

73 Inspects Spec Comm

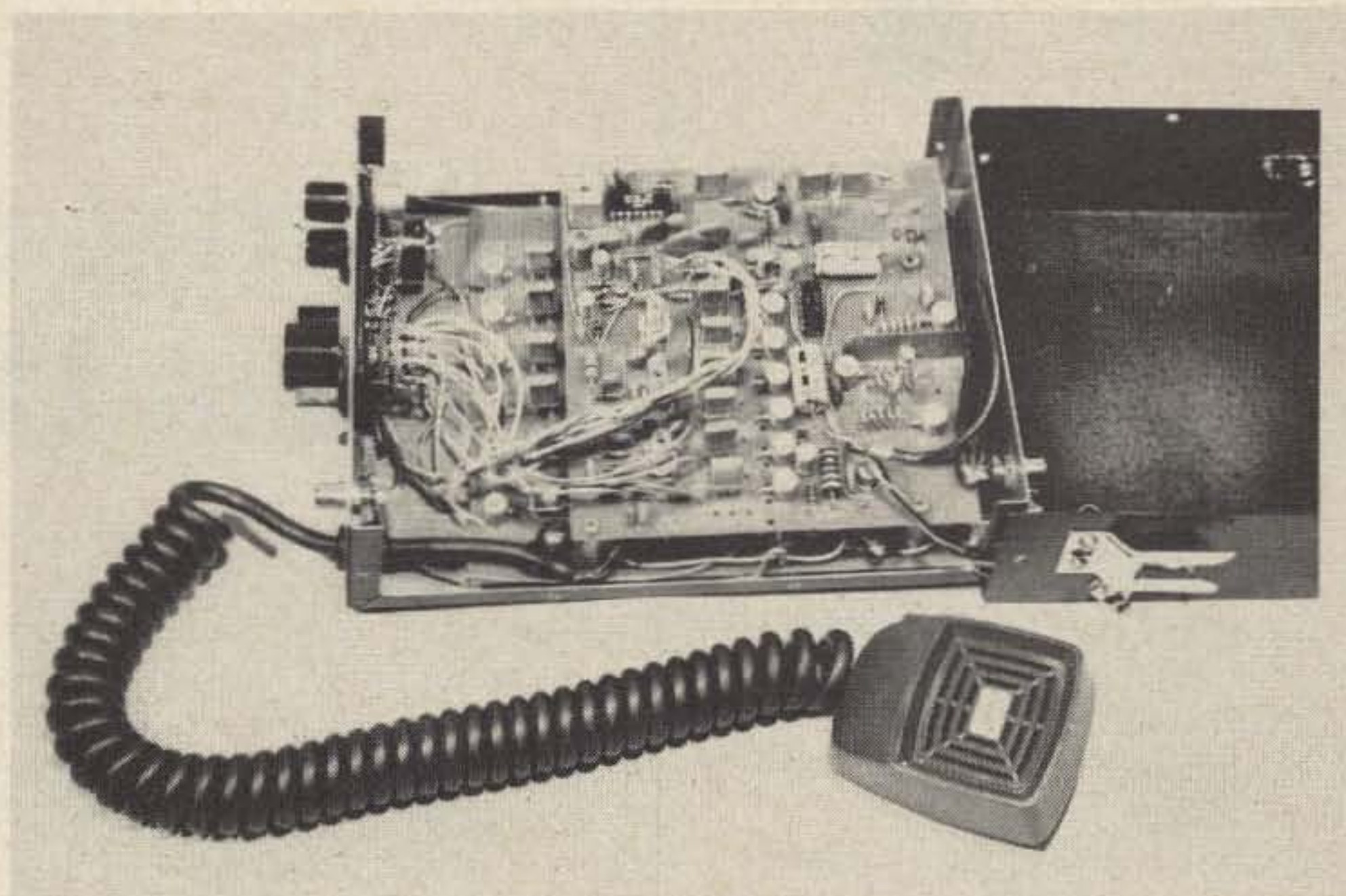
Readers of the ads in 73 may have been wondering about the new two meter FM rigs announced by Spectrum Communications in Worcester, Pa. At that price can they be any good?

We've checked it out at 73 HQ and we want to report that the rig is not just good, it is amazing. The engineers at Spec Comm have applied the latest and hottest IC chips to FM and the result is one of the simplest and most effective rigs on the market.

The receiver centers on the i-f IC which has a four pole crystal filter on the input and a two pole on the output — the result being sharp skirts without all the extra images and other troubles which come with going to a double i-f chain. The mosfet preamplifier and Shottky hot carrier diode mixer go a long way toward eliminating intermod and adjacent carrier interference.

Most of the transmitter is contained in two ICs, including an extremely effective speech clipper/filter which really makes the voice fill out the signal, but without the usual muffled distortion. It sounds beautiful.

There are a lot of details which add up to a remarkable package — such as all solid state switching (no relay to defunct or get dirty), a 3" speaker (which sounds a lot better than the usual 2" jobs), the use of TR-22 crystals (which are available everywhere), a choice of six or twelve channel models (depending on how many repeaters you have around), antenna connections on both front and back of the rig (very handy at times — it also allows clip-on accessories to automatically plug into the antenna input), and one of the best acting squelches we've seen yet.



The accessories help to round out the system — items such as an ac supply which simply clips on the back of the rig (\$45) for home use (the antenna jack feeds through so you can still plug in the antenna on the front or rear of the rig). The power supply uses one of the newest silicon-steel transformers (keeps very cool).

There is a nicad battery pack which also clips on the back of the rig, making it a great five Watt walkie-talkie to sling over the shoulder. The nicads are hefty and designed to run the five Watt rig — not your usual penlight size cells which poop out in a couple of hours.

A 25 Watt amplifier clip-on module is also available (\$90) which both boosts the power output of the rig and provides a low-noise preamplifier for the receiver.

There is a battery status indicator on the front panel that indicates when it is time to stop talking and service

the nicads. Anyone who has over-talked nicads will appreciate the value of this gadget. The indicator is needed because the voltage regulator circuit is so good that the receiver never indicates when the voltage is starting to run low. Hooking up the rig backwards won't blow it either, due to a reverse voltage protector. The final is well protected from shorts or open circuits.

The rig is built on two large circuit boards so everything is right out there easy to check and service — quite a difference from some of the rigs which take a deformed midget to get into.

By virtue of the 1975 type of circuit and direct sale from the factory, the Spec Comm boys are able to make the 560 (five Watts six channel) available for \$180. The twelve channel model 512 is \$200. There aren't many bargains like that any more.

