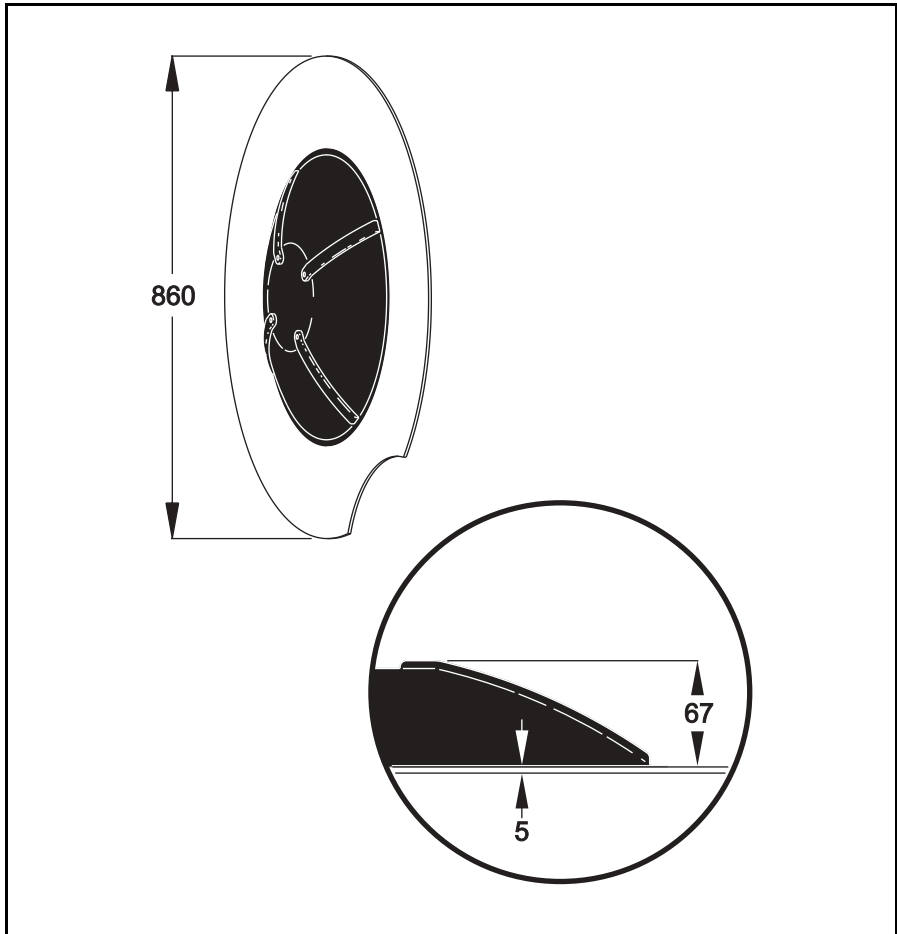


Outdoor ViroSphere

user manual

Measurements are in millimeters



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Introduction

Thank you for selecting the Outdoor ViroSphere. The Outdoor ViroSphere is a circular flat panel speaker designed especially for outdoor venues where high quality omnidirectional sound is required.

The acoustic design of the Outdoor ViroSphere combines a very flat design with an audio performance with a strong emphasis on good speech intelligibility. Sound pressure from the Outdoor ViroSphere drops linearly over distance which results in a very uniform sound pressure throughout the venue.

Outdoor ViroSpheres can be supported either by the Martin Architectural ViroSub sub-woofer or by the bass output from a main PA in the installation.

Features

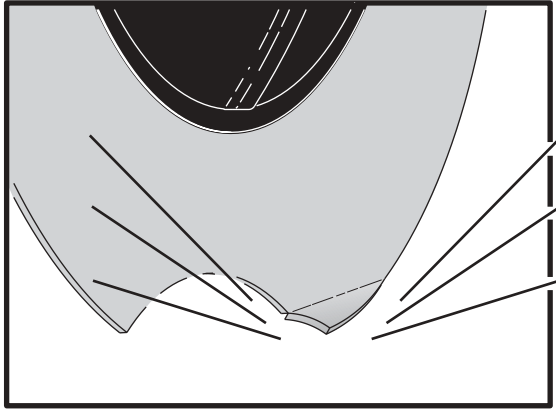
- Wall mountable, plus many other mounting options with the broad range of Viro mounting accessories
- Light reflecting capability
- Sturdy, IP 65 weather proof mechanical cabinet
- Based on NXT* technology
- Patent pending poly carbonate Acoustic Board Design
- Designed to provide sound to a 10 x 10 metre (33 x 33 foot) area

