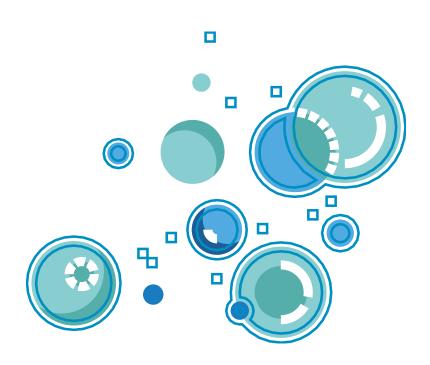
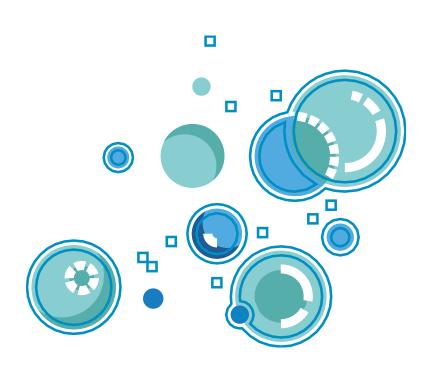


# SHX Multisensory Room User Guide













### **Contents**





How to launch the SHX system

How to control the multisensory room using the SHX app

How to control the entire room using the SHX Controller, Die or Mat

How to control the room using switches

How to access Edit Mode and change the content of a cell

How to create a new scene

How to edit actions activated by each cell

Editing actions: adding multimedia content

Editing actions: adding a sound or song

Editing actions: controlling devices

Editing actions: adding pauses between series of actions

Editing actions: controlling luminous elements

How to enable audio-activated lighting

How to import and export SHX settings

How to use SHX with two screens

How to use SHX Proximity in the sensory room

How to control the system with a different tablet

How to control an SHX Room with Eyetracking

How to control an SHX Room with Voice

How to control an SHX Room from an external program

How to close the SHX System





### How to launch the SHX system





Here are the steps for launching the SHX system with an SHX Rack. Follow the same procedure when using the SHX Compact and SHX Device Lite.

#### 1. Switch on the projector, television or monitor









3. Switch on the PC

OFF ON

4. Switch on the vibroacoustic amplifier

coustic amplifier sound

#### **Vibration**

Sound



ON/OFF

a c b

Make sure the acoustic amplifier has the following settings:

vibration

- a) Direct: off
- b) Main IN: off

**SHX Rack** 

- c) Phase Matching Bass: off
- d) Volume: any setting other than 0
- e) Input: Line 1

#### 5. Launch the SHX program on the PC

The program should launch automatically when you open Windows. If not, double-click on the program icon on the desktop.



You will need a **keyboard** and **mouse** to access the software.



## 6. Switch on the tablet and open the SHX app







## How to control the multisensory room using the SHX app





Once the system is running, you will be able to control the entire room with the tablet.

## 1. Open the SHX app on the tablet

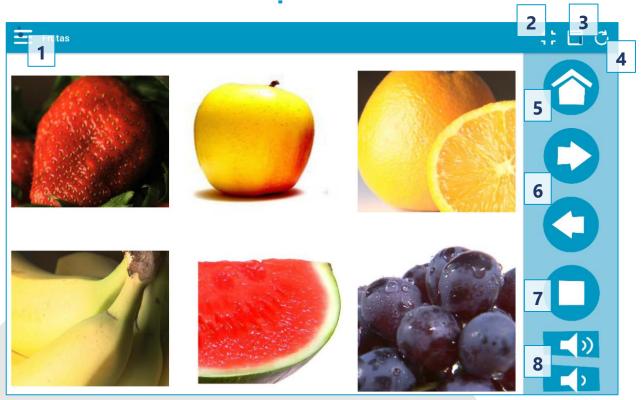
When the SHX app is opened on the tablet, any changes that have been made to the content will be synchronized automatically.



If you have purchased an SHX tablet with the SHX system, no adjustments will be necessary as it is ready for use.

