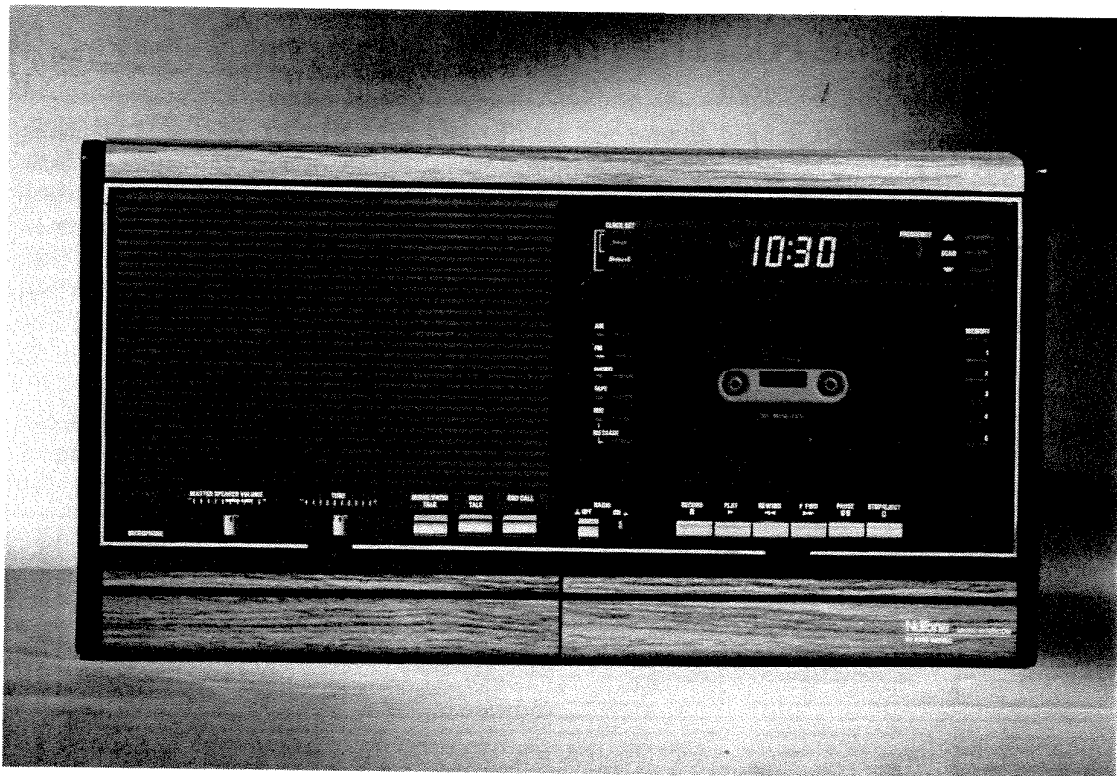# NuTone
RADIO INTERCOM SYSTEM
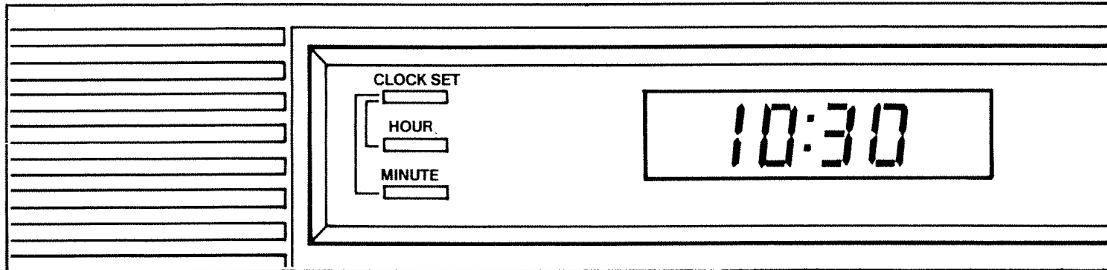## MODEL IM-4006 SERIES

HOMEOWNER'S OPERATING INSTRUCTIONS

Clock

To set clock use the following procedure:

