



STERLING™

OWNER'S MANUAL



MX5

**5" POWERED
STUDIO
MONITOR**

MX8

**8" POWERED
STUDIO
MONITOR**

INTRODUCTION:

Congratulations on your Sterling MX Series studio monitor purchase. We are proud to bring our wealth of experience and sound innovation to this new product line. The MX Series combines years of our transducer technology R&D with sleek and purposeful industrial design. The carefully balanced voicing of each monitor allows for critical mixing and monitoring as well as playback. To get the most of your purchase, read this manual carefully and store it for future reference.

FEATURES:

- Unique vertical-and-horizontal waveguide design for wide frequency dispersion and superior stereo imaging
- Low frequency drivers with multi-fiber paper cone design for improved damping and frequency response
- 1" silk dome tweeter for clear transients and superior audio definition
- High-efficiency, low-distortion, bi-amped class A/B amplifier for accurate sound reproduction
- Studio grade internal components with protective electrical design
- Rear panel porting offers superior bass response and accuracy
- Elegant, polished ebony front baffle and Sterling LED for outstanding looks



WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.
AVERTISSEMENT: POUR ÉVITER LE RISQUE D'INCENDIE OU DE CHOCS ÉLECTRIQUES, NE PAS EXPOSER CET APPAREIL À LA PLUIE OU À L'HUMIDITÉ.

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use the attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. **WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
16. When the MAINS plug, or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.
17. Protective Ground Terminal: The apparatus shall be connected to an AC main socket with a protective earth ground connection.



HANDLING AND MAINTENANCE

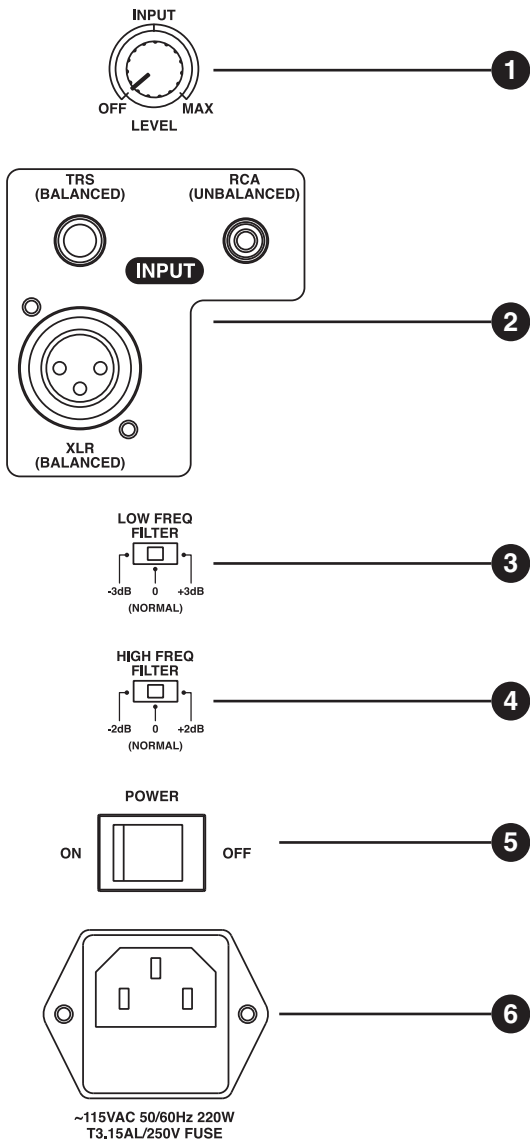
- Using a cell phone near the speaker system can induce noise. If this occurs, move the cell phone further away from the speaker system.
- Air blowing out of the rear bass reflex ports is normal, and often occurs when the speaker is handling program material with heavy bass content.
- Always turn the power off when the device is not in use.
- Avoid touching or allowing objects to come in contact with the speaker diaphragms.
- These speakers should be used vertically, not laid on their side.
- Keep these speakers away from magnets other electronic devices containing magnets, such as Cathode Ray Tube (CRT) monitors.

CONNECTIONS

1. Turn off power on all devices. Set all volumes to minimum. Now it is safe to connect all devices and power up.
2. Turn on the power to all connected devices such as computers, outboard gear and audio interfaces.
3. Turn on the power to your MX studio monitors.
4. Play music or sound through your audio system and then slowly increase the volume of the monitors to the desired level.
5. When turning off your audio system, make sure to follow these steps in reverse. You can choose to leave your volume levels where you set them originally, so long as the output on your mixer, audio interface or sound system outputs remains the same as well.

