

SONANCE

BEYOND SOUND

MARINER® MX OUTDOOR SPEAKERS
MX52 | MX56 | MX62 | MX66 | MX86 | MX52 SST | MX62 SST
INSTRUCTION MANUAL

MARINER MX

MX52 | MX56 | MX62 | MX66 | MX86
MX52 SST | MX62 SST

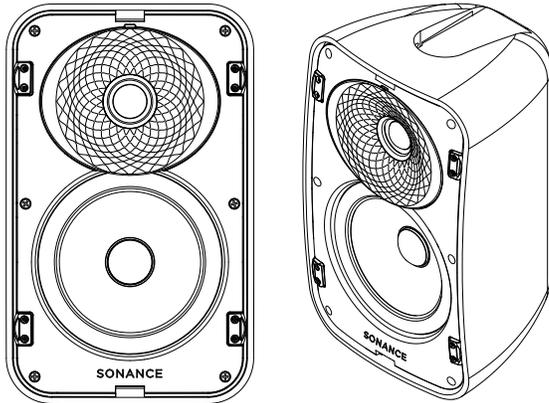


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- (2) Speakers
- (2) Speaker Grilles
- (2) FastMount Brackets
- (2) Waveguide Terminal Covers
- (1) Manual

Sonance Mariner Single Stereo Technology® Speaker (MX52 SST, MX62 SST):

- (1) Speaker
- (1) Speaker Grille
- (1) FastMount Bracket
- (1) Waveguide Terminal Cover
- (1) Manual

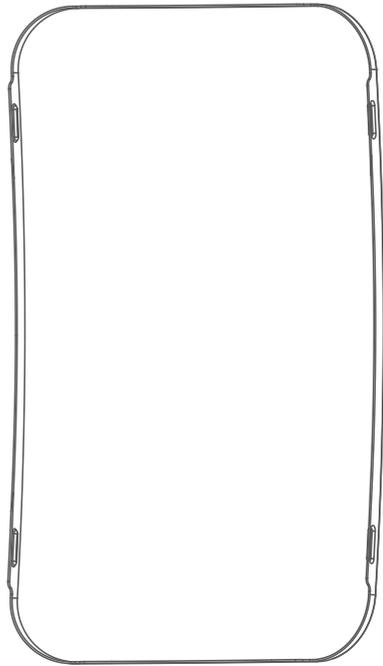
IMPORTANT SAFETY INSTRUCTIONS

This product is intended to be installed by professional AV integrators and installers only. This product manual is intended to serve as a general guideline for most applications. It is the installer's responsibility to ensure this product is installed in accordance with local building codes and regulations. Consult a local authority for specific requirements, regulations, and building codes of the jurisdiction in which this product is to be installed.

