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## TOA SPEAKER SYSTEM

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# SUPER WOOFER SYSTEM

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## SW-38W-UL/SW-38S-UL

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### DESCRIPTION

The TOA SW Series Super Woofer System SW-38W-UL and SW-38S-UL are ultra-low frequency bass-reflex loudspeakers designed for professional applications in high-level sound reinforcement situations where high efficiency, an extremely low frequency range and true-to-the-original reproduction are required. The SW Series Super Woofer System is ideal for dance clubs, concert halls, theaters, movie houses, auditoriums, and in live sound enhancement. The SW-38S bass-reflex enclosure contains one ultra-linear, high-power 15" woofer, while the SW-38W comes with two woofers.

The woofer used in the SW Series is the HLS38UL-8, with a 2.8" (72mm) diameter voice coil of edge-wound copper ribbon on an aluminum coil form. The coil is driven by powerful double ferrite 14,200 gauss flux density magnets, supported by a rugged diecast aluminum frame. The extra-long voice coil on the HLS38 produces a greater coil surface area within the magnetic flux field, resulting in precise control over cone movement, excellent heat dissipation, and less dynamic compression during extended high-power applications.

The bass-reflex cabinet design is computer optimized to produce a flat frequency response, wide bandwidth, and a more pleasing low-frequency sound than is possible with comparable horn-loaded designs.

The SW Series Super Woofer System is rated at 300 watts RMS (150 watts RMS on the 38S) of continuous pink noise, and at 900 watts (450 watts on the 38S) of continuous program material.

Two pairs of screw type input terminals (one pair on the 38S) are provided on the rear of the SW Series enclosure. Removal of the jumper pieces permits the two woofers on the 38W to be driven independently, each by its respective amplifier. By removing blank panels on the rear-mounted input panel, two female XLR connectors (38W) or one male and one female XLR connector can be attached. The SW Series enclosure is finished in gray paint and is highly reinforced to eliminate unwanted vibrations. Large carrying handles are provided on both sides of the enclosure, and the punched-metal front grille is detachable.

### FEATURES

1. Ultra-linear, high-power 15" woofer provides enhanced response efficiency in the extra-low frequency range.
2. High power handling capacity of 300 watts RMS (150 watts for the 38S) continuous pink noise, and 900 watts (450 watts for the 38S) of continuous program material.
3. CAD (Computer-Assisted Design) employed for bass-reflex enclosure to assure precise timing and maximum performance.
4. Screw type input terminals (2 pairs on the 38W and 1 pair on the 38S) are provided. By removing their jumper pieces, the two 38W woofers can be driven independently by their respective amplifiers.
5. Two female XLR connectors may be attached to the 38W, and one male-female connector on the 38S.
6. Rugged gray-painted enclosure with carrying handles and a detachable punched-metal grille.

# SPECIFICATIONS

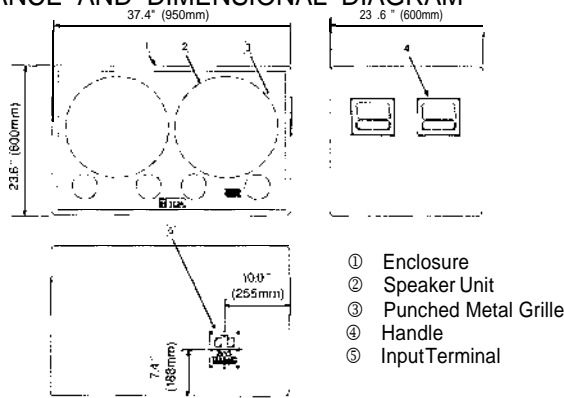
Model No.	SW38W-UL
Enclosure	Vented (bass-reflex) type
Speaker	Two 15" woofers, 2.8" (72 mm) edge-wound copper ribbon voice coil, Aluminum diecast construction
Power Handling Capacity Continuous Pink Noise	300 watts RMS of band-limited pink noise (40 Hz to 1kHz, 24 hours)
Continuous Program	900watts
Nominal Impedance	4 ohms (parallel) or Two 8 ohms (independent)
Sensitivity	96 dB (1W/1m, Band-limited pink noise, 50 Hz to 500 Hz)
Frequency Response	35 Hz to 1 kHz
Box Tuning Frequency	40 Hz
Recommended Crossover Frequency	60 Hz to 100 Hz
Input Terminals	Screwtype
Enclosure Materials and Finish	Lauan plywood, Lacquer in gray color
Dimensions	23.6(H) x 37.4(W) x 23.6(D) inches 600(H) x 950(W) x 600(D) mm
Weight	163 lbs (74 kg)

