This is Zenpho's quick and dirty guide to getting Jack, Ableton Live and PureData to work together allowing you to use Pd as an effects plugin via the JACK-PLUGIN Audio Units on MacOSX.

REQUIRED SOFTWARE AND INSTALLATION

Install Jack OsX 0.74
Install Live 5.2
Install PureData Extended 0.38.4 RC8

Start JackPilot.

Set JackPilot Preferences to be exactly as below:
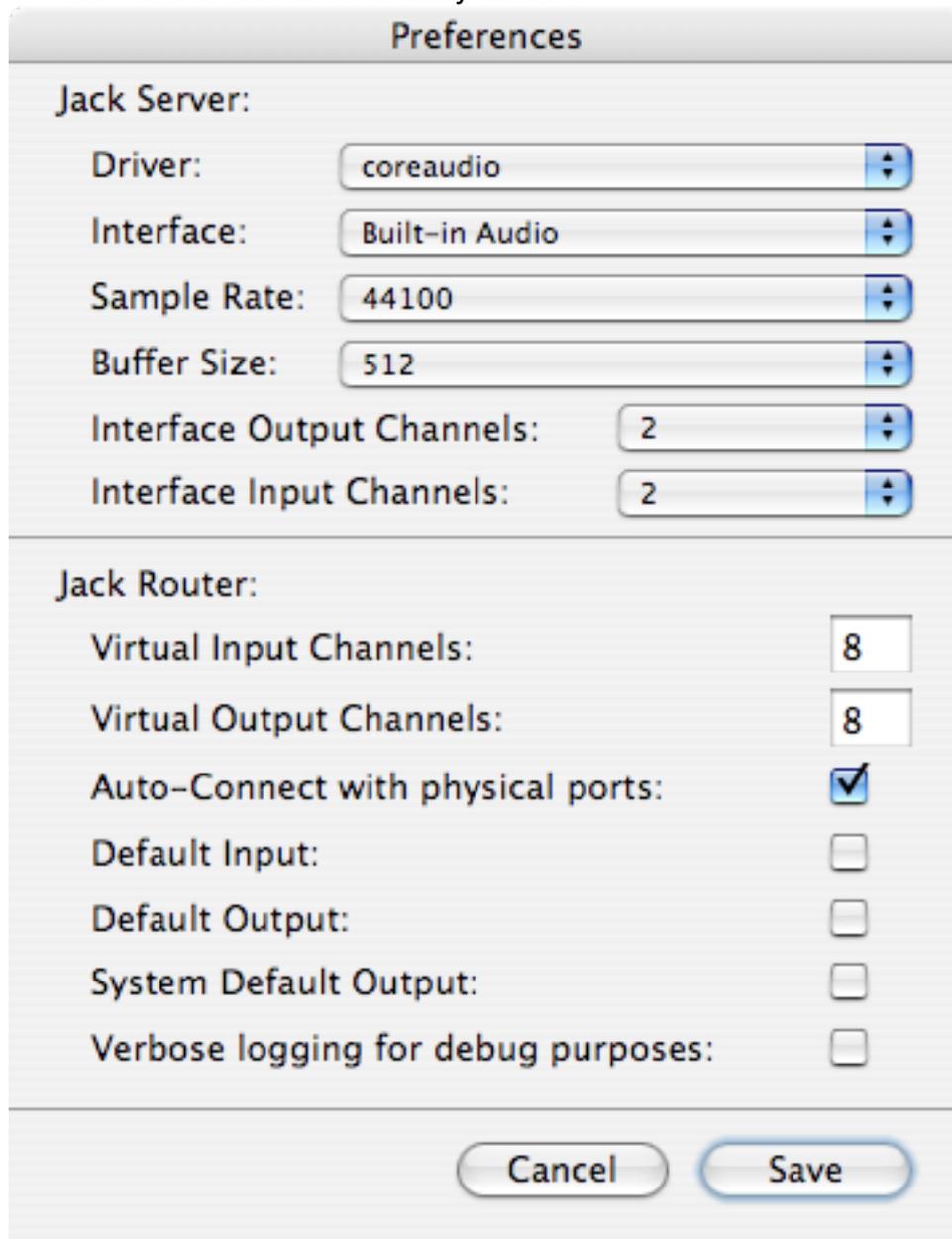
Click SAVE in JackPilot Preferences.

