



CobraNet PCI(e) Sound Card Quick Start Guide

PCI cards ASI6416, ASI5416, ASI5408
PCIe cards ASI6316, ASI5316, ASI5308

Terminology: Throughout this document, “CobraNet sound card” refers to any of the above listed cards.

1 Introduction

This document explains how to set up a CobraNet sound card in a Windows PC for testing/configuration purposes. For additional information on AudioScience CobraNet sound cards, please refer to the datasheets on our website www.audioscience.com under Products → Network Audio → CobraNet Soundcards, then click on the link for the specific CobraNet sound card to find its datasheet link.

This document presumes a working knowledge of CobraNet, though details will be given below. The CobraNet sound cards adhere to the CobraNet standard through the use of off-the-shelf CobraNet silicon from Cirrus Logic. More detailed CobraNet information is available from Cirrus Logic’s website: <http://www.cobranet.info/>.

2 What you will need

- A PC, running Windows, with a Network Interface Card (NIC)
- A basic Ethernet switch (a 4-port NetGear, LinkSys, or similar)
- A CobraNet sound card
- AudioScience’s Windows WAVE, WDM or Combo driver (for drivers, go to www.audioscience.com and under Download click on Windows Drivers; older drivers can be obtained from a link at the bottom of this web page)
- ASIControl (installed when you run the AudioScience driver EXE)
- Another CobraNet device to receive/transmit bundles to/from the CobraNet sound card
- Three Cat5/Cat5e/Cat6 Ethernet cables (one for the PC, one for the CobraNet sound card, one for the other CobraNet device)

3 Installation

1. With the PC turned off, install and secure the CobraNet sound card. Connect the Ethernet port (top port for an ASI6316/53xx) on the back of the CobraNet sound card to a spare port on the switch via an Ethernet cable. Connect the PC and the other CobraNet device (via Ethernet cables) to the same switch. (The CobraNet soundcard uses Cirrus’ standard of utilizing SNMP to access the CobraNet portion of the CobraNet sound; therefore there must be a valid path between the PC and the CobraNet sound card.)
2. Start the PC and cancel out of the Windows Found New Hardware Wizard if it appears and double-click the driver EXE to run it. The driver EXE will display the image to the right; always pick “Install Standard + Network Audio Driver” when installing an AudioScience CobraNet sound card. A reboot is required after installing the driver.

Install Standard PCI/PCIe Driver.
 Install Standard + Network Audio Driver.
 Remove all driver components.
3. 3.1 When the PC restarts, double-click the ASIControl shortcut now on the desktop. An **Interface Selection** dialog box will pop-up; select **Local PCI(e) + Networked adapters** then click **OK**. (This dialog box can also be accessed from ASIControl’s menu item **Options**→**Configure adapter interface**.)
 3.2 Click on **Options** and select **Configure Network Interface and Auto-IP Assignment Range**. If more than one NIC in the PC, select the correct one to use in the **Network Adapter** portion of the dialog box. In the **CobraNet IP Address Assignment** section, check **Enable dynamic CobraNet IP address assignment** and type in the **Start IP** and **End IP** ranges of IP addresses to use. Click **OK**. ASIControl will restart and an IP address will be assigned to the CobraNet sound card. (Note that a static IP address can be assigned later by right-clicking on the CobraNet sound card in the top of ASIControl and selecting **CobraNet change IP address**.)
 3.3 Click on the CobraNet sound card in the top pane; you will see the ‘topology’ view of the CobraNet sound card in the left pane. Clicking on a ‘node’ in the left pane will bring up its information in the right pane. See the ASIControl manual (found in Programs→AudioScience→ASIControl), and the CobraNet sound card datasheet, for information on controls and nodes.
4. To set up CobraNet Transmitters (outputs) and Receivers (inputs), right click on the CobraNet sound card in the top pane of ASIControl and select **Configure CobraNet**. Assign bundle numbers, change latency, set persistence, etc., here. (It is recommended to set **Persistence** to on. Also, Transmitter 1, 2, 3, etc. correlates to Receiver 33, 34, 35, etc., as per the CobraNet Routing Primer: http://www.cirrus.com/en/pubs/appNote/CobraNet_AudioRoutingPrimer.pdf. Multicast bundle numbers range from 1-255 and Unicast bundle numbers range from 256-65279.) Configure the other CobraNet device on the network to transmit/receive to/from the CobraNet sound card.

If you are having issues with your CobraNet sound card, please send specific details to support@audioscience.com. Thank you for choosing AudioScience products.

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