



Aardvark Embedded Solutions

PayLink Dot Net User Guide

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1 Introduction

1.1 User

It is assumed that the reader is a Windows developer familiar with Visual Studio and C# or VB.Net

1.2 Contents

The Paylink distribution CD contains five items of interest to the dot net programmer.

- The AESImhei Class Library
- A brief example of using the Class Library in C#
- A brief example of using the Class Library in VB.Net
- An Example written in C#
- An Example written in VB.Net

The Examples are provided on an “as is” basis - they were written as exercises by Aardvark staff and are not necessarily suitable for use as a basis for operational software.

1.3 Dot Net Versions

The AESImhei Class Library and the VB.Net example program are Dot Net 2.0 the C# example is Dot Net 3.5.

1.4 Compiler Versions

The AESImhei Class Library and the VB.Net example projects are VS2005, the C# example project is VS2008.

2 Class Library

2.1 Supplied Files

The Class library is located at "SDK\Dot Net" and is called AesImhei.Net.dll. This is suitable for inclusion in the reference section of a C# or VB.Net project.

In order to use a Paylink with a dot net program you need to follow:

- AesImhei.Net.dll - in either the local directory or C:\Windows\System32
- AesImhei.dll - in either the local directory or C:\Windows\System32
- AESWDriver.exe - program running to handle the Paylink communications.

For reference the source of the AesImhei.Net, class library, and the associated VS2005 project, can be found at "SDK\Dot Net\AesImhei.Net".

2.2 Example Usage

2.2.1 C#

A very simple C# program is available at "SDK\Dot Net\AesImhei.Net\TestApp\TestApp.cs". This shows how to call all the interface functions that are not completely straightforward. The file can be compiled and run if the user wishes to confirm its correctness.

2.2.2 VB.Net

A very simple VB.Net program is available at "SDK\Dot Net\AesImhei.Net\VBTest\VBTest.vb". This shows how to call all the interface functions that are not completely straightforward. The file can be compiled and run if the user wishes to confirm its correctness.

3 Demonstration Programs.

3.1 C# Demonstration

This application has been written in C# using Visual Studio 2008 to run under Microsoft's .NET Framework version 3.5 or later.

To form a functioning system you also require the standard Paylink items, this application is compatible with versions 1.12 or lower of the Paylink firmware.

The Dot Net software, as written, requires:

- Microsoft .NET Framework 3.5 or later
- Microsoft Visual Studio 2008 or later

The "SDK\Examples\C# Demo" folder on the distribution contains two elements:

- MHE.dll, a C# style interoperability class library, which you will need to use for the project and
- Demo.exe, a demonstration program written in C# to illustrate the usage of the interface

To run the Demo program, the AesImhei.dll / AesImhei.Net.dll interface needs to be available (in system32, on the path, or in the local directory) and the USB Driver Application needs to be running. Checking the Output Window of the USB Driver Application lets you make sure that it has detected the Paylink device.

This class library contains the class MHE which is an abstraction of the Paylink device providing all the features and properties of that device and its peripherals like coin acceptors, dispensers, meters and switches. It uses the standard Aesimhei.Net.dll class library to communicate with the USB Driver Application, which in turn communicates with the Paylink device via the USB Driver.

If you need to re-compile this for compatibility with your development environment, the complete source is in the SDK\Dot Net\AesimheiInterop.

The Windows Forms application (Demo) creates an instance of the class MHE when the main Form is loaded. This instance is then used for all communication with the Paylink device.

The solution should build without errors and will run without errors provided the interoperability class library and basic Aesimhei.dll interface are available, and the USB Driver Application is running. If the USB Application is not running or is running but cannot detect a Paylink device, the error 'MHE Open Error 31' occurs at Startup.

The application can be run within Visual Studio. To run the application from Visual Studio click the Debug menu then 'Start Debugging' or 'Start Without Debugging'.

3.2 VB.Net Demonstration

This application has been written in VB.Net using Visual Studio 2005 to run under Microsoft's .NET Framework version 2.0 or later.

To form a functioning system you also require the standard Paylink items, this application is compatible with versions 1.12 or lower of the Paylink firmware.

The Dot Net software, as written, requires:

- Microsoft .NET Framework 2.0 or later
- Microsoft Visual Studio 2005 or later
- The "SDK\Examples\VB.Net Demo" folder on the distribution contains the entire source and project for the VB.Net PaylinkDemonstraton program.