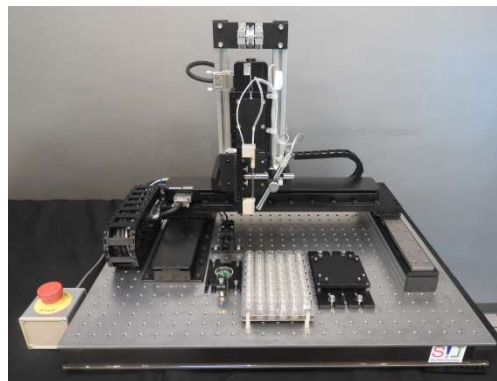


# Pico-dispensing system — BIO Drop —

- Picolitre dispensing
  - Automatic filling & cleaning
  - Up to 16 ink reservoirs
  - Easy operation
- Click-based programming  
User-friendly interface

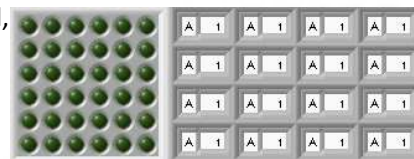


## Outline

- Dispensing nanolitre to picolitre  
Various kinds of liquids are usable (Functional material, organic ink, protein, DNA solution, reagent)  
Automatic filling and cleaning system for contamination-free dispensing with a single nozzle  
Camera for monitoring dispensed droplets

## Advantages

- User-friendly interface
- Inkjet parameters are controllable while watching droplets being dispensed, even during printing.
- Simply click to dispense liquids at points to create a program.



## Applications

- Spotting with functional materials for electronic sensors (e.g. tongue and nose)
- Synthesis of organic materials, proteins, reagents

Just click dispensing points, inks and numbers of droplets

## Specifications

Item	BIO Drop (SBP-3020)
Driving axes	3 axes (X, Y, Z), gantry type, table top
Driving type	Ball screw + Stepping motor
Maximum working area	X 300mm, Y 200mm, Z 85mm
Maximum print area	X 100mm, Y 100mm
Inkjet type	Piezo type (automatic filling and cleaning)
Viscosity	1-20mPa.s (depends on use case)
Nozzle I.D.	30, 50, 70μm
Inkjet volume	20, 90, 180 pl (depends on use case)
Customized options	Large work area, multi-head, environment control chamber etc.



AIST Start-Up

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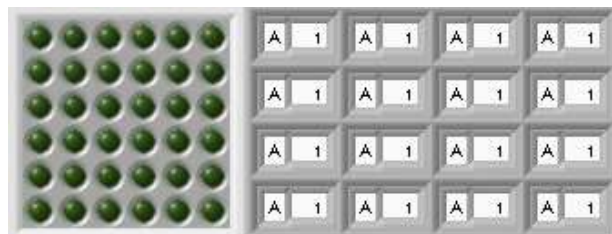
info@sjtechnology.com

URL

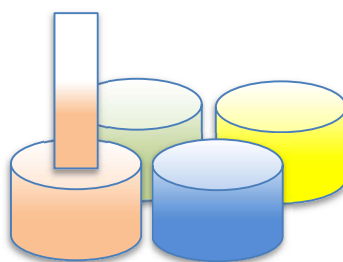
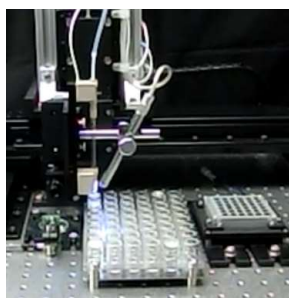
www.sijtechnology.com/en

# Pico-dispensing process

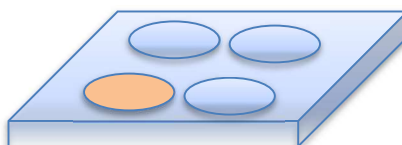
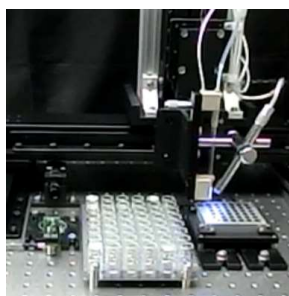
**Step1.** Click dispensing liquids, points,  
the numbers of droplets



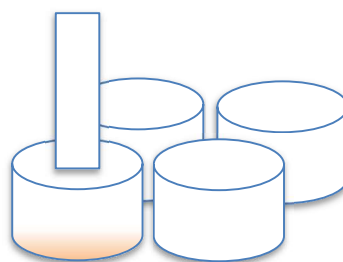
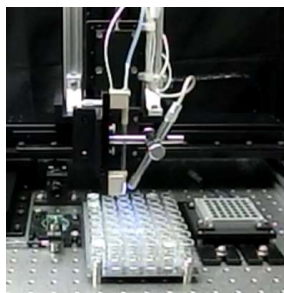
**Step2.** Liquid A is charged into the nozzle automatically.



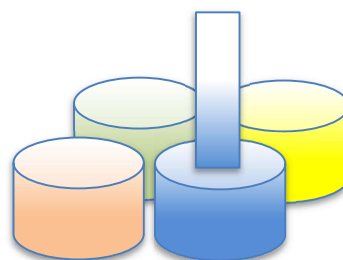
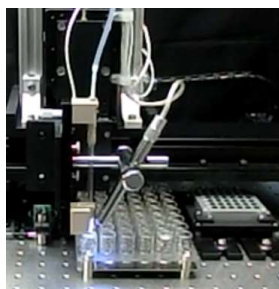
**Step3.** Liquid A is dispensed according to the program.



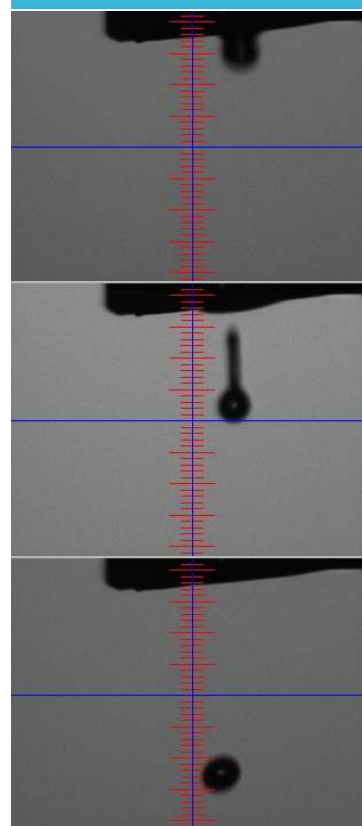
**Step4.** Liquid A is discharged and the nozzle is washed.



**Step5.** Liquid B is charged automatically.



Monitoring flying  
droplets



Control the numbers  
of droplets

