Anritsu - GRL

USB 3.1 Rx Test Application

Release Note

Sixth Edition

This software is released for USB 3.1 Rx Test.

Table of Contents

1. Released Software

The certificate software versions for Keysight Scope are shown in the table.

Keysight

Edition	GRL USB3.1 Rx Test Application	Anritsu MX190000A	Anritsu MX183000A	Scope
06	V1.00.149	V4.03.12	V4.03.15	DSAZ634A V06.40.00714
05	V1.00.143	V4.03.12	V4.03.15	DSAZ634A V06.40.00714
04	V1.00.138	V4.03.12	V4.03.15	DSAZ634A V06.40.00714
03	V1.00.116	V4.03.12	V4.03.15	DSAZ634A V06.40.00714
		V4.02.10	V4.02.10	
02	V1.00.116	V3.00.05	V3.06.16	DSAZ634A V06.20.01101
01	V1.00.116	V2.05.08	V3.04.09	DSAZ634A V06.00.01001

Tektronix

Edition	GRL USB3.1 Rx Test Application	Anritsu MX190000A	Anritsu MX183000A	Scope
06	V1.00.149	V4.03.12	V4.03.15	DPO75902SX V10.0.8.138
05	V1.00.143	V4.03.12	V4.03.15	DPO75902SX V10.0.8.138

2. Peripheral Devices

The peripheral devices for the application are shown in the table.

Model	Name
MP1900A	Signal Quality Analyzer-R
MU181000B	12.5GHz 4port Synthesizer
MU181500B	Jitter Modulation Source
MU195020A	21G/32G bit/s SI PPG
MU195040A	21G/32G bit/s SI ED
MU195050A	Noise Generator

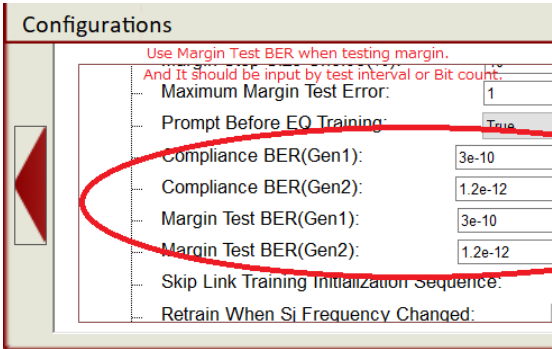For the installation position of the mainframe, refer to the Anritsu website (https://www.anritsu.com).

3. Added Functions

Version	Description
V1.00.143	Supports Tektronix scope

4. Bug Fixes
None

5. Remaining Known Bugs

Version	Item (Management Number)	Issue
V1.00.116	A bug causing Margin Test to refer to a wrong parameter.	Though Margin Test for Gen1/2 should refer to the **Margin Test BER** value as the threshold, it refers to the **Compliance BER** value.

6. Usage Notes

The precautions for using each version are described below.

6.1 How to set SigTest version and template files

To change the versions of SigTest used for calibration, edit the following version numbers.
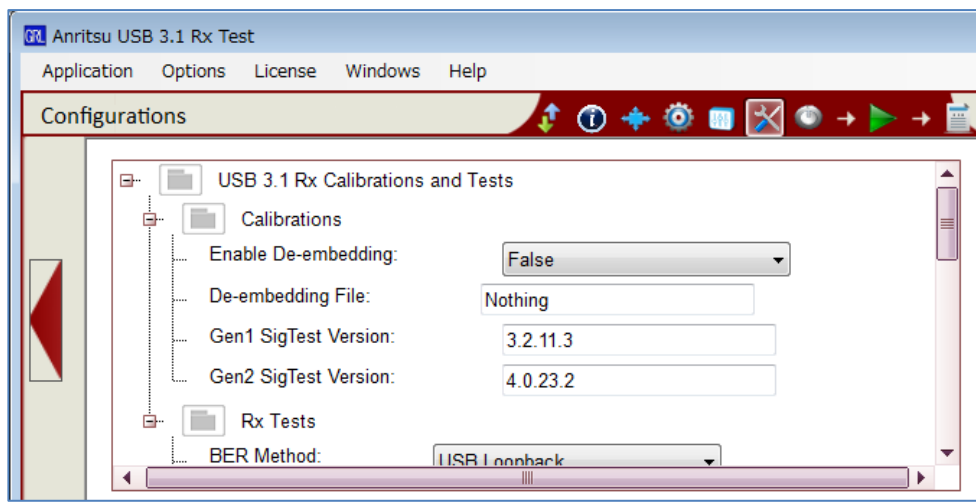
SigTest template depends on the file in:
C:\GRL\Rx Test Solution\Applications\USB3_1_AN_RxTest\SigTestPathSetup

