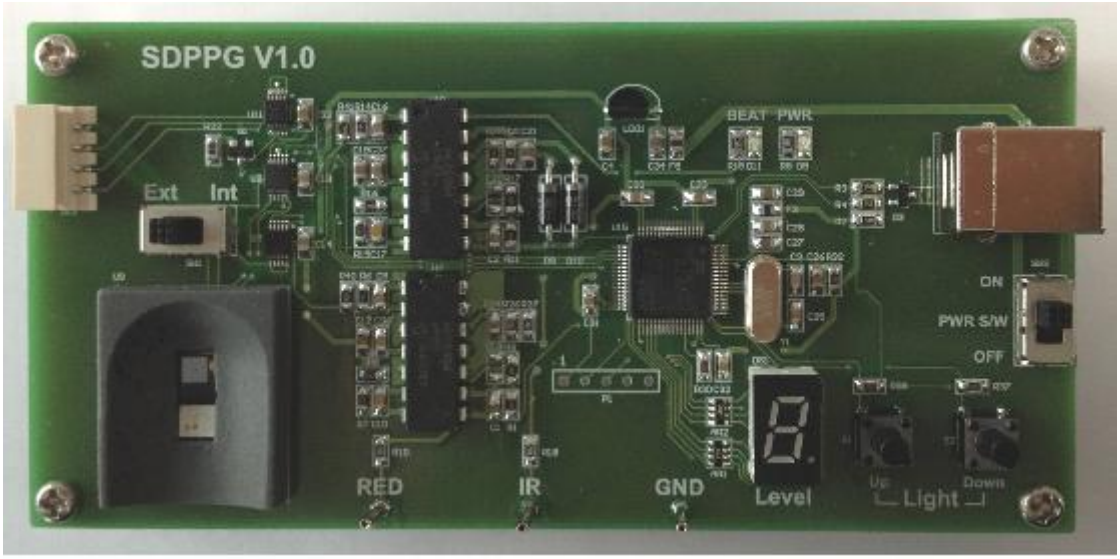
SDPPG V1.0 User Guide



1. Feature

- 12bit ADC
- 32bit Cortex-m3 MCU
- USB 인터페이스
- Supply DC 5V via USB port
- Sampling Rate : 2KHz
- Sensitivity level of Sensor : 1~9 step
- Data saving
- Real time monitoring
- Support over Windows XP, Windows 7 (32bit and 64bit)
- Digital graphic output : PPG Visible, FDPPG Visible, SDPPG Visible, PPG IR, FDPPG IR, SDPPG IR
- Able to monitor analog PPG signals (Visible and IR) output by oscilloscope
- LED Heart beat indicator

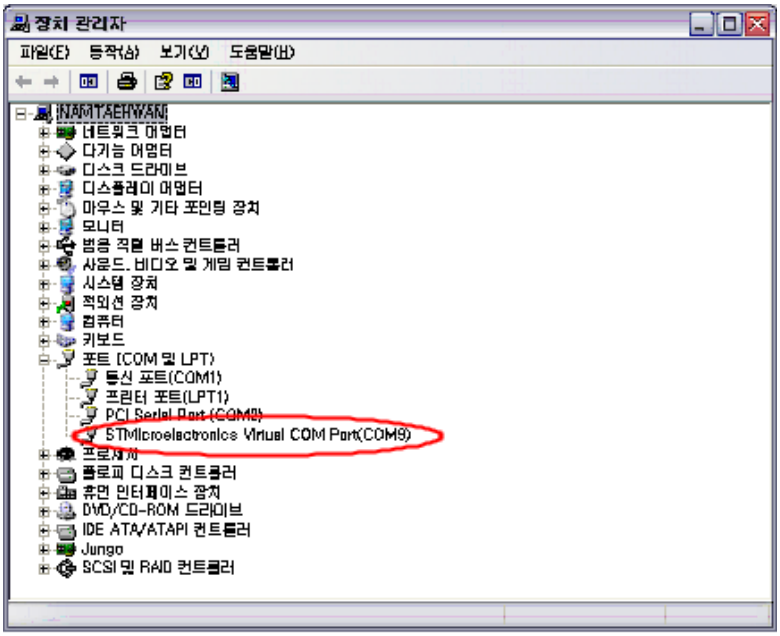
2. Installation SW

1) Install driver

① Install proper USB driver from the SDPPG driver folder.
- VCP_V1.3.1_Setup.exe (32bit) or VCP_V1.3.1_Setup_x64.exe (64bit)

