grandMA2

QUICK START GUIDE

grandMA2

Version 3.9 | 2024-09-30

English

Table of contents

1. Welcome to the Quick Start Guide

Hello and welcome to the Quick Start Guide.

In the following chapters we are going to have a guided look at some of the most used functions in the grandMA2.

This is a more personal guided tour through the grandMA2 software and I (the author) will guide you (the reader), writing in a more direct and easygoing manner than the rest of this manual. I hope you will enjoy it.

We are not going to spend time on how to connect or configure a console or onPC in this guide.

We will begin where everything is up and running. If you need help setting up the console before this guide, please have a look at the First step topics. If you need help with installing and running your onPC, please have look at grandMA2 onPC details or the Introduction.

Preface

This guide is written using primarily the grandMA2 onPC. The thought is that most users that go thru this, is on the onPC platform. If there is any difference in how to operate the onPC or console, then it will be explained.

A mouse/trackball is recommended. Often the guide will say something like "click the button". This is the same as tapping it on a console. "Right click the fixture number" is the same as first pressing the Edit key and then tapping the fixture number on a console. You can use the trackball or an external mouse on the console, it is all up to you.

If you are using the onPC, then you are going to work a lot on the "virtual" screens. If "screen 1" is mentioned, then it is the one on the **Command** section - buttons on the right hand side. If the onPC is running in "MultiScreen" mode (onPC options), then it is your main window and you will not see a Command button on the right side. You can access the executors by tapping the Executor 1 - 15 101 - 115 buttons in the menu on the right side. The different other screens can be accessed by tapping the relevant buttons in the right hand side menu.

At some point we need to use the big main executors. On the console it is the two 100mm faders and the three big default buttons below the faders. On the onPC you can find the same faders and buttons by tapping the Masters button - also in the menu on the right side.

It is recommended that you read this online, since this is the most up to date version. But you can also create this as a PDF and print it. But you could save the paper and maybe just take the PDF with you and read it on your favorite electronic platform instead.
One favorite platform could be the console or onPC where this guide is available in the help system - and then you do not need to create a PDF.

The Quick Start Guide is meant to be read from start to finish and it is meant for beginners. If you are looking for help on a specific topic you should try to have a look at the menu on the left or search for it in the online manual.

To get the best result you should try to do precisely what is written. If you change something that is not described you might get a different result - and then you might get sad and depressed and lighting should be fun :-)

Markup in the Quick Start Guide

In this guide there are different markups of different situations.

Even though this is written for onPC there is going to be a lot of (virtual) button presses. If you should press or click keys then it is displayed like this: Store Cue 1 Please.

If we are just talking about a key, then it will be written in single quotes like this: The 'Store' key.

If it is an area on the screens you will need to click or press then it is written like this Internal. This could be tabs in menus or a button on the screen.

If we are talking about a term, then it will look like this: **Store** is a function to save something.

If you need to use a keyboard and write something in the command line (we are going to look at what this is later) the it will look like this:

All input like this should be executed with a Enter on your keyboard. This is not displayed. It is the same as the Please key. It is not a visible command - it is the key that executes the typed command. There is a default keyword displayed in the command line input above. It is the word inside the square brackets. You do not need to write this it is already there - it might be different than the one displayed above.

A feedback from the system is displayed like this:

Notice that the Please or Enter is not displayed.

If you need to write something on the keyboard that is not for the command line, then the keyboard input will look like this: **store cue 1**.

So, let us begin. Make sure the onPC or console turned on and running, then go to the next page.

2. Let's create a new empty show

The first thing you need to do is the press the Backup key so the Backup Menu can be seen on the 9" screen in the command section - this is called screen 1. Menus often appear on screen 1

Then make sure the Internal tab is selected.

Now tap the New Show button.

This opens the "New Show" pop-up. Here you can write the name of the new show and choose to clear different areas of the current show.

In the name box, write this: **Quick Start Guide 1**

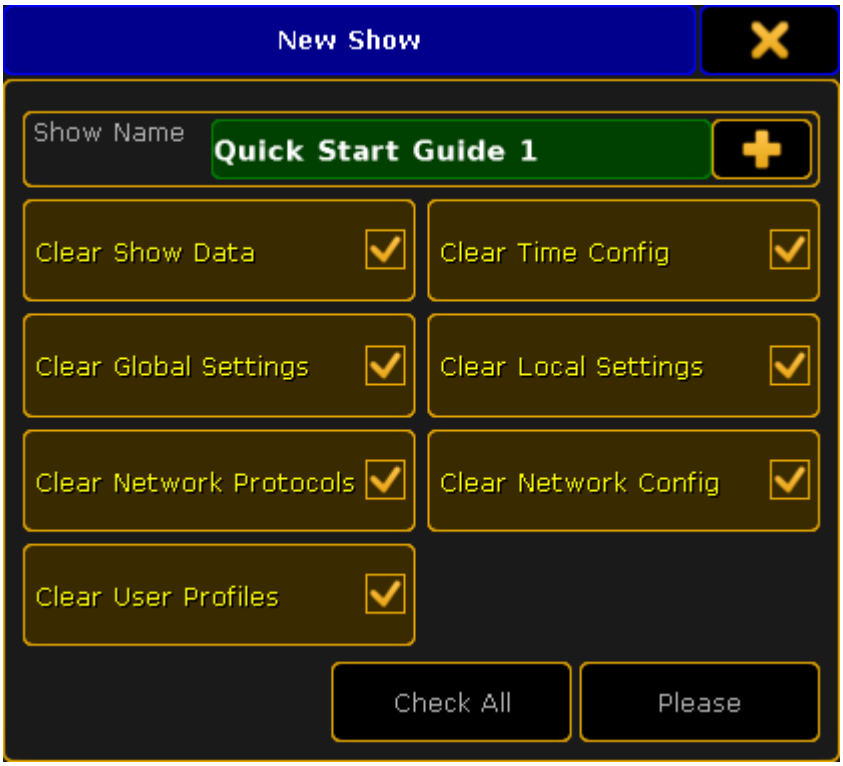
If you are using console that you share with other people, then please add your name in front of this. This will make sure that you are creating a new show file instead of overwriting an existing one - in case someone else already did this guide.

Make sure you check all the boxes in the pop-up.

This ensures that the new show is empty and with all the default options. It basically makes sure you do not bring anything from the currently loaded show into our new show.

The fast way to this is to tap the Check All button

Your pop-up should look something like this:



New Show pop-up

Then you can tap the Please button. If there already exists a show using the name you typed, then a warning will appear asking what to do. You can go back and write a different name or overwrite the existing show.

Close the Backup Menu by pressing the yellow X in the upper right corner when you have created a show file. The yellow 'X' is how you always closes temporary windows and pop-ups.

You have now created a new empty show.

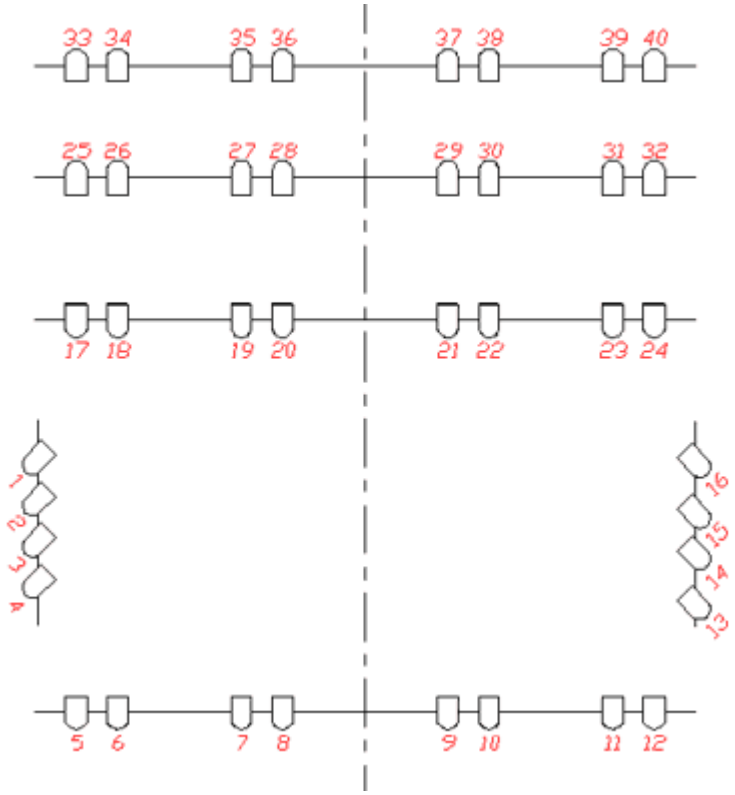
Go to the next page to learn to patch dimmers.

3. Adding and patching dimmers

Now we are going to add and patch 40 dimmer channels.

During this tutorial we are going to create a show with many different fixtures that can do a lot of exiting things. It is just virtual lights so they do not cost anything :-)

Before we can dance ballet, we have learn to crawl, so we begin with a simple design with some general stage wash.



Drawing of the light plot

This gives you a total of 40 dimmer channels.

