

VTTool – Vision Therapy Training Tool

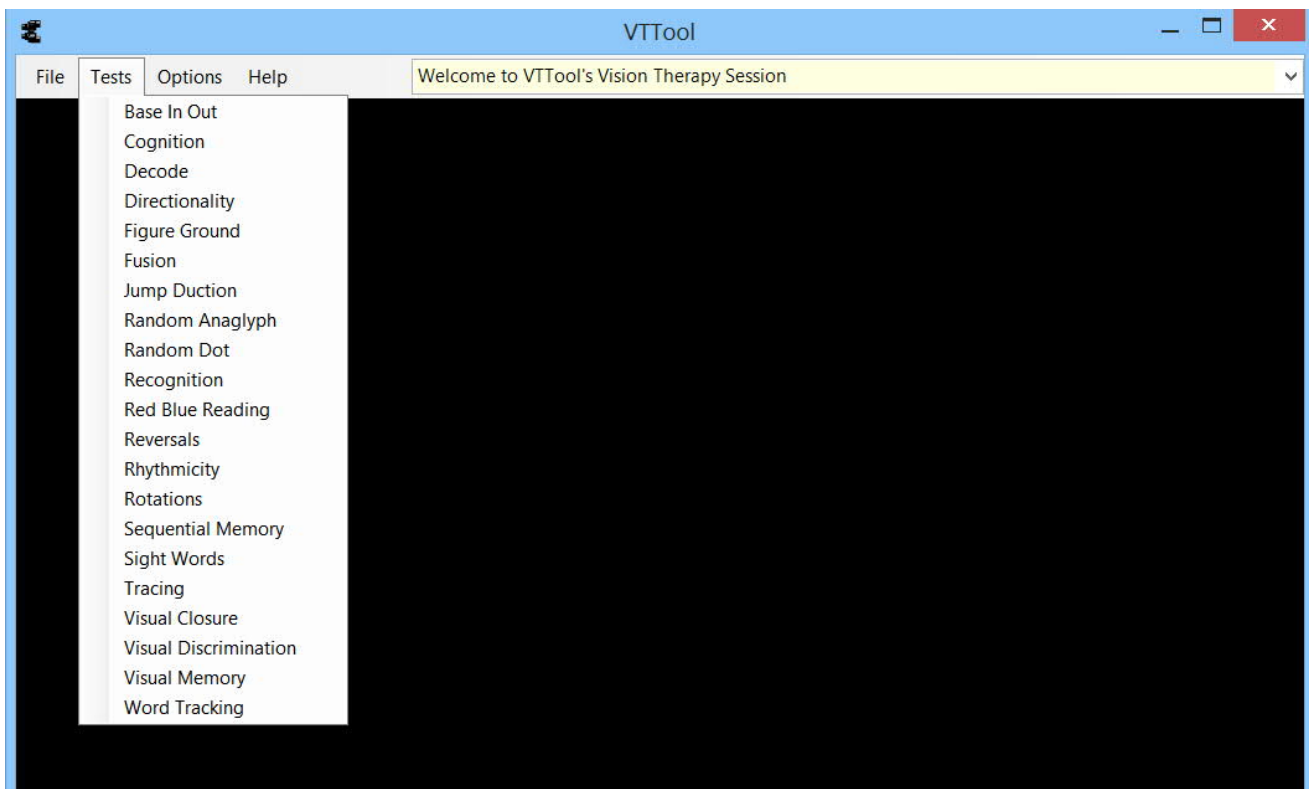
VTTool is a suite of exercises that can be used by the visual therapist for in-office training or by the patient for at-home practice. The suite includes exercises for:

- Base In Out*
- Cognition**
- Decode
- Directionality
- Eidetics
- Figure Ground
- Fusion **
- Jump Duction*
- Random Anaglyph*
- Random Dot
- Recognition**
- Red Blue Reading*
- Reversals
- Rotations
- Rhythmicity
- Sequential Memory
- Sight Words
- Tracing**
- Visual Closure
- Visual Discrimination
- Visual Memory
- Word Tracking

