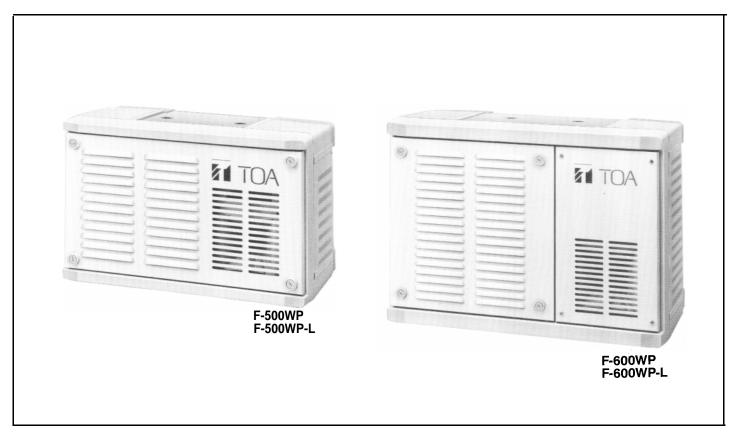
## TOA SPEAKER SYSTEM

# 2-WAY WEATHERPROOF SPEAKER

# F-500WP/F-500WP-L/F-600WP/F-600WP-L



#### **DESCRIPTION**

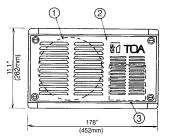
The TOA F-500WP/F-500WP-L & F-600WP/F-600WP-L are weatherproof 2-way sealed type loudspeaker systems housing a 7.9" (F-600WP/F-600WP-L: 12") woofer with high power capacity, and a constant directivity (CO) horn tweeter with a high-efficiency driver. The CD horn assures a uniform, well-controlled dispersion pattern of 60° horizontal by 40° vertical within its specified frequency response range. An extremely durable low-foam polypropylene resin enclosure provides superb acoustic characteristics. Providing not only high efficiency, wide frequency coverage and high durability, but also easy installation, the TOA weatherproof F-500WP/F-500WP-L & F-600WP/F-600WP-L speaker systems have been designed for all-weather outdoor applications and moist places such as ice arenas, as well as for a wide variety of other applications.

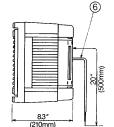
#### **FEATURES**

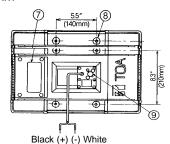
- Rain- and weather-proof construction makes these speaker systems ideal for all-weather use outdoors and in highly humid indoor applications.
- The 2-way sealed 100V/70V constant voltage speaker system (F-500WP-L, F-600WP-L: 8 ohms) incorporates a woofer with high power handling capacity, and a constant directivity (CD) horn tweeter that also includes a highefficiency driver.
- 3. CD horn provides a uniform dispersion pattern of 60° horizontal by 40° vertical.
- 4. Low-foam polypropylene resin enclosure assures highquality acoustic response.
- Speaker design and weatherproofing provide high efficiency, extended range and durability, plus easy installation, enabling use in a wide range of all-weather outdoor and humid indoor situations.
- 6. Built-in overload protection circuitry.

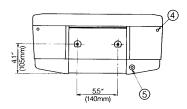


#### APPEARANCE AND DIMENSIONAL DIAGRAM









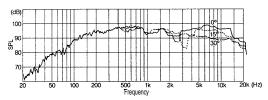
**OPTION** 

- Woofer Front Panel
- © Speaker Cable⑦ Handle
- ③ Tweeter
  - **® Installation Screws**
- 4 Ventilation Aperture 9 Impedance Selector Switch
- <sup>⑤</sup> Horn Drainage Aperture

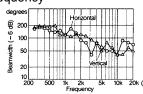
#### CHARACTERISTIC DIAGRAMS

Frequency Response

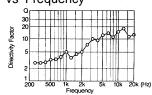
(1W/1m: 1/3 Octave Pink Noise)



