

F-05BT-WP-UE

SPEAKER SYSTEM



The F-05BT-WP-UE is a 2-way surface-mount speaker system designed to deliver high-quality audio for a variety of applications. This versatility makes it ideal for foreground or background music playback, as well as public address announcements. It is IP65-rated and compliant with EN 54-24 Type B as well as UL 1480A (UEAY (Outdoor use)).

The F-05BT-WP-UE is certified according to the European Standard EN 54-24: 2008, DoP number is 24-105.

Key features

- Versatile 5-inch 2-way surface-mount speaker system
- Perfect for music and announcements
- Sleek design for seamless integration with walls and ceilings
- Flexible angle adjustment for both wall and ceiling mounts
- IP65-rated for dust and water resistance
- Compliant with EN 54-24 and UL 1480A (UEAY outdoor use)
- Ideal for permanent installs or portable setups

Specifications

Enclosure	Sealed type
Rated Input	30 W (100V line, 70V line)
Power Handling	Rated noise power: 60 W (8Ω) (*1) Continuous program: 120 W (8Ω) (*1)
Rated Impedance	8Ω 100V line: 330 Ω (30 W), 1 kΩ (10 W), 3.3 kΩ (3 W), 10 kΩ (1 W) 70 V line: 170 Ω (30 W), 330 Ω (15 W), 1 kΩ (5 W), 3.3 kΩ (1.5 W), 10 kΩ (0.5 W)
Sensitivity	89 dB (1 W, 1 m) (1 - 10 kHz, pink noise)
Frequency Response	80 Hz - 20 kHz, -10 dB at installation in 1/2 free sound field
Crossover Frequency	4.5 kHz
Directivity Angle	Horizontal: 100°, Vertical: 100°
Speaker Component	Low frequency: 13 cm (5") PPcone-type, High frequency: 25 mm (1") dome tweeter
Input Terminal	M4 screw terminal, distance between barriers: 9 mm (0.35")
Cable Requirements	Cable type: Ø6 - Ø10 mm (0.24" - 0.39") Solid wire, Twisted wire: 0.3 - 3.3 mm ² (AWG 22 - 12)
Compliance/Certifications	EN 54-24: 2008, UL 1480A (UEAY (outdoor use)
Dust/Water Protection	IP65
Installation Environment	Indoor installation, Outdoor installation (*2) (*3)
EN 54-24 Specifications	Sensitivity: 76 dB (1 W, 4 m) Max. SPL: 91 dB (30 W, 4 m) Coverage Angle (-6 dB): Horizontal: 360° (500 Hz), 170° (1 kHz), 110° (2 kHz), 85° (4 kHz) Vertical: 360° (500 Hz), 150° (1 kHz), 115° (2 kHz), 35° (4 kHz) Environmental Type: B (outdoor applications) IP Code: IP33C
Operating Temperature	-10 °C to +50 °C (14 °F to 122 °F)
Finish	Enclosure: HIPS, black (RAL 9011 equivalent), paint Grille: Aluminum, black (RAL 9011 equivalent), paint U bracket, Speaker bracket: Stainless steel, t2, black (RAL 9011 equivalent), paint
Dimensions	162 (W) X 274 (H) X 164 (D) mm (6.38" X 10.79" X 6.46")
Weight	2.8 kg (6.17 lb)
Included Accessories	U bracket x 1, Speaker bracket x 2, Bracket fixing screw x 1 set, Terminal cover x 1, Terminal cover mounting screw x 4

