TOA

INSTRUCTION MANUAL

SPEAKER SYSTEM

F-505WP, F-505WP-L
F-605WP, F-605WP-L

Please follow the instructions in this manual to obtain the optimum results from this unit.
We also recommend that you keep this manual handy for future reference.

■ SAFETY PRECAUTIONS

- Be sure to read the instructions in this section carefully before use.
- Make sure to observe the instructions in this manual as the conventions of safety symbols and messages regarded as very important precautions are included.
- We also recommend you keep this instruction manual handy for future reference.

Safety Symbol and Message Conventions
Safety symbols and messages described below are used in this manual to prevent bodily injury and property damage which could result from mishandling. Before operating your product, read this manual first so you are thoroughly aware of the potential safety hazards as well as understand the safety symbols and messages.

⚠ **WARNING** Indicates a potentially hazardous situation which, if mishandled, could result in death or serious personal injury.

⚠ **CAUTION** Indicates a potentially hazardous situation which, if mishandled, could result in moderate or minor personal injury, and/or property damage.

⚠ WARNING

- Do not open the inside for disassembly or modification. Because the unit employs a special splashproof construction, do not loosen nor remove screws.
  Failure to observe these instructions may cause the speaker to fall, resulting in personal injuries.

- Use the unit in locations where the temperature is between –15°C and +50°C. When installing in the snowy area, take appropriate measures to prevent snow from lying on the unit. If the ambient temperature exceeds –15°C or +50°C or if the snow lies on the unit, the speaker may fall, causing personal injuries.

- Install the unit only in a location that can structurally support the weight of the unit and the mounting bracket. Doing otherwise may result in the speaker falling down and causing personal injury and/or property damage.

- Should the following irregularity be found during use, immediately stop operating the unit and contact your nearest TOA dealer. Make no further attempt to operate the unit in this condition as this may cause fire or electric shock.

  · If you detect smoke or a strange smell coming from the unit.
  · If water or any metallic object gets into the unit
  · If the unit falls, or the unit case breaks
  · If it is malfunctioning (no tone sounds.)

⚠ CAUTION

- Since installation requires specialized skills and professional experience, always consult the shop from where the unit was purchased before beginning installation. If the speaker should fall, it could result in electrical shocks or other personal injuries.

- Do not operate the speaker for an extended period of time with the sound distorting. This is an indication of a malfunction, which in turn can cause heat to generate and result in a fire.

- Have the speaker unit checked periodically by the shop from where it was purchased. Failure to do so may result in corrosion or damage to the speaker or its mounting bracket that could cause the speaker to fall, possibly causing personal injury.

TOA Corporation

■ FEATURES

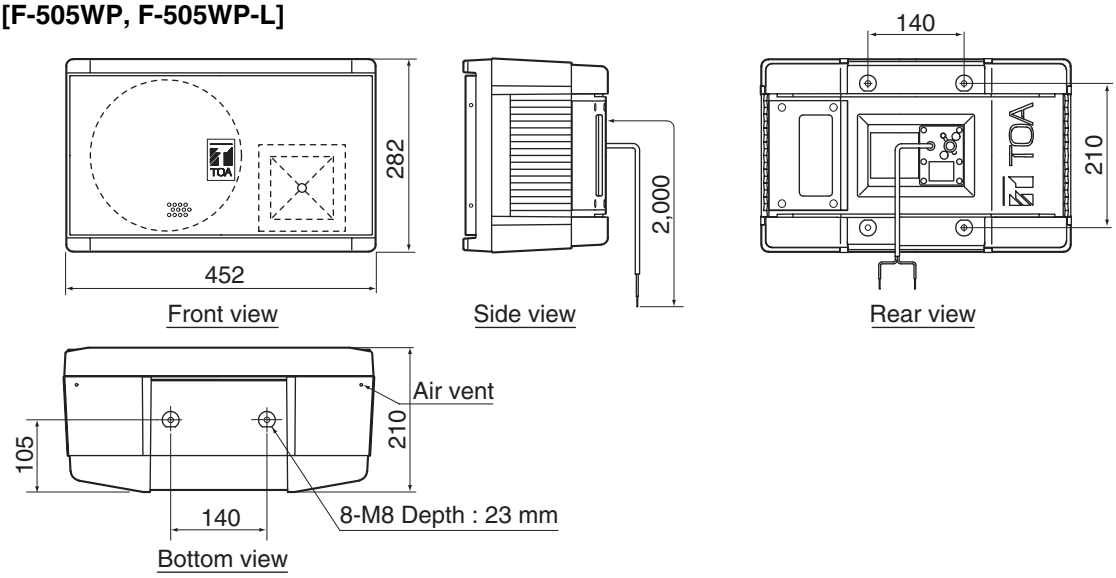
- Rain- and weather-proof construction that makes the speaker most ideal for outdoor applications.
- 2-way sealed speaker incorporating a woofer with high power handling capacity and a constant-directivity (CD) horn tweeter with a high-efficient driver.
- Uniform frequency response within the range of 60° horizontal x 40° vertical thanks to the CD horn.
- Enclosure is made from polypropylene resin that assures high sound performance.
- Designed for high efficiency, extended range and high durability as well as for easy installation, the speaker can be used in wide applications.