Back to the JackPilot main window, click START
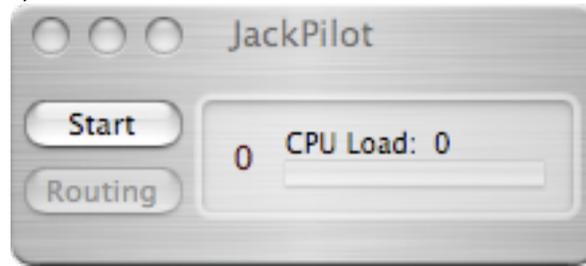
A message will appear "Jack server is starting" and JackPilot window
will now show CPU Load and the Routing button un-greyed.

Click ROUTING button:
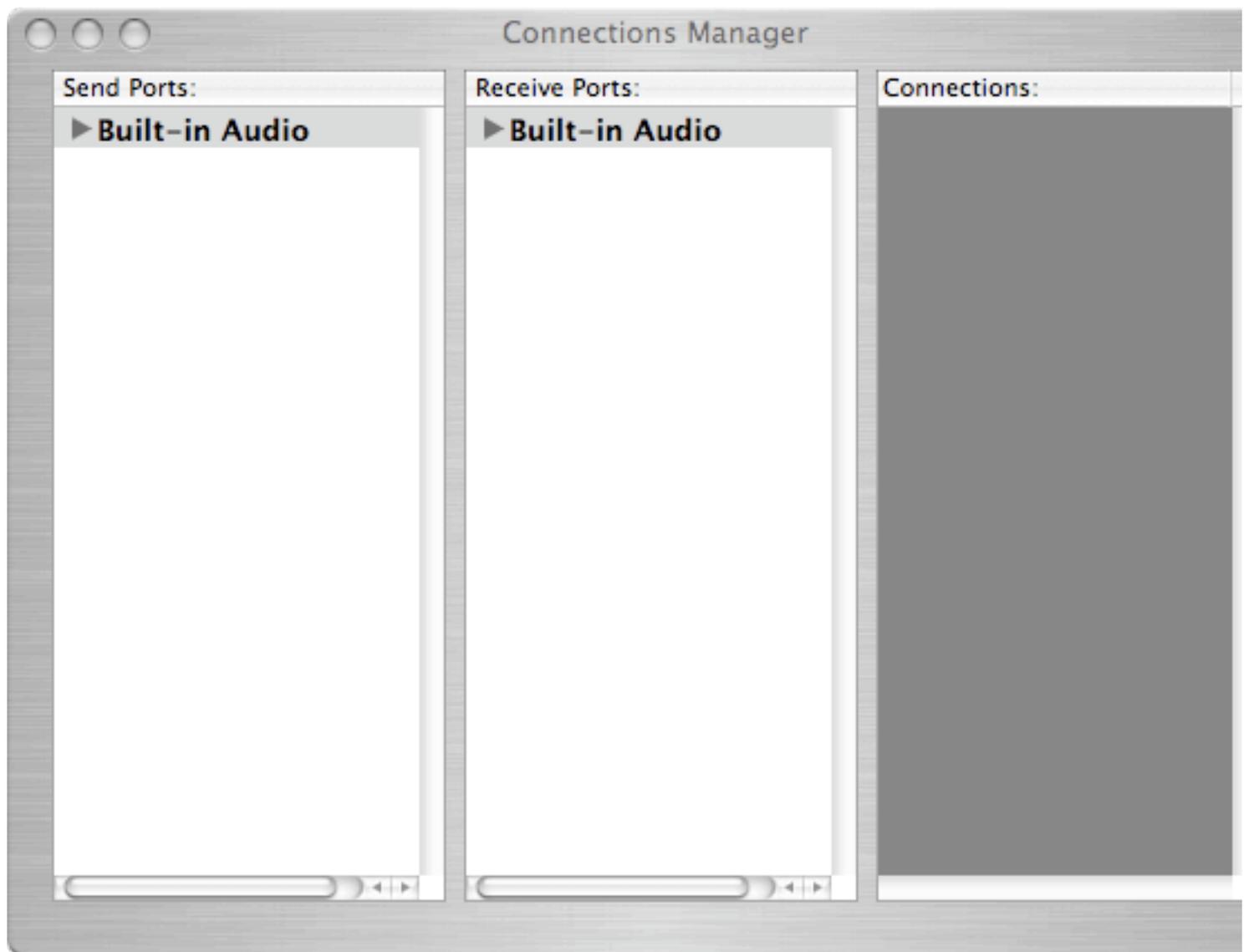
The Connections Manager window is where you connect outputs of to inputs and thus route audio around
between applications. Built-in Audio is the only input /output pair shown at the moment.

