

## Halo Counter Quick Start Guide

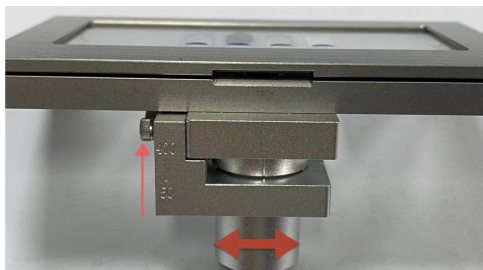
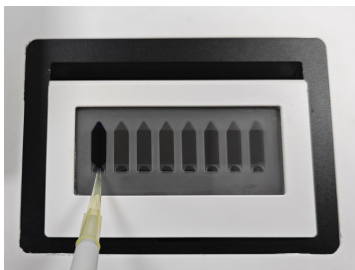
1. Power and Switch on the instrument, enter into the Halo Counter home screen.



2. Sample preparation and loading.

Bright field	Fluorescence
For total cell counting, load cell suspension into the chamber	Mix cell suspension and pre-mixed AO/PI solution at 1:1
For viable cell counting, mix cell suspension with trypan blue 0.4% solution at 1:1	

- For normal use(1e5~3e7), load 20ul mixed sample into the chamber.
- For Lower concentration(1e3~1e5), load 40ul mixed sample into the chamber.
- For smaller cell such as Algae, Yeast, E.coil, load ~5ul mixed sample into the chamber.



3. Sample measurement

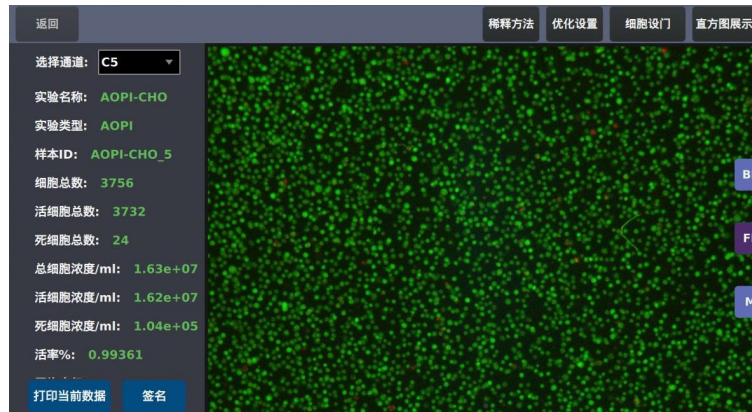
- Select cell counting mode from the counting options.
- Bright Field: Total cell counting
- Trypan blue: Cell counting & Viability
- Fluorescence: Cell Lines & Primary cells, PbmC
- GFP&RFP: Transfection rate.

4. Choose the chambers and count

- Enter into the application
- Choose the chambers
- Go to Count



## 5. View and Save Results

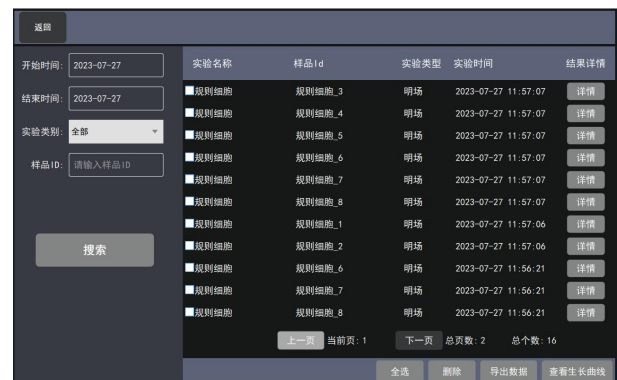


## 6. Toolbar

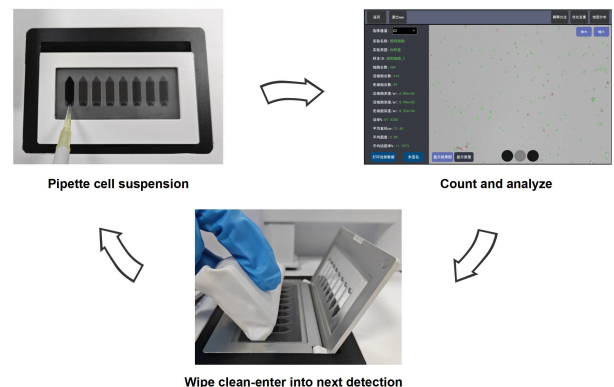
- **Dilution Calculator:** enables the user to define target cell number or density and culture volume. The counted result will automatically provide instructions to correctly dilute cultures to reach the desired target.
- **Optimize Settings:** Once a sample has been counted, a subset of the protocol parameters can be further adjusted to optimize the result. That value including Minimum Diameter and Maximum Diameter;Threshold.
- **Cell Size Histogram:** View cell size distribution and cluster histogram

## 7. Database: Enter into the start time and end time, experiment type, sample name, you can search for result.

- Data available to export includes results, images, and histograms in .CSV, PDF, IMAGE.
- Growth curve was auto made.
- The Delete function permanently removes the selected data from the instrument database and cannot be restored to the instrument.



8. Once a measurement is complete, lift arm and wipe away sample with clean,dry color wipe. And then spray 70% ethanol, use another white dry wipe to clean again and close the up surface. When surface is close, we can enter into the next count.



## 9. Power off

Enter into the settings app and choose "power off". When the screen black, toggle the power switch to shut down the instrument.