

How to install antenna calibration data to spectrum analyzer(MSA400 series)

◇ The electric field strength can be measured connecting your antenna to our spectrum analyzer.

Application

Usually, the electric field strength (dBμ/m) is measured in order to confirm how the radio wave radiated from a wireless communication equipment is strong. Since the antenna calibration data of M401 to M407 is installed beforehand in the spectrum analyzer MSA400 series, the electric field strength can be measured easily in the combination of our spectrum analyzer and dipole antennas. However, when the electric field strength is measured with your antenna, the calibration data of your antenna should be stored in an spectrum analyzer. The calibration data can be easily installed using the PC software MAS400.

Solution

System components

- Spectrum analyzer (MSA400 series)
- Antenna calibration data (※ settable up to 10 points)
- PC (Windows)
- USB cable (MI400)
- PC software(MAS400)

How to install

①Prepare the antenna calibration data by a text file.

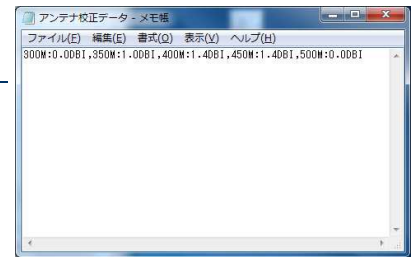
- Antenna absolute gain (dBi) is used as the calibration data.
- Open the text file (EX. notepad) and install antenna gain with frequency referring to the following format, and then save this file.

Format Frequency:calibration data,Frequency:calibration data · · ·

Example: Our dipole antenna M405 is formatted.

M405	Frequency	300MHz	350MHz	400MHz	450MHz	500MHz
calib.data	Antenna gain	0.0dBi	1.0dBi	1.4dBi	1.4dBi	0.0dBi

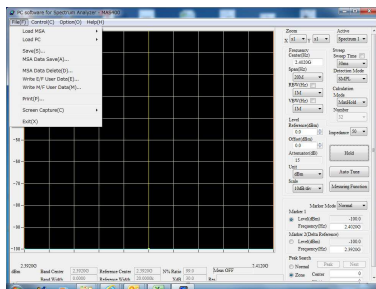
Format 300M:0.0DBI,350M:1.0DBI,400M:1.4DBI,450M:1.4DBI,500M:0.0DBI



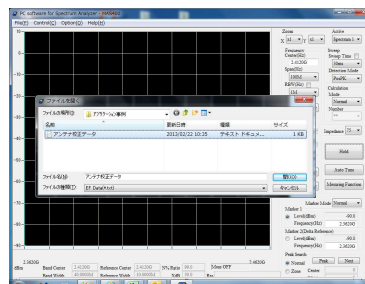
Text file(calibration)

②Store the calibration data into MAS400.

- Turn on the power after connecting the spectrum analyzer to PC using USB cable.
- Execute the following steps after starting the PC software MAS400.



Select [File]->[Write E/F User Data] from the menu displayed above.



Select the file made in ①, since the file selection window will be opened.



Setting completion is displayed in window when storing in the spectrum analyzer.

System configuration

- | | | |
|-------------------|---------------|---|
| Spectrum analyzer | MSA400 series | 1 |
| U S B cable | MI400 | 1 |
| P C software | MAS400 | 1 |