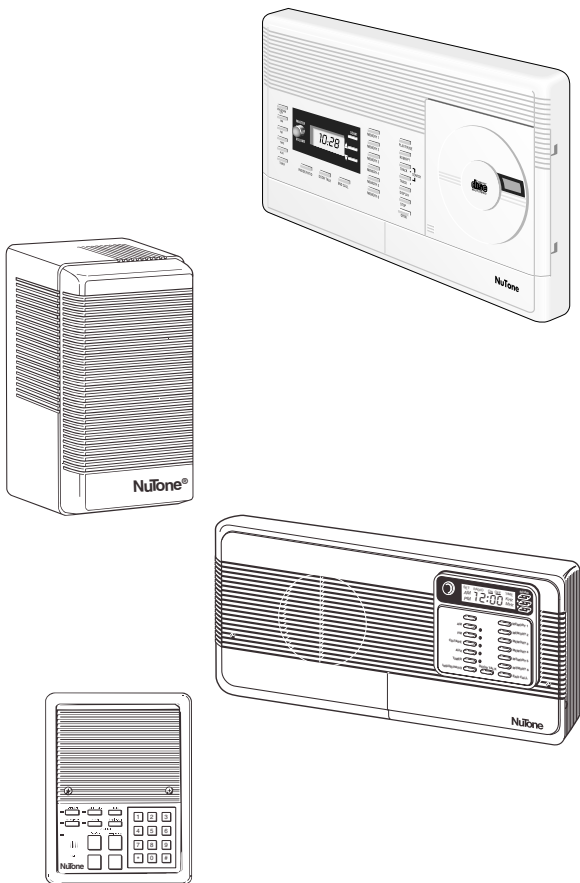


NuTone®

Electronic, Communication, and Music System Selection and Installation Guide



- Voice/Music Intercoms
- Voice Intercoms
- Music Distribution Systems

**Building Solutions
for Today's Lifestyles**

How to use this Guide

NuTone offers a wide selection of electronic, communication, and music systems that feature a wide range of benefits; from the distribution of hi-fi music with intercom to a system that features intercom only. These systems will satisfy a wide range of needs and budgets.

Use this guide to make your final decision on the system that best meets your needs. Once that decision is made, this manual can help you choose the accessories, speakers, and cable you'll need to complete your system and plan your installation. NuTone intercoms and accessories ship complete with detailed instructions to make the installation and your enjoyment of the system, a pleasure.

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Choosing Your NuTone System

1

Select your NuTone system

| | |
|-----------|---------------------------------------|
| IK-15/25 | Door Intercom |
| IMA-516 | Intercom |
| IM-3204WH | Basic Music Intercom |
| IM-3303 | Deluxe Music Intercom |
| IM-4406 | Premium Music Intercom with CD Player |
| IM-5000 | Selective Call Intercom |

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2

Select your options

| | |
|-----------------|-------------------|
| Cassette Player | Door Release |
| Door Chime | Audio Input Plate |

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3

Select your NuTone systems and controls

Typically, the master unit is installed in the kitchen. NuTone recommends a speaker in each of the following rooms: living room, media room, family room, each bedroom, dining room, each outside door, garage, basement, patio/deck, kitchen (when master is not installed in kitchen) and master bath (which allows you to step out of the shower and easily answer the door).

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4

Select your installation accessories

Choose the installation accessories you will need to install your master and speakers. These include recessed or surface mount wall housings, mounting brackets and cable.

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5

Install and enjoy your new NuTone system

Illustrated instructions and owner's manuals are included with each unit.

NuTone System Features

Not all units have the same features. To find out more about each unit's features, locate the corresponding description on the following pages.

| FEATURES | COLOR | | MODEL | | | |
|--|----------|---------|-----------|-----------|-----------|-------------|
| | BISCUIT: | — | IM-4406L | IM-3303L | — | — |
| | BLACK: | — | IM-4406BL | — | — | — |
| | WHITE: | IM-5000 | IM-4406WH | IM-3303WH | IM-3204WH | IMA-516 |
| A. Music/Intercom Speaker Capacity | | 20 | 9* | 13 | 6 | 10 |
| B. Door Speaker Capacity | | 3 | 3 | 3 | 3 | 2 |
| C. Number of Room Selector Switches | | | 9* | 9 | 6 | |
| D. Music Muting during Intercom or Chime | | ● | ● | ● | ● | Intrcm Only |
| E. Constant-On 24-Hour Intercom | | ● | ● | ● | ● | ● |
| F. Monitors Room Speaker | | ● | ● | ● | ● | ● |
| G. Selective Call | | ● | | | | |
| H. Room-to-Rooms Intercom (All Call) | | ● | ● | ● | ● | ● |
| I. Room-to-Doors Intercom | | ● | ● | ● | ● | ● |
| J. Number of Wires in Speaker Cable | | 6 | 6 | 3 | 4 | 6 |
| K. "Hands Free" Answering | | ● | ● | ●** | | |
| L. Intercom Only Switch Setting | | | ● | ● | | |
| M. One Button Door Answering | | ● | ● | ● | ● | ● |
| N. AM/FM Radio Built In | | | ● | ● | ● | |
| O. Built-in CD Player | | | ● | | | |
| P. Electronic Tuning | | | ● | ● | ● | |
| Q. Remote Radio On/Off, Memory Control | | | ● | ● | ● | |
| R. Station "Recall" Memory | | | 12 | 12 | 8 | |
| S. Tape, CD and/or Aux. Inputs | | 1 | 2 | 2 | 1 | 1 |
| T. Separate Bass/Treble Tone Controls | | | ● | ● | ● | |
| U. Loudness Control | | | ● | ● | ● | |
| V1. Tune Selectable Chime Option (10 choices) Available | | ● | ● | ● | ● | |
| V2. Westminster Chime Option (8, 2, 1 note) Available | | ● | ● | ● | ● | |
| V3. External Chime Option | | ● | ● | ● | | ● |
| W. Master Unit Color Choices | | 1 | 3 | 2 | 1 | 1 |
| X. Digital Clock | | | ● | ● | | |
| Y. Digital CLock Can Turn Radio On & Off | | | ● | ● | | |
| Z. Time and Radio Memory Backup (Up to) | | | 30 hours | 30 hours | | |
| AA. Lighted Function Display | | | ● | ● | | |
| BB. Self Diagnostic Troubleshooting Circuitry | | | ● | ● | ● | |
| CC. Built-In Surge Protector | | ● | ● | ● | ● | ● |
| DD. Privacy Switch on Intercom Speakers | | ● | ● | | | |
| EE. End Call Button | | ● | ● | ● | ● | |
| * Up to 15 speakers with addition of IA-440 Expansion Module | | | | | | |
| ** Calls made from master | | | | | | |

Music Intercom Features Explained

A. Music/Intercom Speaker Capacity

The number of rooms you can have intercom communications and play music in depends on the number of intercom speakers you can put on the system.

B. Door Speaker Capacity

All NuTone music/intercom and intercom systems can handle three doors except the IMA-516 which can handle up to two door speakers.

C. Number of Room Selector Switches

Room selector switches allow you to choose what is sent to each room speaker. The room switch can be set to one of four settings:

1. Radio Intercom
2. Intercom Only
3. Monitor
4. Off

Why would you have a speaker switch set to anything other than the first - *Radio Intercom*? Well, if you're an early riser, you may want to set the bedrooms to *Intercom Only*. That way you can play music and not disturb your sleeping children or spouse. The *Monitor* setting allows you to monitor rooms and broadcast the sound from the monitored room through the rest of the intercom speakers inside and out. *Off* setting turns off all intercom, music, and chime sounds to the room.

The IM-4406 and IM-3303 systems have these four switch options. The IM-3204 has *Radio Intercom*, *Off* and *Monitor*. Monitor, intercom, and music control features for the IMA-516 and IM-5000 are located directly on the room speakers.

D. Music Muting during Intercom or Chime

During intercom, the music is muted allowing for clear voice communication. The music is also muted when the chime button is pushed.

E. Constant-On 24 hour Intercom

The intercom is always on. You can use the intercom function at a moment's notice.

F. Monitors Room Speaker

On radio/intercom units, position room selector switch at the master to *Monitor* to instantly check on a room. On the IMA-516 and IM-5000, press the "TALK LOCK/MONITOR" button on the room speaker.

G. Selective Call

Selective intercom calling is available on the IM-5000. To make a selective call, first enter the two-digit room number corresponding to the room you wish to call. After the second digit is pressed, a call tone is heard at both stations to indicate a call is being made and intercom audio from the called station is heard. To talk to the selected room, simply press the "TALK" button. To hear the reply, simply release the "TALK" button.

H. Room to Rooms (All Call) Intercom

Press a button in any room to speak to the other rooms. Most NuTone intercom systems are "all room" intercom systems. This means that when you press the talk button you speak to all rooms that have intercom speakers. Our IM-5000 is both an "all call" and "selective call" system. With this system, you can specifically call one room from another. A selective call intercom system is well suited to business installations like dentist or doctor's offices or other small businesses. One advantage to an "all room" system is that often when calling an individual, particularly children, they may have moved from one room to another. With a NuTone "all call" intercom you'll immediately be able to communicate with the individual.

Music Intercom Features Explained

I. Room to Doors Intercom

Press the door talk button on a room speaker to speak with a visitor at the door. Release to hear the reply.

J. Number of wires in Intercom Speaker Cable

If you wish to replace an existing Music/Intercom to take advantage of updated styling and new features, you need to be aware of the cable used to wire the system you're replacing. If you can, you'll want to use the cable already in the wall. In most cases, a current NuTone 3-wire system can replace an older 3-wire system, 4-wire replace 4-wire, etc. You may also be able to replace a different brand intercom with a NuTone system. Our Technical Support Group would be pleased to help you determine your options, please phone us at 888-336-6151, or fax us at 513-527-5122.

Please have the brand, model number, number of speakers, number of wires and any other details you may have on your system available when you call.

K. "Hands Free" Answering

Ideal for the couch potato in all of us. The person being called doesn't have to rise from the chair to answer. In systems without the "Hands Free" circuitry, the person being called needs to go to the intercom speaker and press a button to respond. On IM-5000 and IM-4406, all calls from master or any speaker are "Hands Free". On IM-3303, only calls from the master are "Hands Free".

L. Intercom Only Switch Settings

If you're an early riser, you may want to set the bedrooms to Intercom only. That way you can play music and not disturb your sleeping children or spouse.

M. One Button Door Answering

To answer the door, you press one button to speak to the visitor, release the button to listen to their response. All NuTone systems offer one button door answering. In some systems you press one

button to speak, another button to listen. One button door answering is more convenient because you are less likely to miss part of your visitor's response. It is not dependent on how quickly you press the second button to listen.

N. AM/FM Radio

O. CD Player

Many of our intercoms have built-in AM/FM radios so you can enjoy your favorite radio station throughout your home. Model IM-4406 has a built-in CD Player.

P. Electronic Tuning

Allows for easy, accurate tuning of your favorite radio station.

