

Head-eye Coordination

Module tutorial



Table of contents

1. GENERAL	3
1.1. Description	3
1.2. Required accessories.....	3
1.3. Patient setup	3
2. Settings	3
2.1. Session settings	3
2.1.1. Shape	4
2.1.2. Path settings	4
2.1.3. Target settings	5
3. Module.....	6
3.1. Session	6
3.2. Shortcuts	7
3.3. Results	9
3.3.1. Summarized results	9
3.3.2. Report and charts	9



1. GENERAL

1.1. Description

Head-Eye Coordination is a rehabilitation software for cervical spine rehabilitation and vestibular stimulation.

The patient must follow, with his head, the movement of a planet, the trajectory being chosen by the physiotherapist.

1.2. Required accessories

Headset.

1.3. Patient setup

Seated, hands clasped behind the back (avoid thoracic/lumbar spine compensation): work on cervical spine amplitudes.

Standing position: global balance work.

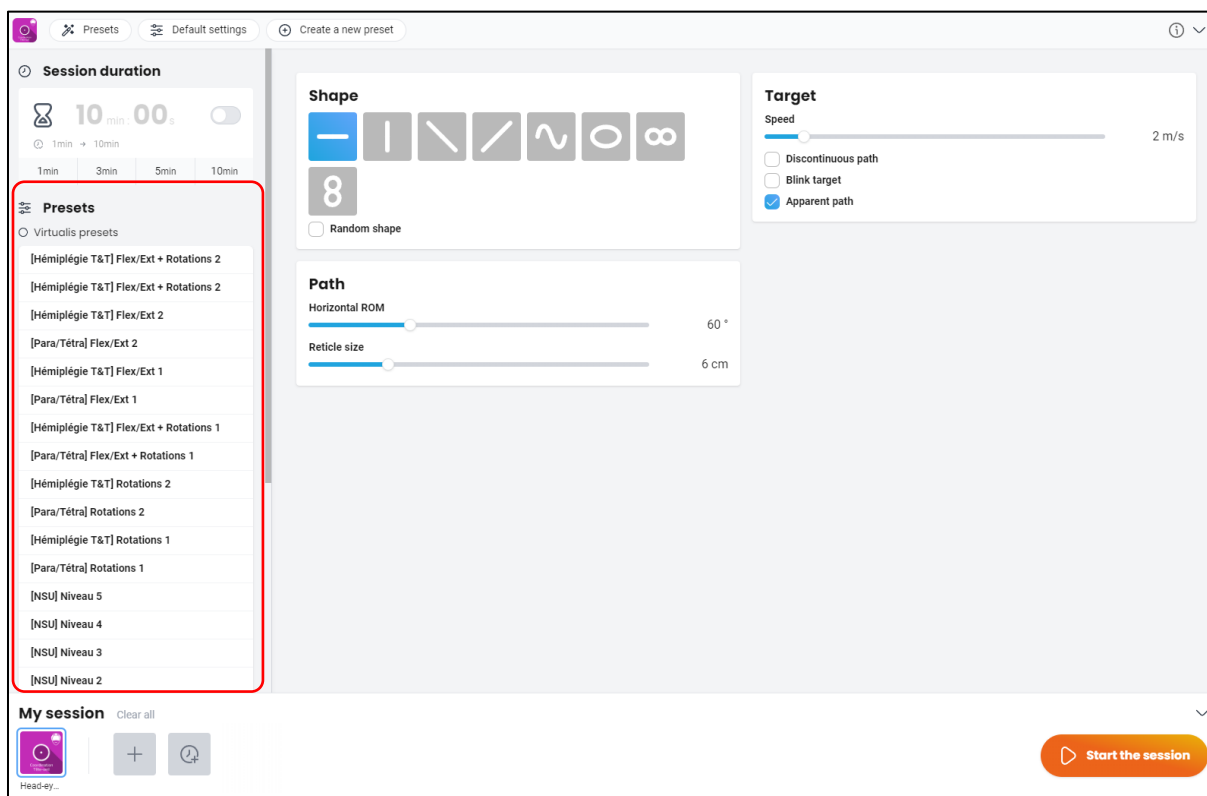
Standing position on a foam block (balance pad): specific balance work (vestibulospinal reflex).

2. Settings

2.1. Session settings

When starting the Head-Eye-Coordination software you reach a home page from which you can find some protocols of different difficulty levels.