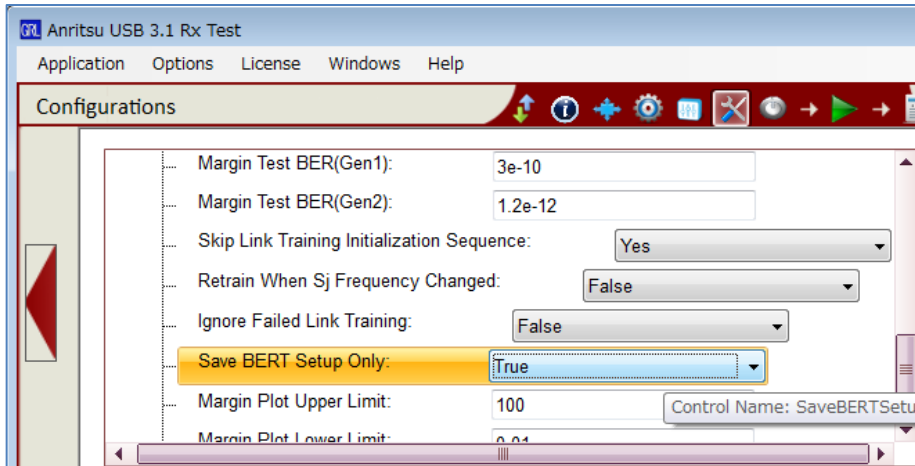To change template files, edit file names in this text file.

6.2 How to save calibration results to BERT

1. Set **Save BERT Setup Only** to **True**.

2. On the **Select Tests** tab, expand **Rx Tests**, and then **Gen1** and **Gen2**, and select the **Compliance Tests** check boxes.
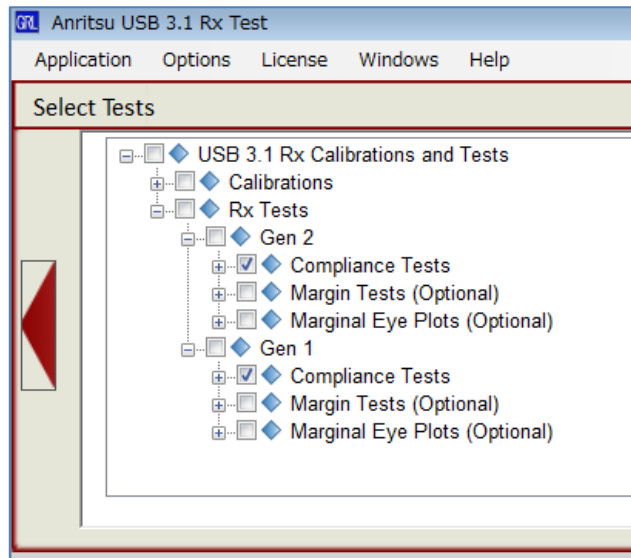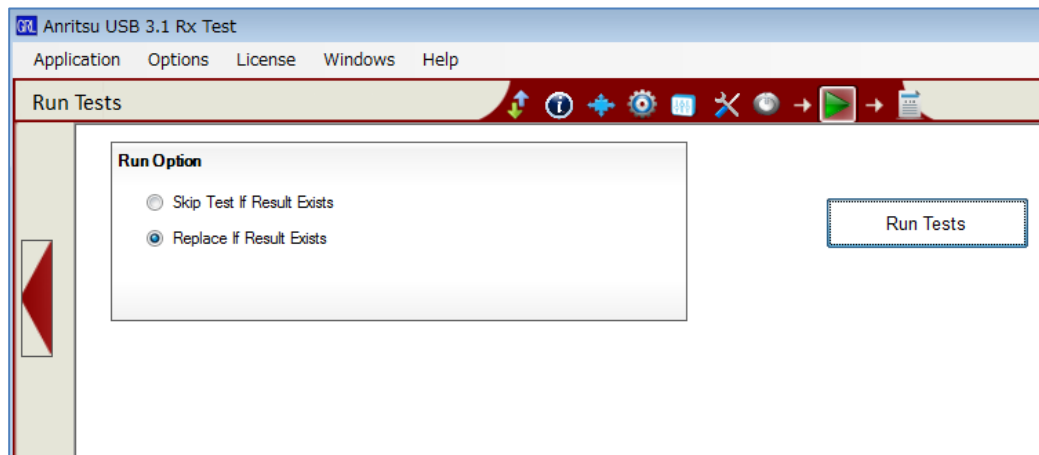
3. Click **Run Tests** to start saving calibration results.

