Installation Note

Option 010 Time Domain Upgrade Kit

For HP 8753E, HP 8753ET, and HP 8753ES Network Analyzers

Network Analyzer Model Number	Applicable Upgrade Kit Model Number		
HP 8753E	HP 8753EU Option 010		
HP 8753ET	HP 8753ETU Option 010		
HP 8753ES	HP 8753ESU Option 010		



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Time Domain Upgrade Kit

Products Affected:	HP 8753E and all Options HP 8753ET and all Options HP 8753ES and all Options
To Be Performed By:	HP Service Center, Personnel Qualified by HP, or Customer
Estimated Installation Time:	30 minutes
Estimated Verification Time:	30 minutes

Purpose

This Option 010 upgrade kit provides the network analyzer with time domain operation. The upgrade kit is keyed to the serial number of a specific network analyzer and cannot be used to upgrade other instruments.

Items Included in the Kit

Table 1 describes the parts included in this upgrade kit. Check the contents of this kit against Table 1.

Table 1 Option 010 Upgrade Kit Contents

Quantity	Description	HP Part Number
1	Installation note	08753-90420
1	Keyword label (affixed to page 5)	9320-6215
1	Keyword label (to affix to instrument)	9320-5805
1	Envelope	9230-0023

Equipment and Tools Required

Table 2 Required Equipment and Tools

Item	HP Part Number
TORX T-10 screwdriver	
TORX T-15 screwdriver	
RF cable (for verifying HP 8753E Option 011 and HP 8753ES Option 011)	8120-4781
Electrostatic discharge (ESD) grounding strap and mat	

Safety Considerations

WARNING	Before you disassemble the instrument, turn the power switch OFF and unplug the instrument. Failure to unplug the instrument can result in personal injury.
CAUTION	Electrostatic discharge (ESD) can damage or destroy electronic components. Perform these procedures only at a static-safe workstation and wear a grounding strap. Refer to the documentation that pertains to your instrument for information about static-safe workstations and ordering static-safe accessories.

Conventions

This installation note uses the following conventions for front-panel keys and softkeys. Front-Panel Key represents a key physically located on the instrument. **SOFTKEY** represents a "softkey," a key whose label is determined by the instrument's firmware.

Installation Procedure for the Option 010 Upgrade Kit

The network analyzer must be in proper working condition prior to installing this option. Any necessary repairs must be made before proceeding with this installation.

NOTE	The HP 8753E network analyzer is shown in the illustrations of this installation
	procedure. If you have an HP 8753ET or an HP 8753ES network anlayzer, the
	details of these illustrations may vary slightly. However, these slight differences
	will not affect the procedures of this installation.

Verify the Serial Number

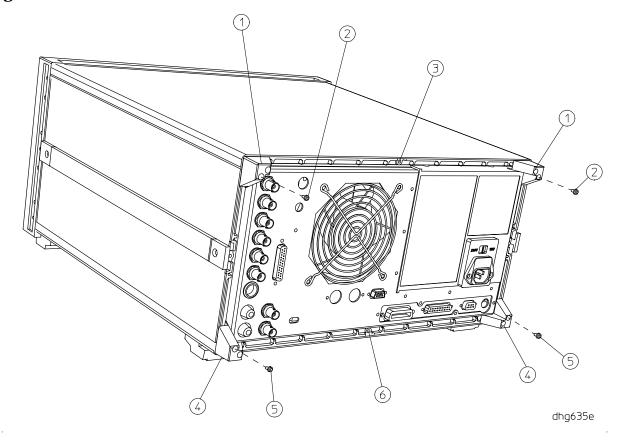
Refer to the keyword label in the box below. First, verify that the analyzer's serial number matches the serial number on the keyword label. Second, verify that the option number on the keyword label matches the option number for this installation note. If in either step, the serial number or the option number does not match the expected results, the keyword will not enable the option. If this is the case, refer to Table 3, "Hewlett-Packard Sales and Service Offices," on page 10 and contact the nearest sales or service office for assistance.

Remove the Bottom Cover

Refer to Figure 1.

- 1. Disconnect the power cord from the rear of the instrument and set the analyzer on its side.
- 2. Remove both of the lower feet (item 4) by loosening the TORX T-10 screws (item 5).
- 3. Loosen the captive TORX T-15 screw (item 6). This will cause the cover to pull away from the front frame.
- 4. Slide the cover towards the rear of the instrument, then pull it out and away. (The cover has a tight fit and may need to be worked loose.)

