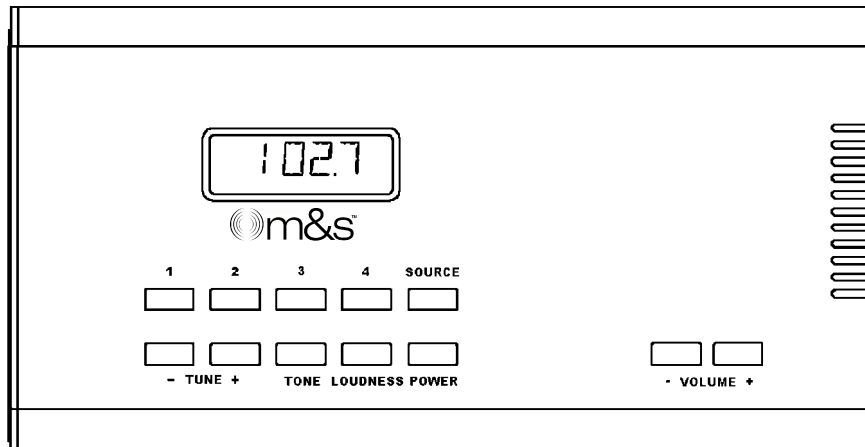# Model MC960
Stereo Music System

Owner's Guide

This booklet contains the information you need to get the most from your music system. It also tells you what to do if your system develops operating problems, and contains applicable statements of warranty. Keep this booklet for future reference.

CONTENTS

The rough-in and finish-out instructions should be retained with this operating guide after installation. These instructions include important safety information for the MC960 system.

ABOUT YOUR SYSTEM

Congratulations! Your new Model MC960 is a state of the art Music Center that provides high quality stereo music throughout your house.

The transreflective LCD display and power conserving backlight can be read in any lighting condition from direct sunlight to complete darkness. The unit provides excellent stereo music for up to 10 rooms with plenty of power from a single remote amplifier. Add additional amplifiers to distribute music to even more rooms! The MC960 has a Digital Phase Lock Loop Tuner with 8 AM and 8 FM Station Presets. The MC960 also has three external source inputs (AUX/CD, AUX 2 and TAPE) that can be used with M&S's built-in Multi-disc CD player and/or cassette tape player as well as your TV or other music sources.

The MC960 is designed to be as user-friendly as possible. Remote scan volume controls allows you to:
- ➡ turn the music on and off
- ➡ control system wide volume
- ➡ change preset radio stations
- ➡ change tracks when used with the MCD6 multi-disc CD player
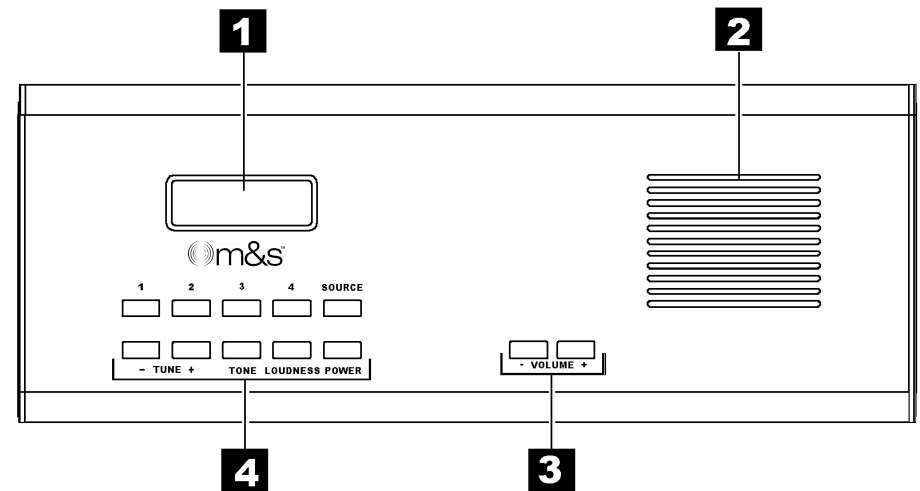- ➡ change music sources

Up to four optional hand-held remote controls can be used to control the MC960 from any room inside, and even outside, your home

In addition, your new music system also features:

- ➡ Lightning, static, and surge protection.
- ➡ Permanent memory that saves radio presets and hand-held remote programming - even during long-term power interruptions.

