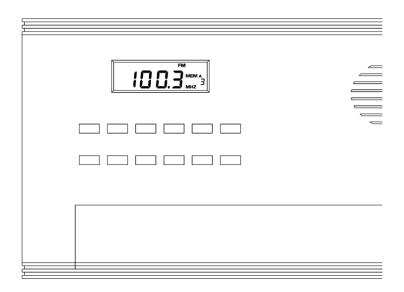
MC702

MUSICAL INTERCOM SYSTEM

OWNER'S GUIDE





CONGRATULATIONS

Your purchase of an M&S built-in musical intercom system is an investmen that will provide years of service and convenience. M&S built-in music system are backed with more than 50 years of experience in the design and

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ABOUT YOUR SYSTEM
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The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of

SAFETY INSTRUCTIONS

Read instructions - All the safety and operating instructions should be read before the appliance is operated.

Retain instructions - The safety and operating instructions should be retained for future reference.

Heed warnings - All warnings on the appliance and in the operating instructions should be adhered to.

Follow instructions - All operating and use instructions should be followed.

Water and moisture -The appliance should not be used near water - for example; near bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.

Attachments - Do not use attachments not recommended by the product manufacture as they may cause hazards.

Ventilation - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings: or, placed in a built-in installation, such as a

bookcase or cabinet that may impede the flow of air to the ventilation openings.

Heat - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

Power sources - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

Grounding or polarization -

ANTENNA
LECUIN

GROUND

GROUNDING CRONDUCTORS

ELECTRIC

GROUNDING CRONDUCTORS

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GROUNDING CRONDUCTORS

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Precautions should be taken so that the grounding or polarization means of an appliance is not defeated. Power lines - An outdoor antenna should be located away from power lines.

Outdoor antenna grounding - If an outside antenna is connected to the receiver, be sure the antenna system is

grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure below.

Object and liquid entry-Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

Servicing - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service

Damage requiring service -The appliance should be serviced by qualified service personnel when:

The power-supply

ABOUT YOUR SYSTEM

Your new Model MC702 is a state of the art stereo music and intercom system that provides music and room to room communication throughout your house. An optional door chime can be integrated into the system to provide door communication with automatic muting. The MC702 contains a digital clock with backup power source that maintains the correct time for up to 3 hours without power and never needs replacing.

The innovative transflective LCD display and power-conserving back light can be read in any lighting condition from direct sunlight to complete darkness. The unit provides music for up to 15 rooms with plenty of power. The MC702 has a digital phase lock loop tuner with 8 AM and 8 FM station presets. It also has two external source inputs (AUX IN and TAPE IN) and one line output (TAPE OUT) that can be used with M&S's built-in cassette tape and/or CD player, as well as your TV or other music sources. The MC702 enables communication between up to 15 rooms and the master location plus up to 4 door entry locations.

The MC702 can turn itself ON and OFF at preset times like an alarm clock or sleep-to-music device. As a home security device, it can be programmed to play talk radio when the house is vacant. The MC702 was designed to be as user-friendly as possible the display tells you how to set the time and alarm functions. It also shows when and how the intercom function is being used. It has a built-in door release which can be used to open a door or gate from the master unit or from any indoor remote room station.

The MC702 has an optional hand-held RF REMOTE CONTROL which allows you to turn the radio on or off, scan radio stations up or down, change sources, and change the volume up or down from ANYWHERE in or around the house.

The MC702 allows you to monitor any room (including the master unit location) to let you know when a baby is crying or when an elderly person needs help.

Like all M&S products, the MC702 is designed to make your home atmosphere more enjoyable. M&S is committed to producing high quality products for your home. If you have any questions about the operation of your system, please call us at

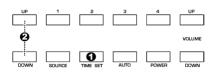
(800) 366-9422.

