MONOLITH™

Monolith™ THX® Subwoofer

P/Ns 24456, 24457, 24458, 38543

User's Manual

CONTENTS

SAFETY WARNINGS AND GUIDELINES 3

CUSTOMER SERVICE 4

PACKAGE CONTENTS 5

PRODUCT OVERVIEW 5

SETUP GUIDE 7

- Subwoofer Placement 8
- Connecting to a Balanced XLR Output 8
- Connecting to a Subwoofer/LFE Output 9
- Connecting to a Stereo Preamp Output 10

TECHNICAL SUPPORT 11

TROUBLESHOOTING 11

SPECIFICATIONS 12

SAFETY WARNINGS AND GUIDELINES

Please read this entire manual before using this device, paying extra attention to these safety warnings and guidelines. Please keep this manual in a safe place for future reference.

- This device is intended for indoor use only.
- Do not expose this device to water or moisture of any kind. Do not place drinks or other containers with moisture on or near the device. If moisture does get in or on the device, immediately unplug it from the power outlet and allow it to fully dry before reapplying power.
- Do not touch the device, the power cord, or any other connected cables with wet hands.
- If operating this subwoofer in a humid environment, ensure that no condensation occurs. Condensation could cause damage to the speaker cone and could cause a short in the subwoofer's amplifier, which in turn could cause fire or severe electric shock.
- Do not subject the product to extreme force, shock, or fluctuations in temperature or humidity.
- Do not expose this device to excessively high temperatures. Do not place it in, on, or near heat sources, such as a fireplace, stove, radiator, etc. Do not leave it in direct sunlight.
- Do not place or install this device in an area where it can be exposed to excessive amounts of dust, humidity, oil, smoke, or combustible vapors.
- Prior to operation, check the unit and power cord for physical damage. Do not use if physical damage has occurred.
- Before plugging the unit into a power outlet, ensure that the outlet provides the same type and level of power required by the device.
- This device uses a grounded power cord and requires a ground connection for safe operation. Ensure that the power source has a proper ground connection. Do not modify the plug or use a "cheater" plug to bypass the ground connection.

- Disconnect the unit from the power source when replacing the fuse. Replace the fuse only with the same type.
- Unplug this device from the power source when not in use.
- Take care to prevent damage to the power cord. Do not allow it to become crimped, pinched, walked on, or become tangled with other cords. Ensure that the power cord does not present a tripping hazard.
- Never unplug the unit by pulling on the power cord. Always grasp the connector head or adapter body.
- Ensure that power is turned off and disconnected before making any electrical connections.
- Clean using a soft, dry cloth only. Do not use chemical cleaners, solvents, or detergents. For stubborn deposits, moisten the cloth with warm water.
- This device has no user serviceable parts. Do not attempt to open, service, or modify this device.

CUSTOMER SERVICE

The Monoprice Customer Service department is dedicated to ensuring that your ordering, purchasing, and delivery experience is second to none. If you have any problem with your order, please give us an opportunity to make it right. You can contact a Monoprice Customer Service representative through the Live Chat link on our website **www.monoprice.com** during normal business hours (Mon-Fri: 5am-7pm PT, Sat-Sun: 9am-6pm PT) or via email at **support@monoprice.com**

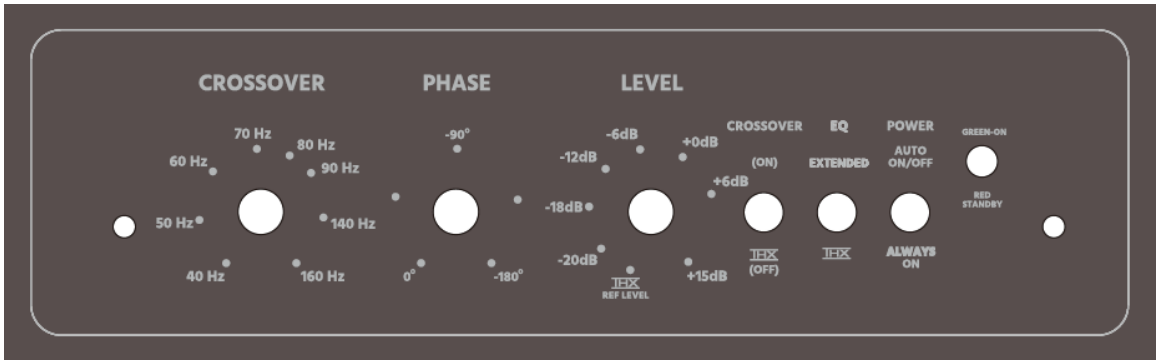
PACKAGE CONTENTS

Please take an inventory of the package contents to ensure you have all the items listed below. If anything is missing or damaged, please contact Monoprice Customer Service for a replacement.

