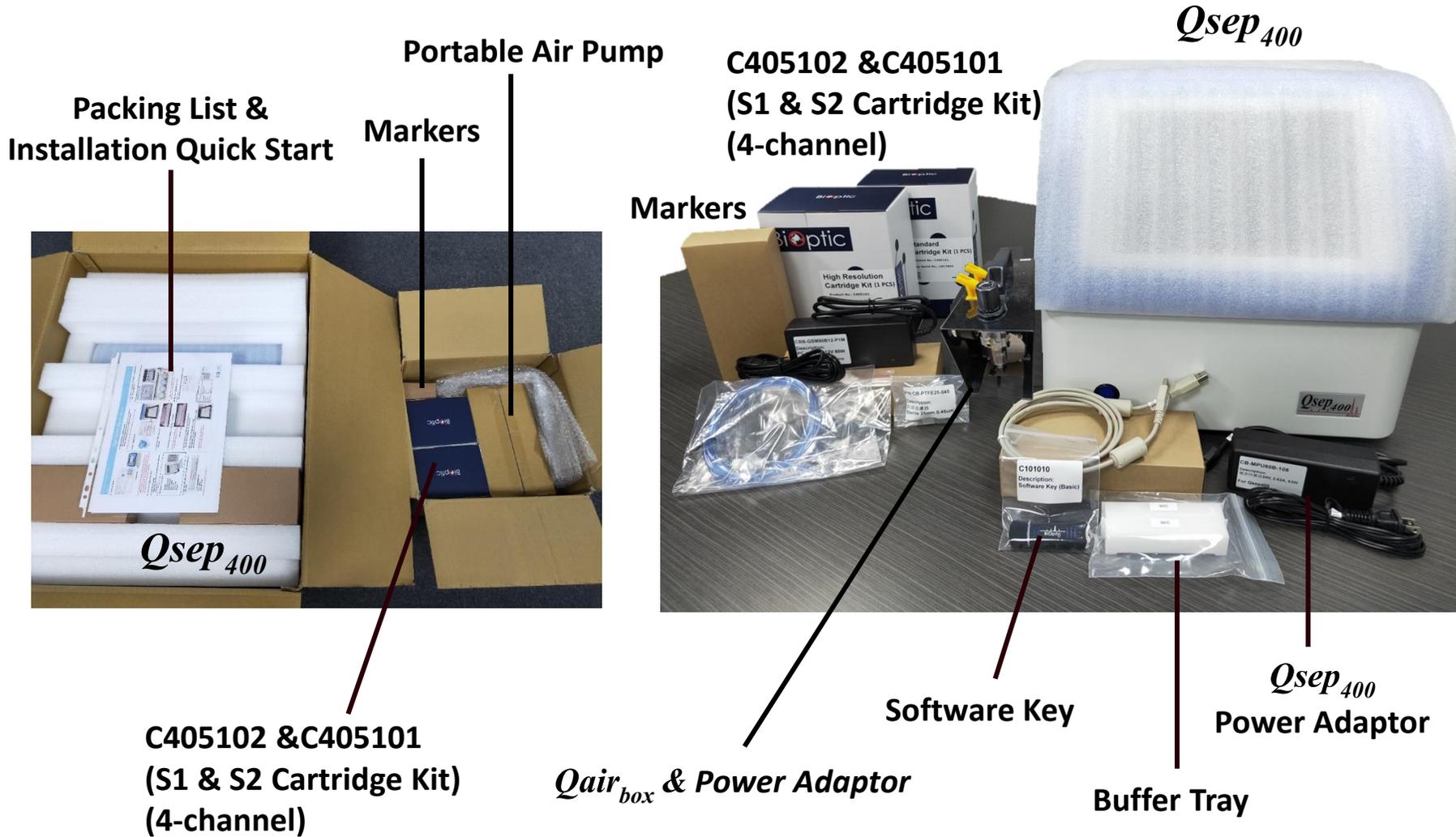


Installation Quick Start



***Two persons or proper transportation tool (trolley) is needed to move/transport the equipment.**

**** Please follow the instructions to remove the fixture and packing materials before inserting the power plug to avoid serious damage of the instrument.**

1. Open the box and remove all the documents, accessories and upper cushioning material.



2. Gently move the instrument out of the box.



3. Hold and lift the blue frame of the front panel and unscrew the fixture securing screws.

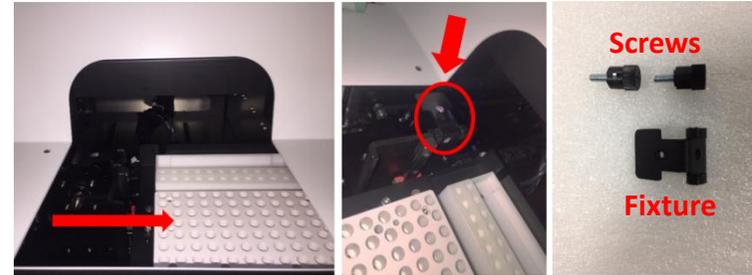
****Sample plate holder is secured by the fixture. Remove the fixture before plugging in the power adaptor and starting the instrument or it may cause system damage.**



Fixture Securing Screws



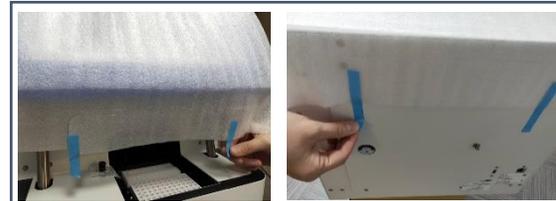
4. Push the sample plate holder to the right and remove the fixture.