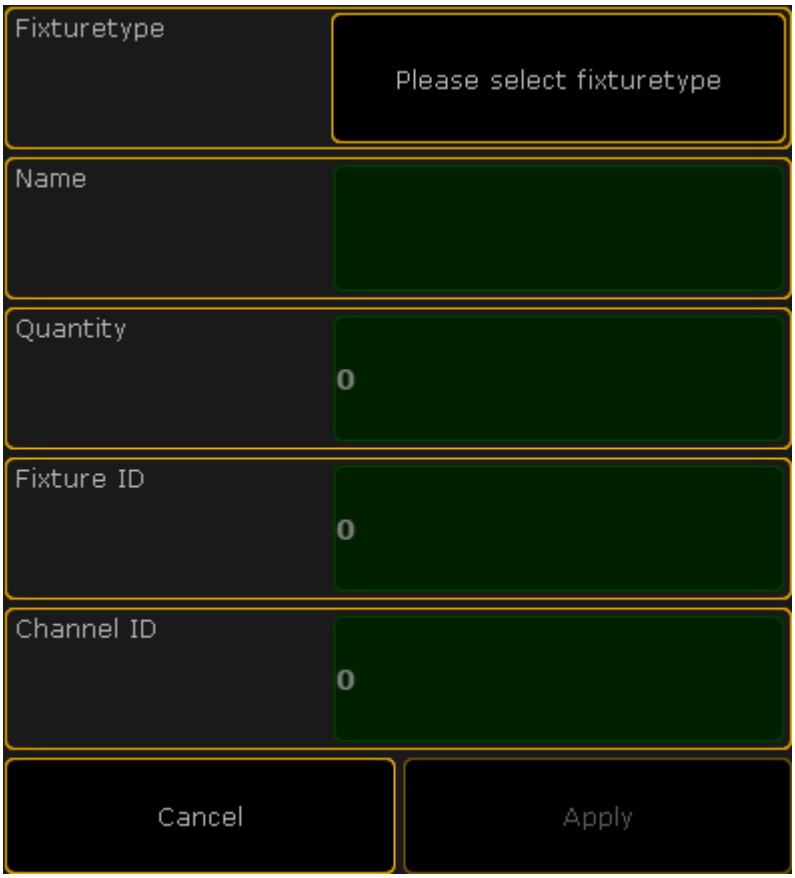
Enter the Fixture Schedule

Press the Setup key. Tap the Patch & Fixture Schedule button.

Now you will see a pop-up that is called "Layer Name". Here you write: **Dimmers** followed by a 'Please'/enter.

Next thing you see is the "Fixture Wizard" - I know, you expected that to be an old guy with a pointed hat and a wand. Sorry, it is not.

The left part of the wizard should look like this:



Empty Fixture Wizard

We need to put information in all the green areas to add the dimmers.

The right side of the screen will help filling out the data in the green fields. It changes depending on what field is selected on the left side.

Select the fixture type

Make sure you have selected the first thing that needs to be filled out - tap the button called Please select fixturetype.

The right side now shows you the the fixture types that currently exist in our show.

There is one called "2 Dimmer 00 (DMX 1)". This is a general dimmer that uses one DMX channel to control the output from a dimmer.

That fits perfectly to what we need right now - please tap it.

Give it a name

Selecting the fixture type changes the left side of the screen. It has changed the fixture type to the one you have selected. It has put something in the Name field as well. It automatically calls it "Dim 1". This means that the first dimmer channel that we add will be named "Dim 1".

Because of the space between the text and number, the following fixtures will be enumerated. So the second fixture will be called "Dim 2", third one is "Dim 3", and so on.

This is a fine name for now.

Adding multiple fixtures in one go

The field that is highlighted on the left side is called "Quantity".

Here we can type the number of fixture we want to add.

Write: **40** followed by a 'Please'/enter.

Fixture and channel ID

We call a dimmer a "fixture" even though it might be a dimmer in a rack of multiple dimmers somewhere.

All fixtures need a unique ID number that allows you to select the fixture and give it a value.

All the fixtures can have two ID numbers; a "Fixture ID" and a "Channel ID". There is naturally a difference. A fixture can have both a Fixture ID and Channel ID and they can be different, but it needs at least an ID number in one of them.

In this guide we need the dimmers to only have a Channel ID, so leave the "0" in the "Fixture ID" field.

We want the first dimmer to use Channel ID number 1. Make sure the green field in the "Channel ID" says "1".

Automatically the rest of the dimmers will be enumerated from this.

DMX patch

Now we need to tell the grandMA2 the DMX address for the first dimmer. The rest will be enumerated from this.

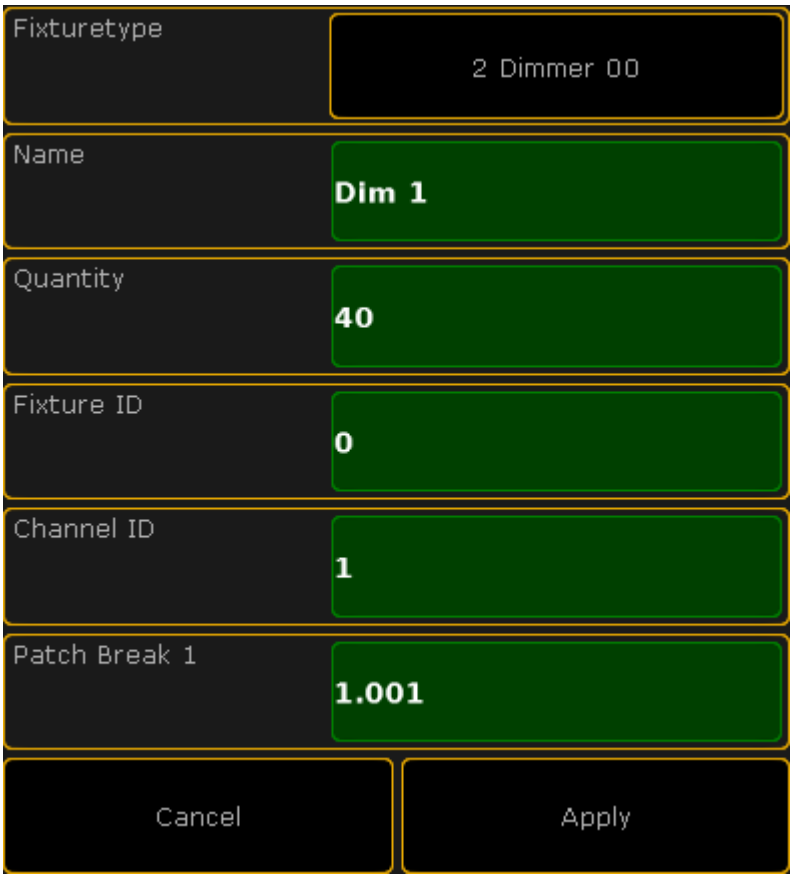
We want the dimmers to begin at DMX address 1 in the first DMX universe.

Type **1.001** followed by 'Please'.

This is Universe 1, a dot, and then address number 1.

Finish and confirm

Now the left side should look like this:



Completed Fixture Wizard

Press the Apply button. You have now added 40 dimmers in the fixture schedule.

Close the two setup screens using the yellow X. Do not worry to much about their content, we will return to them again later.

You are asked to confirm the changes you have made. This means if we want to save what we did in the fixture schedule. Please save it.

On the next page we are going to look at controlling those channels.

4. Using the screens and windows

Now is a good time to have a closer look at working with screens and windows.

Command Line Feedback window

Often it can be an advantage to see how the console reacts to your input. This is done on the Command Line Feedback window.

We are going to create this window at the bottom of screen 2 (the 15,4" touch screen on the right side).

Tap anywhere in the upper left corner on the empty screen. This gives you the "**Create Basic Window**" pop-up. Here you need to tap the System tab. Here you will find a Command Line button. Tap it.

Now you have created a Command Line Feedback window.

It continually gives you a lot of information. Do not be confused about all the information. We will go through it, when needed.

You can resize the window by pressing and holding the area in the lower right side of the window (where there is are a lot of yellow dots) and then move your finger/mouse into the window. Release the screen when you are happy with the size.

Make the window smaller.

When the window does not take up the entire screen, then the window can be moved by pressing and holding the title bar of the window (where the "Command Line Feedback" text is) and move your finger/mouse around the screen.

Move the window to the bottom of the screen.

