

# INTERIOR DESIGN SERIES

## H-3 WIDE DISPERSION SPEAKER

THE H-3 WIDE-DISPERSION WALL-MOUNT SPEAKER is the newest addition to the TOA Interior Design Series and continues TOA's modern, innovative approach to commercial speaker design. The H-3's unique appearance and superb sound quality provide a welcome alternative to conventional wall-mount speakers for spaces where appearance is a prime consideration.

Applications include speaker systems for hotels, houses of worship, offices, museums, residential spaces, restaurants, retail stores, and many others. A weather-resistant version, model H-3WP, is also available for outdoor applications such as gardens, patios and swimming pools.

The H-3's wide 140 degree horizontal coverage pattern provides a solution for eliminating deadspots inherent between wall-mounted speakers. Also, the Minimum Reflection design significantly reduces sound wave reflections and the resulting sound coloration that occurs with conventional bracket-mounted "box" type speakers.

The H-3 is a two-way, sealed enclosure with high quality components including a 1" dome tweeter, dual 4" woofers, matching transformer, and removable terminal block. The grille is paintable for custom-matching to the room decor.

An optional 900 Series Processor Module is also available for convenient system equalization using the industry-standard TOA 900 Series Mixer/Amplifiers. The H-3 also carries a five year warranty.



## HIGHLIGHTS

- **Unique Appearance**  
blends well with modern architecture for background/foreground music and paging systems.
- **Wide Variety of Applications**  
including hotels, houses of worship, museums, offices, residential spaces, restaurants, and retail stores.
- **Wide Coverage Area:**  
140° horizontal x 70° vertical dispersion
- **Weather-Resistant Version Available, Model H-3WP,**  
for outdoor applications such as gardens, patios and swimming pools.
- **Minimum Reflection Design**  
reduces sound wave reflections typical of conventional bracket-mounted "box" type speakers.
- **High Power Handling:**  
150 W (Continuous Program)
- **Two-Way, Sealed Enclosure with High-Quality Components:**  
1" Dome Tweeter and Dual 4" Woofers with Neodymium Magnets
- **Built-In 70.7/100 V Matching Transformer (30 W max.)**  
for distributed speaker systems (8 and 16 ohm taps also available).
- **Protection Circuit**  
prevents loudspeaker damage from excessive input.
- **Built-In Crossover**  
with optimized filter slopes.
- **UL-Listed Fire-Resistant Material**
- **Removable Terminal Block**  
with loop-through terminations for distributed speaker systems.
- **Paintable Grille**  
to custom-match to the environment.
- **Five Year Warranty**

## OPTIONAL ACCESSORIES

<b>E-06R</b>	900 Series Processor Module for convenient system equalization
<b>FB-100</b>	Subwoofer
<b>HB-1</b>	Flush-Mount Subwoofer

# SPECIFICATIONS

H-3 WIDE-DISPERSION SPEAKER

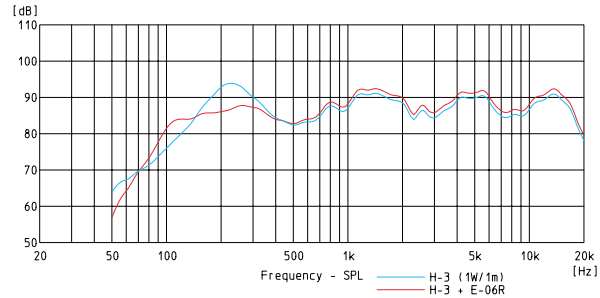
Tel: 800-733-7088  
 Fax: 800-733-9766  
 www.toaelectronics.com



