# Y E LECTRONICS

# **DTH™** Concert Sub II

### Low-Frequency **Enclosure**

#### **SPECIFICATIONS**

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

45 Hz to 250 Hz

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

**Usable Low-Frequency Limit** (-10 dB point):

35 Hz

#### Power Handling:

Speakers Parallel: 700 W continuous (52.9 V RMS) 1400 W program

Speakers Independent: 350 W continuous (52.9 V RMS)

2 x 700 W program

Sound Pressure Level, 2.0 V (1 watt) • 1 meter in anechoic environment:

**Maximum Sound Pressure Level:** 

#### **Transducer Complement:**

Two 1505-8DT Black Widow® drivers

**Box Tuning Frequency:** 

47 Hz

100 dB

126 dB

**Recommended Crossover** Frequency:

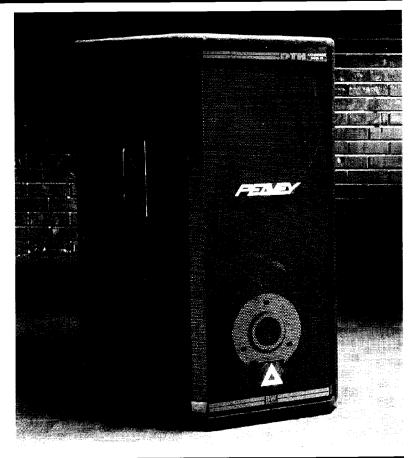
150 Hz to 250 Hz range

#### Impedance, Z:

Speakers Parallel: 4 ohms nominal 3.2 ohms minimum Speakers Independent:

8 ohms nominal

2 x 6.4 ohms minimum



#### Input Connections:

One Neutrik® 4-conductor Speakon® (NL4MP)

One Neutrik® 8-conductor Speakon® (NL8MP with 4-conductor NL4MP output)

#### **Enclosure Materials & Finish:**

3/4" plywood with battleship grey carpet and plasticized metal grille

Dimensions (H x W x D):

39-1/2" x 18-3/4" x 30-1/4" (100.3 cm x 47.6 cm x 76.8 cm)

#### Net Weight:

124 lbs. (56.3 kg)

#### **FEATURES**

- Dual 1505-8 DT Black Widow® woofers
- Anti-axial driver arrangement
- 16-gauge plasticized metal grille
- 4-and 8-conductor input with 4-conductor output
- Battleship grey carpet
- Rear pocket casters



#### **DESCRIPTION**

The DTH™ Concert Sub II is a perfect match as an additional low-frequency enclosure for any of the DTH™ enclosures. This enclosure is loaded with two 1505-8DT Black Widow® drivers. One of these woofers has been mounted backwards (its electrical polarity has also been reversed so that its acoustical polarity is identical to the other woofer). The Anti-axial arrangement of the drivers eliminates virtually all even-order harmonic distortion. Maximum versatility was our main goal when considering the input to this loudspeaker. Both drivers are connected to a Neutrik® 4-conductor Speakon® connector. The drivers are also connected to one half of a Neutrik® 8-conductor Speakon® connector. The other half of this connector is hooked up to a second Neutrik® 4-conductor connector. This connector serves as an output to another loudspeaker such as a DTH™ S5. By using this output, you will have only one "home run" of a cable going to your amps instead of two 4-conductor cables. A battleship grev velour carpet covers the DTH Concert Sub II. This is a low-wear, high abrasion-resistant carpet, similar to those used in the automotive industry. A heavy-duty, 16-gauge metal grille dresses off the enclosure and provides superior protection for the drivers. The grille has been coated with a plasticized paint. This aids greatly in damping grille vibrations at high sound pressure levels. All this combines to give you a great-looking and great-sounding subwoofer perfectly suited to any lowfrequency sound reinforcement application.

