Preset Grid Generator

Plugin Guide

v2.6.0

GIAFFO DESIGNS

Contents

Plugin Overview

The Preset Grid Generator is a GrandMA2 plugin that creates a dynamic layout view based on user-defined groups and presets. This allows the user to quickly and easily change looks on stage by quickly changing presets of different fixture groups, and quickly recall combinations of these preset looks, via a series of macros that trigger preset sequences.

Showfile Requirements

- o MA2 version 3.2.2.16 or later to operate.
- o The MA2 show file must already contain fixture groups and desired presets.
- o The Preset Grid Generator plugin must be imported into the Plugins pool in the show file.

For assistance with these requirements, please refer to the GrandMA2 User Manual or visit the Tutorials page of GiaffoDesigns.com.

DISCLAIMER

Plugin Use Tutorial

Step 1: Define User-Config Section

The Preset Grid Generator will create a series of macros, images, sequences, worlds, and layouts in order for the final product to function. Before running the plugin, there are a few variables that need to be reviewed. To view and adjust these variables, `Edit` the plugin in the plugin pool to view the script, and look in the **User-Config Settings** section of the script.

```
------------------------------
---- USER CONFIG VARIABLES ----
--------- (edit these) --------
------------------------------

---- Primary Settings
userconfig.PRESET_TYPE = 4
userconfig.MACRO_PRESETS_COUNT = 12

userconfig.BACKGROUND_COLOR = '000000'

---- Starting storage locations: ----
-- NOTE: GD plugins will never overwrite e:
--       All values below are where the plu
userconfig.MACRO_START    = 777
userconfig.IMAGE_START    = 1000
userconfig.LAYOUT_SLOT    = 1

userconfig.SEQUENCE_START  = 1
userconfig.WORLD_START     = 1
```

The first set of variables determine some basic settings of the generated content, including the type of preset used and the location of stored material.

The second set of variables, located in the "Technical Stuff" section of the script, can be used to further customize the created content. The use of Wildcards is supported and is explained at the end of the "Technical Stuff" section of the script.

Refer to the table on the following page for an explanation of each variable. After adjusting these variables, **Save** the plugin.

```
---- Technical Stuff ----
-- These variables will only matter if you are
userconfig.STORE_SEPARATE_SEQUENCES = false

userconfig.KEEP_SOURCE_IMAGES = false

---- Naming Things (see "Wildcard Info" below
userconfig.VARIABLE_PREFIX = '<pt>Mac'

userconfig.MACRO_NAME      = '<grp> <pset>'
userconfig.SEQUENCE_NAME   = '<grp> _<pt>Exec'

---- Wildcard Info
-- <pt>     = PresetType abbreviated (Preset
-- <ptype>  = PresetType full (PresetType 4
-- <pset>   = Preset name ('Red') (Macros or
-- <grp>    = Group name (for use in SEQUEN(
```

Primary Settings

Variable	Description	Example	Result
userconfig. **PRESET_TYPE**	number for the PresetType being used (color, gobo, beam, etc)	4	The Preset Grid will create a layout based on color presets
userconfig. **MACRO_PRESETS_COUNT**	number of empty preset "look" macros that will be automatically build into the layout	12	12 macros will be included in the layout to store "looks" to during use
userconfig. **BACKGROUND_COLOR**	hex value (rrggbb) of color that will be used as background for the generated layout	000000	layout background will be black
		2f0000	layout background will be dark red
userconfig. **USE_INSTALL_GROUPS**	enable values typed in install.GROUPS (located below userconfig)	true	values entered in install.GROUPS will be automatically input to skip prompt during installation. A confirmation screen will be provided instead. If cancelled, normal input will be collected.
userconfig. **USE_INSTALL_PRESETS**	enable values typed in install.PRESETS (located below userconfig)	true false	same as above
userconfig. **USE_INSTALL_PAGE**	enable values typed in install.PAGE (located below userconfig)	true false	same as above
userconfig. **USE_INSTALL_EXEC**	enable values typed in install.EXEC (located below userconfig)	true false	same as above
userconfig. **MACRO_START**	starting location of generated macros in the Macros Pool*	1	generated macros will be stored into Macros Pool starting at slot 1
userconfig. **IMAGE_START**	starting location of generated images in the Images Pool*	201	generated images will be stored into Images Pool starting at slot 201
userconfig. **LAYOUT_SLOT**	location of generated Preset Grid layout in the Layout Pool*	3	Preset Grid layout will be stored to slot 3
userconfig. **SEQUENCE_START**	location of generated sequences in the Sequence Pool*	1	generated sequences will be stored into Sequence Pool starting at slot 1
userconfig. **WORLD_START**	location of generated worlds in the World Pool*	2	generated worlds will be stored into World Pool starting at slot 2

If content already exists in a pool slot, the plugin will find the next available slot to store content instead of overwriting existing material.