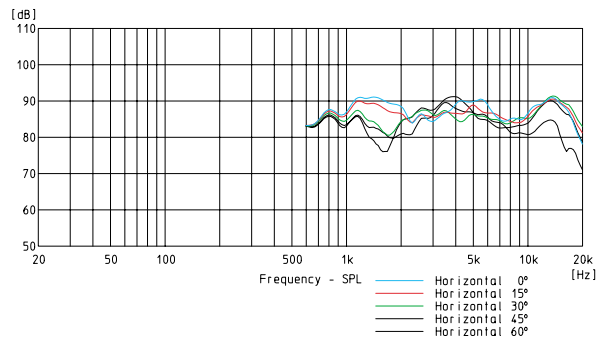
<b>Model No.</b>	H-3
<b>Enclosure Type</b>	Sealed, two-way
<b>Speaker Components</b>	1" dome tweeter Two 4" x 2" cone woofers (Neodymium magnets)
<b>Impedance</b>	Direct: 8 Ω Transformer: 16 Ω 70.7 V line: 30 W (170 Ω), 15 W (330 Ω), 7.5 W (670 Ω), 3.75 W (1.3 k Ω) 100 V line: 30W (330 Ω), 15 W (670 Ω), 7.5 W (1.3 k Ω)
<b>Sensitivity</b> (1 W / 1 m, 1/2 space)	89 dB SPL
<b>Power Handling</b> (50 Hz - 20 kHz) Continuous Program: Continuous Pink Noise (24 hrs.): Transformer:	150 W 50 W 30 W (16 Ω, 70.7 V, 100 V line)
<b>Frequency Response</b> (-10 dB, 1/2 space)	100 Hz to 20 kHz
<b>Crossover Frequency</b>	4 kHz (LPF: -12 dB/octave, HPF: -18 dB/octave)
<b>Material / Finish</b>	Enclosure: Fire-resistant ABS resin (UL94:V-0 grade), black H-3WP Weather-Resistant Rating: IP-X4 Grille: H-3: Rolled steel plate, white, paintable H-3WP: Stainless steel, white, paintable Grille Frame: Same as enclosure, white Base Plate: H-3: Rolled steel plate H-3WP: Stainless steel
<b>Input Connector</b>	Removable terminal block with screw terminals (AWG #14 - #24). Two pairs of (+)/(-) for input and loop-through terminations.
<b>Dimensions</b> (W x H x D)	11.6" x 12.5" x 5.1" (295 mm x 318 mm x 129 mm)
<b>Weight</b> (including base plate)	7.3 lbs. (3.3 kg)
<b>Accessories</b> (included)	Base Plate, Mounting Screws
<b>Options</b>	E-06R 900 Series EQ Module FB-100 Subwoofer HB-1 Flush-Mount Subwoofer

## FREQUENCY RESPONSE

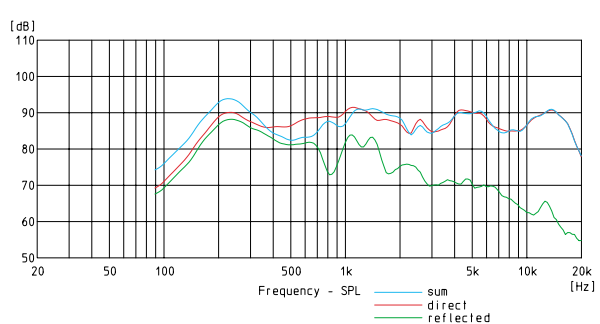
E-06R Processor In/Out



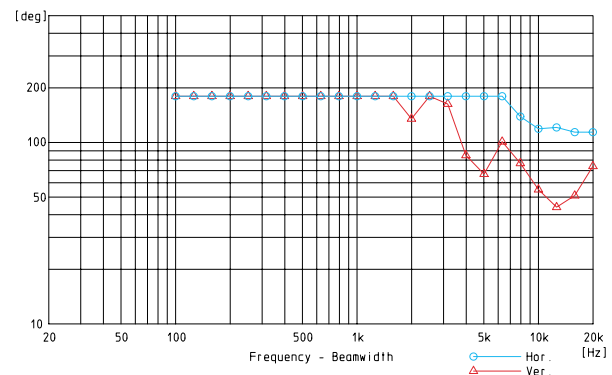
Horizontal (0° - 60°)



