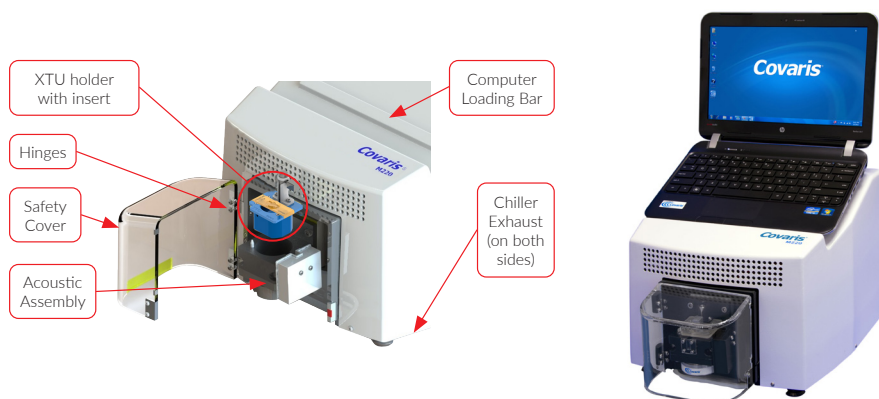


Quick Start Guide: M220 Focused-ultrasonicator

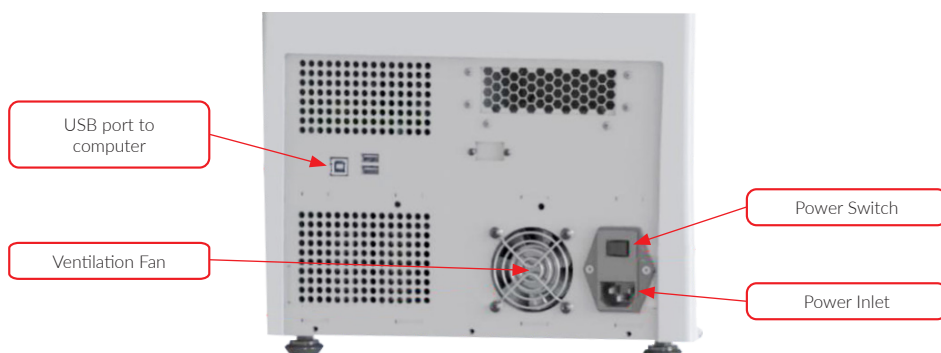
Unpacking and Setup

Space requirements: Height: 19 1/2" (with computer open), Width: 14", & Depth: 10". Two - 110V electric plugs are required.

- M220 is shipped in a padded cradle inside the cardboard shipping box. Lift cradle from the cardboard box by using the lifting handles. Remove the M220 system from the cradle and place it on the bench top. **CAUTION:** Lift the M220 out of the box by its baseplate. Do not lift by the acoustic assembly. Remove all wrapping materials.



- Unpack all accessories included with the instrument shipment. Items include the Notebook computer with AC adapter, 1 USB Cable, 1 M220 Power cord, fill-drain kit, M220 Holder XTU, inserts for various size microTUBEs, 100 mL wash bottle, 20 mL syringe, 10 disposable swabs, AFA grade water (125 mL), and a safety cover. Additional items may be in the shipment if they were included in the order.
- Peel off the backing from the Velcro stripes on the computer loading bars. Place laptop computer on the top of the M220 using the Velcro strips to secure it in place.
- Connect the laptop to the M220 using the USB cable. The port for the USB cable is on the back on the M220.
- Plug in M220 power cord and laptop power cord.
- Place the safety cover on the front of the M220, on the hinges, and close it.
- The M220 and laptop can now be powered on. Power Switch for M220 is located on the back as shown below.

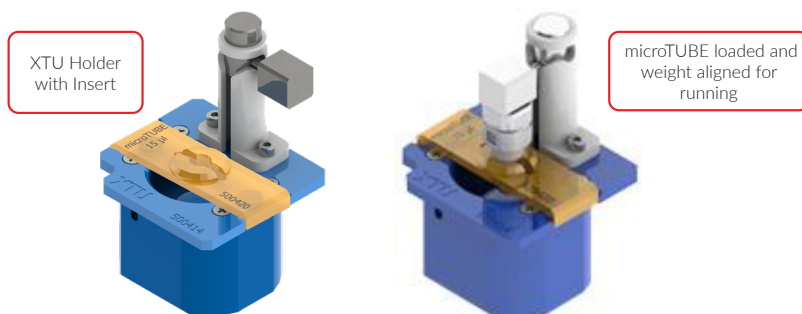


M220 Preparation

- Turn on M220 and start computer.
- Open SonoLab™ 7.2 system software.
- Prepare your accessories for use:
 - Choose insert to match the AFA-TUBE® to be used and place in the Holder XTU.

NOTE: Each insert is labeled with the tube size.

- Place Holder XTU with insert into the water reservoir.
- Place AFA-TUBE into the insert.
- Move weight so that it is holding the tube down.



- Fill water bath with the Holder XTU in place with DI or AFA grade water. Water level should be just below the cap of the tube.
- Select a Method in the Method box from the preloaded list - this will set the temperature.
- Water Temperature must be within acceptable Min and Max limits.
- Close the safety enclosure door.
- Select Run.
 - Run will start when temperature is within range.

NOTE: Do not run the M220 without water in the reservoir.

M220 Shutdown - Draining water and cleaning

Special care needs to be taken when draining the water from water bath.

- Remove the tube holder and place it on a clean, dry surface. Draw the water from the acoustic assembly using the provided syringe. It is important to use the plastic tip on the syringe to prevent the possibility of scratching the transducer surface. Completely drain the reservoir of as much water as possible.
- Use the disposable cleaning swab to sweep the water channels in the Acoustic Assembly. Wipe the surfaces of the transducer and the metal housing with lint-free cloth and air dry for next use.
- Store the Tube Holder Insert in a dry place.
- Power off the system.

Technical Assistance

Technical Support – Ongoing assistance with the operation or application of the equipment and/or troubleshooting is provided via:

- Telephone
 - United States: Tel: +1 781.932.3959 during the hours of 9:00 a.m. to 4:00 p.m., Monday through Friday, Eastern Standard Time/EST (UTC-05:00)
 - Europe: Tel: 44 (0) 845 872 0100, during the hours of 9:00 a.m. to 5:00 p.m., Monday through Friday, Greenwich Mean Time/GMT
- E-mail instrumentation queries to techsupport@covaris.com or application queries to applicationsupport@covaris.com

Notes
