Feb.13.2005
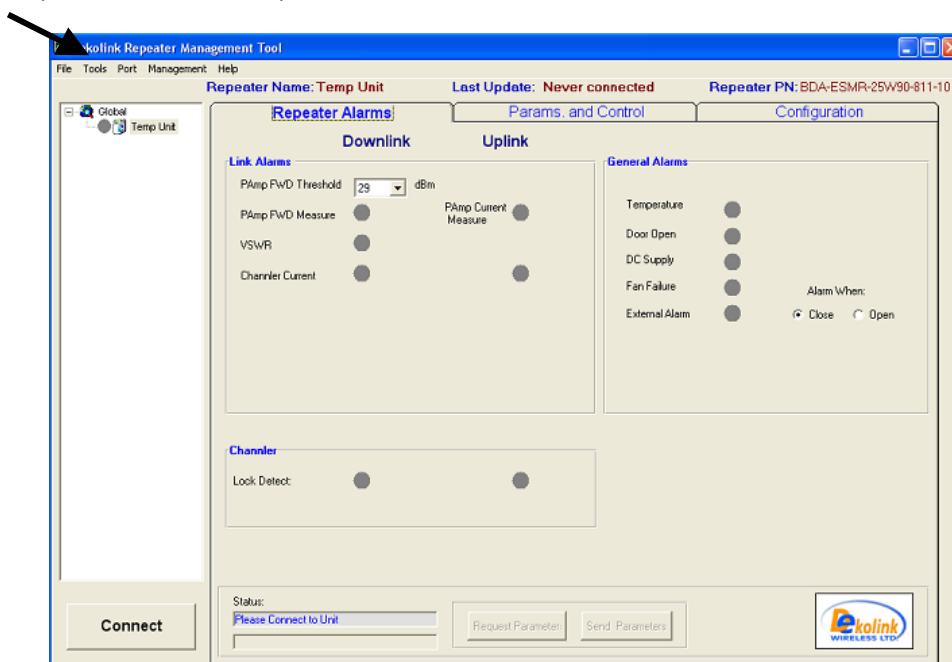
Tune up procedure for CSR

1. General
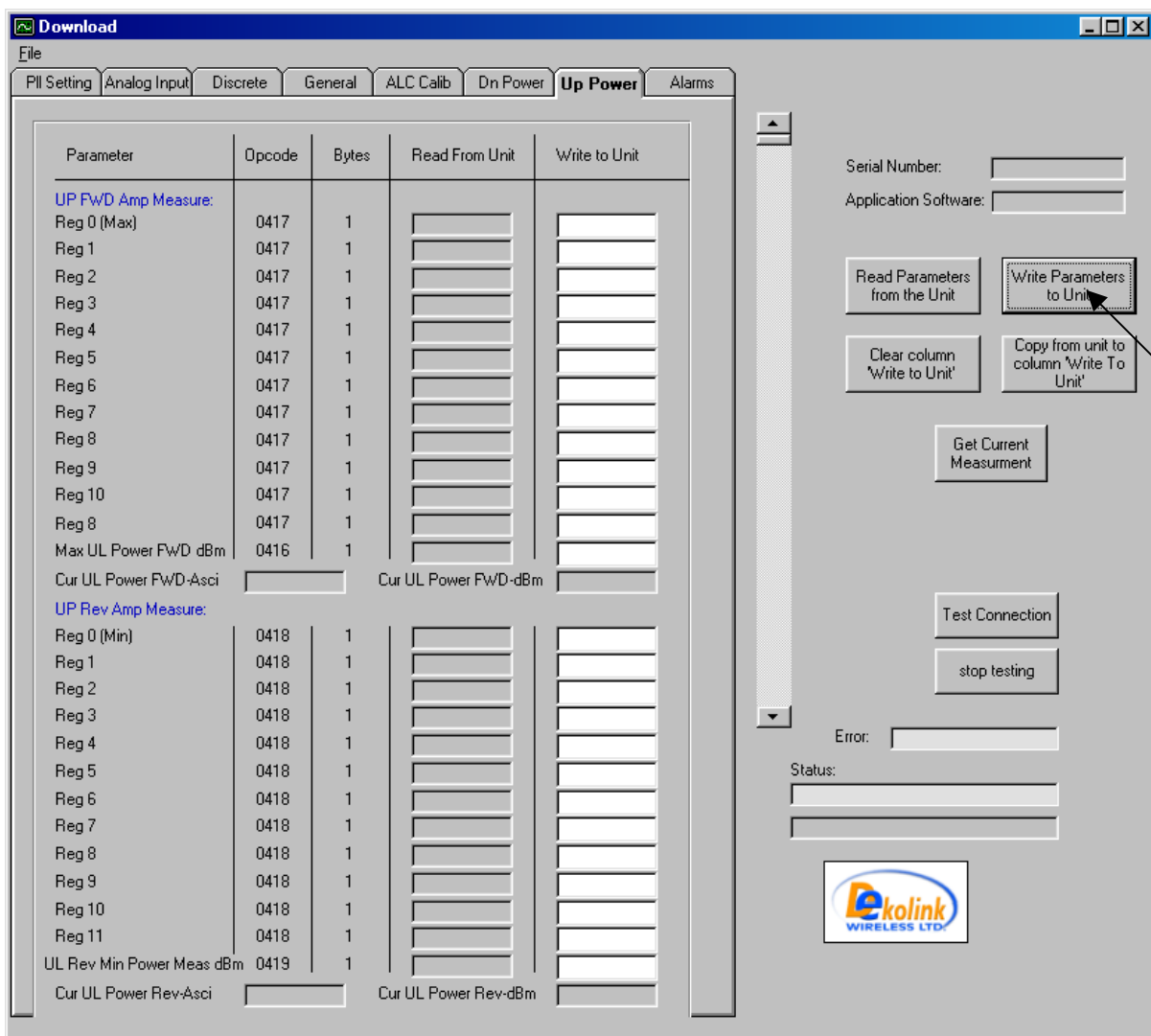
1.1. This Procedure is intended to calibrate the repeater so that the customer can set ALC level by assigning power value (dBm) in the "Max Power" box on the RMT, "Parameters and Control " screen.

1.2. This procedure is conducted during the test procedure in the manufacturer's premises. Customer has no access to this procedure.

2. Preparations

2.1. Connect to unit using RMS (see Manual).

2.2. Press Ctrl+P and Enter Technician password.

2.3. Press "Tools→ Open Param Loader" to get the tune up screen (see arrow below):

Download screen appears:

2.4. Press " Write Parameters to Unit." And wait for download to complete

2.5. Press "General" Tab

2.5.1. Set Downlink ALC On/Off to "0"