1. **HOUR SET**—depress and hold the **CLOCK SET** pushbutton and **HOUR** pushbutton simultaneously until the hour that you desire is reached then release buttons (be sure that you have proper AM or PM setting.)
2. **MINUTE SET**—depress and hold the **CLOCK SET** pushbutton and **MINUTE** pushbutton simultaneously until the desired minute is displayed. Release the pushbuttons.
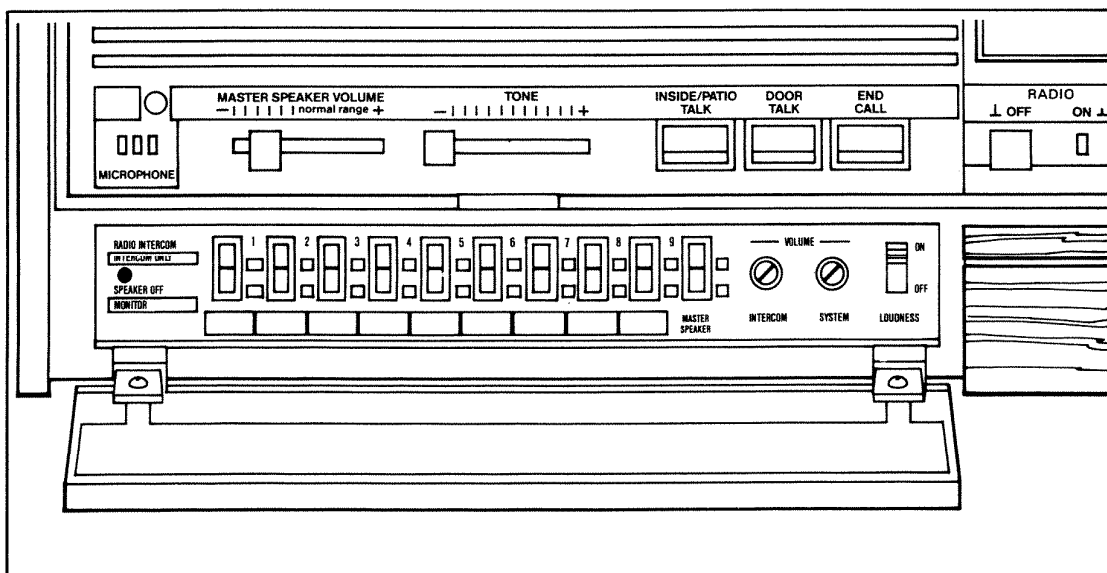

Radio Operation

1. **RADIO ON/OFF PUSHBUTTON**—Press the power button to the ON (⊥) position to supply power to the program functions (radio, phono, tape). The red power indicator light will illuminate. Press and release the button to the OFF (⊥) position to turn off the program functions.
   NOTE: RADIO SWITCH NEED NOT BE ON FOR INTERCOM, CLOCK OR OPTIONAL CHIME OPERATION. THESE OPERATIONS REMAIN FUNCTIONAL AT ALL TIMES.
2. Turn **SYSTEM VOLUNE CONTROL** to approximately ⅓-½ volume. (Turn control clockwise to increase and counterclockwise to decrease volume.)
3. Slide **MASTER SPEAKER VOLUME** control to approximately ⅓-½ level. (Slide control to the right to increase and to the left to decrease volume.)

4. Press **AM** or **FM** pushbutton for the radio function you desire. The light will illuminate beside the selected function.

5. To tune your radio to desired frequency, use one of the following methods:

(a) **RAPID TUNE** Depress and hold either of the 'arrowed' pushbuttons until you reach the station you want, then release the pushbutton.

(b) **STEP TUNE**—Momentarily touch either of the arrowed pushbuttons and the tuner will move to the nearest radio frequency on the band.

(c) **AUTOMATIC SCAN**—Momentarily touch the "SCAN" pushbutton and the tuner moves up the radio dial to the nearest strong signal. It remains on this signal for five (5) seconds, them moves to the next nearest strong signal. When the desired station is found, press the 'SCAN' pushbutton to stop the automatic operation.

(d) **MEMORY**—Choose your favorite radio stations for instant recall when you touch one of the five memory pushbuttons. Five **FM** and five **AM** stations are easily placed into the radio memory using the following procedure:
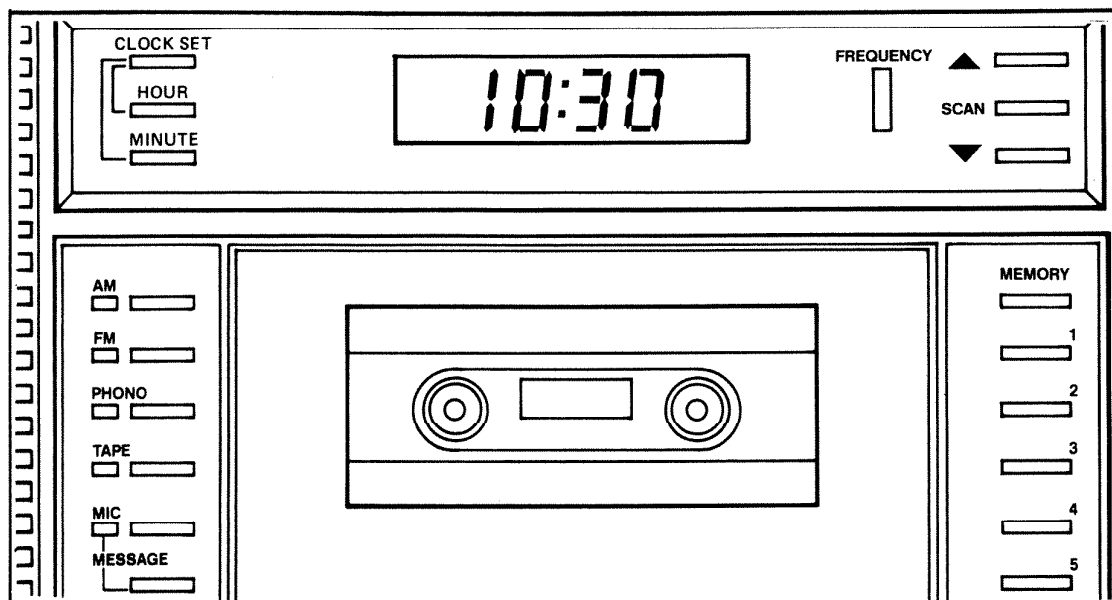
Set the radio into the **FM** mode and tune to the station you want. Touch 'MEMORY' and then the first pushbutton. Repeat this for the five stations that you desire, touching 2, 3, etc. NOTE: For your convenience, it is recommended that you enter the lowest frequency into the first position, the next highest into the second position, through the five positions.

Switch to the **AM** mode and repeat the procedure.

NOTE: This radio-intercom includes a battery backup. In the event of an electrical power failure, the ten-station memory will be retained and the clock will keep time for up to 30 hours. The digital display will not be lighted. The life expectancy of the battery is 5 to 7 years (See page 10 of this manual for battery replacement procedure).

In all cases, while setting the radio station, the digital display will show the radio frequency for approximately five (5) seconds then return to the clock display. To check the radio station that is being listened to, press the frequency pushbutton. The radio frequency will be displayed for 5 seconds and will automatically return to the clock function.

6. After the radio station has been selected, adjust the following:

(a) Volume levels as desired

(b) Tone control as required—left to right will increase treble and reduce base—right to left will increase base and reduce treble.

(c) If a boost in the highs and lows (treble and base) are desired, push the loudness switch **ON.** This is located behind the intercom control door.

3.

Intercom Controls And Operation

Master Station Intercom Controls

MASTER SPEAKER VOLUME Slide the 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 that was in progress when the intercom call was initiated.

NOTE: This system is equipped with an automatic **END CALL TIMEOUT** feature that is factory set at approximately 30 seconds which will return the system to playing the original program source automatically after the 30 seconds has elapsed. This 30 second period begins each time you release a **TALK** button.
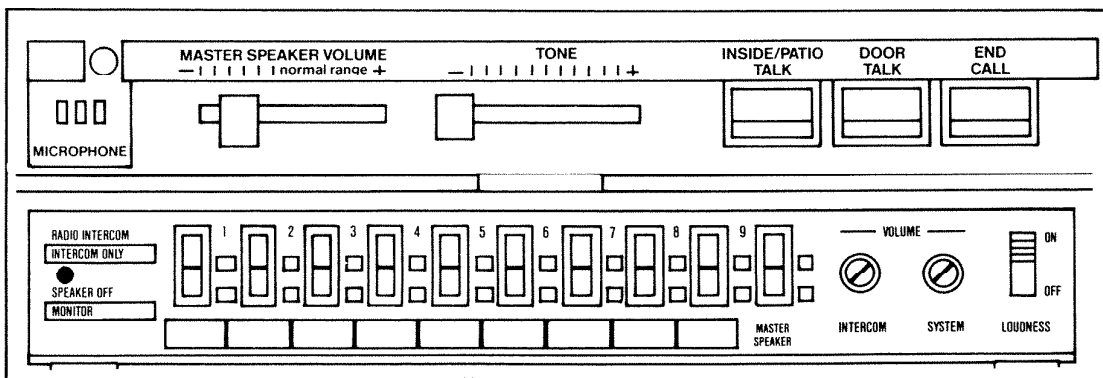
INTERCOM VOLUME—Turn this control clockwise to increase intercom volume throughout the system. Set this control at ¾ to maximum for normal intercom use. This control is located behind the master station's left panel door.

