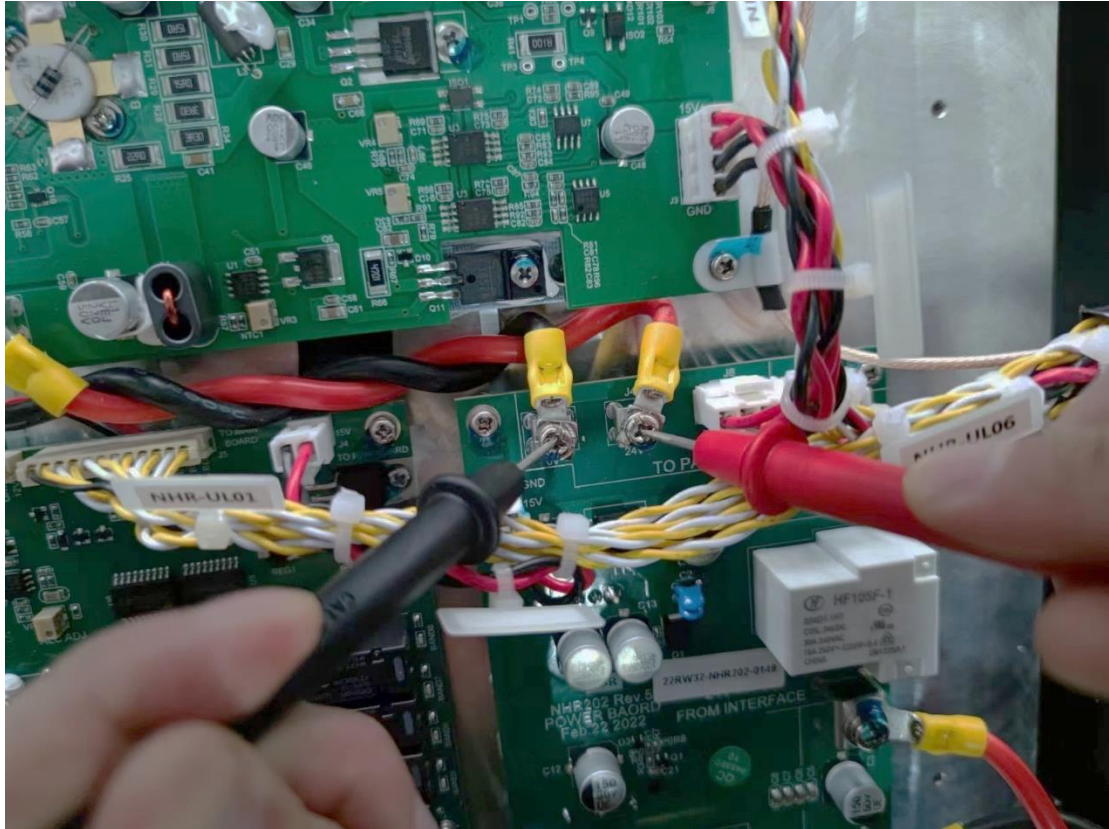


NHR-1500 transmitter power check

When enter the PTT and transmitter has no power output, please check power supply. If the power supply is ok but the issue still exists, please check as below.

1.Measure the PA voltage

Measure the voltage at NHR202 PCB, from the connector "TO PA"



