

# Amateur radio KG9OM - PR 30 review



A review of a pre-production Heil PR 30 dynamic microphone by radio amateur Don Snodgrass "KG9OM"

## Greater demand for superior microphones

You know the old saying, "Great mic... great sounding audio". Well, it's no longer quite that simple. Today's hams often employ sophisticated internal and external audio processing techniques. However, the right microphone can make a significant difference. For most hams, the microphone remains the most critical piece of gear to accurately capture vocal sound. Start with a proper microphone and you have more than an excellent chance of coming up with a quality sounding amateur radio station.

## Heil steps it up a notch

Bob Heil has established a reputation for innovation over the years. He continues to produce superior quality microphones for amateur radio applications. Now, with the advent of the PR30, Heil Sound is looking beyond amateur radio to new markets including commercial radio, live sound and studio recording.

The PR30, although outwardly looking like many studio condenser microphones, is a true dynamic microphone designed to meet the demanding needs of amateur radio operations on all levels, straight into the radio or through external audio processing equipment. There are currently four models in the PR series, the PR20, PR30, PR40 and PR780. The PR40 is expected to be the top of the line. The PR780, although similar to the PR30, has been specifically designed for use with the ICOM 7800 transceiver. The PR20 is essentially a Goldline Pro with a new look.

## Initial impressions

I was favorably impressed by the PR30 as soon as I saw it. The fit and finish is exceptional. This microphone is built with Heil's characteristic sturdiness. The PR30 has that same solid construction as previous Heil microphones. However, don't expect the usual black finish. The PR30's exterior is finished in a light metallic grey color.



## Several shock mount alternatives

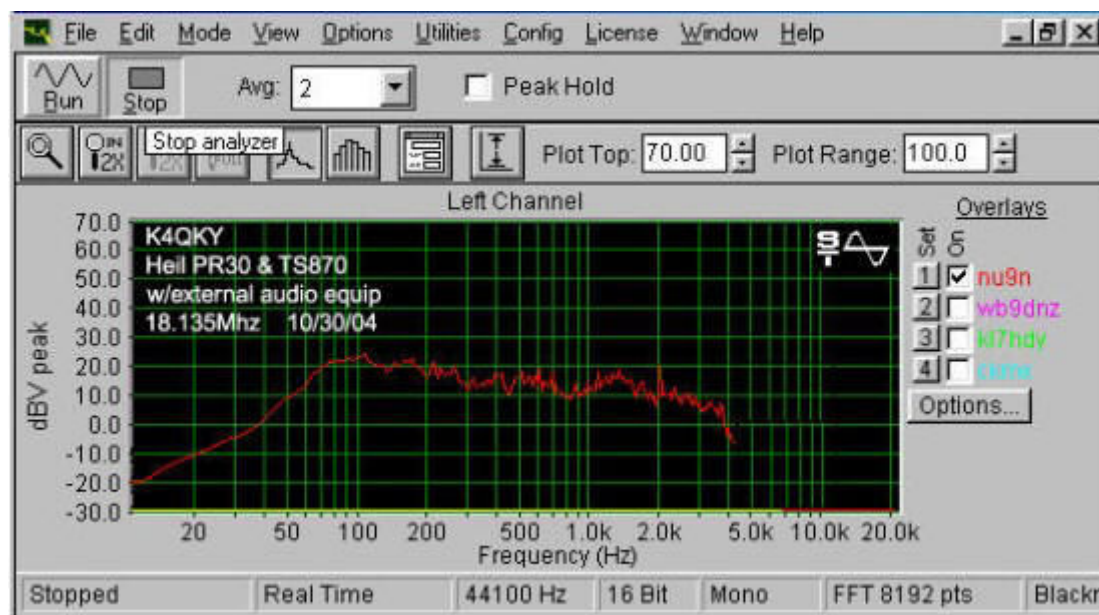
PR series microphones are designed to accept the model 309A suspension shock-mount shown at left. This fairly expensive mount is typically used with the Elettro Voice RE20 and RE 27 microphones. Although it wasn't available for this review, Bob Heil indicates that a companion Model SM-3 will be packaged with the PR30, 40 and 780 microphones which most hams will prefer. The SM-2 shock mount will also work.

### How well it works

Of course, the real point of this review is to evaluate how well the PR30 sounds on the air. For this review, I evaluated the PR30's performance in two separate configurations:

Configuration A (no external audio processing)	Configuration B (external audio processing)
Microphone output straight into microphone input of a Kenwood TS870. Kenwood TS870 settings as follows: <ul style="list-style-type: none"><li>ü TX offset 100</li><li>ü TX width 3000</li><li>ü TX EQ "high boost"</li></ul>	Microphone output into a Presonus tube microphone preamp; then into a Behringer DEQ2496 processor; through the W2IHY iBox interface into the microphone input of a Kenwood TS870. Kenwood TS870 settings as follows: <ul style="list-style-type: none"><li>ü TX offset 100</li><li>ü TX width 3000</li><li>ü TX EQ "off"</li></ul>

Most hams contacted were impressed with the overall sound of the PR30. All confirmed that the PR30 benefited from external processing as described in Configuration B although the microphone sounded excellent even without processing.



The received audio trace above was recorded and analyzed 10/30/04 on 17 meters courtesy of VE6CQ "Rick", a professional radio broadcaster. Rick was extremely impressed with the gently falling yet nearly flat audio trace from about 80Hz to about 3.6KHz. He believes that the PR30 will be great success for Heil Sound.

### Which PR series to buy?

Since these mics are generally similar and serve the same set of applications, I'd say go for the highest in the series you feel you can afford. The PR30 will suit the needs of most Amateurs. The PR40 with its expected 20Hz - 19KHz frequency response may be a better choice for the more discerning operator. Any of the PR series microphones can easily hold a coveted place in the ham shacks of radio amateurs or any pro audio application whether on stage or in the studio.