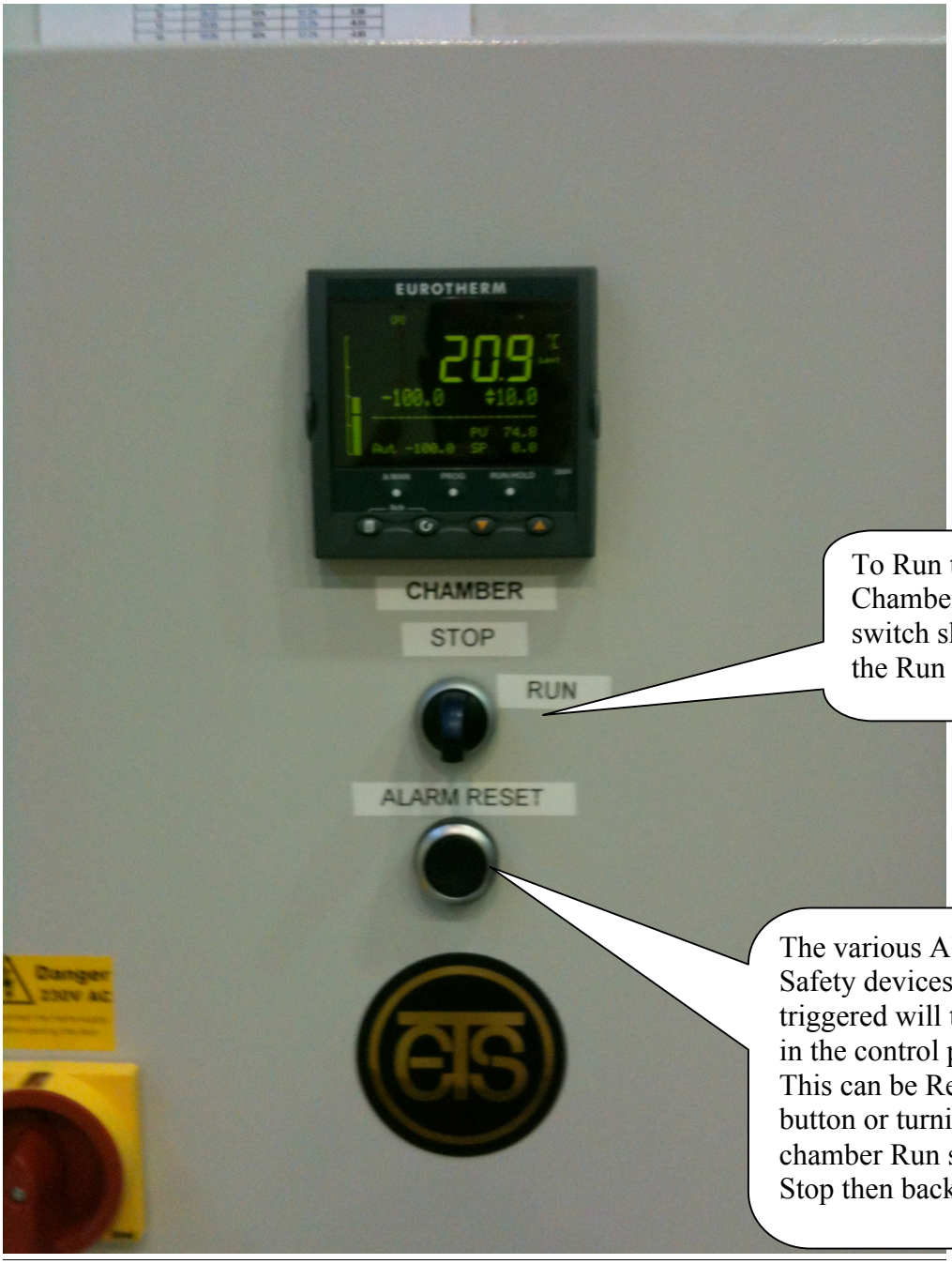
Example of a Walk In Room Control Upgrade



Software User Guide

iTools - Configuration and Monitoring Software

- A complete engineering studio for **Configuration**; **Data logging**; **Communications**; **Monitoring software**

View Builder

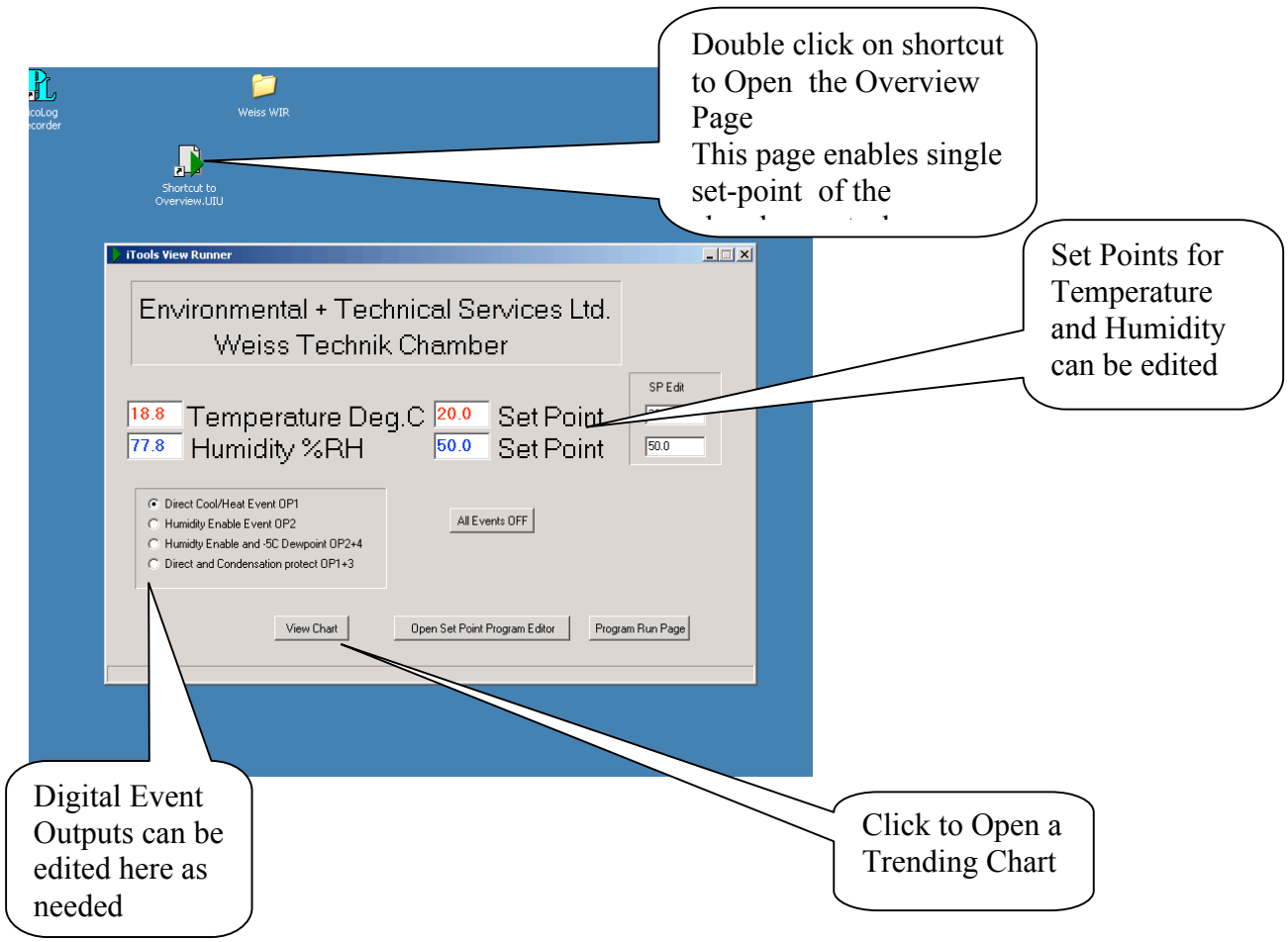
View builder allows creation of customized screens to provide a simple visualization of your process.