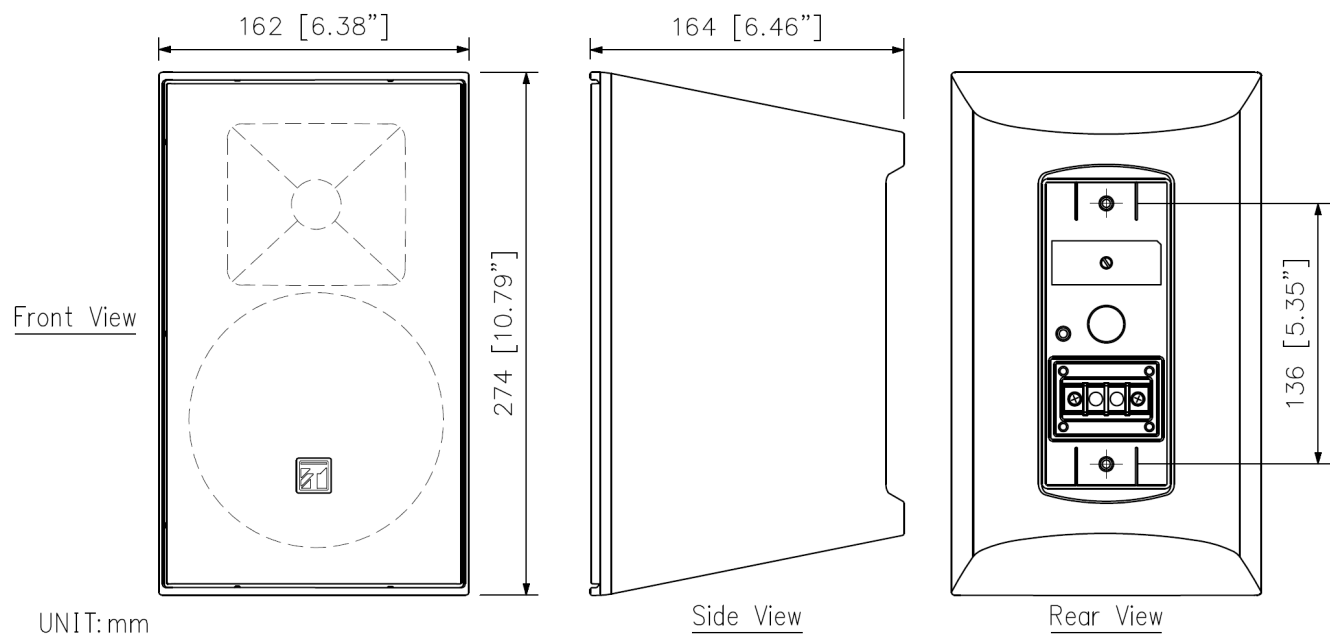
(*1) Rated noise power is defined by IEC60268-5. Continuous program is 3 dB above Rated noise power.

(*2) Avoid installing the speaker in areas with corrosive gases, such as coastal or hot spring areas, or in poorly ventilated indoor swimming facilities, or places with dust or strong wind. Corrosion may cause the speaker to fall, resulting in injury.

(*3) Keep the front part of speaker away from direct sunlight. Otherwise, ultraviolet rays deteriorate the speaker unit's cone, causing the speaker to malfunction.

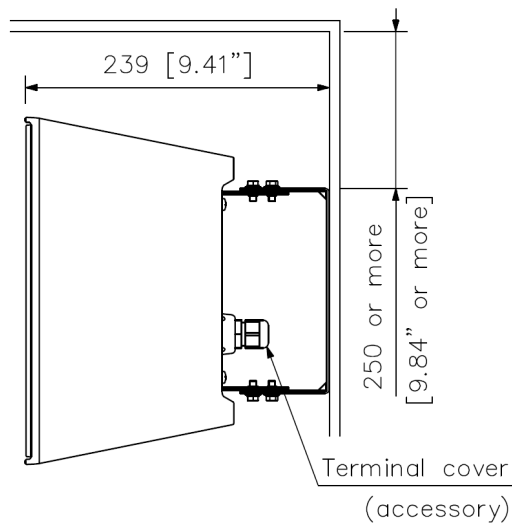
Note : Bolts and nuts for mounting the bracket to the wall or ceiling are not included. Prepare them separately.

