

```
roslaunch local_planner local_planner_aero.launch
... logging to /home/intelaero/.ros/log/c7b1e5e0-4580-11e9-bdbe-
b6c463b3a847/roslaunch-IntelAero-18723.log
Checking log directory for disk usage. This may take awhile.
Press Ctrl-C to interrupt
Done checking log file disk usage. Usage is <1GB.
```

```
started roslaunch server http://IntelAero:39876/
```

SUMMARY

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CLEAR PARAMETERS

```
* /mavros/
```

PARAMETERS

```
* /camera/camera_nodelet_manager/num_worker_threads: 4
* /camera/depth_rectify_depth/interpolation: 0
* /camera/disparity_depth/max_range: 4.0
* /camera/disparity_depth/min_range: 0.5
* /camera/disparity_registered_sw/max_range: 4.0
* /camera/disparity_registered_sw/min_range: 0.5
* /camera/driver/base_frame_id: camera_link
* /camera/driver/camera_type: R200
* /camera/driver/color_fps: 30
* /camera/driver/color_frame_id: camera_rgb_frame
* /camera/driver/color_height: 480
* /camera/driver/color_optical_frame_id: camera_rgb_optica...
* /camera/driver/color_width: 640
* /camera/driver/depth_fps: 30
* /camera/driver/depth_frame_id: camera_depth_frame
* /camera/driver/depth_height: 360
* /camera/driver/depth_optical_frame_id: camera_depth_opti...
* /camera/driver/depth_width: 480
* /camera/driver/enable_color: True
* /camera/driver/enable_depth: True
* /camera/driver/enable_fisheye: False
* /camera/driver/enable_imu: False
* /camera/driver/enable_ir2: True
* /camera/driver/enable_ir: True
* /camera/driver/enable_pointcloud: False
* /camera/driver/enable_tf: True
* /camera/driver/fisheye_frame_id: camera_fisheye_frame
* /camera/driver/fisheye_optical_frame_id: camera_fisheye_op...
* /camera/driver/imu_frame_id: camera_imu_frame
* /camera/driver/imu_optical_frame_id: camera_imu_optica...
* /camera/driver/ir2_frame_id: camera_ir2_frame
* /camera/driver/ir2_optical_frame_id: camera_ir2_optica...
* /camera/driver/ir_frame_id: camera_ir_frame
* /camera/driver/ir_optical_frame_id: camera_ir_optical...
* /camera/driver/mode: manual
* /camera/driver/serial_no:
* /camera/driver/usb_port_id:
* /camera/points_xyzrgb_sw_registered/queue_size: 100
```

```
* /local_planner_node/goal_x_param: 0
* /local_planner_node/goal_y_param: 0
* /local_planner_node/goal_z_param: 4
* /local_planner_node/pointcloud_topics: ['/camera/depth/p...
* /mavros/cmd/use_comp_id_system_control: False
* /mavros/conn/heartbeat_rate: 1.0
* /mavros/conn/system_time_rate: 1.0
* /mavros/conn/timeout: 10.0
* /mavros/conn/timesync_rate: 10.0
* /mavros/distance_sensor/hrlv_ez4_pub/field_of_view: 0.0
* /mavros/distance_sensor/hrlv_ez4_pub/frame_id: hrlv_ez4_sonar
* /mavros/distance_sensor/hrlv_ez4_pub/id: 0
* /mavros/distance_sensor/hrlv_ez4_pub/orientation: ROLL_180
* /mavros/distance_sensor/hrlv_ez4_pub/send_tf: True
* /mavros/distance_sensor/hrlv_ez4_pub/sensor_position/x: 0.0
* /mavros/distance_sensor/hrlv_ez4_pub/sensor_position/y: 0.0
* /mavros/distance_sensor/hrlv_ez4_pub/sensor_position/z: -0.1
* /mavros/distance_sensor/laser_1_sub/id: 3
* /mavros/distance_sensor/laser_1_sub/orientation: ROLL_180
* /mavros/distance_sensor/laser_1_sub/subscriber: True
* /mavros/distance_sensor/lidarlite_pub/field_of_view: 0.0
* /mavros/distance_sensor/lidarlite_pub/frame_id: lidarlite_laser
* /mavros/distance_sensor/lidarlite_pub/id: 1
* /mavros/distance_sensor/lidarlite_pub/orientation: ROLL_180
* /mavros/distance_sensor/lidarlite_pub/send_tf: True
* /mavros/distance_sensor/lidarlite_pub/sensor_position/x: 0.0
* /mavros/distance_sensor/lidarlite_pub/sensor_position/y: 0.0
* /mavros/distance_sensor/lidarlite_pub/sensor_position/z: -0.1
* /mavros/distance_sensor/sonar_1_sub/id: 2
* /mavros/distance_sensor/sonar_1_sub/orientation: ROLL_180
* /mavros/distance_sensor/sonar_1_sub/subscriber: True
* /mavros/fcu_protocol: v2.0
* /mavros/fcu_url: udp://:14540@loca...