Channel Sheet

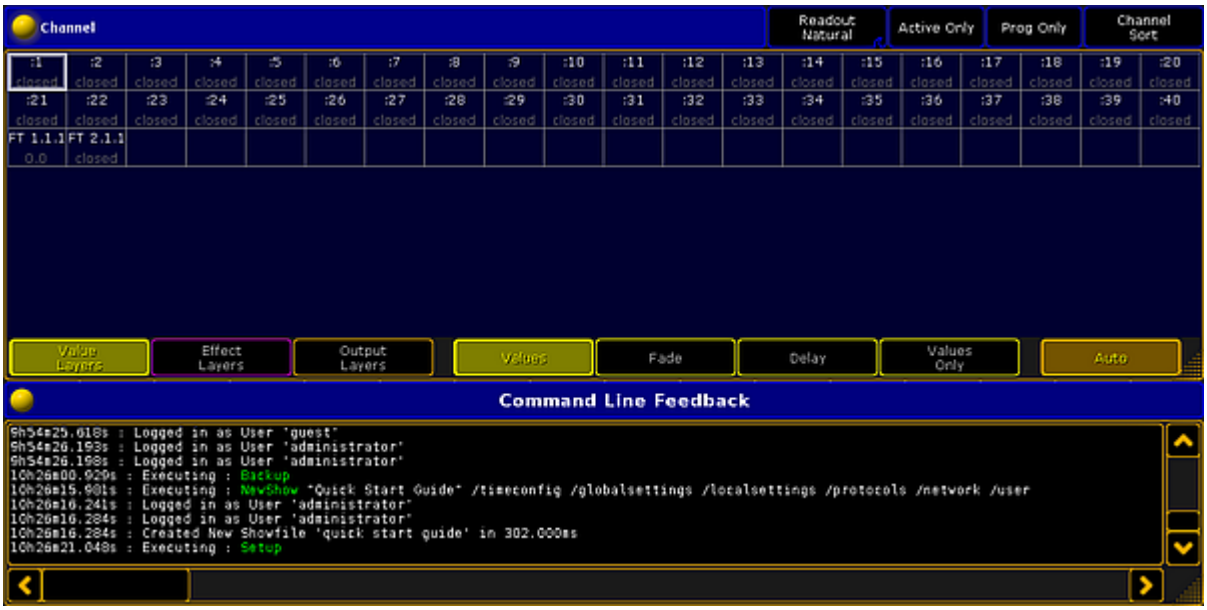
To view your 40 channels you will need a Channel Sheet window.

Press the upper left corner on screen 2. Then select the Sheets tab in the "**Create Basic Window**" and then the Channel button.

You have now created a Channel Sheet. Here you can see your channels and the values they have.

There are some extra special channels in the sheet. They are called "FT 1.1.1" and "FT 2.1.1". They are automatically created "Fixture Type" channels. They are created by the software and you should not worry about them. The details about them are outside the scope of this guide.

Your screen should now look something like this (It is scaled down in size - click it to open the bigger version - online manual only):



Screen layout

Storing Views

In the right side of screen 2 you have some positions where you can store your window arrangement, the stored arrangement is called a "View" and the buttons on the right side screen of screen number 2 to screen number 6 are called "View Buttons".

You can store your view on any of the view buttons.

We are going to store our view on the top view button on screen 2.

Press the Store key followed by the V1 key (hard key next to screen 2). On the onPC you do not have the 'V1' key so just tap the view button on the screen.

This gives you a pop-up. It asks which screens you want to store. Without changing anything tap the Please button.

You have now created a view called "view 1". Let us give it a better name.

Press the Assign key twice followed by the V1 - or just the view button. This gives you a new input pop-up. Here you write: **Channel** followed by a 'Please'/enter.

You can see in your Command Line Feedback window writes this:

```
[time] : Executing : Label ViewButton 1.1 /screen=2
```

This tells you that you have given your view a new label and that it is regarding screen number 2.

The view button should look like this:

ViewButton with thumbnail

This is a thumbnail of the stored view.

It does not matter if you press the V1 key or the view button on the screen. The result is the same.

On the next page we are going to learn about controlling the values of the channels.

5. Controlling dimmers or channels

We are now going to control the dimmers - called channels.

Turn on the channels

There are many ways to turn on channels on a grandMA2.

Begin with one of the simple ones. Press 1 At 1 0 0 Please - You have now turned on channel 1 at 100%.

This works because you have "Channel" as the default keyword in your command line input:

This is the keyword the console will put in front of your command, unless you specify a different keyword. This saves you from manually pressing the 'Channel' key before the command input.

If your default keyword is not "Channel", then press Channel Please.

Let us have a look at what else happened. The Channel ID "1" has changed to a yellow color and the background behind the value has changed to a red color. Also the value (in this case the intensity) is now in a red text color.

The yellow colored Channel ID means that the channel is selected and setting at new value will affect the selected channels. Now press At 5 0 Please. Since the channel is already selected you can just give it a new value and it is now at 50%.

Now press Clear once. Channel 1 is no longer selected and you cannot just change the intensity again.

The red background color indicates that the value will be saved if you press 'Store' (do not do it now). Instead press once more on Clear.

The only thing left is the value in the red text color. This means that it is still in the temporary memory (called the programmer) and will create output, but it will not be saved if you store.

Press Clear once more. Now channel 1 is turned off and it is not in the programmer anymore. Instead of pressing the 'Clear' button 3 times you can keep it pressed for about 1 second and you have cleared the programmer - same as the three presses on 'Clear'.

There are other ways to turn a channel at 100%. Here's another example: 1 At At. This is a shortcut to give the channel a value of 100% (unless someone have changed a setting in the setup).

Press . twice. This gives channel 1 a value of 0%. You can of course also use "At 0 Please". The value is in the programmer and will be stored (if you save a cue).

Press Clear until the programmer is cleared.

If you have several channels in the programmer and just what to "release" one, you can use the 'Off' key in combination with the 'Channel' key. Turn on channel 1 at 100%.

Now press Off Channel 1 Please. This will take out channel 1 from your programmer.

One other way to give a channel a value is the "Level" wheel. With this you can change the value of the selected channels fast and simple. Turn it away from you and the value of the selected channels goes up. Turn it towards yourself and it goes down.

If you want to turn on several channels at the same time you need the '+' and/or 'Thru' keys. They are pretty self-explanatory.

Guess what you need to press to turn on channel 1 to 10 plus 20 at 20%. This is the fast way: 1 Thru 1 0 + 2 0 At 2 0 Please.

If you want to exclude channels you can use '-' (minus). So if you want to give channel 1 to 10 plus 20 but minus 5 a value of 0%, this is the fastest way: 1 Thru 1 0 + 2 0 - 5 . .

You can also use '+' and '-' to change the value. 5 At + 3 0 Please. This brings channel five up to 50% - It was at 20% and got 30% more.

5 At - 5 0 Please. Brings the channel down to 0% - notice that is got a red background, so it got a value of 0% in the programmer.

Now you know how to assign values to channels. End this section by clearing your programmer.

On the next page we are going to look at Groups.

6. Working with Groups

Now it is time to have a look at groups.

Groups Pool

Since we are going to make some groups it would be practical to be able to see them.

It would be nice to have it at the same screen (since there is enough room). So you need to make the Channel Sheet one line smaller and then press the new empty space on the left side.

Again you are presented with the "Create Basic Window" pop-up. This time you need to access the Pools tab. Here you find the Groups button - press it. Now you got some empty group buttons right at your fingertips.

You could store this as a new view or store the existing view again.

The first group

All the odd numbers in our light plot have a warm color and all the even ones have a cold color.

We are going to make some groups with those colors. The first one is all the warm colors from front of house (FOH). Press: 5 + 7 + 9 + 1 1 Please. Now you have selected channels 5, 7, 9 and 11. Then press Store followed by the first available group button. Groups cannot contain any value so we do not need to assign any.

Before you do anything else, use your keyboard to write: **FOH Warm** - this automatically allows you to label the latest "touched" element. Should you have touched anything else (buttons, screens, anything) before typing, you can use a different method to name things (for instance groups).

The function is called "Label" and you access it by pressing the 'Assign' key twice. Do that and then press the first group button again. Now you have the option to change the name, delete it, or type it for the first time. When you are happy press Please.

Look at your Channel Sheet. Here you can see that the numbers 5, 7, 9 and 11 have the yellow color, meaning that they are still selected. We are done with those four channels, so press the 'Clear' key once.

11 more groups

All right, now you know everything you need to know about making groups. We need 12 groups. All the information you need for making the groups is displayed in the following table. You have already made group 1, but the rest is a nice little exercise.

Group number:	Channels:	Name:
1	5 + 7 + 9 + 11	FOH Warm
2	17 + 19 + 21 + 23	LX1 Warm
3	25 + 27 + 29 + 31	LX2 Warm
4	33 + 35 + 37 + 39	LX4 Warm
5	1 + 3 + 13 + 15	Box Warm
6	All uneven numbers	All Warm
7	6 + 8 + 10 + 12	FOH Cold
8	18 + 20 + 22 + 24	LX1 Cold
9	26 + 28 + 30 + 32	LX2 Cold
10	34 + 36 + 38 + 40	LX4 Cold
11	2 + 4 + 14 + 16	Box Cold
12	All even numbers	All Cold

When you are done, your group pool should look something like this:

Completed group pool

On the next page we will make the first cue.

7. Storing the first cue

It is time to make the first cue.

First a little theory and setup

A light cue is saved in a sequence. The grandMA can handle an almost unlimited number of sequences.

We only need a few for this tutorial. All cue numbers have to be in numeric order. This means that cue number 4 cannot be before cue number 3. The cue can have any name.

First of all, you need a window where you can see the sequence. Click on the top-left cell on one of your empty screens. If you only have one screen you need to clear it first (by deleting the windows already there) and then press the top-left cell.

The window you need is called the Sequence Executor Sheet. In the **"Create Basic Window"** pop-up, select the Sheets tab and tap the button called Sequence Executor. It is very empty right now, but there will appear content as you create the cues

You should save this as a new view and give it a name - not just "View 2".