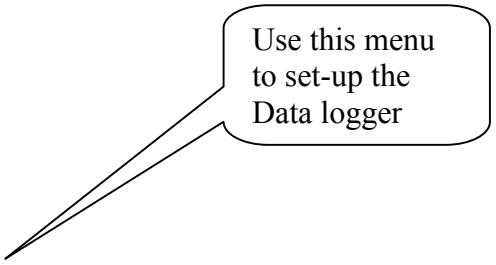
Data logging and trending

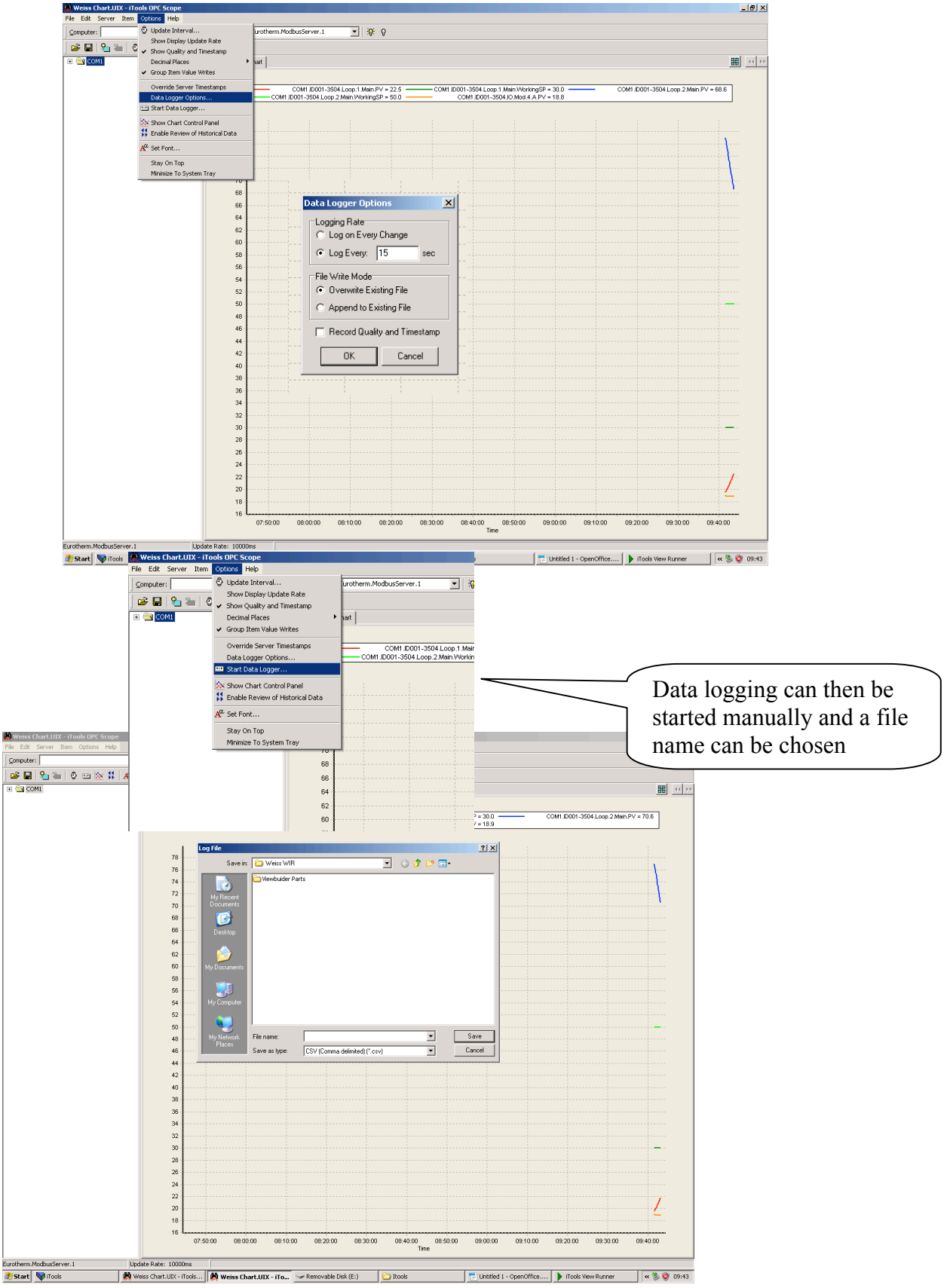
Access to real time monitoring

Setpoint program editor - simple setup of setpoint profiles

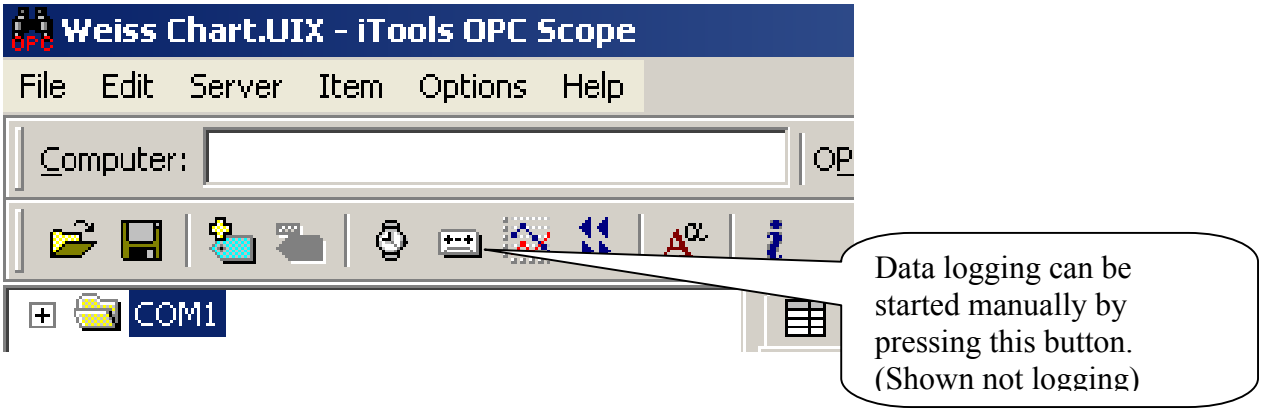
A number of screens have been configured as detailed in the next few pages but