Matrox Imaging Video Specification Form

Email the completed form to imaging.techsupport@matrox.com with relevant documentation to the attention of the Technical Support department, which can be reached at (514) 822-6061.

The information contained in this form is the minimum required to determine compatibility between Matrox Imaging hardware and a specific video source. Please answer all questions in sections I through IV directly on this form and supply documentation from the camera manufacturer (e.g., attach camera manual if available). Please reply N/A for any non-applicable entries. Please note that some sections of this form do not need to be completed for Camera Link®, CoaXPress®, USB3 Vision® and GigE Vision® video standards.

Name: _____

Company: _____

Telephone: _____

Fax: _____

E-mail: _____

Matrox Imaging Library (MIL) revision: _____

Target Matrox Imaging board: _____

Section I: Acquisition requirements

Please complete a description below (use extra pages and add diagrams as necessary) of the desired operation of your camera and acquisition system (i.e., signal exchange, triggers, etc.). Refer to specific modes available to your camera and used in your application. This information is important to allow us to choose the best way to interface the camera with our hardware.

_____

_____

_____

Section II: General Information

1. Camera manufacturer: _____

2. Model number: _____

3. Camera Type: ☐ Frame scan: ☐ Line scan ☐ Other, specify: _____

4. Video data rate: _____ MHz and _____ frames per second (fps)

5. Desired acquisition resolution: _____ Horizontal x _____ Vertical

6. Scanning format: ☐ Interlaced (2 fields/frame) ☐ Non-interlaced / Progressive (1 field or pass/frame)

7. Video data format:

   Analog – Amplitude _____ V (p-p),

   Swing type (select only one): ☐ Positive ☐ Negative ☐ Both

   Digital - _____ bits, Format: ☐ TTL ☐ RS-422 ☐ LVDS ☐ Camera Link/Channel Link ☐ CoaXPress ☐ GigE

Matrox Imaging Video Specification Form

Section II: General Information (continued)

8. Synchronization format (skip this question for Camera Link, CoaXPress, USB3 Vision and GigE Vision)

☐ Analog:

      ☐ Composite video OR ☐ Video & composite sync

      ☐ Serrated sync OR ☐ Block sync

☐ Digital:

      ☐ Csync OR ☐ Hsync AND/OR ☐ Vsync

      Synchronization digital format: ☐ TTL ☐ RS-422 ☐ LVDS

      Csync or Hsync polarity: ☐ positive going polarity ☐ negative going polarity ☐ not available
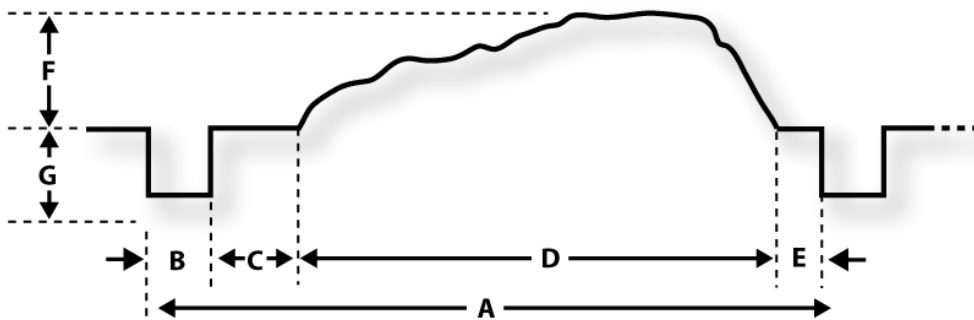
      Vsync polarity: ☐ positive going polarity ☐ negative going polarity ☐ not available

Pixel clock (if available) clock rate: _____ MHz ☐ TTL ☐ RS-422 ☐ LVDS

Section III: Timing Specifications (skip this section for Camera Link, CoaXPress, USB3 Vision and GigE Vision)

Please fill in the information requested below or include the timing specification documentation supplied by your camera manufacturer. Although a composite video waveform is shown in the following diagram, the timings also apply to separate video and sync sources (just imagine the signals being superimposed).

Horizontal timings (in sec* or pixels per line, please specify)

A – Horizontal total line time: _____ (/ line)

B - Horizontal sync pulse width: _____ (/ line)

C - Horizontal back porch: _____ (/ line)

D - Horizontal total active line time: _____ (/ line)

E - Horizontal front porch: _____

   Horizontal values given in: ☐ seconds* _____ ☐ pixels _____

F - Video active amplitude: _____ (V - p.p.)
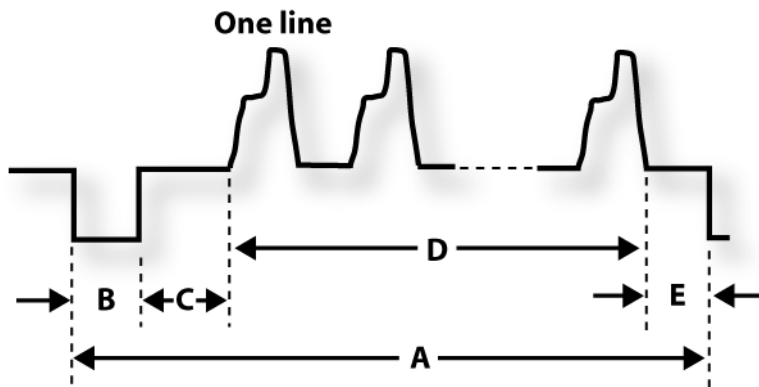
G - Sync pulse amplitude: _____ (V - p.p.)

        * Specify time scale (i.e. μsec or msec)

Matrox Imaging Video Specification Form

Section III: Timing Specifications (cont.)

Vertical timings

Vertical timings are given in number of lines per frame (horizontal syncs pulses/frame) for Interlaced and Non-interlaced video sources, and additionally in lines per field (horizontal syncs pulses/field) if interlaced. Please note that horizontal syncs are not shown in the diagram below.

	horizontal syncs pulses/field (Interlaced only)	horizontal syncs pulses/frame (Interlaced and non-Interlaced)
A - Vertical total line time:	_____ (lines)	_____ (lines)
B - Vertical sync pulse width:	_____ (lines)	_____ (lines)
C - Vertical back porch:	_____ (lines)	_____ (lines)
D - Vertical total active line:	_____ (lines)	_____ (lines)
E - Vertical front porch:	_____ (lines)	_____ (lines)

Section IV: Cable Specifications (skip this section for Camera Link, CoaXPress, USB3 Vision and GigE Vision)

Please describe below or attach a diagram which identifies all accessible signals from your video source, including the type and gender of each physical connector on the video source (i.e., female BNC connector for video, male DB-25 connector for pixel clock and sync, etc.).This information will allow us to describe the necessary cable to interface your video source with our hardware. Please estimate the maximum cable length required: _____(feet).

_____

_____

_____

Thank you for taking the time to fill out this form. It is important to us that we have complete information on the video sources that imaging professionals wish to use with our products. Please email the form to us at imaging.techsupport@matrox.com. If you have any questions regarding this form, you can reach us by calling 514-822-6061 or by sending e-mail to imaging.techsupport@matrox.com.