TOA

INSTRUCTION MANUAL

POWERED HORN SPEAKER

SC-P620-AS
SC-P620-EB

Thank you for purchasing TOA's Powered Horn Speaker.
Please carefully follow the instruction in this manual to ensure long, trouble-free use of your equipment.

1. SAFETY PRECAUTIONS

- Before installation or use, be sure to carefully read all the instructions in this section for correct and safe operation.
- Be sure to follow all the precautionary instructions in this section, which contain important warnings and/or cautions regarding safety.
- After reading, keep this manual handy for future reference.

⚠ WARNING

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

When Installing the Speaker

- Refer all installation work to the dealer from whom the speaker was purchased. Installation requires extensive technical knowledge and experience. The speaker may fall off if incorrectly installed, resulting in possible personal injury.

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

- When installing the speaker in the snowy area, take appropriate measures to prevent snow from lying on the speaker. If the snow lies on the speaker, the speaker may fall, causing personal injuries.

- Do not use other methods than specified to mount the bracket. Extreme force is applied to the speaker and the speaker could fall off, possibly resulting in personal injuries.

- Attach the safety wire to the speaker. If not attached, the speaker could fall off, resulting in personal injury.

- Use nuts and bolts that are appropriate for the ceiling's or wall's structure and composition. Failure to do so may cause the speaker to fall, resulting in material damage and possible personal injury.

- Tighten each nut and bolt securely. Ensure that the bracket has no loose joints after installation to prevent accidents that could result in personal injury.

- Do not mount the speaker in locations exposed to constant vibration. The mounting bracket can be damaged by excessive vibration, potentially causing the speaker to fall, which could result in personal injury.

- Do not use anti-rust lubricant. If it contacts resin or rubber parts, they could deteriorate and cause the speaker to fall, possibly resulting in personal injury.

- Avoid installing the speaker in a location close to the seashore or in locations exposed to corrosive gas. In such locations, the bracket may be vulnerable to corrosion, eventually allowing the speaker to fall resulting in personal injury.

- Do not install the speaker in indoor swimming pools or such locations where liquid chemicals are used. The parts deteriorate if corroded, causing the speaker to fall, which could result in personal injury.

- To avoid accidental air explosions, do not use the speaker around gasoline, thinner or other combustibles.

When the Speaker is in Use

- Should the following irregularity be found during use, immediately switch off the amplifier's power, disconnect the power supply plug from the AC outlet and contact your nearest TOA dealer. Make no further attempt to operate the speaker in this condition as this may cause fire or electric shock.
  - If you detect smoke or a strange smell coming from the speaker.
  - If water or any metallic object gets into the speaker.
  - If the speaker falls, or the speaker case breaks.

- To prevent a fire or electric shock, never open nor remove the speaker case as there are high voltage components inside the speaker. Refer all servicing to qualified service personnel.

⚠ CAUTION

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

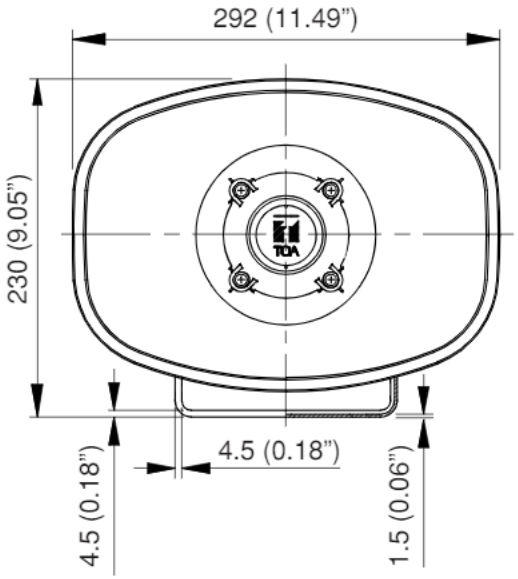
When Installing the Speaker

- Avoid touching the speaker's sharp metal edge to prevent injury.
- To avoid electric shocks, be sure to switch off the amplifier's power when connecting the speaker.
- Do not operate the speaker for an extended period of time with the sound distorting. Doing so may cause the speaker to overheat, resulting in a fire.
- Do not stand or sit on, nor hang down from the speaker as this may cause it to fall down or drop, resulting in personal injury and/or property damage.
- Have the speaker checked periodically by the shop from where it was purchased. Also, when mounting the speaker on a vehicle, be sure to check both the speaker and its mounts before moving. 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.
- Avoid installing the speaker in humid or dusty locations, or in locations exposed to heaters, solvents, acid, alkali, smoke or steam, as excessive exposure to these factors could result in speaker failure, fire or electric shock.

