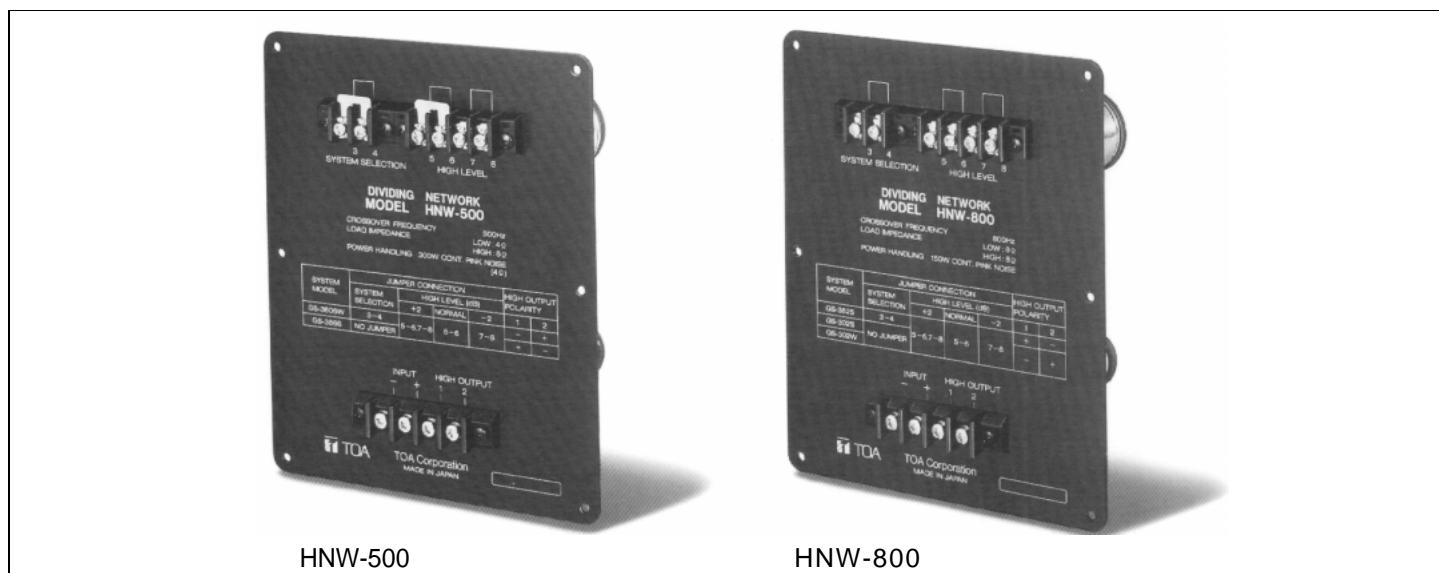


# TOA SPEAKER COMPONENT

# DIVIDING NETWORK

## HNW-500/HNW-800



HNW-500

HNW-800

### DESCRIPTION

The TOA Model HNW-500 and HNW-800 dividing networks are designed for use with 2-way speakers in high-quality professional sound systems where wide range, high efficiency and faithful reproduction are required. Ideal applications include studios, theaters, concert halls, auditoriums and night clubs. The HNW-500 and HNW-800 are intended to be used between a full-range power amplifier and the loudspeakers.

These dividing networks provide a smooth crossover from the low frequency loudspeaker to the high frequency driver, delivering the correct frequency band to each, and preventing the low frequencies from damaging the high frequency driver.

The HNW-500 is a full section, dual LC filter having a 500Hz crossover frequency with 12dB per octave low-pass and 18dB per octave high-pass filter slopes. It will handle 300 watts of broad-band continuous pink noise. It has an input impedance of 8 ohms, with 4-ohm low frequency and 8-ohm high frequency output impedances.

The HNW-800 is a full section, dual LC filter having a 800Hz crossover frequency with 12dB per octave high- and low-pass filter slopes. It will handle 150 watts of broad-band continuous pink noise. It has an input impedance of 8 ohms, with low/high frequency output impedances of 8 ohms in each band pass. In both the HNW-500 and HNW-800, overall characteristics are minimally affected by normal variations in load impedance.

Both dividing networks employ a high frequency level control which allows a  $\pm 2$ dB variation in level.

