

# SPECS

PEAVEY ELECTRONICS

## TSL™ 1

### Theatre Surround Loudspeaker System

#### SPECIFICATIONS

Frequency Response, 1 Meter  
On-Axis, Swept Sine in Anechoic  
Environment:

70 Hz to 20 kHz  $\pm 2$  dB

Low-Frequency Cut Off (-3 dB point):  
70 Hz

Usable Low-Frequency Limit  
(-10 dB point):  
50 Hz

Power Handling:  
100 watts RMS

Sound Pressure Level, 2.8 V at  
1 Meter, Swept-Sine Input in  
Anechoic Environment:  
93 dB

Radiation Angle Measured at -6 dB  
Point of Polar Response, Swept-Sine  
Input:

Horizontal Plane:	Vertical Plane:
250 Hz to 500 Hz	250 Hz to 500 Hz
200° $\pm 30^\circ$	160° $\pm 40^\circ$
500 Hz to 10 kHz	500 Hz to 10 kHz
150° $\pm 30^\circ$	110° $\pm 15^\circ$
10 kHz to 16 kHz	10 kHz to 16 kHz
60° $\pm 5^\circ$	50° $\pm 15^\circ$

Directivity Factor Q,  
500 Hz to 16 kHz Median:  
5.7 (+9.1, -2.8)

Directivity Index D<sub>i</sub>,  
500 Hz to 16 kHz Median:  
6.8 dB (+4.9 dB, -2.2 dB)

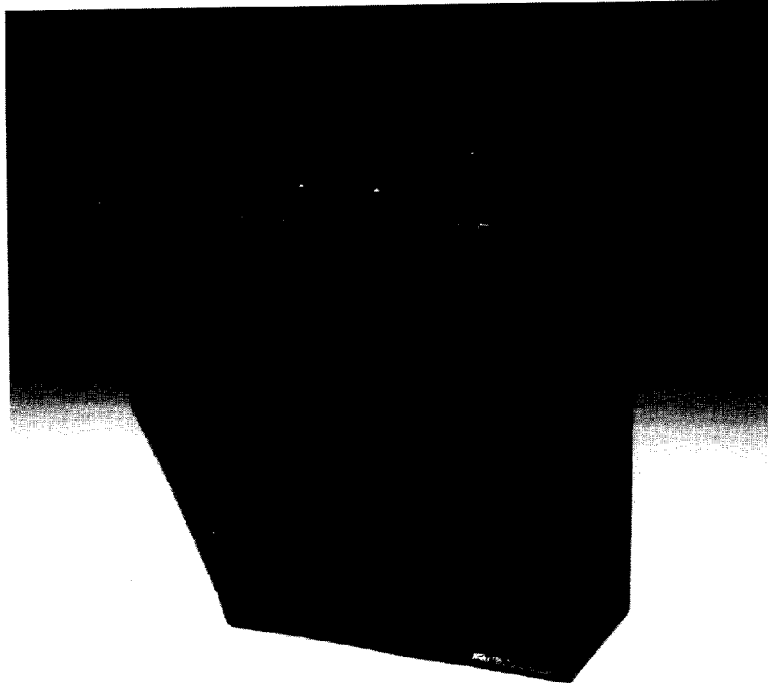
Transducer Complement:  
One 10" woofer  
One 1" dome tweeter

Crossover Frequency:  
2 kHz

Crossover Type:  
Two-way passive; with special EQ to  
provide ISO 2969 Curve X response

Crossover Slope:  
18 dB/octave (3rd order) low pass  
18 dB/octave (3rd order) high pass

Impedance (Nominal):  
8 ohms



Impedance (Minimum):  
5.1 ohms

Input Connections:  
Two 10-32 binding posts

Enclosure Materials and Finish:  
3/4" plywood covered with black splatter-  
coat paint

Mounting:  
Omnimount® Series 100 hardware

Dimensions (H x W x D):  
18" x 13-3/4" x 14-1/8" (6-1/4" at bottom)

Net Weight:  
28 lbs. (12.7 kg)

