
TOA SPEAKER SYSTEM

SUPER WOOFER SYSTEM

SW-46W-UL2/SW-46S-UL2



DESCRIPTION

The TOA SW series Super Woofers are super-low frequency loudspeaker system designed for professional applications in high-level sound reinforcement environments where high efficiency, super-low frequency range, and faithful reproduction are required, such as discos, concert halls, theaters, movie houses, auditoriums, and in live sound reinforcement applications.

The SW-46S bass-reflex enclosure contains one (1) ultra-linear, high-power 18" woofer, while the SW-46W contains two 18" woofers.

The woofer, Model HLS46UL2-8, employs a 4" (100 mm) diameter voice coil of edge-copper ribbon on an aluminum coil form, which is driven by powerful double ferrite magnets. The magnets are supported by a rugged diecast aluminum frame and give a flux density of 13,600 gauss.

Bass-reflex ports are tuned to the optimum condition by computer, allowing the woofer to provide maximum performance.

The system is rated at 480 watts RMS (240 watts RMS for 46S) of continuous pink noise, and at 1,440 watts (720 watts for 46S) of continuous program material.

Two pairs of screwtype input terminals (one-pair of terminals in the case of the 46S) are provided on rear of enclosure.

Removal of the jumper pieces permits the 46W to drive the two woofers independently by their respective amplifiers. By

removing blank panels on the rear-mounted input panel, two female XLR connectors (46W) or one each of male and female XLR connectors (46S) can be mounted.

The enclosure is highly reinforced to eliminate unwanted vibrations. Large carrying handles are provided on both sides of an enclosure, and a detachable punched metal grille in front.

The enclosure is finished in gray painting.

FEATURES

1. Ultra-linear, high power 18" woofer provides high efficiency in the super-low frequency range.
2. High power handling capacity of 480 watts (240 watts for 46S) RMS continuous pink noise and 1,440 watts (720 watts for 46S) continuous program material.
3. Bass-reflex enclosure tuned to the optimum conditions by computer assures the maximum woofer performance.
4. Screwtype input terminal (2 pairs for 46W and 1 pair for 46S) are provided. By removing jumper pieces two woofers can be driven independently by means of respective amplifiers (46W).
5. Two mountable female XLR connectors (46W) or one each of male and female XLR connectors (46S).
6. Rugged, gray-painted enclosure with carrying handles and a detachable punched grille.

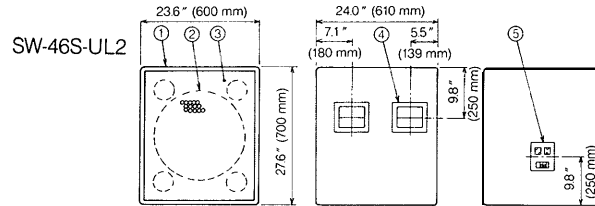
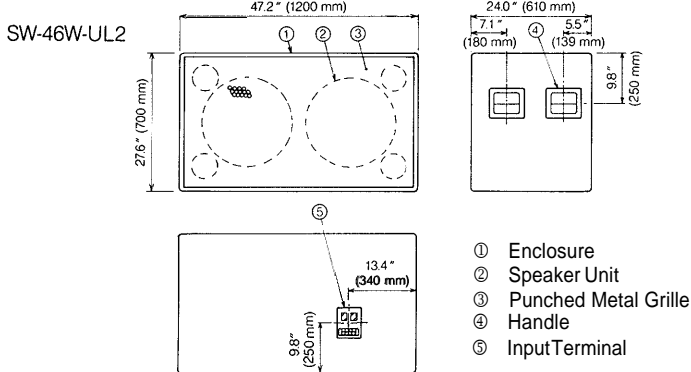
SPECIFICATIONS

