

IVIS anesthesia

The IVIS anesthesia system is composed of three units:

- 1) Wall mounted oxygen supply
- 2) XGI-8 anesthesia unit with isoflurane vaporizer
- 3) Induction chamber located in the laminar flow cabinet next to the IVIS machine

Oxygen supply



XGI-8 unit



Induction chamber

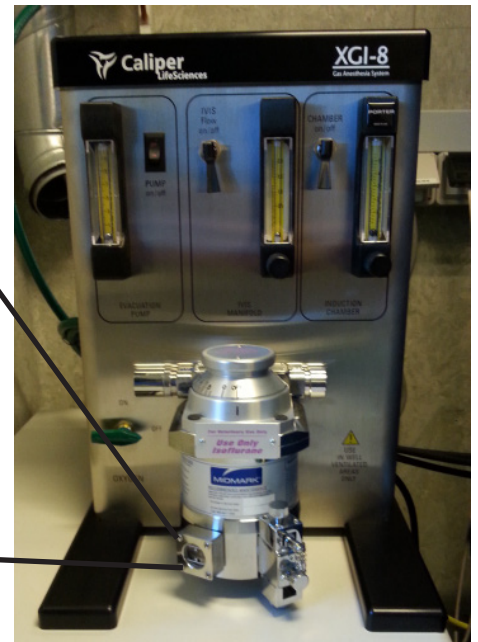
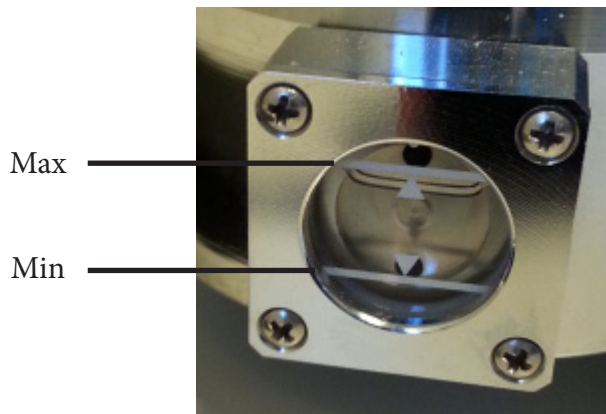


Important points

- Always check the isoflurane level in the vaporizer prior to imaging. Isoflurane cannot be added while the system is pressurized and on. Therefore imaging must be stopped while filling the vaporizer since no anesthesia can be produced.
- Turn off flow to the induction chamber when not in use. This saves a lot of isoflurane.
- If using the 5 mice manifold with fewer than 5 mice remember to put the black plastic stoppers in unused ports to save isoflurane.
- If further info is needed look in the XGI-8 manual located in the top right drawer.

Filling isoflurane on the vaporizer

Before using the IVIS system always check the isoflurane level at the vaporizer. The liquid should be at least half filled.



If needed follow these instructions:

- Make sure the XGI-8 is turned off and depressurized.
- Take an isoflurane bottle and the purple adaptor in the closet near the door.
- Attach the adaptor to the bottle in the LAF cabinet (1 and 2).
- Unscrew the place filler key on the top screw and take out the key (3 and 4)
- Insert the isoflurane bottle adaptor with the two holes facing down (5).
- Tighten the top screw to secure no isoflurane leakage.
- Elevate the isoflurane bottle to fill the vaporizer.
- When done, lower the bottle, unscrew the top screw and carefully remove the bottle and adaptor.
- Insert the place filler, tighten the top screw. Remove the isoflurane adaptor in the LAF cabinet and put bottle and adaptor in the closet near the door.



1



2



3



4



5



Operating the system

- 1) Turn on the evacuation pump (a) and confirm that the flow is greater than 6 liters per minut (lpm)
- 2) Turn on the oxygen supply on the wall. DO NOT ADJUST THE FLOW RATE.
- 3) Turn the green oxygen handle (b) to the on position.
- 4) Rotate the dial on the vaporizer (c) to 2,5 % isofluran. This setting works for most animal procedures.
- 5) Turn on the flow to the induction chamber (d). The flow rate is normally set to 1,5 lpm but can be adjusted if desired.
- 6) Place animals in the induction chamber.
- 7) Turn on the flow to the IVIS manifold (e). The flow rate is normally set to 0,25 lpm.
- 8) Turn off the flow to the induction chamber. Take the animals and put them in the manifold in the IVIS machine.

Oxygen supply



XGI-8 unit



Induction chamber



Turning off the system

- 1) Turn the vaporizer (c) to the off position.
- 2) Turn off the oxygen supply at the wall.
- 3) Open the valves to the induction chamber and IVIS manifold to depressurize the system (d and e).
- 4) When the balls in the rotameters are at the bottom, turn off both valves and turn off oxygen valve (b).
- 5) Turn off the evacuation pump (a).

Remember to clean the induction chamber with Virkon S.