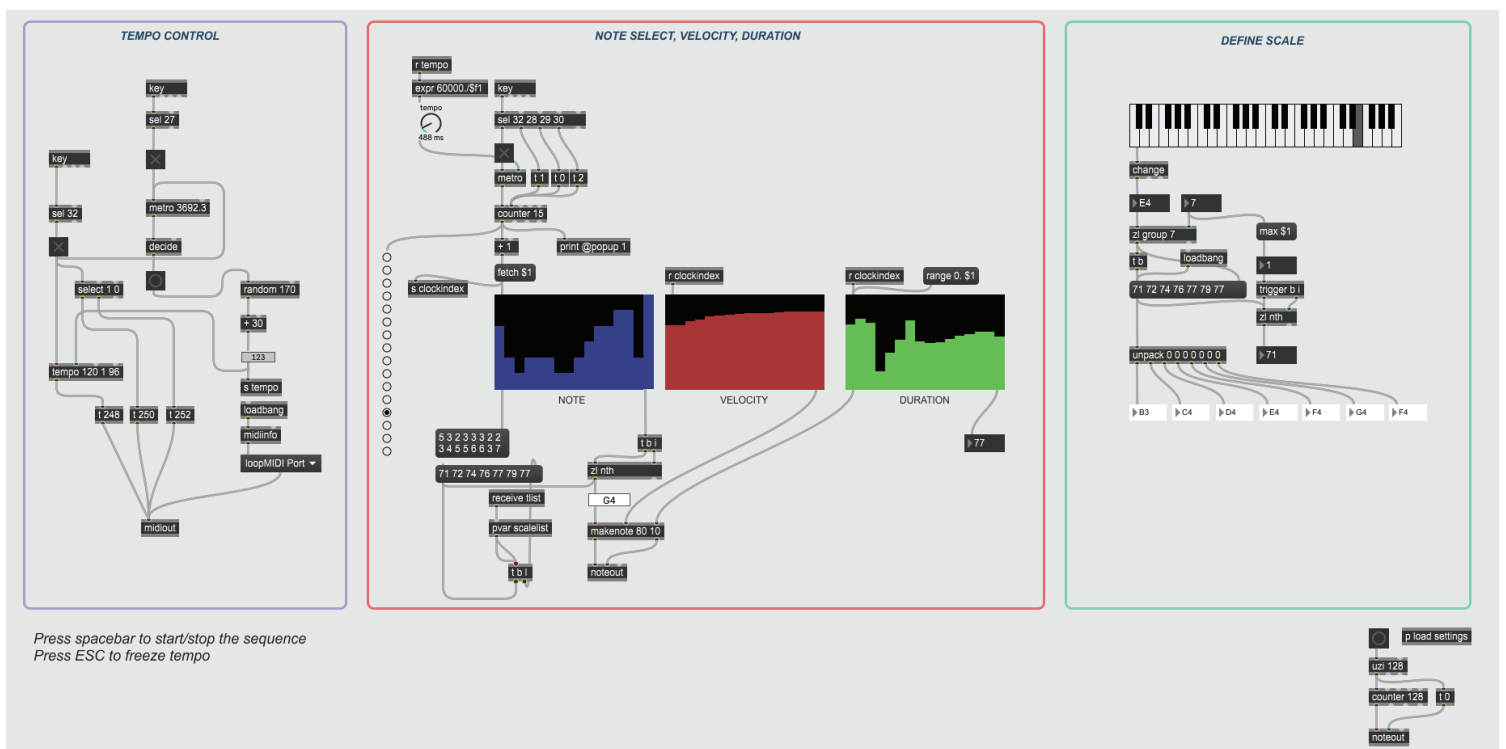
