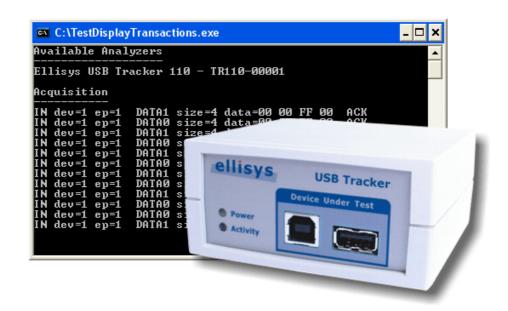
# Ellisys USB Analysis SDK Getting Started Guide



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# Chapter 1: Overview

## 1.1 Introduction

The USB Analysis Software Development Kit is written in C++. This programming language offers uncompromised performance for the most demanding developers.

You will find more information about the installation and the use of the development kit in addition to a Troubleshooting Guide at the end of this document.



# Chapter 2: Using the native C++ version

#### 2.1 Introduction

The native C++ version of the USB Analysis Software Development Kit is compatible with Visual Studio 2005. Samples are provided with the project files which are compatible with these environments.

#### 2.2 SDK Libraries

The SDK libraries are provided for Microsoft Visual Studio 6.0 and above. They are compiled with the DLL (*Dynamic Link Library*) version of CRT (*C runtime*).

The directory called *Lib* contains the various SDK libraries. Several versions are available which are compliant with the Visual C++ version used. The libraries called *usbdkXX.lib*, where XX represents the Visual C++ version number, contain all the SDK definitions. The following table shows the relationship between the Visual C++ version number and its trade name:

Version	Trade name of Visual C++
80	Visual Studio 2005 (Visual C++ 8.0)



The *UsbAnalysis.h* file available in the *Inc* directory contains the pre-processor directives enabling automatic selection of the correct version of the SDK library compliant with the Visual C++ version detected. The following table shows the library version used that is compliant with the Visual C++ version:

VC++	Library	Runtime Library	CRT
8.0 debug	Usbdk80d.lib	Multi-threaded Debug DLL	MSVCRTd.DLL
8.0 release	Usbdk80.lib	Multi-threaded	MSVCRT.LIB
8.0 debug	Usbdk80x64d.lib	Multi-threaded Debug DLL	MSVCRTd.DLL
8.0 release	Usbdk80x64.lib	Multi-threaded	MSVCRT.LIB

## 2.3 Provided Samples

The SDK samples are available in the *Samples* directory. Project files are provided for Microsoft Visual Studio 2005. The files are named according to the Visual C++ version:

Visual C++	Solution file	Project file
8.0	Sample_vc80.sln	Sample_vc80.vcproj

## 2.4 Configuring a new Visual C++ Project

When creating a new project using the USB Analysis SDK, it is essential to make sure that the executable uses the *Multi-threaded Debug DLL* version of CRT (see Figure 1). It is also preferable to add the SDK *Inc* and *Lib* directories to the paths used by the project (see Figure 2 and Figure 3).

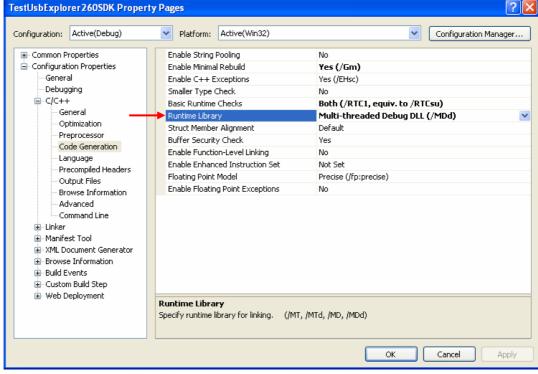


Figure 1 - Runtime library



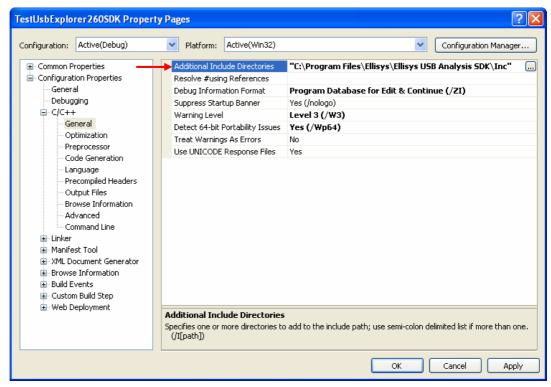


Figure 2 - Additional Include Directories

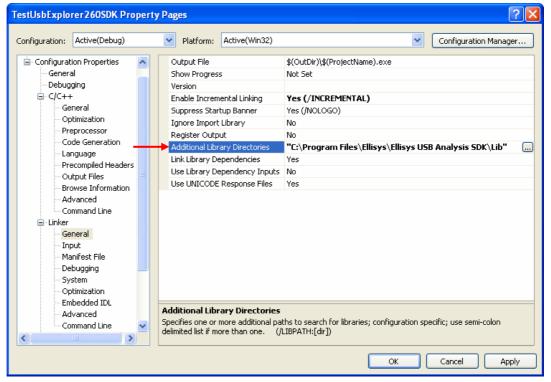


Figure 3 - Additional Library Directories



#### 2.5 To find out more

To find out more, please refer to the SDK reference manual available in Microsoft Help format. If you cannot read the CHM files, a free help viewer program is available as a download from Microsoft at the following address:

http://msdn.microsoft.com/library/default.asp?url=/library/enus/htmlhelp/html/hwMicrosoftHTMLHelpDownloads.asp

The samples provided are an excellent starting point for understanding the basic functionality of the development kit.



# **Chapter 3: Troubleshooting**

## 3.1 Compiling

When I try to compile my program the compiler indicates that a header file is missing.

Check that you have added the path to the SDK Inc directory in your project as specified in Chapter 2.4  $Configuring \ a \ new \ Visual \ C++.$ 

When I try to compile my program the compiler indicates that a library file is missing.

Check that you have added the path to the SDK Lib directory in your project as specified in Chapter 2.4 Configuring a new Visual C++.

When I try to compile my program the linker alerts me to a large number of errors.

Check that you are using the *Multi-threaded Debug DLL* version of the *Runtime Library* as specified in Chapter 2.4 *Configuring a new Visual C++*.

#### 3.2 General

I cannot read the CHM file from the SDK reference manual.

The Microsoft Help Viewer program is required to view CHM files. It is available as a download at the following address:

http://msdn.microsoft.com/library/default.asp?url=/library/enus/htmlhelp/html/hwMicrosoftHTMLHelpDownloads.asp