2.5.2. Set Uplink ALC On/Off to "0"

2.5.3. Press "ALC Calib " tab, the following window appears:

Download

File

| PII Setting | Analog Input | Discrete | General | ALC Calib | Dn Power | Up Power |

Connect

Serial Number:

Application Software:

Parameter	Opcode	Bytes	Read From Unit	Write to Unit
ALC DL Amp Calib Table:				
Reg 0 (Max)	0404	1		
Reg 1	0404	1		
Reg 2	0404	1		
Reg 3	0404	1		
Reg 4	0404	1		
Reg 5	0404	1		
Reg 6	0404	1		
Reg 7	0404	1		
Reg 8	0404	1		
Reg 9	0404	1		
Reg 10	0404	1		
Reg 11	0404	1		
DL Power Value FWD	0405	1		
AGC Down Level	0202	2		
ALC UP Amp Calib Table:				
Reg 0 (Max)	0414	1		
Reg 1	0414	1		
Reg 2	0414	1		
Reg 3	0414	1		
Reg 4	0414	1		
Reg 5	0414	1		
Reg 6	0414	1		
Reg 7	0414	1		
Reg 8	0414	1		
Reg 9	0414	1		
Reg 10	0414	1		
Reg 11	0414	1		
UL Power Value FWD	0415	1		
AGC Uplink Level	0201	2		