Creating the cue

The first thing you need to do is to select the first executor. Press the following keys: Select Exec 1 Please. The executor is currently empty, but when you store the cue then it will appear.

Let us make the first cue. Press: 2 0 At 4 0 Please. Then Store Please. That was it! You have now saved channel 20 at 40% in cue 1 in sequence 1 at executor 1.

If you do not specify anything else, the console assumes you are referring to your selected executor and the sequence assigned to that executor. You can always locate your selected executor by its green background color where it displays the sequence name (now it says "Sequ").

You also got a line in your Sequence Executor window. Most of the columns are self-explanatory - but we should look at some of them.

"Number" is, of course, the cue numbers.

"Name" is the cue name.

"Trig" describes what triggers the cue. If you look at the first cue, the trigger is "Go". This means that to execute the cue, you need to press a Go key.

"Delay", "Fade", "Out Delay" and "Out Fade" shows you the respective times.

Before we make more cues, we should change the cue name. If you do not specify anything the desk names it "Cue" followed by the cue number. Press Assign Assign Cue 1 Please. Use the keyboard to write **Behind**

Curtain followed by a 'Please'/enter. A different way to change the cue name is to right-click on the name with the mouse. No matter what way you choose - your first cue should now have the name "Behind Curtain". And since we have not given the sequence a name, then it also displays the name of the first cue in the title area of the executor (the one that said "Sequ" before).

Let us also give the sequence a name. Tap the command line and write the following:

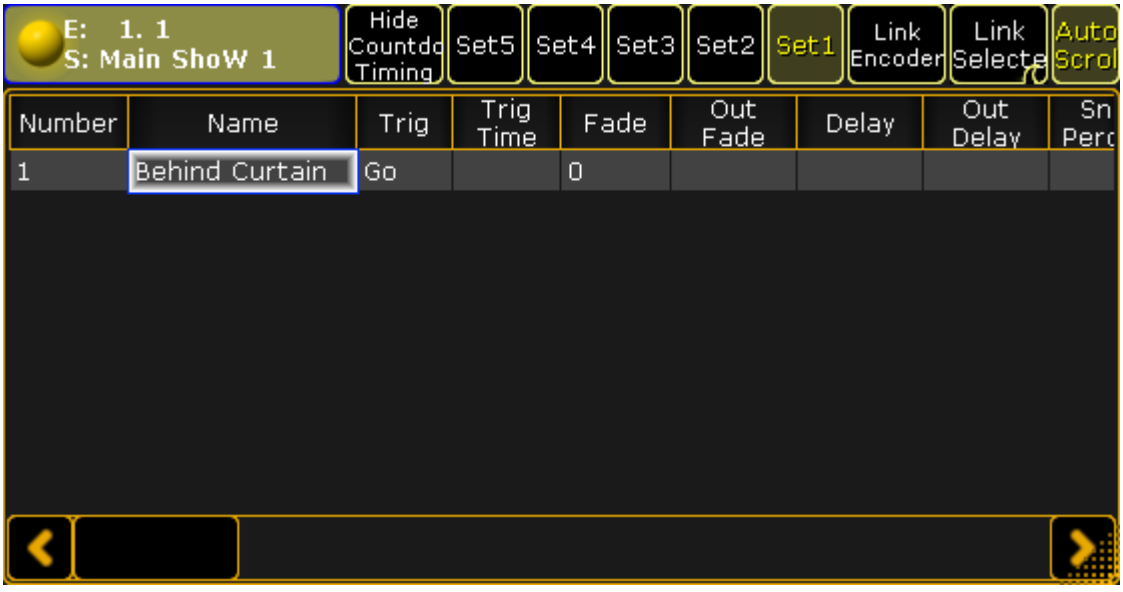
```
[Channel]> Label seq 1 "Main Show"
```

And finish with a 'Please'/Enter. We do not need to write "Sequence" we can just write "seq". Most of the keywords we use have a short version. The best way to learn the short version is to read about the keyword in the "Command Syntax and Keywords" section of this manual.

When you give something a name or you are referencing to the name of something, then you need to put it in quotation marks. That will make the software interpret it as names.

Back to the cues. If you cannot see the entire cue name, you can expand the column width by placing the mouse cursor on the line that divides "Name" and "Trig". When you are at the right place, your cursor changes so it now also has a little horizontal double-ended arrow. Click and hold the left mouse button while you drag the mouse to your right. Then release the mouse button again. You can adjust all the columns width like this. You need to store the view again to keep the changes.

Now your Sequence Executor sheet should look something like this:



Sequence Executor Sheet with one cue

On the next page, we are going to create more cues.

8. Create more cue

Now we are going to make more cues.

Making more cues.

Let us make some more cues. Press: 2 0 + 2 8 At 8 0 Store Cue 2 Time 1 5 Please. That created cue 2 with a fade time of 15 seconds. Let us continue with cue 3. Now we are going to use the groups and the command line.

You need to locate the Command Line. It looks like this:

This is the Command Line. It can be a fast way to get around the console and the commands. But sometime the keys are fastest.

In the Command Line type this:

followed by Please.

Then type:

followed by Please.

Now let us have a look at the Command Line Feedback and how the console has responded (please do not press any buttons).

What does all this mean?

"g" is the shortcut for "Group". That means the respond to the first line is:

The "t" in the second line as a short for "Thru". The console respond to the second line is:

We are going to store the cue using the keys: Store Time 2 0 Time 2 5 Please. This is the response from the console:

[Time] : Executing : Store Fade 20 OutFade 25

Now why is this? We typed "Time 20 Time 25". The desk interprets this as 20 seconds Fade and 25 seconds OutFade. Pretty clever, huh?

Notice that after the second cue we do not need to specify the cue number. The desk automatically uses the next available number.

In cue 4 we need to take 30% of everything that is on. We do this in a fast and easy way: If Please At - 3 0 Store Time 1 0 Please.

That was fast!

By using "If Please" you run the command "IfOutput". This selects everything that currently have output.

Then by using "At - 30" you subtract 30% from whatever value the channels had before (of course nothing less than 0%).

Now we are going to make a lot of changes:

Group 6 . . Group 9 Thru 1 1 At 6 0 Please

Group 7 + 8 At 7 5 Store Time 1 5 Time Time 5 Please.

What is: "Time 15 Time Time 5"? If you have a look at your Command Line Feedback it reads: "Fade 15 Delay 5". This means that you told the desk to delay the trigger of the cue with 5 seconds after you press the "Go" key (and then fade using 15 seconds - but you probably guessed that).

With the "Time" command we can assign many different times. A command like: "Time 20 Time 15 Time 10 Time 5" is translated by the desk to: "Fade 20 DownFade 15 Delay 10 DownDelay 5".

The last cue we are going to make is a blackout. And we do that with only six button presses: If Please . . Store Please. That was 6 cues.

Clear your programmer.

It was hopefully fast and painless.

The next page we are going to make some changes to the sequence.

9. Editing a sequence

Now we are going to make some changes to the sequence.

Make a "Follow"

We would like to change cue 3 to automatically run when cue 2 is done.

Look at the Sequence Executor Sheet. Each cue have its own row in the sheet. The columns are the different properties a cue can have. It is not the **content** in the cue, but the **cue** properties.

The trig column is the one that governs how the cues are triggered. We need to change the setting for cue number 3. You do this by right-clicking with the mouse (or pressing Edit and then tap) on the screen where it says "Go" in the "Trig" column in the row for cue 3.

This gives you a small pop-up with the following choices: Go, Time, Follow, Sound, BPM, Timecode. Select Follow by clicking or tapping it.

Now when cue 2 is done, the desk automatically activates the fade to cue 3.

Changing the cue names

Let us change the cue names. You know how to do this, so here is a table with the new names:

Cue Number:	Name:
1	Behind Curtain
2	With Curtain Up
3	Build
4	Darker
5	Cold
6	B.O.

If you need to, then expand the "name" column in your Sequence Executor Sheet, so you can see the entire names.

Updating a cue

Let us imagine that we got a lighting designer who has changed his mind. He wants 5% more on the group called "LX 1 Warm" in cue 3. Go to cue 3: Goto 3 Time 0 Please.

What happened? We went to a cue and activated the executor. And now there is a yellow frame around cue 3 in the Sequence Executor Sheet. To go to cue 3 you only need to write "Goto 3 Please". We added "Time 0". This ignores the fade times stored in the cue and we do not have to wait for the cue to fade in. It does not change the stored fade time.

Let us continue: Group 2 At + 5 Please.

Now the 'Update' button lights up. This means you can update the active cue. Press Update and without worrying about anything press the U3 key (or where it says: Tracking Update) so the button changes to "Update Cue Only". Now press the X6 key (or where it says Update Cue) to update the cue.

To exit the cue and deactivate the sequence you need to press the top button above executor fader 1 - in the onPC you could open the Executor view and tap where it says "Off" above executor 1.

