RJC1000

Writing new modules for RJC1000

A module in RJC1000 is a folder containing at least one Pd abstraction called **_module.pd** and an image file called "image.png". The folder's name has to end in ".rjm". The Pd file is loaded by the RJC1000 and can communicate with it through its inlets and outlets.

Currently only modules with these inlets and outlets are supported:

- one audio inlet
- one message inlet
- two audio outlets ("left and right")
- one message outlet

The audio inlet currently automatically receives the microphone signal. The audio outlets ar speakers/headphone. The message inlet will receive control messages from the RJC1000, th be used to send messages back to the RJC1000.

Module example and template

RJC1000 ships with an example and a template module, they are also available in our Trac

http://trac.rjdj.me/browser/trunk/rjc1000

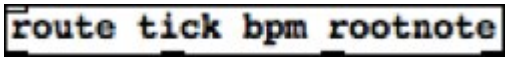
Parameters

The message inlet gets various kinds of messages fromt the RJC1000 main patch and from in edit mode on the laptop. Among these messages is a metro tick, information about the gl the global rootnote as set in the scene.

Every of these global parameter is preceded by a symbolic name:

- tick <number>: receives a tick from a metro
- bpm <number>: the current speed of a track
- rootnote <number>: a midi pitch
- switch 0/1: toggles DSP processing in this module
- page <number>: number of page the user swiped to.

You can route some of those global parameter messages to different parts of your module. route object up to the message inlet from the RJC1000. Messages are routed through the re where you can send them to any destination in your module. The outlet on the far-right hol own custom parameters.

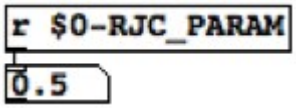


Modules can define their own parameters by using an object out of the family of "rjc_param parameters can be controlled through the RJC1000-GUI when in laptop-edit-mode, and thei within the page number when the scene is exported from the RJC1000.

Currently there is only one rjc_parameter supported: rjc_parameter_floatrange.pd It is mea point number that is limited to a range (0-1). You create it as:

```
[rjc_parameter_floatrange $0 Your_Parameter_Name 0.5]
```

"Your_Parameter_Name" will be the name of this parameter (in this case RJC_PARAM), 0.5 an optional default value. Connect this to the message inlet and outlet of your _module.pd f incoming "Your_Parameter_Name"-messages to a receiver called "$0-Your_Parameter_Nam



Check out the example module for more detailed information.

Module info

Every module also required to contain a pd subpatch called "pd MODULE_INFO" that is used about it in the RJC1000 GUI. It contains comments that start with the following field names

```
DTYPE: s1m1-s2m1
AUTHORS: Author name
NAME: Module name
DESCRIPTION: A description of the module
TAGS: freeform tags
```

"DTYPE" means "decorator type". Just write s1m1-s2m1 here. It stands for 1 audio inlet (s1 (m1), 2 audio outlets (s2) and 1 message outlet (m1).

Installation

Once you have finished your RJC-module and called its folder "MODULE_NAME.rjm", you ca RJC1000 on your desktop by adding the module folder to the directory "/Users/YOUR_NAME Support/RJC1000/modules/".