

GelFrame MA2 Patch Importer

Overview

This program takes patch and position information from an Excel spreadsheet and imports it directly into MA onPC. There are several options in the settings menu to customize the spreadsheet column names and dmx address information.

At this time only meters are supported for XYZ positions. Position and rotation columns can be disabled if you are only looking to import patch data.

This program functions similarly to the Vectorworks to MA plugin that generates an XML file expect most the process is automated via Telnet commands to onPC.

The basic workflow is:

1. Populate Excel spreadsheet with data
2. Setup fixture types in onPC
3. Load Excel data into program
4. Load fixture types into program
5. Associate fixture types to excel fixture names in data grid
6. Import patch into onPC

This program works best on new show files. If you need to use this on existing show files it is best to create a new showfile and then PSR the patch into your existing show. See the last page on this document for a more in-depth explanation.

This document will walk you through the steps to import the sample data into onPC.

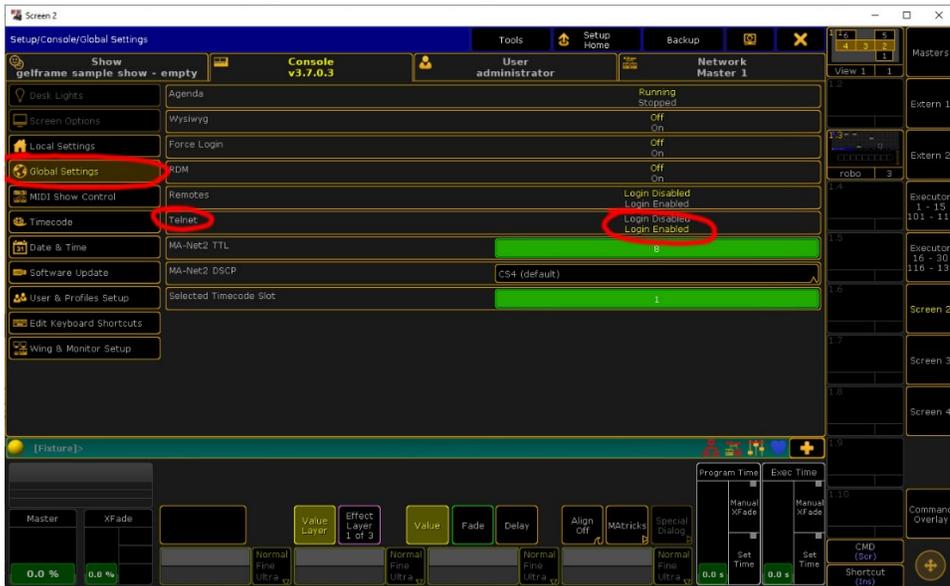
System Requirements

1. Microsoft Excel must be installed
2. Grand MA onPC must be installed

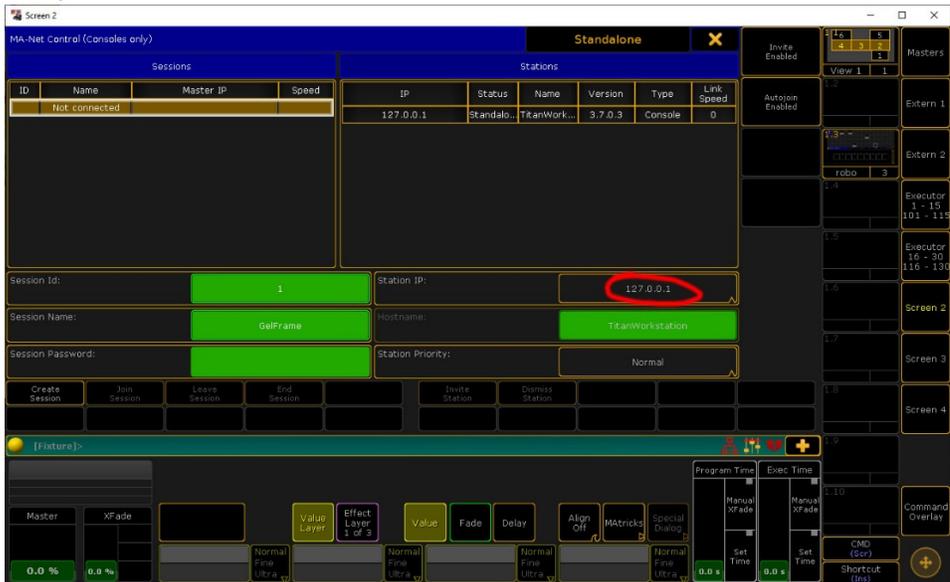
Setup GrandMA onPC

This program talks to onPC through telnet. Telnet must be enabled you will need to note the active ip address in onPC.

1. Enable Telnet
2. Setup => Global Settings => Telnet => Login Enabled



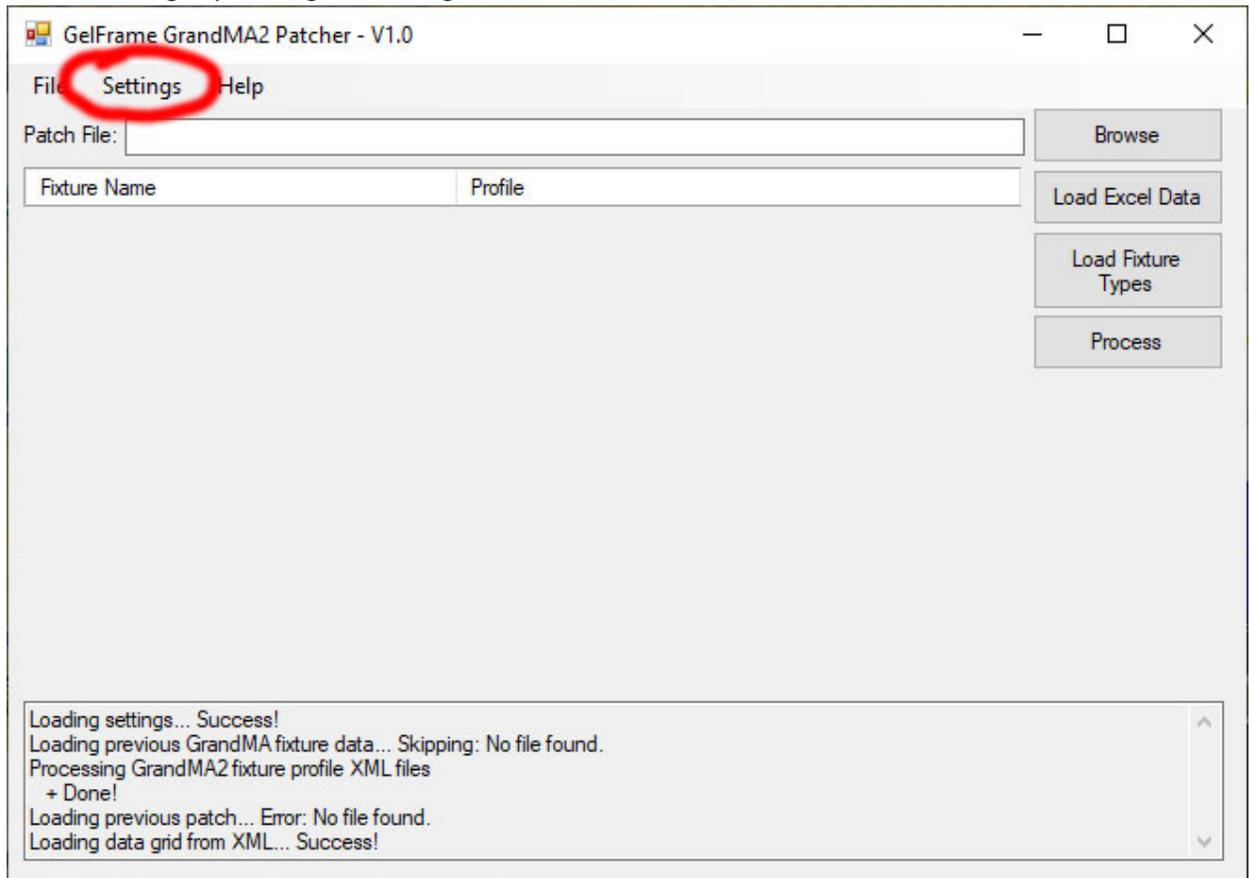
3. Get onPC IP address
4. Setup => MA Network Control => Station IP



5. Load sample show file gelframe sample show - empty.show.gz from sample\Show File directory. You can do these through USB or copy the gzip file to: C:\ProgramData\MA Lighting Technologies\grandma\<VERISON>\shows. This file has all the correct fixture types already loaded.