* /mavros/gcs_url:
* /mavros/global_position/frame_id: fcu
* /mavros/global_position/rot_covariance: 99999.0
* /mavros/global_position/tf/child_frame_id: fcu_utm
* /mavros/global_position/tf/frame_id: local_origin
* /mavros/global_position/tf/send: False
* /mavros/image/frame_id: px4flow
* /mavros/imu/angular_velocity_stdev: 0.000349065850399
* /mavros/imu/frame_id: fcu
* /mavros/imu/linear_acceleration_stdev: 0.0003
* /mavros/imu/magnetic_stdev: 0.0
* /mavros/imu/orientation_stdev: 1.0
* /mavros/local_position/frame_id: local_origin
* /mavros/local_position/tf/child_frame_id: fcu
* /mavros/local_position/tf/frame_id: local_origin
* /mavros/local_position/tf/send: True
* /mavros/local_position/tf/send_fcu: False
* /mavros/mission/pull_after_gcs: True
* /mavros/mocap/use_pose: False
* /mavros/mocap/use_tf: True
* /mavros/plugin_blacklist: ['safety_area', '...
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* /mavros/plugin_whitelist: []
* /mavros/px4flow/frame_id: px4flow
* /mavros/px4flow/ranger_fov: 0.0
* /mavros/px4flow/ranger_max_range: 5.0
* /mavros/px4flow/ranger_min_range: 0.3
* /mavros/safety_area/p1/x: 1.0
* /mavros/safety_area/p1/y: 1.0
* /mavros/safety_area/p1/z: 1.0
* /mavros/safety_area/p2/x: -1.0
* /mavros/safety_area/p2/y: -1.0
* /mavros/safety_area/p2/z: -1.0
* /mavros/setpoint_accel/send_force: False
* /mavros/setpoint_attitude/reverse_throttle: False
* /mavros/setpoint_attitude/tf/child_frame_id: attitude
* /mavros/setpoint_attitude/tf/frame_id: local_origin
* /mavros/setpoint_attitude/tf/listen: False
* /mavros/setpoint_attitude/tf/rate_limit: 10.0
* /mavros/setpoint_position/tf/child_frame_id: setpoint
* /mavros/setpoint_position/tf/frame_id: local_origin
* /mavros/setpoint_position/tf/listen: False
* /mavros/setpoint_position/tf/rate_limit: 50.0
* /mavros/startup_px4_usb_quirk: True
* /mavros/sys/disable_diag: False
* /mavros/sys/min_voltage: 10.0
* /mavros/target_component_id: 1
* /mavros/target_system_id: 1
* /mavros/tdr_radio/low_rssi: 40
* /mavros/time/time_ref_source: fcu
* /mavros/time/timesync_avg_alpha: 0.6
* /mavros/vibration/frame_id: vibration
* /mavros/vision_pose/tf/child_frame_id: vision
* /mavros/vision_pose/tf/frame_id: local_origin
* /mavros/vision_pose/tf/listen: False
* /mavros/vision_pose/tf/rate_limit: 10.0
* /mavros/vision_speed/listen_twist: False
* /roscdistro: kinetic
* /rosversion: 1.12.14
```

NODES

```
/camera/
  camera_nodelet_manager (nodelet/nodelet)
  depth_metric (nodelet/nodelet)
  depth_metric_rect (nodelet/nodelet)
  depth_points (nodelet/nodelet)
  depth_rectify_depth (nodelet/nodelet)
  depth_registered_sw_metric_rect (nodelet/nodelet)
  disparity_depth (nodelet/nodelet)
  disparity_registered_sw (nodelet/nodelet)
  driver (nodelet/nodelet)
  ir_rectify_ir (nodelet/nodelet)
  points_xyzrgb_sw_registered (nodelet/nodelet)
  register_depth_rgb (nodelet/nodelet)
  rgb_debayer (nodelet/nodelet)
  rgb_rectify_color (nodelet/nodelet)
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  rgb_rectify_mono (nodelet/nodelet)
/
  local_planner_node (local_planner/local_planner_node)
  mavros (mavros/mavros_node)
  tf_90_deg (tf/static_transform_publisher)
