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NM100 SERIES SYSTEM INSTALLATION

READ AND SAVE THESE INSTRUCTIONS

CAUTION

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

- 1. Read all instructions carefully before installing or using the NM100 System.
- 2. The NM100 must be installed by a qualified dealer or installer, and must conform to all local building and electrical codes.
- 3. For continued protection against risk of fire replace the fuse in the power switch module only with the same type 3 Amp, 250 Volt fuse.
- 4. Adhere to all warnings on the NM100 and in these instructions. Follow all operating and installation instructions.



THESE INSTALLATION INSTRUCTIONS ARE FOR USE BY QUALIFIED PERSONNEL ONLY. TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT PERFORM ANY SERVICING OTHER THAN THAT CONTAINED IN THE OPERATING INSTRUCTIONS UNLESS YOU ARE QUALIFIED TO DO SO.

 Do not attempt to service the NM100 yourself as opening or removing covers may expose you to dangerous voltage or other hazards. 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.

- Locate the system away from heat sources such as radiators, heat registers, stoves, or other heat producing products.
- Do not locate the NM100 master or remote stations in an outside wall.
- Do not expose the NM100 to moisture. Doing so can create fire or shock hazards and void the warranty.
- Do not place the NM100 master or remote stations in any wall cavity with any other electrical wiring in the cavity.
- Install the NM100 system after application of the wall covering material.
- Do not expose the outdoor remote station speakers to significant water contact. The outdoor remote speakers are weatherproof but not waterproof. Continuous direct water exposure will cause system problems.

- Do not connect a remote or door station wire if you are unsure of its terminating point. Connecting a door station to a remote station may result in system damage.
- Do ensure that all rough-in instructions have been followed before power is applied to the NM100 system.
- Do not splice cables. Splices are unreliable and defeat the signal isolation properties of the cable.
- Do not attach devices unauthorized for use with this system. Authorized devices include:

Audio components connected via a line level input

NC300 6-disc player

- If extra cables have been run for future speaker additions, care must be taken to ensure these cables are not connected to the NM100 master unit. Un-terminated cables (no station) connected to the NM100 master may cause electrical feedback that will damage the master station.
- Do not over-tighten the screws for the remote stations or master as the plastic face panels may crack or strip out.
- Use only NuTone certified replacement parts and have them installed by a NuTone dealer or installer. Unauthorized substitutions can result in fire, electric shock, or other hazards.
- Upon completion of any service or product repair, have the dealer or installer conduct a safety check to ensure the system is in proper operating condition.
- Use only a damp cloth to clean the NM100 master and remote stations. Do not use liquid cleaners or aerosol cleaners.

CAUTION: WIRING

- A qualified electrician must run a 120V AC line to the NM100 retrofit transformers.
- Individual wire runs should not exceed more than 350 FEET of wire from any single remote station to the NM100 master or 1000 total feet for the entire system.
- Label all wiring runs. <u>Connecting the wires to the NM100</u> master, remote station or door stations incorrectly may result in system damage.
- Run a single cable from the master unit location to each remote station and door station in a "home run" fashion. Do not loop cable from one remote station to another.
- Do not staple cables. Staples cause shorts.
- Do not splice cables. Splices are unreliable and defeat the signal isolation properties of the cables.
- Do not run electrical wires through the rough-ins. If you encounter 120VAC wires running through a rough-in during a retrofit you must have a qualified electrician rerun those wires around the rough-in.

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- Keep cables at least 18 inches from fluorescent light fixtures, dimmer controls, and all other wiring. This includes AC wiring, security cable, cordless phone units, and other control wires. These can cause a "hum" or "buzzing" sound.
- Keep cables away from objects such as heating and air conditioning ducts, metal construction plates, and anything else with sharp edges that can damage the cables.

CAUTION: REMOTE STATION ROUGH-IN

Careful consideration should be used when determining the location of the remote stations and master. Since this is a retrofit system you will not be able to control the location of the existing system. But please follow the guidelines below if you install any new locations:

- Do not install remote stations in return air ducts.
- Do not install remote stations in exterior walls. Insulation materials will change speaker range and efficiency. Temperature changes in the wall will reduce speaker life.
- Do not install remote stations in saunas. They will not withstand the extreme heat and moisture.
- Do not install remote stations in stud cavities with other wiring or appliances.
- Do not install remote stations within 18" of dimmers, fluorescent light fixtures, security wiring, cordless phone units, and other control wiring.
- Do not install remote stations within 10 feet of other remote stations or the NM100 master unit. This will cause acoustic feedback.
- Do not install remote stations in stud cavities with other remote stations or the NM100 master unit. This will cause acoustic feedback.
- Do not install remote stations facing other remote stations or the NM100 master unit. This will cause acoustic feedback.
- Do make sure all rough-ins are level and oriented as shown in these instructions.

INSTALLATION

Designed to update older intercom systems, the NM100 is a whole-house music communications system that uses your existing intercom 3 or 4 conductor system wire. It is designed to provide years of enjoyment and service to the homeowner.