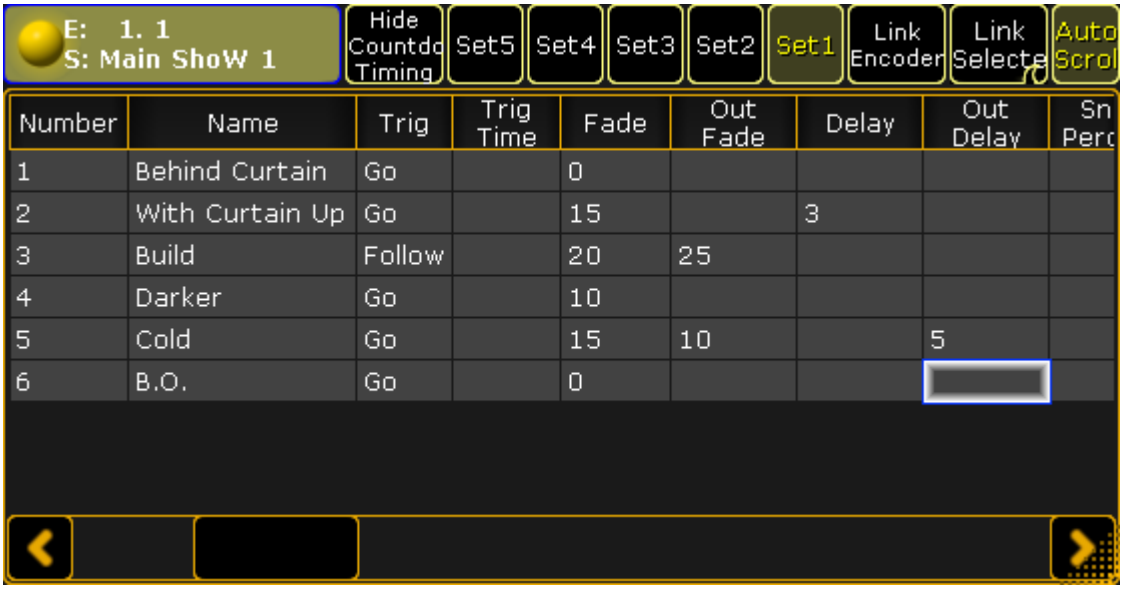
Editing the times

Let us change some of the times in the cue list. This is how your times should end up:

Fade	Out Fade	Delay	Out Delay
0			
15		3	
20	25		
10			
15	10		5
0			

Look at the Sequence Executor Sheet. Right click on the cells and type in the new value either on "the calculator" pop-up on the screen, the buttons on your console, or using the keyboard. If a cell is empty then it can be a zero time or in the case of the "OutFade" it is actually the same as the (In)fade. If the in and out fade is the same then you do not need to specify an outfade - only when there is a difference. It is the same with in and out delay.

The final result should look like this:



The Sequence Executor Sheet with new timings

Try pressing the big 'Go+' key to see how your channels react to the different times. You find this in the "Masters" section on the right side of your onPC.

Press: Backup Backup (as double-clicking a mouse button). This is the fast way to store your show (with the same name).

On the next page we are going to look at adding some moving lights.

10. Adding Moving lights

We are going to store the show with a new name and add some moving lights to the patch.

Storing the show

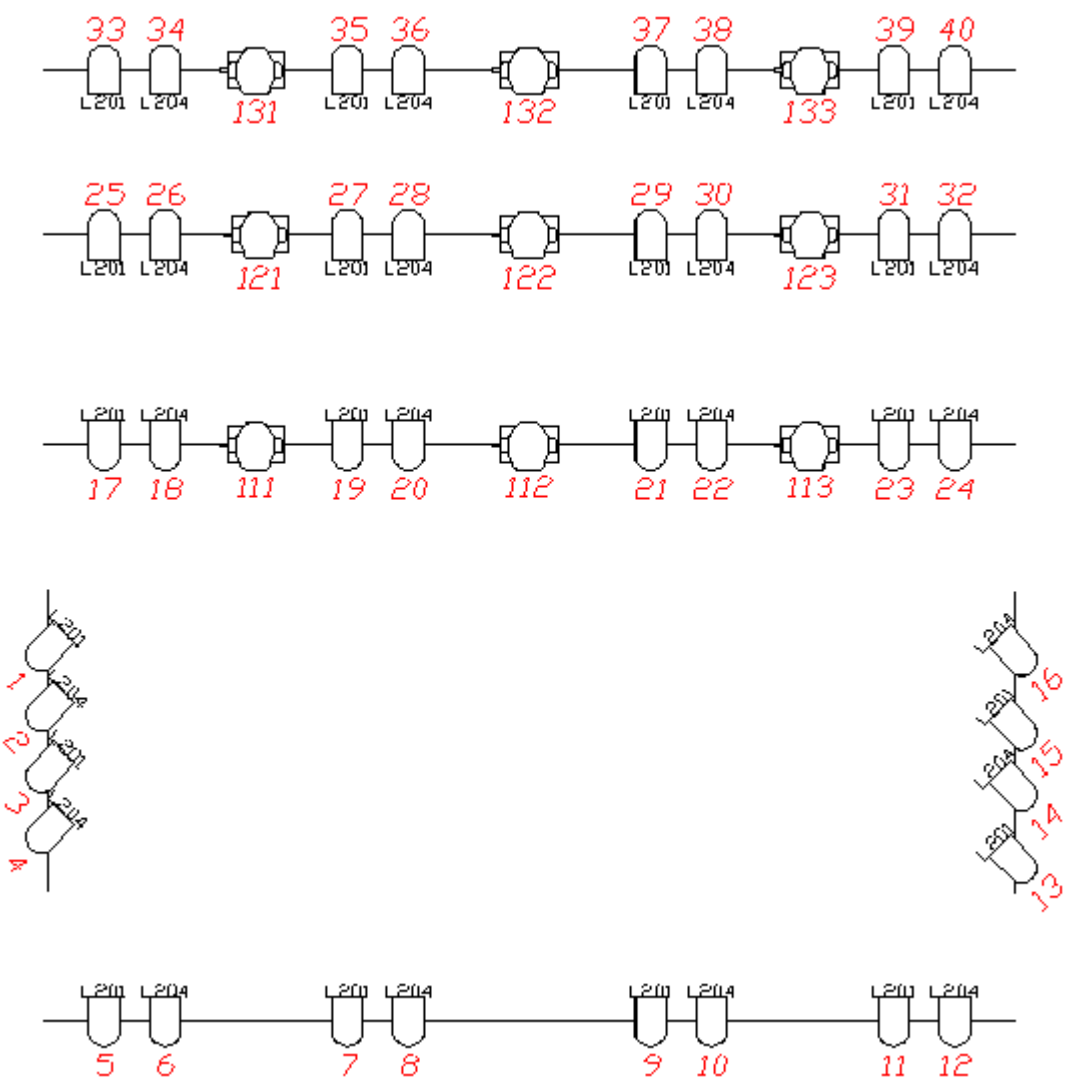
Before we are doing anything else, we need to store the show with a new name.

Press the Backup key and then make sure you have chosen the "Internal" tab. Now tap the Save Show As button and in the pop-up write this name: **quick start guide 2**. Maybe with your name in front.

Now you have saved the show with a new name and you can close the Backup Menu using the yellow cross in the upper right corner.

Add new fixtures

We just got 9 Mac 700 Profiles from Martin Professional and we want to add them to the patch. This is what the new light plot looks like:



The new extended light plot

All right, let us begin.

Press the Setup key then the Show tab and the Patch & Fixture Schedule button.

We want to add the fixtures in a new layer. So that is the first thing you are going to add.

Make sure the "Layer" part (the left half) of the screen is selected, and then press the 'Add Layer' key (it is the X1 key on a console).

In the pop-up write: **Mac700**.

Now you are back in the Fixture Wizard. The console thinks, since you added a layer, then you most likely want to add some fixtures in it.

Press the Please select fixturetype. The Mac 700 does not exist in the show. You need to add the fixture type from the internal library into the show file.

Press From Library to import a new fixture type into the show. The library is big list of several thousand fixture types. The best way to limit this list is to filter it. No one wants to spend their life scrolling a big list.

You can filter the manufacturer and/or the fixture name.

The manufacturer is "Martin" and we need the "Mac 700 Profile" in the extended mode.

In the Manufacturer input field you need to write **Martin** and in the Fixture input filter you can write **700**.

Now you have a smaller list. You can only see the fixtures from Martin that has 700 somewhere in the name.

Find the Mac 700 Profile in Extended mode. Tap it so the background is blue and then tap Import.

Back in the Fixture Wizard we need to set the quantity to "9".

