



User manual

xp.visual

xp.visual is a m4l (max-for-live) device. It comes inside the XP bundle under the file name *xp.visual.amxd*

The *xp.visual* device works dynamically with XP standalone. It doesn't process any sound or midi and instead works as an advanced remote to control XP standalone from Ableton

Working

Only one *xp.visual* is required and must be loaded at first in a project. However the device doesn't process any audio signal, we recommend to preferably load it on an audio track. On load in a Live project, it instantly launches *xp standalone* which works in symbiosis with it. Moreover, this latter cannot be opened without loading *xp.visual*. So it is fundamental to start by loading this device on a new empty track

Loading

The track on which it is loaded takes the name *visual1* **Don't rename the track.**

The 3d scene screen of *XP* appears after load time, and you can now add the second device *xp.engine* (see *xp.quickstart*).

Saving a default template or project in Live with the device already loaded on a track will spare user further time of instancing.

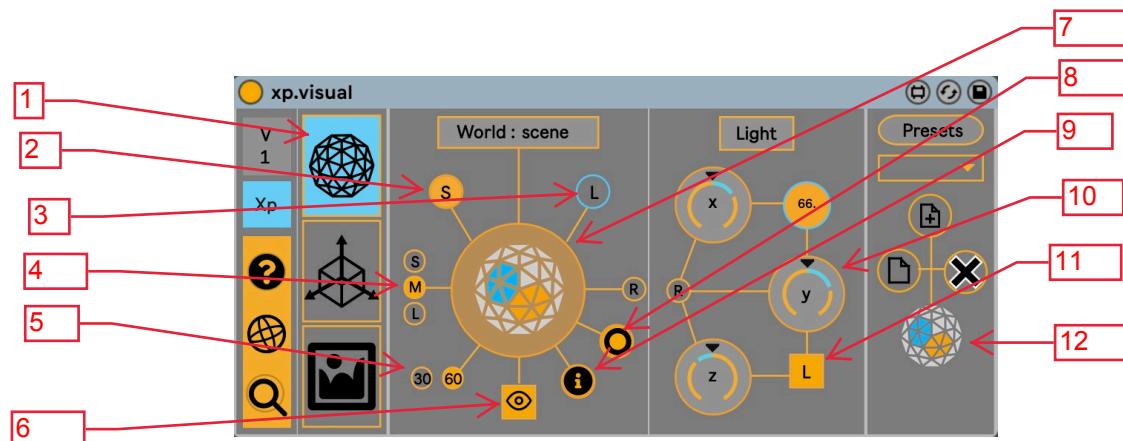
Depending on the complexity of an already saved project (number of sources for instance), the loading time of such project might increase to allow instancing of each of the other devices. Be sure to wait until the 3d scene appears before loading any other *xp.devices*

As other *xp.devices*, be aware that it uses Osc to communicate with the application (see *Initialization in xp.app-doc*).

Mode

From the version 1.11, *xp* is supporting two modes of audio rendering, that are accessible from this device. In **scene** mode (S), *xp* will operate and display the usual spatial audio scene. In **listener** (L) mode, *xp* works similar as a ""first person shooter" mode, and allows to navigate through the sound scene with **6DOF**, allowing as well head tracking for binaural rendering. Enabling one of the other mode will display different user interfaces in the *xp visual*.

World interface



1 : Menu : navigate through visual interface : world, camera, elements

2 : Select the mode "S"

3: Select the mode "L"

4: Predefined view size (small, medium, large)

5: Set predefined Fps (frame per second)

6: Hide view

7: Stop rendering (it also closes the view and stops audio engine)

8: Hide/show audio reactive circle cue

9: Hide/show datas on the view

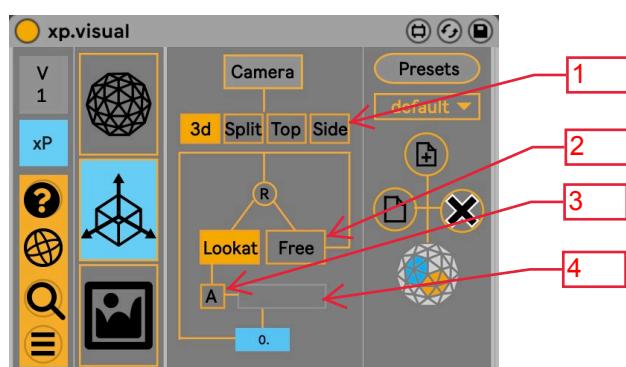
10 : Rotate light (xyz)

