

Proper Use of Fyrite CO₂ Meter

Note: If casing is opened and fluid is exposed gloves and goggles or face shield are required for handling.

Safety Note: Do not under any circumstances vent the Fyrite meter while fluid is at the top – this will expel fluid out of the top of the meter. Fluid is corrosive and poisonous (contains 26% Potassium Hydroxide). Avoid pointing the instrument at yourself or others while pressing the vent button.

1. Ensure that the incubator environment is representative of normal use and that the CO₂ level has stabilized and the inner door is closed and latched.
2. Attach sample tubing to the sample port on the upper left hand side of the CO₂ incubator. Opening the outer door will expose the sampling port; there is no need to open the inner door.
3. Next ensure that the Fyrite instrument is upright and all the fluid has drained to the bottom. Make sure the meter is calibrated to zero by loosening and moving the scale up or down accordingly until the zero mark is level with the fluid. If you need to add fluid (i.e. fluid too low to take accurate reading), carefully allow water to run in a sink and hold the Fyrite under the dripping faucet and allow a few drops to fall on the lip of the button, press the button down to allow the water to enter the Fyrite chamber, repeat this step until fluid is returned to normal level.
4. Press the larger end of the sample tubing down onto the top of the Fyrite and press down gently but firmly (make sure the fluid is all at the bottom before doing this).
5. Squeeze the bulb on the sample tubing 18 times while keeping the top button pressed firmly down and the sample tubing over the opening on the top of the Fyrite.
6. Remove the sample tubing and allow the button to come back up to the closed position.
7. Turn the Fyrite upside down slowly; you may need to hold it at a 45° angle to allow all the fluid to flow to the other side of the instrument. Make sure you turn the instrument all the way over 180° before returning it to the upright position in order to take the measurement.
8. Take the measurement of the % CO₂ and the repeat steps 5-7 twice more and take the average of the three readings.
9. If the incubator is above or below 10% adjust with the calibrate function on the incubator control panel. Ex – if the average reading is 17% adjust the calibrate

readout to 17% and then return the incubator to normal status. This will recalibrate the incubator to 10% CO₂.