The DT150 OEM is a driver specially designed to offer a smooth extended frequency response over a broad band, from mid to highs with high efficiency.

Ideal for compact two way systems that require excellent performance with high power output and superb frequency response.

The magnetic assembly with high flux density is provided by FEA (Finite Element Analisys) software.

The 1" phenolic dome diaphragm is light weight and extremely reliable, covering the frequency range from 1,500 Hz to 15,000 Hz with high fidelity.

The voice coil is made of high temperature wire wound on Nomex® former to withstand high operating temperatures.

The DT150 OEM is capable of handling up to 75 watts RMS or 150 watts (Musical Program) if connected to a 12 dB/octave crossover with a 4,000 Hz cut-off frequency.

The driver has a standard $1^3/_8$" - 18 TPI screw mounting.

A precisely engineered diaphragm structure and alignment mechanism allows for easy, reliable and cost effective repair in case of diaphragm failure.

DRIVER x HORN CONNECTION

HM11-25

HM17-25E

HM25-25

DT150 OEM

HC23-25

HL14-25
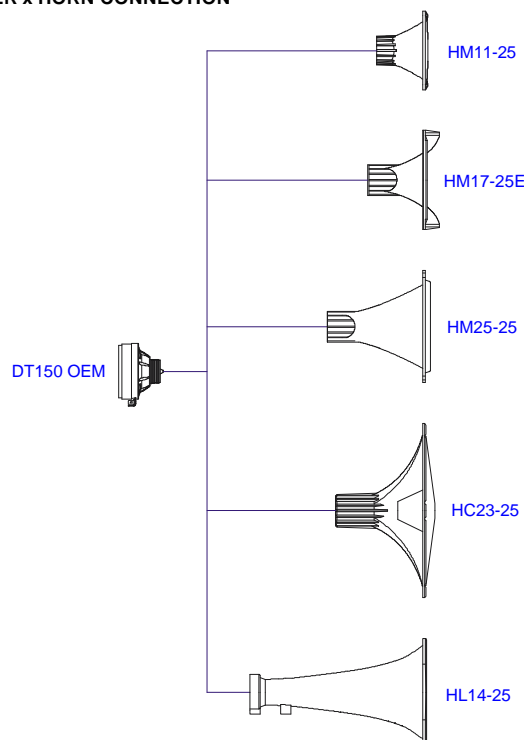
SPECIFICATIONS

Nominal impedance. 8	Ω
Minimum impedance @ 6,300 H z 9.6	Ω
Power handling	
Musical Program(w/ xover 2,000 Hz 12 dB / oct)[1]. . . . 80	W
Musical Program(w/ xover 4,000 Hz 12 dB / oct)[1]. . . 150	W
Sensitivity	
On horn,1W @ 1m, on axis[2] 108	dB SPL
Frequency response @ -6 dB. . . . . 1,500 to 15,000	Hz
Throat diameter 25 (1)	mm (in)
Diaphragm material . . . . Phenolic	
Voice coil diameter 25 (1)	mm (in)
Re 8.0	Ω
Flux density 1.50	T
Minimum recommended crossover (12 dB / oct) 4,000	Hz

[1] Specifications to handle normal speech and music program material with 5% maximum acceptable distortion on amplifier, with the recommended passive crossover connected. Power is calculated taking into account the true RMS voltage at amplifier output along with transducer nominal impedance. Musical Program= 2 x W RMS.
[2] Measured with HM11-25 horn, 2,000 - 8,000 Hz average.

ADDITIONAL INFORMATION

Magnet material . . . . Barium ferrite	
Magnet weight 290 (10)	g (oz)
Magnet diameter x depth . . . . 82 x 14 (3.23 x 0.55)	mm(in)
Magnetic assembly weight 665 (1.47)	g (lb)
Housing material . . . . Plastic	
Housing finish . . . . Black	
Magnetic assembly steel finish . . . . Zinc-plated	
Voice coil material . . . . CCAW	
Voice coil former material . . . . Nomex®	
Voice coil winding length. 2.4 (7.87)	m (ft)
Voice coil winding depth 2.0 (0.08)	mm (in)
Wire temperature coefficient of resistance (α25) 0.00435	1/°C
Volume displaced by driver 0.3 (0.011)	l (ft³)
Net weight 735 (1.62)	g (lb)
Gross weight (12 pieces per carton) 10,000 (22.05)	g (lb)
Carton dimensions (W x D x H) . . . . 32 x 36 x 13.5 (12.6 x 14.2 x 5.3)	c m (in)

MOUNTING INFORMATION

Horn connection . . . . Screw-on $1^3/_8$" - 18 TPI
Connectors . . . . Push onterminals
Polarity . . . . Positive voltage applied to the positive (+) terminal gives diaphragm motion toward the throat

ø 82

65

W1 3/8" - 18TPI

ø 25

45   15   5

Dimensions in mm.