Q. Remote Radio On/Off, Memory Control

Radio operation can be controlled from any intercom speaker. Press the "RADIO CONTROL/END CALL" button at any intercom speaker for 2 seconds to turn the radio ON. To turn the radio OFF, again, press the "RADIO CONTROL/END CALL" button for 2 seconds. To sequence through each programmed radio memory channel, momentarily press the "RADIO CONTROL/END CALL" button.

R. Station "Recall" Memory

Program your favorite stations into memory for easy recall later.

S. Aux Audio Input(s)

The master has audio input(s) allowing you to add a NuTone Cassette player, to patch in the audio from your multi-disc CD player or home theater for broadcast throughout your home.

Music Intercom Features Explained

T. Bass/Treble Controls

Tone controls allow you to fine tune the music output. NuTone music intercom systems have separate bass and treble controls.

U. Loudness Control

When activated, the loudness control boosts the bass and treble response during low volume use.

V1. Tune Selectable Chime Option

The IA-29 chime module offers 10 different tunes plus Westminster chime. To select a different tune, press the tune change switch through the tune change access hole located on the master panel. Also includes a two and one note chime sound for the side and rear doors. Module mounts and plugs into master unit.

V2. Westminster Chime Option

The IA-28 chime module offers a Westminster chime sound for the front door, and a two/one note chime for the side and rear doors. Module mounts and plugs into master unit.

V3. External Chime Option

Most NuTone electronic chime models can be connected to the master unit to allow chime sound to be heard over the room speakers.

The addition of a chime module or NuTone electronic chime to your NuTone intercom system ensures you'll never miss a guest again by sounding the chime through all intercom speakers that are turned on.

W. Color Choices

All NuTone intercoms are available in white. Some are also available in black and biscuit. Our cassette player is available in white. Speakers are available in white. Some speaker models are available in biscuit, black or brown. Door speakers are available in antique brass, bright brass, white or brown.

X. Digital Clock

The IM-3303 and IM-4406 music intercoms feature a built-in digital clock.

Y. Digital Clock can turn Radio on and off

The Music Intercom system can be used as a whole house alarm clock. Set the clock to turn music on in the morning and have it gently wake your children. The digital clock can also be used as a sleep timer to turn music off at a certain time. This feature also can be used as a deterrent to intruders. The timer can be set to turn music on while you are away - making a thief think you are there, discouraging them from entering your home.

Z. Time and Radio Backup

A built-in electrical backup system maintains your time and radio memory channels up to 30 hours during a power outage.

AA. Lighted Function Display

The lighted digital display is easy to read day or night.

BB. Self Diagnostic Troubleshooting Circuitry

For proper performance and operation of an Intercom, it is important that all wires are securely attached to the proper terminal. Otherwise, certain features of the intercom may not work, there could be humming or no sound at all. NuTone's self diagnostic circuitry allows the installer to easily check the installation and if there is a misconnected wire, identify which room is affecting the system. This helps ensure that when the installer leaves, your system is operating as it was designed to.

CC. Built-in Surge Protection

Mov's and diode clamping circuitry help minimize the potential for damage to your NuTone music intercom system from line surges and electrical storms.

DD. Privacy Switch on Intercom Speakers

Switch on speaker can be used to turn off the ability to monitor that room. Ideal for master bedrooms and baths.

EE. End Call Button

Allows intercom call to be manually ended.

Options

Cassette Player

Auto reverse cassette player can play both sides of a tape over and over. Includes fast forward/rewind functions and a convenient tape storage area. Can be used with IMA-516, IM-3204, IM-3303, IM-4406 and IM-5000 series.

Music and Intercom 25 ohm Speakers

NuTone offers a wide selection of speaker options; wall-mount, ceiling-mount, indoor and outdoor speakers. To determine which speakers are available for your system, see the system diagrams in this guide.

Music Input Plate

Connect your existing music and TV audio components to a NuTone system. Allows you to follow the action of a sports event when you leave your home theater room by broadcasting the audio throughout your home. Can be used with IMA-516, IM-3204, IM-3303, IM-4406 and IM-5000 series.

Surface Mount Housings

Surface mount housings are available for most NuTone room speakers as well as door speakers. They make it a little easier installation as you do not have to cut an opening to recess mount the speaker. They are especially handy when you want to put a door speaker on a brick surface or if you want to have a speaker on a fire rated wall (typically this is the wall between an attached garage and the living space).

Chime

Never miss a guest again. Chime rings through every intercom speaker throughout your home. The NuTone IA-29 chime module offers the ability to easily select from ten different tunes for the front door and change them as your mood desires. Melody choices include: Westminster 8-notes, Westminster 4-notes, Anniversary Waltz, Beethoven's Fifth, Dixie, Greensleeves, Happy Birthday, Jingle Bells, Joy to the World, Mazel Tov, Oh Tannenbaum and the Star Spangled Banner. The second door rings two notes and the third door rings one note.

The IA-28 chime module plays 8-note Westminster for one door, two notes for second door and one note for a third door.

Wiring Your System

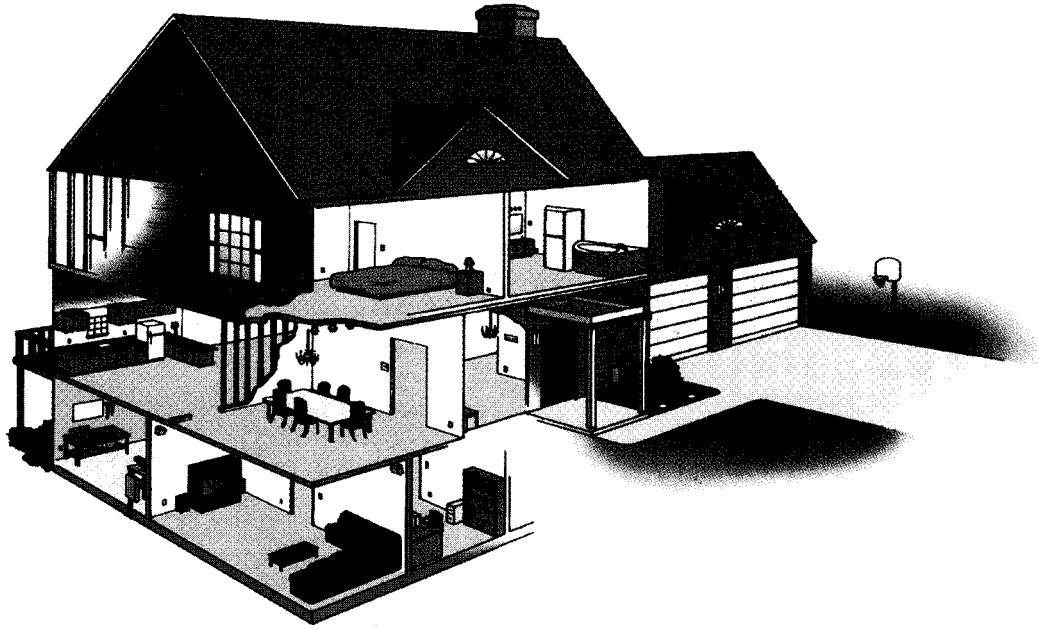
What Cable is Needed

VERY IMPORTANT - Use only NuTone intercom cable to wire NuTone intercom system. NuTone intercom cable is designed and constructed to electrical specifications necessary for satisfactory performance.

Use of “generic” cable can result in humming, interference and feedback in the installed system. After the house is finished, it will be time consuming and expensive to correct problems caused by use of the wrong cable. NuTone will not warranty systems where NuTone intercom cable is not used.

- On all models except the IMA-516 and IM-5000, you should plan a separate “home run” cable from the master housing to each individual speaker or volume control location. Do not loop cables from one speaker or volume control to another. Electronic feedback or poor system performance will result. Models IMA-516 and IM-5000 can have speakers “looped”. See IMA-516 and IM-5000 instruction sheets for details.
- Do not splice cables. Always install an uninterrupted cable from the master to the intercom speakers or volume controls and from the volume controls to the music speakers.
- Plan to keep cables 18 inches from fluorescent light fixtures, light or fan dimmer controls and any other wiring (electrical power, security system, etc.) to minimize risk of system interference.
- Plan cable routes away from metal (heating and air conditioning ducts, construction plates, etc.) or any other objects that may have sharp edges that could cause damage to the cables. If cables must be routed through metal, use rubber grommets in the holes to protect the cables.
- Cables installed outside the house are to be routed through PVC conduit to protect them from the elements. The cables are not constructed to be UV weatherproof.

Locating Your Components



Where to Install Master

Determine location of master with the following considerations:

- **Choose master location with regard to residents' lifestyle, either centrally located (living room, kitchen, central hallway, etc.) or securely located (master bedroom).**
- **Locate master in an accessible area. Do not locate closer than 2 inches to a corner, cabinet, counter top, etc.**
- **Do not locate master in an outside wall. Insulation and temperature changes may adversely affect unit's performance and life.**
- **Select a location that will not restrict wire routing from the speaker to the master.**

Where to Install Music Speaker Volume Controls

Select music speaker volume control location with the following considerations:

- Except for model IC-902, do not locate volume control in a sauna or outside. Extreme heat and moisture will adversely affect its performance and life.
- Locate volume control a minimum of 18 inches from fluorescent light fixtures, light or fan dimmer controls and other wiring (electrical power, security system, etc.) to minimize risk of system interference.
- Do not connect more than one speaker to a monaural volume control or one pair of speakers to a stereo volume control.