1x Monolith™ subwoofer

1x AC power cable

PRODUCT OVERVIEW



CROSSOVER: Use the **CROSSOVER** knob to adjust the upper limit of the subwoofer's frequency response from 40 to 160 Hz. The subwoofer will output only those frequencies below the set level. You should set the crossover frequency to obtain a smooth and seamless transition from the subwoofer to the main speakers in your system. If your main speakers are smaller units with limited low frequency output, start with a higher frequency, such as in the 100-150 Hz range. With larger speakers that have greater low frequency output, you might start with this control set lower, such as in the 60-100 Hz range.

PHASE: This control allows you to alter the phase of the subwoofer's output signal from 0° - 180° to correct for a possible mismatch in phase, which results in cancellation between the subwoofer and your main speakers. To adjust the **PHASE**, listen to the system with music playing and tune between 0° and 180° while listening for a

change in mid-bass output. The correct position will have a higher amount of apparent mid-bass output.

LEVEL: This control allows you to adjust the output level of the subwoofer to match the main speakers in your system. We recommend starting with the **LEVEL** knob set to the **THX** position and then calibrate your system with your AV receiver, surround preamp/processor, or SPL meter. The THX® position corresponds roughly to a 0dB setting.

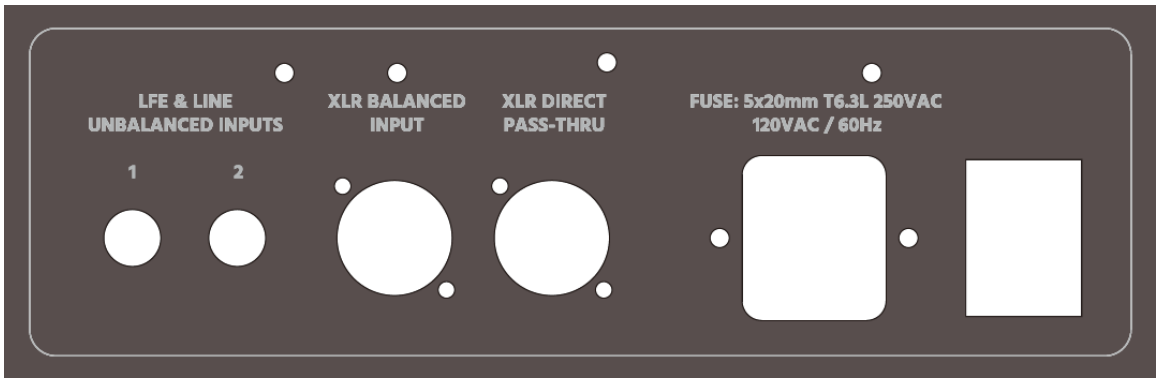
For most home theater receivers and surround sound processors, set the **LEVEL** knob to point straight upwards (in the 12 o'clock position). For music systems, start with the **LEVEL** knob at a low setting and increase it slowly from there until the audio level matches that of the main speakers. The use of test tones (from a receiver/processor's built-in calibration function or test disc) and an SPL meter is suggested for proper level matching of all speakers.

CROSSOVER: Set this switch to the **THX (OFF)** position when using a modern audio/video receiver to bypass the subwoofer's crossover settings. Use the **ON** setting to use the subwoofer's built-in crossover, which is set using the **CROSSOVER** knob.

EQ: Set the **EQ** switch to the **THX** position to have the subwoofer perform within the THX certified parameters. When set to the **EXTENDED** position, the subwoofer will use your amplifier's equalizer, with the result that the output level will be slightly louder, but with more distortion. Experiment to find which setting you prefer.

POWER: Use the **POWER** switch to determine whether the subwoofer's will always remain on or if it will automatically go into standby mode after 30 minutes of no audio input.

LED INDICATOR: The LED will illuminate green when the subwoofer is powered on and will illuminate red when the subwoofer is in standby mode.



LFE & LINE UNBALANCED INPUTS: Use either of these RCA inputs to connect the LFE output on your amplifier or receiver. If your amplifier/receiver does not have an LFE output, connect the stereo preamplifier output on your amplifier/receiver to both the **1** and **2** inputs.