SETUP

SETTING THE TIME

When the Time/Auto Set button is pressed momentarily, the display will show SET TIME and the current time will be displayed with the hours flashing. The UP and DOWN buttons (either TUNING UP and DOWN or VOLUME UP and DOWN) can then be used to increment or decrement the current time hours. Pressing the UP button (or DOWN button) momentarily will increment (or decrement) the hours





by one each time the key is pressed. Holding the UP button (or DOWN button) depressed will rapidly increment (or decrement) the hours until the button is released. The time display also includes the AM or PM indicator that is changed by scrolling the hours past 12:00.

Note: The MC702 remains in the set mode for 25 seconds with no activity (no buttons being pressed) after which the unit automatically returns to the normal mode of operation. The TIME SET button must be pressed again to return to the set mode.

Once the current hours have been set correctly, momentarily press the TIME/AUTO SET button again. The display will show SET TIME and the current time will be shown with the minutes flashing. The UP and DOWN buttons can be used as described previously to increment or decrement the current time minutes.

Once the current minutes have been set correctly, momentarily press the

TIME/AUTO SET button again to return to the normal mode or let the MC702 automatically return to the normal mode if no buttons are pressed for 25 seconds.



SETTING AUTOMATIC ON/OFF TIME

To set the AUTO on and off times, the TIME/AUTO SET button must be momentarily pressed three times



without changing the current time. After pressing the TIME/AUTO SET button for the third time, the display will show **SET AUTO ON TIME** and the auto on time will be displayed with the hours flashing. The UP and DOWN buttons can be used as previously described to increment or decrement the auto on time hours.

Downloaded from www.Manualslib.com manuals search engine

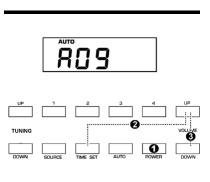
Once the AUTO ON TIME hours has been set correctly, momentarily press the TIME SET button again. The display will show SET AUTO ON TIME and the AUTO ON TIME will be displayed with the minutes flashing. The UP and DOWN buttons can be used as previously described to increment or decrement the AUTO ON TIME minutes.

Once the AUTO ON TIME minutes has been set correctly, momentarily press the button again. The display will show SET AUTO OFF TIME and the AUTO OFF TIME will be displayed with the hours flashing. The UP and DOWN buttons can be used as previously described to increment or decrement the AUTO OFF TIME hours.

Once the AUTO OFF TIME hours has been set correctly, momentarily press the TIME SET again. The display will show SET AUTO OFF TIME and the AUTO OFF TIME will be displayed with the minutes flashing. The UP and DOWN buttons can be used as described previously to increment or decrement the AUTO OFF TIME minutes

SETTING THE AUTO ON VOLUME LEVEL

When the Auto function is turned on, the MC702 will turn itself on automatically when the current time reaches the Automatic ON TIME and will then turn itself OFF when the current time reaches the Automatic OFF TIME. When the MC702 automatically turns itself ON it will always turn on at the same volume level. This "AUTO ON VOLUME LEVEL" has a default of 12 but it can be changed following these simple steps:



- i Turn on the MC702 by momentarily depressing the POWER button (unless the radio is already on).
- Momentarily press the VOLUME UP and AUTO buttons, at the same time, and then release. The display will show the letter 'A' for AUTO ON volume followed by the current music volume setting.
- î Depress the VOLUME UP or VOLUME DOWN buttons to set the desired music volume level. (1-32).

When you have the volume set to your desired level wait for 9 seconds. The display will revert to the time display.

NOTE: The MC702's AUTO ON volume is defaulted to the last volume setting when the music was last turned off. Therefore, it is recommended that a new fixed auto volume setting be set since the MCTX wireless remote control transmitter, effectively, turns off the radio when the volume is turned down completely. If the music is turned off using the MCTX wireless transmitter the music will AUTO ON at a volume level of 1.

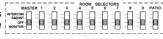
REMOTE INTERCOM STATION SELECTION

These switches are used to control the operation of the room station in each corresponding room. The MASTER INTERCOM switch controls the master room station. ROOM SELECTOR switches 1 through 9 control the corresponding remote room stations. The PATIO SELECTOR switch controls patio room station(s).



Step 1 - Push in to release

There are four positions switches:



INTERCOM-

A room station with its switch set in the INTERCOM position will only hear intercom (excluding monitor) and the chime.

