# DEKA UltraSpeed US20-D CO2 Laser Power Check

Turn Laser ON.

Touch START

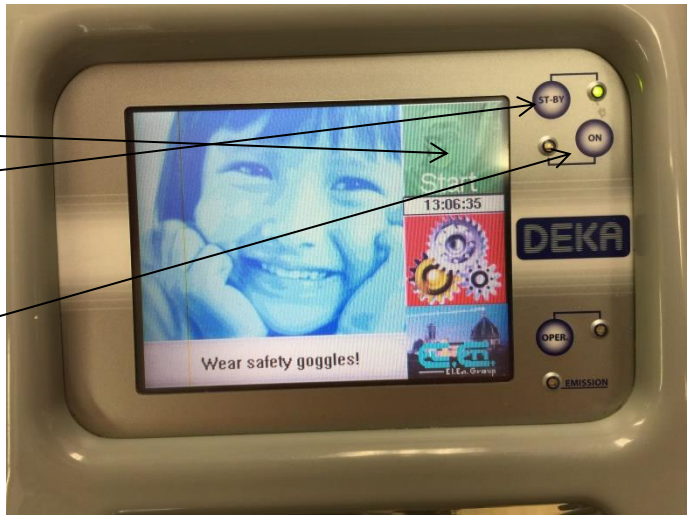
Hold Down Stand By for 10 seconds,

Another screen will appear. (CW Mode)

Set the Power to 10 W using the

UP Arrow

Press ON




Look in the top left corner, there is a

Black rectangle, the first line is “Peltier”

Record the number’s average as it fluctuates

up and down slightly.

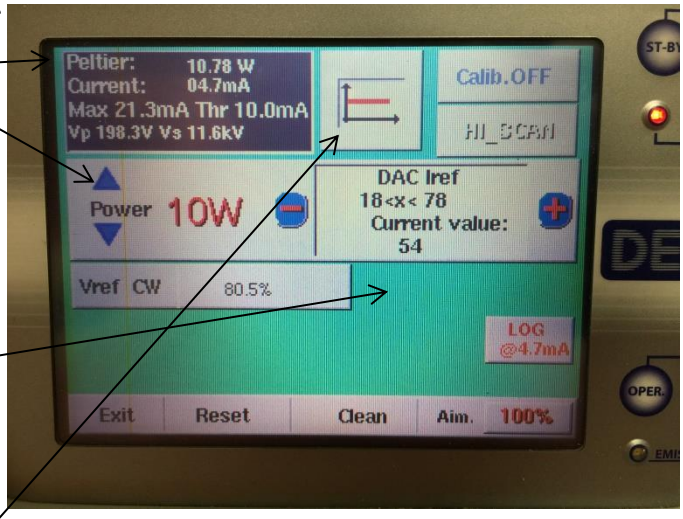
If the Peltier reading is 0.0W after pressing on,

check to see if “LP” (Low Power) appears

in the middle of the screen.

If it does, the tube is too weak to produce

any power at all. Vs can still be recorded by pressing “On” a few times.




Record “Current”

Look a couple of lines down, after **Vp** is **Vs** (Vp is usually about 200V, plus or minus 10 V).

Record **Vs**.

Now, touch the graph in the top middle of the Screen, the Screen will change to the PW Mode setting, displaying 4 vertical bars

Set the Level to 15, *8 on a Vero*

Set Frequency to 80

Press ON

Record Peltier

Record DAC

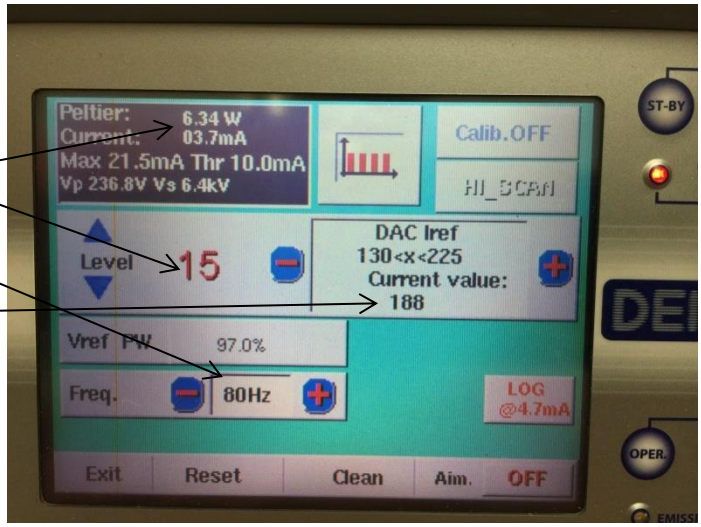
If it is < 225, set it to 225 with the Plus sign.

This increases the Current on the tube, to get

the most power out of it

Record the new DAC

Record the new Peltier Reading




Press "EXIT" at the Bottom left and when it asks if you want to save the new DAC settings, touch "Yes"

**Standard for recording readings:**

| |
|---|
| Peltier (10W, CW): |
| Current: |
| Vs: |
| Peltier P15/80: DAC: |
| Peltier P15/80 with DAC maxed out at 225: |

**Please e-mail or fax the obtained parameters to:**
cs@ils-service.com
Fax: (954) 289-4630

**Explanation:**

On CW or PW Mode, the Peltier is the actual power as measured internally by the laser.

If it is set to 10W CW and the Peltier shows less than 7 W, then it could be an indication of a Low Tube. If the Vs reading is greater than 12.5 kV, that is another indication of a bad tube.

At Level 15, 80 Hz, the Bare Minimum should be 5.2W, with the DAC maxed out. Any less than that, the tube is bad. At 5.2W, the tube will need to be replaced soon.

Tubes last on the average, about 3 – 4 years, whether the laser is used or not.