REAR PANEL

The MX switches and connectors are located on the rear panel, as described below.



SPEAKER INPUT AND RESPONSE CONTROL

1 LEVEL CONTROL

Adjusts the output level of the speaker. When fully counterclockwise, the speakers will be off. When turned to the right, the speakers will be on and the backlit LED will light.

2 INPUT CONNECTORS

These connectors receive the input signal to the speaker. Three input connectors are provided: one balanced XLR connector, one balanced (TRS) phone jack, and an unbalanced RCA connector.

NOTE: The XLR and phone jack input connectors can not be used simultaneously. Use only one input connector at a time.

NOTE: Refer to "Connection and Cable Types" on page 4 and 5 for more connector details.

3 LOW FREQUENCY FILTER

This switch adjusts the low frequency performance of the speaker by -3dB or +3dB at 75Hz. The switch is in the neutral position in the center at 0dB. The -3dB setting can be used to compensate for increased bass response resulting from the speaker being close to reflective surfaces in your listening environment. With each adjacent reflective surface, there is +3dB increase in low frequency response. So if the speaker must be placed next to a wall, for example, there will be a +3dB boost in low frequency performance which can be accounted for by using the -3dB switch. You can also choose to use the +3dB setting if you are using the speakers primarily for listening rather than as reference monitors or if you prefer more bass as part of your listening experience.

4 HIGH FREQUENCY FILTER

This switch adjusts the high frequency performance of the speaker by -2dB or +2dB at 10kHz and above. This filter can be used when compensating for listening environments based on their reflective properties. Listening environments with a large proportion of hard, reflective surfaces such as concrete, brick or drywall tend to sound abnormally bright or harsh in the high frequencies. The -2dB setting may be helpful here. Rooms with a high proportion of absorptive materials such as carpet or foam tend to sound duller. The +2dB setting may be more appropriate. Try the low and high frequency filters to determine which settings are correct for your listening environment and personal preference.

5 POWER SWITCH

Turns power to the speaker ON or OFF. Rock the switch up to turn the power ON, or down to turn the power OFF. The logo on the front panel will light when the power is ON.

CAUTION

- Turning the power switch ON and OFF in rapid succession can cause the device's electronics to malfunction. Please wait for 3 seconds or more after turning the power OFF before turning it ON again.
- Even when the power switch is turned off, electricity is still flowing to the product at the minimum level. When you are not using the product for a long time, make sure to unplug the power cord from the wall AC outlet.

6 AC IN CONNECTOR

Connect the supplied power cable here. First connect the power cord to the speaker, then insert the power cord plug into the AC outlet.

SETUP

In this section we'll look at the general procedure for connecting and setting up a monitor speaker system. This is just an example though, so feel free to set up your own system in the way that best serves your personal listening needs.

CABLES

You'll need to acquire appropriate cables to connect the MX series monitor speakers to your audio interface or other source equipment.

- Short, high-quality cables
 - Use high-quality cables of the shortest practical length. The longer the cable, the more chance there is that noise will creep in to degrade your sound.
- Balanced cables
 - Balanced cables are more resistant to noise than unbalanced cables. If you have to use unbalanced cables because the source equipment only has unbalanced outputs, be sure to use the shortest possible unbalanced cables.

For connection to a balanced phone jack input.



OR

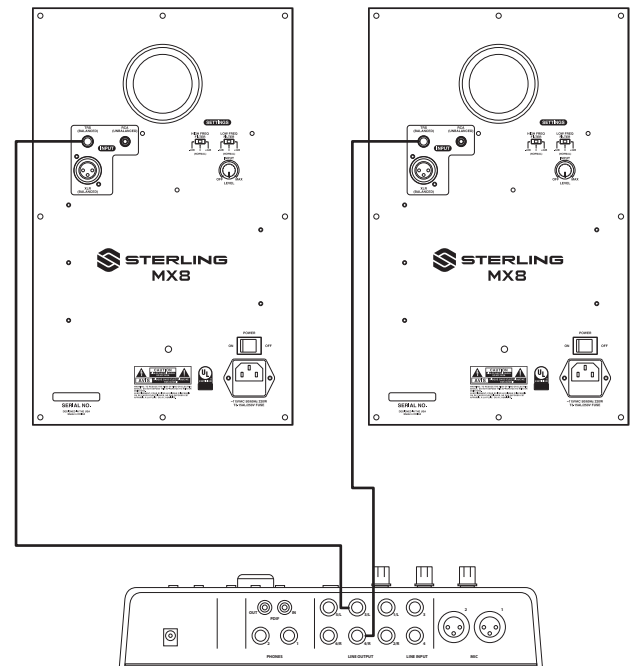


For connection to an unbalanced RCA input.



