# PEAVEY ELECTRONICS

# **DTH™ 118**

### Low-Frequency, Folded-Horn Enclosure

#### **SPECIFICATIONS**

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

50 Hz to 250 Hz

Low-Frequency Cut-Off (-3 dB point): 50 Hz

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

44 Hz

#### **Power Handling:**

350 W continuous (45.8 V RMS) 700 W program 1400 W peak

#### Sound Pressure Level, 2.4 V (1 watt)

• 1 meter in anechoic environment: 106 dB

Maximum Sound Pressure Level: 132 dB

#### Transducer Complement:

One 1801-4 Black Widow® driver

## Recommended Crossover Frequency:

150 Hz to 250 Hz range

#### Impedance, Z:

6 ohms nominal 4 ohms minimum

#### **Input Connections:**

One Neutrik® 4-conductor Speakon® (NL4MP)

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

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

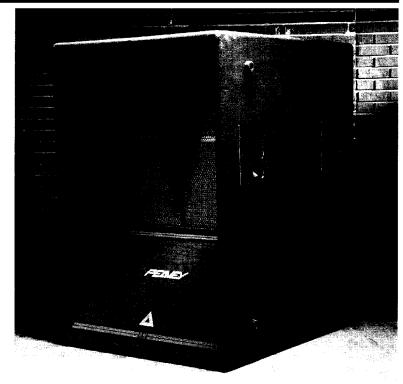
3/4" plywood with battleship grey carpet and plasticized metal grille

#### Dimensions (H x W x D):

43-3/4" x 29-1/4" x 38-3/4" (111.1 cm x 74 cm x 98.4 cm)

#### Net Weight:

214.1 lbs. (97.12 kg)



#### **FEATURES**

- 18" Black Widow® woofer
- Compact, folded-horn design
- · 16-gauge plasticized metal grille
- 4- and 8-conductor input with 4-conductor output
- 350 watts continuous power handling
- Built-in, heavy-duty casters

#### **DESCRIPTION**

The DTH™ 118 is a low-frequency, folded-horn enclosure designed to augment bass reinforcement for a full-range system. Its folded-horn design combines efficiency and low-frequency bandwidth into a compact, yet very powerful bass enclosure. The DTH 118 uses one 18" 1801-4 Black Widow® woofer in the compression chamber of the horn. The amount of compression both from the rear of the woofer cone and into the slot loaded horn throat,

effectively raises the impedance to nominally 6 ohms.

The cabinet is constructed of 7-ply, 3/4" high-density plywood covered with battleship grey carpet. Recessed handles on each side and rear casters aid in convenient transport. Feet on the side as well as bottom allow flexibility in stacking other mid- and high-frequency enclosures using the DTH 118 as a stable base.

Rear panel connections are designed to allow a simple 4-conductor input for the DTH 118 alone, or 8-conductor input with a 4-conductor output for bi-amping to other systems. For example: if an 8conductor cable is used, then



4-conductor can be paralleled into 2 pair for high current capacity, and drive the DTH 118 from its low-frequency amplifier; while the other 4 can be configured as bi-amp output for an upper frequency 2-way system.

# PERFORMANCE OPTIMIZATION

The DTH 118 can be placed relative to stage, floor, and/or wall surfaces in a variety of ways to extend its already impressive low frequency performance without the aid of electronic processing. Using existing surfaces in this way creates a virtual coupling of the horn to those surfaces that guide the expansion of the sound wavefronts radiated by the mouth of the horn, which can result in as much as a 6 dB increase in efficiency at frequencies below 50 Hz.

Placement suggestions include freestanding the DTH 118 on its bottom or side on a floor or stage with at least four feet of clear floor space in front of the horn mouth. Another novel placement approach is to stand the horn upright and then face the horn mouth into a room corner at an angle of 45°, 15 inches from the walls. Thus, the room itself becomes an extension of the horn mouth. This placement into the room corner can be further enhanced by using a triangular 3/4" or thicker plywood "cover" (not supplied by Peavey) that serves the purpose of sealing the top of the DTH 118 to the walls much like the floor seals the bottom to the same walls. This cover need not extend farther into the room than the rear of the DTH 118, and if constructed appropriately, could also be used to support the mid- and highfrequency enclosures of a full-range system.

#### **FREQUENCY RESPONSE**

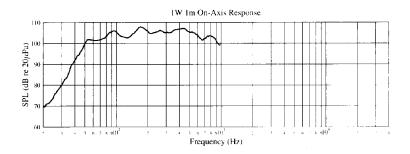
This measurement is useful in determining how accurately a given enclosure reproduces an input signal. The frequency response of the DTH™ 118 is measured at 1 meter using a 2.4-volt swept sine input. As shown the DTH 118 provides a smooth frequency response below 45 Hz and up to the crossover frequency.

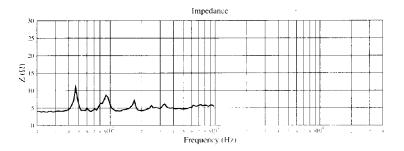
#### **POWER HANDLING**

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.

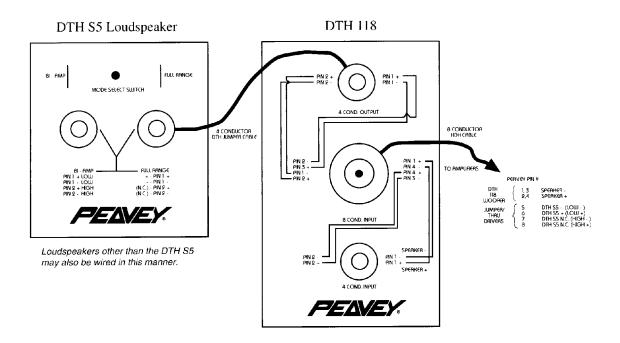
# ARCHITECTURAL & ENGINEERING SPECIFICATIONS

The loudspeaker system shall have an operating bandwidth of 50 Hz to 250 Hz. The output level shall be 106 dB when measured at a distance of one meter with an input of one watt. The nominal impedance shall be 6 ohms. The continuous power handling shall be 350 watts, with maximum program power of 700 watts and minimum amplifier headroom of 3 dB. The outside dimensions shall be 29-1/4" inches wide by 43-3/4 inches high by 38-3/4 inches deep. The weight shall be 200 lbs. The loudspeaker system shall be a Peavey model DTHTM 118.





# **Wiring Diagram**



#### 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+
Я	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 cars 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.

#### 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.