SPEAKER STATUS SWITCHES—These 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 left panel door.

NOTE: If your system has more than nine (9) speaker locations, these additional switches are located behind the master station's right panel door.

Each speaker may be set for one of the following functions:

1. **RADIO-INTERCOM**—Speakers set to this mode will receive all program material and intercom audio (provided that the speaker's system volume control is properly set). Program material includes: system radio, cassette, or any optional program sources wired to the system, such as a record changer or cassette player/recorder. An optional electronic door chime or security alarm will also be heard over a speaker set to this operating mode.

2. **INTERCOM ONLY**—A speaker set to this mode will only receive intercom audio.

3. **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.**

4. **MONITOR**—When a speaker is set to this mode, most sounds that originate at the speakers location will be transmitted over the system's other speakers unless the speaker is in private 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 that is below the switch that controls that speaker. To determine speaker locations, use the following procedure:

1. Set all the **REMOTE SPEAKER STATUS** switches to **SPEAKER OFF.**
2. Set the **MASTER SPEAKER** switch to **RADIO INTERCOM.**
3. Tune in a radio station, then turn the **SYSTEM VOLUME** control to maximum (full clockwise).
4. Slide the **MASTER SPEAKER VOLUME** control to minimum volume (-). Make sure each remote speaker's **VOLUME** control is turned completely clockwise for maximum volume.
5. 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.
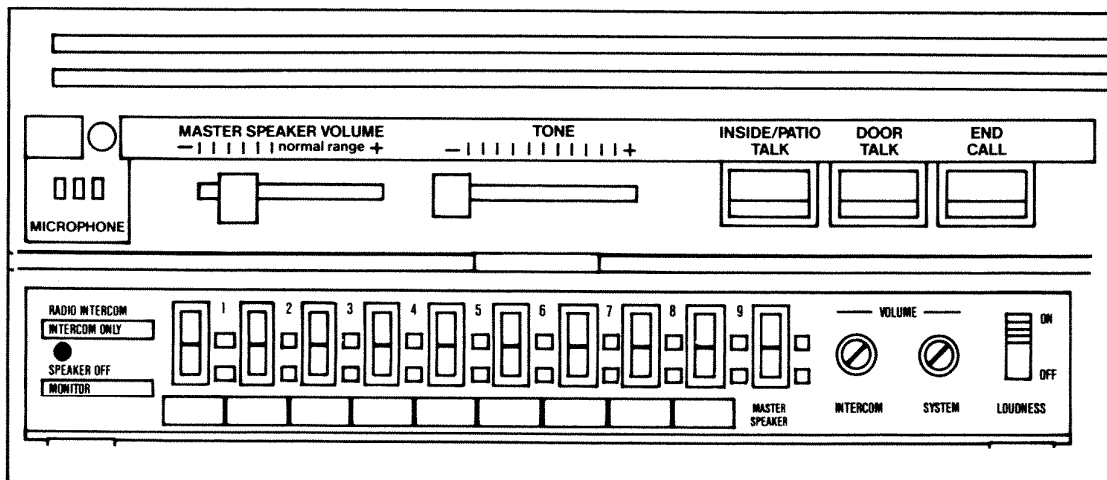
Setting System Volume Controls

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. Slide the **MASTER SPEAKER VOLUME** control to maximum (+) volume.
4. Turn the **SYSTEM VOLUME** control on the master station to approximately ⅓ volume.
5. Select an AM or FM radio station with a strong, clear signal.
6. Adjust the master station's **SYSTEM 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.).
   NOTE: 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 **SYSTEM VOLUME** sets the system's volume level, you may adjust an individual speaker's volume level within the set range.
7. Adjust the **MASTER STATION VOLUME** control and all remote station's **VOLUME** control to the volume level you desire. Do not set the remote station's volume controls below the **NORMAL RANGE** setting.

