UVC XU GUI — quickstart

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This tool streams the camera with OpenCV and lets you send UVC Extension Unit (vendor) control

requests via PyUSB/libusb while the driver is active (Linux recommended).

Install deps:

python3 -m venv .venv && source .venv/bin/activate

pip install opencv-python pyusb pillow numpy

Run (for your Sonix cam):

python uvc\_xu\_gui.py --vid 0x0C45 --pid 0x6366 --device 0

Tips:

- Start with Unit 3, Selector 1..24, Len=3.

- Click GET\_LEN / GET\_INFO / GET\_CUR to see behavior, then SET\_CUR with payload like "00 00 00" or "01 00 00".

- Use "Bit Toggle" to auto-fill a simple 1-bit pattern.

- Save names for useful selectors; they persist in xu\_labels.json.

- The "Brute-force" helper will walk selectors and try a few payloads while you watch the preview.

Notes:

- On Windows, libusb cannot typically open the UVC device while usbvideo.sys owns it (unless you swap drivers with Zadig).

This app is intended for Linux where control transfers on ep0 are allowed without detaching the uvcvideo driver.