

PROFESSIONAL SOUND SYSTEM



Super Woofer System

SW-46W-UL2
Model SW-46S-UL2



GENERAL DESCRIPTION

The Toa SW series Super Woofers are super-low frequency loudspeaker systems 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" (100mm) diameter voice coil of edge-wound 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 terminal (one-pair of terminals in the case of the 46S) is provided on rear of enclosure. Removal of the jumper pieces permit 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 connector (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 grey painting.

FEATURES

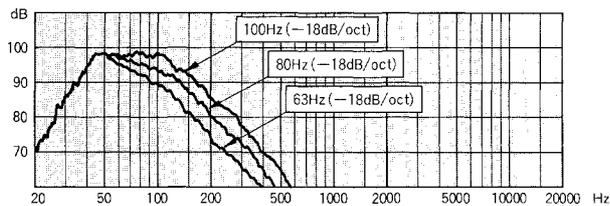
1. Ultra linear, high power 18" woofer provides high efficiency in the super-low frequency range.
2. High power handling capacity of 480 watts (240 watts for 46S) RMS continuous pink noise and 1,440 watts (720 watts for 46S) continuous program material.
3. Bass-reflex enclosure tuned to the optimum conditions 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 connector (46S).
6. Rugged, grey-painted enclosure with carrying handles and a detachable punched grille.

Specifications

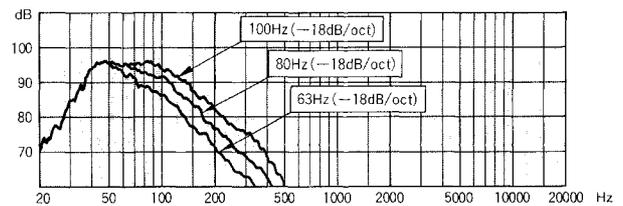
MODEL NUMBER	SW-46W-UL2	SW-46S-UL2
Enclosure	Vented (bass reflex) type	
Speaker	Two 18" woofers	One 18" woofer
Power Capacity		
Continuous Pink Noise	480 watts RMS of band limited pink noise (40~1kHz)	240 watts RMS of band limited pink noise (40~1kHz)
Continuous Program	1,440 watts	720 watts
Impedance	4 ohms (parallel) or Two 8 ohms (independent)	8 ohms
Sensitivity	99dB (1W/1m)	96dB (1W/1m)
Frequency Response	30~500Hz	
Recommended Crossover Frequency	60~100Hz	
Input Terminals	Screwtype	
Finish (Enclosure)	Painted grey	
Dimension	700(H)x1200(W)x610(D) mm 27.6(H)x47.2(W)x24(D) inches	700(H)x600(W)x610(D) mm 27.6(H)x23.6(W)x24(D) inches
Weight	95kg (210 lBS)	60kg (132 lBS)

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

● SW-46W-UL2

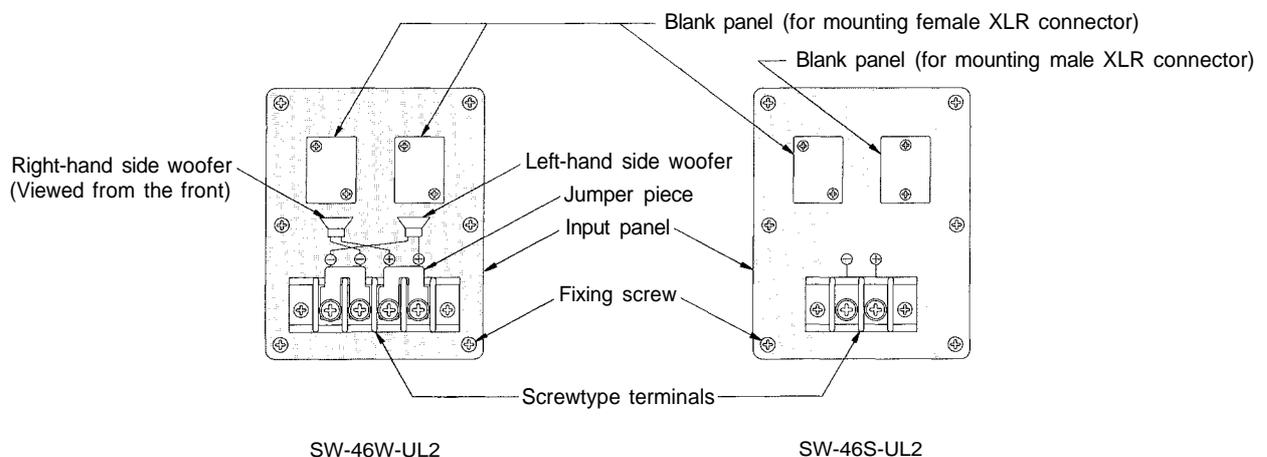


● SW-46S-UL2



(Using an external crossover network)

