

# CQ REVIEWS:

## The Daiwa PS-304 Power Supply


BY LEW McCOY\*, W1ICP

**D**aiwa Industry Co. Ltd. of Japan has been in the business of making power supplies and numerous other items for the amateur market for many years. I have been using and testing their Model 304 power supply for nearly a year.

The PS-304 is an adjustable supply, from 1 volt to 15 volts, providing a continuous output of 24 amps with a maximum rating of 30 amps. This is more than adequate for most of the transceivers made these days. The front-panel meter provided can be switched to read either voltage or current, full-scale current, 40 amps, full-scale voltage 20 volts.

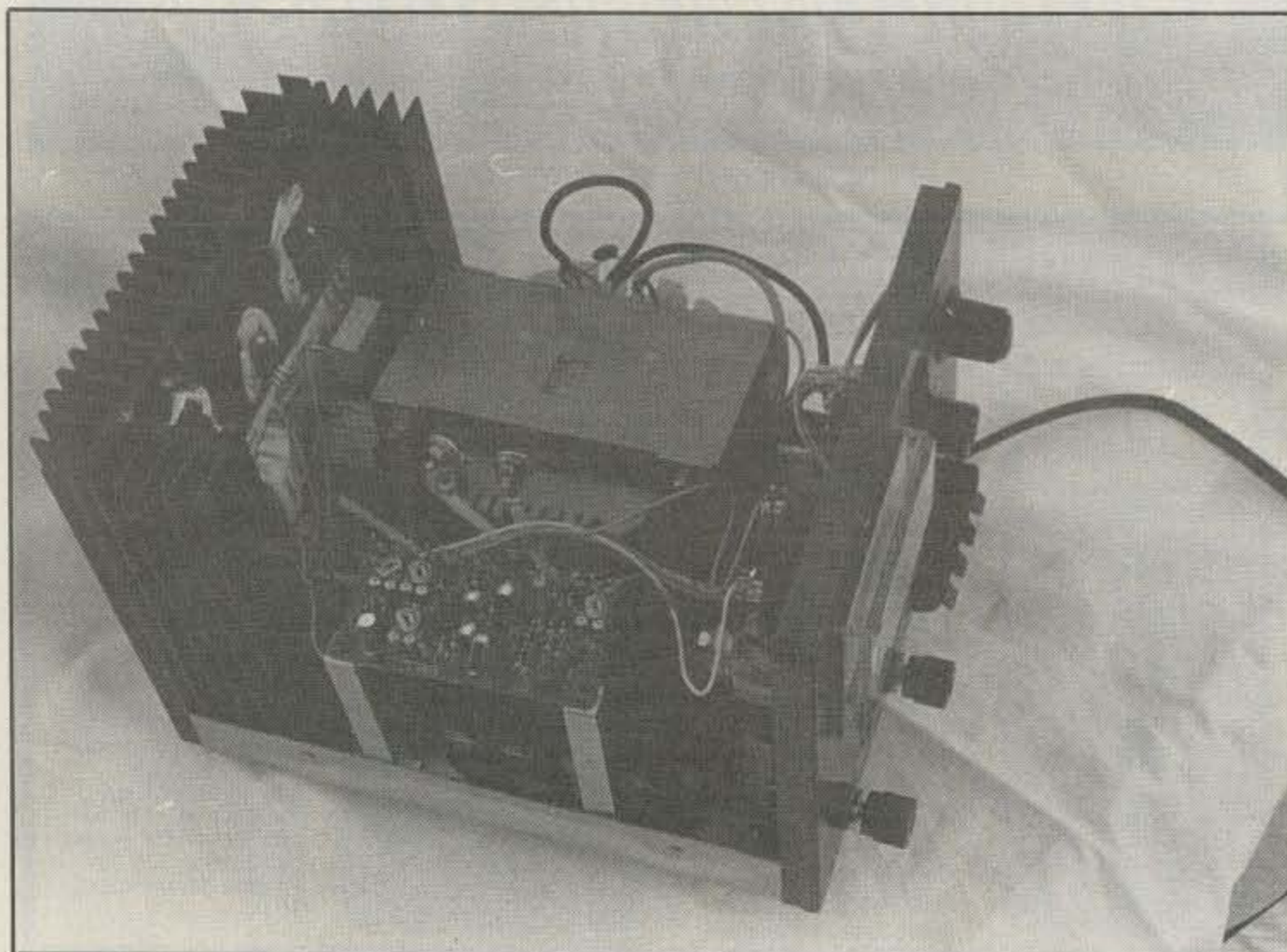
A rather unusual feature of this supply is that it has a cigarette-lighter jack built into the front panel, just below the meter. I guess this would be a popular feature for those amateurs who use a cigarette-type plug with their radio in mobile operation. Immediately below the jack are the two terminals, plus and minus, for transceiver hookups. There are also two sets of terminals for accessories. These are rated at 5 amps each.

As you can see from the photograph of the inside of the unit, the power transformer appears to be very rugged. I put a scope on the output voltage to test for any ripple, and I had to go all the way to a 30 amp load before there was any sign of ripple. The circuitry has crow-bar protection and will shut down in the event you short the output. I consider this a very necessary feature in a power supply. Another item in this supply that I like very much is the very extensive heat sink—in other words, the supply is a "class act."

List price of the supply is \$169.95. It is manufactured by Daiwa Industry Co. Ltd. and is distributed in this country by EDCO Electronic Distributors, 325 Mill St., Vienna, VA 22180 (1-800-344-0397). 



Front view of the Daiwa PS-304 power supply. At the upper left is the meter and immediately below is the cigarette-plug receptacle. The high-output terminals are at the lower right.



Inside view of the PS-304. The control circuitry is mounted alongside the power transformer. Note the heat-sink array on the rear. The power supply measures 172 mm wide by 150 mm high by 240 mm deep. Total weight is 8.9 kg.

\*Technical Editor, CQ, 200 Idaho Street, Silver City, NM 88061