



GSM/GPRS/GPS Tracker **GMT100**

Tune-up Procedure

TRACGMT100UM004
Revision: 1.02

Queclink Co.



<http://www.queclink.com>

sales@queclink.com

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Revision History

Revision	Date	Author	Description of change
1.01	2011-10-18	Owen Feng	Initial
1.02	2013-10-20	Niu	Add RF table

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Tune-up Procedure of GMT100

During manufacturing each phone will be individually calibrated.

The measurement is done in a fully calibrated setup, which is based on Agilent 8960 or RS CMU200 (TX power, AFC, DRP, LNA Gain.....).

Furthermore, the highest power level is verified afterwards in a call measurement on three channels (low, mid and high).

Procedure:

1. Set the module to operational voltage and on one certain channel in a special service mode by means of company proprietary software.
2. The actual power is measured at several power levels.
3. The gain factors of each individual phone are adjusted via the Board-test SW using automatic adjustment arithmetic until the target value is met.

The appropriate gain control settings are stored in RF table (a special section in Nor Flash marked with Read only and untouchable for end user) each phone individually (for each power level).

The user has no possibility to change these settings later on.

AT factory calibration, the target output power, low power limit and high power limit is As following table:

Table 1. GMT100 RF power table

EGSM900																
PCL	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
Normal out power	32.5	31	29	27	25	23	21	19	17	15	13	11	9	7	5	
Low limit(dBm)	31.5	30	27	25	23	21	19	17	15	13	11	9	7	5	3	
High limit(dBm)	33.5	33	31	29	27	25	23	21	19	17	15	13	11	9	7	
GSM850																
PCL	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
Normal out power	32.5	31	29	27	25	23	21	19	17	15	13	11	9	7	5	
Low limit(dBm)	31.5	29	27	25	23	21	19	17	15	13	11	9	7	5	3	
High limit(dBm)	33.5	33	31	29	27	25	23	21	19	17	15	13	11	9	7	
DCS																
PCL	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

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Normal out power	29.5	28	26	24	22	20	18	16	14	12	10	8	6	4	2
Low limit(dBm)	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0
High limit(dBm)	30.5	30	28	26	24	22	20	18	16	14	12	10	8	6	4
PCS															
PCL	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Normal out power	29.5	28	26	24	22	20	18	16	14	12	10	8	6	4	2
Low limit(dBm)	28	26	24	22	20	18	16	14	12	10	8	6	4	2	0
High limit(dBm)	30.5	30	28	26	24	22	20	18	16	14	12	10	8	6	4