

CONGRATULATIONS!

Your purchase of an M&S music and communications system is an investment that will provide years of enjoyment and service for your customer.

M&S audio products are backed with more than 40 years of experience in the design and manufacture of precision acoustical equipment for the home. To ensure that your customer 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. If you follow the step-by-step illustrated instructions below, the result will be a successful professional-quality installation. In the event you need troubleshooting assistance, please call our technical staff at 800-366-9422.

INSTALLATION INSTRUCTIONS FINISH-OUT MC902

Please read and understand these instructions completely **before** cutting any wall material.

1/8" wide) screwdriver



NOTE: Make sure the master power switch is off (the switch shaft is fully extended) while making any connections to or disconnections from the unit!

Tools Required: Phillips Screwdriver, Wire cutters/strippers, Standard (flat

DOs & DON'Ts

- K **USE ONLY M&S SYSTEMS BRAND CABLE** as called out in these instructions. The cable is designed and constructed with electrical specifications necessary for proper audio performance. **IMPORTANT: THE USE OF NON M&S SYSTEMS' BRAND CABLE OR CABLE SUBSTITUTION WILL VOID PRODUCT WARRANTY.**
Note: All M&S Systems' cable has M&S Systems and the part number printed on it!
- K **DO NOT** power up master until all remote stations and speakers are connected.
- K **DO** ensure that all rough-in instructions (*literature number 115706*) have been followed before power is applied to system.
- K **DO NOT SPLICE CABLES.** Splices are unreliable and defeat the signal isolation properties of the cable.
- K If extra cables have been run for possible future speaker additions, care must be taken that these cables do not get connected to the master unit. Unterminated cables (no station) connected to the master unit may cause electronic feedback that will damage the master unit.
- K **DO NOT** over-tighten the screws for the remote stations or the master as the plastic face panels may crack.

INTERCOM STATION N94

At each remote station location, strip approximately 4 Inches of jacket (MS7XSC) from wire and separate the colored wires from one another. Strip 1/2 Inch of insulation from each wire as shown in figure 1. Cut each shield drain wire at the shield foil to prevent them from touching each other. Connect each colored wire to its respective screw terminal as shown in figure 2. Mount each remote station to its mounting ring using the two screws provided with each station as shown in figure 3.

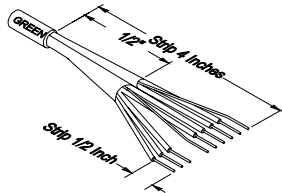


Figure 1 - MS7XSC cable preparation

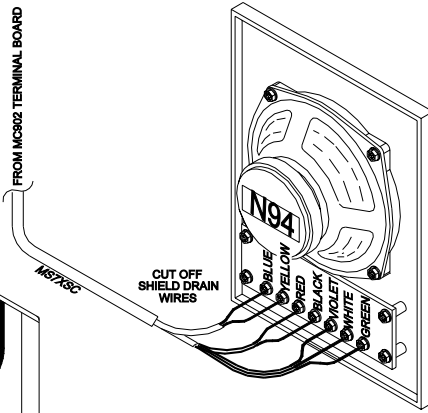


Figure 2 - N94 hookup

Mounting ring
remote station
mounting screws 3.

Figure 3

INTERCOM/VOLUME CONTROL N94 NSV94 (STEREO CONTROL)

At each remote station location, strip approximately 4 Inches of jacket (MS7XSC, MS3XSC and MS2SXSC) from wire and separate the colored wires from one another. Strip 1/2 Inch of insulation from each wire.

