Exporting a Stage and Lighting Plan into MA 3D from Vectorworks

Vectorworks 2017

MA 3D V3.2.2.16

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Introduction

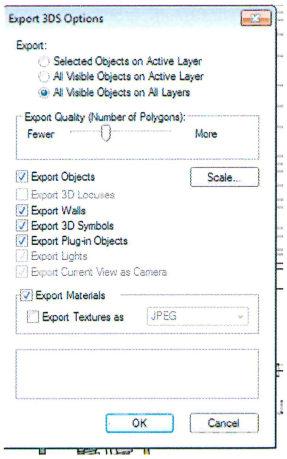
This document shows is a step by step guide of how to export a stage and lighting plan from Vectorworks 2017, with the use of spotlight to MA 3D, which then can be programmed using any MA2 lighting software.

Content

Exporting the Stage Plan on Vectorworks

Firstly you will need to export your Vectorworks plan as a 3DS file. However this plan must not include your lighting fixtures as it will export them as part of the model not as a lighting fixture which you cannot control.

In Vectorworks go to **File > Export > Export 3DS (3D only)** you will then be shown this window:



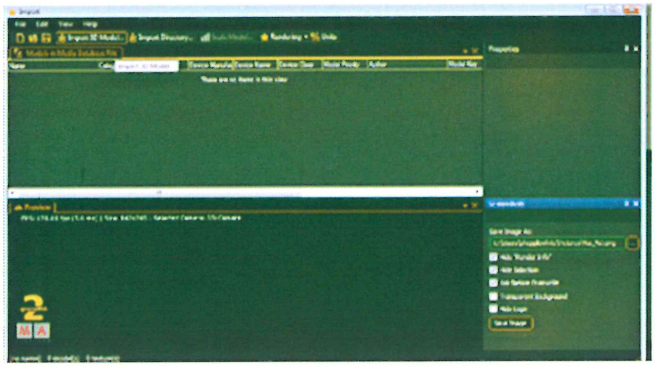
Depending on what you want in your plan depends on what layers to export. The recommended selection is All Visible objects on all layers.

The default scale is 1:1 which is what it needs to be set at. Leave the rest selected as default.

This is then available to save as a 3DS file wherever you need it.

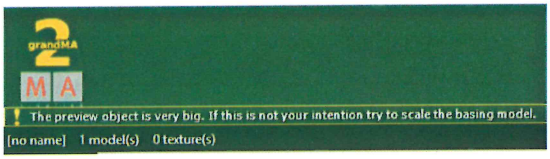
Importing Stage Plan on MA 3D

Now after opening MA 3D go **File > Import > Import 3D Model** this will open a separate window called Import.

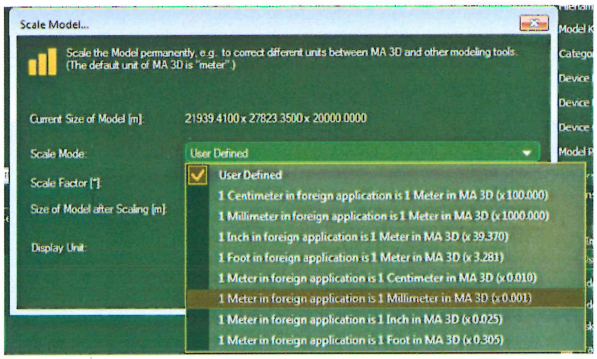


Within the Import window go **File > Import 3D Model** and select the 3DS file you exported from Vectorworks.

Once you have import the 3DS file you may be shown a warning message saying the object is very big. This means that you need to change the scale within the import window.



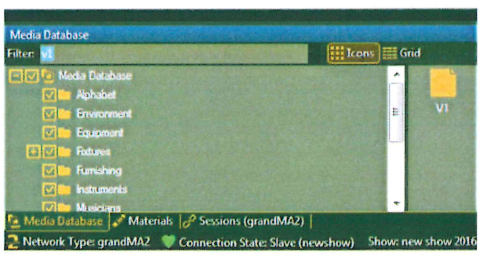
To change the scale press the **Scale model** button within the Import window while you have your plan selected. This will bring up the scale model window. Select **1 Meter in foreign application is 1 millimeter in MA 3D (x 0.001).** This will put it into the right scale to work with.