If you wish to control the room with a different tablet (Android or iOS), you will need to adjust its settings to allow it to connect to the server.

See info sheet: How to control the system with a different tablet.



#### 2. Controlling the room with the tablet

Using the SHX app:

- 1. Scene selection menu.
- 2. Full screen mode.
- 3. Hide/Show the navigation bar (in iOS, this option can be accessed from the Menu).
- 4. Refresh edited content (in iOS, this option can be accessed from the Menu).
- 5. Go to the home screen.
- 6. Buttons for moving to the previous or next scene.
- 7. Room STOP button: switches off lights and devices.
- 8. Volume control buttons.



### How to control the entire room using tothe SHX Controller, Die or Mat

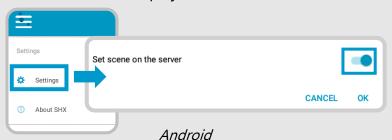




Different controllers, such as the SHX Controller, Die or Mat, can be used to interact with the SHX room.

#### 1. Select a scene

In the Options menu in the SHX app, select "Set scene on the server". Then, search for the scene you wish to work with in the tablet. Any system controller can now be used to activate the cells displayed on the screen.





*i05* 

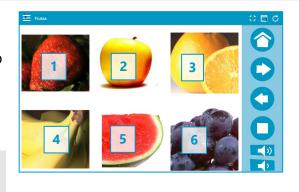
#### 2. Use the SHX Controller

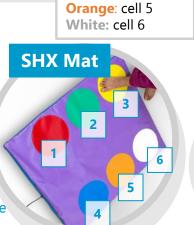
Every button on the SHX Controller corresponds to a cell in the selected scene, in the same order.

- The system recognizes the order of
- the elements in use, not the color of the controls.

#### **Button/cell equivalencies:**

The SHX software cell activated by each button on the Controller, Mat, or face of the Die, is as follows:





Red: cell 1 Green: cell 2

Yellow: cell 3

Blue: cell 4



Place pictograms on each face of the Die.

Remember to charge the Die.

1. Open the zip.

2. Connect it to the charger





On switch

Remember to charge the Controller.



### How to control the room using switches





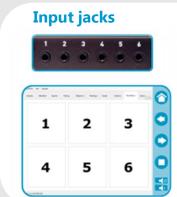
The SHX room can also be controlled using push button switches.

#### 1. Connect the SHX Device

Connect a switch to one of the 9 control inputs depending on the desired function.

- The first 6 jack plugs activate the first 6 cells in in every scene tab.
- The **next 3** activate special functions.





#### **Special function input jacks**

**Scanning**: this input system allows the different cells on the active scene tab to be activated by scanning. A second activation of the switch will launch the content associated with the selected cell.



Random: every activation launches the content of a random cell on the active scene tab.



Sequential: every activation launches the content of each cell on the active tab in order.

#### 2. Select a scene

In the Options menu in the SHX app, select "Set scene on the server". Then, search for the scene you wish to work with in the tablet. The input switch activates the cells on the screen.





Android

105

#### 3. Press the push button



When using wireless switches, remember that both the controllers and the receivers require batteries.



## How to access Edit Mode and change the content of a cell

You will need to connect a mouse and a keyboard to the PC. The TV set or area you are projecting onto, such as the wall, will act as a screen.

#### 1. Exit Reproduction Mode

If you have been displaying content in the room, you will need to exit Display Mode. To do so, move the mouse until a cross appears on the screen. Click it to close and you will return to the main menu.



#### 2. Select Edit Mode

Press F11 or select File -> Edit in the menu.



Check the File menu is not hidden. Press "ALT" to show or hide it.

#### 3. Edit the cells

Double-click on a cell to begin changing its functions.

See info sheet: How to edit cell actions



#### 4. Appearance

Use the menu on the left to change the name of the scene tab, alter the number of rows and columns of cells, display or hide the cell and frame, or edit the image and text in the cell.