Input Panel



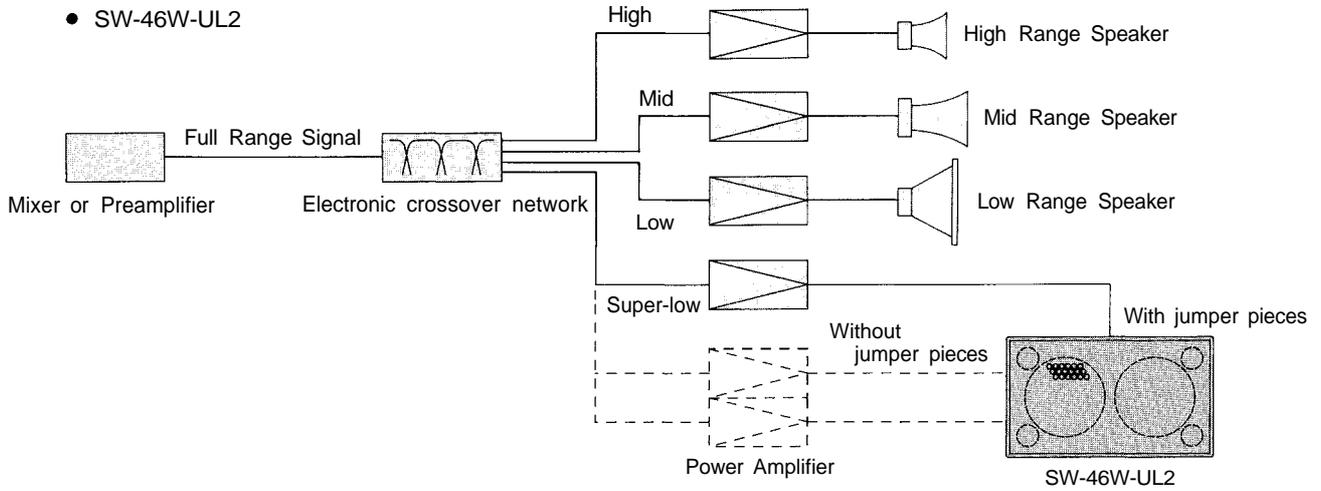
[Fig 1]

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 disconnect the two woofers from each other, allowing each of them to be driven independently by means of their respective ampli-

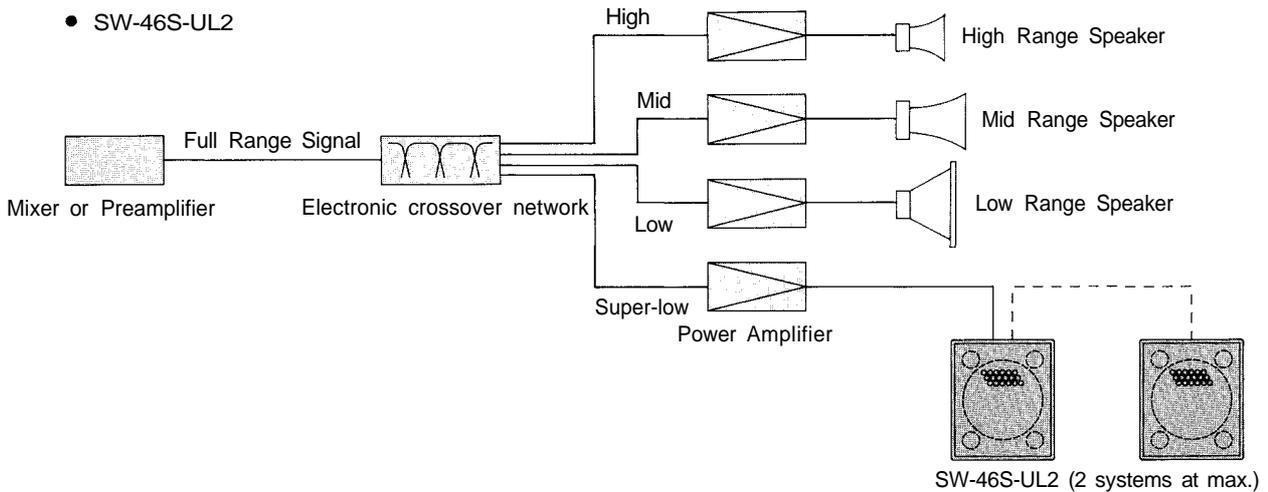
fiers (impedance of each is 8 ohms). By removing the blank panels two female XLR connectors (46W) or one each of male and female XLR connector (46S) can be mounted. To do wiring work, remove the rear-mounted input panel.