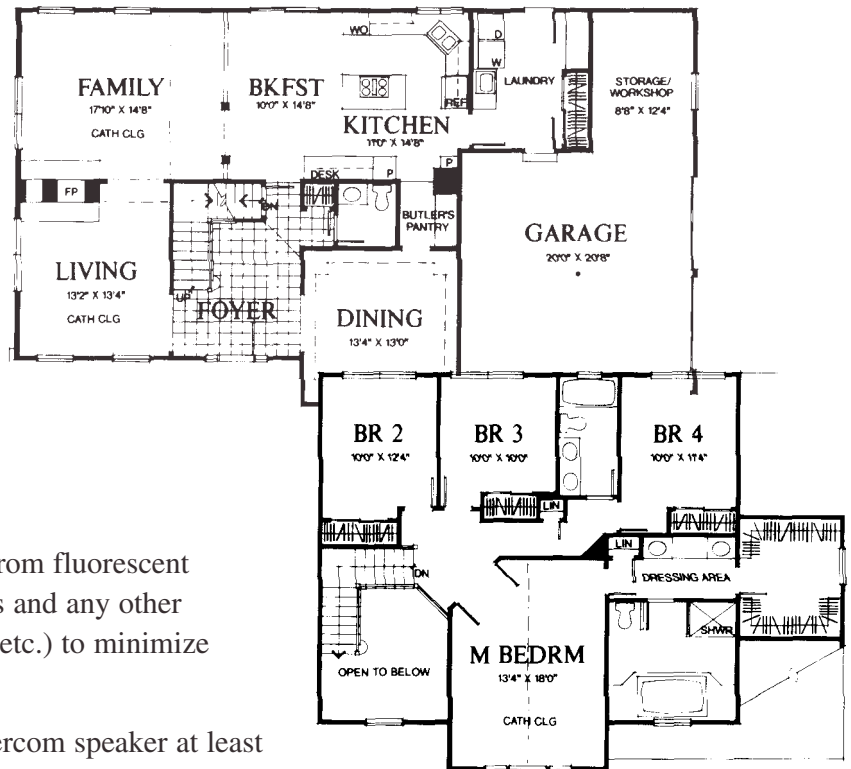
Where To Install Speakers

Typically, the master unit is installed in the kitchen. NuTone recommends a speaker in each of the following rooms:

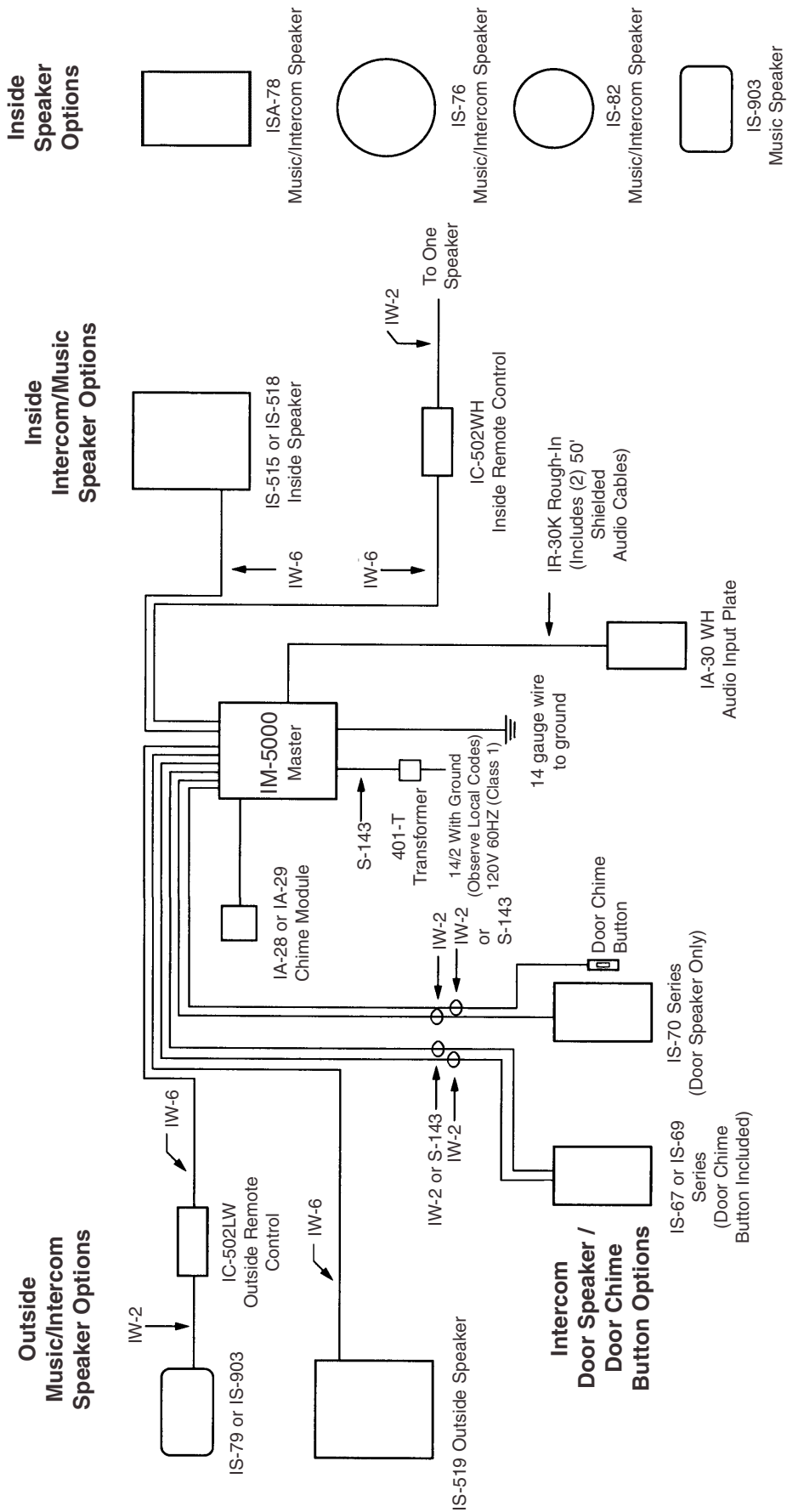
- | | | |
|---|---|---|
| <input checked="" type="checkbox"/> Living Room | <input checked="" type="checkbox"/> Media Room | <input checked="" type="checkbox"/> Family Room |
| <input checked="" type="checkbox"/> Bedrooms | <input checked="" type="checkbox"/> Dining Room | <input checked="" type="checkbox"/> Outside Doors |
| <input checked="" type="checkbox"/> Garage | <input checked="" type="checkbox"/> Basement | <input checked="" type="checkbox"/> Patio/Deck |
| <input checked="" type="checkbox"/> Laundry | <input checked="" type="checkbox"/> Kitchen (not if master is installed in kitchen) | <input checked="" type="checkbox"/> Master Bath (allows you to step out of the shower and easily answer the door) |

Select speaker location with the following considerations:

- Choose location where open doors or furniture will not cover the speakers.
- Do not locate speaker in an outside wall, except for speakers intended for outdoor use. Insulation and temperature changes may adversely affect the speaker's performance and life unless it has been designed for outdoor use.
- Do not locate speaker in a sauna. Extreme heat and moisture will adversely affect the speaker's performance and life.
- Locate speaker a minimum of 18 inches from fluorescent light fixtures, light or fan dimmer controls and any other wiring (electrical power, security system, etc.) to minimize risk of system interference.
- To avoid audio feedback noise, locate intercom speaker at least 10 feet from another intercom speaker and keep intercom speakers from directly facing each other or from being mounted within the same wall cavity. Never locate two intercom speakers in the same room.
- For optimum stereo separation, stereo music speakers should be located 6 to 10 feet apart. Ideally, you will also want to keep the speaker(s) 2 feet from any sidewall, ceiling or floor.
- Do not locate more than one speaker in a room except when installing the SR-9000 stereo receiver.



NuTone IM-5000 System Block Diagrams



CABLE MODEL NUMBER

| 100 ft. Roll | 200 ft. Roll | 500 ft. Roll | 1000 ft. Roll | DESCRIPTION | Max Length | Max System Length |
|--------------|--------------|--------------|---------------|---|------------|-------------------|
| IW-2-100 | | IW-2-500 | | 2 Conductor Intercom Control Cable | 25 Feet | 500 Feet |
| IW-2-100-UL | | IW-2-500-UL | | UL Approved 2 Conductor Intercom Control Cable | 25 Feet | 500 Feet |
| IW-2-100 | | IW-2-500 | | 2 Conductor Door Speaker and Chime Button Cable | 300 Feet | 750 Feet |
| IW-2-100-UL | | IW-2-500-UL | | UL Approved 2 Conductor Door Speaker and Chime Button Cable | 300 Feet | 750 Feet |
| | | IW-6-200 | | 6 Conductor Remote Speaker Cable | 750 Feet | 4000 Feet |
| | | IW-6-200-UL | | UL Approved 6 Conductor Remote Speaker Cable | 750 Feet | 4000 Feet |
| | | S-143 | | 2 Conductor Power/Chime Cable (18 ga) | 50 Feet | 50 Feet |
| | | S-143UL | | UL Approved 2 Conductor Power/Chime Cable (16 ga) | 50 Feet | 50 Feet |

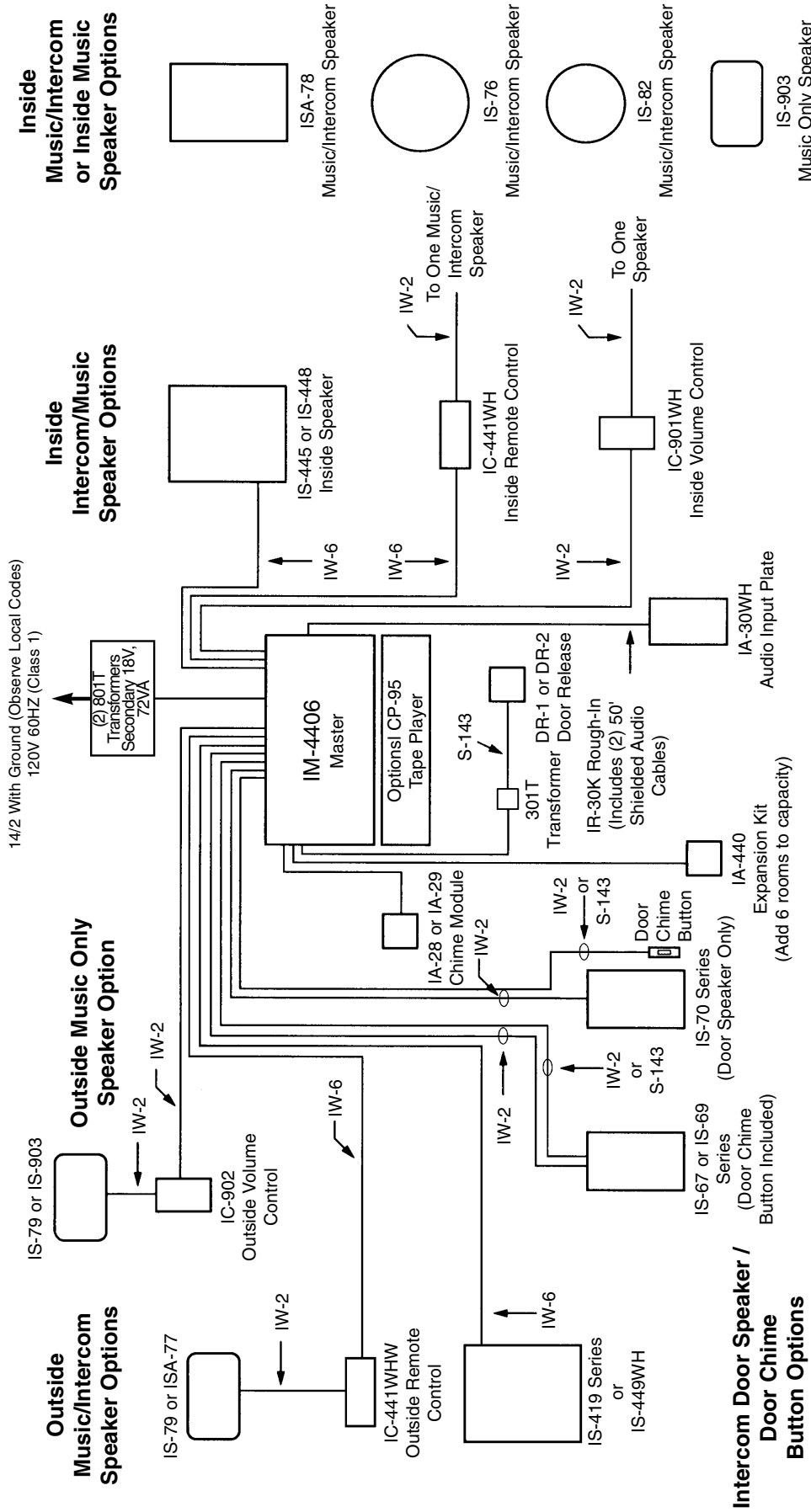
Available in USA and Canada

IM-5000 Series Components

| Model No. | | Options | Description | Recessed Housing |
|-----------------|---------|---------|--|------------------|
| Intercom Master | IM-5000 | White | Selective/All Call Intercom | — |
| Cassette Player | CP-95 | White | Cassette Player with Auto Reverse | IR-90 |
| Chime Modules | IA-28 | — | Chime Module (8, 2 & 1 note - 3 doors) | — |
| | IA-29 | — | Chime Module (Multitone, 2 & 1 note - 3 doors) | — |
| Transformer | 401T | — | 24 Volt, 40VA Transformer | — |

