

MEYER SOUND WEATHER PROTECTION

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MEYER SOUND WEATHER PROTECTION

Weather Protection is strongly recommended for all permanent outdoor installations where loudspeakers are directly exposed to the natural environment, including high levels of UV light. This includes desert and semi-arid climates, where protection against dust and sand is important, and where infrequent rainstorms can contribute to the deterioration of loudspeaker components.

Weather Protection is also recommended when the loudspeakers are sheltered from direct exposure to precipitation but are nevertheless exposed to prolonged high humidity, fog, or mist, i.e., installations on covered outdoor terraces or pavilions.

Weather Protection is further advisable for portable or touring systems when any significant outdoor use is anticipated. Even though standard procedures may call for using external protective measures, these are often not deployed in time to prevent moisture intrusions that could lead to premature performance degradation of the loudspeaker.

Weather-protected loudspeakers should be specified when exposure to any of these weather conditions may occur:

- high humidity, moisture, fog, mist, rain, water, or other liquids
- high levels of UV light
- wind-blown dust or sand



WARNING

It is the responsibility of the purchaser to select weather protection when appropriate. The owner is responsible for periodical inspections of their loudspeaker installations for any deterioration that may lead to safety concerns.

WEATHER PROTECTION SUMMARY - STD, OT, OP

Meyer Sound offers several weather protection standards. Always discuss the environmental conditions of your Meyer Sound installation with your Meyer Sound Sales Manager and verify the availability of Weather Protection for specific loudspeaker models of interest. The Sales Manager, together with Technical Support, will verify the appropriate level of weather protection for your loudspeakers and related rigging hardware.

The three sections below provide details about each of our weather protection options: Standard, Outdoor Temporary, and Outdoor Permanent. Though many of our loudspeaker products are available with one or two of these levels of protection, it is rare that a loudspeaker model is available with all three levels. Please see the current price list for the available weather protection options for a specific loudspeaker model.

Additionally, some of our products are not available with weather protection options and are rated for indoor use only, e.g., cinema and studio monitor loudspeaker models and signal processors.

Standard (STD) Protection

The STD finish option is intended to increase the useful life of Meyer Sound loudspeakers when they are used indoors only.

Meyer Sound STD products have been tested to the following environmental conditions:

Test Parameters	Conditions
Operating Temperature	0°C to 45°C (32°F to 113°F) ambient air temperature in still air conditions. The product will operate to its full published specifications.
Non-Operating Temperature	Below -40°C and above 75°C (below -40°F and above 167°F) ambient air temperature in still air conditions. The product will not be harmed by exposure to these temperatures when not used.
Humidity	Up to 95% at 45°C
IP Rating	Tested to IP-5x for dust incursion only

Standard (STD), 5-Year Warranty

STD listed Meyer Sound products are covered by Meyer Sound's 5-year manufacturer's warranty when installed indoors only when they are mounted in accordance with our requirements.

STD Installation Requirements for Warranty Coverage

- Loudspeakers must be mounted in accordance with any guidance given in the operating instructions.
- Loudspeakers must be mounted indoors in a climate-controlled environment.
- A Meyer Sound supplied rigging or mounting accessory is considered compromised and out of warranty if it has been modified, i.e., drilling additional holes in a U-bracket to support an installation method.

Outdoor Temporary (OT) Weather Protection

The Outdoor Temporary weather protection option is intended to increase the useful life of Meyer Sound loudspeakers when they are used outdoors. Our OT standard includes additional preparation of the wood cabinet, including a penetrating treatment, the use of special primers, and either additional plating that protects the steel hardware or upgrading to stainless-steel hardware. OT is designed to prevent electrical malfunctions caused by harsh operating environments and slow the deterioration expected when loudspeakers are exposed to the elements, reducing the risk of structural failures.

Meyer Sound OT products have been tested to the following environmental conditions:

Test Parameters	Conditions
Operating Temperature	0°C to 45°C (32°F to 113°F) ambient air temperature in still air conditions. The product will operate to its full published specifications.

Test Parameters	Conditions
Non-Operating Temperature	Below -40°C and above 75°C (below -40°F and above 167°F) ambient air temperature in still air conditions. The product will not be harmed by exposure to these temperatures when not used.
Humidity	Up to 95% at 45°C
IP Rating	Tested to IP-55 for dust and moisture ingress.

Outdoor Temporary (OT), 5-Year Warranty

OT listed Meyer Sound products are covered by Meyer Sound's 5-year manufacturer's warranty when permanently installed outdoors, only when they are mounted in accordance with our requirements.

OT Installation Requirements for Warranty Coverage

- Loudspeakers must be mounted in accordance with any guidance given in the operating instructions.
- Loudspeakers must be mounted in a sheltered environment protected from direct sunlight or direct rainfall.
- Loudspeakers must be mounted with a minimum of 1° degree of down tilt relative to the front grille. Loudspeakers must not be mounted with the grille tilted or facing upward.
- Subwoofer models must be mounted with a minimum of 0° of down tilt relative to the front grille.
- For loudspeaker models that have optional protective hoods or other protective accessories, they must be deployed and deployed in such a way that the opening in the protective accessory does not face any direction but down.
- A Meyer Sound supplied rigging or mounting accessory is considered compromised and out of warranty if it has been modified, i.e., drilling additional holes in a U-bracket to support an installation method.
- All cabling connected to the loudspeaker must be installed with a "drip-loop" or equivalent method to ensure that water or moisture is not wicked towards the loudspeaker.

