

Plugins

A plugin is a piece of software that adds features to an existing program.

The grandMA3 supports such plugins, thus allowing customization.

For the plugins used in the grandMA3 software, the scripting language Lua is used.

Important:

The creation and use of plugins can go deeper into the system as the "normal" usage of a console. Therefore the technical support team of MA Lighting may not be able to help you in all circumstances when using complex Lua plugins and Lua plugins might have to be rewritten when migrating show files to future grandMA3 software version.

Add a Plugin Pool Window

• To add a plugin pool window, follow the instructions under Add windows.

In the Add Window pop-up:

- 1. Tap Pools .
- 2. Tap Plugins
 - The plugin pool opens.

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Plugin pool window

• To adjust the plugin pool window settings, follow the instructions under <u>Window settings</u>.



Add a Plugin to the Pool

• To add a plugin to the plugin pool, tap an empty pool object and use the swipey menu to select Edit .

The Edit Plugin window opens:

🗱 EditPlugin1													Settings 📮 🗶		
Name Plugin 1		jin 1	Scribble		Appearance		Lock		Author		Version	0.0.0	Path		UserRights /
Lock	No	Name		Scribble	Appearance	FileName	FilePath	FileSize	Installed	InStream	UserRights				
		New Componer	ntLua												
Insert	new Co	mponentLua					Oops								'New object' line
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MA	-	Admin@Show[Data/Data	Pools/Default/F	Plugins/Plugin 1									ĥ	🔤 🌐 💻 🕨

Edit Plugin window

Edit a Plugin

A Lua component is a piece of software code that can be inserted into the console, usually one file.

• To add a new Lua component, tap Insert new ComponentLua .

*	Edit Ph	gin 1												Settings 📮 🗱
Name Plugin 1		igin 1	Scribble		Appearance	Appearance		Lock		Author		0.0.0.0	Path	UserRights None
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	1	ComponentL	ua 1					0	No	Yes	None			
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MIA 📼 Admin@ShowData/DataPools/Default/Plugins/Plugin 1> 🍰													📼 🥶 💻 🕨	

The new component is added.

• To add Lua code to the component, tap Edit .



The Text input window opens:



Lua Text input window

- Add text or paste the Lua code into the Text input window.
- To save the Lua plugin, tap Save .
- To add a Scribble, tap Scribble , and select the desired scribble from the drop-down list.







• To add an Appearance, tap Appearance, and select the desired appearance from the drop-down list.

This file is saved in the show file, unless you export it.

- To enable or disable Installed, tap Installed to toggle between Yes and No.
 If Installed is set to Yes, the Lua components will be updated from the file archive they were imported from.
 To update any changes in these Lua components, the <u>command ReloadPlugins</u> must be executed.
- In Stream describes if the Lua code will be saved in the show file and be streamed in the session or not.
 In Stream depends on the setting in Installed and cannot be modified by the user.
 In Stream Yes means that the Lua code is saved in the show file and streamed in the session but stays as saved in the show file.

In Stream No means that the Lua code is locally saved on the hard drive. The content of this Lua code can be updated by the <u>command ReloadPlugins</u>.

• To adjust the user rights, tap User Rights , and select the desired user right needed to execute the plugin from the drop-down list.



Select UserRights 🗶
Admin
Setup
Program
Presets
Playback
None

• To close the Edit Plugin window, tap 🎇

Run a Plugin

• To run a Lua plugin, tap the desired Plugin object.



Import a Plugin

• To import a plugin, first create the plugin with your editor.

Example Plugin

XML file my_plugin.xml:

<?xml version="1.0" encoding="UTF-8"?>

```
<GMA3><Plugin Path="/my_plugin" Name="My Plugin"><ComponentLua Name="my_plugin" Installed="Yes" FileName="my_plu
```

Lua file my_plugin.lua:

```
local function main()
Printf("Hello, MA user!")
end
```

return main

- Save the Lua file and the XML file in the folder
- Tap Import .

The Import selection menu opens:

Selec	Moto	o import into Plugir	0 O:			Internal	×
Filter:		lg					Clear
Lock	No	Name	FileName	FileSize	FileTime	Path	
SL 1		debug_examples	debug_examples.xml	430 B	12.05.2020 08:21	C:/ProgramData/MALightingTechnology/gma3_1.5.2/shared/resource/lib_plugins/examples/debug_example	
SL 2		execute example	execute example.xml	260 B	12.05.2020 08:21	C:/ProgramData/MALightingTechnology/gma3_1.5.2/shared/resource/lib_plugins/examples/execute_example	
SL 8		hardware_test	hardware_test.xml	9.7 kB	28.06.2021 16:22	C:/ProgramData/MALightingTechnology/gma3_1.5.2/shared/resource/lib_plugins/hw_test	
SL 4		performance3d	performance3d.xml	421 B	11.10.2019 13:42	C:/ProgramData/MALightingTechnology/gma3_1.5.2/shared/resource/lib_plugins/performance3d	
SL S		system_test	system_test.xml	41.3 kB	29.07.2021 12:36	C:/ProgramData/MALightingTechnology/gma3_1.5.2/shared/resource/lib_plugins/systemtests	
SL 6		import_plugin	import_plugin.xml	257 B	11.10.2019 13:42	C:/ProgramData/MALightingTechnology/gma3_1.5.2/shared/resource/lib_plugins/systemtests/db/import_files	
SL 7		PlJue	PIJue.xml	4.1 kB	27.07.202109:42	C:/ProgramData/MALightingTechnology/gma3_library/datapools/plugins	
SL 8	3	my_plugin	my_plugin.xml	201 B	24.08.202109:29	C:/ProgramData/MALightingTechnology/gma3_library/datapools/plugins	
SL S)	execute example	execute example.xml	272 B	27.07.202109:51	C/ProgramData/MALightingTechnology/gma3_library/datapools/plugins/examples/execute_example	
						Imp	port

• Select the plugin you want to import and tap Import.

The plugin is imported.



*	Edit Plu	gin 1 My Plu	jlif												Settings 🛄 💥
Name My Plugin		Nugin	Scribble	e Appi		Appearance		Lock		Author		0.0.0.0	Path /my_plugin		UserRights None
Lock	No	Nam	e	Scribble /	ppearance	FileName	FilePath	FileSize	Installed	InStream	UserRights				
	1	my_plugin				my_plugin.lua		65	Yes	No					
		New Compon	entLua												
Inse	t new Co	mponentLua		Cut			Oops								'New object' line
	Del	ete		Сору		Import	Expor	t		Edit					Merge children
MA	-	Admin@Show	Data/Data	Pools/Default/Pl	ugins/Plugin										🔤 🥶 🔜 🕨