

FUME[]CARE

CA-PRO RANGE

Fumecare CA-PRO Cyanocrylate Chamber

FOR COMMENT ONLY

CA-PRO-90



CA-PRO-60



FILTER
AND PRE-
FILTER

HOT PLATE

HUMIDIFIER



CONTROL
PANEL

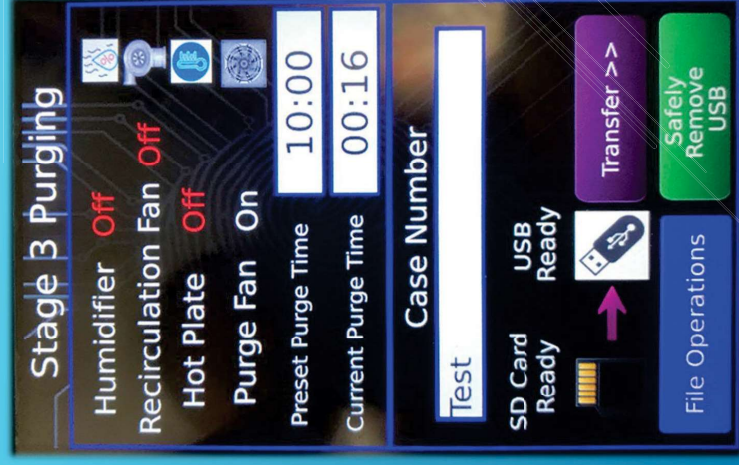
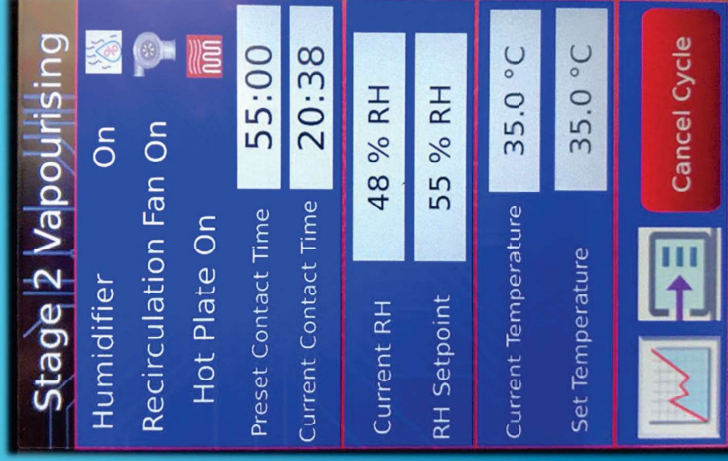
INITIAL CABINET SET UP

On receipt of the cabinet first identify the loose items that are wrapped and supplied separately:

1. Humidifier
2. Trays
3. Shelf Brackets
4. Shelf Bars
5. Pre-Filter
6. Keys
7. Manual
8. Stylus Pen

Proceed to fit them in the various locations, ensure the RH Wick Filter is fitted inside the humidifier. And then fill with around 2L of Deionised water. Ensure it is then plugged in to the trailing 4 pin lead located inside the cabinet

STANDARD CYCLE SCREEN SHOTS



RH CALIBRATION

Main Menu

0

Select Cycle Type

Standard Cycle

User Defined Cycle 1

User Defined Cycle 2

Case Number

889fggj

Officer ID

iutf653

Door Locked

Adjust Parameters

Start Cycle >>

SETTINGS

Cancel Cycle

Settings

Set Time Of Day

10 : 28 : 46

Actual RH Value

44 % RH

Offset

0

Calibrate Humidity

Start Purge Cycle

Controller Setup

Door Lock Toggle

UV Light

HOME

RH Calibration

RH Setpoint Value

80 % RH

Set RH Value
Press When
Cabinet RH
Is At 80%

Offset

-2

Clear RH
Offset
Value ?