* 3D red-cyan glasses required

** 3D red-cyan glasses optional

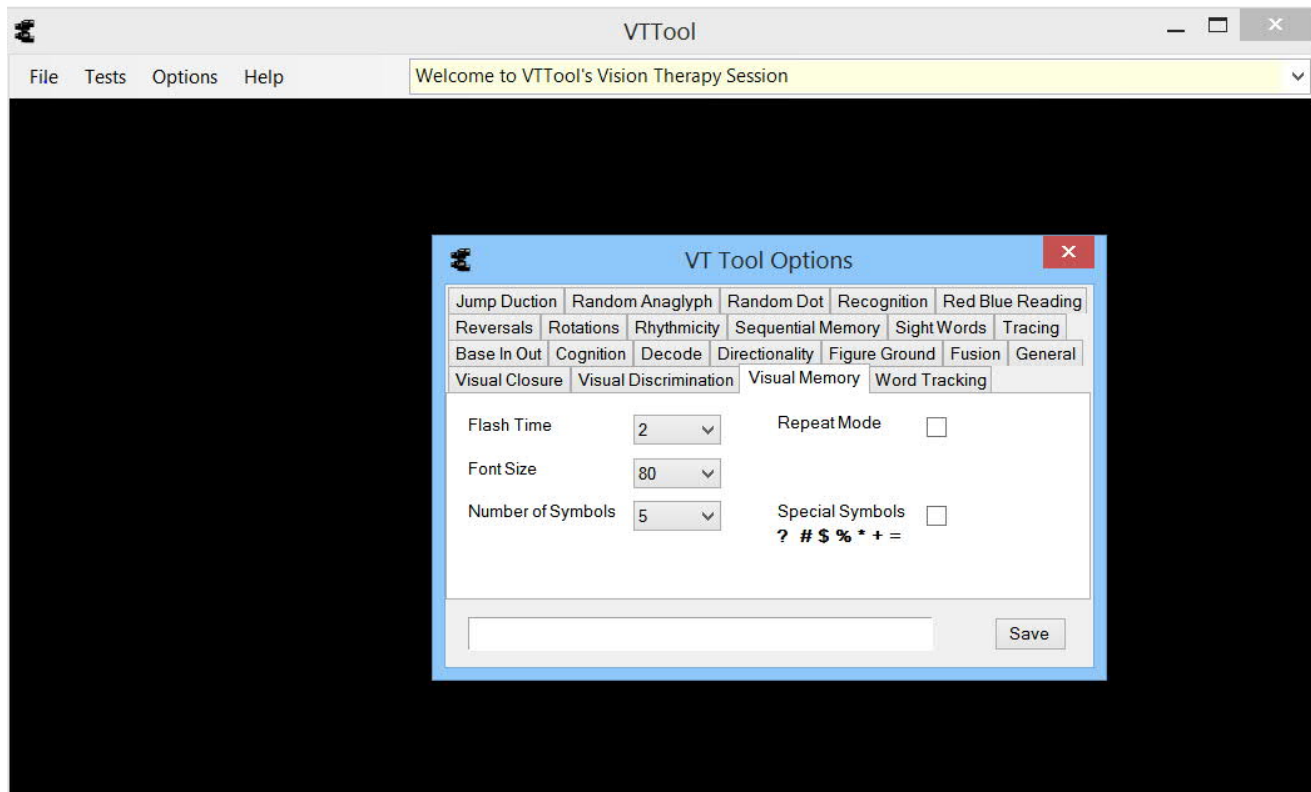
The VTTool window consists of simple menu items (top left), a pull down menu used to give the user exercise information (top right) and an area for running the exercise (black area below menu stripe). The window always runs in full screen mode and is non-sizable. It can be dragged to a second monitor. It can also be minimized to allow running other applications. After minimizing, a subsequent restore will return the window to full screen mode and restart the current exercise.



Running an Exercise

To start a new exercise, click on Tests and select the exercise you wish to run. When the exercise begins, the pull down menu will contain instructions on how to run the exercise and what exercise

settings are available to change the difficulty, speed, etc. While you're running an exercise, the pull down menu will give you results as to how you're doing. At the end of a test, the pull down menu will contain any available overall results. Most exercises can be re-run by merely pressing the keyboard space bar. Some exercises hide the mouse cursor in the black area when running. The cursor will re-appear whenever a test is restarted or whenever the cursor is moved over the menu bar.