RAD/INT - A room station with its switch set in the ON

position will hear intercom communications, music and chime.



Step 2 -

Release to

A room station with its switch set in the OFF position will not hear anything, but can still talk to other room stations and the door

MONITOR A room station with its switch set in the MONITOR position will not hear any intercom

Step 3 - Open

communications, but the room station will be used as a microphone. Any sounds that this microphone picks up will be heard from any room station that is in the ON position. The MONITOR position can be used to listen to (monitor) a baby's or elderly person's room.

Your MC702 may be equipped with either a 3-note or 8-note Door Chime. This optional chime always mutes the radio and rings through the master speaker when the doorbell button is pressed. It also rings through all the room stations that are turned on. However, the music speakers mute while the chime is broadcast through the room stations and the master unit.

SETTING THE INTERCOM LEVEL

The INTERCOM LEVEL adjust the gain of the entire intercom system. The INTERCOM LEVEL is generally set by the installer upon initial installation to match your home's acoustics and should not require further adjustment. However, if you find the system's intercom gain is too high or too low, follow the procedure below to reestablish the correct intercom gain setting.

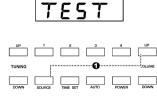
Turn all room station volume controls to maximum (fully-clockwise). Turn the master speaker volume to maximum (fully-clockwise). Set all PRIVACY switches to the OFF or out position (N75/N78 only).

- Depress and hold ROOM TALK at the master location while speaking.
- Adjust the INTERCOM LEVEL until good clear audio is heard at the remote stations without hearing acoustic feedback (squeal). This initial setting should result in audio that is likely to be as loud as you would normally need. This setting should not be readjusted. The volume controls at the individual room stations can be adjusted as desired for that room.

NOTE: Your MC702 system is designed for high intercom gain and very low noise simultaneously. When monitoring room stations, it is not necessary to increase the intercom level in an effort to hear 'something'. Doing so will unnecessarily increase any background noise, such as air conditioning systems and other appliances built-in to your home. If you are monitoring a baby's room, for example, no noise will be heard until the baby cries or makes a noises at which time you will hear with ample

SETTING UP THE WIRELESS REMOTE CONTROL

PROGRAMMING - Upon initial power up of the MC702 or upon applying power after the unit loses its memory (power outages greater than 2 hours), the unit must be programmed or taught the unique code that is present in the REMOTE CONTROL TRANSMITTER. To do this, the MC702 must be put into its test mode by momentarily pressing the VOLUME UP and SOURCE buttons at the same



time on the MC702. The display on the MC702 should show TEST.

While the MC702 is in the test mode, press and hold the TUNING UP button on the REMOTE CONTROL TRANSMITTER. The display on the MC702 will flash between TEST and SAVE. When the display



shows SAVE without flashing, release the button on the The MC702 has now learned the TRANSMITTER. Momentarily press both VOLUME UP and POWER buttons at the same time to restore the MC702 to normal operating mode.

If more than one transmitter is to be used with the system, the second, third, and fourth transmitters must be learned by pressing the TUNING DOWN, VOL UP, and VOL DOWN on



transmitter button)



Press and hold the **TUNING UP** button to signal the MC702 wireless receiver

the respectively instead of the TUNING UP button on the TRANSMITTER.

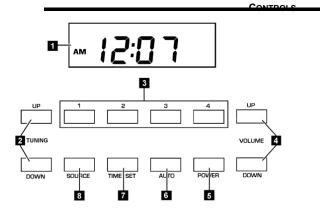




Exiting TEST mode or 'RESETTING' the MC702

NOTE: Pressing the same button on two different

MUSIC OPERATION



1 LCD DISPLAY - This back lighted readout indicates: current time, auto radio on/off status, radio station frequency, station memory setting, and active intercom status. This display also shows diagnostic codes when the TEST mode is

enabled.

2 UP/DOWN BUTTONS - These buttons are used to scan through FM or AM radio stations.

To exit the TEST mode, press the VOLUME UP and POWER buttons at

the same time and then release.

