

Using a Fastec InLine High-Speed Camera with MiDAS DA

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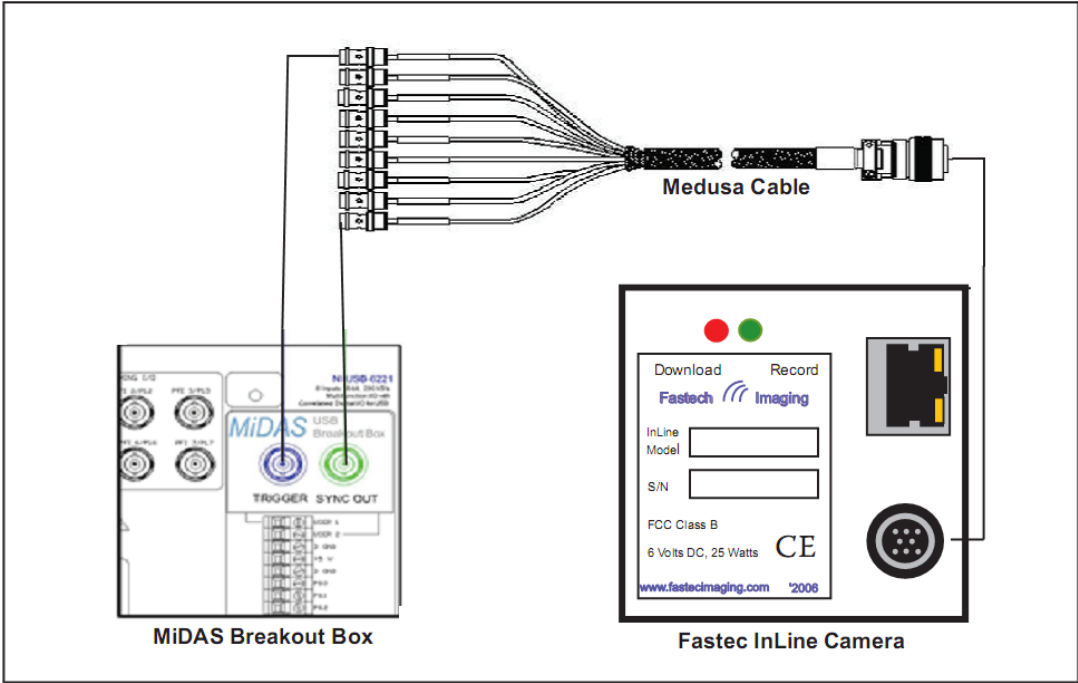
Abstract

This application note describes the hardware connections and software settings for using MiDAS DA software with a Fastec InLine high-speed video camera running MiDAS OS camera control software. Included in this document are the settings for putting the camera into Slave/External Sync mode.

Instructions

Note: Decide your measurement settings in advance, including the video frame rate, data samples/frame (or total data rate), duration of recording and trigger percentage.

1. Locate the MiDAS DA breakout box connector labeled **Sync Out**. Connect a BNC cable from **Sync Out** to the medusa cable connector labeled **Sync In**. Next, locate the MiDAS DA breakout box connector labeled **Trigger**. Connect a BNC cable to the medusa cable connector on the Fastec InLine labeled **Trigger**, as shown in the diagram below.



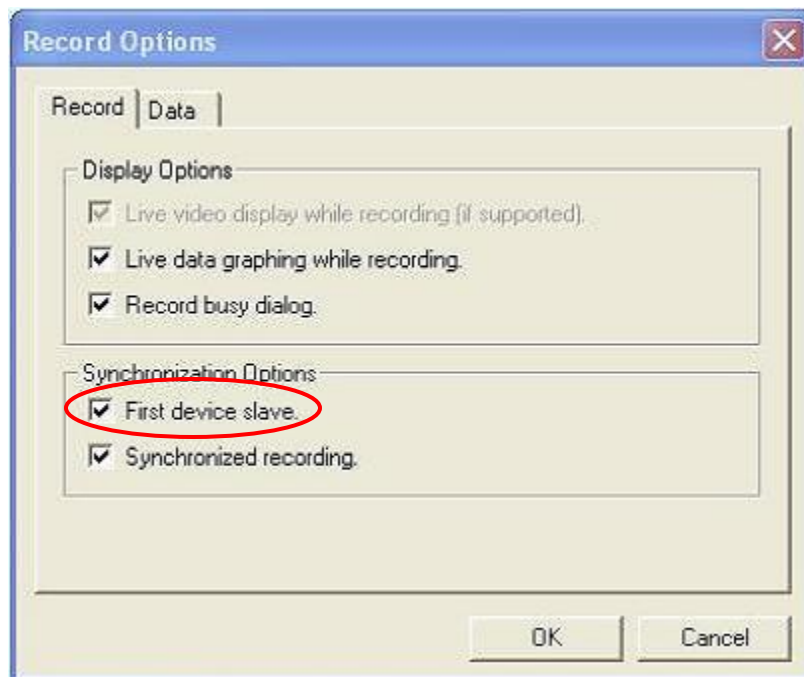
2. Launch MiDAS DA and configure the number and type of sensor input channels.

