E8257D-17D

Modification Available Performance Enhancement Service Note

Supersedes: E8257D-17C

E8257D Analog Signal Generator

Serial Numbers: US00000000-US49287999, MY00000000-MY49287999, SG00000000-SG49287999

Instrument failing self-test 704

Parts Required:

P/N Description Qty.

NONE

ADMINISTRATIVE INFORMATION

[[]] Calibration Required PRODUCT LINE: 15
X Calibration NOT Required Calibration NOT Required AUTHOR: PY

ADDITIONAL INFORMATION:



Situation:

The self-test limits for A6 Frac-N to be updated to avoid possible faulty self-test failure 704. This applies for all instruments prefix <US4928/MY4928/SG4928 including units with Special Handling options HCC and HAR.

Solution/Action:

- 1. If you are experiencing self-test failure 704, verify the self-test limits by pressing: Utility > Instrument Information/Help Mode > Self-Test > View Test Info.
- 2. Using the RPG or the up and down arrow keys, scroll to self-test 704. Press: Run Highlighted Test.
- 3. When the self-test has completed, press: View Details. The lower limits for the following tests should be:

600-1000 MHz lower = 0.5 1-1.55 GHz lower = 0.5

1.55-2.4 GHz; lower = 0.5

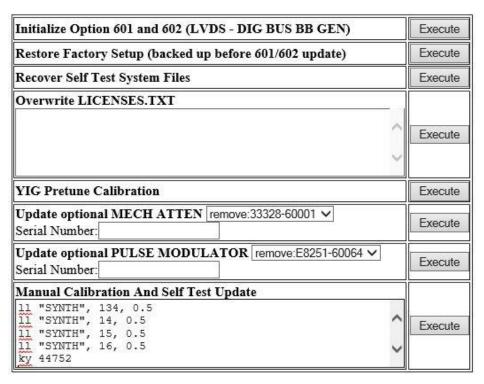
2.4-3.2 GHz; lower = 0.5

- 4. If the self-test limits are correct, continue to troubleshoot the problem using the troubleshooting procedure.
- 5. If the self-test limits are incorrect, first verify that the instrument has firmware equal or higher then C.06.17. If yes, proceed to step (7). If not, update to the latest firmware.
- 6. If after upgrade firmware and the self-test still fail, proceed with the step (7).
- 7. Connect the instrument to LAN, then press: Utility > GPIB/RS-232 LAN > LAN Setup > LAN Config set to DHCP > Proceed with Reconfiguration > Confirm Change (Instrument will Reboot).
- 8. After the instrument had power cycle, press: Utility > GPIB/RS-232 LAN > LAN Setup and record down the IP address.
- 9. Open a browser window and type in the instrument IP address/update (http://xxx.xxx.xxx/update)
- 10. Then enter the following text into the 'Manual Calibration And Self-Test Update' box.

ll "SYNTH", 13, 0.5 ll "SYNTH", 14, 0.5 ll "SYNTH", 15, 0.5 ll "SYNTH", 16, 0.5 ky 44752

System Update

WARNING: Do not use this page unless specifically instructed to do so by the Service Manual or a Service Note.



- 11. Press 'Execute' button next to the 'Manual Calibration And Self Test Update'.
- 12. When the update is completed, another webpage will be displayed with the message 'Operation completed'. To finish, power cycle the instrument and verify the limits have been updated using steps 1-3 above.
- 13. If the replacement E8251-60647 board version is having either A0100 or A0101, the following SCPI command is required to be send.
- 14. To check the board version, press: Utility > Instrument Information/Help Mode > Installed Board Info and look for 'FRACN' > Version.
- 15. Open a browser window and type in the instrument IP address/display (http://xxx.xxx.xxx.xxx/display)
- 16. Send the following command: :SERV:REPL:FRAC

SCPI command	:SERV:REPL:FRAC	SEND

17. Power cycle the instrument again and re-run the self test 704.

Revision History:

Date	Service Note Revision	Author	Reason for Change
21 August 2013	01	PY	Update to all affected Frac-N board for this self -test failure.
14 February 2017	02	SN	Update to include all affected Frac-N board for this self-test failure applies to all instruments including units with options HCC and HAR.
24 October 2019	03	PY	Update the serial number prefix and add 1 lower level limit to be updated (600-1000MHz). Additional steps required for Frac-n with Version A0100 or A0101.
18 November 2019	04	PY	Update "Manual Calibration And Self-Test Update" information.