Settings

1. Launch settings by clicking the Settings menu button



2. Configure general settings:
 - a. Check "Copy fixture number to channel number..."
 - b. Set rotation mapping to:
 - i. X: Z
 - ii. Y: Y
 - iii. Z: X
 - c. Set rotation offsets:
 - i. X: 0
 - ii. Y: 0
 - iii. Z: 180
 - d. Set rotation inverts:
 - i. X: unchecked
 - ii. Y: checked
 - iii. Z: unchecked

- e. Setup rules:
 - i. Rule 1
 - 1. Condition: Location
 - 2. Switch: Contains
 - 3. Pattern: floor
 - 4. Change: Rotation Y
 - 5. Value: 180
 - 6. Enabled: checked
 - ii. Rule 2
 - 1. Condition: Fixture #
 - 2. Switch: Range
 - 3. Pattern: 301-384
 - 4. Change: Rotation X
 - 5. Value: 90
 - 6. Enabled: checked
 - iii. Rule 3
 - 1. Condition: Location
 - 2. Switch: Contains
 - 3. Pattern: tower
 - 4. Change: Rotation Z
 - 5. Value: 180
 - 6. Enabled: checked
 - iv. Rule 4
 - 1. Condition: Location
 - 2. Switch: Contains
 - 3. Pattern: tower
 - 4. Change: Rotation Y
 - 5. Value: 180
 - 6. Enabled: checked
 - v. Rule 5
 - 1. Condition: Location
 - 2. Switch: Contains
 - 3. Pattern: tower
 - 4. Change: Rotation X
 - 5. Value: 180
 - 6. Enabled: checked
 - vi. Rule 6
 - 1. Condition: Fixture #
 - 2. Switch: Range
 - 3. Pattern: 401-418,501-512,601-612
 - 4. Change: Rotation X
 - 5. Value: -60
 - 6. Enabled: checked

- vii. Rule 7
 - 1. Condition: Fixture #
 - 2. Switch: Range
 - 3. Pattern: 701-705,711-715,721-725,731-735,741-745,751-755,761-765,771-775,781-785
 - 4. Change: Rotation Z
 - 5. Value: -90
 - 6. Enabled: checked
 - 7. Enabled: checked
- viii. Rule 8
 - 1. Condition: Fixture #
 - 2. Switch: Range
 - 3. Pattern: 706-710,716-720,726-730,736-740,746-750,756-760,766-770,776-780,786-790
 - 4. Change: Rotation Z
 - 5. Value: 90
 - 6. Enabled: checked
 - 7. Enabled: checked
- ix. Rule 9
 - 1. Condition: Fixture #
 - 2. Switch: Range
 - 3. Pattern: 701-705,711-715
 - 4. Change: Rotation Y
 - 5. Value: -25
 - 6. Enabled: checked
 - 7. Enabled: checked
- x. Rule 10
 - 1. Condition: Fixture #
 - 2. Switch: Range
 - 3. Pattern: 706-710,716-720
 - 4. Change: Rotation Y
 - 5. Value: 25
 - 6. Enabled: checked

f. Completed General tab should look like this:

The screenshot shows the 'Settings' dialog box with the 'General' tab selected. The 'Options' section includes a checked checkbox for 'Copy fixture number to channel number if no channel numbers are present' and an unchecked checkbox for 'Allow duplicate fixture and/or channel numbers and multipatch'. The 'Organize layers by:' dropdown is set to 'By Fixture Type'. The 'Rotation Mapping' section shows X: Z, Y: Y, and Z: X. The 'Rotation Offsets' section shows X: 0, Y: 0, and Z: 180. The 'Rotation Invert' section has X and Z unchecked, and Y checked. The 'Rules' section contains ten rules, each with a condition and a change. Rule #10 is highlighted.

