

# Kenwood TS 120s Common Problems and How to Fix them?

Kenwood TS 120s can be called the first generation of ham transceiver. It is a good quality radio device with a design that is still preferred nowadays by most radio lovers. It is thought to be a quality constructed device. It has an analog circuit in it and has a display counter for displaying the frequency.

The [radio has a specific band](#) of frequency that it catches and displays, and there is no memory regarding the frequency or auto-tuned channels in this radio. It has a built-in [power supply](#) operation, and there is no automatic antenna installed in it. The rig of the radio needs to be tuned frequently for perfect display and audio.

Changing the frequency with radio is possible because of the presence of rig. As far as its external look is concerned, it has a smart look that can be taken for trips. It is excellent regarding performance and frequency with the specific number of bands. Even though the number of bands is limited, but the frequency display is so much satisfaction that the limited number of bands is not a thing to worry about.



The range of frequency Kenwood TS 120s can handle is about 80 to 10 meters. It is considered one of the best HF transceivers. It is because its maximum output power with all the specific bands and the reception is excellent. Even though it can be classified as vintage, but it is still loved by many.

But there are a few common problems that occur with Kenwood TS 120s. If you are facing any of these, you can treat your radio like a pro by following these simple solutions.

## Problem with display needle

The most common problem that many of the Kenwood TS 120s use face is with the needle of the display band showing the frequency range of the radio. So, the meter shows the output range when it is operating on CW. When it is shifted to USB, then the needle does not move.



You can solve this problem yourself by attaching a microphone to your radio device and shifting the RF output on SSB. When you turn on CW, you get a full frequency of RF through your transmitting device. You need to keep an eye on your RF output. The other simple strategy you can adopt is by using a screwdriver and retightening all the screws present in the circuit board of the radio. A thorough cleaning is essential before rearranging the components together. It would get your needle back to normal working.

## Issues with unlocking from the lock loop panel

This is the most irritating issue ever caused by the Kenwood TS 120s. When the lock is unable to fit in its position, and resultantly there is a faulty display or improper display with some dots. So if you are facing the same issue with the frequency display of your device, you can try these simple techniques to get your frequency being displayed properly in no time.

This issue can easily be solved if you just warm up the loop lock panel. You can try this by switching to different frequencies and checking whether the lock fixes in position or not. The first frequency that you can try is 14 megahertz. Then consider turning off your radio and see if the lock is moved from its position.



The displacement of the lock from its initial position may be due to bad soldering done initially with the device. So, if you gently remove the old soldering and solder all the parts of the radio again, you can get your lock fixed in its position and device to proper working.

For the further setting of your loop lock panel, you need a voltmeter and simple hairdryer or any blow dryer that you have. So simply bring your hairdryer close to the boards in which the locks are not fitting properly. So whenever you heat the metal parts, the locks are fitted properly in place. But it is not a permanent solution.

Underneath the circuit board, an AF board produces the signal of the desired frequency that is then carried to the loop lock panel board. We need to open up and test the AF board. Connect the second pin with the frequency counter and a voltmeter with the loop lock panel board. The signal that it is about to transmit is about eight megahertz.



When the radio device is turned off, there is no frequency signal reaching the AF board. So, the frequency meter would show zero frequency. When you gently heat the metallic portion, the lock fits into its place perfectly, and the signal displayed by the frequency signal reader is about eight megahertz.

The other common for that can occur with your frequency not being displayed perfectly is the fault with the carrier board that it fails to oscillate properly due to the transistors having a low gain. For the board to access the loop lock panel perfectly, you need to remove the transistor. Now we need to fix the transistor and reinstall it back to your AF board.



Using the hairdryer, gently heat the transistor with it being connected with a tester. Note the gain required for the specific device and check the difference that the tester is

showing. While it is warmed up, the gain would slightly increase. If it does your task, then reinstall it back in the AF board. If not, then you can try installing a new transistor with your board having again higher than the previous one.

Now when you turn on your radio, you will see that all the locks are fitted perfectly in place, and the frequency band is being displayed correctly on the device. It shows that your Kenwood TS 120s has been fixed appropriately.

## Frequency display issues

Over time in Kenwood TS 120s, there is a common problem that RX works on all bands, but when you dial the frequency ranges, the display would disappear, and if you re-adjust the frequency dial, it would appear again.



The other problem with a device is that TX shows zero power, but sometimes it shows the full power of about 120 watts what the needle gets stuck and sometimes moves up and down rapidly. It makes quite a frustrating situation for the radio user.

You can fix this easily by doing a quick service of your Kenwood TS 120s radio device. So while you open up your radio device and look at the circuit board, you would see that there is another small board on the ultimate left side. It is the board that connects your RF. Disconnect it from the main circuit board and perform a manual cleanup of it. Then reinstall the board back into position.



For the issues with TX, you need to check the soldering of various components of your radio device. Generally, the soldering is done with components being inside out, so even the slightest vibration can fracture the soldering easily. You need to remove the old soldering and apply a good solder to reattach all the components of your radio together. It would solve the problem of your power display.