

Monitoring Software

for Horizon's STACKS



INTRODUCTION

ECO-Marathon Serial Port Monitor is software, which is developed to help the user to communicate with ECO-Marathon system, monitor and record various information, including: Ambient Temperature, Stack Temperature, Stack Voltage, Stack Current, Stack Power, Battery Voltage and Stack Status.

Features

1. System Monitoring

- a) Ambient Temperature Monitoring
- b) Stack Temperature Monitoring
- c) Stack Voltage Monitoring
- d) Stack Current Monitoring
- e) Stack Power Monitoring

2. Real-time Curves

- a) Ambient Temperature Curve
- b) Stack Temperature Curve
- c) Stack Voltage Curve
- d) Stack Current Curve
- e) Stack Power Curve
- f) Battery Voltage Curve

3. History Display

- a) Display Result
- b) Save to File

Equipment

Hardware Equipment

- 1. Desktop or Laptop with Serial Port
- 2. Serial Cable(RS232)

OR

- 1. Desktop or Laptop with USB
- 2. USB To RS232 Cable with driver

Software Equipment

Microsoft Windows XP or above (32bit)

Installation

- 1. Put the installation CD into the CD-ROM drive.
- 2. Run Setup program.

NOTE: Better to install the program on a root directory. E.g. C:

Usage

Open program

1. Find "ECO-Marathon Monitor" in "START\All Programs".
2. Click the icon to open.

Configuration

1. Select I/O Port which is to connected to the ECO-Marathon system.
2. Set Timeout (Default is 100s).
3. Set REC ON/OFF, whether to record data or not.
4. Set recording Period (Default is 1s).

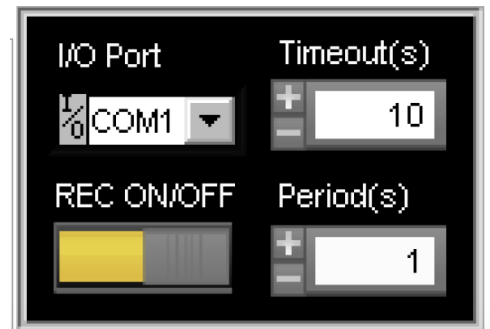


Figure 5.1 Configuration



Figure 5.2 RUN button



Figure 5.3 STOP button

Run & Stop

1. After the configuration, press the RUN button on the top left corner to run the program.
2. Press STOP button on the top right corner to stop the program.

Monitor Panel

Ambient Temperature, Stack Temperature, Voltage, Current, Power will display as meter and number on this panel.

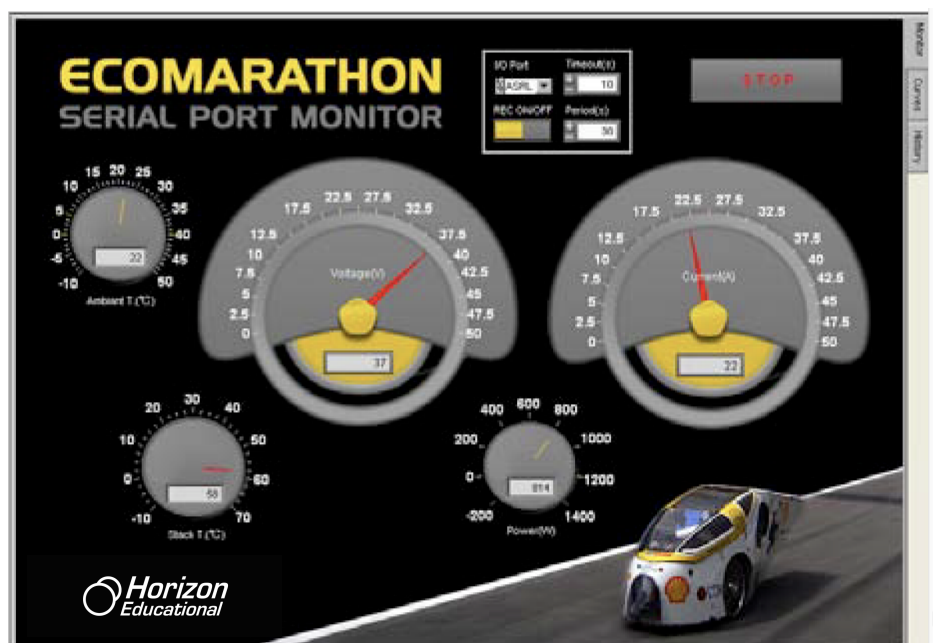


Figure 5.4 Monitor panel

Curves Panel

Ambient Temperature, Stack Temperature, Voltage, Current, Power, Battery Voltage will display as real-time curves on this panel.

