

Datalink for Vent Check & Vent Check Plus



- Datalogging software
- RS232 to USB cable
- Realtime graph display of CO₂ and temperature
- Printable statistics
- Data can be saved to text file for further analysis
- Upto 10,000 sample readings
- Programmable sample interval from 1 to 3,600 seconds
- User defined maximum and minimum alarm setting

Installation

1. Insert the CD into your computer and when it loads, select 'Install Software'.



Follow the on-screen instructions to install the software and reboot your computer once finished. (The system may ask you if you wish to replace existing files, click 'Yes'.)

2. Once your computer has rebooted, reload the CD and select 'Install USB Driver'.

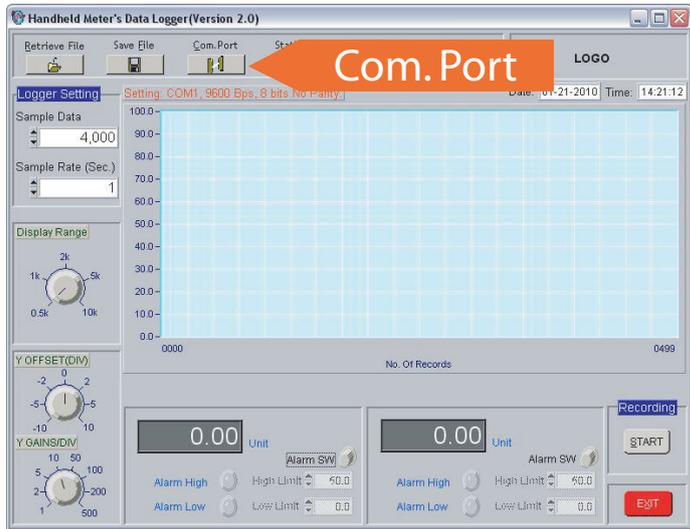
Select the relevant operating system and follow the on-screen instructions.



When the installation finishes, be sure to click the box labelled 'Launch the CP210x VCP Driver Installer' and click finish.

Follow the on-screen instructions again to complete installation of the driver and reboot your computer once more.

Setup

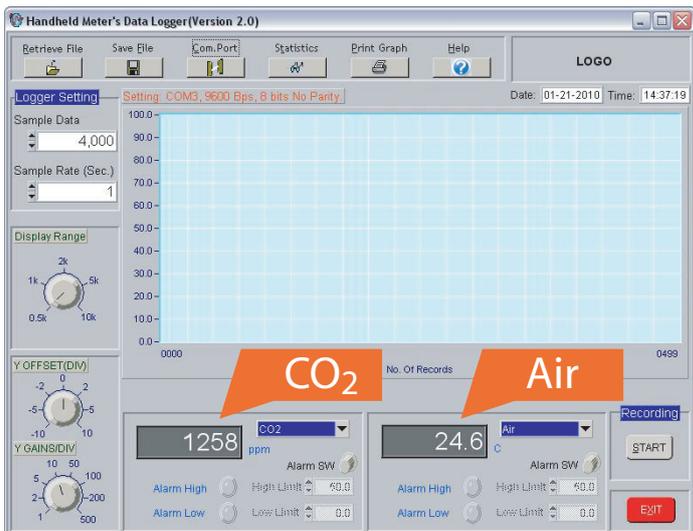


To begin datalogging, the 'Com Port' settings on the program need to be setup. Click 'Com. Port' at the top of the screen and enter the values as per the table below.

Baud Rate	Data Bits	Parity	Stop Bit
9600	8	None	1

The COM port used by the USB Driver can be determined by connecting the meter, powering it up and going to START - Control Panel - System - Hardware tab - Device Manager - Ports (COM & LPT). The COM port that the device is connected to will be listed next to the 'Silicon Labs CP210x USB to UART Bridge' driver.