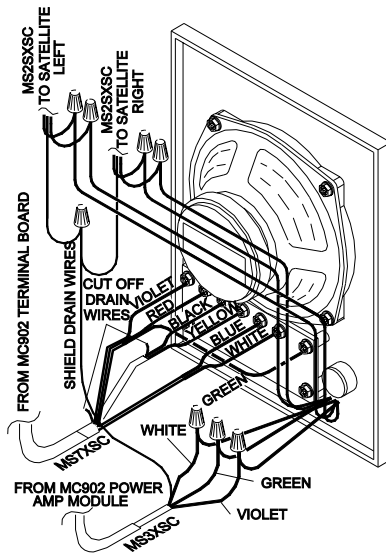


Figure 4 - NSV94 hookup

On the MS7XSC cut each shield drain wire at the shield foil to prevent them from touching each other. Connect each shield drain wire from the MS3XSC and MS2SXSC cables to each other as shown in figure 4. Connect each colored wire to its respective screw terminal as shown in figure 4. Mount each remote station to its mounting ring using the two screws provided with each station as shown in figure 3.

th each station as shown in figure 8.

INTERCOM/VOLUME CONTROL N94 NMV94 (MONAURAL CONTROL)

At each remote station location, strip approximately 4 inches of jacket (MS7XSC, MS3XSC and MS2SXSC) from wire and separate the colored wires from one another. Strip 1/2 inch of insulation from each wire. On the MS7XSC cut each shield drain wire at the shield foil to prevent them from touching each other. Connect each shield drain wire from the MS3XSC and both MS2SXSC cables to each other as shown

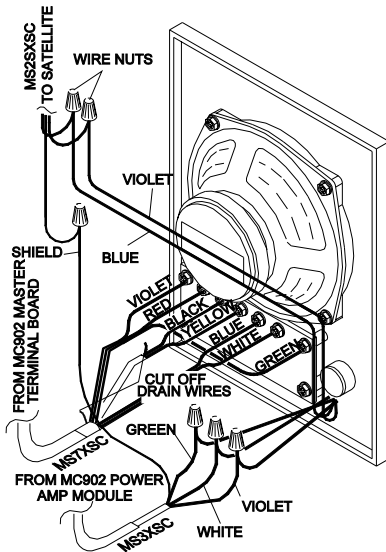


Figure 5 - NMV94 hookup

in figure 5. Connect each colored wire to its respective screw terminal as shown in figure 5. Mount each remote station to its mounting ring using the two screws provided with each station as shown in fig. 3.

MUSIC SPEAKERS N88V (MONO)

At each music station location, strip approximately 4 inches of jacket (MS3XSC) from wire and separate the colored wires from one another. Strip 1/2 inch of insulation from each wire.

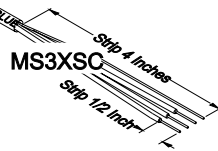


Figure 6 - Cable preparation

Connect each wire of the MS3XSC to its corresponding wire on the N88V as shown in figure 7. Mount each remote station to its mounting ring using the

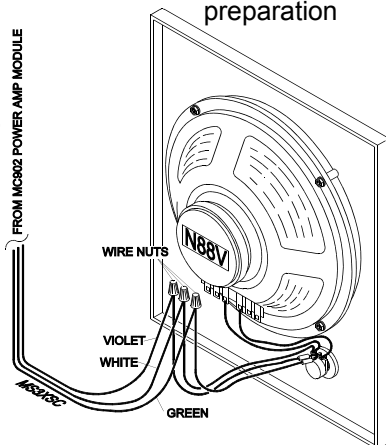


Figure 7 N88V Hookup

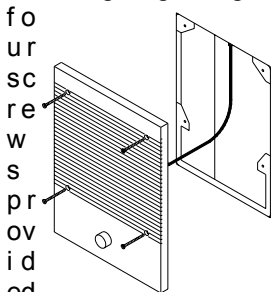


Figure 8 - Speaker mounting

STEREO PAIR MUSIC SPEAKERS

At each music station location, strip approximately 4 inches of jacket from the (MS3XSC) and (MS2SXSC) cables and separate the colored wires from one another. Strip 1/2 inch of insulation from each wire. Connect each wire of the MS3XSC and MS2SXSC as shown in figures 9 and 10. Mount each NS88V speaker to its mounting ring using the four screws provided as shown in figure 8.