"Technical Stuff" Settings

Variable	Description	Example	Result
userconfig. **STORE_SEPARATE_SEQUENCES**	creates separate sequences for each fixture group instead of creating one sequence and applying a fixture World to each executor	false	one sequence will be created and stored to multiple executors, with Worlds to filter playback from each
		true	A separate sequence will be generated for each group, so that each executor contains a different sequence.
userconfig. **KEEP_SOURCE_IMAGES**	retains all images imported into the show file during installation, instead of just the images that are used in the generated layout; *only use this when trying to obtain the included images, as the uninstaller will not delete this and it will increase the size of your showfile unnecessarily.*	false	only images used in the generated Preset Grid layout will stay in the show file; unused images that were imported during layout installation will be removed
		true	all images imported during layout installation will be retained in the Images Pool
userconfig. **SHOW_TRIG_NAMES**	display names over trigger macros	true	names will be displayed over grid macros in layout
userconfig. **SHOW_ALLTRIG_NAMES**	display names over column-trigger macros (down-arrows by default)	true	names will be displayed over arrow macros in layout
userconfig. **VARIABLE_PREFIX**	prefix for variables used in plugin-generated macros	'<pt>Macro'	variables will begin with the PresetType and "Macro", for example "colMacro"
userconfig. **MACRO_NAME**	names for the generated executor trigger macros	'<grp> <pset>'	macros will be named with the group that they affect, followed by the name of the preset that they trigger, for example "Spots Red"
userconfig. **SEQUENCE_NAME**	name for generated sequences	'PresetGrid'	Sequence(s) will be named "PresetGrid".
		'<grp> <ptype>'	Generated sequences will be named with the group that they affect and the PresetType that they change, for example "Spots Color"

Install Defaults

Variable	Description	Example	Result

*install.***GROUPS**	input to be provided for group numbers. If userconfig.USE_INSTALL_GROUPS is set to *true,* these values will be used. A prompt will confirm with the user that the numbers provided are the ones that were wanted.	{
		  {1, 10}
		}
			Groups 1 thru 10 will be automatically input for groups during installation.

		{
		  {1, 10},
		  {17, 19}
		}
			Groups 1 thru 10 + 17 thru 19 will be automatically input.
			
			(please note the extra comma after the first **{start, end})**

*install.***PRESETS**	input to be provided for preset numbers. These are formatted to include image numbers. If an image link is not wanted, it can be set to *nil.*	{
		  {pset=1, img=1},
		  {pset=2, img=2},
		  {pset=3, img=nil},
		  {pset=4, img=4},
		}
			Presets 1 thru 4 are provided. Presets 1, 2, and 4 are matched with the same numbered image. Preset 3 is paired with no image, and user will be prompted for the image to link with this preset.

*install.***PAGE**	input to be provided for page number.	100	Page 1000 will be provided during installation.
*install.***EXEC**	input to be provided for executor number.	101	Executor 101 will be the attempted starting point for storing executors.

Step 2: Run Plugin

Before running the plugin, make note of which group and preset numbers you would like to include in the preset grid, as well as which executor page and executor you would like to use to store the sequences that the Preset Grid will reference. The plugin will run a series of prompts asking for this information.

Click on the Preset Grid Generator plugin in the Plugin pool to begin setup. A pop-up will appear verifying the User Config Settings. Click **Ok** to continue if these settings are correct or **Cancel** to adjust the User Config Settings.

The pop-up will then ask for desired groups to be used in the Preset Grid Layout. Input each group number individually, followed by [Please], or input a range of groups with the [THRU] keyword *(i.e. 2 thru 10).* When all desired groups have been entered, press [Please] once more to continue to the next step.