To ensure that the homeowner receives the high-quality music and voice reproduction that the system is designed to deliver, it is important that each step of the installation be done carefully. In the event you need troubleshooting installation assistance, please call our technical staff at 1-888-336-6151.

Prior to installing the NM100 system, read and observe the Important Safety Instructions.

The NM100 retrofit installation is completed using the following steps:

- Develop the job estimate
- Removal of the old intercom system
- Install the NWH300 or NWH300C rough-in

- Replace the remote stations (Note: do not remove the existing remote station rough-ins)
- Install the optional NC300 player
- Install the NM100 master and make all remote station connections
- Test the system

The following tools are required for the NM100 installation. The use of these or other tools is dependent on the existing intercom system installation:

- #2 Phillips screwdriver
- Wire stripper/cutter
- Tape measure
- Level
- Tin Snips
- Digital Multimeter (dmm)
- Small (or precision size) Philips/Flat head screw driver
- Power drill with 1" auger
- Small Crowbar
- Large Flat head screw driver
- Rubber mallet
- Extension cord
- Wood chisel
- Dry wall saw

You may not need to use all these tools on each install but having them handy will make the overall installation process easier.

DEVELOP THE JOB ESTIMATE

It is critical that you determine the complexity of each retrofit installation prior to developing the job estimate. It is hard to predict all the unique situations you will encounter in the field. For this reason NuTone recommends you visit each retrofit site prior to developing a job estimate and ordering equipment. During this onsite visit it is recommended that you complete the items listed below:

- Determine the model number and manufacturer of the existing intercom system.
- Count the number of remote stations and door stations.
- Determine if the door stations and outdoor remote stations are surface or flush mount.
- Remove the master from the wall to see if any non-standard installation situations might exist, including:
 - Electrical running through the rough-in.
 - Telephone wires running through the rough-in.

- Stud spacing that varies from a standard 16" on center spacing

- The type of wire used for indoor remote, door and outdoor remote station runs (NuTone, M&S or other such as telephone wire). If you encounter non-standard wire contact our Technical Support team at 1-888-336-6151 for assistance.

- A remote transformer
- A remote door chime

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The answers to the above information will help you scope, price and install the retrofit system.

REMOVING THE OLD SYSTEM

Prior to removing the existing intercom system make sure all power is turned off at the intercom location. Remove the screws from the intercom master and while removing the intercom, make sure to carefully label each wire with its corresponding room location. Disconnect all the remote station and door station wires from the master. Then carefully remove the existing wall housing and transformers.

If the existing system was not working prior to replacement, check each wire run between the remote stations and master for shorts and wiring integrity. If one of these remote station to master wire runs has a short, re-run that wire prior to installing the NM100. When replacing NuTone 3 wire cable runs, use NuTone IWA3 cable. When replacing NuTone or M&S 4 wire cable runs, use NuTone NW4S cable.

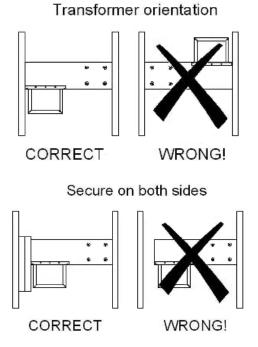
Note: if you encounter 120VAC running through the existing rough-in, have a qualified electrician reroute the 120VAC around the rough-in.

If you encounter a remote transformer, an additional electrical run may have to be made by a qualified electrician to power the master station and/or optional CD player. Also check to make sure that the area around the housing is clear of any additional 120VAC runs or other obstructions.

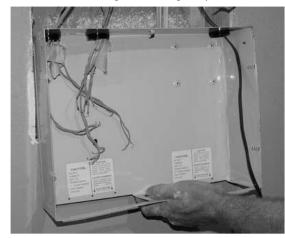
INSTALLING THE ROUGH-IN

The NWH300 and NWH300C rough-ins are designed for 16" on center studs. In retrofit applications you may encounter stud spacing that varies from this standard. Use the NWH300 rough-in when you are replacing an existing system with an intercom only system. The NWH300C rough-in is used for combination systems only that use the NM100 master and the optional NC300 6-disc CD player.

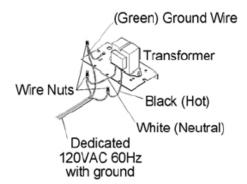
Locate the NWH300 or the NWH300C rough-ins. The rough-in must be positioned so that the transformers are on the bottom of the rough-in as shown in the figure below.



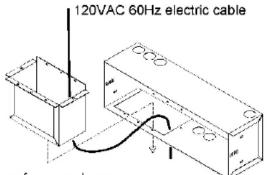
If you are replacing the existing master only system with a combination NM100 master and NC300 CD changer you will have to cut the rough-in opening larger to accommodate the larger rough-in. Prior to making the cutout check the stud cavity for obstructions or items in the wall that may prevent the transformers from fitting in the wall. The NWH300 and NWH300C transformers drop in from the bottom of the rough-in. Please refer to the next figure for rough-in placement.