Enter this into the Com.Port settings and the unit is setup and ready to datalog. Connection is successful when the parameters of CO₂ and Air are visible at the bottom of the screen.



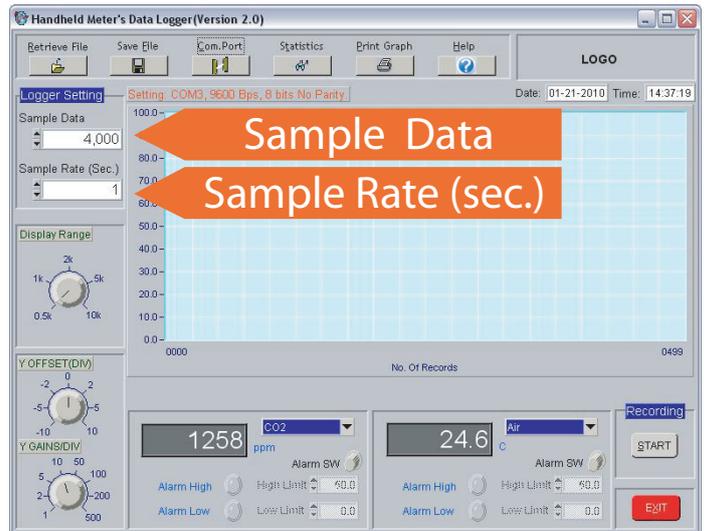
If the Vent Check Plus is connected to the datalogger, it is possible to view the Relative Humidity, Dew Point and Wet Bulb Temperature readings.

To view one of these, click one of the drop down boxes next to the current reading and select the required one.

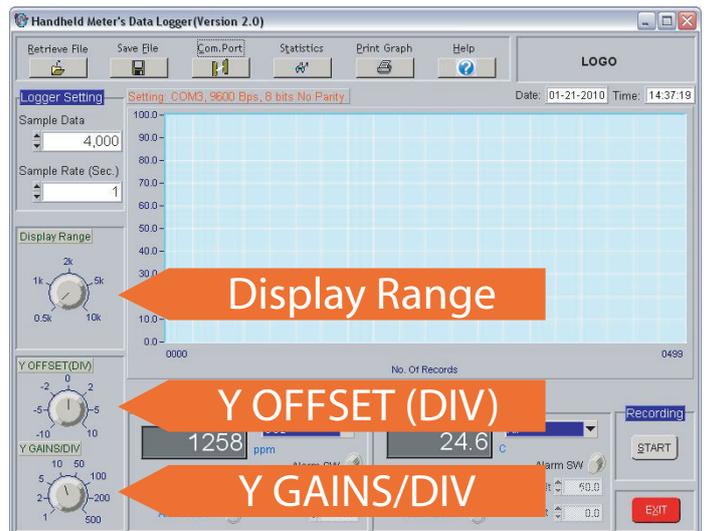
Datalogging Settings

There are several parameters that can be altered on the datalogger.

Firstly, the 'Logger Settings' control for how long and how frequently samples are taken. 'Sample Data' can be 2,000, 4,000, 6,000, 8,000 and 10,000 points (meaning it will take that many samples). 'Sample Rate' can be anything from between 1 and 3,600 seconds (i.e. the length of time to sample data for).