all are configurable by the end user to make the system more user friendly.

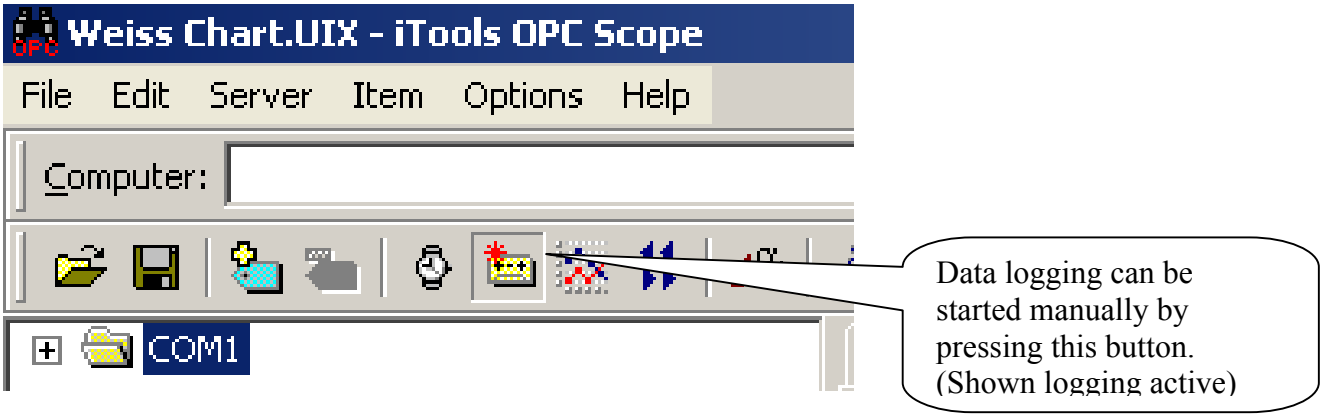


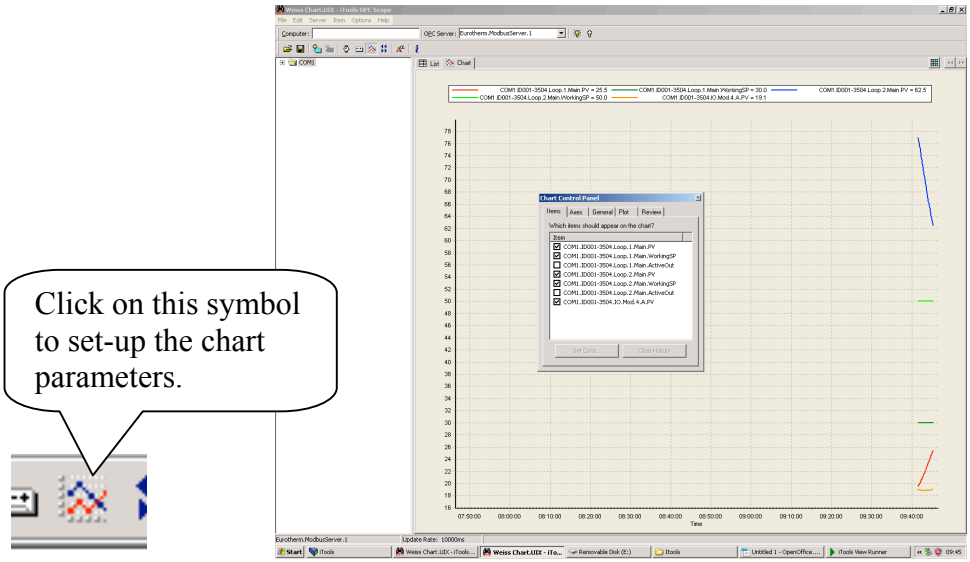


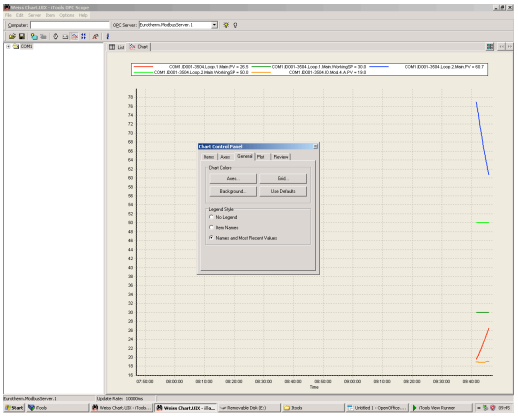


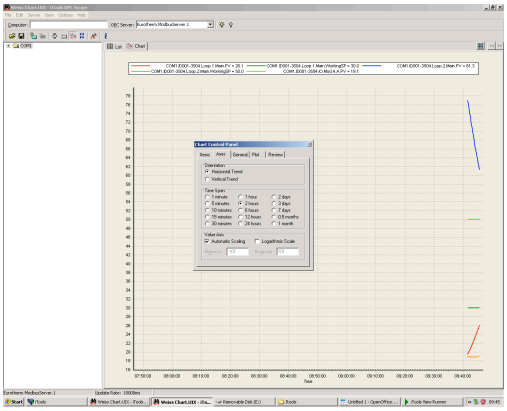
Data logging can then be started manually and a file name can be chosen


