Psychtoolbox Q&A

Q: Which version of Psychtoolbox should I install?
A: The newest version of Psychtoolbox is 64-bit. If your (Windows) computer only supports 32-bit programs or you are planning to use your computer with BIOPAC, you will need to install the 32 bit version of Matlab and Psychtoolbox. This means that your psychtoolbox call will need to include a "flavor." After downloading the DownloadPsychtoolbox script, open Matlab and use the command 

```
DownloadPsychtoolbox('Psychtoolbox-3.0.11')
```

gysesforsystems.org for Windows.

Q: I'm getting warnings about GStreamer when I open Matlab. What is the correct way to install this add-on?
A: This was a common problem in the lab, and each person dealt with it differently. Here are things that worked for us: If you manually downloaded the 64-bit version from the folders located at gstreamer.freedesktop.org, make sure you downloaded all the files in the newest version, and the folder is located in the same place as your Program Files folder if using Windows (usually in your Local Disk). You may also need to run "SetupPsychtoolbox" or "startup" when you open Matlab. Another fix is to do the automatic download from GStreamer (look for the big green button partway down the page). This site also lets you differentiate between 32-bit and 64-bit versions.

Q: I've installed the latest version of GStreamer but it causes Matlab to crash as soon as it tries to load a movie. What's going on?
Unfortunately, there seem to be some incompatibilities between the recent releases of GStreamer and some versions of Matlab on Windows. There is a very, very long discussion thread on Yahoo groups here between several people trying to debug this issue. The recent version of GStreamer (2013.6 Congo) has been verified in the lab to work with Matlab R2010a. It has also been verified to NOT work with R2013b. Some suggestions from the Yahoo thread include using the 32-bit version of GStreamer or using an earlier release of the 64-bit version. None of these have been tested locally.

Q: How do you display multiple pictures on a single screen?
A: Though PTB documentation suggests using Screen('DrawTextures', ...), this call seemed to create a memory error with 3 pictures. Instead, make separate Screen('DrawTexture', ...) calls for each picture, where you specify the window in which the picture can be drawn. For example, 

```
Screen('DrawTexture', w, tex, [], [0 0 50 50]);
```

will draw your entire picture that is stored in the texture "tex" in a 50x50 pixel square in the top left corner of the screen. Once you have drawn all the textures relating to the pictures you want to show on the single screen, use the flip command to display them all. For more information about the Screen command, see the basics section in Intro to Psychtoolbox and example code in Screen Function.

Q: How do you quit a Psychtoolbox script while it is running?
A: On a Windows computer, "@" is the Master-Abort key. On Mac, the easiest way to kill a script is to click control+c a whole bunch of times to clear out of any potential MATLAB text and then type "sca" (shortcut for Screen('CloseAll')) and click enter. If that doesn't work, the only other reliable way we know to quit a Psychtoolbox script is to kill MATLAB with option+command+esc.