



ReJoyce Software User Manual

User Assistance Information

For maintenance or assistance with the software, contact Rehabtronics, Inc. at:

International:
(+1) 780-701-5167

Toll Free (US & Canada):
1-800-481-3214

For health-related concerns, contact your health care professional. Any serious incident that has occurred in relation to the device should be reported to the manufacturer and the appropriate regulatory authority in which the user and/or patient is established.

Contents

Introduction	3
ReHab Software	3
Software Overview.....	3
Users	3
Help and Language Settings.....	4
ReHab Setup and Administrator Account.....	5
Initial Setup	5
Administrator Account.....	5
Clinician Management	6
Creating New Clinician Accounts	6
Disabling and Deleting Clinician Accounts	7
Changing Clinician Passwords	8
Patient Management	9
Creating New Patient Profiles.....	9
Deleting a Patient.....	9
Sharing Patients	10
Transferring Patients.....	11
Applications.....	12
Application Updates.....	13
ReHab Settings	13
Backup and Restore Data.....	14

Audit Log15

ReJoyce Software16

ReJoyce Application Overview16

 Launching the ReJoyce Application (Launch Modes)
 16

 Navigation18

Clinician Mode19

 Tests Management19

 Track Patient Progress22

Patient Mode23

 Playing Games23

 Take Tests.....23

 Track Progress.....24

Games25

 Biplane25

 Blox.....27

 Boxing.....29

 Bullseye32

 Catcher34

 Cupid's Arrow36

 Freeracer38

 Spaceport40

Customer Support

NOTE: On the back of the ReJoyce Base is the device serial number. Please refer to this number when contacting customer support.



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 Edmonton, AB
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Contact ReJoyce customer support via any of the following channels:

Phone: (+1) 780-701-5167 (*International*)
 1-800-481-3214 (*Toll Free, US & Canada*)

Email: support@rehabtronics.com

Website: www.rehabtronics.com

European Union

The manufacturer declares that the CE marked device meets the provision of Regulation (EU) 2017/745 for Medical Devices (MDR), Directive 2014/30/EU, and Directive 2011/65/EU.



CMC Medical Devices & Drugs S.L.
 C/ Horacio Lengo Nº18,
 CP29006,
 Málaga-Spain

2. Click the “Re-Calibrate Now” button, and then follow the on-screen instructions through the calibration process.
3. At the end of the calibration activities, a real-time 3D model of the ReJoyce hardware will be presented. Move each of the ReJoyce hardware parts and confirm that the corresponding 3D model updates according to manipulation of the hardware.

Debug ReJoyce Hardware

Correct function of connected ReJoyce hardware can be checked by selecting the “Debug” option from the left menu while in Configuration Mode.

The debug window will show a real-time 3D representation of connected ReJoyce hardware, as well as the raw values of each of its sensors. Manipulate the ReJoyce hardware while observing the 3D model and sensor values. Both the 3D model and sensor value fluctuations should reflect movements made to the ReJoyce.

Stack Attack.....	42
Tennis.....	44
Weedo.....	46
Wizard.....	48
Configuration	51
Excluded Games.....	52
Calibrate ReJoyce Hardware	52
Debug ReJoyce Hardware	53
Customer Support.....	54
European Union	54

Introduction

The software that accompanies the ReJoyce hardware is also called “ReJoyce”. This software requires an additional software called “ReHab” to manage the software installation. Installers for the ReJoyce and ReHab software are available on Rehabtronics’ website at:

<https://www.rehabtronics.com/downloads/rejoyce/>

ReHab Software

Software Overview

ReHab is a platform that allows healthcare facilities to manage clinicians, patients, and medical software applications.

Users

There are three types of users of the software, and each interacts with the ReHab platform in different ways. The three types of users are:

1. **Administrator**
 - There is only one administrator account, and it is created when the ReHab software is first launched. This user has access to all clinician

Excluded Games

If desired, specific games can be excluded so that they are not shown in the list of games while in Patient Mode or Quickplay Mode.

1. While in Configuration Mode, select “Excluded” from the left menu. A list of all ReJoyce games will be presented.
2. Check any games to be excluded. Checked games will not be available for play.

Calibrate ReJoyce Hardware

ReJoyce hardware must be calibrated to the computer system running the software.

IMPORTANT: *The hardware should come pre-calibrated to the computer shipped with the ReJoyce.*

As such, calibration should only be done in the following circumstances:

- When the ReJoyce hardware is going to be used with another computer system
- Sensor issues are observed (see Debug ReJoyce)

To calibrate ReJoyce hardware:

1. Select “Calibration” from the left menu.

Difficulty Settings

The difficulty setting influences the following:

- How long the patron's desired potion remains on screen
- How quickly the player must pour the potion to accumulate score

Configuration

The ReJoyce Configuration Mode allows access to ReJoyce hardware calibration and debugging tools, and the ability configure which ReJoyce games are available.

This mode is only available to the ReHab Administrator account or by Clinician Admin accounts.

To launch the ReJoyce application in Configuration mode:

1. Login to ReHab under a Clinician Admin account, or as the ReHab Administrator.
2. Select the “ReJoyce” option from the menu on the left
3. Click the “Configure” button.

and patient management options and software settings.

