



## PSKMeter

How much would you pay for a perfect PSK31 or PSK63 signal, one that occupies as little bandwidth as possible and doesn't drive your fellow hams crazy with obnoxious splatter?

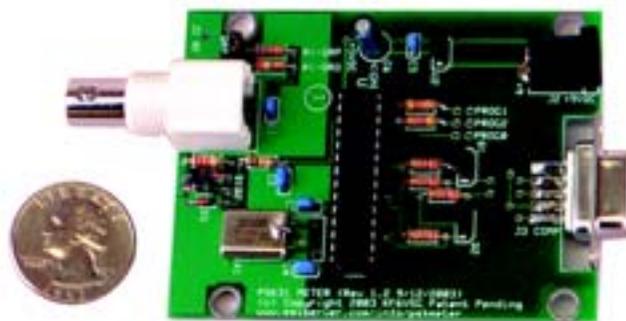
How about \$39.35? That's the cost of the PSKMeter kit by Software Science. This clever gadget, developed by George Rothbart, KF6VSG, samples your transmitted RF and sends the results to your computer where the PSKMeter software *automatically* adjusts your sound card audio output until the splatter disappears. You never have to worry about whether your sound card levels have changed since the last time you were on the air. Just start transmitting and the PSKMeter takes care of the rest.

The PSKMeter sampling hardware is composed of a single PC board that's smaller than a pack of cigarettes (there is an enclosure available for an additional charge). At one end of the board there is a BNC RF connector; the other end sports a 9-pin serial jack and a coaxial power jack. You install the PSKMeter in your coaxial feedline through the use of a T adaptor (not supplied). The data is transferred to a COM port on your PC through a standard serial cable.

### Installation and Operation

Once the kit is assembled, the fun begins. You start by downloading and installing the PSKMeter software for *Windows* from the Software Science Web site. The application is compact and runs in the background on most PCs without compromising performance.

I didn't have an available COM port, so I bought the serial-to-USB converter from Software Science. One thing the converter manual does not make clear is that you must *first* connect the converter cable to your USB port. When you do, *Windows* will detect that a USB device has been attached and will ask for the appropriate drivers. That's when you put the converter CD-ROM in the drive and continue. In my case, the drivers loaded quickly and soon I had a "virtual COM 3" on my USB.

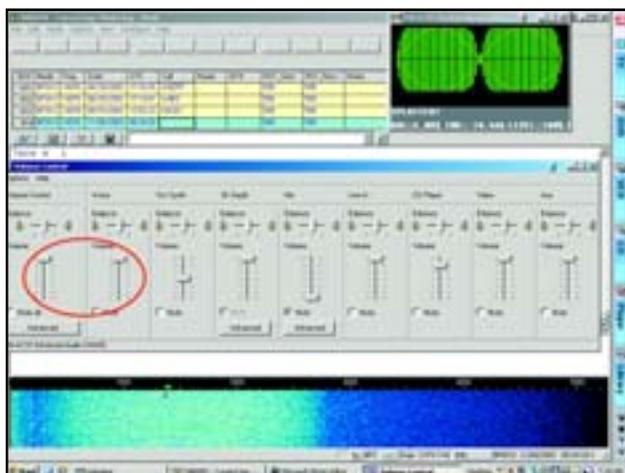


With the PSKMeter inserted in my feedline (it didn't affect the SWR) and the power cable attached, I was ready. The screen shots show the results. Using *MixW* software in the PSK31 mode, I deliberately moved the master VOLUME and WAVE sound card output controls to maximum and clicked TX (transmit). The PSKMeter told me that my signal was horrible, as you'd expect.

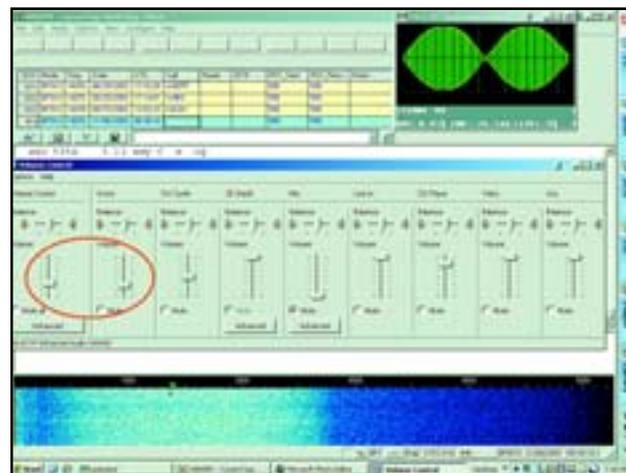
Next, I selected "Automatic Level Control" in the PSKMeter software and clicked TX again. It was fascinating to watch the PSKMeter perform its analysis and slowly reduce the audio output until my signal was clean. The process took about 8 seconds. In cleaning up my signal, the PSKMeter also dropped my RF output from 100 W to 50 W, but that's still more than enough power for PSK.

The PSKMeter may be the Holy Grail PSK operators have been seeking for several years. With a PSKMeter in the feedline, there is no excuse to transmit a dirty signal.

*Manufacturer: Software Science, 7 Mt Lassen Dr, C250, San Rafael, CA 94903; [www.ssiserver.com/info/pskmeter/](http://www.ssiserver.com/info/pskmeter/). Kit: \$39.35. Enclosure: \$6.95. BNC T connector: \$4.99. Serial-to-USB converter: \$29.95. Note: Kit instructions and software must be downloaded from the Software Science Web site.*



My hideous, overmodulated signal before the PSKMeter was allowed to adjust it. Note the "Splatter!" warning in the PSKMeter window (upper right) and the maxed-out VOLUME and WAVE controls (circled in red).



The PSKMeter takes over and my signal is as clean as the proverbial whistle. Note the new positions of the VOLUME and WAVE controls (circled in red).

QST