| Model No. | | Options | Description | Recessed Housing | Surface Mount Housing Model |
|--|--------------|--|---|------------------|-----------------------------|
| Remote Intercom Speakers | IS-515 | White (WH), Biscuit (L) | 5" Inside Remote with Controls | IR-50 | IA-60 |
| | IS-518WH | White | 8" Inside Remote with Controls | IR-80 | — |
| Intercom Speaker Frames | IS-519 | Biscuit | 5" Outside Remote with Controls | IR-50 or IR-55 | avail. as service part |
| | IA-60 | White (WH), Biscuit (L) | 5" Wall/Desk Mounting Frame | — | — |
| | IA-6 | — | Wall Receptacle for IA-60 | — | — |
| | IA-6C | — | Cable for IA-6 | — | — |
| Remote Intercom Controls | IC-502WH | White | Inside Remote Intercom Control | IR-91 | — |
| | IC-502LW | Biscuit | Outside Remote Intercom Control | IR-91 | — |
| Music/Intercom Speakers | IS-76 | White | 8" Inside Round Recessed Speaker | IR-70 | — |
| | ISA-77 | Black Grille with Brown frame/mounting bracket | 8" Inside Round Recessed Speaker | — | included |
| | ISA-78 | White (WH), Biscuit (L) | 8" Inside Rectangular Recessed Speaker | IR-80 | — |
| | IS-79 | Aluminum | 8" Outside Square Recessed Speaker | IR-9 | — |
| | IS-82 | White | 5" Inside Round Recessed Speaker | included | — |
| | IS-903 | White (WH), Black (BL) | 3 1/2" 2-Way Inside/Outside Speaker | — | included |
| Music Speakers <small>Can be used with the IC502 controls as music/intercom speakers (IM-5000 only)</small> | IS-905WH | White | 5 1/4" 2-Way Inside Recessed Speaker | IR-905 or IR-906 | — |
| | IS-908WH | White | 8" 2-Way Inside Recessed Speaker | IR-908 or IR-909 | — |
| | IS-920WH | White | 5 1/4" 2-Way Round Recessed Ceiling Speaker | included | — |
| | IS-921WH | White | 6 1/2" 2-Way Round Recessed Ceiling Speaker | included | — |
| | ISA-63 | Dark Brown/Brass | Surface Mount; Molded; No Pushbutton | — | included |
| | ISB-64 | Dark Brown/Brass | Surface Mount; Molded; Unlighted Pushbutton | — | included |
| Door Speakers | IS-67 | White (WH), Woodgrain/Gold (D) | Recessed; Molded; Lighted Pushbutton | IR-6 | IA-70 |
| | IS-69 | White (WH), Antq Brass (AB), Polshd Brass (PB) | Recessed; Cast Metal; Lighted Pushbutton | IR-6 | IA-70 |
| | IS-70 | White (WH), Antq Brass (AB), Polshd Brass (PB) | Recessed; Cast Metal; No Pushbutton | IR-6 | IA-70 |
| | IA-30WH | White | Wall Plate for use with External Music Source | IR-30K | — |
| Audio Adapter Plate Cable | IW-2-100 | — | 100 feet 2 Cond. 22 ga Door Speaker/Chime Cable | — | — |
| | IW-2-100-UL | — | 100 feet 2 Cond. 22 ga UL Approved Door Speaker/Chime Cable | — | — |
| | IW-2-500 | — | 500 feet 2 Cond. 22 ga Door Speaker/Chime Cable | — | — |
| | IW-2-500-UL | — | 500 feet 2 Cond. 22 ga UL Approved Door Speaker/Chime Cable | — | — |
| | IW-6-200 | — | 200 feet 6 Cond. 22 ga Intercom Cable | — | — |
| | IW-6-200-UL | — | 200 feet 6 Cond. 22 ga UL Approved Intercom Cable | — | — |
| | IW-6-1000 | — | 1000 feet 6 Cond. 22 ga Intercom Cable | — | — |
| | IW-6-1000-UL | — | 1000 feet 6 Cond. 22 ga UL Approved Intercom Cable | — | — |
| | S-143 | — | 500 feet 2 Conductor Power/Chime Cable (18 ga) | — | — |
| | S-143-UL | — | 500 feet 2 Conductor UL Approved Power/Chime Cable (16 ga) | — | — |

NuTone IM-4406 System Block Diagrams



CABLE MODEL NUMBER

| 100 ft. Roll | 200 ft. Roll | 500 ft. Roll | 1000 ft. Roll | DESCRIPTION | Max Length | Max Syst. Length |
|--------------|--------------|--------------|---------------|--|------------|------------------|
| IW-2-100 | | IW-2-500 | | 2 Conductor Intercom Control or Volume Control Cable | 25 Feet | 375 Feet |
| IW-2-100-UL | | IW-2-500-JL | | UL Approved 2 Conductor Intercom Control or Volume Control Cable | 25 Feet | 375 Feet |
| IW-2-100 | | IW-2-500 | | 2 Conductor Door Speaker and Chime Button Cable | 300 Feet | 750 Feet |
| IW-2-100-UL | | IW-2-500-JL | | UL Approved 2 Conductor Door Speaker and Chime Button Cable | 300 Feet | 750 Feet |
| | IW-6-200 | | IW-6-1000 | 6 Conductor Music/Intercom Speaker Cable | 750 Feet | 4000 Feet |
| | IW-6-200-UL | | IW-6-1000-JL | UL Approved 6 Conductor Music/Intercom Speaker Cable | 750 Feet | 4000 Feet |

