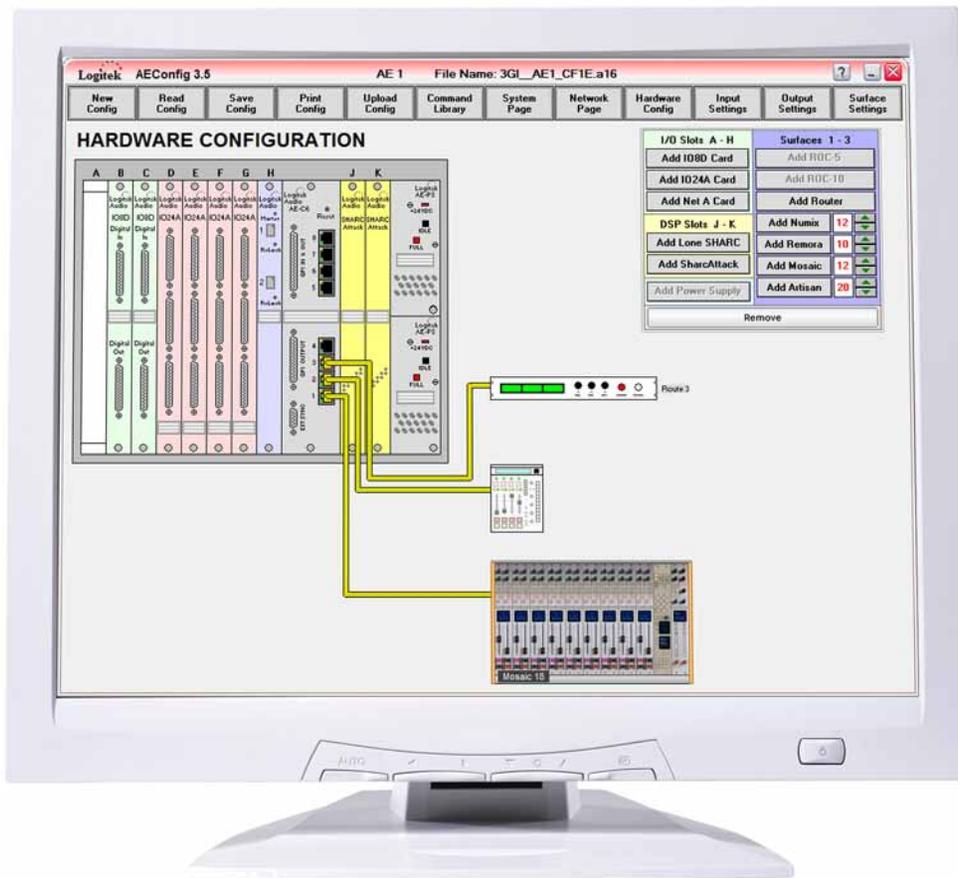


Logitek

Logitek Electronic Systems

AEConfig Reference Manual



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Document Revisions

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Contents

1	Introduction.....	3
	About this Manual.....	3
	About AEConfig.....	4
	How to Use This Manual.....	4
	System Requirements.....	5
2	Installing & Upgrading AEConfig.....	6
	Software Installation.....	6
	AEConfig Files.....	9
3	Planning your Audio Engine layout.....	11
	Engine Slot Allocation.....	11
	Surface Port Allocation.....	12
	Audio I/O Allocation.....	13
	GPI Allocation.....	13
	Other Notes.....	13
4	Working with AEConfig.....	14
	Create New Config File.....	14
	Read Existing Config File.....	15
	Save Config File.....	15
	Print Config File.....	16
	Upload Config File.....	18
5	Creating & Editing Config Files.....	24
	Hardware Config.....	24
	System Page.....	26
	Network Page.....	29
	Input Settings Summary.....	32
	Editing, Adding and Removing Inputs.....	33
	Output Settings Summary.....	39
	Editing, Adding and Removing Outputs.....	40
	Surface Settings.....	44
	Configuring Surface Settings.....	45
6	Tips & Common Tasks.....	47
	Renaming Inputs and Outputs.....	47
	Changing the Normal level of an Input/Output.....	47
	Appendix A Release Notes.....	48
	What's New in AEConfig 3.6.....	48
	Release Notes.....	49
	Appendix B DSP Tables.....	50

1 Introduction

About this Manual

This manual describes the installation and operation of the **Logitek AConfig** application.

Intended Audience

This manual is aimed at Engineers and Technical Operators responsible for installing, configuring and supporting a **Logitek Console Router System**.

In the context of a system installation, or to become familiar with the entire **Logitek Console Router System**, the reader should also reference:

- Audio Engine Installation & Support Manual
- Supervisor Reference Manual
- Systems Design Guide
- Surface Reference Manuals

It is assumed the person responsible for installing and configuring *AConfig* has a solid understanding of Microsoft Windows desktop operating systems, or has ready access to IT support.

Manual Conventions

The following conventions are used in this manual:

This text indicates a menu choice to be made, with an arrow separating a multi-level selection, eg Control Panel ➤ Users & Passwords. This can be a menu choice in a Logitek application, or within Windows.

↪ *Indicates a “see-also” section in this manual, or another Logitek manual.*



The exclamation symbol signifies an important note or critical information.

This text represents a command, script block example, instruction to be typed, or directory path.

 **TIP:** A useful tip from our knowledge base!

About AEConfig

The *AEConfig* program has been developed by **Logitek Electronic Systems** to allow simple configuration of your **Audio Engines**. It allows you to setup the hardware in the **Engine**, as well as **Inputs, Outputs, Surfaces** and **GPIs** that interface to it.

AEConfig's purpose is to configure the audio and associated control of a **Logitek Audio Engine**.

How to Use This Manual

The primary purpose of this manual is to educate the reader in the configuration of their **Logitek** system. This manual covers all the tasks required to fully configure an **Audio Engine**. However, those who do not need to build a system from scratch, but simply need to support or update an existing config, can skip some chapters.

The manual is divided into chapters that can be read in isolation, depending on what level of knowledge the reader requires.

Chapter 1 – Introduction

This chapter provides an introduction to the application and how to navigate your way around it.

Chapter 2 – Installing AEConfig

This chapter details the process of installing *AEConfig*.

Chapter 3 – Planning your Audio Engine Layout

This chapter details the considerations that should be made before installing your **Audio Engine**.

Chapter 4 – Working with AEConfig

This chapter outlines the screens in which you will work when creating, saving, reading and uploading config files.

Chapter 5 – Creating and Editing Config Files

This chapter outlines the procedures to create configs from scratch and edit existing configurations.

Chapter 6 – Common Tasks

This chapter describes some common tasks that you may need to perform during system maintenance. This is recommended reading for engineers that need to support an existing system.

System Requirements

AEConfig is designed to run on **Microsoft Windows NT** based operating systems, including *Windows 2000* & *Windows XP*. Non-NT based systems (such as *Windows 95*, *98* and *ME*) are no longer considered appropriate for broadcast systems and are not supported.

Recommended PC Specification

Although *AEConfig* can run under a lower specification, the following is provided as the recommended minimum under new or recent hardware.

Processor	Pentium 4
Memory	512MB
System	Windows NT based (2000, XP, Server 2003, or newer)
Screen Size	1024x768 or greater (High Color modes recommended)
Disk Space	Minimal disk space required

Compatibility

AEConfig 3.6 is designed for use with **Logitek Version 3 Audio Engines** and software applications.

From version 3, *AEConfig* supports **Audio Engine** configurations with both 8-character or 16-character **Device Names**. It also contains some updates and bug fixes from previous versions. 16-character **Audio Engine** configurations require compatible **Audio Engines** running the *AE-C6* controller card and recent surfaces such as *Artisan*, *Mosaic* and *Remora*. Please contact **Logitek Electronic Systems** or your reseller if you are unsure about 16-character support in your system.

2 Installing & Upgrading AEConfig

This chapter describes the first time installation of *AEConfig*.

Software Installation

The **Logitek** *AEConfig* software will be supplied via Email or download from the **Logitek** website.

Logitek software is developed without reliance on components that are not standard in *Windows*. Upon first execution, *AEConfig* will setup default registry keys and make configuration files in the program directory.

It is possible to use the software without running an installer package. However, an installer package, *Setup3.6.exe* will do all the installation tasks for you.

To install using Setup3.6.exe

1. Create a new folder on your PC, such as `C:\Temp`.
2. Download all of the new applications to that folder, including **Setup 3.6**.
3. Launch **Setup 3.6**.
4. Select the option that fits your situation. See Figure 1 for further details. Use the first option when you are installing the apps for the first time. Use the second option when you are upgrading a previous installation where *Supervisor* is dated before 2007 (This **will not** copy profile data and Registry entries). Use the third option when you are upgrading a previous installation where *Supervisor* is dated after 2007 (This **will** copy profile data and Registry entries).
5. The setup program will prompt you for the location of your existing **Logitek** files. Point it to the existing folder (usually, this is `c:\Logitek`).
6. The setup program will prompt you for the location of the new files. The default is `c:\Logitek3.6`. Adjust this if you use a different folder or drive letter.
7. The setup program will also give you a choice of, setting up a folder called **Logitek Programs** in the *Windows* Start menu, and creating Desktop shortcuts.

To upgrade Configs and Triggers from previous versions

1. Launch *AEConfig*, read each config file (.aec or .a16) and save it without making any changes to ensure that any new formatting is correctly done.
2. Launch **Supervisor 3.6** and set up the COM ports for the engines if necessary. In **Supervisor 3.6** you can change COM port assignments without having to restart the program.
3. Launch **CommandBuilder 3.6**, read your trigger table from `c:\Logitek3.6`, save it, and upload it to *Supervisor*.
4. Configure and launch any other PC applications that you use at your facility. Do not try using older versions of our software with version 3.6 as it will not be compatible.

The setup program will copy the required files to the program directory, establish a folder called **Logitek Programs** in the Windows Start menu (if ticked), and create desktop shortcuts (if ticked). These tasks can also be done manually by copying the program file to an appropriate directory.



Figure 1 - Setup3.6 Installation Type Choice

TIP: For the latest support information, visit www.logitekaudio.com. Share your questions in our support forum and join the support-list to receive release notes.

Upgrading Configs from 8-char to 16-char

AEConfig supports upgrading of configs from 8-character to 16-character **Device Names**.



Before proceeding, take a backup of your files. We recommend making a new configuration directory/revision, as this will be a major change to the configurations.

To perform the upgrade:

1. Open *AEConfig*.
2. Open the config file.
3. On the **System Page**, load a 16-character compatible DSP table using the **Load Dsp Table** button. See Appendix B for a relevant DSP table for your configuration.
4. Go to the **Input Settings**, **Output Settings**, then **Surface Settings** pages. **Source Devices** in the **Output Settings** column may be left-clipped. After going to **Surface Settings** and back to **Output Settings**, this data is refreshed from the **DSP Table** and the column should now show valid names. It is important you ensure this data is correct before continuing.
5. Save the config file. You will need to manually change the file extension to `.a16`.
6. You will be prompted to change the Audio Engine configuration file name within the Network file. Click **Yes** to do so.
7. At the Configuration file save complete prompt, click **OK**.
8. Close *AEConfig*. Do not skip this step.
9. Repeat this process for each config file in your system.
10. Open *AEConfig*.
11. On the **Network Page**, click **Reload Network Sources**. This will read **Network Label** and **Unique Name** data for network sources in each configuration.
12. Save the config.
13. If the `.NCO` file names changed from your 8-character configs, you now need to open each additional upgraded config, select the correct file in the **Network Page** and save the config.
14. Repeat this process for each config file in your system.

At this point, you should now have valid 16-character configs, with only the first 8 characters of the **Surface Label** populated. You can now go through and edit the **Inputs** and **Outputs** as you normally would, to suit your preferred 16-character names.

- TIP:** After updating labels for **Inputs** and **Outputs** that are shared to the **Network**, click **Network Page** ➤ **Reload Network Sources** then **Input Settings** ➤ **Load Network Inputs** in each configuration. This will refresh the labels of inputs from the **Network**, without losing settings or **Surface Ticks** for those **Inputs**.

AEConfig Files

Audio Engine Configuration (.aec or .a16)

Each **Audio Engine** has its own configuration file. This file contains all of the data related to one **Audio Engine** only.

We recommend you name the files in a format similar to:

AE# - Studio#.aec

AE# Audio Engine Number (2 digits).
Studio# Audio Engine's Main Studio Number or Name.

By using a file name format similar to the above, you will be able to view the config name on the **Audio Engine's** LCD screen.

Network Configuration (.nco)

There is one **Network Config** file per system. This file contains a list of sources that are distributed via the **Fiber Network**.

This file is also used by *CommandBuilder* to reference the AEC files for your system. *CommandBuilder* reads both the NCO and AEC / A16 files.

If your system does not have **Fiber Network** cards, you may still wish to setup a **Network Config** file to allow *CommandBuilder* to read the **Source** and **Destination Devices**. This will assist in the development of a **Trigger Table**.

Typical Network Filenames could be similar to:

Southfork Texas.nco or 2WIN.nco or Bauer London.nco

Command Library (.lib)

In most new **Logitek** systems, the **Command Library** is not used, as *CommandBuilder* & *Supervisor* provide scripting and macro functionality.

However, some commands (such as audio level alarms or US EAS switching) may need to be executed inside the **Audio Engine**, rather than in *Supervisor*. Generally you will only use library commands under advice from **Logitek** or your reseller.

A default library file (AECCommand.lib) is established when a new **Config** is created. This file contains some system default commands, such as mic muting and GPIs. *AEConfig* will handle the management of this file automatically.

DSP Tables (.dsp)

Each **Config** requires an associated **DSP Table**, which instructs the **Audio Engine** on how to interact with the **DSP Cards**.

These files are supplied by **Logitek Electronic Systems**, or your reseller. In most cases, the standard files can be used without alteration. However, in some circumstances the **DSP Tables** may need to be customized to change default device names, fader levels or bus assignments.

The **DSP Table** required for your **Audio Engines** is dependent upon the type and version of **DSP Cards** used. Where your **DSP Cards** are the same between **Audio Engines**, and no **Engine** specific customizations are required, you can reference the same **DSP Table** in each **Configuration**.

↪ *See Appendix B for a list of current DSP Tables.*

🔊 **TIP:** Before creating a **Config**, you should copy the required **DSP Table(s)** to the directory where you will save the **Configs**. The **DSP Table** can be set on *AEConfig's System Page*.

3 Planning your Audio Engine layout

This chapter outlines some best practices used in the field for **Audio Engine** configuration.

- 🔔 **TIP:** Planning the optimum layout of a system does require some prior experience with the **Logitek** system. If a system design has not been provided during the sales process, we recommend you work with **Logitek Electronic Systems** or your reseller to create or review your system design.

Engine Slot Allocation

- **Audio Engine** slots **A** through **H** are able to accept a range of input/output (I/O) cards.
- **Audio Engine** slots **J** and **K** are for DSP cards such as *LoneSharc* and *SharcAttack*.
- The double-width controller card must be located in slot **I**.

Available I/O cards include:

IO8D	Digital I/O card with 8 stereo inputs & outputs
IO24A	Analog I/O card with 12 stereo inputs & outputs
NetA	Fiber Network card with 512 audio channels

I/O cards may be allocated as follows:

- Analog and Digital I/O cards can be in any slot from **A** to **H**.
- **Logitek** recommends grouping cards, with the Digital I/O cards to the left of the Analog I/O cards, starting from slot **A**. This helps to minimize the impact of backplane noise/reflections.
- The primary *NetA* card must be loaded into slot **H**. A secondary *NetA-LX* card may be placed in Slot **G** to connect one **Audio Engine** to a distant transmitter site.
- To aid future expansion, you may prefer to leave some intermediate slots blank. If considering this, please contact **Logitek** or your reseller for advice.

DSP cards must be allocated as follows:

- *LoneSharc* and/or *SharcAttack* DSP cards are loaded into slots **J** and/or **K**.
- The card in slot **J** handles DSP for the **Port 1 Surface**.
- The card in slot **K** handles DSP for **Port 2 & 3 Surfaces**.

An example hardware layout is shown in the **Hardware Config** tab of *AEConfig* on the following page.