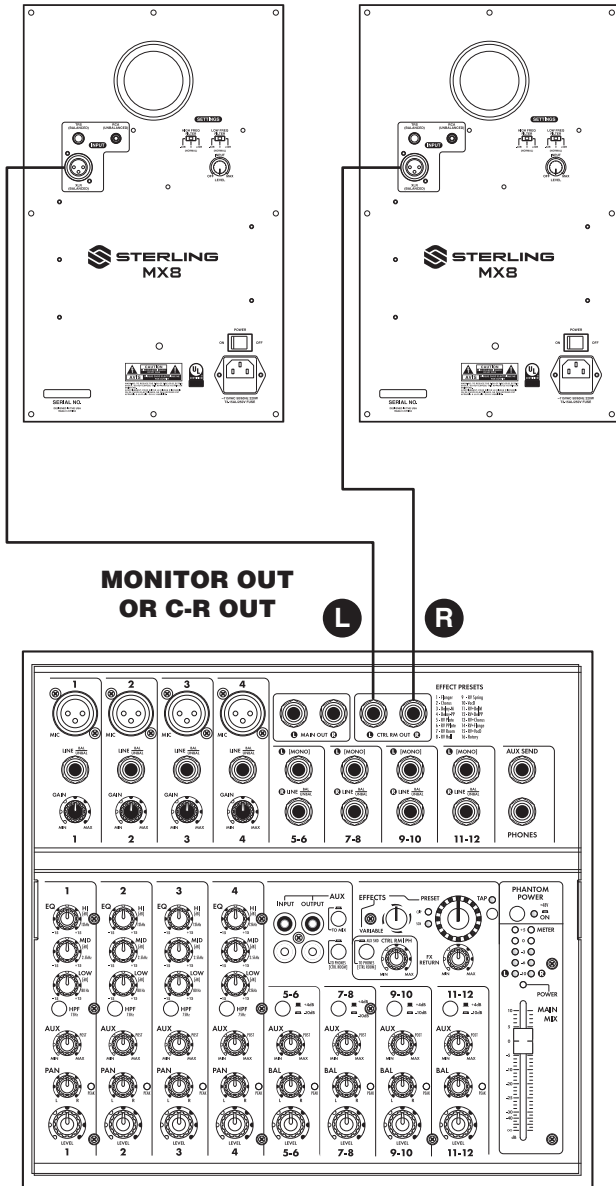
CONNECTING TO AN AUDIO INTERFACE

When connecting an audio interface to MX series speakers, connect the audio interface output connectors directly to the desired input connectors. Normally you'll connect to the LINE OUT 1 and 2, although that might depend on the specific audio interface and DAW (Digital Audio Workstation) settings used.



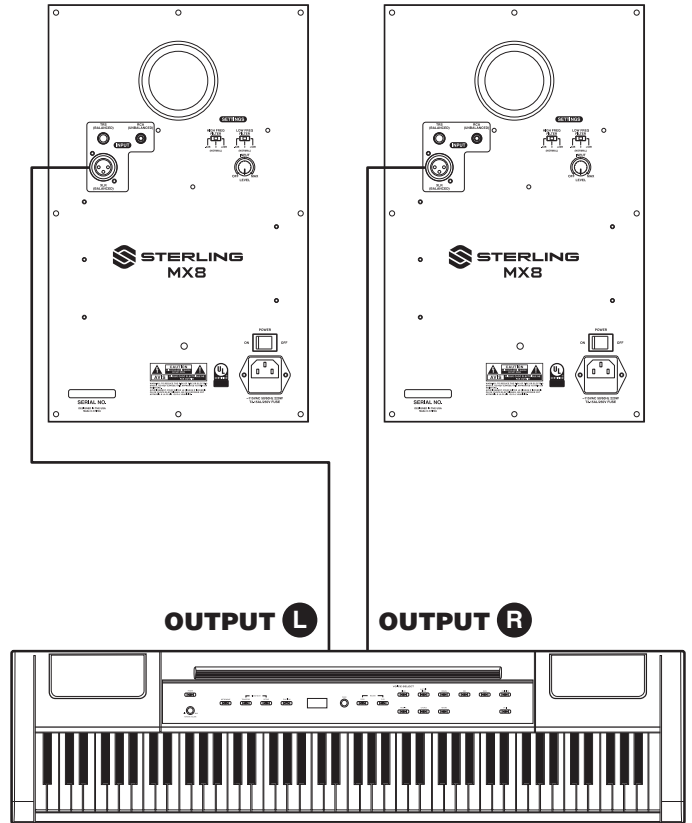
CONNECTING TO A MIXER

When connecting a mixer to MX series speakers, connect the mixer's MONITOR OUT or C-R OUT (Control Room) connectors directly to the speakers' input connectors. This makes it possible to control the monitor level independently from the mixer's main bus level.