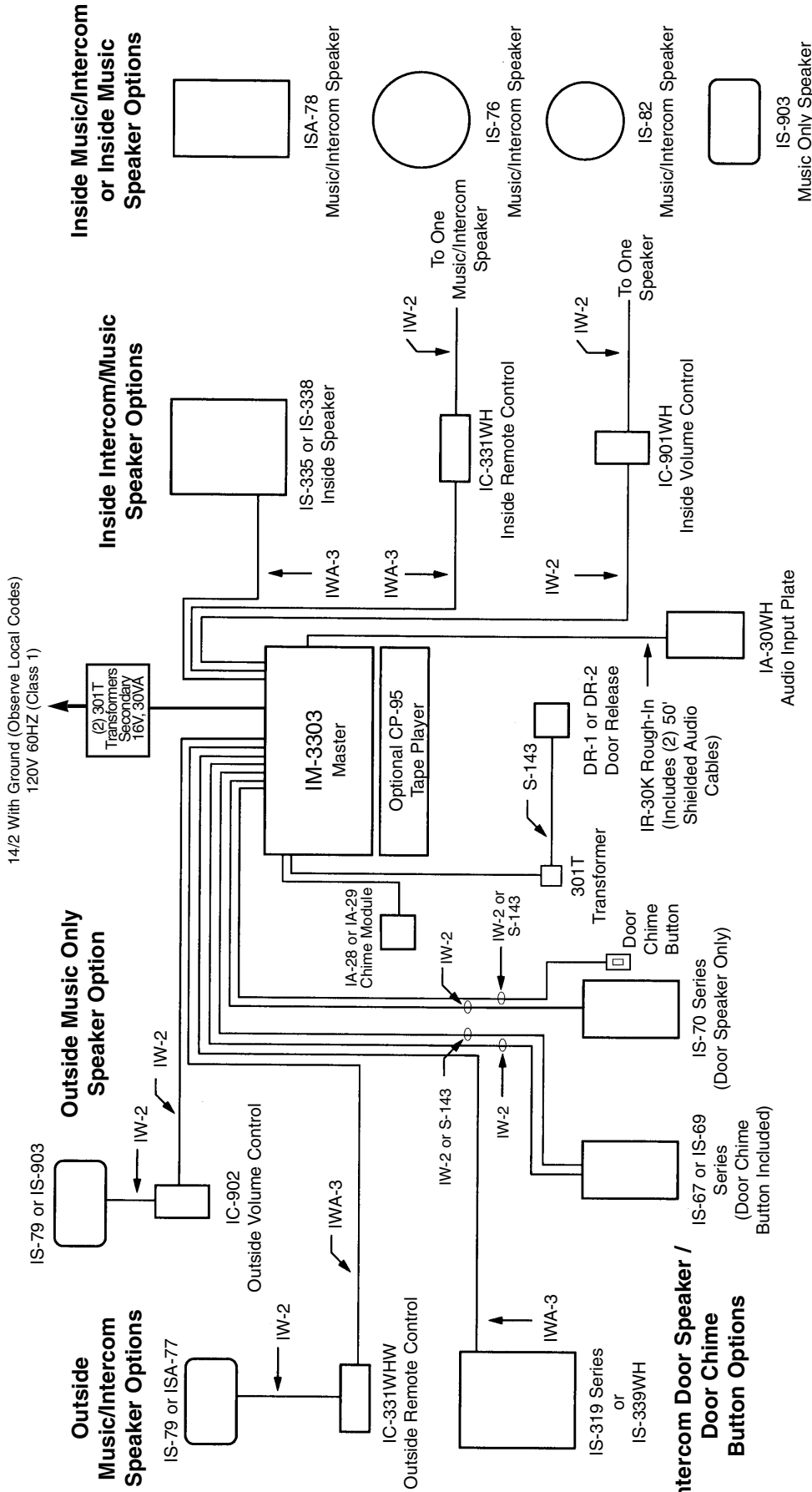
Available in USA and Canada

IM-4406 Series Components

| | | Model No. | Options | Description | Recessed Housing | Surface Mount Housing Model |
|--|---|---|--|------------------|------------------|-----------------------------|
| Music Intercom Master Expansion Module Cassette Player Chime Modules | IM-4406 | White (WH), Biscuit (L), Black (BL) | Premium Monaural Music Intercom Master with CD Player | IR-105 | | |
| | IA-440 | Increases capacity from 9 to 15 spkrs. | Allows addition of 6 room speakers | — | | |
| | CP-95 | White | Cassette Player with Auto Reverse | IR-90 | | |
| | IA-28 | — | Chime Module (8, 2 or 1 note - 3 doors) | — | | |
| | IA-29 | — | Chime Module (Multitone, 2 or 1 note - 3 doors) | — | | |
| Remote Intercom Speakers | IS-445 | White (WH), Biscuit (L), Black (BL), Sable Brown (D) | 5" Inside Remote with Controls | IR-50 | IA-60 | |
| | IS-448 | White (WH), Biscuit (L), Black (BL), Sable Brown (D) | 8" Inside Remote with Controls | IR-80 | — | |
| | IS-449WH | White | 5" Outside Remote with Controls | — | included | |
| | IS-419 | White (WH), Antq Brass (AB), Polishd Brass (PB) | 5" Outside Remote with Controls | IR-50 or IR-55** | — | |
| | IA-60 | White (WH), Biscuit (L), Walnut (D) | 5" Wall/Desk Mounting Frame | — | — | |
| | IA-6 | — | Wall Receptacle for IA-60 | — | — | |
| | IA-6C | — | Cable for IA-6 | — | — | |
| | IC-441WH | White | Inside Remote Intercom Control (one spkr per control) | IR-91 | — | |
| | IC-441WHW | White | Outside Remote Intercom Control (one spkr per control) | — | included | |
| | IS-76 | White | 8" Inside Round Recessed Speaker | IR-70 | — | |
| | ISA-77 | Black Grille with Brown frame/mounting bracket | 8" Outside Surface Mount Speaker | — | included | |
| | ISA-78 | White (WH), Biscuit (L) | 8" Inside Rectangular Recessed Speaker | IR-80 | — | |
| IS-79 | Aluminum | 8" Outside Square Recessed Speaker | IR-9 | — | | |
| IS-82 | White | 5" Inside Round Recessed Speaker | included | — | | |
| IS-903 | White (WH), Black (BL) | 3 1/2" 2-Way Inside/Outside Speaker | — | included | | |
| IS-905WH | White | 5 1/4" 2-Way Inside Recessed Speaker | IR-905 or IR-906 | — | | |
| IS-908WH | White | 8" 2-Way Inside Recessed Speaker | IR-908 or IR-909 | — | | |
| IS-920WH | White | 5 1/4" 2-Way Round Recessed Ceiling Speaker | included | — | | |
| IS-921WH | White | 6 1/2" 2-Way Round Recessed Ceiling Speaker | included | — | | |
| ISA-63 | Dark Brown/Brass | Surface Mount; Molded; No Pushbutton | — | included | | |
| ISB-64 | Dark Brown/Brass | Surface Mount; Molded; Unlighted Pushbutton | — | included | | |
| IS-67 | White (WH), Woodgrain/Gold (D) | Recessed; Molded; Lighted Pushbutton | IR-6 | IA-70 | | |
| IS-69 | White (WH), Antq Brass (AB), Polishd Brass (PB) | Recessed; Cast Metal; Lighted Pushbutton | IR-6 | IA-70 | | |
| IS-70 | White (WH), Antq Brass (AB), Polishd Brass (PB) | Recessed; Cast Metal; No Pushbutton | IR-6 | IA-70 | | |
| IC-901WH | White (WH) | Inside Volume Control (one spkr per control) | Std Wall Box | — | | |
| IC-902 | Stainless Steel | Outside Volume Control (one spkr per control) | Std Wall Box | — | | |
| IA-30WH | White | Wall Plate for use with External Music Source | IR-30K | — | | |
| PB-1CL | Clear | Pushbutton (snaps into knockout in Master) | — | — | | |
| DR-1 | Brass (BA) or Silver (SA) | Electric Door Release for Wood Jamb | — | — | | |
| DR-2-SA | Silver | Electric Door Release for Metal Jamb | — | — | | |
| IW-2-100 | — | 100 feet 2 Cond. 22 ga Door Speaker/Chime Cable | — | — | | |
| IW-2-100-UL | — | 100 feet 2 Cond. 22 ga UL Approved Door Speaker/Chime Cable | — | — | | |
| IW-2-500 | — | 500 feet 2 Cond. 22 ga Door Speaker/Chime Cable | — | — | | |
| IW-2-500-UL | — | 500 feet 2 Cond. 22 ga UL Approved Door Speaker/Chime Cable | — | — | | |
| IW-6-200 | — | 200 feet 6 Cond. 22 ga Intercom Cable | — | — | | |
| IW-6-200-UL | — | 200 feet 6 Cond. 22 ga UL Approved Intercom Cable | — | — | | |
| IW-6-1000 | — | 1000 feet 6 Cond. 22 ga Intercom Cable | — | — | | |
| IW-6-1000-UL | — | 1000 feet 6 Cond. 22 ga UL Approved Intercom Cable | — | — | | |
| S-143 | — | 2 Conductor Chime Button Cable (18 ga) | — | — | | |
| S-143-UL | — | 2 Conductor UL Approved Chime Button Cable (16 ga) | — | — | | |

**IR-55 used for stucco or brick exterior

NuTone IM-3303 System Block Diagrams

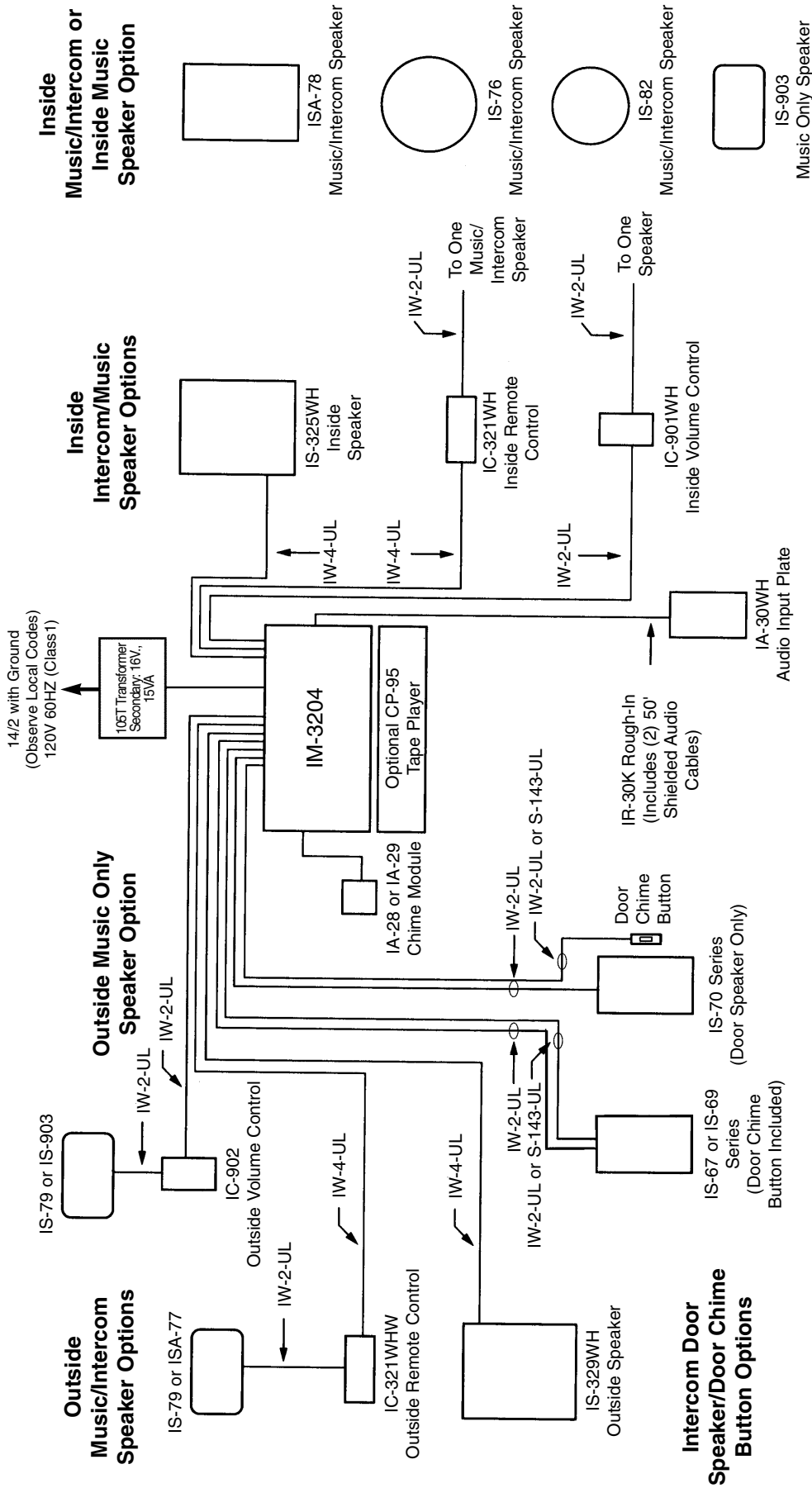


CABLE MODEL NUMBER

| 100 ft. Roll | 200 ft. Roll | 500 ft. Roll | 1000 ft. Roll | DESCRIPTION | Max Length | Max Syst. Length |
|--------------|--------------|--------------|---------------|--|------------|------------------|
| IW-2-100 | | IW-2-500 | | 2 Conductor Intercom Control or Volume Control Cable | 25 Feet | 325 Feet |
| IW-2-100-UL | | IW-2-500-UL | | UL Approved 2 Conductor Intercom Control or Volume Control Cable | 25 Feet | 325 Feet |
| IW-2-100 | | IW-2-500 | | 2 Conductor Door Speaker and Chime Button Cable | 300 Feet | 750 Feet |
| IW-2-100-UL | | IW-2-500-UL | | UL Approved 2 Conductor Door Speaker and Chime Button Cable | 300 Feet | 750 Feet |
| | IWA-3-200 | | IWA-3-1000 | 3 Conductor Music/Intercom Speaker Cable | 300 Feet | 2000 Feet |
| | IWA-3-200-UL | | IWA-3-1000-UL | UL Approved 3 Conductor Music/Intercom Speaker Cable | 300 Feet | 2000 Feet |

Available in USA and Canada

NuTone IM-3204 System Block Diagrams



CABLE MODEL NUMBER

| 100 ft. Roll | 200 ft. Roll | 500 ft. Roll | 1000 ft. Roll | DESCRIPTION | Max Length | Max System Length |
|--------------|--------------|--------------|---------------|--|------------|-------------------|
| IW-2-100-UL | | IW-2-500-UL | | 2 Conductor Intercom Control or Volume Control Cable | 25 Feet | 150 Feet |
| IW-2-100-UL | | IW-2-500-UL | | 2 Conductor Door Speaker and Chime Button Cable | 300 Feet | 450 Feet |
| | IW-4-200-UL | | IW-4-1000-UL | 4 Conductor Music/Intercom Speaker Cable | 150 Feet | 600 Feet |