#### 5. Confirm changes

## 6. Refresh the content in the tablet

See info sheet: How to control the entire room using the SHX app.





#### How to create a new scene





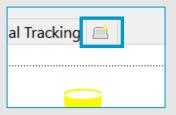
The SHX content is organized in scenes or tabs, in which each a series of cells are displayed. The software can be used to create as many scenes as desired.

#### 1. Select Edit Mode

See info sheet: How to access Edit Mode and change the content of a cell.

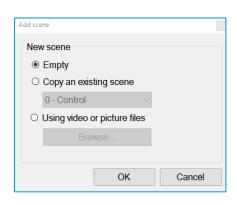
#### 2. Create a new scene

Go to the last scene tab and press "Add scene".



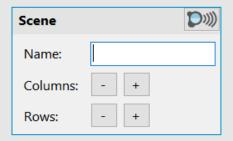
#### 3. Select the scene format

- Blank: this creates a new scene with 6 default blank cells. The number of cells, their position on the tab and their appearance can be changed with the Scene and Cell menus.
- <u>Copy existing scene</u>: this duplicates an existing scene and all its settings.
- <u>From image or video file</u>: this allows you to select several multimedia files and create a cell for each one.



- 4. Name the scene
- 5. Change the number of cells
- 6. Edit every cell

See info sheets: Editing actions...



#### 7. Confirm changes

## 8. Refresh the content in the tablet

See info sheet: How to control the entire room using the SHX app.

The **settings** group together the number of scenes, appearance and combination of actions that are defined in each cell. Every setting is saved in a file with the .bjx extension. You can name each file as you wish. You can create as many settings profiles as you wish, each with its own personalized content to suit the needs of different users or purposes.

See info sheet: How to import and export SHX settings.





## How to edit actions activated by each cell





You can decide how and when the different elements in the sensory room behave by selecting a series of **actions**.

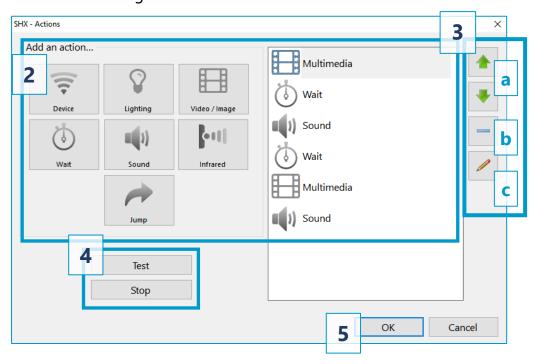
Actions allow you to program special effects adding devices, lighting and multimedia files, for example, into any scene.

See info sheet: How to access Edit Mode and change the content of a cell.

#### 1. Double-click on a cell to go to the "Add an action" menu

#### 2. Select the desired action by clicking on the cell

The icons on the left (actions) will allow you to achieve the desired effect in the room. They will appear in selection order in the panel on the right, from top to bottom. You can use the side bar to navigate between them.



See info sheets: Editing actions: adding multimedia content, Editing actions: adding a sound or song, Editing actions: controlling devices, Editing actions: controlling luminous elements and Editing actions: adding pauses between series of actions.

## 3. Edit actions and change launching order

Use the side buttons with the list of actions to (a) change the order they are launched in, (b) delete them or (c) edit them.

#### 4. Test

You can preview the changes you make with the "Test" button. Use the "Stop" button to stop the actions.

#### 5. Confirm changes





### Editing actions: adding multimedia content







Images, video, webpage or YouTube files can be used in the room by selecting the Video/ Image function.

See info sheet: How to access Edit Mode and change the content of a cell.

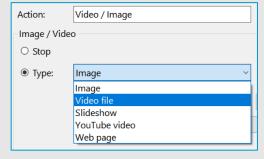
#### 1. Double-click on a cell to go to the "Add an action" menu

#### 2. Select Video/Image by clicking on the cell



#### 3. Select the file type

- · Pause: turns the screen black and silences the sound of the previous action.
- Type: image, video file, slideshow, YouTube video or webpage.



