Installation Note

Agilent Technologies ESA-E Series Spectrum Analyzers and EMC Series Analyzers Time-Gated Spectrum Analysis (Option 1D6) Retrofit Kit



Agilent Technologies

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Time-Gated Spectrum Analysis Retrofit Kit (Option 1D6)

Products Affected:	ESA E4401B	EMC E7401A
	ESA E4402B	EMC E7402A
	ESA E4404B	EMC E7403A
	ESA E4405B	EMC E7404A
	ESA E4407B	EMC E7405A
Serial Numbers:	US00000000/US99999999	
Options:	1D6	
To Be Performed By:	(X) Agilent Service Center	
	(X) Personnel Qualified by Agilent	
	(X) Customer	
Estimated Installation Time:	0.5 Hours	

Introduction

This kit contains the parts and instructions to install Option 1D6. No tools are required.

Installation Kit Parts List

Item	Description	Item Number
1	Time-Gated Spectrum Analysis Installation Note	this note
2	Option Upgrade Entitlement Certificate	---

Procedure

CAUTION Electrostatic discharge (ESD) can damage or destroy electronic components. All work on electronic assemblies should be performed at a static-safe workstation. Refer to the documentation that pertains to your instrument for information about static-safe workstations and ordering static-safe accessories.

Firmware Revision Verification

1. Turn on the analyzer and wait for the power-on alignments to complete. Check that there are no error messages displayed.
2. Press **System**, **More**, **Show System**. Make a note of the firmware revision and see if Option B72, Expansion Memory, is listed on the display.
3. If the firmware revision is A.04.00 or later, the firmware does not need to be upgraded and you can skip steps 4 through 6.
4. If your firmware revision is prior to A.04.00, you must upgrade your analyzer firmware before the license key can be activated.
5. If Option B72, Expansion Memory is installed, you should upgrade the instrument firmware to the latest version using one of the following methods:
   - Download the instrument firmware via the world-wide web at http://www.agilent.com/find/esa_firmware. This entire process of upgrading firmware will take approximately 45 minutes.

     Note: If you are upgrading an EMC analyzer, look for the link stating "*EMC Firmware*" at this website.
   - Receive the latest firmware upgrade disk set by ordering upgrade Option UE2.

     Note: Special instructions in the Agilent ordering configurator should have made you aware of Option UE2 in case access to the internet wasn't available.
6. If Option B72, Expansion Memory is not installed, you should upgrade the instrument firmware to version A.07.05. This is the latest version for instruments that do not have Option B72 installed.
   - Download the instrument firmware via the world-wide web at http://www.agilent.com/find/esa_firmware. Look for the link stating "*ESA Firmware Version A.07.05*". This entire process of upgrading firmware will take approximately 45 minutes.
   - Order upgrade Option B72, which includes the expansion memory and the latest ESA firmware upgrade disk set.

Obtaining a License Key and Activating the Option

The entitlement certificate supplied in this kit allows you to obtain a license key from our Agilent website so you can enable this upgrade option. Once you have retrieved the license key, you can begin the process of activating the option

1. Press **System**, **More**, **More**, **Licensing**, **Option**. When you press **Option**, the alpha editor will be activated. For instructions on using the alpha editor, refer to the analyzer User's Guide.
2. Use the alpha editor to enter the three-character designation for the option, in this case, "1D6", that you want to activate.
3. Press **Enter** when done.
4. Press **License Key**. When you press **License Key** the alpha editor will be activated.
5. Use the alpha editor and the numeric keypad to enter the 12-character license key number (for example: D7C374DABD5B) for the option that you want to activate.
6. Press **Enter** when done.
7. Press **Activate** to turn on the option.
8. If the option and license key entries were correct, a message stating "`Option Activated`" will appear on the analyzer display.

Functional Testing

1. Press **System**, **More**, **Show System** to verify existence of Option 1D6.
2. Press **Sweep**. You should see **Gate On Off** and **Gate Setup** in the softkey menu.
3. To test the functionality and performance of this option, execute the following performance verification tests located in the analyzer Calibration Guide.
   - "Gate Delay Accuracy and Gate Length Accuracy"
   - "Gate Mode Additional Amplitude Error"
4. If you have problems performing either of these tests, contact the nearest Agilent Technologies sales and service office listed in the troubleshooting chapter of the analyzer User's Guide.