11 : Enable/disable light

12 : preset panel

Camera interface

In "scene" mode

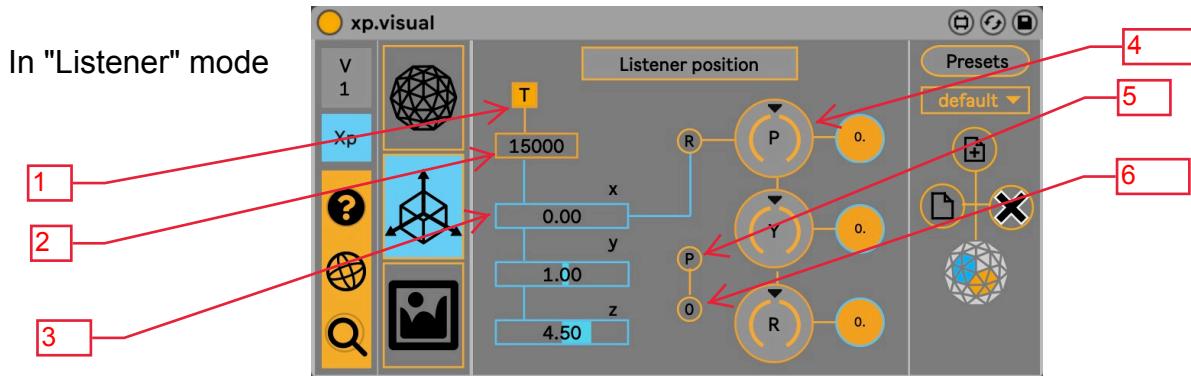


1: view type : 3d, split (top/side), top, side

2 : navigation mode

3 : automatic navigation

4 : Range for the automatic navigation camera



- 1: enable/disable external tracking or assignation
- 2 : sets osc port for datas input
- 3 : sets the position of the virtual listener (x,y,z)
- 4 : sets the listener head orientation (pitch, yaw, roll)
- 5 : reset the listener position
- 6 : sets the listener at position 0/0/0 (for still head tracking)

When 1 (external tracking) is enable, you can assign midi controls or send OSC datas from any externals devives/software to the virtual listener.

In the case of osc, be sure to format address as following :

For position :

/visual/listener/position <x y z>

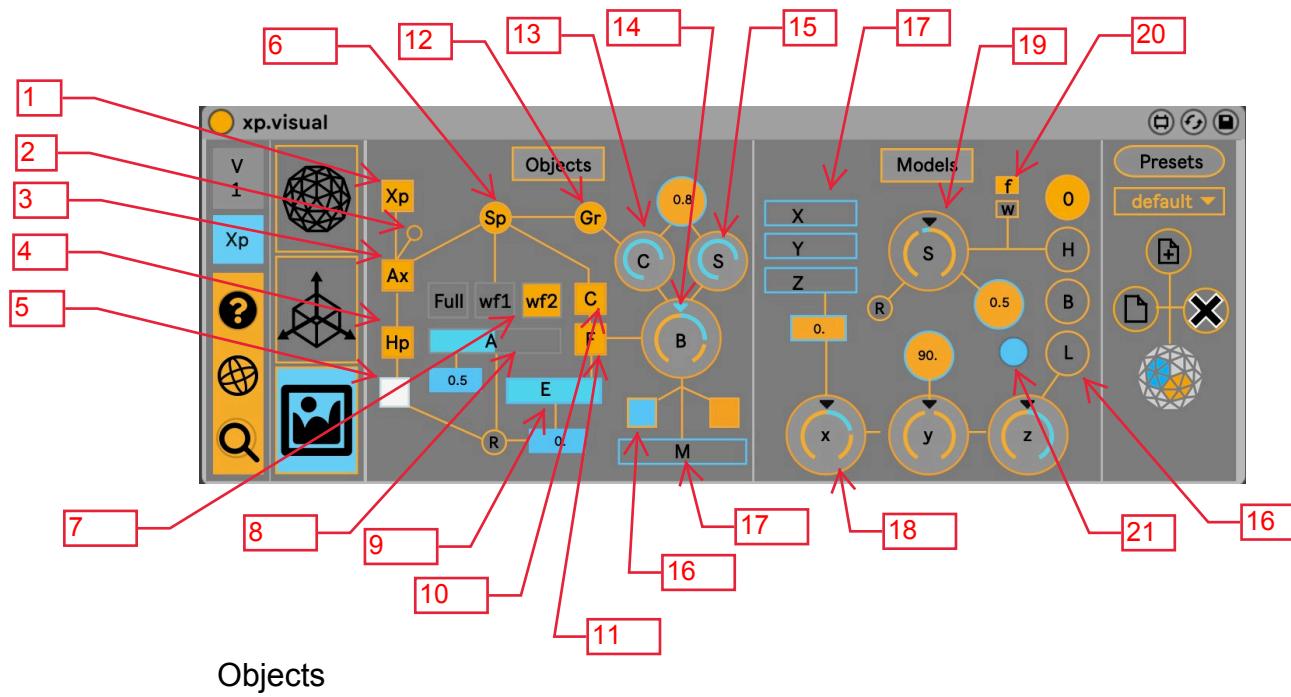
For listener orientation :