Safety information

Read this manual before powering or installing the Outdoor ViroSphere, follow the safety precautions listed below and observe all warnings in this manual and on the Outdoor ViroSphere. If you have questions about how to operate the Outdoor ViroSphere safely, please contact your Martin Architectural dealer or call the Martin Professional 24-hour service hotline at +45 70 200 201 (or in the United States at 888-TECH-180).

- Do not open the Outdoor ViroSphere. There are no user-serviceable parts inside.
- When installing the Outdoor ViroSphere above ground level, verify that the structure can hold at least 10 times the weight of all installed devices.
- Block access below the work area whenever installing or removing the Outdoor ViroSphere.
- Do not modify the Outdoor ViroSphere or install other than genuine Martin parts.
- Refer all service to a Martin Architectural service technician.

Warning *Ensure that the Outdoor ViroSphere is not dropped as it can be easily damaged.*



Installation

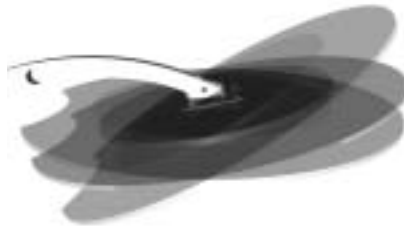
This section describes in general terms how to mount the fixture and connect it to an amplifier. These procedures shall be performed by qualified professionals.

Viro installation accessories

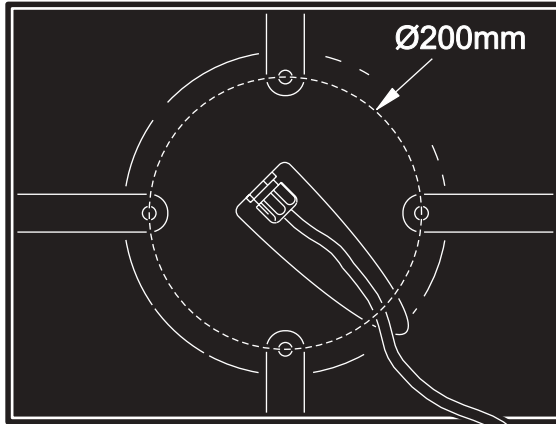
The Viro range of mounting accessories enable the Outdoor ViroSphere to be installed in a number of ways. Consult your Martin Architectural dealer for information about the range of currently available mounting accessories.

Use of a mounting bracket

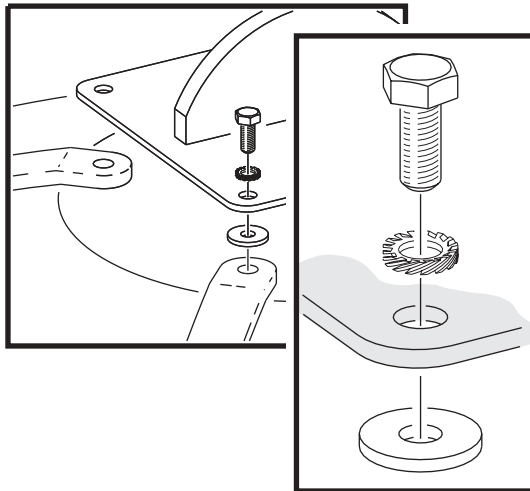
The Outdoor ViroSphere can be placed on a mounting bracket (a Viro bracket, or one from another manufacturer).



