



## NOTE 13 ASIHPI32.DLL Migration

As 64-bit versions of both Windows and Linux become more prevalent, AudioScience has been investigating the best way to provide 64-bit support while minimizing impact on existing applications.

Prior to driver 3.00, customers writing HPI level applications for Windows would link HPIFUNC.C into their application. This has the drawback of limiting some internal HPI structures to 32-bit only. The more transparent approach is to have AudioScience provide a DLL that implements the functions in HPIFUNC.C and shield the customer's application from internal HPI structure sizes. We call the 32-bit version of this DLL ASIHPI32.DLL. All functions previously available in HPIFUNC.C are available via ASIHPI32.DLL.

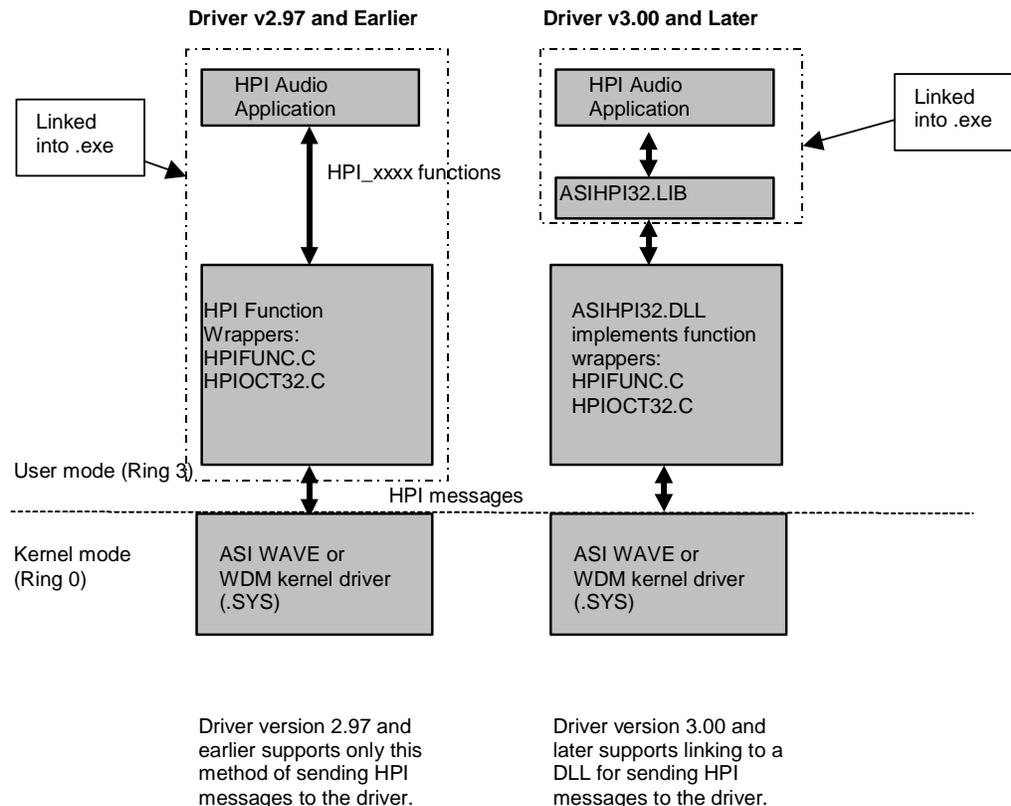


Figure 1. Left example shows the 2.97 method of communicating to an ASI driver using HPI messages. The right side example shows the linking of ASIHPI32.LIB in to the user application.

The steps to integrating ASIHPI32.DLL into an HPI based application are as follows.

1. Make sure you have driver version 3.00 or greater installed in your system.
2. Remove HPIFUNC.C and HPIOCT32.C from the application build.
3. Make sure you are using HPI\_DataCreate() when assigning data buffer pointers.
4. Add an ASIHPI32.LIB to the application build. This is available from hpkw2kNNNNNNN.zip (where "NNNNNN" is the driver version) from the SDK section of the AudioScience website.

## **Older adapter support**

The goal is to have customers maintain a single application across a range of driver versions. Since driver version 3.00 does not support the same range of adapters as 2.97, AudioScience will provide a "legacy" version of ASIHPI32.DLL for driver versions 2.97 and earlier.

An installer application will conditionally install ASIHPI32.DLL, depending on whether or not ASIHPI32.DLL already exists on the system. This will allow older drivers to remain working on the system while allowing updated application software that requires ASIHPI32.DLL to work correctly.

## **Conditional DLL loading**

The distributed version of ASIHPI32.LIB will internally handle runtime loading of HPI functions from ASIHPI32.DLL. This will allow an application that links to ASIHPI32.LIB to startup whether or not ASIHPI32.DLL is on the system.

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