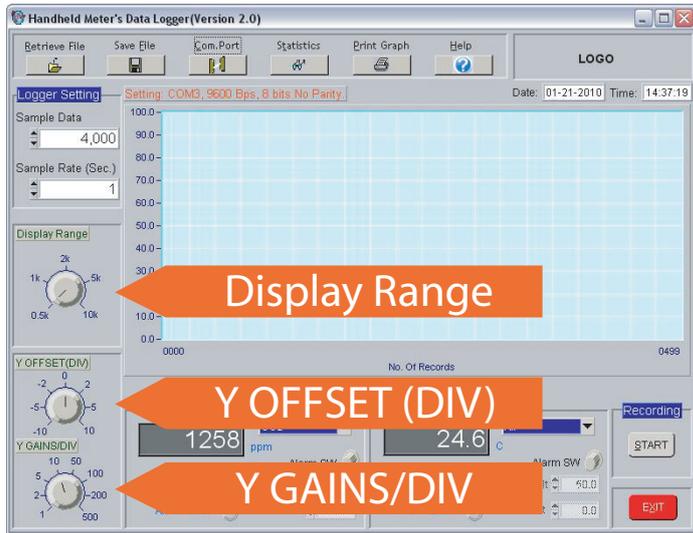


Secondly, the display range (the graph) can be altered. The range of both the X and Y-axis can be changed by altering the values set by the three controls on the left hand side.



The first of these, 'Display Range', determines the number of samples shown on the X-axis. For example if the control is set at 0.5k, the axis will read 0 - 499 and so on.

Datalogging Settings (cont.)

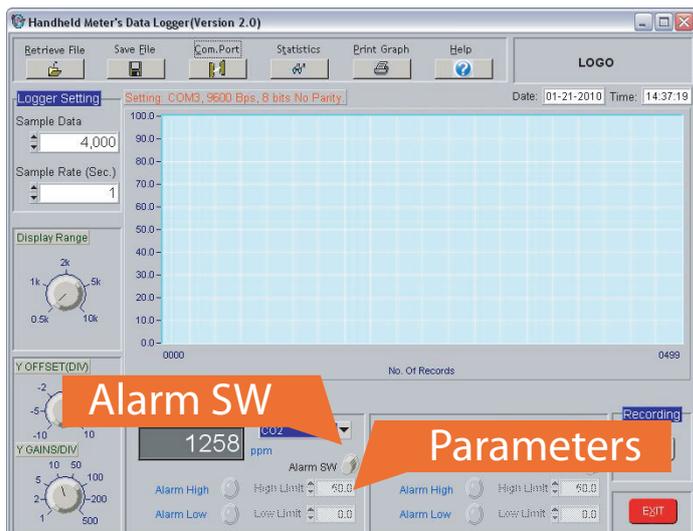


The remaining two controls alter the Y-axis. The 'Y OFFSET (DIV)' button determines what level the axis starts at. If it is set at 0, it will start at 0. If set at 2 it will start at 20, if at 5 it will start at 50 and so on.

'Y GAINS/DIV' alters the amount that the divisions of the axis will go up in i.e. 1 will go up in divisions of 1 etc.

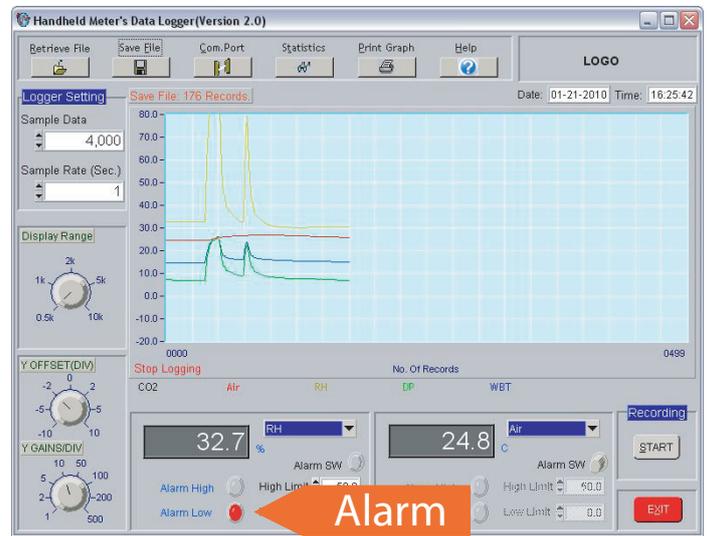
NOTE: If you cannot see data correctly, it may be necessary to alter some/all of these controls. For example, CO₂ is likely to be in values of around 100 or 1000, but temperature is likely to be in values in the 10's.

