



ATLONA.

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Tech Paper

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Atlona Matrix Switcher EDID Learning

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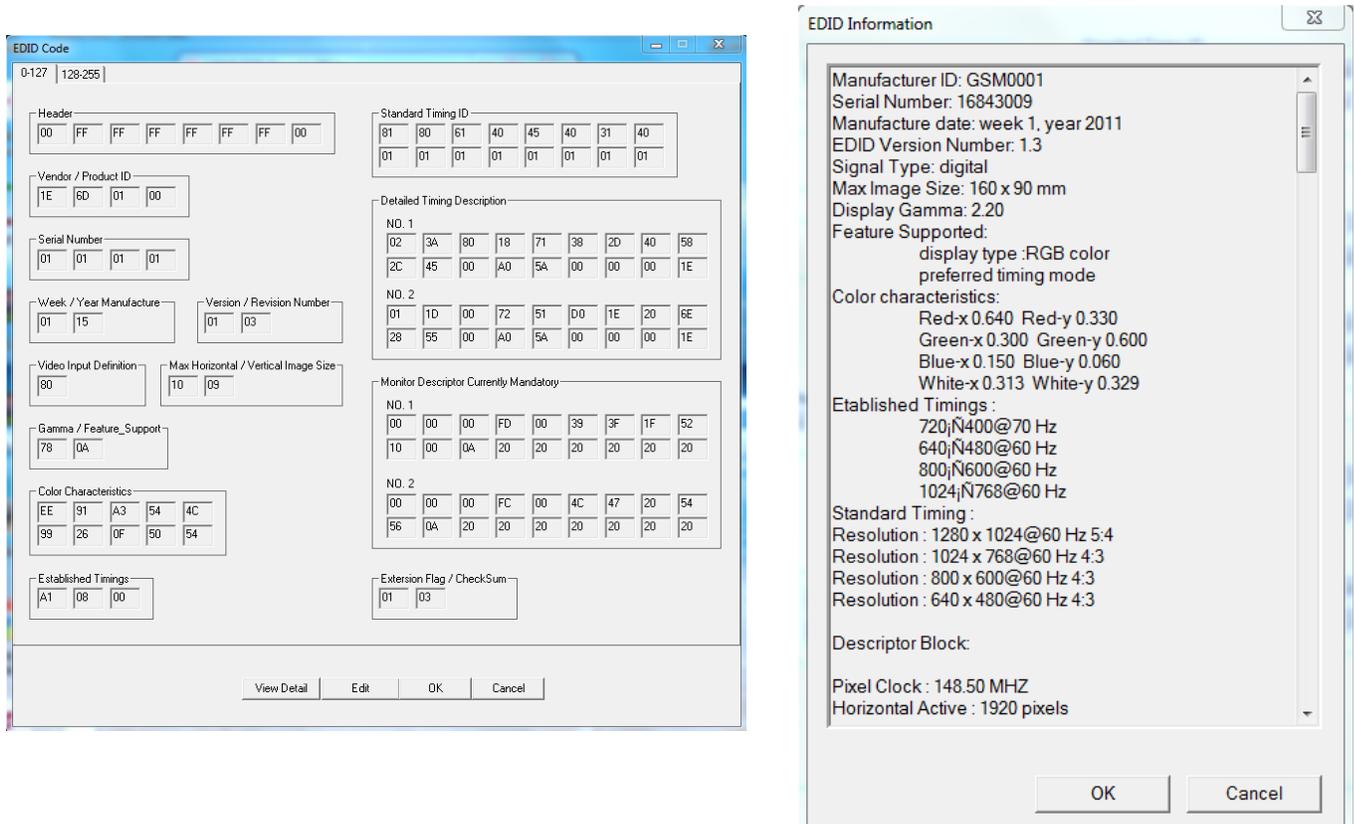
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In this document we will discuss how to quickly and easily manage the EDID from a display in our matrix switchers to allow for faster switching and a more reliable and stable handshake.

First let's cover a few basics of what the EDID file actually is. EDID stands for "Extended Display Identification Data" and it is basically a table of information that the display sends into the system when it recognizes a digital handshake. The EDID file contains all the capabilities of the display such as video resolution, audio capability, color depth and 3D capability as well as many others. This file is how the source determines what format to output for the signal.



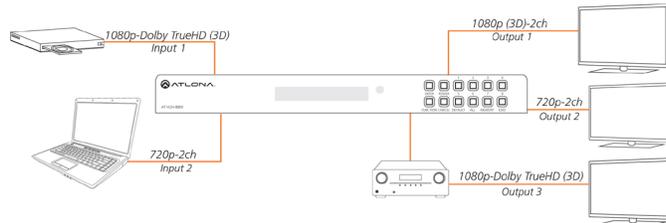
There are 3 different methods that can be used through the Atlona Matrix units to manage EDID files.