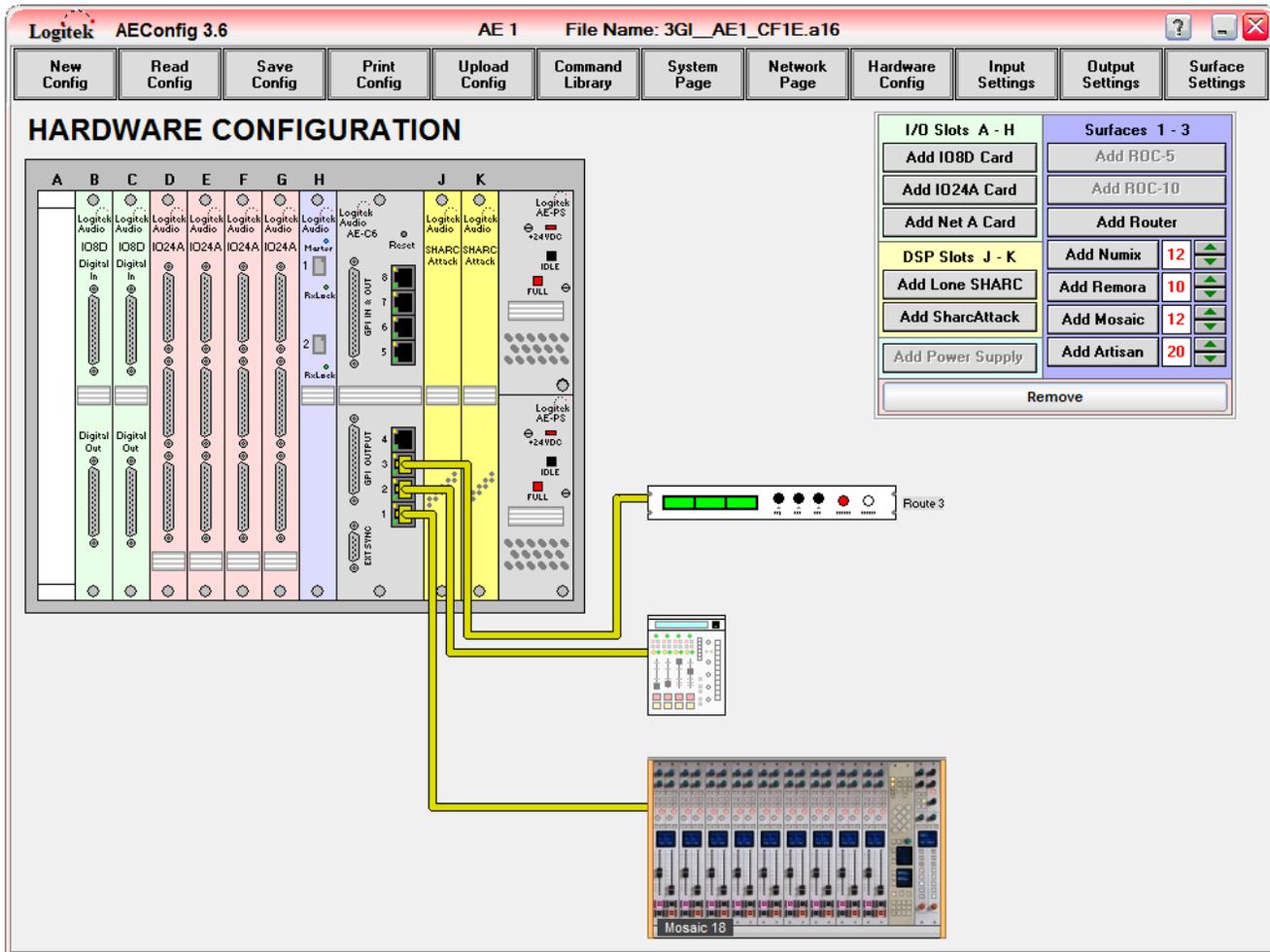


Figure 2 - Loaded Config Example

Surface Port Allocation

Many factors influence the ideal placement of **Surfaces** on specific **Ports**. If you are unsure, we suggest asking **Logitek** or your reseller for advice. The following general guidelines may assist with these decisions:

- **Port 1** supports extended **Mix Minus Busses** (MM4-25) and/or **Aux Busses** (AUX4-8). Therefore, main studios should go on **Port 1** of each engine, if possible.
- **Port 1 & Port 2** can support up to 24 faders per console.
- **Port 3** can only support a 4 or 6 channel console.
- DSP for **Port 1** is allocated by the card in slot **J**. **Port 2 & 3** is allocated by the card in slot **K**. If you are using a **SharcAttack** in slot **J** only, you will only have access to extended DSP features (delay, eq, dynamics, input metering) on **Port 1**.
- In general, you should allocate the consoles in order of size – place a studio console on **Port 1**, a secondary studio on **Port 2** and a router/edit console on **Port 3**.

AE-C2 Ports

The **AE-C2 Controller Card** has 3 ports available for **Console Surfaces** or **Utility Panels**.

AE-C6 Ports

The **AE-C6 Controller Card** has 6 ports available for **Surfaces**. Under **Audio Engine v3.x**, **Ports 1-3** can be used for **Console Surfaces** or **Utility Panels**. **Ports 4-6** can only be used for **Utility Panels**. We recommend connecting **Utility Panels** to these high ports.

Utility Panels do not need to be shown on the **AEConfig Hardware Config** page. These are programmed by **Triggers** in **CommandBuilder**.

➔ *See Chapter 5 for more information on Hardware Config port allocations.*

Audio I/O Allocation

The following best practices can assist with a functional layout, but do not have to be observed if impractical:

- Group studio **Inputs/Outputs** on cards. This reduces interruption in the unlikely event of a card failure by affecting only one studio (allowing you to work around the failure by swapping operations to another studio).
- Match stereo pairs of **Inputs/Outputs** on adjacent pins (eg D1 & D2).
- Group related mono **Inputs** on adjacent pins (eg mics) so spares are generally stereo pairs.
- Match **Inputs** and **Outputs** to the same pins (eg Telephone on Input D1, Telephone Mix Minus on Output D1). This assists with both jackfield/termination block layouts, and grouping of related **Inputs & Outputs** on data converters within the I/O card.

These tips aren't essential, but make the wiring, documentation and management easier.

GPI Allocation

The following best practices can assist with a functional layout, but do not have to be observed if impractical:

- Allocate **Surface GPIs** to the studio devices that accompany that surface. This allows the connection from studio devices to the **Surface GPIs**, reducing cabling requirements.
- Allocate **Engine GPIs** to equipment room devices. Again, this reduces cabling requirements by localizing GPI connections.

Other Notes

The **Logitek** system generally does not care where **Inputs, Outputs, GPIs, Network Channels** and the like are allocated, as they are all configurable. However, it is always good to have a logical allocation that helps humans (engineers) understand and support the system. As with any system, time spent in the planning stage, can save time and avoid problems later in the project.

4 Working with AEConfig

This chapter outlines how to create, save, read and upload **Config** files.

When you first open *AEConfig* you will see a number of buttons across the top. These are used to access core functions of the program.

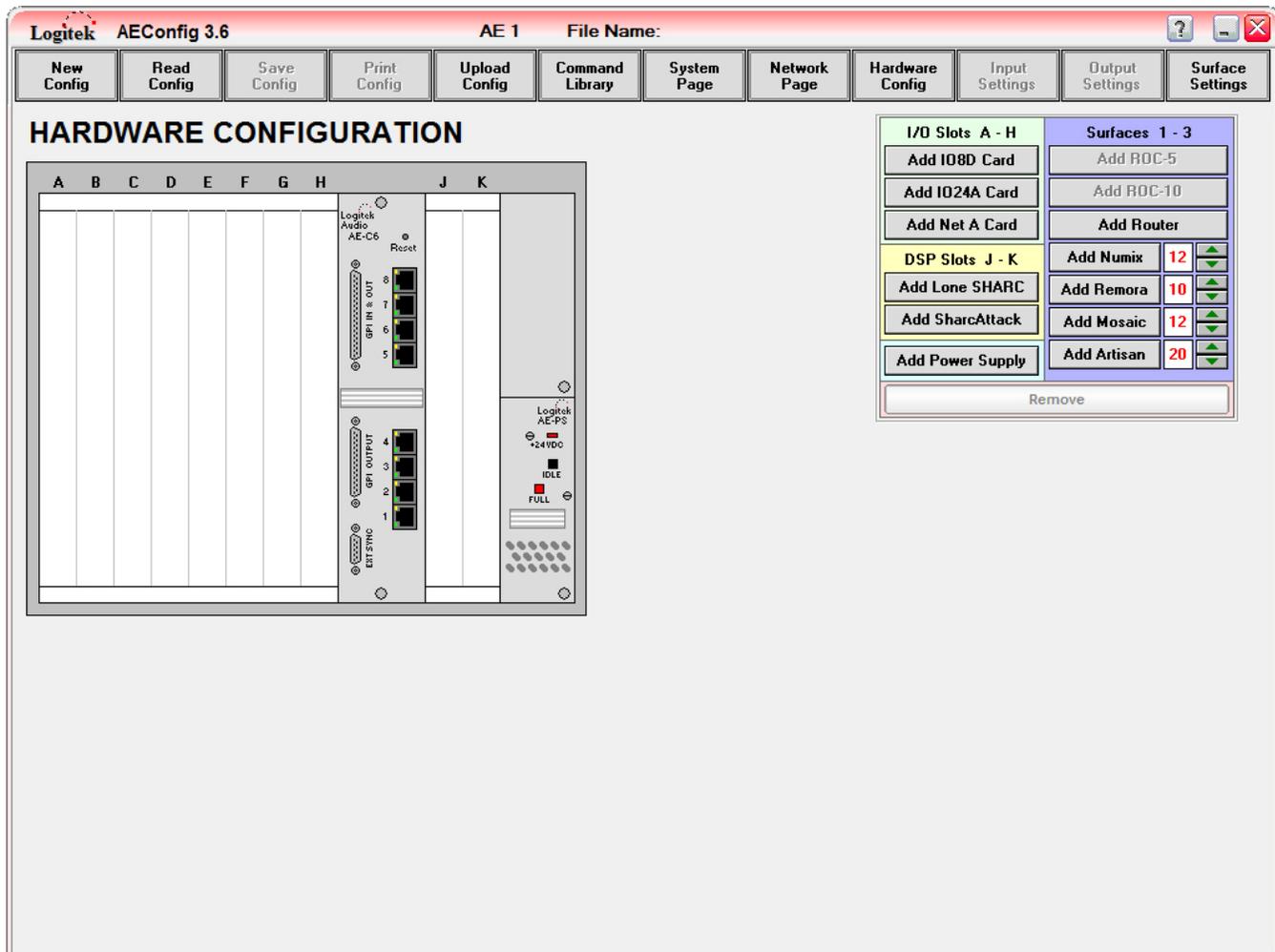


Figure 3 - AEConfig main page

Create New Config File

The *New Config* button allows you to create a new empty **Config** file.



A warning message will be displayed if you attempt to make a new **Config** after editing the current **Config File** without saving. Note that any changes to the current file are not saved until explicitly done so by the user. When you press *New Config*, you will be presented with a blank *Hardware Configuration* page as in Figure 3 above.

Read Existing Config File



The **Read Config** button allows you to read an existing file into *AEConfig*. A **Config** must be read before it can be edited or uploaded to *Supervisor*. Clicking the **Read Config** button displays a standard Windows Open File dialog box. Select the appropriate file and press **Open** to read the file. Choose **Cancel** if you accidentally clicked the **Read Config** button.

A warning message will be displayed if you attempt to read an existing **Config** after editing the current **Config** without saving.

Save Config File



The **Save Config** button allows you to save the current **Config** in *AEConfig* to a file. Clicking the **Save Config** button displays a standard Windows Save As dialog box. Select an existing file name or enter a new file name and press **Save** to write the file to disk. Select **Cancel** to go back to the program without saving.

A warning message will be displayed if you attempt to make a new **Config**, read an existing **Config** or exit the program after editing the current **Config** without saving it. Any changes to the current **Config** are not saved unless explicitly done so by the user. Although not required, it is a good idea to save the current **Config** before uploading it to the **Audio Engine**.



Renaming `.aec/.a16` file names on a networked system will break your network. When saving a file, *AEConfig* will compare the file name to the file name stored in the `.nco` file. If they do not match, *AEConfig* will warn you that the new file name does not match what is in the Network File and will offer to rename it. You must answer **Yes** to this question or else you will have problems with your network. We recommend not renaming config files on networked systems. Instead, rely on the backup copy in the `Backup` folder if you need to roll back to an earlier revision.

When saving a file, *AEConfig* will compare the file name to the file name stored within the `.nco` file. If they do not match, a warning message will be displayed indicating that the new file name does not match the file name stored in the Network file, and will offer to rename it. You must answer Yes to this question otherwise your network will cease to function.

-  **TIP:** Logitek recommends not renaming config files on Networked Systems. Instead it is recommended to use the Backup Copy created during each save. This will be in the Backup Folder located inside the directory where the config file is stored.

Print Config File



The **Print Config** button allows you to print the current **Config File** in *AEConfig* to a printer. Clicking the **Print Config** button displays the **Print Configuration** screen as shown below in Figure 4.

Selected Printer

Use the pull down box to select the printer you wish to use. These will be the printers that have been installed on the PC you are using.

Print options

Print an individual section from the list by clicking on its button, or print the **Complete Package**.

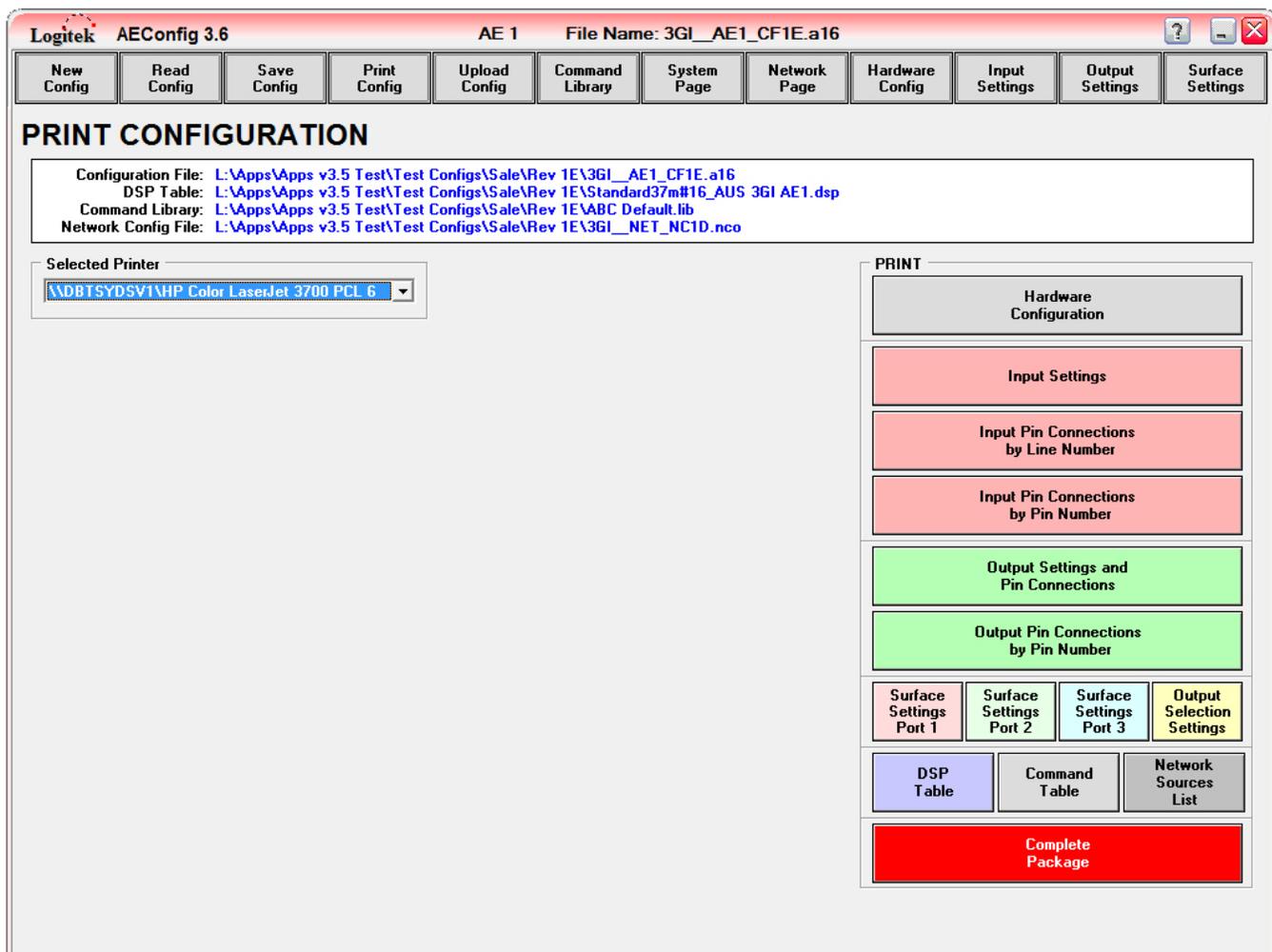


Figure 4 - Print Configuration Screen

-  **TIP:** Surface Settings Port 1 etc; will only be available for those ports which have a surface configured in the Hardware Configuration Page. Those ports which do not have a surface configured will be blank. i.e. there will be no button present for that port.

Upload Config File



Configs must be uploaded to each **Audio Engine**. You do not need to be familiar with **Config** creation to perform an upload. It is important to note that you cannot download a **Config** from an **Audio Engine** to *AEConfig*. **Configs** are only uploaded TO the **Audio Engine**.

Upload methods

You can upload **Configs** in one of two ways:

1. Directly to the **Audio Engine** using a serial connection.
2. Via *Supervisor*, using *Supervisor* as an IP-to-Serial gateway.

If your system uses *Supervisor*, you will generally upload **Configs** via *Supervisor*, as it has a continuous serial connection to each **Audio Engine**. *AEConfig* cannot access the serial ports if *Supervisor* is running. If your system does not make use of *Supervisor*, then you would upload directly to the **Audio Engines**, using a suitable PC or laptop.

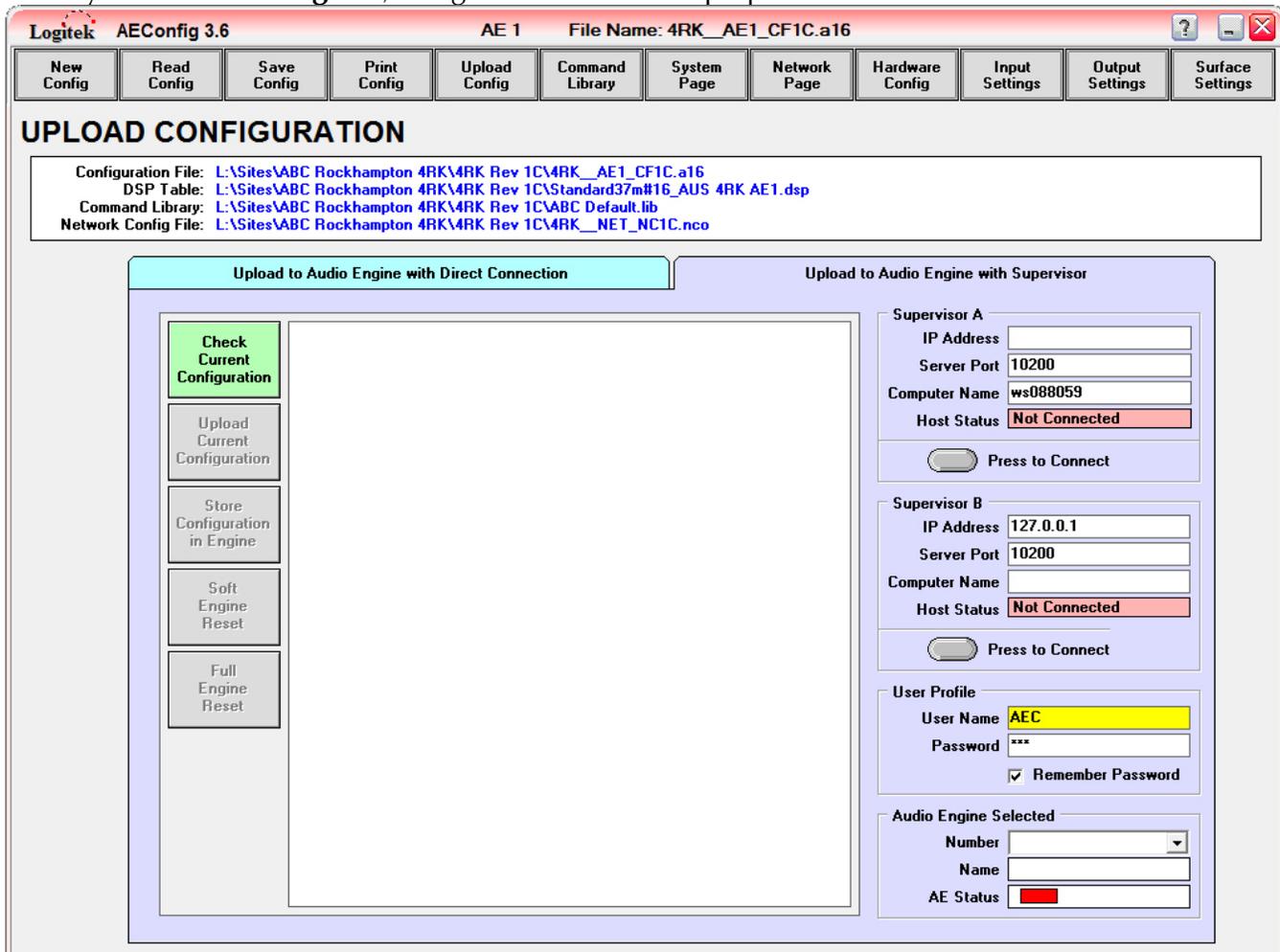


Figure 5 - Upload Configuration via Supervisor

Setting Direct Upload options

If you wish to upload directly to an **Audio Engine** using your PC or laptop, click the **Upload Config** button, then **Upload to Audio Engine with Direct Connection** tab. You can then select a serial port from the port list (which shows all COM Ports from Windows).