/visual/listener/rotatexyz <x y z>

where x (rotate on x axis) is pitch

where y (rotate on y axis) is yaw

where z (rotate on z axis) is roll

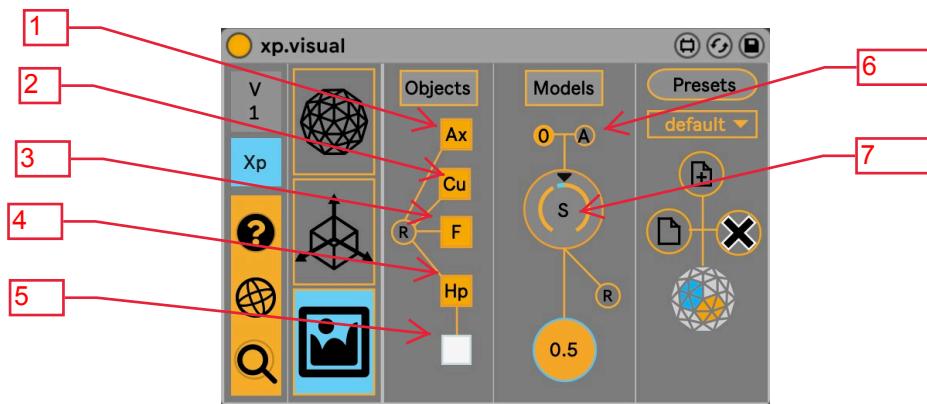
**Objects**

- 1 : show/hide xp icon
- 2 : show/hide degrees reference
- 3 : show/hide axes (xyz)
- 4: show/hide loudspeakers
- 5 : sets loudspeakers colors
- 6: show/hide sphere
- 7: sets sphere display mode (full/wireframe)
- 8: sets sphere alpha
- 9 : sets floor elevation
- 10 : show/hide cube
- 11 : show/hide floor
- 12 : show/hide layer of gradient color
- 13 : sets contrast of gradient layer
- 14 : sets brightness of gradient layer
- 15: sets saturation of gradient layer
- 16 : sets the two colors of gradient layer
- 17 : sets the mix of the 2 gradient layer colors

Models

- 16 : sets a 3d model in the view (head, human, load)
- 17 : sets 3d model position (xyz)
- 18 : sets 3d model rotation (xyz)
- 19 : sets 3d model size
- 20 : sets model display mode (full/wireframe)
- 21 : reset loaded model

In *LISTENER* mode



Objects

- 1 : show/hide axes (xyz)
- 2 : show/hide cube
- 3 : show/hide floor
- 4: show/hide loudspeakers
- 5 : sets loudspeakers colors

Models

- 16 : show/hide a 3d arm model
- 19 : sets 3d arm model size