



TECH NOTE

Title: I/O on i-SPEED 210 / 220
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The I/O on an i-SPEED 210 and 220 is accessed via a breakout cable that goes in line with the 6 pin power connector.

Trigger in

Recording can be stopped either with a trigger switch or by a low or high external signal.

Using a trigger switch

To use a hand trigger cable then connect using BNC T connector with the Trigger In connector on the breakout cable.

Using an external trigger input

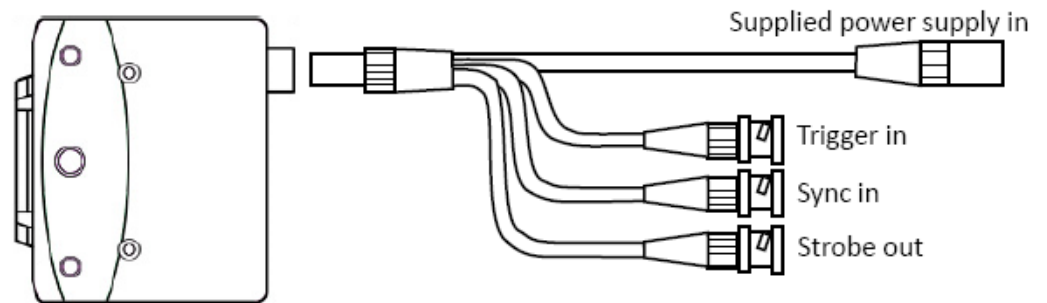
Connect the Trigger In connector with an external trigger. Enable External Trigger in the Camera IO menu of the Control 2 series software and decide whether a rising or falling edge of the signal will stop the recording.

Sync in

The Sync In connector allows the user to synchronize one or more cameras with an external signal. Before using this feature, enable Sync In in the Camera IO menu of the Control 2 Series software and decide whether a rising or falling edge will start synchronization. Note: Sync out activates a strobe that corresponds to the exposure time of the camera.

Sync In combined with ARM

Sync In combined with ARM can be used to start/stop recording with a high or low external signal. ARM means that the camera is armed and recording. Enable Sync In in the Camera IO menu of



the Control 2 Series software and decide whether a rising or falling edge will set the ARM signal low or high. ARM is only active if the record settings have been set to Ring Mode in the Control 2 Series software.

Strobe Out

Strobe out supplies the synchronization, trigger, or recording status of the camera.

Trigger signal widths

The trigger signal is debounced. This is why an external mechanical switch can be used. Minimum pulse width according to trigger polarity is shown below.

- Trigger polarity=rising and a positive pulse of greater than 100nS
- Trigger polarity=rising and a negative pulse of greater than 5mS
- Trigger polarity=falling and a positive pulse of greater than 5mS
- Trigger polarity=falling and a negative pulse of greater than 5uS

5uS after the debounce the trigger will be processed.