

Demo LimiFrog / ST – V0.1

Turn LimiFrog ON : push button near corner for 1/2s

Turn LimiFrog OFF : push button near corner

Hard Power down: push button near corner for 10s

1) Step1: Splash Screen = LimiFrog Logo

“Free” the frog by putting hand in front of VL6180X detector

Frog can be moved by tilting LimiFrog

(challenge: try to keep it centered !)

Then next step of demo is triggered by Microphone noise detection :

lightly tap on the bottom right corner of LimiFrog (just below the screen)

...or clap your hands

...or “click” your tongue

2) Step2: Carroussel of pictures

Select previous or next picture by tilting LimiFrog

Stop on current picture by keeping LimiFrog horizontal

<Next step: light tap or noise>

3) Step3: Real-time display of graph with accelerometer XYZ axis values

<Next step: light tap or noise>

4) Step 4 : Time-domain and FFT display of magnetometer values

- Capture sequence of magnetometer values,

- at fairly slow rate (20Hz) so user can modify orientation at speed meaningful vs capture rate

- At the end of sequence, display FFT of values captured on Z axis

- ==> if user swings LimiFrog around Z-axis regularly during capture, swing frequency shows up on FFT

Note: uncalibrated magnetometer values are used. Not an issue here as only affects DC Value of FFT.

<Next step: light tap or noise>

5) Step 5: VL6180X demo

Detects distance of hand or object up to 20cm

Might need some tuning due to interference of case

<Next step: light tap or noise>

6) Step 6: LPS25H demo

Display measured atmospheric pressure

<Next step: light tap or noise>

Then Back to start (Splash Screen)