E4405B-14

S E R V I C E   N O T E

Supersedes:
NONE

ESA Series Spectrum Analyzers

Serial Numbers: US00000000 / US99999999
MY00000000 / MY999999999
SG00000000 / SG99999999

Input Attenuator Switching appears to be incorrect

Parts Required:

P/N	Description	Qty.
None		

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:
INFORMATION ONLY
AUTHOR: MPM   PRODUCT LINE: 12
ADDITIONAL INFORMATION:

Agilent Technologies

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Situation:

There are different input attenuators for the various configurations that are available for these products, which require different switching logic. Because of this it is possible to have what appears to be a hardware problem that is actually caused by having the Model Number, Frequency Range, or Option UKB status set improperly. While the Processor Initialization utility in the current version of the field software will straighten out the Model Number and Frequency Range settings, it will not correct the Option UKB status. This could then make it appear that there is either a problem with the input attenuator itself or the control logic, possibly resulting in much time spent in troubleshooting a perceived hardware problem that does not exist.

Solution/Action:

There are 3 different settings on the Service menu of the instrument that can potentially cause/correct this problem. They are:

- Model Number
- Maximum Frequency
- Option UKB status

These can all be set correctly by accessing the Service Menu by pressing:

[**System**]{**More**}{**More**}{**Service**} enter passcode* {**Service**}{**More**}{**Initialize Instrument****}

Where do you find the correct values for these settings?

- Model Number   Front panel label just above the display
- Maximum Frequency   Front panel label just above the display
- Option UKB status   Front panel label just above the display
    - 9KHz start frequency = UKB No
    - 100Hz start frequency = UKB Yes

Warning: Setting these values to anything other than what is actually installed in the instrument **will cause problems**, which is why this service note is written. You cannot enable any extended functionality without having the corresponding hardware installed.

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* The passcode can be found in the Service Guide under "Using the Internal Service-Diagnostic Routines"

** Requires firmware version A.08.00 or newer. The latest firmware can be downloaded for free from
   http://www.agilent.com/find/esa_firmware