Connect the existing, dedicated 120VAC/60Hz line with ground connection from the power panel to the rough-in as shown below. The NM100 requires a dedicated power source to assure no interference from other equipment caused by looped power circuits. The ground is necessary for proper radio reception.



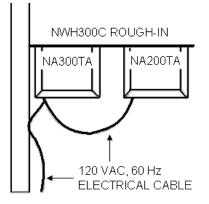
Place transformer enclosure from the inside of the wall housing into the transformer enclosure opening at the bottom of the rough-in as shown below. Do not run the 120VAC through the



Install transformer enclosure from INSIDE NWH300 rough-in

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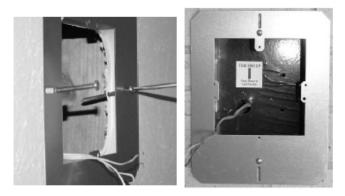
For the NWH300C Master Station and CD combination rough-in, have a qualified electrician loop a power wire from the NA300TA transformer enclosure to the NA200TA transformer enclosure following the same procedure described previously and shown in the next figure.



REPLACING THE ROOM STATIONS

The remote and door stations use the existing wire and station rough-in mounting frames or boxes. To replace the station, first remove the old station. Leave the existing remote or door station rough-ins in place.

After removing the remote station verify the integrity of the wire run. Then install the mounting plate from the NF300RWH frame. Align the plate on the wall either vertically or horizontally so that the screw holes line up with those on the rough-in or box. Use a level to make sure the plate is level. There are several screw hole locations on the mounting plate so it can attach to many rough-in designs. Mount the plate to the wall using the screws provided.



Next connect the wires to the retrofit remote station. Match the wire colors to the corresponding screw locations on the NRS103WH or NRS104WH remote stations. Please make sure to use only NRS103WH remote stations in a 3-wire installation and NRS104WH remote stations in a 4-wire installation. All 6wire installations use the NRS200WH remote stations. Please refer to appendix A for a diagram of which NuTone and M&S systems map to the 3, 4 or 6-wire (requires NM200 master) configurations. Refer to the following two charts for the NM100 wiring diagram:

Three-wire Installations

NM100 CONNECTION	NUTONE IWA3 CABLE	WIRE FUNCTION
White	Blue Stripe or	Intercom Mic
	Outside Silver Wire	Audio Input & Control
Red	Center Wire	Ground
Green	Red Stripe or	Speaker
	Outside Copper Wire	Output/Monitor
		Mic Input



Four-wire Installations

NM100	NUTONE 4	M&S 4	WIRE FUNCTION
White	Blue Stripe Wire	Silver Outside Gray Wire	Intercom Mic Audio Input
Black	Gray/Copper Wire	Next Copper Outside Gray Wire	Intercom Control
Red	Gray/Silver Wire	Next Copper Outside Gray Wire	Ground
Green	Red Stripe Wire	Outside Copper Outside Red Stripe Wire	Speaker Output/Monitor Mic Input
NM100	M&S MS4XSC CABLE	NUTONE NW4S CABLE	WIRE FUNCTION
White	White	Red	Interom Mic Audio Input
Black	Black	Black	Intercom Control
Red	Red	Orange	Ground
Green	Green	Yellow	Speaker Output/Monitor Mic Input

Connect the remote station to the existing wiring using the diagrams above. Place the remote station through the NF300RWH plastic mounting frame. Position the frame either vertically or horizontally depending on the remote station

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replaced. Place the remote station into the rough-in ring and align the frame with the remote station. Use the screws provided with the remote station to screw the remote station and frame into place. The holes in the remote station align with the holes in the mounting plate. The remote station keeps the plastic frame in place on the wall.



Note that the plastic frames are paintable. Please prime the plastic first and then apply standard room paint. The white plastic may require two coats of paint to get full coverage. It is recommended that you paint the frame prior to mounting it to the wall.

Important: Please label all cables at both ends. Incorrectly connecting cables to the master, remote stations or door stations could result in system damage.

OUTDOOR REMOTE STATIONS

Do not remove the existing outdoor remote station rough-in. The NuTone retrofit system is designed to fit into the existing enclosure. It is important to note that the outdoor remote stations are weather resistant not water proof. These stations should not be located in an area that is in direct line of water from sprinklers, rain or other devices such as power washers.

Please use the NF300PWH frame in outdoor and high sun areas. The NF300PWH plastic is designed to withstand sun and resist fading. If a patio requires a surface mount application, use the NRKS200PWH. This is a surface mount box and cover that will support the NPS200WH, NPS103WH or NPS104WH outdoor remote stations.

To install an outdoor remote station follow the instructions presented earlier for indoor remote stations.

DOOR STATIONS

Remove the old door station but do not remove the rough-in box or surface mount box. When replacing a NuTone door station you must use the NF300DWH mounting frame. The M&S door station sets in the NF300DWH frame and the screws attach to the existing rough-in. Connect the door station with the corresponding color wires. Screw the door station or door station with NF300DWH frame into the rough-in box.