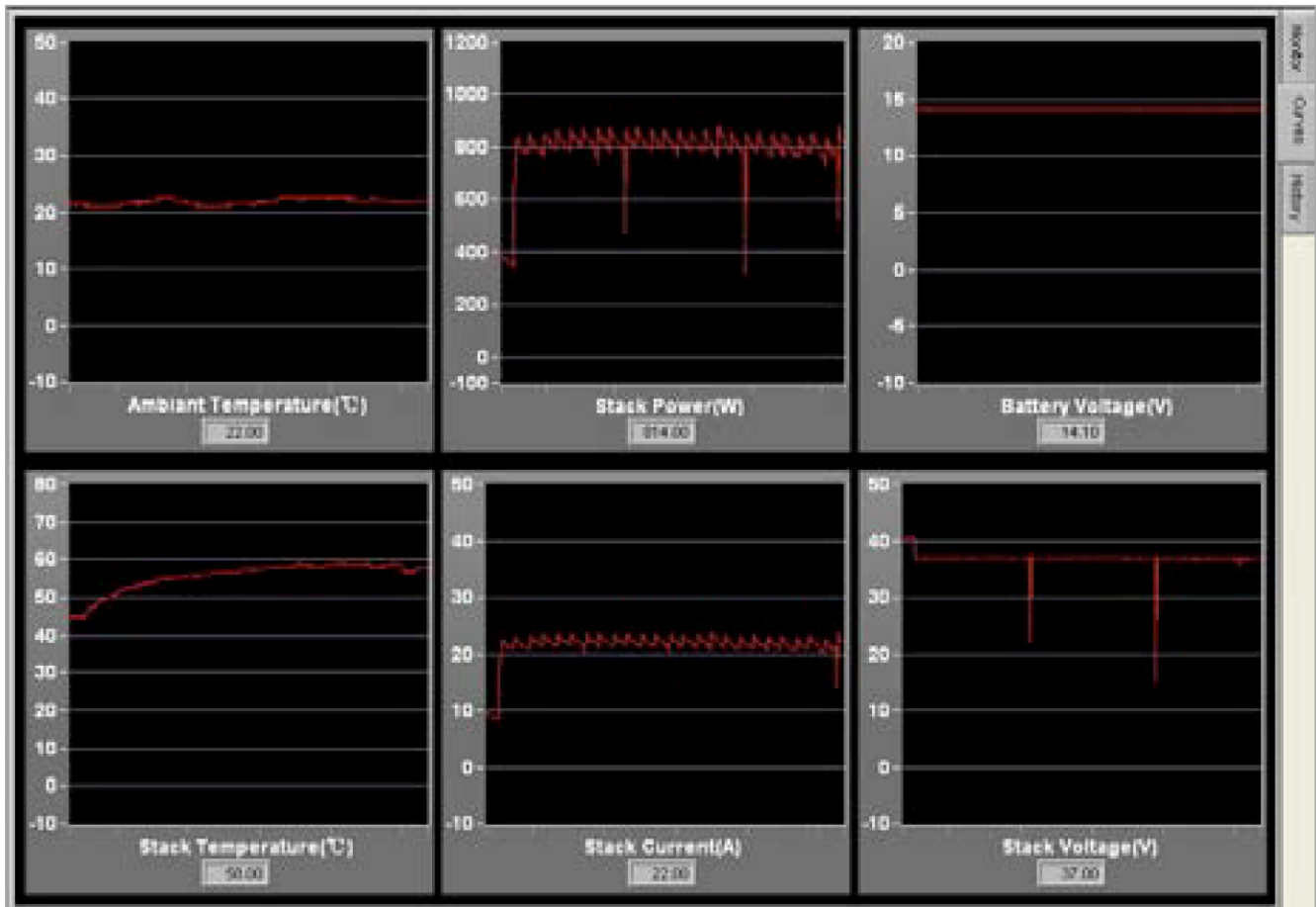


Figure 5.5 Curves panel

History Panel

1. User select the time from the pull down list.

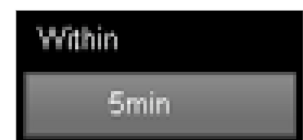


Figure 5.6 Pull down list

2. Press the DISPLAY RESULT button, the history data will display in the result records table.



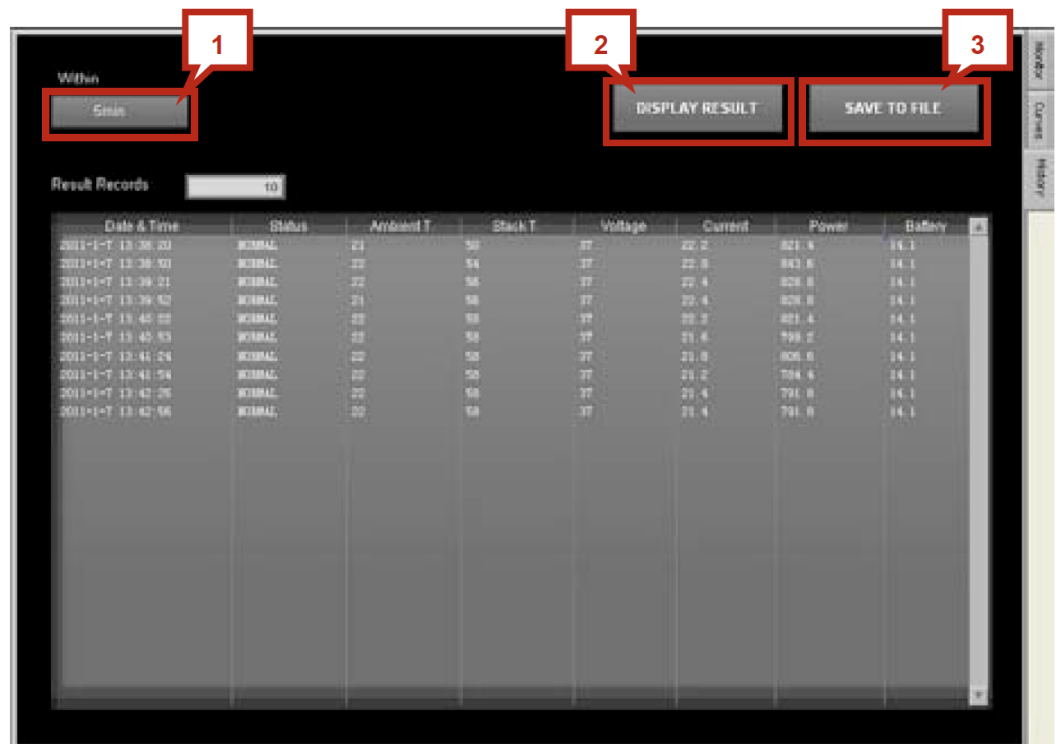
Figure 5.7 DISPLAY RESULT button

3. Press SAVE TO FILE button, the results will save in the data directory as an EXCEL file.



Figure 5.8 SAVE TO FILE button

Figure 5.9 History panel



Error Information

Connection Timeout Error

a) Phenomenon

A dialogue window will pop up as follows:

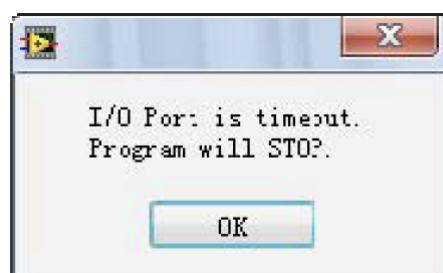


Figure 5.10 Monitor panel

b) Description

ECO-Marathon Serial Port Monitor lost connection to the system.