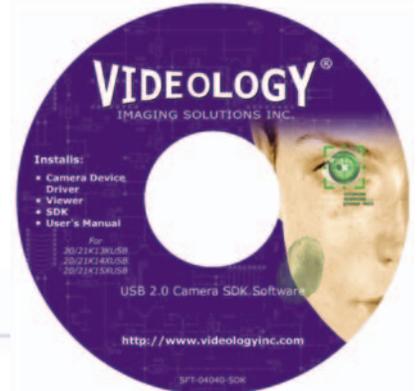




Software Features

- DirectX compliant WDM driver and SDK.
- Videology's SDK will provide camera control APIs for controlling the camera's front end, including various Camera Feature Adjustments:
 - Shutter Mode
 - Gain
 - Red Gain
 - Blue Gain
 - White Balance Mode
 - BLC Weight
 - BLC Window Size
 - BLC Window Position
 - Mirror Mode
 - Edge Enhancement



General Overview

In order to program these cameras, Microsoft DirectX SDK should be used for video image streaming and control. Third party DirectX filters or components can also be easily incorporated into the application software.

Videology SDK includes VidUSB2IO files, which includes VidUSB2IO.h and VidUSB2IO.lib, sample VC++ project and manual.

The CVidUSB2Prop class in the VidUSB2IO libraries (VidUSB2IO.lib) implement methods for accessing the Videology USB camera registers as well as interfaces for programming camera features.

It is recommended that your build environment includes the following tools:

- VC++ (6.0 SP6)
- Microsoft Platform SDK (Feb. 2003 or later)
- DirectX SDK (Summer 2003 or later)

Basic Tasks

The following section provides guidance for performing specific and common tasks using the API. The source code provided with the Developer's Kit contains specific examples of these tasks.

1. Linking with VidUSB2IO.lib
Linking with VidUSB2IO.lib requires the following libraries being specified in your project setting: VidUSB2IO.lib msacm32.lib quartz.lib strmbase.lib winmm.lib strmiids.lib
2. Connecting
In order to communicate with a camera the COM library must be initialized by using CoInitialize, then create and get a pointer of the CVidUSB2Prop object, which is then used to access the API functions.
3. Disconnecting
When finished with the camera, the connection should be terminated by using vidDestroyPort only once. The CVidUSB2Prop object should also be deleted from memory and the COM library should be un-initialize.

Camera Feature and Property Adjustments

Examples of camera features are shutter mode, gain, white balance mode, etc., and are assigned key codes and values. There are only three functions associated with camera features. **vidSetFeature** is used to set the value of a camera feature. **vidGetFeature** is used to get the value of a camera feature. **vidGetAllFeatures** is used to get all the feature values from the camera.

Register Access

The CVidUSB2Prop class in VidUSB2IO libraries (VidUSB2IO.lib) also provides the methods for accessing the camera DSP and EEPROM registers.

Important!

Changing any DSP or EEPROM registers in the camera except by professionals who are very familiar with the camera DSP and EEPROM register programming is not recommended. Videology will not be responsible for any damage resulting from directly changing the camera DSP and EEPROM programming.

Videology 20/21K series camera provides a DirectX compliant WDM driver. DirectX SDK provides the camera with video/image view and capture functions, which VidUSB2IO library does not include.