Weiss Chart.UIX - iTools OPC Scope
File Edit Server Item Options Help
Computer:
COM1
Data logging can be started manually by pressing this button. (Shown not logging)

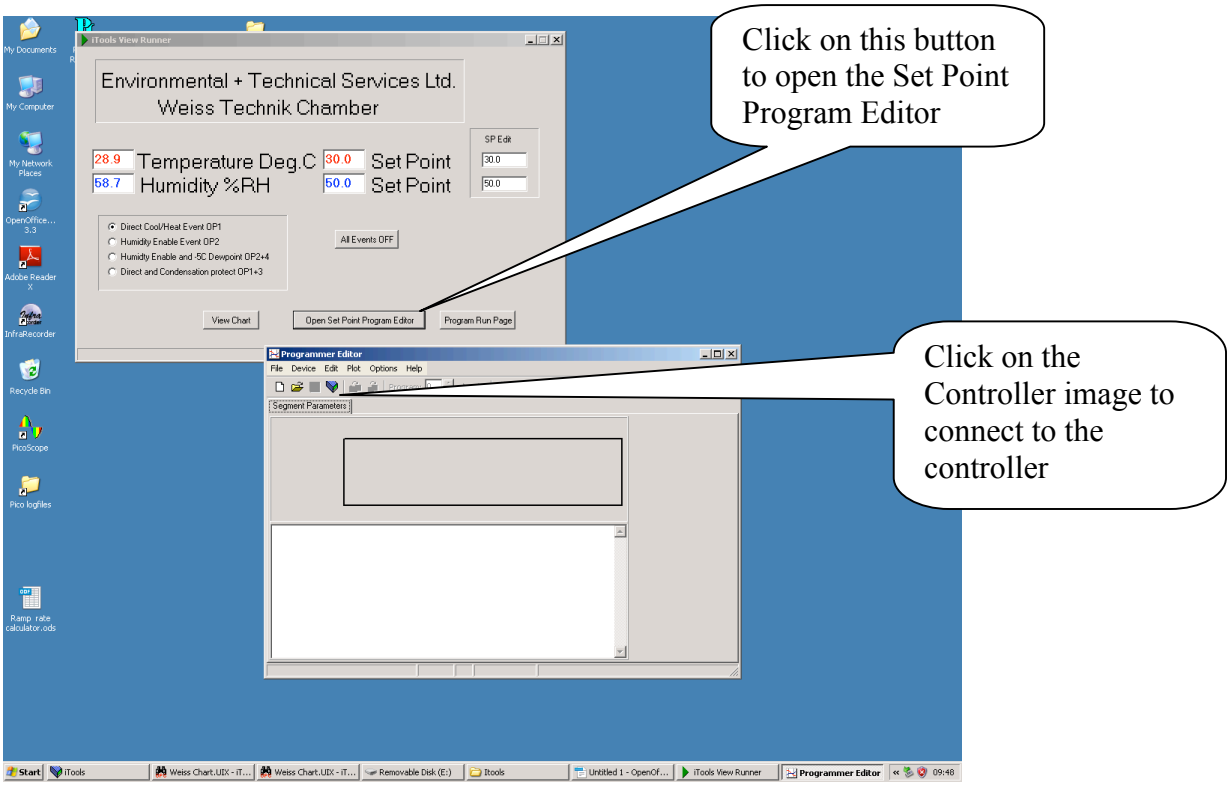

Weiss Chart.UIX - iTools OPC Scope
File Edit Server Item Options Help
Computer:
COM1
Data logging can be started manually by pressing this button. (Shown logging active)

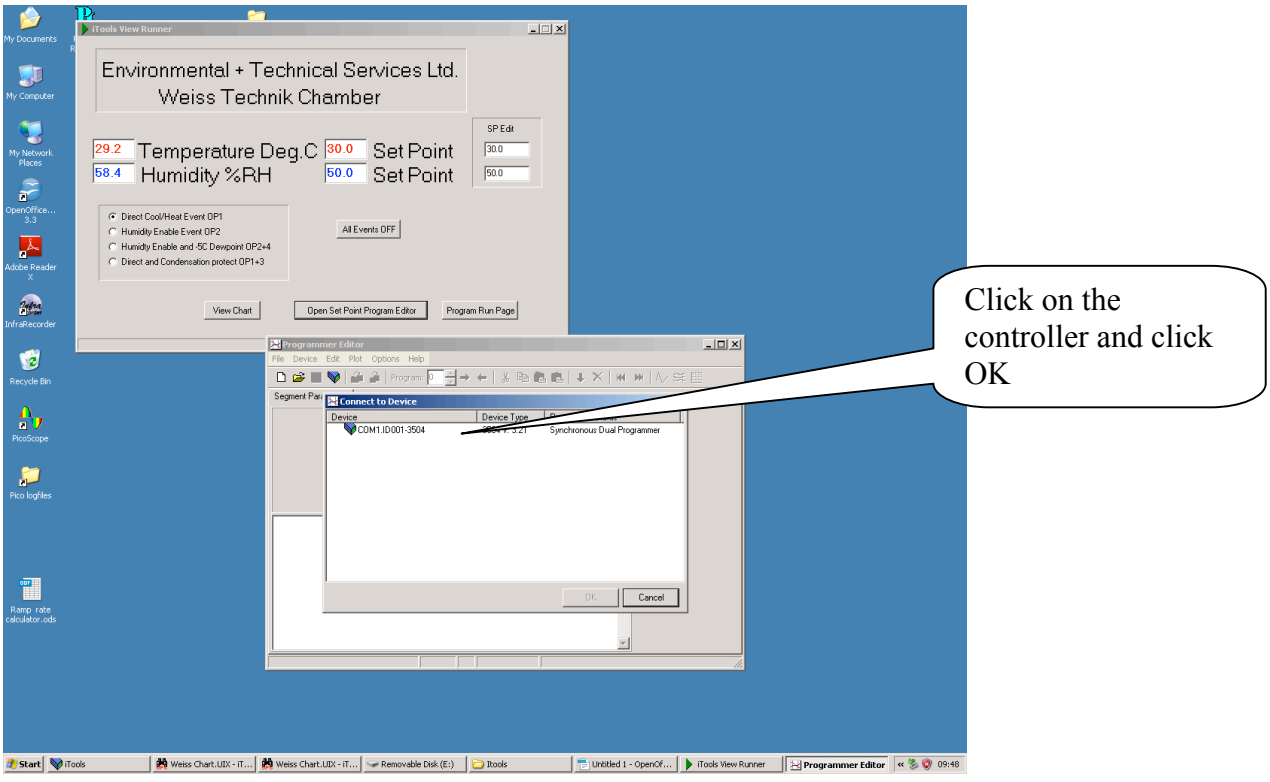

Click on this symbol to set-up the chart parameters.