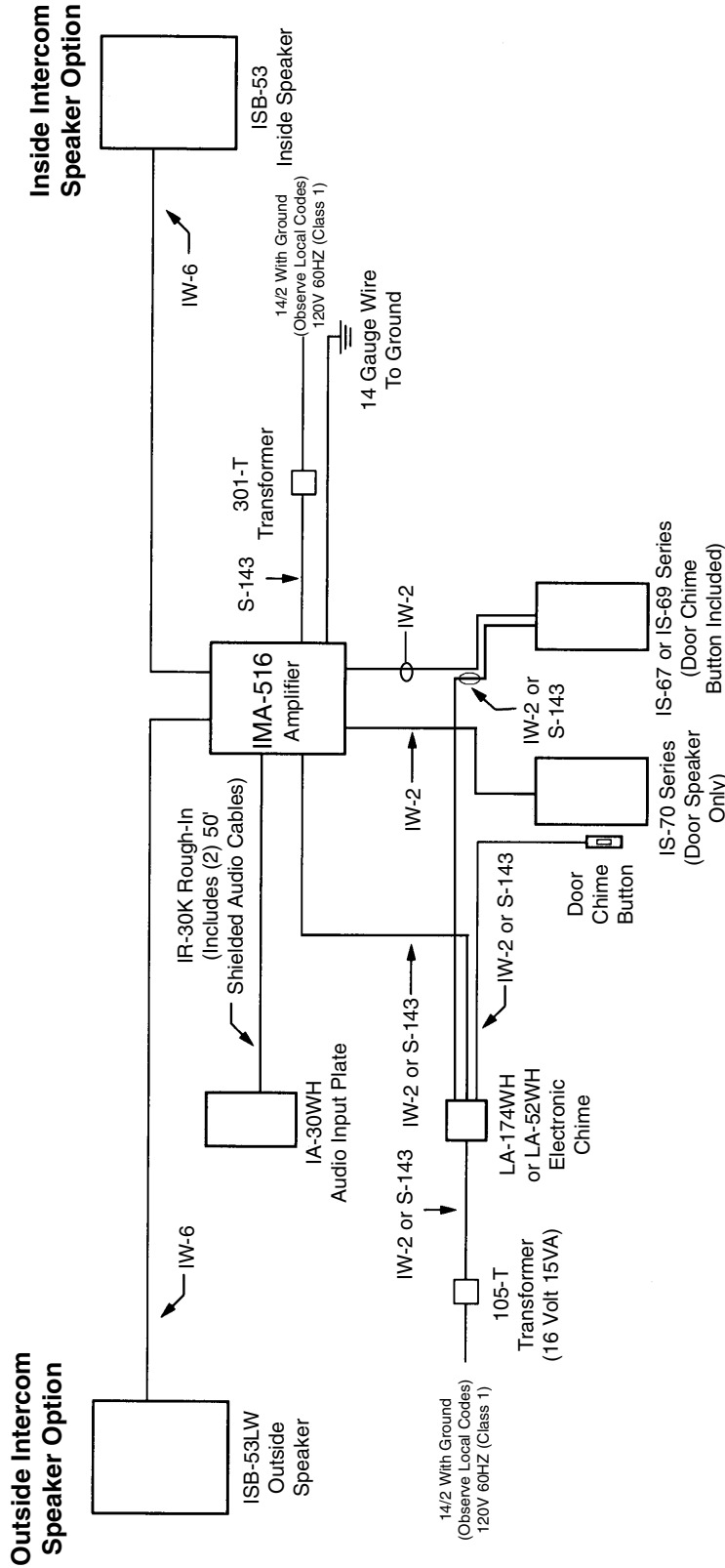
Available in USA

IM-3204 Series Components

| | Model No. | Options | Description | Recessed Housing |
|-----------------------|-----------|---------|---|------------------|
| Music Intercom Master | IM-3204WH | White | Basic Monaural Music Intercom Master | IR-103 |
| Cassette Player | CP-95 | White | Cassette Player with Auto Reverse | IR-90 |
| Chime Modules | IA-28 | — | Chime Module (8, 2 or 1 note - 3 doors) | — |
| | IA-29 | — | Chime Module (Multitune, 2 or 1 note - 3 doors) | — |

| | Model No. | Options | Description | Recessed Housing | Surface Mount Housing Model |
|---|--------------|---|---|------------------|-----------------------------|
| Remote Intercom Speakers | IS-325WH | White | 5" Inside Remote with Controls | IR-50 | IA-60WH |
| | IS-329WH | White | 5" Outside Remote with Controls | — | included |
| Intercom Speaker Frames | IA-60WH | White | 5" Wall/Desk Mounting Frame | — | — |
| | IA-6 | — | Wall Receptacle for IA-60 | — | — |
| | IA-6C | — | Cable for IA-6 | — | — |
| | IC-321WH | White | Inside Remote Intercom Control (one spkr per control) | IR-91 | — |
| Remote Intercom Controls | IC-321WHW | White | Outside Remote Intercom Control (one spkr per control) | — | included |
| Music/Intercom Speakers | IS-76 | White | 8" Inside Round Recessed Speaker | IR-70 | — |
| | ISA-77 | Black Grille with Brown frame/mounting bracket | 8" Outside Surface Mount Speaker | — | included |
| | ISA-78 | White (WH), Biscuit (L) | 8" Inside Rectangular Recessed Speaker | IR-80 | — |
| | IS-79 | Aluminum | 8" Outside Square Recessed Speaker | IR-9 | — |
| | IS-82 | White | 5" Inside Round Recessed Speaker | included | — |
| | IS-100 | White | 6" Round Ceiling/Wall Speaker | included | — |
| | IS-903 | White (WH), Black (BL) | 3 1/2" 2-Way Inside/Outside Speaker | — | included |
| Music Speakers <small>Music and intercom speakers must not be installed in the same room or a squeal will occur during intercom operation)</small> | IS-905WH | White | 5 1/4" 2-Way Inside Recessed Speaker | IR-905 or IR-906 | — |
| | IS-908WH | White | 8" 2-Way Inside Recessed Speaker | IR-908 or IR-909 | — |
| | IS-920WH | White | 5 1/4" 2-Way Round Recessed Ceiling Speaker | included | — |
| | IS-921WH | White | 6 1/2" 2-Way Round Recessed Ceiling Speaker | included | — |
| | ISA-63 | Dark Brown/Brass | Surface Mount; Molded; No Pushbutton | — | included |
| | ISB-64 | Dark Brown/Brass | Surface Mount; Molded; Unlighted Pushbutton | — | included |
| | IS-67 | White (WH), Woodgrain/Gold (D) | Recessed; Molded; Lighted Pushbutton | IR-6 | IA-70 |
| Volume Controls | IS-69 | White (WH), Antq Brass (AB), Polishd Brass (PB) | Recessed; Cast Metal; Lighted Pushbutton | IR-6 | IA-70 |
| | IS-70 | White (WH), Antq Brass (AB), Polishd Brass (PB) | Recessed; Cast Metal; No Pushbutton | IR-6 | IA-70 |
| | IC-901WH | White (WH) | Inside Volume Control (one spkr per control) | Std Wall Box | — |
| Audio Adapter Plate Cable | IC-902 | Stainless Steel | Outside Volume Control (one spkr per control) | Std Wall Box | — |
| | IA-30WH | White | Wall Plate for use with External Music Source | IR-30K | — |
| | IW-2-100-UL | — | 100 feet 2 Cond. 22 ga UL Approved Door Speaker/Chime Cable | — | — |
| | IW-2-500-UL | — | 500 feet 2 Cond. 22 ga UL Approved Door Speaker/Chime Cable | — | — |
| | IW-4-200-UL | — | 200 feet 4 Cond. 22 ga UL Approved Intercom Cable | — | — |
| | IW-4-1000-UL | — | 1000 feet 4 Cond. 22 ga UL Approved Intercom Cable | — | — |
| S-143-UL | — | 2 Conductor UL Approved Chime Button Cable | — | — | |

NuTone IMA-516 System Block Diagrams



CABLE MODEL NUMBER

| 100 ft. Roll | 200 ft. Roll | 500 ft. Roll | 1000 ft. Roll | DESCRIPTION | Max Length | Max System Length |
|--------------|--------------|--------------|---------------|--|------------|-------------------|
| IW-2-100 | | IW-2-500 | | 2 Conductor Door Speaker Cable | 300 Feet | 400 Feet |
| IW-2-100-UL | | IW-2-500-UL | | UL Approved 2 Conductor Door Speaker Cable | 300 Feet | 400 Feet |
| | | S-143 | | 2 Conductor Transformer to Amplifier Cable | 150 Feet | 150 Feet |
| | | S-143-UL | | UL Approved 2 Conductor Transformer to Amplifier Cable | 150 Feet | 150 Feet |
| | IW-6-200 | | IW-6-1000 | 6 Conductor Intercom Speaker Cable | 150 Feet | 4000 Feet |
| | IW-6-200-UL | | IW-6-1000-UL | UL Approved 6 Conductor Intercom Speaker Cable | 150 Feet | 4000 Feet |

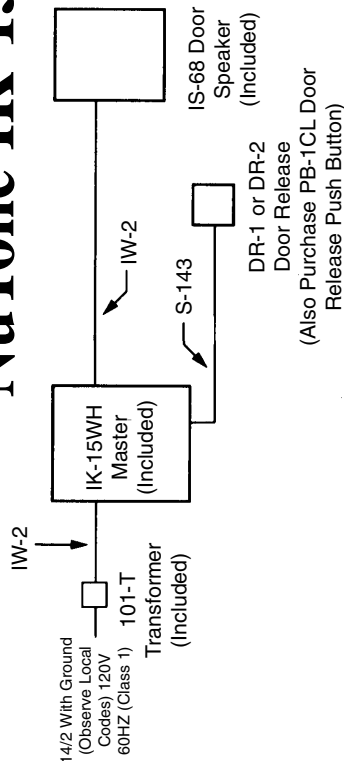
Available in USA and Canada

IMA-516 Series Components

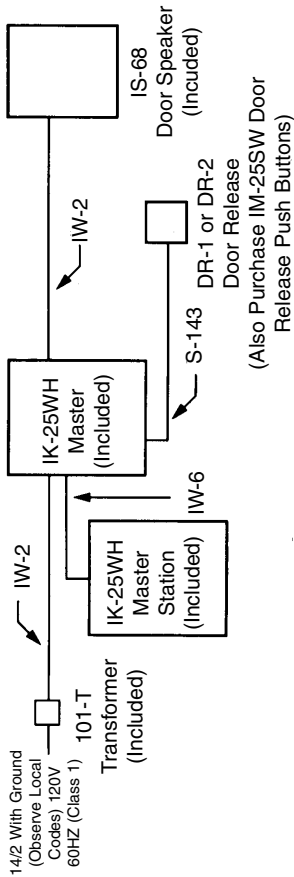
| | Model No. | Options | Description | Recessed Housing |
|-----------------|-----------|------------------------------|-----------------------------------|------------------|
| Intercom Master | IMA-516 | Eggshell White with Aluminum | Intercom Master, Surface Mount | — |
| Cassette Player | CP-95 | White | Cassette Player with Auto Reverse | IR-90 |
| Transformer | 301T | — | 16 Volt 30VA Transformer | — |

