

V001 BASIC INSTALL INSTRUCTIONS FOR QUANTIZER SOFTWARE

These instructions will help a user to download, install, and run the Quantizer software for ATLAS data sonification. Some of the programs are 3rd party software and some of the code is written by the Quantizer group. This is not a manual for running the software and composing. Additionally, a meeting to assist with the installation is typically required before a user can start composing.

Before meeting as a group to fully install / integrate / test the software, please:

Install Pure Data Extended

Install Max MSP

Install Ableton Live

(see steps below for download links). This helps to save time waiting for downloads; you don't have to try doing the install by yourself.

Step	Details (More Details Below Table)
Install PD-Extended	https://puredata.info/downloads/pd-extended/releases You also need X11 installed
Install Ableton Live	https://www.ableton.com/en/live/
Install Max MSP	https://cycling74.com/downloads/#.VvxSyBlrLcM
Ensure Python 2.7 installed	type "python" in command line. If given prompt, type: import sys print (sys.version) If output is 2.7.x, successful. Otherwise, install Python 2.7: https://www.python.org/downloads/mac-osx/
Install pip	sudo easy_install pip (a mac installation command)

Install pyosc	<p>sudo pip install pyosc</p> <p>Note: To install pyOSC you need to add the flag "--pre" to the command if you are using pip v1.4 or later.</p>																																																		
Install PD GUI/backend patches/Python files	<p>Install git and git clone https://github.com/cherston/Quantizer_public.git</p> <p>OR just manually download the directory by going to: https://github.com/cherston/Quantizer_public</p> <p>Note that port is currently set to 5002 in osc_engine, so make sure to use this in PD pat</p>																																																		
Open passthrough in Max	Select 'to max 1' and 'aus synth' in the drop downs																																																		
Verify Max Midi Settings	<p>Options->Midi Setup</p> <p>Select 'to max 1' as input with 'abbrev' 'a' and 'from max 1' as output with abbrev 'b'</p> <p>Also check AU DLS synth 1 (not pictured)</p>  <table><thead><tr><th>Type</th><th>On</th><th>Name</th><th>Abbrev</th><th>Offset</th></tr></thead><tbody><tr><td>input</td><td><input checked="" type="checkbox"/></td><td>from Max 1</td><td>÷ a</td><td>÷ 0</td></tr><tr><td>input</td><td><input type="checkbox"/></td><td>from Max 2</td><td>÷ _</td><td>÷ 0</td></tr><tr><td>input</td><td><input type="checkbox"/></td><td>to Max Runtime 1</td><td>÷ _</td><td>÷ 0</td></tr><tr><td>input</td><td><input type="checkbox"/></td><td>to Max Runtime 2</td><td>÷ _</td><td>÷ 0</td></tr><tr><td>output</td><td><input type="checkbox"/></td><td>AU DLS Synth 1</td><td>÷ _</td><td>÷ 0</td></tr><tr><td>output</td><td><input checked="" type="checkbox"/></td><td>to Max 1</td><td>÷ b</td><td>÷ 0</td></tr><tr><td>output</td><td><input type="checkbox"/></td><td>to Max 2</td><td>÷ _</td><td>÷ 0</td></tr><tr><td>output</td><td><input type="checkbox"/></td><td>from Max Runtime 1</td><td>÷ _</td><td>÷ 0</td></tr><tr><td>output</td><td><input type="checkbox"/></td><td>from Max Runtime 2</td><td>÷ _</td><td>÷ 0</td></tr></tbody></table>	Type	On	Name	Abbrev	Offset	input	<input checked="" type="checkbox"/>	from Max 1	÷ a	÷ 0	input	<input type="checkbox"/>	from Max 2	÷ _	÷ 0	input	<input type="checkbox"/>	to Max Runtime 1	÷ _	÷ 0	input	<input type="checkbox"/>	to Max Runtime 2	÷ _	÷ 0	output	<input type="checkbox"/>	AU DLS Synth 1	÷ _	÷ 0	output	<input checked="" type="checkbox"/>	to Max 1	÷ b	÷ 0	output	<input type="checkbox"/>	to Max 2	÷ _	÷ 0	output	<input type="checkbox"/>	from Max Runtime 1	÷ _	÷ 0	output	<input type="checkbox"/>	from Max Runtime 2	÷ _	÷ 0
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Open PD-Extended	<p>Open PD-Extended (software that you installed earlier)</p> <p>media -> midi settings: set output device 1 to 'max 1'</p>																																																		

Open PD patches	They are called PD/LatestATLASController and PD/LatestATLASGUI
Setup	Click twice on purple button in upper left corner of GUI to ensure that all settings are initialized
Testing audio	<p>Open up Terminal window and navigate to repository's python directory (cd python)</p> <p>Run python ATLAS_live_audio.py --test --uniform --spb=.25 [runs a series of events through system, with beat mode on, and seconds per beat set]</p> <p>Hear piano? This is your device's default synth</p>
Prepping for composing	<p>Toggle Max 'Passthrough' patch from 'aus synth' to 'from Max 1'</p> <p>Open up Ableton live or equivalent DAW, and set your tracks to receive Midi signal from 'from max 1'</p> <p>Channel 1: RPC Channel 2: Track Channel 3: Liquid Argon Hits Channel 4: Hadronic Endcap Hits</p> <p>Youtube link for demonstrating how basic GUI settings work:</p>
Bonus	<p>•To run many events through system:</p> <ul style="list-style-type: none"> •replace --test flag with --c and run python script •open a second terminal window and navigate to data directory •Run: cp 1A/* unprocessed <p>•Additional Flags: [run python ATLAS_live_audio.py --help to see them all]</p> <p>--seconds --maxbeats --uniform --overlap --spatialize [layer by layer streaming, nothing implemented WRT spatialized audio] --geo</p>

APPENDIX:

to do:

- Add House info as an example
 - Add the pd files and the ableton live directory for House
 - Add textfile with python command for running House
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[JULIANA'S ICAD WORKSHOP DECK \[INCLUDES BOTH WINDOWS AND MAC INSTRUCTIONS\]](#)

Juliana's ICAD Preworkshop install links:

1. [Pure Data Extended](#)
2. [Python 2.7](#) (preinstalled on your machine in many cases)
3. [pip](#) (just type **sudo easy_install pip** if on a mac)
4. [pyosc](#) (just type **sudo pip install pyosc** if on a mac)
5. [Max Runtime](#) (if you have Max already, you don't need this)
6. Either [Ableton Live 30 day trial](#), [Reaper](#), (or a DAW of your preference)