

LIPS Depth camera Lens_mode setting

Windows

1. Find the config file "ModuleConfig.json" from
C:\Program Files (x86) or Program Files for x64 \LIPSToF
2. Open the ModuleConfig.json file with administrator privilege
3. Scroll down to the button.
4. Set the parameter of "lens_mode" to "0".

```
"config": {  
    "profile": 1,  
    "ifmt": 1,  
    "binning_en": false,  
    "lens_mode": 0,  
    "portrait_mode_en": false,  
    "accel_mode": 254,  
    "accel_mode_00000004": 254 }
```

The default setting is 1.

#lens_mode: 0 => Near mode

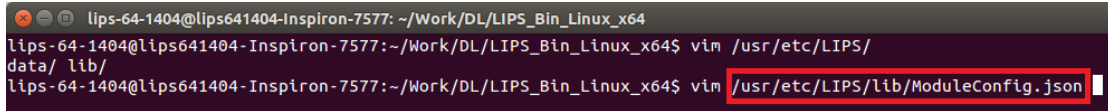
#lens_mode: 1 => Normal mode

After modifying and saving the config file. Launch Viewer and check if the setting has been applied or not in console as below,

```
[config] config.ifmt = 1  
[config] config.binning_en = 0  
[config] config.lens_mode = 0  
[config] (owct not round) config.owct = 1  
[config] config.portrait_mode_en = 0  
[config] config.accel_mode = 254
```

Linux

1. Find the config file "ModuleConfig.json" from /usr/etc/LIPS/lib/ModuleConfig.json
2. Edit the ModuleConfig.json file



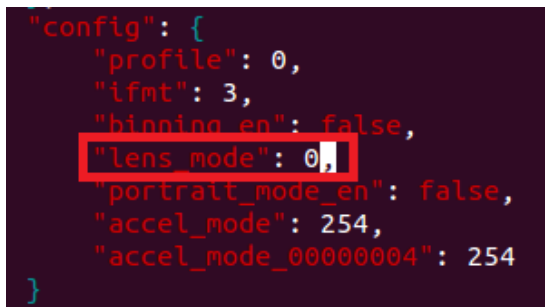
```
lips-64-1404@lips641404-Inspiron-7577: ~/Work/DL/LIPS_Bin_Linux_x64
lips-64-1404@lips641404-Inspiron-7577:~/Work/DL/LIPS_Bin_Linux_x64$ vim /usr/etc/LIPS/
data/ lib/
lips-64-1404@lips641404-Inspiron-7577:~/Work/DL/LIPS_Bin_Linux_x64$ vim /usr/etc/LIPS/lib/ModuleConfig.json
```

3. Scroll down to the button.
4. Set the parameter of "lens_mode" to "0".

```
"config": {
  "profile": 1,
  "ifmt": 1,
  "binning_en": false,
  "lens_mode": 0,
  "portrait_mode_en": false,
  "accel_mode": 254,
  "accel_mode_00000004": 254 }
```

#lens_mode: 0 => Near mode

#lens_mode: 1 => Normal mode



```
"config": {
  "profile": 0,
  "ifmt": 3,
  "binning_en": false,
  "lens_mode": 0,
  "portrait_mode_en": false,
  "accel_mode": 254,
  "accel_mode_00000004": 254
}
```

After modifying and saving the config file. Launch NiViewer and check if the setting has been applied or not in console as below,

