BALANCE SYSTEM™ SD AND BIOSWAY™ GAMES

ADDENDUM

FOR 15.6" DISPLAY

Contact information
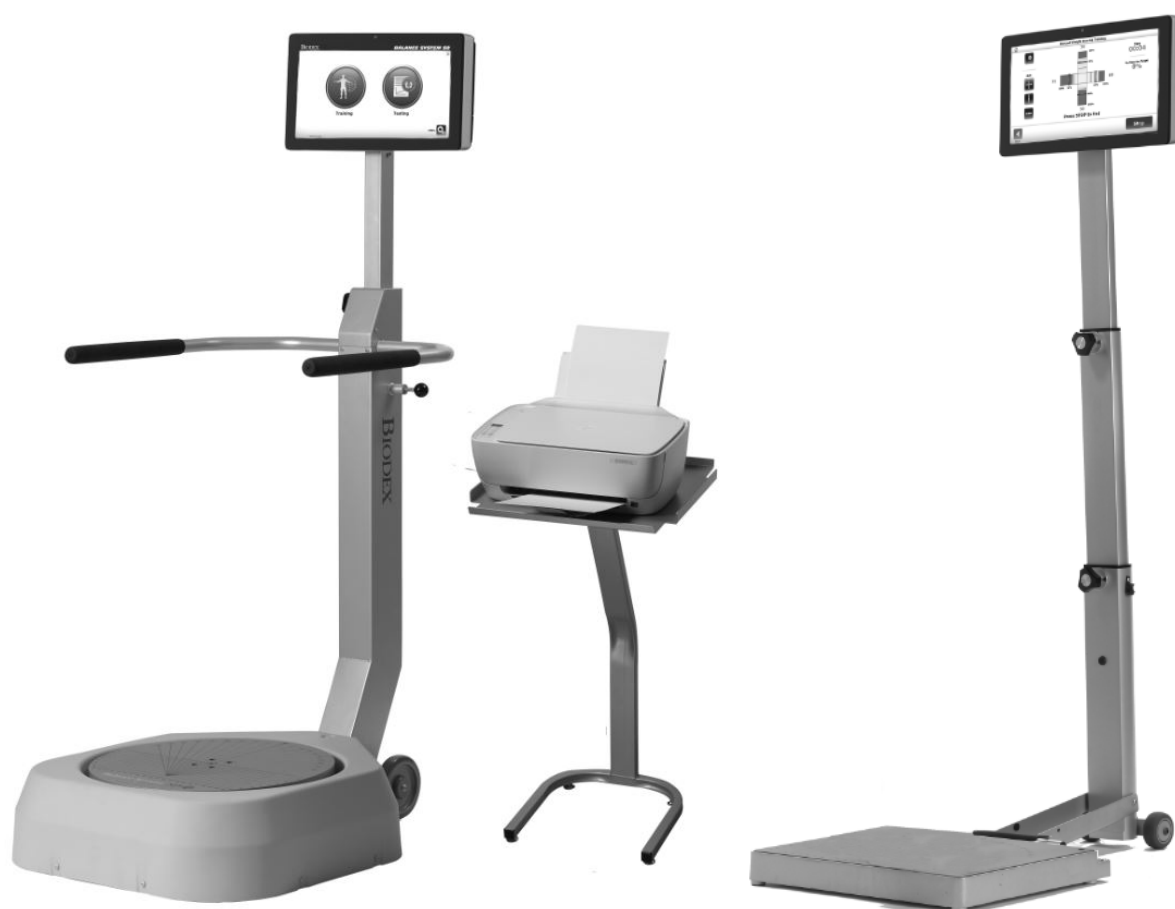
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Download Instructions

Use the following steps to upgrade your Balance System™ SD or BioSway™ software with Balance Games (available for devices with a 15.6" display):

## Part I: Updating the Balance Software

1. Open your Chrome web browser.
   Note: Using Internet Explorer may require extra steps.

2. Navigate to the Biodex Software Updates page:

   Physical Medicine > Products > Software Updates
   or
   https://www.biodex.com/physical-medicine/products/software-updates

3. Select the Balance System SD Software Update v4.0.X or BioSway Software Update v4.0.X.

4. Scroll down and click the download button.

5. Fill in all required fields and click the submit button. A Software Update screen will display.

6. Insert a flash drive into your computer.

7. Click the download button. The file will appear at the bottom of your screen.
   *Note: Do **not** open the file.*

8. Open your Downloads folder.

9. Drag and drop the BalanceSystem.bioupdate file to copy it the root of your flash drive.

10. Remove the flash drive and insert it into your Balance System or BioSway display.

11. Wait at the Home screen for the flash drive to be detected.

12. Follow the on-screen prompts until the update is installed.

Part II: Downloading and Installing the Games

Note: Balance Software v4.0.10 or higher is required before installing the games.