Model No.	SW-38S-UL
Enclosure	Vented (bass-reflex) type
Speaker	15" woofer, 2.8" (72 mm) edge-wound copper ribbon voice coil, Aluminum diecast construction
Power Handling Capacity Continuous Pink Noise	150 watts RMS of band-limited pink noise (40 Hz to 1kHz, 24 hours)
Continuous Program	450 watts
Nominal Impedance	8 ohms
Sensitivity	93 dB (1W/1m, Band-limited pink noise, 50 Hz to 500 Hz)
Frequency Response	35 Hz to 1 kHz
Box Tuning Frequency	40 Hz
Recommended Crossover Frequency	60 Hz to 100 Hz
Input Terminals	Screwtype
Enclosure Materials and Finish	Lauan plywood, Lacquer in gray color
Dimensions	23.6(H) x 19.3(W) x 23.6(D) inches 600(H) x 490(W) x 600(D) mm
Weight	88 lbs (40 kg)

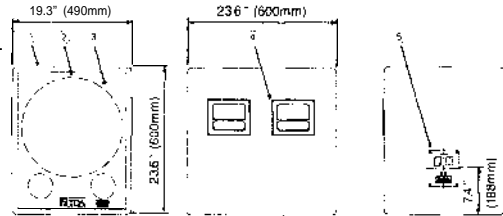
\*Specifications are subject to change without notice.

## APPEARANCE AND DIMENSIONAL DIAGRAM

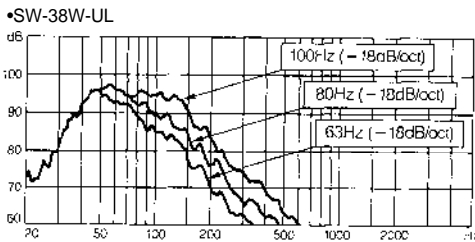
SW-38W-UL



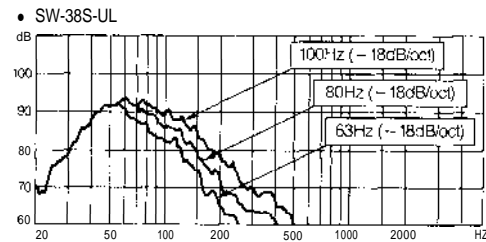
SW-38S-UL



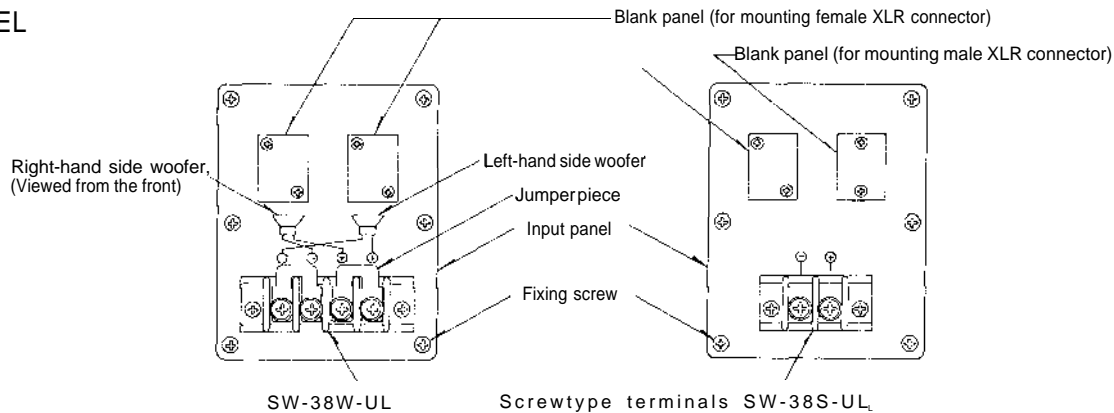
## FREQUENCY RESPONSE (1W/1 m: 1/3 Octave Pink Noise)