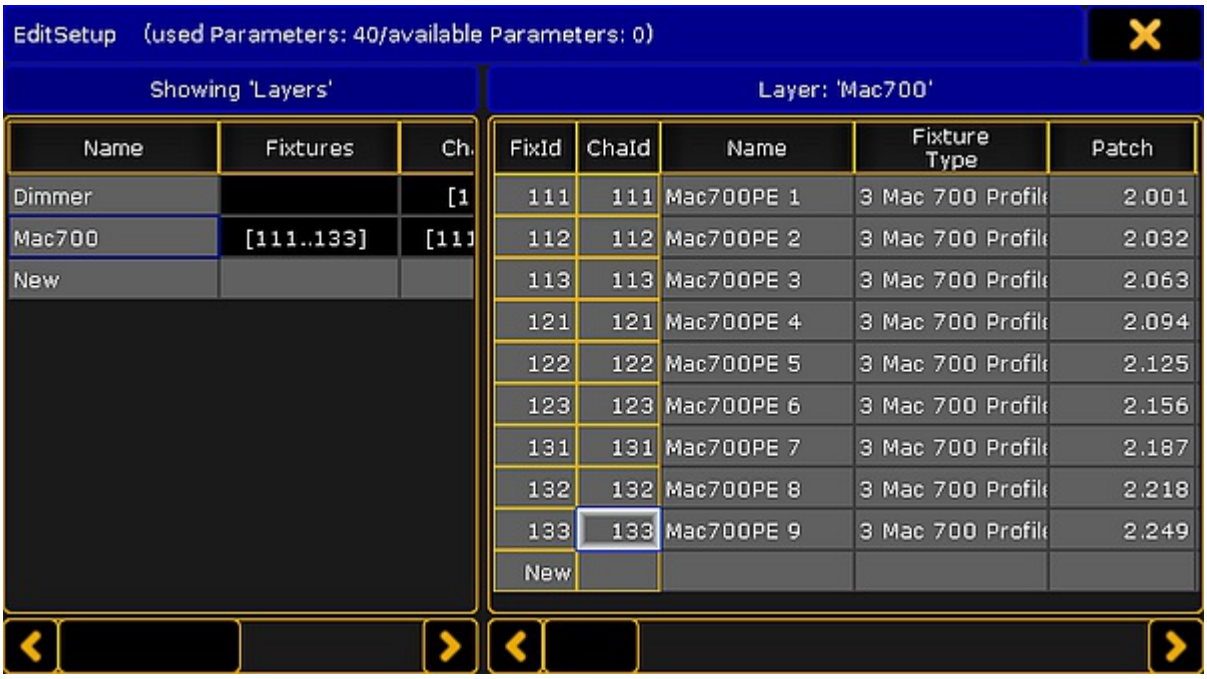
For the Channel and Fixture ID we need them both to start at "111".

The patch begins at the second universe with DMX channel 1 (that makes the first fixtures patch number "2.1").

And now press the Apply button.

But we are not quite done. We need to change some of the Channel and Fixture IDs to match the light plot. This is just like editing any other cells in a table.

When you are done your fixture list should look like this:



New fixtures in the Fixture Schedule

And now we can exit both the Edit Setup pop-up and the Setup menu. Confirm that you want to save the changes.

Go to the next page to learn about the Fixture Sheet.

11. Working with the Fixture Sheet

The Fixture Sheet is used for displaying all the attributes of the fixtures. The Channel Sheet only shows the dimmer attribute.

Creating the Fixture Sheet Window

Now that we have fixtures it would be nice to see what they are doing. To do this we need the **Fixture Sheet window**.

It might be a good idea to have the fixture sheet on a screen that is close to the encoders. If you are on a console it would be a suggestion to have it on screen 2. If you are using the onPC, then you could try to put it on screen 1.

To empty a screen and start on a fresh, press and hold the  (you do not have to "hold" in the onPC). Now you got a small pop-up in the lower right corner of your screens. It looks like this:

Small Encoder Settings

Tap where it says Clear Screen. This will delete any windows you have on that screen. If you tap "Clear All Screen" then you empty all your screens.

Now you need to add the Fixture Sheet.The **Fixture** Sheet is in the **Sheet** tab in the **Create Basic Window**.

In the Fixture sheet your fixtures are (as a default) represented as a list. Your fixtures are in rows and the different attributes (like Dimmers, Pan/Tilt, Gobos, etc.) are sorted in columns.

Also notice that you now got three "FT" fixtures at the bottom of the list. These are the automatically created "Fixture Type" fixtures - that you do not have to worry about.

Sheet Options

When you press the yellow ball in the upper left corner of the sheet you get the sheet options (it is also here you can delete a single window - if you have not noticed).

The options are separated into different areas. Each area have a tab.

The **Tools** tab gives you the option to add different elements to your view - scrollbars etc.

The **LayerMask** options allows you to activate and control some masking in your sheet (masking hides different elements).

The **Display** controls how your Fixture sheet looks.

In **Title Buttons** you can turn on or off the different buttons in the sheets title bar.

Mask (Local) is a mask you can apply to this specific sheet (if activated in the LayerMask tab).

In some sheets there might be more tabs and other options then the ones you can see in the options for the Fixture Sheet.

Most of these options are outside the scope of this Quick Start Guide. But there are some that you should change.

Open the Display tab and make the following changes:

- Symbol Output - Auto
- Symbol Feature - On
- Feature Sort - On
- Hide Empty Cells - On
- Merge Same Values - Off

Now tap the Save to Default button the title bar of the options.

What did all this mean? Well, let us have a look each of them.

Symbol Output is a small square in the Name cells. This square is displaying the current output (Dimmer and Color) of the fixture.

Symbol Feature is symbols in many of the cells. This shows you what the current Color, Gobo, Dimmer value and so on are in each of the relevant columns.

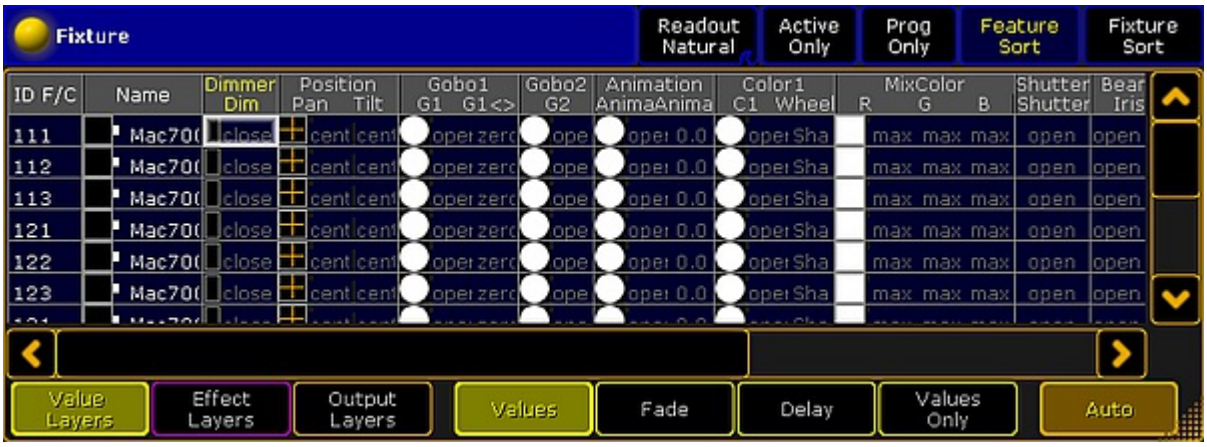
Feature Sort will move the selected feature/preset type (next page deals with these) next to the Name column. This means that you do not need to scroll left and right in your fixture sheet to see what you are currently changing on the fixture.

Hide Empty Cells can be very useful if you have a show with different fixture types. Then some fixtures will have some functions that others do not. Removing the empty cells can increase the readability of the sheet.

Merge Same Values is a function that will only write a value once in some columns, if the current value is the same for all elements. If for instance you have a RGB fixture and all three colors are at "Full", then it will combine the three RGB columns and just write "Full" once. When the cells are not combines then it will write "Full" three time. Having combined values can make it a little hard to see what each of the RGB colors are doing. In the RGB example, try to imagine that the column displays "Full Closed". Now you need to find out what two colors are at "Full" or "Closed". Having all three values visible all time means that you do not have to think about it. Sorry for the long explanation :-)

'Save to Default' means that the changes you just made, will be used every time you create a new Fixture sheet.

The Fixture Sheet should now look something like this:



The Fixture sheet

On the next page we are going to have a look at how to control fixtures.

12. Controlling fixtures

Being able to control your fixtures is one of the most important things using a grandMA.

The Preset (Type) Control Bar

The key to controlling fixtures is this bar:

Preset Control bar

It is the "Preset Control" bar. With this you can control what Preset Type you are controlling with your encoders.

All fixtures are separated into different function sections. This is called Preset Types.

The bar will only display the preset types you have access to. You might have noticed that before we added the Mac 700s the only thing in the bar was the 'Dimmer' button.

The bar might disappear when you move focus to something else. But you can always bring it back by pressing somewhere in your Fixture Sheet or Channel Sheet.

If you select a fixture, then the frame around each button in the bar might change (from gray to light green). The green frame indicates the Preset Types you can use for the selected fixture. If you clear your programmer and try to select channel 1, then you can see that it is only the 'Dimmer' button that got a green frame.

Playing with the movers

To control fixtures you need to select them. Let us try with fixture 111. Clear your programmer and press: 1 1 1 Please. This selects the fixture.

Dimmer

You can assign a dimmer value using the methods you learned on the previous pages or you can select the Dimmer preset type by touching the bar and turn the left encoder to turn up the lights.

Position

Select Position by tapping it in the bar. Notice how your encoder changes function according to what preset type you have selected. With the "Position", your encoders look like this:

Position encoders

Turning the encoders changes the values. Turning them with the encoder pressed changes the value faster. if you want to make smaller movement with a turn (increasing the resolution) you can tap the "Normal / Fine / Ultra" button next to the value.

