

Subject TS2000e 20 to 30db Attenuated Receive signals

Experience by Paul G4APL

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15 January 2015 Updated

Symptoms

G4APL's TS2000e suffers from 20 to 30db attenuated receive signals and Intermittent 'Static' on all bands with the aerial connected or not, or switched to dummy load.

This is at a fixed level. Using the RF control made no different to the level.
So the problem must be in the IF's and not the RF Front-end.

Listening to 14MHz signals and compared them with my two Kenwood transceivers
TS-480SAT 59_40db
TS2000e 59

Listening on 718kHz AM
TS-480SAT 59+20db
TS2000e 55

The receive signals on 2.6 and 70cms have been well down compared to the reports give by 20db or more.

i.e. very deaf or all bands and frequency range.

This fault has been present since Paul purchased the TS2000e in 2008. (three years). Not having, made time to do detail comparisons with other stations. until this year (2011) when more time was available.

The Cure

Seems to be a known problem as I found a similar report to quote from Professor Google search engine.
Quote"

I just found this on the net:

"Problem Noise, static crashes in rx, all bands.

L72-0984-05 Filter TS2000

DAP202U Dual Diode

MA2S111 Diode TH79

Located and replaced FL1 on Tx/rx unit which had shorted on the input and was pulling down the switching diodes for the filters causing noise. Also the rx was down about 20db in addition to the noise

Kenwood TS-2000 receiver crackling noise problems

I have also found an excellent article in PDF format prepared by Roar LA4AMA.

[Kenwood TS-2000 receiver crackling noise problems repair procedure](#)

Explaining the problem, cause and repair.

It is recommended that you get a professional technician to repair the TS2000 transceiver. As you could damage the PCB's desoldering the filters

Update 26.9.2011

The faulty TS2000e was taken by appointment for A Repair While You Wait, at an Amateur Radio Emporium close to the M25 Junction 11. Paul took a copy of the above document along with the Kenwood transceiver.

Paul was happy to sit and read a book.

The three ceramic filters were replaced and the omitted blocking capacitor was added.
The results were excellent. Receiver is now very much more sensitive.

Update February 2015

Kenwood TS-2000 Sub Receiver very deaf

Back in November 2014, while the Sub Receiver was left monitoring some packet radio frequencies. When Paul came back in to the Radio Shack some hours later. Found that the Sub Receiver was very very deaf.

The Main Band receivers was working correctly. Receiving a 2m or 70cm 59+60 signal on the MAIN receiver. The Sub Receiver would barely detect it.

update February 2015

The TS2000e was taken in for investigation, who found that the two original ceramic filters had failed. This was down to a bad batch of Tokyo ceramic filters fitted by the manufacturer.

So was now have had five of these filters replaced.

Paul is still happy with the performance of the TS2000e..

Paul G4APL