SELENIUM
L O U D S P E A K E R S
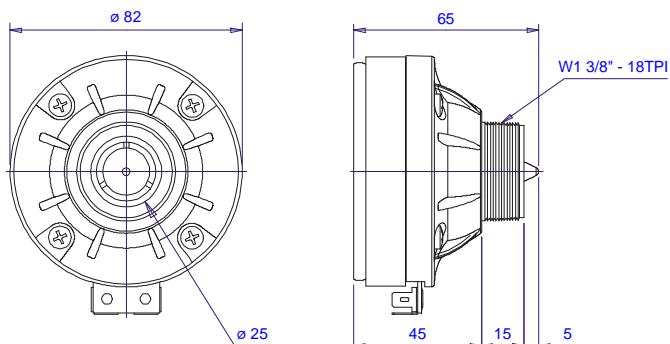
RESPONSE CURVE MEASURED W/ HM11-25 HORN INSIDE AN ANECHOIC CHAMBER, 1 W / 1 m
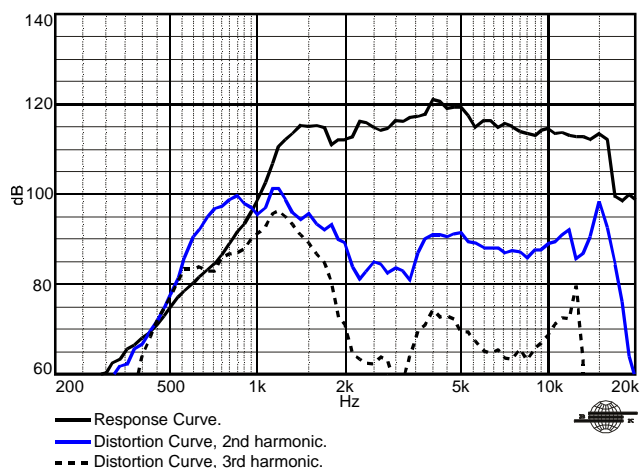
— Response Curve.

IMPEDANCE AND PHASE CURVES MEASURED W/ HM11-25 HORN IN FREE-AIR.

— Impedance Curve.
-- Phase Curve.

HARMONIC DISTORTION CURVES W/ HM11-25 HORN, 1 W / 1 m.

— Response Curve.
— Distortion Curve, 2nd harmonic.
-- Distortion Curve, 3rd harmonic.

HARMONIC DISTORTION CURVES W/ HM11-25 HORN, 7.5 W / 1 m.

— Response Curve.
— Distortion Curve, 2nd harmonic.
-- Distortion Curve, 3rd harmonic.
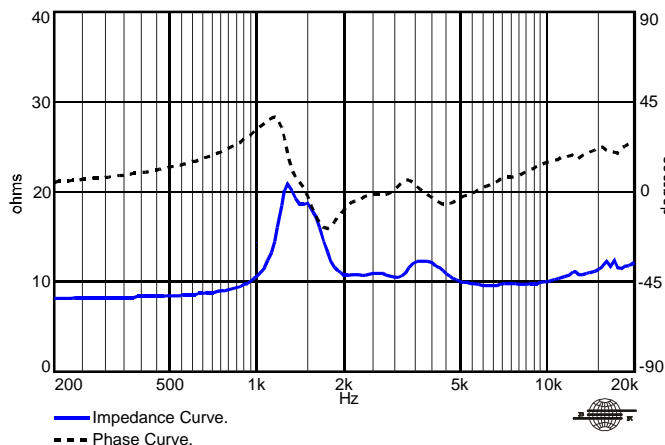
POLAR RESPONSE CURVES

2 kHz   **4 kHz**   **8 kHz**

— Polar Response Curve.
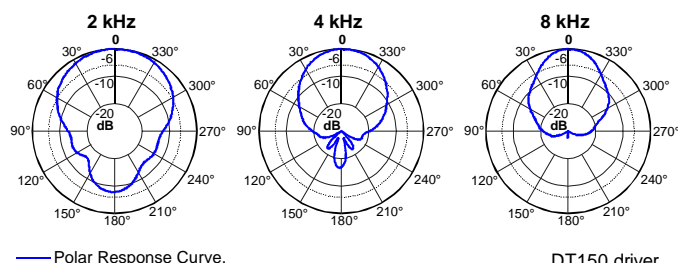
DT150 driver coupled to a HM11-25 horn.
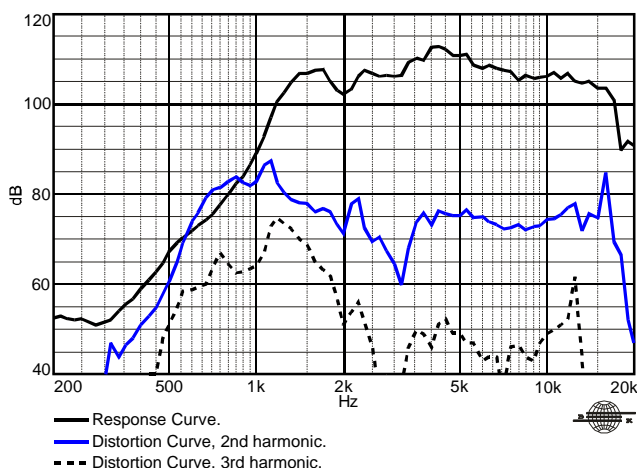
HOW TO CHOOSE THE RIGHT AMPLIFIER

The power amplifier must be able to supply twice the RMS driver power. This 3 dB headroom is necessary to handle the peaks that are common to musical programs. When the amplifier clips those peaks, high distortion arises and this may damage the transducer due to excessive heat. The use of compressors is a good practice to reduce music dynamics to safe levels.

FINDING VOICE COIL TEMPERATURE

It is very important to avoid maximum voice coil temperature. Since moving coil resistance (R_E) varies with temperature according to a well known law, we can calculate the temperature inside the voice coil by measuring the voice coil DC resistance:

$$T_B = T_A + \left(\frac{R_B}{R_A} - 1\right)\left(T_A - 25 + \frac{1}{\alpha_{25}}\right)$$

T_A , T_B= voice coil temperatures in °C.
R_A , R_B= voice coil resistances at temperatures T_A and T_B, respectively.
α_{25}= voice coil wire temperature coefficient at 25 °C.