EXTERNAL MUSIC SOURCE

The NM100 retrofit system supports the use of external music sources. You can use an existing connection or run a new wire to support local source connection. To install a new local source follow the steps detailed in the following paragraphs.

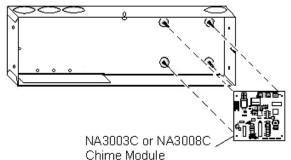
Choose a location for the IA30WH audio wall plate that will be easily accessible to the sources that are to be connected to the system (close to the receiver, TV or DVD player for example). Note: the external source wire run to the NM100 must not exceed 50 feet.

At this location, attach a single gang box included in the IR30K rough-in to a wall stud at a center height of normal wall outlets. Use a low voltage plaster ring in existing construction installations.

Make sure the single gang box extends past the wall stud and into the room so it will be flush with the sheetrock when it is applied. Run the Red and Black shielded audio cables (included in the IR30K) from the master unit location to the IA30WH audio wall plate location. Connect the cables.

INSTALLING THE CHIME MODULE

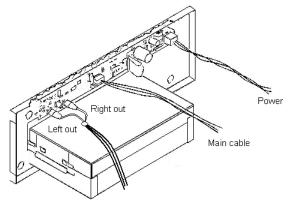
Install the NA3003C or NA3008C optional chime module in the rough-in by pressing the chime module over the 4 plastic standoffs attached to the rough-in as shown in the following figure. Refer to the instructions shipped with the chime module.



INSTALLING THE NC300 CD CHANGER

Connect the audio cables to the audio jacks of the NC300 player as shown in the figure below. After connecting the audio cables and main cable, connect the power cord from the NA200TA transformer to the power connector on the NC300 CD changer. Please refer to the installation manual packed with the NC300 CD changer.

Ensuring that nothing is between the CD player and the back of the rough-in (including cables), place the NC300 player into the lower opening of the frames including the NF200C or NF100C frames. Use the screws provided to secure the unit in place.

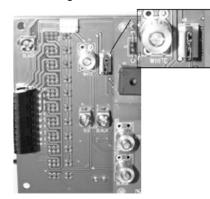


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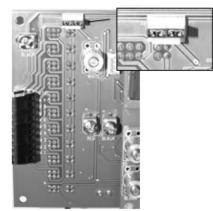
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INSTALLING THE NM100

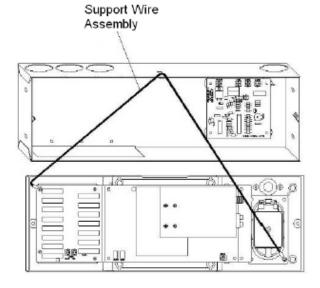
The NM100 ships configured for a 3-wire retrofit system. If you are replacing a 4-wire system you must change the jumper setup on the NM100 master. The jumper change must be completed before any cables are connected. To change the jumpers just pull them off the existing connections shown in the next figure.



Place the jumpers you just disconnected in the 4-wire position shown in the next figure.

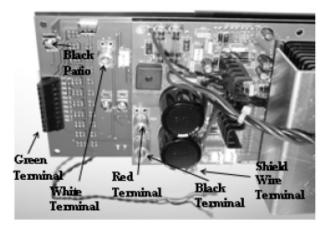


Suspend the master unit from the rough-in by looping the support wire assembly (thick green wire) over the hook at the top of the rough-in. Be careful not to damage the wall surface.

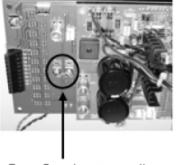


If the NM100 system has more than 9 remote stations, some remote selector switches will control two remote stations. Connect each Green wire (except patio/outdoor remote Green) to a single green terminal on the master. Each numbered Green terminal corresponds to a remote station selector switch. Note: No more than 2 Green wires can be connected to any Green terminal and not to exceed 15 speakers for the 4-wire or 13 speakers for the 3-wire system. This limitation does include remote controls and volume controls but not door stations. The station location can be marked on the inside of the door access panel on the left side of the NM100 master.

Connect the green wire(s) from the outdoor remote station(s) to the Patio green terminal. Connect the outdoor remote Black wire(s) to the patio Black terminal. Note: Only two outdoor remote stations can be connected to the patio terminals. Connect the Red wire with the other Red wires to the Red terminal. Connect the White wire with the other White wires to the White terminal. Refer to the figure shown below for wire placement.



Connect the red and black wires of the door station cables (NW4S) to the red and black door station terminals on the NM100 master as shown in the next figure. When using the NW4S shielded wire, insulate the bare wires using some of the jacket material to prevent shorting to the circuit board. Connect this wire to terminal labeled shield. Connect all orange wires from the door stations to the common terminal on the NA3003C or NA3008C chime module. Connect each yellow wire to a note sleection terminal. (Do not connect more than one yellow wire per note terminal).



Door Speaker connections

Plug in the modular chime plug to the 4 pin connector labeled as CHIME on the NM100 master unit as shown in the next figure.