● Connection Diagrams

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



[Fig 2]

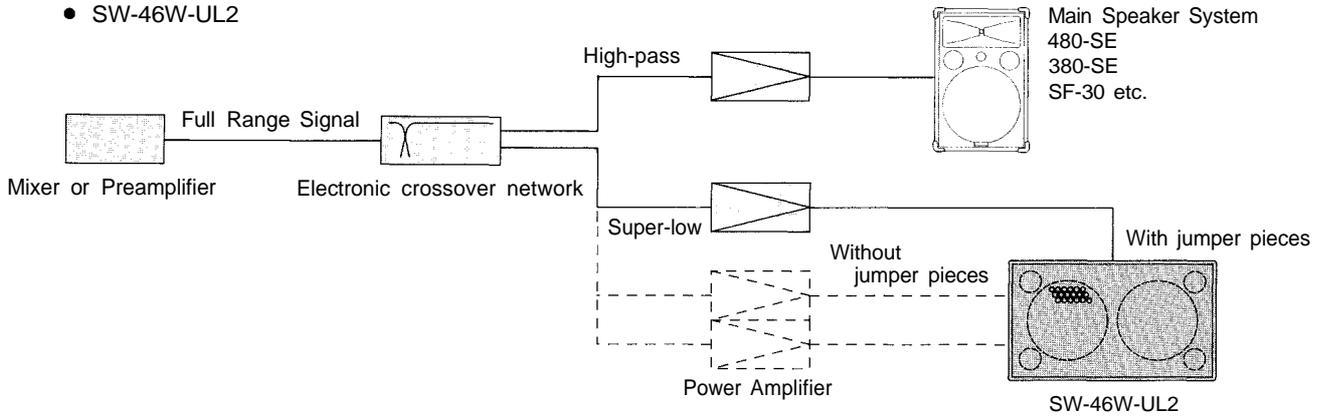


[Fig 3]

● Connection Diagrams

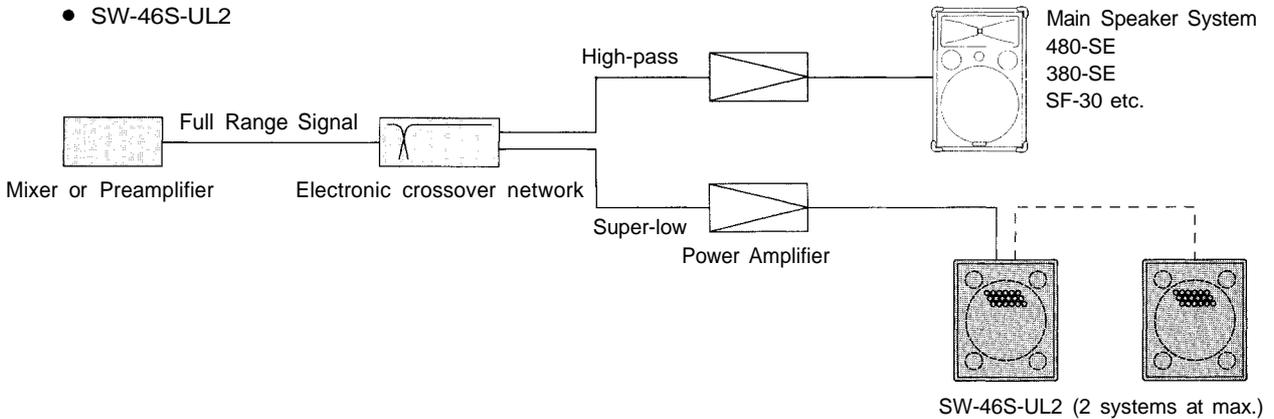
2. System using electronics crossover network and 2 or 3 power

- SW-46W-UL2



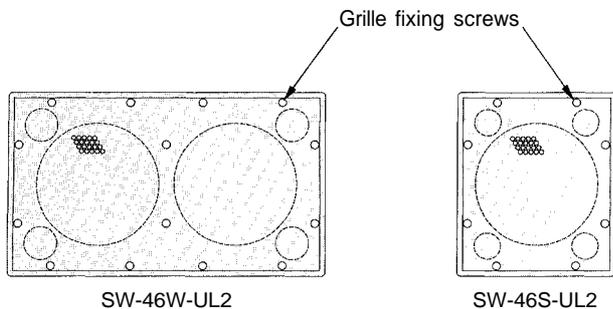
[Fig 4]

- SW-46S-UL2



[Fig 5]

● Grille



Loosen the grille fixing screws (14 screws on 46W and 8 on 46S) shown in the figure to remove the grille.