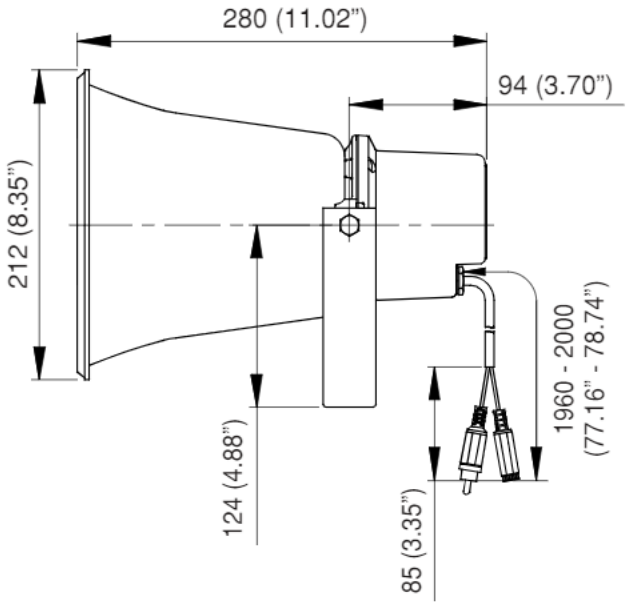
2. DIMENSIONAL DIAGRAM

Unit: mm(inch)

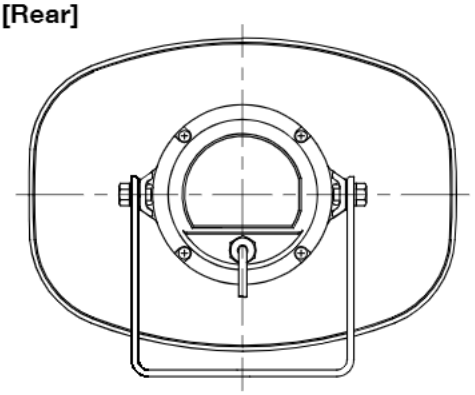
[Front]



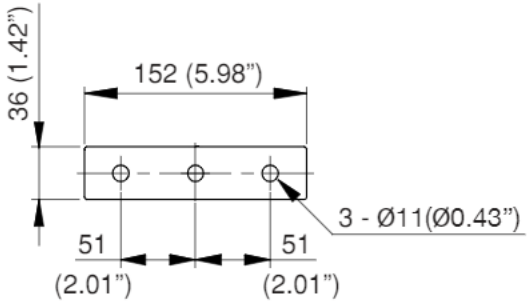
[Side]



[Rear]



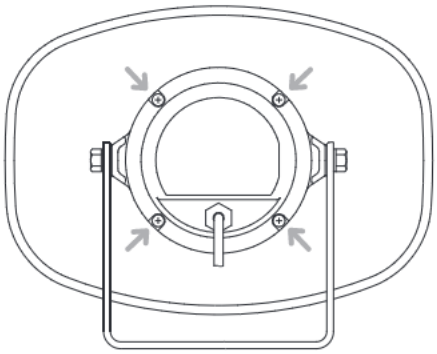
[Mounting bracket]



3. GENERAL DESCRIPTION

The SC-P620-AS/EB is a highly inteligible speaker with a built-in 20W digital power amplifier, that provides public address announcement and remote paging via network video surveillance applications. Its powder-coated finish and stainless steel screws ensure the unit's weatherproof capability.

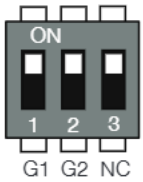
4. SET THE GAIN AND VOLUME LEVEL



To Set the gain and volume level of the amplifier module, please follow instruction as below :

1. Remove 4 screws to open back cover of Horn speaker.
   On the PCB, there is DIP Switch marked “SW1”.
   To Set gain refer to table below :

GAIN	G1	G2
8dB	OFF	OFF
16dB	ON	OFF
24dB	OFF	ON
32dB	ON	ON



Note.
Factory preset the gain and volume :
* Gain setting : 16dB
* Internal Volume : Maximum

2. Adjust the internal volume (anti-clockwise for volume down or clockwise for volume up) until the output level is adequate. If the output level is insufficient, set the gain to the next highest gain, according to the table and repeat the precedure with the internal volume.



INTERNAL VOLUME

3. Now replace the rear cover. As this Horn speaker is weatherproof to IP65, care must be taken during the replacement of the back cover, to ensure the gaskets are correctly refitted and watertight.

ATTENTION !!
To avoid damage, do not put more pressure when turning the internal control. The rotational stopper strength of internal volume is about 2.94 N.cm.