****Before moving the instrument, the sample plate holder needs to be secured by the fixture to avoid system damage. Please keep the fixture and screws for later use.**

5. a. Carefully remove the blue tape and the wrap around the front panel.
b. Remove the sticker covering the power entry and plug in the power adaptor.

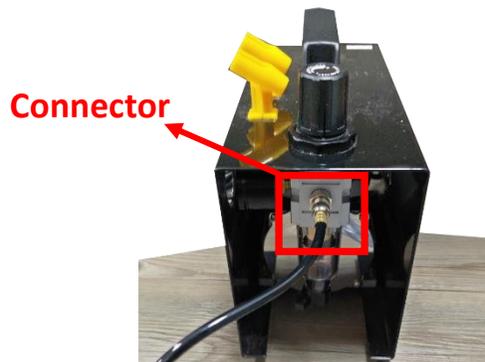
a.



b.



1. Unpack portable air pump and tighten the air tube with connector



Turn on the power of Qsep₄₀₀ and portable air pump

Your Qsep₄₀₀ is READY TO USE

***DO NOT switch on the instrument immediately after powering off Wait at least 5 seconds**



2. Plug the power cord into Qsep₄₀₀
(Please make sure the label on the power cord is labeled Qsep₄₀₀)



3. Plug the other side of the air tube into Qsep₄₀₀



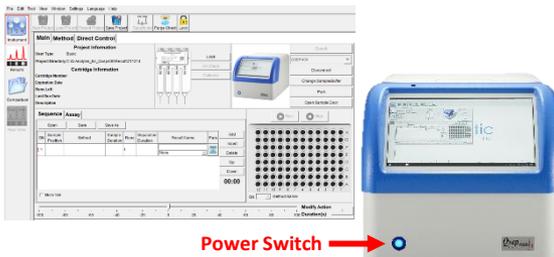
Re-pack Qsep₄₀₀ before moving

1. Remove buffer tray, samples and cartridge from the instrument
2. Click "Lock" and sample tray will move to initial position



3. Turn off Qsep₄₀₀ and hold the front panel
4. Pull the sample tray to left side and lock the fixture

1. Turn on the power.



✘ The message box of "Purge Function Check" will pop up once connected. Follow the instructions to proceed. It is recommended to perform the check every 6 months.

Packing List of Cartridge Kit:

- Cartridges
- Alignment Marker
- Separation Buffer
- Dilution Buffer
- Mineral Oil
- Droppers
- 0.2 ml Tubes



2. Buffer and Alignment Marker preparation:

2-1. Add Separation Buffer into "S" wells and add diH₂O into P and W/C wells.

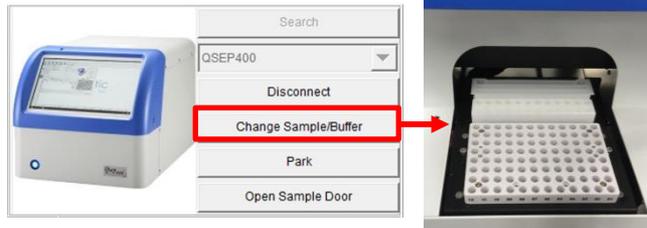


✘ Use the droppers to fill the wells.
 ✘ Each well should be 80% full. Overfilling or having droplets left on the dividers will conduct the current and will be hard to keep track of the changes.

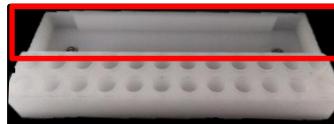
2-2. Alignment Marker (AM) preparation:
 Add ≥ 20 µl Alignment Marker into 0.2 ml tubes (4 tubes) and add 10 µl Mineral Oil on top of them.

✘ Make sure there is no air bubble in the 0.2 ml PCR tubes.

3. Click "Change Sample/Buffer".



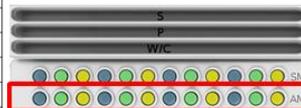
4. Allocate the buffer tray into the tray holder.



5. Allocate Alignment Marker in "AM" row on the holder.

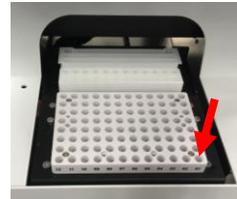
✘ Make sure Alignment Markers are placed in the assigned positions.
 ✘ Make sure to use individual 0.2 ml PCR tubes for Alignment Markers and Size Markers.