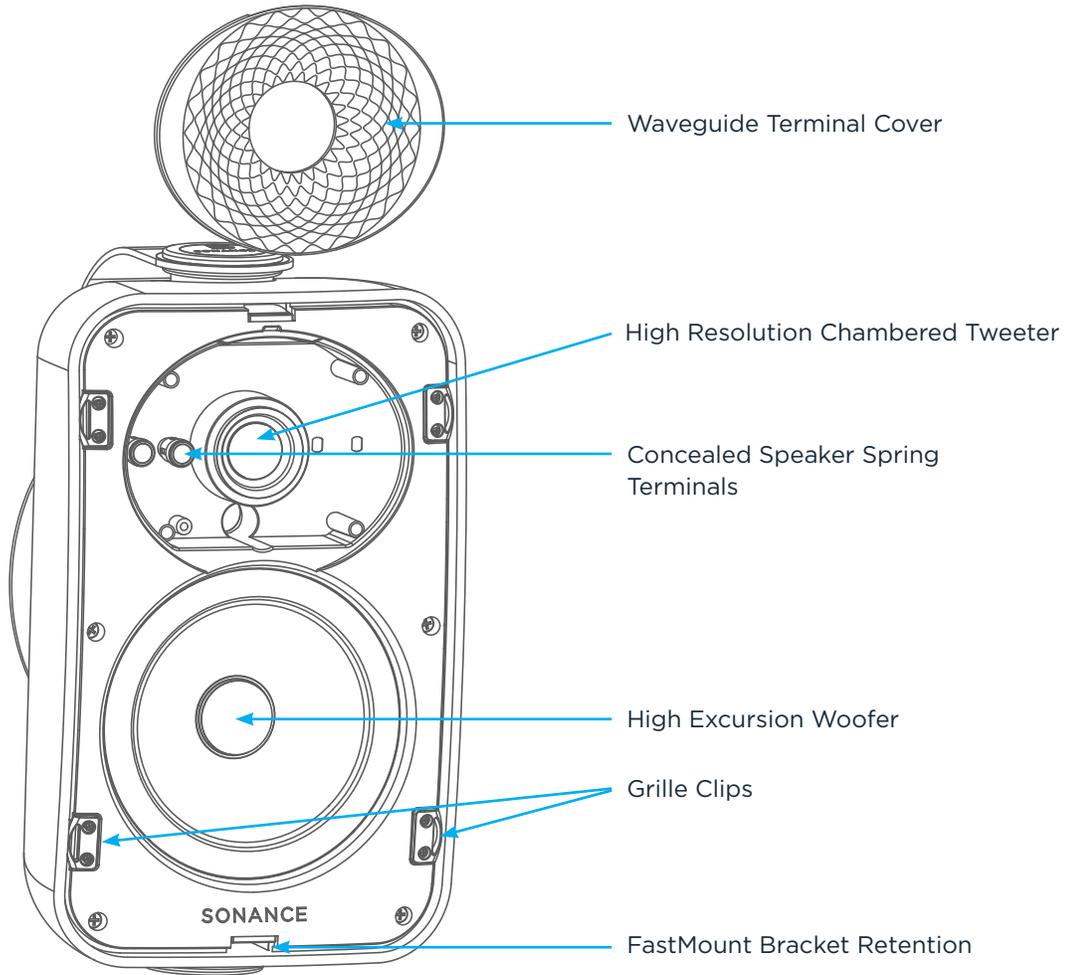
READ THIS DOCUMENT IN ITS ENTIRETY BEFORE ATTEMPTING USE

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Clean only with a dry cloth.
6. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
7. Do not install near a heat source such as radiators, heat registers, stoves, fireplaces, or other apparatus (including amplifiers) that produce heat.
8. Only use attachments/accessories specified by Sonance.
9. This product is IP66 rated, suitable for installation in outdoor environments.
10. Refer all servicing to qualified service personnel.

PRODUCT FEATURES



Powder Coated Aluminum Grille



Waveguide Terminal Cover

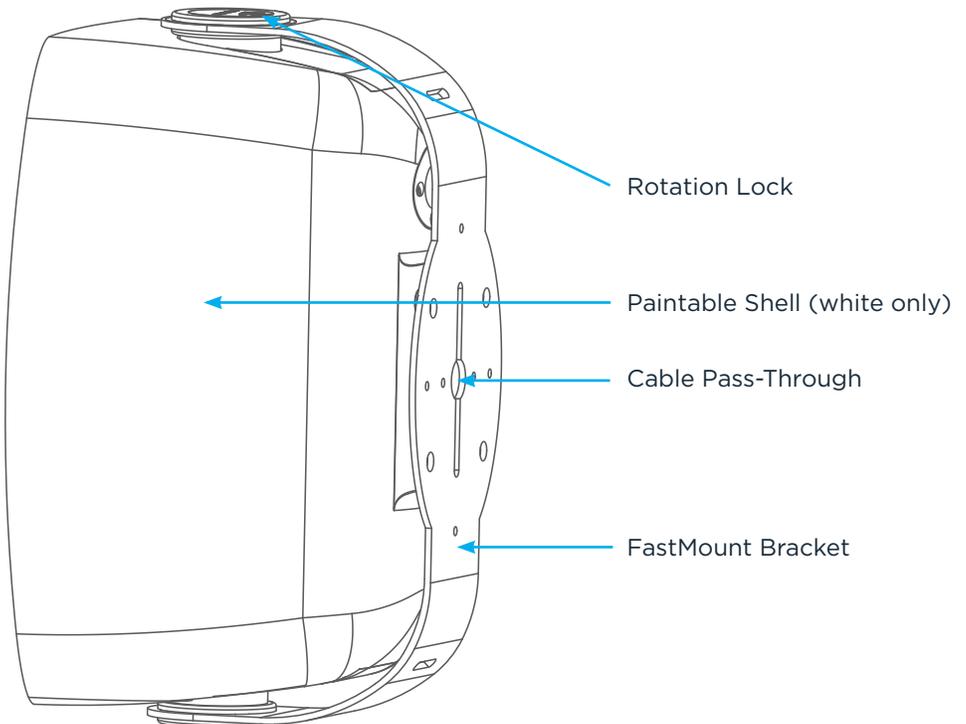
High Resolution Chambered Tweeter

Concealed Speaker Spring Terminals

High Excursion Woofer

Grille Clips

FastMount Bracket Retention



Rotation Lock

Paintable Shell (white only)

Cable Pass-Through

FastMount Bracket

PRODUCT DESCRIPTION

Thank you for purchasing Sonance Mariner® MX weather-resistant speakers. When properly installed, these speakers will give you many years of outdoor entertainment pleasure. To get the most out of your new speakers, please read this manual thoroughly before you begin installation.

The directions in this manual apply to the following models: MX52 | MX56 | MX62 | MX66 | MX86
MX52 SST | MX62 SST

WIRE GAUGE

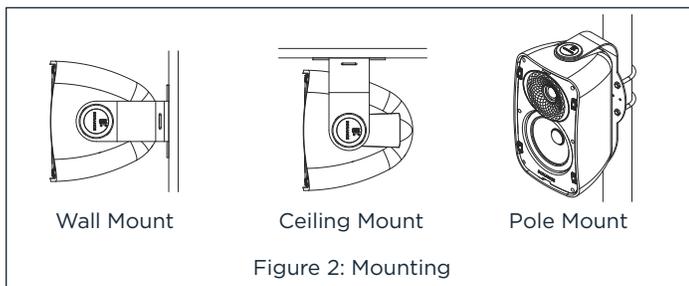
When installing Sonance Mariner MX Outdoor Speakers, careful consideration should be made when determining speaker placement and what gauge wire should be used. Please refer to the wiring chart (see Figure 1) to determine which size wire to use over the given distance between the amplifier/receiver and the speakers.