After you have put it into the right scale you need to save it within the import window. Go to **File > Save as.** It will automatically direct you into Grand MA program data which is where it needs to be saved for MA software to recognise it, ensure that it has saved there. It will now be saved as a .gmamedia file.

Now that it has been saved exit the import window and go back to Main MA 3D window. Open Media Database Window by pressing **F5** or **View > Media Database Window.**

Search for your file name within the filter bar, where your plan should appear as icon, and now click and drag the icon onto the stage view. Your Stage plan should now appear.



Installing MA Spotlight Plugin on Vectorworks

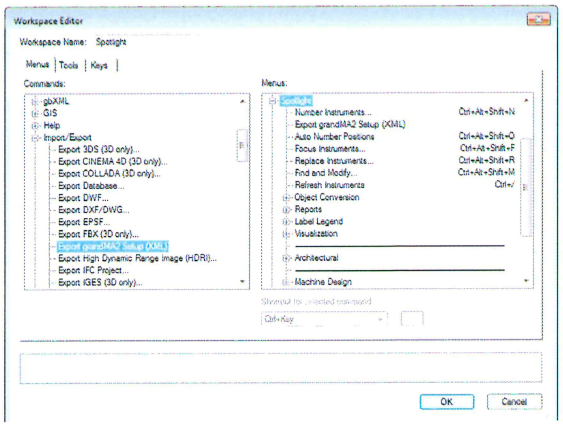
Firstly, you need to ensure that Vectorworks Spotlight Plugin is installed and added into your workspace options so you can select it. The spotlight plugin is available on the MA lighting website under Software.

http://www.malighting.com/en/support-downloads/software.html

To add the plugin into your spotlight works space. Go **Tools > workspaces > edit current workspace.**

The workspace editor window will appear and the Export grandMA2 Setup (XML) plugin will be in Menus tab under Import/Export.

Then you can click and drag into your workspace Menus where you want it. At this point you can add a shortcut command if you wanted.

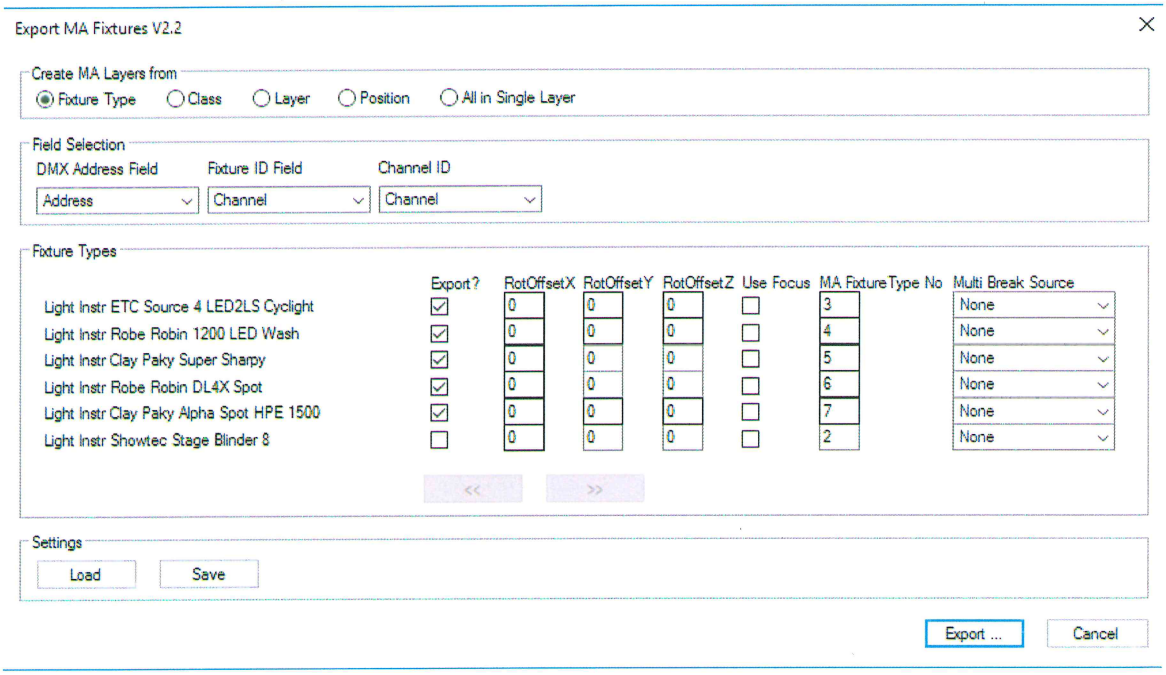


MA Patch Setup

First, you will need to setup the MA Software. Go to **Setup > Patch & fixture Schedule > Fixture Types.** In this window **Import** each of your Fixture Types ensuring that they are under the correct fixture number with the correct modes.