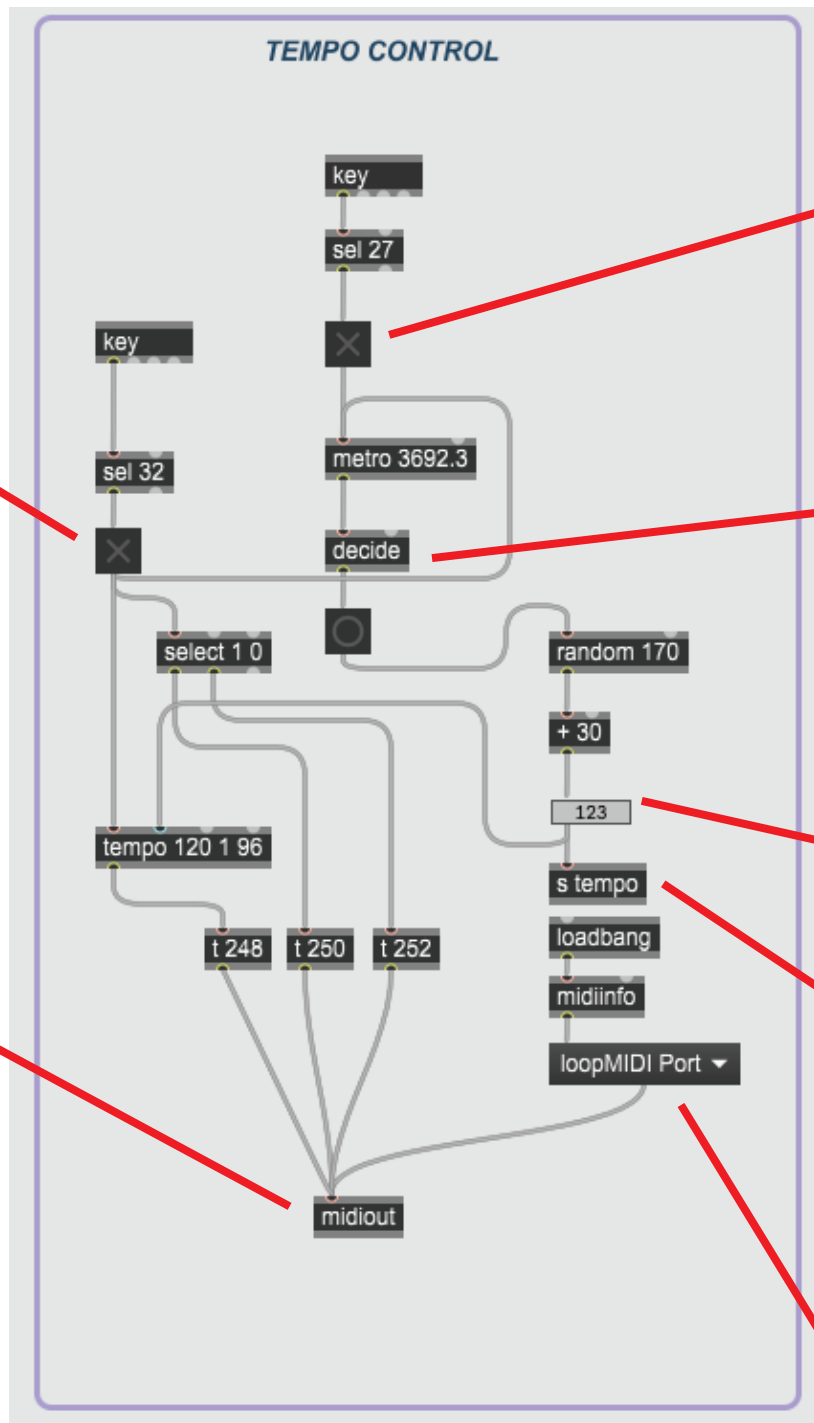