For each proposed protocol, the different options are already set. Just validate the selected protocol to start the application.



The variable settings for this module are as follows:

2.1.1. Shape



Several types of paths are available. Simply click the required path to select it. The option “**Random shape**” is used to generate a path and its animation setting randomly **at a selected interval**.

Interval: 10 to 300 seconds.

2.1.2. Path settings



Path

Horizontal ROM

60 °

Vertical ROM

45 °

☐ Lock ROM ratio

Waves number

3.00

Reticle size

6 cm

Horizontal and vertical angles as well as the reticle diameter can be set using the cursors. The settings available vary depending on the chosen **Shape**.

- **Horizontal ROM:** 15 to 170°.
- **Vertical ROM:** 15 to 120°.

You can "freeze" the ratio of horizontal and vertical angle values by checking the "**Lock ROM ratio**" box.

- **Waves number:** from 1 to 4.
- **Reticle size:**

More accuracy is required if the **Reticle size** is small.

Value: from 2 to 20 cm.

2.1.3. Target settings

Target

Speed

2 m/s

☒ Discontinuous path

☒ Blink target

Frequency

0.4 s

☒ Apparent path

**Speed:**

The object movement speed can be set using the cursor.

Value: 0 to 20 m/s.

Discontinuous path:

By default, the movement is a continuous round-trip movement. If you check the “**Discontinuous movement**” box, the movement is a one-way movement that resets to the start.

Blink target:

The object can remain displayed for the duration of the exercise or appear intermittently by selecting the “**Blink target**” option.

Frequency:

The disappearance interval and duration can be modulated.

Value: 0.2 to 2.0 s.

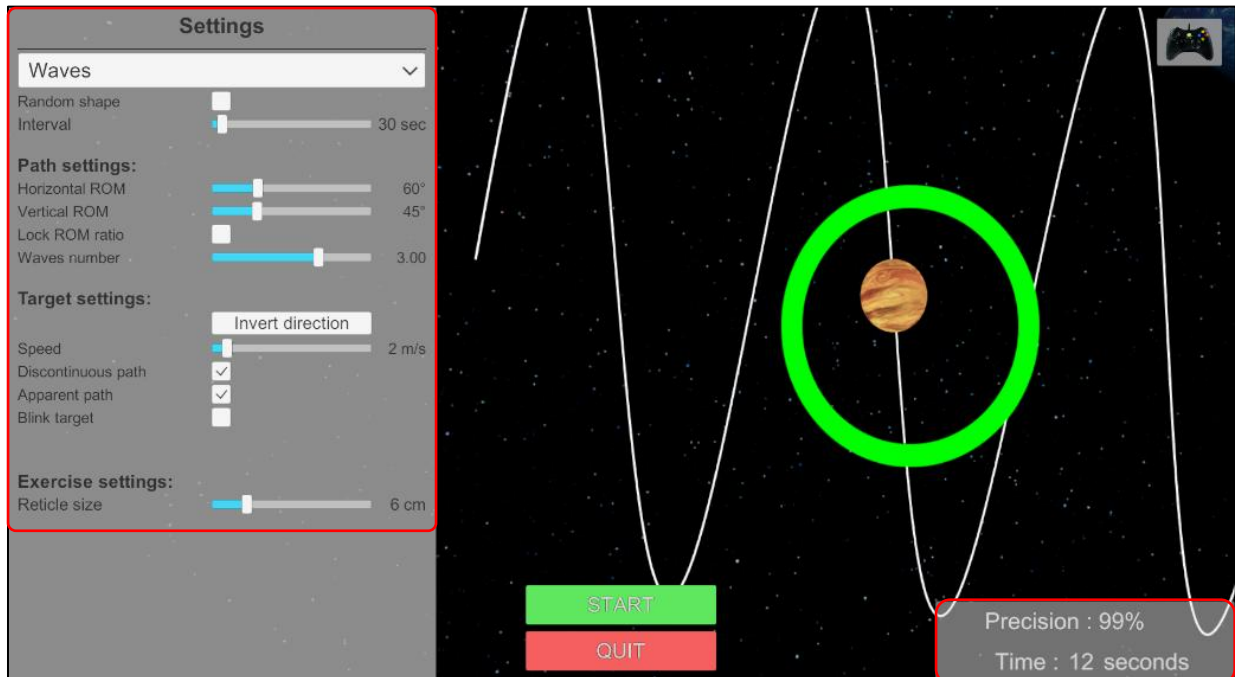
Apparent path:

The object path can be displayed or hidden by checking the “**Apparent path**” box.