Figure 1 Cover Removal

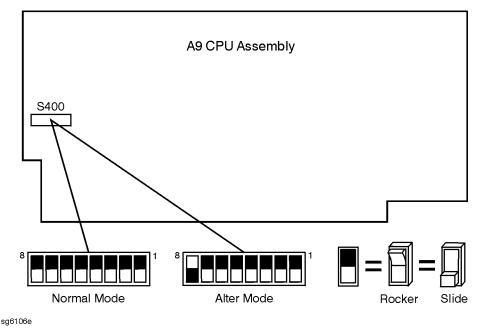


Configure the Analyzer for Time Domain Operation

Refer to Figure 2.

- 1. Locate the A9 switch on the A9 CPU assembly at location S400.
- 2. Set the A9 switch to Alter Mode.

Figure 2 A9 Switch Location



- 3. Reinstall the bottom cover and set the analyzer upright for normal operation.
- 4. If this installation is being performed on a network analyzer equipped with Option 011, connect the RF cable (8120-4781) between the RF Out and R (Reference) connectors on the front of the instrument.
- 5. Reconnect the analyzer power cord and switch on the power.
- 6. After the instrument has initialized, press Preset Display MORE TITLE ERASE TITLE to erase the HP logo.
- 7. Enter the keyword from the label located on page 5. There are two methods to do this: use a keyboard connected to the analyzer's mini-DIN connector on the rear panel, or rotate the front panel knob to position the arrow below each character of the keyword. Press

 SELECT LETTER to enter each character. When all characters are entered, press

 DONE.

NOTE Be sure to use upper-case letters when entering via a keyboard.

8. Press System SERVICE MENU TESTS 56 X1 EXECUTE TEST YES.

9.	If	the	disi	olav	shows

- Test 56 Option Cor DONE, press Preset. Proceed to "Verify Time Domain Operation."
- Test 56 Option Cor FAIL, perform the following steps to correct the failure:
 - ☐ Make sure that you entered the keyword correctly by repeating the previous steps.
 - □ Press System SERVICE MENU FIRMWARE REVISION. Compare the serial number shown on the analyzer's display to the one on the keyword label included with this installation note.
 - ☐ If the serial numbers do not match, or if Test 56 fails repeatedly, refer to page 10 and contact the nearest HP sales or service office for assistance.

Verify Time Domain Operation

1. Switch the instrument power on and press (Preset), then (System). Softkey 4 should be labeled **TRANSFORM MENU**.

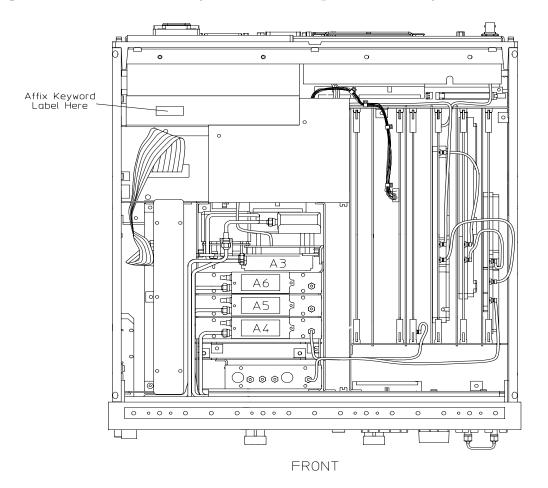
Return the A9 Switch to Normal

- 1. Set the A9 switch to the Normal Mode. *Refer to Figure 2.*
- 2. Replace the bottom cover.

Affix the Keyword Label

- 1. Remove the top cover of the instrument. *Refer to Figure 1.*
 - a. Remove both of the upper feet (item 1) by loosening the TORX T-10 screws (item2).
 - b. Loosen the captive TORX T-15 screw (item 3) in the top cover.
 - c. Slide the cover towards the rear of the instrument, then pull it out and away. (The cover has a tight fit and may need to be worked loose.)
- 2. Locate the keyword label in the small envelope and remove it from its backing. Affix the label onto the location shown in Figure 3.
- 3. Replace the top cover.
- 4. Replace the feet on the rear corners of the instrument (item 1 and item 4 of Figure 1).

Figure 3 Location of Keyword Label, Top View of Analyzer



dg646e

Table 3 **Hewlett-Packard Sales and Service Offices**

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