Spotlight Export MA Fixtures Description

Once The Spotlight Plugin is installed and put into your Workspace you can open the Export MA Fixtures window. There is a useful tutorial which goes through Spotlight Plugin and how you need to set it up on the MA software however this is a brief summary of the process.



Create MA Layers from: These options go through where it exports the information from. Keep it selected at Fixture Type

Field Selection: These are important options as they decide where MA reads DMX, Fixture and Channel numbers from the spotlight info from each fixture.

Export: This selects which fixture types are being exported. If they are not checked it will not export those fixture types.

RotOffsetX...etc: These are used to change the default position of moving fixtures if required.

Use Focus: If you have used focus information and focus points in Vectorworks this will enable you to export this information as well.

MA Fixture Type no: These number selections are very important as they need to correlate to fixture types number on the MA software.

Multi Break Source: This is used if a fixture has more than one address. You can then selected where you have inputted information for this

Load and Save: These are used to save and load setups for Export MA Fixtures window.

Online Tutorial: https://www.youtube.com/watch?v=M3L26gNdnkM

Exporting Fixtures from Vectorworks

Now to export the spotlight information off your plan ensure that each fixture has all 3D positions set, all required data (Address, Channel), Focus points and focus information for generics, correct DMX modes, within the Vectorworks plan.

To export open **Export MA Fixtures window** input correct field selection data:

DMX Addresses field > Address.

Fixture ID Field > Channel.

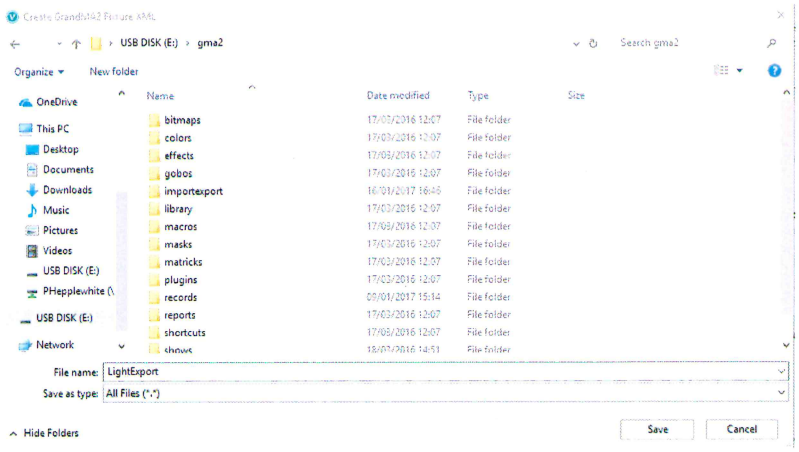
Channel ID > Channel.

Check the relevant fixture types to export. *You must export all fixtures at once, you cannot add as you go!*

Set your MA Fixture Type No. to the relevant number.

To **Export** you will need to save the file in the **gma2 folder** which you are working from. Within this folder there needs to be an **importexport** folder. Create one if required.

It will now save within this folder as two separate files, a XML document and another as a File.