Figure 1: WIRE GAUGE CHART	
WIRE GAUGE	DISTANCE
18 Gauge	Up to 100 feet (30 meters)
16 Gauge	Up to 150 feet (45 meters)
14 Gauge	Up to 250 feet (80 meters)

SPEAKER PLACEMENT

Mariner MX Speakers are IP66 rated, weather-resistant, and when mounted outdoors will perform exceptionally well for years even under adverse weather conditions. The Mariner FastMount bracket system makes it easy to mount the speakers in a variety of positions and locations (see Figure 2). The best performance is obtained by placing the speakers at ear level, facing the listener.

- If you are mounting the speakers above or below ear level, pivot them up or down to direct the sound toward the listener.
- You can orient the speakers either horizontally or vertically without affecting the sound quality.



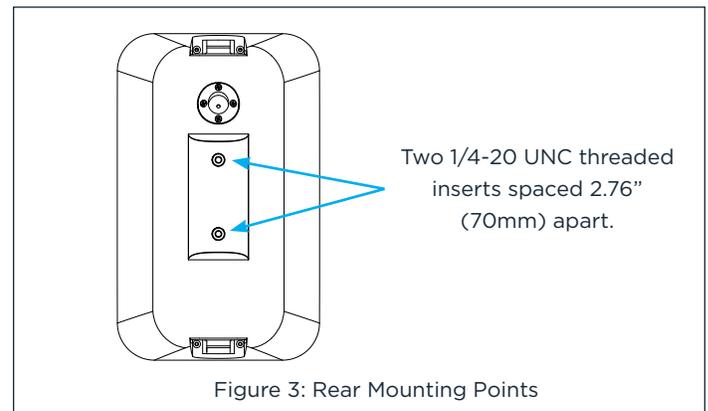
WALL/CEILING MOUNTING

It is important that the bracket is securely mounted onto a structurally sound surface, capable of withstanding the weight of the product and any vibration created by the operation of the speaker. Four screw points must be used at all times. A screw size of #14 to #20

diameter x 2" length or M6 to M8 diameter x 50mm length is recommended. When mounting onto drywall or plasterboard, the bracket should be affixed to a joist or stud. When mounting onto brick or concrete, wall plugs or concrete anchors should be used. Install a safety cable from one of the 1/4-20 UNC threaded holes on the back of the speaker to a secure location on the adjoining mounting surface (hardware not included). Optional compatible third party mounts: OmniMount 15.0C, OmniMount 15.0W, and Konig & Meyer 24180-000-55.

POLE MOUNTING

To mount the speaker on a pole, two U-bolts and nuts should be used to clamp around the pole and bolt through the four holes on the back of the FastMount bracket. Spring washers or blue thread lock are recommended to ensure the nuts do not loosen through the vibration of the speaker.



PIVOTING THE SPEAKERS

You can rotate the speaker in the bracket to direct the sound towards the listeners.

1. Unlock the slide locks on the speaker pivots by moving them towards the rear of the speaker.
2. Rotate the speakers to the desired position.
3. Lock the slide locks by moving them towards the front of the speaker.

PAINTING THE SPEAKER AND GRILLE

Sonance Mariner MX Speakers feature a tough polypropylene enclosure that can be painted. Sonance recommends using a weather-resistant outdoor paint and a spray gun.

1. If they have already been installed, remove the grilles from the speakers.
2. To protect the speaker driver units during painting, place the grilles on a piece of cardboard and trace around their outlines. Then cut the cardboard just inside of the trace line and fit these "paint plugs" into the speakers' baffles. Be careful not to damage the driver components while fitting the paint plugs.
3. Paint the speakers the desired color according to the paint manufacturer's instructions. Remove the paint plugs after the paint has thoroughly dried.

- Paint the grille separately from the speaker using very thin paint (5:1 ratio). Avoid plugging the grille holes with excess paint.

INSTALLING THE SPEAKERS

WARNING: Turn the amplifier's power off until you have completed all of the connections and have determined that they are correct. If the amp's AC plug is accessible we recommend that you unplug it from the wall outlet to avoid accidental turn-on and possible damage to the amplifier.

- In most cases you will be able to attach the FastMount brackets directly to the mounting surface. Run the speaker wires from the amplifier to the speaker locations and through the holes in the brackets (see Figure 6).

NOTE: To increase water resistance and make installation easier, the speaker wire terminals are located on the Mariner speakers' front panel behind the removable waveguide. Be sure to leave enough wire at the speaker location to feed through the tunnel in the speaker enclosure and connect to the terminals on the front.

