Introduction and Notes

This document will detail the procedures for installing the hardware and software components required for upgrading an OmniPlex system to use more than one AD64 board and Amp. This is necessary when moving beyond a 64-channel system.

A summary of what needs to be completed for this upgrade:

1) Insert a second AD64 and Amp Link card into the chassis

2) Install the drivers for the new cards in the chassis

3) Plug in and arrange two OmniPlex Amps with respect to which channel ranges they will be handling

4) Load an OmniPlex Server .pxs file for 128 channels to test and confirm that the upgrade was successful
Hardware Components

A 64-channel OmniPlex system will have one Amp Link card, and one AD64 card, as seen below.

In the pictured 64-channel configuration, the 64-channel Amp output is sent into the OmniPlex Analog Input board (channels 1-48) and the BNC Interface Board (channels 49-64). The Analog Input board is then connected to an AD64 card via a short white ribbon cable.
A 128-channel OmniPlex system will have two Amp Link cards, and two AD64 cards, as seen below.

In the pictured 128-channel configuration, the 64-channel Amp for channels 1-64 has an output adaptor that sends the Amp output directly into the left-most AD64 card. The 64 channel Amp for channels 65-128 is being sent into the OmniPlex Analog Input board (channels 65-112) and the BNC Interface Board (channels 113-128). The analog input boards are then connected to the right-most AD64 card via a short white ribbon cable.

The diagram on the next page illustrates what positions each chassis card should be in.
Use the above image as a reference for where the new cards belong in the OmniPlex chassis.
Driver Installation

1) Power down the PC and OmniPlex chassis
2) Place the new cards into the chassis as seen in the pictures in the previous section
3) Power up the OmniPlex chassis, and then power up the PC
4) When Windows finishes booting to the desktop, you should see the “Found New Hardware Wizard” pop up.

Select “No, not this time”, and click “Next”.

A hardware device (either the new AMP LINK or AD64 board) will attempt to install.
Select “Install the software automatically” and then click “Next”
If successful, you will see the next dialog box – click “Finish”

![Found New Hardware Wizard](image)

Do the same for the next “Found New Hardware Wizard”.

5) Shut down the computer, turn the chassis on, then turn the computer on

## Test Procedure

Testing to make sure that the correct Amp is being controlled, and that the Amp is sending output to the expected AD64 card is vitally important to the upgrade process.

**Test to verify AD64 board channel range:**

1) Start OmniPlex and load a 128ch .pxs file

2) Send a test signal with the HTU and test .wav file into the Amp for channels 1-64. If the signals show up on channels 65-128, then double check the ribbon cable pathway

*NOTE* It is a possibility that the AD64 board channel ranges could be swapped, but this is not something we have experienced

**Test to verify Amp Link control pathway:**

1) Start OmniPlex and load a 128ch .pxs file

2) Send a test signal with the HTU and test .wav file into the Amp for channels 1-64
3) Increase the gain on channel 1 in the PlexControl software. If the signal on channel 1 increases in the analog display, then you can confirm that the Amp Link cable is controlling the correct Amp. If the signal on channel 65 increases, then you need to swap the link cables.

*NOTE* Do not unplug the link cables when the OmniPlex chassis is on!

Document History

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- Initial creation of OmniPlex upgrade procedure document