Setting Supervisor Upload options

If you wish to upload to an **Audio Engine** via *Supervisor*, you will require IP connectivity to the *Supervisor* computer. Click the **Upload Config** button, then **Upload to Audio Engine with Supervisor** tab.

In the **Supervisor** box enter either the **IP Address** or **Computer Name**, and the **Server Port** (default is **10200**). You can use **127.0.0.1** (loopback) to upload to *Supervisor* on the same PC.

In the **User Profile** screen in *Supervisor*, a valid user name and password must be entered, with the checkbox for "AEConfig" ticked. This user name and password should be entered into the **User Profile** section.



A new **Remember Password** tickbox has been included as of *AEConfig* v3.6.2.0. This is ticked by default, however, if you are remotely managing multiple sites it is a good idea to untick the **Remember Password** box. This can greatly assist in preventing the accidental uploading of an incorrect **Audio Engine Config** to a site.

Upload process

The **Upload Configuration** screen, as shown below in Figure 6, contains three basic functions, as follows:

1. Connects to the **Audio Engine** via serial or to *Supervisor* via the IP network.
2. Checks the current **Configuration**.
3. Uploads the **Config** to the **Audio Engine**.

You do not need to connect to the **Audio Engine** or *Supervisor* to check the configuration – this can be done whilst disconnected (useful for checking configs off-site).

If uploading via *Supervisor*, click the **Press to Connect** button to connect to *Supervisor*. *Supervisor* will ping the engine to make sure it is there. If the engine responds, the AE Status box will change to a green status, the red status "Not Connected" bar will change to a green status "Connected" bar and the button title will change to **Press to Disconnect**. The AE Status box will change to green, the log is cleared and the **Check Current Configuration** button is also reset at this time. This is shown below in Figure 6.

- TIP:** If you click the *Check Current Configuration* button before the **Audio Engine** responds to the ping, you will get an error stating that the **Audio Engine** is not ready. Wait a couple of seconds for the ping to answer back. At this point both the *Host Status* and *AE Status* boxes will change to a green status. You can now proceed to click the *Check Current Configuration* button again.

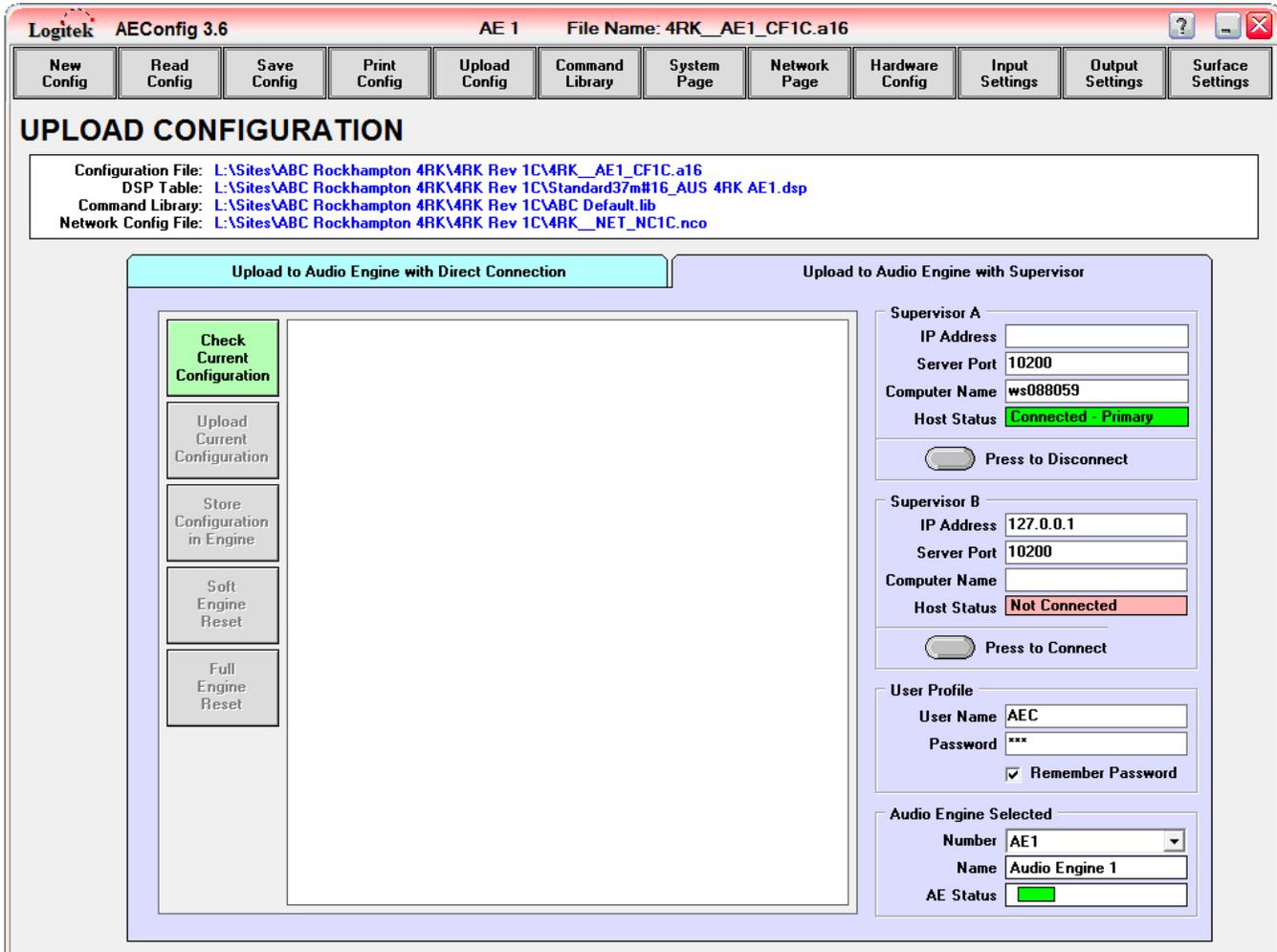


Figure 6 - Upload Configuration - Connected

If uploading with a direct serial connection, you can skip straight to the *Check Current Configuration* procedure below.

Click the *Check Current Configuration* button to check the config file for errors. If any errors are found, the **Config File** cannot be uploaded to *Supervisor*. If no errors are found, then the config may be uploaded and a message will be displayed in the log screen as shown below in Figure 7.

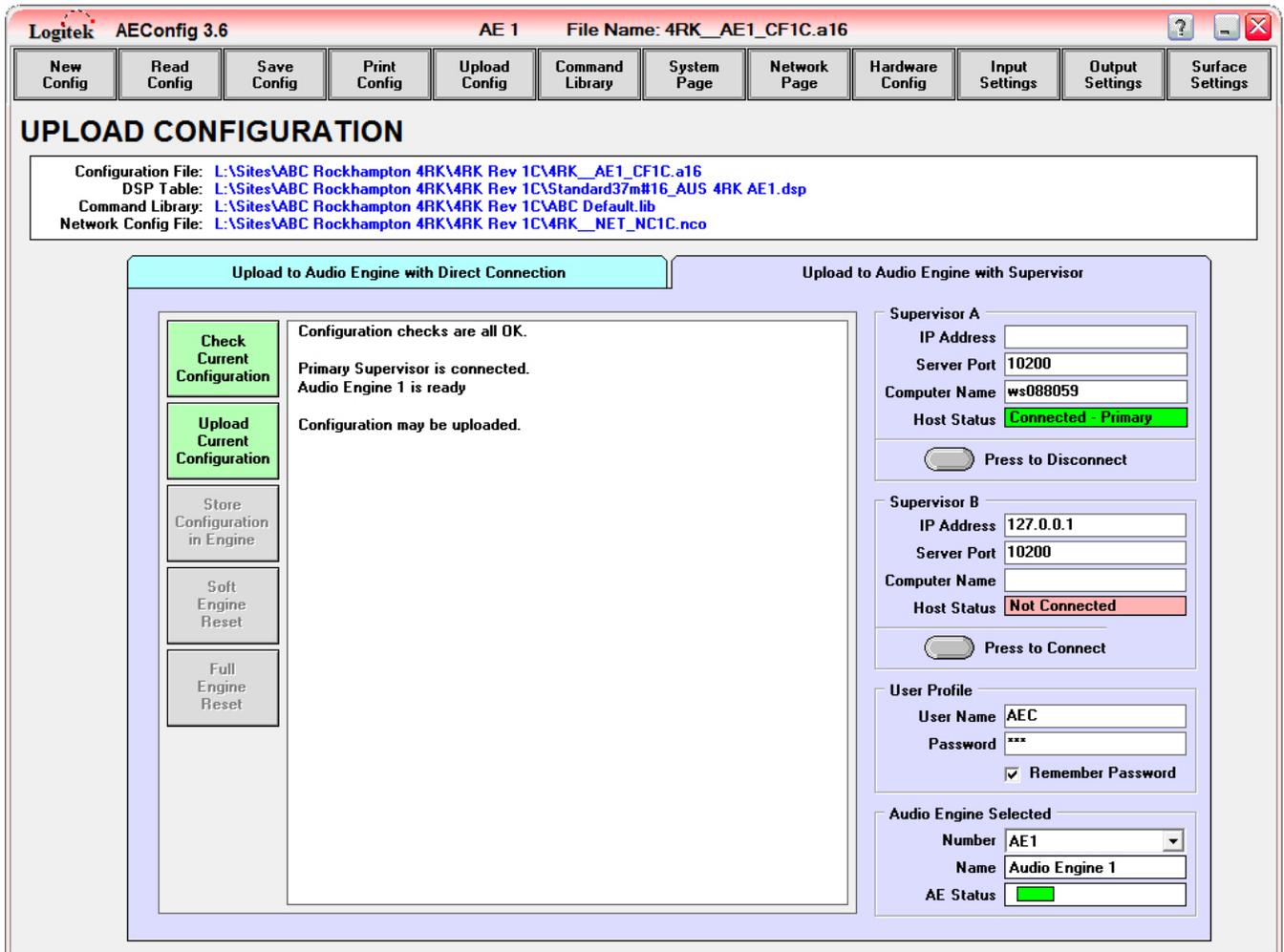


Figure 7 – Upload Configuration - Checked

Click the **Upload Current Configuration** button to upload the **Config File** to *Supervisor*.

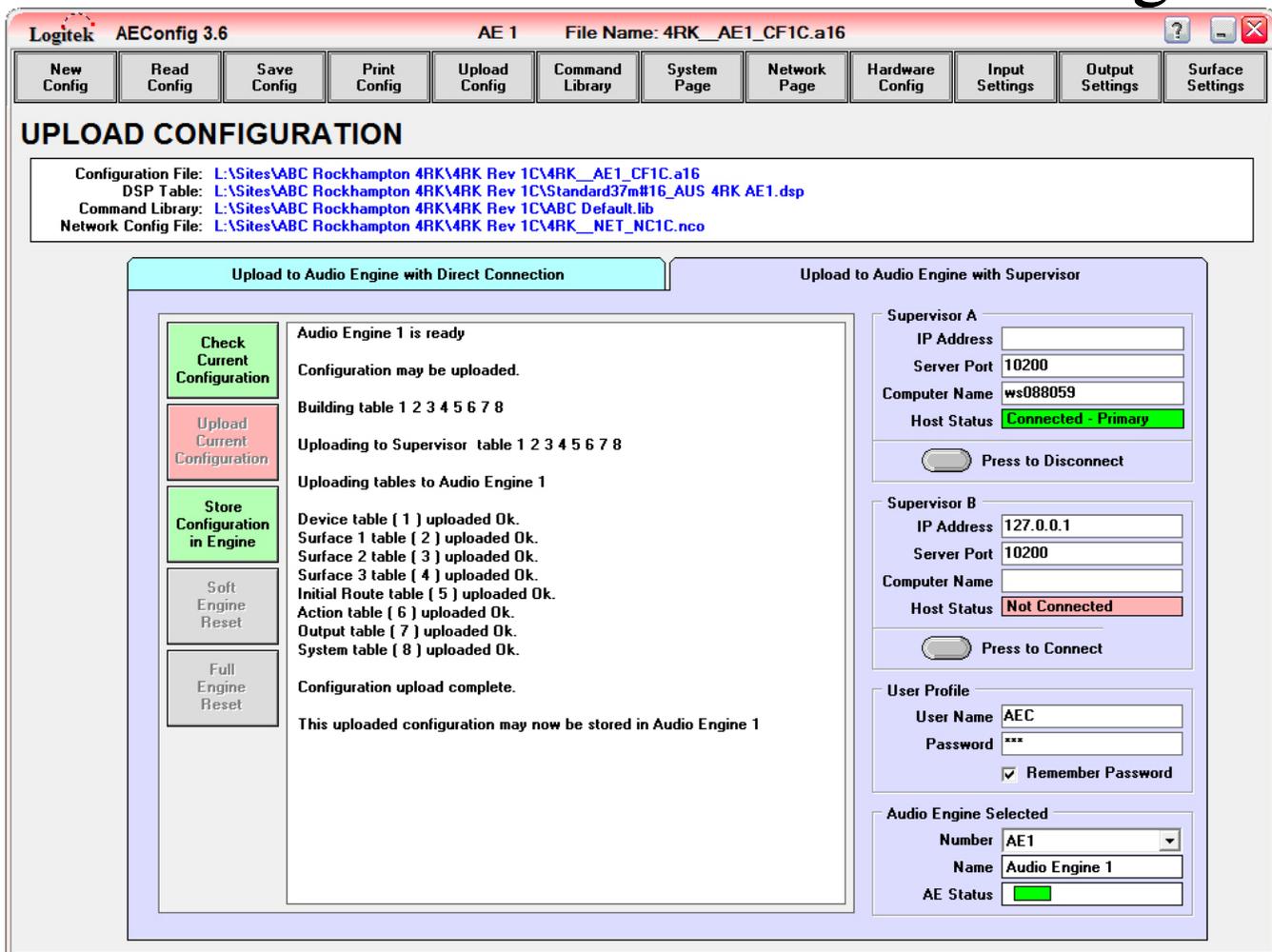


Figure 8 - Upload Configuration - Uploaded

If successful, the log screen will display a message confirming so, as shown above in Figure 8. The config must now be stored in the engine. This is done by clicking on the **Store Configuration in Engine** button.

TIP: After the **Config** is stored in the **Audio Engine**, it has not been made active. An **Engine** reset is required before the **Config** goes live (see following page).

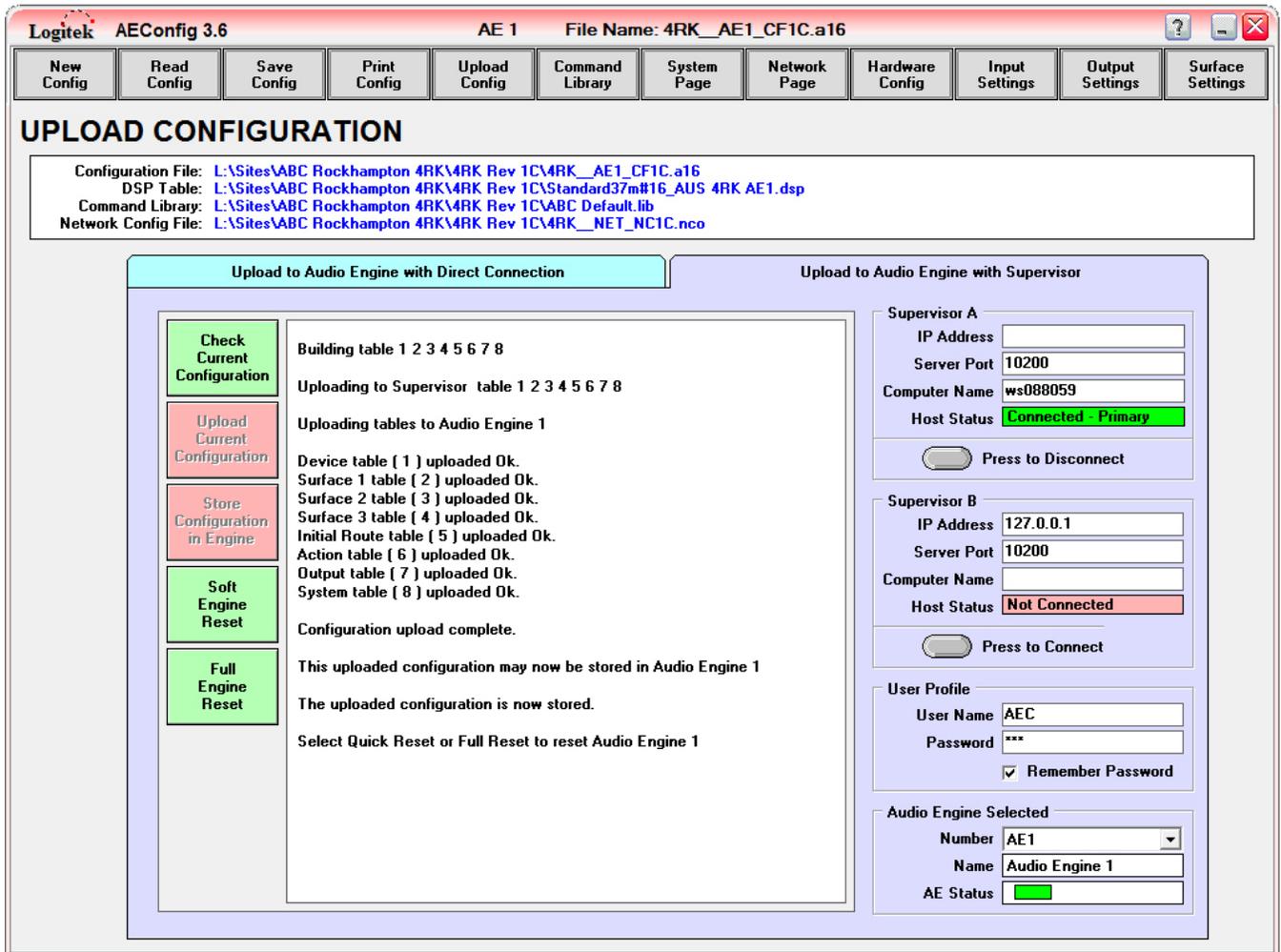


Figure 9 - Upload Configuration - Stored

If successful, the log screen will display a message confirming so, as shown above in Figure 9. A **Soft Reset** or **Full Reset** must now be performed to activate the **Configuration**.