Note: For more information on configuring your data channels please refer to the MiDAS DA User Guide.

3. Launch MiDAS OS. Under File select **Open camera...** Follow the instructions to “open” your camera.

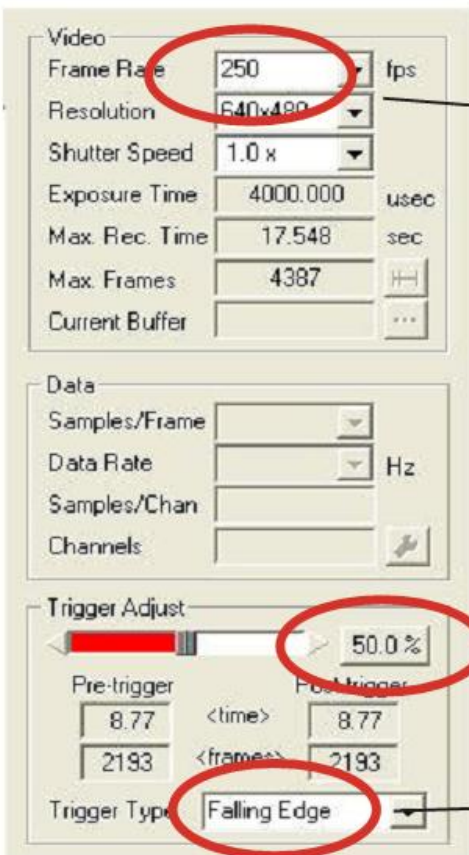
Note: For more detailed instructions on “opening” your Fastec camera, please refer to Application Note 140 – Using a Fastec Camera with MiDAS OS.

4. Under Edit select **Record Options**. Check the box labeled, **First device slave**, as shown below.

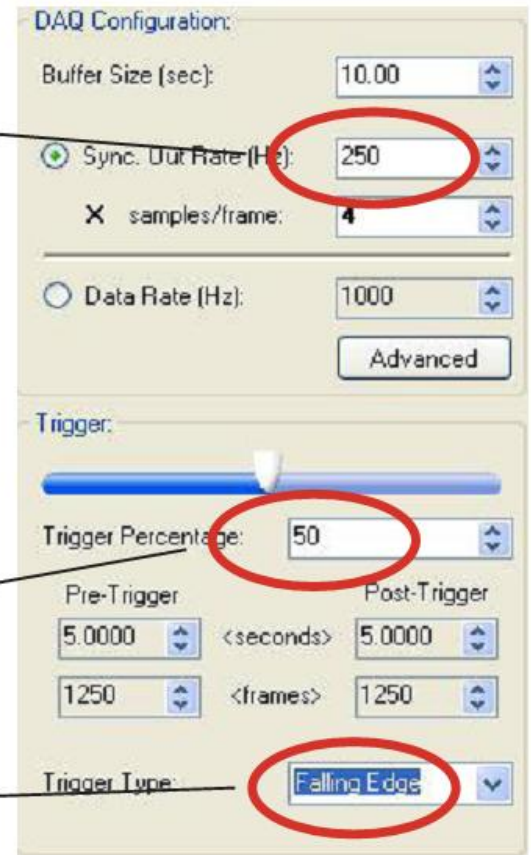






5. You must now close and re-open your camera to put it into slave mode.
6. Configure your Frame Rate and trigger percentage to match MiDAS DA as shown on the following page.

MiDAS OS



MiDAS DA



7. In MiDAS DA, enter the video rate in the Sync Out Rate (Hz) field, and the samples per frame in the samples/frame field.
8. Click the green **Record**  button at the bottom left-hand corner of the window. This will start the data acquisition as well as start sending sync pulses to the camera in order to get synchronized video acquisition.
9. In MiDAS OS, click the red **Record**  button to start recording video.
10. Trigger your recording by either clicking the **Trigger**  button in MiDAS DA or by pressing your external trigger.
11. After recording, trim the video length to the specific frames of interest and save the video.
12. Import your video into MiDAS DA either by dragging and dropping it into the MiDAS DA workspace or by clicking **File ► Project ► Add Video** from the menu bar. Once your video is imported, the Playback window will appear. Click the **Play**  button to simultaneously play your synchronized video and data.

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