

Hiru | The only eye-tracker that works in Windows and iPadOS, indistinguishably



## User Manual

Hiru eye tracker | Compatibility | CE & MDR | Technical Specifications

## User Manual IRISBOND Hiru Eye Tracking System

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### Compliance Information: CE and MDR

### Declaration of conformity (MDR)

### Technical Specifications

## Before getting started... Welcome to IRISBOND!

Congratulations on purchasing the IRISBOND system which will allow you to use a computer simply by moving your eyes!

The IRISBOND system is based on the latest innovations in artificial vision technology, and more specifically, on Eye Tracking technology, which allows the user to control a computer mouse by moving their eyes. Those who benefit most from the system are people with severe motor impairment who cannot use conventional mouse movement systems. Individuals with Amyotrophic Lateral Sclerosis (ALS) or Cerebral Palsy using Irisbond can access a variety of apps installed on the computer. Irisbond gives the user a window to the world, allowing them to communicate, share experiences and knowledge, watch movies, read, listen to audiobooks, play...there really is no limit!

In addition, by using Augmentative and Alternative Communication (AAC) tools such as a virtual keyboard, voice synthesizers and environmental control systems, the user can control the remote control for the TV, or any other infrared device. For perhaps the first time ever, they will be able to control devices at home around them.

## IRISBOND Huru Eye tracker

The system consists of one eye tracking device connected to the computer via a cable (included with the device) through a USB port. The eye tracker emits infrared light beams which create reflections on the user's corneas. A camera then registers these reflections and through a series of complex computational algorithms can identify the user's pupils. The information is then processed in the Huru and sent to the software via the USB cable. This allows the user's eye movements to be translated into onscreen positioning coordinates for the mouse.

The Huru eye tracker can be switched between different computers and operating systems, if Huru has a valid license, and the device with the minimum requirements listed below.



### Components included

The IRISBOND Huru system comes with the following components:

- 1 IRISBOND Eye tracker.
- 1 Holder + 2 Screws + 2 Magnet strips.
- 1 USB C-A Cable (50 cm.)
- 1 Adapter A-C for e.g. iPad Pro.

## Compatibility

Minimum requirements	Intel Graphics
<ul style="list-style-type: none"> <li>○ CPU 1.33GHz</li> <li>○ RAM 2GB</li> <li>○ Hard Disk 3GB + HDD</li> <li>○ USB 3.0</li> </ul>	Nvidia and others with OpenGL 2.0



*If you want to use the eye tracker with larger screens, you can do so by changing the position of the camera and placing it further away from the screen.*

## Multiplatform

Hiru eye tracker can be used both with Windows and iOS (iPad). The same eye tracker works with both operating systems.

[We recommend iPad Pro / Surface Windows 10](#)

iPadOS	Windows
<b>iPad Pro 12.9"</b> 5th and 6th generation <b>iPad Pro 11"</b> 3rd and 4th generation	Windows 7-11

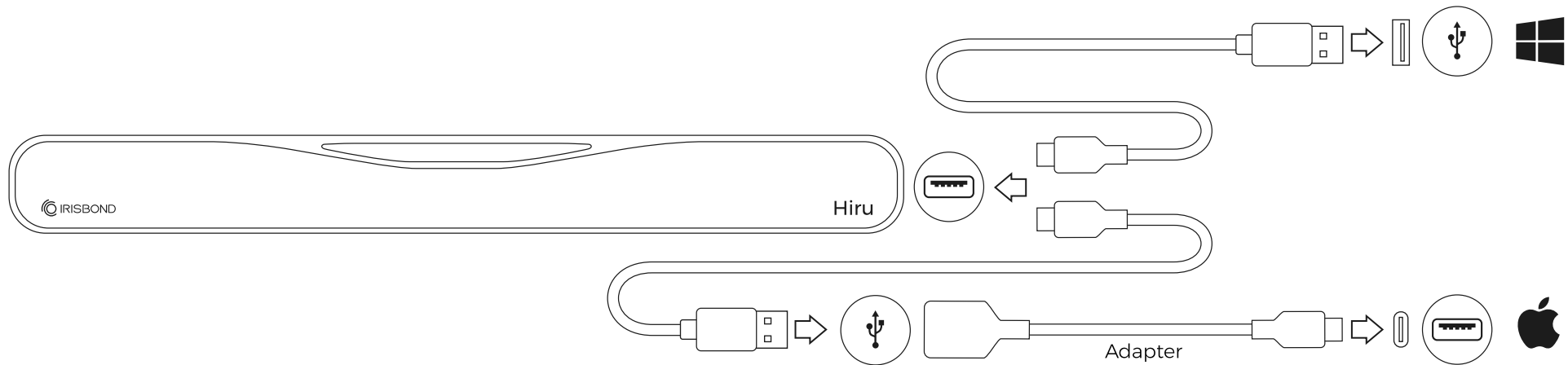
## Positioning

Optimum working distance	Optimum screen size
55 cm.	10" - 20" inches

## USB Connection and mounting

Depending on the device that you may be using, an adaptor might be needed:

- For **Windows** devices, just use the long C-A cable. The C male connects to the Hiru and the A male connects to the device.
- For **iPad PRO**, the A-C adaptor is needed. Connect the adaptor to the iPad Pro, and the long cable to the Hiru.

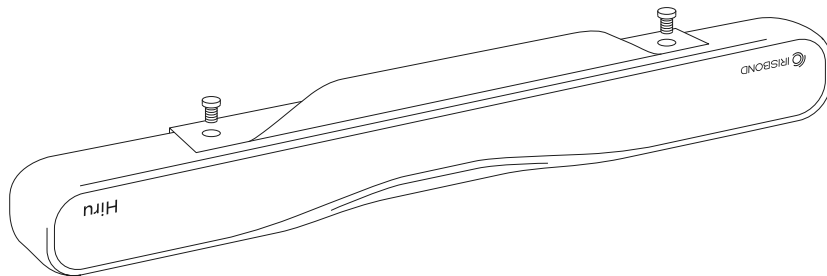


## Assembly Options

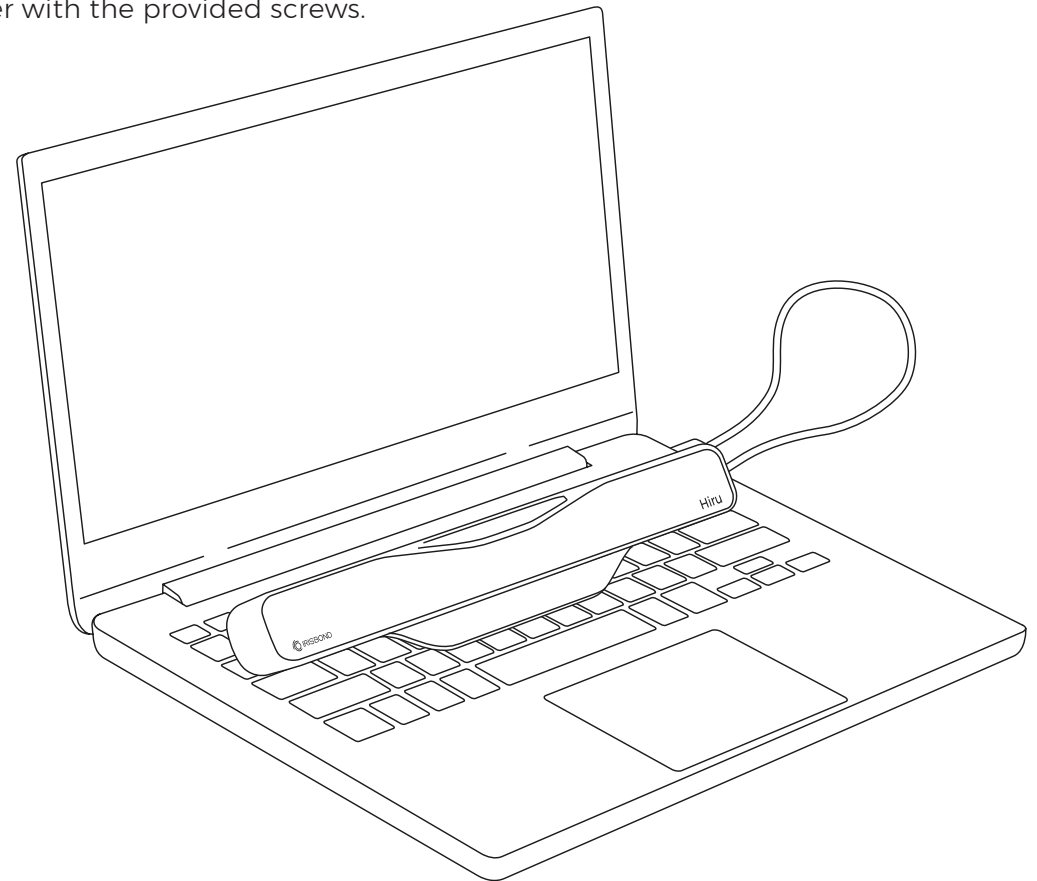
The IRISBOND Hiru system is designed to be fully adaptable for use with laptops, Desktop PCs, and tablets:

### Laptop

Under the laptop or PC, fix the Hiru onto the holder with the provided screws.



Click [here](#) to watch *Set Up* video for IRISBOND Hiru.

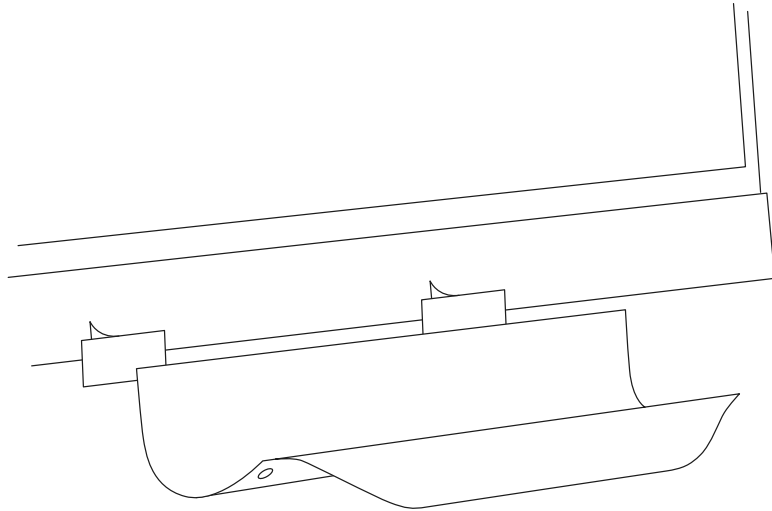




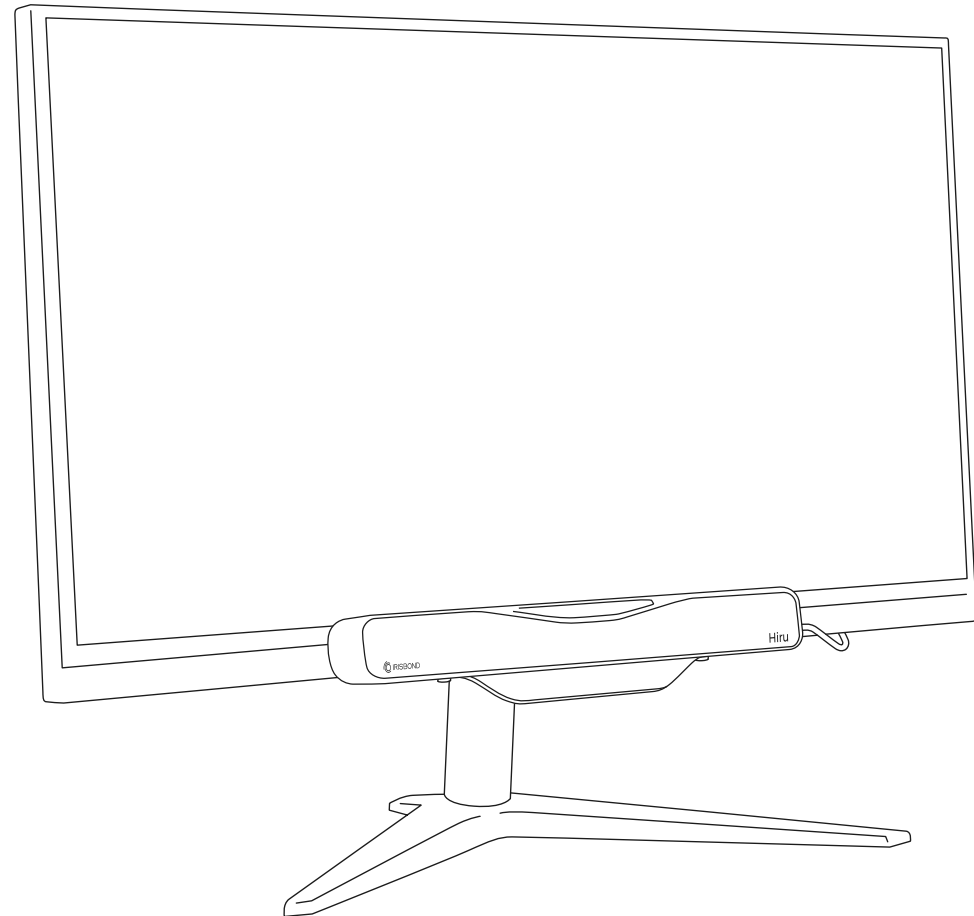
## Assembly Options

### Desktop Computer / Monitor

Place the holder on a screen with the provided magnets and screw the Hiru to the holder.



