BONOLO V5 Air Quality Monitor

Software Guide

1 Table of contents

Table of Contents

2 Table of Figures

Table of Figures

3 Software requirements

To communicate with the unit a UART terminal software application is required. The data access can be done on Windows, MacOS, Linux or Android operating systems. This guide is specific to Windows 10.

A USB driver for the CH340N chip will also be required. Android, Linux and MacOS should already have the driver installed.

The USB driver for the unit can be downloaded from:
https://sparks.gogo.co.nz/ch340.html

The recommended “YAT” USB to UART terminal application can be downloaded from:
https://sourceforge.net/projects/y-a-terminal/

Download and install above before proceeding. Default settings for the YAT application are available through the following URL.

https://products.circor.co.za/BonoloV5/

To download the settings right clock on **Bonolo_YAT_settings.yat**, then “save link as”.

After downloading the file, import it to the app. Go to File > Open then select the downloaded file.

4 Using the YAT terminal software

Plug the USB-C end of the USB cable to the sensor unit and the other USB-A end, to a personal computer. Launch the YAT terminal software.

4.1 Selecting the correct port

You will need to select the correct “PORT” assigned to the sensor unit by the computer. In the window menu of the YAT application, select (Terminal > Settings >) in that order. A “Terminal Settings” window will pop up. Some settings will need to be configured in this window. Under the “Port” section, your computer might have one or more ports available. You will need to identify which one is for the sensor unit and select it. In this instance we have COM1215 as the port. See the image below. You may identify which one is the correct port by unplugging the sensor to see which port number disappears from the list.

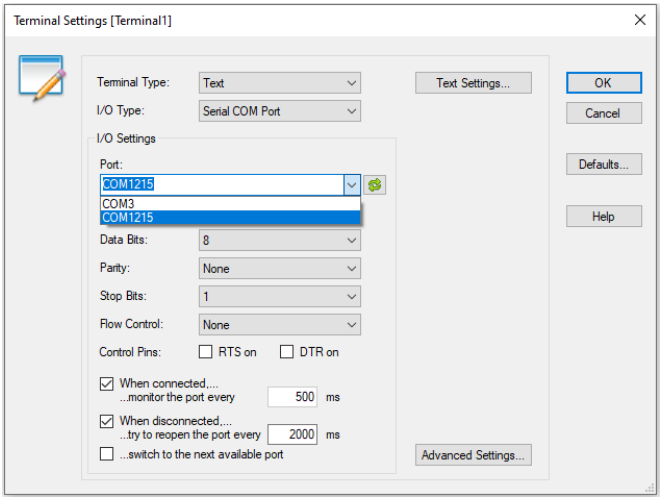

Figure 1: Port selection

4.2 Setting the correct Baud Rate

In the same “Terminal Settings” window, we will set the correct communication baud rate. A baud rate of 500000, is used by the sensor units. Manually type this number in the “Bits per second” section.

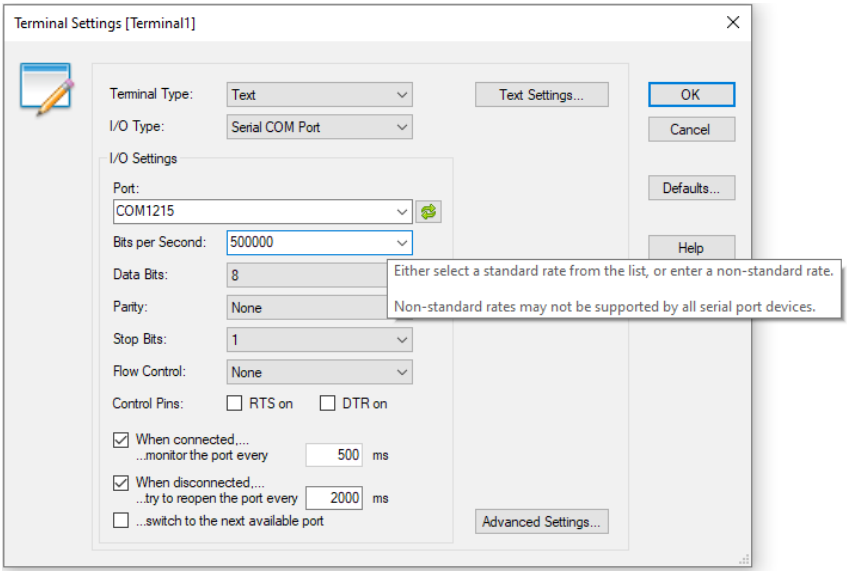

Figure 2: Baud rate

Click OK to save and close the Terminal Settings window. All other settings should be left with default settings, otherwise use the image above for reference.