| | Model No. | Options | Description | Recessed Housing | Surface Mount Housing Model |
|--------------------------|---------------------------|--|---|---|-----------------------------|
| Remote Intercom Speakers | ISB-53 | White (WH), Eggshell (L) | 3 1/2" Inside Remote with Controls | IR-3 | IA-15 |
| | ISB-53LW | Eggshell White | 3 1/2" Outside Remote with Controls | — | included |
| Music Speakers | IS-76 | White | 8" Inside Round Recessed Speaker | IR-70 | — |
| | ISA-77 | Black Grille with Brown frame/mounting bracket | 8" Inside Surface Mount Speaker | — | included |
| | ISA-78 | White (WH), Biscuit (L) | 8" Inside Rectangular Recessed Speaker | IR-80 | — |
| | IS-79 | Aluminum | 8" Outside Square Recessed Speaker | IR-9 | — |
| | IS-82 | White | 5" Inside Round Recessed Speaker | included | — |
| | IS-100 | White | 6" White Recessed Ceiling/Wall Speaker | included | — |
| | IS-903 | White (WH), Black (BL) | 3 1/2" 2-Way Inside/Outside Speaker | — | included |
| | IS-905WH | White | 5 1/4" 2-Way Inside Recessed Speaker | IR-905 or IR-906 | — |
| | IS-908WH | White | 8" 2-Way Inside Recessed Speaker | IR-908 or IR-909 | — |
| | IS-920WH | White | 5 1/4" 2-Way Round Recessed Ceiling Speaker | included | — |
| Door Speakers | IS-921WH | White | 6 1/2" 2-Way Round Recessed Ceiling Speaker | included | — |
| | ISA-63 | Dark Brown/Brass | Surface Mount; Molded; No Pushbutton | — | included |
| | ISB-64 | Dark Brown/Brass | Surface Mount; Molded; Unlighted Pushbutton | — | included |
| | IS-67 | White (WH), Woodgrain/Gold (D) | Recessed; Molded; Lighted Pushbutton | IR-6 | IA-70 |
| | IS-69 | White (WH), Antq Brass (AB), Polshd Brass (PB) | Recessed; Cast Metal; Lighted Pushbutton | IR-6 | IA-70 |
| | IS-70 | White (WH), Antq Brass (AB), Polshd Brass (PB) | Recessed; Cast Metal; No Pushbutton | IR-6 | IA-70 |
| | IC-901WH | White (WH) | Inside Volume Control (one spkr per control) | Std Wall Box | — |
| | IC-902 | Stainless Steel | Outside Volume Control (one spkr per control) | Std Wall Box | — |
| | IA-30WH | White | Wall Plate for use with External Music Source | IR-30K | — |
| | Audio Adapter Plate Cable | IW-2-100 | — | 100 feet 2 Cond. 22 ga Door Speaker Cable | — |
| IW-2-100-UJL | | — | 100 feet 2 Cond. 22 ga UL Approved Door Speaker Cable | — | — |
| IW-2-500 | | — | 500 feet 2 Cond. 22 ga Door Speaker Cable | — | — |
| IW-2-500-UJL | | — | 500 feet 2 Cond. 22 ga UL Approved Door Speaker Cable | — | — |
| IW-6-200 | | — | 200 feet 6 Cond. 22 ga Intercom Cable | — | — |
| IW-6-200-UJL | | — | 200 feet 6 Cond. 22 ga UL Approved Intercom Cable | — | — |
| IW-6-1000 | | — | 1000 feet 6 Cond. 22 ga Intercom Cable | — | — |
| IW-6-1000-UJL | | — | 1000 feet 6 Cond. 22 ga UL Approved Intercom Cable | — | — |
| S-143 | | — | 2 Conductor Chime Button Cable (18 ga) | — | — |
| S-143-UJL | | — | 2 Conductor UL Approved Chime Button Cable (16 ga) | — | — |

NuTone IK-15 & IK-25 Block Diagrams



Master Station, Door Speaker and 101-T Transformer included. Purchase cable and optional door release separately.



Master and Inside Remote Stations, Door Speaker and 101-T Transformer included. Purchase cable and optional door release separately.

IK-15

| CABLE MODEL NUMBER | 100 ft. Roll | 200 ft. Roll | 500 ft. Roll | 1000 ft. Roll | DESCRIPTION | Max Length |
|--------------------|--------------|--------------|--------------|---------------|---|------------|
| IW-2-100 | | | IW-2-500 | | Transformer to IK-15 Cable | 100 Feet |
| IW-2-100-UL | | | IW-2-500-UL | | UL approved Transformer to IK-15 Cable | 100 Feet |
| IW-2-100 | | | IW-2-500 | | IK-15 to Door Speaker Cable | 300 Feet |
| IW-2-100-UL | | | IW-2-500-UL | | UL Approved IK-15 to Door Speaker Cable | 300 Feet |
| IW-2-100 | | | IW-2-500 | | IK-15 to Door Release Cable | 100 Feet |
| IW-2-100-UL | | | IW-2-500-UL | | UL Approved IK-15 to Door Release Cable | 100 Feet |
| | | | S-143 | | IK-15 to Door Release Cable | 200 Feet |
| | | | S-143-UL | | UL Approved IK-15 to Door Release Cable | 200 Feet |

IK-25

| CABLE MODEL NUMBER | 100 ft. Roll | 200 ft. Roll | 500 ft. Roll | 1000 ft. Roll | DESCRIPTION | Max Length |
|--------------------|--------------|--------------|--------------|---------------|--|------------|
| IW-2-100 | | | IW-2-500 | | Transformer to IK-25 Cable | 100 Feet |
| IW-2-100-UL | | | IW-2-500-UL | | UL approved Transformer to IK-25 Cable | 100 Feet |
| IW-2-100 | | | IW-2-500 | | IK-25 to Door Speaker Cable | 300 Feet |
| IW-2-100-UL | | | IW-2-500-UL | | UL Approved IK-25 to Door Speaker Cable | 300 Feet |
| | | IW-6-200 | | IW-6-1000 | IK-25 Master to IK-25 Remote Cable | 100 Feet* |
| | | IW-6-200-UL | | IW-6-1000-UL | UL Approved IK-25 Master to IK-25 Remote Cable | 100 Feet* |
| IW-2-100 | | | IW-2-500 | | IK-25 to Door Release Cable | 50 Feet |
| IW-2-100-UL | | | IW-2-500-UL | | UL Approved IK-25 to Door Release Cable | 50 Feet |
| | | | S-143 | | IK-25 to Door Release Cable | 100 Feet |
| | | | S-143-UL | | UL Approved IK-25 to Door Release Cable | 100 Feet |

* 50 feet maximum if door release is used.

IK-15 Components

| | Model No. | Options | Description | Recessed Housing | Surface Mount |
|------------------|-----------|--|--|------------------|---------------|
| DoorCom Intercom | IK-15WH | Eggshell White Inside Unit, Brown Door Speaker | Two-Station Door Answering Intercom, Surface Mount | — | included |

| | Model No. | Options | Description | Recessed Housing | Surface Mount |
|-------------------------|-------------|---------------------------|---|------------------|---------------|
| Additional Door Speaker | IS-68 | Brown | Surface Mount; Molded; Unlighted Pushbutton | — | included |
| | PB-1CL | Clear | Pushbutton (snaps into IK-15 inside station) | — | — |
| Door Release | DR-1 | Brass (BA) or Silver (SA) | Electric Door Release for Wood Jamb | — | — |
| | DR-2-SA | Silver | Electric Door Release for Metal Jamb | — | — |
| Cable | IW-2-100 | — | 100 feet 2 Cond. 22 ga Door Speaker Cable | — | — |
| | IW-2-100-UL | — | 100 feet 2 Cond. 22 ga UL Approved Door Speaker Cable | — | — |
| | IW-2-500 | — | 500 feet 2 Cond. 22 ga Door Speaker Cable | — | — |
| | IW-2-500-UL | — | 500 feet 2 Cond. 22 ga UL Approved Door Speaker Cable | — | — |
| | S-143 | — | 2 Conductor Door Release Cable (18 ga) | — | — |
| | S-143-UL | — | 2 Conductor UL Approved Door Release Cable (16 ga) | — | — |

IK-25 Components

| | Model No. | Options | Description | Recessed Housing | Surface Mount |
|------------------|-----------|--|--|------------------|---------------|
| DoorCom Intercom | IK-25WH | Eggshell White Inside Unit, Brown Door Speaker | Three Station Door Answering Intercom, Surface Mount | — | included |

| | Model No. | Options | Description | Recessed Housing | Surface Mount |
|-------------------------|--------------|---------------------------|---|------------------|---------------|
| Additional Door Speaker | IS-68 | Brown | Surface Mount; Molded; Unlighted Pushbutton | — | included |
| | IM-25-SW | Clear | Pushbutton (snaps into IK-25 inside station) | — | — |
| Door Release | DR-1 | Brass (BA) or Silver (SA) | Electric Door Release for Wood Jamb | — | — |
| | DR-2-SA | Silver | Electric Door Release for Metal Jamb | — | — |
| Cable | IW-2-100 | — | 100 feet 2 Cond. 22 ga Door Speaker Cable | — | included |
| | IW-2-100-UL | — | 100 feet 2 Cond. 22 ga UL Approved Door Speaker Cable | — | — |
| | IW-2-500 | — | 500 feet 2 Cond. 22 ga Door Speaker Cable | — | — |
| | IW-2-500-UL | — | 500 feet 2 Cond. 22 ga UL Approved Door Speaker Cable | — | — |
| | IW-6-200 | — | 200 feet 6 Cond. 22 ga Intercom Cable | — | — |
| | IW-6-200-UL | — | 200 feet 6 Cond. 22 ga UL Approved Intercom Cable | — | — |
| | IW-6-1000 | — | 1000 feet 6 Cond. 22 ga Intercom Cable | — | — |
| | IW-6-1000-UL | — | 1000 feet 6 Cond. 22 ga UL Approved Intercom Cable | — | — |
| | S-143 | — | 2 Conductor Door Release Cable (18 ga) | — | — |
| | S-143-UL | — | 2 Conductor UL Approved Door Release Cable (16 ga) | — | — |

