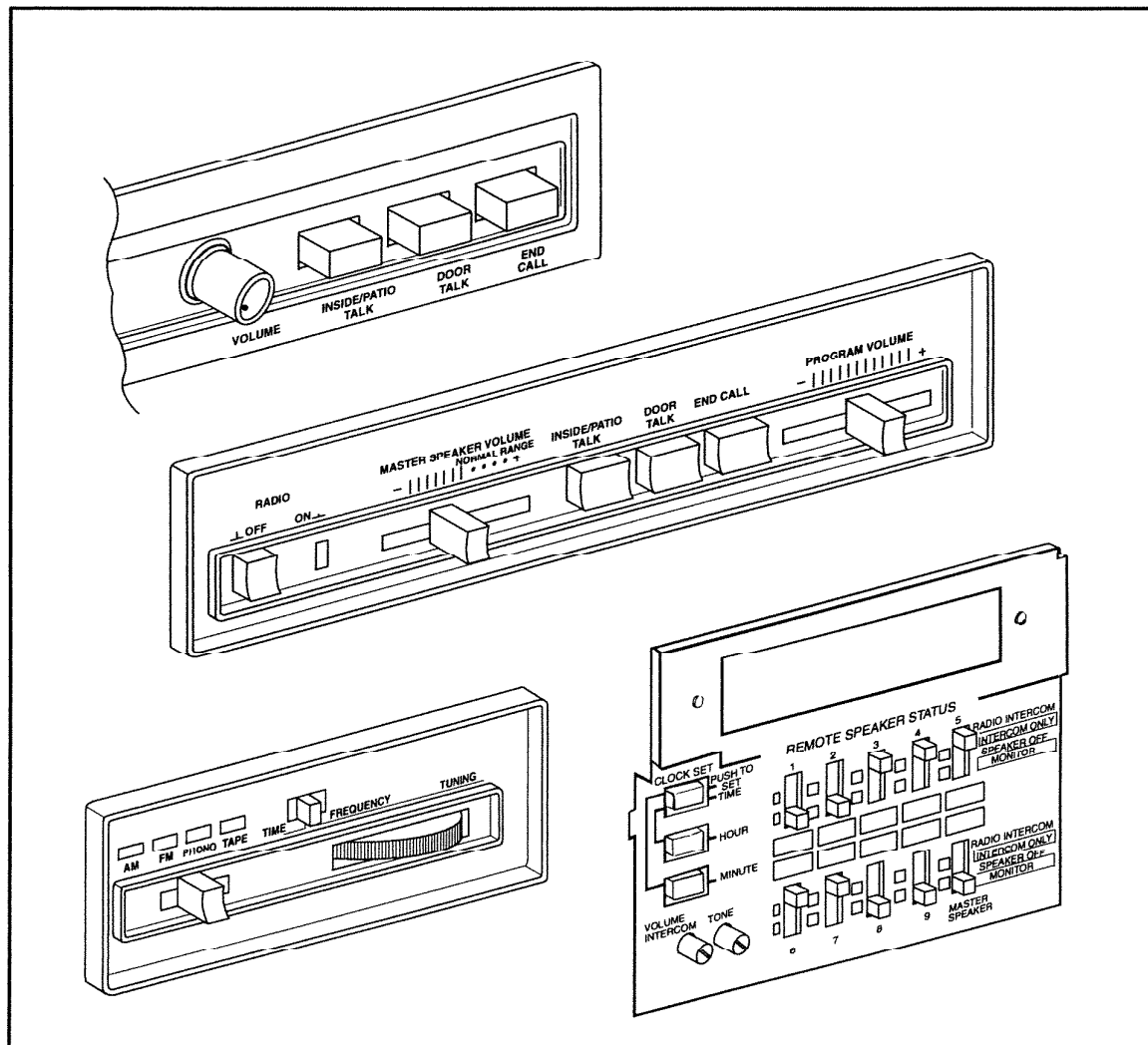
Speaker Status Switches

The **REMOTE SPEAKER STATUS** switches set the operating mode of each speaker in the intercom system. The master station's operating mode is also controlled by a status switch. Locate these switches behind the master station's panel door.