1. Open your Chrome web browser.
   Note: Using Internet Explorer may require extra steps.

2. Navigate to the Biodex Software Updates page:

   Physical Medicine > Products > Software Updates
   or
   https://www.biodex.com/physical-medicine/products/software-updates

3. Select Balance Gaming Software.

4. For each of the games, click the download button, click submit at the bottom of the fill form, and click download again. The files will appear on your screen.
   *Note: Do **not** open the files.*

5. Open your Downloads folder. It should contain the files shown below.
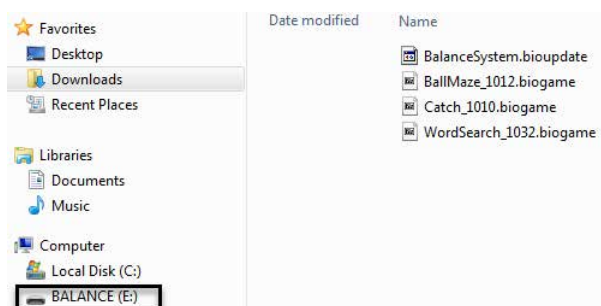
6. Drag and drop each game to copy the files onto the root of your flash drive.

7. Remove the flash drive and insert it into your Balance System or BioSway display.

8. Wait at the Home screen for the flash drive to be detected.

9. Follow the prompts until each game is installed.

Part III: Reinstalling the Games

In the event that the games are accidentally deleted, please follow the Part II instructions to download and reinstall the games. Or, if you still have your flash drive, you can use it to reload the games onto your display.

Need Help?
Contact Biodex Software Support
1-800-224-6339 ext 2120, or
softwaresupport@biodex.com

Using the Balance System SD and BioSway Games

There are several games that are available on the Balance System SD and BioSway products. The games provide the patient an opportunity to work on balance skills in a game-like, interactive setting. Patient information for the session can be saved and printed.

The following games are currently available:

- Ball Maze
- Word Search
- Catch

Ball Maze:

The object is to direct the ball through a circular maze; the ending point will be the outside circle opening.

1. The Ball Maze game is accessed by touching <Training> from the Home screen. The Training screen is displayed.

Figure 1.   Training Screen.

> **NOTE:** When <Games> is touched on the Training screen, the system exits from the Balance System and a message is displayed on the screen at this time:
>
> *Loading Program...Please Wait*
>
> *Do not touch the screen until the Games menu is displayed.*

2. Touch <Games>. The Games screen is displayed.

Figure 2.   Games Screen.

NOTE: The Delete function is discussed at the end of the Addendum.

3. Touch <Ball Maze>. The Ball Maze screen is displayed:

Figure 3.   Ball Maze Screen.

Before beginning the game, there are a few settings that need to be established.

Skill Levels:

There are two skill levels for this game. The default skill level is Easy. To change the skill level, touch <Skill level>. The more advanced bar (Hard) will be highlighted.

Degree of Sway:

The degree of sway provides a way to define the patient's field of sway within their capabilities. It is calibrated as follows:

1. Stand in the center of the Balance System and touch <Degree of Sway>. The Ball Maze Degree of Sway screen is displayed:
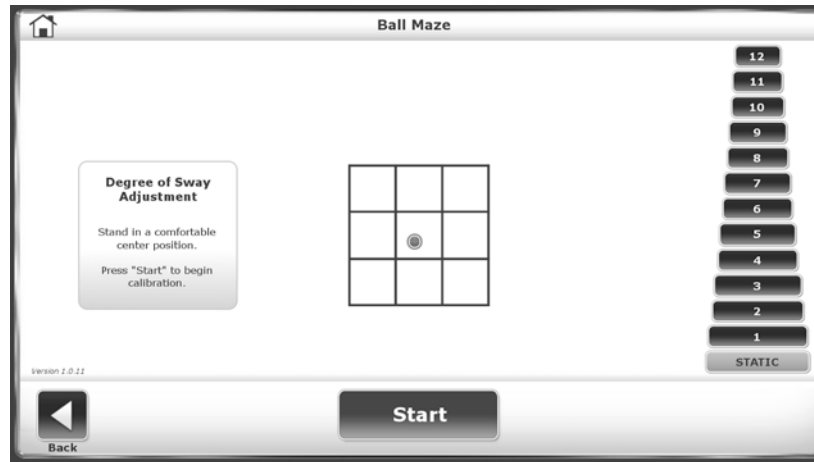

Figure 4.   Ball Maze Screen – Degree of Sway.

2. Lean to the right. The circle in the center of the grid will move in the same direction. Stop when the desired right-most limit has been reached.

3. Lean to the left. The circle in the center of the grid will move in the same direction. Stop when the desired left-most limit has been reached.

4. Lean forward. The circle in the center of the grid will move in the same direction. Stop when the desired forward limit has been reached.

5. Lean backward. The circle in the center of the grid will move in the same direction. Stop when the desired backward limit has been reached.