A **Soft Engine Reset** will reload the configuration on the fly, and is safe to perform while the system is live. The only settings not activated by a **Soft Engine Reset** are **Default Routes** and new **Outputs** (however, *AE-C6 v3.67* and later will activate new **Outputs** during a **Soft Engine Reset**). A **Full Engine Reset** will restore default **Routes**, **Bus Assignments** and **Fader Levels**.



A Full Engine Reset will interrupt audio for a few seconds. In addition, the restoration of default routes may affect on-air signal routing.

After Uploading

If uploading via *Supervisor*, click the **Press to Disconnect** button to disconnect from *Supervisor*. The connection is automatically closed when the *AEConfig* program is terminated.

5 Creating & Editing Config Files

This chapter explains the steps required to setup a new **Config** or edit an existing one. The editing tools follow most *Windows* conventions and provide many functions for streamlining the process.

The order of pages in this manual is based on how you would build a **Config** from scratch, and does not necessarily follow the order of buttons along the button bar.

Hardware Config



The **Hardware Config** page is used to allocate cards to slots in the **Audio Engine** and to allocate **Surfaces**. This information is used by the **Audio Engine** to ensure appropriate operation. The **Audio Engine** must be told what hardware it has, using this **Config** page.

To add **Audio** cards to the I/O slots (**A-H**), simply click the button corresponding to the card type you wish to add. Once clicked, you can populate slots by clicking on the slots where this type of card will be placed. To place a different type of card, just select the different type and repeat the previous procedure for that type of card.

To add **DSP Cards** to slots **J** and **K**, simply click the button corresponding to the **DSP Card** type you wish to add. Once clicked, you can populate slots by clicking on the slots where this type of card will be placed. To place a different **DSP Card**, just select the different type and repeat the previous procedure for that type of **DSP Card**.

To add **Surfaces**, simply click the button corresponding to the surface type you wish to add (**ROC5**; **ROC10**; **Numix**; **Remora**; **Mosaic**; **Artisan** or **Router**). Once clicked, you can populate the engine by clicking on the ports where you wish this type of **Surface** to be placed. To place a different type of **Surface**, just select the different type and repeat the previous procedure for that type of surface.



You must use a DSP Table file that is compatible with the surfaces and DSP card types that are included with your system.

To remove any of the additions you have made, simply click the **Remove** button and then click on the objects you wish to remove.

TIP: It is important to set the correct hardware locations. Whilst the **Audio Engine** may still work with incorrect hardware types, unpredictable behavior may occur.

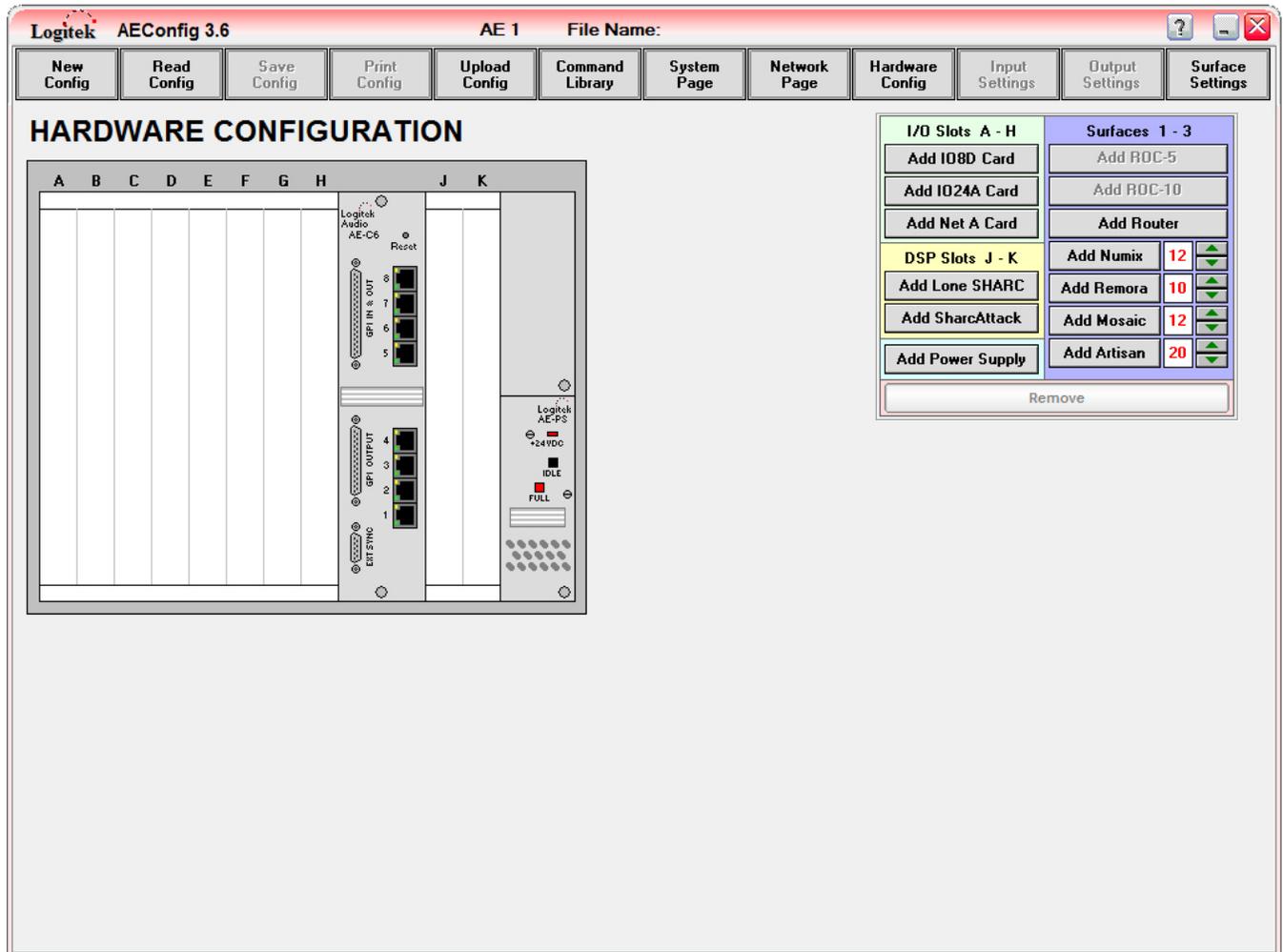


Figure 10 - Hardware Config Page

AE-C6 Ports 4-6

The **AE-C6** controller card has 6 **Surface Ports**, instead of the 3 available in the **AE-C2**. In **Audio Engine** version 3, only **Ports 1-3** are available for allocation DSP resources.

If connecting **Utility Panels** (router, intercom, button or guest panels), you do not need to show these in *AEConfig's Hardware Config* page. The port allocation is only to establish **DSP** resources.

Router

When you select a **Router** in the *Hardware Config* page, **DSP Router Crosspoints** are allocated in the **Audio Engine**. Between 10-20 mono/stereo are available, depending on the **DSP Card** and **Port**. It is possible to use **DSP Router Crosspoints** without a physical **Router** panel connected. Likewise, a physical panel can be configured to use **Output Routes** only and not use a **DSP Port**.

➔ *For more information see the Utility Panels User's Manual.*

System Page



The **System Page** is used to setup information about a **Config** including **Surface Label Size**, **AE Number**, **Controller Card Type**, **Sampling Rate**, **International Settings** and the associated **DSP Table** file.

The current **Configuration** file, **DSP Table**, **Command Library** and **Network Config** file names, and their associated paths are displayed in the upper portion of the screen.

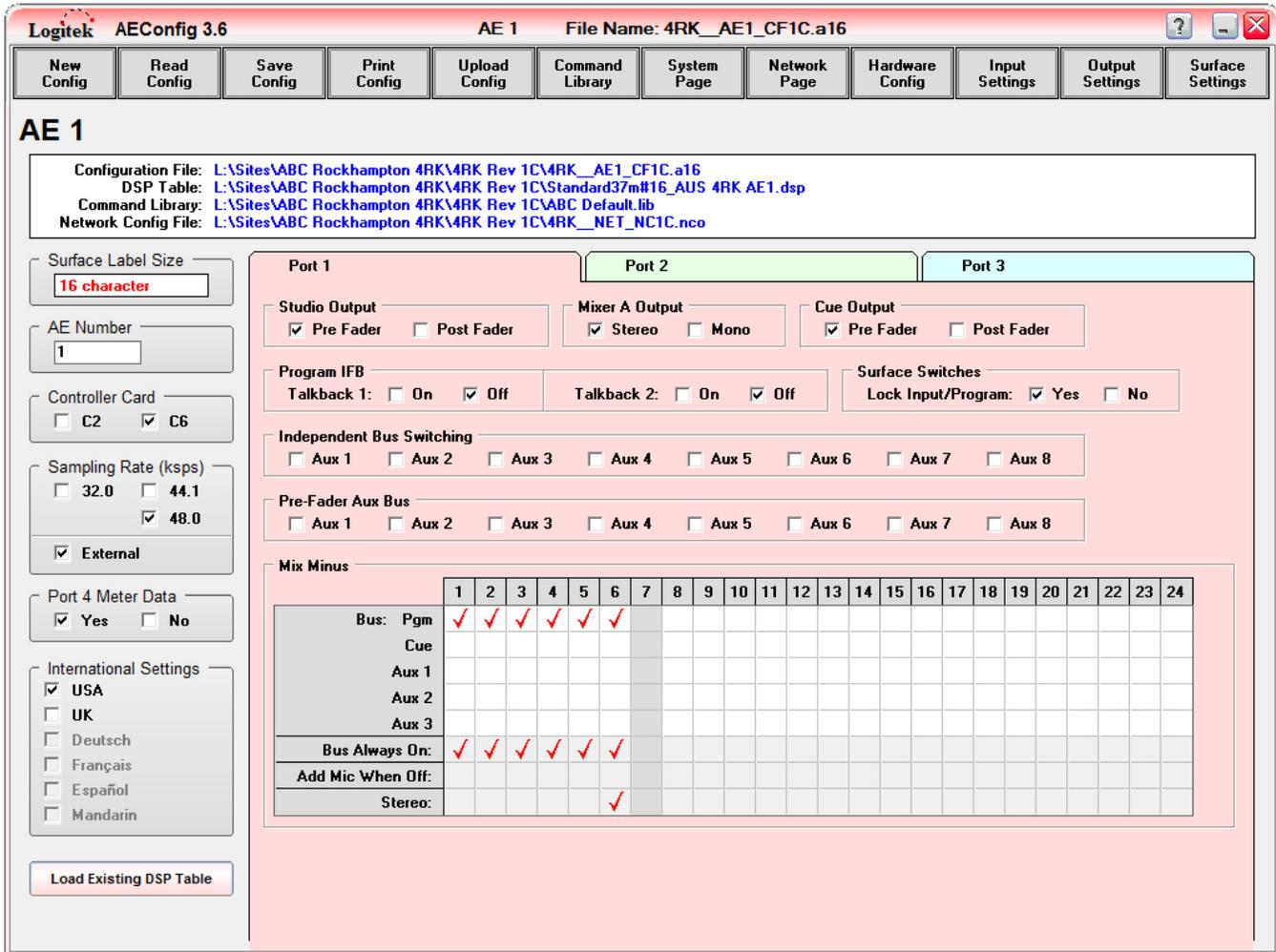


Figure 11 - AEConfig System Page

The **Config** is linked to a **DSP Table** (.dsp file). The **DSP Table** stores the data necessary for each type of **Digital Signal Processing** card and console **Surface**.

Load Existing DSP Table

The **Load Existing DSP Table** button allows you to select a **DSP Table** file name to be associated with the current **Config**. You will be presented with a standard Windows Open File dialog box.

Select the appropriate **DSP Table** (it should be located in the same directory as the other **Config** files).

Data Fields – Engine Specific

Surface Label Size displays you with either 8 or 16 character mode. This is determined by the file extension of the **Config** file that *AEConfig* has read (either *aec* or *a16* format).

AE Number is where you set which **Audio Engine** this **Config** file is for. It is essential that this number is correct, or you will have trouble with **Network** sources and uploading via *Supervisor*.

Sampling Rate (kbps) is where you select 32.0, 44.1 or 48.0 kbps for your sampling rate. This affects the system and output sample rate. You can also enable or disable **External Sync**.

 **TIP:** When you change the sample rate, *External Sync* is automatically deselected.

The **Port 4 Meter Data** checkbox determines whether meter data is sent to *Supervisor* or not. Generally this is set to **Yes**.

The **International Settings** field allows you to select USA or UK style faders on your surfaces.

Data Fields – Port Specific

Each of the three **Port** tabs allow you to set certain settings for each **Surface**. The tabs will only be enabled if a **Surface** has been configured for that port on the **Hardware Config** page.

Studio Output is where you select whether the **Studio/Guest** output is **Pre Fader** or **Post Fader**.

Mixer A Output can be set to either **Stereo** or **Mono**. **Mixer A** is a three channel sub-mixer.

Cue Output can be set to either **Pre Fader** or **Post Fader**.

The **Program IFB** frame controls the **Talkback 1** and **Talkback 2** outputs on *ROC* and *Numix I* surfaces. *Numix II*, *Mosaic* and *Remora* consoles do not generally use the TB1 or TB2 buttons. The checkboxes allow you to turn the **Program** bus IFB on or off.



The **Program IFB** controls refer to settings within Legacy Version 2 **Audio Engines** and do not have a function on a Version 3 **Audio Engine**.

The **Surface Switches** frame allows you to set the **Lock Input/Program** mode, to lock a **Fader's** input and **Program** bus when the **Fader** is on.

The **Independent Bus Switching** checkboxes set whether independent bus switching is used for **Aux 1** through **Aux 8**. When **Independent Bus Switching** is turned on, **Aux** bus assignments are active even when the main **Fader** switch is off.

The **Pre-Fader Aux Bus** checkboxes set whether the **Aux 1** through **Aux 8** busses observe or ignore the **Fader Level**. In **Pre-Fader** mode, an **Aux** bus level is always unity regardless of **Fader** position.

The **Mix Minus** check boxes setup the **Mix Minus** bus outputs for that surface. Up to 24 **Mix Minus** busses can be configured, subject to available **DSP** and **Device Numbers** (generally only 3 **Mix Minus** outputs can be used on **Port 2** & **Port 3 Surfaces**). The settings for **Mix Minus 1-24** are:

Bus	Sets the default Source Bus for the Mix Minus – PGM , CUE , Aux 1 , Aux 2 or Aux 3 .
Always On	Determines whether the Mix Minus is always on, or only produces audio when the associated Input is turned on.
Add Mic	If Add Mic When Off is selected, the studio's Talkback Mic is routed to the Mix Minus output when the associated Input if turned off.
Stereo	Makes the Mix Minus a stereo Output (this will disable/pair the following Mix Minus bus).

🔊 TIP: **Bus Always On** and **Add Mic When Off** will conflict with each other if they are both selected on the same **Mix Minus** Bus. Only one of these checkmarks should be selected in per individual **Mix Minus** column. If both are selected, **Bus Always On** will prevail.

🔊 TIP: **Mix Minus 1-3** are individual mono **Busses**. **Mix Minus 4-25** are paired, with each pair being either a stereo **Mix Minus** or two adjacent mono **Mix Minuses**. If creating stereo **Mix Minus** outputs, start at an **EVEN** numbered bus from **MM 4** up.

🔊 TIP: Because **Mix Minus 4-25** are paired, you will need to allocate a single **2-Channel Output** in **AEConfig** per pair of mono **Mix Minuses Busses**. The **Output** is then allocated a paired **Mix Minus** (eg **MM4/5**), which carries the two individual Mono **Mix Minus Bus Outputs**.

Network Page



The **Network Page** is used to setup network information for the sharing of audio between **Engines**. The network configuration information is also used by *CommandBuilder*, so is usually required even when no **Fiber Network** is actually used.