2. Clinician

- Clinician accounts are created by the administrator and have their own login credentials to the ReHab platform. Some clinicians may be given limited administrative access to extend their control over the software.

3. Patient

- Patient profiles can be created by either clinicians or administrators and are used through managed software applications available on ReHab, but do not interact with the ReHab platform directly.

Help and Language Settings

At all points in the software interface, two icons at the top right of the screen can be used to access help and change the language:



Press this icon at any time to access the in-software help



Press this icon at any time to change the language. Language settings are saved for the specific user (Administrator, Clinician, Patient).

ReHab Setup and Administrator Account

Initial Setup

When the ReHab software is first launched, follow the on-screen instructions to guide you through the process of setting up the Administrator account, and registering the software.

Administrator Account

There is only one administrator account, and it is created when the ReHab software is first launched. Ensure that only trusted person knows the administrator password, and that the reset code is stored in a safe, secure location in the event that the administrator password is forgotten.

Changing the Administrator Password

There are two ways to change the administrator password:

Controls

Movement

The player takes control of the player hand using the ReJoyce. Range-of-motion is limited to 2-D play: the player can move the hand left, right, up and down using the selected ReJoyce control components.

Potion Selection and Pick-Up

The player must select and pour potions based on patron orders. Once a patron approaches the cauldron, a speech bubble appears displaying his or her desired potion.

To pick up a potion, activate the selected ReJoyce control component. To drop the potion again, re-activate the selected ReJoyce control component.

Pouring

To pour the potion, the player must position their hand over top of the cauldron then activate the selected ReJoyce control component to tilt the potion bottle over. The bottle must remain tilted over until the potion indicator is filled.

Level Progression

As the player progresses, more and more types of potions will be available to choose from.

On-Screen Items



1. **Hand:** the player's on-screen control.
2. **Patron:** The current customer.
3. **Patron's Requested Potion:** the potion type that the patron requested, the player must choose this potion when pouring.
4. **Potions:** The potions the player can select from. More types of potions become available as the player progresses.
5. **Cauldron:** Where the player must pour the potion into.
6. **Potion Indicator:** keeps track of how much potion has been poured (and is still needed) to satisfy the patron.
7. **Score Indicator:** keeps track of the player's score.

- If you know the current password, login to ReHAB as the administrator and navigate to the settings screen to create a new password.
- If you have forgotten the current password, select the “Administrator” username at the ReHAB login screen, then click the “Forgot Password?” link. The reset code provided in the initial ReHAB setup will allow you to reset the administrator account password.

Clinician Management

Clinician accounts can be created by the ReHAB Administrator, or by other Clinician Admin users. Only the ReHAB Administrator can delete Clinician accounts, and grant Admin privileges.

Creating New Clinician Accounts

To create a new Clinician account either:

1. Log into ReHAB under the Administrator account, select “Clinicians” from the left menu, and then click the “+ Add New” button; or
2. Log into ReHAB as a Clinician Admin user. Click the “Enter Admin Mode” button at the top right, then select “Clinicians” from the left menu, and then click the “+ Add New” button.

You will be presented with fields for entering clinician information.

The following table describes the Clinician information fields:

When all the required fields are filled in, click the “Save” button.

The clinician can now login at the ReHab login screen using the assigned password.

Disabling and Deleting Clinician Accounts

Clinician accounts can be either disabled or deleted by the ReHab Administrator.

- Disabling clinician accounts will remove the ability for the clinician to login to ReHab. Disabled clinician account data persists and can be accessed by the ReHab Administrator. The ReHab Administrator can also re-enable the account at any time.
- Deleting clinician accounts permanently deletes the clinician account.
 - *NOTE: before deleting a clinician account, all patients managed by the clinician must first be transferred to another clinician. See Transferring Patients for details.*

To disable or delete a clinician account:

Weeds dropped into areas other than a compose heap will quickly reappear next to a flower.

Level Progression

To progress to the next stage, the player must dispose of enough weeds to completely fill the Score bar at the top of the screen.

If weeds are not removed fast enough, the flowers' health will deteriorate. Flower health is shown on the Flower Health bars beneath each flower.

If all flowers perish before a stage is complete, the game ends.

Difficulty Settings

The difficulty setting influences the following:

- How quickly the sun heals flowers
- How quickly weeds spawn
- Damage dealt by sinister weeds
- How many weeds must be picked to level-up
- How many weeds can be on the screen at once

Wizard

Goal

Serve patrons the potions they request to increase your score.

6. **Score Bar:** Displays the player's current score. Once the bar is full, the stage is complete.

Controls

Movement

The player takes control of the Hand using the ReJoyce. Range-of-motion is limited to 1-D play: the player moves the Hand left and right using the selected control component.

Targeting

To target a weed, the player must position the Hand on top of any of the Weeds. The Hand and Weed will glow purple when correctly positioned.

Weeding

Once the Hand is positioned over a Weed, the player can pick-up the Weed by manipulating the selected control-component.

Compost Bins

While keeping the selected control-component engaged, the player must move the ReJoyce either left or right and drop the weed into one of the two Compost Bins.

