

## VIA DEVICES: Setting Up Headtracking



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**Note:** Head tracking is only available on iOS devices or iPadOS devices that have a front-facing TrueDepth® camera.

The head tracking feature allows individuals who are unable to use their hands to alternatively use small head movements to control where the pointer moves on the screen. The front camera in your device translates these head movements into pointer movements and activations/selections on the screen.

### Turning Head Tracking On or Off

To access the head tracking settings, select **Menu > Settings**. Under Head Tracking, tap **Enable Head Tracking** to turn head tracking on or off.

**Important!** The first time you enable head tracking, you will be prompted to allow access to the device's front-facing camera. Select **OK**. If you don't allow access, you will not be able to use head tracking. If the message "Camera Permission Denied" appears, see the resolution under "Troubleshooting Head Tracking".

### Positioning the User

Analysis of positioning by a qualified person is required to prevent repetitive stress injuries to the user. Position the user approximately 12 to 36 inches from the device screen. You may find that the user has more control when located toward the lower end of that range.

If someone is sitting beside the user, try to position the device to face the user as much as possible. If the camera detects two faces, the head tracking system will choose the largest, or most clearly recognizable face.

### Adjusting Head Tracking Settings

It is important to adjust the head tracking settings in the App software to work best for the individual who will be using it.

**Important!** Because head tracking depends on the user's head movement capabilities, these instructions only cover the setup basics. You may need to refine your settings several times. We suggest changing one setting at a time.

To change a setting:

1. Select **Menu > Settings**.
2. Under **Head Tracking**, select the setting you want to change. A list of options will be displayed.
3. Select the option you want, then press **Done**.

### Available Settings:




**Note:** The default setting for each option in this section is indicated by an asterisk \*.

### Tracking Speed

The relative speed at which the cursor moves on the screen for each head movement. Choose from the following tracking speeds: Very Slow, Slow \*, Normal, Fast, and Very Fast. The slower settings require greater head movement; the faster settings require less head movement.

### Cursor Shape

The type of cursor that is displayed to indicate head position as you move your head and make selections. You can indicate head position by cursor, by highlight, or by both at the same time. Choose from the following cursor shapes:

None	No visible cursor. <b>Note:</b> If you select None, it is best to turn the Highlight Buttons setting on. If you set Cursor Shape to None and turn Highlight Buttons off, you will have no visible way to track head movements
Dot *	
Crosshair	
Arrow	


### Off-Screen Indicator

Indicates when head movement is taking the cursor off the screen to the left, right, top, bottom, or any corner. Choose from the following off-screen indicators:

None	No off-screen indicator will appear
Dot	A dot will appear at the edge of the screen. The dot gets larger the farther off-screen you move.
Triangle *	A triangle will appear at the edge of the screen.

### Trigger Action

The head or face action that will make an activation. When you stop moving your head to point at the item you want, the cursor appears on that item, or the item is highlighted. The selected action then activates the item. Choose from the following trigger actions:

None	No activations will be made
Hover 	When you point at an item for an extended time, a circle begins to form around the cursor. When the circle is complete (determined by your Hover Time setting), the item is activated. If you point away from the item before the circle is complete, the item is not activated.  <b>Note:</b> When you select Hover as the trigger action, the setting Hover Time replaces the setting Trigger Sensitivity.  <b>Important!</b> If you select Hover as the trigger action, <b>DO NOT</b> attempt to pause head tracking. Currently, the hover trigger will not resume head tracking.
Blink *	Blink your eyes to make an activation
Mouth Open	Open your mouth to make an activation
Eyebrows Up	Raise your eyebrows to make an activation
Tongue Out	Stick out your tongue to make an activation
Smile	Smile to make an activation
Frown	Frown to make an activation

### Hover Time

When you select Hover as the trigger action, the setting Hover Time replaces the setting Trigger Sensitivity. Choose from the following hover times: 0.5 Seconds, 0.75 Seconds, 1 Second, 1.25 Seconds, 1.5 Seconds, 1.75 Seconds, 2 Seconds, 2.5 Seconds, 3 Seconds

### Trigger Sensitivity

The degree of trigger movement required to make an activation. Choose Low, Medium, or High \*.

**Note:** When you select Hover as the trigger action, the setting Hover Time replaces the setting Trigger Sensitivity.

## Trigger Indicator

The visual indication that an item has been activated. Choose one of these indicators:

None	No visual indicator
Dot	A light-coloured transparent dot
Pop *	A starburst

**Note:** **X** appears when you try to use your trigger action on a non-selectable item.


## Highlight Buttons

When Highlight Buttons is turned on, buttons are highlighted by a coloured outline to indicate head position as you move your head. Tap to turn on the highlight. You can indicate head position by cursor, by highlight, or by both at the same time.

**Note:** Highlight Buttons is turned on by default. If you turn Highlight Buttons off, be sure to select a cursor shape. If you turn Highlight Buttons off and set Cursor Shape to None, you will have no visible way to track head movement.