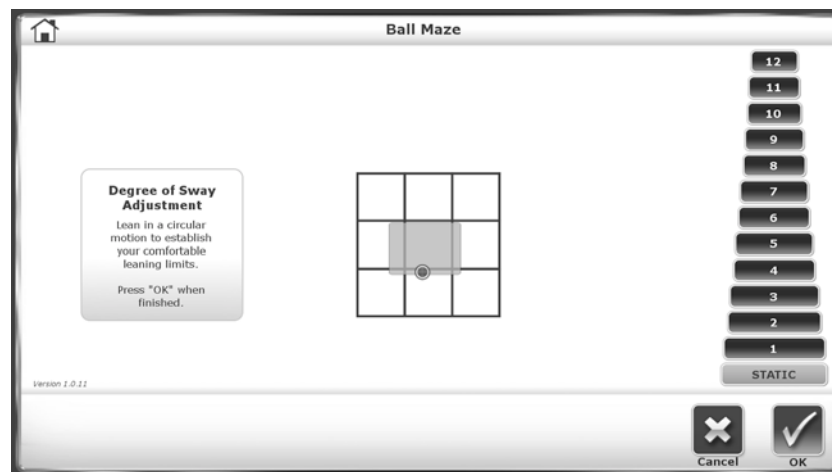6. A square will be highlighted within the grid.

Figure 5.   Ball Maze Screen – Degree of Sway Highlighted.

7. If the square defines the desired degree of sway, touch <OK>. If it does not touch <Cancel> to begin the calibration again.

8. Touch <Back> to return to the Ball Maze screen.

Options:

The Options icon allows the user to set the volume for the audio and the speed at which the ball will move within the maze. To change the setting for either option, touch the circle in the center of the field and move to the right to increase and to the left to decrease.
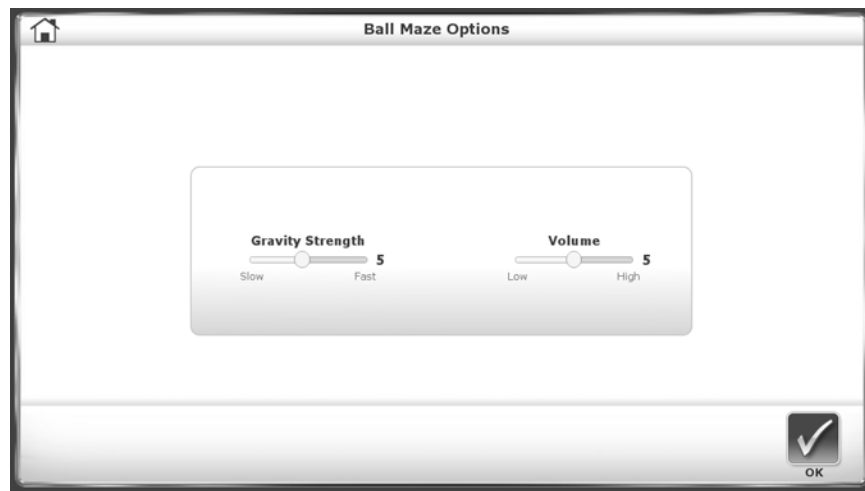

Figure 6. Ball Maze Options Screen.

Playing the Game:

The game is played as follows:

1. Touch <Start>. The ball is released from the maze.

2. Moving forward, backward, left, and right, guide the ball through the maze until it exits from the final gate.

Figure 7. Moving the Ball Through the Maze.

Note: *The Balance System provides static and dynamic platform control, and as such, the ability to control the platform firmness is available. The level change is not available on the BioSway.*

3. When the ball exits from the maze, the system displays the following message:

Figure 8.   Ball Maze Displaying Completion Message.

4. Touch <Stop>. Touch <Back>. The system displays a message asking whether the user want to exit the game or not. Touch <No> to play another game. Touch <Yes> to exit the Ball Maze game and return to the main Games screen.

Word Search:

The goal is to sway in a straight linear motion highlighting the letters that make up various words.

1. The Word Search game is accessed by touching <Training> from the Home screen. The Training screen is displayed (see Figure 1).

2. Touch <Games>. The Games screen is displayed (see Figure 2).

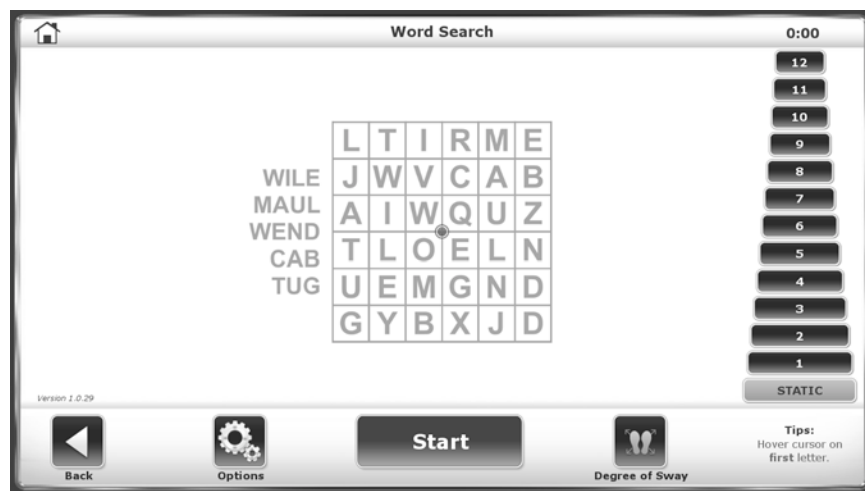3. Touch <Word Search>. The Word Search screen is displayed:

Figure 9.   Word Search Screen.