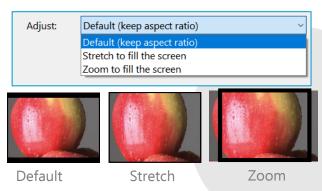
If you choose to use images or video files, we recommend you save them all in the same location on your PC.

- If you wish to generate **new content**, we recommend creating a file with the scene name in
- C:\BJCSHX\ and saving all the audio, video or image files used there. This will make it easier for you to find your content and manage your settings.

You can <u>adjust the image</u> to fit the screen: maintain appearance, expand or zoom to fill the screen.

You can also decide to silence the sound on a video file (Mute) or select Repeat mode to play it on loop.





If the images are part of a slide presentation, such as a series of photographs, you can choose how long each image is projected before the presentation continues. You can also repeat the sequence if you wish.





Remember that some YouTube videos may be subject to broadcasting and copyright restrictions.



## "Editing actions: adding a sound of song





In addition to introducing sounds and songs with the Video/Image action cell, a single sound can also be added to the scene with the Sound cell.

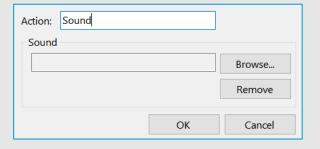
See info sheet: How to access Edit Mode and change the content of a cell.

- 1. Double-click on a cell to go to the "Add an action" menu
- 2. Select Sound by clicking on the cell



#### 3. Select the desired file

We recommend that all the sound files used in the scene are saved in the same location on your PC.



- If you wish to generate **new content**, we recommend creating a file with the scene name in
- C:\BJCSHX\ and saving all the audio, video or image files used there. This will make it easier for
- you to find your content and manage your settings.





### **Editing actions: controlling** devices





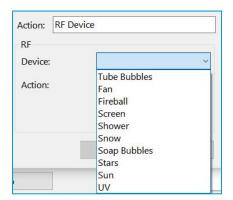


Set the cells to create special effects in the room with a fan, a bubble machine, star projector, UV light or other items using the Device cell.

See info sheet: How to access Edit Mode and change the content of a cell.

#### 1. Double-click on a cell to go to the "Add an action" menu



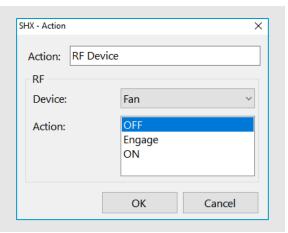




#### 3. Select the device you wish to control from the list

#### 4. Select the desired action

- **ON:** the device will switch on.
- **OFF**: the device will switch off completely.
- **Change state:** The device will work for the length of time assigned in the RF receptor (yellow selector on the Enabler Socket+).



Selector

The **Enabler Socket+** is a device that allows you to use the system to activate and deactivate electrical devices that are plugged into the mains, such as fans, soap bubble machines, etc.

Use the table as a guide to program the activation time of the different devices with the function selector.



Socket+

Avoid setting the selector to 0 (bistable) or small values.

position functions	Operating mode
0	ON/OFF
1	Temp.1s
2	Temp. 2s
3	Temp. 3s
4	Temp. 5s
5	Temp. 10s
6	Temp. 15s
7	Temp. 30s
8	Temp. 45s
9	Temp. 60s
Α	Temp. 1min 30s
В	Temp. 2min
C	Temp. 2min 30s
D	Temp. 3min
E	Temp. 4min
F	Temp. 5min



## Editing actions: adding pauses between series of actions







Sequences of actions can be created and programmed to launch at a different time with the Wait function.

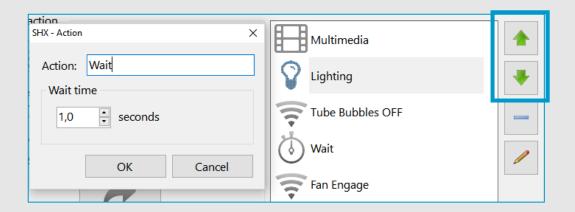
See info sheet: How to access Edit Mode and change the content of a cell.