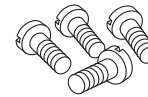
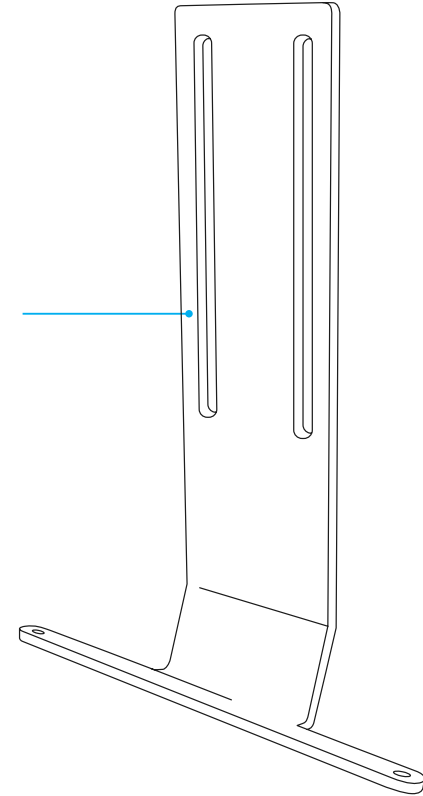
Click [here](#) to watch *Set Up video for IRISBOND Hiru.*



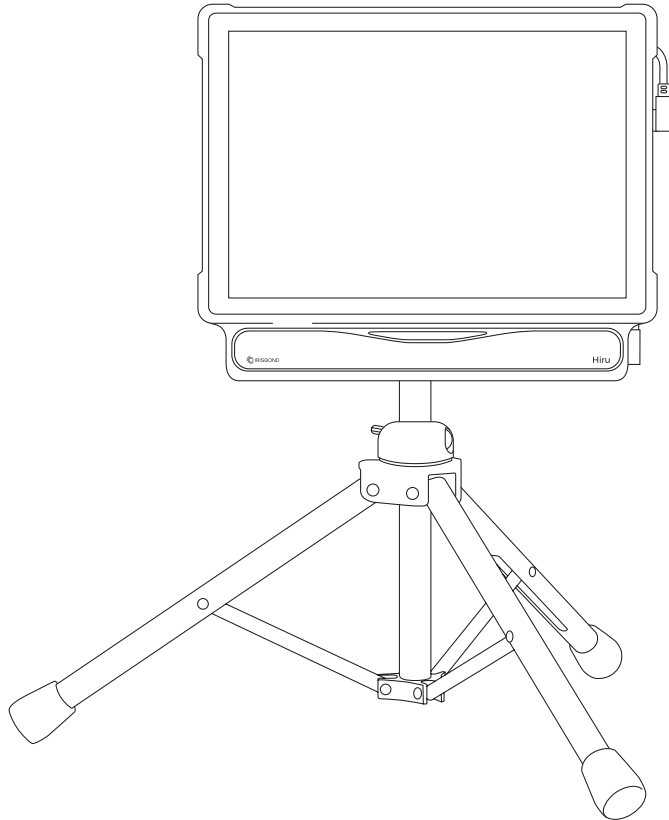
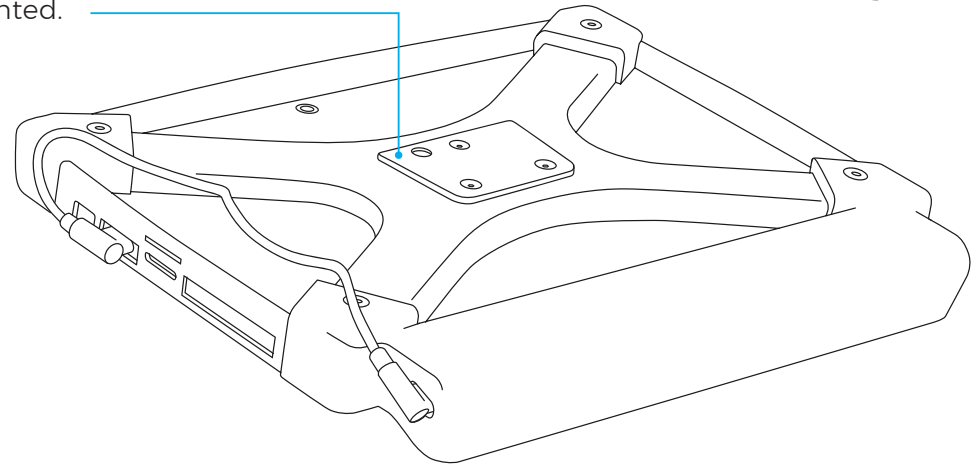
## Assembly Options

### Tablets

1. Attached to a tablet:  
Rehadapt's GA IRISBOND Hiru bracket (#16.1239).



2. Every Oskol casing comes by default  
with the Rehadapt's GA Universal adapter  
(#16.1224) mounted.

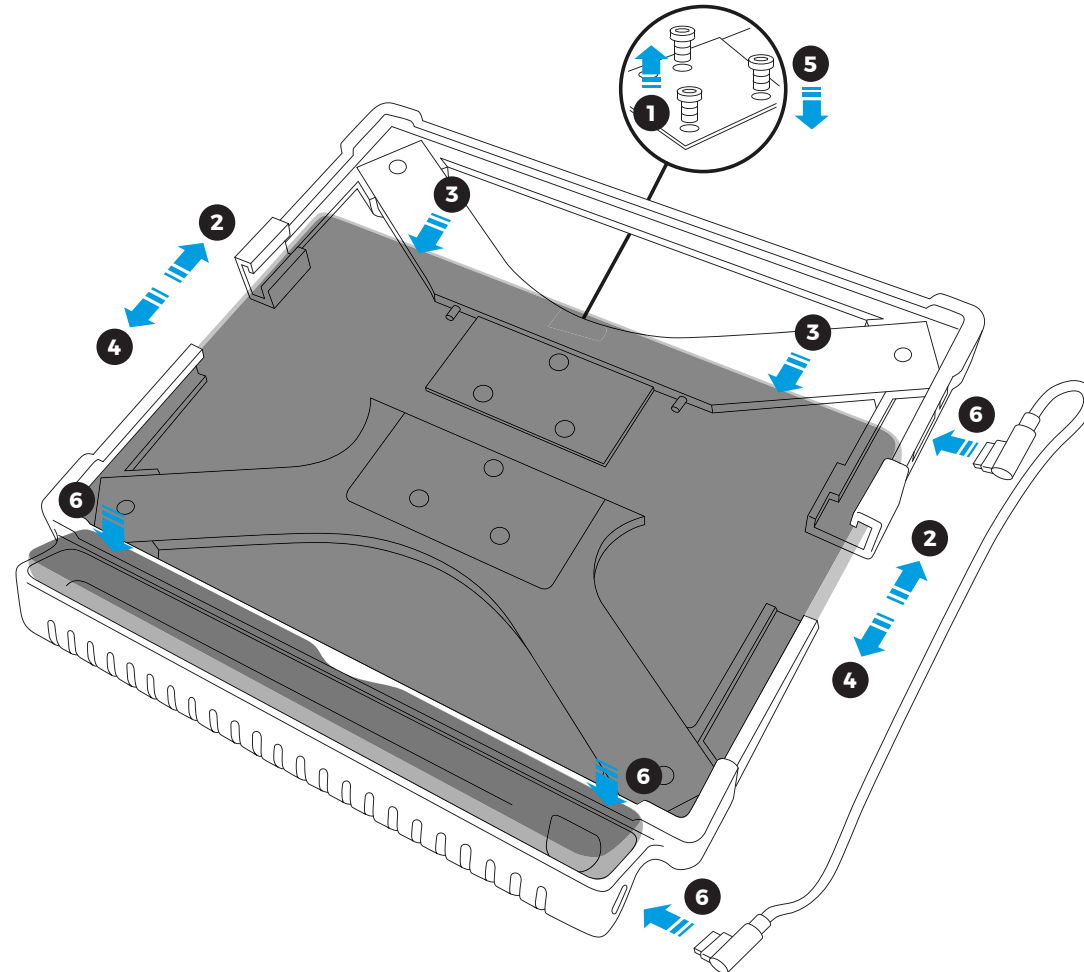


Click [here](#) to watch *Set Up video for IRISBOND Hiru*.

## How to mount Oskol in Windows

Oskol has a space dedicated for a Surface Pro tablet and another for Hiru. To mount the tablet in the Oskol follow these steps:

- 1 Remove the mounting plate and 3 screws. The screws and plate are included in the box.
- 2 Separate the top and bottom pieces of the casing. Push up on each side joint, until the top piece slides up.
- 3 Place the tablet in the bottom piece of the casing. The bottom corners of the tablet should sit tightly in the casing.
- 4 Place the top piece over the the tablet. Slide the top piece down until it is in place. The side joints and middle piece should fit together.
- 5 Place the screws in the back of the mounting plate. Use an allen wrench to tighten.
- 6 Place the Hiru in the slot below and Connect the cable.

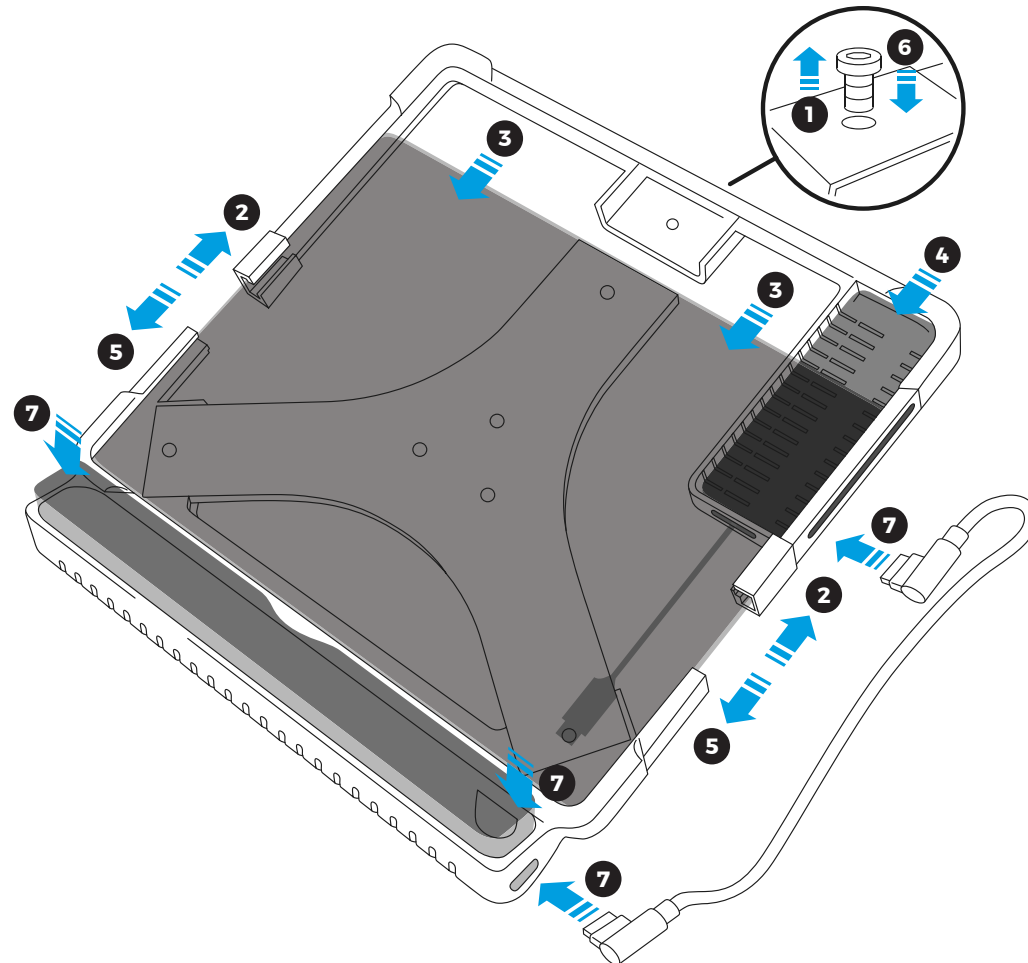


Click [here](#) to watch *How to insert and remove a tablet and Hiru from Oskol.*

## How to mount Oskol in iOS

Oskol has a space dedicated for the iPad and another for Hiru. To mount the iPad in the Oskol follow these steps:

- 1 Identify the top connection point, and ensure the screw is removed. The screw will be shipped in the bag below the Oskol.
- 2 Separate the top and bottom pieces of the casing. Push up on each side joint to separate them.
- 3 Place the iPad in the bottom piece of the casing. The bottom corners of the iPad should sit tightly in the casing.
- 4 Place the hub and spring in the compartment. The hub's ports should be facing the outside edge of the casing, so they are accessible through the space in the casing. Place the spring in the compartment, to the left side of the hub, to provide a tighter fit.
- 5 Place the top piece over the iPad. Slide the top piece down until it is in place. The side joints and middle piece should fit together.
- 6 Place the screw back in the top connection point. Use the allen wrench to tighten the screw.
- 7 Place the Hiru in the compartment below, and connect the cables. Connect the USB-C cable to the Hiru. Connect the hub to the iPad.



