

## NanoDrop Spectrophotmetre

1. Click NanoDrop icon on desktop and select desired application (i.e. Nucleic acid, protein, cell culture, etc.)
2. To initialize instrument: open sampling arm and pipette 2µl of dH<sub>2</sub>O onto the lower pedestal. Gently lower arm and click “ok”.
3. Wipe away sample from **both** upper and lower pedestals by buffing (2-3 times) with a clean Kimwipe.
4. Enter user name and sample ID (optional).
5. Apply 2µl of blank sample and click “blank” on screen.
6. Wipe away sample from both upper and lower pedestals by remove with a clean section of the Kimwipe.
7. Apply 2µl of sample and click “Measure”.
8. Continue reading multiple samples following steps 6 and 7.

### Nucleic Acid Samples

1. Select DNA or RNA or Other from the pull down window.
2. If you select “Other”; select the wavelength you want to read your samples at.
3. The concentration (ng/µl) is the actual concentration of the sample placed on the probe. If you have made any dilution use must multiply by your dilution factor.

<b>Detection Limit (ng/µl)</b>	<b>Upper Limit (ng/µl)</b>	<b>Reproducibility (min. 5 samples)</b>
1.5	3700 (dsDNA) 3000 (RNA) 2400 (ssDNA)	Sample range 1.5-100 (ng/µl): ±1.5 (ng/µl) Sample range: 100 (ng/µl): ±2%

## Cell Cultures (Optical Densities)

1. The default wavelength is 600 nm. If you want to read at another wavelength use the drop down window to select the wavelength you desire (located under “User Curser”).
2. The Absorbance displayed is for a 1 mm path. **To get the Absorbance for a 10 mm (1 cm) path multiply your absorbance by 10 (Beer’s Law is based on a 1 cm path length).**
3. Cells with excess polysaccharides will require pedestal decontamination between samples (see Clean Up below).

## Clean-up

### Nucleic Acids

1. Moisten Kimwipe with dH<sub>2</sub>O and wipe **both** upper and lower pedestals.
2. Wipe around probe to remove any splashed sample.
3. Gently lower sampling arm. **ARM SHOULD ALWAYS BE IN THE DOWN POSITION WHEN YOU ARE FINISHED.**

### Cell Cultures and Proteins

1. Moisten Kimwipe with a 5% bleach solution.
2. Proteins, cells with excess polysaccharides and solutions with surfactants can “uncondition” the pedestals. Buff pedestals with a **DRY** Kimwipe 15-20 times.
3. Wipe around probe to remove any splashed sample.
4. Gently lower arm. **ARM SHOULD ALWAYS BE IN THE DOWN POSITION WHEN YOU ARE FINISHED.**

## Saving Files

1. A file folder is automatically generated for each user.
2. Folders within your names folder are automatically created for each type of measurement you do.
3. Measurements are automatically saved to your named folder.
4. Download data using a USB key.
5. If you **do not** enter a user name your data is stored in the Default folder.