The directory to save created Quick Save files is:

C:\Configurations\Anritsu USB 3.1 Rx Test

Final_Setting_LONG_Gen1_5G__S1~8.CND

Final_Setting_LONG_Gen2_10G__S1~9.CND

Final_Setting_SHORT_Gen1_5G__S1~8.CND

Final_Setting_SHORT_Gen2_10G__S1~9.CND
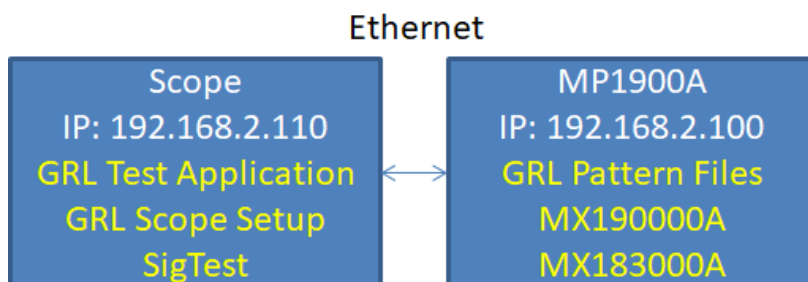
6.3 Note on Coaxial Cable Connection

When an unexpected error occurs during calibration or test, check the coaxial cable connection first. Due to the complex connection, POS and NEG are very easy to mistake. Improper connection causes an unexpected error.

Appendix

   A. Quick Startup Guide

      1. Connect instruments with Ethernet cables as shown below.
      2. Set the IP addresses as shown below. These can be set in the Network and Sharing Center (Windows OS feature).
      3. Install all applications as shown below (Yellow letters).

-   Recommended connection

Ethernet

Scope	MP1900A
IP: 192.168.2.110	IP: 192.168.2.100
GRL Test Application	GRL Pattern Files
GRL Scope Setup	MX190000A
SigTest	MX183000A