Your MC960 is designed to make your home more functional and enjoyable. Prepare yourself for a more satisfying home living experience.
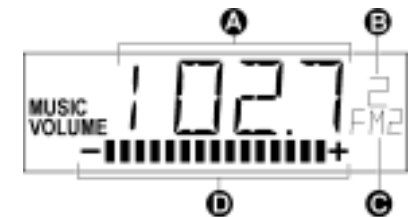
CONTROLS AND FEATURES

1 **DISPLAY** Easy to read and understand Liquid Crystal Display with backlight. The display normally functions as a frequency readout for AM and FM, but it can also show additional important information. This other information is explained under the function with which it is associated.

A Radio station frequency

B Radio station preset

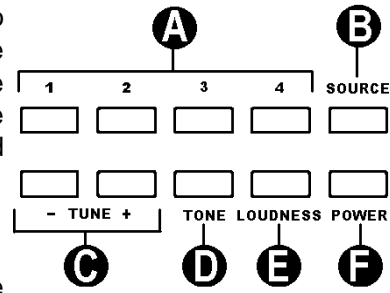**C** Radio band indicator

D Bargraph display for levels of volume, bass and treble

2 **MASTER SPEAKER** This speaker provides a monitor function when operating the controls at the control panel.

3 **VOLUME** These controls increase/decrease the system volume. They also increase/decrease the level of BASS and TREBLE when they are selected for change.

4 **CONTROLS** These buttons are used to operate the various features of the MC960. Some of these functions are available from the SVC96RS remote control wall plate and the hand-held wireless remote control.

Ⓐ **1, 2, 3, and 4 buttons** - These buttons are used to save and recall your most frequently used FM and AM radio stations (presets)-8 for each band.

Ⓑ **SOURCE button** - This button is used to select the audio source (FM 1, FM 2, AM 1, AM 2, AUX/CD*, AUX2, or TAPE input) which the MC960 will output to the speakers. Each time the SOURCE button is momentarily pressed, the audio source changes. The active source is displayed on the LCD display.

* When using the MCD6, the AUX source will display 'CD' instead of 'AUX'

Ⓒ **TUNING UP/DOWN buttons** - These buttons are used to scan up/down through the FM or AM radio stations.

Ⓓ **TONE button** - This button is used to enable changes to the bass and treble settings. Use either the TUNING **+/** – buttons or the VOLUME **+/ –** buttons to change the BASS and TREBLE of the music.

Ⓔ **LOUDNESS button** - This button toggles the loudness function on/off. When the LOUDNESS is on, the bass response is increased at low volume levels.

Ⓕ **POWER button** - This button is used to turn the MC960 ON and OFF. When the unit is turned on, one of the five source indicators (AM, FM, AUX/CD*, AUX2 or TAPE) will be shown. When the unit is off, all annunciators will be off. The MC960 must be turned on to operate the radio, or to listen to other music through the unit.

TUNING RADIO STATIONS

AUTOMATIC TUNING
Press the TUNE +/ – buttons momentarily to scan radio frequencies, until the next strong station is found. The audio mutes and the displayed frequency changes during this Automatic Search tuning. Once the MC960 locks onto a strong station, it will stop scanning. The frequency of the station is displayed, and the audio will again be played.

MANUAL TUNING
The TUNE +/– buttons are pressed and held, to perform manual tuning of the radio. After about 1 second of holding a TUNE button, the MC960 will go into the manual mode. The displayed frequency changes and the audio plays at each frequency. The frequency continues to change until the TUNE button is released. The manual tuning is used to select a station that is not strong enough to be picked up by the automatic search, or to scan through many frequencies without stopping on each strong station.

NOTE: To change the radio frequency by a single increment, press and hold the TUNE +/– button until the frequency changes, then immediately release.

USING MEMORY PRESETS

Storing radio station frequencies

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

❷ Tune to the desired radio station.

❸ Press and hold a numbered button until the preset number is displayed.

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

❶ Press the SOURCE button to change to FM2.

❷ Tune to the desired radio station.

❸ Hold the 3 button until a 3 appears as the preset number.

Recalling radio station frequencies

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

❷ Momentarily press the desired numbered preset button.

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

❶ Press the SOURCE button to change to AM1.

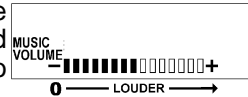**❷** Momentarily press the 2 button.

ADJUSTING THE SOUND

VOLUME UP/DOWN buttons - Pressing the two VOLUME buttons together, alternately selects between music volume and speaker volume setting modes. The selected function is indicated on the display and it may be adjusted by the VOLUME +/ – buttons.

SPEAKER VOLUME sets the level of the master unit speaker.

