

Keysight E4980A/AL Precision LCR
Meter

E4980A/AL Data Transfer Program Operation Manual

July 2018

Notices

The information contained in this document is subject to change without notice.

This document contains proprietary information that is protected by copyright. All rights are reserved. No part of this document may be photocopied, reproduced, or translated to another language without the prior written consent of Keysight Technologies.

Microsoft®, MS-DOS®, Windows®, Visual C++®, Visual Basic®, VBA® and Excel® are registered trademarks of Microsoft Corporation.

© Copyright 2011-2018 Keysight Technologies

Sample Program

The customer shall have the personal, non-transferable rights to use, copy, or modify SAMPLE PROGRAMS in this manual for the customer's internal operations. The customer shall use the SAMPLE PROGRAMS solely and exclusively for their own purpose and shall not license, lease, market, or distribute the SAMPLE PROGRAMS or modification of any part thereof.

Keysight Technologies shall not be liable for the quality, performance, or behavior of the SAMPLE PROGRAMS. Keysight Technologies especially disclaims any responsibility for the operation of the SAMPLE PROGRAMS to be uninterrupted or error-free. The SAMPLE PROGRAMS are provided AS IS.

KEYSIGHT TECHNOLOGIES DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Keysight Technologies shall not be liable for any infringement of any patent, trademark, copyright, or other proprietary right by the SAMPLE PROGRAMS or their use. Keysight Technologies does not warrant that the SAMPLE PROGRAMS are free from infringements of such rights of third parties. However, Keysight Technologies will not knowingly infringe or deliver software that infringes the patent, trademark, copyright, or other proprietary right of a third party.

1. General information

Overview of the program

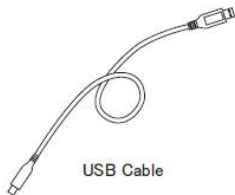
This program (a VBA macro for Microsoft Excel®) transfers the list sweep measurement data from the E4980A/AL to a PC.

Supported model

Model
E4980A/AL Precision LCR Meter

Required equipment

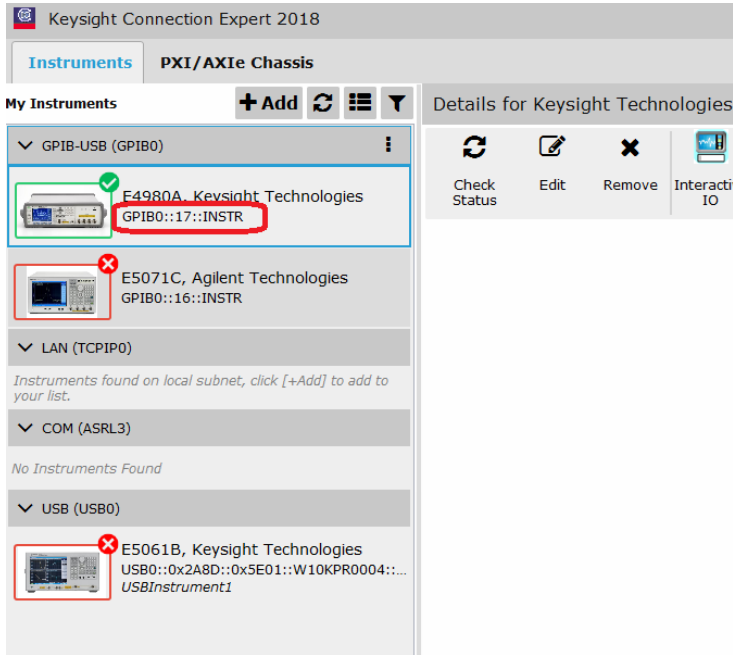
- Personal computer
 - * Microsoft Excel® installed
 - * Keysight I/O Libraries Suite 16 or higher installed
- Connection cable (Use either one of the following cables)
 1. USB cable (type mini-B for E4980A/AL side and type A male for PC side, furnished as an E4980A/AL standard accessory)



2. Keysight 82357A or 82357B USB/GPIB Interface
3. LAN cable

2. Connection configuration through Keysight Connection Expert

1. Run Keysight Connection Expert from the start menu on Windows.
2. Connect the E4980A/AL and the PC using either USB cable, LAN or USB/GPIB interface. Then the connection will be automatically configured. After the connection is properly configured, the E4980A/AL appears on “My Instrument” pane of Keysight Connection Expert as shown in the figure below.



3. How to use the program

1. Set the measurement conditions for the list sweep, then perform the compensation. The E4980A/AL can sweep frequency, test signal level, DC bias signal level, DC source level up to 201 points with the list sweep function by pressing **Meas Setup** hardkey > **LIST SETUP** softkey.