Before beginning the game, there are a few settings that need to be established.

Degree of Sway:

The degree of sway provides a way to define the patient's field of sway within their capabilities. It is calibrated as follows:

1. Stand in the center of the Balance System and touch <Degree of Sway>. The Word Search Degree of Sway screen is displayed:
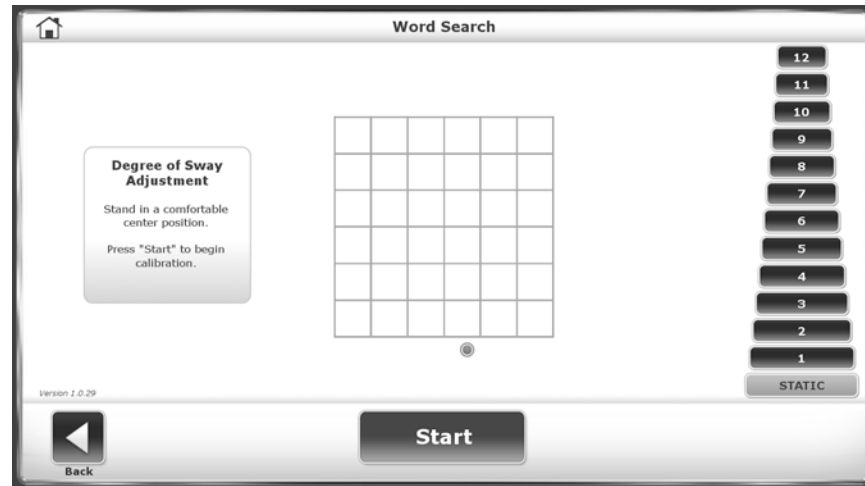

Figure 10.   Word Search – Degree of Sway.

2. Lean to the right. The circle in the center of the grid will move in the same direction. Stop when the desired right-most limit has been reached.

3. Lean to the left. The circle in the center of the grid will move in the same direction. Stop when the desired left-most limit has been reached.

4. Lean forward. The circle in the center of the grid will move in the same direction. Stop when the desired forward limit has been reached.

5. Lean backward. The circle in the center of the grid will move in the same direction. Stop when the desired backward limit has been reached.

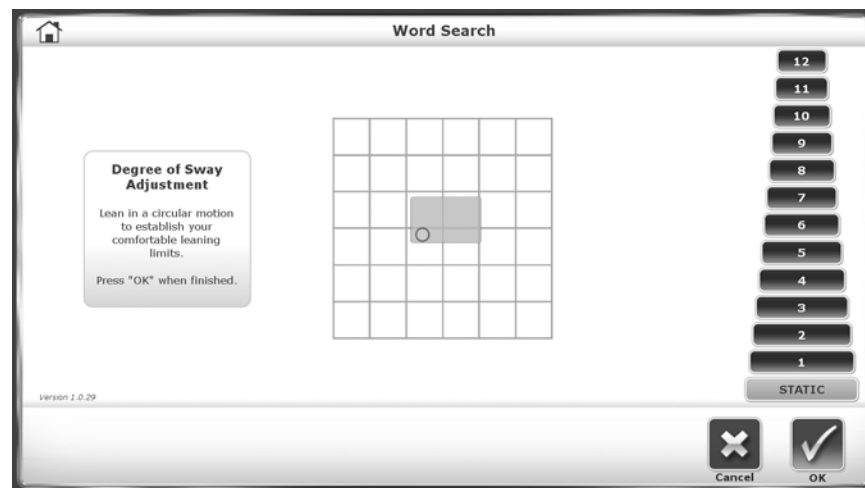6. A square will be highlighted within the grid.

Figure 11.   Word Search – Degree of Sway Highlighted.

7. If the square defines the desired degree of sway, touch <OK>. If it does not touch <Cancel> to begin the calibration again.