SETTING THE STATUS SWITCHES – Each speaker may be set for one of the four following functions: **RADIO INTERCOM, INTERCOM ONLY, SPEAKER OFF, MONITOR**. For each remote speaker in the system, set the switch for the desired function. Also set the switch marked **MASTER SPEAKER**. See "Setting Speaker Status Switches," page 7, for a detailed explanation of each operating mode.

DETERMINING SPEAKER LOCATIONS – Each **SPEAKER STATUS SWITCH** is numbered and labeled. You will want to determine the location of each speaker in your home and write each location on the blank label above or below the switch that controls that speaker. To determine the speaker locations, set all the **REMOTE SPEAKER STATUS** switches to **SPEAKER OFF**. Set the **MASTER SPEAKER** switch to **RADIO INTERCOM**, tune in a radio station, and slide the **PROGRAM VOLUME** control to maximum (+). Slide the **MASTER SPEAKER VOLUME** control to minimum volume (–). Make sure each remote speaker's **PROGRAM VOLUME** control is turned completely clockwise for maximum volume.

Now, one at a time, set a **REMOTE SPEAKER STATUS** switch to **RADIO INTERCOM** and locate the speaker by sound. Write the speaker's location on its label. Repeat the procedure until you locate and label every speaker in your system.

Digital Clock Controls

TIME/FREQUENCY SWITCH – Use this switch to set the function of the digital display. Set the switch to the **TIME** position for using the display as a clock.

SETTING THE DIGITAL CLOCK
1. Place the **TIME/FREQUENCY** switch in the **TIME** position.
2. Simultaneously depress and hold the **SET TIME** and **HOUR** pushbuttons. After a two-second delay, the display will begin to step through the hours. Release both pushbuttons at the correct hour setting.
3. Simultaneously depress and hold the **SET TIME** and **MINUTE** pushbuttons. After a two-second delay, the display will begin to step through the minutes. Release both pushbuttons at correct minute setting.

Radio Operation

1. Depress the master station's **RADIO ON/OFF** button.
2. Slide the **PROGRAM VOLUME** control to approximately 1/3 - 1/2 volume.
3. Set the **PROGRAM SELECT SWITCH** to **AM** or **FM.**
4. Set the **TIME/FREQUENCY** switch to **FREQUENCY.**
5. Use the **TUNING WHEEL** to select the radio station. The digital display will show the radio frequencies.
6. Adjust volume levels as desired.
7. Adjust the **TONE** control as required.

Setting System Volume Controls

The volume levels required at each station may vary with the location of the speaker and the size of the room where the speaker is located. Spend some time experimenting with volume levels and adjust each speaker so that you can clearly hear the radio and intercom. Use the following procedure to set your system's volume levels.