Read Parameters from the Unit

Write Parameters to Unit

Clear column 'Write to Unit'

Copy from unit to column 'Write To Unit'

Test Connection
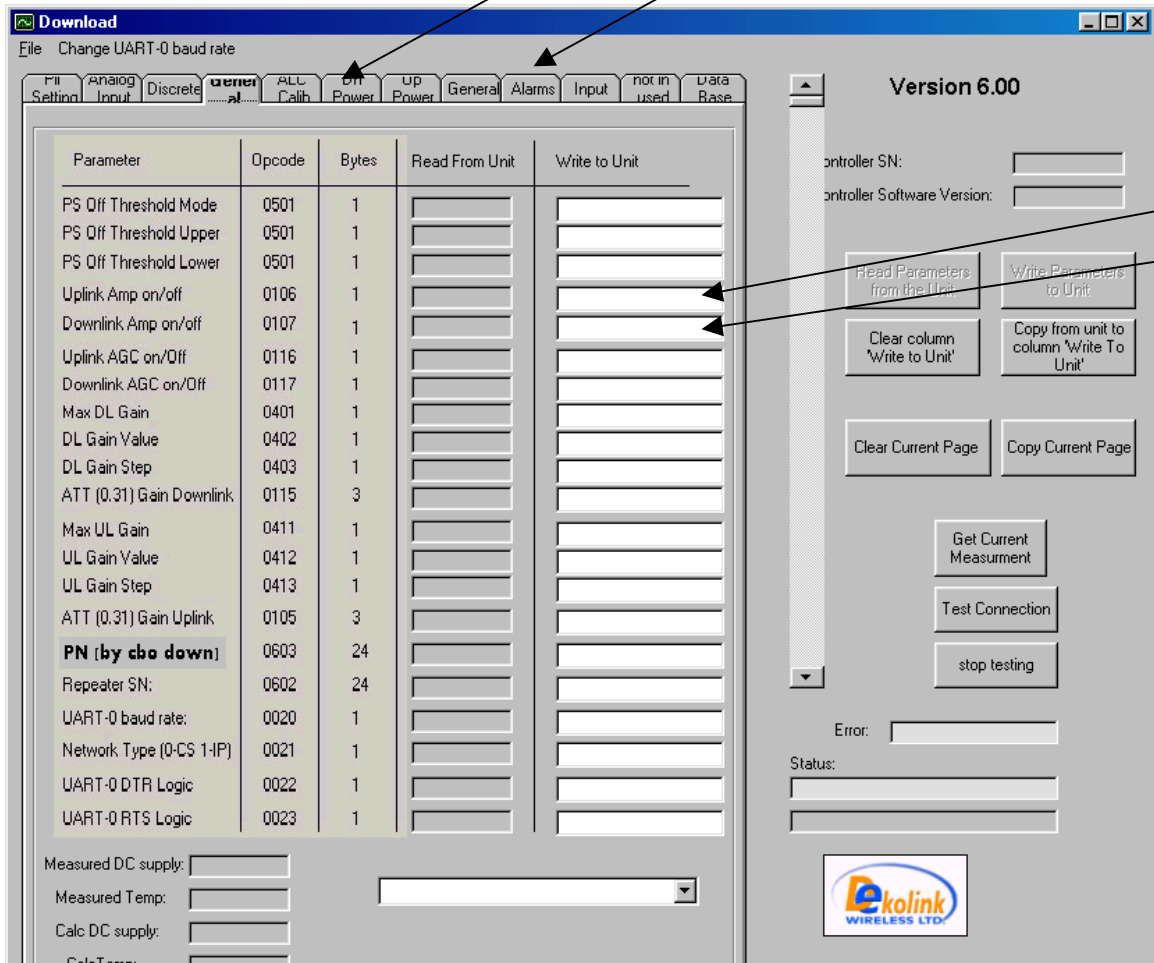
stop testing

Status:

Message:

Error Message

Pekolink WIRELESS LTD.