Start AbletonLive

Live

Live will request serial number:

Enter Your serial number

Welcome to Ableton Live.
Please enter your Live 5 serial number.

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Click CANCEL

Cancel

Live will display products information:

| Audio | MIDI/Sync | Plug-In | Defaults | Misc | Products |

Product	Status
Live 5	Demo Mode
Operator	Hidden
Live 5 Essentials	Installed
Live 5 Lessons	Installed
Operator Pack	Installed
Search for more Live Packs...	

Click the AUDIO button (top left). Live will show audio preferences.
Change the settings to read exactly as below:
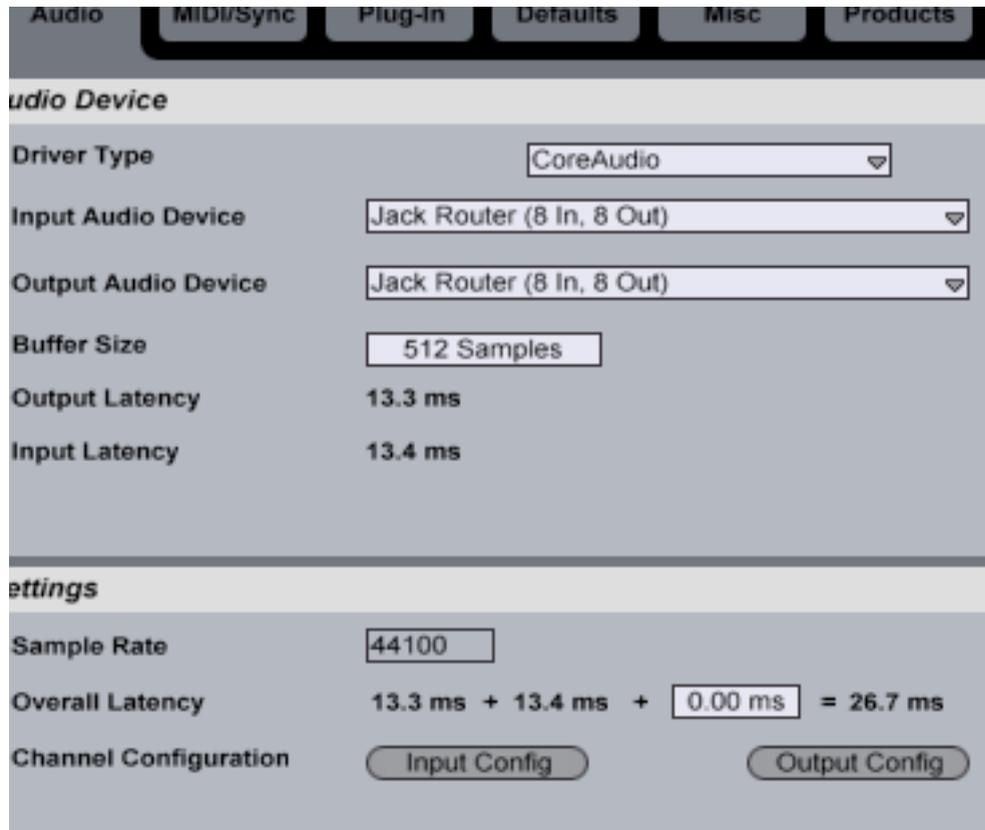
Click OUTPUT CONFING. Change the settings to be exactly as below:
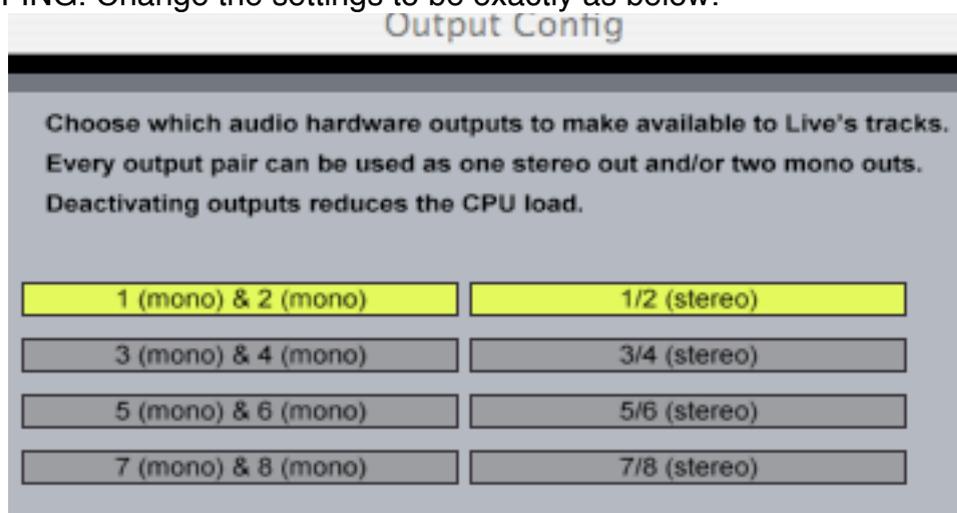
Click OK
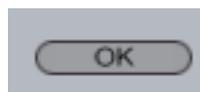
Do the same for INPUT CONFIG, change settings to be exactly as below:
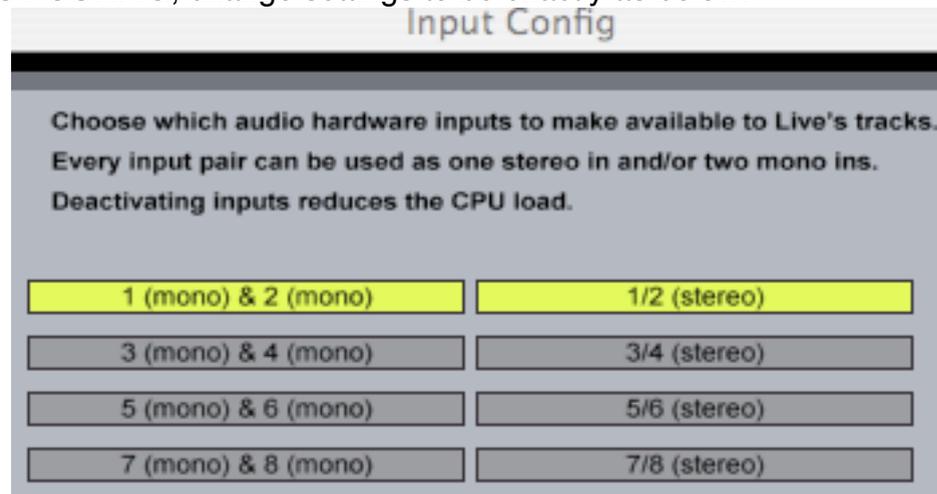
Go to the plugins tab (3rd along). Change the settings to be exactly as below:
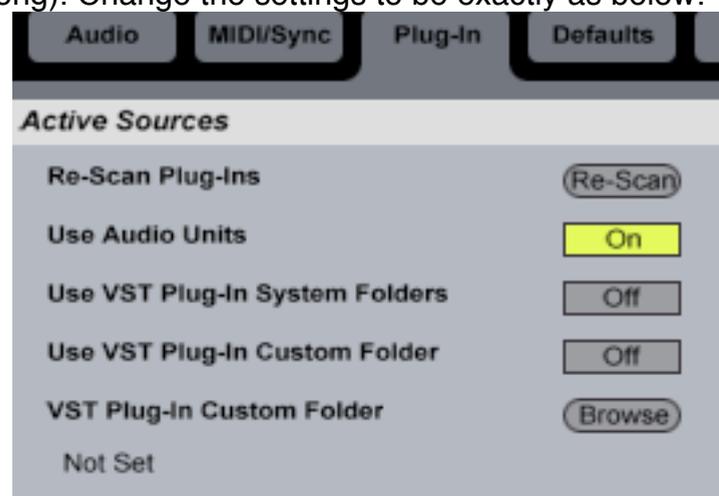
Close the Live preferences window.