#### FREQUENCY RESPONSE

This measurement is useful in determining how accurately a given enclosure reproduces an input signal. The frequency response of the DTH<sup>TM</sup> Concert Sub II is measured at 1 meter using a 2.0-volt swept sine input. As shown in Figure 1, the drivers in the DTH Concert Sub II combine to give a smooth frequency response from 45 Hz to 250 Hz.

#### **POWER HANDLING**

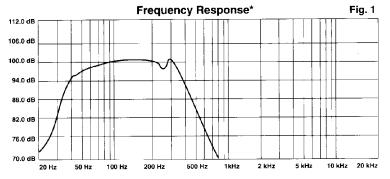
There are many different approaches to power handling ratings. Peavey rates this speaker system's power handling using a modified form of the AES Standard 2-1984. Utilizing audio band (20 Hz to 20 kHz) pink noise with peaks over four times the RMS level, this strenuous test signal assures the user

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 tones that may extend beyond audibility. This rating is contingent on having a minimum 3 dB of amplifier headroom available.

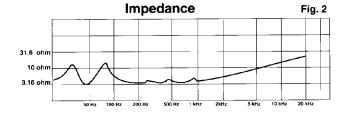
# ARCHITECTURAL & ENGINEERING SPECIFICATIONS

The loudspeaker system shall have an operating bandwidth of 45 Hz to 250 Hz. The output level shall be 100 dB when measured at a distance of one meter with an input of one watt.

The nominal impedance shall be 4 ohms with speakers paralleled, 8 ohms with speakers independently powered. The continuous power handling shall be 700 watts, with maximum program power of 1400 watts and minimum amplifier headroom of 3 dB with speakers paralleled. The continuous power handling shall be 350 watts x 2, with maximum program power of 700 watts x 2, and minimum amplifier headroom of 3 dB with speakers independently powered. The outside dimensions shall be 18-3/4 inches wide by 39-1/2 inches high by 30-1/4 inches deep. The weight shall be 124 lbs. The loudspeaker system shall be a Peavey model DTH™ Concert Sub II.



\* With 350 Hz 4th Order Linkwitz-Riley Crossover

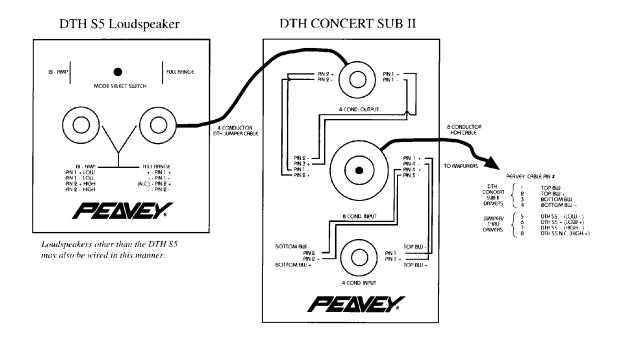


#### ONE YEAR LIMITED WARRANTY

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.

# **Wiring Diagram**

## and use of DTH Concert Sub II Jumpering/Thru Capability



#### 8-Conductor Speakon® (NL8MP)/Pin-Out Cross-Reference

Peavey 8-Conductor Cable	NL8MP
1	1+
2	4 -
3	4+
4	3 -
5	3+
6	2 -
7	2+
8	1 -

#### **WARNING**

Exposure to extremely high noise levels may cause a permanent hearing loss. Individuals vary considerably in susceptibility to noise induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a sufficient time. The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the following permissible noise level exposures.

Duration Per Day In Hours	Sound Level dBA, Slow Response
8	90
6	92
4	95
3	97
2	100
1-1/2	102
1	105
1/2	110
1/4 or less	115

According to OSHA, any exposure in excess of the above permissible limits could result in some hearing loss. Ear plugs or protectors in the ear canals or over the ears must be worn when operating this amplification system in order to prevent a permanent hearing loss if exposure is in excess of the limits as set forth above. To ensure against potentially dangerous exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of producing high sound pressure levels such as this amplification system be protected by hearing protectors while this unit is in operation.





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