8. Touch <Back> to return to the Word Search screen.

Options:

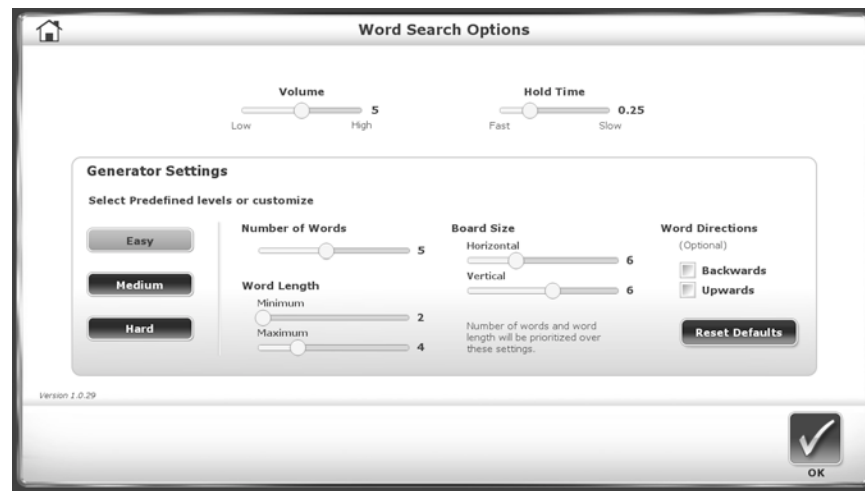The Options icon allows the user to set several parameters for the game.

Figure 12.   Word Search Options Screen.

1. Raise or lower the audio sound effects by touching the circle in the center of the <Volume> field and sliding it to the right to raise the sound or to the left to lower the sound.

2. Raise or lower the amount of time the user must hold the cursor on a letter within the search grid by touching the circle in the center of the <Hold Time> field and sliding it to the right to raise the required amount of time or to the left to lower the required amount of time.

3. There are three skill levels for this game. The default is Easy. To change the skill level, touch either <Medium> or <Hard>.

4. The number of words in the Word Search can be set by touching the circle in the center of the <Number of Words> field and sliding it to the right to raise the desired number of words or to the left to lower the desired number of words.

5. Set the word length for the words using the Minimum and Maximum fields. Touch the circle and increase or decrease the word length by sliding the circle to the right (increase) or left (decrease).

6. Establish the size of the displayed board using the Horizontal and Vertical fields. Touch the circle within one or both and increase or decrease the size of the board by sliding the circle to the right (increase) or left (decrease).

7. Word Directions is optional. It allows the user to establish the direction(s) in which the hidden words are displayed. To select one or both of the directions, touch <Backwards> to allow the word to be displayed in reverse order (e.g., hcuot for touch) or upwards (e.g., the second letter is displayed directly under the first and so forth).

8. When all of the changes have been made, touch <Reset Defaults>. To exit without saving any of the changes, touch <OK> without touching <Reset Defaults>.

9. Touch <OK> to exit and return to the Word Search Game screen.

To Play the Game:

The game is played as follows:

1. Touch <Start>.

2. Moving forward, backward, left, and right, guide the cursor through the list of letters until the hidden word is red highlighted.
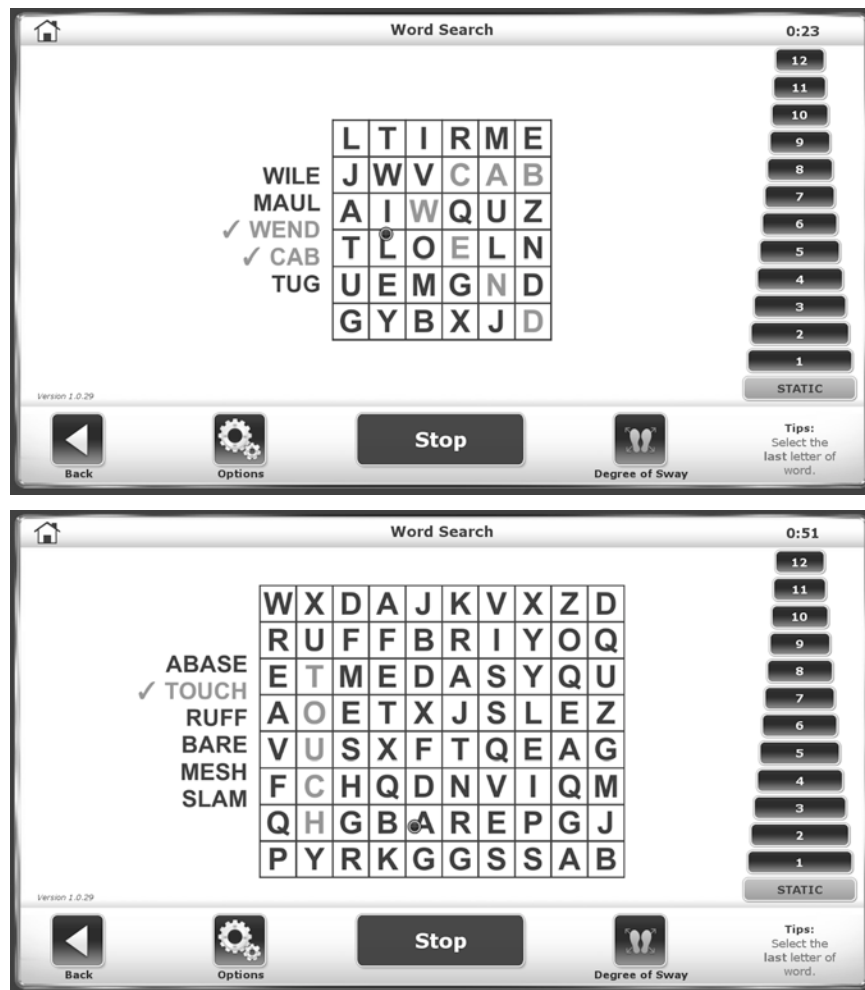
Figure 13.   Moving the Cursor Through the Letters.