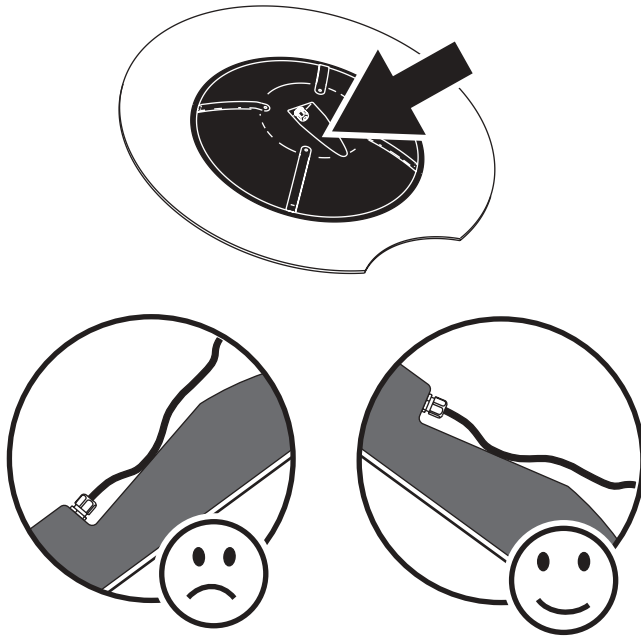
Mounting holes are located at the four points of a square located inside a 200 mm diameter circle from the center of the Outdoor ViroSphere.



A mounting bracket can be attached using four M10 x 25 screws and rubber spacers (to prevent vibration during operation).



Warning! *When installed in environments where the Outdoor ViroSphere will be exposed to rain, the recessed space containing the cable connector must be oriented so that water does not collect in it.*



Amplification

When being used in public address, distributed paging, and in foreground/background music applications, we recommend the use of a constant-voltage (CV) distribution system. A CV system relies on an amplifier whose output voltage is constant over a very wide range of load impedances (down to a practical minimum, usually 4 ohms). Where the program bandwidth is limited, and SPL demands are low, CV systems offer a cost-effective solution to the challenge of sound distribution.

Connections

Always use high quality speaker cables approved for outdoor use. Poor cables will reduce the sound quality and the reliability of the amplifier and speakers.

The Outdoor ViroSphere is supplied with a 6 m (20 ft) cable. When the speaker is used in an outdoor configuration, this cable must be connected to an appropriate IP-rated junction box, that is in turn connected to the amplification system. Ensure that connections are weather-proofed and that

they conform with local rules and regulations regarding the connection outdoor electrical equipment.

For correct polarity always ensure that the brown wire (positive) is connected to the positive terminal (red or +) on the amplifier. Likewise, ensure that the blue wire (negative) is connected to the negative terminal (black or -) on the amplifier.

Note: *If one speaker is operated in reverse polarity, the result is a strong decrease in bass output and lack of focus in the mid/high frequencies.*

Operation with a ViroSound sub woofer

It is possible to provide additional bass output using the ViroSound sub woofer (in indoor environments). This sub woofer features a stereo amplifier, which enables it to power two Outdoor ViroSpheres.

Note that only one Outdoor ViroSphere can be connected to each sub woofer output channel. The ViroSound sub woofer can be ordered from your Martin Architectural dealer.

Overload protection

The Outdoor ViroSphere contains a protection circuit that reduces the current to the panel when the sound pressure is so high as to be damaging.

The audible result is a decrease in the output from the Outdoor ViroSphere. If this happens, do not increase the high frequency level on the EQ or the tone control on the mixer, as this might cause damage to the panel. At this time the panel has reached its maximum power handling and if higher output is required, more or larger speakers are needed.

When volume is decreased and current returns to a safe level, the protection circuit automatically restores full signal to the panel and the audio output returns to normal.

Specifications

Physical

Diameter	860 mm (33.9 in.)
Panel depth	72 mm (2.8 in.)
Shipping dimensions	885 x 885 x 85 mm (34.8 x 34.8 x 3.3 in.)
Weight	5.5 kg (12 lbs)
Color	white

Performance

Power rating IEC268	60W (6dB high pass filter / 150Hz)
Power rating PEAK	120W
Sensitivity 1W/1m	84 dB
Max SPL, calculated long term	100dB
Impedance	8 ohms
Frequency range +/- 4dB	120 Hz – 20kHz

Recommended amplifier

120W into 8 ohms (100W into 8 ohms/ 6dB high pass filter @ 150Hz)

Included items

User manual

Ordering information

Outdoor ViroSphere P/N 93723002



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