4.3 Open the communication channel

To send data between the computer and sensor unit, open the communication channel by clicking the green tick icon under the window menu. See the image below.

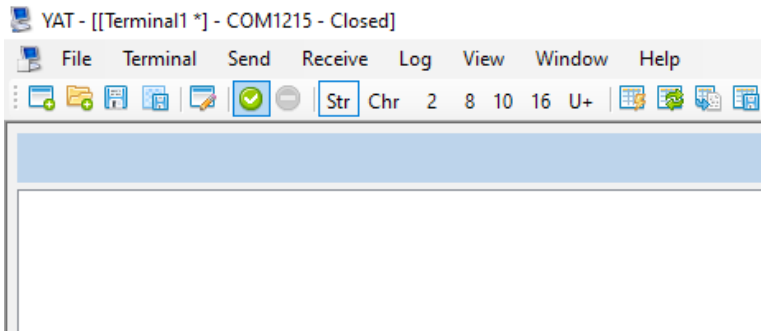

Figure 3: Open communication channel from icon

Alternatively select (Terminal > Open/Start) from the menu. An image is shown below for illustration.

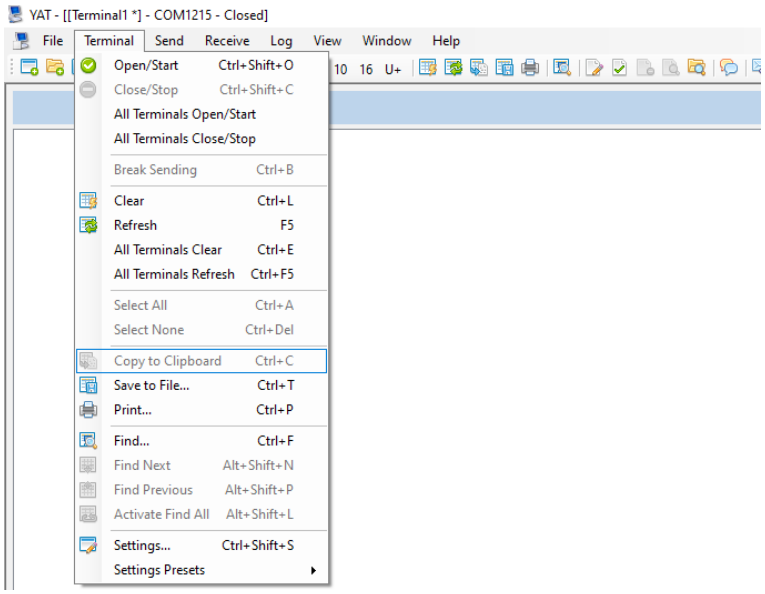

Figure 4: Open communication channel from menu

5 Mac OS Software Application

The recommended uart terminal for Mac OS is “CoolTerm”, available through the url below.

https://freeware.the-meiers.org/

Setting can be configured in a similar manor to the Windows app above.

6 Android Software Application

The recommended uart terminal for Android OS is “CoolTerm”, available through the url below.

https://play.google.com/store/apps/details?id=de.kai_morich.serial_usb_terminal

Setting can be configured in a similar manor to the Windows app above. The settings file is available at:

https://products.circor.co.za/BonoloV5/

To download tap and hold **Bonolo Android App settings.txt** then click “download link”.

NB: For some android devices(e.g newer Samsung and Oppo), USB On-the-go (OTG) must be enabled before the BonoloV5 unit can be detected by the phone. Open the phone settings. Search for “OTG”. Then toggle the switch to enable OTG.

7 Control commands

To interact with the unit please consult the “BonoloV5 Commands” document.