

83480A / 54750A Firmware Release Notes

REV A.01.00: Initial Release 11/94

REV A.01.01: Bug fix release 12/94

- Fixed FPCP error

REV A.02.00: Maintenance release 5/10/95

Enhancements:

- TDR support
- 50 GHz support
- Ability to save custom masks
- Fill-display mask alignment mode
- Adjustable "measurement complete" setting
- Enable "connected dots" with mask testing on
- Added single button to turn off all "Mask test fail action store waveforms" at once
- Added HPIB command to query installed options
- Added Deskjet 540,560 printer drivers
- Added fixed-voltage masks

Bug fixes:

- When averaging is turned on, mask failure counts don't start until specified number of averages is reached
- Fixed incorrect STS-1 eye mask

REV A.03.00: Maintenance release 9/19/95

Enhancements:

- 83485B/54752B support
- Added extinction ratio correction factor

Bug fixes:

- Various improvements to template alignment algorithm and fill display mask alignment algorithm (especially improved alignment with fast risetime pulses)
- Fixed error in MEAS:HIST:MEAN command
- Allow mask margins to be turned on without dumping database
- Fixed extinction ratio bug that sometimes showed % value labeled in dB.

REV A.04.00: Maintenance release 12/13/95

- 83481A support
- Fixed bug causing instrument to crash if high resolution display and mask test turned on at same time
- Fixed DS-3, DS-2, and STS-1 template scaling problem

REV A.04.01: Special handling release

- Supports 83481A H02 special

REV A.06.01:

- Added support for 83486A, 83487A modules
- 10/97 increase optical gain for optical cal of 83486A module, required for cal

REV A.06.15

REV A.07.00

- Adds support for the Clock Recovery Modules, 83491A, 83492A, and 83493A
- Adds support for 83485A special option H92

- Adds ability to read files from internal floppy disk drive via GPIB, :DISK:DATA? ""
- Changes the Extinction Ratio algorithm to the new OFSTP-4A method from TIA/EIA 526-4A. This eliminates the bouncing values seen on signals with pattern dependent effects using the old algorithm.
- Improves rise time algorithm.
- Corrected the readout of module calibration status to reflect recommended calibration conditions. This change will force a Dark Cal and vertical cal for extinction ratio measurements after:
 - The module is removed from the mainframe.
 - The power to the mainframe was turned off.
 - The operating temperature is more than +/- 5 deg C from the cal temperature.
 - Eight hours of continuous operation after a vertical cal.

We believe this change is necessary to ensure accurate, repeatable extinction ratios at high extinction ratios.
- Changed the default value for DEfine Measurement/Color Grae/Measurement Complete from 1 to 16. This provides more stable measurement results, but slows down the reporting of measurement results.

REV A.07.11:

Bug fixes:

- Fixes a bug in the vertical cal routine that could cause some 83485B and 83485A option H91 and H92 modules to fail vertical calibration erroneously.
- Changes the vertical calibration status reporting. FW rev 7.0 would change the module cal status to uncalibrated after 8 hours of continuous operation. We believe for optimum accuracy it is necessary to perform the vertical cal every 8 hours. Forcing the user to perform this calibration caused a problem for some customers in automated testing. FW 7.11 will no longer change the cal status to uncalibrated after 8 hours of continuous operation. The status will change after a power cycle and if the temperature changes more than 5 deg C from the cal temperature. We still recommend that the user perform a vertical calibration after 8 - 10 hours of continuous operation.

REV A.07.12:

Bug fixes:

- Zero divide errors, primarily in remote operation
- FPCP errors, primarily in remote operation
- 54753/4A module fails cal in 83480A/54750A after cal in 86100A. The workaround for this is to initialize the TDR module in the 83480A/54750A and then cal or install fw 7.12.