How to Use the Dylos DC 1700 Particle Monitor

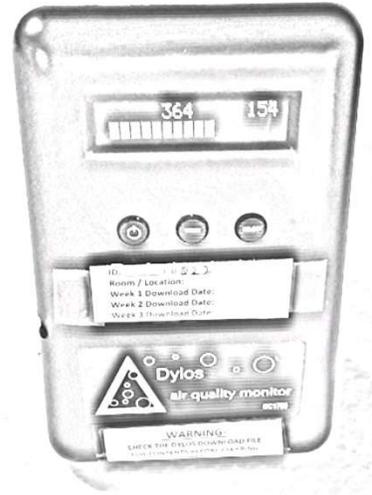## Introduction to the Device
Plug in the device and press the **"Power"** button (front top left). The monitor will automatically enter **"Continuous"** mode and will begin collecting data.

Measurement
The Dylos DC 1700 measures 0.5 µm (microns) and larger on the left (which we call Dylos small particle count) and 2.5 µm and larger on the right (which we call Dylos large particle count).

The number you view is the number of particles per 1/100 cubic feet. You do not have to make a correction for this when logging data, or sharing your readings on Building Performance Community.

Modes
Cycle through the various modes by pressing the **"Mode"** button (middle). Make a selection by pressing the **"Select"** button (right).

The various modes are: Monitor Mode, Minute History (provides minute history for past 1 hour), Hour History (provides hourly history for past 24 hours), Day History (provides daily averages for the past 30 days), Date & Time, and Clear History? (deletes all data on device). Always use continuous mode.

How to Set-Up
1. Set-Up   (refer to Equipment Set up handout for locations)
Name your files leading with your initials_, Dylos location_ (I – Indoor, O – Outdoor, and R – Roamer), Dylos ID_, date of download_, and room location.

This is the format for the file name: "LMW_I_D002_10-12-20_Kitchen"

Your Dylos ID: _ _ _ I _ _ _ _ _ _ _ -_ _ - _ _
                 _ _ _ R _ _ _ _ _ _ _ -_ _ - _ _
                 _ _ _ O _ _ _ _ _ _ _ -_ _ - _ _

Fill in the label on the front of the Dylos. The date in the file name will be the date of your download.

Plug in the indoor, outdoor, and roamer Dylos. Switch on the battery (Right Side), in case of a power outage. It will automatically open to **"Continuous"** Mode when you push power on (left button).

Most Important – Dylos Data
To prevent the loss of data, it is critical to download Dylos data each week.

After downloading open the text file to confirm 1) the data set is complete, 2) the date/time stamp is correct, and 3) the file name is current. The file size should be 200 - 300 KB. Once confirmed, check to make sure the date and time are correct on the Dylos and clear data on the Dylos monitor.
To clear history, press the "Mode" button (Middle), as you cycle through the options to "Clear History?". Press "Select" button (Right), and the device is cleared.

Note: A Windows PC is necessary for the following instructions. If you have a MAC OS reference the MAC instructions.

How to Download Dylos Data will be demonstrated during the Dylos Downloading Online Meeting

Before You Download the First Time
1) Generate the file name and write it on the equipment label (Equipment ID) on each Dylos.
2) Set up a folder on your computer for your Dylos downloads.
3) Install driver for **Trendnet TU-S9** USB to serial port cable (white cable).
   Download from http://www.trendnet.com/support/supportdetail.asp?prod=265_TU-S9
4) Download Putty onto your computer
http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html
5) Confirm the USB com port number for one of your computer's com ports. One way to do this is to open up "devices and printers" with the Trendnet cable inserted and look under "unspecified".

Each Time You Download
1) Open Putty and Select **"Run".** Plug your Trendnet cable into your computer's USB port.
2) Under Putty Configuration (1st screen) select the **"Serial"** button in upper R corner. Change the com port (under serial line) to the one that matches the port where the Trendnet cable is installed.
3) In the lower left corner select **"Serial".** A new screen will open. Under options on the right side, change flow control to **"None".** The other options should already be correct showing the correct com port, baud 9600, data bits 8, stop bits 1, and parity none.
4) Select **"Logging"** from the top of the list on the left. A new screen will open. Under session logging select **"**all session output**"** and **"**always append to the end of it**"**. Deselect other options.
5) Under log file name, use **"browse"** to find the folder where you are saving your Dylos downloads.
6) Enter the file name for your Dylos leading with your initials. Add current date and room name to end of the file name. Use this file name convention: "LMW_I_D002_10-12-16_Kitchen". Select **"Save".**
7) Plug the Dylos in to the serial port of the white Trendnet cable and turn on the monitor. On putty select **"Open".** If you get an error message check to make sure you have the correct com port number and that the com port is working.
8) Enter **"D"** followed by **"Enter"** ; Note: "D" must be upper case (may be "shift" and "D"). "D" will not show up on the screen.
9) Data should start to download with one line per minute of data. If it doesn't repeat **"D" "Enter"**. Check to make sure the cord is secure in both the Dylos and the com port and that the Dylos is turned on.
10) When it is finished, the Dylos will revert to the continuous mode.
11) Close the Putty screen; you will be prompted by "Are you sure you want to close this session?" Select **"OK". Before clearing data, check to make sure you can find the file and that the name is correct. Open it with Notepad to ensure that the download was successful- it should be in the 100-400 KB range, depending on days monitored.**
12) Upload your file to ROCIS using the upload link we have provided; note that this program won't do folders, so drag-n-drop individual files. You can upload multiple files at once.
13) Return Dylos to its location and repower. Note that the power connection can be stiff, so push the power plug into the Dylos power port to make sure it fully seated.

Stuck? Email or text Linda, lwigington1@outlook.com, *724-986-0793; Rob,* robb@rocis.org