Thank you for choosing a MityCAM-B2521F/B1910F from Critical Link.

The MityCAM-B2521F/B1910F (MityCAM) Hardware Setup Guide will introduce you to the hardware components of your camera. Once completed, you should be able to follow the MityViewer Application Quick Start Guide (located on the included disc), which will guide you through your first image acquisition using the MityCAM and the MityViewer software application from Critical Link on a PC. Each camera features either a dual CameraLink interface, for use with PC based frame grabber cards, or Gigabit Ethernet, for use with MityViewer, for optimal throughput and complete functionality.

The MityCAM contains the following:

Provided Hardware:
- MityCAM-B2521F or MityCAM-B1910F Camera
  - Fairchild Imaging CIS 1910F or CIS 2521F based sensor board
  - Cyclone V SoC based CPU platform
  - Acquisition electronics
  - Dual CameraLink or Gigabit Ethernet Interface
  - USB 2.0 Image Capture Capabilities (MityViewer Application)
  - Housing for C-mount lens
- USB Cable
- Ethernet Cable (Gigabit Ethernet Models only)
- IO Connector breakout cable
- 100V-240V AC/DC 12V 3.3A (or similar) power adapter and connector
- Standard Lens (C-Mount)
- Disc with Software Applications and Users Guides

Printed Documents:
- MityCAM-B2521F/B1910F Hardware Setup Guide (this document)
- MityCAM-B2521F/B1910F MityViewer Quick Start Guide

Software and Documentation:
- MityViewer 2.5.2 or above – PC (Windows) software
- MityCAM CamlinkPanel Serial Control Panel – PC (Windows) software
- MityCAM CamlinkPanel Users Guide
- MityCAM-B2521F Datasheet
- MityCAM-B1910F Datasheet
- MityCAM-B2521F CameraLink Interface Document
- MityCAM-B1910F CameraLink Interface Document

Additional Hardware (not provided):
- Laptop / PC to host the MityViewer software or CameraLink frame grabber

Hardware Setup

Figure 1 – MityCAM Back Panel CameraLink (Left) and Gigabit Ethernet (Right)

1) Ensure that power to the AC/DC adapter is "off" prior to connecting it to the camera.

2) Insert the DC (4-pin) power connector into the "Power" connector on the back panel of the camera. (Identifier #1)

3) Insert the USB cable into the Mini B type connector. (Identifier #2)

4) Thread supplied lens (included lens may vary) into front plate assembly; outlined with red below.

5) (Optionally) You can connect the MityCAM camera through the CameraLink or Gigabit Ethernet connectors (Identifier #3). Steps 6 through 18 of this document are for USB image acquisition support only. Please consult the "Camera Link Users Guide" or "MityViewer Quick Start Guide" (Gigabit Ethernet) for further details.

6) Connect the USB cable to a PC, RNDIS drivers will automatically be installed through Windows update on the PC if necessary. Drivers may be required for Windows XP.

7) Record Kit S/N (Identifier #4). This will be used later in the "MityViewer" application when connecting to the camera.

8) Plug the AC/DC power into an outlet. The fan will turn on immediately.

9) The following steps were done with Win 7, but Win XP is similar.

10) Your PC should detect the USB RNDIS device (camera) and begin installing/downloading the driver.
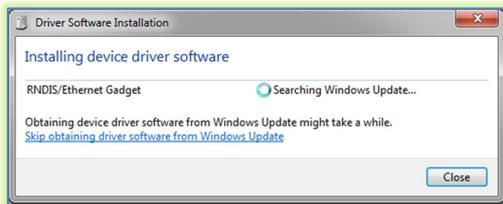
11) Open the Network Connections dialog; it may be found by selecting Control Panel -> Network and Internet -> Network Connections.

12) Select and 'right-click' the "USB Ethernet/RNDIS Gadget #X" icon (underlined in red) and then select "Properties" from the pop-up menu.

13) Select "Internet Protocol Version 4" (TCP/IPv4) and then press the "Properties" button.
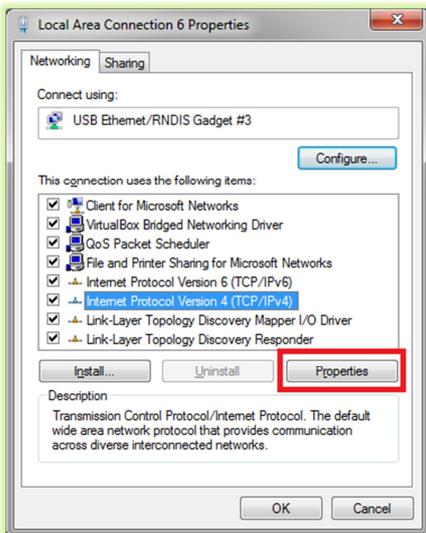
14) Enable static IP for the USB by NIC by setting the following parameters:
   a. Select "Use the following IP address"
   b. Enter IP address: 10.1.47.1
   c. Enter subnet mask 255.255.255.0
   d. Leave Default Gateway blank
   e. Select "Use the following DNS server addresses" radio button and leave blank
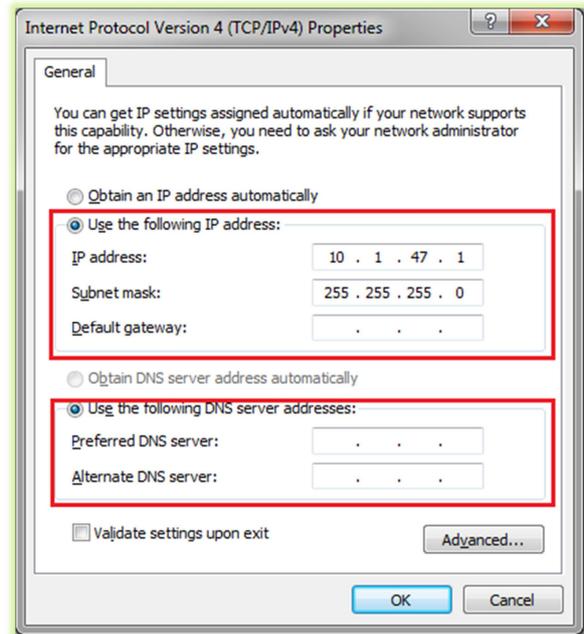
15) The USB RNDIS device is now configured for use with the MityCAM. Note that you can connect to the camera using SSH and SCP protocols. The User Name is "root" and there is no password by default.

16) Note that the "I/O" connector (Identifier #5) is to be used with the included flying lead assembly, 80-000683. The I/O's can be controlled from the MityViewer application.

17) Please continue on to the "MityCAM-B2521F/B1910F MityViewer Quick Start Guide" to setup the software for your first image acquisition.

Thank you!

MityCAM-B2521F and MityCAM-B1910F

Hardware Setup Guide