In Live, select the first audio channel; "1 AUDIO"
Select the PLUGIN DEVICES BROWSER ICON (top left of the live screen, 3rd icon down)

Scroll down and select the JACK-INSERT plugin within the
JACKOSX.COM folder.

DRAG the plugin icon to the "1 AUDIO" channel name strip near the top of the screen.

The lower part of the screen will show the plugin is loaded, and the plugin information
will appear.

JACK-insert/1-Audio

Jack is online

Johnny Petrantoni JACK-insert v1.6.1, (c) 2003 – 2006.

johnny@meskalina.it

http://www.jackosx.com/

Drop Audio Effects Here
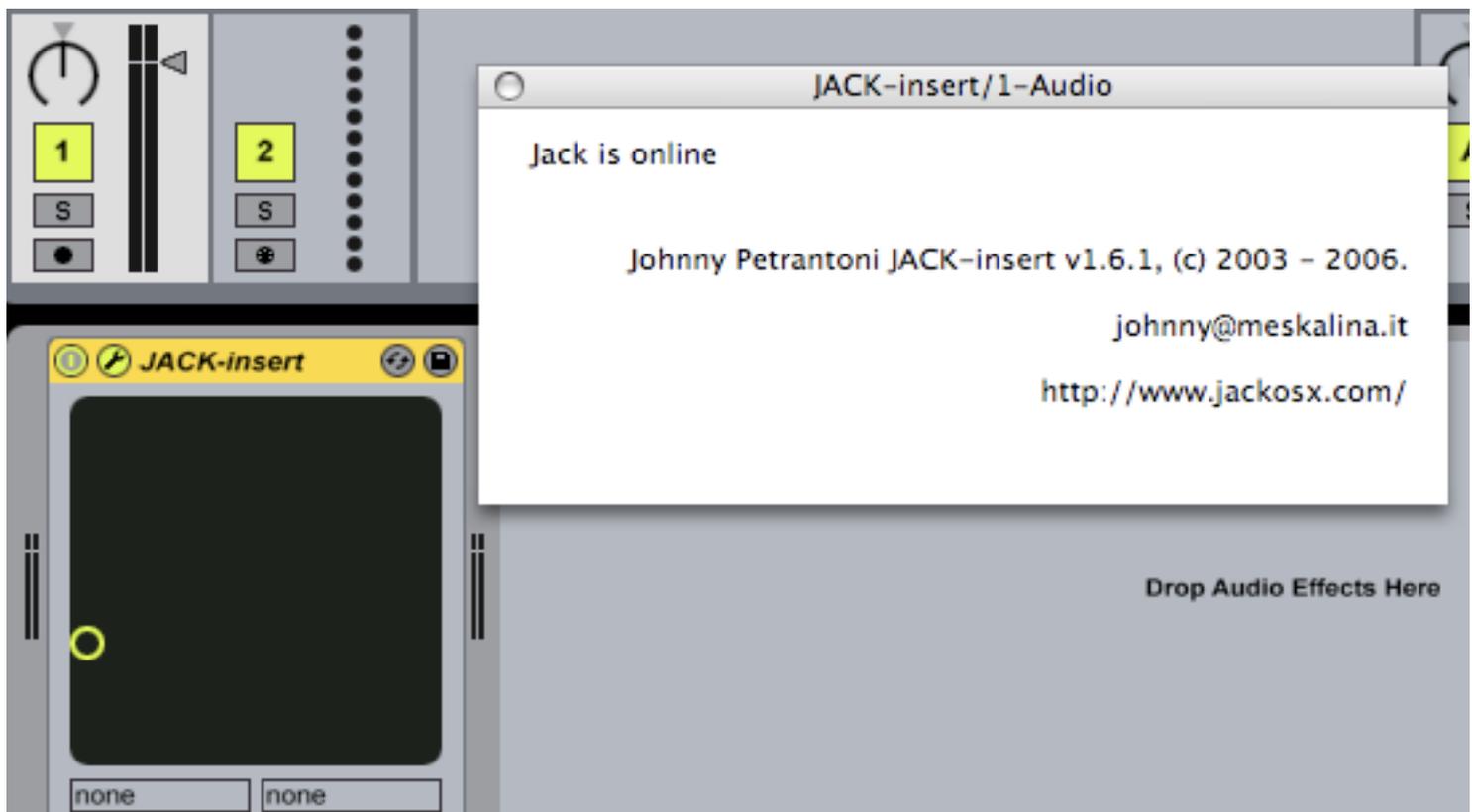
Now start PureData.