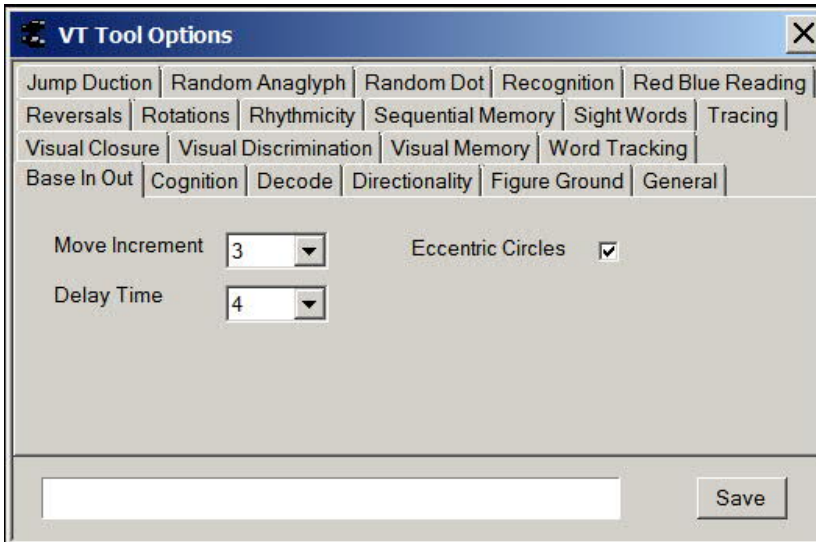
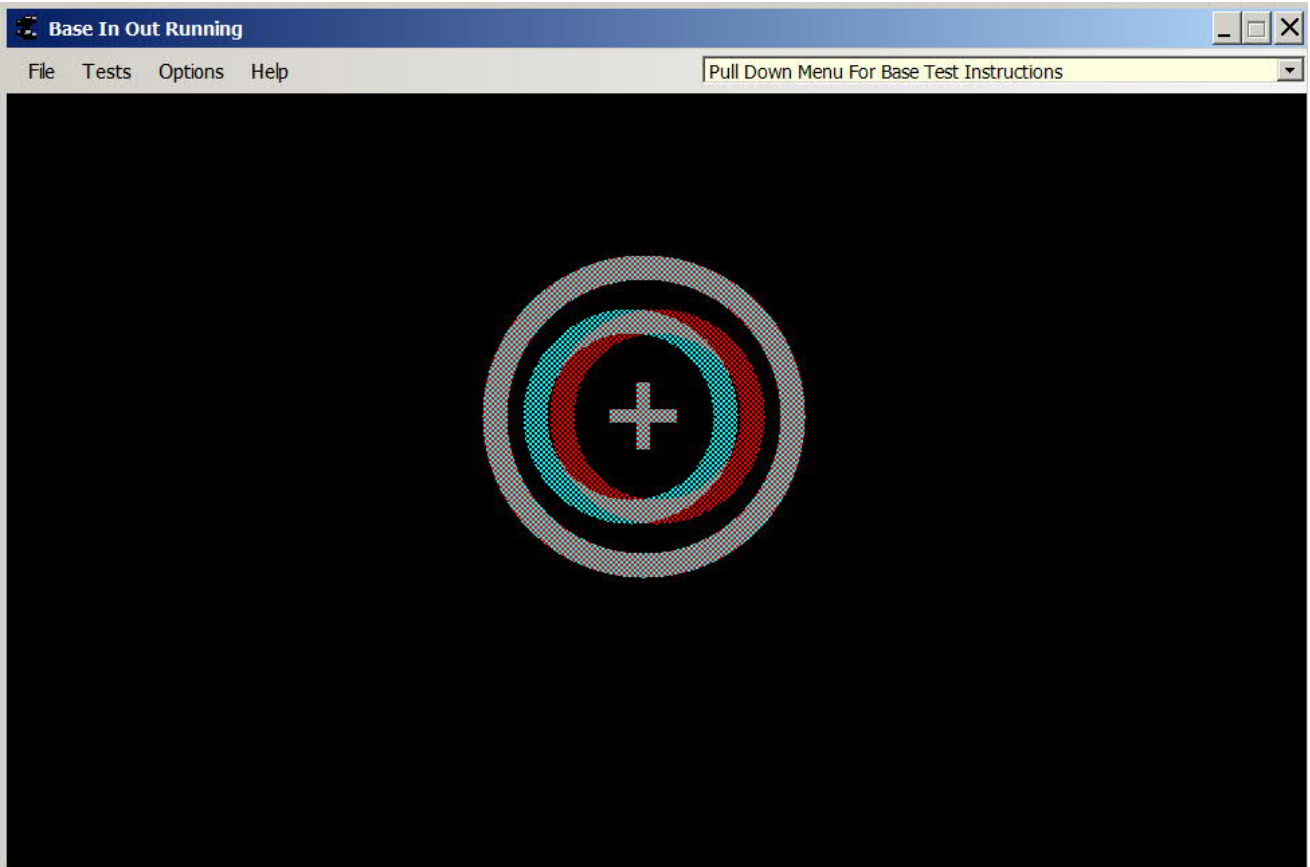