Click [here](#) to watch *How to insert and remove your iPad from Oskol*.

## Use with different Operating Systems: Overview

Hiru eye tracker can be used with both: Windows and iOS (iPad Pro). The same eye tracker works with both operating systems.



### Windows Overview

**EasyClick:** Our computer access software. EasyClick is now compatible with Duo and Hiru in the same app. Download this new version of EasyClick [here](#) and a course of how to use it [here](#).

**Grid 3:** From version 61 on, Grid 3 is integrated with Hiru. Select “Irisbond” from the available eye gaze cameras.

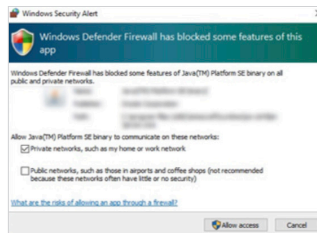
**Mind Express 5:** Hiru is integrated with MindExpress 5. Select “Irisbond” from the available eye gaze cameras.

**Microsoft HID:** It is possible to use Windows Eye Control with Hiru using HiruSystray app. For more information, please read the following [document](#).

### ! Keep in mind

When using third party apps, the following Windows message may appear:

If this is the case, please allow both **private** and **public networks**.



- Do this when installing Systray by clicking both check boxes.
- To change these settings after installing, enter “Windows Defender Firewall and select “allow an app or feature through Windows Defender Firewall”, and enable the checkboxes accordingly.

## Use with different Operating Systems: Overview



### iOS Overview

Hiru works on iPad Pro with iOS version 15.2 and later.

**Hiru iOS App:** Calibrate and configure Hiru, update Hiru, and activate Hiru licenses in our app. You can download it directly from the App Store [here](#). All the details about the app in this [video](#).

**Apple Assistive Touch:** Use Hiru to control the iPad with eye gaze. To find the tool, go to iPad Settings then, Accessibility, Touch, Assistive Touch and select “ON”. Find more information in this [video](#).

**TouchChat:** TouchChat will be integrated with Hiru in versions above 2.36.1. Watch this [video](#) to see how to use Hiru inside TouchChat. If you need further assistance, you can check eye gaze configuration in the TouchChat guide. We recommend you contact the software manufacturer PrC-Saltillo if interested too.

**Predictable 6:** Predictable 6 is fully integrated with Hiru and eye gaze. To use it, select the access method “Eye Gaze” and select Hiru. More information on its use can be found [here](#). If you need further assistance, we recommend you read the Predictable 6 User Guide, or contact the software manufacturer, Therapy Box.

### Keep in mind

- Unlock your iPad, open the Assistive Touch Menu, and close the Hiru App before connecting Hiru.
- After connecting, wait 15 sec until the Hiru’s LEDs turn on and the Assistive Touch cursor appears.
- Navigate the iPad by selecting commands on the Assistive Touch Menu.
- When opening integrated apps, enable eye gaze for best use.

Click [here](#) to check our website to download compatible software and find more about integrations!

## Windows

### How to update Hiru in Windows

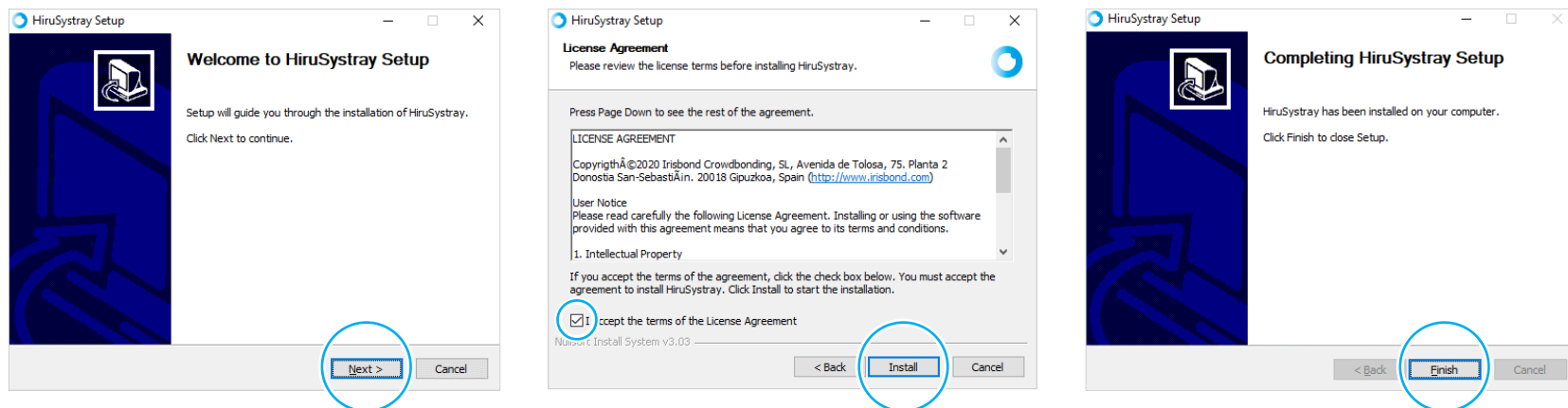
Hiru has continuous updates and new versions of firmware are released regularly. Update Hiru in Windows using our Systray app.

Download the latest version of Systray app (below).

#### Updating Hiru: Step by step

Install Systray from this link: <https://downloads.irisbond.com/systray>

Video tutorial [Update your Hiru in Windows](#).



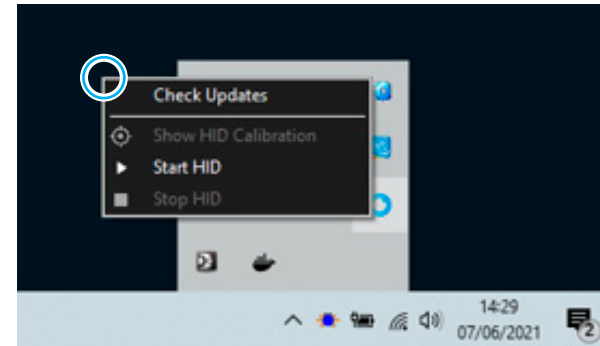
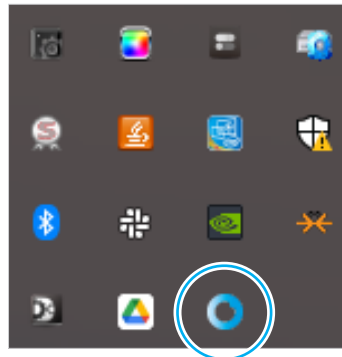
## How to update Hiru in Windows

The Systray icon will open in the Windows Toolbar (see image below).

If the Hiru is connected to the PC, the Systray will periodically check if there is a firmware update available. It is also possible to check for the updates by clicking in *Check Updates*.

### Keep in mind

- IRISBOND's Systray App should always be installed.
- If an update is available, a notification will show up, please, DO NOT disconnect the Hiru during this process.
- If no notification is shown, please check that your device that the Focus Assistant is OFF and Notifications for Systray are ON.



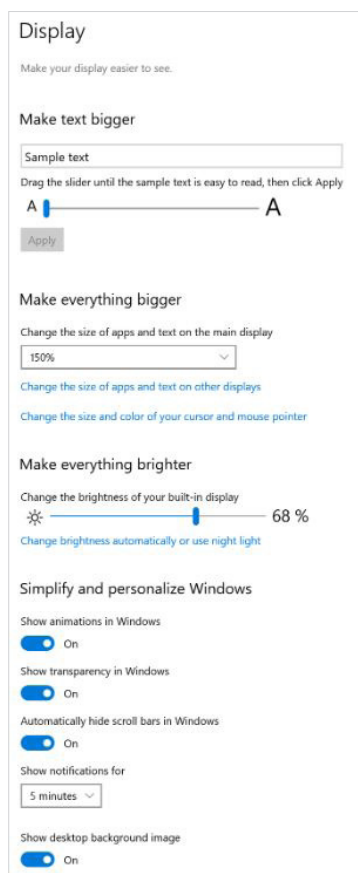
Ensure the focus assistant is turned off, and notifications for Systray are turned on in Windows Settings in *Notifications and Actions* and be sure your WiFi is connected.



## How to update Hiru in Windows

To ease the access of the update with eyegaze, set the notifications to appear for more time.

- Go to: Settings > Ease of Access > Display.  
Set Notifications to show for 5 minutes.



## How to update Hiru in Windows

These are the notifications that you will receive once the process is started:

**Hiru update**  
New update available. [Click here to update](#)

**Hiru update**  
Download completed. Updating Device...

*Updating...*

**Hiru update**  
Update completed. Hiru device will restart.  
Please, do not unplug the device.

*Updated, do not remove the Hiru.*

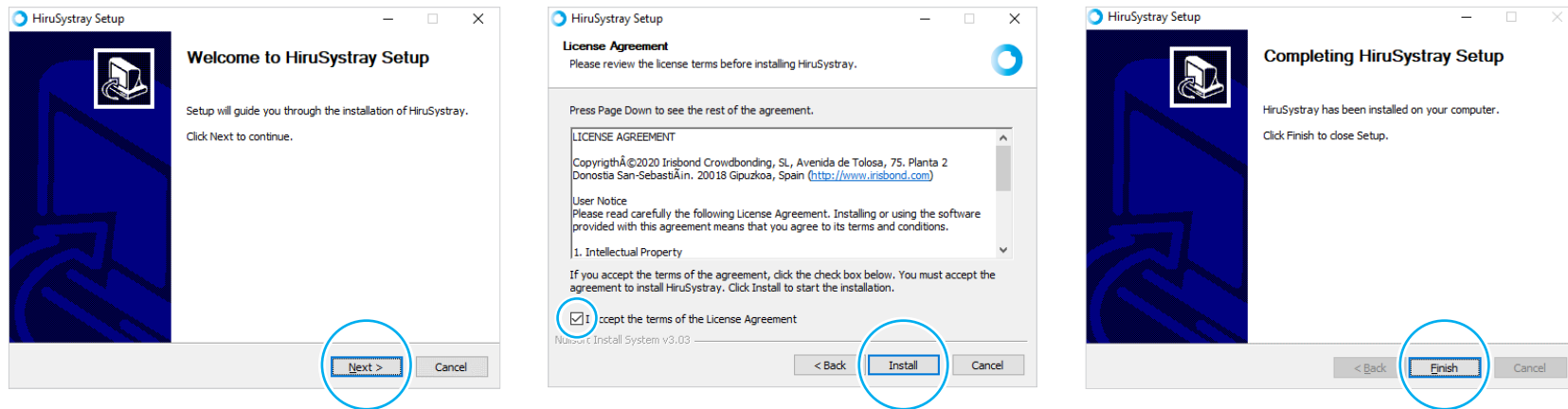
**Hiru update**  
You already have the last Hiru update

*Now, the Hiru is ready to be used!*

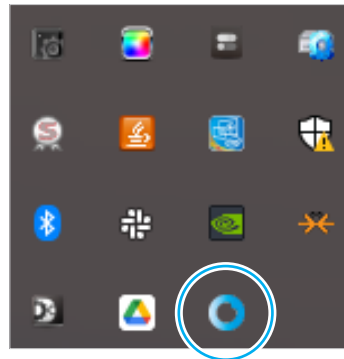
Click [here](#) to check our Youtube channel and find out more about Hiru!

## Windows Eye Control: Microsoft HID Protocol

Install HiruSystray from this link: <https://downloads.irisbond.com/systray>

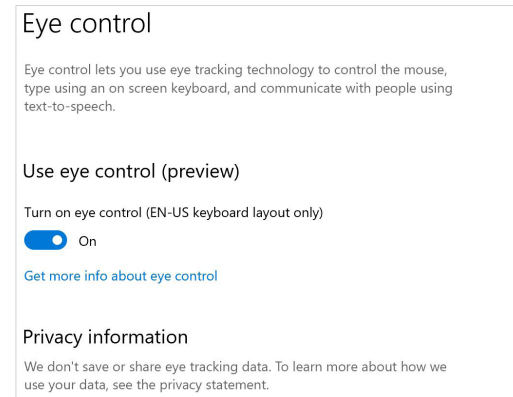


The Systray icon will open in the Windows Toolbar.



