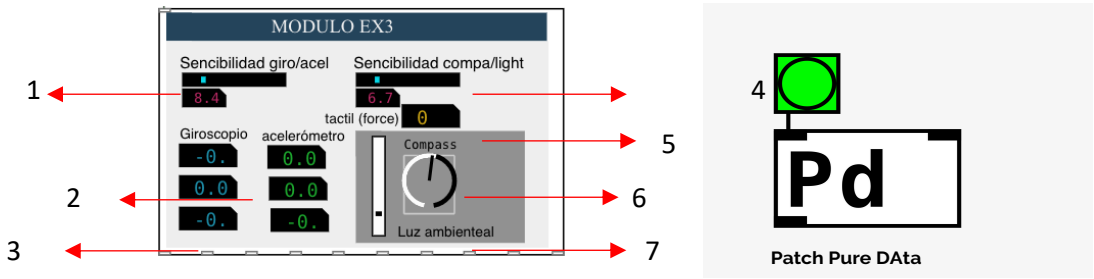
Patch Pure DAta

EX3 (ZIG SIM)
MODULE

Diseño y desarrollo de sistemas MMHCI híbridos con bioseñales y un DMI de smartphones, para obras bio-interactivas mixtas y performáticas

Pure Data Patches for the PhD Thesis: Juan Pablo posada Alvarez



1. **Filter window setting** (moving average) **spin/acel**: Reduced values in this parameter allow for a flow with greater data variation per unit of time, while high values contribute to stability in data variation by decreasing the noise level. In the case of this slider, for the values of the accelerometers and gyroscope.
2. **Gyroscope:** The module provides data on the raw gyroscope values of all 3 axes (x, y, z). These values are sent by the module's Outlets.
3. **Accelerometer:** The module provides data on the raw accelerometer values of all three axes (x, y, z). These values are sent by the module outlets
4. **Filter window setting** (moving average) **compa/light**: Reduced values in this parameter allow a flow with greater data variation per unit of time, while high values contribute to the stability in the variation of the data by decreasing the noise level. In the case of this slider for compass values and ambient light sensor.
5. **Touch Force:** This value represents the "force" exerted on the touch screen of the Smartphone.

6. **Ambient light:** Similar to the ambient light module, this display can observe the amount of light in lumens captured by the device. In this module, no adjustment algorithms were designed for the user's context because it is a support module. If this type of adaptation is required, it must be done outside the module.
7. **Compass:** This dial represents the angle of the compass azimuth as follows: (North) is equal to 0º degrees, (East) to 90º degrees, (South) is 180º degrees, and so on. Note that a negative value would indicate an invalid address. The orientation of portrait mode and landscape mode can be set in the Portrait Mode and Landscape mode directly in the app on the smartphone.

The module is connected as follows:

- **Left inlet:** Input for OSC module. It is recommended to use a different OSC module if you want to use it with other modules, and to adjust the different port number to receive data in each module.
- **Outlets 1-3:** Output of a gyroscope raw values on all 3 axes (x, y, z), the value range is between -1 and 1.
- **Outlet 4-6:** Output raw values of the accelerometers in the three axes (x, y, z) the range of values is, between -1 and 1.
- **Outlet 7: Ambient** Light Sensor Value Output
- **Outlet 8:** Output of values for the force detection sensor on the touch screen
- **Outlets 9:** Output Azimuth Values of the Smartphone Compass