#### DESCRIPTION

The TSL™ 1 is a full-range, two-way enclosure designed specifically for use as a surround-sound loudspeaker. The TSL 1 has been approved by THX® for use in all THX® installations. The cabinet is

constructed of 3/4" plywood laminated with a durable paint, reinforced with 12-gauge steel bracing. A black opaque foam is attached to the baffle to provide component protection and cosmetic appeal. Mounting of the enclosure is accomplished via an Omnimount® Series 100 mounting bracket that bolts directly into the rear of the enclosure. The two-way system is comprised of a 10-inch, wide-bandwidth, low-frequency driver and a one-inch dome, which supplies the high frequencies. The angled baffle of the TSL 1 not only provides proper aiming of surround information to give excellent



audience coverage, but also assures optimum temporal alignment of the drivers. The frequency spectrum is divided by a two-way passive crossover. As requested by theatre builders and sound installers, the ISO 2969 Curve X response has been incorporated into the TSL 1 through the use of a special EQ circuit which yields a 3 dB/octave roll off above 2 kHz.

### FREQUENCY RESPONSE

The frequency response of the TSL 1 is measured in an anechoic environment at a distance of 1 meter while using a 2.8 volt swept sine input. This measurement is useful in determining the accuracy with which the enclosure reproduces the input signal. The EQ circuit used in the crossover of the TSL 1 exhibits a flat response with respect to the ISO 2969 Curve X.

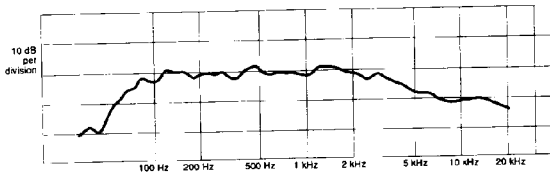
### POWER HANDLING

There are many different approaches to power handling ratings. Peavey rates this speaker system's power handling using a modified form of the AES Standard 2-1984. Utilizing audio band (20 Hz to 20 kHz) pink noise with peaks over four times the RMS level, this strenuous test signal assures the user that every portion of this system can withstand today's high-technology music. The test signal contains large amounts of very low-frequency energy, effectively simulating the frequency content of live music situations. The full measure of high frequencies in the test signal allow for exposure of the speaker system to synthesized tone that may extend beyond audibility. This rating is contingent on having a minimum 3 dB of amplifier headroom available.

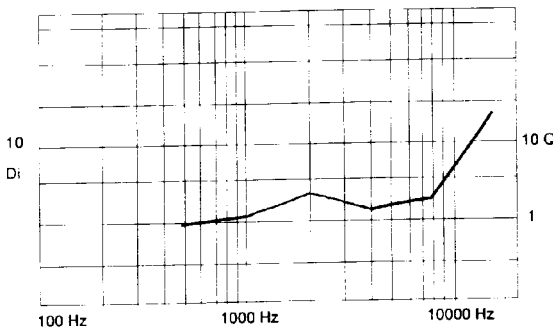
### ARCHITECTURAL & ENGINEERING SPECIFICATIONS

The loudspeaker system shall have an operating bandwidth of 50 Hz to 20 kHz. The output level shall be 93 dB SPL when measured at a distance of one meter with an input of one watt. The nominal impedance shall be 8 ohms. The power handling capability shall be 100 watts RMS. The exterior dimensions shall be 18 inches high by 13-3/4 inches wide by 14-1/8 inches deep at the top and tapering to 6-1/4 inches deep at the bottom of the enclosure. The weight shall be 28 lbs. The loudspeaker system shall be a Peavey model TSL™ 1.

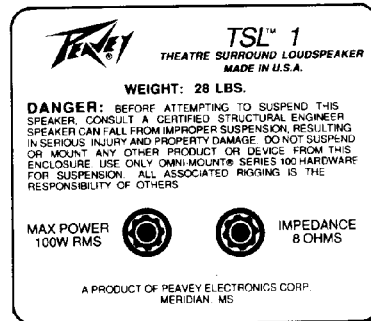
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FREQUENCY RESPONSE



DIRECTIVITY



REAR PANEL DETAIL

### ONE YEAR LIMITED WARRANTY

**NOTE:** For details, refer to the warranty statement. Copies of this statement may be obtained by contacting Peavey Electronics Corporation, P.O. Box 2898, Meridian, Mississippi 39302-2898.



Features and specifications subject to change without notice.

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