## Open Windows Eye Control

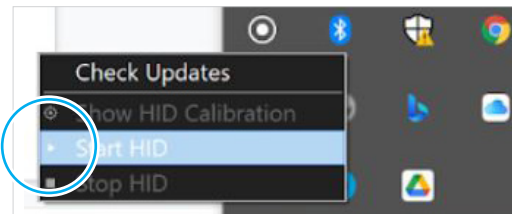
Go to Settings > Ease of Access > Eye Control > Turn on the toggle



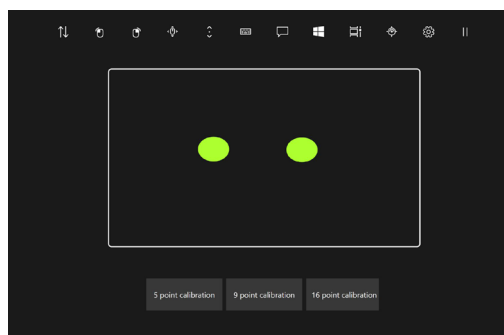
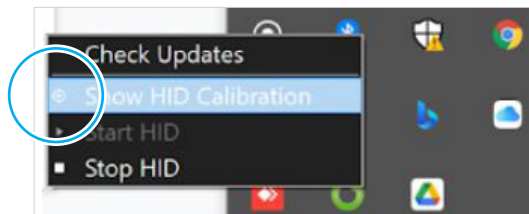
*Windows Eye Control Bar will open*

## Activate HID integration for start using Huru with Windows Eye Control

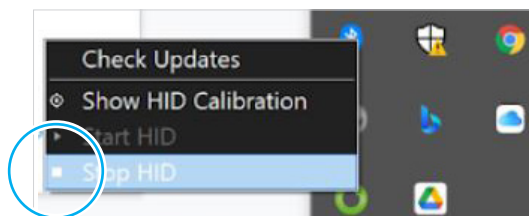
Go to Systray and click in Start HID.



### Calibrate Huru by clicking in Show HID Calibration



After calibrating, start controlling the Windows Eye Control bar with Huru. Stop HID connection if using other apps integrated.





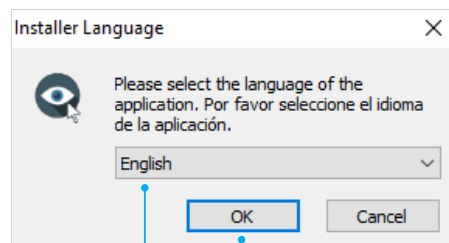
Our computer access software EasyClick, is compatible with DUO and Hiru, as the app automatically detects which eye tracker is connected.

Download the application before connecting the eye tracker to your computer.

### Compatibility

The software is compatible with computers and portable devices which have a Windows operating system (Vista, 7-11).

Click [here](#) to check our website to download and find more information about our access software and [view a video tutorial!](#)



Choose your preferred

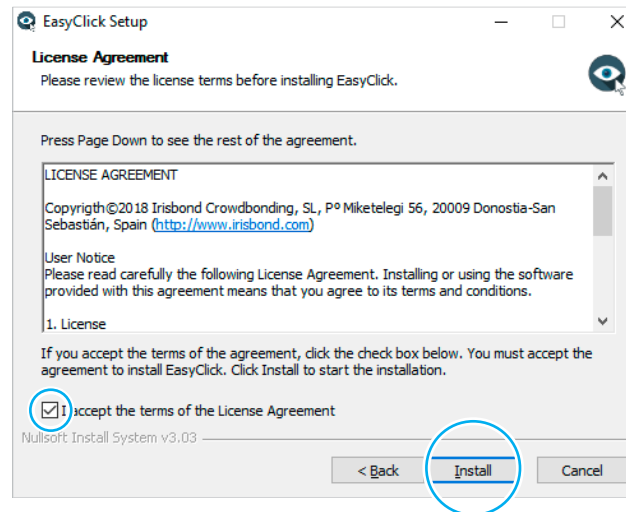
Accept

### Downloading and installing EasyClick step by step

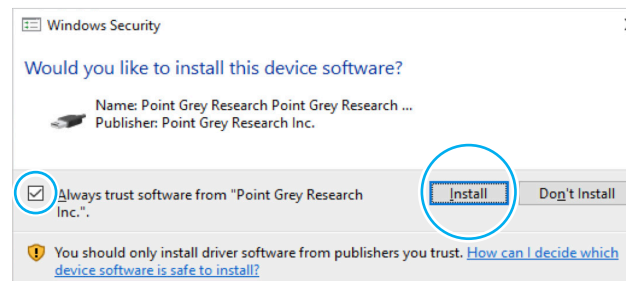
1. Download the app from IRISBOND's website, and the program installer will appear.
2. If it does not start automatically, you may find the installer on the Downloads folder of your computer and execute it manually.



Accept the License Agreement and click on Install:



If it is the first IRISBOND application installed on your computer, the next window may appear. Check the option *Always trust software from "Point Grey Research Inc."* if it is not checked and press Install.

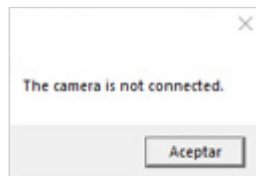




When EasyClick is installed on your computer, a shortcut will be automatically created on your Desktop:



To start the application, first connect Hiru, wait 10 seconds, then open the app.



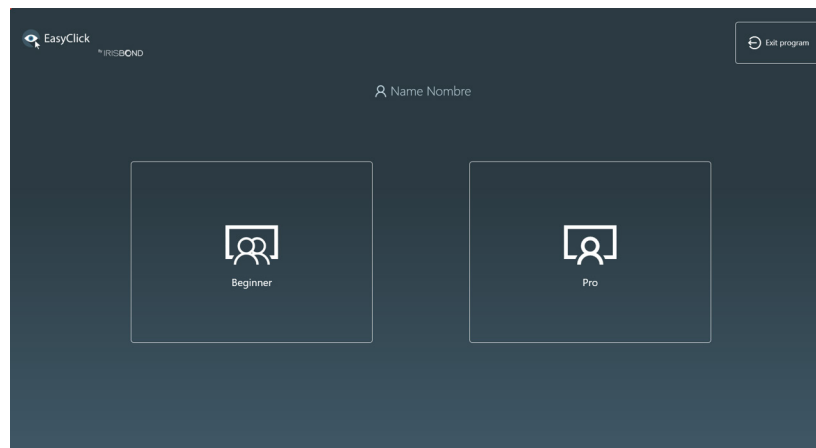
### Keep in mind

- If this message pops up, verify that the IRISBOND Hiru led lights are on and if it is correctly connected to the computer. EasyClick cannot start if it does not detect the device.



## EasyClick features

When the application is opened, the following window will appear:

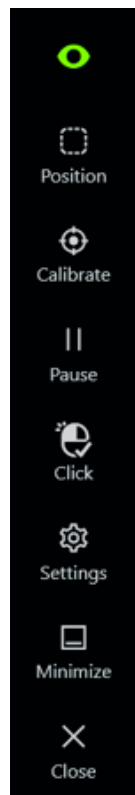


The application is designed for two general user profiles, as we are aware that not everyone has the same needs:

- First, there are **Beginner** users, accompanied by a therapist or a family member, who start using the application with basic functionalities and always with external help.
- Alternatively, **Pro** users are those who have experience and ease with eye gaze and require access to the whole computer. They are autonomous users and do not require assistance to use the application.

 **EasyClick features****Beginner Mode**

If you select the **Beginner** option, the toolbar will appear. It is the main menu of *EasyClick Beginner*:



**Eye detection:** Indicates eyes are detected. If green, the detection is correct. If red, there is no or little detection.

**Position:** Refers to the position of the user according to the Hiru.

**Calibration:** A quick, one point calibration. Once positioning is correct, start the calibration with this icon.

**Pause:** Used to stop gaze control.

**Click:** This allows the assistant to stop or start the click option.

**Settings:** Enter here to customize settings for gaze control.

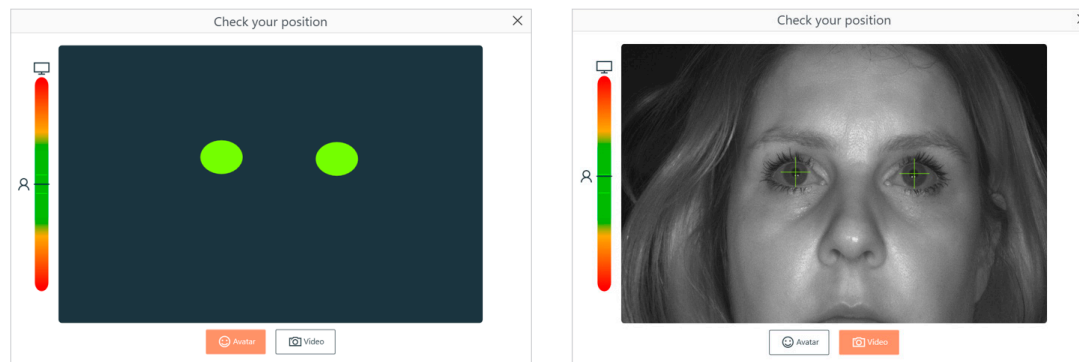
**Minimize:** Used to minimize the toolbar. This is helpful to remove distractions.

**Close:** Displays a confirmation windows to completely close the program.



### More about position

If you click on positioning, this window will open:



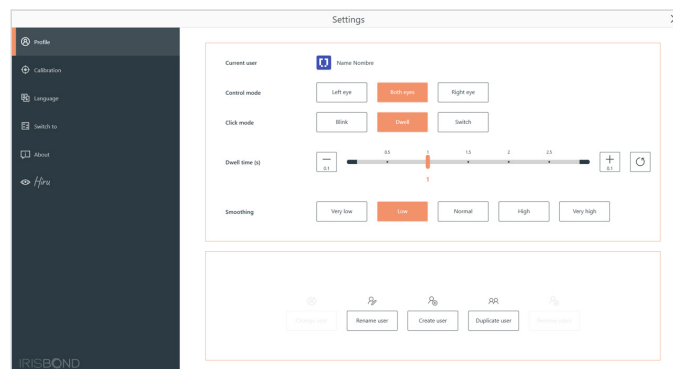
Using this guide, check the user position by avatar or video image.





The avatar (left) indicates the distance and height between the user and the device. If the circles are in red, it means that the eyes are detected but the user is too far or too close. When they are in green, the distance and height are optimal for a correct operation.

In video mode (right), the green crosses over the eyes confirm that the device can detect them. This feature is very helpful when doing remote assessments.

 **EasyClick features****Beginner mode settings**

In settings, the following window will be opened:

**Adjust and customize your profile**

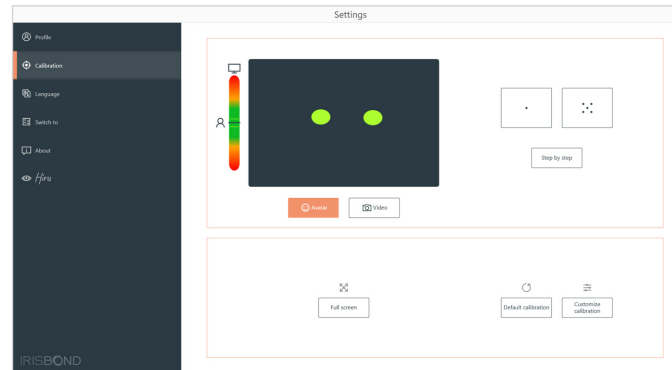
-  **Control mode:** choose which eye will be detected. This feature may be very useful for users who have eye conditions.
-  **Click mode:** choose between clicking by dwell, blink, or external switch.
-  **Dwell time:** choose the fixation time for clicking.
-  **Smoothing:** choose the mouse sensitivity depending on the needs of the user.

In the lower section, you have the option to create new users, where you can save settings for each. This is useful for professionals, education centres, etc where more than one user may be present.



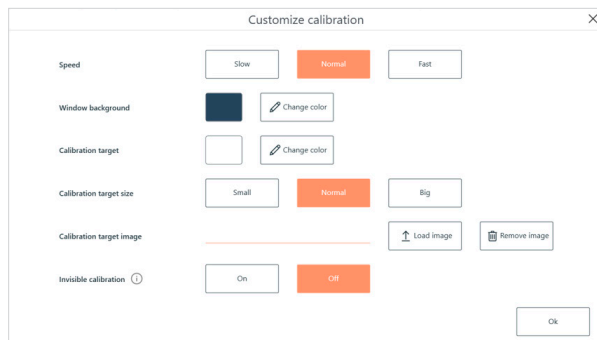
## Calibration

In calibration, you will see the following window.



You can choose between:

- One point calibration.
- Five points calibration.
- Step by step calibration.



In the lower section, customize the calibration, change the speed, color, size, and image of the target.

Additionally, the one point invisible calibration, which means that no target is shown on the screen, is available here.

If Invisible calibration is on, the next time a calibration is launched, it will be a one point invisible calibration. This is useful for users in early stage learning who may experience distraction when calibrating.