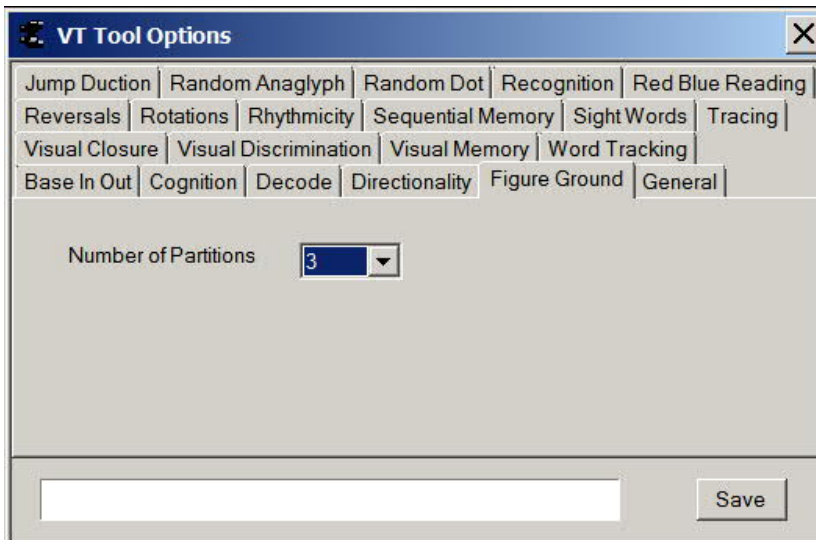
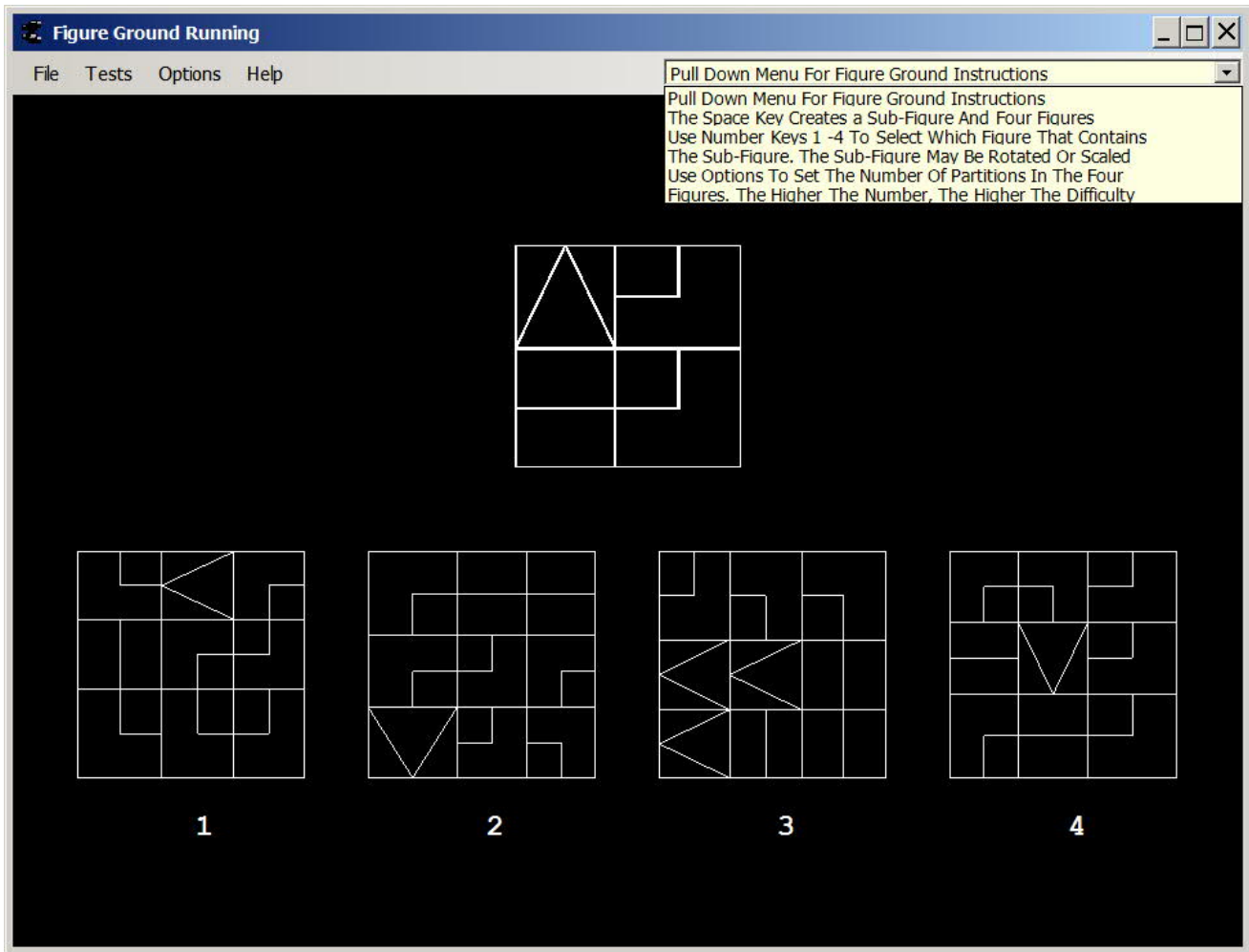
Changing Exercise Settings