To drop a weed into one of the bins, the player simply releases the selected control-component.

1. Login to ReHab under the Administrator account.
2. Click "Clinicians" from the menu on the left and select the clinician to disable or delete.
3. Click the "Edit" button
4. Click either "Disable" or "Delete" and confirm.

Changing Clinician Passwords

Clinician account passwords can be changed either through the Clinician account, or by the ReHab Administrator:

Change password as the clinician:

1. Login to ReHab under the Clinician account.
2. Navigate to the settings screen.
3. Enter a new password and click "Save".

Change password as Administrator:

4. Login to ReHab as the Administrator.
5. Click "Clinicians" from the menu on the left and select the clinician whose password you would like to change.
6. Click the "Edit" button, then "Change Password".

Patient Management

Patient profiles can be created by Clinicians, or by the ReHab Administrator. Patients can be shared among all Clinician accounts or be only viewable by a specific Clinician.

Creating New Patient Profiles

To create a new Patient profile either:

1. Log into ReHab under the Administrator account, select “Patients” from the left menu, and then click the “+ Add New” button; or
2. Log into ReHab under a Clinician account. Select “Patients” from the left menu, and then click the “+ Add New” button.

You will be presented with fields for entering patient information.

The following table describes the Patient profile information fields:

Deleting a Patient

Patient profiles can be deleted by the Clinician who owns the patient, or by the ReHab Administrator.

To delete a patient profile:

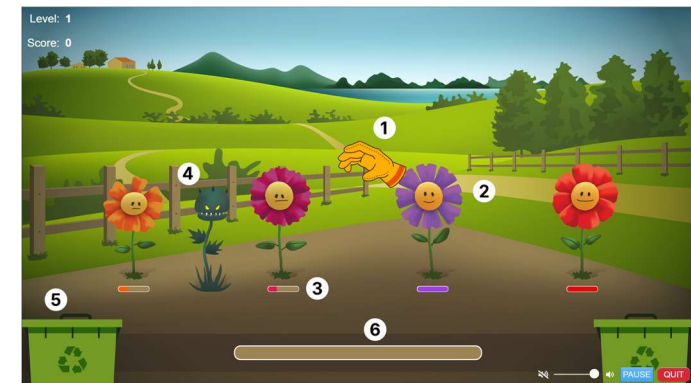
Login to ReHab as either the Administrator, or under the Clinician account that owns the patient.

Weedo

Goal

The player must protect the flowers by removing weeds and dropping them into the compost heaps on either side of the screen.

On-Screen Items



1. **Hand:** The player's on-screen control.
2. **Flower:** The flowers that make up the player's garden.
3. **Flower Health Bar:** Displays the flower's remaining health.
4. **Sinister Weed:** Weeds that pop up progressively throughout each stage.
5. **Compost Bin:** Used for enemy disposal. To successfully destroy a weed, the player must drop it into one of the compost bins.

least a 2-set advantage to progress in the tournament.

Controls

The player uses the selected ReJoyce control components to move their avatar around on the screen. The avatar will automatically swing at the tennis ball if it comes close to them.

The object is to position the control-cursor where the ball is heading, allowing the player time to run to the location and hit the ball back.

Level Progression

To win the tennis tournament, a player must defeat all the opponents.

The game uses standard tennis rules, where each game follows a 15-30-40-Game scoring progression, but winning requires at least a two score advantage.

Difficulty Settings

The difficulty setting influences the following:

- Ball speed
- Opponent speed

Select “Patients” from the left menu, and then select the patient to delete.

Click the “Edit” button, then click the “Delete” button. Confirm the deletion when prompted.

- **WARNING:** *This will permanently delete the patient and all associated data.*

Sharing Patients

Patient profiles can be shared among all the Clinician accounts, allowing other clinicians to access the patient.

- **NOTE:** *This option is only available if the ReHab setting “Allow shared patients” is enabled. If the setting is enabled, then patient profiles will have sharing enabled by default when they are created.*

To share or un-share a patient:

1. Ensure the ReHab setting “Allow shared patients” is enabled.
2. Login to ReHab as either the Administrator, or under the Clinician account that owns the patient to share/un-share.
3. Select “Patients” from the left menu, and then select the patient to share/un-share.
4. Click the “Edit” button, then toggle the “Share” option.

- Click the “Save” button to save changes to the patient settings.

Transferring Patients

Patient profiles are “owned” by a single account, allowing that account to toggle sharing and delete the profile. By default, any Patient profile is owned by the account under which the profile was created.

Ownership of a Patient profile can be transferred to other Clinicians, such as in the following circumstances:

- The Patient profile was created by the ReHab Administrator, and so it isn't assigned to any Clinician.
- Prior to deleting a Clinician account the account must first have all its owned Patients transferred to another Clinician.