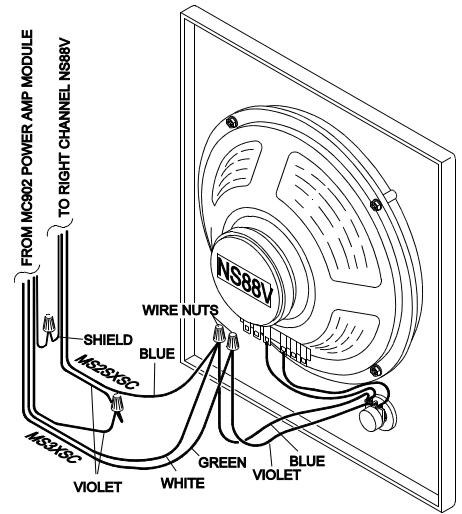


Figure 9 Left Channel hookup NS88V

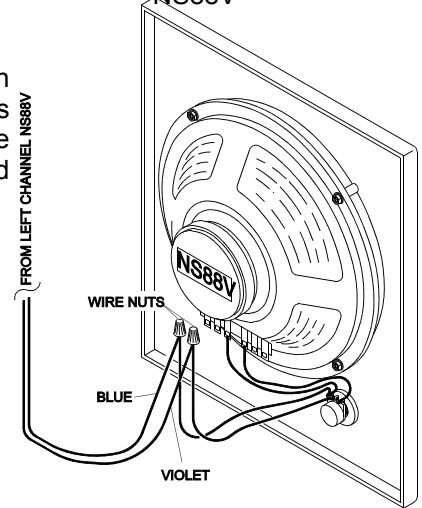


Figure 10 Right channel hookup (NS88V)

SATELLITE VOLUME CONTROLS

At each satellite control station location, strip approximately 4 inches of jacket (MS3XSC and MS2SXSC) from wires and separate colored wires from one another. Strip 1/2 inch of insulation from each wire. Connect drain wires together from both cables using a wire nut (MS3XSC only).

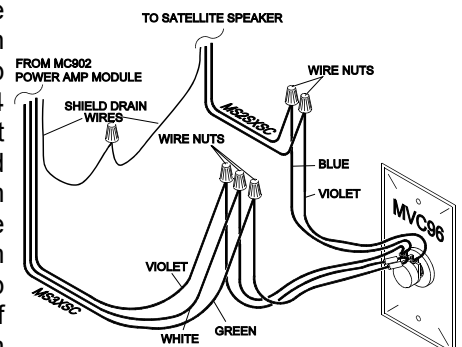


Figure 11 - MVC96 Hookup

Wire nut each colored wire to its respective wire as shown in figure 11 (mono) or figure 12 (stereo). Connect the Blue and Violet wires to the corresponding terminals of the satellite speaker(s). Mount the volume control to the single gang box using the two screws provided with the volume control.

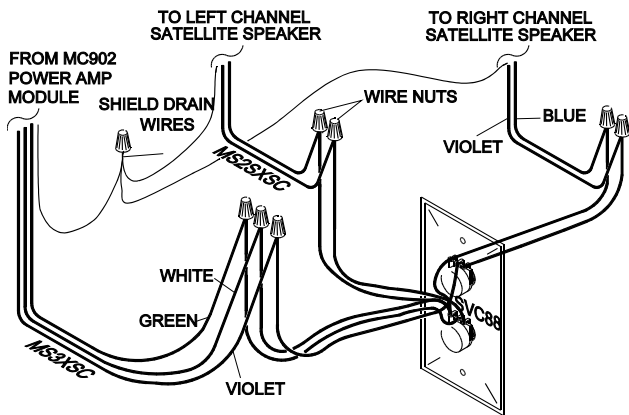


Figure 12 - SVC88/SVC96 hookup

SATELLITE CEILING SPEAKERS

At the each speaker location, strip approximately 4 Inches of jacket from the (MS2SXSC) cables and separate the colored wires from one another. Strip 1/2 Inch of insulation from each wire. MS2SXSC as shown in figure 13.