To change the settings for an exercise, click on Options and select the tab of the exercise to change. The tab will automatically be set to whatever exercise is currently running. Click Save to save any changes you make and then close the Options window. You may change the settings for more than one exercise. Any changes you make without doing a Save will be lost when you close the Options window.

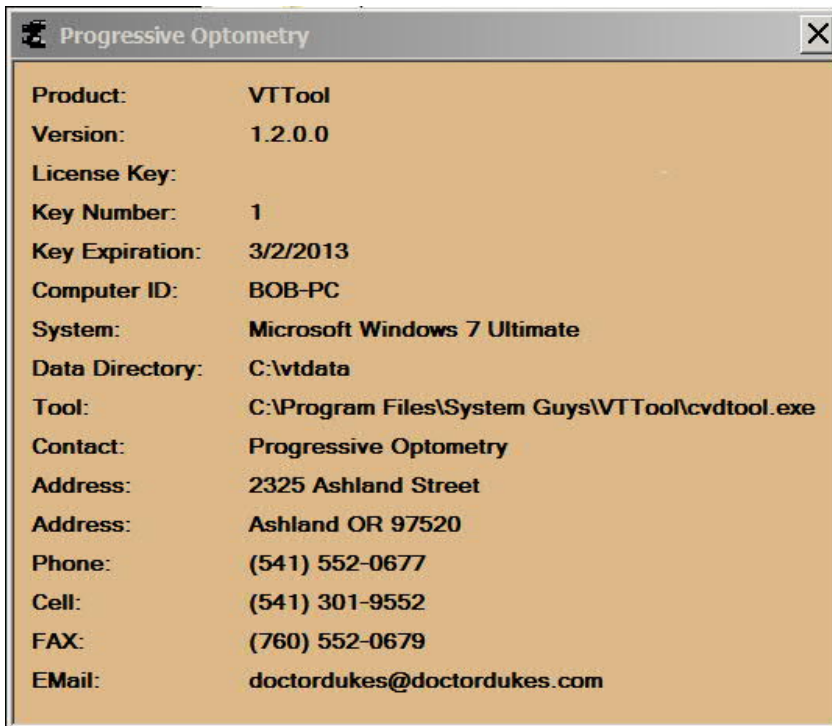
Sample Exercise Instructions and Settings

The following screen shots show samples of the instructions in the pull down menu when starting an exercise and the exercise's associated settings tab. The best way to familiarize oneself with any exercise is to start it running and then use the pull down menu to read the exercise instructions. Run the exercise a couple of times and then play with the settings in the exercise's Option's tab.



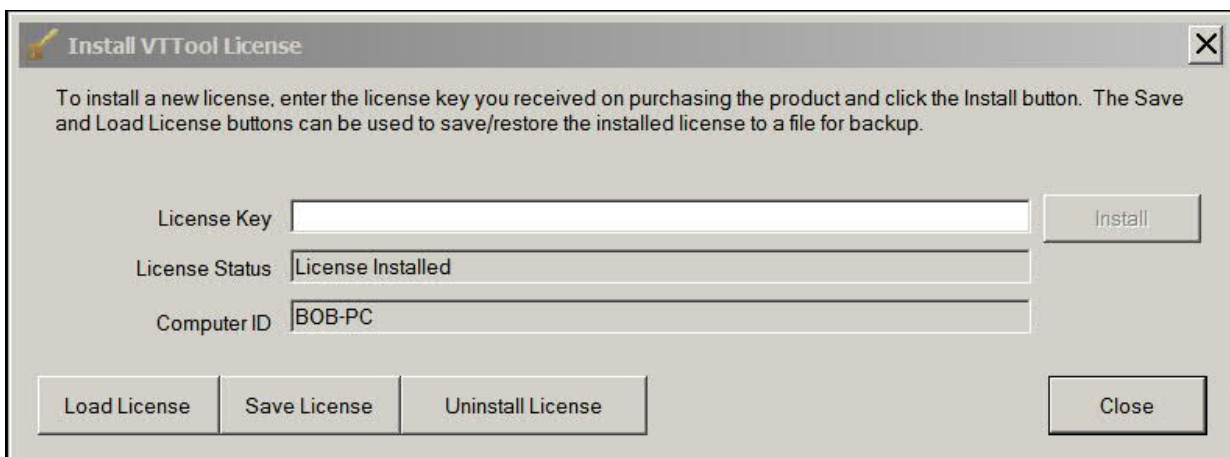


Help – About



The About sub-menu (under Help) will display three sections of information about VTTool. The first section describes the tool, the version being used and your license information. The second shows you where the VTTool data and program are installed. The third contains contact information for pre-sales questions. Please use e-mail or the forum at www.systemguys.com for any technical issues.