Outdoor Permanent (OP) Weather Protection

The Outdoor Permanent weather protection option is intended to increase the useful life of Meyer Sound loudspeakers when they are permanently mounted outdoors. Our OP standard includes additional preparation of the wood cabinet including a penetrating treatment, the use of special primers, and either additional plating that protects the steel hardware or upgrading to stainless-steel hardware. OP is designed to prevent electrical malfunctions caused by harsh operating environments and slows the deterioration expected when loudspeakers are exposed to the elements, reducing the risk of structural failures.

Meyer Sound OP products have been tested to the following environmental conditions:

Test Parameters	Conditions
Operating Temperature	0 C° to 45 C° (32 F° to 113 F°) ambient air temperature in still air conditions. The product will operate to its full published specifications.
Non-Operating Temperature	Below -40 C° and above 75 C° (below -40 F° and above 167 F°) ambient air temperature in still air conditions. The product will not be harmed by exposure to these temperatures when not used.
Humidity	Up to 95% at 45 C°

Test Parameters	Conditions
IP Rating	Tested to IP-55 for dust and moisture ingress.
Corrosion Rating	Tested to SAEJ2334 for water and salt corrosion of finishes.

Outdoor Permanent (OP), 5-Year Warranty

OP listed Meyer Sound products are covered by Meyer Sound's 5-year manufacturer's warranty when permanently installed outdoors, only when they are mounted in accordance with our requirements.

OP Installation Requirements for Warranty Coverage

- Loudspeakers must be mounted in accordance with any guidance given in the operating instructions.
- Loudspeakers must be mounted in a sheltered environment protected from direct sunlight or direct rainfall.
- Subwoofer models must be mounted with a minimum of 0° of down tilt relative to the front grille.
- For loudspeaker models that have optional protective hoods or other protective accessories, they must be deployed and deployed in such a way that the opening in the protective accessory does not face any direction but down.
- A Meyer Sound supplied rigging or mounting accessory is considered compromised and out of warranty if it has been modified, i.e., drilling additional holes in a U-bracket to support an installation method.
- All cabling connected to the loudspeaker must be installed with a "drip-loop" or equivalent method to ensure that water or moisture is not wicked towards the loudspeaker.



NOTE

- When a product has been permanently mounted outdoors, the Meyer Sound Service Department reserves the right to request visual confirmation of the installation conditions when processing warranty claims.
- For maximum product longevity, loudspeakers should be mounted in a sheltered location that prevents direct exposure to rain or direct sunlight.

Climate variations and owner maintenance

The wear of a loudspeaker will vary significantly with different climate conditions. For example, a weather-protected loudspeaker installed in a sunlight-exposed location on an ocean-side pier will experience much harsher conditions than a loudspeaker in a similar installation that is shaded by trees and exposed only to rainfall. Constant exposure to direct UV radiation and a salt air environment will cause loudspeaker products and rigging/mounting accessories to wear more quickly than those with partial UV shielding and exposed only to freshwater moisture.

Wear can eventually affect the performance of the loudspeaker. Wear also affects aesthetics, for example, in salt air environments, the exterior grille can quickly show signs of oxidation, causing unsightly discoloration.

Apart from selecting suitable weather protection, the progress of wear and tear on the loudspeaker can be slowed by a regular schedule of inspection and cleaning. This is particularly necessary in harsh environments. Inspection and cleaning should include routine removal of any visible oxidation or environmental particulates, as these can accelerate metal corrosion or decay of the cabinet. If installed loudspeakers are not in use for an extended period, exterior protection or temporary removal and storage of the loudspeakers should be considered.

Users are advised that the following environmental conditions will increase wear and tear and are likely to contribute to a shorter total product life.

- Higher than average salt environments, such as those found on cruise ships or ocean-side visitor attractions.
- Higher than average chlorine or other chemical environments, such as those found in swimming pool areas and themed attractions with wind-carried water spray.
- Regular exposure to high UV, such as external mounting in arid or desert conditions with no shade.
- Regular exposure to high humidity, such as mist, fog, sea fog, or seasonal extreme rainfall events.

IP ratings

Ingress Protection (IP) Rating			
First Digit		Second Digit	
Protection against solid objects	Definition	Protection against liquids	Definition
0	No protection	0	No protection
1	Protected against solid objects over 50mm.	1	Protected against vertically falling drops of water.
2	Protected against solid objects over 12mm.	2	Protected against direct sprays up to 15° from the vertical.
3	Protected against solid objects over 2.5mm.	3	Protected against direct sprays up to 60° from the vertical.
4	Protected against solid objects over 1mm.	4	Protected against direct sprays from all directions. Limited ingress permitted.
5	Protected against dust. Limited ingress permitted.	5	Protected against low-pressure jets of water from all directions. Limited ingress permitted.
6	Totally protected against dust.	6	Protected against strong jets of water from all directions. Limited ingress permitted.
		7	Protected against the effect of temporary immersion between 15cm and 1m.
		8	Protected against the effect of long-term submersion of 1m or more.



NOTE

IP ratings only apply to enclosures. A loudspeaker is considered an enclosure and as such, an IP rating can be determined. Rigging and mounting hardware is not an enclosure and cannot have an IP rating. Cable and cable-mounted connectors connected to a loudspeaker are not part of the loudspeaker enclosure and are not included in the IP rating of the cabinet. They have separate IP ratings. Only chassis-mounted connectors are considered part of the loudspeaker enclosure when an IP rating is determined.