

# Detect Control Reference

The Detect class includes controls for common features of various motion or object detection capable devices.

## Detect Control IDs

V4L2\_CID\_DETECT\_CLASS (class)

The Detect class descriptor. Calling `ref`VIDIOC_QUERYCTRL`` for this control will return a description of this control class.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\v4l\[linux-master][Documentation][userspace-api][media][v4l]ext-ctrls-detect.rst, line 19); [backlink](#)**

Unknown interpreted text role "ref".

V4L2\_CID\_DETECT\_MD\_MODE (menu)

Sets the motion detection mode.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\v4l\[linux-master][Documentation][userspace-api][media][v4l]ext-ctrls-detect.rst, line 26)**

Unknown directive type "tabularcolumns".

```
.. tabularcolumns:: |p{7.7cm}|p{9.8cm}|
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\v4l\[linux-master][Documentation][userspace-api][media][v4l]ext-ctrls-detect.rst, line 28)**

Unknown directive type "flat-table".

```
.. flat-table::
   :header-rows: 0
   :stub-columns: 0

   * - ``V4L2_DETECT_MD_MODE_DISABLED``
     - Disable motion detection.
   * - ``V4L2_DETECT_MD_MODE_GLOBAL``
     - Use a single motion detection threshold.
   * - ``V4L2_DETECT_MD_MODE_THRESHOLD_GRID``
     - The image is divided into a grid, each cell with its own motion
       detection threshold. These thresholds are set through the
       ``V4L2_CID_DETECT_MD_THRESHOLD_GRID`` matrix control.
   * - ``V4L2_DETECT_MD_MODE_REGION_GRID``
     - The image is divided into a grid, each cell with its own region
       value that specifies which per-region motion detection thresholds
       should be used. Each region has its own thresholds. How these
       per-region thresholds are set up is driver-specific. The region
       values for the grid are set through the
       ``V4L2_CID_DETECT_MD_REGION_GRID`` matrix control.
```

V4L2\_CID\_DETECT\_MD\_GLOBAL\_THRESHOLD (integer)

Sets the global motion detection threshold to be used with the V4L2\_DETECT\_MD\_MODE\_GLOBAL motion detection mode.

V4L2\_CID\_DETECT\_MD\_THRESHOLD\_GRID ( \_\_u16 matrix)

Sets the motion detection thresholds for each cell in the grid. To be used with the

V4L2\_DETECT\_MD\_MODE\_THRESHOLD\_GRID motion detection mode. Matrix element (0, 0) represents the cell at the top-left of the grid.

V4L2\_CID\_DETECT\_MD\_REGION\_GRID ( \_\_u8 matrix)

Sets the motion detection region value for each cell in the grid. To be used with the

V4L2\_DETECT\_MD\_MODE\_REGION\_GRID motion detection mode. Matrix element (0, 0) represents the cell at the top-left of the grid.