GROOVE FLUCTUATION PATCH DOCUMENTATION



Designed by Jack Lemonidis &
Steingrimur Stefansson

TEMPO CONTROL



Pressing ESC will allow you to freeze or release the tempo at any point.

The decide function will allow a little randomness as to whether the tempo will shift to something new, or stay where it currently sits. There is a 50/50 chance.

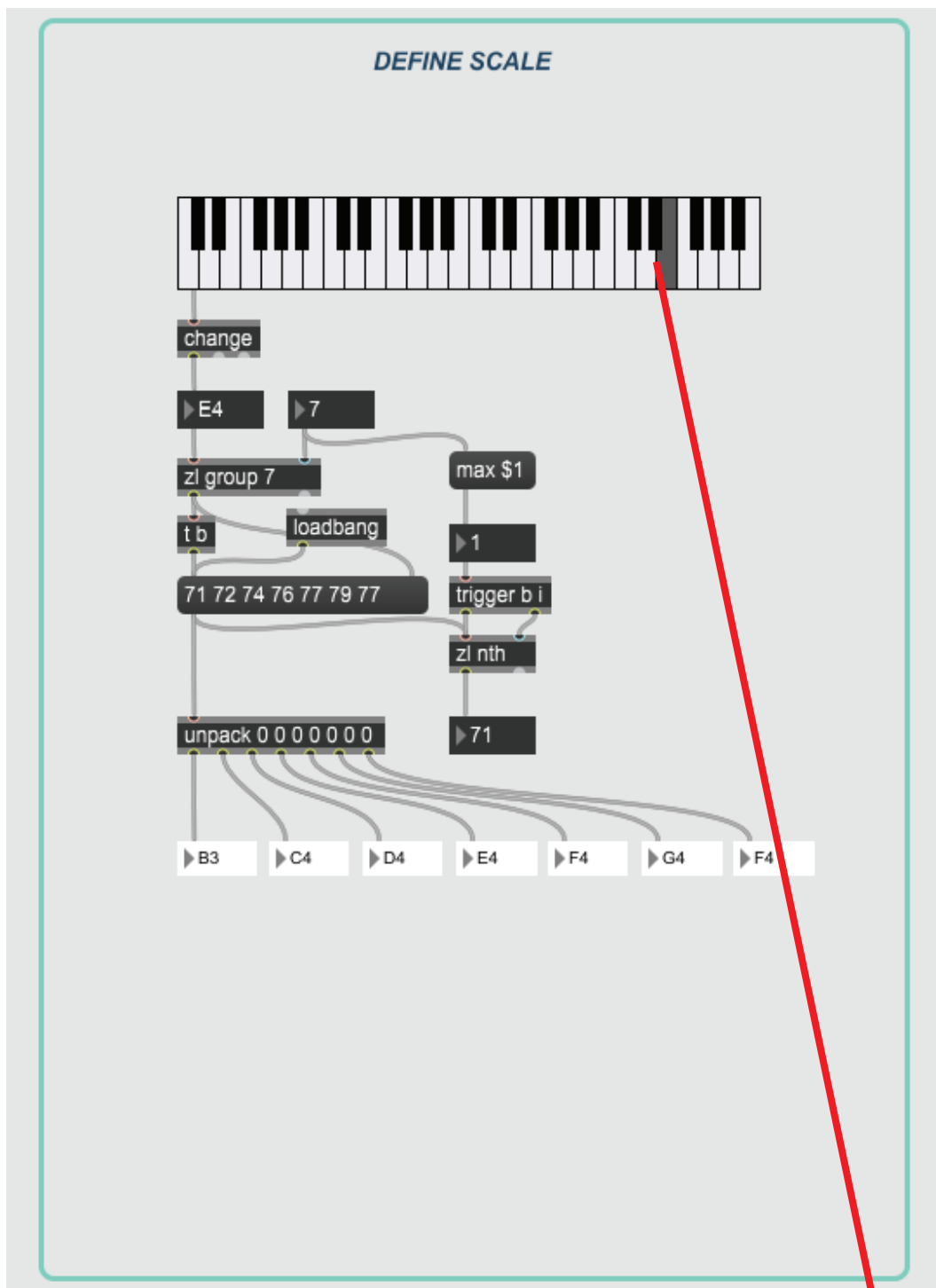
When there is a bang, a random number will be chosen between 0 and 170. 30 will be added to this number and the output will be the corresponding BPM.

The tempo is sent from here to be used in the Sequencing section of the patch

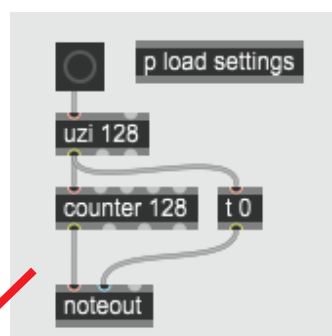
The virtual midi port is selected from this drop down menu for linking to Ableton. Here looMidi is being used, but any virtual midi port is fine. On a Mac, you can just use the built in ports Max 1 or Max 2.

Pressing SPACEBAR will start the metro which will cause the tempo to shift. The metro is set to trigger every 3692ms but this number can be anything.

