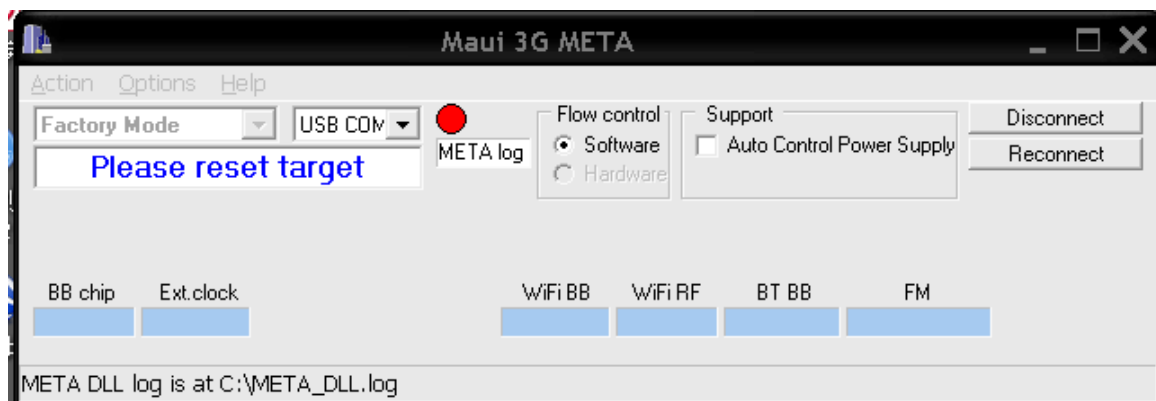
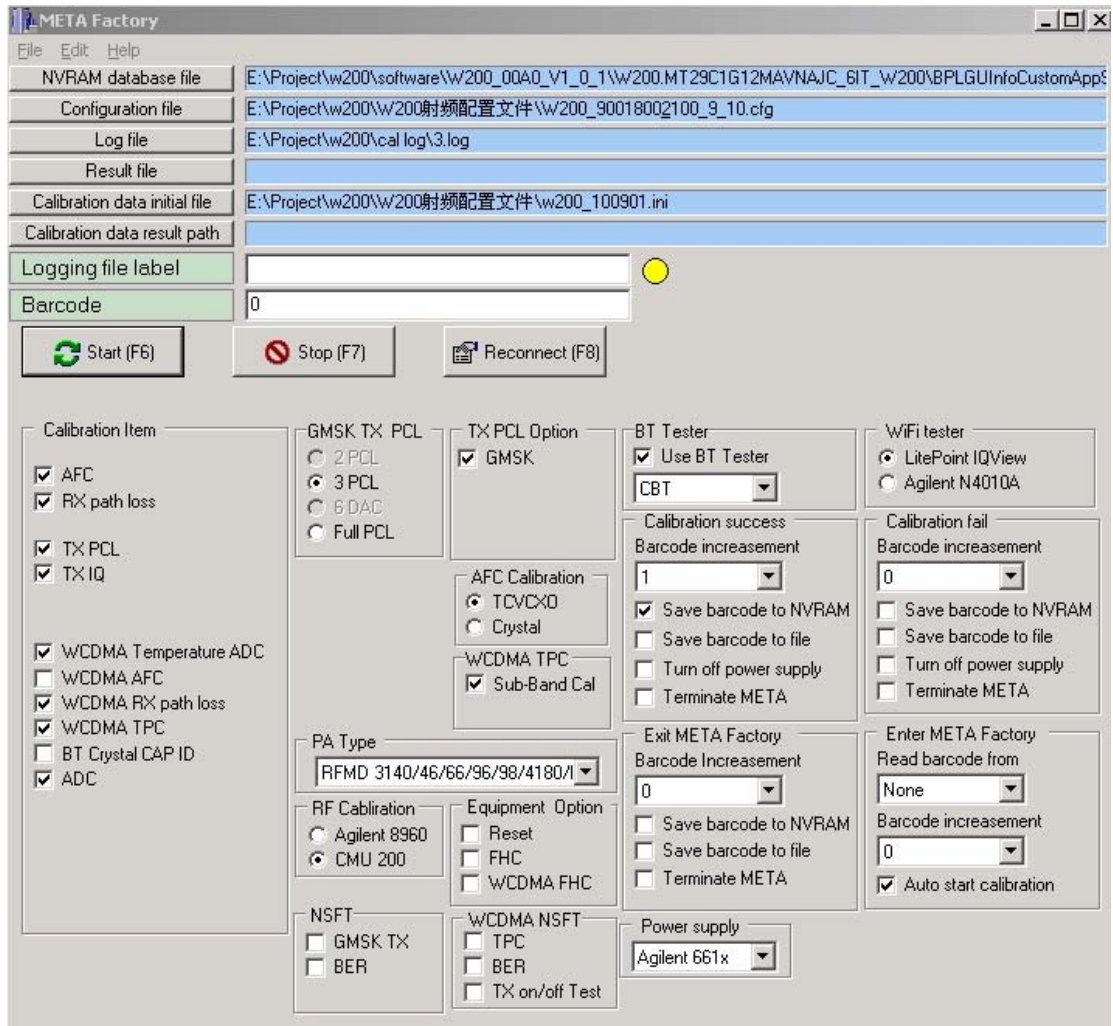