1. At each remote station, turn the **VOLUME** control completely clockwise to maximum volume.
2. At the master station, set all **REMOTE SPEAKER STATUS** switches to the **RADIO INTERCOM** position. Set **MASTER STATION** switch to **RADIO INTERCOM.**
3. Latch the master station's **RADIO ON/OFF** button to **ON** (⊥) position.
4. Slide the **MASTER SPEAKER VOLUME** control to maximum (+) volume.
5. Slide the **PROGRAM VOLUME** control on the master station to approximately 1/3 volume.
6. Set the master station's **PROGRAM SELECT** switch to **AM** or **FM.** Tune in a radio station with a strong, clear signal.
7. Adjust the master station's **PROGRAM VOLUME** control until you have enough volume at the remote station that requires the highest volume (i.e., a large living room or family room, a basement, etc.).
8. Adjust each remote station's **PROGRAM VOLUME** control to the volume level you desire. Do not set the remote station's volume controls below the **NORMAL RANGE** setting.
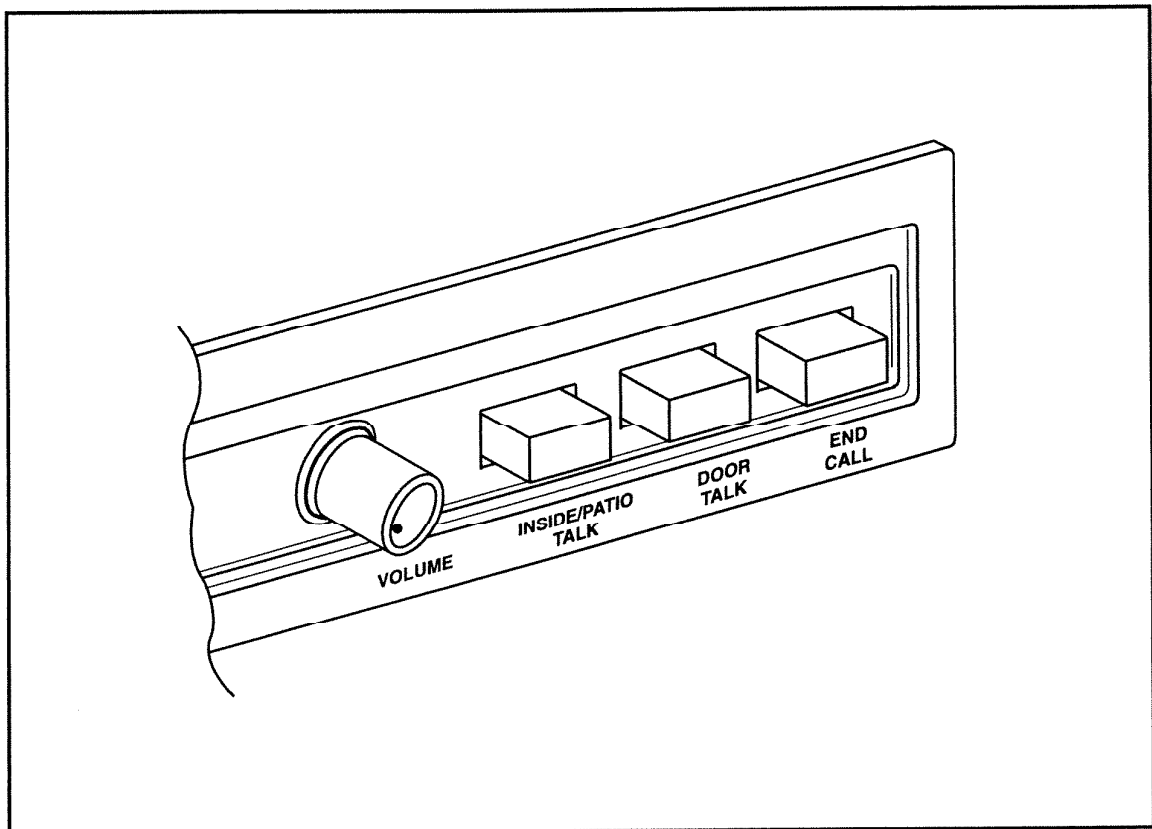
Individual Station Volume Control

The master station's speaker and all remote stations (except the door speakers) are equipped with their own volume controls. Although the master station's **PROGRAM VOLUME** control sets the system's volume level, you may adjust an individual speaker's volume level within the set range.

1. **MASTER STATION** – Slide the control marked **MASTER SPEAKER VOLUME** from left to right to increase master speaker's volume. For everyday use, set this control to **NORMAL RANGE.** For privacy at the master station, slide this control fully to the left.
2. **REMOTE STATIONS** – Turn the **PROGRAM VOLUME** control knob clockwise to increase volume; turn knob counterclockwise to decrease volume. For privacy at a particular remote station, turn the **PROGRAM VOLUME** control knob completely counterclockwise.

Important Reminders

1. The Master station's **PROGRAM VOLUME** control governs the volume level for the entire system. If this control is set to minimum volume (–), remote speakers will receive no program audio and lowered intercom audio. Make sure the **PROGRAM VOLUME** control on the master station is set to a reasonably high level.
2. If the remote stations' **PROGRAM VOLUME** controls are set too low and the master station's **PROGRAM VOLUME** control is set too high, distortion may result. Keep remote stations' volume levels turned to **NORMAL RANGE.**
3. If the voice level during intercom conversations is too low, use the **VOLUME INTERCOM** control to increase intercom volume throughout the system.
4. A remote station will only perform as its **REMOTE SPEAKER STATUS** switch is set at the master station.