Dimensions for Rough-Ins and Trim

| Model | Width | Height | In-Wall Dept | Projects From Wall |
|---------------------------|--------------------|--------------------|-------------------|-----------------------|
| MASTERS | | | | |
| IK-15, IK-25 Room Speaker | 5 $\frac{1}{2}$ " | 7 $\frac{3}{4}$ " | — | 1 $\frac{1}{8}$ " |
| IM-3204 | 15 $\frac{1}{2}$ " | 8 $\frac{1}{4}$ " | 3 $\frac{3}{8}$ " | 1 $\frac{1}{4}$ " |
| IM-3303 | 15 $\frac{1}{2}$ " | 8 $\frac{1}{4}$ " | 3 $\frac{3}{8}$ " | 1 $\frac{1}{4}$ " |
| IM-4406 | 17 $\frac{3}{4}$ " | 10 $\frac{5}{8}$ " | 3 $\frac{1}{2}$ " | 1 $\frac{1}{8}$ " |
| IM-5000 | 8" | 12 $\frac{1}{2}$ " | — | 3 $\frac{1}{2}$ " |
| IMA-516 | 4 $\frac{5}{8}$ " | 7 $\frac{5}{8}$ " | — | 2 $\frac{3}{8}$ " |

| Model | Width | Height | In-Wall Dept | Projects From Wall |
|------------------------|--------------------|-------------------|-------------------|-----------------------|
| CASSETTE PLAYER | | | | |
| CP-95 | 15 $\frac{1}{4}$ " | 3 $\frac{1}{4}$ " | 3 $\frac{5}{8}$ " | 1 $\frac{1}{8}$ " |

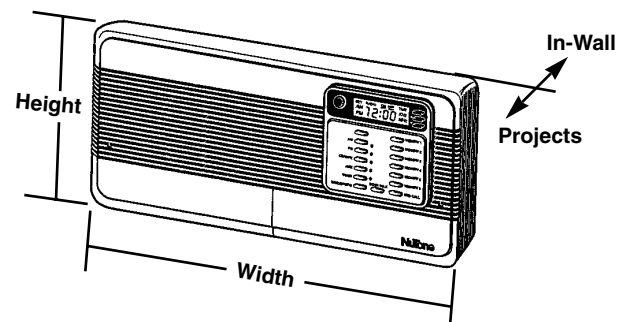
| Model | Width | Height | In-Wall Dept | Projects From Wall |
|--------------------------|--------------------|--------------------|-------------------|-----------------------|
| ROUGH-IN HOUSINGS | | | | |
| IR-3 | 3 $\frac{7}{8}$ " | 5 $\frac{7}{8}$ " | — | — |
| IR-6 | 3 $\frac{3}{4}$ " | 5" | — | — |
| IR-9 | 10 $\frac{5}{8}$ " | 11 $\frac{1}{8}$ " | — | — |
| IR-50 | 5 $\frac{3}{8}$ " | 7 $\frac{1}{4}$ " | — | — |
| IR-55 | 5 $\frac{3}{8}$ " | 7 $\frac{1}{4}$ " | — | — |
| IR-70 | 17 $\frac{3}{4}$ " | 12 $\frac{3}{8}$ " | — | — |
| IR-80 | 8 $\frac{5}{8}$ " | 10 $\frac{1}{4}$ " | — | — |
| IR-90 | 14 $\frac{1}{2}$ " | 2 $\frac{1}{4}$ " | — | — |
| IR-91 | 6 $\frac{1}{8}$ " | 3 $\frac{1}{4}$ " | — | — |
| IR-103 | 14 $\frac{1}{2}$ " | 7" | 3 $\frac{3}{8}$ " | — |
| IR-104 | 14 $\frac{1}{2}$ " | 7" | 3 $\frac{3}{8}$ " | — |
| IR-105 | 14 $\frac{1}{2}$ " | 9" | 3 $\frac{3}{8}$ " | — |
| IR-905 | 6 $\frac{3}{8}$ " | 9 $\frac{7}{8}$ " | — | — |
| IR-906 | 5 $\frac{5}{8}$ " | 10 $\frac{5}{8}$ " | — | — |
| IR-908 | 9 $\frac{1}{8}$ " | 13 $\frac{1}{8}$ " | — | — |
| IR-909 | 8 $\frac{1}{4}$ " | 13 $\frac{3}{8}$ " | — | — |

| Model | Width | Height | In-Wall Dept | Projects From Wall |
|--------------------------------|-------------------------|--------------------|--------------------|-----------------------|
| MUSIC/INTERCOM SPEAKERS | | | | |
| IS-76 | 12 $\frac{3}{4}$ " dia. | — | 2 $\frac{3}{4}$ " | $\frac{1}{4}$ " |
| IS-79 | 12 $\frac{5}{8}$ " | 12 $\frac{5}{8}$ " | 2 $\frac{5}{8}$ " | $\frac{1}{4}$ " |
| IS-82 | 8" dia. | — | 2 $\frac{1}{4}$ " | $\frac{1}{4}$ " |
| IS-100 | 6 $\frac{5}{8}$ " dia. | — | 1 $\frac{1}{4}$ " | $\frac{3}{4}$ " |
| IS-319 | 6 $\frac{1}{4}$ " | 8 $\frac{1}{4}$ " | 1 $\frac{1}{8}$ " | $\frac{1}{2}$ " |
| IS-325WH | 6 $\frac{5}{16}$ " | 8 $\frac{1}{4}$ " | 1 $\frac{1}{16}$ " | $\frac{7}{8}$ " |
| IS-329WH | 6 $\frac{11}{16}$ " | 8 $\frac{5}{8}$ " | 3 $\frac{1}{8}$ " | 2 $\frac{15}{16}$ " |
| IS-335 | 6 $\frac{3}{8}$ " | 8 $\frac{1}{4}$ " | 1 $\frac{1}{8}$ " | $\frac{7}{8}$ " |
| IS-338 | 10" | 11 $\frac{1}{4}$ " | 2 $\frac{3}{4}$ " | $\frac{7}{8}$ " |
| IS-339WH | 6 $\frac{3}{4}$ " | 8 $\frac{5}{8}$ " | — | 3 $\frac{1}{8}$ " |
| IS-419 | 6 $\frac{1}{4}$ " | 8 $\frac{1}{4}$ " | 1 $\frac{1}{8}$ " | $\frac{1}{2}$ " |
| IS-445 | 6 $\frac{3}{8}$ " | 8 $\frac{1}{4}$ " | 1 $\frac{5}{8}$ " | $\frac{7}{8}$ " |
| IS-448 | 10" | 11 $\frac{1}{4}$ " | 2 $\frac{3}{4}$ " | $\frac{7}{8}$ " |
| IS-449WH | 6 $\frac{5}{8}$ " | 8 $\frac{5}{8}$ " | — | 3 $\frac{1}{8}$ " |
| IS-515 | 6 $\frac{1}{4}$ " | 8 $\frac{1}{4}$ " | 1 $\frac{1}{8}$ " | 1" |
| IS518 | 10 $\frac{5}{8}$ " | 11 $\frac{1}{2}$ " | 2 $\frac{1}{8}$ " | $\frac{7}{8}$ " |
| IS-519 | 6 $\frac{1}{4}$ " | 8 $\frac{1}{4}$ " | 1 $\frac{1}{8}$ " | 1" |
| IS-903 | 7 $\frac{1}{4}$ " | 4 $\frac{3}{4}$ " | — | 6 $\frac{1}{2}$ " |
| IS-905WH | 7 $\frac{1}{2}$ " | 11" | 2 $\frac{3}{8}$ " | $\frac{3}{8}$ " |
| IS-908WH | 10" | 14" | 3 $\frac{1}{4}$ " | $\frac{3}{8}$ " |
| IS-920WH | 8" dia. | — | 2 $\frac{5}{8}$ " | $\frac{3}{4}$ " |
| IS-921WH | 8 $\frac{7}{8}$ " dia. | — | 2 $\frac{7}{8}$ " | $\frac{3}{4}$ " |
| ISA-78 | 10 $\frac{5}{8}$ " | 11 $\frac{3}{8}$ " | 2 $\frac{3}{4}$ " | $\frac{3}{8}$ " |
| ISB-53 | 4 $\frac{7}{8}$ " | 6 $\frac{3}{4}$ " | 3 $\frac{1}{8}$ " | $\frac{1}{2}$ " |
| ISB-53LW | 4 $\frac{7}{8}$ " | 6 $\frac{3}{4}$ " | — | 3 $\frac{1}{8}$ " |

| Model | Width | Height | In-Wall Dept | Projects From Wall |
|-----------------------------|-------------------|-------------------|-----------------|-----------------------|
| MUSIC VOLUME CONTROL | | | | |
| IC-901 | 2 $\frac{3}{4}$ " | 4 $\frac{3}{4}$ " | $\frac{1}{2}$ " | $\frac{7}{8}$ " |
| IC-902 | 2 $\frac{3}{4}$ " | 4 $\frac{1}{2}$ " | $\frac{3}{4}$ " | $\frac{7}{8}$ " |

| Model | Width | Height | In-Wall Dept | Projects From Wall |
|------------------------|-------|--------|-------------------|-----------------------|
| REMOTE CONTROLS | | | | |
| IC-321WH | 7" | 4" | 1 $\frac{1}{8}$ " | 1 $\frac{1}{4}$ " |
| IC-321WHW | 7" | 4" | — | 2 $\frac{1}{4}$ " |
| IC-331WH | 7" | 4" | 1 $\frac{1}{8}$ " | $\frac{7}{8}$ " |
| IC-331WHW | 7" | 4" | — | 2 $\frac{1}{4}$ " |
| IC-441WH | 7" | 4" | 1 $\frac{1}{8}$ " | $\frac{7}{8}$ " |
| IC-441WHW | 7" | 4" | — | 2 $\frac{1}{8}$ " |
| IC-502 | 7" | 4" | 1" | 1" |
| IC-502LW | 7" | 4" | 1" | 1" |

| Model | Width | Height | In-Wall Dept | Projects From Wall |
|---------------------------|-------------------|-------------------|-------------------|-----------------------|
| DOOR SPEAKER | | | | |
| IK-15, IK-25 Door Speaker | 4 $\frac{1}{8}$ " | 5 $\frac{3}{8}$ " | — | 1 $\frac{1}{4}$ " |
| IS-67 | 4 $\frac{7}{8}$ " | 6 $\frac{1}{2}$ " | 2" | $\frac{5}{8}$ " |
| IS-69 | 4 $\frac{7}{8}$ " | 6 $\frac{1}{2}$ " | 1 $\frac{3}{4}$ " | $\frac{5}{8}$ " |
| IS-70 | 4 $\frac{7}{8}$ " | 6 $\frac{1}{2}$ " | 1 $\frac{3}{4}$ " | $\frac{5}{8}$ " |
| ISA-63 | 3 $\frac{3}{4}$ " | 4 $\frac{5}{8}$ " | — | 1 $\frac{1}{8}$ " |
| ISB-64 | 3 $\frac{3}{4}$ " | 4 $\frac{5}{8}$ " | — | 1 $\frac{1}{8}$ " |



All illustrations and specifications in this Selection and Installation Guide are based on the latest product information available at the time of publication. NuTone reserves the right to make changes at any time without notice, in prices, colors, materials, equipment, sizes, specification and models, and to discontinue models or equipment.

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