## Cursor Adjustment

Cursor Adjustment allows you to adjust the relative position of the cursor when the user is unable to be positioned directly in front of the device. Choose one of these options:

Defaults	Selecting Defaults will reset the cursor's centre position back to system defaults. This assumes the user is positioned directly in front of the device.
Center	<p>Selecting <b>Center</b> will adjust the position of the cursor so that it is centred with respect to the user's current head position. If you change the orientation or the position of the device relative to the user, you may need to re-centre the cursor.</p> <p>e.g.: a device is mounted slightly to the left of the user on a wheelchair. Because of this, when the user looks straight ahead, the cursor may appear shifted to the right. To compensate for this, have the user position their head at a comfortable, natural starting position and then select <b>Center</b>. This will automatically adjust the cursor so that it is once again centred on the screen, relative to the user.</p> <p>When you select <b>Center</b>, the cursor is hidden temporarily, and the centring image appears in the centre of the screen.</p>  <p>Have the user look at the image until the image disappears (after 3 seconds). The cursor will be centred.</p> <p><b>Hint:</b> You can also centre the cursor by creating a Center button in your vocabulary.</p> <ol style="list-style-type: none"><li>1. Navigate to the page that includes the button you want to use.</li><li>2. Tap <b>Menu &gt; Edit Page</b>, tap the button you want to use, and tap <b>Edit This Button</b>.</li><li>3. Give the button a name that describes its purpose.</li></ol>

	<ol style="list-style-type: none"><li>4. Scroll down to the <b>Button Actions</b> section.</li><li>5. Tap <b>Add</b>.</li><li>6. Scroll through the list of actions and select <b>Center Head Tracking</b>.</li><li>7. Tap <b>Save</b>, then <b>Done</b>.</li></ol>
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## Cursor Smoothing

Smoothing compensates for minor shakiness or tremors to reduce accidental button activations. The greater the user's involuntary head movement, the more you may need to increase the smoothing value to compensate. A lower smoothing value will also make the cursor more responsive. Choose one of these options:

Low	The cursor will appear least stable, but will be more responsive to head movements.
Medium *	The cursor will appear slightly more stable, and will be slightly less responsive to head movements.
High	The cursor will appear very stable, but will be less responsive to head movements.

## Rest Area

The rest area is an inactive area surrounding the last activation point. This area allows the user to rest before moving to the next activation. When the user is within the rest area, head-tracking does not make activations via any trigger action. To access the rest area settings, choose **Rest Area** from the **Head Tracking settings**. The rest area settings will be displayed.

### To Activate the Rest Area

Select the **Rest Area On/Off** button to turn the rest area **On**. Turning the button on activates the rest area and the rest area settings.

**Note:** When the Rest Area On/Off button is turned Off, the rest area settings are not available.

### To Set the Size of the Rest Area

Select **Rest Area Size** to open a window for adjusting the size of the rest area radius. Select a value and choose OK.

**Note:** Even if Rest Area Size value is set to Off, the "Use Button as Rest Area" option is still available.

### To Use the Last Vocabulary Button Activated as the Rest Area

Select **Use Button as Rest Area**. The last vocabulary button activated becomes the rest area. While the pointer is within the button, head tracking does not make any activations, allowing the user to rest. "Show rest area" and "Rest area size" are not needed and are therefore not available when Use Button as Rest Area is selected.

### To Make the Rest Area Visible on the Screen

Select **Show Rest Area**. A light circle will outline the rest area perimeter.

**Note:** Selecting Show Rest Area does not enable the rest area itself. It merely makes the rest area visible on the screen. The Rest Area On/Off setting (see above) enables and disables the rest area.

## To Leave the Rest Area

To leave the rest area and resume making activations, the user simply moves the pointer out of the rest area circle or off the vocabulary button used as the rest area.

## Additional Setting – Auto-Lock Time

If the device screen dims while you are using head tracking, change the Auto-Lock time. Change the time only as much as necessary. Longer auto-lock times will use more battery charge.

1. Open the iPad settings.
2. Select **Display & Brightness** in the left pane.
3. In the right pane, select **Auto-Lock**.
4. Select the next higher time value.
5. Return to the APP and continue using head tracking.
6. If the screen still dims too soon, repeat steps 1 through 5.

## Head Tracking Tips





### Pausing Head Tracking

When you turn head tracking on, "Pause" appears centred between Vocab and Menu. When you activate Pause, head tracking stops temporarily, and "Resume" appears. Use your trigger action to activate Resume and start up head tracking again.

**Note:** When the on/off head tracking setting Start Paused is turned on, head tracking is paused by default when opened. Simply Activate Resume to start making selections.

### Scrolling

When head tracking is enabled, quick scroll arrows appear in the corners of the app settings and the app list of vocabularies. When you need to scroll through these lists of items, point at and trigger the appropriate quick scroll arrow.

	Scroll down through the listed items
	Scroll up through the listed items
	Jump to the bottom of the list
	Jump to top of the list

## Troubleshooting Head Tracking

When you try to enable head tracking in the app settings, you see the message "Camera Permission Denied".

While customizing a vocabulary sometime in the past, you may have denied camera access. To resolve this:

1. Open the iPad settings.
2. Select the APP in the left pane.
3. In the right pane under "Allow \*\*\*\*\* to Access", turn Camera **ON**.