Setting Speaker Status Switches

The **SPEAKER STATUS** switches set the operating mode for each speaker (including the master sPeaker) in the radio intercom system. The four available operating modes are defined below.

RADIO INTERCOM – Speakers set to this mode will receive all program material and intercom audio (provided that the speaker's **PROGRAM VOLUME** control is properly set). Program material includes: radio and any optional program sources wired to the system, such as music played on an optional Cassette Deck or Compact Disc Player. An optional electronic door chime will also be heard over a speaker set to this operating mode.

INTERCOM ONLY – A speaker set to this mode will only receive intercom audio. Note: The door chime will be heard in this mode.

SPEAKER OFF – All program and intercom audio are shut off to speakers set to this mode. However, intercom calls may be made from a remote station which is set to SPEAKER OFF.

MONITOR – When a speaker is set to this mode, most sounds that originate at the speaker's location will be transmitted over the system's other speakers.

Intercom Operation

Before you proceed to each intercom operation, make the following adjustments. Then, after operating your system, adjust the specific controls to suit your taste needs. Remember that the intercom is constantly powered.

1. Press the master stations' **END CALL** button.
2. Adjust the master station's **PROGRAM VOLUME** to about 1/3 volume.
3. Set each remote station's **PROGRAM VOLUME** control and the **MASTER SPEAKER VOLUME** to the **NORMAL RANGE** setting.
4. Make sure all **SPEAKER STATUS** switches are set to **RADIO INTERCOM.**

How To Make A Call

1. Depress the **INSIDE/PATIO TALK** button and hold the button down while you speak. (The radio will be muted.) Your voice will be heard at all speakers (except the door speaker).
2. Release the **INSIDE/PATIO TALK** button to hear the reply.
3. Continue depressing the button to speak and releasing it to listen.
4. Press **END CALL** to end the intercom conversation and return the system to playing the program source. If you do not press **END CALL,** the system will automatically return to playing the program source approximately 30 seconds after you've last released the **INSIDE/PATIO TALK** button.

How To Receive A Call And Make A Reply

1. When the caller has finished speaking, depress the **INSIDE/PATIO TALK** button and hold it down while you speak.
2. Release the **INSIDE/PATIO TALK** button to hear a response.
3. Continue depressing the button to speak and releasing it to listen.
   "HANDS FREE" OPERATION – If the call is initiated from the master station, the person answering from a remote station does not have to use any controls. The entire intercom conversation can be controlled from the master station. If you are sure the call is coming from someone at the master station, just listen: when the caller stops speaking and releases the **INSIDE/PATIO TALK** button, you can reply to the master without using any control.

How To Answer Your Door

1. Depress the **DOOR TALK** button and hold it down while you speak.
2. Release the **DOOR TALK** button to hear the door caller's reply.
3. Both your call to the door and the door caller's reply will be heard at all intercom stations.
4. Press **END CALL** to end the call.

How To End An Intercom Call

1. When a **TALK** button is pressed, the intercom becomes active and mutes the program source.
2. After you have completed an intercom call, you can immediately return the system to playing the program source by pressing the **END CALL** button.

How to Use the Monitor Function

The monitor function lets you use the intercom to listen to the sounds from a certain location. It is most frequently used to monitor a "sickroom" or a child's room. When a station is set to **MONITOR,** all sounds in that room will be transmitted to all other stations.