Important Reminders

1. The master station's **SYSTEM VOLUME** control governs the volume level for the entire system. If this control is set to minimum volume (full counterclockwise), remote speakers will receive no program audio. Make sure the **SYSTEM VOLUME** control on the master station is set to a reasonably high level.
2. If the remote station's **VOLUME** controls are set too low and the master station's **SYSTEM 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 **INTERCOM VOLUME** 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.

Intercom Operation

NOTE: All remote speakers are equipped with a **PRIVATE** pushbutton. When this pushbutton is pushed in, it insures no one can hear you; while at the same time allowing you to hear door chime, intercom calls, and music if you so desire. **IF YOU RECEIVE A CALL OR IF YOU MAKE A CALL, THIS PUSHBUTTON WILL NEED TO BE PUSHED AND RELEASED BEFORE YOU CAN TALK.**

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 for 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 have released the **INSIDE/PATIO TALK** button.
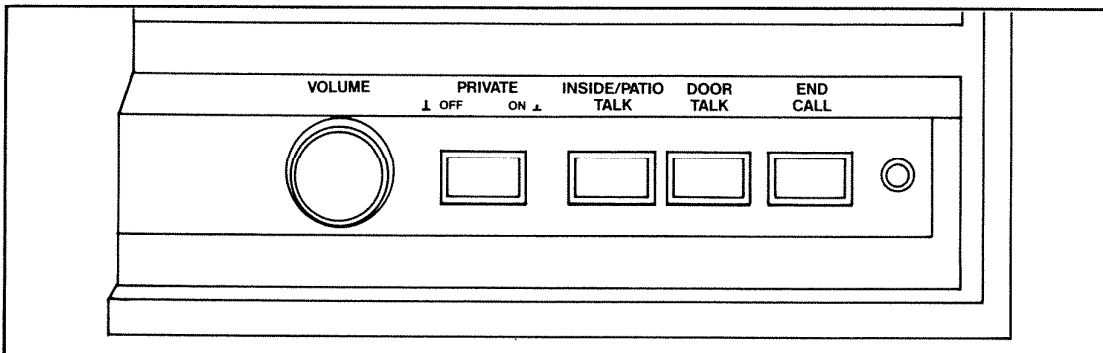
How To Receive A Call And Make A Reply

This system has **HANDS-FREE** answering at all remote stations and the master station. When you receive a call, make your reply without touching any of the controls. The entire intercom conversation is controlled from the station that initiated the call.

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. Press **END CALL** to end the call.
   NOTE: Both your call to the door and the door caller's reply will be heard at all intercom stations.

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 minitor a 'sickroom' or a child's room. When a station is set to **MONITOR**, most sounds in that room will be transmitted to all other stations in the **RADIO/INTERCOM** mode. (The monitor function will not operate if the station you desire to monitor is in the **PRIVATE** mode.)
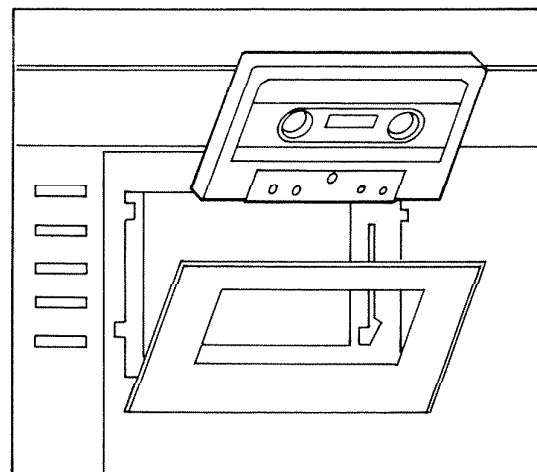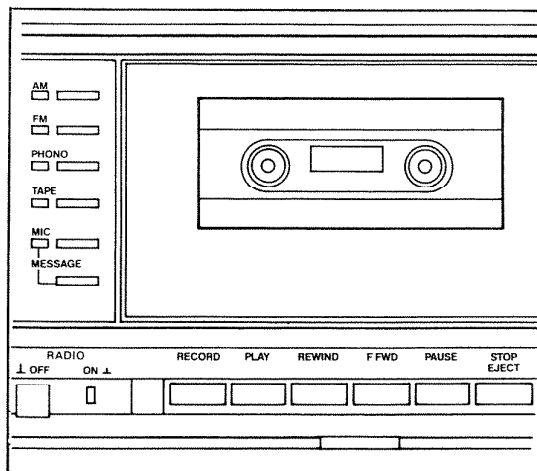
1. Set the remote station's **REMOTE SPEAKER STATUS** switch to **MONITOR**. To monitor the master station, set the **MASTER STATION STATUS** switch to **MONITOR**.
2. Reset the **REMOTE SPEAKER** or **MASTER STATION STATUS** switch when you no longer want to monitor that station.