lips-64-1404@lips641404-Inspiron-7577: ~/Work/DL/LIPS_Bin_Linux_x64/Samples/Bin/x64-Release

```
[config] algorithm.A9.option.P0 = 0
[config] algorithm.A10.option.P0 = 0
[config] algorithm.A11.option.P0 = 1
[config] algorithm.A12.option.P0 = 3
[config] algorithm.A13.option.P0 = 1
[config] algorithm.A13.option.P1 = 4095
[config] algorithm.A14.enable = 1
[config] algorithm.A15.option.P0 = 63
[config] algorithm.A16.enable = 0
[config] algorithm.A16.option.P0 = 0.001
[config] algorithm.A16.option.P1 = 19
[config] algorithm.A16.option.P2 = 0
[config] algorithm.A16.option.P3 = 1
[config] algorithm.A17.enable = 0
[config] algorithm.A17.option.P0 = 200
[config] algorithm.A17.option.P1 = 400
[config] algorithm.A17.option.P2 = 0
[config] algorithm.A18.enable = 1
[config] algorithm.A18.option.P0 = 2e-07
[config] algorithm.A18.option.P1 = 0.03
[config] algorithm.A18.option.P2 = 1000
[config] config.ifmt = 3
[config] config.binning_en = 0
[config] config.lens_mode = 0
[config] (owct not found) config.owct = 1
[config] config.portrait_mode_en = 0
[config] config.accel_mode = 254
[config] (cmatrix not found) cmatrix.tof.vflip = 0
[config] (cmatrix not found) cmatrix.tof.hflip = 0
[config] (cmatrix not found) cmatrix.rgb.vflip = 0
[config] (cmatrix not found) cmatrix.rgb.hflip = 0
INFO: /dev/video1: 2df2 0214 0013
INFO: device_name = 4
INFO: /dev/video1: 2df2 0214 0013
INFO: device_name = 4
INFO: /dev/video1: 2df2 0214 0013
INFO: device_name = 4
```

LIPS Depth camera flying pixel removal

5. Find the config file "ModuleConfig.json" from
C:\Program Files (x86) or Program Files for x64 \LIPSToF
6. Open the ModuleConfig.json file with administrator privilege
7. Scroll down to the button.
8. Set the parameter of "A18" to "false".

```
"A18": {  
    "enable": false,
```

The default setting is true

#A18 -> enable: true: flying pixel removal enable

#A18 -> enable: false: flying pixel removal disable

After modifying and saving the config file. Launch Viewer and check if the setting has been applied or not in console as below,

```
[config] algorithm.A18.enable = 0  
[config] algorithm.A18.option.P0 = 2e-007  
[config] algorithm.A18.option.P1 = 0.03  
[config] algorithm.A18.option.P2 = 1000  
[config] config.ifmt = 3  
[config] config.binning_en = 0  
[config] config.lens_mode = 1  
[config] (owct not found) config.owct = 1  
[config] config.portrait_mode_en = 0  
[config] config.accel_mode = 254
```

LIPS Depth camera GPU_ACCEL setting

9. Find the config file "ModuleConfig.json" from
C:\Program Files (x86) or Program Files for x64 \LIPSToF
10. Open the ModuleConfig.json file with administrator privilege.
11. Scroll down to the button.
12. Modify accel_mode setting as below.

```
"config": {  
    "profile": 1,  
    "ifmt": 1,  
    "binning_en": false,  
    "lens_mode": 1,  
    "portrait_mode_en": false,  
    "accel_mode": 254,  
    "accel_mode_00000004": 254  }
```

#accel_mode: 0 => CUDA mode

#accel_mode: 1 => OpenCL mode

#accel_mode: 2~253 => Reserved

#accel_mode: 254 => CPU only mode (Default)

#accel_mode: 255 => Auto detect mode (Auto detect if there is GPU on system)

After modifying and saving the config file. Launch Viewer and check if the setting has been applied or not in console, the value Config.accel_mode should be the same as the "accel_mode" setting within ModuleConfig.json file and there is an information print on console indicate which accel_mode be used as below,

- CPU only mode

#accel_mode: 254

Config.accel_mode = 254, NO ACCEL SUPPORTED, USING CPU

```
[config] config.ifmt = 1
[config] config.binning_en = 0
[config] config.lens_mode = 1
[config] (owct not found) config.owct = 1
[config] config.portrait mode en = 0
[config] config.accel mode = 254
[config] (cmatrix not found) cmatrix.tof.vflip = 0
[config] (cmatrix not found) cmatrix.tof.hflip = 0
[config] (cmatrix not found) cmatrix.rgb.vflip = 0
[config] (cmatrix not found) cmatrix.rgb.hflip = 0
INFO: No.1 Device VID:0x2DF2,PID:0x213,REV:0x7
Read SF Time: 0.015 s, Data Size: 16
Read SF Time: 0.016 s, Data Size: 240
Read SF Time: 0.000 s, Data Size: 248
Read SF Time: 0.000 s, Data Size: 16
Read SF Time: 0.015 s, Data Size: 24
Read SF Time: 4.641 s, Data Size: 616986
Read From New Flash (4M).
INFO: Image Registration mode = UVMapping(Depth2Image)
NO ACCEL SUPPORTED, USING CPU
INFO: Camera init completed
```