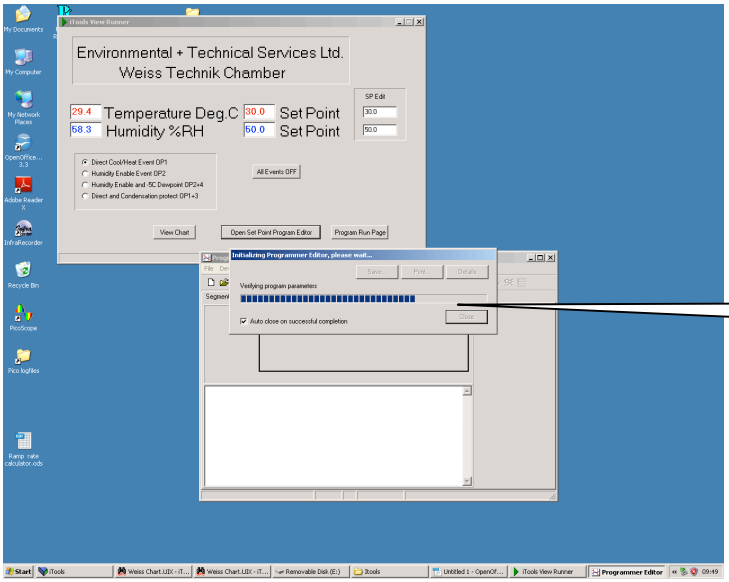


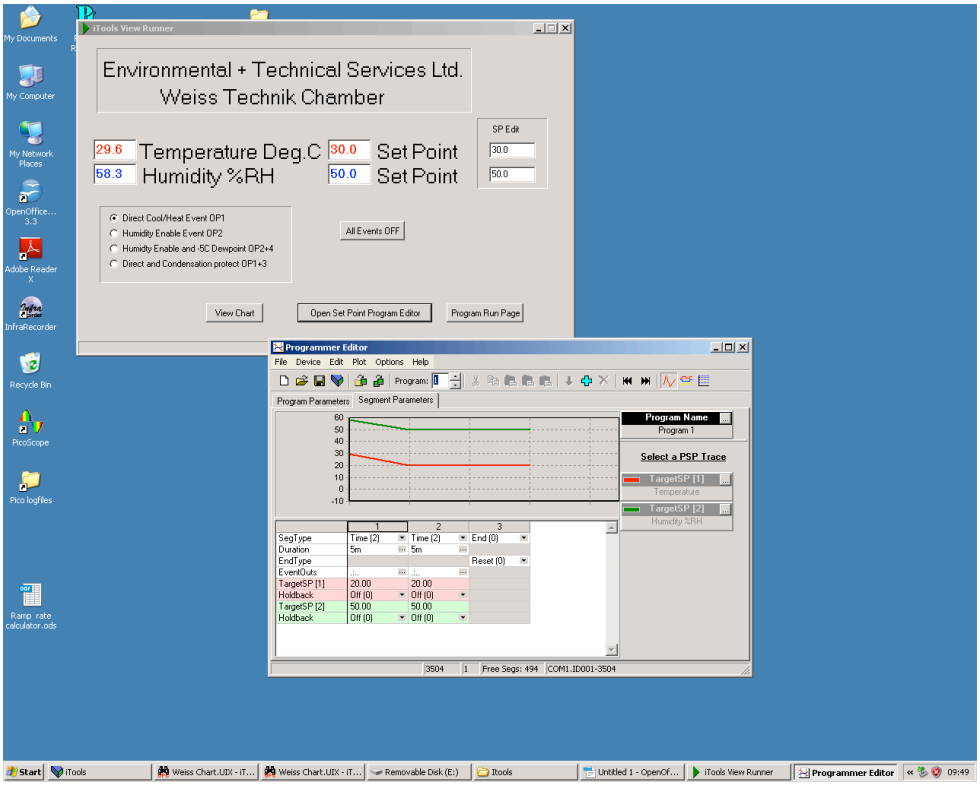


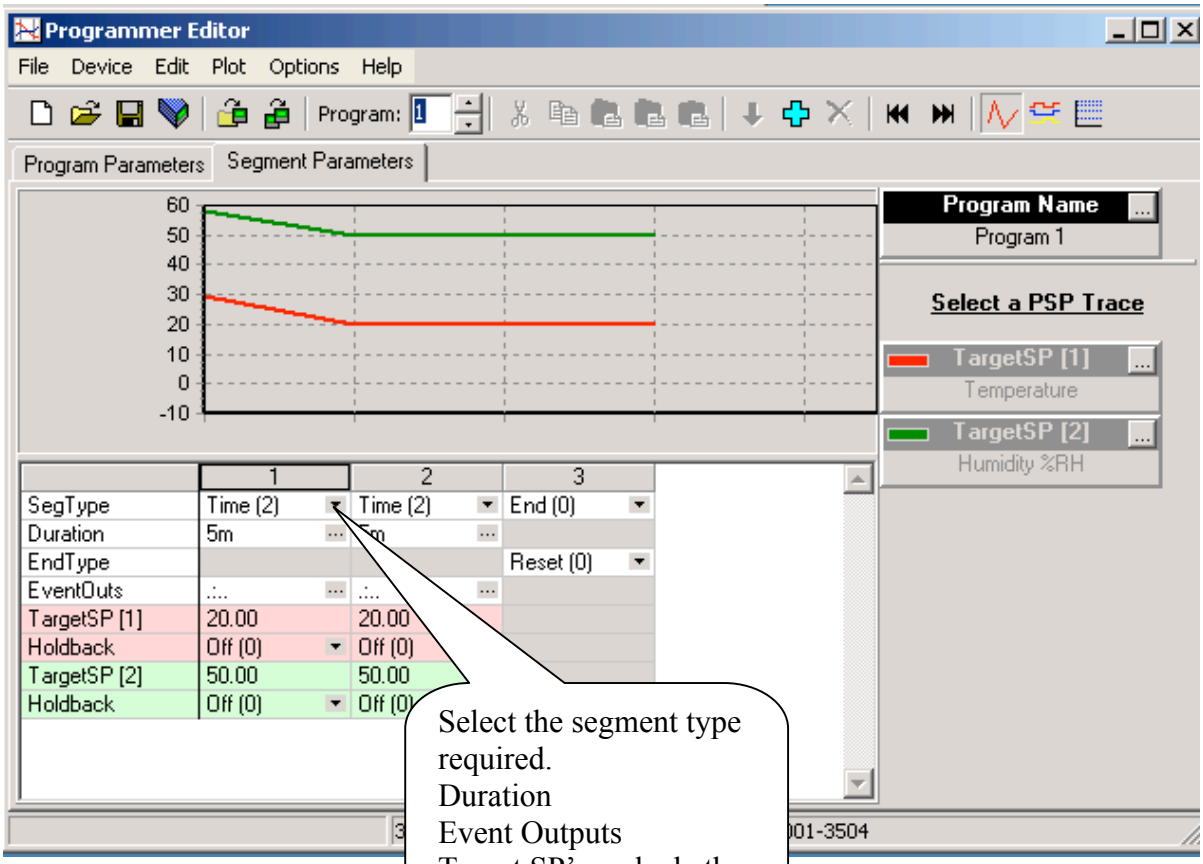
Set Point Programming Editor






Environmental + Technical Services Ltd.
Weiss Technik Chamber
29.4 Temperature Deg.C 30.0 Set Point
58.3 Humidity %RH 50.0 Set Point
Initializing Programmer Editor, please wait...
Verifying program parameters
Values are loaded


Environmental + Technical Services Ltd.
Weiss Technik Chamber
29.6 Temperature Deg.C 30.0 Set Point
58.3 Humidity %RH 50.0 Set Point
SP Edit
Direct Cool/Heat Event OP1
Humidity Enable Event OP2
Humidity Enable and -5C Dewpoint OP2+4
Direct and Condensation protect OP1+3
All Events OFF
View Chart
Open Set Point Program Editor
Program Run Page
Programmer Editor