Pd-0.38.4-extended-RC8
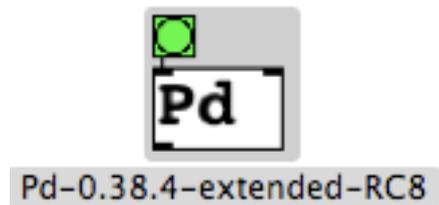
Use the menu to select Media -> Jack
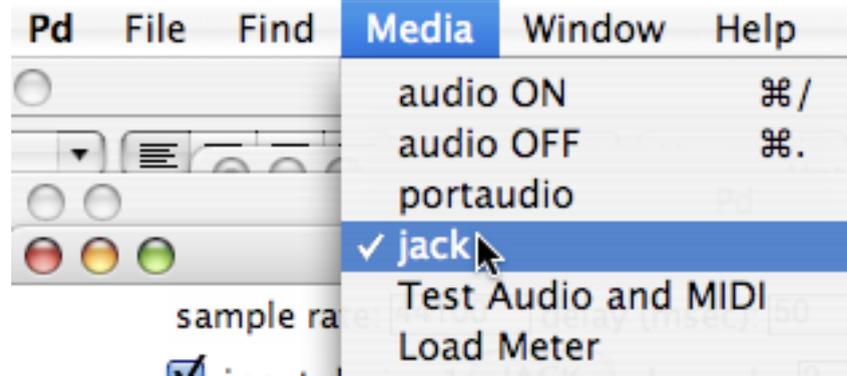
In the audio configuration window, change the settings to be exactly as below:
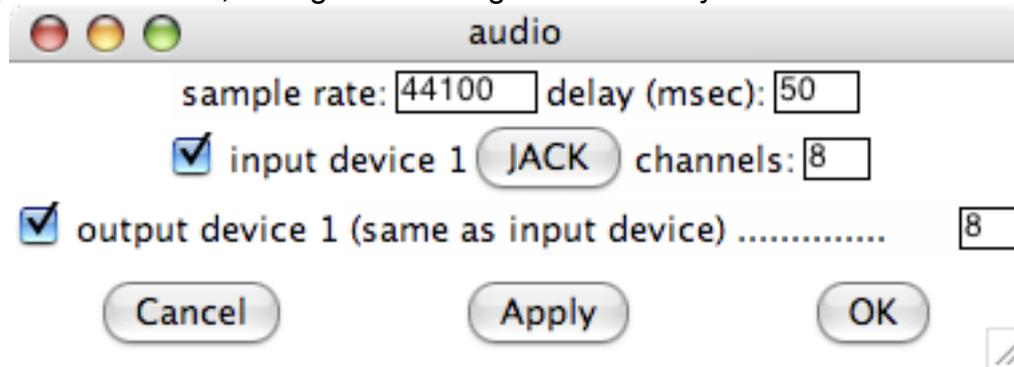
Click OK