Direct, Reflected and Summed Response



## BEAMWIDTH



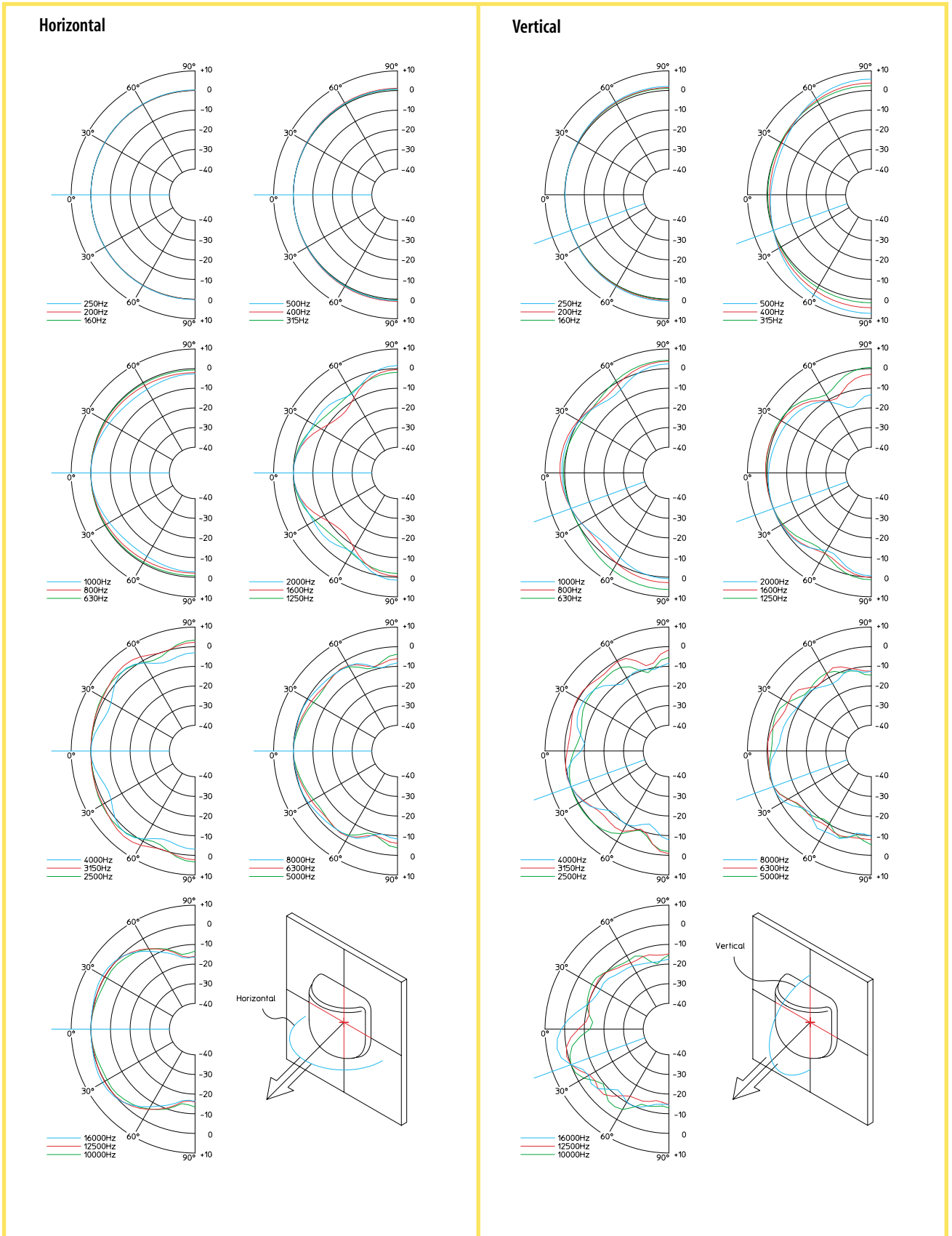
# SPECIFICATIONS

H-3 WIDE-DISPERSION SPEAKER

Tel: 800-733-7088  
Fax: 800-733-9766  
www.toaelectronics.com



## POLAR RESPONSE



# SPECIFICATIONS

H-3 WIDE-DISPERSION SPEAKER

Tel: 800-733-7088  
Fax: 800-733-9766  
www.toaelectronics.com



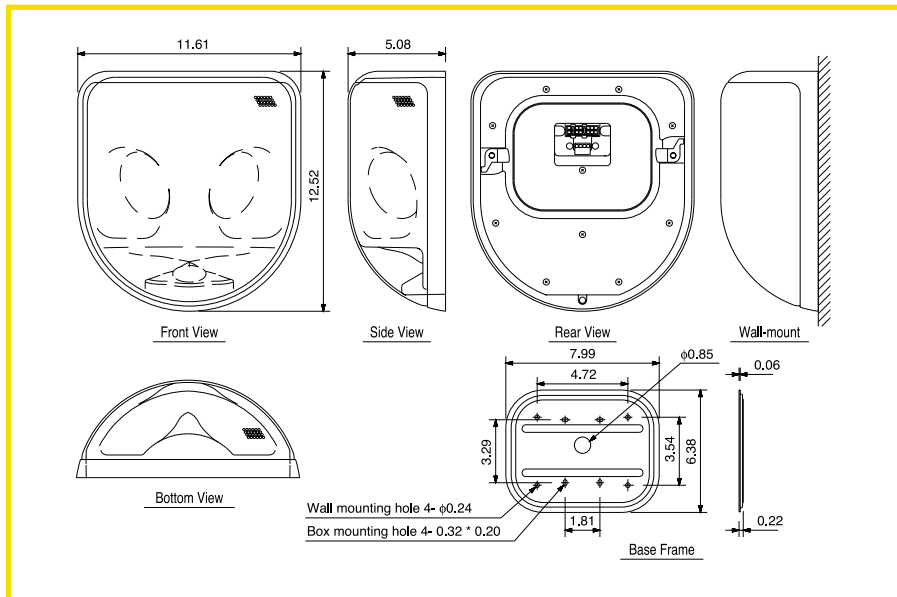
## ARCHITECT'S & ENGINEER'S SPECIFICATIONS

The speaker shall be a two-way, sealed enclosure suitable for wall-mounting. The speaker shall have an external appearance that is visually pleasing and blends well with surrounding building architecture and fixtures. Speakers requiring visible external mounting brackets shall not be acceptable. The loudspeaker shall utilize high quality components with Neodymium magnets for high power handling. The high frequency component shall be a 1" dome tweeter and the low frequency components shall be dual 4" cone woofers. The speaker shall be compatible with low and high impedance speaker systems and shall include a built-in 70.7/100 V matching transformer with the following selectable tap settings: 30 W, 15 W, 7.5 W, 3.75 W (70.7 V) and 30 W, 15 W, 7.5 W (100 V). The speaker shall also have selectable impedance settings of 8 ohms and 16 ohms. The output sound pressure level at a distance of 1 meter with 1 W of input power applied shall be 89 dB SPL. The rated power handling (Continuous Program) shall be 150 W at 8 ohms and 30 W at 16 ohms or with matching transformer. The speaker shall have a frequency response from 100 Hz to 20 kHz. The speaker shall

