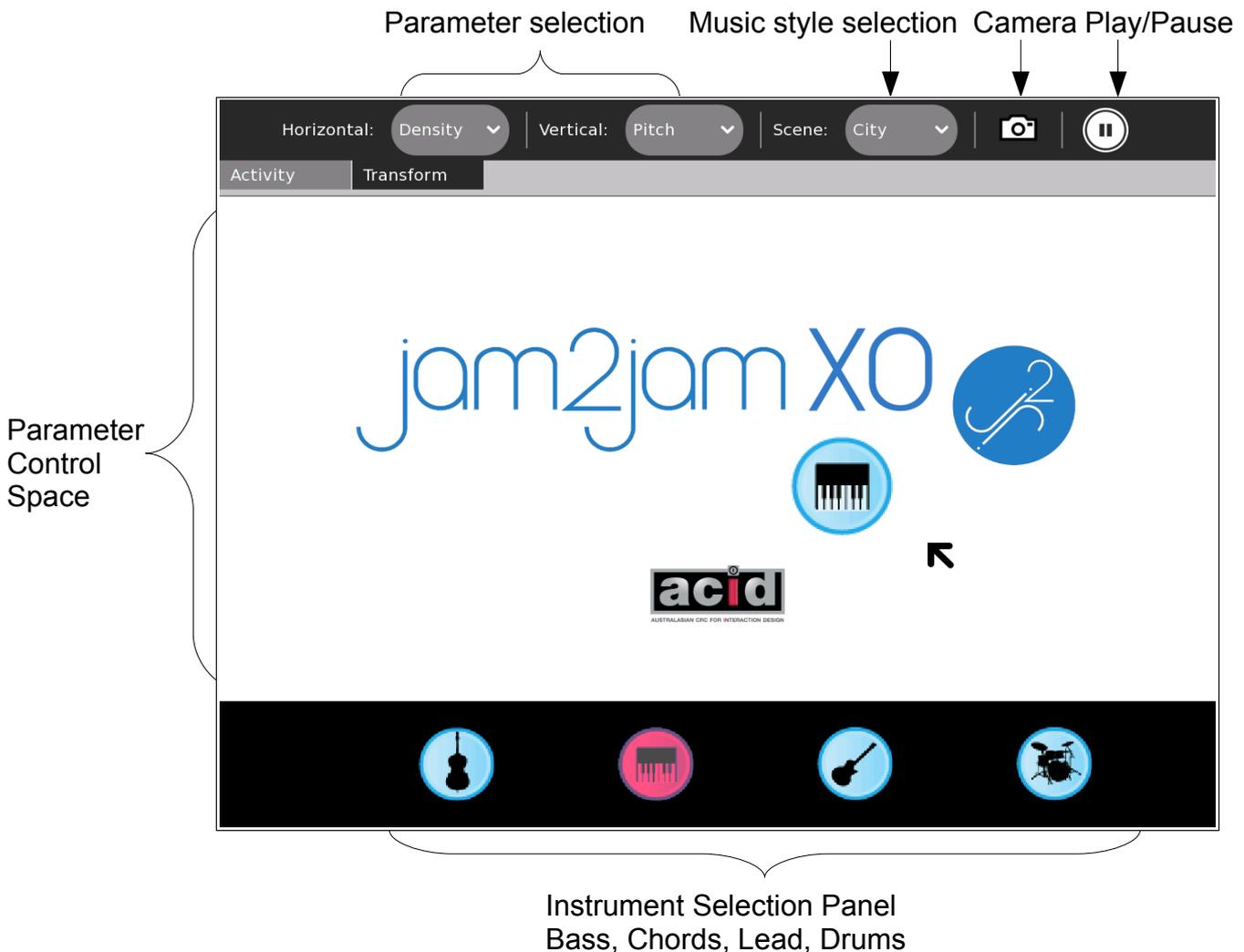




Jam2JamXO guide

Jam2Jam XO is an activity which manipulates musical styles by employing generative algorithms. The game-like interface facilitates changes in the music such as the complexity of musical activity, or the pitch contour of melodies. As a solo or collaborative activity, players can play in a virtual ensemble easily and without much musical knowledge or experience.