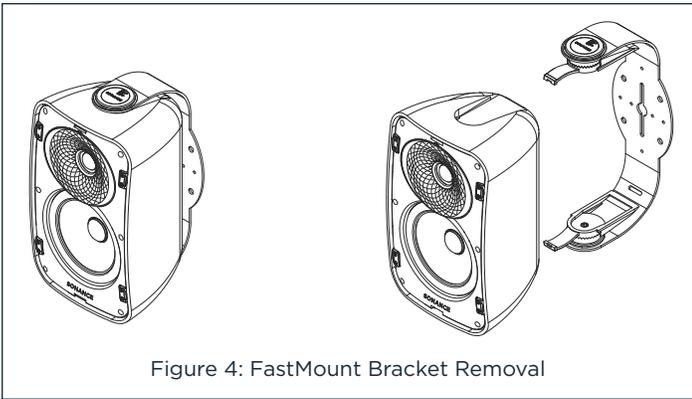


Figure 4: FastMount Bracket Removal

- Attach the FastMount brackets to the mounting surface using hardware (not included) that is appropriate for the type of surface. If the installation requires that the speaker be mounted in a corner, attach the bracket with hardware through the slots in the angled corners (see Figure 5).

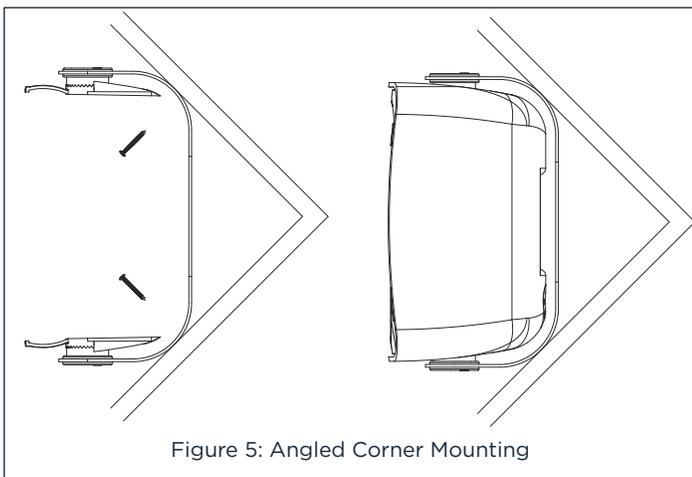


Figure 5: Angled Corner Mounting

- If the installation requires that the speaker be mounted on a pole you can attach the FastMount brackets to the pole using 2.5" U-bolts (not included) (see Figure 6).

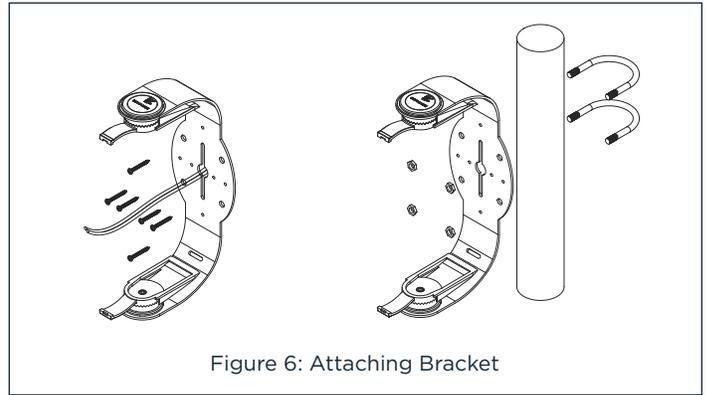


Figure 6: Attaching Bracket

- Feed the speaker wires from the bracket into the wire entry grommet on the back of the speaker, through the wire tunnel and out the opening on the speaker's front panel (see Figure 7).
 - The grommet forms a water-resistant seal around the speaker wire.
 - Make sure there is enough slack in the wire to allow the speaker to pivot on the bracket.

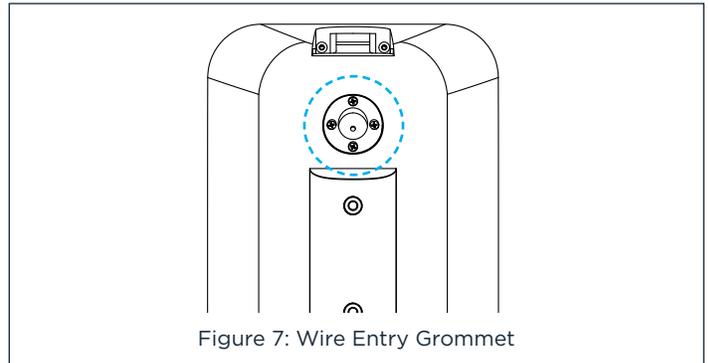


Figure 7: Wire Entry Grommet

- Slide the speaker onto the bracket and firmly snap into place.

NOTE: Be sure that the bracket clips snap completely into place to prevent any blockage within the speaker perimeter where the grille is to be inserted.

Pull enough wire through the front of the speaker to allow connection to the terminals (see Figure 8).

IMPORTANT: Do not touch the tweeter dome as damage will occur.

- Connect the speaker wires to the speaker's terminals:
 - Strip about 0.5" of insulation from each conductor and twist the strands together or tin them with solder.
 - Press down on the tops of the connectors to open them.
 - Insert the wires into the connector holes (see Figure 8).
 - Release the connectors.