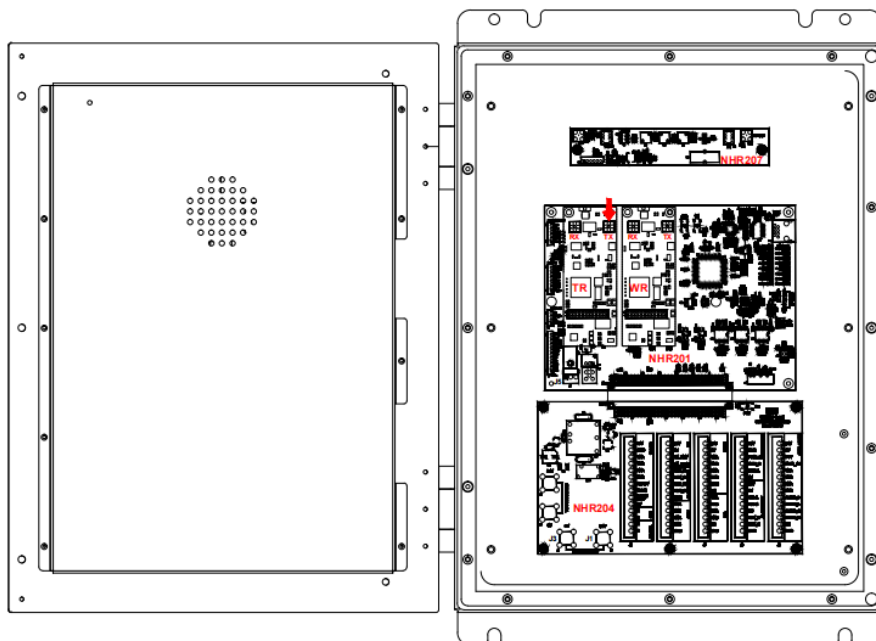
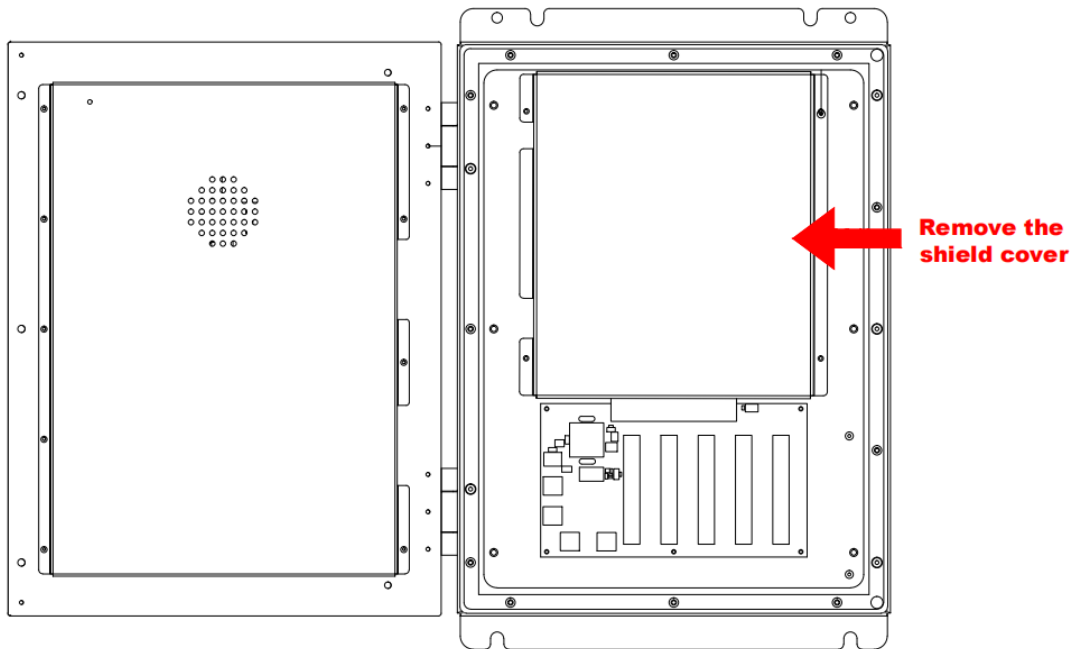
Press "TUNE" at control unit, the voltage to PA should be 24V DC.

If no 24V at PA power supply, the ISO1 at NHR201 PCB should be replaced by new.