Dimensions

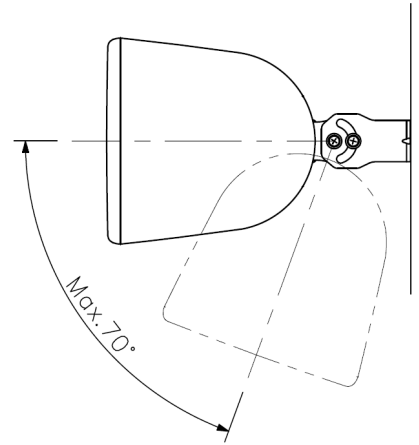


Dimensions

■ Wall mounting example

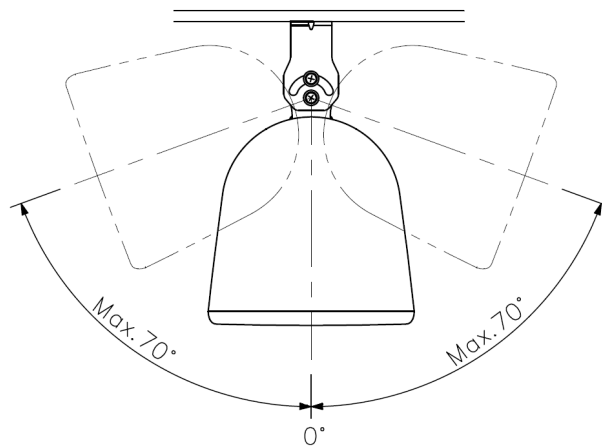


Vertical installation

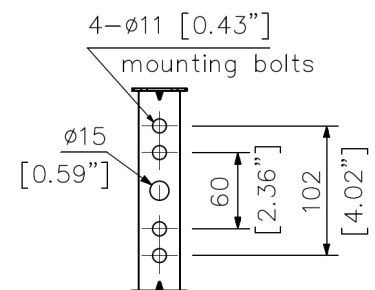
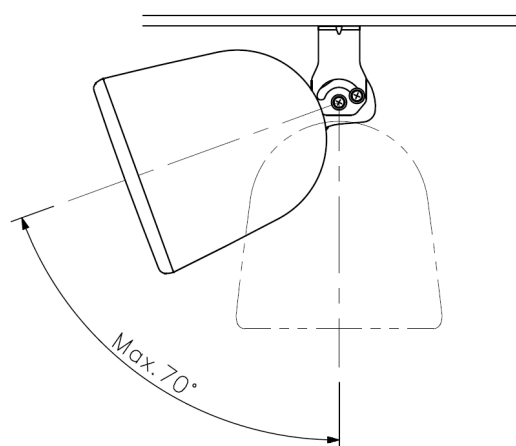


Horizontal installation

Vertical installation
(View from the top)



■ Ceiling mounting example



Dimension for mounting hole
(U bracket (accessory))

Note: For the details of the installation location of the U bracket, refer to the instruction manual.

A&E specifications

The speaker shall be a 2-way, bass-reflex type enclosure for ceiling or wall mounting. The low-frequency driver shall be a 13 cm (5") polypropylene (PP) cone-type, and the high-frequency driver shall be a 25 mm (1") dome tweeter. The speaker shall have a rated noise power handling capacity of 60 W (8 Ω) and continuous program power 120 W (8 Ω). The rated input for the speaker shall be 30 W when connected to 100 V or 70 V line systems. The speaker shall offer multiple tap settings, including 330 Ω (30 W), 1 k Ω (10 W), 3.3 k Ω (3 W), and 10 k Ω (1 W) for the 100 V line, and 170 Ω (30 W), 330 Ω (15 W), 1 k Ω (5 W), 3.3 k Ω (1.5 W), and 10 k Ω (0.5 W) for the 70 V line. The impedance shall be 8 Ω for direct connection.

The speaker shall have a sensitivity of 89 dB at 1 W, measured at 1 m distance in a 1/2 free sound field. The frequency response of the speaker shall range from 80 Hz to 20 kHz, with a -10 dB variance in a 1/2 free sound field. The directivity angle of the speaker shall be 100° horizontally and 100° vertically, ensuring broad coverage for optimal sound dispersion. The speaker shall have an ingress protection rating of IP65, providing resistance against dust and water for reliable operation in various environments.

The speaker shall comply with EN 54-24:2008 and UL 1480A (UEAY outdoor use). The specifications in accordance with EN 54-24 shall include a sensitivity of 76 dB (1 W, 4 m), a maximum sound pressure level (SPL) of 91 dB (30 W, 4 m), and a coverage angle (-6 dB) of Horizontal 360° (500 Hz), 170° (1 kHz), 110° (2 kHz), 85° (4 kHz) and Vertical 360° (500 Hz), 150° (1 kHz), 115° (2 kHz), 35° (4 kHz). The ingress protection rating in accordance with EN 54-24 shall be IP33C.

The enclosure shall be constructed of high-impact polystyrene (HIPS) and finished in either black or white. The grille shall be made of aluminum and finished to match the enclosure color.

The U-bracket and speaker bracket shall be made of stainless steel and shall be painted to match the finish of the enclosure.

The speaker shall be capable of operating in a temperature range from -10°C to +50°C (14°F to 122°F). The overall dimensions of the speaker shall be 162 mm (W) x 274 mm (H) x 164 mm (D) (6.38" x 10.79" x 6.46"), and the weight shall be 2.8 kg (6.17 lbs.). Included accessories shall consist of one U-bracket, two speaker brackets, one set of bracket fixing screws, one terminal cover, and four terminal cover mounting screws.

Manufacturer: TOA Corporation

Model: F-05BT-WP-UE/F-05WT-WP-UE