#### Beamwidth vs Frequency



### Directivity Factor vs Frequency



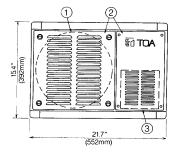
#### YS-500 Wall/Pole Mounting Bracket Wall/Pole Installation Bracket Pole Size Adjustment Bolt Speaker Mounting Bracket Wall/Pole Mounting Bracket

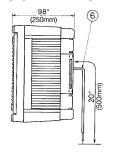
- Aperture for Wraparound Band 6 Angle Adjustment Bolt
  - (YS-6OB) © Wall Mount Aperture

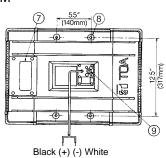
\*Available pole diameter when using YS-6OB : φ3.6 ~ φ13.4" (90mm ~ 340mm)

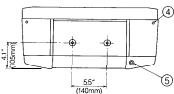
#### F-600WP/F-600WP-L

#### APPEARANCE AND DIMENSIONAL DIAGRAM









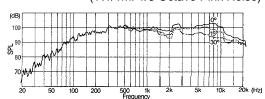
**OPTION** 

- ① Woofer
- ② Front Panel
- 6 7 Handle
- 3 Tweeter 8 InstallationScrews
- Ventilation Aperture 9 Impedance Selector Switch
- S Horn Drainage Aperture

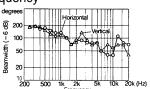
#### CHARACTERISTIC DIAGRAMS

Frequency Response

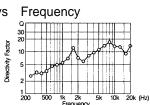
(1W/1m: 1/3 Octave Pink Noise)



#### Beamwidth vs Frequency



#### Directivity Factor vs



# YS-600 Wall/Pole Mounting Bracket

- Speaker Mounting Bracket Wall/Pole Mounting Bracket
- Wall/Pole Installation Bracket © Pole Size Adjustment Bolt

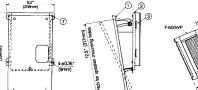
Speaker Cable

- Aperture for Wraparound Band

- und Band 

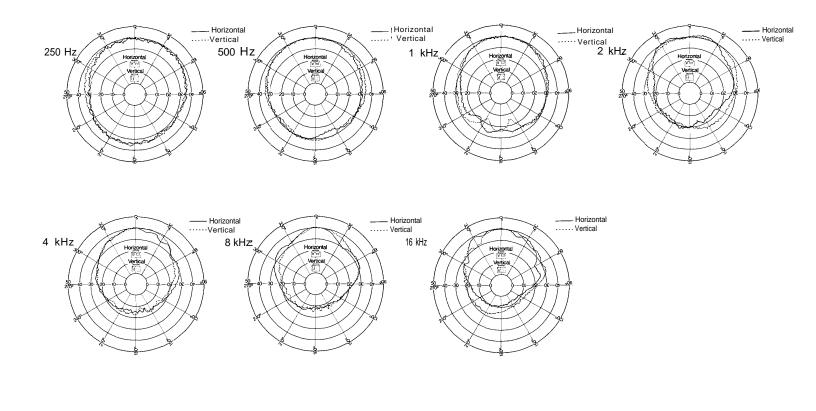
  Angle Adjustment Bolt (YS-60B) 

  Wall Mount Aperture

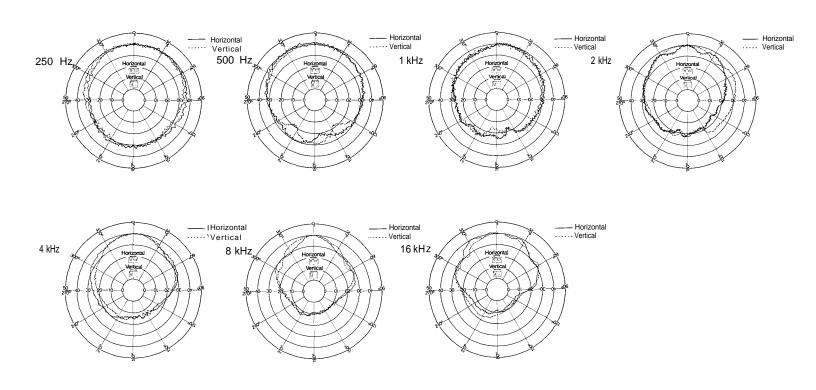


\*Available pole diameter when using YS-6OB: \$\phi 3.6" \( \phi \) \$13.4" (90mm ~ 340mm)

