



Motion Engineering Company

# Quick Start Operating Instructions

## HiSpec 1

### High Speed Camera System Components



Camera Body



AC Power



Multi-Wire Pigtail  
Input/ Output Cable



Trigger Cable



Ethernet Cable



F-C Mount Adapter

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**DAMAGE TO EQUIPMENT FOR IMPROPER CONNECTION BETWEEN CAMERA, CABLES, AND COMPONENTS IS AT CUSTOMER'S RISK....See Rental Agreement for clarification.**

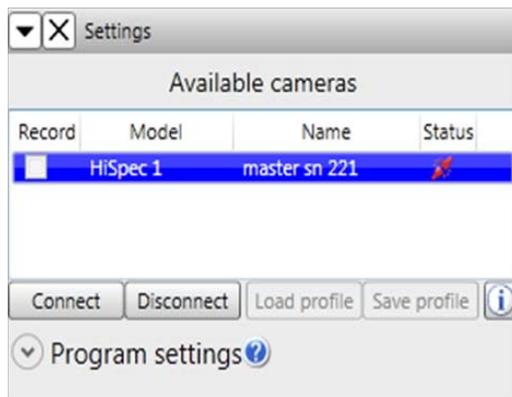
## **Instructions:**

- 1. Connect the Multi-Wire Pigtail Input/ Output cable to the Camera Body.**
- 2. Connect the Power Supply to the Multi-Wire Pigtail Input/ Output cable labeled “Power”.**



- 3. Connect the Manual Trigger Cable to the “TRIG IN” connector on the Multi-Wire Pigtail Input/ Output Cable.**
- 4. Connect the CAT-6 Ethernet Cable between the laptop and the back of the Camera Body.**
- 5. Connect the laptop power supply and then turn on the laptop.**
- 6. At the Windows Log on screen, type “pci” as the User Name, and “pci” as the Password.**
- 7. Once the camera is connected to the laptop, you will see an icon with a yellow triangle and exclamation point over the network connection icon located on the bottom right of the desktop. (Note: This may take a minute or two)**
- 8. After camera is connected, double click on the “HiSpec Director II” software icon located on the desktop.**

9. Attach the desired lens to the Camera Body. C-Mount Lenses connect directly to the camera (no need for adapter). Nikon F-Mount Lenses require the “F-C Mount Adapter”.
10. Once the software has loaded, the camera model, name, and status should be shown in the upper left had side of the window, under “Available Cameras”.

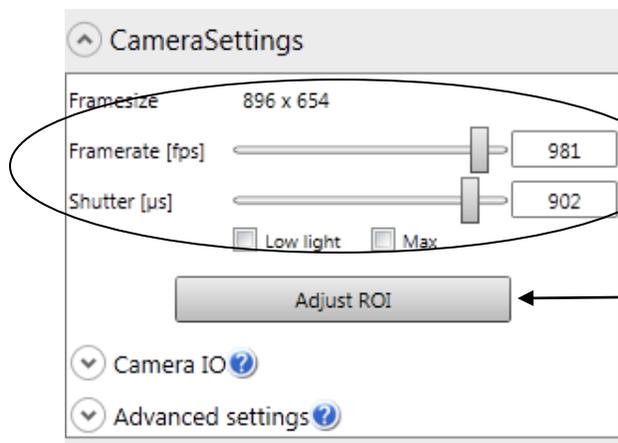


Connected camera(s) are displayed with their status. Select camera(s) and press “Connect” or Double Click on camera(s) name to connect camera(s) to Director II Software

Click the “i” icon to rename camera(s)

11. Select connected camera and then “Connect” or Double-Click Camera Name.
12. Select desired Frame Rate, Resolution, Shutter Speed, and Trigger Mode.

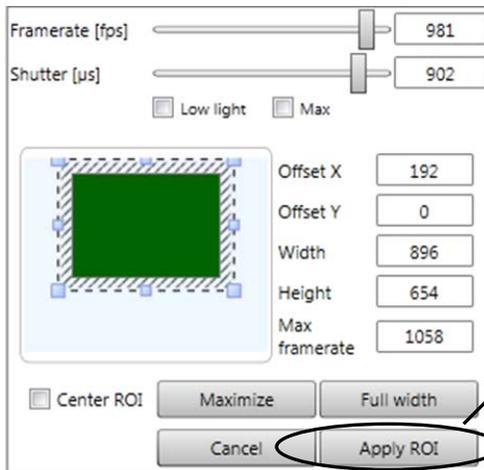
### Adjusting Frame Rate & Shutter:



Adjust Frame Rate, and Shutter Speed by either using scroll bar or clicking on number box (right of scroll bar) and typing in desired value via keyboard

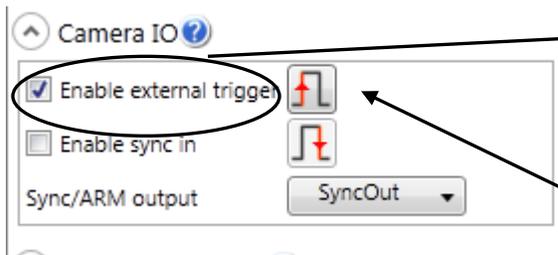
Adjust the Region of Interest “ROI” by clicking the button, then adjusting either offsetX / offsetY, moving the red rectangle, or the green rectangle to desired area

## Adjusting ROI:



If adjusting the “ROI”, select the “Adjust ROI” option from Camera Settings and then edit within this menu. Then adjust with offsetX / offsetY values, moving the red or green rectangle to the desired area.

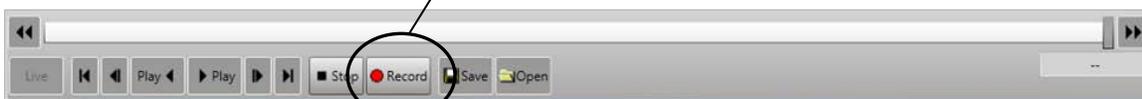
When you are done editing, make sure to select “Apply ROI”



If using an external hardware trigger, you MUST have “Enable external trigger” checkbox checked. You may change the “rising” or “falling” edge of the trigger, depending on how you want to stop your recording, by clicking on the icon.

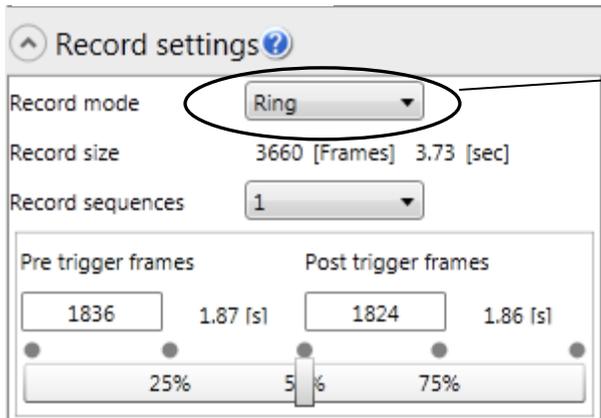
To change from “rising” to “falling” click on the icon

## 13. To make recording, select “Record” icon on bottom toolbar



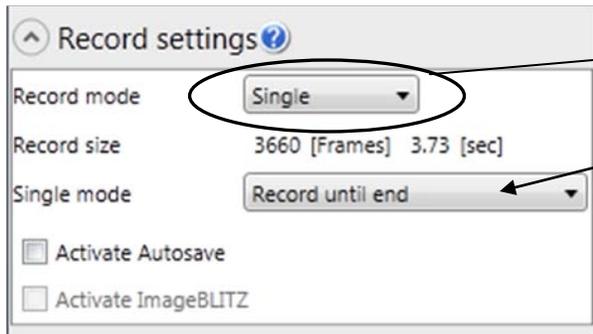
**Note:** There are two different Record Modes, Ring and Single. Single mode has three different types of modes; Record until end, Burst trigger mode, and Record while trigger is active.

### Ring Record Mode:



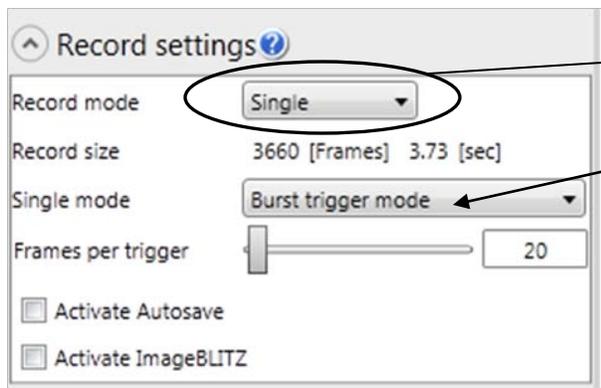
If in “**Ring**” recording mode, image will be continuously buffering (and rewriting over itself) until you click the trigger button or use F12 for software trigger