Model No.	SW-46S-UL2
Enclosure	Vented (bass reflex) type
Speaker	18" woofer, 3.94" (100 mm) edge-wound copper ribbon voice coil, Aluminum diecast construction
Power Handling Capacity Continuous Pink Noise	240 watts RMS of band-limited pink noise (40 Hz to 1 kHz, 24 Hours)
Continuous Program	720 watts
Nominal Impedance	8 ohms
Sensitivity	96 dB (1W/1 m, Band-limited pink noise, 50 Hz to 300 Hz)
Frequency Response	30 Hz to 500 Hz
Box Tuning Frequency	35 Hz
Recommended Crossover Frequency	60 Hz to 100 Hz
Input Terminals	Screwtype
Enclosure Materials and Finish	Lauan plywood, Lacquer in gray color
Dimensions	27.6 (H) x 23.6 (W) x 24 (D) inches 700 (H) x 600 (W) x 610 (D) mm
Weight	132 lbs (60 kg)

Model No.	SW-46W-UL2
Enclosure	Vented (bass reflex) type
Speaker	Two 18" woofers, 3.94" (100 mm) edge-wound copper ribbon voice coil, Aluminum diecast construction
Power Handling Capacity Continuous Pink Noise	480 watts RMS of hand-limited pink noise (40 Hz to 1 kHz, 24 Hours)
Continuous Program	1,440 watts
Nominal Impedance	4 ohms (parallel) or Two 8 ohms (independent)
Sensitivity	99 dB (1W/1 m, Band-limited pink noise, 50 Hz to 300 Hz)
Frequency Response	30 Hz to 500 Hz
Box Tuning Frequency	35 Hz
Recommended Crossover Frequency	60 Hz to 100 Hz
Input Terminals	Screwtype
Enclosure Materials and Finish	Lauan plywood, Lacquer in gray color
Dimensions	27.6 (H) x 47.2 (W) x 24 (D) inches 700 (H) x 1,200 (W) x 610 (D) mm
Weight	210 lbs (95 kg)

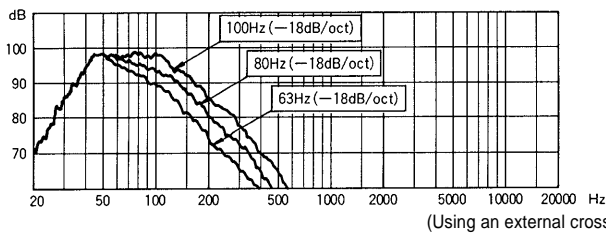
*Specifications are subject to change without notice.

APPEARANCE AND DIMENSIONAL DIAGRAM

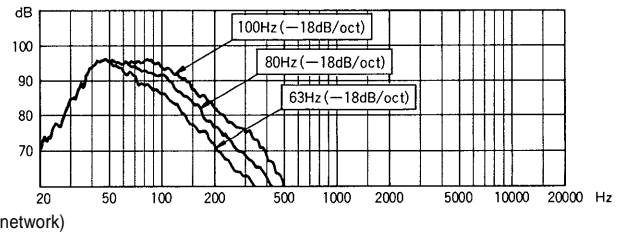


FREQUENCY RESPONSE (1W/1m: 1/3 Octave Pink Noise)

• SW-46W-UL2

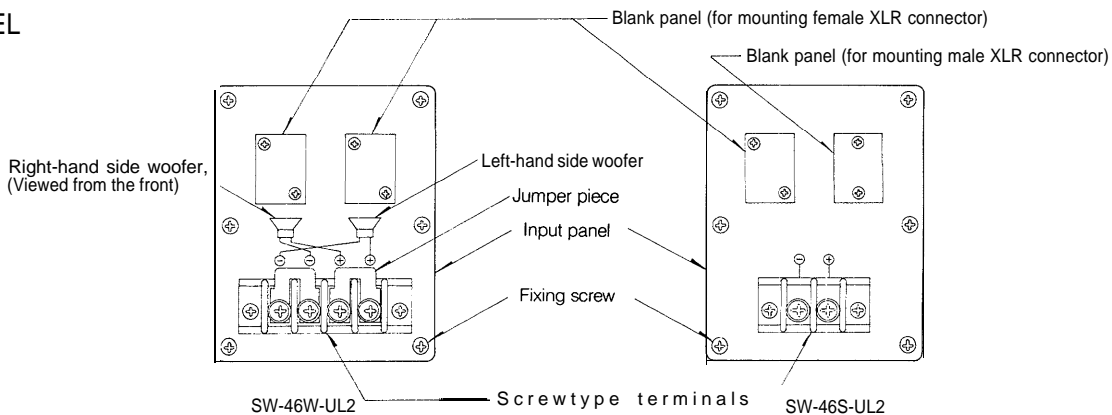


• SW-46S-UL2



(Using an external crossover network)