Notice how some of the buttons in the Preset Control Bar have a red square and some a gray one. The red one indicates that you have changed values in that preset type. This value will be saved if you press the 'Store' key (do not do it now).

Gobo

Tap the Gobo button in the bar. Now instead of turning the first encoder - now labeled "G1" - just press it shortly. This is where the "calculator" pop-up proves its power. The "calculator" is the pop-up that allows you to input values to attributes using a graphic interface instead of just numbers. This is what it looks like with "Gobo 1" selected:

Gobo Calculator

Next to the usual buttons with numbers, there is a lot of buttons that changes according to your selections. When gobo is selected you have easy access to all the different gobos. Try to tap the button called "Water".

When our fixture has more than one gobo wheel you can choose the others by using the "Feature" button. It looks like this:

Feature button with Gobo1

You can tap the text (Gobo1) to toggle thru the possible features. All buttons on the screen with the little "wave" icon in the lower right corner have a swipe function. Try to press/click and hold while you move out of the frame of the button, then you can release the hold. This will open a small list with the possible choices:

Swiped Gobo Feature

Here you can tap the feature you want to control.

Color

The last thing I will introduce you to, is how to control colors.

Tap the Preset Type button Color. The first thing you see is the attribute "C1" - This is the first color wheel. This works just like the gobo wheel we just looked at.

Now try to select "MixColor" using the "Feature" button. This assigns R (red), G (green) and B (blue) to the first three encoders (in that order). Now you can control these three attributes manually.

When you work with colors, then you can also use some special dialogs. There is a small button called "Special Dialog". It is located between the Preset bar and the labels for the right encoder. Please tap it.

It gives you a pop-up that is called "Color Picker". Here you can tap anywhere in the colored area to give your fixtures the color you tapped.

It uses the MixColors as a default and sets the colors wheels to open white.

The color picker have four different modes. You can change between them by pressing the buttons on the right side on the screen.

Fader:

This is three different ways to mix colors. HSB (Hue, Saturation and Brightness), CMY and RGB.

HSB:

This is a big color area where you can choose a color.

Swatch Book:

This is a list of the most used gel manufacturers and their gel catalog. You can choose a manufacturer and then one of their colors. This is not hundred percent accurate, but it will give you something close.

Raw Faders:

The faders will give you direct access to the MixColors. As a default it is displayed as RGB even though your fixtures might use a CMY color system internally (like the Mac700). This can be changed in the setup.

The color picker looks the same no matter what color system your fixtures are using. The exception is the "Raw Faders". They might show you more faders when you use LED fixtures with multiple colored LEDs.

Notice how your Fixture Sheet changes and always shows you what your fixture is outputting.

Take some time to experiment with the fixture controls. When you are done, clear your programmer and move on to the next page.

13. Preset and Preset Pool

A preset is a way to store a set of values.

What are Presets

There a 10 default groups of presets. They are named "All", "Dimmer", "Position", "Gobo", "Color", "Beam", "Focus", "Control", "Shapers" & "Video". Basically each preset group can only store their own kind of info - for instance a "Position" preset can only store Position values.

The exception to this is the "All" presets. They can store info about all the types of values.

In the **Create Basic Window pop-up** you can also see that there is something called "Dynamic". This is not a preset pool in it self. It is a pool window that changes to the pool of the Preset Type you select in the Preset Type Control bar.

The Preset Pool windows are a lot like the Group Pool window. There are of course differences.

If you do not have any fixtures selected and press a preset in the pool, then you select the fixtures that can use the preset. Second press will apply a preset link to the attribute in your programmer. This means that you **are not coping** the values stored in the preset to the attribute - you tell the fixture to go look in the preset to see the values. We try this in chapter 14.

If you have a selection of fixtures and you press a preset, then it will apply the preset link (if the fixtures can use them) to the fixtures.

Create Preset Pools

In this guide we are going to use "All", "Position", "Gobo" and "Color" presets. You can also try to create a "Dynamic" pool, just for fun.

How you arrange them is all up to you. You know how to create and store views.

To increase fast visual recognition it can be a good idea to color the frames of the different preset pool. This can be done from the pool options.

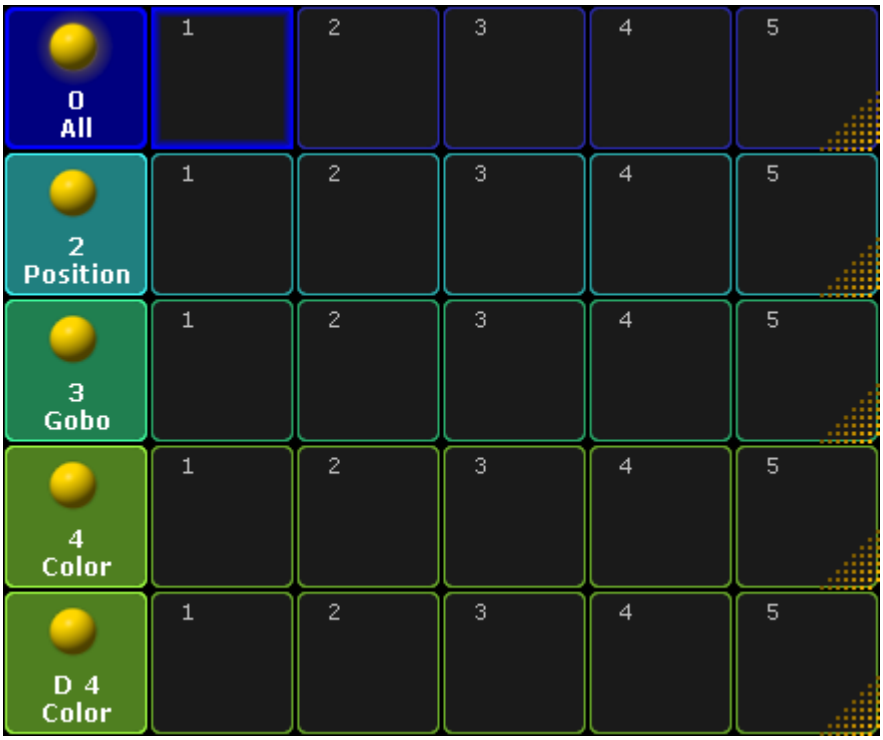
You enter the Pool Options by pressing the yellow ball in the pool title button:

Pool title button

In the options pop-up you need to tap where it says Frame Color. Now you have indicated that you are working on the color for the frame. Now you can select a new color using any method you like in the left side of the options pop-up.

Set a frame color for the preset pools we need. Notice that you do not need to set it for the Dynamic pool, it follows the color of the selected preset type.

When you are done, your view could look something like this:



Colored but empty preset pools

On the next page we are going to look at creating presets.

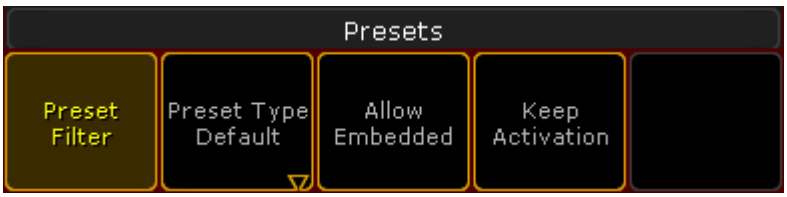
14. Making presets

Next we are going to make some presets.

Some preparations

In just a few seconds we are going to store a preset. But to make sure we save them correctly we need to examine the "Store options". Press and hold the Store key for approximate 1 second until the Store Options pop-up appears (on screen 1).

We need the "Preset Options" to look like this:



Preset Store options

Press the buttons until they are correct, then press the Save as Default in the title bar.

Finish by pressing the Esc key twice (we are not storing anything right now).

Creating presets (finally)

All right, give your moving heads different values in the pan and tilt.

When you are happy, make sure you can see the preset pool called "Position". Press Store and then the first Position preset pool button.

Now instead of values your fixture sheet shows "P2.1". This refers to Preset Pool 2, Pool Button 1. When we name presets, then the name will appear instead of this number.

Move your lights to different position. Now press: Store Preset 2 . 2 Please. This creates a second position preset.

The "2 ." is a reference directly to the position presets (you may have noticed the pool window are called "2 Position").

Move your light, make one more position preset and clear your programmer.

Select the first Mac 700 (Fixture 111). Change the color to a blue one using the Special Color Dialog. Now store the first color preset.

Notice how the position presets have a red "S" at the top of the pool button. This means that the position preset

are locked to the fixtures that specifically had position values when the preset was stored - it is called a "Selective" preset. So if you add more moving lights later, then they cannot use the position preset already made.

The color preset you just made have an orange "G" in the top. This means that it is a "Global" preset. A global preset can be used by all the fixtures of the same fixture type. So all our Mac 700s can use the color preset even though we just had one fixture selected when we made it. If you later add more Mac 700s then they can also use the color preset.

There is a third preset option called "Universal". They are used to make presets that applies also to other fixture types than the ones used during the creation. So if we had made the color preset as a universal preset, then we could use the color preset on any fixture that have a MixColor system.