- Autodetect mode

#accel_mode: 255

Config.accel_mode = 255, ACCEL PLUGIN: cudaproc.dll

```
[config] config.ifmt = 1
[config] config.binning_en = 0
[config] config.lens_mode = 1
[config] (owct not found) config.owct = 1
[config] config.portrait mode en = 0
[config] config.accel mode = 255
[config] (cmatrix not found) cmatrix.tof.vflip = 0
[config] (cmatrix not found) cmatrix.tof.hflip = 0
[config] (cmatrix not found) cmatrix.rgb.vflip = 0
[config] (cmatrix not found) cmatrix.rgb.hflip = 0
INFO: No.1 Device VID:0x2DF2,PID:0x213,REV:0x7
Read SF Time: 0.016 s, Data Size: 16
Read SF Time: 0.000 s, Data Size: 240
Read SF Time: 0.015 s, Data Size: 248
Read SF Time: 0.016 s, Data Size: 16
Read SF Time: 0.015 s, Data Size: 24
Read SF Time: 4.625 s, Data Size: 616986
Read From New Flash (4M).
INFO: Image Registration mode = UVMapping(Depth2Image)
testing CUDA...
ACCEL PLUGIN: cudaproc.dll
INFO: Camera init completed
```

LIPS Depth camera OWCT setting

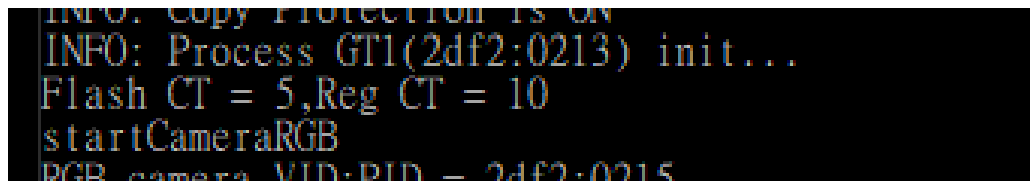
13. Find the config file "ModuleConfig.json" from
C:\Program Files (x86) or Program Files for x64 \LIPSToF
14. Open the ModuleConfig.json file with administrator privilege
15. Scroll down to the button.
16. Set the parameter of "lens_mode" to "0".

```
"config": {  
    "profile": 1,  
    "ifmt": 1,  
    "binning_en": false,  
    "lens_mode": 1,  
    "portrait_mode_en": false,  
    "accel_mode": 254,  
    "accel_mode_00000004": 254  }
```

After modifying and saving the config file. Launch Viewer and check if the setting has been applied or not in console as below,