## EasyClick features

### Pro Mode

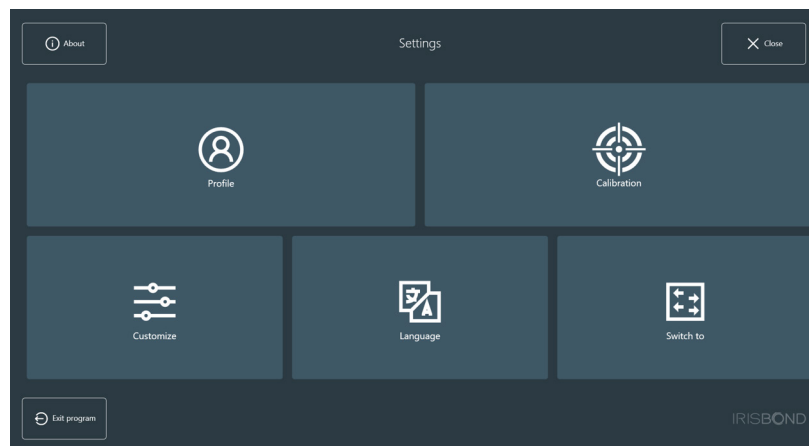
If you select the **Pro** option, the *Desktop Bar* will appear:



When starting in Pro Mode, click the settings button.

### Settings

In settings, configure users, calibrate the camera and customize application settings.





## Profile

A default user is created when EasyClick is downloaded.

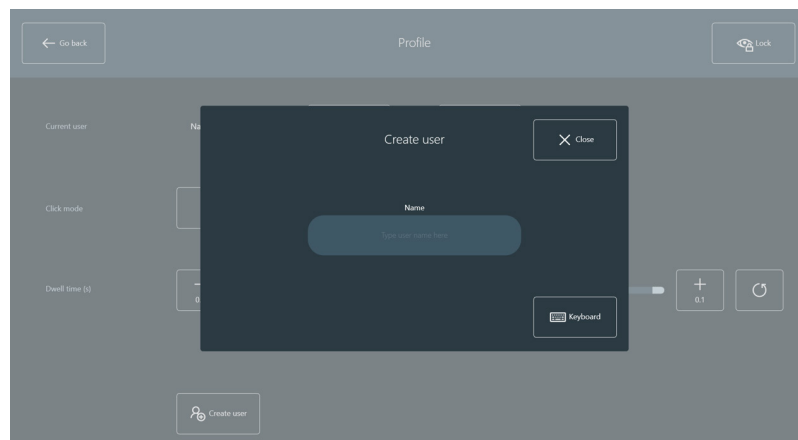


These are the different options in this window:

- **Rename user:** allows you to change the name of the current user.
- **Set default values:** applies the default values for the current user (click mode and dwell/blink time, also options in Customize window).
- **Blink:** changes the click mode to blink.
- **Dwell:** changes the click mode to dwell.
- **Blink or Dwell time:** select the time in seconds for the dwell or the blink. Increase or decrease the time in 0.1 seconds, by moving the selector across the bar points, or to set the default value.

## EasyClick features

- **Create user:** it opens a new window to insert the new user's name. Type the name and click *Close*.



Two new buttons will appear on *Profile* window: *Change user* and *Remove users*.

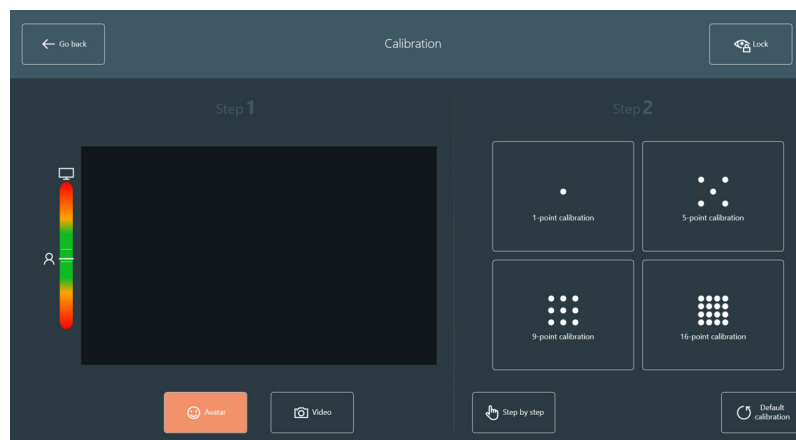
- **Change user:** allows you to change the current user.
- **Remove users:** allows you to remove multiple users. Notice that it is not possible to remove all of them, it is mandatory to keep at least one user.



## EasyClick features

### Calibration

Calibrate the camera for the current user. A good calibration is key to the best eye tracking experience, so if need be, click “Lock” in the upper right hand corner to stop unwanted clicks.



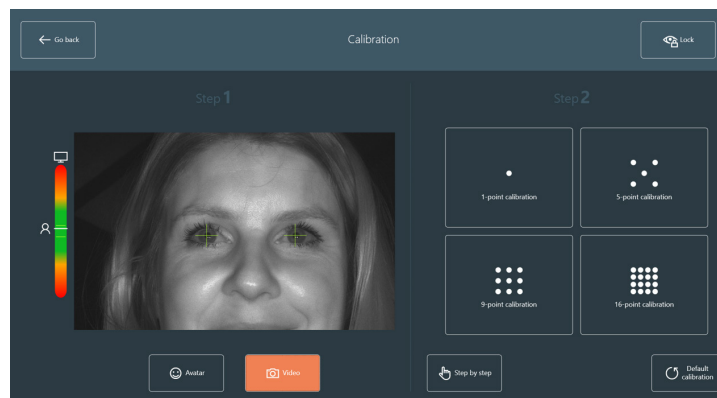
### Step 1: Positioning

First, click on the *Video* button to position the eyes of the user. Here are some tips that will help you:

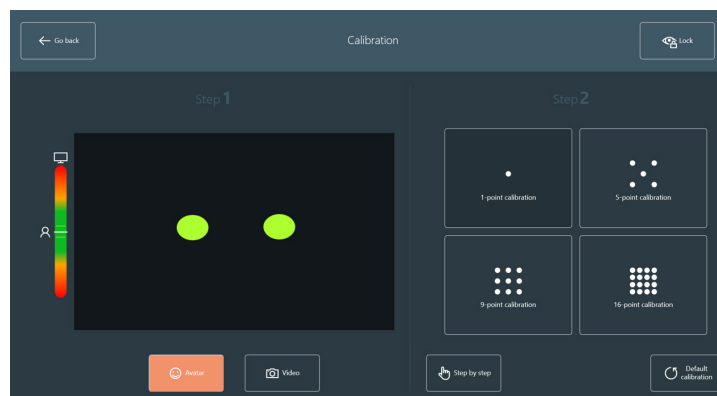
- The optimal distance from the eyes to the camera is 55 cm (24 inches).
- The optimal position for the eyes is the middle of the video image, both horizontally and vertically.
- Eyes should be aligned with the top of the tablet's / laptop's screen.

## EasyClick features

A correct positioning should be like in the image below:

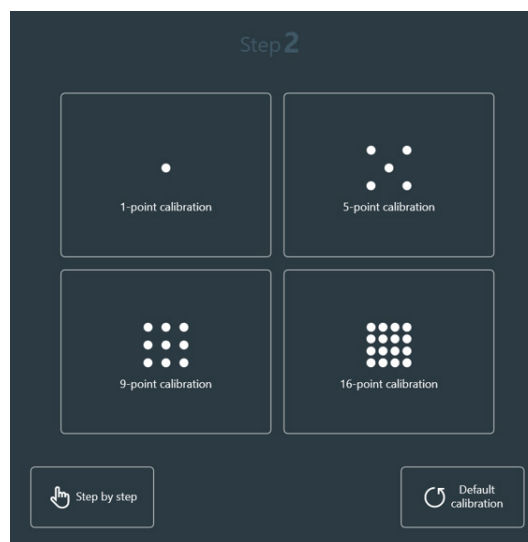


Next, click on the Avatar button to adjust the distance from the eyes to the camera. The bar on the left side will help you position in the right distance from the screen. Try to maintain them in the middle of the black window, as shown in the image below.



 **EasyClick features****Step 2: Calibration**

In this step, launch the calibration with the selected number of points: 1, 5, 9 or 16-point calibration. You can also use the eye tracker without doing any calibration, but depending on the attention capabilities and precision needed, we recommend calibrating with more points.



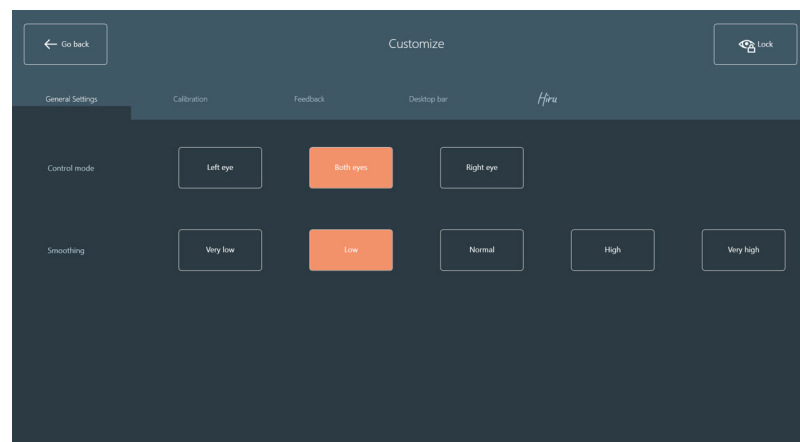
Additionally, it is possible to launch the calibration step by step. This option is only clickable by a mouse, so it needs the support of another person for triggering each calibration point (using a touch screen or with a keyboard by pressing the space bar).

The *Default calibration* button removes the current calibration and applies the default one.

## EasyClick features

### Customize

In this window, customize the application. There are four tabs: General Settings, Calibration, Feedback, Desktop bar and Hiru.



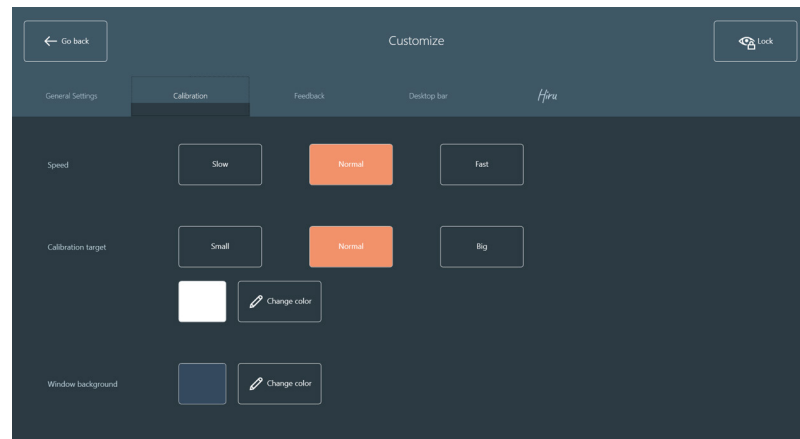
### General Settings

- **Control mode:** select if the user is going to control the camera with one eye (left or right) or both eyes.
- **Smooth:** select the smoothness level for the mouse movement. Five levels are available: *Very low*, *Low*, *Normal*, *High* and *Very high*.

## EasyClick features

### Calibration

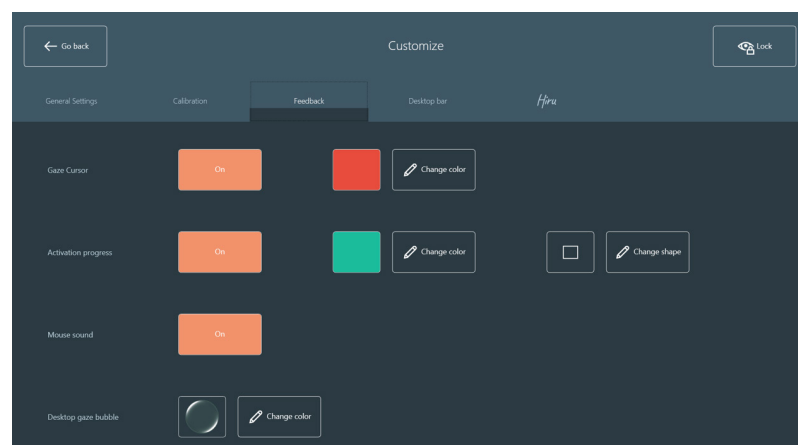
- **Calibration speed:** select the speed at which the calibration point will move.
- **Calibration target:** select the size of the calibration point and its color.
- **Calibration background:** select the color of the background during the calibration process.



## EasyClick features

### Feedback

- **Gaze point:** activate or deactivate the gaze point. Possibility to change the color.
- **Activation progress:** if it is *On* and the click mode selected is Dwell, a progress bar will be displayed on each button while the gaze is over it. It is possible to change the color and shape of the activation progress.
- **Mouse sound:** if *On* is selected, a sound will be heard in each click.