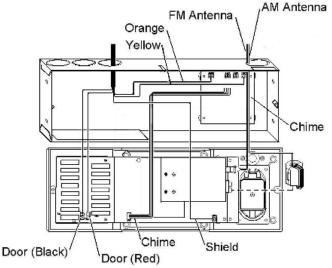
MODEL NM100WH





Chime Plug connection

Connect the optional NC300 player RCA cables and control wire. See additional instructions packed with the NC300 CD

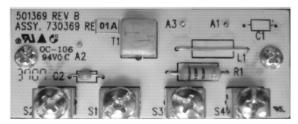


changer.

CONNECTING THE ANTENNA

Separate the intercom cables from the antenna leads, if grouped together the intercom cables can shield the antenna leads resulting in poor radio reception. Keep the antenna leads away from metal ductwork and aluminum backed insulation. These can also shield the antenna leads.

The number and style of antenna leads will vary based on the intercom system being replaced. The NM100 system is designed to use the existing antenna. See next figure.



Follow the steps below to attach a NuTone 300 Ohm twin lead antenna to the NM100.

If the antenna has a plug on the end, cut the plug off

- 1. Strip the 2 wire ends
- 2. Connect the wire ends to terminal S1 and S2 on the antenna board

3. Connect a bare jumper wire (a 22 gauge speaker wire works well) between the S3 and S4 terminals.

Follow the steps below to attach a separate AM/FM antenna system with 300 Ohm FM twin lead and orange AM antenna wire:

- 1. Connect the FM twin leads to terminal S1 and S2 on the board
- 2. Connect the AM antenna (orange wire) to terminal S4
- 3. Terminal S3 is not used in this configuration

Follow the steps below to connect a single orange wire antenna system:

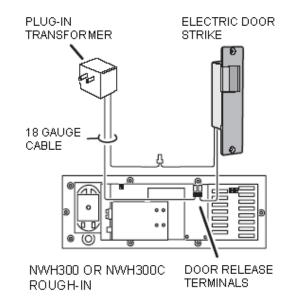
- 1. Connect the orange wire to either S1 or S2. Note do not connect the wire to both S1 and S2 doing this will short out the FM antenna signal.
- 2. Connect a bare jumper wire (a 22 gauge speaker wire works well) between the S3 and S4 terminals.

DOOR RELEASE OPTIONS

The door release option is a dry contact closure provided by the NM100 master. This dry contact is rated 24 Volt/2 Amps. The sample applications below represent some uses of this option. However, only one application can be used in any NM100 system at a time.

DOOR OR GATE RELEASE MECHANISM

Run a single line of 18 gauge solid copper, twisted pair approved low voltage cable from the NWH300 or NWH300C rough-in to the door release mechanism. Connect the two wires from the 18 gauge solid copper cable to the two wire terminals of the door release mechanism.



Run another single line of 18 gauge solid copper, twisted pair approved low voltage cable from the NWH300 or NWH300C rough-in location to a gang box next to a 120VAC receptacle where the remote door/gate release power transformer will be plugged in. Label and secure cables at the rough-in.

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The door release switch contacts are very versatile and can be used with many AC/DC door or switch contacts. Be sure to use the wire and power supply or transformer specified by the door or gate release product being used.

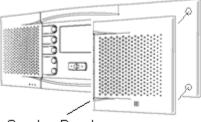
PANIC INTERFACE WITH SECURITY SYSTEM

Run a line of 18 gauge solid copper, twisted pair approved low voltage cable from the NWH300 or NWH300C rough-in location to the security control panel. Setup the security panel to receive a normally open dry contact for panic operation. (Refer to programming procedures accompanying the security panel). Label and secure cables at the NWH300 or NWH300C roughin. Have a certified security installer hook the NM100 up to the alarm system.

TESTING

After all connections have been made, insert the NM100 power plug into NA300TA transformer and secure the master to the rough-in using the 2 screws provided. If using the NF200CWH, NF100CWH or NF100MWH frame with a NC300 player, install the master unit over the frame. Do not over tighten the screws as the plastic may distort or crack. Install the speaker panel on the master as shown.

Please be careful to only apply pressure on the speaker panel at the corners and not in the middle. Check all functions by following the guidelines in the Owners Manual shipped with the master unit. If any difficulties are encountered, recheck all connections. If after reviewing these instructions you are unable to resolve any problems, contact technical support at 1-888-336-6151.