Jam2Jam XO Interface



Selecting Instruments

The lower portion of the Jam2Jam screen displays images of instruments in a black panel. Selecting one of these instruments will display the same instrument image in the control space above. Note that an instrument which has been shared, and appears red in the black panel, cannot be selected.

Parameter Control

The parameter control space is the large area below the menu bar, and above the black instrument panel. An instrument is always displayed in this space. The instrument position reflects the parameter values assigned to that instrument, for the parameters assigned on the horizontal and vertical axes.

By default, the horizontal axis is assigned to display 'Density', whilst the vertical axis displays 'Pitch'. Thus the horizontal position of the instrument reflects value of the 'Density' parameter for that instrument, whilst the vertical position reflects the 'Pitch' parameter value. The type of parameter can be changed by selecting a parameter from the 'Horizontal' or 'Vertical' drop-down menus, located in the 'Transform' menu bar.

By moving the instrument in this space, you are able to adjust two parameters at a time. The parameter changes will produce an audible difference in the music for that instrumental part.

Selecting Scenes

A 'Scene' a musical style. By default, Jam2Jam always begins with the 'City' scene. This can be changed by selecting a style from the 'Scene' drop-down menu, located in the 'Transform' menu bar. Scene changing becomes unavailable when instruments are being shared in a Jam.

Camera

Clicking on the camera icon in the 'Transform' menu bar will replace the background image with a photo taken by the XO. Taking multiple photo's will set the background to cycle through images in time to the music.

Pause / Play

Clicking on the pause / play icon in the 'Transform' menu bar will toggle the playback of the music and any images.

Key Commands

Various keyboard and XO display buttons offer an alternative to using the mouse.

Arrow Keys and XO arrow buttons on the left of the display.	Provide horizontal and vertical movement to the selected instrument.
P	Select the Pitch parameter for horizontal movement.
D	Select the Density parameter for horizontal movement.
L	Select the Length parameter for horizontal movement.
T	Select the Timbre parameter for horizontal movement.
V	Select the Volume parameter for horizontal movement.
Shift + P	Select the Pitch parameter for vertical movement.
Shift + D	Select the Density parameter for vertical movement.
Shift + L	Select the Length parameter for vertical movement.
Shift + T	Select the Timbre parameter for vertical movement.
Shift + V	Select the Volume parameter for vertical movement.
1 and XO display game button <input type="checkbox"/>	Select the Bass Instrument to control.
2 and XO display game button <input checked="" type="checkbox"/>	Select the Chords Instrument to control.
3 and XO display game button <input type="radio"/>	Select the Lead Instrument to control.
4 and XO display game button <input type="checkbox"/>	Select the Drums Instrument to control.

Jamming in a group.

Jam2Jam XO can be used as a collaborative tool, allowing for multiple players in a 'Jam'.

A Jammer can 'Share' a jam by selecting the 'Neighbourhood' option from the 'Share With' button in the 'Activity' tab. When a Jammer 'shares' a jam, they become a kind of 'band leader'. Their Jam2Jam will continue to play all the instrumental parts, until other jammers begin to join the shared jam.

When someone joins a shared jam, they take an instrument. For the sharer of the jam this means one instrumental part will stop playing and the instrument will dim to red in the Instrument selection panel. This instrument has been relinquished by the 'band leader'. For the joiner of the jam, this instrument is selected for them to play with. They will play the instrumental part of only that instrument.

Up to four jammers (one per instrument) are able to join a jam. During a jam, jammers can re-select any other available instruments. Note that someone joining a jam will only ever play one instrumental part at a time. The 'band leader' on the other hand, will play all the

instrumental parts which aren't being shared.

Notes on networking:

Timing information is communicated to ensure the jammers stay 'in time' with each other. Parameter data is also communicated when instruments are shared and relinquished, so as to allow jammers to 'pick up' where the part was last left. The success of this – especially the ability to synchronise in time – will depend on the reliability of the network connection.

Known Issues:

It is recommended to turn the 'Automatic power management' feature in the control panel off. The control panel can be accessed by hovering the mouse over the XO icon in the middle of the circle of activities in the 'favourites' view.

Jam2Jam XO has been developed and tested on the XO version 1.0, running Sugar 0.82.1, build 767. Feedback on the performance of Jam2Jam on other XO's, or Sugar environments is welcome.