

# Connecting to Argus VPU

The Jetson connects to the Argus VPU using a special video splitter cable that provides an an RCA video input to the Argus VPU. The Argus VPU is programmed to copy a central ROI from the video input and display that to the implant. In order to provide this input to the VPU, the display output from the Jetson is used. The Jetson is programmed to display an OpenCV window positioned at the center of the "screen" (i.e., center of the display output) that displays the image to be sent to the VPU.

1. Cable interconnection
  - a. Since the Jetson does not have a direct RCA output, an adapter must be used to convert the Jetson display output to RCA format.
    - i. Jetson Xavier: HDMI-to-RCA adapter is used.
    - ii. Jetson Orin: DisplayPort-to-HDMI and HDMI-to-RCA adapters are used in series.
2. Starting Application Remotely over SSH
  - a. Establish SSH connection to Jetson
  - b. configure Jetson to use its local display for GUI output with command:
    - i. `export DISPLAY=:1`
  - c. run the application