3. When the word is highlighted, the system will change the color to green and put a checkmark at the beginning of the word in the word list.

    NOTE: If a string of letters that does not form one of the words in the list is highlighted, the system will keep the letters highlighted. The game is lost and a new game must be begun.

4. The game can be stopped at any time by touching <Stop>. The system exits the game and returns to the Word Search screen.

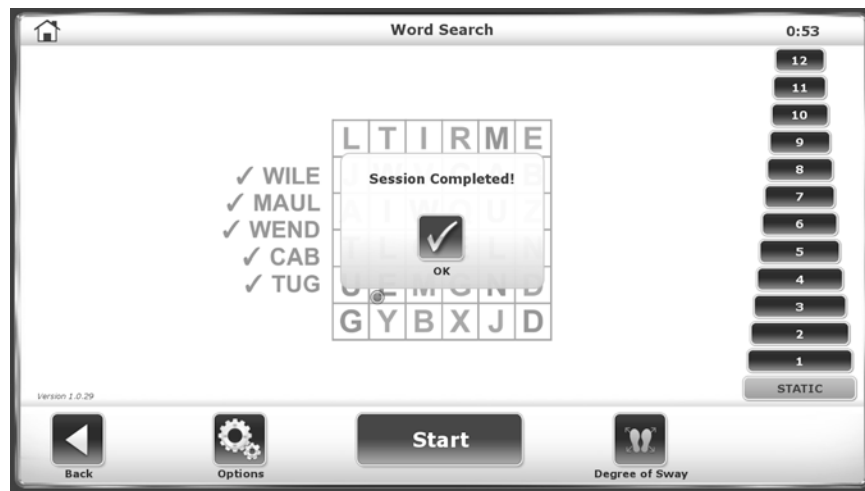5. When all of the words have been highlighted, the system displays the following message:

Figure 14.   Game Completion Message.

6. Touch <Stop>. Touch <Back>. The system displays a message asking whether the user wants to exit the game. Touch <No> to play another game. Touch <Yes> to exit the Word Search game and return to the main Games screen.

Catch:

The game is played with either a stable or dynamic platform. In the Random game, a ball is thrown to a random target and the patient moves to reach the target. When the patient reaches the target, the ball is thrown back to the thrower and this random pattern continues. The Motor Control game is played in the same manner with the exception that the targets are not random.

1. The Catch game is accessed by touching <Training> from the Home screen. The Training screen is displayed (see Figure 1).

2. Touch <Games>. The Games screen is displayed (see Figure 2).

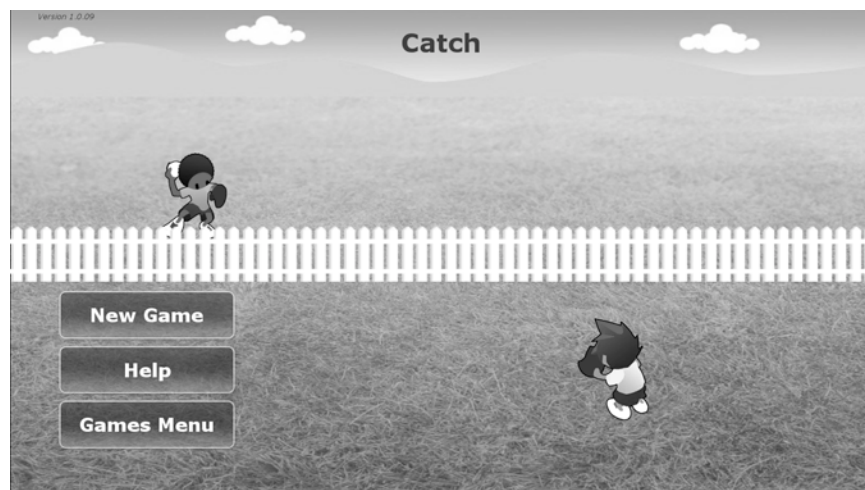3. Touch <Catch>. The Catch screen is displayed:

Figure 15.   Main Catch Screen.

