

Important notes:

- Be sure the permeate fitting is fully seated in its port on the side of the instrument; otherwise the fluid will not flow through the instrument.
- The instrument can concentrate and elute with the head in any position.
- Never run alcohol through the instrument as it may damage internal components.
- Use the knob on the left side of the arm to adjust how tightly the head is held in place.
- Use the up (▲) and down (▼) arrows to highlight options on the screen and press enter (↵) to select. To adjust settings, press enter and use the up and down keys to adjust the setting to the value desired. Then press the enter key again. At the bottom of each menu tree, the option “Return” is displayed, selecting this option will return you to the previous menu.
- A run can be paused at any time by pressing enter. You will be able to restart the run as long as no air is allowed to enter the tip. Selecting “End Run” on the pause menu will allow you perform an extraction.
- The final volume of your sample is controlled by the extraction fluid valve open time. Generic “small”, “medium” and “large” extraction fluid volume values are found in the options menu, however under “Adv. Options” you can precisely control the number of milliseconds the valve is open, as well as the number of pulses the valve performs. The longer the open time and the more pulses performed, the larger the extraction volume. For reference, a single 75 msec pulse will produce approximately a 100 µL extraction volume.
- When adjusting the extraction volume, be sure to perform the test extraction with a tip installed, otherwise you will not account for the volume of elution fluid that remains in the tip at the end of an extraction cycle.
- Once a filter tip becomes wet, it can no longer be used for testing. Keep a used tip handy to test extraction volume settings without wetting a new tip.
- You can perform a test extraction by selecting “Extract” in the “Procedures” menu.

Setting up the instrument:

- Plug the 24VDC power supply into the instrument.
- Attach the permeate tube to the permeate port using the quick connect fitting and insert the other end of the permeate tube in a waste container.
- Install an elution fluid can in the instrument by first placing the tip of the inverted can into the tan port on the right side of the instrument. Then push the can down and latching it under the black hook.
- Flip the power switch to turn the instrument on, it will take approximately 5 seconds for the unit to power up.
- Press enter to advance from the welcome screen.
- To purge air from the extraction line select the following:
 - a. Options>Procedures>Purge,
 - b. Hold a waste container under the tip interface ports on the bottom of the head and press enter. A small amount of foam will come out of the front tip port.
- Select “Return” to go back to the options menu, select “Ext. size” and choose the desired final extraction volume. Further control of the extraction volume is found under the “Adv. Options” menu.

Concentrating a sample:

1. Raise the head up all the way and insert a tip into the ports located on the underside of the head. The larger port on the tip should be at the back (the tip can only be inserted one way). You should feel the tip “click” into place, and you should be able to confirm that the tip is fully seated by looking through the clear plastic of the head.
2. Place the sample on the platform under the tip and lower the head so the tip reaches all the way to the bottom of the sample container.
3. From the main menu, select “Start run”. The pump will start, a red light in the head will flash and the screen will display “Concentrating” with a running timer. It will take several seconds for the liquid to reach the pump, once it does it may sound louder.
4. Once all of the fluid is pulled through the tip, the unit will stop automatically. This will occur 3 to 30 seconds after the last of the fluid is pulled into the tip.
5. When the run is finished, raise the tip out of the sample container. Hold a small sample container under the tip and select “Extract”. The extraction cycle will take about 10 seconds and a jet of white foam will be eluted from the tip into your sample container.
6. Remove the used tip by pushing your thumb up against the bottom of the head while you pull the tip down with your hand, the tip is only held in place by a detent.