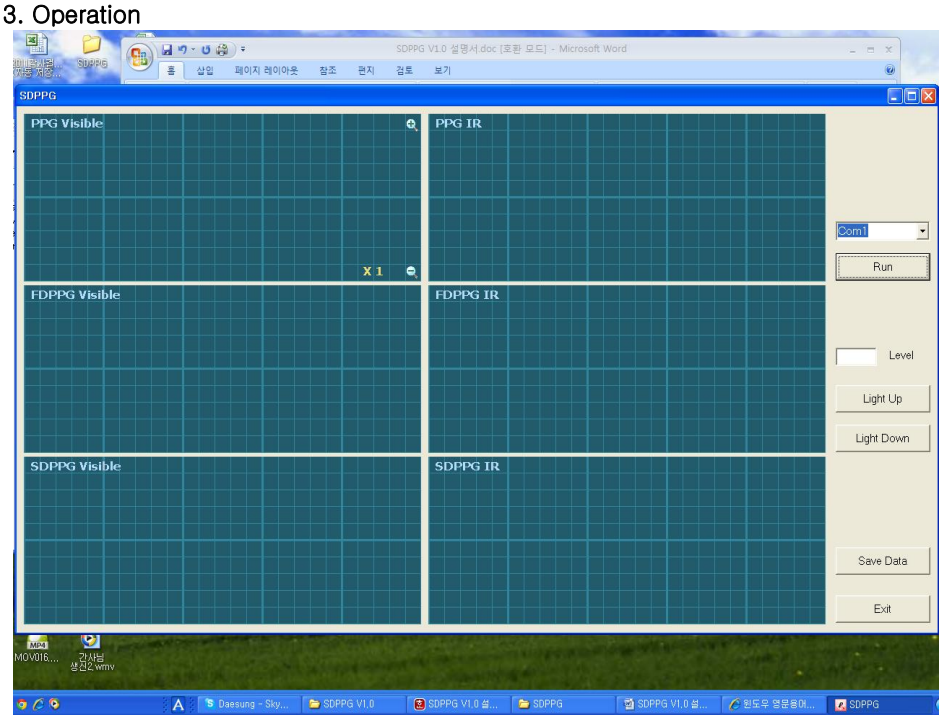
② Connect the device to PC through USB cable, then board power on.

③ Check current COM Port in the Windows device manager.(setting>control panel>system>hardware>)
- Check the number of STMicroelectronics Virtual COM Port.



※ Remark: If COM Port number is over 10, should change less than 10 (STMicroelectronics Virtual COM Port>regi inform>set port>advance>COM port number). It may require re booting PC if need.

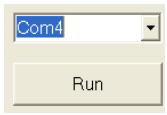
3. Operation



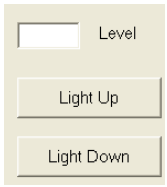
1) Copy folder "SDPPG" to convenient any place.

2) Run "SDPPG.exe".

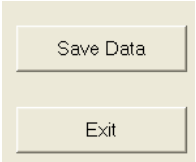
3) Set COM Port number as checked at device manager, then clik "Run" button.



4) Control lighting power by "Light Up/Down" button, 1~9 level



5) Click "Save Data" for data logging, click again to stop saving.
Data will be saved as .txt in a low as,
1st column is PPG, 2nd first derivative of PPG, 3rd second derivative PPG of Visible Red
4th column is PPG, 5th first derivative of PPG, 6th second derivative PPG of Infra Red
Data creates a folder "SaveData" then be saved in it.



6) Click Exit to out SDPPG