

Tune Up Procedure

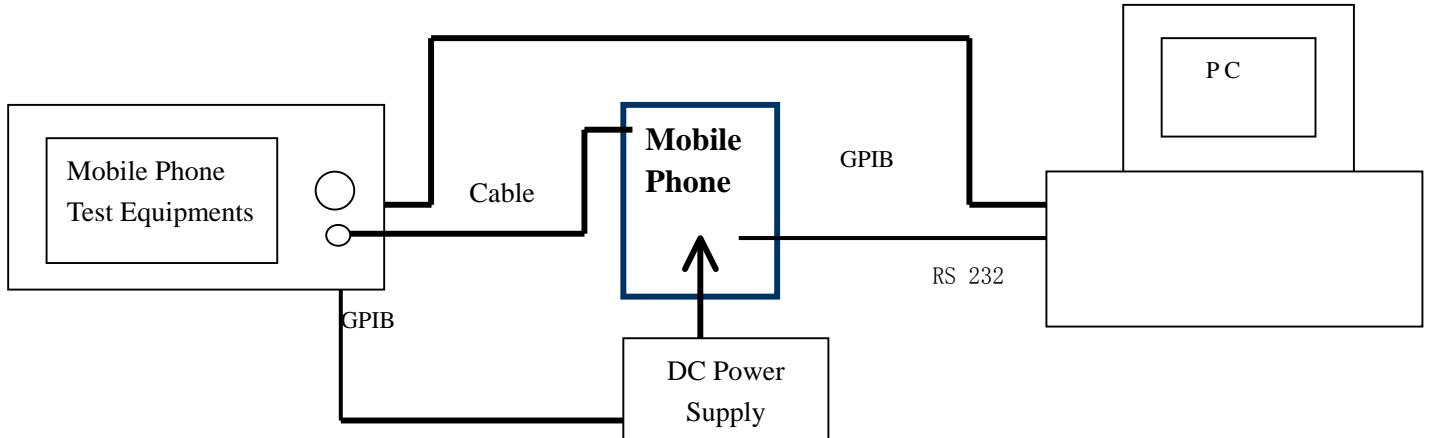


Figure 1. Setup Diagram of Adjustment of RF Output Power

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

Figure 2. Power Control Level

Adjustment of RF Output Power

1. The test equipment setup as shown Figure 1.
2. Operation of PC adjusts equipment.
 - 1). Set GSM1900 Band
 - 2). Set Channel
 - 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 what shown in figure 2.
 - 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.

Within the Mobile Phone Test Equipments, there is a digitally controlled attenuator and peak power detector for this purpose. Each unit will be calibrated at the factory for accuracy and

maximum power limiting.

The power detector is calibrated and set to a power limit of 23.5dBm for PCS band and 24.5dBm for Cellular band. During operation of the unit, the GSM base station detected the transmit power from the device and command it to step up/down by 1dB depending on whether the device power is low or high. But the unit will not exceed the maximum power