

Instructions for the Trittech Research **Drosophila CO₂ WorkStation™**

WARNINGS!!!!

CARBON DIOXIDE (CO₂) GAS IS COMPLETELY ODORLESS AND NOT DETECTABLE BY HUMAN SENSES! WHEN RELEASED IN SUFFICIENT QUANTITIES IT CAN DISPLACE THE OXYGEN-CONTAINING AIR AND SUFFOCATION CAN RESULT WITHOUT WARNING; THEREFORE, CO₂ SHOULD BE USED WITH ADEQUATE VENTILATION AND CARE SHOULD BE TAKEN TO TURN OFF TANK SOURCE WHEN NOT IN USE! THE DROSOPHILA CO₂ WORKSTATION SYSTEM IS FOR RESEARCH USE ONLY AND MUST BE USED WITH CAUTION. IF SET UP AND USED CORRECTLY, THE DROSOPHILA CO₂ WORKSTATION CAN PROVIDE AN EFFECTIVE MEANS FOR ANAESTHETIZING FRUIT FLIES; HOWEVER TRITECH RESEARCH, INC. DOES NOT WARRANT THAT THE SYSTEM IS ERROR-FREE OR 100% RELIABLE. IN NO EVENT SHALL TRITECH RESEARCH BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES. IF ANY PART OR STATEMENT IN THE WARRANTY OR DISCLAIMER IS UNLAWFUL, THE REMAINING PARTS SHALL CONTINUE TO BE IN FULL EFFECT. IF YOU DO NOT AGREE TO FOLLOW THE WARNINGS AND ACCEPT THE DISCLAIMERS, PLEASE RETURN YOUR UNIT, WITHIN 14 DAYS, IN UNUSED CONDITION, TO TRITECH RESEARCH FOR A FULL REFUND.

SETTING UP:

Obtain a cylinder containing carbon dioxide (CO₂). Insert nipple from the regulator's fitting into the tank's fitting, and screw the collar from the regulator's fitting into the tank fitting. Tighten the fitting securely with a wrench (this fitting must withstand the high pressure in the tank. Before the fitting gets too tight, position the regulator so that the gauges are facing where you will be sitting. **Make sure tank is secure and can not fall over!!!**

Make sure foot pedal is plugged into its jack, for each station.

Plug unit into wall outlet (120 volt AC). Attach output tube(s) securely to microscope staging.

USE:

Make sure unit is plugged in, tubing and wiring are securely attached, and regulator is "off" ("backed out") by turning the regulator control counterclockwise until it is loose.

Open the tank valve by turning it counterclockwise. The inlet gauge will show the pressure in the tank.

Set the pressure by turning the regulator control clockwise until the output gauge has the desired reading (40 - 80 psi is often a good starting point).

Anaesthetize flies by pushing foot pedal to start and stop CO₂ flow. Increase or decrease pressure as needed, but do not go over 100 psi. CAUTION! Do not leave CO₂ flow on for a long time, as this may cause the valve or regulator to ice up.

When finished anaesthetizing, you must turn off the tank and "bleed the line" as follows:

- **Do NOT back out the regulator control.**
- Shut off the tank valve by turning it tightly clockwise.
- Activate foot pedal until pressure reads zero. Now, back out the regulator control.