Back in the JackPilot routing Connections Manager, there will be PureData and Live inputs and outputs listed:
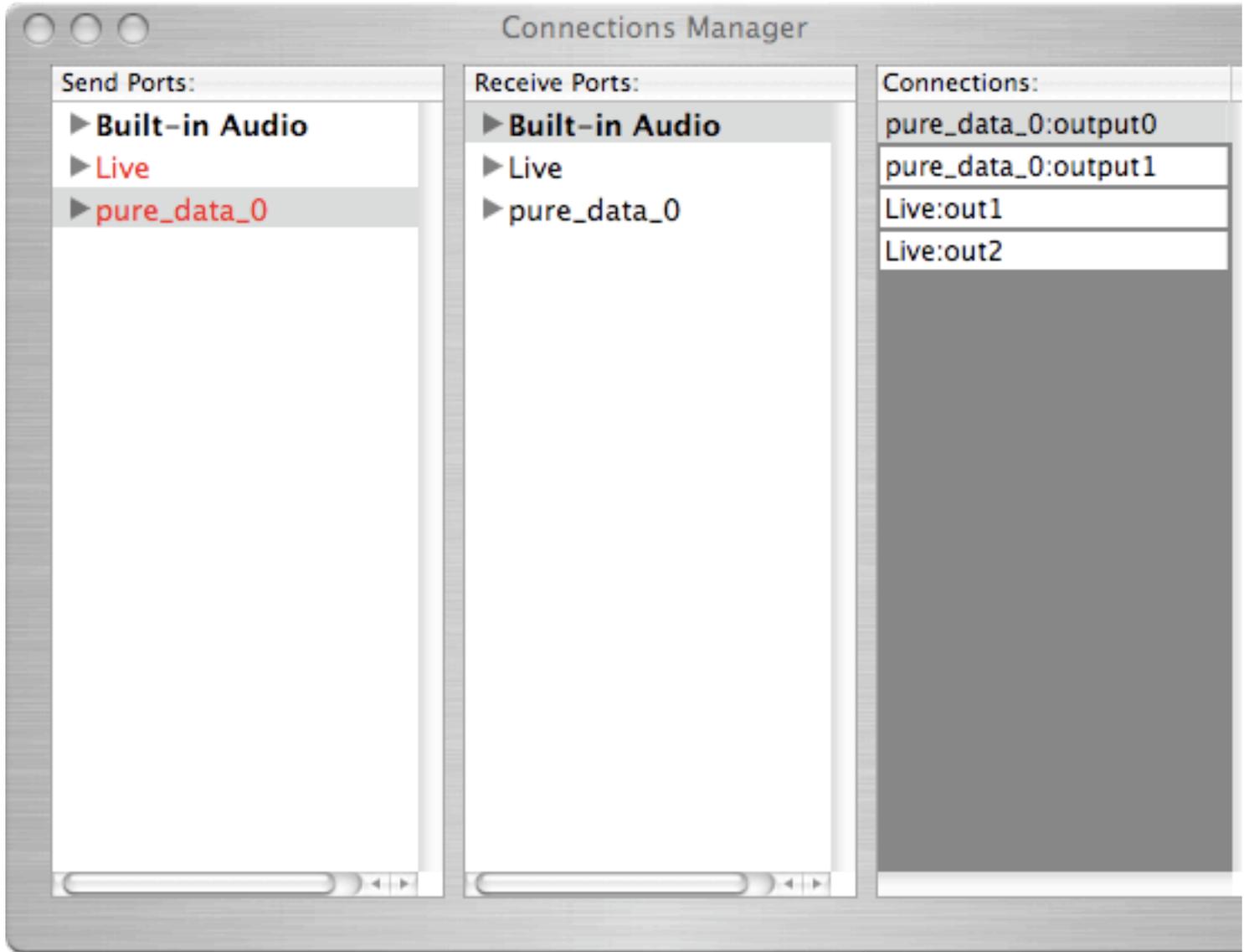
By default; the "1st" and "2nd" channels of Live and PureData (outputs 0 and 1 of PureData, and 1 and 2 of Live)
are routed to Built-in Audio outputs.

In the Live host, you added an insert plugin JACK-PLUGIN, this is listed in the Live SEND-PORT column
as two mono channels "AUsend1" and "AUsend2".
You can route these to PureData Inputs to use PureData as a custom modular effects processor.

Singleclick the Live:AUsend1 entry in the SEND-PORT column.
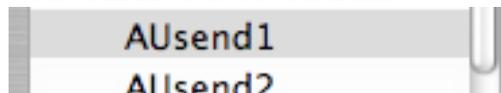
Doubleclick the pure_data_0:input0 entry in the RECEIVE-PORT column.
The entry will change red. Singleclicking on it will show a connection in the CONNECTIONS column.
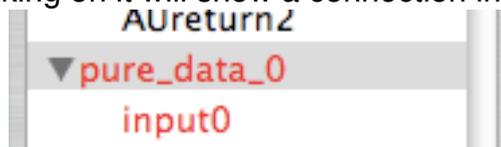
Route the Live:AUsend2 to pure_data_0:input1 in a similar way.
Also route pure_data_0:output0 and output1 entries to Live:AUreturn1 and Live:AUreturn2.

QUICK GUIDE TO ROUTING IN JackPilot:
To expand and contract groupings, click the triangle to the left of the names.

To make and break routings:
Singleclick on a SEND-PORT entry to select it as a source,
**   Any active routings will be shown in RED and listed in the CONNECTIONS column.**

Doubleclick on entries in the Connections column to remove routings.
OR Doubleclick on a RECEIVE-PORT entry to make a routing.

