



# PR 40

## Dynamic Microphone



- Absolute most natural voice response for talk show hosts, voice over applications
- Large low- mass aluminum voice coil
- Properly positioned hum bucking coil and heavy steel case insure maximum shielding
- Four rear ports exhibit excellent rear rejection and minimum proximity effect
- Widest frequency response
- Best kick drum microphone ever
- Assembled and tested in Illinois

### General Description:

The Heil PR 40 represents completely new dynamic microphone technology designed for a wide range of professional applications such as sophisticated recording, live sound, and commercial broadcast. Producing the widest frequency range available in a dynamic microphone, the PR 40 outperforms most condenser microphones, and can withstand huge amounts of SPL. At the same time, it maintains the 25 year Heil Sound tradition of superbly natural voice articulation.

Since 1982, Heil Sound has been the leading manufacturer of communications microphones and has a paramount understanding of phasing. When properly applied, this knowledge creates outstanding cardioid patterns with unbelievable rear rejection that removes unwanted sounds that try to enter from the off axis rear. The pattern control of the Heil PR 40 is outstanding. This exceptional performance is achieved by using the ideal combination of materials for the large low mass diaphragm and a special mixture of neodymium, iron, and boron that gives the PR 40 the strongest magnet structure available. These features allow the microphone to achieve magnificent dynamic range. A unique screen system using two different diameter mesh screens and an internal breath blast filter allow the user to talk closely to the microphone with little worry of pops or excessive sibilance. The large diameter dynamic element is mounted in a unique sorbothane shock mount atop a non-resonant fixture, decoupling the element from the massive steel body.

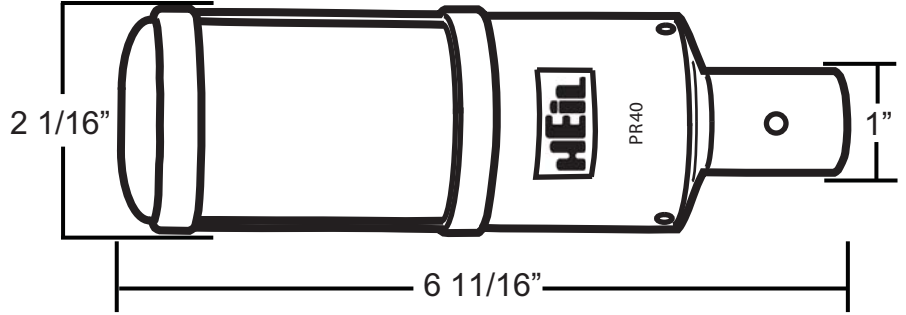
<b>Frequency response</b>	<b>28 Hz - 18 kHz</b>
<b>Polar pattern</b>	<b>super cardioid</b>
<b>Impedance</b>	<b>600 ohm balanced</b>
<b>Output level</b>	<b>-53.9 dB</b>
<b>End fire generating element</b>	<b>1 1/8" diameter dynamic</b>
<b>Polarity</b>	<b>pin 2+</b>
<b>Magnet structure</b>	<b>neodymium, iron &amp; boron</b>
<b>Case structure</b>	<b>steel</b>
<b>Dimensions</b>	
<b>Length</b>	<b>6.75"</b>
<b>Diameter</b>	<b>2.10"</b>
<b>Stem diameter</b>	<b>15/16"</b>
<b>Weight</b>	<b>13.5 oz</b>
<b>Finish</b>	<b>anodized matte champagne</b>
<b>Furnished Accessories</b>	<b>leatherette carrying case &amp; microphone stand clip</b>
<b>Optional Accessories</b>	<b>SM-2 shock mount</b>

This body and the internal hum bucking coil removes any worry of using the PR 40 near monitor screens or noisy lighting fixtures and controls. The new technology of the Heil PR 40 has redefined the dynamic microphone with superior wide frequency response, the lowest presence of noise in the industry, flawless design, and elite quality expected by an innovator and leader in the field. Welcome to the new standard.