Speaker Panel

APPENDIX A - NUTONE SYSTEMS

NuTone Part Number	NuTone IM/IMA-3303	NuTone IM/IMA-4406	NuTone IM-3204
NM200WH		Х	
NM100WH	Х		Х
NRS200WH		Х	
NPS200WH		Х	
NRS103WH	Х		
NPS103WH	Х		
NRS104WH			Х
NPS104WH			Х
NC300WH	X	X	Х
NF200CWH	*	*	*
NF100MWH	X	X	Х
NF100CWH			
NF300RWH	X	X	Х
NF300DWH	X	X	Х
NWH300	X	X	Х
NWH300C	*	*	*
NRKR200R			
NRKF200P			
NRKS200PWH	X	X	Х
NA3003C, NA3008C	X	Х	Х
NDB300WH	X	X	Х
NDB300BB	X	X	Х
NDB300AB	Х	Х	Х

*Refer to frames below:

- NF100MWH Replacing a master only system with an NM100 master
- NF100CWH Replacing a combination system with an NM100 master and NC300 CD player
- NF200CWH Replacing a master only system with an NM100 master and NC300 CD player (requires hole in wall to be made larger)
- NF300RWH Used on all indoor remote station replacements
- NF300PWH Used on all outdoor or high sun area flush mount remote station replacements
- NRKS200PWH Used on all outdoor surface mount remote station replacements
- NF300DWH Used on older NuTone door station replacements, not required for M&S replacements

<u>NuTone</u>

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The following NuTone systems map to either the IM-3303 or IM-4406 systems:

NuTone Systems	IM/IMA-4406	IM/IMA-3303
SM428	Х	
2561/2562*	Х	
2401/2402	Х	
2542	Х	
2540/2541	Х	
IM/IMA-406	Х	
IM/IMA-4006	Х	
IM/IMA-303		Х
IM/IMA-313		Х
IM/IMA-203		Х
IM/IMA-2003		Х
IM/IMA-3003		Х
IM/IMA-3303		Х
IM/IMA-3103		Х
2067/2068		Х
2011/2012		Х
2015/2016		Х
2053/2054		Х
2055/2056		Х
2071		Х
2031/2032		Х
2090/2091		Х

*If existing system is loop or partially loop wired, it can only be converted to the IM5000 system. If the existing system is completely home run wired, the system can be converted to an NM200 system.

APPENDIX B - M&S SYSTEMS

NuTone Part Number	M&S 602	M&S MC602 with MCP/MDC6	M&S MC702
NM200WH			Х
NM100WH	Х	Х	
NRS200WH			Х
NPS200WH			Х
NRS103WH			
NPS103WH			
NRS104WH	Х	X	
NPS104WH	X	X	
NC300WH	Х	X	Х
NF200CWH	*		*
NF100MWH	X		Х
NF100CWH		X	
NF300RWH	X	X	Х
NF300DWH			
NWH300	X		Х
NWH300C	*	X	*
NRKR200R			
NRKF200P			
NRKS200PWH	Х	X	Х
NA3003C, NA3008C	Х	X	Х
NDB300WH	X	X	Х
NDB300BB	X	X	Х
NDB300AB	Х	X	Х

NuTone Part Number	M&S MC702 with MCP/MCD6	M&S 302	M&S MC302 with MCP/MDC6
NM200WH	Х		
NM100WH		Х	Х
NRS200WH	Х		
NPS200WH	Х		
NRS103WH			
NPS103WH			
NRS104WH		Х	Х
NPS104WH		Х	Х
NC300WH	Х	Х	Х
NF200CWH		*	
NF100MWH		Х	
NF100CWH	Х		Х
NF300RWH	Х	Х	Х
NF300DWH			
NWH300		Х	
NWH300C	Х	*	Х
NRKR200R			
NRKF200P			
NRKS200PWH	Х	Х	Х
NA3003C, NA3008C	Х	Х	Х
NDB300WH	Х	Х	Х
NDB300BB	Х	Х	Х
NDB300AB	Х	Х	Х

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NuTone Part Number	M&S 440 Series	M&S 500 Series	M&S 40 Series
NM200WH	Х	Х	Х
NM100WH			
NRS200WH	Х	Х	Х
NPS200WH	Х	Х	Х
NRS103WH			
NPS103WH			
NRS104WH			
NPS104WH			
NC300WH	Х	Х	Х
NF200CWH	*	*	*
NF100MWH	Х	Х	Х
NF100CWH			
NF300RWH	Х	Х	Х
NF300DWH			
NWH300	Х	Х	Х
NWH300C	*	*	*
NRKR200R			
NRKF200P			
NRKS200PWH	Х	Х	Х
NA3003C, NA3008C	Х	Х	Х
NDB300WH	Х	Х	Х
NDB300BB	Х	Х	Х
NDB300AB	Х	Х	Х

NuTone Part Number	M&S 44 Series	M&S Model 5 & Model 6	M&S 220/330
NM200WH	Х		
NM100WH		Х	Х
NRS200WH	Х		
NPS200WH	Х		
NRS103WH		Х	
NPS103WH		Х	
NRS104WH			Х
NPS104WH			Х
NC300WH	Х	Х	Х
NF200CWH	*	*	*
NF100MWH	Х	Х	Х
NF100CWH			
NF300RWH	Х	Х	Х
NF300DWH			
NWH300	Х	Х	Х
NWH300C	*	*	*
NRKR200R			
NRKF200P			
NRKS200PWH	X	Х	Х
NA3003C, NA3008C	Х	Х	Х
NDB300WH	X	Х	Х
NDB300BB	Х	X	Х
NDB300AB	X	Х	Х