 You may use the monitor function as a security device during the night. To monitor your home from the bedroom, set all stations to **MONITOR** (except your bedroom).

Cassette Controls And Operation

NOTE: RADIO ON/OFF PUSHBUTTON must be on for cassette operation.

1. **STOP/EJECT**—Push this button twice and the cassette door will slowly open for insertion or removal of the tape. Puish the button once to stop the tape while it is in progress.
2. **PLAY**—Push this button to play any recorded tape. When you push **PLAY** it will mute any **PROGRAM SOURCE** that is in progress.
3. **RECORD**—Push this button to record any **PROGRAM SOURCE** from your system. (Simply push **AM, FM, PHONO, TAPE**) then the **RECORD** button. This button is also used for recording messages (See **MESSAGE CENTER**).
4. **PAUSE**—Push this button to temporarily stop the tape and avoid recording unwanted material (always use **PAUSE** for temporary stops while recording to obtain proper recording continuity). Push thus button again to release from the **PAUSE** mode.
5. **F FWD**—Push this button to move the tape forward rapidly.
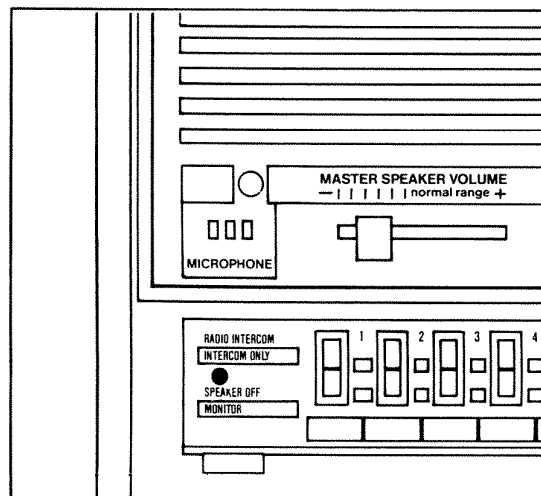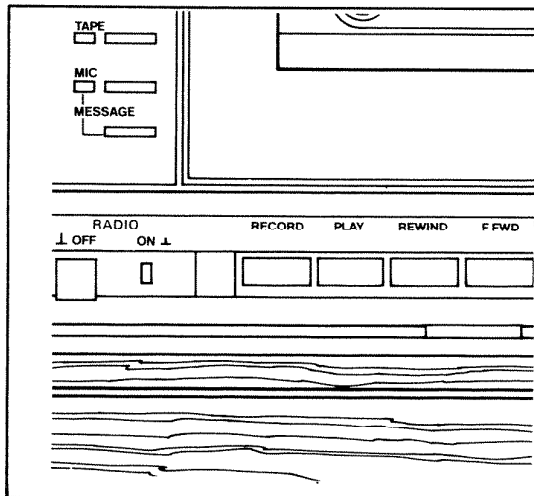6. **REWIND**—Push this button to rewind tapes.

7.

Message Center

How To Record A Message

1. Insert a tape that can be recorded on into the cassette.
2. Push the **MIC** pushbutton (this will mute any **PROGRAM SOURCE** that is in progress at the **MASTER STATION** only) then push the **RECORD** button.
3. Speak into the **MICROPHONE** located to the far left hand side of the master station.
4. When the message is complete **REWIND** the tape.
5. Push the **MESSAGE** button, then push the **MIC** button, the **MIC** indicator light will blink indicating a message has been recorded.

