

S E R V I C E N O T E

SUPERSEDES: 8560E-04K

**8561E Portable Spectrum Analyzer**

**Serial Numbers:** See Below

**Firmware Upgrade Kit and Information**

Duplicate Service Notes:

8560E-04L	Serial Numbers: 0000A00000 / 3745A03343
8561E-03L	Serial Numbers: 0000A00000 / 3745A02170
8562E-03F	Serial Numbers: 0000A00000 / 3745A00609
8563E-04L	Serial Numbers: 0000A00000 / 3745A08208
8564E-01K	Serial Numbers: 0000A00000 / 3745A01071
8565E-01K	Serial Numbers: 0000A00000 / 3745A00837

**To Be Performed By:** Agilent Technologies Qualified Personnel, Customer

**Parts Required:**

Firmware Upgrade Kit 08560-60090.  
May also require EEROM Upgrade Kit 5063-0669 or A2 Controller Kit 08563-60058.  
8561E with prefix 3329A and below which have firmware 930226 or earlier will also need to have the A14 Frequency Control assembly changed to 08561-60055 or later.

*Continued*

DATE: November 1999

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:

**MODIFICATION AVAILABLE**

ACTION CATEGORY:	AGREEABLE TIME	PERFORMANCE ENHANCEMENT SERVICE/RELIABILITY ENHANCEMENT
LOCATION CATEGORY:	CUSTOMER INSTALLABLE ON-SITE SERVICE CENTER	AVAILABLE UNTIL: Product Support Life
AUTHOR: GPB	ENTITY: 5320	ADDITIONAL INFORMATION:



**Situation:**

Later versions of instrument firmware sometimes are implemented to improve instrument performance and reliability. Depending on the vintage and model of the instrument, certain hardware upgrades may also be necessary to make the latest firmware compatible. Firmware revisions 971024 and later are Y2K compliant.

**Solution / Action:**

A firmware upgrade kit has been set up for Agilent 8560E series Portable Spectrum Analyzers. The kit contains six programmed UVEROMs (four for the instrument and two for the Test and Adjustment Module, an installation note, firmware note and a software disc (Table 1). Table 2 describes the firmware revision history and the individual part numbers for the firmware ICs. Tables 3 and 4 list the contents of the hardware upgrade kits which may also be needed. The software included with the kit is used to rewrite data to the instrument's EEROM. This is needed to make room in the memory for the Additional flatness correction points and option information that the revision 930226 and later firmware require. An HP series 700 workstation is required to run the software. (Do not use the software if no hardware retrofits are required.)

If the CPU clock speed of the analyzer to be upgraded is 8 MHz, the A2 Controller Assembly Upgrade Kit will be needed. (If this kit is used, it is unnecessary to purchase the firmware kit as the new firmware is included.) The new controller will have a 16 MHz clock. Instruments with serial prefixes less than 3310A were originally shipped with 8 MHz clocks. To verify the clock speed (in case the controller has already been changed), press [PRESET], [SPAN], 1 kHz. If the annotated sweep time is 477 ms, the clock is 16 MHz. If the annotated sweep time is 740 ms, the clock is 8 MHz. Table 4 lists the contents of the A2 Controller Kit, part number 08563-60058. If the analyzer clock speed is 16 MHz, and the current firmware revision is earlier than 940210, then the EEPROM Upgrade Kit must be installed. This kit requires some soldering. The kit part number is 5063-0669 and its contents are listed in Table 4. This kit is not needed in 8562E, 8564E and 8565E analyzers.

**Table 1: 08560-60090 Firmware Upgrade Kit Contents**

Description	Agilent Part Number	Quantity
UVEROM A2U306	08564-80057	1
UVEROM A2U307	08564-80058	1
UVEROM A2U308	08564-80059	1
UVEROM A2U309	08564-80060	1
UVEROM A2U310	08564-80011	1
UVEROM A2U311	08564-80012	1
856X Firmware Note	08560-90163	1
Installation Note	08560-90164	1
Upgrade Software	5010-7715	1

**Table 2: Agilent 856XE Firmware Refvision History and Part Nos.**

<b>Rev.</b>	<b>U306</b>	<b>U307</b>	<b>U308</b>	<b>U309</b>	<b>U310</b>	<b>U311</b>
980108	08564-80057	64-80058	64-80059	64-80060	64-80011	64-80012
	History: Bug fix-trace data over GPIB in digitized sweeps					
971024	08564-80046	64-80047	64-80048	64-80049	64-80011	64-80012
	History: Bug fixes, including Year 2000 and opt. K35					
970326	08564-80042	64-80043	64-80044	64-80045	64-80011	64-80012
	History: Bug fixes, including error 337, Amp Cor correction					
960830	08564-80038	64-80039	64-80040	64-80041	64-80011	64-80012
	History: Bug fixes for TC, SAMP UNLK, ACP Filter Weighting					
960401	08564-80027	64-80028	64-80029	64-80030	64-80011	64-80012
	History: Adds 85620A FW to inst. FW, EMI Opt., bug fixes First revision compatible with 8562E					
941028	08564-80023	64-80024	64-80025	64-80026	64-80011	64-80012
	History: Bug fix for Temp. Compensation					
940622	08564-80013	64-80014	64-80015	64-80016	64-80011	64-80012
	History: Bug fixes.					
940210	08564-80007	64-80008	64-80009	64-80010	64-80011	64-80012
	History: Amp Cor, Enhanced ACP, additional flatness corr.					
931216	08564-80003	64-80004	64-80005	64-80006	63-80076	63-80077
	History: Original version for 8564/5E only					
930809	08563-80072	63-80073	63-80074	63-80075	63-80077	63-80078
	History: Fixes error 536 bug and inst. hangup on sngl. swp.					
930715	08563-80066	63-80067	63-80068	63-80069	63-80070	63-80071
	History: Series 500 error bug fix when instrument is cold					
930226	08563-80059	63-80060	63-80061	63-80062	63-80063	63-80064
	History: Supports opt. 008, 007, 16 MHz controller					
920528	08563-80032	63-80033	63-80034	63-80035	63-80036	63-80037

**Table 3: A2 Controller Upgrade Kit 08563-60058**

<b>Description</b>	<b>Agilent Part Number</b>	<b>Quantity</b>
A2 Controller Ay*	08564-60022	1
Upgrade Software	5010-7725	1
Installation Note	5961-6784	1

\*Part number may change with later versions of A2.

**Table 4: EEROM Upgrade Kit 5063-0669**

<b>Description</b>	<b>Agilent Part Number</b>	<b>Quantity</b>
EEROM, 8K byte	08564-80001	1
PAL, Programmed	08564-80002	1
IC Socket, 28 Cont.	1200-0567	1
Jumper	8159-0005	1
Label	9320-6209	1
Installation Note	5962-5015	1