

This tape deck is being thoroughly checked before it is assembled into a complete communications rack.

ers of both the newer digital testers and the older analog instruments. But, I like the digital meter because when you're zipping through a circuit it's easier to note the number flashing by than it is to interpret where the needle deflects on a meter.

**ES:** *Do you think frequency counters are helpful in your line of work?*

**MP:** Most assuredly. The frequency counter is a valuable tool in repairing video equipment. One nice thing I like on our 465 scope is that it has an outlet on the back in which you can plug a frequency meter. But you can just set it up there; you don't have to do a lot of extra wiring so as to use all your test equipment. The probe, as you look at the signal, will tell you, for example, whether your local oscillator is correct without loading the circuit.

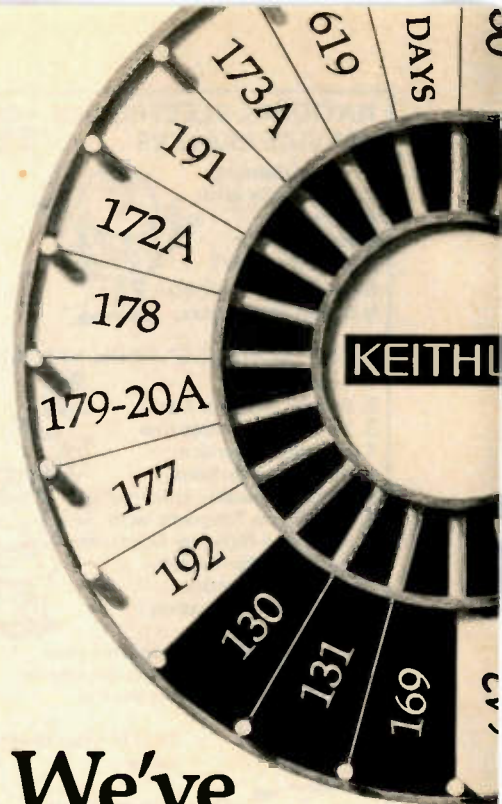
When you go through a color circuit you have to set components at certain frequencies. Also you use it in setting up some servo circuits. If a component or circuit is to be set up at a certain frequency, you can do it with a scope, but it's more time consuming.

A frequency counter is also handy when you're doing audio equalization. When you narrow-band a system you can see exactly

where the notch needs to be. You read the frequency direct and match it. Of course, with some of the newer equipment using active filters the manufacturer has included an on-board oscillator. You flip a switch and beat the local oscillator with the feedback you are notching and simply zero the beat, put in the right capacitors, flip the switch to notch and, you're done. It really make the job easy compared to the old method of component substitution where you could spend all day completing a dozen or so notches. With this newer circuitry you can take 12 notches inside of a half hour.

**ES:** *What do you use to troubleshoot transistors in a faulty circuit?*

**MP:** I'm used to using a different type of transistor tester. Actually, you can use a digital or analog multimeter to test a transistor. If you want to check the Beta or other parameters, you will need a more dedicated piece of test equipment. I elected to use the Sencore Super Cricket, which I think is an excellent transistor checker. With most transistor testers, you have to be careful and make sure the leads are properly connected, etc. With the Super Cricket you can just hook to any wire, push your buttons, and find out whether your transistor is working. It's just a little bit faster



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