  tf_depth_camera (tf/static_transform_publisher)
```

ROS_MASTER_URI=http://localhost:11311

```
process[tf_90_deg-1]: started with pid [18741]
process[tf_depth_camera-2]: started with pid [18742]
process[mavros-3]: started with pid [18750]
process[camera/camera_nodelet_manager-4]: started with pid [18764]
process[camera/driver-5]: started with pid [18770]
process[camera/rgb_debayer-6]: started with pid [18778]
process[camera/rgb_rectify_mono-7]: started with pid [18779]
process[camera/rgb_rectify_color-8]: started with pid [18786]
process[camera/ir_rectify_ir-9]: started with pid [18797]
process[camera/depth_rectify_depth-10]: started with pid [18810]
process[camera/depth_metric_rect-11]: started with pid [18821]
process[camera/depth_metric-12]: started with pid [18831]
[ INFO] [1552476583.094274588]: Initializing nodelet with 4 worker
threads.
process[camera/depth_points-13]: started with pid [18839]
process[camera/register_depth_rgb-14]: started with pid [18855]
process[camera/points_xyzrgb_sw_registered-15]: started with pid [18863]
process[camera/depth_registered_sw_metric_rect-16]: started with pid
[18874]
process[camera/disparity_depth-17]: started with pid [18883]
process[camera/disparity_registered_sw-18]: started with pid [18894]
process[local_planner_node-19]: started with pid [18903]
[ INFO] [1552476583.560157586]: FCU URL: udp://:14540@localhost:14557
[ INFO] [1552476583.563244785]: udp0: Bind address: 0.0.0.0:14540
[ INFO] [1552476583.564082617]: udp0: Remote address: 127.0.0.1:14557
[ INFO] [1552476583.564410852]: GCS bridge disabled
[ INFO] [1552476583.629038299]: Plugin 3dr_radio loaded
[ INFO] [1552476583.647970940]: Plugin 3dr_radio initialized
[ INFO] [1552476583.648165929]: Plugin actuator_control loaded
[ INFO] [1552476583.688806451]: Plugin actuator_control initialized
[ INFO] [1552476583.699762436]: Plugin adsb loaded
[ INFO] [1552476583.735564642]: Plugin adsb initialized
[ INFO] [1552476583.735853311]: Plugin altitude loaded
[ INFO] [1552476583.742075098]: Plugin altitude initialized
[ INFO] [1552476583.742313127]: Plugin cam_imu_sync loaded
[ INFO] [1552476583.745342634]: Plugin cam_imu_sync initialized
[ INFO] [1552476583.745637816]: Plugin command loaded
[ INFO] [1552476583.793217150]: Plugin command initialized
[ INFO] [1552476583.793480843]: Plugin companion_process_status loaded
Intel RealSense F200_camera ; 2.60.0.0
Intel RealSense LR200_camera ; 2.0.71.18
Intel RealSense R200_camera ; 1.0.72.06
Intel RealSense SR300_camera ; 3.10.10.0
Intel RealSense ZR300_adapter ; 1.29.0.0
Intel RealSense ZR300_camera ; 2.0.71.28
```

```
Intel RealSense ZR300_motion_module ; 1.25.0.0
[ INFO] [1552476583.814970222]: /camera/driver - Detected the following
camera:
        - Serial No: 2481018851, USB Port ID: 2-4, Name:
Intel RealSense R200, Camera FW: 1.0.71.06
[ WARN] [1552476583.815048915]: /camera/driver - Detected unvalidated
firmware:
        - 2481018851's current camera firmware is
1.0.71.06, Validated camera firmware is 1.0.72.06
[ INFO] [1552476583.815098030]: /camera/driver - Connecting to camera
with Serial No: 2481018851, USB Port ID: 2-4
[ INFO] [1552476583.824247030]: Plugin companion_process_status