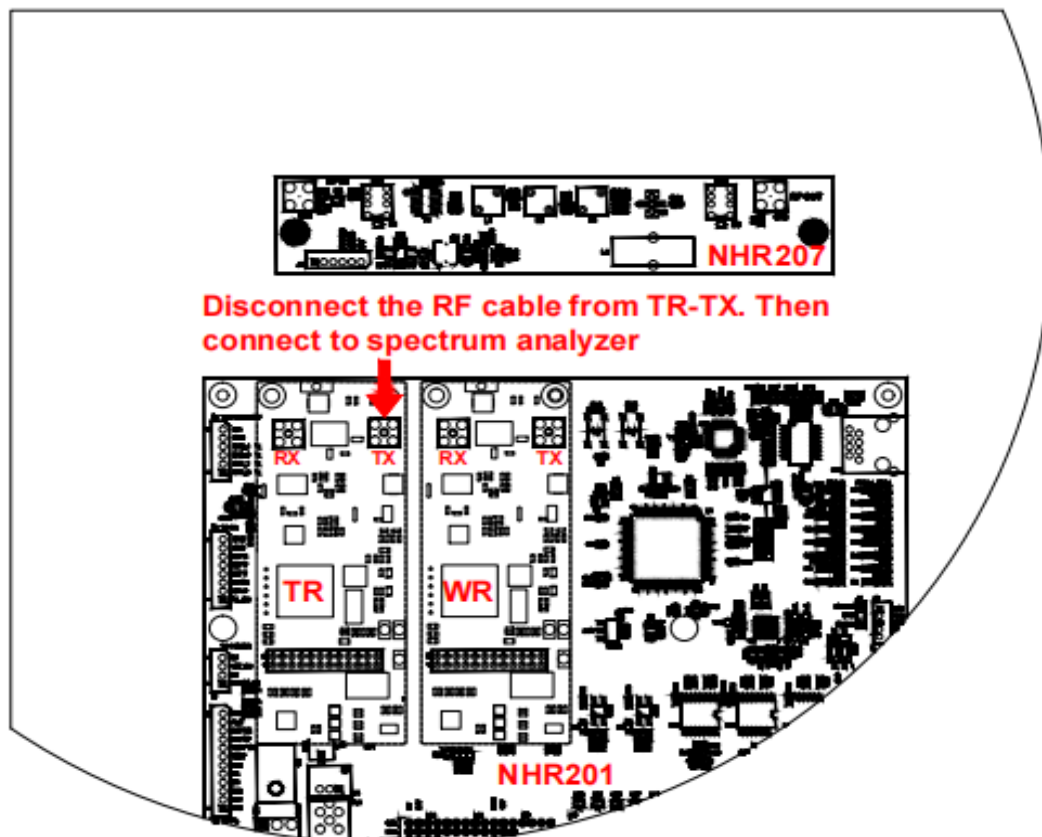


2.If 24V is OK, check as below.

Remove the shield cover, find the TR board on the NHR201.

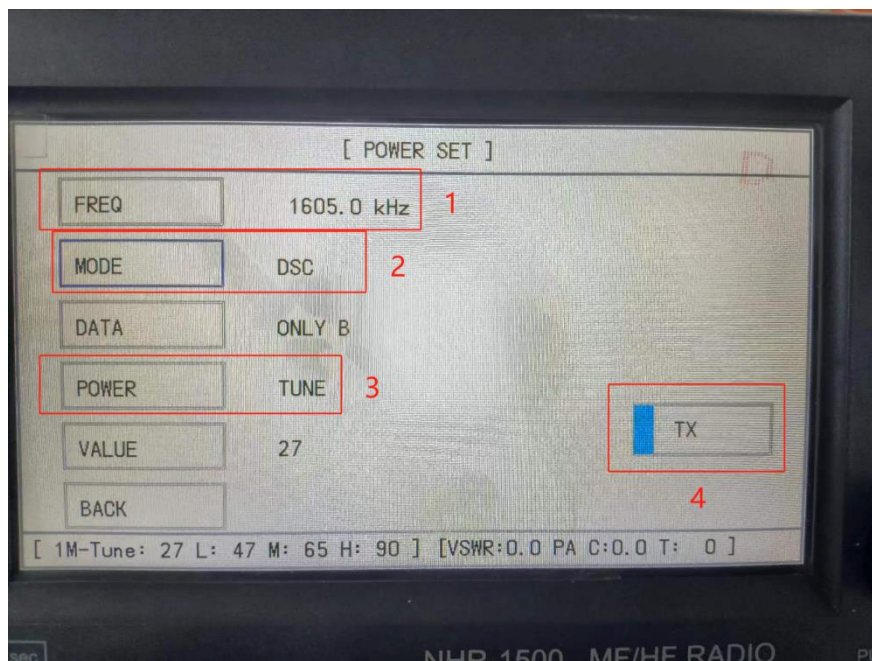


Disconnect the RF cable from TR board TX, then connect to spectrum analyzer (If spectrum analyzer is not available, oscilloscope may be used).

