

## Welcome to Strand Lighting's Tutorials for the PaletteOS



PaletteOS is the Palette Operating Software and it runs on all consoles...large and small.

Historically channel control has been about selecting channels on command line and building groups and subs. Today's PaletteOS offers you so much more. From touchscreen interfaces to learning as you type. We will explore all the ways you can select channels and assign levels.

This tutorial will provide you with comprehensive instruction for the covered topic. Just follow along and look for more tutorials in the future.

Any tutorial syntax for you to follow along will be in bold. An example is...

**1 @ 5 ENTER**

Now relax...power up the console or the Off-Line Editor and let's get started.

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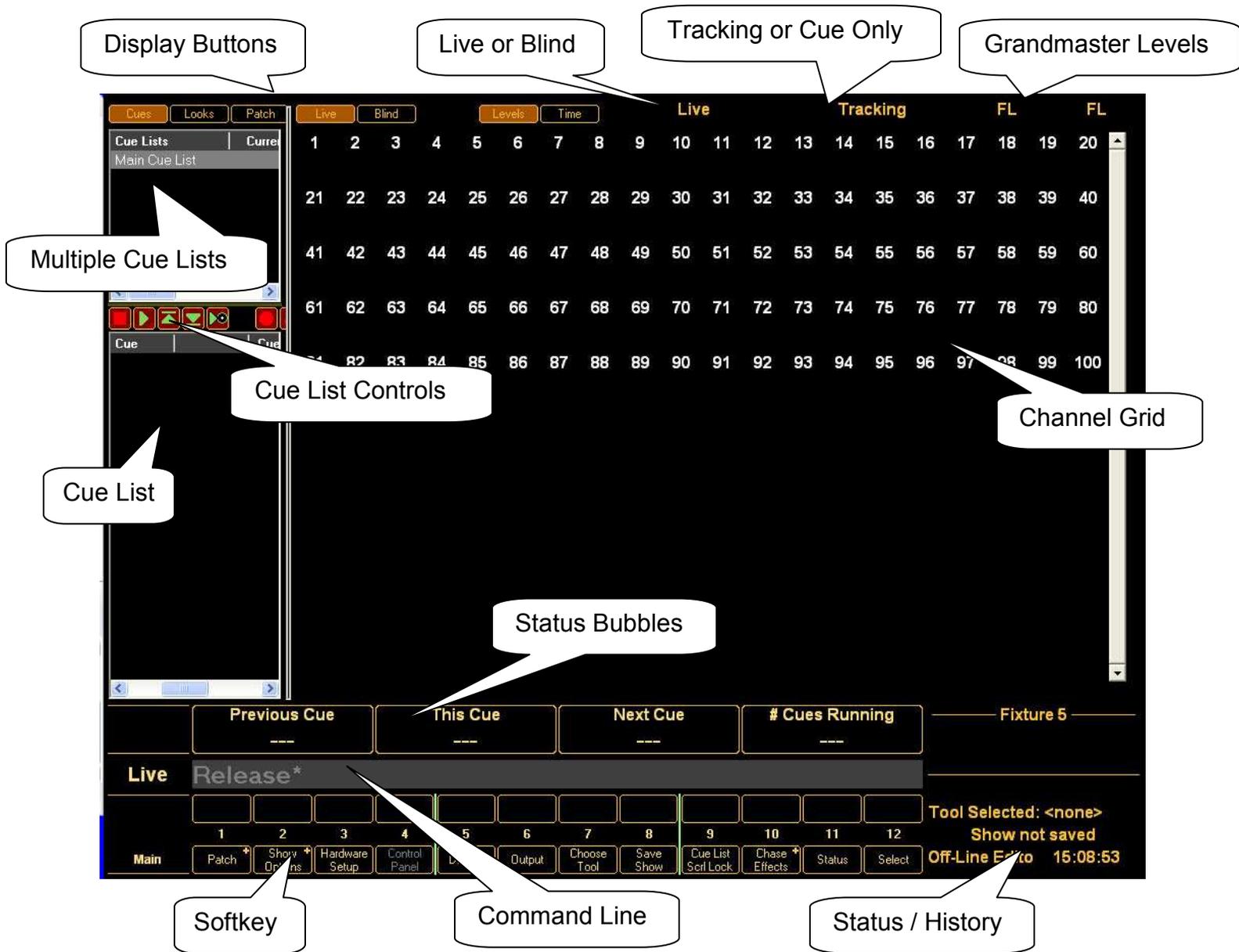
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## Console Screen Layout

In order to get familiar with the console screen, let's identify the key areas of the layout.