Rule #	Condition	Change	Value	Enabled
Rule #1	Location Contains floor	Rotation Y	180	Yes
Rule #2	Fixture # Range 301-384	Rotation X	90	Yes
Rule #3	Location Contains tower	Rotation X	180	Yes
Rule #4	Location Contains tower	Rotation Z	180	Yes
Rule #5	Location Contains tower	Rotation Y	180	Yes
Rule #6	Fixture # Range 401-418,501-512,601-612	Rotation X	-60	Yes
Rule #7	Fixture # Range 55,761-765,771-775,781-785	Rotation Z	-90	Yes
Rule #8	Fixture # Range 60,766-770,776-780,786-790	Rotation Z	90	Yes
Rule #9	Fixture # Range 701-705,711-715	Rotation Y	-25	Yes
Rule #10	Fixture # Range 706-710,716-720	Rotation Y	25	Yes

3. Configure Excel Tab

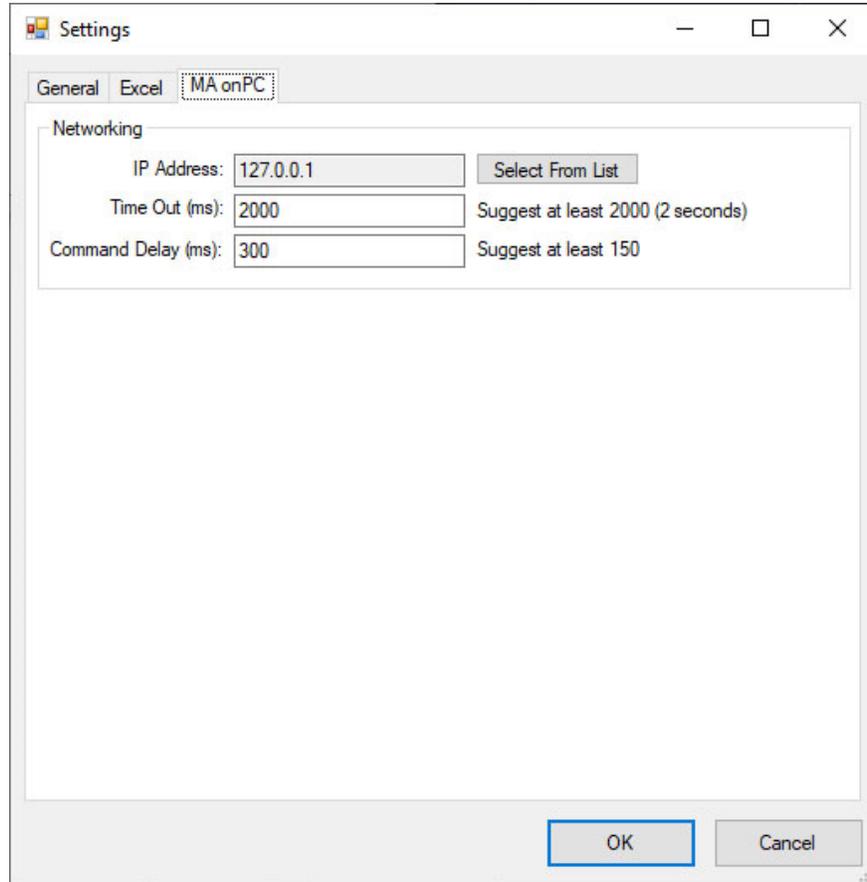
- a. Fixture Name: Model
- b. Fixture #: Unit#
- c. Channel #: Channel#
- d. Universe: Universe
- e. Address: DMX
- f. Mode: Mode
- g. Location: Location
- h. Position X: Position X (Meters)
- i. Position Y: Position Y (Meters)
- j. Position Z: Position Z (Meters)
- k. Rotation X: Rotation X
- l. Rotation Y: Rotation Y
- m. Rotation Z: Rotation Z
- n. Only use fixture number: checked
- o. Universe and address in single field: checked
- p. Separation character: .
- q. Enable Mode: checked (Displays in fixture selection grid for reference)
- r. Enable Location: checked (Option to group layers by location)
- s. Enable Position: checked (all imported position XYZ will be 0 if unchecked)
- t. Enable Rotation: checked (all imported rotation will be 0 if unchecked)

