



# PR 20

## Dynamic Microphone



- Best live sound vocal microphone
- Perfect Mid range articulation
- Wider Frequency range
- Absolute best snare drum microphone
- Heavy steel construction
- Assembled and Tested in Illinois

### General Description:

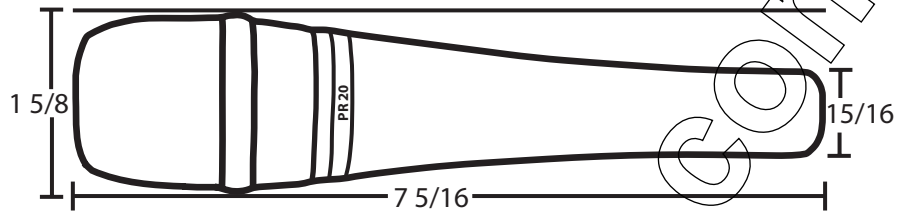
The Heil PR 20 represents completely new dynamic microphone technology designed for a wide range of professional applications such as live sound, commercial broadcast, and sophisticated recording. Its wide frequency range outperforms the tired, 30+ year old industry technology and can withstand huge amounts of SPL. The end result is a microphone that can answer the call to any application. For example, the gorgeous upper mid range makes the PR 20 the absolute best live vocal microphone, while its outstanding frequency response and superb dynamic range suit it perfectly for use with a snare drum.

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 20 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 20 the strongest magnet structure available.

<b>Frequency response</b>	<b>50 Hz - 18 kHz</b>
<b>Polar pattern</b>	<b>cardioid</b>
<b>Impedance</b>	<b>600 ohm balanced</b>
<b>Output level</b>	<b>-52.9 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>7.25"</b>
<b>Diameter</b>	<b>1.65"</b>
<b>Stem diameter</b>	<b>7/8"</b>
<b>Weight</b>	<b>9 oz</b>
<b>Finish</b>	<b>matte black lacquer</b>
<b>Furnished Accessories</b>	<b>vinyl carrying bag, gold &amp; black metal wind screen, microphone stand clip</b>
<b>Optional Accessories</b>	<b>SM-1 shock mount</b>

In addition to the special magnet structure, the PR 20 achieves its exceptional performance by using a large 1 1/8" low mass voice coil assembly. Special attention has been paid to the phasing plug assembly with equally placed ports that sense audio from behind, entering them out of phase. Thus, the PR 20 produces a very linear cardioid pattern and reduces the proximity effect while achieving perfect articulation. This new Heil element is usable in extreme high sound pressure levels and is immune to overload conditions making it perfect for vocal and live sound applications. Welcome to your new workhorse microphone.

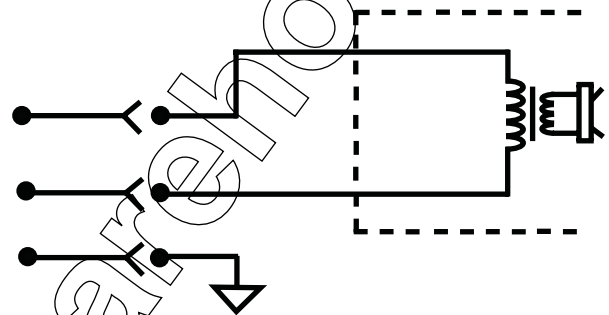
### Dimension Drawing:



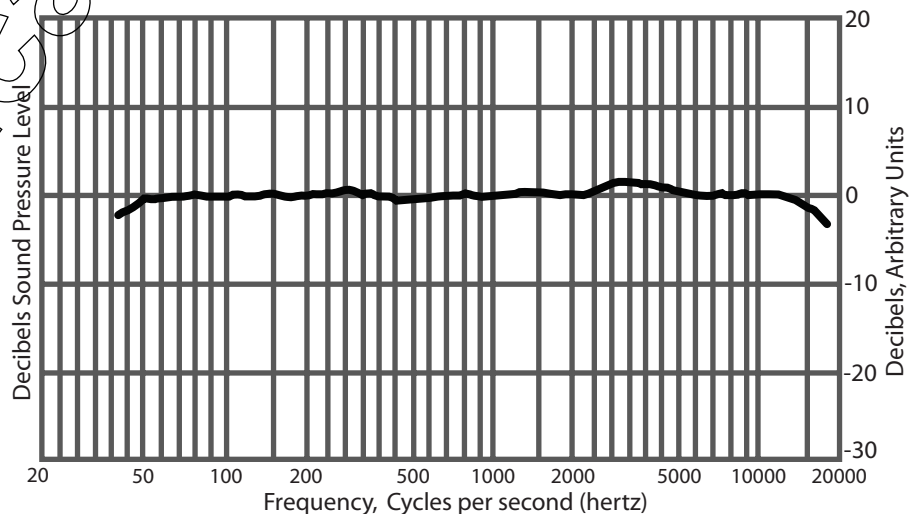
### Engineers' Specifications:

A high performance microphone shall bring new large diameter technology to the industry. It shall have a personality in its wide frequency response of 50 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. The microphone shall exhibit bright natural sounds, perfect for vocals as well as snare drum and cymbals. The case will be created in steel, finished in non-reflecting black matte color. The microphone shall have a maximum diameter of 1 5/8" with a length of 7 5/16". A cast zinc adjustable 5/8" - 27 stand patten lined in Teflon will be supplied. The new dynamic technology from Heil Sound shall be named the PR 20.

### Wiring Diagram:



### Frequency Response:



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