Many screen layout items are configurable. Take the cursor to the top of your window and a hidden taskbar will appear. There are 3 pulldown menus; File, Display and Help. In the Display pulldown, there are many display options that can be turned on and off. The tutorial will go through these as needed but feel free to experiment.

Now let's make sure that the desk's options are setup to provide a comfortable programming environment.

## Hardware Setup

### S3 (Hardware Setup) S12 (Console)

The *Level Entry Mode* determines the format for assigning channel's levels using the Command Line. The Command Line entry is completed only when the Enter key is pressed.

The options here are...

**Use Enter Key:** levels are set when the Enter key completes the command.

(i.e. 1 @ 5 ENTER)

**Single Digit Entry:** levels are set after the first digit is entered. (i.e. 1 @ 5)

**Two Digit Entry:** levels are set after the second digit is entered. (i.e. 1 @ 50)



*Note: All softkey notations within dialogue boxes will say S1 - 12 when on a console, F1 - 12 when using the Off Line Editor.*

Feel free to experiment with each level entry mode to find what works best for you.

*Note: If you choose to use Single Digit Mode and you want the level to be 55% just type 1 @ 055.*

The tutorial will assume that the Level Entry Mode is set to *Use Enter Key*. If you select another mode, please adjust the tutorial's syntax accordingly.

## Channel Control

Channel Control is about the ability to provide intensity level information based on a percentage intensity value to the fixtures patched in the console.

### Command Line Entry

Traditional methods will have you using command line style operation. Using the main tile on your console, type...

**1 THRU 5 @ 5 ENTER**

You'll notice that the command line shows this...



While the channel grid shows this...



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
50	50	50	50	50															
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

*Note: The Command Line entries grey out when the command is completed with the Enter key.*

When the channels are selected, you can roll the level wheel to adjust intensity.

### Clear / Backspace

Pressing CLEAR or Backspace will unselect the selected channel set. Try it now... **CLEAR**

*Note: Some generations of hardware have the  key while some have a CLEAR key.*

Since the channels are no longer selected, you will have to reselect the channels in order to affect change to them. We'll talk more about intelligent options for this later in this tutorial.

## ***Graphical User Interface Option***

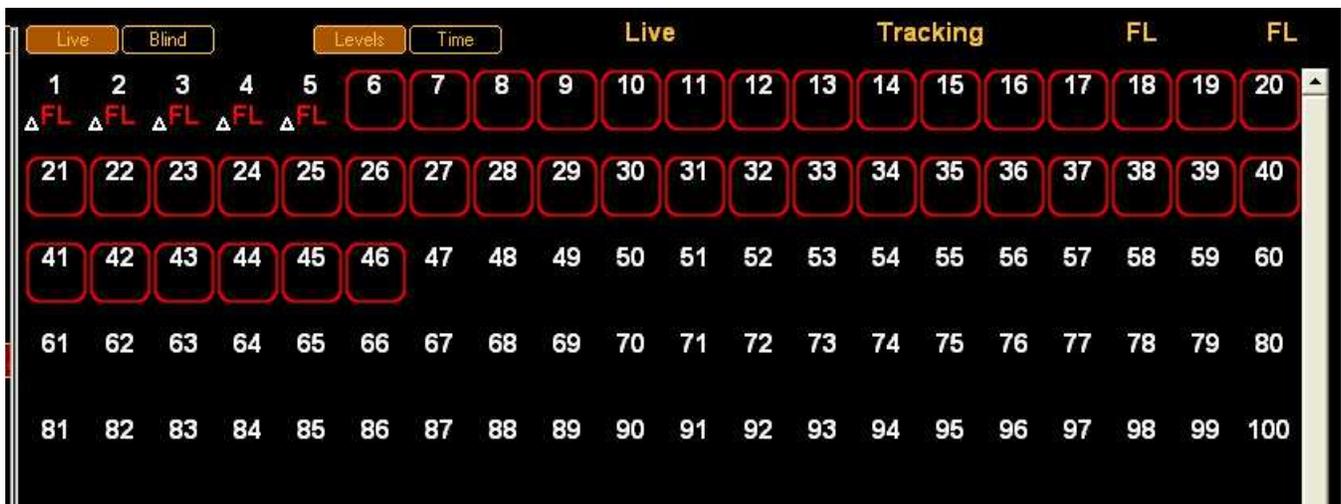
Because the software is built on a graphical user interface platform, you now have options other than command line for channel entry.