The binding post connectors can accept wire up to 14 gauge. Double-check that you connected all of the wires properly (amplifier '+' to speaker '+'; amplifier '-' to speaker '-') at all connections.

IMPORTANT: Be sure not to let any stray '+' and '-' wires touch each other. Touching wires can cause a short-circuit that could damage your amplifier.

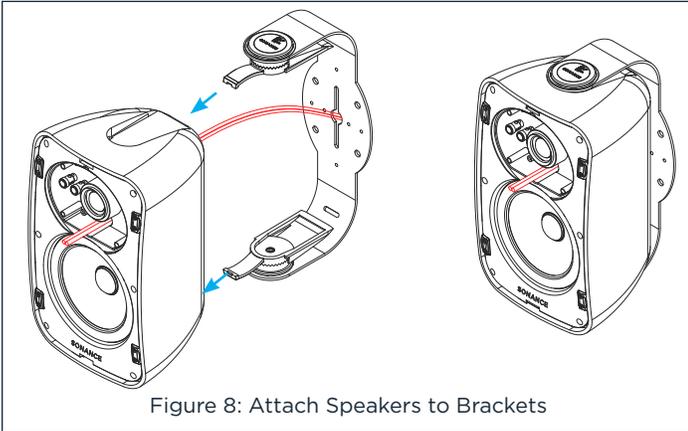


Figure 8: Attach Speakers to Brackets

7. Fit the removable waveguide wiring connector cover into the recess in the speaker's front panel. The cover should fit tightly, but can be removed and replaced if the speaker needs to be disconnected (see Figure 9).

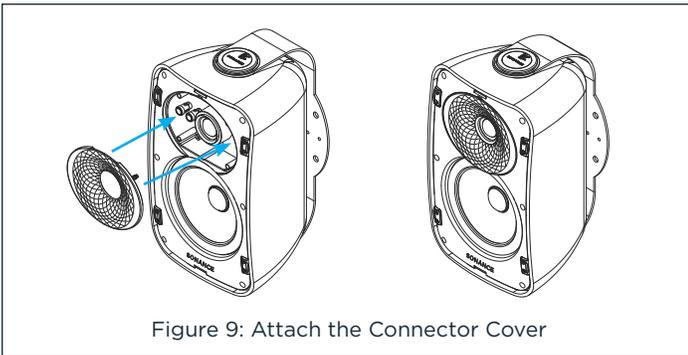


Figure 9: Attach the Connector Cover

8. Fit the grille onto the speaker by aligning the edges of the grille with the groove of the speaker face perimeter and pressing firmly until it is snugly in place (see Figure 10).

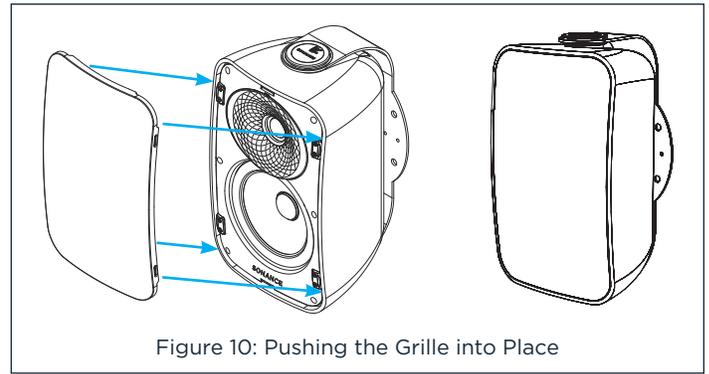


Figure 10: Pushing the Grille into Place

FITTING AND REMOVING THE GRILLE

1. When installing the grille, align the grille skirt with the groove in the front of the enclosure.
2. To lock the grille in place apply pressure at the locations of the four grille retention clips. An audible click should be heard as the grille locks into place.

NOTE: To remove the grille, we suggest starting in any one of the four corners using a grille pulling tool (not included). Once the grille is pulled out past the retention clip in one corner, the remainder of the grille can be removed by working your hand around and lightly pulling outward, being careful not to bend the grille skirt. If the grille skirt does become bent during removal, it can be straightened by carefully bending it back into its original shape.

REMOVING THE SPEAKER FROM THE BRACKET

Remove the speakers from the mounting brackets by pulling the tabs on the front panels outward and away from each other while pulling the speaker cabinet toward you, away from the bracket (see Figure 11).

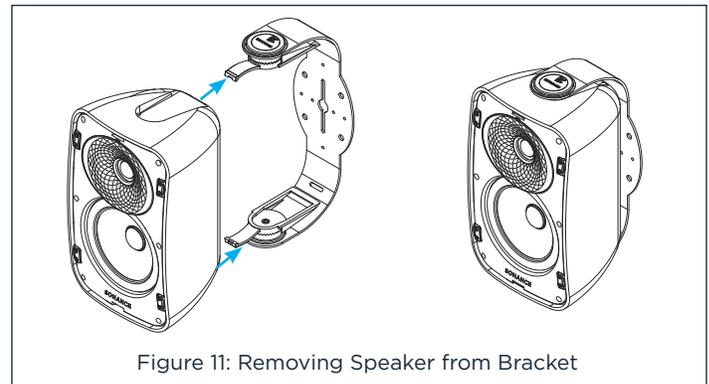
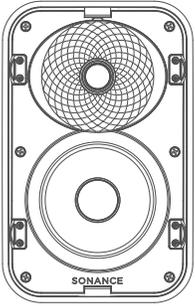


Figure 11: Removing Speaker from Bracket

MX52 SPECIFICATIONS



Black Part #	93604 (PR)
White Part #	93605 (PR)
Tweeter	0.75" (19mm) Cloth Dome, Ferrofluid-cooled, Acoustic Back Chamber
Woofer	5.25" (130mm) Textured Polypropylene Cone, Rubber Surround
Dispersion Technology	Sinusoidal Textured Waveguide
Frequency Response	65Hz - 20kHz +/-3dB
Impedance	8 ohms Nominal (6 ohms Minimum)
Power Handling (RMS)	5 Watts Minimum to 90 Watts Maximum
Sensitivity (2.83V/1M)	87dB SPL
Environmental	Mill Spec 810 for Humidity, Salt Spray, Temperature, UV; IP66 Waterproof Rating
Environmental Temp	-13° to 149°F(-25°C to 65°C)
Grille	Perforated Aluminum
Product Dims (WxHxD)	6.36" x 10.08" x 5.68" (162mm x 256mm x 144mm)
Shipping Weight	12 lbs. (5.5kg) per pair

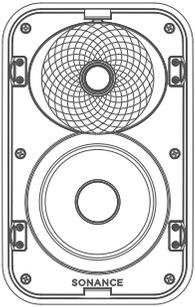
INCLUDED ACCESSORIES

- (2) Speakers
- (2) Speaker Grilles
- (2) FastMount Brackets
- (2) Waveguide Terminal Covers

OPTIONAL ACCESSORIES

- MX5 Replacement Bracket BLK | 93652
- MX5 Replacement Bracket WHT | 93649

MX56 SPECIFICATIONS



Black Part #	93606 (PR)
White Part #	93607 (PR)
Tweeter	0.75" (19mm) Ceramic Dome, Ferrofluid-cooled, Acoustic Back Chamber
Woofer	5.25" (130mm) Kevlar/Nomex Cone, Rubber Surround
Dispersion Technology	Sinusoidal Textured Waveguide
Frequency Response	60Hz - 20kHz +/-3dB
Impedance	8 ohms Nominal (6 ohms Minimum)
Power Handling (RMS)	5 Watts Minimum to 100 Watts Maximum
Sensitivity (2.83V/1M)	88dB SPL
Environmental	Mill Spec 810 for Humidity, Salt Spray, Temperature, UV; IP66 Waterproof Rating
Environmental Temp	-13° to 149°F(-25°C to 65°C)
Grille	Perforated Aluminum
Product Dims (WxHxD)	6.36" x 10.08" x 5.68" (162mm x 256mm x 144mm)
Shipping Weight	13 lbs. (6kg) per pair

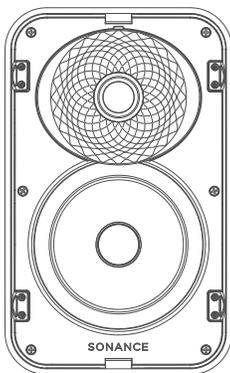
INCLUDED ACCESSORIES

- (2) Speakers
- (2) Speaker Grilles
- (2) FastMount Brackets
- (2) Waveguide Terminal Covers

OPTIONAL ACCESSORIES

- MX5 Replacement Bracket BLK | 93652
- MX5 Replacement Bracket WHT | 93649

MX62 SPECIFICATIONS



Black Part #	93608 (PR)
White Part #	93609 (PR)
Tweeter	1" (25mm) Cloth Dome, Ferrofluid-cooled, Acoustic Back Chamber
Woofer	6.5" (165mm) Textured Polypropylene Cone, Rubber Surround
Dispersion Technology	Sinusoidal Textured Waveguide
Frequency Response	55Hz - 20kHz +/-3dB
Impedance	8 ohms Nominal (6 ohms Minimum)
Power Handling (RMS)	5 Watts Minimum to 125 Watts Maximum
Sensitivity (2.83V/1M)	89dB SPL
Environmental	Mill Spec 810 for Humidity, Salt Spray, Temperature, UV; IP66 Waterproof Rating
Environmental Temp	-13° to 149°F(-25°C to 65°C)
Grille	Perforated Aluminum
Product Dims (WxHxD)	7.51" x 12.14" x 6.86" (191mm x 308mm x 174mm)
Shipping Weight	14 lbs. (6.4kg) per pair

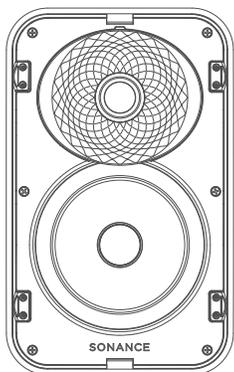
INCLUDED ACCESSORIES

- (2) Speakers
- (2) Speaker Grilles
- (2) FastMount Brackets
- (2) Waveguide Terminal Covers

OPTIONAL ACCESSORIES

- MX6 Replacement Bracket BLK | 93653
- MX6 Replacement Bracket WHT | 93650

MX66 SPECIFICATIONS



Black Part #	93610 (PR)
White Part #	93611 (PR)
Tweeter	1" (25mm) Ceramic Dome, Ferrofluid-cooled, Acoustic Back Chamber
Woofer	6.5" (165mm) Kevlar/Nomex Cone, Rubber Surround
Dispersion Technology	Sinusoidal Textured Waveguide
Frequency Response	50Hz - 20kHz +/-3dB
Impedance	8 ohms Nominal (6 ohms Minimum)
Power Handling (RMS)	5 Watts Minimum to 140 Watts Maximum
Sensitivity (2.83V/1M)	90dB SPL
Environmental	Mill Spec 810 for Humidity, Salt Spray, Temperature, UV; IP66 Waterproof Rating
Environmental Temp	-13° to 149°F(-25°C to 65°C)
Grille	Perforated Aluminum
Product Dims (WxHxD)	7.51" x 12.14" x 6.86" (191mm x 308mm x 174mm)
Shipping Weight	17 lbs. (7.7kg) per pair

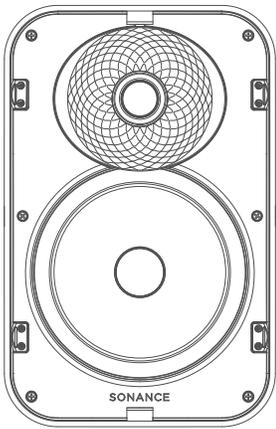
INCLUDED ACCESSORIES

- (2) Speakers
- (2) Speaker Grilles
- (2) FastMount Brackets
- (2) Waveguide Terminal Covers

OPTIONAL ACCESSORIES

- MX6 Replacement Bracket BLK | 93653
- MX6 Replacement Bracket WHT | 93650

MX86 SPECIFICATIONS



Black Part #	93612 (PR)
White Part #	93613 (PR)
Tweeter	1.2" (30mm) Ceramic Dome, Ferrofluid-cooled, Acoustic Back Chamber
Woofers	8" (203mm) Kevlar/Nomex Cone, Rubber Surround
Dispersion Technology	Sinusoidal Textured Waveguide
Frequency Response	45Hz - 20kHz +/-3dB
Impedance	8 ohms Nominal (6 ohms Minimum)
Power Handling (RMS)	5 Watts Minimum to 150 Watts Maximum
Sensitivity (2.83V/1M)	91dB SPL
Environmental	Mill Spec 810 for Humidity, Salt Spray, Temperature, UV; IP66 Waterproof Rating
Environmental Temp	-13° to 149°F(-25°C to 65°C)
Grille	Perforated Aluminum
Product Dims (WxHxD)	9.01" x 14.02" x 8.58" (229mm x 356mm x 218mm)
Shipping Weight	20 lbs. (9kg) per pair

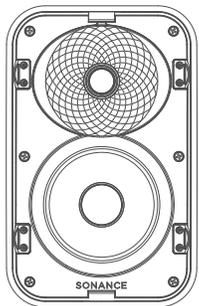
INCLUDED ACCESSORIES

- (2) Speakers
- (2) Speaker Grilles
- (2) FastMount Brackets
- (2) Waveguide Terminal Covers

OPTIONAL ACCESSORIES

- MX8 Replacement Bracket BLK | 93654
- MX8 Replacement Bracket WHT | 93651

MX52 SST SPECIFICATIONS



Black Part #	93614 (EA)
White Part #	93615 (EA)
Tweeter	0.75" (19mm) Cloth Dome, Ferrofluid-Cooled, Acoustic Back Chamber, Dual Voice Coil
Woofer	5.25" (130mm) Textured Polypropylene Cone, Rubber Surround, Dual Voice Coil
Dispersion Technology	Sinusoidal Textured Waveguide
Frequency Response	65Hz - 20kHz +/-3dB
Impedance	8 ohms Nominal (6 ohms Minimum)
Power Handling (RMS)	5 Watts Minimum to 90 Watts Maximum
Sensitivity (2.83V/1M)	87dB SPL
Environmental	Mill Spec 810 for Humidity, Salt Spray, Temperature, UV; IP66 Waterproof Rating
Environmental Temp	-13° to 149°F(-25°C to 65°C)
Grille	Perforated Aluminum
Product Dims (WxHxD)	6.36" x 10.08" x 5.68" (162mm x 256mm x 144mm)
Shipping Weight	6 lbs. (2.8kg) each

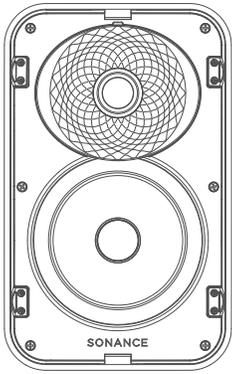
INCLUDED ACCESSORIES

- (1) Speaker
- (1) Speaker Grille
- (1) FastMount Bracket
- (1) Waveguide Terminal Cover