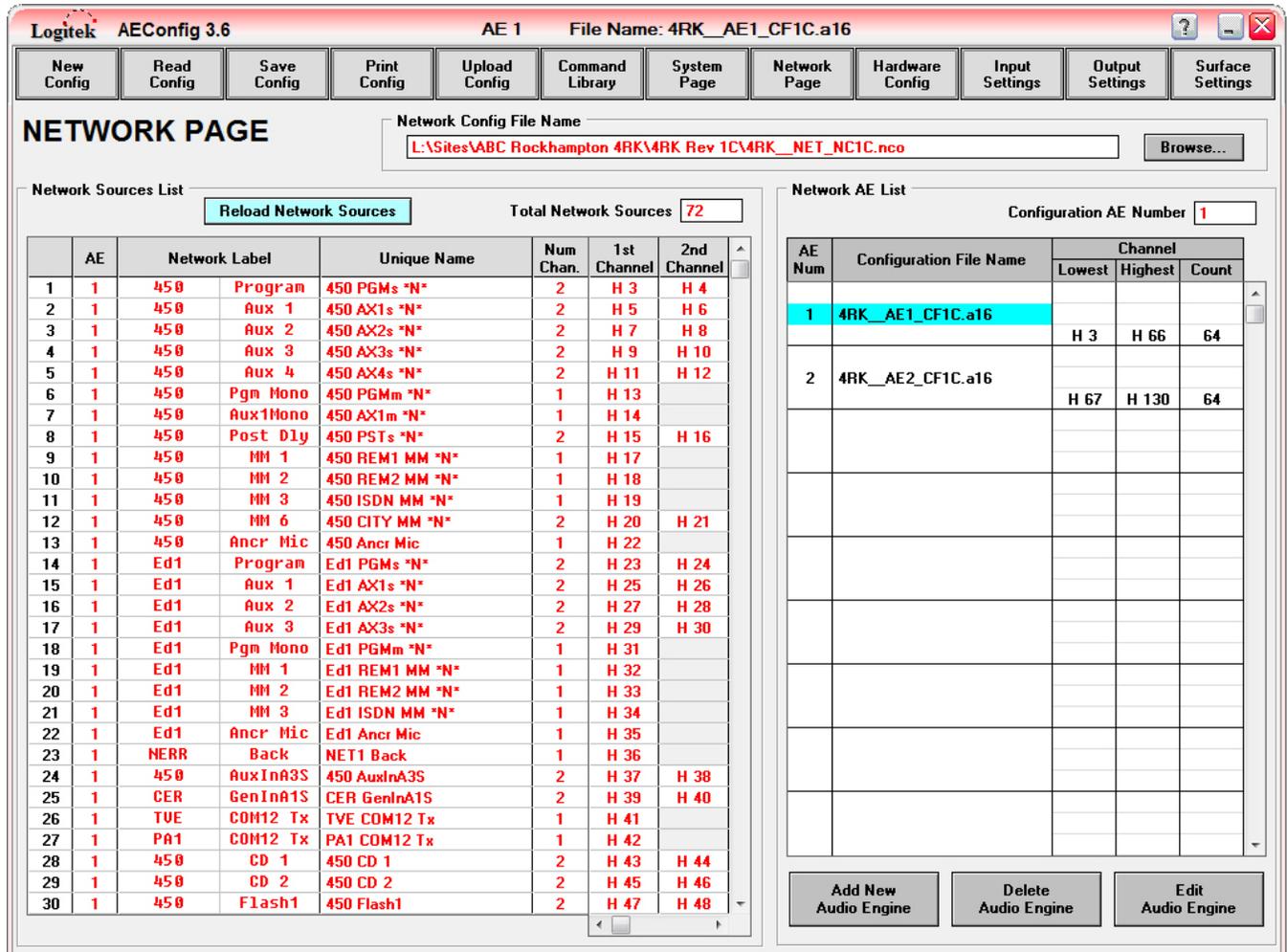


Figure 12 - Network Page

When using a **Fiber Network**, the **Network Page** is built automatically from the **Network Config File**. Once each **Audio Engine** is added to the **Network AE List** and **Sources** are allocated to the **Network** in each **Config**, the **Network Sources List** will be built by *AEConfig*.

Network Config File Name

The **Network Config File Name** field is used to determine where the **Network Config File** (.nc0) is saved. Click **Browse...** to locate or create an .nc0 file. If creating a new .nc0 file, click **Browse...** then type a file name - the .nc0 file is then automatically created when the **Config** is next saved.

Network AE List

To add an **Audio Engine**, simply click on the **Add New Audio Engine** button located at the bottom of the **Network AE List** shown in Figure 12.

The new **Engine** will be listed in the first available position, so add each **Audio Engine** in order. After you add an **Engine**, it is displayed with the message **FILE NOT FOUND**, as in Figure 13.

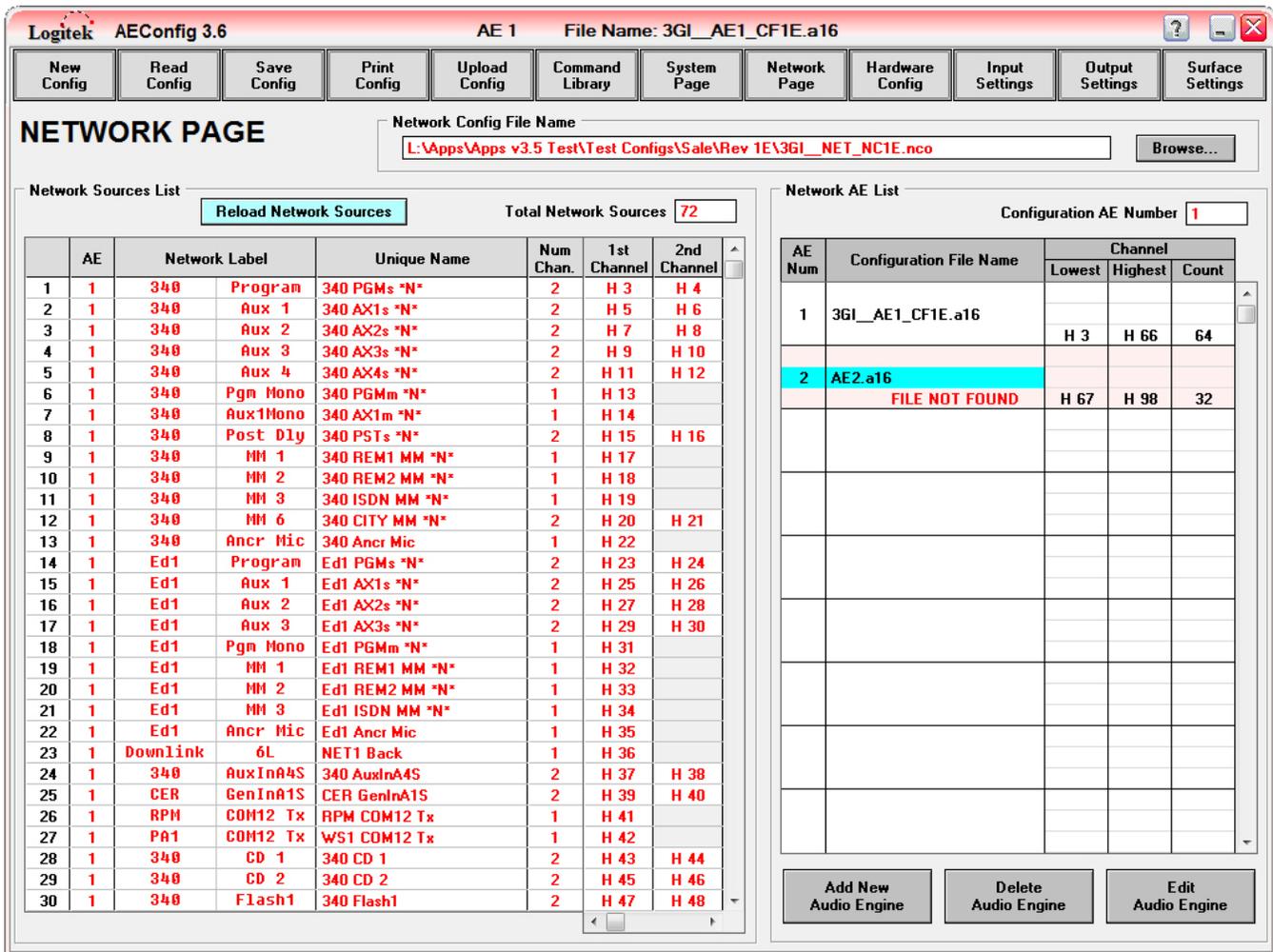


Figure 13 - Audio Engine Added

Once you have added the required **Audio Engines**, you must set their properties:

1. Click the **Edit Audio Engine** button.
2. The **Edit Audio Engine** box is displayed over the **Network AE List**, as in Figure 14 below.
3. Click on the **Browse...** button to find the **Engine's Config** file (.aec or .a16) file.

4. Adjust the channel count to accurately reflect the correct channel count of the **Audio Engine**. You should already have planned the allocation of network channels, as *AEConfig* will prevent you from overlapping any ranges.
5. Click **OK** to confirm the changes. The *Edit Audio Engine* field will be replaced by the *Network AE List* field.
6. Repeat this process for each **Audio Engine** in your system. The **Config** files for each **Engine** must already be setup.

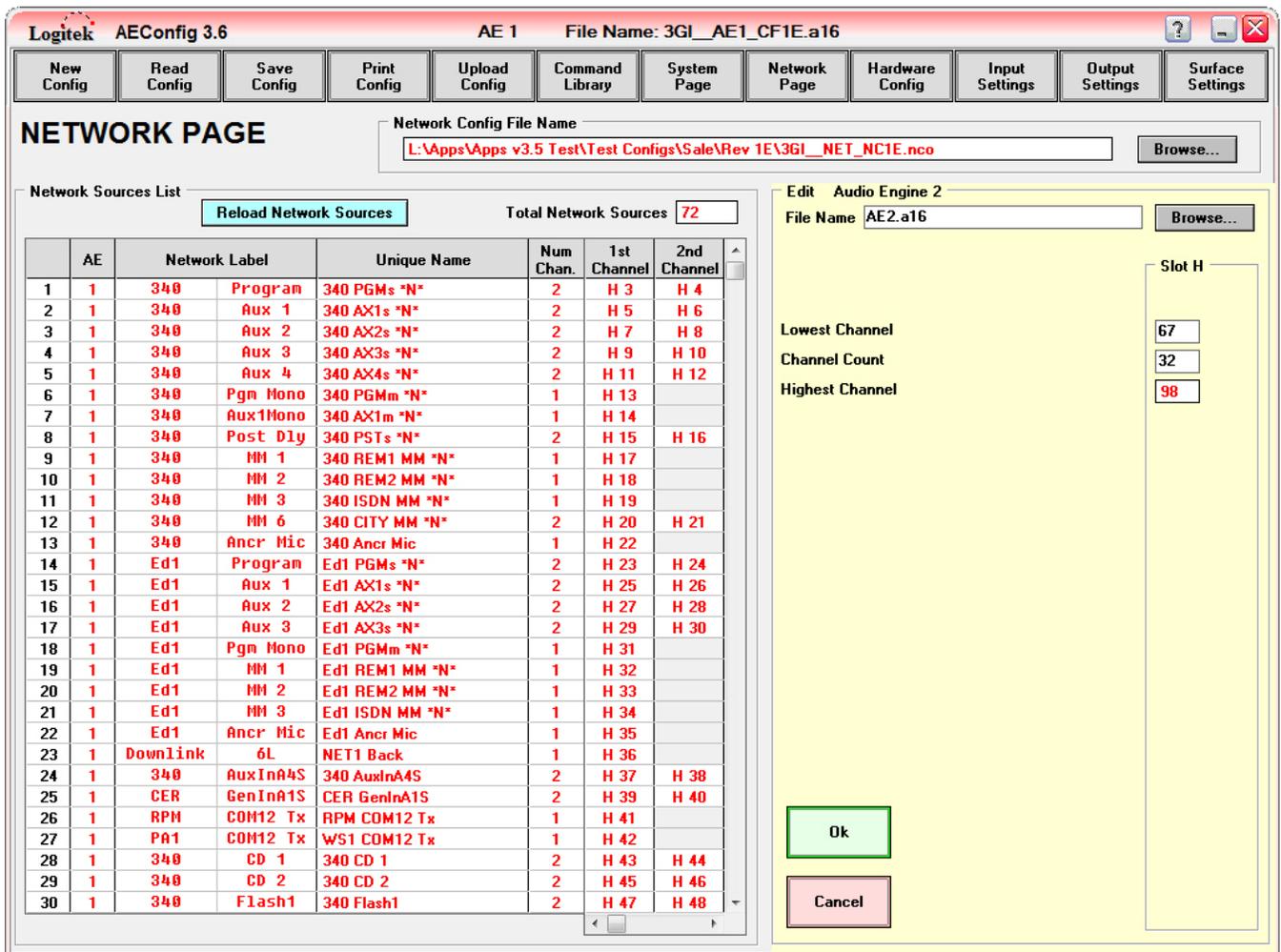


Figure 14 - Edit Audio Engine

Network Sources List

The *Network Sources List* frame displays all **Network Sources** from every **Audio Engine**.

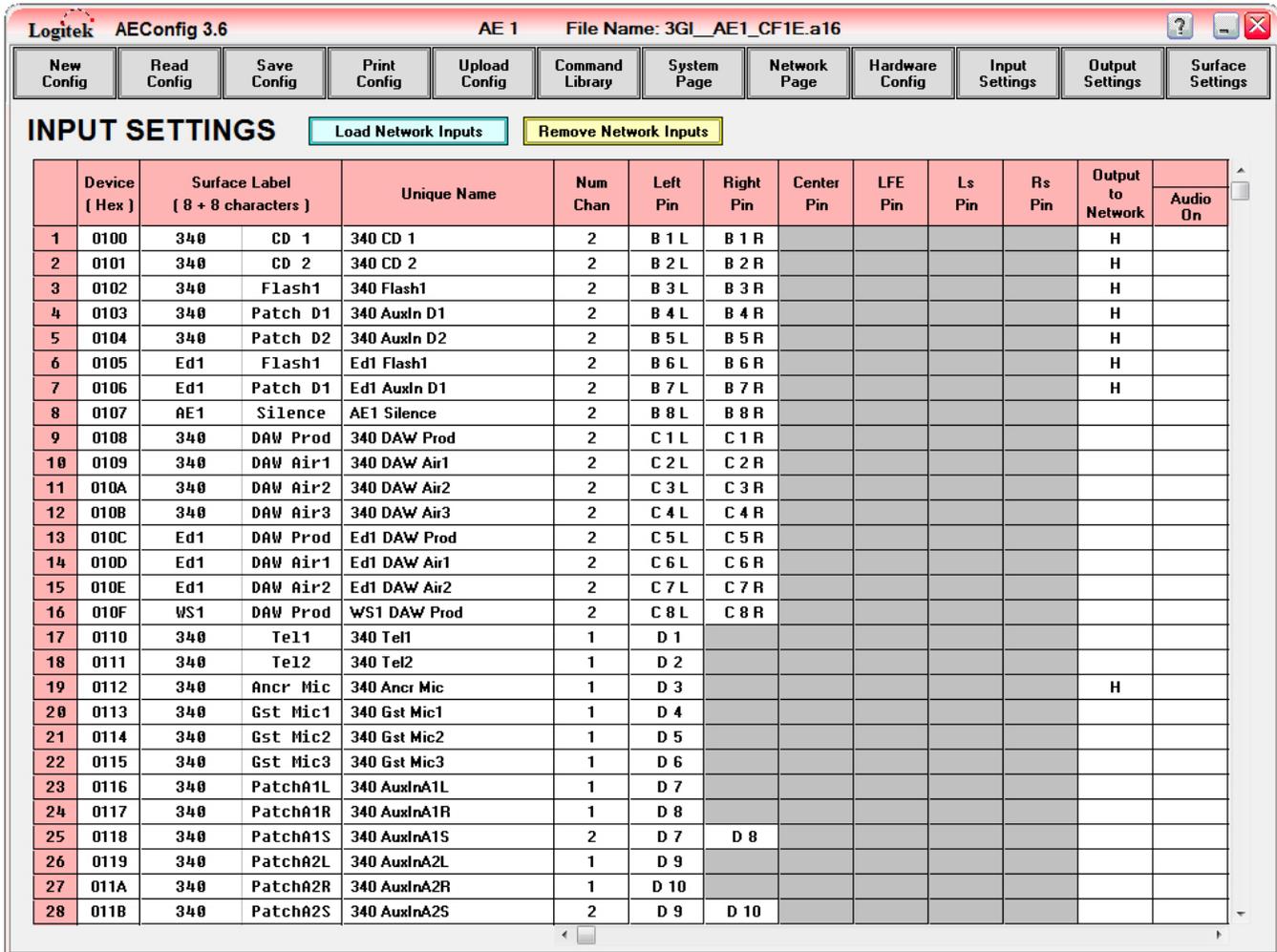
The list is built automatically as sources are assigned to the **Network**. However, after completing network allocations, click the *Reload Network Sources* button to refresh and rebuild the list.

TIP: You must save the **Config** before you can *Reload Network Sources*.

Input Settings Summary



The **Input Settings** page is used to allocate **Inputs** (sources) for the **Audio Engine**. The methods employed to configure **Inputs** are detailed on the next few pages.



	Device [Hex]	Surface Label [8 + 8 characters]		Unique Name	Num Chan	Left Pin	Right Pin	Center Pin	LFE Pin	Ls Pin	Rs Pin	Output to Network	Audio On
1	0100	340	CD 1	340 CD 1	2	B 1 L	B 1 R					H	
2	0101	340	CD 2	340 CD 2	2	B 2 L	B 2 R					H	
3	0102	340	Flash1	340 Flash1	2	B 3 L	B 3 R					H	
4	0103	340	Patch D1	340 AuxIn D1	2	B 4 L	B 4 R					H	
5	0104	340	Patch D2	340 AuxIn D2	2	B 5 L	B 5 R					H	
6	0105	Ed1	Flash1	Ed1 Flash1	2	B 6 L	B 6 R					H	
7	0106	Ed1	Patch D1	Ed1 AuxIn D1	2	B 7 L	B 7 R					H	
8	0107	AE1	Silence	AE1 Silence	2	B 8 L	B 8 R						
9	0108	340	DAW Prod	340 DAW Prod	2	C 1 L	C 1 R						
10	0109	340	DAW Air1	340 DAW Air1	2	C 2 L	C 2 R						
11	010A	340	DAW Air2	340 DAW Air2	2	C 3 L	C 3 R						
12	010B	340	DAW Air3	340 DAW Air3	2	C 4 L	C 4 R						
13	010C	Ed1	DAW Prod	Ed1 DAW Prod	2	C 5 L	C 5 R						
14	010D	Ed1	DAW Air1	Ed1 DAW Air1	2	C 6 L	C 6 R						
15	010E	Ed1	DAW Air2	Ed1 DAW Air2	2	C 7 L	C 7 R						
16	010F	WS1	DAW Prod	WS1 DAW Prod	2	C 8 L	C 8 R						
17	0110	340	Tel1	340 Tel1	1	D 1							
18	0111	340	Tel2	340 Tel2	1	D 2							
19	0112	340	Ancr Mic	340 Ancr Mic	1	D 3						H	
20	0113	340	Gst Mic1	340 Gst Mic1	1	D 4							
21	0114	340	Gst Mic2	340 Gst Mic2	1	D 5							
22	0115	340	Gst Mic3	340 Gst Mic3	1	D 6							
23	0116	340	PatchA1L	340 AuxInA1L	1	D 7							
24	0117	340	PatchA1R	340 AuxInA1R	1	D 8							
25	0118	340	PatchA1S	340 AuxInA1S	2	D 7	D 8						
26	0119	340	PatchA2L	340 AuxInA2L	1	D 9							
27	011A	340	PatchA2R	340 AuxInA2R	1	D 10							
28	011B	340	PatchA2S	340 AuxInA2S	2	D 9	D 10						

Figure 15 - Input Settings Page

Shown above is a grid summarizing the **Inputs** for this **Audio Engine**. Scroll the grid down (if required) to see all **Inputs**. Scroll the grid to the right to see additional options.