XLR BALANCED INPUT: Use this XLR input to connect to a balanced audio source.

XLR DIRECT PASS-THRU: This XLR output passes the original audio signal without modification of any kind.

FUSE/120 VAC: Plug the included AC power cord into the C14 panel connector on the combined AC input and fuse holder. The fuse holder includes both the main fuse and a replacement fuse. If you need an additional fuse, use the type indicated on the rear panel.

SETUP GUIDE

To get the maximum performance from your new Monolith™ THX® Subwoofer, it must be properly connected, positioned properly within the room, and configured to match your main speakers. To connect the subwoofer you will need either a single mono RCA audio cable (in the case of systems with a subwoofer/LFE output), a stereo RCA audio cable (in the case of systems with a left/right pre-amp output), or an XLR cable (when connecting from a receiver or processor with a balanced subwoofer output jack). Note that once an input signal is detected on the RCA or XLR input, the subwoofer will select that signal source and will disable the other source. To change the input from RCA to XLR or vice versa, unplug the subwoofer from the power outlet.

Subwoofer Placement

In most rooms, the optimum location for your subwoofer is in the closest solid front corner or somewhere along the front wall in line with your front speakers. This location typically offers optimal energy coupling with the room, front-speakers, and the deepest low frequency extension, with the best high impact bass. Try to avoid a location that is far away from walls or near the center of your room.

Bass output is maximized when the subwoofer is tucked into a corner. An ideal corner is far from wall divisions and has at least 6 feet or more of wall to either side. Try to keep the subwoofer placement away from any large openings into other rooms. When corner loading a subwoofer, you might want to experiment with how close the subwoofer sits to the closest wall, with a general rule of thumb that it should be within 1 foot.

Placing the subwoofer in close proximity to the seating position, for example, right next to or behind the sofa, maximizes the output and can reduce room effects on the subwoofer.

A great technique for determining the best placement for your subwoofer is known as the Subwoofer Crawl. The first step is to place the subwoofer at your listening position. Ensure that audio with constant bass content or a test tone is playing. Next, crawl around the room (after all, the subwoofer will not be 5 feet in the air) and listen for where the bass sounds most full and has definition, punch, and depth. This will generally be the best location in your room. Finally, place the subwoofer in that location and finish the rest of the setup and configuration.

Connecting to a Balanced XLR Output

The best possible connection, with the least amount of noise or distortion, is connecting using an XLR cable to a balanced XLR output on a receiver or mixer. Perform the following steps to connect the subwoofer using the XLR balanced input.

1. Power off and unplug all equipment to be connected.
2. Using an XLR cable, plug one end into the **XLR BALANCED INPUT** on the subwoofer, then plug the other end into balanced XLR output on your receiver or mixer.

3. (Optional) Using another XLR cable, plug one end into the **XLR BALANCED INPUT** on another Monolith™ subwoofer, then plug the other end into the **XLR DIRECT PASS-THRU** jack on the subwoofer.
4. Plug one end of the included AC power cable into the **FUSE/120 VAC** connector on the subwoofer, then plug the other end into a nearby AC power outlet.

   Warning! Due to the power requirements of the Monolith subwoofer, do not connect to the accessory outlets on a receiver or processor. If using a power strip, ensure that it is rated to accommodate the subwoofer's power requirements.
5. Plug in and power on all connected equipment.
6. Set the **POWER** switch on the subwoofer to the **AUTO ON/OFF** or **ALWAYS ON** position, as desired.
7. Using the information in the *PRODUCT OVERVIEW* section, set the controls to the desired starting positions, then adjust as needed.

Connecting to a Subwoofer/LFE Output

If your amplifier has a Subwoofer or LFE output, you can connect to the subwoofer using a single, mono RCA cable. Perform the following steps to connect the subwoofer to a dedicated subwoofer or LFE output on your receiver or amplifier. Note that any receiver that can decode Dolby Digital or DTS soundtracks will have a dedicated subwoofer or LFE output.

1. Power off and unplug all equipment to be connected.
2. Using a single, mono RCA cable, plug one end into one of the **LFE & LINE UNBALANCED INPUTS** on the subwoofer, then plug the other end into the dedicated subwoofer or LFE output on your receiver.
3. (Optional) Using an XLR cable, plug one end into the **XLR BALANCED INPUT** on another Monolith subwoofer, then plug the other end into the **XLR DIRECT PASS-THRU** jack on the subwoofer.
4. Plug one end of the included AC power cable into the **FUSE/120 VAC** connector on the subwoofer, then plug the other end into a nearby AC power outlet.