### **Click and Select**

You can use the mouse to click and select channels.

### **Click and Drag**

You can also use the mouse to click and drag to select a range of channels.



When experimenting with this, click and drag horizontally across the screen. Then click and drag vertically, you'll notice that the selection set will include all channel numbers in that range.

If your system has a touchscreen, then your finger can replace any use of the mouse here.

Once you have the channels selected (with the red edging around each channel), the wheel on the mouse or the level wheel on the console itself can be used to roll up the levels! Very simple.

Now let's talk about all the ways that you can assign levels to the live output.

## ***Assigning Levels Live***

There are many ways to assign levels to channels. Please follow along and complete all suggested commands below.

### **Command Line**

You have experimented with this earlier in this tutorial but I want to go over all the ways that this can work. Below you will find examples that I will explain individually.

### **Full**

Quickest way to get a set of channels to 100%.

**1 THRU 5 FULL**

### **@ LEVEL ENTER**

Most common way to assign the most common of values that are rounded to every 10%.

**6 THRU 10 @ 5 ENTER**  
**11 THRU 16 @ 70 ENTER**

If you need more specific levels then you can always use a two digit number.

**17 @ 15 ENTER**  
**18 @ 05 ENTER**

### **UP % / DOWN %**

There are two shortcut keys that allow you to adjust the selected channels up or down a specific percentage value. The default value used is 10% and can be adjusted in *S2 (Show Options > S9 (General) > S4 Up/Down Percent*.

**16 UP**  
**15 DOWN**



*Note: When you go into Show Options, you will, by default, go into the General tab. So if you are accessing this via softkeys, then you can skip S9 General in the instructions above.*

Handy Hint: You can also press and hold SHIFT with UP% and DOWN% and the level will go up in 1% increments.

## ON

The ON key that is on the main tile of the desk has a default value.

### 21 ON

You'll see that 21 is at 80%. This is the ON value and it can be changed in S2 (*Show Options*) > S9 (*General*) > S5 (*On Key Level*)

## DMX Value

You can assign a channels level using a DMX value rather than a percentage value.

19 @ . 128 ENTER **19 At Decimal 128\*** It's the decimal point that makes this work.

## Select and Adjust

You can also just select channels and then adjust them.

22 ENTER ON  
23 ENTER UP UP  
24 ENTER @ 5 ENTER  
25 ENTER FULL  
26 ENTER - roll the level wheel

## @ @

This is an old Broadway shortcut to get a channel to full.

### 27 @ @

As you can see there are lots of ways to assign levels and we're not done yet!

## @ ENTER



@ Enter is an old LightPalette command that means "to get rid of" or assign a null value. Before any cue has been recorded, @ ENTER will take a channel's value out or off. Notice that the shown value is in purple. That's the tracked color.

After a cue (or several cues) have been recorded, @ ENTER may do different things. In the first cue or the cue where the channel gets its first instruction, the level will go out. If you are in a cue where the channel has changed from the previous cue, @ ENTER will remove the current instruction and present the channel in its previous cue's value. If you are sitting in a cue where the value is tracking, then nothing will happen as there is no instruction to remove. You'll learn more about this in the tutorial about recording cues.

## ***Channel Ranges***

Earlier you played with selecting ranges of channels but you don't have to limit yourself to consecutive channel ranges.

### **Thru, Plus and Minus**

This one shows you how to incorporate adding ranges with the + or plus sign.

**31 THRU 35 + 41 THRU 45 FULL**

This example uses the – or minus key.

**46 THRU 55 – 50 THRU 51 @ 5 ENTER**

### **Thru On**

This one is a really nice trick. Let's say you want to grab all channels within a range that have a level, ignoring the channels in that range that are not on...

**31 SHIFT THRU 55 ENTER**

By holding down the Shift key while pressing the THRU key, you get THRU ON presented on the command line. Now let's press Clear so that nothing is selected before we proceed.