Help – License Options



Use the License Options sub-menu (under Help) to bring up the License install window.

Help – New Version Check

The New Version Check sub-menu (under Help) will try to access the on-line download site to see if a new version of VTTool is available for download. If the download site cannot be reached, a message to try again later will be displayed. If the download site's version is the same as you're currently using, a message will tell you so. If the download site's version is different, the message will show the version number on the site and give you the option of doing an update. If you choose to update, VTTool will be closed and the download page will appear in your web browser to allow you to install the new version.

Creating Fusion Image Set Files

A Fusion image set consists of a left and right image which are used to test the user's ability to fuse into a single image. The vtdata folder contains two subfolders named fusionleft and fusionright which hold the image set's left and right images. VTTool installs three sample image sets into these subfolders. You can create and install more image sets by doing the following. Open Windows paint and create a left and right image in two square bitmaps 512 pixels on a side. Give each image a different file name and then temporarily save each as bit map specifying the number of colors you want. (monochrome bitmaps greatly reduce the size of the completed image) Reload each bitmap image. If you have a left image , save it into the vtdata/fusionleft folder as a .png file with the name that Fusion will use to display it. (e.g. myimage.png) If you have a right image, save it into the vtdata/fusionright folder as a .png file using the same name you used when saving the left image. Your new image set can now be displayed in the Fusion test by hitting the F1 key and selecting the image set name.

Creating Sight Word and Word Tracking Text Files

VTTool installs a sample text file for each of the Sight Word and Word Tracking tests into the vtdata folder. You can use any text editor to create more. The text file these tests run can be selected by hitting the F1 key and selecting the text file name. Sight Word uses a simple list consisting of a single word on each text line. The list can be any length. Word Tracking consists of story lines followed by questions and correct answers to the questions in the following format:

Jack has a dog named Rover
Jill has a cat named Tiger
Rover likes to chase cars
Tiger likes to play with yarn
Q:Jack's pet is what kind of animal?

1. Cat
2. Elephant
3. Dog
4. Kangaroo

A:3

Q:Rover likes to do what?

1. Play with yarn
2. Chase cars
3. Dance the bugaloo
4. Eat crackers

A:2

Creating Eidetic Image Set Files

An Eidetic Image Set is a folder that has an image file and a text file for each eidetic test contained in the set. The text file is used to ask the user questions about the image displayed. The vdata folder has a subfolder named eidetics which contain the eidetic image sets. VTTool installs an eidetic image set folder named sampleset in the eidetics subfolder. You can create as many image sets with as many eidetic tests as you like. The image set that the Eidetics test will use can be selected by hitting the F1 key and selecting an image file name within an image set folder. You can then run just the selected eidetic test or all the eidetic tests in the image set folder either sequentially or randomly.

To create a new eidetic image set, simply add a new subfolder under the eidetics subfolder and then add your eidetic test files to the new subfolder. The image file and text file should have the same names with an extension of .jpg for the image file and .txt for the question file. To create an image file, open any jpeg image in the Windows Paint program. While maintaining the aspect ratio, resize the image to make it's pixel height 768 (This will greatly reduce the size of the completed image). Then save it as a .jpg file into your new eidetic image set folder. Then use any text editor to create the question file and save it as a .txt file with the same name as your image file into your eidetic image set folder. Look at any of the .txt files in the sampleset folder to see the question file format.

Exercise Instructions Contained In Pull-Down Menus

Base In Out

The Up and Down Arrow Keys Move In And Out
The Spacebar Resets The Test
Use Options To Make Movement Slower (Delay Time)
Use Options To Make Movement Faster (Move Increment)
Use Options To Change Display To Eccentric Circles

Cognition

Cognition Hides The Mouse When a Test is Running
Use Spacebar To Start or Restart The Test
Use The Enter Key To Start Seeing Patterns
Of Two or More Numbers Ended By a Letter.
When The First Number Of a Pattern Shows, Say The
Number. Add Each Succeeding Pattern Number And
Say The Sum. When The Ending Letter Shows, Say
a Word Beginning With The Letter.
Each Number and Letter Will Show For a Fixed Time
At a Random Screen Position. (Show Time)
The Time Between Showings Is Fixed And Is The Sum
Of The Show Time And A Zero Or Greater Delay Time.
Use Options To Set Font Size And Color, Max
Numbers In a Pattern, Show And Delay Times And
The Display Of a Fixation Target.

