naturalpoint's website]]]. the optihub provides basic synchronization features. advanced_wnd_np_tab.png ==== try to connect ==== ==== pulse mode ==== off - no external sync pulses are sent from the optihub, even when the cameras are connected and streaming. always on - external sync pluses are sent from the optihub continuously when the cameras are connected and streaming. on during recording - sync pulses are only sent from the optihub when capture2d is recording. ==== pulse phase ==== in phase - no global offset is applied. delayed by global offset - controls the delay between any of the chosen sync input sources and when the cameras are actually told to trigger (i.e. expose a frame). units is in us. valid range: 0 – 65,862 us. ==== pulse duration ==== exposure time - external sync output signal is asserted when the ir-strobes are turned on, which is concurrent with when the sensors are exposed. the signal is asserted for as long as the strobe is on (and the imager is exposing). pass through - a ttl level-translated version of the signal applied to the external sync input jack is presented on the external sync output jack for daisy-chaining applications. recording level - external sync output signal is asserted continuously when the application is recording, and de-asserted when recording is stopped. recording pulse - like exposure time, except pulses are issued only when the application is recording, and idle when recording is stopped. ==== invert pulse polarity ==== unchecked - the pulse polarity is normal (also known as active-high). checked - the pulse polarity's amplitude is inverted (also known as active-low). for more information on naturalpoint's optihub settings, see [[[http://www.naturalpoint.com/optitrack/static/documents/optihub%20user%20guide.pdf|optihub users guide]]]. ==== frequency ==== selects the system frequency (i.e., the common frequency in which each camera is running). valid settings are 100 hz (default), 50 hz and 25 hz. changing the system frequency adjust all connected cameras to that frequency. ==== frames to record ==== indicates the number of frames that will be recorded. this value is determined by 1) the system frequency and 2) the record duration in seconds in the main capture2d window. ==== sensor list ==== contains a list of each connected sensor (camera). settings displayed below the sensor list are applied to the currently selected sensor. ==== ir led ==== sets the infrared led setting for the currently selected sensor in the sensor list display (above). ==== threshold ==== sets the threshold setting for the currently selected sensor in the sensor list display (above). ==== expsoure ==== sets the expsoure setting for the currently selected sensor in the sensor list display (above). ==== apply to all ==== applies all settings (ir led, threshold, exposure) of the currently selected sensor to all connected sensors. ===== ndi firstprinciples ===== capture2d supports the ndi (northern digial inc.) firstprinciples ethernet stream, so no drivers are required on the client side (the computer running capture2d). the server machine running firstprinciples does required northern digital's pci interface and drivers. advanced_wnd_ndi_tab.png ==== try to connect ==== ==== device list ==== ==== frequency ==== ==== frames to record ==== ===== amti ===== capture2d supports the amti gen5 digital signal conditional and requires usb drivers, available from [[[http://www.amti.biz/|amti's website]]]. advanced_wnd_amti_tab.png ==== try to connect ==== ==== device list ==== ==== frequency ==== ==== frames to record ==== ==== zero ==== ==== genlock on ==== ==== edit force plate parameters ==== ===== bertec ===== capture2d supports the bertec am6500 digital signal conditional and requires usb drivers, available from [[[http://www.bertec.com/|bertec's website]]]. advanced_wnd_bertec_tab.png ==== try to connect ==== ==== device list ==== ==== frequency ==== ==== frames to record ==== ==== zero ==== ==== genlock on ==== ==== edit force plate parameters ==== }}}}}}}}