employ a high quality internal passive crossover circuit with a crossover frequency of 4 kHz with optimized filter slopes of -12 dB per octave low pass filter and -18 dB per octave high pass filter. The speaker shall include a removable terminal block connector, screw terminal type, with loop-through terminations and accept AWG #14 - #24. An internal protection circuit shall prevent damage to the high frequency component in an overload condition. Once activated, the circuit shall reduce the input signal and reset automatically after approximately ten seconds once overload condition is removed. The speaker grille material shall be rolled steel plate (H-3) / stainless steel (H-3WP) with a paintable white finish. The speaker enclosure shall be fire-resistant ABS resin with UL94:V-0 rating. The unit shall be compact and lightweight with dimensions of 11.6" W x 12.5" H x 5.1" D (295 mm x 318 mm x 129 mm) and weight of 7.3 lbs. (3.3 kg).

The loudspeaker shall be the TOA H-3 / H-3WP.

## DIMENSIONAL DRAWING



### TOA Electronics, Inc.

601 Gateway Boulevard  
Suite 300  
South San Francisco, CA 94080

Tel: 800-733-7088 Fax: 800-733-9766

www.toaelectronics.com

### TOA Canada Corp.

Tel: 905-564-3570 Fax: 905-564-3569

Literature Order #: L-H-3  
Specifications subject to change without notice.  
© 2005 TOA Electronics, Inc.