They are:

1. Auto EDID Management
2. A 12 block pre-saved EDID table
3. And the EDID Learn function.

The first is Auto EDID Management. Auto EDID Management is when you let the matrix do all the work and negotiate the signals all on its own. The default setting for Atlona Matrix units is Auto EDID Management.

When the matrix is completely connected and turned on it will load the **default EDID**, which is the highest common native resolution of the connected devices. (i.e. In the diagram below the default would be 720p with 2ch audio. **Multi-channel audio and 3D are not enabled on internal mode, unless all devices have these features.**)



The second method is to use a pre-saved EDID table with 12 EDID memory banks. The 12 block or bank pre-saved EDID table will allow the operator to select from one of 12 common EDIDs used in HD systems such as 1080P, 2channel, 2D and others.

<i>Internal EDID options</i>	<i>Front panel display readout</i>
EDID 1: 1080P 2CH audio	ATL 1080P 2CH
EDID 2: 1080P multichannel audio*	ATL 1080P Multi CH
EDID 3: 1080P Dolby Digital/DTS 5.1**	ATL 1080P DD
EDID 4: 1080P 3D 2CH audio	ATL 1080P 3D 2CH
EDID 5: 1080P 3D multichannel audio*	ATL 1080P 3D Multi CH
EDID 6: 1080P 3D Dolby Digital/DTS 5.1**	ATL 1080P 3D DD
EDID 7: 720P 2CH audio	ATL 720P 2CH
EDID 8: 720P Dolby Digital/DTS 5.1**	ATL 720P DD
EDID 9: 1280x800 RGB 2CH audio	ATL 1280x800 RGB 2CH
EDID 10: 1366x768 RGB 2CH audio	ATL 1366x768 RGB 2CH
EDID 11: 1080P DVI***	ATL 1080P DVI
EDID 12: 1280x800 DVI***	ATL 1280x800 RGB DVI

* Recommended EDID for use of an AVR

** Recommended EDID for use of the S/PDIF audio de-embedding

*** Recommended EDID for use of DVI projectors

The third and final method is to learn or capture and save the EDID information into the Matrix. The EDID Learn Function is designed for a full system integration that may be having issues with particular devices like displays. Learning the EDID information into the Matrix is the best way to guarantee that the EDID will not become corrupted during signal transmission.

Let me demonstrate how to capture the EDID file. Capturing EDID is a two-step process that begins with saving the EDID file into a bin location and then assigning that Bin or EDID file to an input. All Atlona matrix units capture the EDID file in the same way, through the same settings, which means you can repeat the process with each installation.

To begin make sure your display is powered on, tuned to the correct input and connected into the system.

On your matrix select the "Function" option

Next select the "EDID" option

Select option 1: "Copy up to 8 EDIDs"

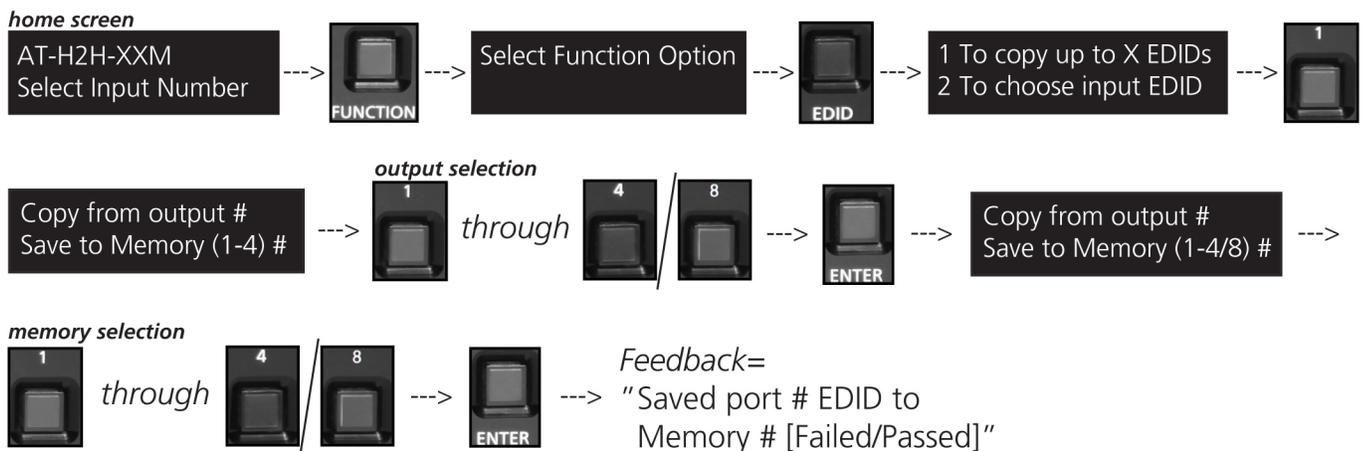
Next select the output number you want to save the EDID file from then select "Enter"

Next select the Bin file location you want to save the EDID file to then select "Enter"

If there was no issue the display will now indicate "SUCCESS"

If there was an error in copying the EDID the display will indicate, "FAILED"

Atlona suggests that the EDID file be saved into the same Bin location as the output to more easily keep track where the EDID is located.