## 1. Double-click on a cell to go to the "Add an action" menu

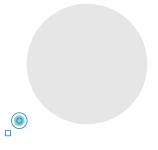
#### 2. Select Wait by clicking on the cell

The Wait function can be used to add pauses between one action and the next or program actions to occur at a specific time, such as special effects during a video projection.





- Use the **buttons at the side** to change
- the order of the actions, delete or edit
- them.





## Editing actions: controlling luminous elements



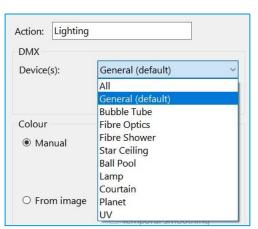


Control the color and intensity of the room lighting and luminous devices with the Lighting function.

See info sheet: How to access Edit Mode and change the content of a cell.

## 1. Double-click on a cell to go to the "Add an action" menu

#### 2. Select Lighting by clicking on the cell





## 3. Select the device you wish to control from the list

The "All" option controls the ambient lighting in the room (LED strips, LED light bars/panels, etc.) and all of the luminous devices (bubble tubes, fiber optic elements, etc.); the "General" option only controls the ambient lighting.

#### 4. Select 1 of the 4 lighting modes

- Manual: Select a color. Adjust the transition time for a gradual color change.
- **Image activated:** The device will light up in the average color of the image being projected.
- **Audio activated:** The device will change color depending on the volume of the noise. There are four different lighting modes:
  - White: the device lights up in varying intensities of white depending on the volume of the noise.
  - <u>VU Meter</u>: the color will change from green to red depending on the volume of the noise.
  - <u>Peaks</u>: the light shines white when the noise goes above a certain level.
  - <u>Random</u>: the color changes randomly when the noise exceeds a certain volume.

Select the sound source in the SHX Program Options menu: microphone or PC output (stereo mixer).

See info sheet: How to configure the sound source for the Audio-activated lighting function

Colour

● Manual

Change

transition time

From image

Increase saturation

Temporal smoothing

Screen:

Default

Automatic

Automatic: The device will change color automatically, following a cycle.



## How to enable audio-activated lighting



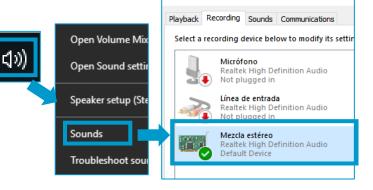


You can select the microphone or your PC (stereo mix) as the sound source to launch lighting effects in the room.

See info sheet: Editing actions: controlling luminous elements

## **1.** Make sure stereo mix is installed and enabled

Go into the sound settings in the Windows control panel to enable the volume on stereo mix or the microphone. A simple way of doing this is to right-click on the microphone icon at the bottom right of the screen and select Sound -> Record.



Sound

- This option is not
- available on all PCs.

You can also navigate to Start -> Control Panel -> Sound.

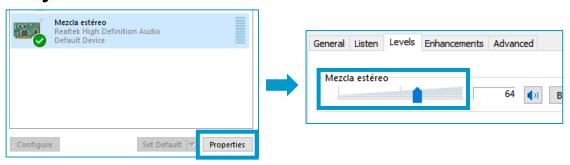


## 2. Select the sound source in the SHX Program Settings menu

In the SHX program in the PC, access the sound source options by navigating to File -> Settings -> Recording device. Select the desired source in the drop-down menu: microphone or PC output (stereo mixer).



#### 3. Adjust the sound levels



You can use the sound settings on your PC to adjust the audio levels to modify the sensitivity of the lighting effects in the room.





### **How to import and export SHX** settings





You can create as many settings profiles as you wish, each with personalized content to suit different purposes and user needs. It is also possible to export or save series of scenes and import them at any moment.

The settings include all the scenes with a specific profile and actions associated with each cell. Every setting is saved in a file with the .bjx extension. You can name each file as you wish.

