Installing the PCI BEI card

Broadcast Electronics Tech Note

THE INFORMATION IN THIS ARTICLE APPLIES TO:

All AudioVAULT products

SUMMARY

The BEI card is a general-purpose remote control card. With 15 inputs and 8 outputs, wiring and operation are identical to the ISA version of the card. In addition to the difference in physical layout, the PCI version of the card also requires a device driver, where the ISA version does not.

MORE INFORMATION

1. Setup the workstation with all of the required AudioVAULT software, including support for at least one BEI card.

2. Close all application running on the machine.

3. **Install** the included drivers from the CD-ROM included with the BEI card. The **Setup** executable is located at **D:\GPI\Disk1**, where **D** is your CD-ROM drive letter. Either find the file using Windows Explorer and double-click on **Setup.exe**, or launch the **Setup** file using the Windows Run dialog.

When prompted, click **Next** to start the setup wizard.

Click **Yes** to accept the license agreement and continue with setup.
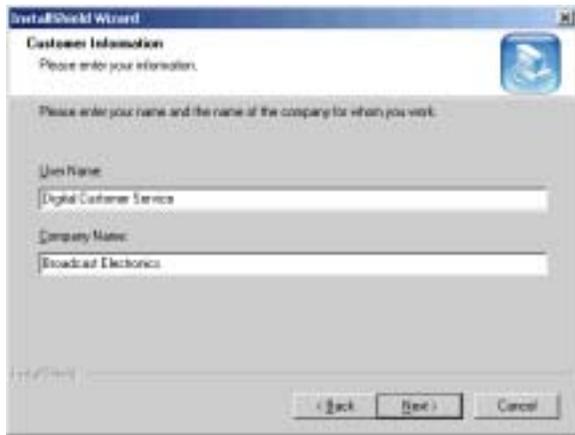
Enter a **User Name** and your **Company Name**.

Select a destination folder for the driver files and tools. Click **Next** to continue and accept the default, or change the destination and then click **Next**.
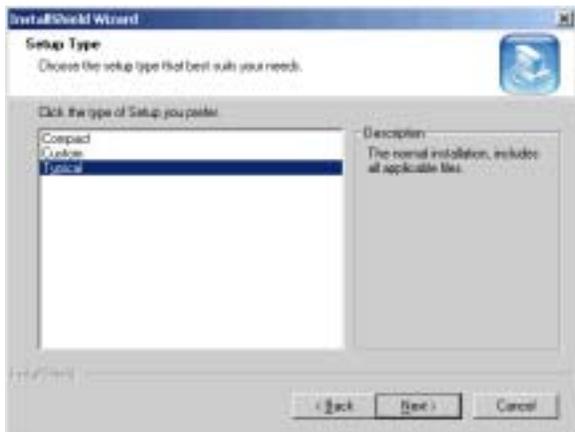
Select a **Typical** installation, and click **Next**.

Select a destination folder for the shortcuts Setup will create. Click **Next** to continue and accept the default, or change the destination and then click **Next**.
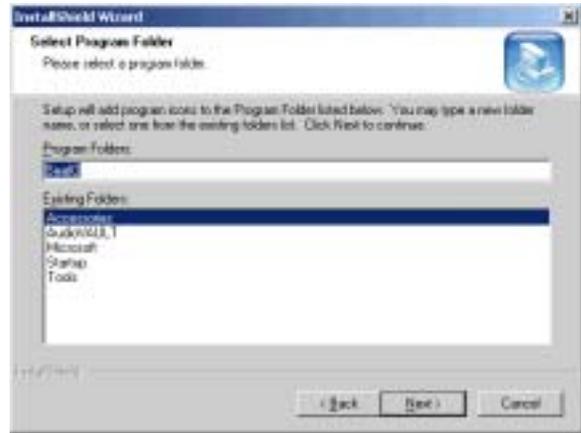
Click **Finish** to complete the installation of the drivers.

4. Shut down the computer and physically **install** the BEI card in an available PCI slot.

5. **Restart** the PC. Windows should automatically detect and install support for the BEI card. After the system has stabilized (all programs have loaded) shut down any AudioVAULT applications that may be running.

6. Open the Windows **Control Panel**, run the **SeaIO Devices** applet. Determine the **Base Address** of the BEI card. This address will be used when editing the registry to enable AudioVAULT support for the device.