Flash CT = M, Reg CT = N

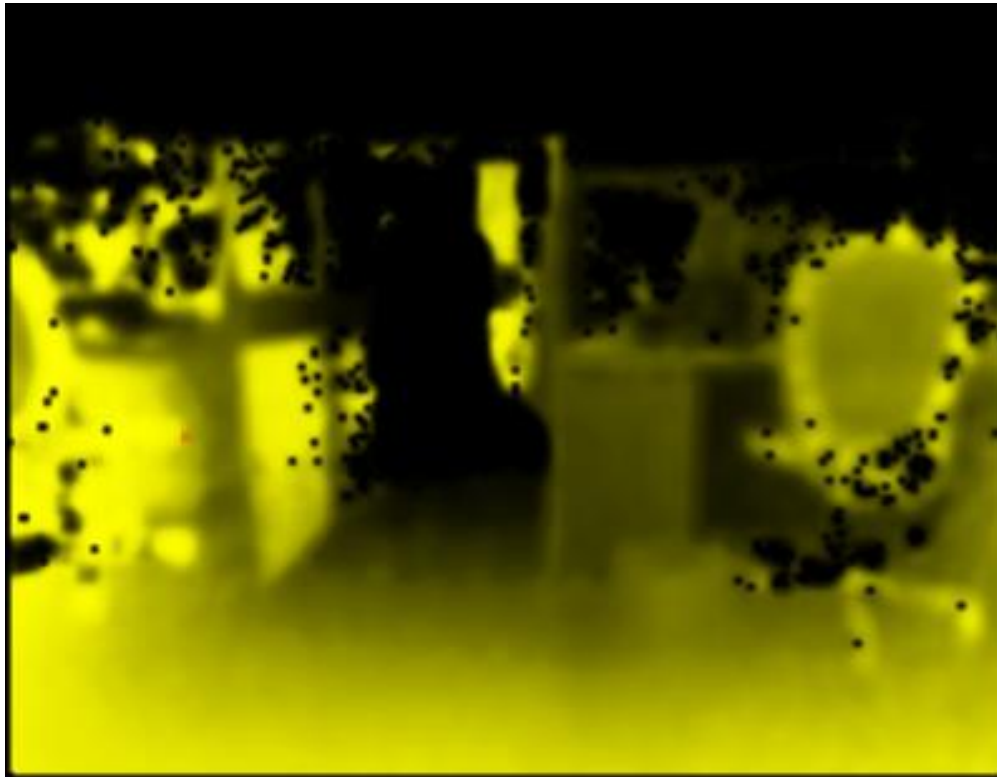
M is the value that save in flash, N is the value that set in config file and will apply to register



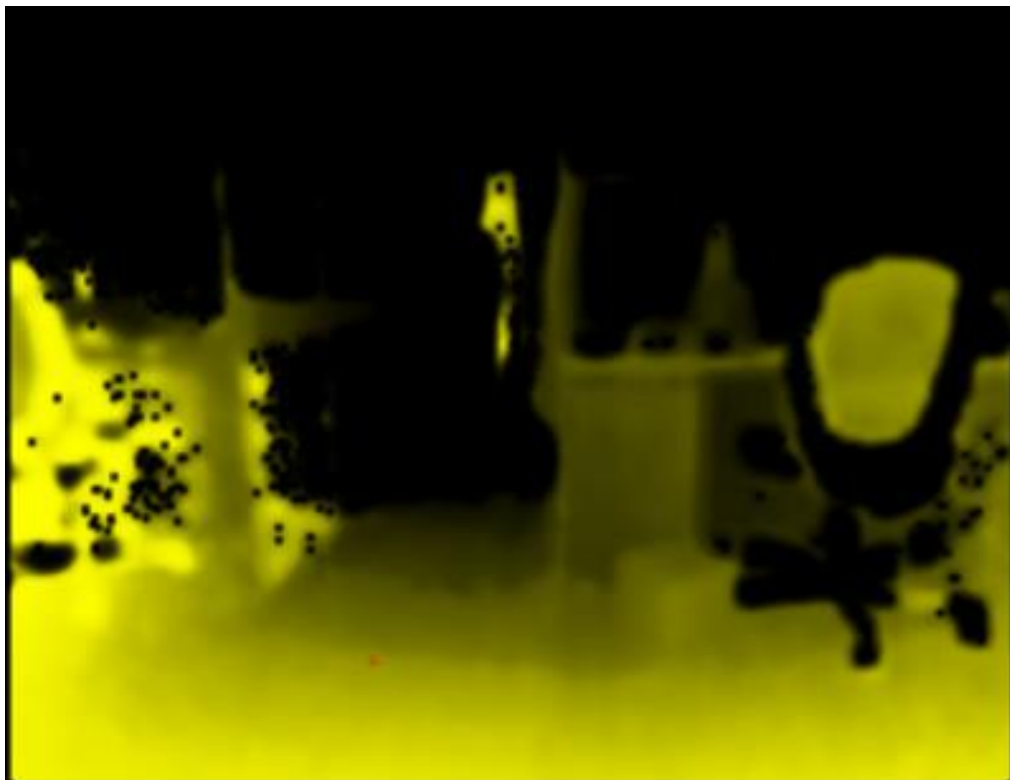
```
INFO: Copy Protection IS ON  
INFO: Process GT1(2df2:0213) init...  
Flash CT = 5,Reg CT = 10  
startCameraRGB  
RGB_camera VID:PID = 2df2:0215
```