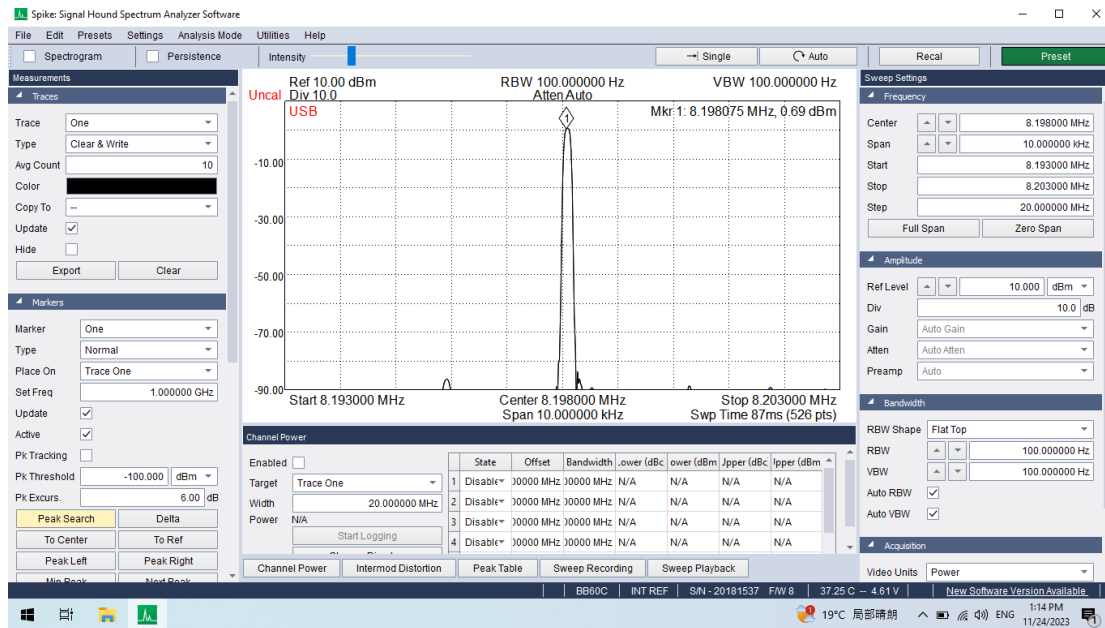


Enter **【MENU】** - **【SERVICE】** - **【ADVANCED】** - **【POWER SET】** with password **【77777777】**.

Set the Freq about 8MHz, set the **【MODE】** as DSC, set **【POWER】** as TUNE and then enter the **【TX】**.