To transfer Patient profiles:

- Login to ReHab as either the Administrator, or under a Clinician account that has access to the Patients to be transferred.
- Select “Patients” from the left menu, and then select a patient.
- Click the “Transfer” button

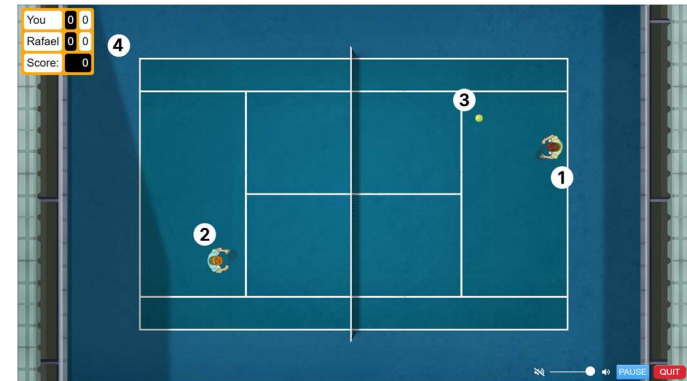
- Game speed

Tennis

Goal

Win the tennis tournament by defeating a number of high-profile opponents. The user must position their player strategically on the court in order to hit the ball back.

On-Screen Items



- Player:** the avatar that the user is controlling.
- Opponent:** the player's opponent.
- Tennis Ball:** position the player in the anticipated trajectory of the ball to hit it back.
- Score Indicator:** displays the current set scores. A player must win at least 3 with at

3. **Score Indicator:** indicates the player's current score.
4. **Alarm:** the alarm will light up when two widgets stack up.

Controls

The player uses the following control components by activating them by:

- **Doorknob:** turning the doorknob.
- **Gripper:** squeezing the gripper.
- **Jar:** turning the jar.
- **Peg:** lifting the peg.

Level Progression

The player increases score by successfully activating the required control component when a widget is waiting to be placed into a box.

As the player successfully packages widgets, the game speed will gradually increase, enabling the player to score more points.

If a player misses a widgets and two widgets collide, they will be removed.

If the player misses too many widgets in a row, the stage is reset.

Difficulty Settings

The difficulty setting influences the following:

4. Checkboxes will appear next to all the Patients in the list. Check all the Patient profiles you would like to transfer.
5. In the "Transfer to" field, select the account to which the selected patients will be transferred.
6. Click the "Transfer" button, then confirm by clicking the "Transfer Now" button.

Applications

The Applications screen is where you can manage medical software applications that are managed by ReHab. Each installed application screen is only available to administrators and includes the following features:

- **Application License**
 - You may revoke the application license; however this will prevent you from running the software in the future.
- **Application Configuration**
 - Each application may have its own configuration. As an administrator, this is where you may go to configure the managed software on an installation-wide basis. This may include things such as global settings, calibrations, etc.

- **Install / Uninstall**
 - If you wish to install or uninstall the application, you may do so using these buttons. If you uninstall the application, you will not be able to run the software until it is installed again.
- **Installation Information**
 - Includes information such as the manufacturer, version, etc.
- **Change History**
 - A log indicating the changes in the most recent software update of the managed application.

Application Updates

When connected to the internet, ReHAB will automatically search for and install relevant application updates to all managed applications, keeping them up to date as necessary.

ReHAB Settings

ReHAB settings can be accessed by the Administrator account or by Clinician accounts with Admin privileges. The Administrator account has access to all the ReHAB settings, whereas clinicians can only access some of the settings.

To access the settings either:

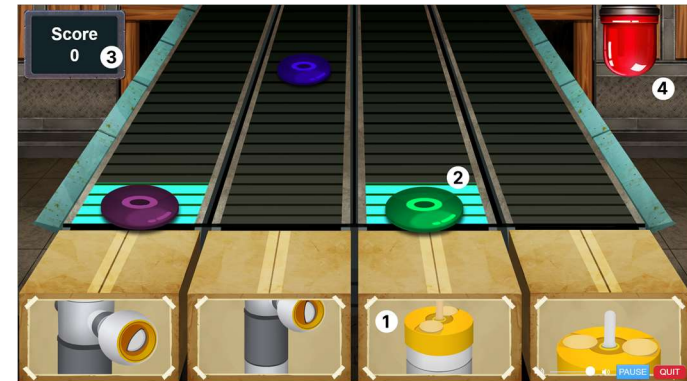
- Game speed

Stack Attack

Goal

The player must package widgets into boxes by activating appropriate ReJoyce control components. If too many widgets stack up, the game is over.

On-Screen Items



1. **Control-Component Boxes:** indicate which ReJoyce control component must be activated to drop a widget into the box. From left to right: doorknob, gripper, jar, and peg.
2. **Widgets:** these travel down the conveyor belts and stack up if they aren't placed into boxes quickly enough.

Controls

Movement

The player takes control of the Space-Port using the ReJoyce. Range-of-motion is limited to 1-D play: the player moves the Space-Port left and right.

Rotation

The player rotates the Space-Port to line it up with incoming astronauts. The player manipulates the selected ReJoyce control component to rotate the Space-Port.

Level Progression

Once the player has successfully aligned the Space-Port with the trajectory of an incoming Space-Ship, the Space-Ship's speed will increase as it attempts to quickly board the Space-Port.

The catches indicator will increase one increment each time an astronaut is successfully caught.

The misses indicator will increase one increment each time an astronaut is missed. If three astronauts are missed, the game is over and will restart.