initialized
[ INFO] [1552476583.824486121]: Plugin debug_value loaded
[ INFO] [1552476583.889989528]: Plugin debug_value initialized
[ INFO] [1552476583.890086884]: Plugin distance_sensor blacklisted
[ INFO] [1552476583.890346364]: Plugin fake_gps loaded
[ INFO] [1552476584.009015661]: Plugin fake_gps initialized
[ INFO] [1552476584.009306718]: Plugin ftp loaded
[ INFO] [1552476584.096562609]: Plugin ftp initialized
[ INFO] [1552476584.096847116]: Plugin global_position loaded
[ INFO] [1552476584.289216578]: Plugin global_position initialized
[ INFO] [1552476584.289456845]: Plugin gps_rtk loaded
[ INFO] [1552476584.318395869]: Plugin gps_rtk initialized
[ INFO] [1552476584.318660212]: Plugin hil loaded
[ INFO] [1552476584.494156898]: Plugin hil initialized
[ INFO] [1552476584.494453256]: Plugin home_position loaded
[ INFO] [1552476584.544359511]: Plugin home_position initialized
[ INFO] [1552476584.544651668]: Plugin imu loaded
[ INFO] [1552476584.639515941]: Plugin imu initialized
[ INFO] [1552476584.639791585]: Plugin local_position loaded
[ INFO] [1552476584.729722133]: Plugin local_position initialized
[ INFO] [1552476584.729988201]: Plugin log_transfer loaded
[ INFO] [1552476584.764300255]: Plugin log_transfer initialized
[ INFO] [1552476584.764623777]: Plugin manual_control loaded
[ INFO] [1552476584.797590313]: Plugin manual_control initialized
[ INFO] [1552476584.797842981]: Plugin mocap_pose_estimate loaded
[ INFO] [1552476584.838795025]: Plugin mocap_pose_estimate initialized
[ INFO] [1552476584.839114196]: Plugin obstacle_distance loaded
[ INFO] [1552476584.859752730]: Plugin obstacle_distance initialized
[ INFO] [1552476584.860080177]: Plugin odom loaded
[ INFO] [1552476584.908851404]: Plugin odom initialized
[ INFO] [1552476584.909186590]: Plugin param loaded
[ INFO] [1552476584.932075201]: Plugin param initialized
[ INFO] [1552476584.932397473]: Plugin px4flow loaded
[ INFO] [1552476584.989734035]: Plugin px4flow initialized
[ INFO] [1552476584.989827042]: Plugin rangefinder blacklisted
[ INFO] [1552476584.990110411]: Plugin rc_io loaded
[ INFO] [1552476585.020423829]: Plugin rc_io initialized
[ INFO] [1552476585.020518248]: Plugin safety_area blacklisted
[ INFO] [1552476585.020778291]: Plugin setpoint_accel loaded
[ INFO] [1552476585.050317156]: Plugin setpoint_accel initialized
[ INFO] [1552476585.050700307]: Plugin setpoint_attitude loaded
[ INFO] [1552476585.122168346]: Plugin setpoint_attitude initialized
```

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[ INFO] [1552476585.122482205]: Plugin setpoint_position loaded
[ INFO] [1552476585.182972044]: /camera/driver - Setting static camera
options
[ INFO] [1552476585.228867276]: /camera/driver - Enabling Depth in manual
mode
[ INFO] [1552476585.229571886]: /camera/driver - Enabling Color in manual
mode
[ INFO] [1552476585.230374591]: /camera/driver - Enabling IR in manual
mode
[ INFO] [1552476585.230705901]: /camera/driver - Enabling IR2 in manual
mode
[ INFO] [1552476585.231020135]: /camera/driver - Starting camera
[ INFO] [1552476585.234184401]: Plugin setpoint_position initialized
[ INFO] [1552476585.234520749]: Plugin setpoint_raw loaded