3 1, 2, 3, and 4 BUTTONS - These

buttons are used to save and recall your most frequently used FM and AM radio stations.

- 4 VOLUME UP/DOWN BUTTONS -These buttons are used to increase and decrease the overall system radio volume.
- 5 POWER ON/OFF BUTTON This button is used to turn the MC702 music source ON and OFF. Note: The intercom is always on!
- 6 AUTO button This button is used

to turn the Automatic Music (AUTO *) function ON and OFF.

- 7 TIME/AUTO SET BUTTON This button is used to access the time setting mode.
- 8 SOURCE button This button is used to select the audio source (FM A, FM B, AM A, AM B, AUX input, or TAPE input).

NOTE: The VOLUME UP/DOWN, TUNING UP/DOWN and SOURCE select buttons are duplicated on the wireless remote control transmitters.

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OPERATING THE TUNER -

To listen to broadcast stations, press the POWER button. Notice the display will change from the time to station frequency. Pressing the SOURCE select button will allow you to change from FM, AM, TAPE and AUX respectively. The SOURCE button is available on the MCTX wireless remote control transmitter.

AUTO SCAN When any AM or FM band is chosen, momentarily pressing the TUNING UP and TUNING DOWN buttons will change the tuned station frequency to the next local station. The audio will be muted and the display will show radio station frequencies increasing or decreasing as it scans. When the next local radio station is detected, audio will again be heard.



MANUAL SCAN Pressing and holding either the TUNING UP or TUNING DOWN button will cause the tuner to scan each successive frequencies one at a time whether a radio station is broadcasting on that frequency or not. You will also be able to hear the reception at these frequencies as they are scanned. When the desired radio station is tuned, release the TUNING UP or TUNING DOWN button to stop the manual scan function. Manual scanning is useful for reception of distant stations that would not otherwise be tuned with the auto scan feature. The MC702 automatically switches from stereo to mono to allow greater sensitivity for a distant radio station. NOTE: To scan upward or downward by just one frequency, the TUNING UP/DOWN button should be depressed until the frequency changes—then immediately released.

USING MEMORY PRESETS

Storing radio station frequencies

1 Change to the desired radio band (FM1, FM2, AM1 or AM2), using the source button.

2 Tune to the desired radio station.

Press and hold a numbered button

until the preset number is displayed.

Example: Save a radio station in band FM2, preset 3.

1 Press the SOURCE button to change to FM2.

2 Tune to the desired radio station.3 Hold the 3 button until a 3 appears as the preset number.

Recalling radio station frequencies

1 Change to the desired radio band, using the SOURCE button.

2 Momentarily press the desired numbered preset button.

Example: Recall the radio station saved in band AM1, preset 2.

1 Press the SOURCE button to change to AM1.

2 Momentarily press the 2 button.

OPERATING A TAPE OR CD PLAYER

The MC702 features two source inputs to connect a variety of built-in and external music sources such as Laser disc players, CD players and tape players. The different sources connected to the TAPE and AUXILIARY inputs are selectable by pressing the SOURCE select button once the POWER is turned on. Momentarily depressing the SOURCE button changes the music



TUNING VOLUME

source from FM, AM, AUX and TAPE inputs, respectively. The SOURCE button on the MCTX wireless remote control performs the same function as the SOURCE select button on the MC702. NOTE: The SOURCE button is only active when the power is on. NOTE: IF the MC702 is installed with the MCD6 multidisc CD changer, the TUNING UP/DOWN buttons on the MCTX wireless remote control transmitter will operate the track selection when AUX mode is selected on the MC702.

ADJUSTING MUSIC VOLUME

There are two ways to adjust music volume. The MC702 system volume control adjusts the music volume for all music speakers in the house and shows the volume setting on the display. (1 = lowest volume) Depressing and Tuning Depressing and Tuni

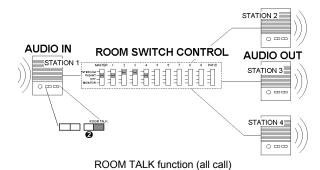
respectively, the system volume. Momentarily depressing the VOLUME UP or VOLUME DOWN increases or decreases, respectively, the system volume by one level. Each speaker in the house has a volume control to adjust the output at the speaker itself. Normally, the individual speaker volume controls are set to maximum or near maximum settings.