Difficulty Settings

The difficulty setting influences the following:

7. Log into ReHab under the Administrator account, select “Settings” from the left menu; or
8. Log into ReHab under a Clinician account that has Admin privileges. Click the “Enter Admin Mode” at the top right, then select “Settings” from the left menu.

The following table describes the available settings:

Backup and Restore Data

All ReHab data can be backed up to a file or restored from a database file by the ReHab Administrator.

To backup or restore ReHab data:

Login to ReHab under the Administrator account and click the “Settings” options from the menu on the left.

Click either the “Import” or “Export” button next to the “Data” setting:

- Selecting “Export” will allow you to save the entire ReHab database to a file on the computer. This file can be used to move the data to a different computer system, or to restore the data later.
 - **WARNING:** the data stored in the backup file will be **unencrypted**, handle the data with care.

- Selecting “Import” will allow you to select a ReHab database file on the computer and load it into the current ReHab instance.
 - **WARNING:** *this action will overwrite any data in the current ReHab.*

Audit Log

The ReHab Audit Log is a timestamped list of all the major software activity such as logins, accounts changes, and settings changes.

It is only accessible by the ReHab Administrator account. To access the Audit Log:

1. Login to ReHab under the Administrator account.
2. Select the “Audit Log” option from the menu on the left.

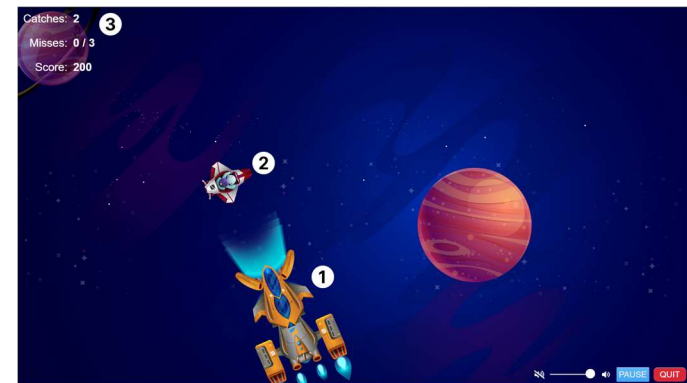
The Audit Log can be exported to a file for sharing or analysis purposes by clicking the “Export” button.

Spaceport

Goal

The player takes control of a mobile Space-Port and must successfully time and align the Space-Port with the trajectory of incoming ships.

On-Screen Items



1. **Player Space-Port:** the Space-Port controlled by the player.
2. **Astronauts:** ships that dock with the player's Space-Port.
3. **Score Indicator:** indicates how many catches and misses the player has achieved as well as the current score.

5. **Speed:** the speed that the player is currently travelling at.

Controls

The player controls the side-to-side steering using the selected ReJoyce control component. The car will drive forward by itself, but by activating the selected “Speed Boost” control component, the car will accelerate much faster.

Level Progression

The player will automatically advance to the next race stage once all racers have finished the current race. The player scores points based on their final race position; the better the race position, the more points they will score.

Difficulty Settings

The difficulty setting influences the following:

- Acceleration of the player's car
- Top speed of the player's car
- Acceleration of the opponents' cars
- Top speed of the opponents' cars

ReJoyce Software

ReJoyce Application Overview

The ReJoyce application is a software package that runs on the ReHab platform and is used with ReJoyce hardware. It allows patients to play games and take tests with ReJoyce hardware and track their progress. Clinicians can use the application to create custom tests for patients, and track patient progress.

Launching the ReJoyce Application (Launch Modes)

There are four ways to launch the ReJoyce application:

4. Quickplay Mode

- Quickplay mode allows access to games only and does not require a ReHab login. No data or settings are maintained.
- To launch the ReJoyce application in Quickplay mode, simply click the ReJoyce button from the ReHab login screen.

5. Clinician Mode

- Clinician mode gives ReHab clinicians access to the utilities for creating custom ReJoyce tests, and

for tracking individual patient progress.

- To launch the ReJoyce application in Clinician mode, login to ReHab under a Clinician account, select a patient, and click the “Clinician Mode” button under the ReJoyce icon.

6. Patient Mode

- Patient mode allows patients to play games, take tests, and track their progress.
- To launch the ReJoyce application in Patient mode, login to ReHab under a Clinician account, select a patient, and click the “Patient Mode” button under the ReJoyce icon.

7. Configuration Mode

** This mode is only available to the ReHab Administrator account or by Clinician Admin accounts.*

- Configuration mode allows access to ReJoyce hardware calibration and debugging tools as well as allows the ability to configure which ReJoyce games are available.
- To launch the ReJoyce application in Configuration mode, login to ReHab under a Clinician Admin account, or as the ReHab Administrator. Select

Difficulty Settings

The difficulty setting influences the following:

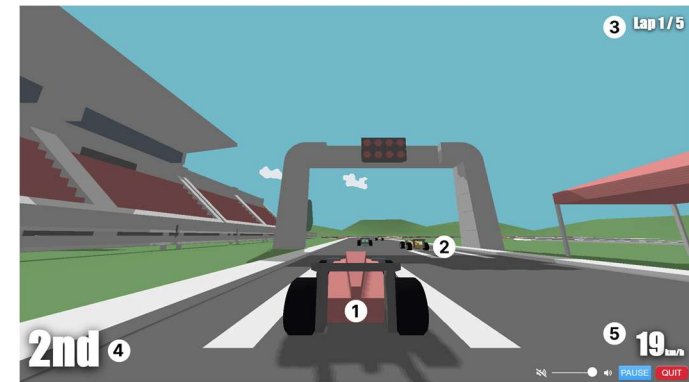
- Game speed (stage time)

Freeracer

Goal

The player must complete each race course and score points based on their race position.