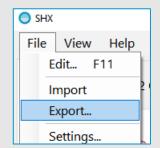
#### To export settings:

#### 1. Use the Export option in the File menu

In the SHX program in the PC, access this menu by selecting File -> Options -> Export...

#### 2. Name and save the setting on your PC

Select the desired folder and save the file. The settings will be saved automatically as a program file with a ".bjx" extension.



Cancel

#### To **import** settings:

#### 1. Use the Import option in the File menu

menu by selecting File -> Options -> Import...

In the SHX program in the PC, access the

#### 2. Select the .bjx file you wish to import

#### 3. Decide if you wish to select the full settings profile or only certain scenes

Choose between "Replace current settings" and "Add scenes to current settings". If you select "Replace current settings", the new settings will replace the current program settings. If you select "Add scenes to current settings", you will be able to select the scenes you wish to import and add to the current program settings.

#### 4. Select the desired option

REMEMBER: multimedia files are not stored in the .bjx file. If you wish to export the settings to another computer, you will need

SHX - Import

☐ 1 - Control

2 - Lighting

☐ 3 - Tube 4 - Fibre Optics 5 - Fibre Shower 6 - Ball Pool

□ 7 - Lamp □ 8 - Planet 9 - Courtain ■ 10 - Microphone □ 11 - Chillout ☐ 12 - Transport

Replace the current layout

Add scenes to the current layout

He

File

View

Edit... F11

Import

Export...

to copy and store the multimedia files in the same location.





#### How to use SHX with two screens





The SHX System allows multimedia content to be projected with two screens or projectors in order to create more immersive sensory environments.

#### 1. Adjust the number of available screens and define the default screen

Access File->Settings->Video/Image to select one or two screens for projecting the multimedia content <a> Check the File menu is</a> (images and videos).

File View Help SHX - Settings Edit... F11 Import Export... Settings... Exit

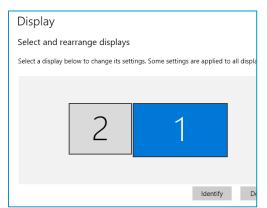
not hidden. Press "ALT" to show or hide it.

Interface English Language: Video / Image Available screens: Default screen: Default screen: Right Left Open Display settings Right

If two screens or projectors are connected to the SHX System, select which will be the main screen. From now on, content will be projected there by default, and you will use it to access the Edit Mode.

Click on "Open Display settings" to see the screen order and which is the default and secondary screen on your computer.

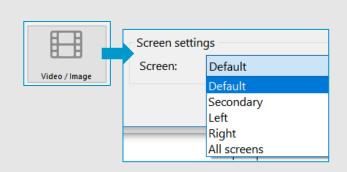
You can select and organize your screens in the Windows screen settings menu. Click on "Identify" to find out which is n°1 and which is n°2. Then, change the screen order by dragging them with the mouse.



#### 2. Select where you want to project your images and videos in every multimedia action

See info sheet: Editing actions: adding multimedia content

Once you have adjusted the number of screens, you will be able to define how your content is projected when you edit it.



If you only wish to project on one screen, select "Default" on the Display Settings menu. If you are using two screens, you can select all screens, the secondary screen, the left or the right.





### **How to use SHX Proximity in** the sensory room







SHX Proximity allows you to interact with the elements in the sensory room using real, physical objects. Activate the desired content and effects by moving the cards or stickers close to the SHX Proximity device.

#### 1. Connect the SHX Proximity Device to a USB port on the PC



### 2. Open the SHX program in the PC and



access Edit Mode

3. Select the scene or cell that you wish to link with the card or sticker

See info sheet: How to access Edit Mode ...

Remember that, in order to create effects, you need to assign actions to cells beforehand.

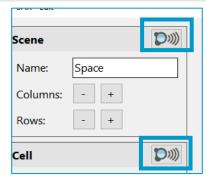
See info sheet: Editing actions...