Inputs are shown in the order they are added. **Network Inputs** are always added after **Local Inputs**. The order of the grid does not affect sorting at the **Surface** – the **Engine** alpha-sorts **Labels**.

TIP: Most **Input** properties can be viewed from the summary grid. To edit an **Input** you need to click its line number to open the edit page. You can also change each **Input's** “allow ticks” directly from the summary grid, allowing you to compare and match settings across **Inputs**.

Function Buttons

Load Network Inputs will automatically load **Inputs** from the **Network**, as per the **Network Page**. This saves considerable amounts of time over manually entering **Inputs** from the **Network**, particularly as the number of **Audio Engines** grows.

When you first click **Load Network Inputs**, *AEConfig* will add the required **Inputs**, which will be shown with blue shading. These will appear after all local/manually entered **Inputs**. The **Inputs** will be added with default allow selections and level, and no GPI, Mix Minus or other settings. You can manually adjust these properties if required and the settings will be retained provided you do not use the **Remove Network Inputs** function.

Whenever you click **Load Network Inputs** in the future, the **Network Inputs** are compared to the **Network Page**, and adjustments to naming are made as needed. Other properties are not affected.

Remove Network Inputs will delete all **Inputs** that were previously added from the **Network**. This function cannot be undone, so you will be presented with a confirmation before proceeding.

 **TIP:** If you have re-allocated Pin connections, it may be necessary to manually adjust, or delete and re-add the changed **Network Inputs**. Note that if you delete one or all **Network Inputs**, you will lose all **Surface Ticks** for those **Inputs**, so proceed with caution.

Editing, Adding and Removing Inputs

To edit, add or remove an **Input**, click the line number on the left hand side of that **Input**. If this is the first **Input** you are adding, click line 1. If you wish to insert an **Input** at a particular location, click the line number for the preceding **Input** first.

Navigation Buttons

A group of buttons is provided to move quickly between items in the grid without going back to the list summary view.

First Line will display the first **Input** in the list.

Previous Line will go the previous **Input** in the list.

Next Line will go to the next **Input** in the list.

Last Line will display the last **Input** in the list.

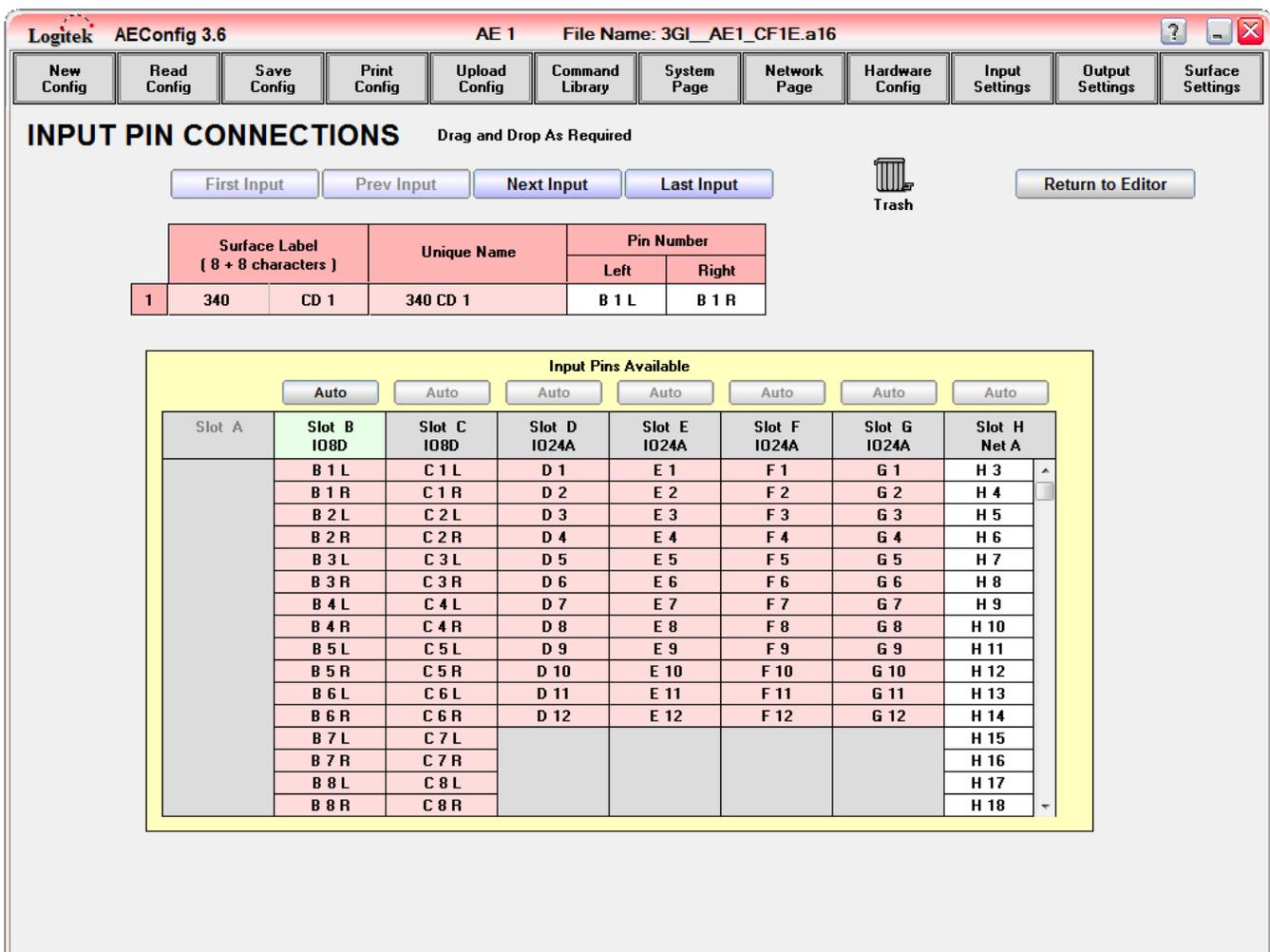
The **Return to Grid** button will return you to the **Input Settings Page** where all **Inputs** are listed.

Function Buttons

Click **ADD new Input after this Input** to insert a brand new **Input** after the currently shown **Input**.

Click **DELETE this Input completely** to remove the currently displayed **Input**. Note this will remove any **Surface Ticks** and other settings and cannot be undone. You will receive a confirmation dialog in case you clicked this button accidentally.

The **Select Pin Connections** button will open the **Input Pin Connection** screen as shown in Figure 16 below. Drag and drop the desired pin into the **1st Channel Pin Numbers** column (and **2nd, 3rd, 4th, 5th and 6th Channel Pin Numbers** column if applicable for a stereo, 3-channel or 5.1 input), or if you wish to assign the next available **Pin(s)** on a particular card slot, simply click the **Auto** button. With **Inputs**, it is possible (and sometimes useful) to duplicate **Inputs** using the same **Pin** connections, but different settings.



INPUT PIN CONNECTIONS Drag and Drop As Required

First Input Prev Input Next Input Last Input Trash Return to Editor

	Surface Label (8 + 8 characters)		Unique Name	Pin Number	
				Left	Right
1	340	CD 1	340 CD 1	B 1 L	B 1 R

Input Pins Available

Slot A	Slot B IO8D	Slot C IO8D	Slot D IO24A	Slot E IO24A	Slot F IO24A	Slot G IO24A	Slot H Net A
	B 1 L	C 1 L	D 1	E 1	F 1	G 1	H 3
	B 1 R	C 1 R	D 2	E 2	F 2	G 2	H 4
	B 2 L	C 2 L	D 3	E 3	F 3	G 3	H 5
	B 2 R	C 2 R	D 4	E 4	F 4	G 4	H 6
	B 3 L	C 3 L	D 5	E 5	F 5	G 5	H 7
	B 3 R	C 3 R	D 6	E 6	F 6	G 6	H 8
	B 4 L	C 4 L	D 7	E 7	F 7	G 7	H 9
	B 4 R	C 4 R	D 8	E 8	F 8	G 8	H 10
	B 5 L	C 5 L	D 9	E 9	F 9	G 9	H 11
	B 5 R	C 5 R	D 10	E 10	F 10	G 10	H 12
	B 6 L	C 6 L	D 11	E 11	F 11	G 11	H 13
	B 6 R	C 6 R	D 12	E 12	F 12	G 12	H 14
	B 7 L	C 7 L					H 15
	B 7 R	C 7 R					H 16
	B 8 L	C 8 L					H 17
	B 8 R	C 8 R					H 18

Figure 16 - Input Pin Connections

To remove existing **Channel Pin Numbers**, simply drag and drop them into the **Trash**. Reallocate as above. You will get a warning when **Uploading** if **Inputs** are allocated without **Pin** connections.

- 🔊 TIP: To speed up the addition of Inputs, you may wish to pre-plan the pin allocations, and enter **Inputs** (without pins) in slot/pin order. After all **Inputs** are added, you can allocate pins quickly using the **Auto** and **Next Line** buttons. There is no requirement for **Inputs** to be in any order – the **Audio Engine** is not fussy. You are free to select any order that makes sense to you. **Input Pin** order is often a good way.

Data Fields

Device Number & **Line Number** are for system use and are not user-editable.

Unique Name is an arbitrary name that is only referenced on the **Surface Settings** page and in **CommandBuilder**. We recommend using a studio name/number prefix followed by a device name.

- 🔊 TIP: Care should be taken to ensure that **Unique Names** are indeed unique, as **CommandBuilder** will use this name to find inputs. **AEConfig** does not check for duplicate **Unique Names**. If a **Unique Name** is duplicated, **CommandBuilder** will always use the first instance of the **Unique Name**, and this could cause an incorrect function when **Triggers** are processed.
- 🔊 TIP: When editing a **Unique Name** that is referred to in a **CommandBuilder Trigger Table**, always ensure the new **Unique Name** is updated in the **Trigger Table**.

Surface Label is where you enter the **Input's** name as viewed on the console screen. If using a 16 character configuration, the first 8 character block is displayed above the second block. **Surface Labels** are alpha-sorted when shown on console **Surfaces**. The **Label** is automatically centered, using the best fit for each 8 characters. (Odd character lengths will be one character to the left).

Number of Channels determines whether the **Input** will be mono (1), stereo (2), 3-channel (3) or 5.1 (6).

GPI Input Number fields contain spaces for **Audio On**, **Audio Off** and **Cue**. If applicable, enter the appropriate GPI numbers for these functions. **GPI Inputs** control the channel **On**, **Off** and **Cue** function. In UK mode, **Cue** is renamed **PFL** and an additional **Ready** indicator is available.

The **GPI Output Number** field contains spaces for **Audio Start**, **Audio Stop** and **Audio Tally**. If applicable, enter the appropriate GPI numbers for these functions. **GPI Outputs** are activated when the channel is turned on (**Start**) or off (**Stop**). The **Audio Tally** is a latching GPI that is active whilst the channel is on. In UK mode, an additional **Control Start GPI Output** is also available.

TIP: GPI numbers are 1-15 for the **Audio Engine** GPIs, and start at 101, 201 or 301 for each set of **Surface GPIs**. The character in the hundreds column corresponds to the surface's **Port**.

The **Normal Signal Level** field is set to 0 by default, however on some **Inputs** you may wish to increase or decrease this. Generally you should set **Analog Inputs** to +4 if using +4dBm as reference level. **Network** and **Digital Inputs** are set to 0 for unity. The valid range is -20 to +8.

TIP: If an Input level is too high, you need to INCREASE the reference level, which causes the **Audio Engine** to reduce the gain relative to unity. The reference value adjusts the gain prior to the A/D converters on Analog I/O cards, so needs to be correctly set to avoid digital clipping.

The **Mix Minus Bus** field allows you to allocate the **Input** to a specific **Mix Minus Bus** number. Refer to page 27 for more information on **Mix Minus Busses**. It is possible to allocate more than one **Input** to the same **Mix Minus Bus**. In that case the appropriate **Mix Minus Output** will subtract ANY of the **Inputs** that are on for that **Mix Minus Bus** number. You cannot have different **Mix Minus Bus** numbers on different **Ports** on the same **Audio Engine**, but you can duplicate the **Input** with the same **Pin** connections and different **Mix Minus** settings.

The **Fader Start** checkbox enables an automatic **Channel On** (and remote start if applicable) when the **Input's** fader is opened. Tick **Yes** to enable this function.

The **Cue Bus** checkbox allows you to change between **Pre** or **Post Fader** for the **Cue** bus. Tick the appropriate box. Generally you would make these the same for all **Inputs**, unless you have a specific **Input** that differs from the norm.

The **Cue @ Inf.** checkbox allows you to set **Cue** to automatically turn on when the **Fader** hits infinity. Tick the appropriate box for Yes or No.

The **Allow Mode** checkbox determines whether this **Input** is allowed **Mode** changes.

The **Allow Pan** checkbox determines whether this **Input** is allowed to be **Panned**.

The **Allow Effects** checkbox determines whether this **Input** is allowed **EQ & Dynamics** control.

The **Allow Trim** checkbox determines whether this **Input** is allowed gain trim control on an **Artisan** or **Mosaic**.

The **Option 2** is a custom option, and is not used unless advised by **Logitek Electronic Systems**.

The **Timer Disable** checkbox controls whether the **Input** will auto-reset the channel/surface **Timers**.

The **Monitor Muting** section allows you to mute a desired output when an **Input** (eg Microphone) is turned on. It also allows up to 3 additional **GPI Output** tallies (eg for Mic On lamps). To enable this function, tick the **On** box, select the desired **DSP Channel** you wish to mute - **Studio**, **Monitor** or **Headphones** and assign the appropriate surface **GPI** numbers to **Mute Tally 1, 2** and **3** as required.

TIP: When a config is uploaded, *AEConfig* will take the Mute Tally assignments only from the last listed microphone in a mute group and apply them to all of the microphones in that group. When assigning multiple microphones to the same mute group, ensure that the mute tally numbers are the same on the first and last microphone in the mute group.