The screenshot shows a 'Settings' dialog box with three tabs: 'General', 'Excel', and 'MA on PC'. The 'Excel' tab is selected. Under the 'Column Names' section, there are text input fields for 'Fixture Name', 'Fixture #', 'Channel #', 'Universe', 'Address', 'Mode', 'Location', 'Position X', 'Position Y', 'Position Z', 'Rotation X', 'Rotation Y', and 'Rotation Z'. To the right of these fields are several checkboxes: 'Only use fixture number', 'Universe and address in single field', 'Enable Mode', 'Enable Location', 'Enable Position', and 'Enable Rotation'. The 'Separation Character' field contains a period '.'. At the bottom of the dialog are 'OK' and 'Cancel' buttons.

Field	Value	Checkbox
Fixture Name	Model	
Fixture #	Unit#	<input checked="" type="checkbox"/> Only use fixture number
Channel #	Channel#	<input checked="" type="checkbox"/> Universe and address in single field
Universe	Universe	Separation Character: .
Address	DMX	
Mode	Mode	<input checked="" type="checkbox"/> Enable Mode
Location	Location	<input checked="" type="checkbox"/> Enable Location
Position X	Position X (Meters)	<input checked="" type="checkbox"/> Enable Position
Position Y	Position Y (Meters)	
Position Z	Position Z (Meters)	
Rotation X	Rotation X	<input checked="" type="checkbox"/> Enable Rotation
Rotation Y	Rotation Y	
Rotation Z	Rotation Z	

4. Configure MA onPC Tab

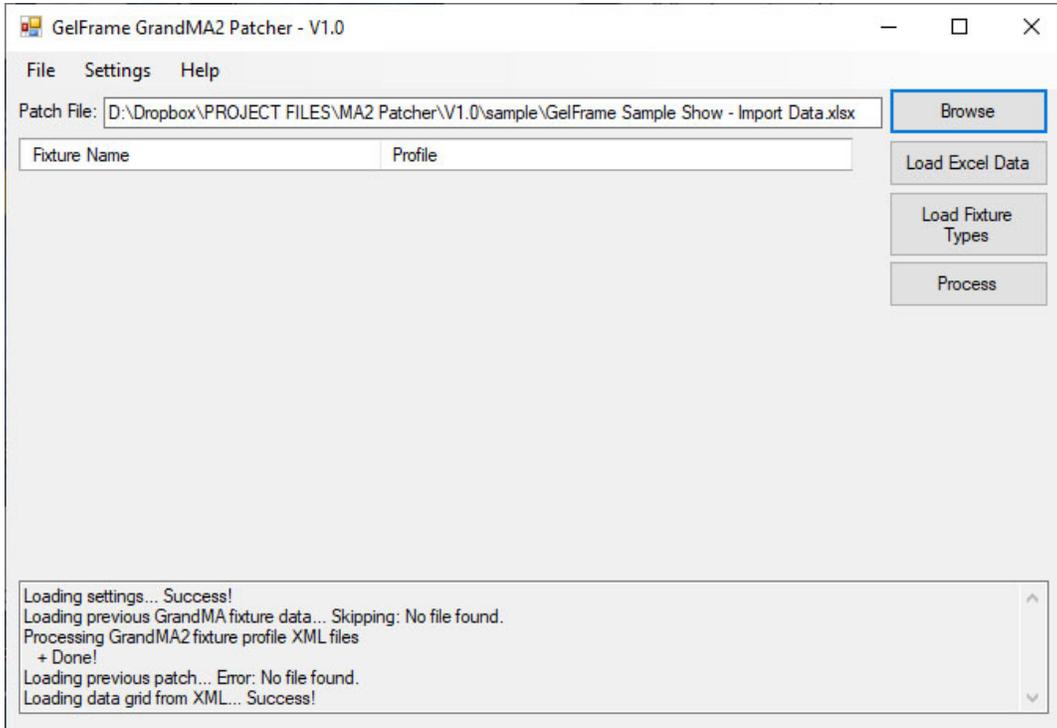
- a. Press Select From List and choose the same IP address that onPC is using.
- b. Time Out (ms): This should be at least 2,000 milliseconds. Increase this number if you are having telnet connection problems.
- c. Command Delay (ms): At least 300, more if you have connection issues.



