Operations to setup the LEED in its home working conditions

- 1. ensure that all the potentiometers are at zero position except the "emission" one that have to be at its maximum.
- 2. turn on the main power.
- 3. Increase the filament current upp to 1.5A slowly(about 2 minutes).
- 4. switch to emission and wait until the emission will be between 100 and 300 mAmps(if it becomes bigger decrease the filament current and vice versa).
- 5. Set wehenelt at -7Volt.
- 6. Set suppressor at 21Volt.
- 7. Set the energy at 15eV 8) using the offset potentiometers of the lenses set $Lens_1 = 15V \ Lens_2 = 30V$.
- 8. Set the energy to 150eV.
- 9. Using the "gain" potentiometers of the lenses set $Lens_1 = 150 Lens_2 = 300$.

Warning: To switch off the LEED control unit just turn all the potentiome-

ters at zero and decrease slowly the filament current (about 2 minutes).

I operating	=	1.459A
Ke = 0	\Rightarrow	Whenhelt $=0$
I emission	=	$2.9 \mathrm{mA}$
L1/3 = 2V L2	=	8
Ke = 1000		
L 1/3 = 1949		L2 = 1021
Ke = 50V		
$I0 = 0.79 \ \mu A$		