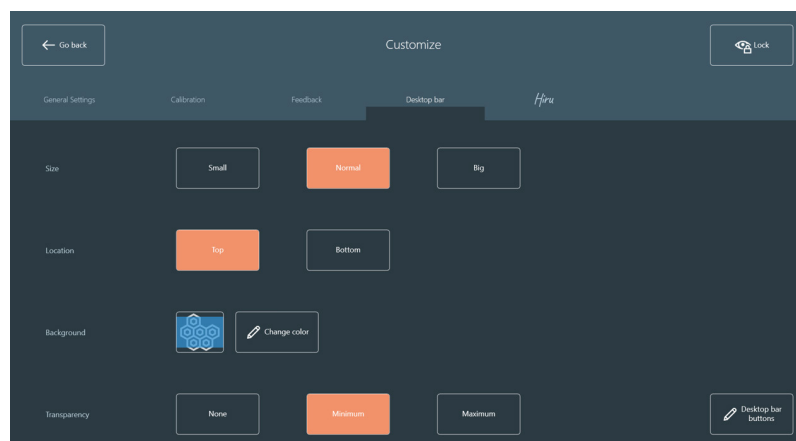


## EasyClick features

### Desktop Bar

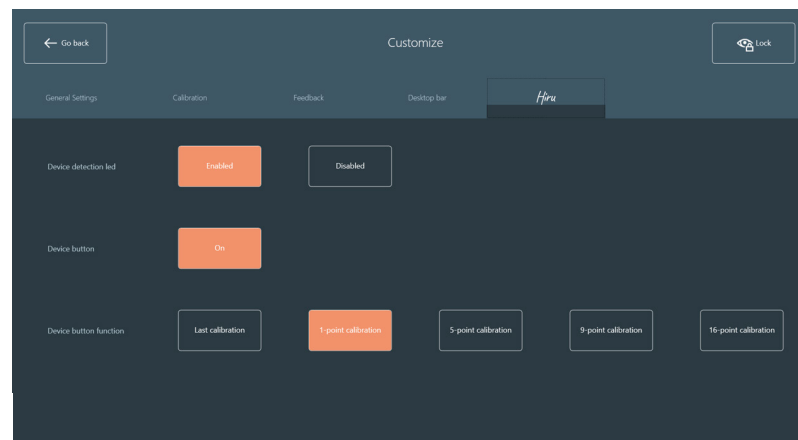
- **Desktop bar size:** select the size of the desktop bar for the current user.
- **Desktop bar location:** select the location of the desktop bar for the current user.
- **Desktop bar background:** select the transparency of the bar for the current user.
- **Desktop bar buttons:** it is possible to change the desktop bar buttons, to include or hide them in the bar (settings cannot be taken away, it must always be in the desktop bar).

Click [here](#) to check all the functions on the desktop bar!



## EasyClick features

### Hiru (only appears with Hiru)



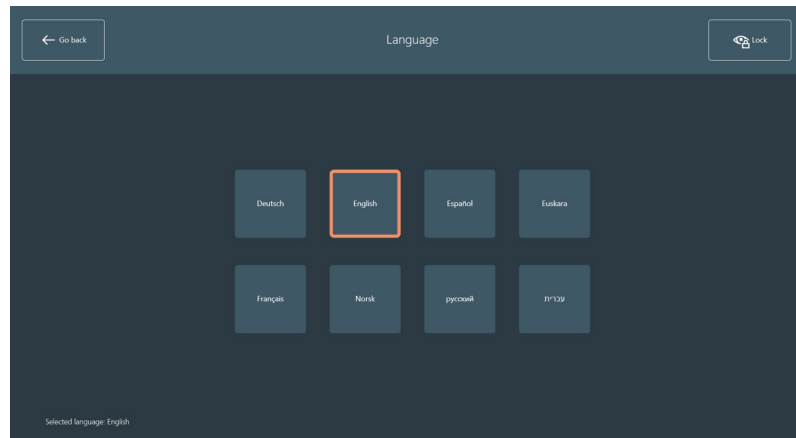
- **Device detection Led:** Shows if the user is well positioned and detected. If the light is on, the user's eyes are being detected. On the contrary, if the light is off, the detection has been lost.  
You can activate or deactivate the detection light indicator on top of Hiru.
- **Device button:** choose between on or off. If it is on, you will be able to calibrate by pushing the physical button.
- **Device button function:** If the device button is *on*, you can customize between different types of calibration (last calibration done, 1, 5, 9 or 16 points), so when the button is pushed this function will be activated.





## Language

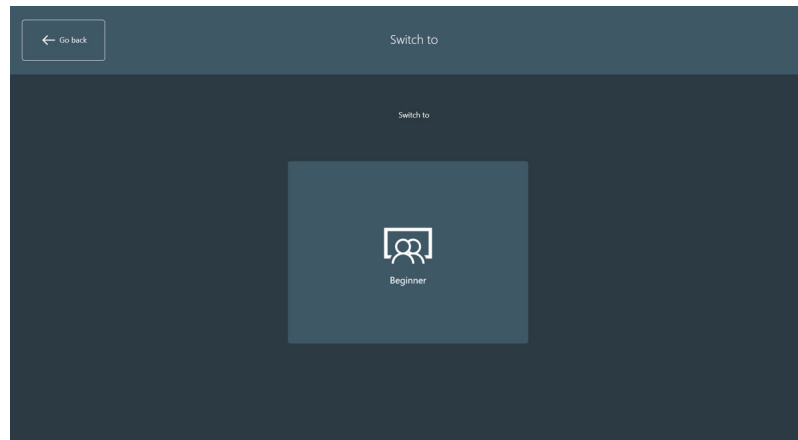
In this window, you can select the language of the application. These languages are implemented: *English, Spanish, Basque, French, Russian, German, Norwegian, Swedish and Hebrew*. The change will be applied once you leave this window.



## EasyClick features

### Switch to

Here, you will be able to change the user mode from **Pro** to **Beginner**. This option is not clickable by the gaze, as the **Beginner** mode needs an assistant.





### More about the desktop bar

#### Move

Moves the bar to the top or to the bottom of the screen.



#### Single left click

The bar will disappear, and a gaze bubble will help the user to focus the click. Once the user has clicked, the bar will appear again.



#### Single right click

The bar will disappear, and a round-pointer will help the user to focus the click. Once the user has clicked, the bar will appear again.



#### Double left click

the bar will disappear, and a round-pointer will help the user to focus the click. Once the user has clicked, the Desktop bar will appear again.



#### Show cursor

The mouse cursor is moved with the gaze. The bar will disappear, and the button stays active until the user disables it.



#### Keyboard

Opens a virtual keyboard. Adjusts to language selection.



#### Readjust calibration

Trigger a one-point calibration.

## More about the desktop bar



### Settings

Open the Settings Window.



### Zoom click bar

Prompts a new menu with four options:

- *Go back to the Desktop bar*
- *Single right click.*
- *Double left click*
- *Single left click.*

Once the gaze of the user is fixed in a point, a zoom will be automatically made to make a precise click.



### Continuous single click

The toolbar will disappear and a click will be repeated when the blink or dwell time is reached. Click the X to return to the toolbar.



### Scroll

The toolbar disappears to select where to scroll. Select where to scroll by a single click and five options will appear:

- *Scroll Up*
- *Scroll Right.*
- *Go back to Desktop bar.*
- *Scroll Left.*
- *Scroll Down*



### Pause

Pauses the gaze control. To reactivate click the pause button again.



### Drag and drop

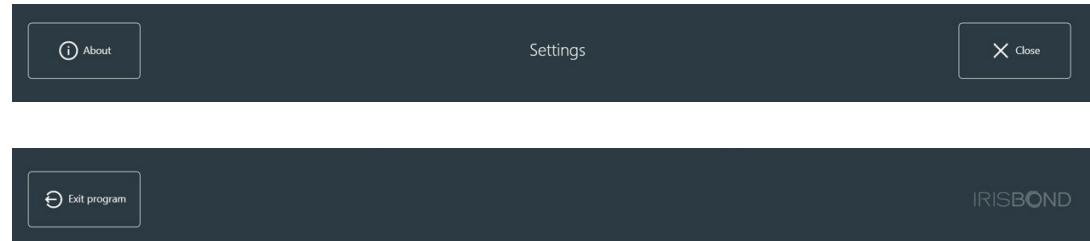
the toolbar disappears. Click twice to carry out the action:

- The first click is to select the item, and the second to select the location and drop.

## EasyClick features

### Other options

There are three buttons on the Settings window:



- **About:** displays some information about the program.
- **Close:** it closes the settings window and displays the Desktop bar.
- **Exit program:** exits de program after the confirmation of the user.

## iOS

### Getting started in iOS

Initial Set up:

1. Plug in Hiru. Wait until the Hiru starts and the AssistiveTouch cursor appears on the screen.



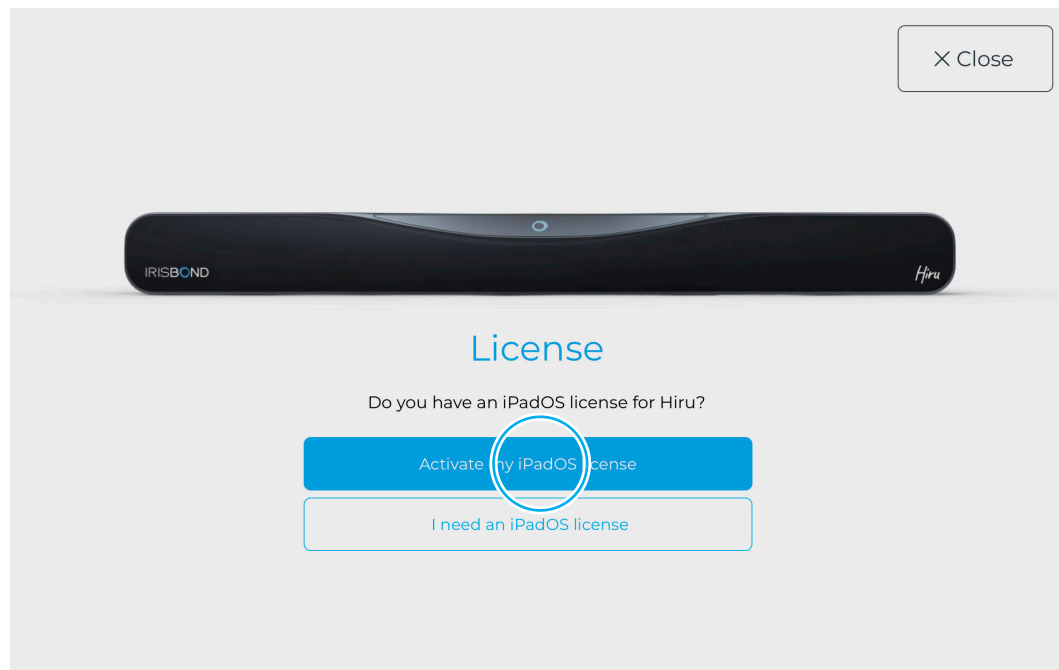
When Hiru is on, you will see 4 red LED lights on each of the edges.

## Hiru App

1. Download and Open the [HIRU APP](#). The first time the Hiru is plugged into the iPad, a message will appear prompting the download of the HIRU APP.

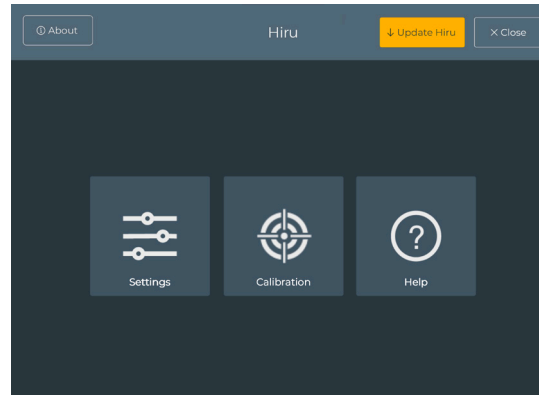


2. Activate the Hiru license within HIRU APP. To do this, open the app, and click Activate License.

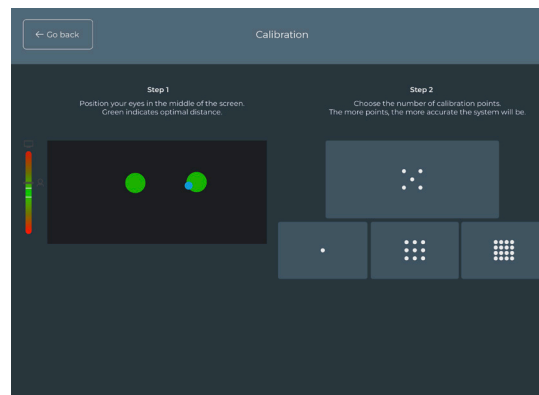


## Hiru App

Choose “Calibrate” and Position yourself using the positioning guide.