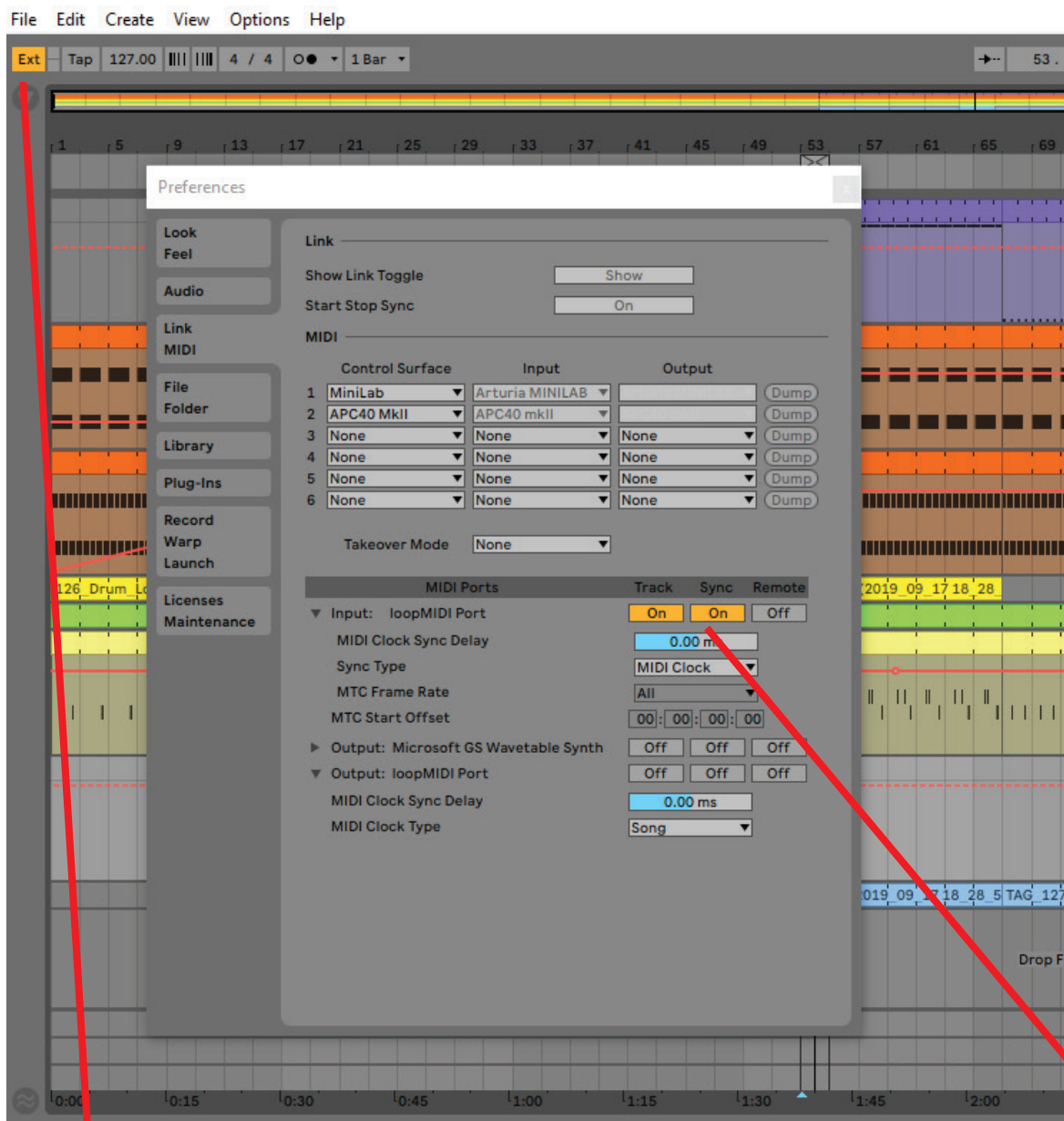
The tempo is set and sent to a midi device which is ported through to Ableton. To see how to link with Ableton, please refer to the last section of the PDF



This is where you define the scale used by the sequencer. By selecting 7 keys in sequence this will define which notes are going to be used.

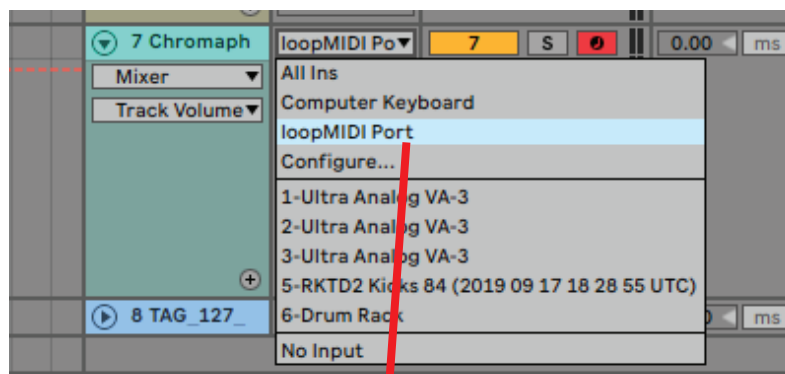


This section allows you to release any stuck notes by pressing the bang.



To sync the shifting tempo from Max to Ableton, simply navigate to the Midi tab in Ableton Settings. Then locate your virtual midi port. In this case, it is the loopMidi port. Under the input section, make sure Track and Sync are both turned on.

Finally, ensure that Ableton is set to Ext Sequencing. Once activated, go back to Max, hit SPACEBAR and the BPM in both programs should be synced.



In the individual tracks, you can select the same virtual midi port (loopMidi in this case). This allows for the sequencer from the patch to send midi information to the channel allowing the sequencer to trigger notes of a VST or similar in time with the shifting tempo. This results in some very cool effects!