Humidifier On

Actual RH Value

52 % RH

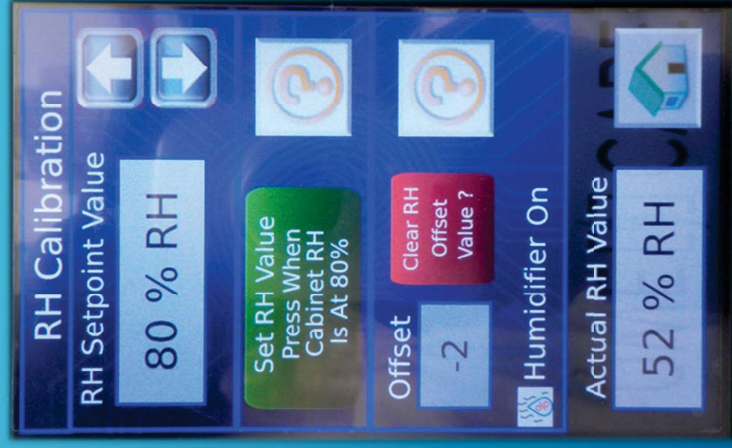
HOME

RH SET
POINT

OFFSET

ACTUAL
RH

RH CALIBRATION SET UP



RH PROBE POSITION ON CA-PRO 60 (Top Left Corner)
ON CA-PRO-90 (Behind the control Panel)



ENSURE
HUMIDIFIER IS
ALIGNED WITH
THE INLET

CALIBRATION PROCEDURE SETUP

Tools Required: Calibrated and Certified RH Meter



CALIBRATION PROCEDURE STEPS

Before proceeding first press the relevant symbol to see instructions- descriptions



CALIBRATION PROCEDURE

1) Insert a calibrated probe inside the CA chamber.

2) Leave the RH Calibration screen on.

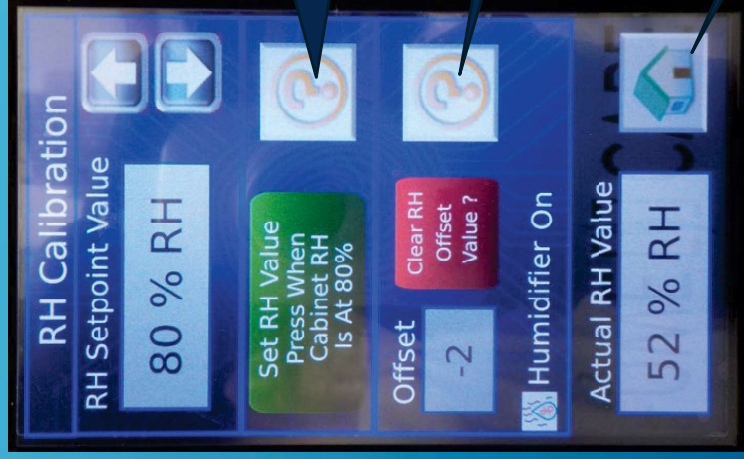
3) Let the calibrated meter stabilise and check the RH reading.

4) If the meter is reading less than 80% humidity press the up arrow button. Each press will increase the % RH by 1% on the display.

5) If the meter is reading more than 80% humidity press the down arrow button. Each press will decrease the % RH by 1% on the display.

6) When the calibrated meter is settled at 80% humidity, press the green button.

7) Remove the calibrated meter and press the "Home" button to return to the Main Menu.



OFFSET / CLEAR RH OFFSET VALUE

The offset value is the amount that has been added or subtracted from the "raw" RH value.

The clear RH offset button will set the offset back to zero. So the value being displayed is the raw value being read in from the sensor.