CAUTION: Take care not to overdrive the amplifier by using excessive system volume to overcome the low volume settings on the music speakers. Doing so will result in distorted audio and may cause amplifier failure!

INTERCOM OPERATION

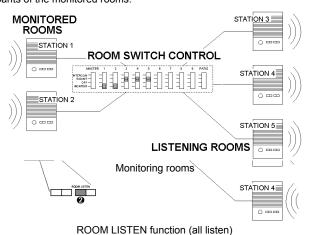
COMMUNICATING WITH OTHER ROOMS

The MC702 system with it's N75, N75RS, and NRC75 series speakers are designed for whole house communication and ease of use. To talk to the room station depress the ROOM TALK button while speaking. To hear the response depress the ROOM LISTEN button. It is not necessary for the called party to press ROOM TALK to reply. Therefore, this type of hands-free communication is beneficial when communicating with someone who is unable to reach the controls of room station to reply. If you are receiving a call from someone else, and are at a non-RS room station that has the PRIVACY feature enabled, you must either turn off the PRIVACY feature or press ROOM TALK to respond. When performing a ROOM TALK function, audio will be heard only at the stations that are turned on at the master and have their volume controls set above the minimum (counter-clockwise) setting. Stations that are set to the OFF or MONITOR position at the master will not hear the ROOM TALK call nor will they be heard in the ROOM LISTEN mode.



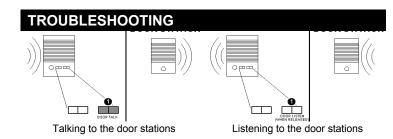
MONITORING OTHER ROOMS

Room station monitoring is useful for constant monitoring of small children and those requiring special care. Any station in which you wish to monitor should be set to the MONITOR position on the room switch panel. The result of the combined monitored stations will be broadcast to any station set to ON at the room switch panel. Non-RS room stations that have the PRIVACY feature enabled cannot be monitored regardless of the room switch setting at the room switch panel. The MC702 is designed to prevent the door chime from ringing at stations set to the MONITOR position at the room switch panel. This will prevent disturbing the occupants of the monitored rooms.



COMMUNICATING WITH DOOR LOCATIONS

The MC702 features two way intercom to the door locations. With the MC702 you need not risk unwanted intrusion by opening the door to respond to the door bell. To communicate with the visitor, depress both ROOM TALK and ROOM LISTEN buttons and speak. To hear the response from the visitor, simply release BOTH buttons. This will automatically switch the system to DOOR LISTEN mode. Pressing both ROOM TALK and ROOM LISTEN again allows you to again talk to the visitor. The DOOR LISTEN function will automatically time out in about 20 seconds or when you momentarily depress ROOM LISTEN or ROOM LISTEN by itself.



M&S Systems products are designed for years of reliable service. If you encounter any problems with your system review this operating guide again. Your installer or dealer can charge you for a service call to come to your home and show you how to operate your system. Most problems are caused by incorrect setup, improper adjustment and incorrect operation and can be corrected by following the instructions in this operating guide. The table below should assist in troubleshooting your problem. If after reviewing this operating guide and are unable to resolve the problem contact your installer/dealer or technical service at (800) 366-9422.

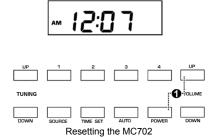
PROBLEM	WHAT TO CHECK
System squeals when ROOM TALK or ROOM LISTEN is depressed	INTERCOM level is set too high at the master location. Reduce the INTERCOM level.
Radio turns on by itself	Check for AUTO operation. If the display shows 'AUTO', turn off the AUTO feature. If the AUTO feature is being enabled inadvertently, program a more suitable AUTO ON/AUTO OFF to prevent being disturbed by AUTO ON activation.
Can't get more than one wireless remote control transmitter to work.	The working transmitter's identification has overwritten the other transmitters. Reprogram all transmitters making sure to depress a different button on each transmitter. (see 'Setting up the MCTX wireless remote control') Check batteries - replace batteries if necessary
Cannot monitor rooms	Check the monitored room stations and ensure that the PRIVACY switches are off and the volume controls are turned up (clockwise).