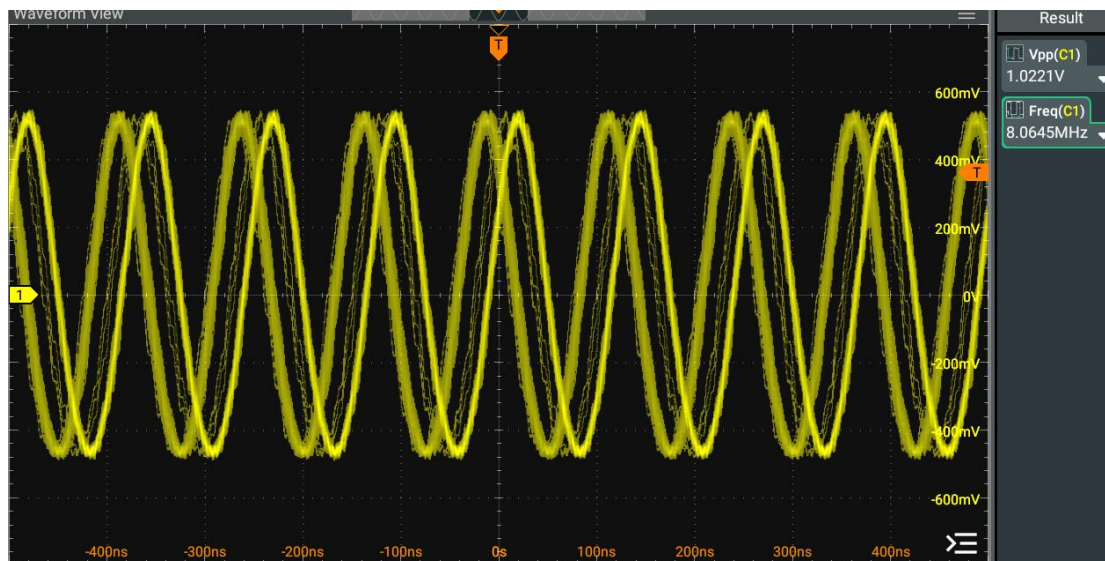


If the TR board is ok, we can see the waveform on spectrum analyzer as below.

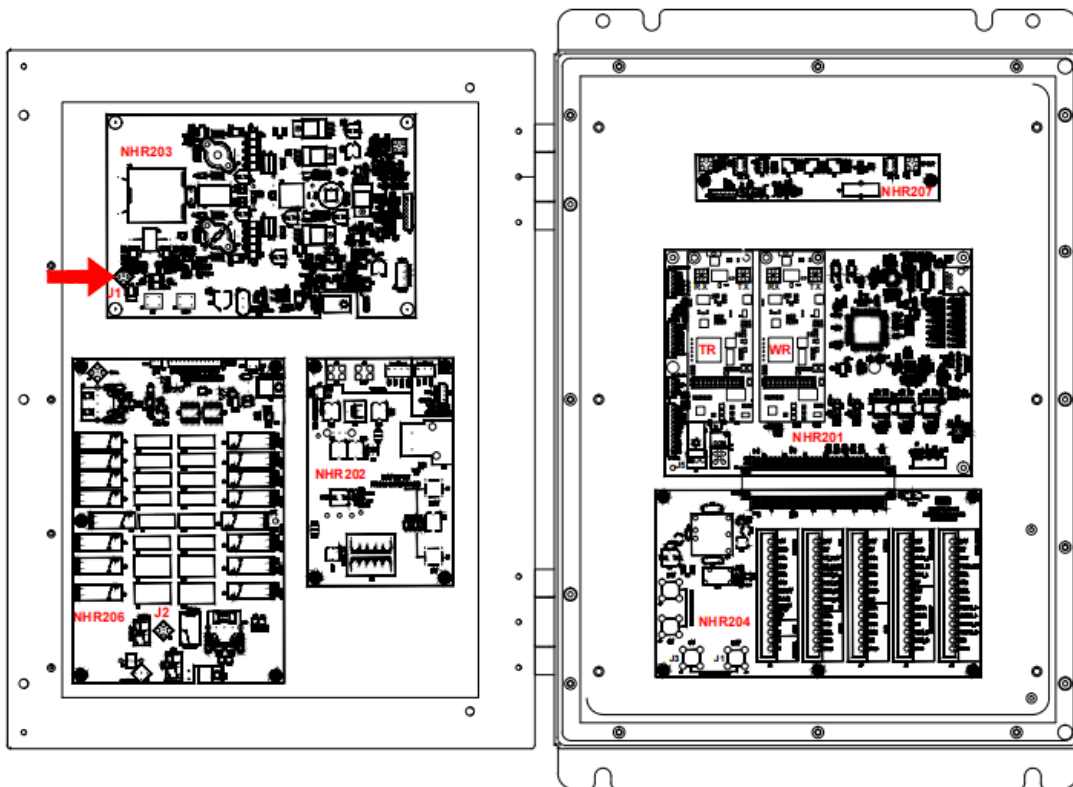


The amplitude is about 0dBm. If it's no power amplitude on spectrum analyzer, maybe the T/R board was damaged. If it's ok, check the next point.