SPEAKER
VOLUME
▬▮▮▮▮▮▮▮▮▮▮▮▮▮▯▯+
0◀─── SOFTER ───

MUSIC VOLUME sets the system level for the music audio. Either a Remote Scan speaker or a hand-held remote control may also change this volume.

MUSIC
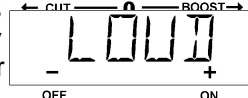VOLUME
▬▮▮▮▮▮▮▮▯▯▯▯▯▯+
0 ─── LOUDER ───▶

The bar graph on the bottom of the display indicates all of these volume settings.

TONE button - This button enables changes to the tone control settings. BASS and TREB are two tone control settings. These settings are used to either boost or cut the appropriate frequencies to optimize the music quality. The bar graph indicates a cut by starting in the middle and displaying segments to the left, and indicates a boost by displaying segments to the right.

BASS
−▯▯▯▯▯▯▮▯▯▯▯▯▯+
← CUT ── 0 ── BOOST→

TREB
−▯▯▯▯▯▯▮▯▯▯▯▯▯+
← CUT ── 0 ── BOOST→

LOUDNESS button - The LOUD (loudness) function is either turned on, indicated by the '+', or off, indicated by the '−'. This function boosts the bass response at lower frequencies, at low volume levels.

LOUD
−   +
OFF   ON

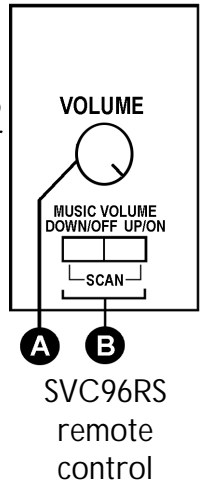*Note: The display will automatically revert back to source after 5 seconds.*

NOTE: For best performance, the individual speaker volume controls should be turned to maximum volume (fully clockwise) and then the VOLUME UP / DOWN buttons adjusted for the proper listening volume (this is really setting the maximum listening volume). The individual speaker volume control can then be adjusted in rooms that require less volume.

IMPORTANT: Do not set the "system volume" to a high number and then adjust all individual speaker volume controls down to low listening level. This is very inefficient, will cause the amplifier to overheat, and will add distortion to the system.

VOLUME CONTROLS

A **VOLUME knob** - This control is used to adjust the output level of the music. *Note: It is recommended to keep this control set at near maximum (clockwise) for optimum performance.*

B **UP/ON - DOWN/OFF buttons** - These buttons are used to increase or decrease the system music volume. These buttons can also be used to turn the MC960 ON and OFF. These buttons also provide radio preset tuning and source select functions. Momentarily pressing both the MUSIC VOLUME UP and DOWN buttons at the same time will perform a scan function which will step through the radio presets. Once all presets have been scanned, the radio station band and/or music source will change.

VOLUME

MUSIC VOLUME
DOWN/OFF UP/ON

SCAN

A **B**

SVC96RS
remote
control

Note: When the MC960 is installed with the MCD6 6-disc player, the scan function will change the track selection. This track function operates when CD is selected as the source. Pressing and holding both MUSIC VOLUME UP and DOWN buttons while in CD mode will change the source to AUX2.
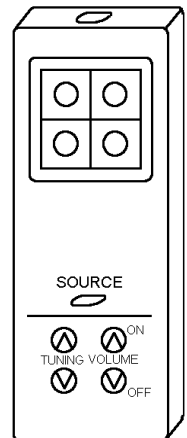
OPTIONAL HAND-HELD RF REMOTE CONTROL

PROGRAMMING - Upon initial power up of the MC960, the unit must be programmed or taught the unique code that is present in the REMOTE CONTROL TRANSMITTER.

STEP 1 The MC960 must be put into its test mode by momentarily pressing the VOLUME + and SOURCE buttons at the same time. The display on the MC960 should show TEST.

STEP 2 Now press the TUNING UP button on the REMOTE CONTROL TRANSMITTER until the display flashes SAVE twice. The MC960 has now learned the TRANSMITTER.
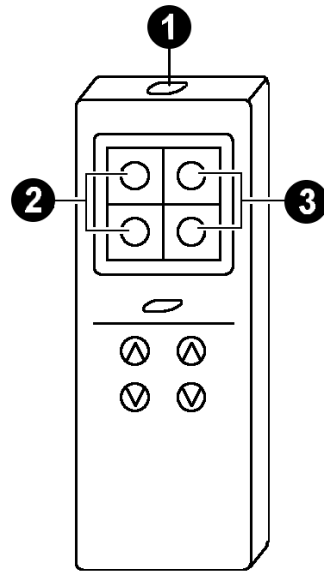
STEP 3 If more than one transmitter is to be used with the system, press a different button for each TRANSMITTER to be programmed.

