

## **Trouble Shooting Guide**

3100 Series II Test Mode

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There is also a special test/service mode built into the incubator control panel. This mode is to be used as a production tool during testing and a service tool for installing and/or troubleshooting problems with the incubator. When in test mode, all incubator control is disabled. To get into test mode the <- and -> arrow keys should be pressed simultaneously and held. The incubator s microprocessor only checks for this key sequence every 5 seconds, so the keys should be held until the display reads Test Mode -> . Listed below are the options available in test mode. To exit test mode, press the mode key and the system will resume normal operation.

**MAX LOAD ON/OFF** Manually turns ON/OFF all heaters, and valves so that the unit is under full load.

MAIN HT ON/OFF Manually turns ON/OFF the main chamber heater.

**DOOR HT ON/OFF** Manually turns ON/OFF the glass door heater.

**DR HEAT XX%** The incubator has a heater built into the inner glass door of the unit. This setpoint which ranges from 0 to 100% is the amount of time that heat will be applied to the glass door in relation to the main heater. System default is 50%.

GG VALVE ON/OFF Manually toggles the Gas Guard Valve. (Gas Guard option only)

CO2 VALVE ON/OFF Manually toggles the CO2 Valve.

CO2 SPAN Used when a span adjustment of the T/C CO2 sensor is necessary.

**O2 VLVE ON/OFF** Manually turns ON/OFF the O2 valve. (O2 option only)

ALM CNTS ON/OFF Manually toggles the remote alarm contacts.

PULSE 485 Sends a 2 second long data stream out the 485 connecter.

OT CAL XX.X C Used to calibrate the over temperature probe.

**TMPOFF XX.X C** Displays the offset amount that the air temperature has been changed during calibration.

**O2OFF** Displays the offset amount that the O<sub>2</sub> has been changed during calibration. (O<sub>2</sub> option only)

**RHOFF XX %** Displays the offset amount that the RH has been changed during calibration. (RH option only)

O2 **XX.X MV** Used to display the O2 cell millivolt reading for a given O2 level. ( O2 option only )



**RESETS XX** Displays the number of times the units has been powered up. This can be cleared by pressing the up arrow and can be used to troubleshoot possible power problems. ( ie brownouts, resets)

C100 ON/OFF Used to turn the Class 100 display ON/OFF.

**DFLT MAIN EE** Pressing < ENTER > reloads the entire contents of the Main Micro Processors non-volatile memory to defaults. When < ENTER > is pressed the message **ARE YOU SURE** will appear, press < ENTER > to perform the default, otherwise press any other key to cancel. **Caution: This should only be used if problems indicate that the memory has been corrupted or erased. Defaults the entire contents of the micro board non-volatile memory.** 

**DFLT SETP** Pressing < ENTER > reloads all system setpoints in non-volatile memory to defaults.

Caution: Defaults all previous setpoints that have been programmed into the unit.

**DFLT CALIB** Pressing < ENTER > reloads all system software calibration in non-volatile memory to defaults. **Caution: Defaults all previous software calibration.** 

MN VERS XX Displays the main board s software version number.

**Note:** When in test mode, the processor will check if the analog board option exists. If it does, the processor will write out the following information to the analog board during any test mode menu: 20.0 degrees C, 20.0 %CO2, 20% rH, and 20.0% O2.

**Note:** When in run mode with SYSTEM OK or CLASS 100 showing in the display, pressing the down arrow will cause the over temp temperature to be displayed in the lower 7 segment display.