

# Tune up Procedure

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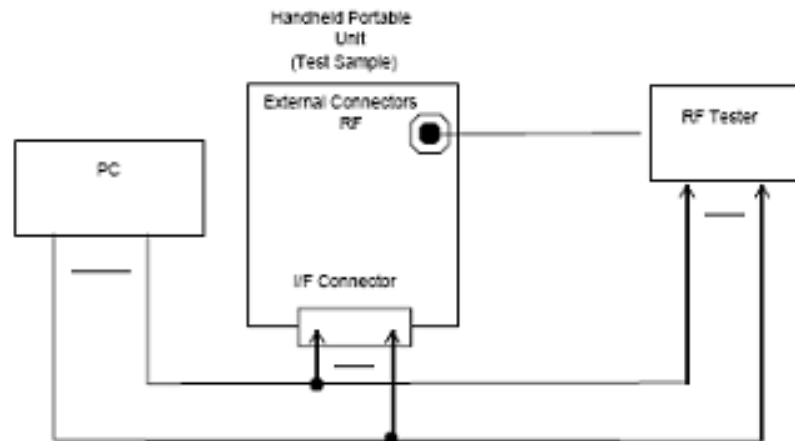


Figure 1

## Adjustment of RF Output Power

- (1) The test equipment setup as shown in Figure 1.
- (2) Operation of PC adjusts equipment.
  - 1) Set GSM1900 Band.
  - 2) Set Channel 0661.
  - 3) TX ON.
  - 4) Adjust the power level to 29dBm (Power control level: PCL = 0) by PA DAC value.
  - 5) Repeat 4) for 15 times, and adjust the power level to 28, 26, 24, 22, 20, 18, 16, 14, 12, 10, 8, 6, 4, 2, 0 dBm ( PCL = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 ).
  - 6) Make 16 Ramp-Up / Ramp-Down data from the adjustment value of (5) and (6).
  - 7) Data of 5) and 6) is write to a memory.

注： 调程序里主要从研发阶段如何实现调节产品功率、频率等其他功能方面来进行阐述。

**Specific Operating Power Range:****Power Class 1;**

Power Control Level 5	+33dBm +0.3dB/-0.3dB
Power Control Level 6	+31dBm +2.0dB/-2.0dB
Power Control Level 7	+29dBm +2.0dB/-2.0dB
Power Control Level 8	+27dBm +2.0dB/-2.0dB
Power Control Level 9	+25dBm +2.0dB/-2.0dB
Power Control Level 10	+23dBm +2.0dB/-2.0dB
Power Control Level 11	+21dBm +2.0dB/-2.0dB
Power Control Level 12	+19dBm +2.0dB/-2.0dB
Power Control Level 13	+17dBm +2.0dB/-2.0dB
Power Control Level 14	+15dBm +2.0dB/-2.0dB
Power Control Level 15	+13dBm +2.0dB/-2.0dB
Power Control Level 16	+11dBm +2.0dB/-2.0dB
Power Control Level 17	+9dBm +2.0dB/-2.0dB
Power Control Level 18	+7dBm +2.0dB/-2.0dB
Power Control Level 19	+5dBm +2.0dB/-2.0dB

**1) Frequency Distribution**

	GSM 850	EGSM900	DCS1800	PCS1900
Transmit (TX):	824-849MHZ	880-915MHZ	1710-1785MHZ	1850-1910MHZ
Receive( RX):	869-894MHZ	925-960MHZ	1805-1880MHZ	1930-1990MHZ

2) Absolute channel Number:	128-251	1-124	512-885	512-810
3) TX RX Space:	45MHZ	45MHZ	95MHZ	80MHZ
4) TX/RX time slot Differential:	3	3	3	3
5) Modulation bit rate:	270.833kbit	270.833kbit	270.833kbit	270.833kbit
6) Frame Cycle:	4.615ms	4.615ms	4.615ms	4.615ms
7) Slot Cycle:	576.9us	576.9us	576.9us	576.9us
8) Bit Cycle time:	3.692us	3.692us	3.692us	3.692us
9) Channel Space:	200KHZ	200KHZ	200KHZ	200KHZ
10. Time slot /Frame:	8	8	8	8
11. Modulation Type:	GMSK	GMSK	GMSK	GMSK
12 Max TX Power:	32.10dBm±0.5dB	32.10dBm±0.5dB	24.60dBm±0.5dB	24.60dBm±0.5dB
13. Min TX Power:	3.3mW	3.3mW	1mW	1mW
14 RF Impedance:	50 Ω	50 Ω	50 Ω	50 Ω