STEP 4 The test mode is exited by momentarily pressing the VOLUME + and POWER buttons at the same time.

SOURCE

ON
TUNING VOLUME
OFF

Hand Held
RF Remote
Control

OPERATION - Your HAND HELD REMOTE CONTROL is an RF (radio frequency) device. This means that it will work anywhere in or around your house (you do not have to be in the same room as the master). The system also has a unique code in the transmitter that is learned by the MC960, virtually insuring that no one else can interfere with your system and you will not interfere with anyone else.

❶ **SOURCE button** - This button is used to select the audio source (FM, AM, AUX/CD input or TAPE input) which the MC960 will output to the Music Speakers. Each time the SOURCE button is momentarily pressed, the audio source changes. The sequence is FM, AM, AUX/CD, AUX2, TAPE, and back to FM.

❷ **TUNING UP/DOWN buttons** - To go up to the next preset station, simply press the UP button momentarily. The MC960 will tune to the next preset station.

> Note: When the MC960 is installed with the MCD6 6-disc CD player, the UP/DOWN buttons will change the track selection. This track function operates when the master is in the CD mode.

Hand Held RF Remote
Control

❸ **VOLUME UP[ON]/DOWN[OFF] button** -
These buttons are used to change the system music volume. Pressing the VOLUME DOWN button reduces the volume. The MC960 will turn off when the volume reaches zero. Pressing the VOLUME UP button turns the MC960 ON if it is OFF.

> NOTE: For best performance, the individual music speaker volume controls should be turned to maximum volume (fully clockwise) and then the volume adjusted with the VOLUME buttons on the wireless hand-held controller for the proper listening volume (this is really setting the maximum listening volume). The individual music speaker volume control can then be adjusted in rooms that require less volume.

TROUBLESHOOTING TIPS

PROBLEM	WHAT TO CHECK
Power amp(s) does not operate and display shows error 1	Check for a broken or disconnected control cable between the control panel and the first amplifier.
Power amp(s) does not operate and display shows error 3	Check for a shorted control cable between the control panel and the first amplifier.
Power amp(s) does not operate. No error codes are displayed.	Check each power amplifier for 120VAC. Make sure each power amplifier is plugged into 120VAC 60Hz supply. Check control cables between first and second amplifiers. Check control cables between second and third amplifiers.
Wireless remote control does not operate the MCD6 6-disc CD player.	Check to make sure the control cable is connected between the MC960 and the MCD6. Contact installer.
System hums when remote sources are connected to the AWP audio wall plate.	Make sure speaker outputs are not used to connect the source equipment to the MC960's audio wall plate AWP.
Music sounds distorted or low volume occurs at high output levels.	Make sure individual speaker volumes are set close to maximum.
Door chime volume at the master is too high or too low	Adjust the volume setting on the chime unit behind the MC960 master.
Door chime is heard only at the master	Turn the room stations up (clockwise)

For on-site technical troubleshooting support contact your installer or the factory by calling (800) 366-9422 or write to:

M&S Systems
2861 Congressman Lane
Dallas, TX 75220
Attn: Technical Service

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 escrow 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.
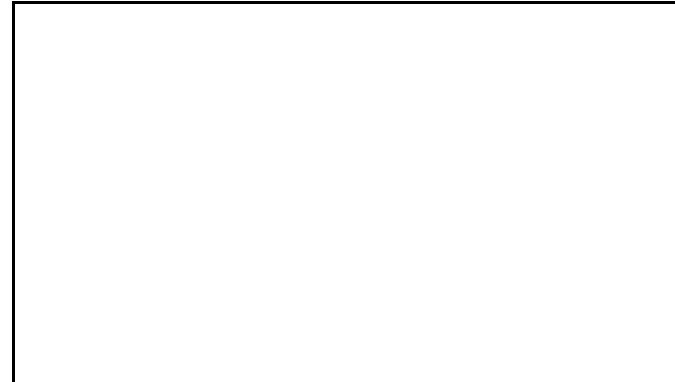
If, during the limited warranty period, it appears as though this product contains a defect which is covered by this limited warranty, call our toll free service number before dismantling the product (1-800-877-6631). Remember to attain a Return Authorization Number (RAN) before returning any product 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 the repaired 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 RETURNED WITHOUT A RETURN AUTHORIZATION 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 purpose 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-M&S/non-AirVac wire (excluding structured wire packages), cable (excluding structured wire packages) 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, exceed the cost of the product covered hereby. No 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.

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