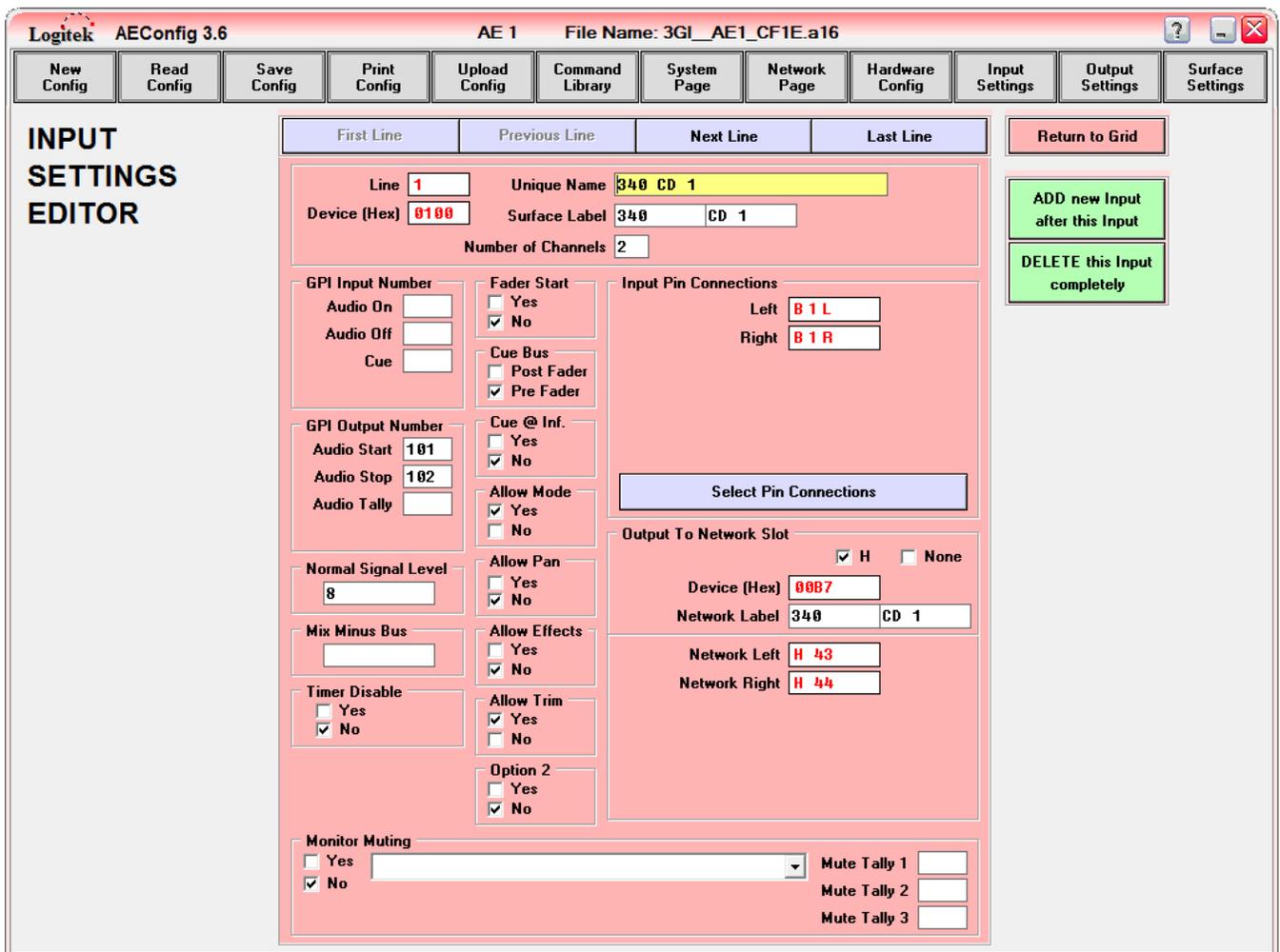


Figure 17 - Input Settings Editor Page

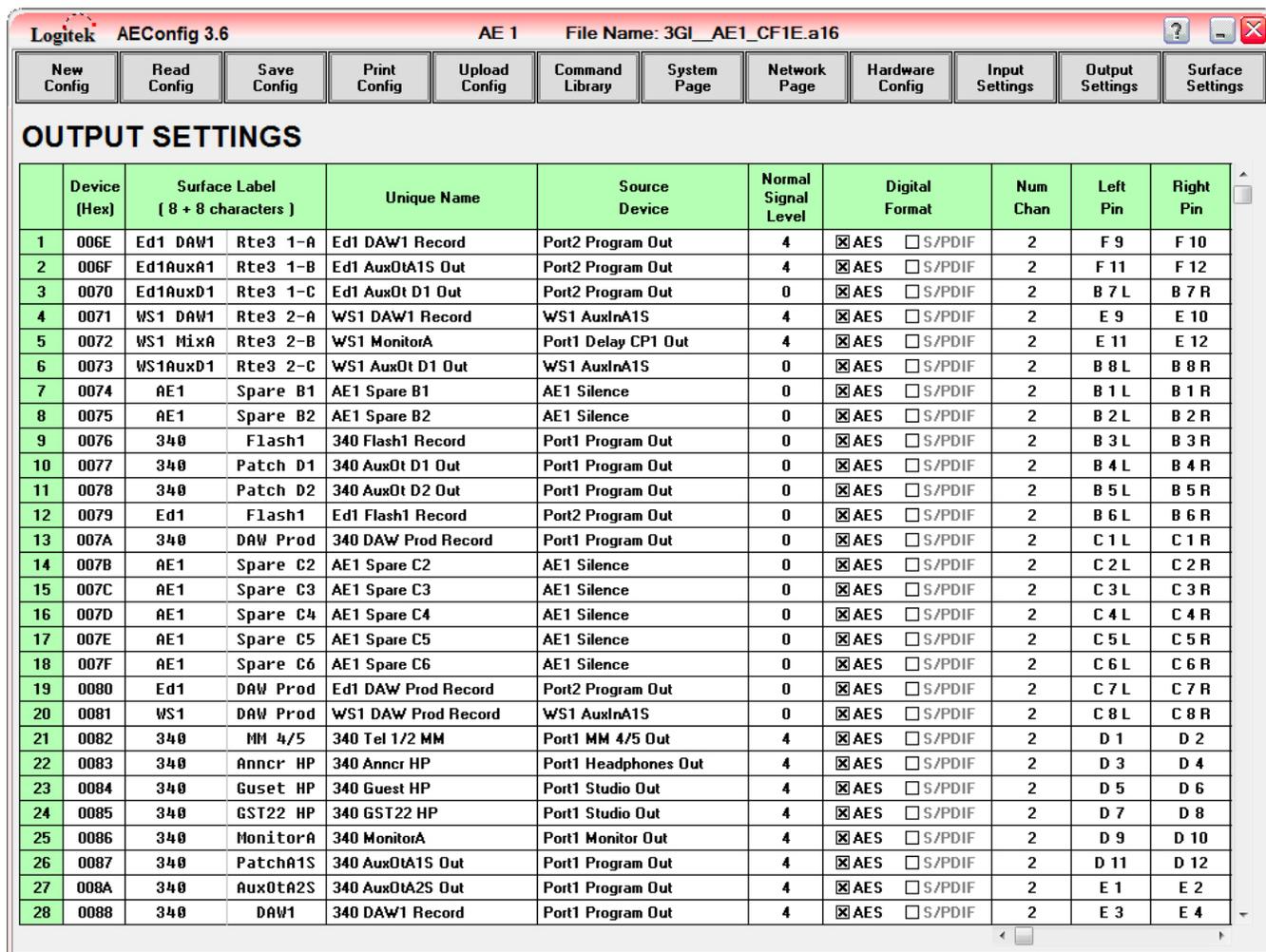
The **Input Pin Connections** field displays the currently assigned **Local 1st Channel** (and **2nd, 3rd, 4th, 5th and 6th Channel Pin Numbers** column if applicable for a stereo or 5.1 input). Configuration of this option was described in the previous section.

The **Output To Network Slot** field allows you to share this **Input** via the **Fiber Network**. For example, you would generally assign the announcer's microphone Input to the **Network** to allow intercom with other studios and devices. By ticking the **H** box, the **Network Label** field/s will be automatically populated with data from the **Surface Label** field (but can be edited if required). The **Network 1st Channel** (and **2nd, 3rd, 4th, 5th and 6th Channel Pin Numbers** column if applicable for a stereo, 3-channel or 5.1 input) will be automatically assigned as the next available **Network Channels** – it is not possible to manually select the **Network Channels**.

Output Settings Summary



The **Output Settings** page is used to allocate **Outputs** (destinations) for the **Audio Engine**. The methods employed to configure the **Outputs** are detailed on the next few pages.



	Device (Hex)	Surface Label (8 + 8 characters)		Unique Name	Source Device	Normal Signal Level	Digital Format	Num Chan	Left Pin	Right Pin
1	006E	Ed1 DAW1	Rte3 1-A	Ed1 DAW1 Record	Port2 Program Out	4	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	F 9	F 10
2	006F	Ed1AuxA1	Rte3 1-B	Ed1 AuxOtA1S Out	Port2 Program Out	4	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	F 11	F 12
3	0070	Ed1AuxD1	Rte3 1-C	Ed1 AuxOt D1 Out	Port2 Program Out	0	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	B 7 L	B 7 R
4	0071	WS1 DAW1	Rte3 2-A	WS1 DAW1 Record	WS1 AuxInA1S	4	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	E 9	E 10
5	0072	WS1 MixA	Rte3 2-B	WS1 MonitorA	Port1 Delay CP1 Out	4	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	E 11	E 12
6	0073	WS1AuxD1	Rte3 2-C	WS1 AuxOt D1 Out	WS1 AuxInA1S	0	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	B 8 L	B 8 R
7	0074	AE1	Spare B1	AE1 Spare B1	AE1 Silence	0	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	B 1 L	B 1 R
8	0075	AE1	Spare B2	AE1 Spare B2	AE1 Silence	0	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	B 2 L	B 2 R
9	0076	340	Flash1	340 Flash1 Record	Port1 Program Out	0	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	B 3 L	B 3 R
10	0077	340	Patch D1	340 AuxOt D1 Out	Port1 Program Out	0	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	B 4 L	B 4 R
11	0078	340	Patch D2	340 AuxOt D2 Out	Port1 Program Out	0	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	B 5 L	B 5 R
12	0079	Ed1	Flash1	Ed1 Flash1 Record	Port2 Program Out	0	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	B 6 L	B 6 R
13	007A	340	DAW Prod	340 DAW Prod Record	Port1 Program Out	0	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	C 1 L	C 1 R
14	007B	AE1	Spare C2	AE1 Spare C2	AE1 Silence	0	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	C 2 L	C 2 R
15	007C	AE1	Spare C3	AE1 Spare C3	AE1 Silence	0	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	C 3 L	C 3 R
16	007D	AE1	Spare C4	AE1 Spare C4	AE1 Silence	0	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	C 4 L	C 4 R
17	007E	AE1	Spare C5	AE1 Spare C5	AE1 Silence	0	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	C 5 L	C 5 R
18	007F	AE1	Spare C6	AE1 Spare C6	AE1 Silence	0	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	C 6 L	C 6 R
19	0080	Ed1	DAW Prod	Ed1 DAW Prod Record	Port2 Program Out	0	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	C 7 L	C 7 R
20	0081	WS1	DAW Prod	WS1 DAW Prod Record	WS1 AuxInA1S	0	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	C 8 L	C 8 R
21	0082	340	MM 4/5	340 Tel 1/2 MM	Port1 MM 4/5 Out	4	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	D 1	D 2
22	0083	340	Anncr HP	340 Anncr HP	Port1 Headphones Out	4	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	D 3	D 4
23	0084	340	Guset HP	340 Guest HP	Port1 Studio Out	4	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	D 5	D 6
24	0085	340	GST22 HP	340 GST22 HP	Port1 Studio Out	4	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	D 7	D 8
25	0086	340	MonitorA	340 MonitorA	Port1 Monitor Out	4	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	D 9	D 10
26	0087	340	PatchA1S	340 AuxOtA1S Out	Port1 Program Out	4	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	D 11	D 12
27	008A	340	AuxOtA2S	340 AuxOtA2S Out	Port1 Program Out	4	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	E 1	E 2
28	008B	340	DAW1	340 DAW1 Record	Port1 Program Out	4	<input checked="" type="checkbox"/> AES <input type="checkbox"/> S/PDIF	2	E 3	E 4

Figure 18 - Output Settings Page

Shown above is a grid summarizing the **Outputs** for this **Audio Engine**. Scroll the grid down (if required) to see all **Outputs**. There is no need to scroll the grid left-to-right for mono or stereo outputs, but you will need to scroll to see higher channels for a 3-channel or 5.1 output.

Outputs are shown in the order they are added. The order of the grid does not affect sorting, as **Output Labels** are not shown on the **Surfaces**.

TIP: Most **Output** properties can be viewed from the summary grid. To edit an **Output** you need to click its line number to open the edit page.

Editing, Adding and Removing Outputs

To edit, add or remove an **Output**, click the line number on the left hand side of that **Output**. If this is the first **Output** you are adding, click line 1. If you wish to insert an **Output** at a particular location, click the line number for the preceding **Output** first.

Navigation Buttons

A group of buttons is provided to move quickly between items in the grid without going back to the list summary view.

First Line will display the first **Output** in the list.

Previous Line will go the previous **Output** in the list.

Next Line will go to the next **Output** in the list.

Last Line will display the last **Output** in the list.

The **Return to Grid** button returns you to the **Output Settings Page** where all **Outputs** are listed.

Function Buttons

Click **ADD new Output after this Output** to insert a brand new **Output** after the currently shown **Output**.

Click **DELETE this Output completely** to remove the currently displayed **Output**. Note this will remove any **Surface Ticks** and other settings, and cannot be undone. You will receive a confirmation dialog in case you clicked this button accidentally.

The **Select Pin Connections** button will open the **Output Pin Connection** screen as shown in Figure 19 on the following page. Drag and drop the desired pin into the **1st Channel Pin Numbers** column (and **2nd, 3rd, 4th, 5th and 6th Channel Pin Numbers** column if applicable for a stereo, 3-channel or 5.1 output) or if you wish to assign the next available **Pin(s)** on a particular card slot, simply click the **Auto** button. It is not possible to use **Output Pin** connections more than once.

To remove existing **Channel Pin Numbers**, simply drag and drop them into the **Trash**. Reallocate as above. You will get a warning when **Uploading** if **Outputs** are allocated without **Pin** connections.

 **TIP:** To speed up the addition of **Outputs**, you may wish to pre-plan the pin allocations, and enter **Outputs** (without pins) in slot/pin order. After all **Outputs** are added, you can allocate pins quickly using the **Auto** and **Next Line** buttons. There is no requirement for **Outputs** to be in any order – the **Audio Engine** is not fussy. You are free to select any order that makes sense to you.

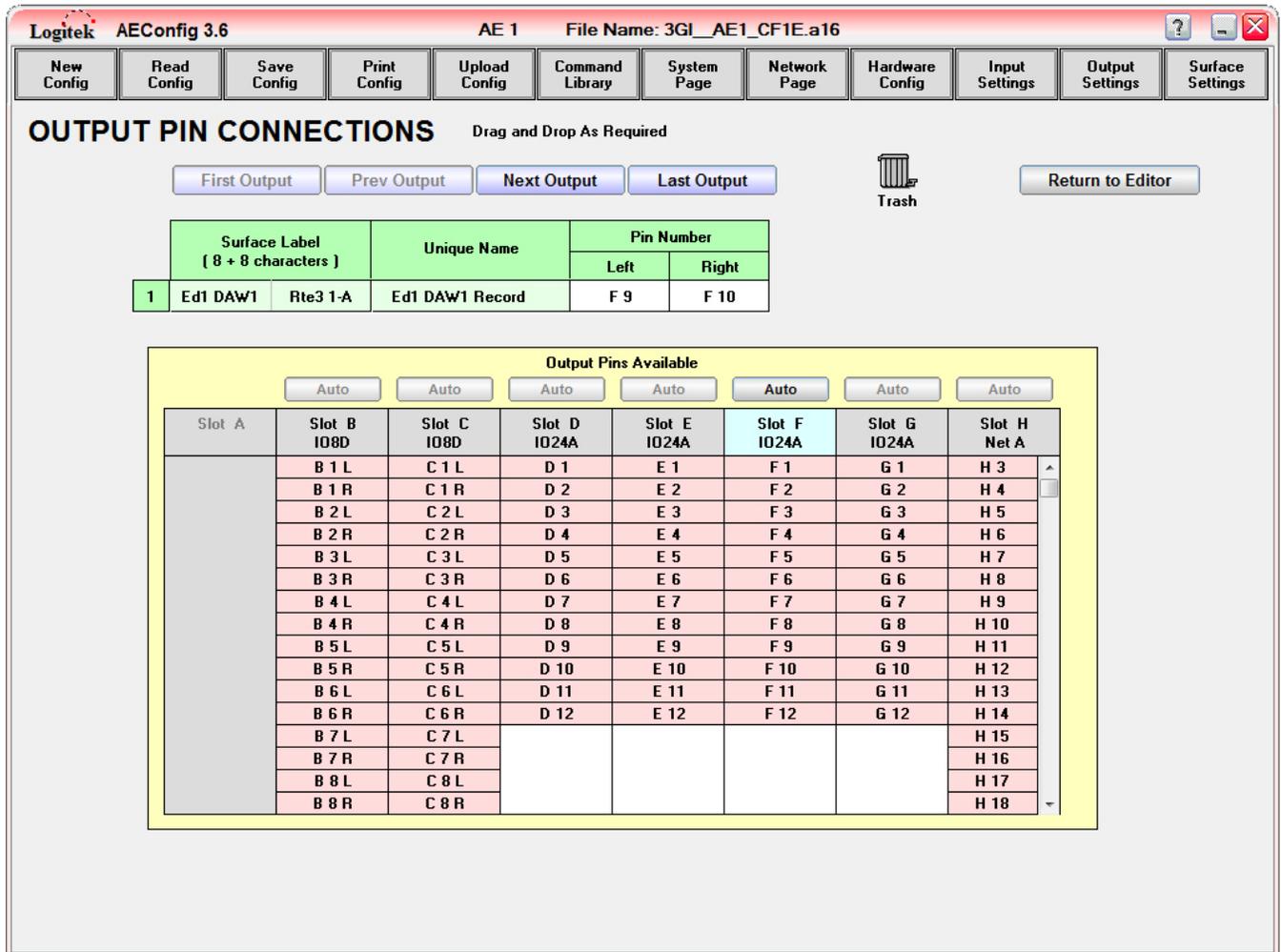


Figure 19 - Output Pin Connections

Data Fields

Device Number & **Line Number** are for system use and are not user-editable.

Unique Name is an arbitrary name that is only referenced on the **Surface Settings** page and in **CommandBuilder**. We recommend using a studio name/number prefix followed by a device name.

- 🔊 TIP: Care should be taken to ensure that **Unique Names** are indeed unique, as **CommandBuilder** will use this name to find outputs. **AEConfig** does not check for duplicate **Unique Names**. If a **Unique Name** is duplicated, **CommandBuilder** will always use the first instance of the **Unique Name**, and this could cause an incorrect function when **Triggers** are processed.
- 🔊 TIP: When editing a **Unique Name** that is referred to in a **CommandBuilder Trigger Table**, always ensure the new **Unique Name** is updated in the **Trigger Table**

Surface Label is where you enter the **Output's** name. If using a 16 character configuration, the first 8 character block is displayed above the second block. **Surface Labels** are alpha-sorted when shown on the console **Surfaces**. The **Label** will be centered automatically, using the best fit for each 8 character block. (Odd character lengths will be one character to the left).

🔊 TIP: **Surface Labels** for **Outputs** generally do not appear on **Surfaces**, as there is no relevant area for them to be displayed. Therefore the **Output Surface Label** is somewhat arbitrary. The exception to this rule is guest headphone panels, which display the **Surface Label** for the **Output** that matches their **Device Number**.

Number of Channels determines whether the **Output** will be mono (1), stereo (2), 3-channel (3) or 5.1 (6).

🔊 TIP: Setting an **Output** as single channel does not automatically make a mono **Output**. If a stereo **DSP Output** is assigned to a single channel I/O card **Output**, the left channel of that **DSP Output** will be used. To ensure true mono **Outputs**, only assign mono sources, or use a **DSP Crosspoint** to perform a stereo to mono mix.

The **Normal Signal Level** field is set to 0 by default, however on some **Outputs** you may wish to increase or decrease this. Generally you should set **Analog Outputs** to +4 if using +4dBm as reference level. **Network** and **Digital Outputs** are set to 0 for unity. The valid range is -20 to +8.

The **Digital Format** field can be set to either AES or S/PDIF by selecting the appropriate box.

The **Pin Connections** field displays the currently assigned **1st Channel Pin Numbers** (and **2nd, 3rd, 4th, 5th and 6th Channel Pin Numbers** column if applicable for a stereo or 5.1 input). Configuration of this option was described in the previous section.

