

Start

GUIDE TO THE INSTALLATION PROCESS



Congratulations on Your Purchase of a Multi!Wav PRO Series Audio Card!

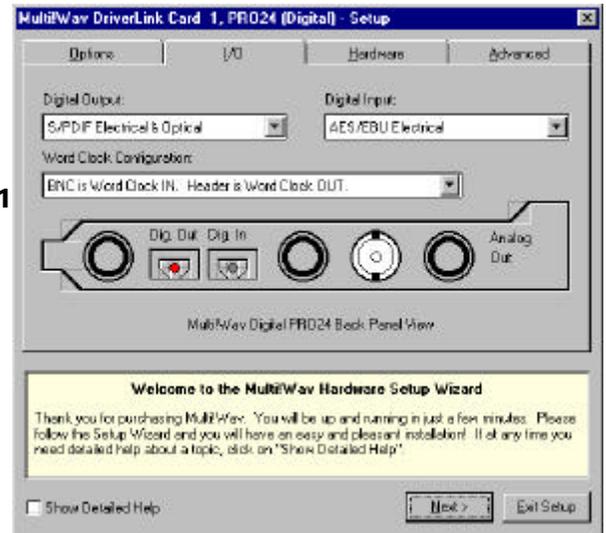
Have You Received Everything?

- ✓ One Multi!Wav™ PRO Series Audio Card.
- ✓ One 3.5" Multi!Wav PRO Setup Diskette.
- ✓ One 3.5" WaveLab SE Setup Diskette.
- ✓ One "Guide to the Installation Process" (what you are reading now).

Installing Multi!Wav under Windows 95 or Windows 3.1

Installation is as simple as A,B,C! Just follow these steps:

- Install the DriverLink™ software **before inserting your Multi!Wav card into your PC**. The DriverLink Setup Wizard will guide you through the configuration of your Multi!Wav hardware.
- Shut down and unplug your PC. Insert your Multi!Wav card.
- Start Windows. Install the Multi!Wav WAV driver. And GO!



So Tell Me, What Is DriverLink™?

DriverLink is the A dB software application that manages your Multi!Wav hardware. During Setup Mode, it guides you through new hardware installations using its Hardware Setup Wizard. During Run Mode, it becomes a real-time control panel! Use it to send commands instantly to your Multi!Wav card. All settings are saved automatically!

Definitions and descriptions of **EVERY** feature of your Multi!Wav hardware can be found in the **DriverLink Help File**. The DriverLink Help File will be installed when you install the DriverLink program. The DriverLink Help File replaces a printed manual. It contains more information than any printed manual ever could, and you'll never lose it! Plus, it helps our environment.

Also included in the Multi!Wav DriverLink Help file is valuable reference material. Topics include: Technical discussions, contacting A dB, warranty information, FCC statements, grounding implementations, and more.

To begin installing your Multi!Wav card, first install the DriverLink software. Do this by referring to the setup instructions printed on the Multi!Wav PRO setup diskette "Disk 1 - DriverLink Setup".

DriverLink Installation Note: If while installing DriverLink you get a warning message that concerns the files DDEML and/or COMMDLG, simply ignore it and continue with the installation. It is completely normal.

Installing Multi!Wav under Windows NT

Please visit our web site and download the NT Installation Files. Installation instructions are contained in those files.

Important Topics to Explore After the Installation

We have found that there are certain Help topics that everyone needs to understand. You can save yourself a call to technical support if you read about the following topics: **Monitor Input Source** and **Cabling**. Run DriverLink. Click Help. Click Search and type in the topic you wish to explore.

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GUIDE TO THE INSTALLATION PROCESS (CONTINUED)

News, Features, and Driver Updates

The latest news and feature updates are posted on our Web site. Visit the site periodically to see What's New.

Thank You and Stay In Touch with AdB

We encourage you to keep us informed of where you would like to see Multi!Wav go. After you've finished the installation, click on the Register button in DriverLink and fill out the form. E-mail, fax, or mail it to us. Thank you for purchasing Multi!Wav.

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Inserting your Multi!Wav Card into your Computer

Step 1. Preparation

You should have already installed the DriverLink software and reached the point where the DriverLink setup Wizard has asked you to install the card. If not, please install the DriverLink software now.

Although it can be easy to insert a peripheral card into a computer, if you are not familiar or comfortable with the process, you should have an experienced individual perform the job. Damage to your Multi!Wav card caused by mis-insertion, is not covered under the warranty.

Step 2. Perform the Installation.

If you are still running Windows, please close all applications and exit Windows. Turn off the power to your computer and remove the computer power cord from the wall outlet.

FAILURE TO REMOVE THE POWER CORD MAY RESULT IN SERIOUS INJURY, INCLUDING DEATH. DO NOT PROCEED UNTIL THE POWER CORD IS REMOVED.

Remove the cover of your computer. (Refer to your computer's manual for instructions.)

ELECTRONIC COMPONENTS CAN BE DAMAGED BY STATIC ELECTRICITY. GROUND YOURSELF BEFORE TOUCHING ANY COMPONENT INSIDE YOUR COMPUTER.

Find an empty 16-bit (ISA type) expansion slot. Remove its metal back panel bracket.

Maneuver your Multi!Wav card so that the jacks protrude out through the back panel of your computer. Line up the edge connector of your Multi!Wav card with the computer's ISA slot. Insert your Multi!Wav card **STRAIGHT DOWN** into the empty slot. If it is not completely inserted in the slot, your card may become damaged or not function properly. Screw in its metal back panel bracket.

Replace the cover of your computer and plug the computer power cord back into the wall outlet. Turn on the power to your computer and run Windows.