Warning! Due to the power requirements of the Monolith™ subwoofer, do not connect to the accessory outlets on a receiver or processor. If using a power strip, ensure that it has rated to accommodate the subwoofer's power requirements.

5. Plug in and power on all connected equipment.
6. Set the **POWER** switch on the subwoofer to the **AUTO ON/OFF** or **ALWAYS ON** position, as desired.
7. Using the information in the *PRODUCT OVERVIEW* section, set the controls to the desired starting positions, then adjust as needed.

Connecting to a Stereo Preamp Output

The least desirable connection type is to connect to the stereo preamplifier output on an amplifier or receiver. Perform the following steps to connect the subwoofer to a stereo preamp output.

1. Power off and unplug all equipment to be connected.
2. Using a stereo RCA cable, plug the connectors on one end into both **LFE & LINE UNBALANCED INPUTS** on the subwoofer, then plug the other end into the stereo preamp outputs on your amplifier or receiver. Because the subwoofer is monophonic, there is no need to match left and right channels.

   Note: If you are using an external power amplifier and your preamplifier has only a single preamp output, use RCA Y-cables on each output to allow both the power amplifier and the subwoofer to be connected to the single output.
3. (Optional) Using an XLR cable, plug one end into the **XLR BALANCED INPUT** on another Monolith subwoofer, then plug the other end into the **XLR DIRECT PASS-THRU** jack on the subwoofer. Repeat as often as desired.
4. Plug one end of the included AC power cable into the **FUSE/120 VAC** connector on the subwoofer, then plug the other end into a nearby AC power outlet.

   Warning! Due to the power requirements of the Monolith subwoofer, do not connect to the accessory outlets on a receiver or processor. If using a power strip, ensure that it has rated to accommodate the subwoofer's power requirements.

5. Plug in and power on all connected equipment.
6. Set the **POWER** switch on the subwoofer to the **AUTO ON/OFF** or **ALWAYS ON** position, as desired.
7. Using the information in the *PRODUCT OVERVIEW* section, set the controls to the desired starting positions, then adjust as needed.

TROUBLESHOOTING

If there is excessive noise/hum when using the RCA input, there are some simple remedies:

1. Use a balanced XLR connection.
2. Reduce the gain of the subwoofer level by approximately 6dB, then increase the output level of the preamplifier/processor. This will improve the signal-to-noise ratio by approximately 6dB.
3. Use an RCA Y-adapter to utilize both RCA inputs, then reduce the gain by approximately 6dB, thereby improving the signal-to-noise ratio by approximately 6dB.

TECHNICAL SUPPORT

Monoprice is pleased to provide free, live, online technical support to assist you with any questions you may have about installation, setup, troubleshooting, or product recommendations. If you ever need assistance with your new product, please come online to talk to one of our friendly and knowledgeable Tech Support Associates. Technical support is available through the online chat button on our website **www.monoprice.com** during regular business hours, 7 days a week. You can also get assistance through email by sending a message to **tech@monoprice.com**

SPECIFICATIONS

Model	24456	
Woofer	10" cone	
Cone Material	2 layer long fiber pulp/glass fiber cone	
Voice Coil	60mm with high temperature aluminum wire and black anodized aluminum bobbin	
Surround	FEA optimized NBR (nitrile budadiene rubber)	
Motor	FEA optimized, 2 aluminum shorting rings, undercut T-pole focused field	
Magnet	Ceramic Y35, 2 pcs total 144 oz.	
Xmax	18mm (one-way)	
Xmech	78mm (peak-to-peak)	
Enclosure	Sealed or vented HDF cabinet with horizontal and vertical bracing	
Finish	Black Ash	
Amplifier	Class D 500W_{rms}	
Frequency Response (-6dB)	**Sealed**	**Vented**
Extended EQ	28-200Hz	17-200Hz
THX® EQ	20-200Hz	17-200Hz
Harmonic Distortion	<1% 20-100Hz (90dB @ 1m)	
Variable Level Control	+15/-20dB	
Crossover	Inline/Bypass variable 40-160Hz	
Inputs	RCA (2), XLR	
Outputs	XLR	
Signal Turn On	Selectable always on/auto	