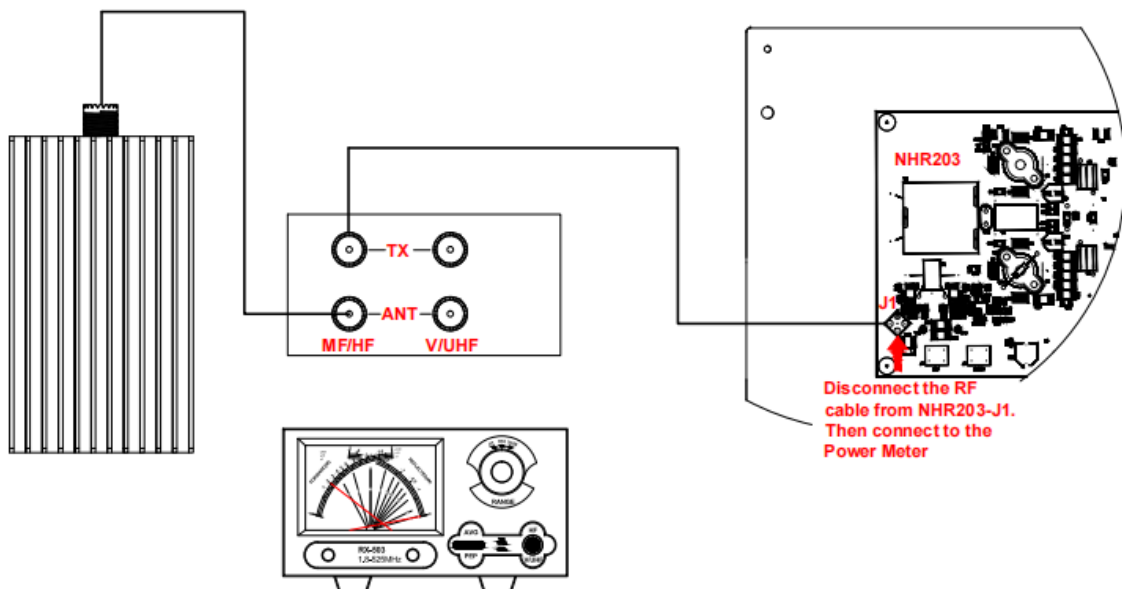
TX output at TR board, measured at oscilloscope. The Vpp should be around 1V, and Freq should be around 8MHz.



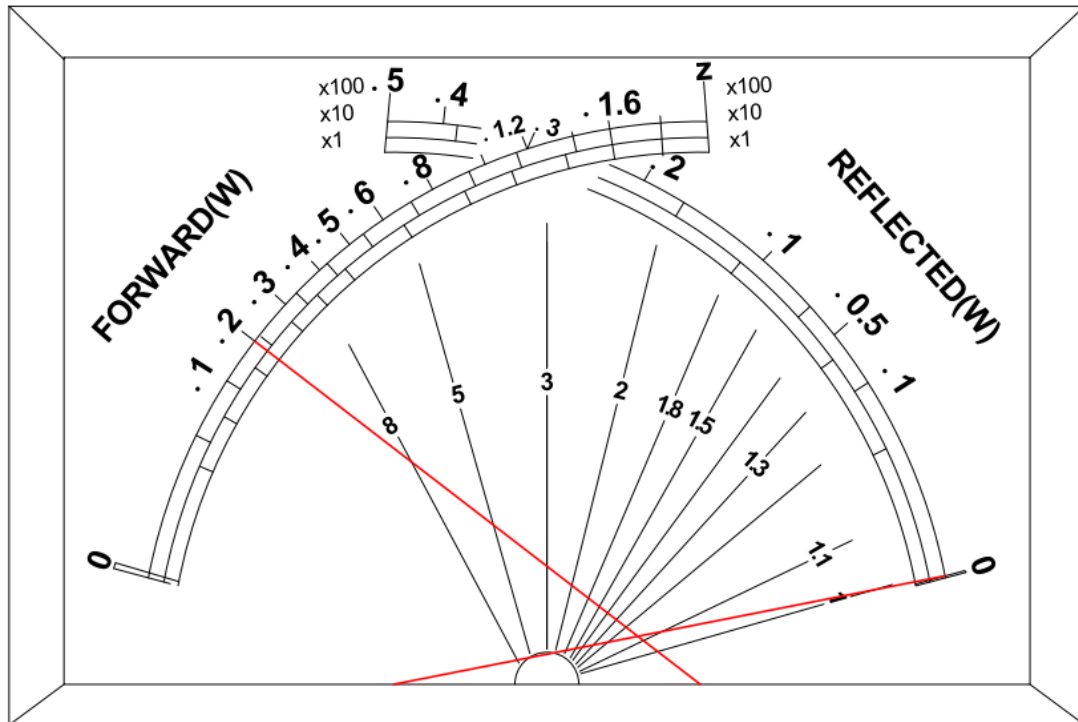
3. Stop the **[TX]** on the POWER SET screen. Disconnect from spectrum analyzer and turn back to connect the RF cable. Remove the shield cover.