	20-1k (C109100)
AM-01 (position 1, 4, 7, 10)	20-5k (C109102)
	20-1.5k (C109109)
	20-15k (C109110)
AM-02 (position 2, 5, 8, 11)	RNA-LM (C109120)
	Protein-LM (C104605)
AM-03 (position 3, 6, 9, 12)	User Define AM



6. Hold the holder and use the thumb to press the Alignment Marker tubes tightly down into the well.

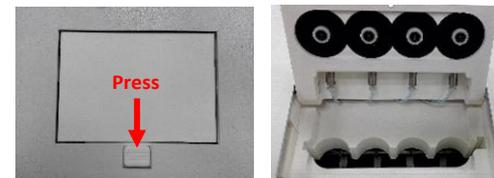
7. Allocate the samples (sample volume ≥ 20 µl).
 Spin down and make sure the sample is down at the bottom of the tube and no air bubble appears.



8. Click "Park" to move the holder back to the park position.

9. Unpack Cartridge:

Please follow the steps of "Unpacking Guide" in the cartridge box. Once done, open the cartridge door and insert multi-channel cartridge.



✘ L-shaped connector of the cartridge should follow the L-shaped guiding groove inside the instrument.

10. Close the cartridge door.

11. Click "Latch".

The cartridge information will be displayed on the screen.



11-1. New Cartridge Calibration:

New cartridge needs to be calibrated before use.
Please follow the steps below to proceed.

1. Click "OK"



2. Click "HV Check"

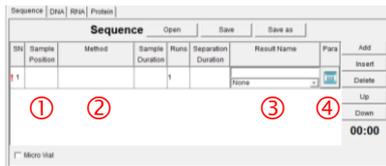


※ The storage and transportation condition may influence the gel-matrix and cause unstable current. If the current (gray line) is unstable during HV check, please repeat this step 2-3 times.

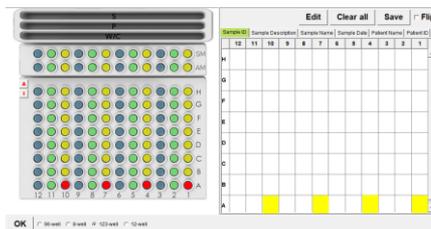
3. Click "Calibrate"

※ Make sure the Alignment Markers (C109200) have been placed in the correct positions.

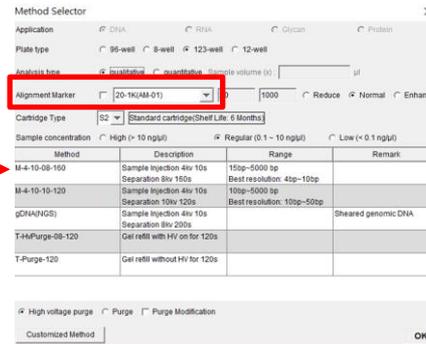
12. Click on the blank column and designate ① the sample locations, ② test method, sample duration, runs, ③ result name and ④ Para by following steps 12-1 to 12-4.



12-1. Click "Sample Position" and mark the positions of samples on the plate and then press "OK".

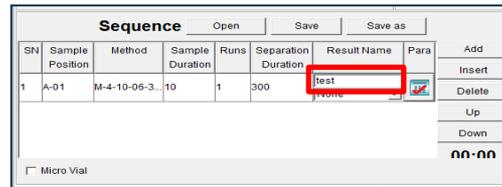


12-2. Click "Method" to select the analysis method.



※ To analyze the samples with Alignment Marker, check ✓ the box and choose the appropriate markers. Once done, place them in the corresponding positions.

12-3. Enter the "Result Name".



12-4. Click the icon "Para" and set the parameters. (Baseline Factor, Peak Threshold, Calculate, etc.)



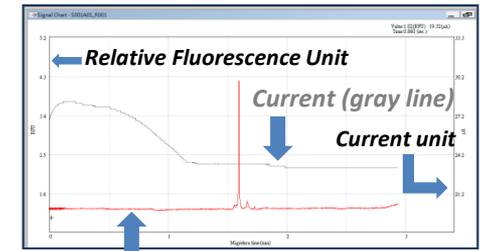
Calculate

- Reference marker table: based on built-in size marker data.
- Create size marker: place size markers in "SM" row on the holder to create size marker data.

13. Click "Run" to start the analysis.



14. Check the results.

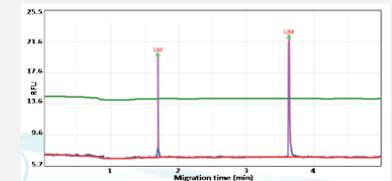


Fluorescence Intensity (red line)

During Calibration

Check if the alignment markers have been placed in the correct positions.

Software will recognize two Alignment Marker signals. **DO NOT** use Size Marker or DNA sample to "Calibrate".



⚠ Notice!!!
Before opening the cartridge door, "unlatch" first.