Decode

Decode Hides The Mouse When a Test is Running

Use Space Bar To Start or Restart The Test
Use Enter Key To Select a Decode Position and Then Press
The Key Board Character That Matches The Position Character.
The Gray Box Turns Green For a Correct match - Otherwise Red.
Use Options To Set The Test Length, To Continuously Run
Or Set The Number of Grid Squares Or The Grid Density

Directionality

Use Spacebar To Start The Test Without Metronome
Use Ctrl Key To Start The Test With Metronome
Mouse Click The Box The White Box Points To
The White Box Turns Gray If You Hit It Or Red If You Miss
The Pointed To Box Then Turns White And Points To Another Box
Keep Clicking On The Boxes Pointed To Until The Test Stops
Use Options To Set The Step Number and Diagonal Stepping
Use Options To Set The Metronome Beats per Minute

Eidetics

Hit Spacebar To Stop The Test
Use F1 Key To Select A Set of Images For a Test
Use Ctrl Key To Run The Test As Many Times As You Want
Use Shift Key To Continue Questions After A Wrong Answer
Display in Options Determines How Many Of The Set Images
The Test Will Display. Use One To Display Just The Image
Selected. Use Set To Display All the Set Images Sequentially.
Use Mix To Display All The Set's Images In Random Order.
Use Image Size In Options To Set The Image Size
Use Font Size To Set The Questions' Font Size
Use Delay Time in Options For Flashing The Image

Figure Ground

The Space Key Creates a Sub-Figure And Four Figures
Use Number Keys 1 -4 To Select Which Figure That Contains
The Sub-Figure. The Sub-Figure May Be Rotated Or Scaled
Use Options To Set The Number Of Partitions In The Four
Figures. The Higher The Number, The Higher The Difficulty

Fusion

Hit Spacebar To Restart The Test
Use F1 Key To Select A Left And Right Image Set
Right Arrow Key Switches Left and Right Image
Set The Pixel Size In Options To Change The Image Size
Up Arrow Key Widens Distance Between Left and Right Image
Down Arrow Key Lowers Distance Between Left and Right Image
Set The Pixel Increment In Options To Change Distance Increment
The Ctrl Key Starts And Stops The Image Set Movement

Set The Delay Time, Move Increment, And Motion in Options To Control The Image Set Movement

Jump Duction

The Up and Down Arrow Keys Move In And Out
The Spacebar Resets The Test
Use Options To Make Movement Faster (Move Increment)

Random Anaglyph

Use Options To Set The Dot Density Of The BackGround, The Size of The Squares Containing The Dots, The Distance To Move The Backgrounds For Correct Answers, And The Starting Position And Offset Of The Red Background. If The Starting Offset is Zero, The Backgrounds Will Move Away From Each Other. Otherwise They Will Move Together. Set The Distance The Arrow(s) Float Above Or Below The Background And The Float Offset Between Arrows. If The The Float Offset Isn't Zero, All The Arrows Will Be Displayed. For A Single Arrow, Use The Arrows Keys To Indicate Where The Arrow Is Pointing. If All The Arrows Are Displayed, Use The Arrow Keys To Indicate The Arrow Farthest Above Or Below The Background. If An Answer Is Correct, The Next Test Is Displayed And The Distance Between The Red And Blue Backgrounds Is Incremented. The Space Bar Restarts The Test

Random Dot

Use Options To Set The Density of Dots In The BackGround, The Size of The Squares Containing The Dots, The Depth The Figure Floats Above Or Below The Background And The Float Offset Between Arrows. If The The Float Offset Between Arrows Isn't Zero, All The Arrows Will Be Displayed. For A Single Arrow, Use The Arrow Keys To Indicate Where The Arrow Is Pointing. If All Arrows Are Displayed, Use The Arrow Keys To Indicate The Arrow Farthest Above Or Below The Background. If An Answer Is Correct, The Next Test Is Displayed. The Space Bar Restarts The Test.

