

## Useful Terms & Links

Psychtoolbox Wiki: <http://psychtoolbox.org/wikka.php?wakka=HomePage>

Psychtoolbox Oneliners: <http://docs.psychtoolbox.org/PsychOneliners>

Alpha Blending: [http://en.wikipedia.org/wiki/Alpha\\_compositing](http://en.wikipedia.org/wiki/Alpha_compositing)

CLUT: <http://en.wikipedia.org/wiki/CLUT>

Gamma Correction: [http://en.wikipedia.org/wiki/Gamma\\_correction](http://en.wikipedia.org/wiki/Gamma_correction)

## Button Box Setup

HHSC 1X5D  
HID Key 12345

## Psychtoolbox Demos

In command line type “open Psychtoolbox/PsychDemos/ *Insert Demo Name Here*”

PsychExampleExperiments - Subfolder with real experiment scripts for tasks, contributed by users.

AlphaImageDemo - Simple demo of OpenGL alpha blending.

AlphaRotateDemo - A variant of AlphaImageDemoOSX, demonstrates rotated drawing.

ArcDemo - Demonstrate the 'FrameArc', 'FillArc' functions.

AudioTunnel3DDemo - Very sketchy demo on how to use OpenAL for 3D spatialized sound.

AudioTunnel3DDemo - Another sketchy demo on how to use OpenAL for 3D spatialized sound.

BasicAMAndMixScheduleDemo - Demonstrates basic use of sound schedules, volume controls, amplitude modulation and audio mixing of multiple voices.

BasicSoundFeedbackDemo - Demonstrates a audio feedback loop via PsychPortAudio(). See DelayedSoundFeedbackDemo for a more research grade approach.

BasicSoundInputDemo - Demonstrate basic usage of PsychPortAudio() for sound capture.

BasicSoundOutputDemo - Demonstrate basic usage of PsychPortAudio() for sound playback.

BasicSoundScheduleDemo - Demonstrate basic usage of sound schedules and buffers with PsychPortAudio().

BubbleDemo - Like GazeContingentDemoOSX, but with multiple apertures.

CalDemo - Demonstrate use of calibration structure and associated routines.

ClutAnimDemo - Demonstrate lookup table animation.

ContrastModulatedNoiseTheClumsyStyleDemo - Demonstrate creation of contrast modulated noise. Clumsy and inefficient, but works on old hardware.

ContrastModulatedNoiseTheElegantStyleDemo - Demonstrate creation of contrast modulated noise. Elegant and efficient, but needs recent hardware.

DatarecordingFromISCANDemo - Template for asynchronous data collection and timestamping of gaze samples from ISCAN eye tracker.

DatarecordingFromSerialPortDemo - Template for asynchronous data collection and timestamping from serial port.

DelayedSoundFeedbackDemo - Demonstrates a audio feedback loop via PsychPortAudio() with exactly controlled latency.

DotDemo - Animate dots with Screen('DrawDots').

DKLDemo - Demonstrate DKL color space.

DrawFormattedTextDemo - Demonstrate formatted text drawing via DrawFormattedText()

DrawHighQualityUnicodeTextDemo - Demonstrate drawing of high quality, anti-aliased and Unicode text.

DrawManuallyAntiAliasedTextDemo - Manually anti-alias text for special purpose applications.

DrawMirroredTextDemo - Shows how to draw horizontally mirrored text.

DrawSomeTextDemo - Very simple example of using 'DrawText'.

DriftDemo - Animation of grating using textures.

DriftDemo2 - More efficient animation of gratings using one texture.

DriftDemo3 - Even more efficient animation of gratings under some constraints.

DriftDemo4 - Very efficient animation of gratings on graphics hardware with shader support.

DriftDemo5 - Animation of dual-gratings via use of alpha blending and color masking.

DriftDemo6 - Very efficient animation of dual-gratings on graphics hardware with shader support.

DriftWaitDemo - Show how to optimally time animations.

ErrorCatchDemo - How to handle errors gracefully (try/catch).

ExpandingRingsDemo - Shows how GLSL procedural textures can be used to create some expanding rings stimulus.

FastNoiseDemo - Demo and benchmark on how to quickly draw noise stimuli.

FastMaskedNoiseDemo - Like FastNoiseDemo, but the noise patch is drawn through an aperture to demonstrate fast masking.

FitGammaDemo - Demonstrate gamma fitting routine FitGamma.

FontDemo - How to check for font availability and set font.

GarboriumDemo - Demonstrate superimposed drawing of many Gabors by use of alpha-blending, 'DrawTextures' batch drawing and PTB imaging pipeline.

GazeContingentDemo - Implementation of a simple gaze contingent display

GLSLCLUTAnimDemo - Demonstrates use of function moglClutBlit to perform CLUT animation with GLSL in an OS independent way.

GratingDemo - Basic display of a grating on the screen.

IsomerizationsInDishDemo - Compute photoreceptor isomerizations for retina in a dish.

IsomerizationsInEyeDemo - Compute photoreceptor isomerizations for human eye.

KbDemo - Demonstrate KbCheck, KbName, KbWait.

KinectDemo - Capture and display video and depths data from a Kinect box.

Kinect3DDemo - Capture data from a Kinect box and view it as a textured 3D point-cloud or mesh.

LineStippleDemo - Draw dotted and dashed lines.

MandelbrotDemo - Visualize the Mandelbrot fractal set by use of a GLSL procedural texture.

MouseTraceDemo - Track mouse around screen and draw contour.

MouseTraceDemo2 - More Tracking mouse around screen drawing contour.

MovieDemo - Animation without offscreen windows.

MovingLineDemo - Shows some horizontally moving lines to demonstrate flat panel display artifacts.

NomogramDemo - Compute photoreceptor nomograms.

OldNewRecogExp - A full old-new recognition experiment.

OpenGL4MatlabDemos - Subfolder: Demos on how to use MOGL OpenGL functions.

ProceduralGaborDemo - Demo for fast drawing of Gabors via procedural textures.

ProceduralGarboriumDemo - Same as GarboriumDemo, just with procedural gabor drawing.

PsychRTBoxDemo - Demonstrates basic use of the RTBox reaction time button response box.

QuicktimeDemos - Subfolder: Demos on how to use Quicktime movie playback.

RenderDemo - Render CIE xyY as a color patch.

SadowskiDemo - Shows the "Sadowski" color afterimage effect.

SimpleVoiceTriggerDemo - Demo of a simple voice trigger with PsychPortAudio.

SpriteDemo - Animates an image that follows the mouse.

StereoDemo - Drive stereo-displays e.g., CrystalEyes.

StereoViewer - A simple viewer for stereo image pairs.

StoreBit - Not at all clear why this is here

ValetonVanNorrenDemo - Exercise our code that implements the V-VN (1983) cone adaptation model.

VideoCaptureDemo - Simple demo for video capture functions.

VignettingCorrectionDemo - Demonstrate how to do display devignetting aka per-pixel gain correction.