Then build a patch using [ADC~] and [DAC~] objects in pure data to process your live audio.
We've made 8 virtual channels in the JackPilot preferences, so you can add 4 more JACK-INSERT
plugins before we run out of stereo pairs.

An example patch will help you debug channel activity, and do simple ring modulation on the left
input.
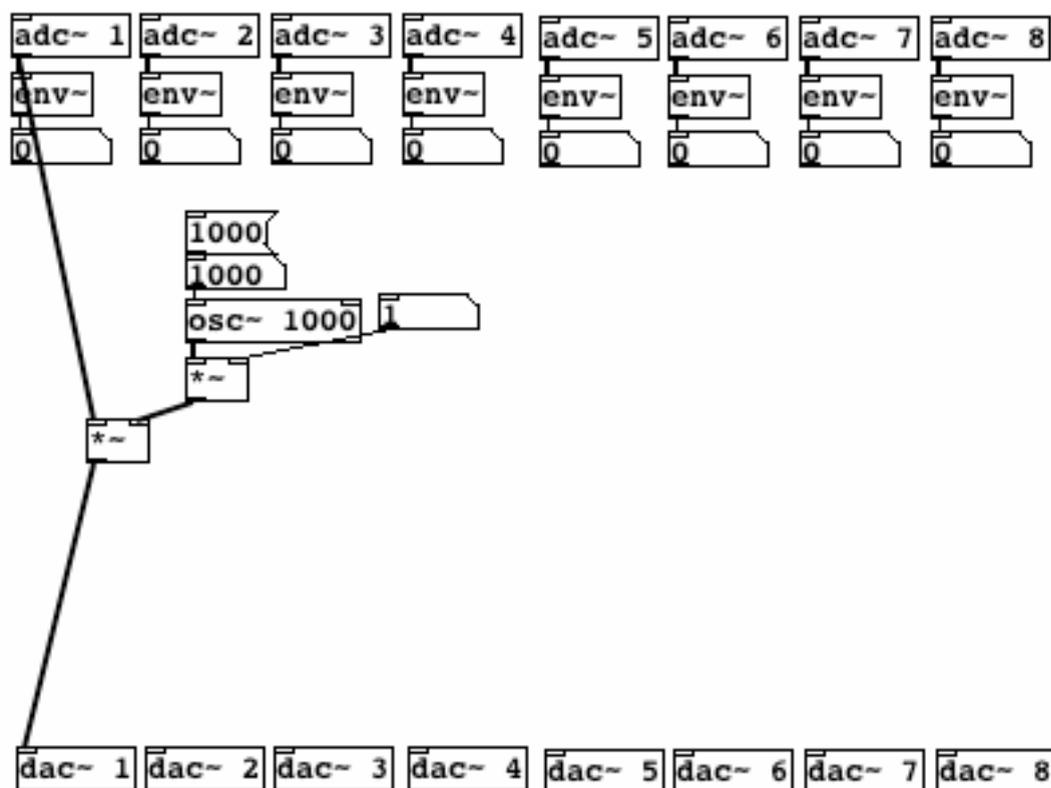
Build your patch using the ADC~ and DAC~ objects (with parameters 1 to 8 for the 8 jack channels),
for example [ADC~ 6] would access the 6th jack input channel and [DAC~ 3 4] would provide a 2-
channel
output pair for the 3rd and 4th jack outputs.

Save your work often, and when you want to quit, you should quit the client applications first,
PureData first, then Live, then push STOP in JackPilot, then quit JackPilot.

ADDING MORE CHANNELS

To add more channels simply edit JackPilot preferences-> virtual input channels / virtual output channels.
To access these extra channels in PureData, don't forget to route them in JackPilot, and to use [ADC~ n] and [DAC~ n] where "n" is a channel number.

Channel numbers are inconsistant, so remember that jack numbers channels differently to live and pd.

ANOTHER IMPORTANT NOTE
** Confusingly, the PureData channel numbering system for jack (with 0 being the "1st" channel)
** is not consistent, so you MUST USE [ADC~ 3] and [DAC~ 4] inside PureData, even though
** in jack you have routed pure_data_0:input2 and 3 and output2 and 3...
**
** PLEASE REMEMBER THIS IF YOU GET CONFUSED **