INPUT PANEL

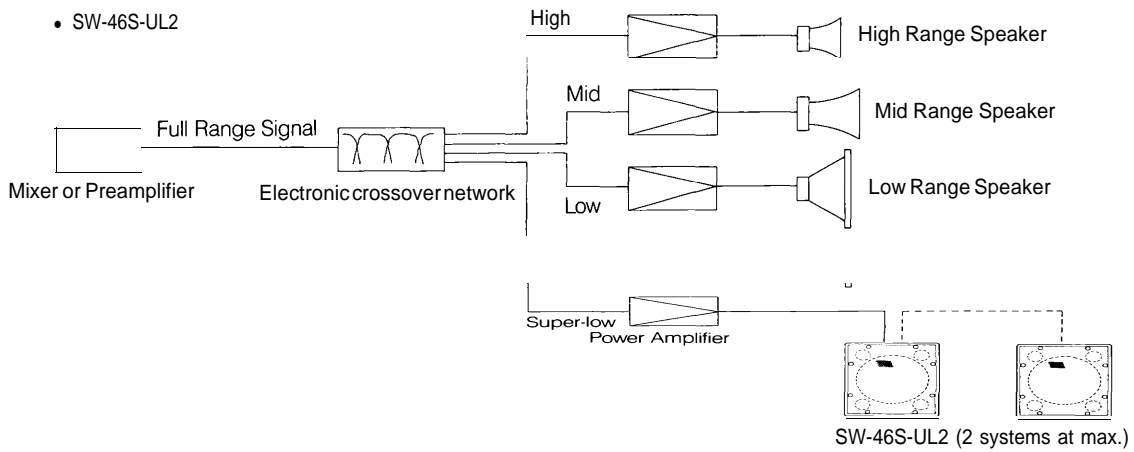
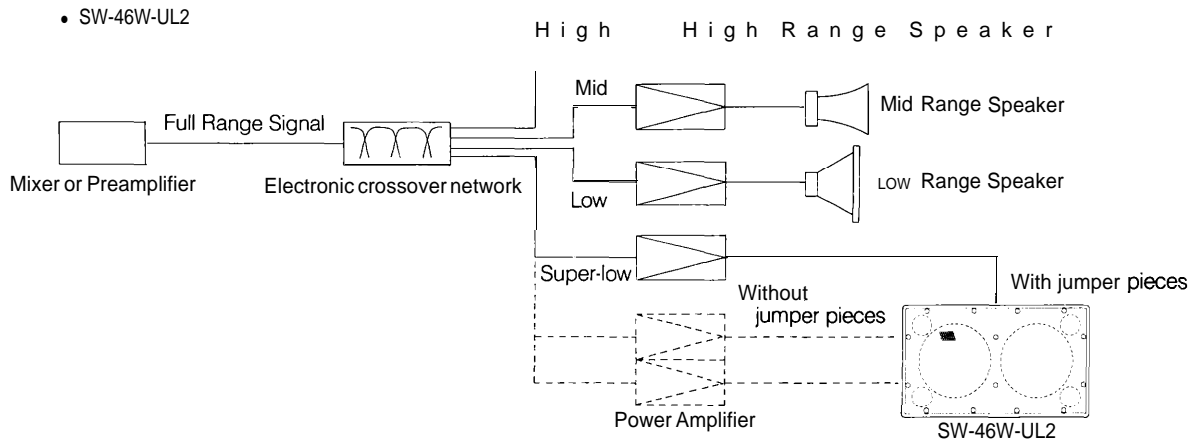


The two woofers of the SW-46W-UL2 are connected in parallel when jumper pieces are used (impedance is 4 ohms). Removal of the jumper pieces disconnects the two woofers from each other, allowing each of them to be driven independently by means of their respective

amplifiers (impedance of each is 8 ohms). By removing the blank panels two female XLR connectors (46W) or one each of male and female XLR connector (46S) 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.