Program Parameters
Segment Parameters
Program Name
Program 1
Select a PSP Trace
TargetSP [1]
Temperature
TargetSP [2]
Humidity %RH



Segment Type

A program consists of a number of segments. This setting defines the individual segment behaviour.

Value Options

0: End Segment

An end segment terminates a program. In an end segment, the programmer can be configured to reset to local setpoint or to continuously dwell at the last programmer setpoint.

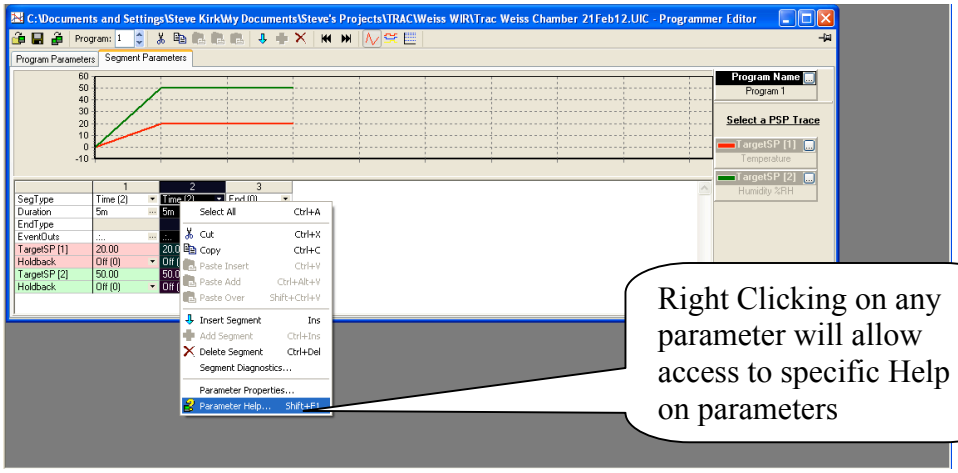
2: Time to Target Segment

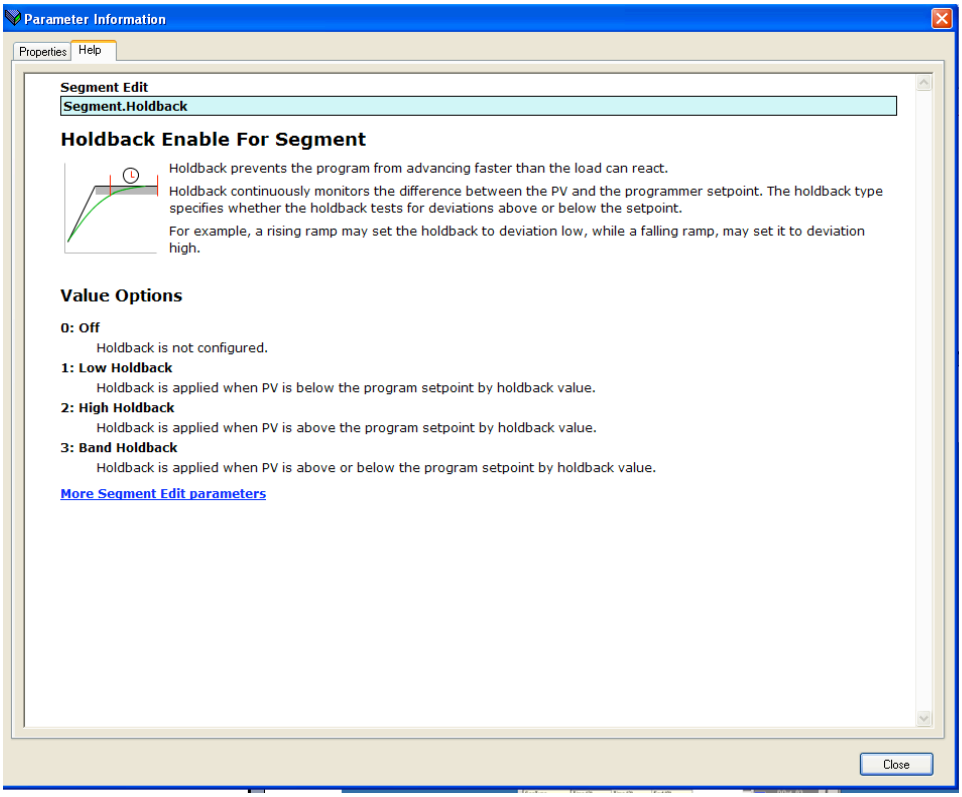
A time to target segment specifies the duration of the segment and the final setpoint for the segment. The Instrument then calculates the ramp rate to move the setpoint to the target in the specified time.