[ INFO] [1552476585.262298994]: /camera/driver - Publishing camera
transforms (/tf_static)
[ INFO] [1552476585.262642768]: /camera/driver - Setting dynamic camera
options (r200_dc_preset=5)
[ INFO] [1552476585.280631595]: Plugin setpoint_raw initialized
[ INFO] [1552476585.280989469]: Plugin setpoint_velocity loaded
[ INFO] [1552476585.311945131]: Plugin setpoint_velocity initialized
[ INFO] [1552476585.312312506]: Plugin sys_status loaded
[ INFO] [1552476585.361649935]: Plugin sys_status initialized
[ INFO] [1552476585.361993596]: Plugin sys_time loaded
[ INFO] [1552476585.387539577]: TM: Timesync mode: MAVLINK
[ INFO] [1552476585.392633237]: Plugin sys_time initialized
[ INFO] [1552476585.392942208]: Plugin trajectory loaded
[ INFO] [1552476585.424996032]: Plugin trajectory initialized
[ INFO] [1552476585.425298753]: Plugin vfr_hud loaded
[ INFO] [1552476585.428379000]: Plugin vfr_hud initialized
[ INFO] [1552476585.428472469]: Plugin vibration blacklisted
[ INFO] [1552476585.428676521]: Plugin vision_pose_estimate loaded
[ INFO] [1552476585.465843719]: Plugin vision_pose_estimate initialized
[ INFO] [1552476585.466236696]: Plugin vision_speed_estimate loaded
[ INFO] [1552476585.483066332]: Plugin vision_speed_estimate initialized
[ INFO] [1552476585.483372615]: Plugin waypoint loaded
[ INFO] [1552476585.504114643]: Plugin waypoint initialized
[ INFO] [1552476585.504211174]: Plugin wheel_odometry blacklisted
[ INFO] [1552476585.504479793]: Plugin wind_estimation loaded
[ INFO] [1552476585.509650345]: Plugin wind_estimation initialized
[ INFO] [1552476585.509772429]: Autostarting mavlink via USB on PX4
[ INFO] [1552476585.509870448]: Built-in SIMD instructions: SSE, SSE2
[ INFO] [1552476585.509933890]: Built-in MAVLink package version:
2019.2.2
[ INFO] [1552476585.509995169]: Known MAVLink dialects: common
ardupilotmega ASLUAV autoquad icarous matrixpilot paparazzi slugs
standard uAvionix ualberta
[ INFO] [1552476585.510083825]: MAVROS started. MY ID 1.240, TARGET ID
1.1
[ INFO] [1552476585.938929421]: /camera/driver - Initializing Depth
Control Preset to 5
[ INFO] [1552476588.897039496]: /camera/driver - Setting dynamic camera
options
^C[local_planner_node-19] killing on exit
```

```
[camera/disparity_registered_sw-18] killing on exit
[camera/disparity_depth-17] killing on exit
[camera/depth_points-13] killing on exit
[camera/depth_registered_sw_metric_rect-16] killing on exit
[camera/points_xyzrgb_sw_registered-15] killing on exit
[camera/register_depth_rgb-14] killing on exit
[camera/depth_metric-12] killing on exit
[camera/depth_metric_rect-11] killing on exit
[camera/depth_rectify_depth-10] killing on exit
[camera/ir_rectify_ir-9] killing on exit
[camera/rgb_rectify_color-8] killing on exit
[camera/rgb_rectify_mono-7] killing on exit
[camera/rgb_debayer-6] killing on exit
[camera/driver-5] killing on exit
[camera/camera_nodelet_manager-4] killing on exit
[mavros-3] killing on exit
[tf_depth_camera-2] killing on exit
[tf_90_deg-1] killing on exit
[local_planner_node-19] escalating to SIGTERM
shutting down processing monitor...
... shutting down processing monitor complete
done
```