The Main Catch screen contains three options:

- • *New Game* – Touch <New Game> to begin playing the Catch game.
- • *Help* – When <Help> is touched, the following message is displayed:

The goal of catch is to reach the target and throw the ball to the other side of the fence.

Touch <Back> to return to the main Catch screen.

- *Games Menu* – Touch <Games Menu> to exit and return to the Games screen (see Figure 1).

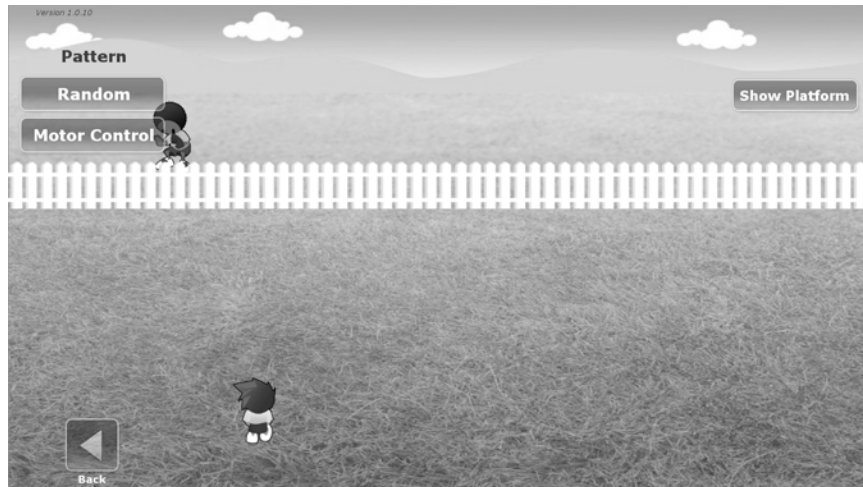4. Touch <New Game>. The following screen is displayed:

Figure 16.   Catch Screen.

Before beginning the game, there are a few settings that need to be established:

1. Select the type of game to play (i.e., Pattern) by touching either <Random> or <Motor Control>.

2. Select the desired skill level by touching <Skill Level>. The default is Easy. Change the skill level to Medium or High by successively touching the button.

3. Touch <Timeout> to set a time limit for the session. To set a timeout, touch the circle in the center of the field and slide it to the right to increase the amount of seconds or to the left to decrease the number of seconds.

4. When all of the options have been set, the game can begin.

To Play the Game:

There are two versions of this game. The difference between the two games is that the targets (series of circles) are established within a select range for the Motor Control game (as illustrated in Figure 17) and a target can be displayed anywhere in front of the fence within the established range (see Figure 18) for the Random game.
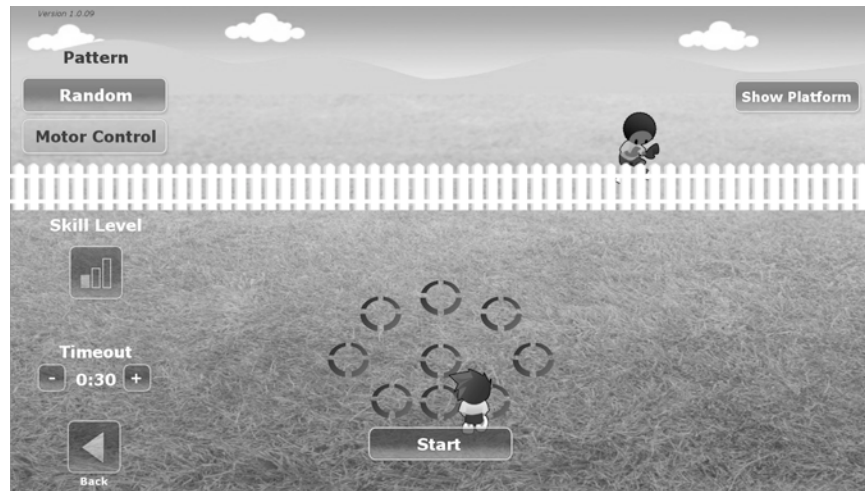
Motor Control:

Figure 17.   Game Screen – Motor Control
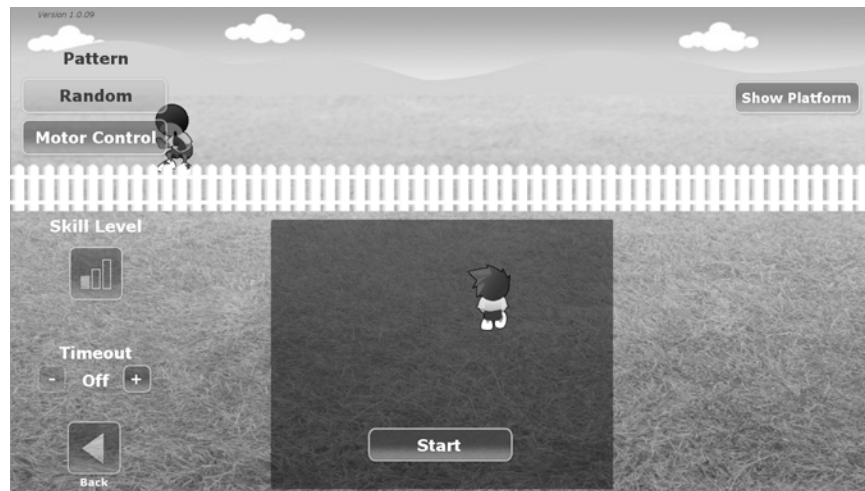
Random:

Figure 18.   Game Screen – Random Pattern.