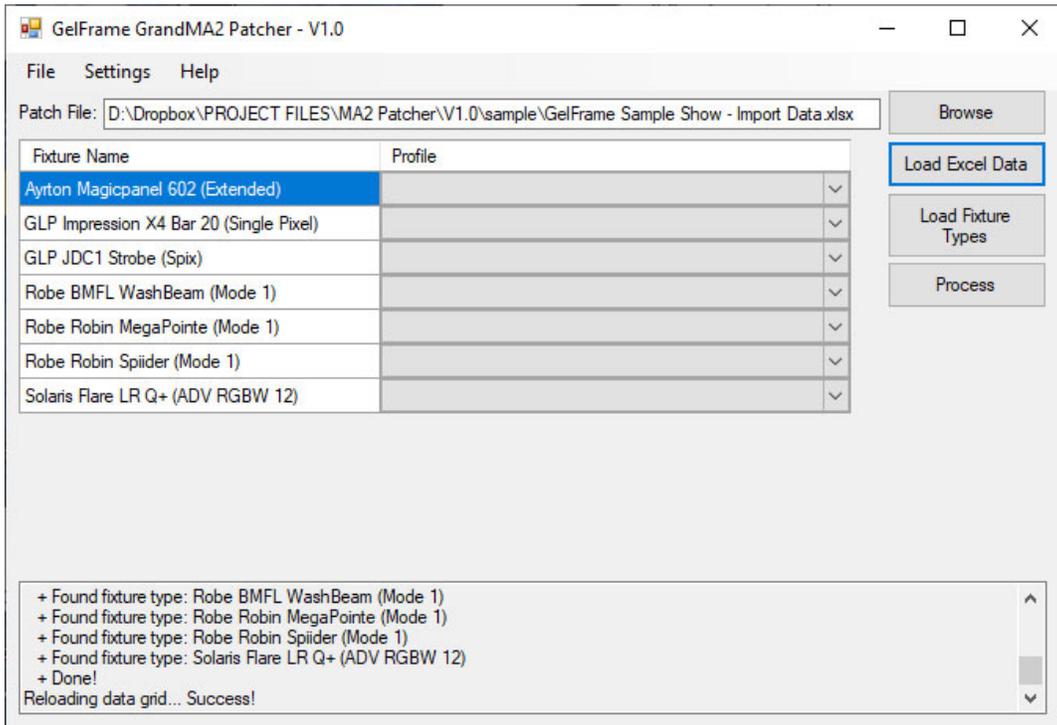
5. Press OK to save and close the settings menu

Patch File

1. Press browse and select the GelFrame Sample Show - Import Data.xlsx in the sample directory of this program.
2. Once selected it will appear in the Patch File text box.