NuTone Part Number	M&S 250	M&S 300/350	M&S 350A
NM200VVH			
NM100WH	Х	Х	Х
NRS200WH			
NPS200WH			
NRS103WH			
NPS103WH			
NRS104WH	Х	Х	X
NPS104WH	X	Х	X
NC300WH	X	Х	X
NF200CWH	*	*	*
NF100MWH	X	Х	X
NF100CWH			
NF300RWH	X	Х	X
NF300DWH			
NWH300	X	Х	X
NWH300C	*	*	*
NRKR200R			
NRKF200P			
NRKS200PWH	X	Х	X
NA3003C, NA3008C	X	Х	X
NDB300WH	Х	Х	Х
NDB300BB	X	Х	Х
NDB300AB	X	Х	Х

NuTone Part Number	M&S 20 Series	M&S 30 Series	M&S Model 150
NM200WH			
NM100WH	Х	Х	X
NRS200WH			
NPS200WH			
NRS103WH			
NPS103WH			
NRS104WH	Х	Х	X
NPS104WH	Х	Х	X
NC300WH	Х	Х	X
NF200CWH	*	*	*
NF100MWH	Х	Х	X
NF100CWH			
NF300RWH	Х	Х	X
NF300DWH			
NWH300	Х	Х	X
NWH300C	*	*	*
NRKR200R			
NRKF200P			
NRKS200PWH	Х	Х	X
NA3003C, NA3008C	Х	Х	X
NDB300WH	Х	Х	X
NDB300BB	Х	Х	X
NDB300AB	Х	Х	Х

<u>NuTone</u>

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Two Year Limited Warranty

WARRANTY OWNER: Broan-NuTone warrants to the original consumer purchaser of its products that such products will be free from defects in materials or workmanship for a period of two (2) years from the date of original purchase. THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

During this two year period, Broan-NuTone will, at its option, repair or replace, without charge, any product or part which is found to be defective under normal use and service. THIS WARRANTY DOES NOT EXTEND TO FLUORESCENT LAMP STARTERS OR TUBES, FILTERS, DUCT, ROOF CAPS, WALL CAPS AND OTHER ACCESSORIES FOR DUCTING. This warranty does not cover (a) normal maintenance and service or (b) any products or parts which have been subject to misuse, negligence, accident, improper maintenance or repair (other than by Broan-NuTone), faulty installation or installation contrary to recommended installation instructions.

The duration of any implied warranty is limited to the two year period as specified for the express warranty. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

BROAN-NUTONE'S OBLIGATION TO REPAIR OR REPLACE, AT BROAN-NUTONE'S OPTION, SHALL BE THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY. BROAN-NUTONE SHALL NOT BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH PRODUCT USE OR PERFORMANCE. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. This warranty supersedes all prior warranties.

WARRANTY SERVICE: To qualify for warranty service, you must (a) notify Broan-NuTone at the address or telephone number below, (b) give the model number and part identification and (c) describe the nature of any defect in the product or part. At the time of requesting warranty service, you must present evidence of the original purchase date.

Date of Installation

Builder or Installer

Model No. and Product Description

IF YOU NEED ASSISTANCE OR SERVICE - CONTACT:

Broan-NuTone LLC Hartford, Wisconsin www.nutone.com 888-336-3948 Broan-NuTone Canada Mississauga, Ontario www.nutone.ca 877-896-1119

Rev. 08/2007

Garantie limitée de deux ans

GARANTIE DU PROPRIÉTAIRE: Broan-NuTone garantie à l'acheteur original de ses produits que ces derniers seront exmpts de tout défaut de matériaux et de fabrication pour une période de deux (2) ans à compter de la date d'acha. AUCUNE AUTRE GARANTIE, IMPLICITE OU EXPRESSE, N'EST DONNÉE, Y COMPRIS, MAIS SANS S'Y LIMITER, GARANTIE DE MARCHANDIBILITÉ OU D'ADAPTATION À UN USAGE PARTICULIER.

Pendant cette période de deux ans, Broan-NuTone procédera au remplacement ou à la réparation sans aucuns frais, mais à sa propre discrétion, de tout produit ou pièce jugé défectueux dans le cadre d'une utilisation normale. CETTE GARANATIE NE VISE PAS LES DISPOSITIFS D'AMORCAGE NI LES TUBES DES LUMINAIRES FLUORESCENTS. Cette garantie ne couvre pas (a) l'entretien et le service courants ni (b) les produits et les pièces ayant fait l'objet du'n usage abusif, de négligence, d'un accident, d'un entretien ou d'une réparation non appropriée (par du personnel non autorisé par Broan-NuTone) d'une mauvaise installation ou d'une installation non conforme aux directives d'installation fournies.

La durée de toute garantie implicite est limitée à la période de deux ans précisée pour la garantie expresse. Certains états ne reconnaissent pas les restrictions relatives à la durée des garanties implicites; il se pourrait donc que cette restriction ne s'applique pas dans votre cas.