A message will appear on the screen asking for desired preset numbers. Input the number of each preset individually, followed by [Please], or input a range of presets with the [THRU] keyword. When all desired presets have been entered, press [Please] once more to move on to the next step. Note that all presets must be from the same preset type that was defined in the User Config section of the plugin script.

The screen will display the Image Pool and a message will appear asking for an image to be selected that matches each preset. Type the number of the desired image, followed by [Please]. Note that the number being asked for is the *label* assigned to the image, not the location of the image in the Image Pool.

Finally, a message will appear asking for the desired executor page and executor for the sequences of colors to be stored. Enter the information when prompted and press [Please].
The plugin will generate a layout from the information that was entered, and a message will be displayed on screen detailing where information was stored and confirming that the plugin was executed successfully.

Step 3: Using the Layout

Layout Features

The plugin will generate a layout with a row of images next to a label for each group of fixtures. These images are macro triggers that change the cue of sequences that the plugin stored to an executor. The preset displayed on stage can be changed by tapping or clicking the image associated with the desired preset.

The top row of the layout has arrow symbols that, when triggered, will change the preset of all fixtures to the preset in that column.

Preset Look Macros

To the right of the preset grid is a set of empty macros that can be used to store combinations of presets as a look, to be recalled simultaneously. To store a look from the preset grid into one of these macros, use the Create Macro Preset macro below these empty look macros. It will ask which macro to store the current look to. Type in a macro number. This can be any macro number and is not limited to the macros in the layout. The Preset Look macro can be relabeled to reflect the look that it creates. Tapping the new macro will immediately recall the look and change the preset grid to reflect the new selection.

Note: The Create Macro Preset <u>will</u> overwrite the first line of a macro that already have pre-existing content and change the macro's name. Be careful when inputting the desired macro number when storing a new Preset Look. Pressing Oops *once will undo the name change. Pressing it a second time will undo an unintended overwrite.*

Plugin Information

In the top left corner of the layout, there is a Preset Grid Info macro. When triggered, this will open the Command Line window on Screen 2. It will list information related to the plugin installation, including location of executors and macros that are used to run the Preset Picker layout. Some information may be cut off, due to character count limitations in the Command Line window. For full text, open an Info window and run the macro again.

Editing Preset Sequences

The Preset Grid Plugin generates sequences that the Preset Grid layout uses as a base for changing fixture presets. If desired, these sequences can be renamed and moved in the Sequence Pool. However, the sequences *cannot* be moved from the executor to which they were assigned, since the Preset Grid layout is referencing the executor, rather than the sequence.

Uninstalling the Plugin
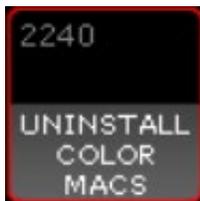
To uninstall the Preset Grid plugin and all associated macros, layouts, worlds, images, and sequences, locate the Uninstall Macro that was created when the Preset Grid layout was initially installed and run the macro. To find the Uninstall macro, run the Info macro from the Preset Grid layout. It will be the first macro listed in the command line. When running the Uninstaller Macro, the macro will ask for confirmation before removing all elements from the show file.

***Please note! Uninstalling the plugin cannot be undone. Please save the show file before running the Uninstaller Macro.*

Advanced Use: Using Custom Images

Purchase of the Preset Grid Generator includes a copy of the Preset Grid Plugin Builder plugin, which allows the user to create Preset Grid layouts with custom images. The Preset Grid Plugin Builder creates a custom copy of the Preset Grid Generator plugin that incorporates user-defined images instead of the default images provided. The Preset Grid Plugin Builder does not need to be used in the same show file that will be used to generate the Preset Grid. It can be used in a separate show file that contains the desired custom images. The custom-built Preset Grid Generator plugin will be able to be exported for use in other show files.

Step 1: Image Setup

Import the desired custom images into an empty section of the Image Pool in the show file. There should be three sets of images - the first set should reflect each fade time in an "off" or inactive status, and the second set should reflect each fade time in an "on" or currently-active status that will indicate which presets are currently being used in the layout. The third set will be used as the image that sets all groups to the same preset (the arrow image in the stock plugin images). There must be a matching number of "on" and "off" images, and they must be in the same order. For example, if an image representing an inactive red preset is the second in the series of inactive preset images in the pool, the image representing an active red preset should be the second image in the series of active preset images. Note the location of the images in the Image Pool - this range will be needed for User Configuration in the plugin script.