#### 4. Click on the SHX Proximity icon and move the card or sticker close to the SHX Device

The icon will allow you to link individual scenes and cells to SHX cards or stickers.

> Use a **scene** change to adjust the actions of the controllers (remote control, etc.).

Use a **cell** change to enable or launch the effects of different elements in the room.



Click on the SHX Proximity icon and place the card or sticker on the SHX Device. Wait for a few seconds, and when the recording process has finished, remove the object and click on OK to confirm the setting.

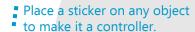
If an error message appears, there is a problem with the connection. Make sure the reader is correctly connected and bring the reader and receiver closer together.



#### 5. Use the card or sticker to control the room

Move the card or object that has the sticker on it towards the SHX Device to launch the effects in the room.







card or sticker as often as you wish. The special function cards that come SHX Proximity are protected and cannot be reprogrammed.





### How to control the system with a different tablet





Both Android and iOS tablets can be connected to the SHX system.

#### 1. Use the tablet to download and install the SHX app

To find it, simply type SHX BJLive! into Google Play or the App Store.





#### 2. Adjust the WiFi settings on the tablet or PC

The tablet and PC (SHX server) must be connected to the same wireless network in order for the system to work correctly.

The SHX System is programmed to create an internal wireless network (without internet connection). To do so, enter the SSID (the default is **MultisensorialSHX**) and the password provided. We recommend deleting other wireless

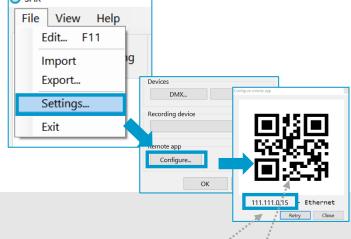
**networks from the device** to avoid it connecting

to them automatically.

3. Find the SHX server's IP address on the PC

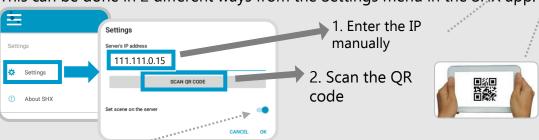
In the SHX program in the PC, access the server application menu by selecting File -> Settings, Remote app -> Settings...

- Check the File menu is not hidden.
- Press "ALT" to show or hide it.



#### 4. Enter the tablet IP address

This can be done in 2 different ways from the Settings menu in the SHX app:



- Remember that, in order for the other room controls to work correctly, the tablet must
- have the "Set scene on the server" option selected.



## How to control an SHX Room with Eyetracking





Using SHX App for Windows. Same for other access methods. Compatible with SHX Server 1.6 or superior.

- 1. Use a computer with an installed eye-tracker device
- 2. Install in this computer the SHX App for Windows from the Microsoft Store

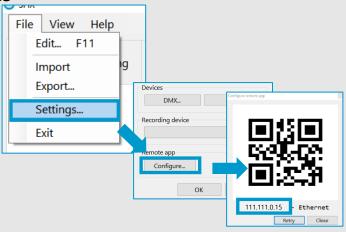
Type "SHX" in the store or use this link <a href="https://www.microsoft.com/en-us/p/shx/9nwhx2znqlrf">https://www.microsoft.com/en-us/p/shx/9nwhx2znqlrf</a>

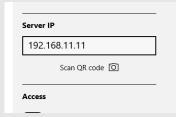
- 3. The computer with the eye-tracker and the SHX App for Windows must be on the same network as the computer with the SHX Server
- 4. Configure the Eye-tracker as a mouse

#### 5. Find the SHX Server's IP address

In the SHX Server, access the server application menu by selecting File - Settings, Remote app - Settings...

- Check the File menu is not hidden.
- Press "ALT" to show or hide it.





6. Enter the SHX Server's IP address in the SHX App for Windows (ie, the computer with the eyetracker)

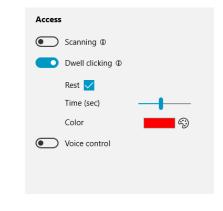
Go to Settings - Server IP

#### 7. Activate Dwell clicking

Go to Settings – Access

#### 8. Choose your preferences.

- Activate or deactivate the **rest option**.
- Choose the dwell **time** to select the item.
- Select the color of the countdown indicator.