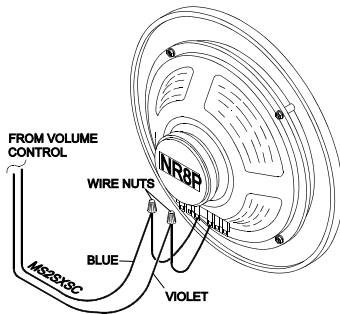


Figure 13 - Ceiling satellite speaker hookup

SATELLITE WALL SPEAKERS

Attach each MS2SXSC cable to its corresponding music speaker matching the colored wires with wire nuts as shown in Figure 14. The shield drain wire must be cut off and not connected at the music speaker end. Attach the music speakers to their rough-in fixtures with the screws provided.

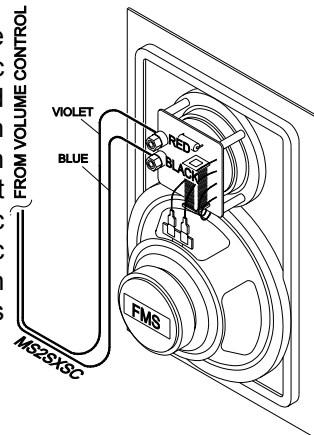


Figure 14 - Wall satellite speaker hookup

DOOR STATIONS SERIES DS3/DS3B & BD3/D3/BD3B/D3B

At each door station location, strip approximately 4 Inches of jacket from wire and separate colored wires from one another. Strip 1/2 Inch of insulation from each wire as shown in figure 15. Cut each shield drain wire at jacket to prevent them from touching each other only.

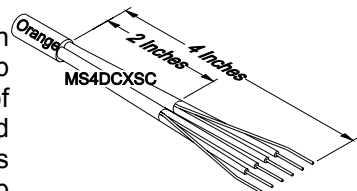


Figure 15

Terminate yellow and orange wires to the screw terminals on the bell button (if equipped). Connect the Red and Black wires to the Red and Black wires on the speaker respectively. Refer to figure 16. Mount door station to housing using the two screws provided with station.

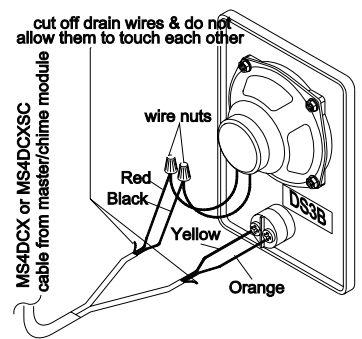


Figure 16 - Door station hookup

EXTERNAL MUSIC SOURCE AWP

Connect the cables from the gang box to the to the AWP wall plate as shown in figure 17. The top RED and BLACK should correspond to a stereo pair (Left and Right respectively at the master and likewise with the bottom RED and BLACK pair. Use the labels provided to mark the plate as identified on the respective cables. Mount the plate using the two screws provided.

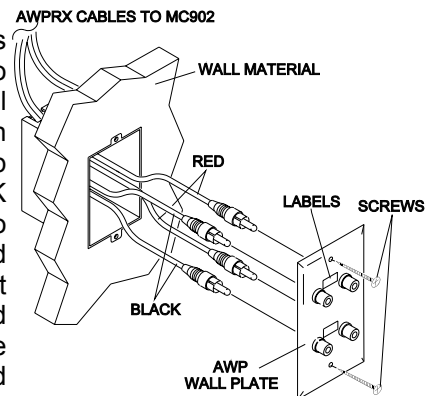


Figure 17 - AWP Hookup

MC902 MASTER STATION HOOKUP

Gather all music cables (MS3XSC) and cut the cable ends to the same length approximately 12 Inches from the entry point in the wall housing. Strip off approximately 8 Inches of jacket and shield foil from each cable. Pigtail all shield drain wires (bare) from the MS3XSC cables to the COMMON terminal on the power amp module. Insulate the bare wires using some of the jacket material to prevent shorting to the circuit board. For the MS3XSC, connect all white wires to the COMMON terminal, all green wires to the L-OUT terminal and all violet wires to the R-OUT terminals as shown in figure 19.