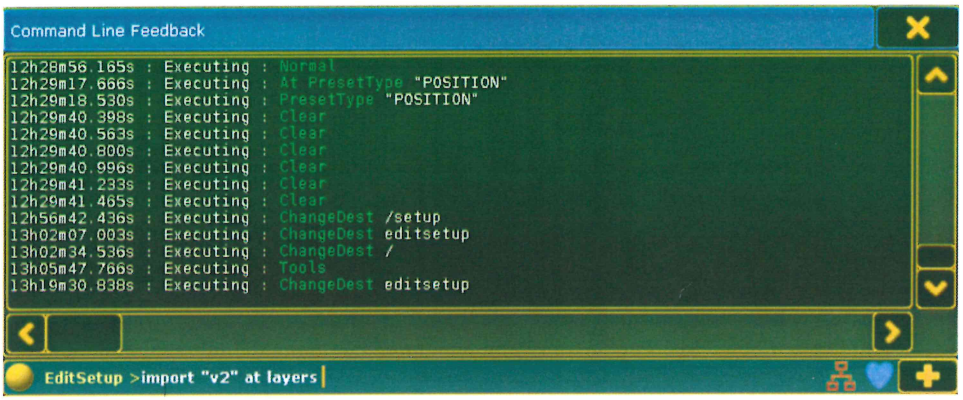


Importing Fixtures on MA

Firstly, to import the file onto the MA software. Ensure you have selected the drive where you have saved the import within the backup menu.

Open the setup directory by typing into the command line **cd editsetup.** *To see the command line feedback press yellow button within the command line. Ensure that all formatting e.g. spacing CAPS are followed and correct.*

To import the file type into the command line **import "filename" at layers.**



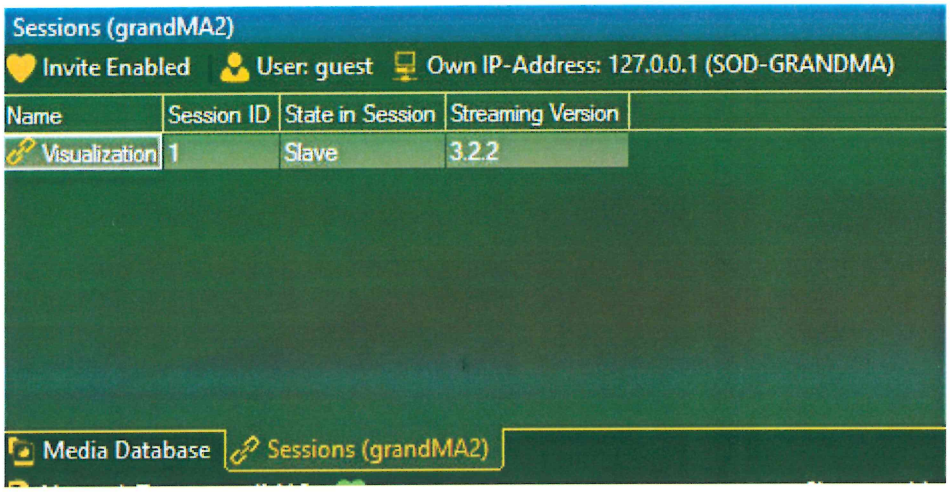

```
13h20m53.632s : Executing : Import "v2" At layers
13h20m53.632s : Import/export folder of object type "Layers" is "importexport".
13h20m53.650s : 1 object(s) from "v2.xml" imported.
```