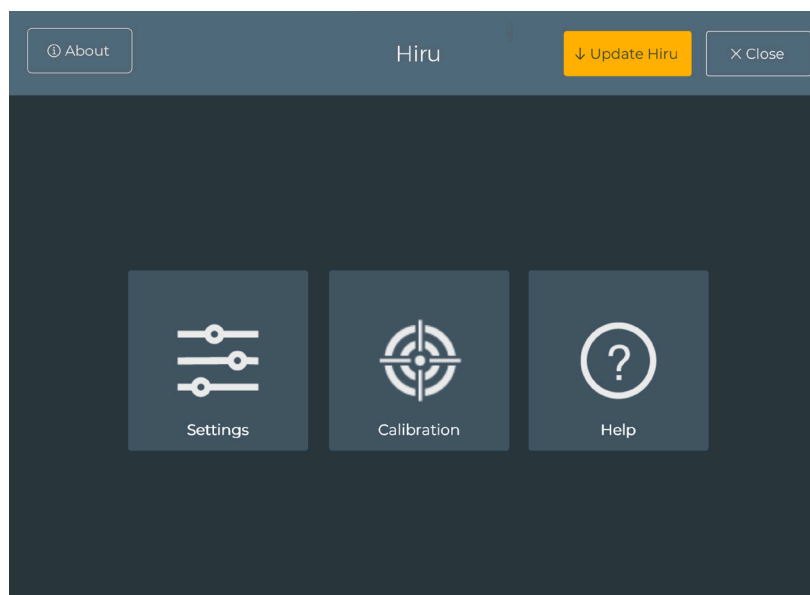
- Red means that you are too close or too far from the Hiru. Green means that the distance is correct.
- Position your eyes in the middle of the box.





## Hiru App

3. Calibrate: Choose how many points you want to calibrate with (1, 5, 9, 16).
  - A target will move across the screen. Look at the point in all the positions where it stops. During the calibration process, Hiru learns from the user's eyes to estimate the gaze points on the screen.
4. Settings: from the home screen, select Settings to configure eye gaze *within the app*.

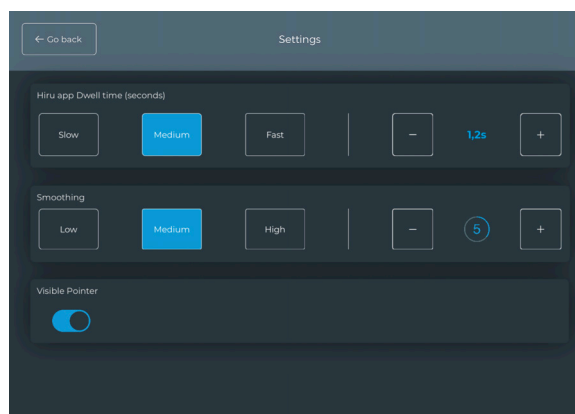


## Hiru App

- Select the **dwelt time**: This determines how much time to fixate on a button in order to click. The lower the time, the quicker the click. On the left, choose from SLOW, MEDIUM or FAST defaults, or adjust the time on the right hand side.
- Adjust **Smoothing**: This determines how sensitive the cursor is to small movements. On the left choose from LOW, MEDIUM or HIGH defaults, or adjust the level on the right hand side. The smoothing chosen here will apply in and outside the Hiru app.

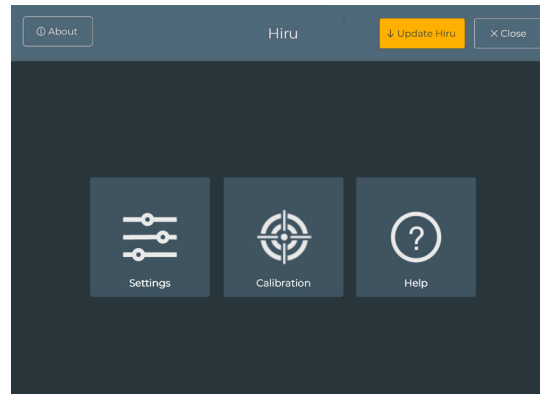
*The smoothing level is a number between 1 and 14. 14 is the highest level of smoothing, resulting in a mouse of low sensitivity. 1 is the lowest level, with a high level of sensitivity.*

- Select Visible Pointer (YES or NO): Choose Yes for a visible pointer and No to hide it within the app.



## Hiru App

5. When finished, exit the App using the “Close” icon in the top right corner.



6. Navigate outside the Hiru App using the cursor to click on different icons.

- The cursor default is to perform a single tap. To choose an alternative command, go to the AssistiveTouch Menu and select an option. See more below in “Hiru and iOS Accessibility Tools”.

## Update Hiru with iOS

Check out this [video](#) for more information.

### Software requirements

- Hiru app needs to be at a minimum version of 2.8.
- Hiru needs to have a license for iOS. If you don't have a license for Hiru, contact your provider.

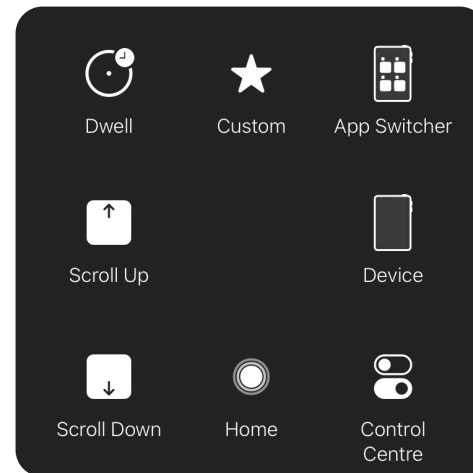
### Steps to update

In Hiru App, when a new version is available, the “Update Hiru” Button will appear in the upper right corner in blue. Click there, then click “Upgrade Hiru”. Leave the Hiru plugged in while the Update completes. Click “Cancel Upgrade” to stop this process.



## Hiru and iOS Accessibility Tools

### Customize your iPad for Eye Gaze



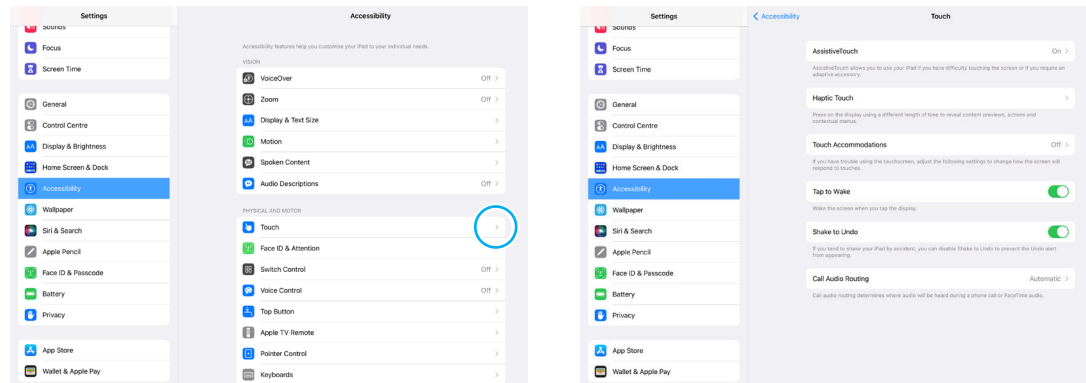
### AssistiveTouch Menu

The AssistiveTouch menu has 8 spaces for commands and is used to simulate various gesture commands using eye gaze. Navigate the iPad using the cursor to click on different icons. The default action is a single tap. To choose an alternative action, select an option from the accessibility tool. This option will be performed once. This menu can be personalized to the user's preference.

## Hiru and iOS Accessibility Tools

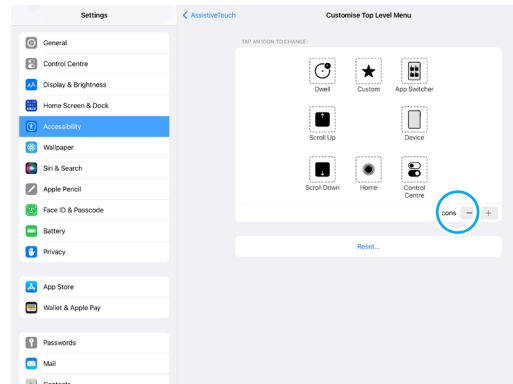
### How to personalize the AssistiveTouch Menu

1. Open the AssistiveTouch Tool in the iPad Settings. To do this, Go to iPad “Settings”, then choose “Accessibility”, and on the right side choose “Touch”. Within Touch, click on “AssistiveTouch Menu”.

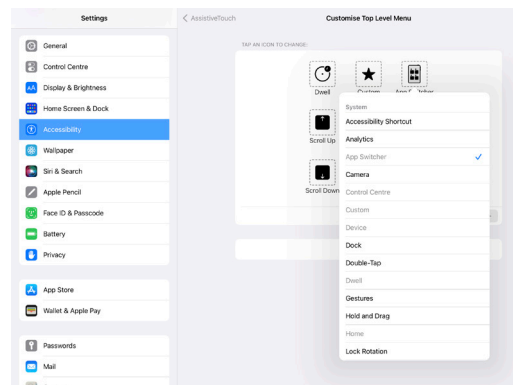


## Hiru and iOS Accessibility Tools

2. Customize the AssistiveTouch Menu: Select “Customize Top Level Menu”. Press + to increase the number of icons available to 8.



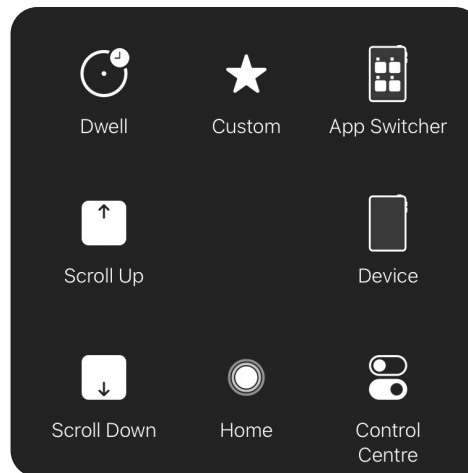
3. Select an icon from the defaults to be replaced (ex. Notification Center), and scroll down the list until you find the desired icon (ex. Pause/Resume Dwell).



## Hiru and iOS Accessibility Tools

4. Continue replacing icons until the menu is as desired. Use the icons below as a guide for eye gaze.

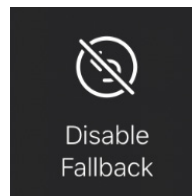
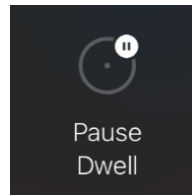
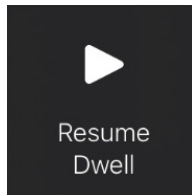
### Recommended icons





## Hiru and iOS Accessibility Tools

### Recommended commands for eye gaze in the AssistiveTouch Menu



#### Pause / Resume Dwell

This icon allows you to stop clicking. When selected, the pointer is visible, but the dwell will not complete. Select “Resume Dwell” from the same icon on the AT menu to resume clicking. You can also set your fallback action to “Pause Dwell”, so between each AssistiveTouch action, the dwell will be paused. Find it in Settings > Accessibility > Touch > AssistiveTouch in the Dwell section.

#### Enable / disable Fallback

With AssistiveTouch, there is a default “fallback” action of a “Tap”. Each time you select an icon from the AT menu, the action will be performed once, and then returned to the fallback action. To maintain the selected action, first select “Disable Fallback” and your selection will be maintained until something else is selected.

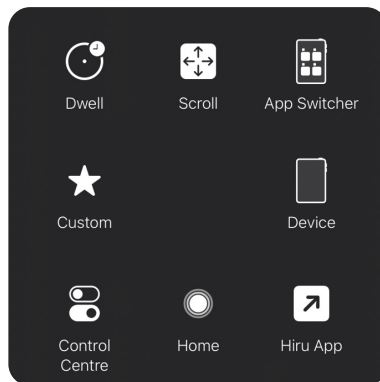
## User Profile Recommendations

### Pro User Profile

#### Goal: Access and communication

Allow a user to access all features of the iPad in order to work, play, communicate and more.

This configuration seeks to maximize the number of icons available to the user, so they can perform the widest variety of actions possible.



#### AssistiveTouch Menu

- **Home:** Jump to home screen.
- **App Switcher:** Change between apps.
- **Device:** iPad features (ex. Volume, sleep, etc.)
- **Dwell Menu:** Move menu and other features inside.
- **Scroll Menu:** More scroll directions.
- **Shortcut:** Open Hiru App for recalibration.
- **Custom:** Create & use custom gestures (swipe, long press, etc.)
- **Control Panel:** Open the Control Panel.

Top Left	Toggle Pause/Resume Dwell >
Top Right	Scroll Up >
Bottom Left	Enable/Disable Fallback >
Bottom Right	Scroll Down >

Dwell in a corner on the screen to perform an action.

#### Hot Corners

- **Top Left:** Pause / Resume Dwell.
- **Top Right:** Scroll Up.
- **Bottom Left:** Disable / Enable Fallback.
- **Bottom Right:** Scroll Down.


## User Profile Recommendations

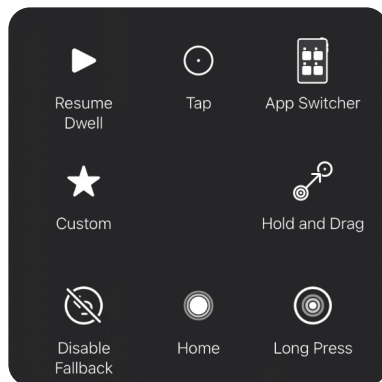
### Beginner User Profile

#### Goal: Communication and Learning

Using AAC, cause and effect games and educational apps.