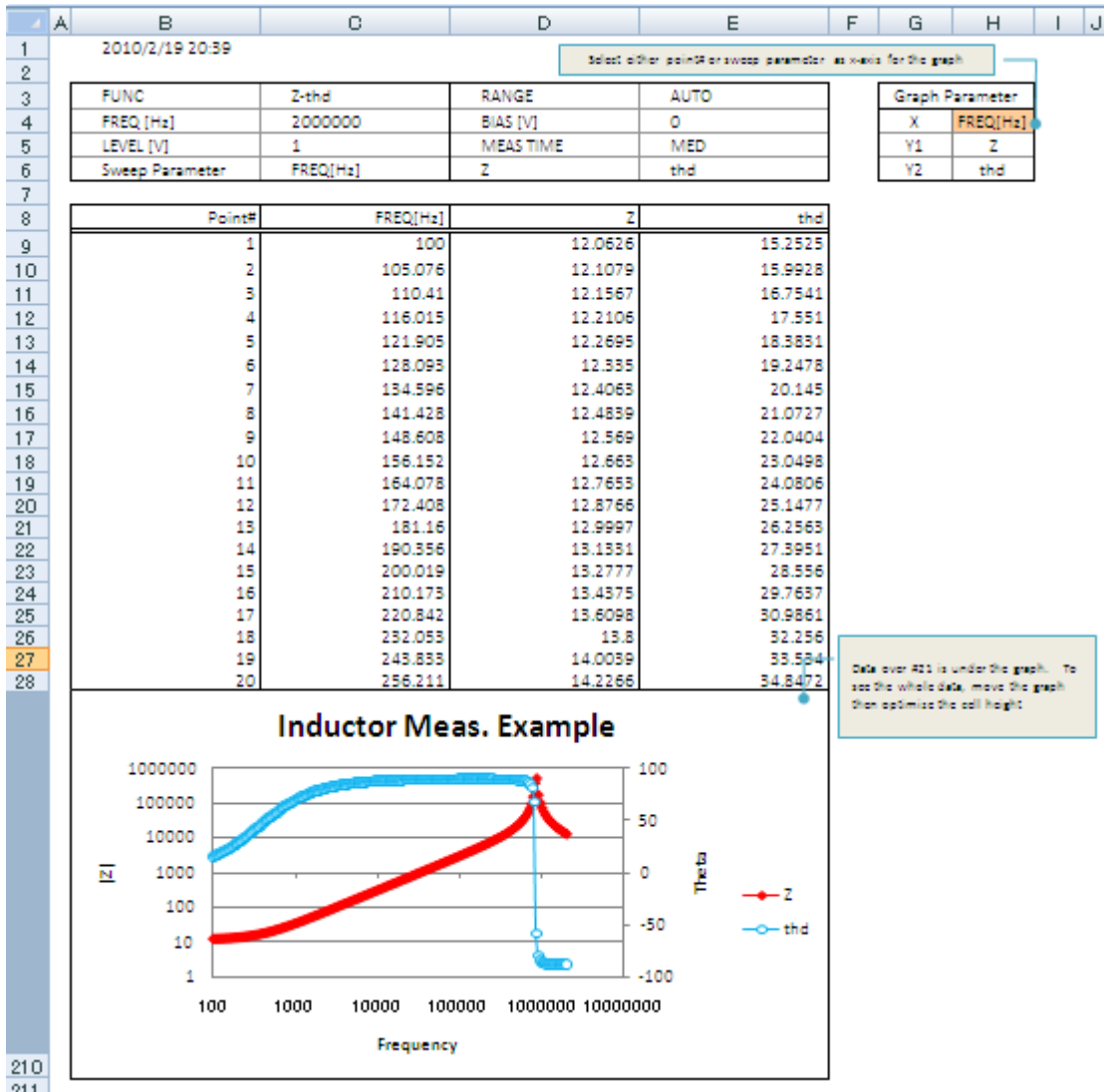
◀LIST SWEEP SETUP▶					MEAS SETUP
MODE	SEQ	LMT	LOW	HIGH	CORRECTION
No.	FREQ[Hz]				LIMIT TABLE
1	100	-	---	---	LIST SETUP
2	105.076	-	---	---	
3	110.41	-	---	---	
4	116.015	-	---	---	
5	121.905	-	---	---	
6	128.093	-	---	---	
7	134.596	-	---	---	
8	141.428	-	---	---	
9	148.608	-	---	---	
10	156.152	-	---	---	

Use softkeys to select

2. Set the trigger to manual mode by pressing **Meas Setup** hardkey, then cursor down to the **TRIG** field to select **MAN**

<MEAS SETUP>		USER COMMENT		
FUNC	Z-θd	RANGE	AUTO	INT
FREQ	2 MHz	BIAS	0 V	MAN
LEVEL	1 V	MEAS TIME	MED	
TRIG	MAN	AVG	1	EXT
ALC	OFF	VDC MON	OFF	
DCR RNG	AUTO	IDC MON	OFF	BUS
DCI ISO	OFF	TRIG DLY	0 s	
DCI RNG	200 μA	STEP DLY	0 s	
DC SRC	0 V	BIAS POL	FIX	
DEV A	OFF	REF A	0 Ω	
B	OFF	B	0 deg	
Use softkeys to select				

3. Perform the single trigger measurement with the DUT by pressing **Display Format** hardkey > **LIST SWEEP** softkey > **Trigger** hardkey
4. Open "E4980A/AL_DataTransfer_xxxx.xls" on the PC. Since this file contains macros, enable "Macros" to boot the program, then follow the "Step-1" and the "Step-2" in the "Main" sheet.
5. On the newly created sheet, choose the graph parameter to show the graph properly (X/Y-axis are changed to Log format in the example below)



Revision History

Revision	Date	Description
01.30	2018/6/14	- Supports LAN as well.
01.20	2011/7/5	- Function added to return to local mode automatically - Function added to show measurement mode as graph title - Evaluated under Windows 7 and Excel 2010 environment - Other minor improvements implemented
01.00	2010/2/22	Initial revision