Step 3. Completing the Installation.

DriverLink should start automatically to guide you through the final steps of the installation. If it is not active when you restart Windows, simply start the DriverLink program. Use the DriverLink Setup Wizard to guide you through the rest of the installation.

Configuring Your Multi!Wav PRO Analog 24

How do I plug it in?

The analog inputs and outputs of your Multi!Wav PRO Analog 24 are set at the factory to interface with a wide variety of gear. However, to fully take advantage of the high resolution, audio fidelity, and signal to noise ratio that your new card is capable of the “one size fits all” approach used for many audio connections, may not be the best. Fortunately, a number of options are provided via jumpers on the Multi!Wav card which can be configured to optimize your setup.

Digital Recording 101

When recording an analog signal into a digital system it is best to record it as close to “digital zero” as possible. This insures that you are utilizing the greatest number of bits in the digital word to represent your signal; the more bits, the higher the resolution and resulting fidelity. However, unlike analog tape recording, *exceeding* the “zero” level must **never** be allowed to occur as it will result in nasty distortion, possibly rendering your “one-of-a-kind” take useless.

To get the lowest distortion and noise, set things up so that you don’t have to crank your mixer or other analog source above it’s recommended levels to get good signal at the Multi!Wav input, nor have to turn your gear way down to keep from hitting digital zero.

The PRO Analog 24 is set at the factory for +4 balanced operation on its inputs and outputs. This should work fine with most professional or project type mixers and gear. If you find that these settings do not work for you, there are other options.

Inputs (A to D)

The Analog Input (A/D) levels are set using jumpers P3 and P4 and the jumper settings are shown on the circuit board. The options are:

- +4 Normal (+13.2 max)
- Consumer Level (used with some consumer stereo type gear)
- -10 Level

There is also a 6db pad available which can give you even more headroom above the normal +4 setting (at the price of signal to noise ratio) if you need it. This is enabled using jumpers P5 and P6. (P5 and P6 are described later.)

Outputs (D to A)

The outputs (D/A) have level options identical to the inputs but are set independently using jumpers P1 and P2. You generally want to set your outputs to match your inputs. These jumper positions are also shown on the circuit board.

There is an additional setting on the output which adds 6db to maintain unity gain if you are using the 6db pad on the input. This is set with P7 and P8, and listed on the circuit board as “BAL +H”.

Balanced/Unbalanced Operation

Your Multi!Wav PRO Analog 24 can be used with balanced or unbalanced signals. However, balanced operation is much quieter, and if your other gear has balanced I/O you should definitely use this option and the appropriate cables.

The jacks used are ¼” TRS. These jacks are wired just like, and compatible with, the balanced ¼” TRS connectors used on almost all pro gear today. The connections are:

- Tip is the “hot” (positive) signal corresponding to pin 2 on a balanced XLR connector
- Ring is the “cold” (negative) signal corresponding to pin 3 on a balanced XLR connector
- Sleeve is shield (grounded), sometimes pin 1 on the XLR

If unbalanced operation is desired, you can simply use a mono ¼" connector with excellent results. You may achieve lower noise with unbalanced analog sources by utilizing standard balanced cable connections to the Multi!Wav inputs and connecting the "cold" wire (ring from the Multi!Wav) to ground (sleeve) *on the output source end*.

Multi!Wav PRO Analog 24 Anti-Hum Feature

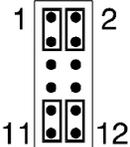
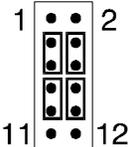
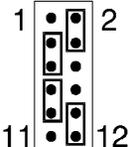
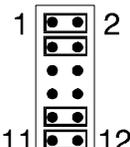
A special design in your Multi!Wav PRO Analog 24 allows it to have terrific hum rejection on unbalanced (as well as balanced) audio signals. Using a special cable, you can get low noise quality from unbalanced sources that is built into balanced audio gear! To create the cable, simply take a balanced ¼”- ¼” cable, unscrew **one** of the plugs, and short the RING and SLEEVE together. Insert the balanced end into you Multi!Wav and the “unbalanced” end into your unbalanced source. You will achieve terrific hum rejection!!

And Furthermore . . .

Have you heard enough? Well, we’re not done. In their forever quest for perfect sound our engineers here at A dB have included yet another option. AC or DC coupled operation on the inputs. The good news is you almost certainly don’t need to be concerned with this option, which is factory set for DC coupled operation. For those tech heads out there that want to go further with this the options are:

- Standard DC Coupled (best all around) (in fact, we’ve designed some really cool stuff into this option that maximizes common mode rejection, ground loop prevention, and, you know, all that stuff)
- DC Coupled Transformer Mode (in the case that your source does not have an adequate ground path on the output stage)
- AC Coupled Mode (for those irritating moments when you have excessive DC offset between your hot and cold signals)

This option is combined on jumpers P5 and P6 with the input pad. Referencing the pin numbers shown in the diagram, the listed pins should be connected (jumped) for the following configurations:

<p>Standard DC Coupled (default) with Anti-Hum.</p> <p>Jumper positions: 1-3, 2-4, 9-11, 10-12</p>	
<p>DC Coupled with 6dB Pad</p> <p>Jumper positions: 3-5, 4-6, 7-9, 8-12</p>	
<p>DC Coupled Transformer Mode</p> <p>Jumper positions: 2-4, 3-5, 7-9, 10-12</p>	
<p>AC Coupled</p> <p>Jumper positions: 1-2, 3-4, 9-10, 11-12</p>	
<p>AC Coupled with 6dB Pad</p> <p>Jumper positions: 1-2, 4-6, 8-10, 11-12</p>	