1. Turn the remote station's **PROGRAM VOLUME** control fully clockwise to maximum volume.
2. Set the remote station's **REMOTE SPEAKER STATUS** switch to **MONITOR.**
3. Set listening stations to **RADIO INTERCOM.**
4. Reset the **SPEAKER STATUS** switch when you no longer want to monitor that station.
5. If you want to monitor the master station from a remote location, slide the **MASTER SPEAKER VOLUME** control to maximum (+) volume and set the **MASTER STATION STATUS** switch to **MONITOR.**
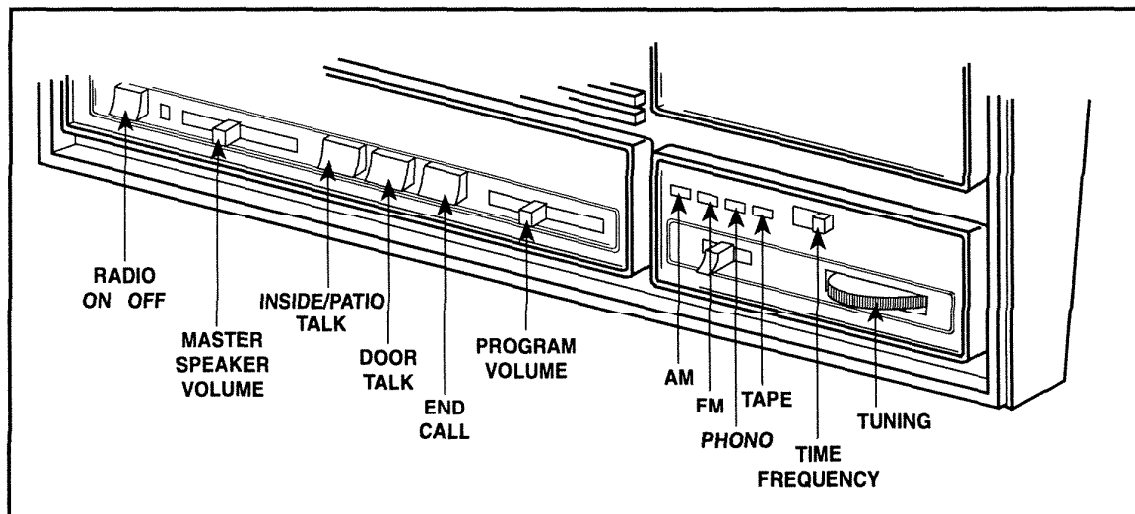
You may use the monitor function as a security device during the night. To monitor your house from your bedroom: set the master's **PROGRAM SELECT** switch to **PHONO** or **TAPE:** Set all stations to **MONITOR** (except your bedroom).

Optional Accessories

CASSETTE PLAYER or **COMPACT DISC PLAYER** – Purchased separately from NuTone, these units may be connected to the Radio-Intercom Master Station as auxiliary program sources that can be played through the intercom system. Note: A Cassette Player/Recorder (purchased locally) allows you to record radio programming from the master station's radio.

CHIME MODULE or **ELECTRONIC DOOR CHIME** – when used with the system, the chime will be heard throughout the intercom system.

PHONOGRAPH – A Record Changer (purchased locally) may be connected to the Master Station: set the **PROGRAM SELECT** switch to **PHONO** and the phonograph will be played over the intercom system.

RADIO
ON OFF

INSIDE/PATIO
TALK

MASTER
SPEAKER
VOLUME

DOOR
TALK

PROGRAM
VOLUME

END
CALL

AM

FM TAPE

PHONO

TIME

TUNING

FREQUENCY

Cassette Player or Compact Disc Player Connections

Refer to the installation instructions supplied with the accessory for information regarding the adaptor required for each unit.

1. Locate the **PHONO INPUT, TAPE INPUT** and **RECORD OUTPUT** jacks on the master panel.
2. To connect the cassette player to the system, insert the accessory's output plug into the master panel's **TAPE INPUT** jack.
3. To connect the compact Disc Player to the system, insert the accessory's output plug into the master panel's **TAPE INPUT** or **PHONO INPUT** jack.
4. To play a phonograph (purchased locally) through the intercom system, insert the accessory's output plug into the master panel's **PHONO INPUT** jack.
5. To use the radio as a program source for recording on a cassette player/recorder (purchased locally), insert the input plug into the master panel's **RECORD OUTPUT** jack.

Placing the Master Station in Service Position

1. Remove the two screws which secure the master station to the rough-in frame.
2. The master station can now be opened on its hinges. Make sure the support strap is secure so that it holds the master panel at approximately a 90° angle to the wall.

TAPE
INPUT
JACK PHONO
INPUT
JACK

RECORD
OUTPUT
JACK