

As a Signal Generator: (and certain Advanced Modes to consider)

For those who have learned to do alignment on older equipment, taking advantage of simply the signal output, without having to resort to the usual "Sig-Gen" can be quite helpful.

Also as a basic troubleshooting device for a quick identification of problems.

Advanced Menu #2

"Resonance Mode" (5.4.1.5)

"Distance to Fault" (5.5.1 in the manual)

Manual setting for the "Velocity Factor" (Propagation Delay value – 5.5 in the manual)

Manually Tuning a Local (in Shack) Matchbox: (I have never seen this in print)

It is quite common to be able to quickly achieve a 1:1 SWR this way.

1. Disconnect the coax from the Transmitter, (assuming it goes directly to the local Matchbox Input).
2. Connect that coax to the MFJ-Analyzer and set to the desired frequency, with the output of the Matchbox directly to the antenna.
3. Preset the Matchbox dials to the Mid-Point settings.
(or close to what has been found before on other frequencies)
4. Now, simply start tuning the Matchbox "**R and X**" dials, looking for a dip in the SWR reading on the MFJ.
5. Expect to find that the X-Dial seems to have the most effect.
6. It will require alternating somewhat with the two dials to achieve the best results.
7. When you are satisfied with your current settings, make a note of them, and try other frequencies and note those settings as well.
8. Any XMTR to be used has no bearing on any of these settings, and the Matchbox can be preset, with only very slight tweeks, depending on the weather, not the XMTR, to any frequency noted.
9. Remember, that any SWR of the antenna will still be present in the coax to the Matchbox, but the XMTR will be happy.
10. Note also that typically, Auto-Tuners only reach a 2:1 or slightly less, before they say "good-enough", but if they are mounted at the feed-point of the antenna they are actually better.