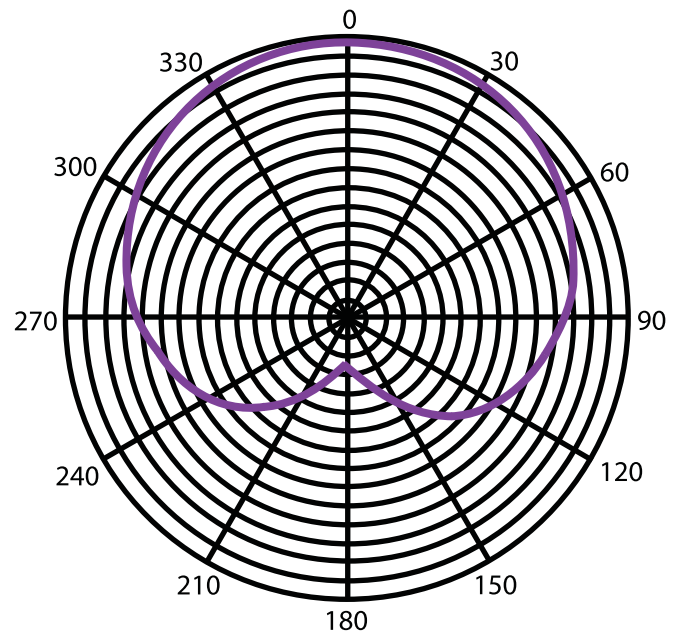
### Engineers' Specifications:

A high performance microphone shall bring new large diameter technology to the industry. It shall have a personality in it's wide frequency response of 28 Hz. to 18 kHz. at the -3 dB points. The traditional Heil Sound 'bouquet' of mid range articulation will be featured which will bring gorgeous speech and instrument reproduction without the use of outboard equalization. A high degree of phasing plug assembly shall reduce the rear rejection typically at -18 dB or better. A large 1 1/8" diameter low mass voice coil assembly with a specially treated diaphragm that can create large dynamic levels. A special blend of neodymium, iron and boron will produce the strongest of magnet structure for this high performance microphone. Nominal impedance shall be 600 ohms. The proximity effect which is present in all cardioid microphones will be properly eliminated in the design of this new microphone. By controlling this bass boost effect, this microphone will be the most ideal microphone for use inside kick drums, for close up guitars and will be the summit for tight vocals and broadcast studios. There shall be a hum bucking coil to eliminate hum and noise when used near a cathode ray tube monitor or around high EMF levels. The case will be created in steel, finished in anodized, non-reflecting champagne matte color. The microphone shall have a maximum diameter of 2 1/16" with a length of 6 11/16". A cast zinc adjustable 5/8" - 27 stand adapter lined in Teflon will be supplied. The new dynamic technology from Heil Sound shall be named the PR 40.

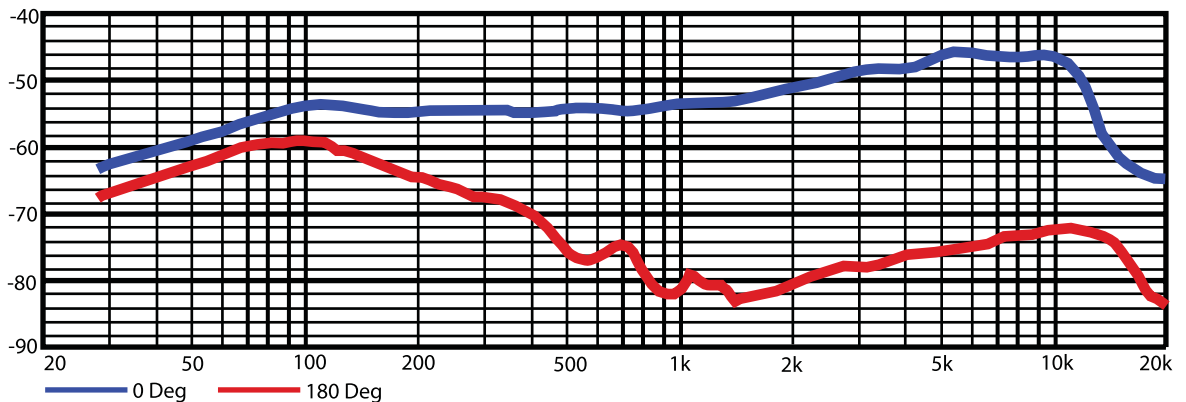
### Dimension Drawing:



### Polar Pattern:



### Frequency Response:



### Wiring Diagram:

