



Tune-up procedure for
RADWIN 1000 3GHz BAND, RADWIN 2000 3GHz BAND and
RADWIN 5000 3GHz BAND operating in the 3.5/3.65GHz bands

Preface:

The tune-up procedure of the RADWIN 1000 3GHz BAND, RADWIN 2000 3GHz BAND and RADWIN 5000 3GHz BAND operating in the 3.5/3.65GHz bands consists several phases. The sequence is performed on two chains

1. Define the desired frequency channel
2. Set the maximum allowed transmission power for the channel
3. Verify the maximum transmission power with power meter
4. Repeat the above on the second transmission chain
5. Burn the maximum transmission power values into the cards' EEPROM

Following is a calibration plot example:

```
*****  
* Manufacturing Calibration Start *  
*****
```

Chain 0 :

Collecting raw data for the adapter for mode 11a

```
Changing Power Meter frequency to 5350MHz: SUCCESS!  
(step > 1) Config Synthesizer 1 to : ST1: 0xa3c40, ST2:  
0x1102402  
Synthesizer 1 frequency: 4535000, ST1: 0x13c00, ST2:  
0x110038d  
Synthesizer 2 frequency: 2665000, ST1: 0x283c40, ST2:  
0x10e59e8
```

```
Changing Power Meter frequency to 3480MHz: SUCCESS!  
ch: 5350 --> max pwr is 26.00 dBm
```

```
Changing Power Meter frequency to 5350MHz: SUCCESS!  
(step > 1) Config Synthesizer 1 to : ST1: 0xa3c40, ST2:  
0x110240c  
Synthesizer 1 frequency: 4535000, ST1: 0x13c00, ST2:  
0x110038e  
Synthesizer 2 frequency: 1805000, ST1: 0x283c40, ST2:  
0x10e5980
```

```
Changing Power Meter frequency to 3545MHz: SUCCESS!  
ch: 5350 --> max pwr is 26.00 dBm
```

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Changing Power Meter frequency to 5500MHz: SUCCESS!
(step > 1) Config Synthesizer 1 to : ST1: 0xa3c40, ST2:
0x1102440
Synthesizer 1 frequency: 4685000, ST1: 0x13c00, ST2:
0x11003a0
Synthesizer 2 frequency: 2830000, ST1: 0x283c40, ST2:
0x10e5908

Changing Power Meter frequency to 3645MHz: SUCCESS!
ch: 5500 --> max pwr is 26.00 dBm

Changing Power Meter frequency to 5500MHz: SUCCESS!
(step > 1) Config Synthesizer 1 to : ST1: 0xa3c40, ST2:
0x1102488
Synthesizer 1 frequency: 4685000, ST1: 0x13c00, ST2:
0x11003a4
Synthesizer 2 frequency: 2841000, ST1: 0x283c40, ST2:
0x10e5880

Changing Power Meter frequency to 3656MHz: SUCCESS!
ch: 5500 --> max pwr is 25.00 dBm

Changing Power Meter frequency to 5670MHz: SUCCESS!
(step > 1) Config Synthesizer 1 to : ST1: 0xa3c40, ST2:
0x11025dc
Synthesizer 1 frequency: 4855000, ST1: 0x13c00, ST2:
0x11003c6
Synthesizer 2 frequency: 2845000, ST1: 0x283c40, ST2:
0x10e56c8

Changing Power Meter frequency to 3660MHz: SUCCESS!
ch: 5670 --> max pwr is 25.00 dBm

Changing Power Meter frequency to 5670MHz: SUCCESS!
(step > 1) Config Synthesizer 1 to : ST1: 0xa3c40, ST2:
0x1102606
Synthesizer 1 frequency: 4855000, ST1: 0x13c00, ST2:
0x11003c7
Synthesizer 2 frequency: 2860000, ST1: 0x283c40, ST2:
0x10e556c

Changing Power Meter frequency to 3675MHz: SUCCESS!
ch: 5670 --> max pwr is 25.00 dBm

Changing Power Meter frequency to 5670MHz: SUCCESS!
(step > 1) Config Synthesizer 1 to : ST1: 0xa3c40, ST2:
0x110261a
Synthesizer 1 frequency: 4855000, ST1: 0x13c00, ST2:
0x11003c9

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Synthesizer 2 frequency: 2875000, ST1: 0x283c40, ST2:
0x10e51ac

Changing Power Meter frequency to 3690MHz: SUCCESS!
ch: 5670 --> max pwr is 25.00 dBm

Changing Power Meter frequency to 5670MHz: SUCCESS!
(step > 1) Config Synthesizer 1 to : ST1: 0xa3c40, ST2:
0x110249c
Synthesizer 1 frequency: 4855000, ST1: 0x13c00, ST2:
0x11003a6
Synthesizer 2 frequency: 2879000, ST1: 0x283c40, ST2:
0x10e57c8

Changing Power Meter frequency to 3694MHz: SUCCESS!
ch: 5670 --> max pwr is 25.00 dBm

Chain 1 :
Collecting raw data for the adapter for mode 11a

Changing Power Meter frequency to 5350MHz: SUCCESS!
(step > 1) Config Synthesizer 1 to : ST1: 0xa3c40, ST2:
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Synthesizer 1 frequency: 4535000, ST1: 0x13c00, ST2:
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Synthesizer 2 frequency: 2665000, ST1: 0x283c40, ST2:
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Synthesizer 2 frequency: 1805000, ST1: 0x283c40, ST2:
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Synthesizer 1 frequency: 4685000, ST1: 0x13c00, ST2:
0x11003a0
Synthesizer 2 frequency: 2830000, ST1: 0x283c40, ST2:
0x10e5908

Changing Power Meter frequency to 3645MHz: SUCCESS!

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Synthesizer 2 frequency: 2841000, ST1: 0x283c40, ST2:
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Synthesizer 2 frequency: 2879000, ST1: 0x283c40, ST2: 0x10e57c8

Changing Power Meter frequency to 3694MHz: SUCCESS!
ch: 5670 --> max pwr is 25.00 dBm

Writing raw data to file cal_AR2413_Power_11a.log
SNOOP: writing to eeprom
SNOOP: BOARD CALIBRATED...power data written to eeprom

```
#####  
#####  
Cal Date: 2011/9/14, Cal Time: 11:12, Cal SSID: 0x3505,  
Cal Result: PASS  
Cal wlan mac ID: 00:15:67:BA:71:02
```

```
#####      ###      #####      #####  
##          ##      ## ##      ##      ## ##      ##  
##          ##      ##      ##      ##          ##  
#####      ##      ##      #####      #####  
##          #####          ##          ##  
##          ##      ## ##      ## ##      ##  
##          ##      ##      #####      #####
```

```
#####  
#####
```