LE REMPLACEMENT OU LA RÉPARATION PAR BROAN-NUTONE, À SA PROPRE DISCRÉTION, DE TOUT PRODUIT OU PIÈCE DÉFECTUEUX CONSTITUE LE SEUL REMÈDE DE L'ACHETEUR EN VERTU DE CETTE GARANTIE. BROAN-NUTONE NE PEUT ÊTRE TENUE RESPONSABLE DES DOMMAGES INDIRECTS, CONSÉCUTIFS OU SPÉCIAUX ATTRIBUABLES À UTILISATION OU AU RENDEMENT DU PRODUIT. Certains états ne reconnaissent pas les restrictions ni les exclusions relatives aux dommages indirects, consécutifs ou spéciaux; il se pourrait donc que cette restriction ne s'applique pas dans votre cas. La présente garantie vous accorde des droits spécifiques, mais vous pourriez aussi avoir d'autres droits en fonction de l'état dans lequel vous résidez. Cette garantie remplace toute autre garantie donnée précédement.

SERVICE SOUS GRANTIE: Pour être admissible au service sous garantie, vous devez (a) aviser Broan-NuTone, à l'adresse ou au numéro de téléphone ci-dessous, (b) fournir le numéro du modèle et la description de la pièce et (c) décrire la nature défaut de la pièce ou du produit. Au moment de la demande de service sous garantie, vous devez fournir une preuve de la date d'achat originale.

Date d'installation

Entrepeneur ou installateur N° de modèle et description du produit

POUR OBTENIR DE L'ASSITANCE OU DU SERVICE - CONTACTEZ:

Broan-NuTone LLC Hartford, Wisconsin www.nutone.com 888-336-3948 Broan-NuTone Canada Mississauga, Ontario www.nutone.ca 877-896-1119

Rev. 08/2007

Garantia limitada de dos años

GARANTÍA DEL PROPIETARIO: Broan-Nu Tone garantiza al comprador consumidor original de sus productos, por el período de dos (2) años desde la fecha original de compra, que tales productos están libres de defectos en material y mano de obra. NO HAY OTRAS GRANTÍAS, EXPRESADOS O SOBREENTENDIDAS, INCLUYENDO, PERO NO LIMITADAS A, GRANTÍAS NO EXPRESADAS DE MERCHNTIBILIDAD O ADAPTABLES A UN PROPÓSITO EN PARTICULAR.

Durante este período de dos años, Broan-NuTone reparará o reemplazará a su opción y sin costo, cualquier producto o parte que se encuentre defectuoso bajo condiciones normales de uso y servicio. ESTA GARANTÍA NO CUBRE A LOS ARRANCADORES PARA LÁMPARAS FLUORESCENTES O A LOS TUBOS FLUORESCENTES, FILTROS, DUCTOS, TAPAS DE TECHO, TAPAS DE PARED Y OTROS ACCESORIOS PARA CANALIZACIÓN. Esta granatía no cubre (a) Mantenimiento y servicios normales (b) Productos o partes sujetos al mal uso, negligencia, accidente, mantenimiento inadecuado o reparaciones (port otros ajenos a Broan-NuTone), instalación defectusoa o a una instalación contraria a las instrucciones de instalación recomendadas.

La duración de cualquier garantia no expresada está limitada a un periodo de dos años según se especifica en la garantia expresada. Algunos estados no permiten limitación en cuanto a la duración de una grantia no expresada, por lo que la limitación arriba indicada puede que no se apliqué a Ud.

LA OBLIGACIÓN DE BROAN-NUTONE DE REPARAR O REEMPLAZAR A SU OPCIÓN, SERÁ EL ÚNICO Y EXCLUSIVO RECURSO QUE TENDRÁ EL COMPRADOR BAJO ESTA GARANTÍA. BROAN-NUTONE NO SERÁ RESPONSABLE POR DAÑOS INCIDENTALES, CONSECUENTES O ESPECIALES QUE RESULTEN A CONSECUENCIA O SEAN INDEPENDIENTE DEL USO O DESEMPEÑO DEL PRODUCTO. Algunos estados no permiten la exclusión o limitación de daños incidentals o consecuentes, de modo que la limitación o exclusión arriba indicada pueda que no se aplique a Ud. Esta garantia le proporciona derechos legales específicos, y Ud.puede tener otros derechos, los cuales varían de estado a estado. Esta garantias reemplaza a todas las garantías anteriores..

SERVICO DE GARANTÍA: Para tener derecho al servicio de garantía, Ud. debe (a) Notificar a Broan-NuTone a la dirección o el número de teléfono abajo, (b) indicar el número de modelo y la identifación de la party y (c) describir la naturaleza de cualquier defecto en la producto o parte. Al momento de solicitor el servicio por la garantía, Ud. debe presentar la evidencia de la fecha original de compra.

Fecha de la instalación

Constructor o instalador Número de modelo y descripción del producto

> SI NECESITA ASISTENCIA O SERIVIVIO - CONTACTO: Broan-NuTone LLC Hartford, Wisconsin www.nutone.com 888-336-3948 Broan-NuTone Canada Mississauga, Ontario www.nutone.ca 877-896-1119