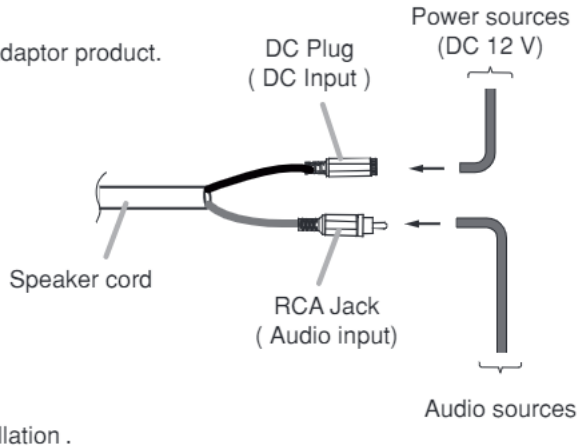
5. WIRING CONNECTION AND WIRING BALANCED INPUT

Connect the DC plug to power sources (DC 12V).
Recommended adaptor power supply, please use TOA’s optional adaptor product.

For Audio sources, connect to RCA Jack.

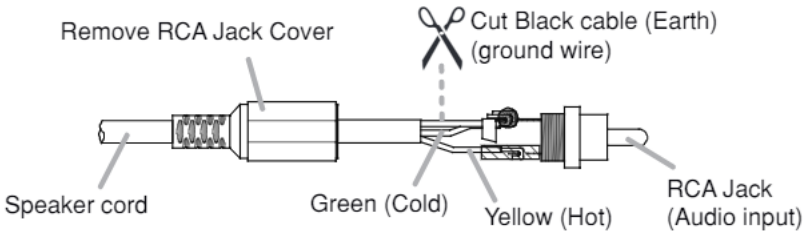
⚠ WARNING

Please ensure that power source is terminated correctly to prevent damage to the amplifier module



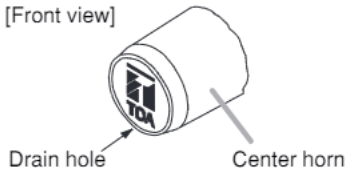
HOW TO MAKE BALANCED-LINE INPUT

Default wiring audio input from factory is unbalanced installation.
Below is the instruction to adjust audio input for balanced-line installation .



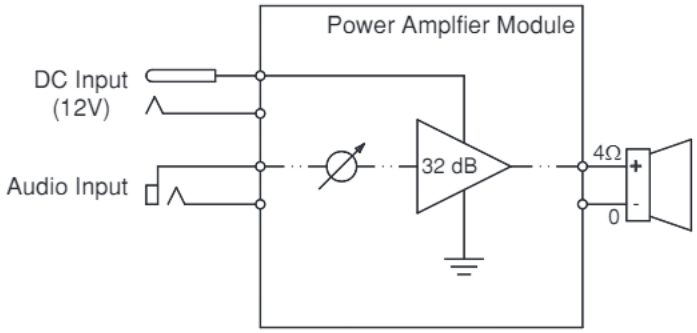
6. INSTALLATION PRECAUTIONS

- Local codes may be required for other installation methods. Check with authority having jurisdiction to determine acceptability of the mounting methods.
- When installing the Horn speaker, be sure the drain hole is positioned toward the ground. Otherwise, rainwater could enter the interior of speaker and the aging of parts may cause speaker failure.
- Do not install the speaker face-up from a horizontal plane. If water accumulates in the horn, this may cause the speaker to malfunction.
- Do not install the speaker under environment that subject speaker to contamination.



7. WIRING DIAGRAM

Shown below is a connection diagram when shipped from the factory.



* Factory setting preset :
- Internal volume : maximum
- Setting gain : 16 dB

8. SPECIFICATIONS

Power Source	12V DC, 2A (DC Socket "+" Type A : 5.5 x 2.1mm)	
Power Consumption	15W (1.25A) at Rated output	
	25W (2.10A) at Maximum output	
Input	0 dB*, 10kΩ, Unbalanced (RCA plug)	
Signal Gain	8, 16, 24 or 32 dB (Factory pre-set to 16dB)	
Volume Adjustment	Internal volume control (Factory pre-set to maximum position)	
Sound Pressure Level	113dB (1W, 1m at 500 Hz to 2.5 kHz peak level)	
	Max. SPL (above 120dB)	
Frequency Response	250 - 10,000 Hz	
Operating Temperature	-20°C to +55°C (must be free from dew condensation)	
Dust/Water Protection	IP 65	
Finish	Horn Flare:	HIPS resin, white (RAL9010 equivalent)
	Reflector horn and case:	ABS resin, white (RAL9010 equivalent)
	Bracket, screws & bolts:	Stainless steel
Cable Cord	Length: 2m Flying Lead (RCA plug) & DC socket ("+")	
Dimensions	292 (W) x 230 (H) x 280 (D) mm	
Weight	Approx. 1.8 kg	

0 dB = 1 V

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

• Optional product

AD-5000-2 (LTE24E-S2-1) AC Adapter: Use this adaptor for supply voltage DC12V to product.

Traceability Information for Europe

Manufacturer:
PT. TOA GALVA INDUSTRIES
Jl. Raya Bogor km 34-35, Tapos
Depok 16958, Indonesia

Authorized representative:
TOA Electronics Europe GmbH
Suederstrasse 282, 20537 Hamburg,
Germany