How To Receive A Message

1. Push **PLAY** to receive a message.
2. After the message has been received push **STOP**.
3. Push **MESSAGE** button to stop indicator light from blinking.

Optional Accessories

ELECTRONIC DOOR CHIME—When a NuTone Electronic Door Chime is connected to your IM-4006 Series Master Station, the chime is played throughout the intercom system.
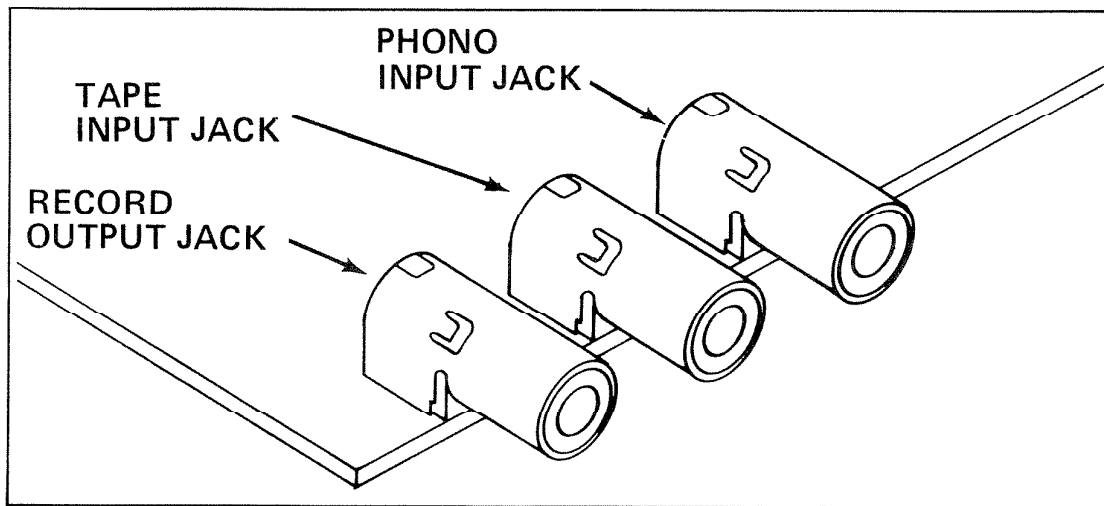
SECURITY—If you connect a NuTone Security System to your IM-4006 Series Master Station, the security alarm (fire or intruder) will sound over the intercom system.

TELEPHONE AND CRADLE—The phone and cradle mount next to the master station.

RECORD CHANGER OR CASSETTE PLAYER/RECORDER
(Not available from NuTone)

1. To connect an optional Record Changer or Cassette Player/Recorder, locate the **PHONO INPUT, TAPE INPUT** and **RECORD OUTPUT** jacks in the back of the master panel.

2. To play the phonograph over the intercom system, insert the accessory's output plug into the master panel's **PHONO INPUT** jack.

3. To play the cassette player over the intercom system, insert the accessory's output plug into the master panel's **TAPE INPUT** jack.

4. To use the radio as a program source for recording on the cassette player, insert the tape player's input plug into the master panel's **RECORD OUTPUT** jack.

5. To use either of these functions, push the **PHONO** or **TAPE** pushbutton on the master panel.

NOTE: Phono input jack will accept levels from a "ceramic" type cartridge. Turntables with "magnetic" cartridges will require an interface amplifier (not supplied by NuTone).

9.

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.

Battery Replacement

To purchase a new battery write to: NuTone Inc., 5410 Hetzel Avenue, Cincinnati, Ohio 45227— Attention: Parts Department.

To replace battery use the following procedure:

1. Place Master Station in Service Position and locate battery in upper left hand corner of radio.
2. Disconnect battery plug from terminal board.
3. Remove screw and lift old battery out.
4. Install new battery and secure with previously removed screw.
5. Plug battery into terminal board being sure red wire goes to the pin marked red.
6. Place Master Station back into operating position.

RED **Plug** **RED**

BLK

Remove This Screw **BLK**

Product specifications subject to change without notice.

NuTone