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Application Note 238: SDS100 Scent Palette Software Setup

Scent Palette Controller CD

You should have received a CD with the following items:

- Scent palette application note: this document, presented as an application note.
- Vizard Lite software (Vizard.exe)
- *Folder*: Python source code and application notes
    - *Sending signals from Vizard to AcqKnowledge via the parallel port*
    - *Sending signals from Vizard to AcqKnowledge via a Measurement computing card*
    - *BASIC_scent_palette.py*
    - *sntpalpy.dll*
    - *sntpal.dll*
- *Folder*: Manual control
    - *BASIC_scent_palette.exe*
    - *ScentPaletteSharp.exe*
    - *sntpal.dll*
    - *sntpalpy.dll*

Setup

The software works on Windows XP and Windows Vista.
.NET framework must be installed.
The following files are needed:

- *Manual control software:*
    - *ScentPaletteSharp.exe*
    - *BASIC_scent_palette.exe*
- *Libraries:*
    - *sntpal.dll*
    - *sntpalpy.dll*

Manually control the scent palette

Use ScentPaletteSharp.exe or BASIC_scent_palette.exe for basic manual control of the scent palette. These executables provide no means of synchronization with the physiological recording—just a simple control of the scent palette.

Script the scent palette control via the Vizard Lite software

IMPORTANT! Once the serial number is entered, installation will be locked to this PC and you will not be able to move it to different computers.

If this computer may not ultimately be the one used to control the scent palette, install the software as trial/demo, which will work for 90 days, and then you can register it with the serial number on another computer (it will lock to the computer at that time). Also, additional licenses can be purchased from BIOPAC.

1. Install the Vizard Lite software from the CD.
2. Activate your license.
    a. Enter your activation code.

To use the Vizard Lite software to script control of the scent palette:

- See the example file *BASIC_scent_palette.py* as a good starting point.

To send digital signals from the computer running Vizard Lite to Acq*Knowledge*:

- You will need an STP100C module with the appropriate interface cable.
- See these application notes and source code examples:
    - *Sending signals from Vizard to AcqKnowledge via the parallel port*
    - *Sending signals from Vizard to AcqKnowledge via a Measurement computing card*

Use the Vizard Development software for stimulus presentation.

Vizard Lite has a branded logo displayed on-screen but the full Vizard software, Vizard Development version, will allow you to create elaborate visual and sound presentation protocols while controlling the scent palette. You would be able to present, for example, pictures and sounds paired with the scent presentation without having the logo displayed. Furthermore, the Vizard Development software is used for virtual reality research and has numerous additional capabilities and is well-integrated with the physiological equipment. Please contact BIOPAC for more info.

Using the scent palette with SuperLab, E-Prime, etc.

Currently, there is no interface provided for that. The scent palette uses the following USB adapter:
http://www.usbmicro.com/products.html
The adapter is the U421. If SuperLab, E-Prime, etc. provide support for this driver then it will be possible to use those software programs to control the scent palette. Meanwhile, Vizard Lite is the only interface option unless you want to write your own custom software.

Writing your own custom software to communicate with the Scent palette.

This can be done by writing your own software to interface with the U421 adapter. For more information, go to:
http://www.usbmicro.com/products.html

Sending signals from Vizard to AcqKnowledge in order to have scent palette events synchronized with and saved with the physiological data.

See the section on using Vizard Lite to control the scent palette.

Controlling the scent palette based on the levels of physiological signals.

It is possible to send physiological signals from Acq*Knowledge* to Vizard in real time and deliver scents depending on the physiological signals. The VRLINK module is required for this functionality. Please contact BIOPAC for more info.