

# Installation Note

---

## **Agilent Technologies ESA-E Series and ESA-L Series Spectrum Analyzers Firmware Upgrade Kit (Option UE2)**



**Agilent Technologies**

Part Number E4401-90343 Supersedes: E4401-90340

Printed in USA February 2002

**Notice.**

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

Agilent Technologies makes no warranty of any kind with regard to this material, including but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Agilent Technologies shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

## Firmware Revision Upgrade Kit (Option UE2)

Products Affected: .....	ESA E4401B ESA E4402B ESA E4403B ESA E4404B ESA E4405B ESA E4407B ESA E4408B ESA E4411B
Serial Numbers:.....	US00000000/US99999999 MY00000000/MY99999999
Options: .....	UE2
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 the Firmware upgrade. No tools are required.

### Option UE2 Firmware Upgrade Kit Contents

Item	Quantity	Description
1	1	Firmware Installation Disk Set
2	1	Installation Note
3	1	ESA CD-ROM documentation set

---

## 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.

---

**NOTE** The enhanced memory option (Option B72) is required to upgrade to firmware revision A.08.00 and later. Option B72 is standard on all analyzers with serial number MY41440000 and higher, or US41440000 and higher. If your analyzer does not have Option B72, perform the Option B72 upgrade instead of the firmware upgrade. A firmware upgrade is part of the Option B72 upgrade process.

If cdmaOne (Option BAC) or Phase Noise (Option 226) is installed, *and* you are upgrading from a firmware revision prior to A.07.00, you may need to upgrade these personalities after you have completed the firmware upgrade (as described in step 12).

---

1. Insert the ESA LOADER Disk in the floppy drive located under the hinged cover on the right-hand side of the analyzer.
2. Plug in the analyzer and turn it on. The firmware loading utility automatically loads from the disk.  
If the analyzer does not have enhanced memory (Option B72), a message is displayed that indicates there is insufficient memory to perform the upgrade.
3. Follow the instructions on the analyzer display for installing the new firmware. It takes approximately 5 minutes to load each disk.
4. After you cycle power, if the analyzer does *not* have the latest version of Power Suite, you will be prompted to insert the Power Suite disk. If you do not receive this prompt, go to step 8.
5. Insert the ESA POWER SUITE Disk into the analyzer floppy drive.
6. Press **Okay**.  
The Power Suite measurement software installs into the instrument; it takes about 15 minutes to load. A status bar on the display informs you of the installation progress.
7. When the installation completes, remove the ESA POWER SUITE Disk from the floppy drive, and press the green **Preset** key on the front panel.
8. For all analyzers except models E4401B and E4411B, connect a BNC cable from the **AMPTD REF OUT** to **INPUT**.
9. Press **System, Alignments, Align Now, All**.  
Wait until the alignment process is finished. The analyzer performs three complete alignment sequences.
10. The firmware upgrade procedure is now complete. To verify the new firmware revision, press **System, More, Show System**. The fifth line of the list shows the current firmware revision, which should now be the version labelled on the installation disks.

11. To return to the analyzer display, press **ESC**.
12. If the analyzer has cdmaOne (Option BAC) or Phase Noise (Option 226) installed, follow the instructions in the option (BAC or 226) user's guide to upgrade these measurement personalities now. You can download the latest version of these personalities from the following URL:

<http://www.agilent.com/find/esa>