

System Design Project 2016

Video Feed Guide

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1 Video Feed Guide

To access the pitch camera video feed successfully and to adjust the video format and baseline settings run `xawtv` from the command line within a terminal window. Note:- by running this from the command line you will see all the relevant error messages that you will need to see to diagnose any potential problems. There are several different video programs on DiCE which can be run from both the menus and the command line, however `xawtv` is the only one to give you useful fault finding information when the video feed fails to appear. `Xawtv` may fail the first time that you try to run it, if it does, then close it and run it again.

Right click in the main window to gain access to the control menu. Check and select PAL and S-Video as the format options. You should also centre the colour, contrast, brightness and gamma settings.

We would suggest going through this procedure each and every time you sit down at a vision system prior to launching your vision system programs. The hardware retains the last users settings, so you may not get the image that you were expecting to see otherwise.

2 Known Issues

The video capture devices can only do one job at a time.

The first user to login into a DiCE PC gets the hardware permissions.

Remotely accessing a video feed from another PC won't work without first being logged into the machine with the direct feed.

There are two different types of video capture device in use:-

The USB ones - which retail the previous users format and colour and contrast settings.

The PCI ones - which default to factory settings every time that you try to use them.

Black screen - means that the video capture device has been upset and will not function properly without rebooting the PC. Reasons for this include, the last users program not being terminated cleanly, the last user being bounced off the machine's front screen which means that they still have all the hardware permissions. Solution - reboot the PC.

Blue Screen - means that the capture device is not seeing a video feed. Note - that the capture devices have two inputs:- Composite and S-video. The device may be set to the wrong one. Solutions - run xawtv and check that S-Video has been selected. Check that the PC has a capture device plugged into it. Check that the capture device has an S-video lead plugged securely into it. Check that that S-Video lead goes to an amplifier and is plugged in securely. Check that the amplifier has an S-video input lead plugged securely into it. Check that the amplifier's power light is on, if not please plug the adapter back in and or switch it on at the wall.

Green Screen - means that xawtv has crashed, try running it again from the command line.

Fuzzy or Black and White (Greyscale)Image - means that you either have a faulty feed or you have the wrong settings. Run xawtv and select PAL and S-Video. Check the attached video lead for bent or broken pins, both at the capture device and the nearby amplifier.

If after trying the above solutions, you still cannot see the video feed correctly, report this to the course technician along with the name and location of the PC in question.