### Single Record Mode:



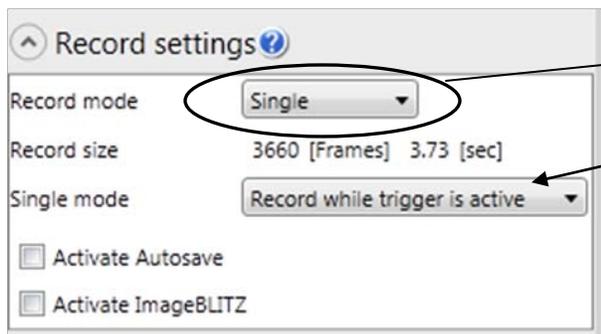
If in “**Single-Record until end**” mode, image will be captured until the memory buffer is full (Start)

### Single-Burst Trigger Mode:

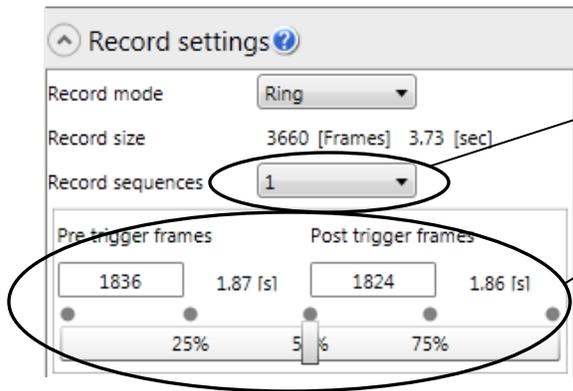


If in “**Single-Burst trigger mode**”, image will be captured until the memory buffer is full (Start)

### Single-Record While Trigger is Active:



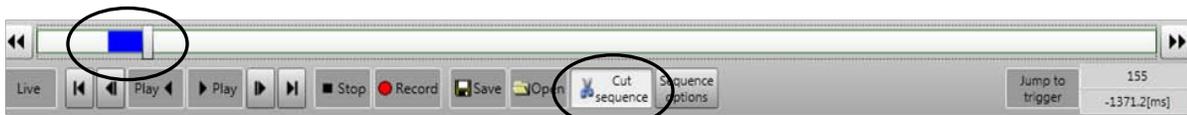
If in “**Single-Record while trigger is active**”, images will be captured when external trigger signal is present (hardware-driven)



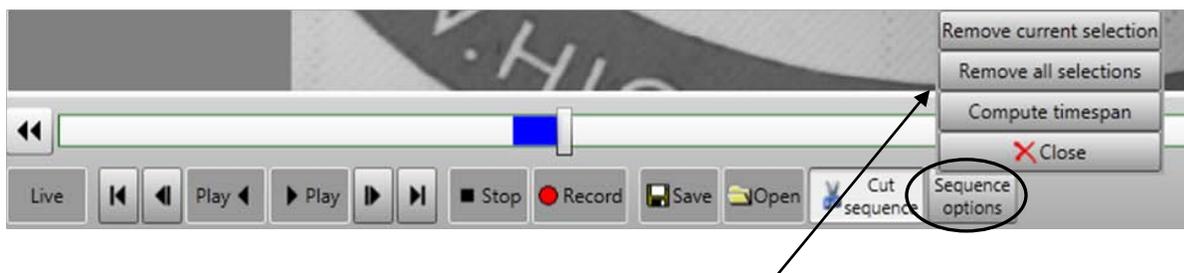
You are able to divide the memory up to 16 same-sized memory ranges

You are able to adjust Pre/Post Trigger frames by either moving scroll bar, or manually typing in desired amounts in boxes. In this example, there will be approximately 50% of the frames captured before and after trigger is initiated

**14. Use Scroll bar to navigate to the first frame of interest within the recording. Select “Cut Sequence”. Drag Scroll Bar through the sequence, stopping at the last frame of interest. Select “Cut Sequence” again. The solid blue bar indicates those images will be viewed/ saved.**



**15. To save image, use the “Save” icon on the toolbar to save images.**



**16. Once a sequence (or sequences) has been created, you can select “Sequence Options”. To deselect the current sequences, use the “Remove Current Selection” option, or use “Remove All Selections” to deselect multiple sequences. Please note, using these two options will NOT delete the actual sequence, but will just deselect them. Use the “Compute Time span” to calculate the distance in time between sequences.**

**17. Select desired “Directory” and “Export Format”, and then select “Start Export” to save images to desired directory.**