■ USER PRECAUTIONS

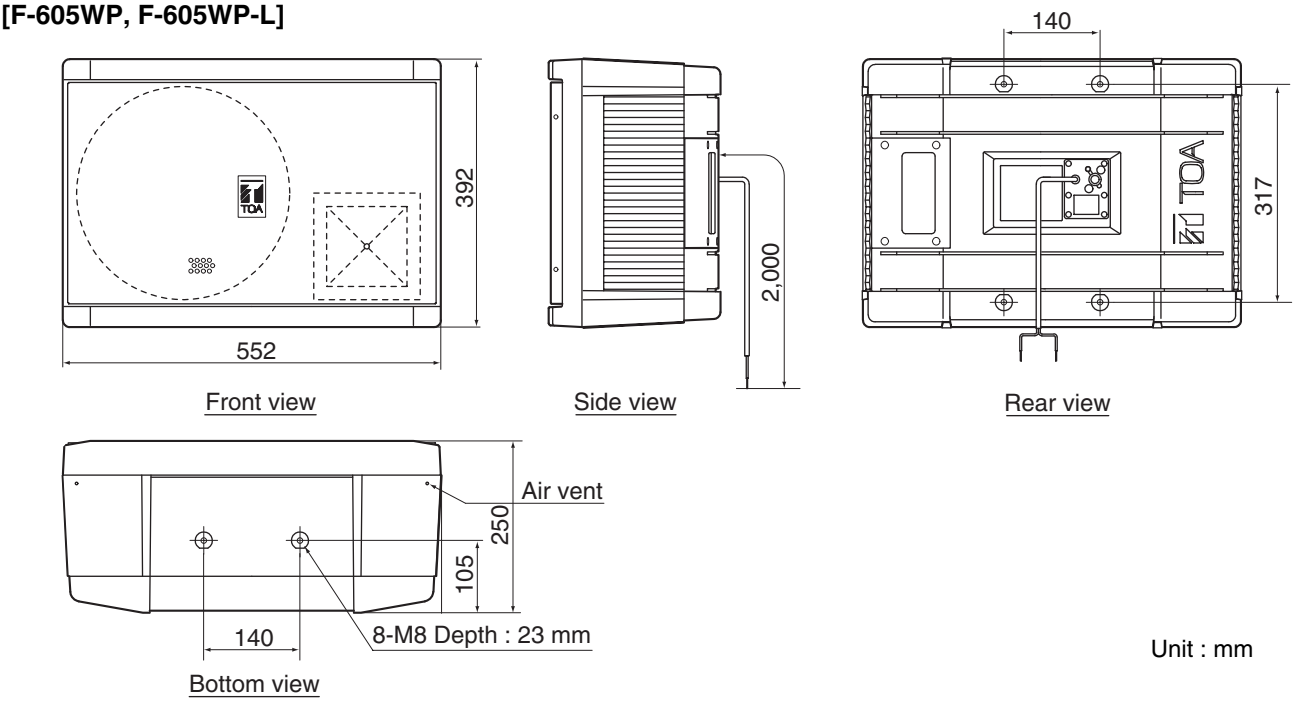
- The unit employs a splashproof construction. However, do not dash water over it purposely to clean, because its speaker element and other internal components may be damaged.
- Avoid installing the unit near the sea because its life is extremely shortened when used in locations affected by a briny air.

■ DIMENSIONAL DIAGRAMS

[F-505WP, F-505WP-L]



[F-605WP, F-605WP-L]

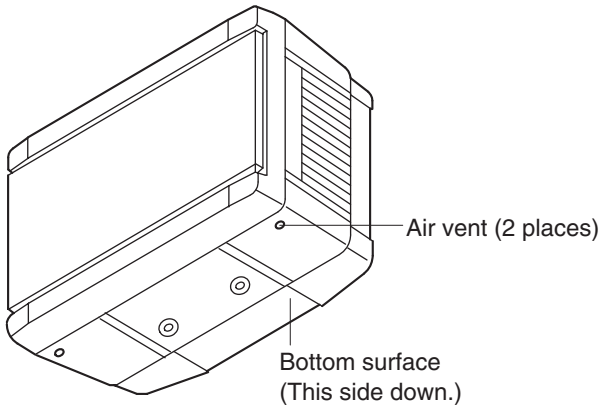


Unit : mm

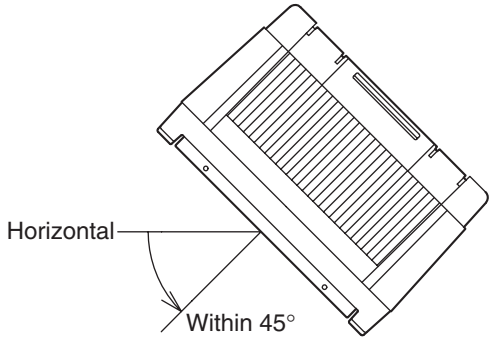
■ INSTALLATION

When installing the speaker, use the optional mounting bracket for outdoor installation.
Also, take care about the following:

- The bottom surface of the speaker has two air vents. Be sure to mount the speaker with that side down, taking care that such holes are not blocked.



