1.Camera usage instructions

1. Using opencv and USB_ Camera error driven by cam

Using Orbbec_ After the launch command in the SDK feature pack drives the camera, you will find that using USB_ The cam cannot drive the camera and will report an error as shown in the following figure.

```
process[image_view-3]: started with pid [10766]
[ INFO] [1697529235.315517776]: Initializing nodelet with 4 worker threads.
[ INFO] [1697529235.405725041]: Using transport "raw"
[ INFO] [1697529235.425513328]: using default calibration URL
[ INFO] [1697529235.426148155]: camera calibration URL: file:///home/yahboom/.ro
s/camera_info/head_camera.yaml
[ WARN] [1697529235.426534453]: [head_camera] does not match name narrow_stereo
in file /home/yahboom/.ros/camera_info/head_camera.yaml
[ INFO] [1697529235.426583374]: Starting 'head_camera' (/dev/video0) at 640x480
via mmap (yuyv) at 30 FPS
[ERROR] [1697529235.426640067]: Cannot identify '/dev/video0': 2, No such file o
r directory
[usb_cam-2] process has died [pid 10765, exit code 1, cmd /opt/ros/noetic/lib/us
b_cam/usb_cam_node __name:=usb_cam __log:=/home/yahboom/.ros/log/51dd48e6-6cc2-1
1ee-b19d-65f5d1e636b5/usb_cam-2.log].
log file: /home/yahboom/.ros/log/51dd48e6-6cc2-11ee-b19d-65f5d1e636b5/usb_cam-2*
.log
```

Solution: Reseat the camera and then use USB_ Cam can then turn on the camera normally.

Open the camera with OpenCV, and if the above error occurs, unplug and plug it again.

Just use Orbbec first_ After the launch in the SDK drives the camera and before using OpenCV to drive the camera, it needs to be unplugged and unplugged again.

2. Virtual machine case demonstration explanation

The cases in the virtual machine include SDKs of multiple cameras.

Therefore, when paired with the cases in the virtual machine experiment tutorial, it is necessary to set the model camera file through the~/. bashrc file, and set [CAMERA_TYPE] to the purchased camera model.

If you are purchasing an astroplus camera, you need to modify the value of [CAMERA_TYPE] to astroplus.

Input following command:

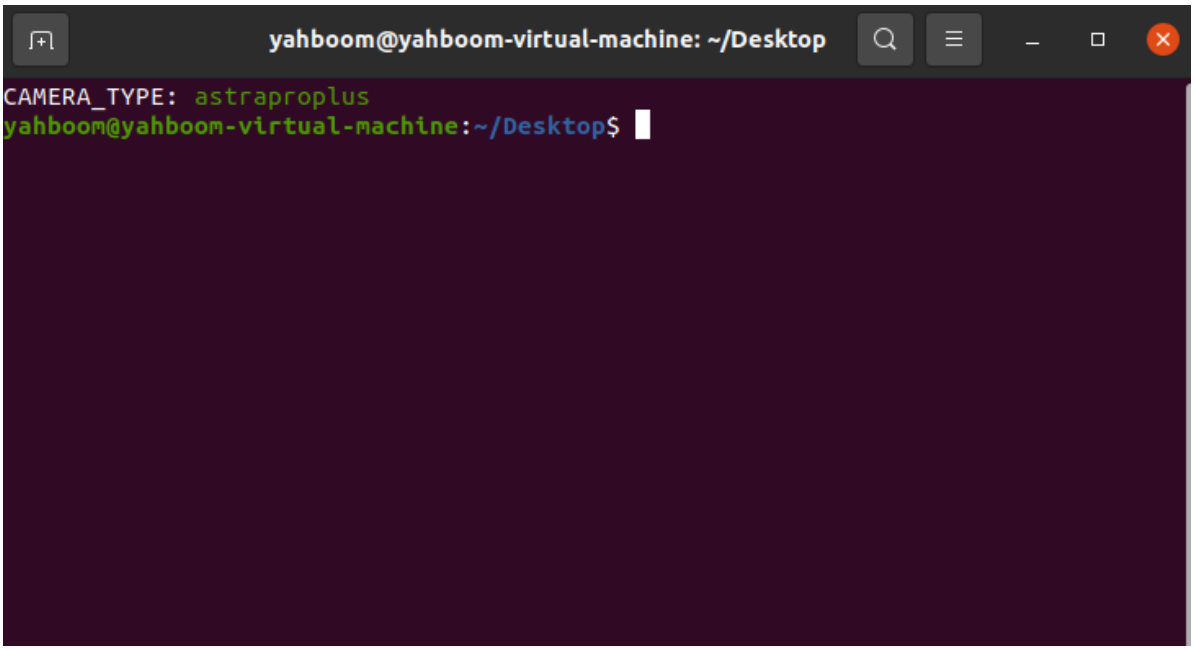
```
sudo gedit ~/.bahsrc
```

In line 140, set 【CAMERA_TYPE】 to astroplus.

```
140 export CAMERA_TYPE=astraproplus
141 echo -e "CAMERA_TYPE: \033[32m$CAMERA_TYPE\033[0m"
142 source ~/ArTrack_ws/devel/setup.bash
143 source ~/orbbec_ws/devel/setup.bash
144 source ~/ros_ws/devel/setup.bash
```

Save and exit.

Restart a terminal, which will print out the set camera type.



3. About code

We provide two sets of source code, one is only for the camera SDK, and the other is for the camera SDK and some demo code in the tutorial.

Orbbec_ ws There are function packages for driving cameras and running demos in conjunction with virtual machines in src.tar.xz.

Orbbec-ros sdk.tar.xz only contains the feature pack that drives the camera. There are only opencv related feature packages in opencv.zip file.

OrbbecSDK_ ROS2.tar.xz contains only the feature pack that drives the camera.

Orbbec_ ws_ There are function packages for driving cameras and running demos in conjunction with virtual machines in src.tar.xz.