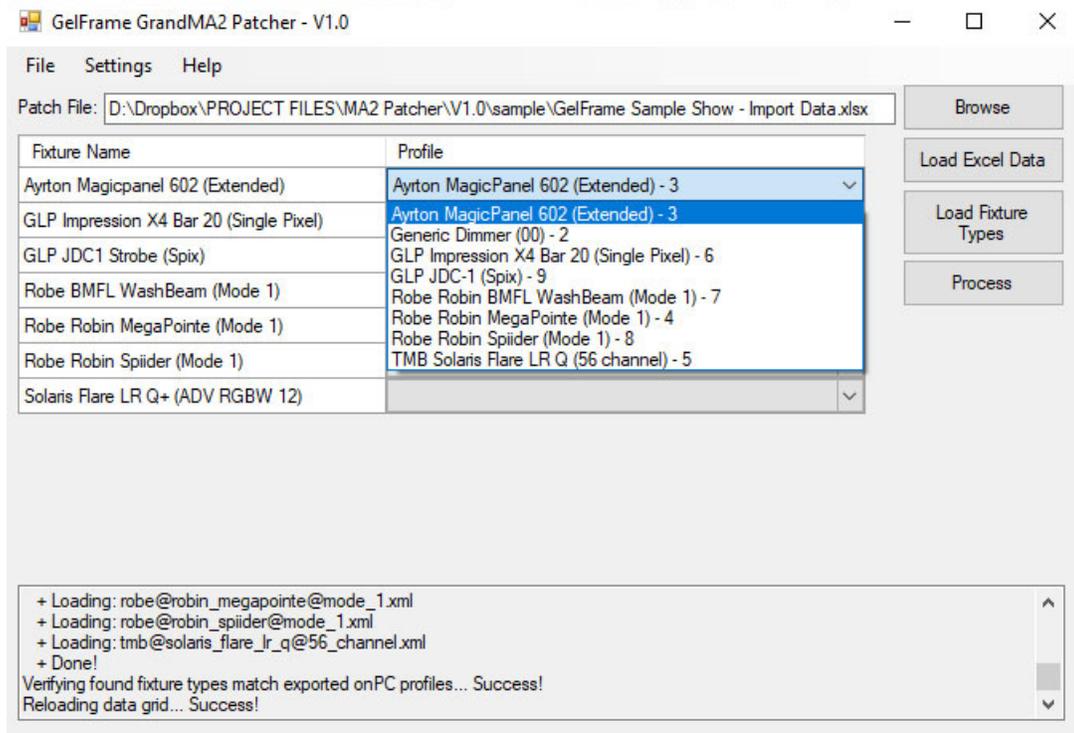


3. Press Load Excel Data to populate the fixture selection grid



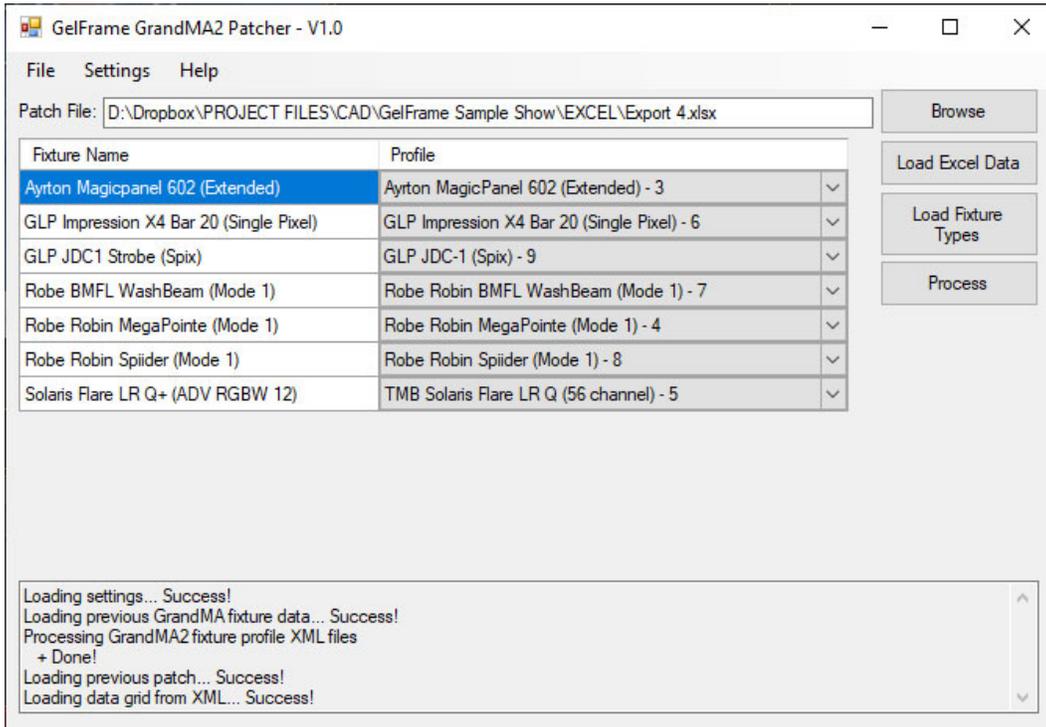
Fixture Types

1. Press Load Fixture Types. Assuming you loaded the sample show file into onPC and left that program open this should work. If you experience connection errors increase the command delay in settings. Fixture types must always be setup in onPC prior to running this command.
2. The status window will display the following when this step has completed successfully:
Verifying found fixture types match exported onPC profiles... Success!
Reloading data grid... Success!
3. Using the dropdown profile menu associate the current MA fixture type for each fixture name.

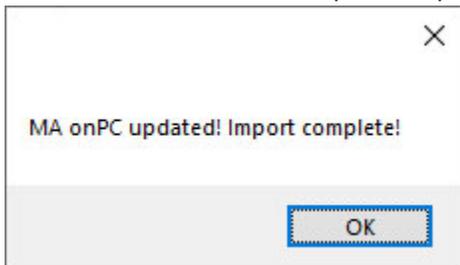


Process

1. Press process to load the patch data into onPC



2. If you experience any connection issues increase the command delay in settings.
3. Successful execution of the patch import will display this message:



Verification

It is very important that you verify the imported patch. **This method works best on new showfiles. Use PSR if you need to get this patch into an existing showfile.**

This program imports the patch the same way as the Vectorworks to MA plugin functions. It creates an XML file and executes the import command via telnet. This method completely replaces any existing patch information. If a fixture already exists in the patch and your new patch data places that fixture on a different layer there may be data loss.

For example this is the result of importing the sample data grouped by universe right after importing the same data grouped by fixture type:

