



Stagetop Environmental Control

Control temperature and CO₂ in a microscope stagetop environment



The ECU is positioned on an inverted microscope. The ECU system consist of the stagetop environment base unit and the electronic controller.

For short term or long term studies of living cell cultures under a microscope or for time lapse video research, a microscope stagetop incubator is essential.

Perfect for Live Cell Imaging, **STEV** (the stagetop environmental control system) is a heated, humidified, compact environmental case that houses your culture wells and fits on a microscope stage. The **STEV** can be used with 35mm well plates by simply replacing the seal on the bottom of the stagetop environment case.

This system offers precision control of temperature, CO₂ and O₂. The system is flexible and easy to configure for a variety of experimental conditions.

The system includes the **Environmental Control Unit (ECU)** electronics which use four programmable loops to control the temperatures of the case and the lid, CO₂ and O₂ within the environmental case, and airflow within the incubator.

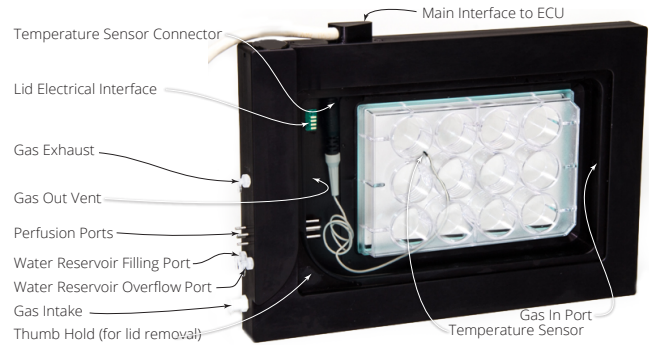
Control System Configurations

| | |
|---------|--|
| ECU-H5 | Controller with heat, premix gas |
| ECU-HC | Controller with CO ₂ and heat |
| ECU-HOC | Controller with CO ₂ and O ₂ |

Features

- Four programmable digital control loops:
 - Independent incubator base temperature PID control with ±0.1°C precision
 - Independent incubator lid temperature PID control with ±0.1°C precision
 - CO₂ digital PID control with ±0.1% precision
 - Airflow digital PID control from 0–900 SCCM
- Electronic flow meter
- Programmable alarm for out of tolerance condition on all four channels

STAGETOP ENVIRONMENT (OPEN)



STAGETOP ENVIRONMENT (CLOSED)



ENVIRONMENT CONTROL UNIT (FRONT)



ENVIRONMENT CONTROL UNIT (BACK)

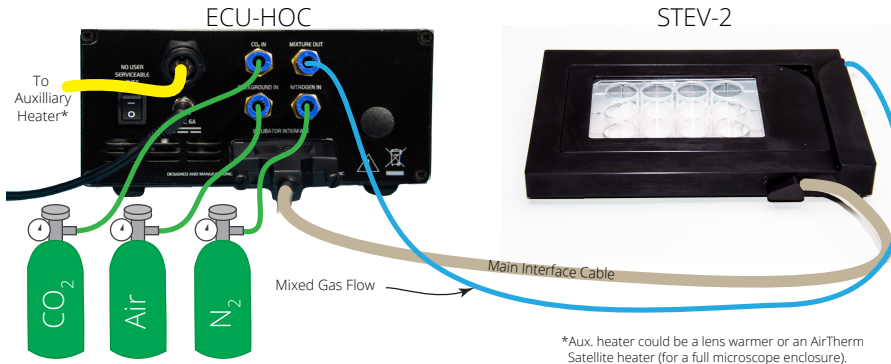




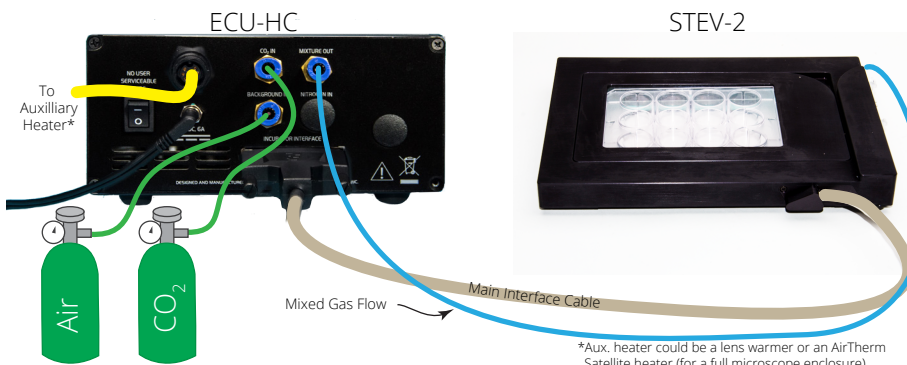
**WORLD
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Stagetop Environmental Control

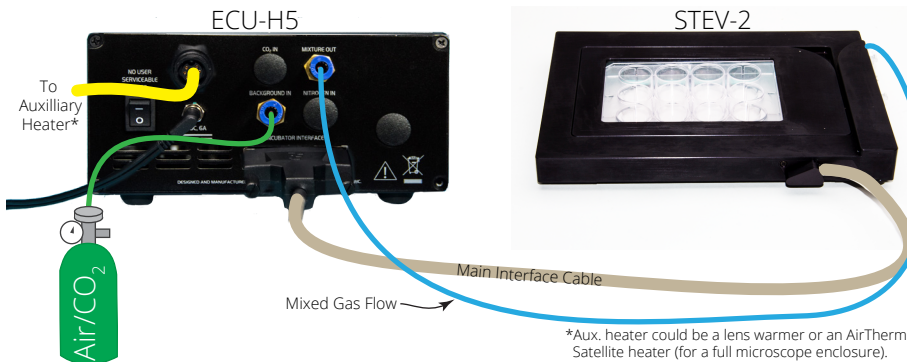
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*Aux. heater could be a lens warmer or an AirTherm Satellite heater (for a full microscope enclosure).



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SYSTEM OPTIONS

- Well plate inserts
- **SI-BF-100** Biofluorometer for fluorescence imaging (Includes light, filtering and timing)



SI-BF-100 Biofluorometer

QUOTATION INFORMATION

When ordering a system, please have the following information ready.

1. Scope manufacturer/model

2. Stage manufacturer/model

3. Stage-piezo Yes No
Type _____

4. Manipulators Yes No
Type _____

5. Objective oil lens Yes No

6. Stage microfluidics Yes No

7. List specimen dishes used:

8. Controller model of choice:
 Heat 5% Premixed Tank
 Heat, CO₂ Mixing
 Heat, CO₂, O₂

9. Imaging requirements for SI-BF100:
Power 110V 240V
Dyes used:

Excitation (nm):

Emission (nm):

WORLD PRECISION INSTRUMENTS

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