HOME

PARAMETER SETTINGS



CYCLE FIXED RH & TEMP

Purge and Contact Time
Cycle Set
User Defined
All Settings User Defined

CYCLE 2

All Settings User Defined

Door lock

PRESS

STANDARD
CYCLE



PURGE TIME

RH TIMEOUT

CONTACT TIME

HOT PLATE TEMPERATURE

UV TIME

USER DEFINED
CYCLE 1 & 2



SETTINGS

Main Menu

Select Cycle Type

- Standard Cycle
- User Defined Cycle 1
- User Defined Cycle 2

Case Number: 889fggj

Officer ID: iutf653

Door Locked

Adjust Parameters

Start Cycle >>

SETTINGS

Cancel Cycle

PRESS

HOME

HOT PLATE SETTING

Actual Temperature: 17.5 °C

Set Temperature: 20.0 °C

Minimum Value: 10.0 °C

Maximum Value: 30.0 °C

Safety cutoff Temperature: 25.0 °C

Manual Setting

Pb: 74

It: 27

Dt: 1205

HOT PLATE AUTO TUNE

PV Low: 0.0 °C

PV High: 80.0 °C

Cv Low: 0.0 % Duty

Cv High: 95.0 % Duty

dt: 100 ms

PID mode: 0

Set Point: 120.0 °C

Process Val: 17.6 °C

Frequency: 1000 mHz

Pb: 74

It: 27

Dt: 1205

Run Auto T

Load AT Data

THESE ARE FACTORY SET

System Settings 1

Machine Type: CA Machine

UV Light: No

Purge Fan Delay: 04:00:00

Next Fan Cycle: 02:00:00

Cycle Type 1 Defaults

RH Default: 81 % RH

Temp Default: 12.5 °C

Purge Exh Time: 33:00

RH Timeout: 22:00

UV On Time: 09:14

Contact Time: 14:00

System Settings 2

User Defined Cycle 1

RH Default: 71 % RH

Temp Default: 120.0 °C

Purge Exh Time: 28:00

RH Timeout: 12:00

UV On Time: 03:30

Contact Time: 22:00

User Defined Cycle 2

RH Default: 71 % RH

Temp Default: 120.0 °C

Purge Exh Time: 28:00

RH Timeout: 12:00

UV On Time: 03:30

Contact Time: 22:00

HOT PLATE TESTING AND SETTING

Set Day / Month / Year
3-March-2020

Set Time Of Day
13 : 45 : 58

Actual RH Value
-1 % RH

Set RH Value
-1 % RH

Actual Temperature
17.5 °C

Set Temperature
20.0 °C

Minimum Value
10.0 °C

Maximum Value
30.0 °C

Safety cutoff temperature
25.0 °C

Manual Setting
Pb 74
It 27
Dt 1205

PID SETTINGS

Pv Low 0.0 °C
Pv High 80.0 °C
Cv Low 0.0 % Duty
Cv High 95.0 % Duty
dt 100 mS
PID mode 0

Set Point 120.0 °C
Process Val 17.6 °C
Frequency 1000 mHz

Pb 74
It 27
Dt 1205

AT Status 0
AT Running

Run Auto T
Load AT Data



MEASURING THE HOT PLATE TEMPERATURE

CAUTION: Care must be taken as the Hot Plate surface gets to over 100 degrees C



The cabinet HEATER control PID system allows an engineer to calibrate the hot plate temperature control. This is an Engineers function and should not be attempted unless you have received training on the system from the manufacturer or agent.



AUTO-TUNE: In the setting menu use the Left & Right arrows to navigate the function pages, once you reach the Run Auto T page and have already set the Temperature. Press Run Auto T Green button and allow the process to continue. Be patient as this take a little while as the control runs the plate up to temperature several times to test the settings and temperature tolerances. When the Auto Tune is complete the green light will show beside the Auto Tune Button, at this point press AT Data to load the calibration settings. NOTE if the screen has returned to the home page during calibration you should return to the Auto Tune page to see if its complete and to press the Load AT button. For the settings to be accepted a cabinet re-start should be undertaken, failure to do so will not store the Auto Tune settings.

PID temperature controllers work using **a formula to calculate the difference between the desired temperature setpoint and current process temperature**, then predicts how much power to use in subsequent process cycles to ensure the process temperature remains as close to the setpoint as possible by eliminating the impact.

DIAGNOSTICS SCREEN

Diagnostics

RH Sensor Bit Count

4918

Temperature Input 0

36.5

Digital Inputs

PID Code

4

Door Switch

RH Water Level

Purge Fan

Spare

Digital Outputs

Hot Plate / Cabinet Heat

Spare Heater Output

Purge Fan

Recirculating Fan

RH Fan

Hotplate / Cabinet Overtemp

UV Lights

BACK

The diagnostics screen displays an indication of what is running at any one time

If the RH Tank water is low this will be indicated on the display

All functions will display if one or more is not functioning.