The screenshot shows the 'EditSetup' window with a table of fixture data. The table is organized into columns: Name, Fixtures, Channels, FixID, ChaID, Name, Fixture Type, Patch, React to Master, Pan DMX Invert, and Tilt DMX Invert. The data is grouped by universe, with 'Universe: 2' selected. The fixtures are 'Solaris Flare Lf' with various fixture IDs and channel addresses.

Name	Fixtures	Channels	FixID	ChaID	Name	Fixture Type	Patch	React to Master	Pan DMX Invert	Tilt DMX Invert
Universe: 1	[201..202]	[101..202]	- 301.1	FARGB12 1	5 Solaris Flare Lf	(-) On				
Universe: 2	[301..309]	[301..309]	- 302.1	FARGB12 2	5 Solaris Flare Lf	(-) On				
Universe: 3	[203..204]	[104..204]	- 303.1	FARGB12 3	5 Solaris Flare Lf	(-) On				
Universe: 4	[205..206]	[107..206]	- 304.1	FARGB12 4	5 Solaris Flare Lf	(-) On				
Universe: 5	[310..318]	[310..318]	- 305.1	FARGB12 5	5 Solaris Flare Lf	(-) On				
Universe: 6	[110..208]	[110..208]	- 306.1	FARGB12 6	5 Solaris Flare Lf	(-) On				
Universe: 7	[113..210]	[113..210]	- 307.1	FARGB12 7	5 Solaris Flare Lf	(-) On				
Universe: 8	[116..212]	[116..212]	- 308.1	FARGB12 8	5 Solaris Flare Lf	(-) On				
Universe: 9	[119..214]	[119..214]	- 309.1	FARGB12 9	5 Solaris Flare Lf	(-) On				
Universe: 10	[319..321]	[319..321]								
Universe: 11	[215..217]	[215..217]								
Universe: 12	[122..327]	[122..327]								
Universe: 13	[218..220]	[218..220]								
Universe: 14	[221..223]	[221..223]								
Universe: 15	[106..223]	[106..223]								

Notice the missing patch information and the random missing fixture numbers. Pressing process again will re import the patch and correct all error but any pallets, cues, or other programming in the console specific to the missing fixture numbers will be deleted.

I believe this is an inherent problem in onPC and not the XML this program is generating. Testing this issue using XML files exported directly from onPC resulted in the same issues.