Alarm Settings



Each of the characteristics that the Vent Check or Vent Check Plus detects can be set to display a visual alarm if a maximum or minimum value is exceeded.

To turn the alarm function on, click the 'Alarm SW' button. If using the Vent Check Plus, the drop down

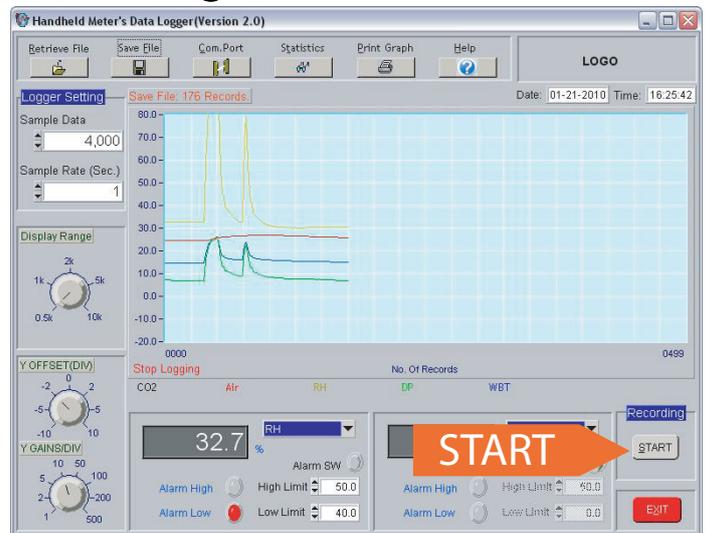


box can be used to select alternative characteristics i.e. Relative Humidity, Dew Point and Wet Bulb Temperature.

To set the alarm level (High or Low), key in the required value in the parameters box. Alternatively you can use the up and down arrows next to the box to alter the value.

When recording, if the value exceeds the High or Low level, the alarm light will come on.

Recording

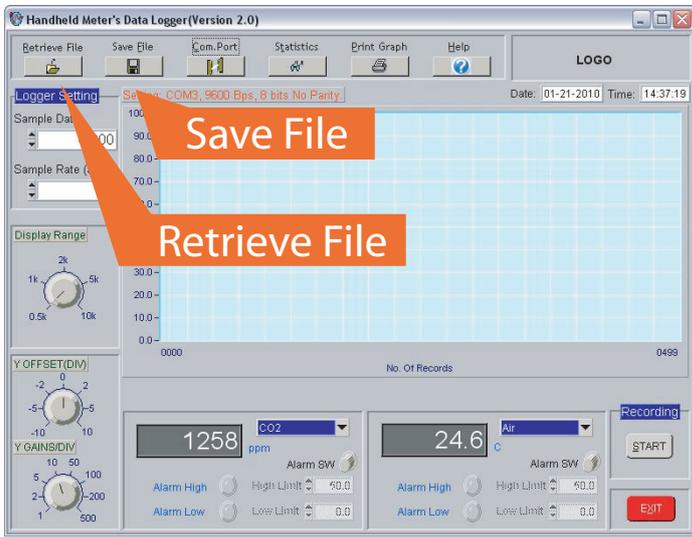


To start recording, simply press the 'START' button (with the meter connected). To stop recording, press the 'END' button.