Note: If there are a mismatched number of images in each set, the Builder plugin will give an error message detailing the issue and will not run.
If images are not in the correct order, the Preset Grid Plugin Builder will create a non-functional Preset Grid Generator plugin, which will create a layout but with undesired results for visual feedback.

Step 2: User Config

[Edit] the Preset Grid Plugin Builder plugin and review the User Configuration Variable at the top of the script. There are four variables to be adjusted:

Variable	Description	Example	Result
userconfig.IMAGES_ARROW	defines the location in the Image Pool of the range of images that will represent all groups being set to the same preset	{521, 529}	Images in the slots 521 through 529 will be used as the images to set all groups to the same preset in the created plugin
userconfig.IMAGES_ON	defines the location in the Image Pool of the range of images representing a preset in its "on" or "active" position	{501, 509}	Images in the slots 501 through 509 will be used as the "on" or "active" images in the created plugin
userconfig.IMAGES_OFF	defines the location in the Image Pool of the range of images representing a preset in its "off" or "inactive" position	{511, 519}	Images in the slots 511 through 519 will be used as the "off" or "inactive" images in the created plugin
userconfig.PLUGIN_SLOT	defines the plugin slot that will be used to store the custom Preset Grid Generator plugin	3	The custom Preset Grid Generator plugin will be stored in slot 3 in the Plugins Pool; if an item already exists in this location, the next available slot will be used

Once these values have been adjusted, **Save** the plugin before closing the Edit Plugin window.

Step 3: Run Preset Grid Plugin Builder

Click on the Preset Grid Plugin Builder plugin to begin. A pop-up will appear asking for a Plugin Name. Input the desired name for the generated custom Preset Grid Generator plugin, then press [Please].

A confirmation window will appear to verify the information. Click **Ok** to continue or **Cancel** to terminate the custom plugin build. Another confirmation window will verify a successful build of the new Preset Grid Generator using the new images. The new plugin will appear in the Plugins Pool and can be used to install a Fades Layout using the normal installation instructions.

Step 3: Export the Plugin for Future Use

The Preset Grid Generator also includes a plugin called "Plugin Export - Reverse Compatible" that will make a plugin compatible with all MA2 software versions. Use this plugin to export the custom Preset Grid Generator plugin so that it can be stored for future use in any show file. This handy plugin can also be used to export any plugin in the Plugins Pool so that the plugin can be imported into previous MA2 software versions.

Click on the Plugin Export plugin to begin the export. A pop-up will appear asking for the plugin number. Input the pool item number of the custom Preset Grid Generator plugin, followed by [Please]. The pop-up will extract the plugin name, but a different name can be used for the export. Press [Please] to continue with the extracted name or type the desired export name and press [Please]. The plugin will be exported and, if using MA2 onPC, the computer's file browser will open and display the Plugins folder with the newly exported file.

FAQ

Can I use this plugin to create layouts for non-color presets?
As of version 2.5.0, this plugin can now create layouts for other preset types. Just change the preset type in the User Config section of the plugin script during installation.

For additional help and resources, please visit GiaffoDesigns.com.

Release Notes

- o Version 2.6.0
  - ADDED: options for installation options being set in user-config
  - ADDED: option for showing macro names
  - FIXED: builder plugin sometimes fails to start
- o Version 2.5.1
  - FIXED: spaces in image names crashed generated plugins from Builder
- o Version 2.5.0
  - Changed plugin name to "Preset Grid Generator"
  - Supports grid creation for all preset types
  - Added creation of preset combination macros to store a preset look and trigger multiple preset macros at once
  - Added option for use of custom images
  - Preset sequences can be stored for each individual group instead of all being stored to the same sequence with group filters on each executor
  - Added option to customize background color of generated Preset Grid layout
- o Version 2.1.2
  - Original Plugin Release, called "Color Grid Generator"
  - Not compatible with MA2 v3.1.2.5 – plugin engine does not support message boxes.

To report any potential plugin bugs, please visit GiaffoDesigns.com/contact.