(Using an external crossover network)



## INPUT PANEL

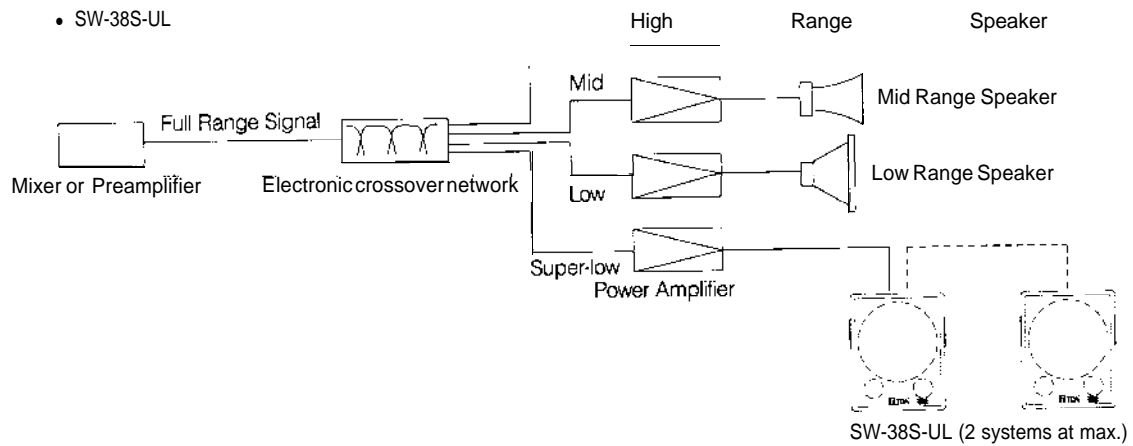
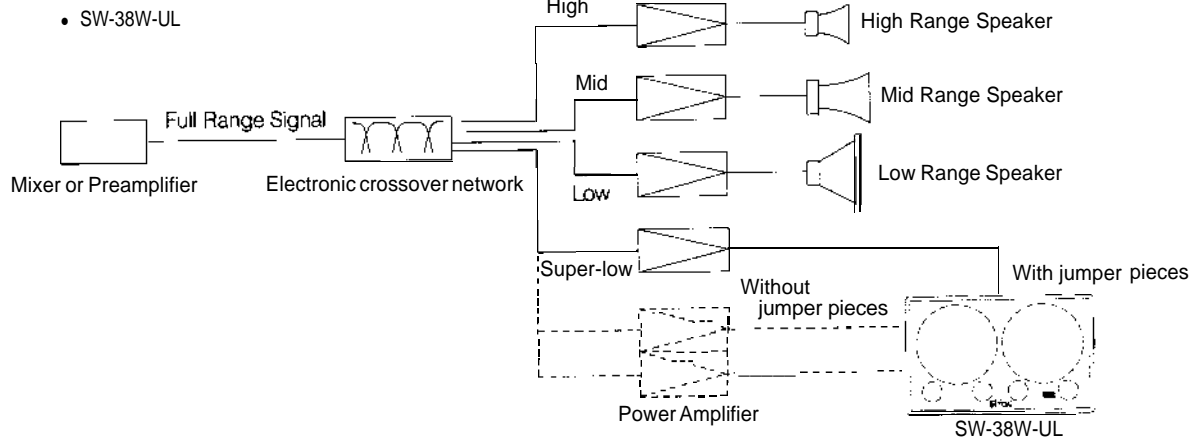


The two woofers of the SW-38W-UL are connected in parallel when jumper pieces are used (impedance is 4 ohms). Removal of the jumper pieces disconnects the two woofers from each other, allowing each of them to be driven independently by means of their respective ampli-

fiers (impedance of each is 8 ohms). By removing the blank panels two female XLR connectors (38W) or one each of male and female XLR connector (38s) can be mounted. To do wiring work, remove the rear-mounted input panel.

# CONNECTION DIAGRAMS

1. Four-way system using electronics crossover network and 4 or 5 power amplifiers.



2. System using electronics crossover network and 2 or 3 power amplifiers.