Now Step 2; linking the EDID Bin file to an Input:

To begin select the "Function" option

Next select the "EDID" option

Select Option 2: "choose Input EDID"

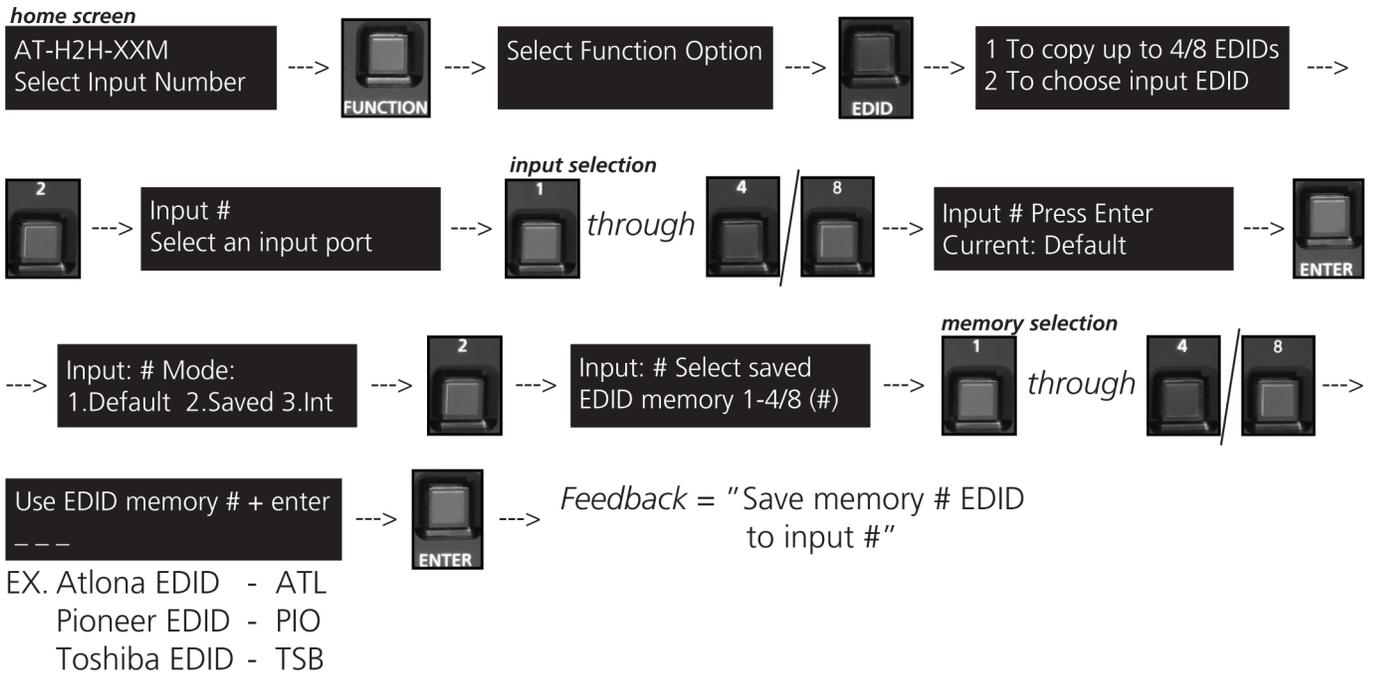
Now select the number for the input port that you want to assign the EDID file to.

Next press Enter to confirm the assignment.

Now select option 2 called "Saved" as you want to assign the Bin location of the EDID that you saved.

Next select the number for the Bin location where you saved your EDID file.

Your display will now show a 3-letter code of the manufacturer from the saved EDID.



That's all there is to it. You should now understand how to manage EDID in an Atlona Matrix unit. Remember atlonacademy.com for all you're A/V connection education needs.

About Atlona®

Atlona® is a leading provider of innovative, AV distribution solutions. Since 2003, the company has been designing and engineering award-winning products for a diverse range of residential and commercial AV and IT markets, including education, business, government, entertainment, and healthcare.

Atlona's products and services enable system designers, integrators, consultants, and installers to simplify installation, minimize maintenance, and maximize the versatility of premier automated control solutions. Atlona's vision is simple: deliver customer-driven products designed and developed with the features, performance, and reliability that industry leaders demand; and deliver the best value in the industry.

More information about Atlona is available at www.atlona.com.

