

# **DS INSTRUMENTS TG6000 Tracking Generator User Guide**

Home » DS INSTRUMENTS » DS INSTRUMENTS TG6000 Tracking Generator User Guide



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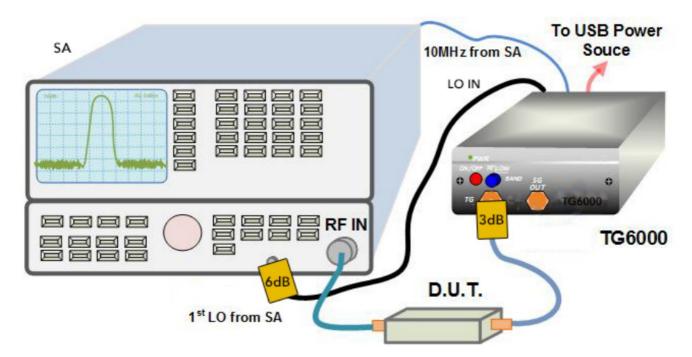
## **Contents**

- 1 INSTRUCTION FOR **USE**
- 2 Documents / Resources
  - 2.1 References
- **3 Related Posts**

### **INSTRUCTION FOR USE**

- 1. Check that the rear rotary switch is set for your device using the provided lookup table or our website.
- 2. Connect the 10MHz BNC jack on rear panel of 8566A/B to rear panel 10MHz MCX input of TG6000 with a COAX cable.
- 3. Connect the rear panel TG6000 "LO IN" SMA jack to the front panel 1st LO SMA jack of the 8566A/B. Use a short high quality coax cable.
- 4. Install a 3dB attenuator pad on the TG output SMA jack. (optional) This pad improves VSWR of TG output port. Note: for maximum dynamic range for TG6000, set 8566A/B internal attenuation to 0dB and use a 6dB pad on RF input of 8566A/B. Install your DUT between the 6dB pad and the 3dB pad.
- 5. Connect a coax cable from the 3dB pad on TG6000 Out port to the front panel RF input of the 8566A/B.
- 6. Turn on 8566A/B or your similar spectrum analyzer. Select DC to 2.5GHz operation via front panel button.
- 7. The 8566A/B should display normal noise floor as the TG6000 is off.
- 8. Connect the supplied USB cable to TG6000 rear panel jack. Connect the other end of the USB cable to any USB jack that is rated for standard USB current drive or use an AC to USB power adapter (not supplied). Note: The TG6000 does not need a PC to command it when used as a TG, it just needs a DC supply on USB port to power it. The TG6000 can be used with a PC for the purpose of changing the SG frequency on the SG Out front panel jack.
- 9. Make sure TG6000 front panel band select button is set to LB. (HB led is off)
- 10. 8566A/B should now display full band TG sweep as no DUT is between TG output and 8566A/B
- 11. Recommended settings of 8566A/B are 10KHz RBW with 100 to 250Msec sweep speed. This will cause an "uncal" message on 8566A/B as these settings would typically cause measurement errors for typical Spectrum Analysis operation of the 8566A/B. This is not the case in TG mode as the RBW filter does not need to "settle" as the TG signal is always inside it.

Fig. 1: Recommended 8566A/B Connections for TG6000



#### Notes:

- · Rear setup switch must be set before unit power-up
- Usage video is available here: <a href="https://www.youtube.com/watch?v=tQDoe9e0s1o">https://www.youtube.com/watch?v=tQDoe9e0s1o</a> (similar revision)

• More support: www.dsinstruments.com



### **Documents / Resources**



**DS INSTRUMENTS TG6000 Tracking Generator** [pdf] User Guide TG6000 Tracking Generator, TG6000, Tracking Generator, Generator

#### References

• DS Instruments Microwave Equipment – RF Signal Generators, Step Attenuators, Mixers, Switches...

Manuals+,