Auto Turn Off	30 minutes
Dimensions	18.9" x 15" x 19.7" (480 x 380 x 500 mm)
Weight	72.5 lbs. (32.9 kg)

Model	24457		
Woofer	12" cone		
Cone Material	2 layer long fiber pulp/glass fiber cone		
Voice Coil	60mm with high temperature aluminum wire and black anodized aluminum bobbin		
Surround	FEA optimized NBR (nitrile budadiene rubber)		
Motor	FEA optimized, 2 aluminum shorting rings, undercut T-pole focused field		
Magnet	Ceramic Y35, 2 pcs total 144 oz.		
Xmax	18mm (one-way)		
Xmech	80mm (peak-to-peak)		
Enclosure	Sealed or vented HDF cabinet with horizontal and vertical bracing		
Finish	Black Ash		
Amplifier	Class D 500W_{rms}		
Frequency Response (-6dB)	**Sealed**	**Vented (1 port)**	**Vented (2 ports)**
Extended EQ	26-200Hz	19-200Hz	18-200Hz
THX® EQ	29-200Hz	23-200Hz	20-200Hz
Harmonic Distortion	<1% 20-100Hz (90dB @ 1m)		
Variable Level Control	+15/-20dB		

Crossover	Inline/Bypass variable 40-160Hz
Inputs	RCA (2), XLR
Outputs	XLR
Signal Turn On	Selectable always on/auto
Auto Turn Off	30 minutes
Dimensions	22.8" x 16.7" x 23.6" (580 x 425 x 600 mm)
Weight	98.5 lbs. (44.7 kg)

Model	24458
Woofer	15" cone
Cone Material	2 layer long fiber pulp/glass fiber cone
Voice Coil	60mm with high temperature aluminum wire and black anodized aluminum bobbin
Surround	FEA optimized NBR (nitrile budadiene rubber)
Motor	FEA optimized, 2 aluminum shorting rings, undercut T-pole focused field
Magnet	Ceramic Y35, 2 pcs total 216 oz.
Xmax	25mm (one-way)
Xmech	90mm (peak-to-peak)
Enclosure	Sealed or vented HDF cabinet with horizontal and vertical bracing
Finish	Black Ash
Amplifier	$1000W_{rms}$

Frequency Response (-6dB)	Sealed	Vented (2 ports)	Vented (3 ports)
Extended EQ	15-200Hz	14-200Hz	16-200Hz
THX® EQ	23-200Hz	19-200Hz	20-200Hz
Harmonic Distortion	<1% 20-100Hz (90dB @ 1m)		
Variable Level Control	+15/-20dB		
Crossover	Inline/Bypass variable 40-160Hz		
Inputs	RCA (2), XLR		
Outputs	XLR		
Signal Turn On	Selectable always on/auto		
Auto Turn Off	30 minutes		
Dimensions	26.8" x 17.7" x 27.6" (680 x 450 x 700 mm)		
Weight	128.5 lbs. (58.3 kg)		

Model	38543
Woofer	2x 15" cone
Cone Material	2 layer long fiber pulp/glass fiber cone
Voice Coil	60mm with high temperature aluminum wire and black anodized aluminum bobbin
Surround	FEA optimized NBR (nitrile budadiene rubber)
Motor	FEA optimized, 2 aluminum shorting rings, undercut T-pole focused field
Magnet	Ceramic Y35, 2 pcs total 216 oz.
Xmax	25mm (one-way)
Xmech	90mm (peak-to-peak)

Enclosure	Sealed or vented HDF cabinet with horizontal and vertical bracing
Finish	Black Ash
Amplifier	2000 watts (RMS)/3600 watts (peak)
Frequency Response	14-200Hz
Harmonic Distortion	<3% 20-100Hz (94dB @ 1m)
Variable Level Control	+15/-20dB
Crossover	Inline/Bypass variable 40-160Hz
Inputs	RCA (2), XLR
Outputs	XLR
Signal Turn On	Selectable always on/auto
Auto Turn Off	30 minutes
Dimensions	42.3" x 20.0" x 27.6" (1075 x 508 x 700 mm)
Weight	216 lbs. (98 kg)

Monolith™ and the Monolith logo are trademarks of Monoprice Inc.

THX® and the THX logo are trademarks of THX Ltd., registered in the U.S. and other countries. The THX Ultra logo is a trademark of THX Ltd.