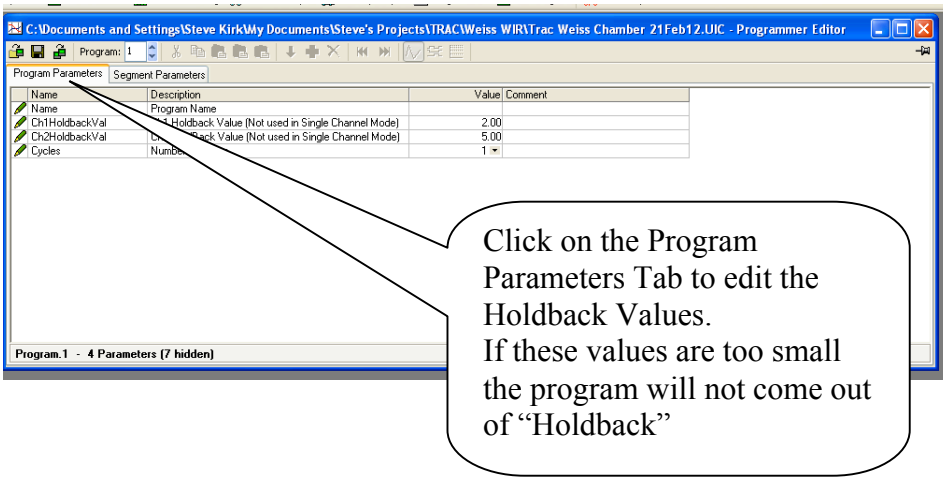
Time to target profiles are easier to setup than ramp rates, however, since the first segment has an unknown starting point, it is not possible to predict the rate of change of setpoint for the first segment.

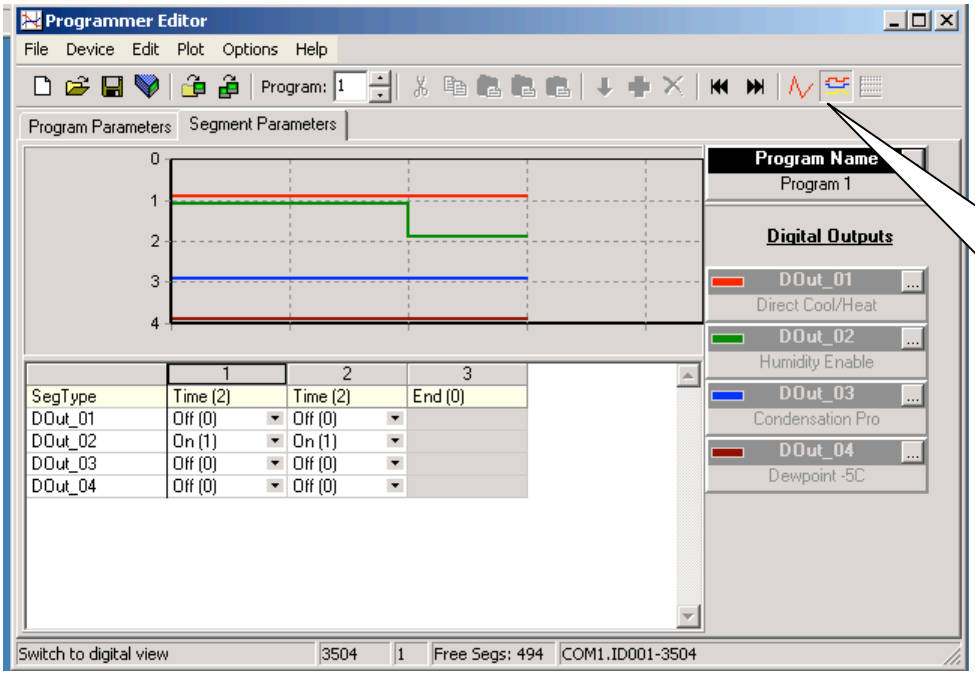
5: Wait Segment Specifiy Conditional Transition to Next Segment

Wait criteria include waiting on programmer digital inputs (PrgIn1 and PrgIn2), PVWaitIP which specifies wait criteria for an auxiliary PV, or the end of a segment of the other channel (Dual Programmers only).