Gather all intercom cables (MS7XSC) and cut the cable ends to the same length approximately 12 Inches from the entry point in the wall housing. Strip 1-2 Inches of jacket and shield foil from the MS7XSC cables. Connect each of the 7 colored wires and the shield drain wire to each plug-in terminal block as

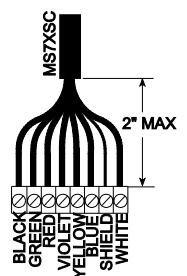


Figure 18 - MS7XSC to terminal block connection

shown in figure 18. Note: Each connector strip corresponds to a room selector as shown in figure 19. NOTE: No more than two MS7XSC cables can be connected to a single plug-in terminal block.

antenna wire to the AM terminal on the tuner module as shown in figure 21.

Gather all door station cables (MS4DCXSC) and cut the cable ends to the same length approximately 12 Inches from the entry point in the wall housing. Strip off approximately 8 Inches of jacket and shield foil from each cable. Insulate the bare wires using some of the jacket material to prevent shorting to the circuit board. Connect the MS4DCXSC cables as shown in figure 19.

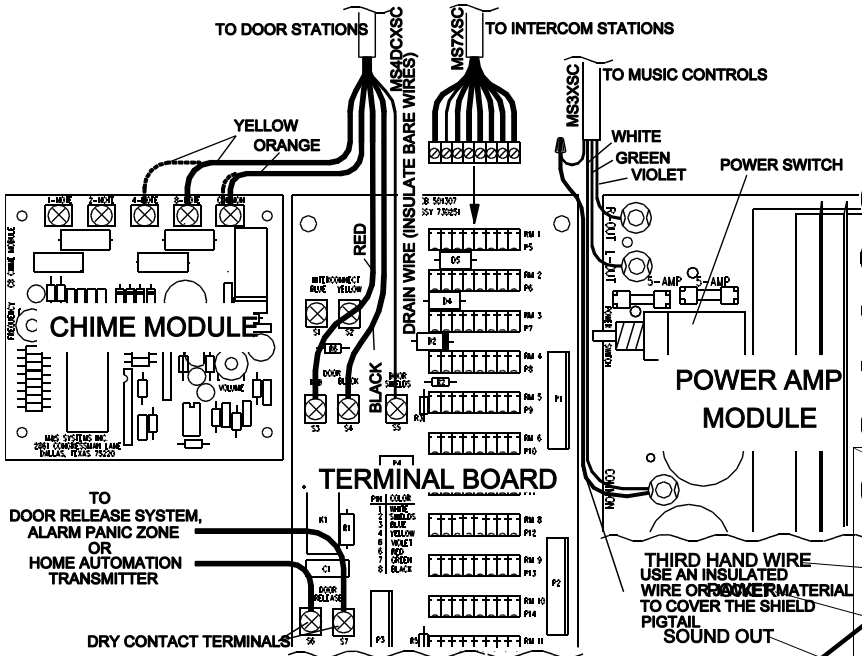


Figure 19 - Field wiring hookup

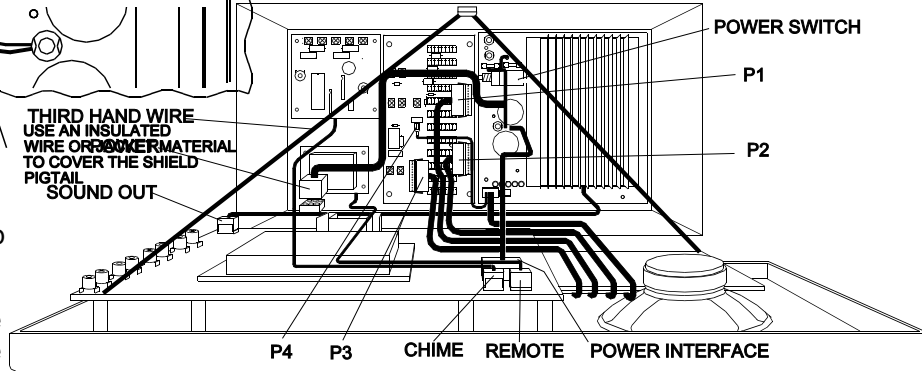


Figure 20 - MC902 Face panel hookup

Install the optional chime module MC3 or MC8 in the upper left corner of the wall housing by pressing the chime module over the 4 plastic standoffs attached to the wall housing. Refer to the instructions shipped with the chime module.

Suspend the master unit from the wall housing by looping the third-hand wire (thick green wire) over the hook at the top of the housing. Be careful not to damage the wall surface. See figure 20. Connect the FM dipole twin lead to the FM 300 Ohm terminals on the tuner module as shown in figure 21. Connect the orange AM antenna wire to the AM terminal on the tuner module as shown in figure 21.

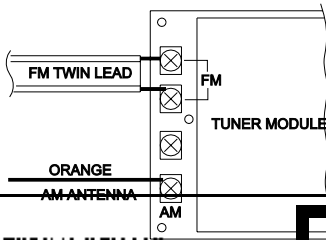


Figure 21 - Antenna hookup



