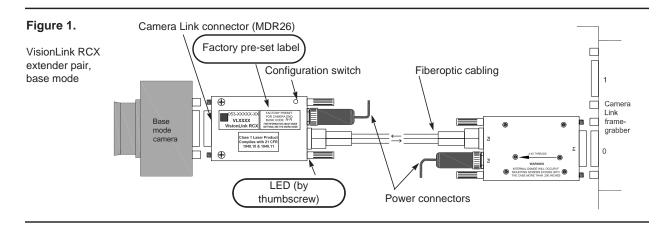


VisionLink RCX Extender Pair: Base Mode Configuration

Each VisionLink RCX unit comes with factory presets, as well as the ability to reset them. For a quick start, see Figure 1 and follow the steps below. For complete documentation of EDT extenders and framegrabbers, see www.skyblue.de.



Step 1 - Verify presets. On each unit's factory preset label (circled in Figure 1 above), find "Blink Code X-Y."

"X" is the device to which the unit connects (1 for camera, 2 for framegrabber); Y is the link rate between units. The camera's output pixel clock rate must fall within this range.

Table 1 below shows blink codes for standard usage (left side of table) and RCX C-Link emulation (right side of table). If you are using a VisionLink RCX with an RCX C-Link, then blink codes X-1 and X-4 are compatible with existing RCX C-Links in matching blink codes.

| Table 1: | Blink codes for standard usage | | | | Blink codes for RCX C-Link emulation | | | |
|------------------|--------------------------------|------------------|-------------------|-------------------------|--------------------------------------|------------------|-------------------|-------------------------|
| Unit connects to | Code (X-Y) | Pixel clock rate | Bits per clock | Link rate between units | Code (X-Y) | Pixel clock rate | Bits per clock | Link rate between units |
| camera | 1-1 | 20-40 MHz | 8–24 | 1.25 Gb/s | 3-1-1 | 20-40 MHz | 8-24 | 1.25 Gb/s |
| camera | 1-2 | 20-80 MHz | 8-24 | 2.50 Gb/s | 3-1-2 | 20-60 MHz | 8-16 | 1.25 Gb/s |
| camera | 1-3 | 20-85 MHz | 8-24 | 3.00 Gb/s | 3-1-3 | 20-60 MHz | 8-24 | 2.50 Gb/s |
| camera | 1-4 | 20-80 MHz | 8-24 | 2.50 Gb/s | 3-1-4 | 60-80 MHz | 8-24 | 2.50 Gb/s |
| framegrabber | 2-1 | 40 MHz | 8-24 | 1.25 Gb/s | 3-2-1 | 40 MHz | 8-24 | 1.25 Gb/s |
| framegrabber | 2-2 | 80 MHz | 8-24 | 2.50 Gb/s | 3-2-2 | 60 MHz | 8-16 | 1.25 Gb/s |
| framegrabber | 2-3 | 85 MHz | 8-24 | 3.00 Gb/s | 3-2-3 | 60 MHz | 8-24 | 2.50 Gb/s |
| framegrabber | 2-4 | 80 MHz | 8–24 | 2.50 Gb/s | 3-2-4 | 80 MHz | 8–24 | 2.50 Gb/s |

Each extender unit must be used as its settings dictate. Data will not transfer if a unit is plugged into the wrong device (i.e., a camera-end unit into a framegrabber, or a framegrabber-end unit into a camera); if the camera's pixel clock rate falls outside the preset range; or if the pixel clock rate and the link rate for the two VisionLink RCX units do not match. In such cases you must reset and relabel each unit.

Step 2 – With all power off, connect all devices. Connect the camera-end extender unit to the camera; the framegrabber-end unit to the framegrabber; the cabling between the two units; and lastly, the units to the power supply.

Step 3 – Power on all devices. In any order, power on all cameras, computers, and RCX units. Each unit's LED (circled in Figure 1) should blink briefly, then stay steady green; if not, see the VisionLink RCX user's guide for troubleshooting.

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