3. Module

3.1. Session

Once the presets have been set, click on “**Start the session**” in the bottom right corner of the screen.



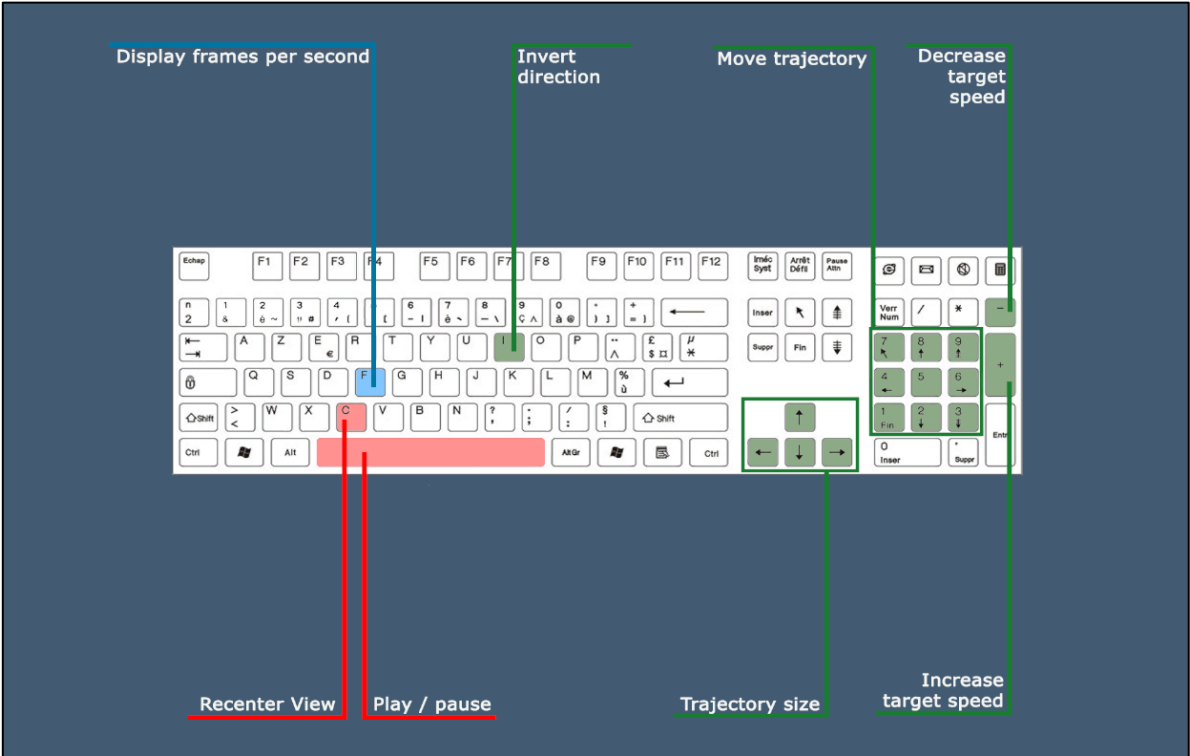
During the session, the user can modify the parameters from **the left side of the screen**. They are not visible to the patient.

In the bottom right of the screen, the user can observe the results of the session live.

3.2. Shortcuts

During the session, the shortcut list is found by clicking on the Xbox controller icon in the upper right corner of the screen.

Some functions can only be accessed using keyboard or the Xbox controller shortcuts, such as “move trajectory”.





3.3. Results

Once the session is over, you can view the results.

3.3.1. Summarized results

By default, the results are as follows:

- Precision

3.3.2. Report and charts

Click on the histogram icon to access detailed results and the session report.

The screenshot shows the 'Head-eye coordination' software interface. At the top, there's a purple header with 'Session details' (10/04/2025 10:10) on the left, the title 'Head-eye coordination' in the center, and a user icon on the right. Below the header is a navigation bar with three tabs: 'Parameters', 'Results' (highlighted in blue), and 'Notes'. The main content area displays a table with two columns: 'Name' and 'Result'. The table contains one row with 'Precision' under 'Name' and '99 %' under 'Result'. A red circle highlights a histogram icon in the top-left corner of the interface.

Name	Result
Precision	99 %