Result:

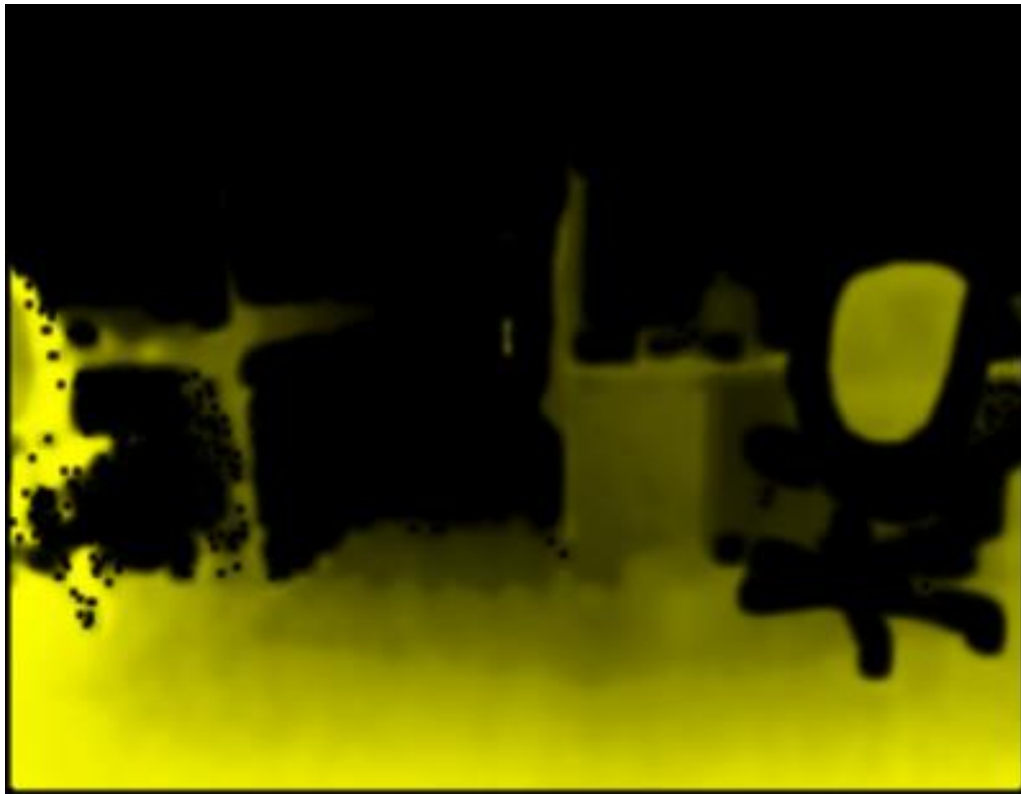
No owct (ct=1)