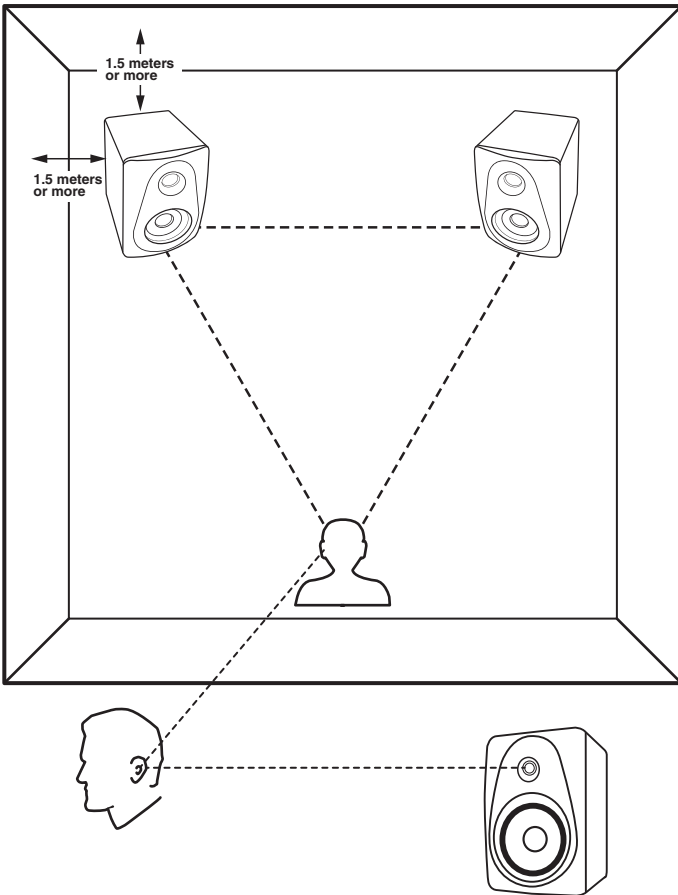
CONNECTING TO A SYNTHESIZER OR OTHER ELECTRONIC MUSICAL INSTRUMENT

When connecting an electronic musical instrument such as a digital piano or synthesizer to the MX series speakers, connect the instrument's L/MONO and R outputs to the MX speaker inputs.



SETTING UP YOUR LISTENING ENVIRONMENT

A number of points should be observed when laying out a monitor speaker system.



POINT 1

Ideally, the speakers should be located at least 1.5 meters away from walls or corners. In situations where it is not possible to position the speakers a sufficient distance from walls or corners, the LOW FREQ switch can be used to compensate for excessive bass. As you move the speaker closer to walls or corners, setting the low frequency filter to the -3dB position may be required to achieve a neutral sounding frequency response.

POINT 2

The left and right speakers should be positioned as symmetrically as possible in relation to the room. In other words, the left and right speakers should be the same distance from the rear wall and the respective left and right walls.

POINT 3

For the most accurate sound and balance, position yourself at the apex of an equilateral triangle formed by the left and right speakers and yourself, with the speakers angled inward so that they're facing you.

POINT 4

High frequencies are quite directional, so for the most accurate monitoring the speakers should be set up so that the tweeters are at approximately the same height as your ears when you're seated at the listening position.

POINT 5

If possible, it is best to position your speakers on individual speaker stands outfitted with adhesive foam bases or separate monitor isolation pads. This approach helps to decouple speakers from the stands or other hardware such as furniture which may place reflective and/or resonant surfaces between you and the speakers. You can also use the included isolation feet to decouple the speakers from your stand or desktop.

POINT 6

Be aware of your room's physical properties to ensure the best positioning of your speakers. Ideal listening environments consist of non-parallel walls with an appropriate amount and positioning of acoustic treatment such as absorptive fiberglass, fabric or foam panels and bass "traps" to help prevent build-up of low frequency energy in corners. Small changes in the positioning of your speakers can make a big difference in the final sound of your listening environment. Reference commonly available material about acoustic design or consult an expert if you are unsure.

