## New feature of GSP810 Remote Control Software V 2.1.0



1. V 2.1.0 adds the utility "SPF Converter" that converts the stored data (SPF format) to text file.

2. Flow Chart of SPF converting



3. Recording and making SPF file (Included in V 2.0.0)

The **SPF Converter** utility is to convert the existed SPF file (test.spf as example here) to text file. Making SPF file is done by operating "Record" and "Save" functions. Please refer to "HELP" for the detailed operation information of "Trace Record" functions.

| ord  |             |      |
|------|-------------|------|
| Play | Save        | Load |
|      | ord<br>Play |      |

## 4. SPF file converting

(a). Clicking the "Utility", "SPF Converter" functions, a prompted window for selecting **SOURCE** SPF file appears as follow.

| Source File Name          |                   |                        |       | <u>? ×</u> |
|---------------------------|-------------------|------------------------|-------|------------|
| 查詢(]):                    | 🔁 RMC_GW          | _Convert 📃             | 🕈 🗈 🖶 | •          |
| <b>び</b><br>記錄            | test.spf          |                        |       |            |
| <b>び</b><br><sub>兵面</sub> |                   |                        |       |            |
| (1)<br>我的文件               |                   |                        |       |            |
| 我的電腦                      | <br>檔名(N):        | test                   | •     | 開啓回        |
|                           | 檔案類型( <u>T</u> ): | GSP Trace File (*.spf) | •     |            |
| 網路上的芳鄰                    |                   | □ 以唯讀方式開啓(R)           |       | li.        |

(b). Select and open the test.spf (example), a prompted window for selecting **TARGET** text file appears as follow.

| Target File Name          |                            | <u>? ×</u> |
|---------------------------|----------------------------|------------|
| 儲存於①:                     | 🔁 RMC_GW_Convert 💽 🔶 📸 📰 🗸 |            |
| <b>び</b><br>記錄            | ≝) test                    |            |
| <b>①</b><br><sub>兵面</sub> |                            |            |
| (1)<br>我的文件               |                            |            |
| 我的電腦                      | 檔名(11):                    | 存檔③        |
| 網路上的芳鄰                    | 存檔類型(I): Text File (*.txt) | 取消         |

Key in the filename and click the "SAVE" bottom to start the converting.

(c) When the converting ends, the following windows will show up. Click "OK" to quit.

| aw File Converted |                                   |  |
|-------------------|-----------------------------------|--|
|                   |                                   |  |
|                   | Record 4 of 4                     |  |
| Source :          | D:\GSP810\RMC_GW_Convert\test.spf |  |
| Target :          | D:\GSP810\RMC_GW_Convert\test.txt |  |
|                   | ОК                                |  |

(d) The test.txt file contains the date and time of when making the SPF file, center frequency, RBW, reference level, span and 501 points of data. Since it is the record of measurement, therefore more then one measured data could be stored. It dependents on how long the trace records. In this case, there are four groups of data.



## 5. Point Data

The Point data is 10 bits DAC value. Equation for converting DAC value to dBm reading is as follow.

$$reading_{dBm} = \left(\frac{DAC}{1,023} - 1\right) \times 80 + Ref.Level$$

For example, the point data is 942, reference level is -20 dBm, the reading of the point in dBm is

$$\left(\frac{942}{1,023} - 1\right) \times 80 + (-20) = -6.33 - 20 = -26.33(dBm)$$

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