#### Polar Response (1W/2m: 1/3 Octave Pink Noise)



#### Polar Response 1W/2m: 1/3 Octave Pink Noise)



#### **SPECIFICATIONS**

| Model No.                                 | F-500WP   | F-500WP-L                  |
|---|---|----------------------------|
| Enclosure                                 | Sealedtype  |                            |
| Woofer                                    | 7.9" (20cm) cone  |                            |
| Tweeter                                   | CD horn + compression driver                                      |                            |
| Rated Power or<br>Power Handling Capacity | 60 watts*   | 80 watts**<br>240 watts*** |
| Impedance                                 | 83 ohms<br>170 ohms<br>330 ohms<br>670 ohms                       | 8 ohms                     |
| Output SPL                                | 93 dB (1W/1m)   |                            |
| Frequency Response                        | 80 Hz to 20 kHz   |                            |
| Crossover Frequency                       | 3 k H z   |                            |
| Ambient Temperature                       | + 5°F to + 122°F (-15°C to + 50°C)                                |                            |
| Enclosure Material                        | Polypropylene resin   |                            |
| Color                                     | lvory   |                            |
| Dimensions                                | 17.8 (W)x11.1 (H)x8.3 (D) inches<br>452 (W) x 282 (H)x 210 (D) mm |                            |
| Weight                                    | Approx. 24.2 lbs. (11kg)  | Approx. 20.9 lbs. (9.5kg)  |

| Model No.                                 | F-600WP  | F-600WP-L                   |
|---|--|-----------------------------|
| Enclosure                                 | Sealedtype   |                             |
| Woofer                                    | 12" (30cm) cone  |                             |
| Tweeter                                   | CD horn + compression driver                                       |                             |
| Rated Power or<br>Power Handling Capacity | 120 watts*   | 120 watts**<br>360 watts*** |
| Impedance                                 | 42 ohms<br>83 ohms<br>170 ohms<br>330 ohms                         | 8 ohms                      |
| Output SPL                                | 98 dB (1W/1m)  |                             |
| Frequency Response                        | 80 Hz to 20 kHz  |                             |
| Crossover Frequency                       | 2 kHz  |                             |
| Ambient Temperature                       | + 5°F to + 122°F ( - 15°C to + 50°C)                               |                             |
| Enclosure Material                        | Polypropylene resin  |                             |
| Color                                     | lvory  |                             |
| Dimensions                                | 21.7 (W)x15.4 (H)x9.8 (D) Inches<br>552 (W) x 392 (H) x 250 (D) mm |                             |
| Weight                                    | Approx. 44.1 lbs. (20kg)   | Approx. 38.5 lbs. (17.5kg)  |
|   |  |                             |

<sup>\*</sup>Rated power input \*\*\*Continuous pink noise input \*\*\*\*Continuous program input Specifications are subject to change without notice

#### **INSTALLATION**

- Optimal operating temperature range is from 15°C to + 50°C. Do not expose speaker to salt air, or intentionally spray with water for cleaning. To prevent direct exposure to snow, place speaker unit under the eaves of a roof, or install it with its own roof covering.
- 2. Use optional mounting bracket for outdoor installation.
- Mount speaker so surface with two air vents and one CD horn rainwater drain is at bottom. Keep drain clear at all times. Make sure speaker is not installed upside down.
- Speaker must not be positioned at any angle outside 0° to 45° downward of horizontal.
- Attempting to disassemble the speaker may impair rainproofing, with consequent risk of accidents or breakdowns.

#### PROTECTION CIRCUITRY

These speakers have individual protection circuitries that protect the woofer and the tweeter from the excessive input. (If the circuitry is activated, the input power to the woofer attenuates by 15 dB, with the tweeter cut off.)