Diagnostics

RH Sensor Bit Count

4918

Temperature Input 0

36.5

Digital Inputs

PID Code

4

Door Switch

RH Water Level

Purge Fan

Spare

Digital Outputs

Hot Plate / Cabinet Heat

Spare Heater Output

Purge Fan

Recirculating Fan

RH Fan

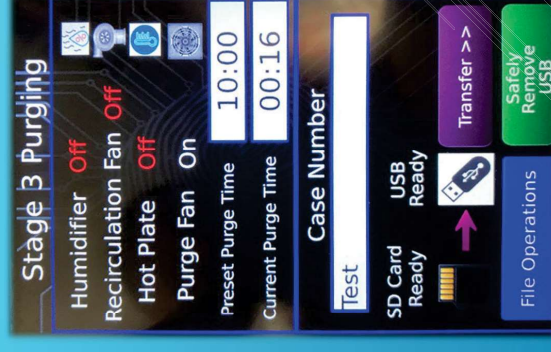
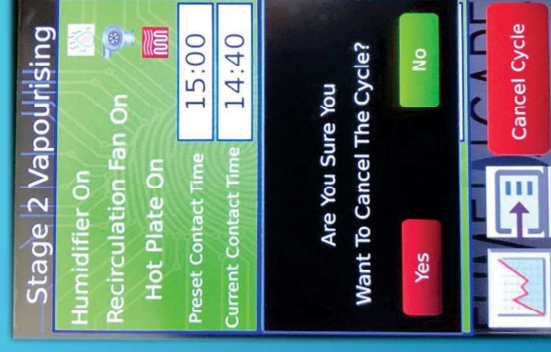
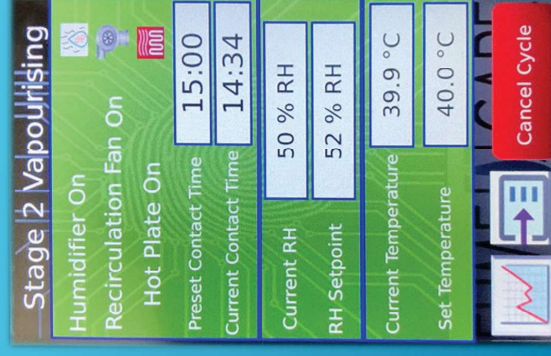
Hotplate / Cabinet Overtemp

UV Lights

BACK

CANCEL CYCLE SETTINGS

This is a feature that allows the operator to abort or cancel the contact timer if the prints are fully developed if the operator is satisfied the prints are ready

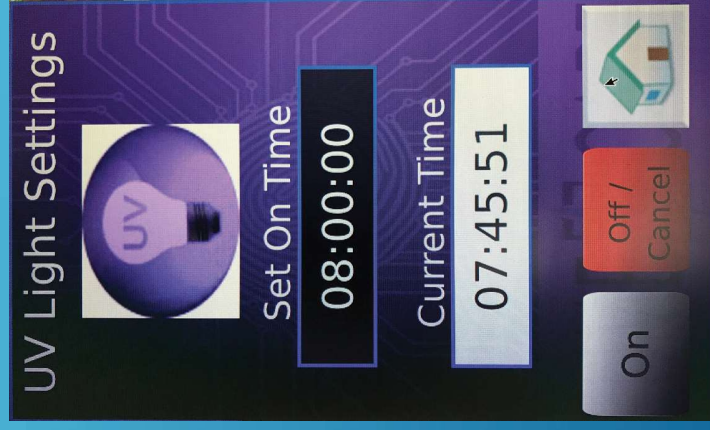


If during the contact cycle the operator is sure the prints are ready, then you can choose to press cancel. You will then be asked if you are sure and if you wish to abort or confirm the contact time is complete in your opinion.

1. Complete will continue the monitoring and recording of the process parameters
 2. This option will stop monitoring and record the cycle was aborted by the operator
- Once you have selected you option the cabinet will continue to purge cycle

UV – (Ultraviolet Decontamination) SCREEN

CAUTION: UV LIGHT IS DANGEROUS AND SHOULD ONLY BE USED IN THE SEALED ENCLOSURE OF THIS CABINET



Close the door and power up the machine.

Set the UV from the touch screen and select the desired run time.

Securely screw in each UV light plug into the sockets inside the chamber. The UV lights should only be used in a dry chamber after cleaning is complete.

Only then position the UV lights inside the of the chamber.

The door is interlocked so the UV lights will switch off if the door is opened.



CAUTION: Do not work on the enclosure or open the door while the UV Lamps are switched on.



CAUTION: Read these instructions fully before use and please pay particular attention to sections of the operators manual that contain this symbol.