- As shown in the figure below, the speaker can be positioned at any angle from 0° (horizontal) to a 45° downward angle. Do not exceed this range, nor direct the speaker upward.



⚠ WARNING

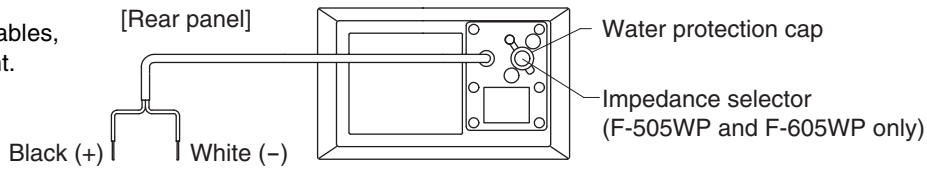
Although the unit employs a splashproof construction for permanent outdoor installation, the ambient operating temperature is from –15°C to +50°C.
When installing in the snowy area, take appropriate measures to prevent snow from lying on the unit. If the ambient temperature exceeds –15°C or +50°C or if the snow lies on the unit, the speaker may fall, causing personal injuries.

Caution: Avoid installing the unit near the sea because its life is extremely shortened when used in locations affected by a briny air.

■ CONNECTION

● Polarity

When connecting the speaker cables, observe the polarity shown at right.



● Impedance Switching (Available for F-505WP and F-605WP)

The speaker input impedance can be switched in 4 steps with a built-in impedance selector (rotary switch).
See the table below.
Note: The impedance is factory-preset to position 3.

F-505WP		100 V Line	70 V Line
Position [1]	670 Ω	15 W	7.5 W
Position [2]	330 Ω	30 W	15 W
Position [3]	170 Ω	60 W	30 W
Position [4]	83 Ω	——	60 W

F-605WP		100 V Line	70 V Line
Position [1]	330 Ω	30 W	15 W
Position [2]	170 Ω	60 W	30 W
Position [3]	83 Ω	120 W	60 W
Position [4]	42 Ω	——	120 W

To switch the impedance, remove the rear-mounted water protection cap and set the impedance selector to the desired impedance using a screwdriver.

Cautions

- Be sure to fit the water protection cap in place after setting the impedance.
- When connecting the speaker to 100 V line, do not place the impedance selector in position 4 because this can be cause failure or breakdowns of the speaker, having the bad effect on the amplifier as well.

■ OVERLOAD PROTECTION DEVICE

The speaker is protected with individual overload protection devices for woofer and tweeter. (When the woofer's device is activated, the woofer's output level is attenuated by about 15 dB, while the tweeter is cut off if the tweeter's device is activated.)
If the sound volume of the woofer or tweeter suddenly decreases during use, this indicates that the related protection device has leaped into action. In such a case, minimize the amplifier's output level once first to wait till the protection device automatically returns to the normal condition (about 2 to 20 seconds). After it is reset, use the speaker turning down the volume a little more than before.

■ SPECIFICATIONS

	F-505WP	F-505WP-L	F-605WP	F-605WP-L
Enclosure Type	Sealed type			
Woofer	20 cm-dia cone		30 cm-dia cone	
Tweeter	CD horn + driver			
Rated Power or Power Handling Capacity	60 W (Rated power input)	80 W (Continuous pink noise) 240 W (Continuous program)	120 W (Rated power input)	120 W (Continuous pink noise) 360 W (Continuous program)
Impedance	83 Ω 170 Ω 330 Ω 670 Ω	8 Ω	42 Ω 83 Ω 170 Ω 330 Ω	8 Ω
Output Sound Pressure Level	93 dB (1 W, 1 m)		98 dB (1 W, 1 m)	
Frequency Response	80 – 20,000 Hz			
Crossover Frequency	3,500 Hz		2,500 Hz	
Ambient Temperature	−15°C to +50°C			
Enclosure Material	Polypropylene resin			
Color	Ivory			
Dimensions	452 (w) x 282 (h) x 210 (d) mm		552 (w) x 392 (h) x 250 (d) mm	
Weight	Approx. 10.5 kg	Approx. 9 kg	Approx. 19 kg	Approx. 16.5 kg

Note: The design and specifications are subject to change without notice for improvement.

Traceability Information for Europe (EMC directive 2004/108/EC)

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