Display shows TALK or LIST without any buttons depressed

Shorted cable or bad speaker. Turn off room speaker switches to isolate which remote station run is causing the problem. Contact dealer/installer.

MANUAL RESET PROCEDURE

In some cases, performing a reset on the MC702 may resolve your problem. First try resetting the MC702 by pressing the POWER and VOLUME UP buttons at the same time.



CARE AND MAINTENANCE

No maintenance is required to provide reliable operation. The MC702 can be cleaned using a slightly dampened cloth. No chemicals should be used to clean the face panel components. Many common household chemicals may damage or discolor the face panel components. Use care when cleaning the display window.

WARRANTY

M&S SYSTEMS Limited 2-Year No-Fault Product Warranty

M&S SYSTEMS warrants for 2 years all products to be free of defects (M&S SYSTEMS honors the 10-Year No-Fault warranty for AirVac Gold power units. See section below). The warranty period begins from either (1) the date of "first user" purchase of this product or (2) the first close of secrow date on a residence in which this new product was originally installed. This warranty extends to the original user of the product and to each subsequent owner of the product during the term of this warranty. M&S SYSTEMS will repair or replace, at its option, parts and materials at no charge. Parts supplied under this warranty may be new or rebuilt at the option of M&S SYSTEMS.

If, during the limited warranty period, it appears as though this product contains a defect which is covered by this limited warranty, call our toll free service number before dismantling the product (1-800-877-6631). Remember to attain a Return Authorization Number (RAN) before returning any product to M&S SYSTEMS. Send this product freight pre-paid and insured to our service center for warranty repair. You will be advised on shipping instructions when you call the toll free service number. M&S SYSTEMS will return thereigh product freight pre-paid within the U.S.A. The installing dealer or distributor may assist you, at your choice and expense, with returning product for repair. Please include a brief description of the problem and a dated proof-of-purchase receipt with any product that is returned for warranty repair. ANY PRODUCT RETURNAUTHORIZATION NUMBER WILL BE REFUSED.

THIS LIMITED WARRANTY IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PUPPOSE OR OTHERWISE, AND OF ANY OTHER OBLIGATIONS OR LIABILITY ON THE SELLER'S PART, THIS LIMITED WARRANTY DOES NOT COVER DAMAGE CAUSED BY IMPROPER INSTALLATION, THE VIOLATION OF APPLICABLE BUILDING OR ELECTRICAL CODES, OR THE USE OF NON-MASS/NON-ARIVAC WIRE, CABLE OR WALL HOUSINGS. THIS LIMITED WARRANTY APPLIES ONLY TO PRODUCTS INSTALLED IN A PRIVATE RESIDENCE.

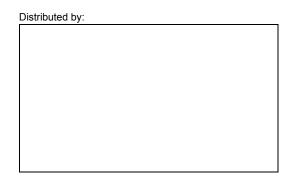
UNDER NO CIRCUMSTANCES SHALL THE SELLER BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES ARISING IN CONNECTION WITH USE, OR INABILITY TO USE THIS PRODUCT. IN NO EVENT SHALL SELLER'S LIABILITY, FOR BREACH OF WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, OR STRICT LIABILITY, EXCED THE COST OF THE PRODUCT COVERED HERCES WE PERSON IS AUTHORIZED TO ASSUME FOR US ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF THIS PRODUCT.

Some states do not allow the exclusion or limitation of consequential, incidental or special damages, so the above limitation or exclusion may not apply to you. This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

NOTES	
Please record the following information for future refe	rence:
Installer installation	Date of
Model MC/02 (Serial number is located behind the face panel insert on the MC702)	Serial number

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M&S SYSTEMS

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Printed in the U.S.A.