DL Power Value FWD

UL Power Value FWD

3. Downlink ALC Calibration

3.1. Connect the unit to Test equipment as follows:

Signal Generator RF OUT — RF Cable — 30dB PED — Base iDEN Digital Reapeter Mobile — 30dB PED — RF Cable — S.Analyzer RF IN
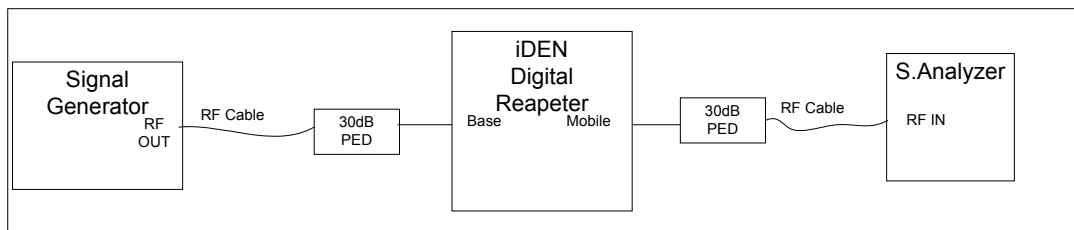
* A Power Meter may be connected instead of Spectrum Analyzer

3.2.   Set the input power to receive 38 dBM at the repeater's MOBILE output.

3.3.   Set DLPower Value FWD to 37.

Set REG 0 (upper list) to 230 (approximate value for 37 dBm output). Read the output power, if output power is higher then 37 dBm, decrease the number in the register, if the power is lower, increase the number. Repeat until 37 dBm output power is achieved.
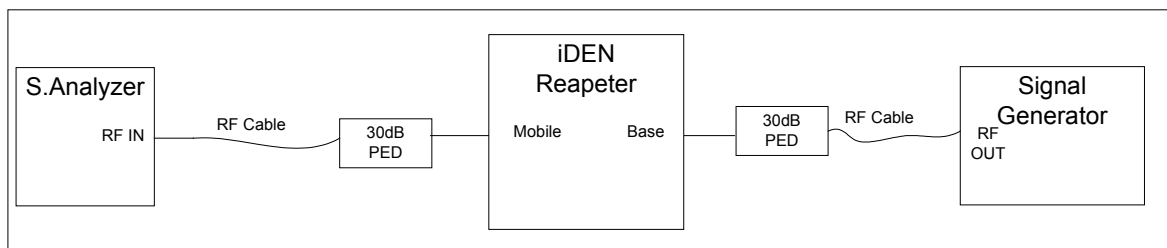
3.4.   Set DLPower Value FWD to 36.

Set REG 1 to the same number achieved in REG 0 (approximate value for 36 dBm output). Read the output power, if output power is higher then 36 dBm, decrease the number in the register, if the power is lower, increase the number. Repeat until 36 dBm output power is achieved.

3.5.   Repeat the above procedure for DL Power Value FWD of 35, 34, to 26 related to REG 2 to REG 11 accordingly, for output power 35 to 26 dBm respectively.

4. . Uplink ALC Calibration

4.1.   Connect the unit to Test equipment as follows:

* A Power Meter may be connected instead of Spectrum Analyzer

4.2. Set the input power to receive 25 dBM at the repeater's BASE output.

4.3. Set ULPower Value FWD to 24.

Set REG 0 (lower list) to 130 (approximate value for 24 dBm output). Read the output power, if output power is higher then 24 dBm, decrease the number in the register, if the power is lower, increase the number. Repeat until 30 dBm output power is achieved.

4.4. Set ULPower Value FWD to 23.

Set REG 1 to the same number achieved in REG 0 (approximate value for 23 dBm output). Read the output power, if output power is higher then 23 dBm, decrease the number in the register, if the power is lower, increase the number. Repeat until 23 dBm output power is achieved.

4.5. Repeat the above procedure for UL Power Value FWD of 22, 21, to 13 related to REG 2 to REG 11 accordingly, for output power 22 to 13 dBm respectively.