Make 2 more color presets and make 3 different gobo presets. When you are done, please clear your programmer.

Press: 1 1 1 Thru 1 3 3 Please Please Please Store Preset 0 . 1 Please.

Now you have made an "All" preset that contains all the default values of the fixtures. The "Please Please Please" activates all parameters of the selected fixtures. If you have a selection of fixtures and press 'Please' multiple times then you activate and deactivate all the attributes of the selected fixtures. So the first 'Please' made the selection. The two following 'Please's activated all possible attributes in the fixtures.

Naming the presets

Did you notice that the Color and Gobo preset automatically named them self. When possible then the grandMA2 tries to add a descriptive name. When it does, then it adds a hashtag after the name.

It cannot guess the position the fixtures have in the Position and All presets. You need to add a name that makes sense. Press Assign Assign and then the first position preset. Type a name in pop-up.

Do the same for the other Position preset and the All preset.

You should have presets that look something like this:

Final Presets

There are many details about presets. There is lot of information on a preset pool button and they can be used for many things - but it is outside the scope of this Quick Start Guide. Use the menu on the left side to read more about presets - but wait till you are done with this guide :-)

This is the presets we need for making our new second sequence. Go to the next page to do that.

15. A second sequence

We are going create a second sequence and link the two sequences.

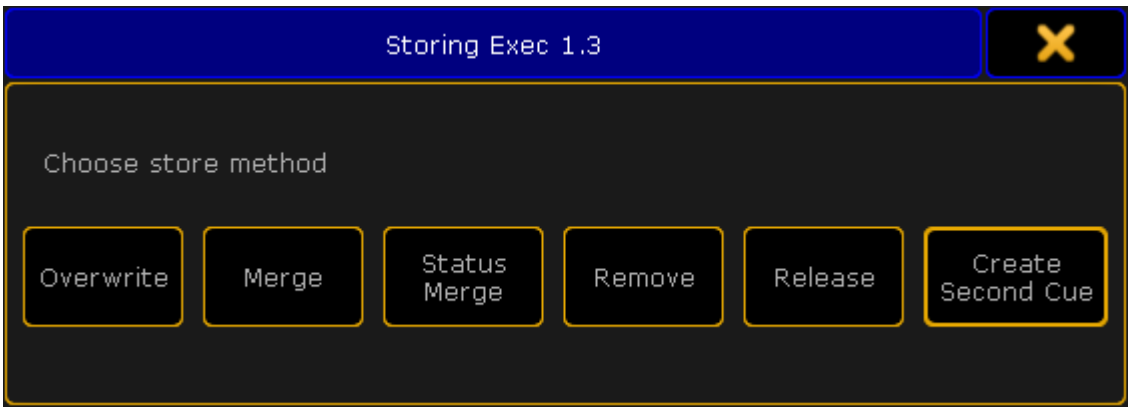
Making the second sequence.

Clear your programmer. Press the first position preset twice.

Now press Store Exec 3 Please. If you are on a console you can just press the 'Store' key and then one of the executor buttons labeled "3".

Now you got a second sequence.

Let us build some more into it. Select executor fader 3 by pressing Select followed by one of the executor buttons associated with executor fader 3. Press the first Gobo and Color presets followed by Store Please. Then we got this pop-up:



Store Method pop-up

Here you choose how you want to store things. Tap Merge.

That was our first cue in the second sequence. Clear the programmer. Press the second Position preset twice followed by the second Gobo and Color presets and then Store Please. This time choose Create Second Cue in the store method pop-up.

Make a third cue with the third Position, Gobo and Color presets. Again you can use Store Please, and this time it will not ask what to do. When you have more than one cue, then it will just create a new cue with the next available whole number.

The last cue you need to make is a cue containing the "All" preset. All the cue times need to be 0 seconds! Clear your programmer when you are gone.

Setting up the sequences (Assign Menu).

Select your first executor. Now press the green name field above the executor fader (where it says "Main Show"):

Executor 1

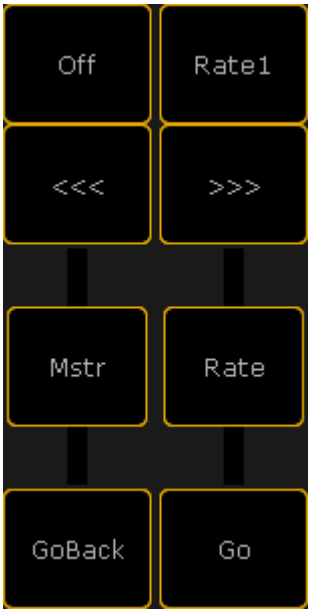
On screen 1 you see some of the options for that executor. This window can be a bit confusing the first you see it, but right now we are only interested in is the size of the executor.

Make sure the you are at the correct view by tapping Function in the upper right corner.

Now we can change the width of the executor by pressing the X2 key (or where it says "Width 2").

Now we need to change the default button assignment. The buttons and fader can have a lot of different functions (explaining those goes beyond the scope of this quick start guide). Tap where it says XF and in the small pop-up select Rate.

Press where it says GoBack and choose the option called Rate1. Change the rest of the buttons so they end up looking like this:



Executor assignment

Close the **Assign Menu** using the yellow X.

What is a Rate fader? Well, the rate fader is used for changing the overall speed of the cues. You can speed it up or slow it down to a complete stop. The cue times are not changed in the sequence permanently, just adjusted according to the rate fader position.

The button called "Rate1" resets the fader to the mid position, where all the times are back at their saved times.

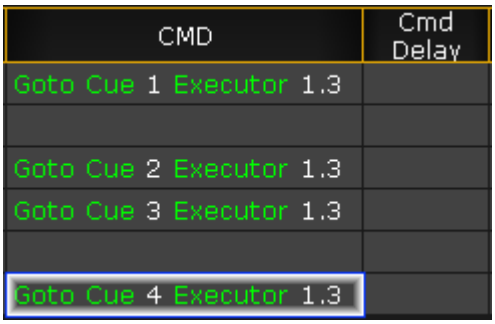
The '<<<' and '>>>' steps one cue back and forward accordingly, without time and without running the follow cue.

Linking and editing the two sequences.

Did you noticed that you did not save any dimmer values to the fixtures in the second sequence (we did actually store a dimmer value in the last cue - the default dimmer value)? We are going to put those in our first sequence and we are going to do some sequence linking.

In your **Sequence Executor** window make sure you can see the "CMD" (command) column.

Right-click in the "CMD" cell for cue 1 and in the pop-up write: **Goto cue 1 exec 1.3** followed by a 'Please'/enter. In the "CMD" cell for cue 3 right-click and write: **Goto cue 2 exec 1.3** also followed by a 'Please'/enter. In cue 4 the command is cue 3 on executor 1.3. And in cue 6 we need a command to cue 4. When you are done it should look like this:



The needed commands

Now press the big Go+ key in the console or in the **Masters** section in the onPC. Notice that booth sequences go to cue number 1. That is the command making sure the second sequence is also running.

Press the >>> executor button. Turn on your moving light at full. Press Update. Tap where it says Original Content Only until it changes to "Add new Content". Then tap Save as Default.

This allows you to not only update existing values, but also add new values to our sequences.

Now there are two possible sequences to update. Make sure you update the one called "Sequ 1 'Main Show'". This can be done by simply tapping the correct line.

Go to cue 6. Notice that the moving light gets the dimmer value "0.1 Default" (or if you gave it a different name). This is actually the value 0% stored in the All preset. To make sure that no matter what, they go to 0, let us store this value in the first sequence also.

Press: 1 1 1 Thru 1 3 3 . . Update. Now you can see that you also have the option to update the preset. **Do not do that**; just update the cue in sequence 1.

Clear your programmer and try moving back and forward in your sequence to see how the link works.

Notice that the moving heads still get the dimmer value from the All preset. This is because sequence 1 first give them 0% and then immediately calls the cue in sequence 2. So the last information they got is from sequence 2 - the value from the All preset.

If you want to make sure that the value from sequence 1 is the one they got, then you can give the executor a higher priority.

Press Assign followed by any of the executor buttons labeled 1 or 2. This opens the **Assign Menu** where you assigned the button and fader functionality. This is also where you can change the Executor options. Tap where it says Options on the right side of the screen.

This opens the a window with many options. The one you need to change is the top one in the second column - column named "Playback". Tap where it says Priority LTP and in the small select pop-up select the one called "High". You might get a warning that this will turn off the executor - please confirm this. Nice to know if you are in a live situation :-) Close the Assign Menu.

Now you can test your sequence and see that now when you run cue 6 the dimmer value reads "closed".

There is no need to separate the moving lights from the conventionals. It was just a way to demonstrate the possibilities.

Last thoughts

It might not be a pretty show, but you should save it anyway. And you should do this at a regular interval during your programming. You can use the double press on the Backup key or use the **Backup menu**.

Now you got a small introduction to the grandMA2. It is a very advanced and flexible console. There are many function and details we have not explored in this guide.

The rest of the manual will help you finding your way around the functions. There is also a lot of help in the videos on MA lighting (external link to the Internet) plus the big international community.

Have fun learning and programming on the grandMA2.

16. Index