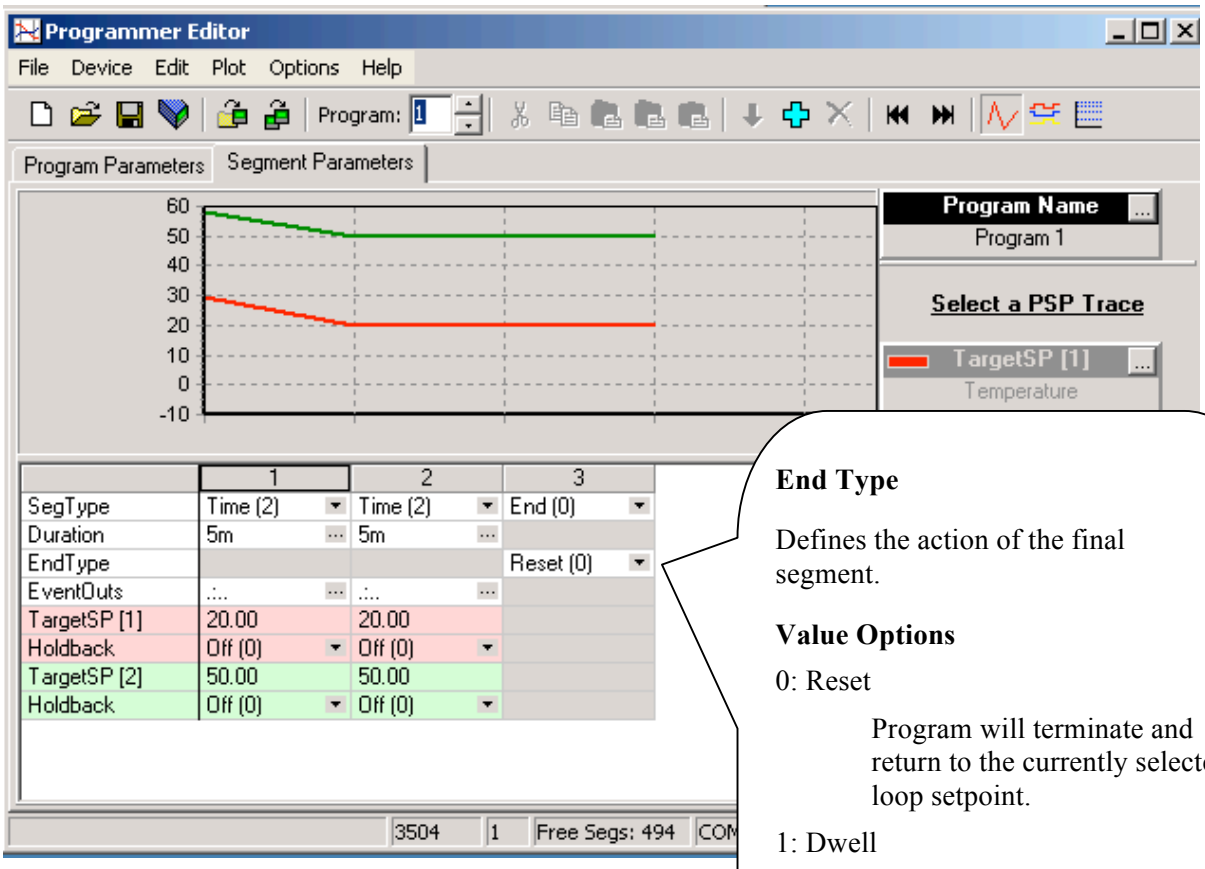

C:\Documents and Settings\Steve Kirk\My Documents\Steve's Projects\TRAC\Weiss WIR\Trac Weiss Chamber 21Feb12.UIC - Programmer Editor
Program Parameters
Segment Parameters
Program Name
Program 1
Select a PSP Trace
Select All Ctrl+A
Cut Ctrl+X
Copy Ctrl+C
Paste Insert Ctrl+V
Paste Add Ctrl+Alt+V
Paste Over Shift+Ctrl+V
Insert Segment Ins
Add Segment Ctrl+Ins
Delete Segment Ctrl+Del
Segment Diagnostics...
Parameter Properties...
Parameter Help... Shift+F1
Right Clicking on any parameter will allow access to specific Help on parameters


Parameter Information
Properties
Help
Segment Edit
Segment.Holdback
Holdback Enable For Segment
Holdback prevents the program from advancing faster than the load can react.
Holdback continuously monitors the difference between the PV and the programmer setpoint. The holdback type specifies whether the holdback tests for deviations above or below the setpoint.
For example, a rising ramp may set the holdback to deviation low, while a falling ramp, may set it to deviation high.
Value Options
0: Off
Holdback is not configured.
1: Low Holdback
Holdback is applied when PV is below the program setpoint by holdback value.
2: High Holdback
Holdback is applied when PV is above the program setpoint by holdback value.
3: Band Holdback
Holdback is applied when PV is above or below the program setpoint by holdback value.
More Segment Edit parameters
Close


C:\Documents and Settings\Steve Kirk\My Documents\Steve's Projects\TRAC\Weiss WIR\Trac Weiss Chamber 21Feb12.UIC - Programmer Editor
Program Parameters
Segment Parameters
Name
Description
Value
Comment
Name
Program Name
Ch1HoldbackVal
2.00
Ch2HoldbackVal
5.00
Cycles
1
Program.1 - 4 Parameters (7 hidden)
Click on the Program Parameters Tab to edit the Holdback Values.
If these values are too small the program will not come out of “Holdback”



A more detailed view of the Digital Outputs can be seen by switching to the Digital view.



End Type

Defines the action of the final segment.

Value Options

0: Reset

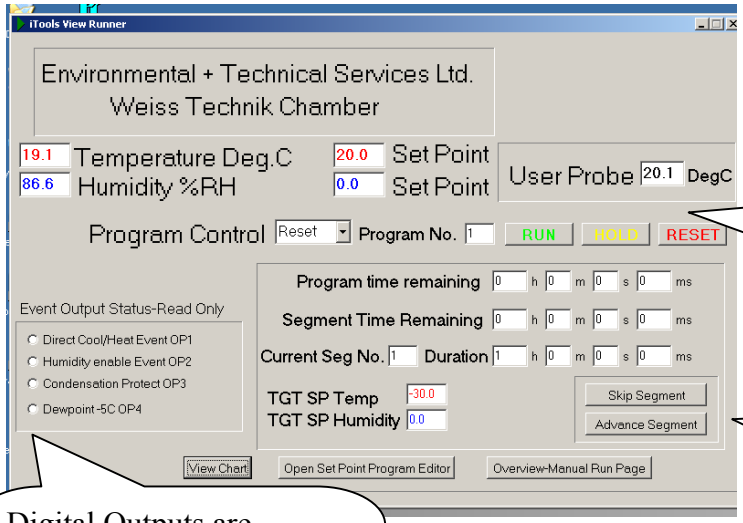
Program will terminate and return to the currently selected loop setpoint.

1: Dwell

Program will terminate at the last segment setpoint.

2: SafeOP

Program will terminate and the loop is forced into the inhibit mode. Safe output power is then applied.

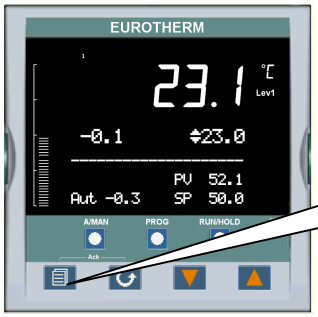


A program can be Run, Held, or Reset by selecting an option from this drop down menu or the buttons.
The program number can be edited here.

While running a program can manipulated using the Skip Segment or Advance Segement buttons. Sement detail is displayed nearby.

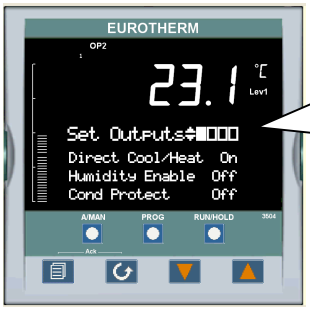
Digital Outputs are controlled by the Program and can switch on a per segment basis and are Read Only on this screen.

Controller User Screens



Use the Page Key (Bottom Left) to scroll between screens.

The Home display shows the current Temperature, Setpoint, and output on the top portion of the display.
Below the dotted line shows the current Humidity in %RH, the Setpoint and the current control output.



The Outputs can be switched on and off with the Up-Down Buttons and Enter to move on to the next Output

More information on standard screens can be obtained from the Eurotherm Manual. Eurotherm3500_HA027987_9.pdf or download from http://www.eurotherm.com/downloads/