OPTIONAL ACCESSORIES

- MX5 Replacement Bracket BLK | 93652
- MX5 Replacement Bracket WHT | 93649

MX62 SST SPECIFICATIONS



Black Part #	93616 (EA)
White Part #	93617 (EA)
Tweeter	1" (25mm) Cloth Dome, Ferrofluid-Cooled, Acoustic Back Chamber, Dual Voice Coil
Woofer	6.5" (165mm) Textured Polypropylene Cone, Rubber Surround, Dual Voice Coil
Dispersion Technology	Sinusoidal Textured Waveguide
Frequency Response	55Hz - 20kHz +/-3dB
Impedance	8 ohms Nominal (6 ohms Minimum)
Power Handling (RMS)	5 Watts Minimum to 125 Watts Maximum
Sensitivity (2.83V/1M)	89dB SPL
Environmental	Mill Spec 810 for Humidity, Salt Spray, Temperature, UV; IP66 Waterproof Rating
Environmental Temp	-13° to 149°F(-25°C to 65°C)
Grille	Perforated Aluminum
Product Dims (WxHxD)	7.51" x 12.14" x 6.86" (191mm x 308mm x 174mm)
Shipping Weight	7 lbs. (3.2kg) each

INCLUDED ACCESSORIES

- (1) Speaker
- (1) Speaker Grille
- (1) FastMount Bracket
- (1) Waveguide Terminal Cover

OPTIONAL ACCESSORIES

- MX6 Replacement Bracket BLK | 93653
- MX6 Replacement Bracket WHT | 93650

TECHNICAL ASSISTANCE AND SERVICE

The Technical Assistance Department at Sonance is available at (949) 492-7777 to answer any questions concerning the operation and installation of your speakers between the hours of 7:00 AM and 5:00 PM Pacific time, Monday through Friday, except holidays.

In the event your unit should need repair or service, you may return the unit to your authorized dealer or use the following guidelines:

Please keep original packaging when possible.

1. Be prepared to state the model number and/or serial number, date of purchase, and dealer's name and address when calling.
2. Contact Sonance directly at (949) 492-7777 or at www.sonance.com

YOU MUST HAVE PRIOR AUTHORIZATION TO RETURN YOUR UNIT.

3. If you are returning the product directly to Sonance, call us to obtain a return authorization number before shipping.
4. Ship the product via United Parcel Service, Federal Express, or other package delivery service. Please do not use the U.S. Postal Service.

Write the Return Authorization Number on the shipping label. Do not write it on the outside of the box.

Ship to:

Attn: Quality Assurance Department
Sonance
11016 Mulberry Ave
Fontana, CA 92337

LIMITED FIVE (5) YEAR WARRANTY

Sonance warrants to the first end-user purchaser that this Sonance-brand product ("Product"), when purchased from an authorized Sonance Dealer/Distributor, will be free from defective workmanship and materials for the period stated below. Sonance will at its option and expense during the warranty period, either repair the defect or replace the Product with a new or re-manufactured Product or a reasonable equivalent.

EXCLUSIONS

TO THE EXTENT PERMITTED BY LAW, THE WARRANTY SET FORTH ABOVE IS IN LIEU OF, AND EXCLUSIVE OF, ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IS THE SOLE AND EXCLUSIVE WARRANTY PROVIDED BY SONANCE. ALL OTHER EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY, IMPLIED WARRANTY OF FITNESS FOR USE, AND IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE ARE SPECIFICALLY EXCLUDED.

No one is authorized to make or modify any warranties on behalf of Sonance. The warranty stated above is the sole and exclusive remedy, and Sonance's performance shall constitute full and final satisfaction of all obligations, liabilities, and claims with respect to the Product.

IN ANY EVENT, SONANCE SHALL NOT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, ECONOMIC, PROPERTY, BODILY INJURY, OR PERSONAL INJURY DAMAGES ARISING FROM THE PRODUCT, ANY BREACH OF THIS WARRANTY, OR OTHERWISE.

This warranty statement gives you specific legal rights, and you may have other rights which vary from state to state. Some states do not allow the exclusion of implied warranties or limitations of remedies, so the above exclusions and limitations may not apply. If your state does not allow disclaimer of implied warranties, the duration of such implied warranties is limited to period of Sonance's express warranty. Your Product Model and Description: Mariner® MX Outdoor Speakers. Warranty Period for this Product: Five (5) years from the date on the original sales receipt or invoice or other satisfactory proof of purchase. Additional Limitations and Exclusions from Warranty Coverage: The warranty described above is nontransferable, applies only to the initial installation of the Product, does not include installation of any repaired or replaced Product, does not include damage to allied or associated equipment which may result for any reason from use with this Product, and does not include labor or parts caused by accident, disaster, negligence, improper installation, misuse (e.g. overdriving the amplifier or speaker, excessive heat, cold or humidity, mishandling, etc.), or from service or repair which has not been authorized by Sonance. Obtaining Authorized Service: To qualify for the warranty, you must contact your authorized Sonance Dealer/Installer or call Sonance Customer Service at (949) 492-7777 within the warranty period, must obtain a return merchandise number (RMA), and must deliver the Product to Sonance shipping prepaid during the warranty period, together with the original sales receipt, or invoice or other satisfactory proof of purchase.