On-Screen Items



1. **Player Car:** the car the player is controlling.
2. **Opponent Cars:** the race competitors.
3. **Lap Indicator:** indicates the player's current lap and how many laps in total are present for the course.
4. **Current Position:** the player's current position in the race. Aim for first!

to complete the pair and increase the score).

3. **Timer:** indicates the remaining play time for the stage.

Controls

Movement

The player takes control of the cross-hairs using the relevant select ReJoyce control components (lateral and vertical movement of the manipulandum by default).

Aiming and Shooting

To aim, the player positions the cross-hairs over the desired target.

The player manipulates the selected ReJoyce control component to shoot and releases it to reload.

Pairing

Once an animal has been “shot,” it will fall in love. To successfully pair the animal, the player must next “shoot” a second animal of the same species.

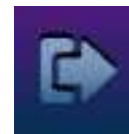
Level Progression

In each level, the player must pair all animals to advance to the next stage. If the timer runs out before all animals are paired, the game is over and is restarted.

the “ReJoyce” option from the menu on the left, then click the “Configure” button.

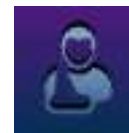
Navigation

Depending on the ReJoyce application mode, the following buttons will be available in the top right of the window:



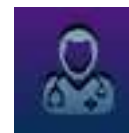
Pressing this button will exit the ReJoyce application.

- Pressing while in Patient Mode will log out of the ReHab platform and return to the ReHab login screen.
- Pressing while in Clinician Mode will return to ReHab under the Clinician's account.



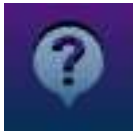
Pressing this button while in Clinician Mode will enter the ReJoyce Patient Mode under the currently selected patient.

This button is only available if in Clinician Mode.



Pressing this button while in Patient Mode allows clinicians to switch to Clinician Mode using their login password.

This button is only available if in Patient Mode.



Press this button to open the ReJoyce contextual help.



Press this button to change the application language.
NOTE: the language setting is saved for the patient (if in Patient Mode), or the clinician (if in Clinician mode).

Clinician Mode

Launching the ReJoyce application in Clinician Mode allows clinicians the ability to create custom ReJoyce tests, and to track patient progress.

To launch the ReJoyce application in Clinician Mode, login to ReHab under a Clinician account, select a patient, and click the “Clinician Mode” button under the ReJoyce icon.

Tests Management

While in Clinician Mode, selecting “Tests” from the menu on the left will display a list of available tests.

Difficulty Settings

The difficulty setting influences the following:

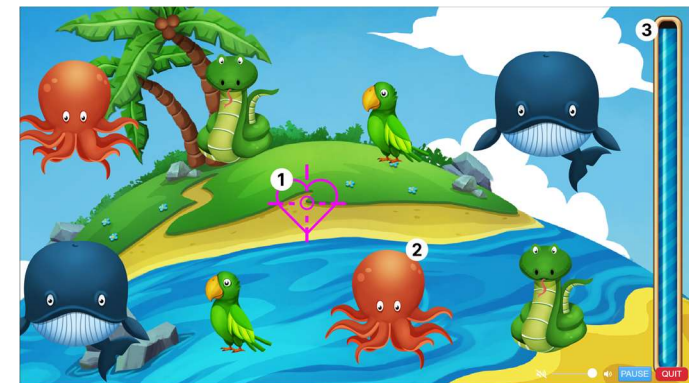
- Game speed

Cupid's Arrow

Goal

The player must pair every on-screen animal with an animal of the same species as quickly and accurately as possible. Every progressive stage presents different animals, with less time available to complete the stage.

On-Screen Items



1. **Heart Cross-Hairs:** the player's point of reference for aiming.
2. **Animals:** targets that must be paired (Example: if the player fires at an octopus, he or she must next fire at another octopus)

Controls

Movement

The player takes control of the Catcher buckets using the ReJoyce. Range-of-motion is limited to 1-D play: the player moves the buckets left and right. During early stages of the game, horizontal movement is very limited.

Rotation

The player rotates the Catcher to match objects with buckets. The player manipulates the selected ReJoyce control component to rotate the buckets.

Level Progression

To successfully catch an object, the player matches shape and color of the falling objects with that of the Catcher's buckets.

For example, the player must catch circular black objects with the circular black bucket, and square white objects with the square white bucket.

The player's score increases with each successful catch. Once the player catches 10 objects, the player will advance to the next stage. Higher stages feature more buckets.

If the player misses three objects in a given level the game is over and is restarted.

Selecting a test will reveal the sub-tests that make up the test, and any patient reminder settings.