1. Touch <Start>. A circle is displayed on the screen. Move the image in the foreground to the desired circle by leaning forward, right, backward, or left as required. The ball is thrown as soon as the foreground image is placed within the circle.

2. The score and the time remaining for the game are displayed in the upper right of the screen (see Figure 19).

3. As soon as the rear image catches the ball, a new circle is displayed in the foreground. Move the foreground image to the circular target before the ball reaches it. If the ball reaches the target first, it is a miss. If the image reaches the target first, it is a catch.

4. The process continues until the foreground image touches <Stop> or the game times out.

5. Once the game has ended, statistics are displayed:

Figure 19.   Statistics Screen Illustrating Score and Time fields.

NOTE: *When <Stop> is touched within the Motor Control game, the statistics are displayed and two options are available. Touch <Menu> to return to the Catch main screen or touch <Games Menu> to exit out to the main Games screen. From the Random game, the Catch main menu is displayed.*

Options:

Once <Start> is touched, a new Options button is displayed. By touching it, the game is paused and the user can turn on music and set the desired music volume.
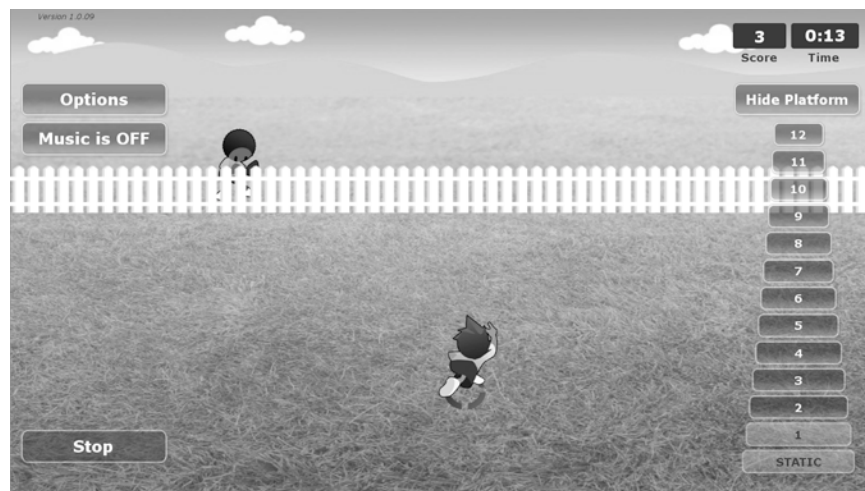

Figure 20.   Catch Game – Options Screen.

Game Screen Options:

Delete – <Delete> allows the user to delete a game from the Game screen. When <Delete> is touched, the system displays the following message:
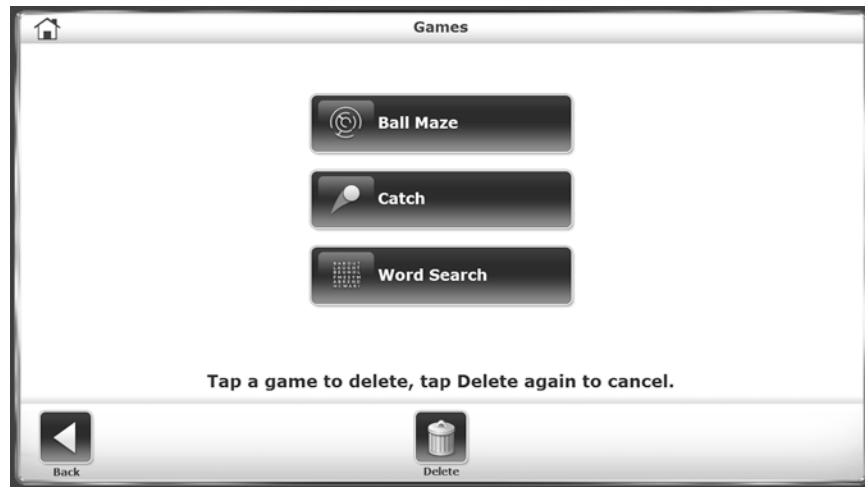

Figure 21.   Delete Function Selected.

Touch the button for the game to be deleted. The system will display the following message:

Figure 22.   Game Screen – Delete Confirmation Message.

Touch the game button a second time to delete the game.

NOTE: *The game still exists on the flash drive provided. It can be re-installed at any time.*