7. From the Windows **RUN** dialog, launch **REGEDIT**.
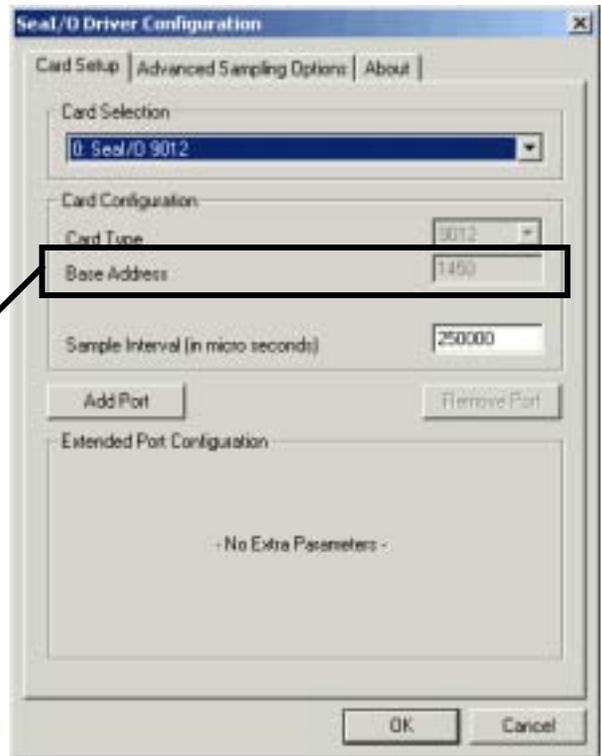
8. Within REGEDIT, **browse** to the following branch:

   `HKEY_Local_Machine\System\CurrentControlSet\Services\Audiovault\Parameters`

   Right click on the **IOPorts** key and make sure it includes BEI1. ────────
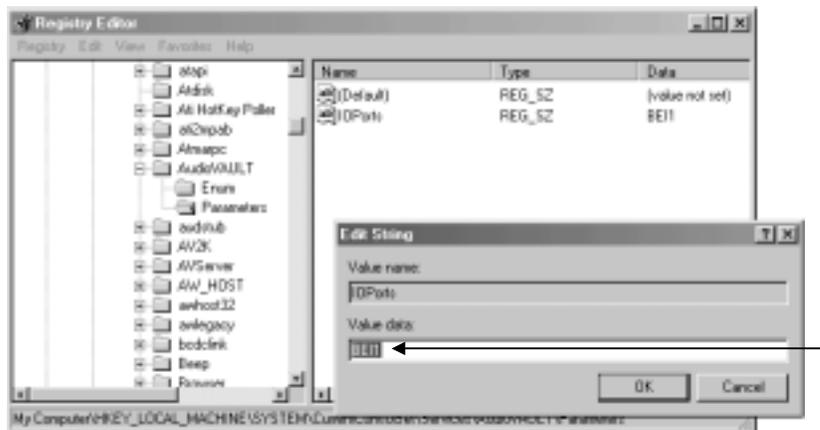
9. **Browse** to the following branch:

HKEY_Local_Machine\System\CurrentControlSet\Services\Audiovault

   and **create** a key called BEI1:
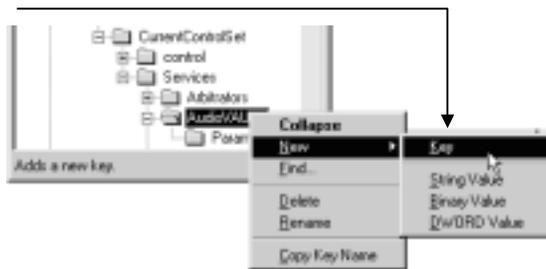
10. **Browse** to your new branch:

`HKEY_Local_Machine\System\CurrentControlSet\Services\Audiovault\BEI1`

and **create** a String Value named **DeviceAddress**, with a value equal to the **Base Address** of the card.
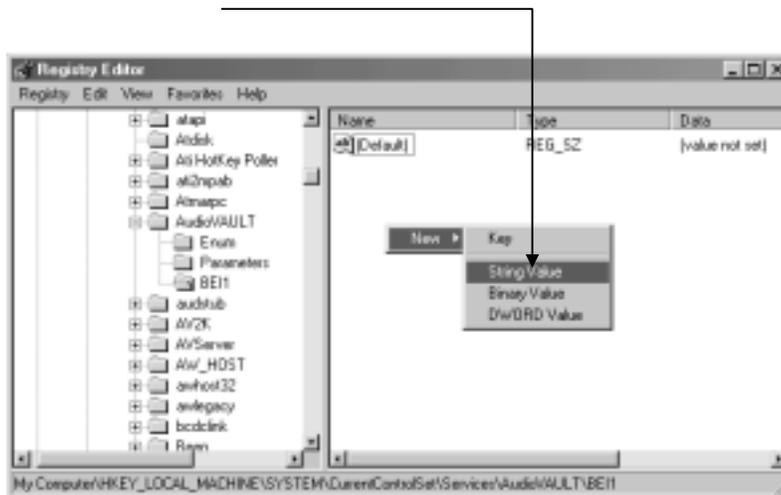
11. **Create** a String Value named **Bits**, with a value of 32.

12. **Reboot** the machine

TESTING THE BEI CARD

AudioVAULT Remote Control statements are defined in each workstation's **audiovau.ini** file. Each statement includes the command being mapped, and the **remote control bit** required to activate that command. Each bit corresponds to a specific **physical pin pair**. To test the card, add the following lines to the AVRPS section of the **audiovau.ini** using a text editor, save the file and restart AVPRS.

```
IDD_Indicator1=,BEI1:-1;BEI1:17
IDD_Indicator2=,BEI1:-2;BEI1:18
IDD_Indicator3=,BEI1:-3;BEI1:19
IDD_Indicator4=,BEI1:-4;BEI1:20
IDD_Indicator5=,BEI1:-5;BEI1:21
IDD_Indicator6=,BEI1:-6;BEI1:22
IDD_Indicator7=,BEI1:-7;BEI1:23
IDD_Indicator8=,BEI1:-8;BEI1:24
IDD_Indicator9=,BEI1:-9
IDD_Indicator10=,BEI1:-10
IDD_Indicator11=,BEI1:-11
IDD_Indicator12=,BEI1:-12
IDD_Indicator13=,BEI1:-13
IDD_Indicator14=,BEI1:-14
IDD_Indicator15=,BEI1:-15
```

Input Bit	Pin Pairs	Output Bit	Pin Pairs
1	1,25	17	9,13
2	2,25	18	10,13
3	3,25	19	11,13
4	4,25	20	12,13
5	5,25	21	21,13
6	6,25	22	22,13
7	7,25	23	23,13
8	8,25	24	24,13
9	14,25		
10	15,25		
11	16,25		
12	17,25		
13	18,25		
14	19,25		
15	20,25		

Pin 25 is ground
Pin 13 is +5/+12 VDC (depending on jumper J6 on the remote control board (1-2 = 12VDC, 2-3=5VDC) +5VDC default.

Access the Indicator menu in AVRPS by clicking on **Misc** and **Indicators 1-8**.

Running a jumper between pins 1 and 25 will ground bit 1, and should illuminate the **Ind 1** button. You should be able to ground the remainder of the input pins (*see chart below*) and illuminate the other Indicator buttons. Grounding once will turn the Indicator on, grounding again will turn the Indicator off.
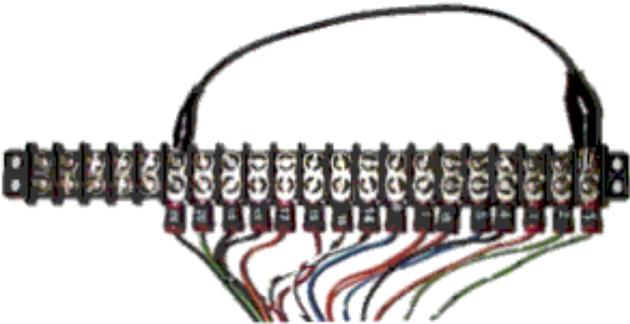
With Indicator 1 illuminated, you should read approximately 5 volts on the Indicator 1 pin pair (*pins 9 and 13*). As each Indicator is illuminated, you should read 5 volts on each subsequent pin pair.

For additional information on this topic, please contact Broadcast Electronics Digital Customer Service at 217.224.4700. You can also email specific questions to service@bdcast.com.