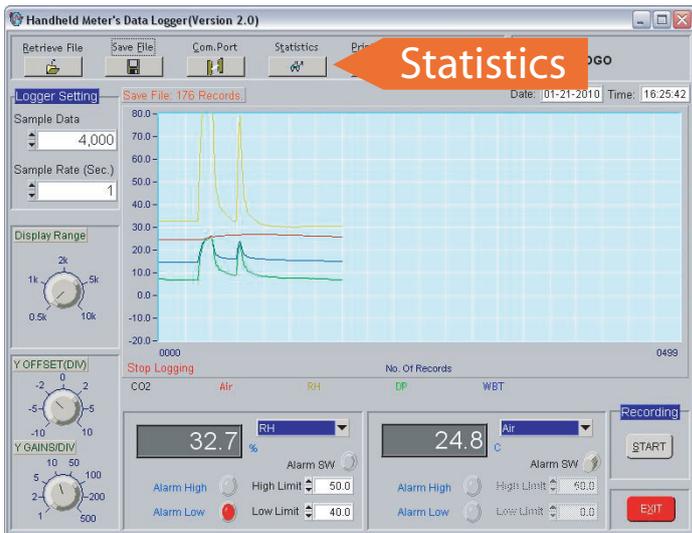
Saving & Retrieving Files

The data logged during a recording session can be saved to a text file for further analysis. To do this, simply click the 'Save File' button.

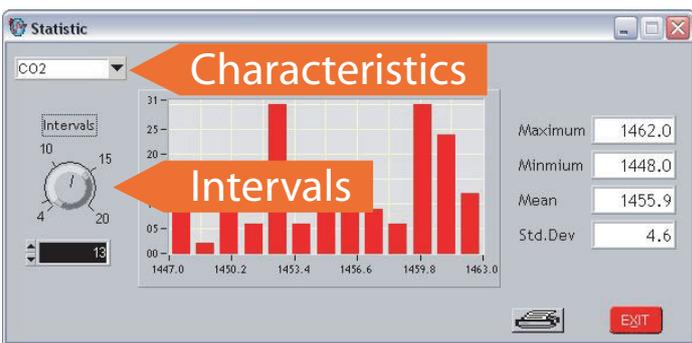
Should you wish to reload a saved file, you can use the 'Retrieve File' button to view a previous recording session.



Statistics



The 'Statistics' button displays a pop-up box showing a graph of current/recorded readings, as well as the maximum, minimum, mean and standard deviation values.

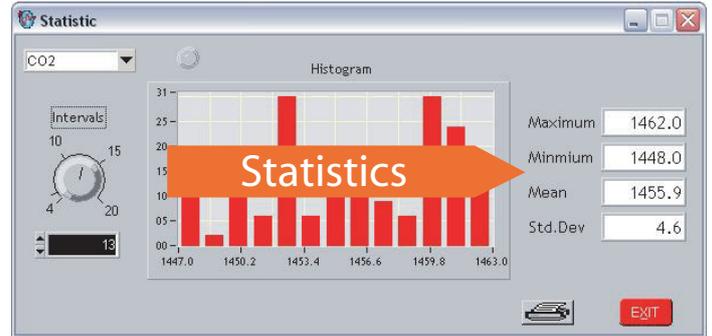


Statistics can be displayed for any of the characteristics that the meter is capable of detecting.

To view a particular characteristic, use the drop down menu in the upper left corner to select the required one.

The number of data points plotted on the histogram can be altered by using the 'Intervals'

control on the left. You can choose from anywhere between 4 and 20 points. Alternatively you can use the up and down arrows next to the box to alter the value.



The statistical histogram updates every 10 seconds and the red dot at the top of the screen flashes to indicate this.

It is possible to print the current set of statistics by using the print button at the bottom of the screen. Use the 'EXIT' button at anytime to leave Statistics.



Print

To print the current display at any time simply press the print button.

Troubleshooting

If when following the procedure for selecting the COM port, you find that the 'Silicon Labs CP210x USB to UART Bridge' driver is listed at a COM port other than 1 -4, do the following;

Follow the procedure listed in the 'Setup' section to open Device Manager and select the driver. Right click and select Properties, then the Port Settings tab, then Advanced. Within this box there is an option to change the COM Port Number. Change this to any port from 1 - 4.

NOTE: Please ensure that any port you choose is not currently being used by another device already installed on your computer.