By default, there are three available tests:

1. **ReJoyce Automated Hand Function Test (RAHFT)** - This includes all sub-tests, utilizing all functions of the ReJoyce hardware.
2. **Arm Range of Motion Test (AROMT)** - This includes a subset of tests in the RAHFT to test only gross motor movements of the arm.
3. **Hand Function Test (HFT)** - This includes a subset of tests in the RAHFT to test only fine motor movements of the hand.

Patient Reminders

Reminders can be set for tests so that patients, when using the ReJoyce application in Patient Mode, will receive reminders to take tests.

The reminder setting for a given test can be set to one of four settings:

- **Never** - No reminders will be given for the test. This is the default setting.
- **Daily (Start of Session)** - Patients will be given reminders to take the test as soon as Patient Mode is entered.

- **Daily (End of Session)** - Patients will be given reminders to take the test prior to exiting Patient Mode.
- **Weekly** - Patients will be given reminders to take the test once per week.

Creating Custom Tests

In addition to the default tests, custom tests can be created, allowing selection of only preferred sub-tests.

To create a custom test:

1. In Clinician Mode, with “Tests” selected in the left menu, click the “+ Create Test” button.
2. Give the test a descriptive name.
3. Select the sub-tests that make up the test.
4. *(Optional)* Check the “Make this test available to all clinicians and patients” checkbox if you want the test to be available to all patients. If left unchecked, the custom test will only be available to the currently selected patient.
5. Click the “Create” button.

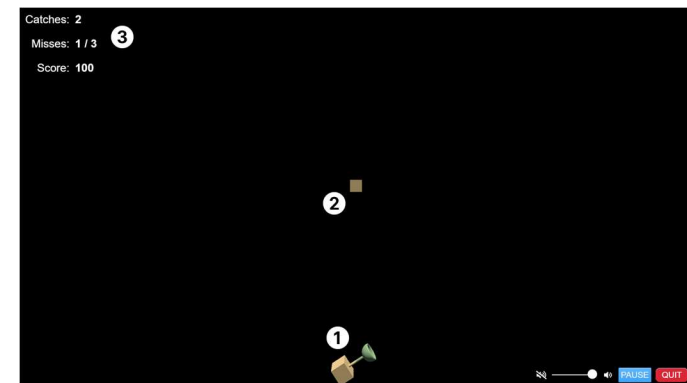
- Game speed

Catcher

Goal

The player must catch as many of the falling color-coded objects in the color-coded buckets as possible.

On-Screen Items



1. **Player-Controlled Catcher:** the player controls location and pitch of the bucket.
2. **Falling Objects:** the player catches each color-coded object in the correctly colored bucket.
3. **Score Information:** indicates the number of catches, misses, and the current score.

Controls

Movement

The player takes control of the cross-hairs using the relevant select ReJoyce control components (lateral and vertical movement of the manipulandum by default).

Aiming and Shooting

To aim, the player positions the cross-hairs over the desired target.

The player manipulates the selected ReJoyce control component to shoot and releases it to reload.

Level Progression

At the end of the stage, the player will receive an overview detailing:

- Total shots taken
- Total shots landed
- Overall accuracy
- Total playtime taken to complete the level
- Score for the level
- Accumulated score for all the levels

Difficulty Settings

The difficulty setting influences the following:

Track Patient Progress

While in Clinician Mode, selecting “Progress” from the left menu will allow you to see test data for the currently selected patient.

Data is displayed per test for a given hand and can be viewed as either a graphical chart to show progress over time, or as a table showing the raw data values.

Exporting Test Data

Test data for the currently selected patient can be exported as follows:

With “Progress” selected from the left menu, select the test from the list whose data you wish to export.

Specify the hand (left or right).

Click either the “PDF” or “CSV” button, depending on the preferred file format:

- “PDF” will create a printable PDF file with the data displayed in both chart and table formats.
- “CSV” will create an editable file with all the raw data that can be opened in a spreadsheet application.

Patient Mode

Launching the ReJoyce application in Patient Mode allows patients to play ReJoyce games, take tests, and track their progress.

To launch the ReJoyce application in Patient Mode, login to ReHab under a Clinician account, select a patient, and click the “Patient Mode” button under the ReJoyce icon.

Playing Games

While in Patient Mode, selecting “Games” from the left menu will display a list of available ReJoyce games.

Selecting a game will display a preview of the game, and options for setting the difficulty and control options.

With the preferred difficulty and ReJoyce hardware control option(s) selected, click the “Play Now” button to start the game.

Take Tests

While in Patient Mode, the patient can take tests as follows:

Select “Tests” from the left menu. This will show a list of available tests.

Select the desired test to take:

Bullseye

Goal

Destroy every on-screen target as quickly and accurately as possible. Each stage will present a new series of targets, with new themes and new behaviors.

On-Screen Items



1. **Cross Hairs:** the player's point of reference for aiming
2. **Targets:** aim at these and fire! Clear all on-screen targets to complete the stage.
3. **Time Remaining:** indicates the amount of time remaining in the stage

Level Progression

Opponent Knock-Down Recovery

Once an Opponent's Health Bar is depleted, he will enter Knock-Down Recovery mode, where he may or may not recover from the knock-down and rise back up.