TROUBLESHOOTING

If you're having trouble, check out these tips...

If there is no power, check to see if...

- The power cord is plugged into both the IEC socket on the rear panel of the monitor and into the AC mains. The Sterling logo on the front face plate will illuminate when the monitor is powered on.
- The AC main voltage is matched to the operating voltage requirements. If the AC mains voltage is higher than the selected voltage on the monitor, it is possible that the fuse needs to be replaced.
- The Sterling logo is illuminated on the faceplate of the monitor. If not, turn the power switch off and check the AC mains fuse(s). NEVER USE A LARGER AMPERAGE FUSE THAN IS SPECIFIED! Turn the power switch back on. The power light should illuminate.
- Note: If a fuse change is required, please check that the AC mains voltage is set correctly. If the fuse(s) blows again when the monitor is turned on, please contact the dealer you purchased it from, or Sterling Customer Service (1-888-621-2154 or support@sterlingaudio.net).

If you can't hear any sound...

- Repeat the steps in the Troubleshooting section above before continuing to the next steps.
- Check to see if all other audio devices using the same AC outlet are still operating.
- Make sure that:
 - The audio source cable is plugged into both the source output and the monitor input.
 - The volume knobs of the monitors are turned up.
 - The signal source (e.g. mixing console, work station, CD player, etc.) is turned up to a level that can properly send a signal to the monitors.
 - Check to see if one of the monitors is working. Exchange the audio input cable from the non-working monitor to the working unit. This will determine whether it's really the monitor, a faulty cable, or some other glitch in the audio chain.
- If the monitor is still not responding, it should be returned to the dealer that you purchased it from, or to Sterling, for servicing.

If the monitor suddenly stops working...

- Turn the outputs of your sound system down or off.
- Repeat the steps in the Troubleshooting sections above before continuing to the next steps.
- Carefully check to see if the amplifier's back plate is hot. If the monitor has been running at its highest power output for an extended period of time, it could be that the unit has become overheated and the protection circuitry has shut the system down momentarily. Your Sterling MX5 and MX8 monitors provide maximum circuitry protection against AC power surges, amplifier overdrive, and overheating of the amplifiers. Turn the monitor off then wait 30 minutes to allow the back plate to cool down. Turn the power switch back on.
- Increase the volume to check for normal operation.
- If the monitor is still not responding, please contact the dealer you purchased it from or Sterling Customer Service (1-888-621-2154 or support@sterlingaudio.net).

The sound quality changes...

- Repeat the steps in the Troubleshooting section above before continuing to the next steps.
- Disconnect the signal cable at the input of the monitor. With power on, place your ear close to each driver (tweeter/woofer) and listen for noise (i.e. a slight hiss or hum). If there's absolutely no sound whatsoever, it could be that one or more of the drivers (woofer, tweeter or both) is at fault. It's also possible that the problem lies somewhere in the electronics.
- Play some non-distorted source material at a low volume. Carefully cover the tweeter (to block the sound) without touching the diaphragm. Is the woofer producing a clean sound? If there is not a clear tonal quality, or any sound at all, then the woofer probably needs to be replaced.
- Cover the woofer so you can hear mostly the tweeter. Is the tweeter producing a clear sound? If there is not a clear tonal quality, or any sound at all, then the tweeter probably needs to be replaced.
- Once you have a better idea of what may be at fault please call our customer service department. We will help you determine the best solution to correct your monitors.

Sterling Customer Service can be reached at 1-888-621-2154 or support@sterlingaudio.net.

The monitor hisses, hums or makes other loud noises...

- Here are some suggestions that will help you eliminate these undesirables from your system:
 - Ensure that the AC power is matched to the operating voltage requirements.
 - Make sure that the power cord is plugged snugly into the IEC socket on the rear of the monitor.
 - Check the connections between the signal source and the monitor. The Sterling MX5 and MX8's XLR and TRS connectors offer completely balanced connectivity. Make sure the output of your audio system is balanced and that you are using balanced cables. While unbalanced RCA connections are also available, this connection format is more susceptible to noise.
 - All audio equipment should use the same ground point. If parts of your audio system are connected to different AC outlets in your room, this may result in an audible hum as a result of small differences in voltage between different connected circuits. Check all other devices using the same AC output in the building such as dimmers, neon signs, TV screens, and computer monitors. These devices should not be using the same circuit.