M&S SYSTEMS' 2-YEAR "NO FAULT" LIMITED WARRANTY

M&S Systems warrants for 2 years all products to be free of factory-caused defects in material and workmanship. M&S Systems will repair or replace, at its option, parts and materials at no charge, regardless of the problem. This warranty extends to the original purchaser of the product and to each subsequent owner of the product during the term of this warranty. This NO FAULT warranty covers only the liability described above, and does not include liability for incidental or consequential damages. NOTE: 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.

Refer to figure 20. From the master unit connect plug assemblies P1, P2 and P3 to headers P1,P2 and P3 on the terminal board respectively. Connect plug assembly P4 to header P4 on the power amp module. Also, connect the black wire from P4 to P4 on the terminal board. From the power amp module connect the power interface cable to the header on the master labeled POWER INTERFACE. Connect the gray cable from the power amp module to SOUND OUT on the master unit. If a chime module is used, connect the plug assembly from the chime to the header on the master labeled CHIME. If the wireless remote control feature is used, connect the plug assembly from the wireless remote control receiver to the header labeled REMOTE on the master unit. If any peripheral music sources are to be connected, follow the instructions with the peripheral equipment for detailed hookup instructions.

Secure the master to the wall housing using the two #6 screws provided. Install the face panel insert to the master. Refer to the user guide to verify proper system operation. See figure 22.

If you encounter any problems, recheck all connections again. If problems still persist, contact our technical assistance center at 800-366-9422.

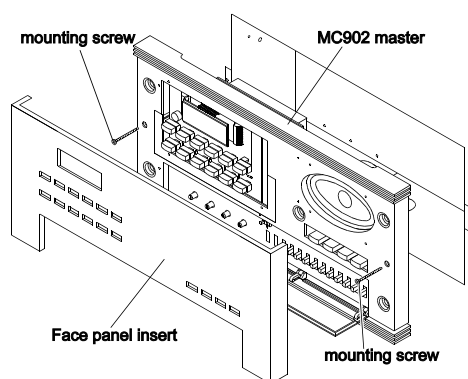


Figure 22