











- Problem: Some instruments were losing critical information from the EEPROM such as model number, options and S/N.

Solution: Added a checksum for this critical data and created a copy of the data so that it could be restored if it is lost somehow.

- Fixes a bug in V1.54 that caused the unit to report Package "None" or "0.00" under System -> Status or remote IDN? Functions.

## VNA Mode

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- Bias Tee Voltage user entry with 0.1 volt resolution.

- Smith Chart Scaling (Amplitude) Menu for Reference Impedance (50 ohm or 75 ohm).

- Smoothing of S11 and S21 Frequency Domain measurements with Smoothing % user entry.

- Faster Vector Voltmeter (CW sweep) calibration steps.

- Faster sweep speeds by as much as 2 times.

- Reference Plane Extension for port 1 (S11 and S21). Includes automatic reference plane extension using current measurement.

- Improved spur avoidance down to 1 MHz.

- Cal Mode (Standard or FlexCal™) for combinations of Cal Type (1-Port or 2-Port) and Cal Power (Low or High).

- FlexCal™ remains valid when switching between Vector Network Analyzer and Vector Voltmeter Modes.

>>> Note: Upgrading VNA module from older firmware version will do an internal cal (about 15 to 30 seconds) <<<

System displays "\*\*\* OPTIMIZING IF GAINS - PLEASE STAND BY \*\*\*" message at bottom of bootup screen or application change to VNA.

## Remote Users:

Remote interface was not updated to include new VNA features of Smith Chart scaling, trace Smoothing, Reference Plane Extension, or FlexCal™. It is possible however, that front panel use has placed the VNA Master in FlexCal™ mode without the knowledge of the remote controller. It is our recommendation that a :SYSTem:PRESet be performed prior to remote calibration to remove this potential cause for error.



HI\_PM Mode

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- Support for MA24106A USB Power Sensor.