The higher the difficulty, the higher the chance that the opponent will recover from a knock-down.

Knockouts

Players progress to the next Opponent only after successfully winning a match.

If the player is knocked out, the game will automatically reload the match for the player to try again.

Difficulty Settings

The difficulty setting influences the following:

- Opponent health
- Opponent strength
- Opponent speed
- Likelihood of opponent to revive from a knock-down

- **RAHFT:** This will test all arm and hand functions, using all parts of the ReJoyce hardware.
- **AROMT:** This will only test range of motion of the arm.
- **HFT:** This will only test fine motor functions of the hand using the ReJoyce manipulandum.
- Additional custom tests can be created by clinicians in [Clinician Mode](#).

Select the affected hand (the hand that will be manipulating the ReJoyce hardware).

Select whether an arm support or other supplementary aid is being used.

Click the “Start Test” button to begin the test.

Track Progress

While in Patient Mode, patients can view their test progress by selecting “Progress” from the left menu.

Data is displayed per test for a given hand, and can be viewed as either a graphical chart to show progress over time, or as a table showing the raw data values.

Additionally, data can be exported to file as follows:

With “Progress” selected from the left menu, select the test from the list whose data you wish to export.

Specify the hand (left or right).

Click either the “PDF” or “CSV” button, depending on the preferred file format:

- “PDF” will create a printable PDF file with the data displayed in both chart and table formats.
- “CSV” will create an editable file with all the raw data that can be opened in a spreadsheet application.

Games

Biplane

Goal

The goal of Biplane is to fly for as long as possible without hitting any obstacles.

5. **Player Health:** indicates the player's current health. If fully depleted, the player will be knocked out.
6. **Opponent Health:** indicates the opponent's current health. If fully depleted, the opponent will enter “Knock-Down Mode.”
7. **Score:** indicates the score the player has acquired.

Controls

Movement

The player takes control of the cross-hairs using the relevant select ReJoyce control components (lateral and vertical movement of the manipulandum by default).

Targets

When a green target appears, the player must position the cross-hairs over the target and activate the relevant selected ReJoyce control component (by default, PUSH on the manipulandum).

When a red target appears, the player must position the cross-hairs over the target and activate the relevant selected ReJoyce control component (by default, PULL on the manipulandum) to defend from an incoming strike.

Boxing

Goal

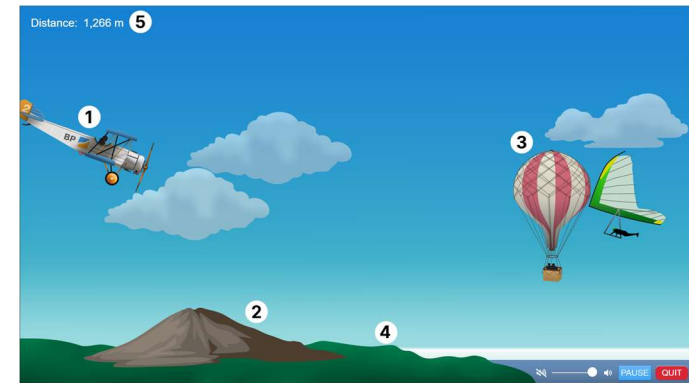
The player must punch opponents and defend against attacks to make progress to the top of the Boxing league.

On-Screen Items



1. **Cross Hairs:** the player's point of reference for aiming
2. **Player Gloves:** indicates defensive guards and offensive strikes
3. **Opponent Targets:** target that the player must hit. Green indicates an offensive target (push the ReJoyce forward) and red indicates a defensive target (pull the ReJoyce back).
4. **Opponent:** The current match opponent.

On-Screen Items



1. **User Plane:** this is the plane that the player controls.
2. **Ground Obstacle:** players must fly over these obstacles to avoid crashing
3. **Flying Obstacle:** avoid these obstacles by flying either over or under them
4. **Ground Boundary:** the player will crash if they fly into the ground
5. **Score Indicator:** this indicates the present distance flown

Controls

The plane is continuously falling down by gravity and the player must manipulate the selected ReJoyce control component to get the plane to lift upward.

Level Progression

Biplane is an endless game, the purpose being to achieve as high a score as possible. The game will automatically restart when the player crashes.

Difficulty Settings

The difficulty setting influences the following:

- Game speed

Blox

Goal

The goal of Blox is to progress through as many levels as possible and achieve the highest number of points.

On-Screen Items



1. **Falling Block:** the block controlled by the player.

2. **Next Blocks:** displays the upcoming blocks that will fall after the current one is placed.
3. **Score Information:** The number of points gained, current level of play, and total lines cleared.
4. **Falling Block Shadow:** Indicates where the currently falling block will land unless moved by the player.

Controls

Falling blocks are moved left and right by moving the relevant selected ReJoyce control component. Blocks can be rotated by moving the relevant selected ReJoyce control component.

Level Progression

The game is endless with level progression being based on the number of lines cleared.

The number of points is based on the total number of lines, and extra points are awarded for multiple lines cleared at once.

The game ends if the blocks are allowed to stack to the top of the grid.

Difficulty Settings

The difficulty setting influences the following:

- Game speed