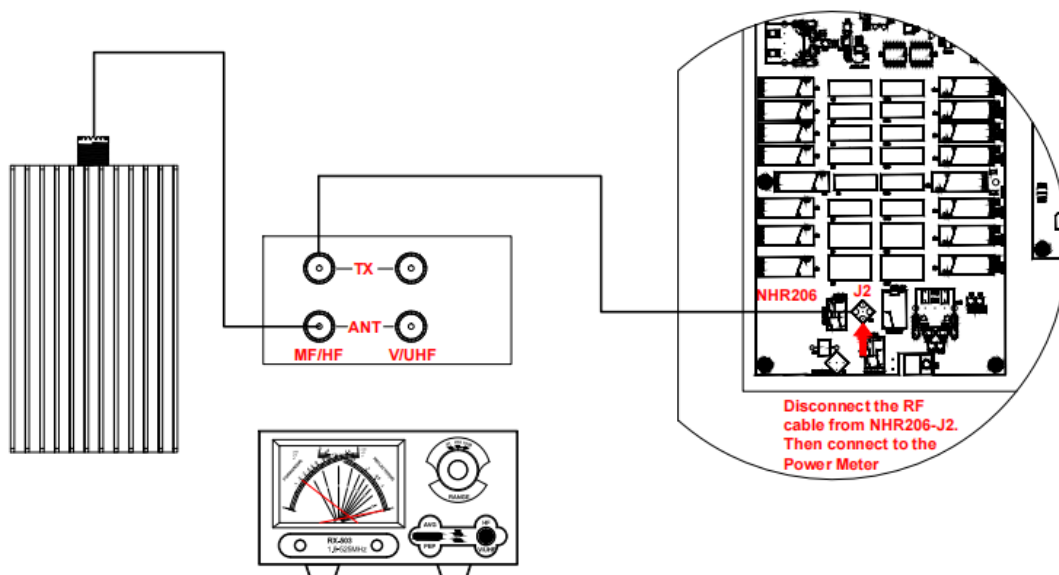
Find the J1 on NHR203, disconnect the RF cable. Then connect to the power meter and dummyload. Set the power meter as **[HF]** and chose **[PEP]** , set the range as **[x100]** .



Click the **TX** on the POWER SET screen. If the NHR203 is ok, the power meter show about 20W. If no power output, maybe NHR203 was damaged. If NHR203 is ok, disconnect the power meter and turn back to connect the RF cable .Stop **TX** on the POWER SET screen and check the next point.



4. Find the J2 on NHR206 and connect it on the power meter, then click **TX** on the POWER SET screen. If the NHR206 is also ok, the power meter show about 20W. If no power output, maybe NHR206 was damaged.



5. Stop **【TX】** on the POWER SET screen. Turn back the RF cable on J2. Connect the power meter on T/R port on transmitter then click **【TX】** on the POWER SET screen. Check the power meter, it should be 20W. If no power output, check the RF cable between the NHR206 J2 to T/R port on transmitter.