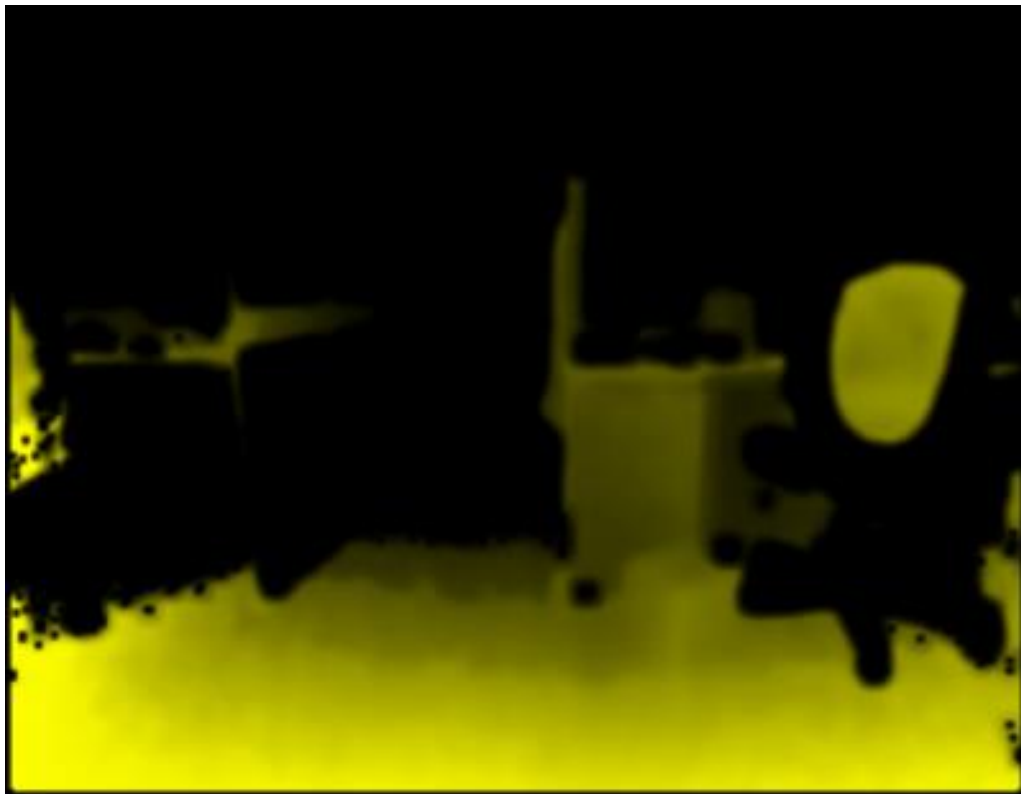
Owct = 2



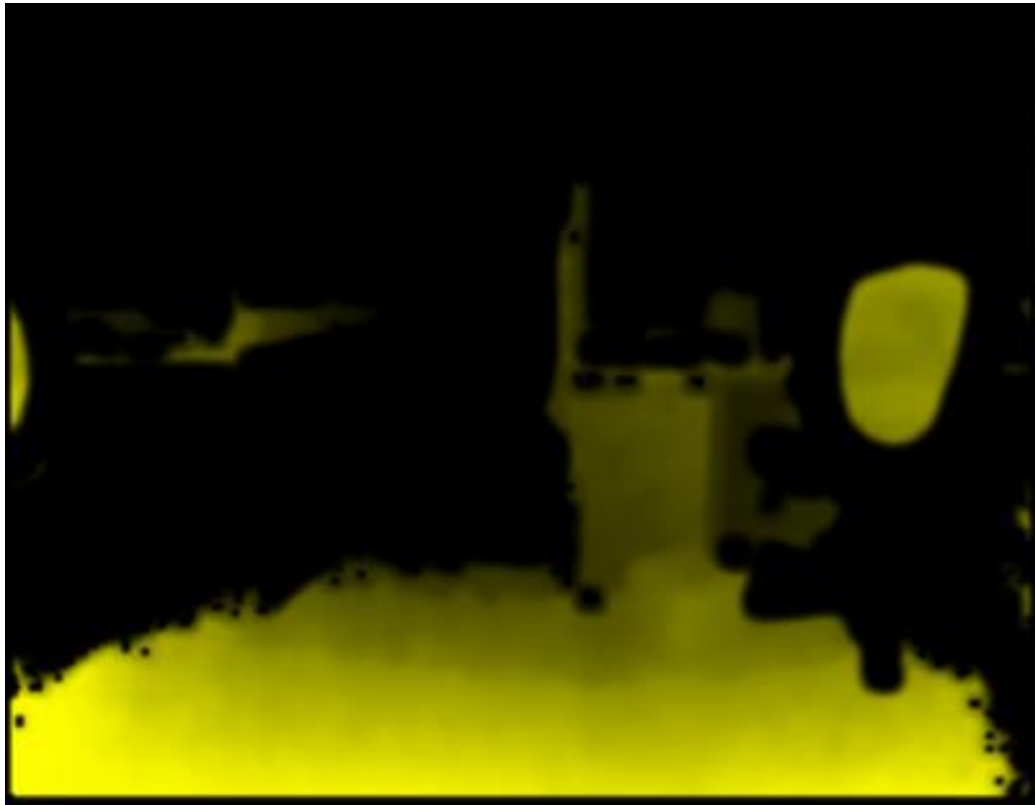
Owct = 3



Owct = 4



Owct = 5



Owct = 6

