

## Description

Data from oF is sent through UDP port number 5000 with a tag of /GML/#, where # represents the module number (ex: "0" or "3", referring to module number zero or module number three). The message after the tag is in a MIDI note-on format (without note-off), where the note value specifies the stick, starting from note '0' to the total number of sticks minus one in a determined module.

Example:

/GML/0 1 100 : tells the robot module number zero to activate the stick number two

Routes incoming OSC messages to the desired output robot

Calibrates the velocity value sent to the module, since each stick seems to have different forces when played with the same velocity value. This step aims to balance all sticks to strike notes with the same force across all modules.

A calibration file is stored for all modules, containing an optimal velocity value (4-bits) for each stick of all modules.

Makes a batched queue list to send to each module at a specified rate (in milliseconds). This might be necessary since the robot will not handle messages below a determined time rate.

Uses 'rp.trama' to send messages to a specified serial port.

## **NOTES/QUESTIONS:**

- 1) should the queue method be implemented in oF in order to have a perfect correspondence from visual data to robot movement?
- 2) some robots might exhibit a time lag from received messages to actually moving a stick. Should oF have a file (similar to the calibration file) in order to create a delay in the visual representation of certain modules, in order to have a perfect correspondence from visual data to robot movement?