## How to control an SHX Room with Voice





Use customised voice commands with the Windows voice recognition engine.

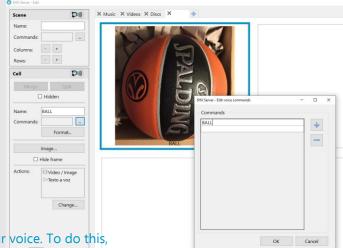
#### 1. Connect a microphone to the SHX computer

• We recommend you to use Voice kit



## 2. Select the cells that you want to control and add a name and/ or voice command

- Each button can have several
- voice commands



- You can also change scenes with your voice. To do this,
- go to the scene, click Scene Commands and add
- the word(s) that will allow you to activate the scene.

#### 3. Set the Voice Options

Select File - Settings – Access and configure the options:

- Status: ON/OFF/Sleep
- Dictionary: choose language
- Threshold: set the level of accuracy
- General commands: customised the commands by default volume up, volume down, stop, wake up and sleep

#### 

#### 4. Use it!

- Say a voice command to launch a specific SHX content.
- Say the name of a tab to change from one scene or tab to another.
- If there's a duplicated voice command, the buttons of the open scene have priority.
- In General commands, "Sleep" switches off the voice recognition, "Wake up" starts it again.





## How to control an SHX Room from an external program





Using SHXRemote, you can launch contents from Grid3. This process is similar to other programs. Compatible with SHX Server 1.6 or superior.

1. Install SHXRemote in the computer where Grid3 is installed

**Download it from:** http://update.bjliveat.com/SHX/SHXRemoteSetup.exe

2. The computer where Grid3 is installed must be on the same

network as the SHX Server

3. On the SHX server, go to edit mode and add a voice command to the cells you want to control

See info sheet: How to control an SHX Room with Voice

#### 4. Edit Grid 3

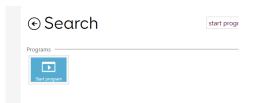
- a) Create a new cell and add a "Start Program" command.
- b) Browse inC:\Program Files (x86)\BJLive!\SHXRemoteand select SHXRemote.exe
- c) In the field "Arguments" of the Start Program command in Grid 3, add the name of the voice command of the selected cell in SHX.

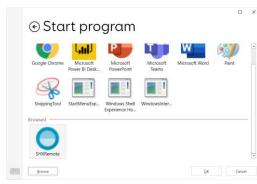
#### 5. Use it!

Every time you press the cell the SHX content will be launched.



In this example we've added "BALL"







Commands





### How to close the SHX System



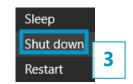


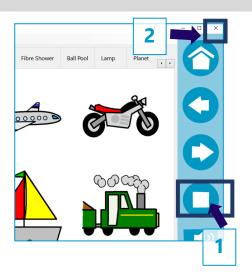
When the activity has finished, follow these steps to switch off the devices and close the SHX system in the room.

#### 1. Press the SHX app OFF button

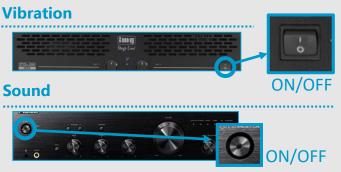
This way, you will switch off all the devices in the room. It will be impossible later!

- 2. Close the SHX program in the PC
- 3. Select the Shut Down option on the Windows menu.





#### 4. Switch off the SHX Vibroacoustic Amplifier



5. Switch off the SHX Device









7. Switch off the projector, television or monitor

**SHX Rack** 



sound



8. Switch off the SHX Controller and Die to save battery power







# Immerse yourself in the world of SHX!

If your require any additional information, please contact us at <a href="mailto:info@bjliveat.com">info@bjliveat.com</a>