Tune up procedure

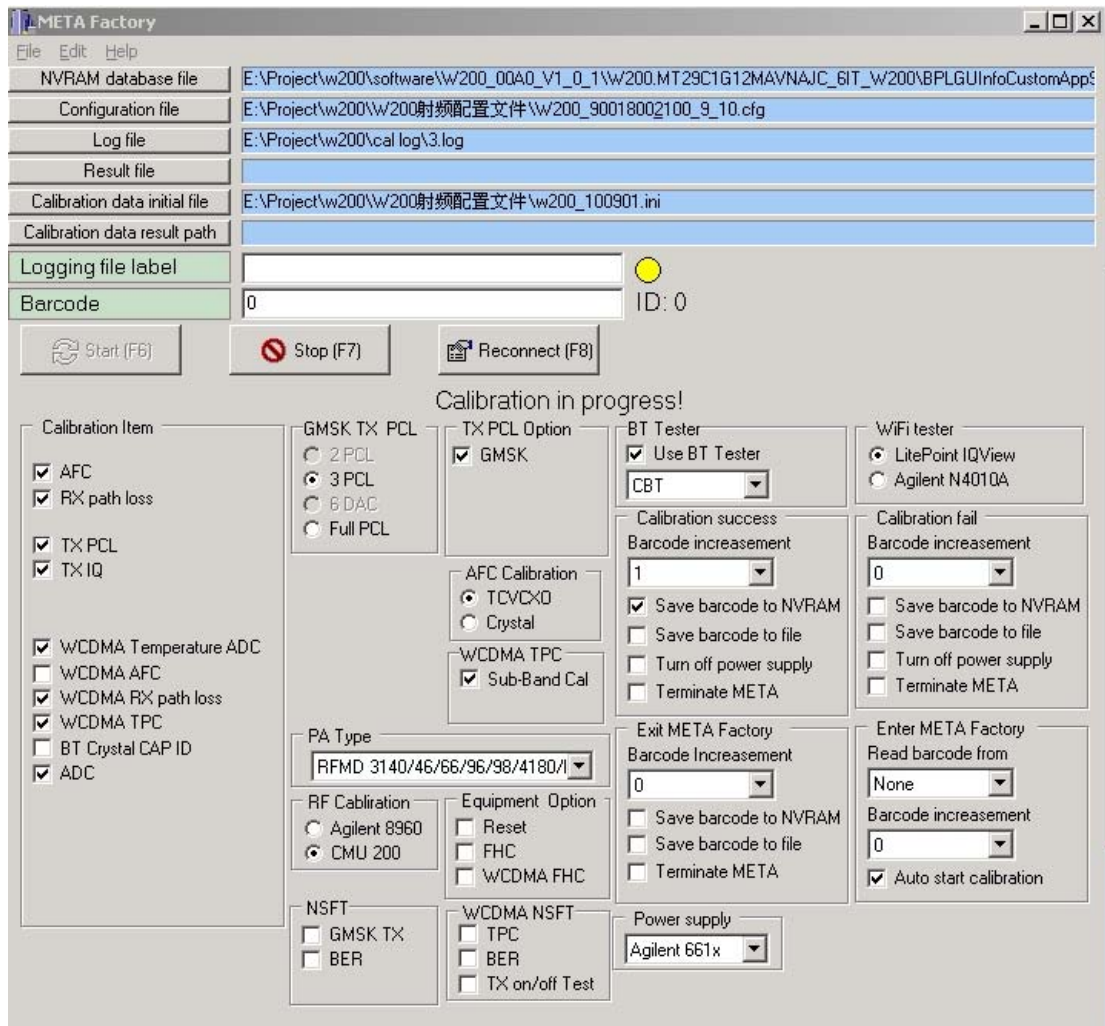
1. It must provide an operational voltage (3.55V---4.2V DC) to turn on the phone and on one certain channel in service mode by means of company proprietary software.
2. Base station simulator (Rohde& Schwarz CMU200 or Agilent 8960) measures the 2G phone specific RF characteristics.
 - I. Connect the CMU200 to the computer Connect the CMU200 and the computer with GPIB cable.
 - II. Connect the Mobile Phone to the CMU200
Connect the bi-directional RF connector RF 2 of the CMU to the antenna connector of the mobile phone.
 - III. Connect the Mobile Phone to the Computer
 - ① Connect the 10-pin-connector end of the USB data cable to the mobile phont.Connect the other end of the data cable to the computer
 - ② Open the Maui Meta software by double clicking the software icon. The following window will be displayed:



- ③ Press OK key, and power on the power supply. Then enter Factory Mode. The following window will be displayed:



- ④ Select the items of 2G and 3G should be calibrated. Click the “Start” button, you will see the following screen:



- ⑤ Once the button is clicked, the CMU will be checking various parameters automatically(e.g. RSSI, Output Power, AFC,etc.) and set different parameters for the mobile phone accordingly(e.g. Gain, Output power, etc.)

For GSM 850/900 band :

$PCL = 5, PWR = 32 \pm 1 \text{ dBm}$

For DCS 1800/pcs1900 band :

$PCL = 0, PWR = 30 \pm 1 \text{ dBm}$

For WCDMA850/900/1900/2100 band :

$MAX_PWR = 24 (+1/-3) \text{ dBm}$

If "Calibration Success !" data appears, the mobile phone had been successfully calibrated and everything is properly tuned. This calibration process typically takes less than 10 minutes if all the above steps are followed and the conditions are met.

3. The maximum gain of each individual phone are adjusted until the target value met.

Then this appropriate gain settings are stored in each phone individually.

The user has no possibility to change these settings later on, and during manufacturing each phone will be individual calibrated. The measurement is done in fully calibrated setup, which is based on a Rohde& Schwarz CMU200 or Agilent 8960 base station simulator. Furthermore, the highest power level is verified afterwards in a call measurement on three channels (low, middle and high).