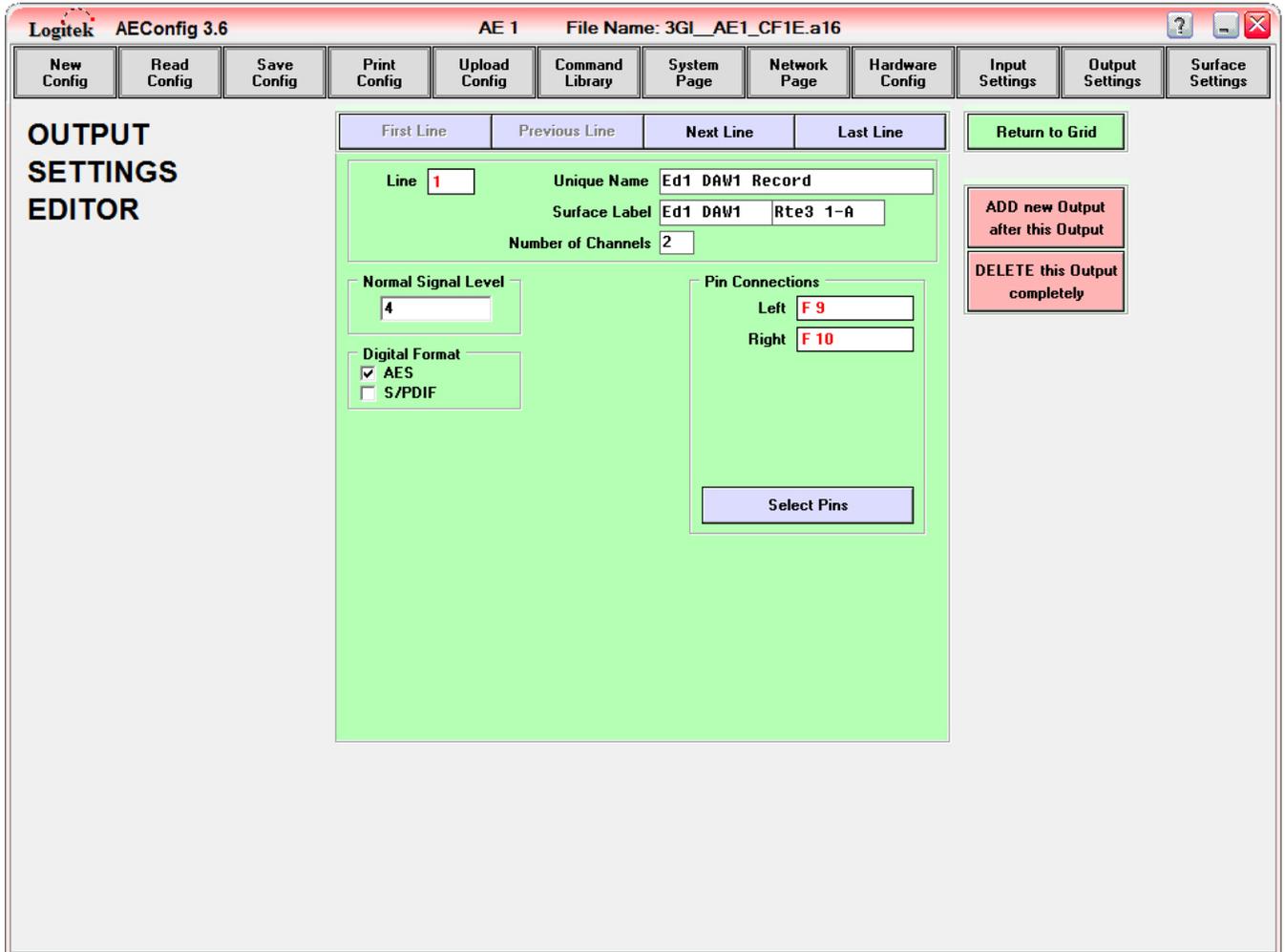


Figure 20 - Output Settings Editor Page

Configuring Surface Settings

Select the tab for which you wish to edit **Surface Settings** and you will be presented with a list of **Sources** (rows) and **Destinations** (columns). **Sources** include all **Inputs** shown on the **Input Settings** page (shaded in RED), as well as **DSP Outputs** (shaded in GREEN). Destinations are **DSP Inputs** (for **Ports 1-3**) and **Outputs (Output Selections)**. The list of **DSP Inputs** is affected by the **Surfaces** defined on the **Hardware Config** page, and the **DSP Table** in use.

To allow an input to be assigned to a particular **DSP Input (Ports 1-3)** or **Output (Output Selections)**, place a tick by clicking the appropriate cell. To make a **Source** the default allocation for a fader, right click and the **I** symbol will be shown instead of a tick.

- 🔊 TIP: To quickly set blocks of adjacent ticks or blanks, click the starting cell and draw a rectangular box around the appropriate cells.
- 🔊 TIP: Default routes are only made when the **Audio Engine** is given a **Full Reset**.
- 🔊 TIP: New to AEConfig as of 3.5 is the handy function that highlights the X and Y axis as your mouse pointer navigates the grid. This enables you to quickly see your grid position relative to both the X and Y axes of the grid.

Port 1 - 3

Each column represents either a **Fader** or a monitoring/utility **DSP Input**.

Output Selections

Each column represents an **Output** to an **I/O** or **Network Card**. The **Output Selections** tab also allows you to select allowed **Destinations** for a **RouteXY** panel (shown at the bottom of the Sources list with BLUE shading.)

➔ *For more information on setting up RouteXY panels, see the Utility Panels manual.*

Monitoring & Cue DSP Inputs

Setting up monitoring for a **Surface** is a two step process. First, you must allocate the desired monitoring **Sources** to the appropriate **DSP Input**, eg “Port 1 Mon In”. You will find the **DSP Inputs** in the columns to the right of the **Fader Input** selections.

Then you need to assign the corresponding **DSP Output**, eg “Port 1 Monitor” to the desired audio **Output**. The **DSP Input** allows control over the monitor route, gain, muting and other functions to be made at the **Surface**. The **DSP Outputs** are in the GREEN shaded rows.

- TIP:** Cue Out for Port 1 is automatically setup. For Port 2, you need to find the “Port 2 Cue Out” DSP Output and assign it to “Port 1 RightCue” on the Port 1 page.
- TIP:** Cue Out for Port 3 requires appropriate settings in your DSP Table, and is only supported by the AE-C6 card.

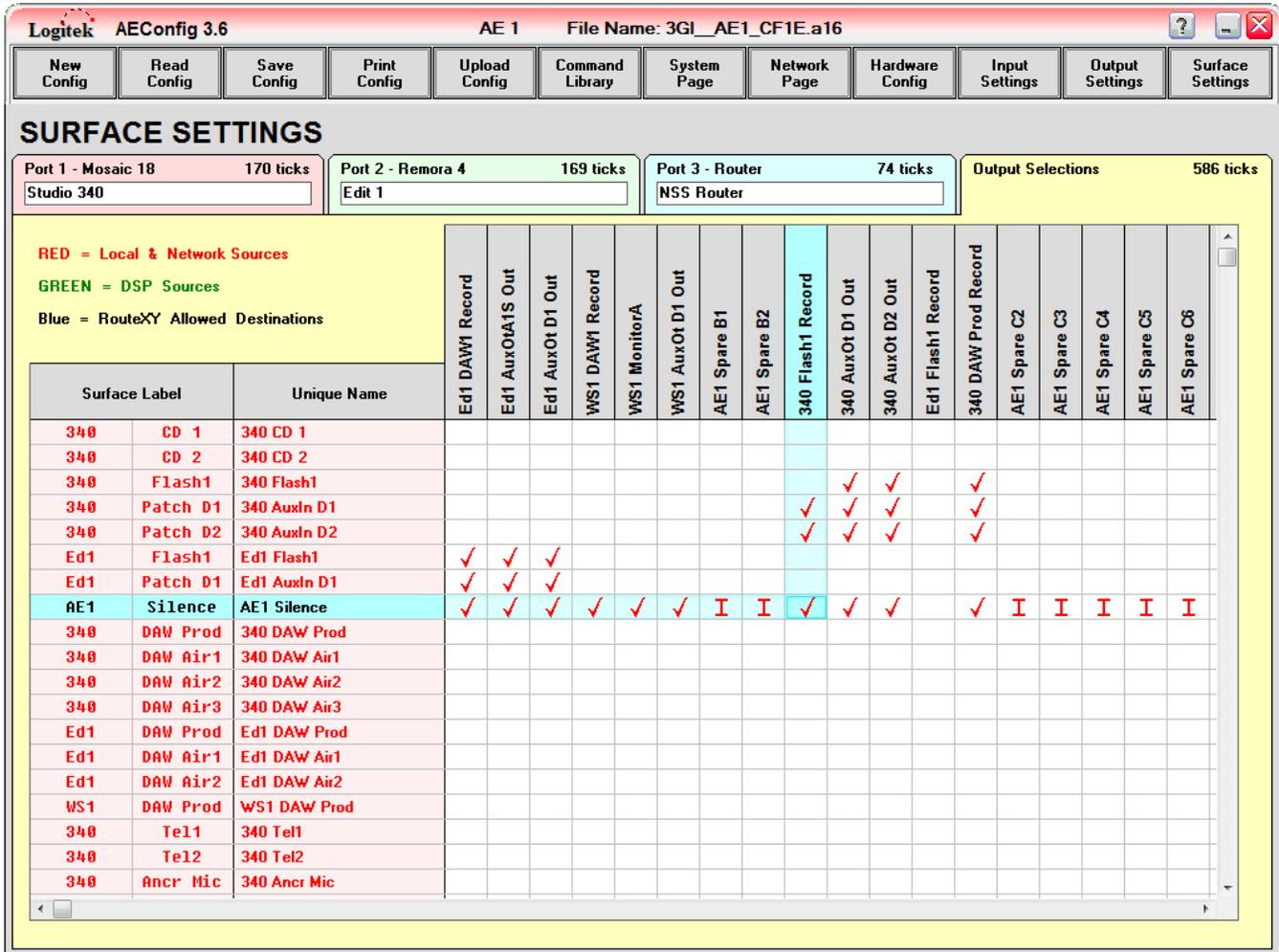


Figure 22 - Output Selections Page

- TIP:** The *Surface Settings - Output Selections* page makes the **Audio Engine** a crosspoint router. Some **Outputs** (eg studio monitor amp) will only ever be given one **Source** (eg Monitor Out). Other **Outputs** (eg record devices) will be allowed a list of **Sources**. Generally you only allow multiple **Sources** when there is a control panel (eg *Route-3*, *Artisan/Mosaic Route screen*, *vRoute*) to control the **Output** routing selection.

6 Tips & Common Tasks

This chapter describes some common tasks that may need to be performed using *AConfig*. It is aimed at technical personnel who support a **Logitek** system, but may not necessarily be experienced with system design and setup.

Renaming Inputs and Outputs

You may wish to rename **Inputs** and/or **Outputs**. In this event you can rename them by following the steps for Editing, Adding and Removing Inputs/Outputs in Chapter 5.

- 🔊 TIP: It is a good idea when renaming the **Unique Name** or the **Surface Label** of an **Input** or **Output** to highlight the entire field and re-type the whole field. This is due to the fact that occasionally the name inside the field includes trailing spaces. If so, you may be prevented from inserting additional characters even though the field isn't full.

If you wish to edit the label that appears on faders for a particular **Input**, you just need to change the **Surface Label** for that **Input**. We recommend you don't change the **Unique Name**, as this name may be referenced by a **Trigger** in *CommandBuilder*. Changing the **Surface Label** does not have any impact on other areas of the system.

- 🔊 TIP: After making a change to **Surface Labels**, you should save and upload any changed configs. A **Soft Reset** will populate the necessary changes to the **Engine** and **Surfaces** and can be done whilst on-air.

Changing the Normal level of an Input/Output

You may wish to change the normal (nominal) level of an **Input** or **Output**. As an example, microphone levels are often set to 0dB reference, to provide an additional 4dB of headroom compared to a mic normalised for +4. You may also have devices or sources that are consistently too low or too high – in this case you can tweak the normal level to make permanent adjustments.

By following the procedures outlined in Chapter 5, the normal **Input** or **Output** level can be set.

- 🔊 TIP: If temporary level changes are required, it is generally easier to use the **Trim** control on a fader, which provides $\pm 10\text{dB}$ (-10 to +20dB for *Artisan*) of gain.
- 🔊 TIP: After making a change to levels, you should save and upload any changed **Configs**. A **Soft Reset** will populate the necessary changes to the **Audio Engine** and can be done whilst on-air.

Appendix A Release Notes

What's New in AEConfig 3.6

AEConfig supports defining inputs and outputs with 6 channels of audio (5.1 surround). However, in order for an **Audio Engine** to operate correctly with a configuration that contains 6-channel inputs sources, the **AE-C6** card in the audio engine must be fitted with a ROM version of 3.97 or later and the **SA-DSP** cards must be fitted with version 1.38 or later.



Please note that 5.1 audio processing is currently supported **ONLY** in Artisan console systems.

Surface Settings Page

- All of the grids on the **Surface Settings** page (Port 1, Port2, Port 3 & Output Selections) have been enhanced with a cursor location indicator which highlights the row & column where your mouse cursor is currently located.
- Added functionality to all the grids on **Surface Settings** page to facilitate the adding of large numbers of tick-marks. The grids will now auto-scroll if you click & drag beyond the visible range on the grid.

Upload Config Page

- NetBIOS computer name may now be used in place of IP address when setting up network connection data.

Release Notes

Installing/Upgrading using Setup3.6

A step-by-step procedure for upgrading or installing *AEConfig* is detailed in Chapter 2.

↪ *See the following Release Notes for a list of issues fixed.*

Known Issues

As at August 2009, there are no issues registered against *AEConfig*. To report any problems, please contact **Logitek Electronic Systems**.

Resolved Issues

- Horizontal and vertical scroll bars on Surface Settings page would sometimes lock in “auto-scroll” mode.
- Previous filename would be displayed on title-bar after pressing New Config button.
- Program would “hang” when attempting to read a non-existent file.

Release History

Following is the maintenance release history for this version of *AEConfig*. For the latest updates and release notes, consult the **Logitek Audio** website.

Executable Name	Version	Date	Notes
AEConfig3.6	3.6.1.0	14-Apr-09	▪ First release.
AEConfig3.6	3.6.2.0	10-Aug-09	▪ Added Remember Password feature in Upload Config Page.

Appendix B DSP Tables

DSP Tables are used by *AEConfig* to allocate resources on the DSP cards for faders, monitor inputs, routing, etc. There are different **DSP Tables** for different models of DSP card and software.

The **DSP Tables** used by a configuration generally do not need to change through the life of a system, unless a major upgrade is performed (eg new DSP cards or DSP software).

In some situations, a DSP table may need to be modified to re-allocate DSP resources, provide custom bus or fader gain defaults, or rename the DSP outputs.

Editing of these files is risky if you are not familiar with their layout.

In some cases, there may be country-specific versions of the **DSP Tables** available (US, Australia, UK). These are generally setup with that country's preferred default settings (eg for talkback). The US versions apply to any country where specific **DSP Tables** have not been made.

Table 1 - Australian DSP Tables

File	Country	Chars	Left DSP (J)	Right DSP (K)	Notes
STANDARD30_AUS	AUS	8	LoneSharc (pre June 2003)	LoneSharc (pre June 2003)	
STANDARD31_AUS	AUS	8	LoneSharc (June 2003+)	LoneSharc (June 2003+)	
STANDARD31#16_AUS	AUS	16	LoneSharc (June 2003+)	LoneSharc (June 2003+)	
STANDARD32_AUS	AUS	8	SharcAttack (June 2005+)	LoneSharc (June 2003+)	Mosaic compatible on Port 1
STANDARD32m_AUS	AUS	8	SharcAttack (June 2005+)	LoneSharc (June 2003+)	Mosaic named for all Ports
STANDARD32#16_AUS	AUS	16	SharcAttack (June 2005+)	LoneSharc (June 2003+)	Mosaic compatible on Port 1
STANDARD33_AUS	AUS	8	SharcAttack (June 2005+)	LoneSharc (June 2005+)	Mosaic compatible on Port 1
STANDARD33#16_AUS	AUS	16	SharcAttack (June 2005+)	LoneSharc (June 2005+)	Mosaic compatible all Ports
STANDARD35_AUS	AUS	8	SharkAttack (pre June 2005)	SharkAttack (pre June 2005)	
STANDARD36_NoPort3_AUS	AUS	8	SharcAttack	SharcAttack	Expanded Port 2, no Port 3
STANDARD37_AUS	AUS	8	SharcAttack (June 2005+)	SharcAttack (June 2005+)	Mosaic compatible all Ports
STANDARD37#16_AUS	AUS	16	SharcAttack (June 2005+)	SharcAttack (June 2005+)	Mosaic compatible all Ports
STANDARD37#16m_AUS	AUS	16	SharcAttack (June 2005+)	SharcAttack (June 2005+)	Mosaic named for all Ports

Table 2 - US DSP Tables

File	Country	Chars	Left DSP (J)	Right DSP (K)	Notes
STANDARD30	US	8	LoneSharc	LoneSharc	
STANDARD3016	US	16	LoneSharc	LoneSharc	
STANDARD3016MosArt	US	16	SharcAttack	SharcAttack	Mosaic named for all Ports Artisan named for Port 1
STANDARD35	US	8	SharcAttack	SharcAttack	
STANDARD36_NOPORT3	US	8	SharcAttack	SharcAttack	Expanded Port 2, no Port 3
Std37 LS_P3 8Char.dsp	US	8	SharcAttack (June 2005+)	LoneSharc	
Std37 LS_P3 16Char.dsp	US	16	SharcAttack (June 2005+)	LoneSharc	
Std37 No_P3 8Char.dsp	US	8	SharcAttack (June 2005+)	SharcAttack (June 2005+)	Expanded Port 2, no Port 3
Std37 No_P3 16Char.dsp	US	16	SharcAttack (June 2005+)	SharcAttack (June 2005+)	Expanded Port 2, no Port 3
Std37 SA_P3 8Char.dsp	US	8	SharcAttack (June 2005+)	SharcAttack (June 2005+)	Mosaic named for all Ports
Std37 SA_P3 16Char.dsp	US	16	SharcAttack (June 2005+)	SharcAttack (June 2005+)	Mosaic named for all Ports
Std38 Artisan5.1.dsp	US	16	SharcAttack (June 2005+)	SharcAttack (June 2005+)	Artisan named for Port 1

TIP: To obtain US/International DSP Tables, contact **Logitek Electronic Systems**. To obtain country specific DSP tables, contact the support agent in that country.