Recognition

Recognition Hides The Mouse When a Test is Running
Use Spacebar To Start or Restart The Test And Display a Recognition Character At Screen Center.
Use The Enter Key To Start Seeing Characters That Appear One At A Time At Random Screen Locations.
Whenever You See a Random Character That Matches

The Recognition Character, Press The Enter Key.
The Recognition Character Will Turn Green For a Match Or Orange If a Mismatch. Not Pressing During a Series Of Random Characters Followed By a Recognition Character Counts As a MisMatch.
Each Random Character Will Show For a Fixed Time.
The Time Between Showings Is Fixed And Is The Sum Of The Show Time And A Zero Or Greater Delay Time.
Use Options To Set Font Size And Color, Max Number Of Random Characters Before A Match, Show And Delay Times And Test Length.

Red Blue Reading

The Space Key Restarts the Test and Displays Red Blue Words Of Random Characters
No Zero's or Ones in Characters - Only Letter O or I
Use Number Keys 1-3 To Select The Matching Symbols
Use Options To Change Font Size And Number Of Characters

Reversals

Use Space Bar To Start or Restart The Test And Show A Reversal Character
Use The Enter Key To Show A Grid Of Characters And Then Select Every Character With The Mouse That Matches The Reversal Character. A Character Will Be Marked With a Light Gray X When You Select It.
Hit The Enter Key Again When You're Done Matching
Matched Reversal Character Backgrounds Will Turn Green
Non-Selected Reversal Character Backgrounds Orange And Mis-Matched Character Backgrounds Red
Use Options To Set The Grid Size And Density Or Include Special Characters

Rhythmicity

Use Spacebar To Reset The Test
Use CTRL Key To Start The Metronome
When You've Got The Rhythm Of The Metronome, Use Ctrl To Keep Time With Each Beat Until The Test Ends
The X Will Turn Green If You're On Time, Red If You're Too Slow, Orange If You're Too Fast
Use Options To Set The Beats Per Minute, The OK Time Percentage And The Number of Beats Or Continuous Beating And Whether To Display The Metronome Beat Image

Rotations

Hit Spacebar To Restart The Test
Use Down Arrow To Choose Between The Infinity

Motion Test and The Circle Motion Test
Use Ctrl Key To Start The Ball Moving And Firing
When The Moving Ball Turns Cyan And Says Fire, Hit Ctrl
If You Hit It, The Ball Will Turn Green and Say Hit
If You Miss It, The Ball Will Turn Red and say Miss
Keep Trying To Hit The Cyan Ball Until The Test Stops
Set The Delay Time, Move Increment, Laps And Reverse in Options
Laps Is The Number of Motion Laps Before The Test Stops
Reverse Is The Number of Laps Before The Motion Reverses
Delay Time and Move Increment Control The Motion Speed

Sequential Memory

The Space Key Resets The Test
The Ctrl Key Displays The Symbols
The Shift Key Repeats The Test If Allowed
Use Number Keys 1-4 To Select The Matching Symbols
Use Options To Set Flash Time, Size And Number Of Symbols
Use Options To Allow Repeat Tries

Sight Words

Use F1 Key To Select The Word List File
The Ctrl Key Flashes The Next Word
The Shift Key Repeats The Word If Allowed
Use Options To Set Flash Time, Size Of Words
Use Options To Allow Repeat Tries

Tracing

Use Space Bar To Start or Restart The Test
Select a Line To Trace By Clicking a Letter On
The Top Row. Then Click A Circle On The Bottom
Row Where The Line Ends At. The Line Letter
Will Appear In The Bottom Circle And The Top Circle
Will Turn Brown to Indicate It's Been Selected.
Hit The Enter Key To Score Your Selections
Bottom Circles Turn Green For Correct Selections
Top And Bottom Circles Turn Red For Incorrect Or
Non-Clicked Selections
Hit Enter Again To See All Correct Selections Or
Click A Top Circle To See That Lines Correct Trace.
Use Options To Set The Grid Size And Density, Line
Complexity And Tension, Line Color And 3D Depth .

Visual Closure

The Space Key Creates a Figure And Four Choices
Use Number Keys 1 -4 To Select The Matching Choice

Visual Discrimination

The Space Key Creates a Figure And Four Choices
Use Number Keys 1 -4 To Select The Matching Choice

Visual Memory

The Space Key Resets The Test
The Ctrl Key Displays The Symbols
The Shift Key Repeats The Test If Allowed
Use Number Keys 1-4 To Select The Matching Symbols
Use Options To Set Flash Time, Size And Number Of Symbols
Use Options To Allow Repeat Tries

Word Tracking

Use Spacebar To Stop And Reset The Test
Use F1 Key To Select A Text File For Reading
Once The Text File Is Selected, Use Ctrl Key
To Run The Test As Many Times As You Want
Use Shift Key To Continue Questions After A Wrong Answer
Use Options To Set The Delay Time Between Word Appearances
And The Font Size