### FEATURES

1. The TOA HNW-500 and HNW-800 are designed for use in permanent installations, optimally matched to the following standard speaker system combinations.  
HNW-500: SB-38S speaker system with LE-940 horn and HFD-260 compression driver; or SB-38W speaker system with LE-M94 horn and HFD-260 compression driver.  
HNW-800: SB-38S, SB-30W or SB-30S speaker system with LE-M94 and HFD-220 compression driver.
2. A system selection circuit is provided to obtain optimal crossover characteristics in the matching speakers.
3. A high frequency level control allows variations of  $\pm 2$ dB from normal levels in the high frequencies.
4. Horn equalization is provided to correct high frequency roll-off for a compression driver equipped with a constant directivity horn.
5. Both dividing networks have 12dB per octave low-pass filter slope rates, with high-pass filter slope rates of 18dB per octave for the HNW-500, and 12dB per octave for the HNW-800.
6. The HNW-500 and HNW-800 face plates are designed to replace the input panels on the SB-46S, SB-38S, SB-38W, SB-30S, SB-30W low frequency enclosures.

## SPECIFICATIONS

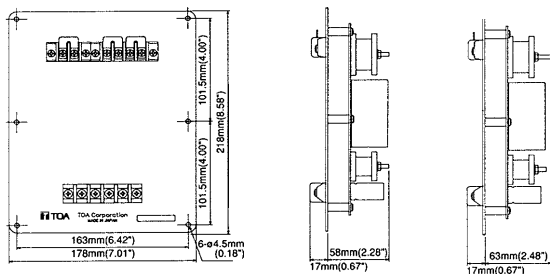
Model No.	HNW-500
Power Handling Capacity	
Continuous Pink Noise	300 watts (4 ohms)
Load Impedance	
Low Frequency	4 ohms
High Frequency	8 ohms
Crossover Frequency	500Hz
Slope Rate	
Low Frequency	12dB/oct
High Frequency	18dB/oct
High Frequency Level Control	Three steps (+2dB, normal, -2dB)
Dimensions	178(W) x 218(H) x 75(D)mm 7.01(W) x 8.58(H) x 2.95 (D) inches
Weight	1.7 kg (3.75 lbs.)
Color	Black

Model No.	HNW-800
Power Handling Capacity	
Continuous Pink Noise	150 watts (8 ohms)
Load Impedance	
Low Frequency	8 ohms
High Frequency	8 ohms
Crossover Frequency	800Hz
Slope Rate	
Low Frequency	12dB/oct
High Frequency	12dB/oct
High Frequency Level Control	Three steps (+2dB, normal, -2dB)
Dimensions	178(W) x 218(H) x 80(D)mm 7.01 (W) x 8.58 (H) x 3.15 (D) inches
Weight	1.6 kg (3.53 lbs.)
Color	Black

\*Specifications are subject to change without notice.

## APPEARANCE AND DIMENSIONAL DIAGRAMS

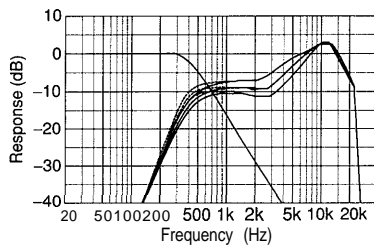
•HNW-500 •HNW-800



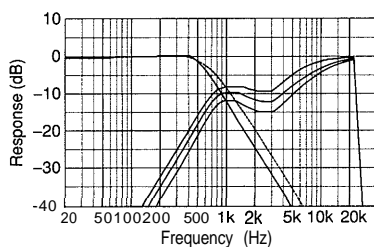
## CHARACTERISTIC DIAGRAMS

### Frequency Response

•HNW-500



•HNW-800



— System selection: Install between terminal Nos. 3 and 4  
 ..... System selection: Jumper not installed  
 Note that the three identical curves indicate +2, 0 and -2 settings

## ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

### TOA HNW-500:

The dividing network shall be a TOA Model HNW-500 with 500Hz crossover frequency for the matching TOA SB-38S speaker system with LE-940 horn and HFD-260 compression driver; or SB-38W speaker system with LE-M94 horn and HFD-260 compression driver, or an approved equivalent. The network shall be a full section, dual LC filter, with 12dB per octave high & 18dB per octave low frequency roll-off, 8-ohm input and 4-/8-ohm output impedances. A three-step high frequency level control with settings for +2dB, Normal and -2dB shall be provided. Horn equalization shall be provided to correct high frequency roll-off when the network is linked to a compression driver with a constant directivity horn. The face plate shall be designed for easy mounting in TOA enclosures' input panel cut-outs.

### TOA HNW-800:

The dividing network shall be a TOA Model HNW-800 with 800Hz crossover frequency for the matching TOA SB-38S, SB-30W or SB-30S speaker system with the LE-M94 horn and HFD-220 compression driver, or an approved equivalent. The network shall be a full section, dual LC filter, with 12dB per octave high & low frequency roll-off, 8-ohm input and 8-ohm high/low output impedances. A three-step high frequency level control with settings for +2dB, Normal and -2dB shall be provided. Horn equalization shall be provided to correct high frequency roll-off when the network is linked to a compression driver with a constant directivity horn. The face plate shall be designed for easy mounting in TOA enclosures' input panel cut-outs.

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