      4. Launch application and configure equipment settings.
Enter the scope address as below, and click ⚡. If the setting and connection are correct, the button will turn green.
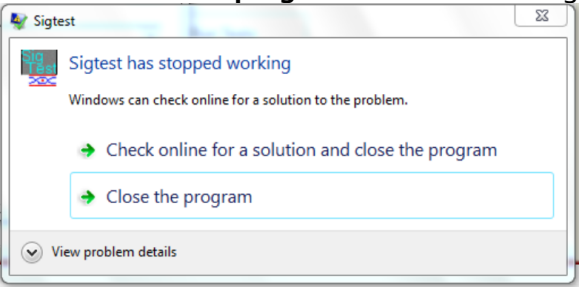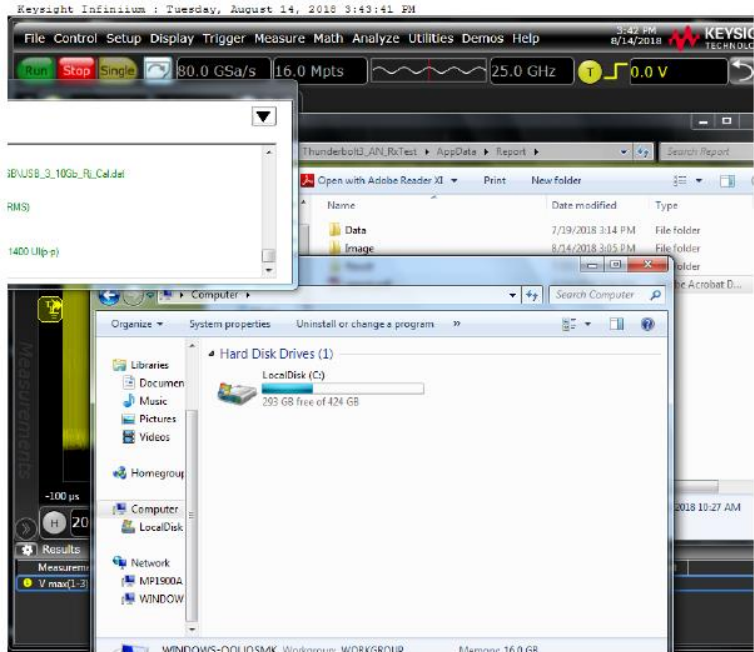
      IP address and port setting examples
       Scope: TCPIP0::localhost::inst0::INSTR
       MP1800A/MP1900A: TCPIP0::192.168.2.100::5001::SOCKET*
       MX183000A: TCPIP0::192.168.2.100::5000::SOCKET*
       * Port numbers should be set for MX190000A and MX183000A.

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B. Troubleshooting

If you encounter any errors during calibration or testing, check as follows.

| Problems	Description
A SigTest error message is displayed when calibrating EH/EW.	Sometimes a SigTest error message is displayed and SigTest has stopped working when calibrating EH/EW. Click on **Close the program** when the message is shown.
Waveform screenshots in a report include other software windows.	Other software windows are overlapping the waveform images. When operating other software, using an external display is recommended.
DE/PS calibration failure SJ, RJ calibration failure Final EH/EW calibration failure	➢ Check the RF connections. Especially, the connection polarity (Pos/Neg) and the trigger connection (PPG Aux Out) are easy to mistake. ➢ Check the software version. A different version of software may cause an unexpected error. ➢ Check the SigTest version. To confirm the latest version of SigTest, visit the USB-IF website (http://www.usb.org/developers/tools/#sigHSETT).

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For more information, refer to the following documents:

M3T-1ETMP1900A0016 - USB3.1_Compliance_Test_Demo_Guide.pptx

M3T-1QAMP1900A0237 - MP1900A USB Link Training Troubleshooting Guide_00.docx

Debug Log would be helpful to isolate the cause of the issue.
On the **Windows** menu, select **Debug Log**.
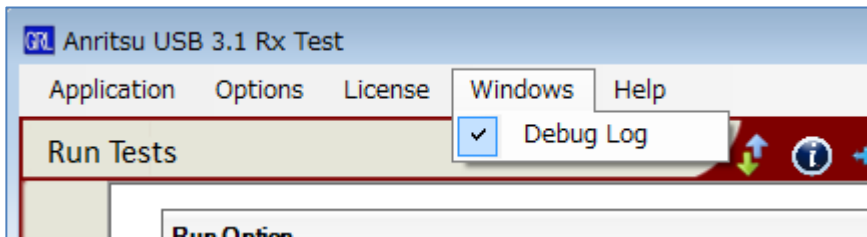
To resolve the issue, copy the following messages and send them to Service Infrastructure Solutions Division.