The file will now be Imported. To exit the setup directory type ***cd/.***

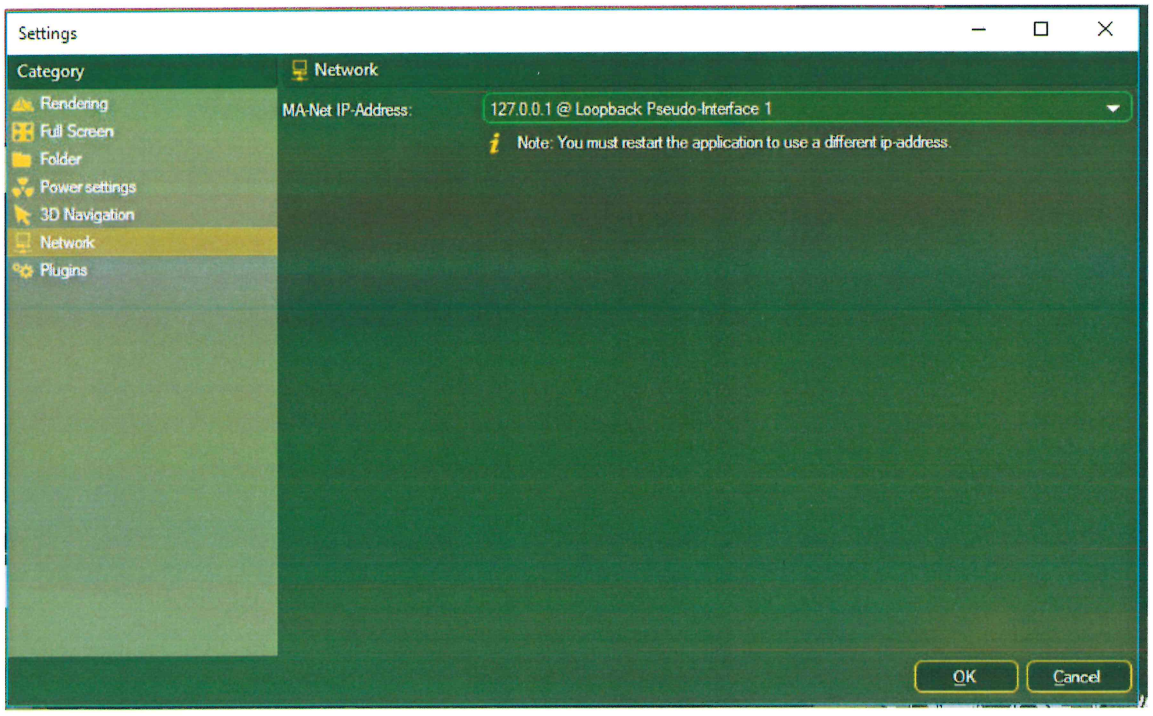
In MA 3D your lighting fixtures will be in ready for the visualisation and available to use with The MA software.

Network Setup for MA 3D

To connect to The MA3D, you will need to change the IP address on MA 3D to be within the same range as the console/OnPC software. Open the session window by pressing **F6.**



Once in the session window Click **Own IP-Address** this will open the Network settings window. You can change the IP address here as required. If you are using OnPC on the same computer as MA3D, you will need to use a loopback IP address 127.0.0.x to use it on the same PC. Loop back meaning that it loops back to applications on the PC rather than over a network. You may have re restart the applications for these changes to take effect.



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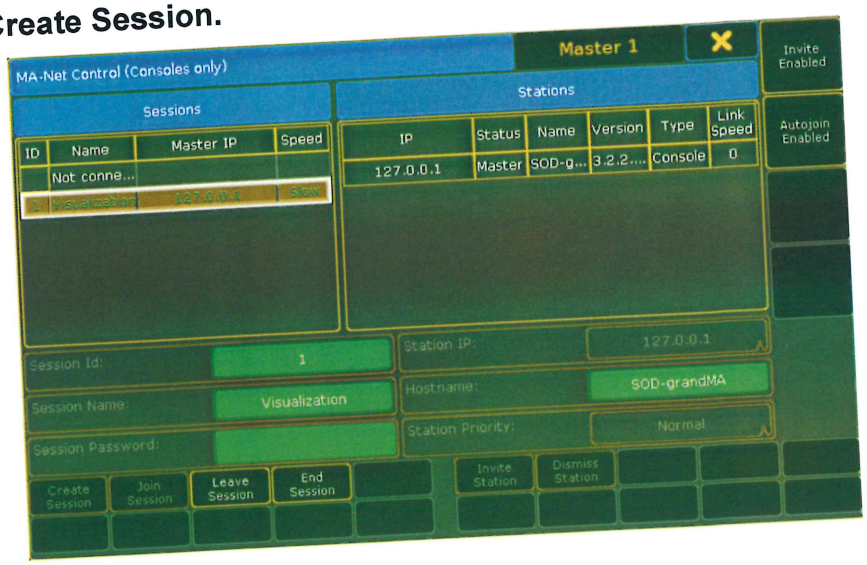
Creating Network Session for MA on PC and MA 3D

First you will need to create a Network session on The MA software. To do this go to **Setup > MA Network Control > Create Session.**

The IP Address for the MA software and MA 3D needs to be in the same range as each other. However the last number of the IP address must be different from each station if using separate computers/consoles, if they are the exact same there will be a collision unless both programs are running on the same address.



Now add MA 3D to the network. Go **Setup > MA Network Configuration > 3D > Add.** A select station window will now open click on the only station available.

Now under the Session member tab within the table right click the box. It will now say YES and will highlight green.

MA 3D will now join the MA Network Session.