# Description and Parameterization / Menue / Settings of PLJ-6LED Frequency Counter DL7MAJ, Dec. 30<sup>th</sup>, 2015

#### **Menue for parameterization:**

Measurement should be active; if not: disconnect and reconnect to supply

<u>Start</u> with UPPER or LOWER keys on the back side of the module:

1. Resolution

UPPER selects next menue: IF-setting

LOWER toggles resolution 10Hz / 100Hz; then select with UPPER key > back to measurement

2. IF-setting

UPPER selects next menue: IF up/down

LOWER: To change IF setting it's necessary to change 1<sup>st</sup> digit (toggle through back to "0") even if you don't want to change it. Then you can change with LOWER and store all digits (each digit separately) as you want with UPPER.

After you changed all 6 digits with the last UPPER > back to measurement

3. IF-sign

UPPER selects next menue: Light intensity

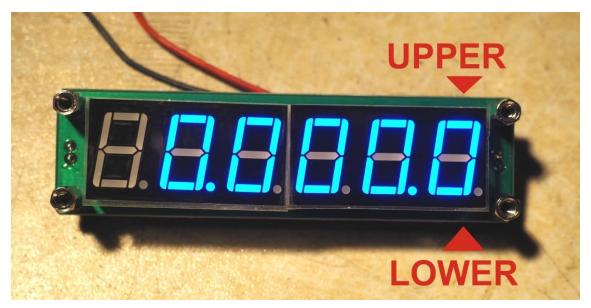
LOWER toggles IF-sign between "u" and "n"

u: subtracts set IF; e.g. if set to 455 kHz and input is 10.455 MHz then 10.000 is indicated n: adds set IF; e.g. if set to 455 kHz and input is 9.545 MHz then 10.000 is indicated Then select with UPPER key > back to measurement

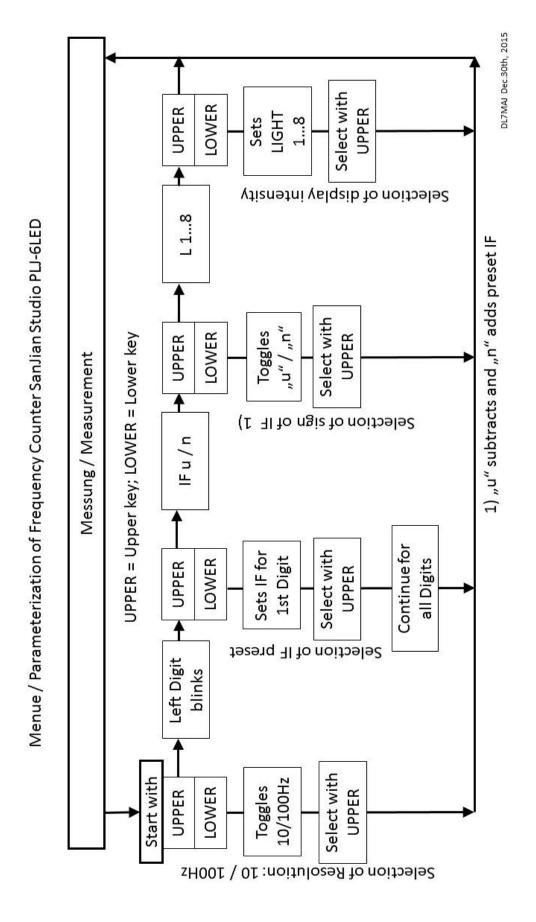
4. Light Intensity

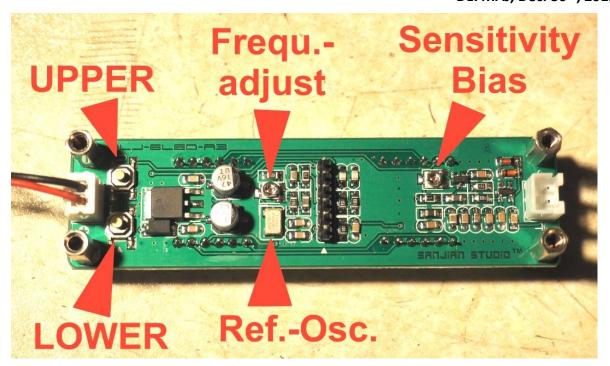
UPPER: End of parameterization and back to measurement

LOWER toggles through 1 to 8 and increases intensity. Then select with UPPER key > back to measurement



UPPER and LOWER keys are on the back side





### **Setting of Sensitivity/Bias**

The sensitivity (DC-Bias) can be set with a trimpot in the DC-feedback of the amplifier for optimum DC-bias:

Use a HF-signalgenerator with 50 to 60MHz and adjust trimpot when reducing input voltage for best and stable readout.

## **Setting of Timebase/Frequency adjust**

The timebase is a DSA535SA (look for datasheet in the www), the frequency can be changed by a tuning voltage.

Use a reference at 50 to 60MHz with 10Hz resolution and 100mVPP with a stable readout and adjust trimpot for exact frequency indication; give the unit some minutes to stabilize.

Ignore that the first digits are suppressed in this setting, only the last digits are relevant

#### **Specification**

Supply: DC 8V-15V; 90mA(max)

High impedance input

Range: 0.1 MHz to 65 MHz (below 100kHz definitely no measurement!)

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