This configuration seeks to shorten the journey to any icon for quick access.

 Place parental controls on the user's iPad, to avoid unwanted clicks in the iPad Settings. Settings > Screen time > Content & Privacy Restrictions



#### AssistiveTouch Menu

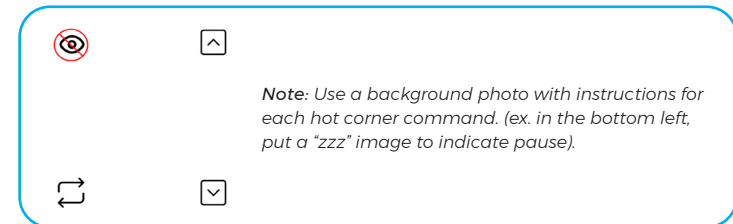
- Home: Jump to home screen.
- App Switcher: Change between apps.
- Tap.
- Long Press.
- Hold and Drag.
- Custom: Create & use custom gestures (swipe, long press, etc.)
- Pause / Resume Dwell.
- Disable / Enable Fallback.

Top Left	Scroll Left >
Top Right	Scroll Up >
Bottom Left	Scroll Down >
Bottom Right	Scroll Right >

Dwell in a corner on the screen to perform an action.

#### Hot Corners

- Top Left: Scroll Left.
- Top Right: Scroll Up.
- Bottom Left: Scroll Down.
- Bottom Right: Scroll Right.



## iPad Settings for Eye gaze

**Dwell Time:** Go to Settings > Accessibility > Touch > AssistiveTouch > Customize Top Level Menu. Scroll to “Dwell Control” and select “ON”. To adjust the Dwell time, go down to four sections and turn to the desired dwell time.

 1.25 second dwell time is a good starting point. Change as desired.

**Mouse Smoothing:** Go to Settings > Accessibility > Touch > AssistiveTouch > Devices > Huru. Here, select the desired smoothing level.

**Mouse Size & Color:** Go to Settings > Accessibility > Pointer Control, and in Pointer Size, scroll the size at least halfway up the scale.

 Select a color other than “none” for higher visibility.

**Motion Reduction ON:** Go to Settings > Accessibility > Motion. Scroll to “Reduce Motion” and select “ON”.


**Pointer Animation OFF:** Go to Settings > Accessibility > Pointer control. Scroll to “Pointer Animation” and select “OFF”.

**Sleep Mode NEVER:** Go to Settings > General > Auto-lock. Choose “Never”, or your desired time.

**Dark Mode:** (optional) Go to Settings > Display & Brightness > Appearance, Select “Dark”.

**View:** Zoom or Standard. Go to Settings > Display and Brightness > View, choose Standard or Zoom. \*When you change this setting, calibrate using the Huru app again to ensure eye tracking accuracy.

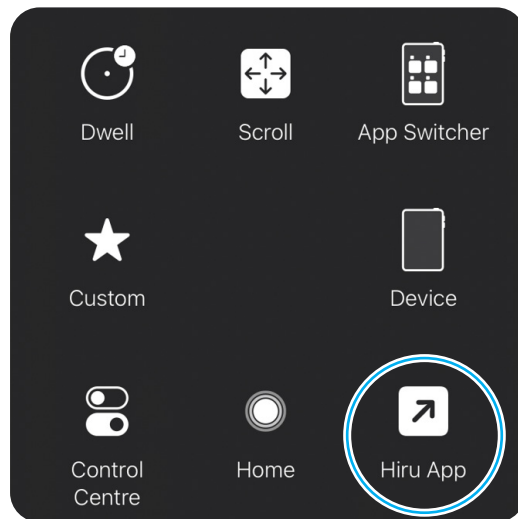
**Hot corners:** Set each corner of your iPad screen to trigger an action. By just looking into the corner, the action will be selected. Watch this video to learn how to do it.

 Settings > Accessibility > Touch > AssistiveTouch > Hot Corners.  
Select an action from the list for each corner.


## How to create a Shortcut

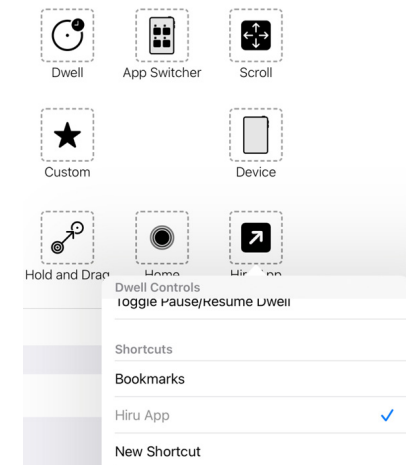
### Create a Shortcut

It's possible to add a shortcut directly to the AssistiveTouch Menu or Hot Corner.



shortcut to Hiru App  
to access a calibration in one click.

1. Open Apple's "Shortcuts" App. 
2. Click the + sign in the upper left corner.
3. Select the type of shortcut (Open App, set timer, etc.)
  - a. Choose from different options depending on apps downloaded and the shortcut goal.
  - b. Find the Apple instructions [HERE](#).
4. Name the Shortcut (Ex. Open Hiru App).
5. To add to the AssistiveTouch Menu, go to iPad settings > Accessibility > Touch > AssistiveTouch > Customize top level menu and a shortcut from the bottom of the list. They appear there automatically when created.



# CE & MDR | Technical Specifications

## Compliance Information: CE and MDR

The device model has been designed and manufactured in conformity with the Directive.

San Sebastián, a 30th of April 2021



Eduardo Jauregui / Technical Director

## DECLARATION OF CONFORMITY

MANUFACTURER	IRISBOND CROWDBONDING, SL VAT: ES-B75091058 ADDRESS: AVENIDA DE TOLOSA, 75 - 2º San Sebastián CP: 20018 Guipúzcoa, País Vasco
APPLICABLE DIRECTIVE	COUNCIL DIRECTIVE 93/42/EEC of 14 June 1993 concerning medical devices
HARMONIZED STANDARDS	EN 55032 (2015) / AC (2016) / A11 (2020) EN 55035 (2017): UNE-EN 62471-1:2009 FCC CFR 47, Part 15, Subpart B (10-1-15 Edition) ICES-003 Issue 6 (2016)
PRODUCT	Sistema de control del ordenador con la mirada HIRU/ Eye tracking system HIRU
REFERENCE	IRISBOND HIRU
TEST CERTIFICATES	65321IEM.001 65321REM.001 65321REM.002 2251989-PHO-21-018A

## Declaration of conformity (MDR)

We, Irisbond Crowdbonding Ltd, declare that the product listed below has been designed and manufactured in conformity with the Directive (UE) 2017/745:

MANUFACTURER	IRISBOND CROWDBONDING, SL ES-B75091058 AVENIDA DE TOLOSA, 75 - 2º San Sebastián, 20018 Guipúzcoa, Spain +34 9434 96 622 http://www.irisbond.com
REFERENCE	IRISBOND HIRU
PRODUCT	Eye tracking system HIRU

The aim of this declaration is a Class I Medical Device and is in conformity with the following harmonised legislation:

APPLICABLE DIRECTIVE	<ul style="list-style-type: none"> <li>• Directive (UE) 2017/745 concerning medical devices, MDR.</li> <li>• EMC Directive, 2004/108/EC.</li> <li>• RoHS Directive, 2011/65/EU.</li> <li>• FCC Rules and Regulations.</li> </ul>
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The following harmonized standards and technical specifications have been applied:

HARMONIZED LEGISLATION	EN 55032 (2015) / AC (2016) / A11 (2020) EN 55035 (2017) UNE-EN 62471-1:2009 FCC CFR 47, Part 15, Subpart B (10-1-15 Edition) ICES-003 Issue 6 (2016)
TEST CERTIFICATES	65321IEM.001 65321REM.001 65321REM.002 2251989-PHO-21-018A

This declaration is signed on behalf of Irisbond Crowdbonding, Ltd in San Sebastián, on the 30th of April, 2021, by Eduardo Jauregui, CEO.






## Declaration of conformity (MDR)

We, Irisbond Crowdbonding Ltd, declare that the product listed below has been designed and manufactured in conformity with the Directive (UE) 2017/745:

MANUFACTURER	IRISBOND CROWDBONDING, SL ES-B75091058 AVENIDA DE TOLOSA, 75 - 2º San Sebastián, 20018 Guipúzcoa, Spain +34 9434 96 622 http://www.irisbond.com
REFERENCE	OSKOL WINDOWS
PRODUCT	This product is composed by the following elements: <ul style="list-style-type: none"> <li>• Medical device; Eye tracking system HIRU.</li> <li>• Case to bundle the Irisbond HIRU eye tracker and the Surface Pro tablet (TPU material has PASSED skin sensitization and cytotoxicity tests in accordance with ISO 10993-5 and 10993-10).</li> </ul>

The aim of this declaration is a Class I Medical Device and is in conformity with the following directives:

APPLICABLE DIRECTIVE	REGULATION (EU) 2017/745 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 April 2017 on medical devices, MRD, amending Directive 2001/83/EC, Regulation (EC) No 178/2002 and Regulation (EC) No 1223/2009 and repealing Council Directive 90/385/EEC.
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The following harmonized standards and technical specifications have been applied:

HARMONIZED LEGISLATION	HIRU: EN 55032: 2015 / AC: 2016 / A11: 2020 EN 55035: 2017 UNE-EN 62471-1:2009 FCC CFR 47, Part 15, Subpart B (10-1-15 Edition) ICES-003 Issue 6: 2016 OSKOL Windows: ISO 10993-5 ISO 10993-10
TEST CERTIFICATES	65321IEM.001 65321REM.001 65321REM.002 2251989-PHO-21-018A

This declaration is signed on behalf of Irisbond Crowdbonding, Ltd in San Sebastián, on the 30th of April, 2021, by Eduardo Jauregui, CEO.




## Declaration of conformity (MDR)

We, Irisbond Crowdbonding Ltd, declare that the product listed below has been designed and manufactured in conformity with the Directive (UE) 2017/745:

MANUFACTURER	IRISBOND CROWDBONDING, SL ES-B75091058 AVENIDA DE TOLOSA, 75 - 2º San Sebastián, 20018 Guipúzcoa, Spain +34 9434 96 622 <a href="http://www.irisbond.com">http://www.irisbond.com</a>
REFERENCE	OSKOL iPad
PRODUCT	This product is composed by the following elements: <ul style="list-style-type: none"> <li>• Eye tracking system HIRU, medical device class I.</li> <li>• Case to bundle the Irisbond HIRU eye tracker and the iPad Pro tablet (TPU material has PASSED skin sensitization and cytotoxicity tests in accordance with ISO 10993-5 and 10993-10)</li> </ul>

The aim of this declaration is a Class I Medical Device and is in conformity with the following harmonised legislation:

APPLICABLE DIRECTIVE	REGULATION (EU) 2017/745 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 April 2017 concerning medical devices, MDR, amending Directive 2001/83/EC, Regulation (EC) No 178/2002 and Regulation (EC) No 1223/2009 and repealing Council Directive 90/385/EEC.
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The following harmonized and/or unharmonized standards and technical specifications have been applied:

HARMONIZED LEGISLATION	HIRU: EN 55032: 2015 / AC: 2016 / A11: 2020 EN 55035: 2017 UNE-EN 62471-1:2009 FCC CFR 47, Part 15, Subpart B (10-1-15 Edition) ICES-003 Issue 6: 2016 OSKOL iPad: ISO 10993-5 ISO 10993-10
TEST CERTIFICATES	65321IEM.001 65321REM.001 65321REM.002 2251989-PHO-21-018A

This declaration is signed on behalf of Irisbond Crowdbonding, Ltd in San Sebastián, on the 30th of April, 2021, by Eduardo Jauregui, CEO.




## Technical Specifications

Optimum screen size	10-20"
Recommended working distance	35-80 cm.
Calibration	0, 1, 5, 9, 16 points
Selection mode	Dwell, Blink, Switch
Head box	20 x 18 cm. at 50 cm.
Eye tracking	Monocular and binocular
Accuracy	0.4°
Sampling rate (Frequency)	60 Hz.
Mounting	Holder, magnets, or specific adaptor for consumer device
Operating system	Windows: 7-10 iPadOS: 13 or above Others: Please get in touch with us
Eye Tracking processing	Hiru on-chip eye tracking technology
Minimum system requirements (laptop, PC, tablet)	<p>Eye-tracking processing done at HIRU itself. System requirements related to the applications used with HIRU. Typically:</p> <ul style="list-style-type: none"> <li>• USB 3.0 -C</li> <li>• 1,33 GHz CPU</li> <li>• 2 GB RAM</li> <li>• 3GB + HDD Hard Disk</li> <li>• Intel Graphics, Nvidia and others with OpenGL 2.0</li> <li>• iOS: iPad Pro</li> </ul>
Weight	115 g.
Dimensions	259 x 25 x 28 mm.
Eye tracking technology	Dark pupil
USB connector	USB-C