**CLEAR**

## Select

With previous consoles, to grab a selection set that you have already used, you would have to reenter the channel range manually. What you don't know, is that the console has been learning as you type. Below you'll learn a very easy way to help the console help you.

**S12**  
**(Select)**



Now look at all the options that you have...

**S12**  
**(Previous)**

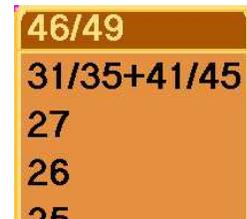


Now you have selected the previous channel range that you had selected. I'll do you one better. Let's say you would like to go further back that just the last selection set.

*Note: Shift plus selection set softkey will use its filter for the levels coming from the current cue list only.*

**S12 (Select) Press and hold S12 (Previous)**

...you'll notice that you get a pop up list. This is a history of the last 10 channel selection sets that you have used. You can use your mouse or the arrow keys and Enter to select from this list.



One of the really nice things about all of the selection tools is that it minimizes how many groups you have to build. Now let's talk about the other selection tools on the Select softkeys.

**Levels > 0%:** will select all levels above zero. A great way to grab all channels for a blackout.

**Levels Going Up:** will select all levels that are at a higher level than the previous cue's levels.

**Levels Going Dn:** will select all levels that are at a lower level than the previous cue's level.

**Captured Attributes:** will select all channels that currently have Captured Attributes. An easy way to grab all moving lights that you are currently working with.

**Using Palette:** will allow you to select all moving lights that are in a particular palette. An example would be, "Select all fixtures in the Night Sky gobo and make them Pink".

**Pattern:** will allow you to select channels using your own modifier. **S12 (Select) S6 (Pattern) 5 ENTER** will select every 5<sup>th</sup> channel from the current selection set.

**Random Order:** will select all currently selected units in a random order. This is useful for adding ranged values or ranged Independent Timing in a random fashion.

**Recall:** will recall a selection set that has been previously stored using **S12 (Select) SHIFT S8 (Store)**. After the selection set has been stored, it can then be recalled **S12 (Select) S8 (Recall)**

**Odd:** will select only odd numbered channels from the current selection set.

**Even:** will select only even numbered channels from the current selection set.

**Invert:** if you have many channels adjusted (deltaed) but only some channels are currently selected, this will unselect current channels and select all non-selected captured channels.

**Previous:** will select the previous selection set. Press and Hold **S12 (Previous)** and the 10 previous selection sets will appear.

## **Undo / Release**

*Note: Some consoles (Palette II (black), Palette VL) have an UNDO key. Others (Palette I (silver) and LightPalette consoles) have a RELEASE key. These are the same function within the software.*

Undo or Release will return the channel's level to its previous control. For example...

**UNDO UNDO** will release the selected channels from active control. In your case, nothing else is controlling them so their levels will go away.

**UNDO** again, will release the adjusted channels that were not previously selected.

At this point, you will have an empty channel grid.

Now if you want to restore this...

**SHIFT UNDO** will restore the last Undo step. This will be all of the adjusted channels that were not selected.

**SHIFT UNDO** again and it will restore the levels to what were the selected channels.

**UNDO ENTER** will return the selected channels to its previous level. So if you have a channel at full then you take it to 50%. **UNDO ENTER** will take it back to full.

## Level Ranges

Now let's talk about ranges of levels across ranges of channels.

### 61 THRU 70 @ 10 TO 100 ENTER

Note: The TO key is also the MINUS key.

Live		Blind		Levels		Time		Live		Tracking		FL		FL					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Δ FL	Δ FL	Δ FL	Δ FL	Δ FL	Δ 50	Δ 70	Δ 70	Δ 70	Δ 70	Δ 60	Δ 80	Δ 15	Δ 5						
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Δ 80	Δ 80	Δ 20	Δ 50	Δ FL	Δ 38					Δ FL	Δ FL	Δ FL	Δ FL	Δ FL					
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Δ FL	Δ FL	Δ FL	Δ FL	Δ FL	Δ 50	Δ 50	Δ 50	Δ 50			Δ 50	Δ 50	Δ 50	Δ 50					
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
Δ 10	Δ 20	Δ 30	Δ 40	Δ 50	Δ 60	Δ 70	Δ 80	Δ 90	Δ FL										
81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

Note: If you select the channels in reverse order, then the levels get applied in reverse order. In fact, the levels get applied in the order in which you select the channels. Very powerful.

## Selection Order

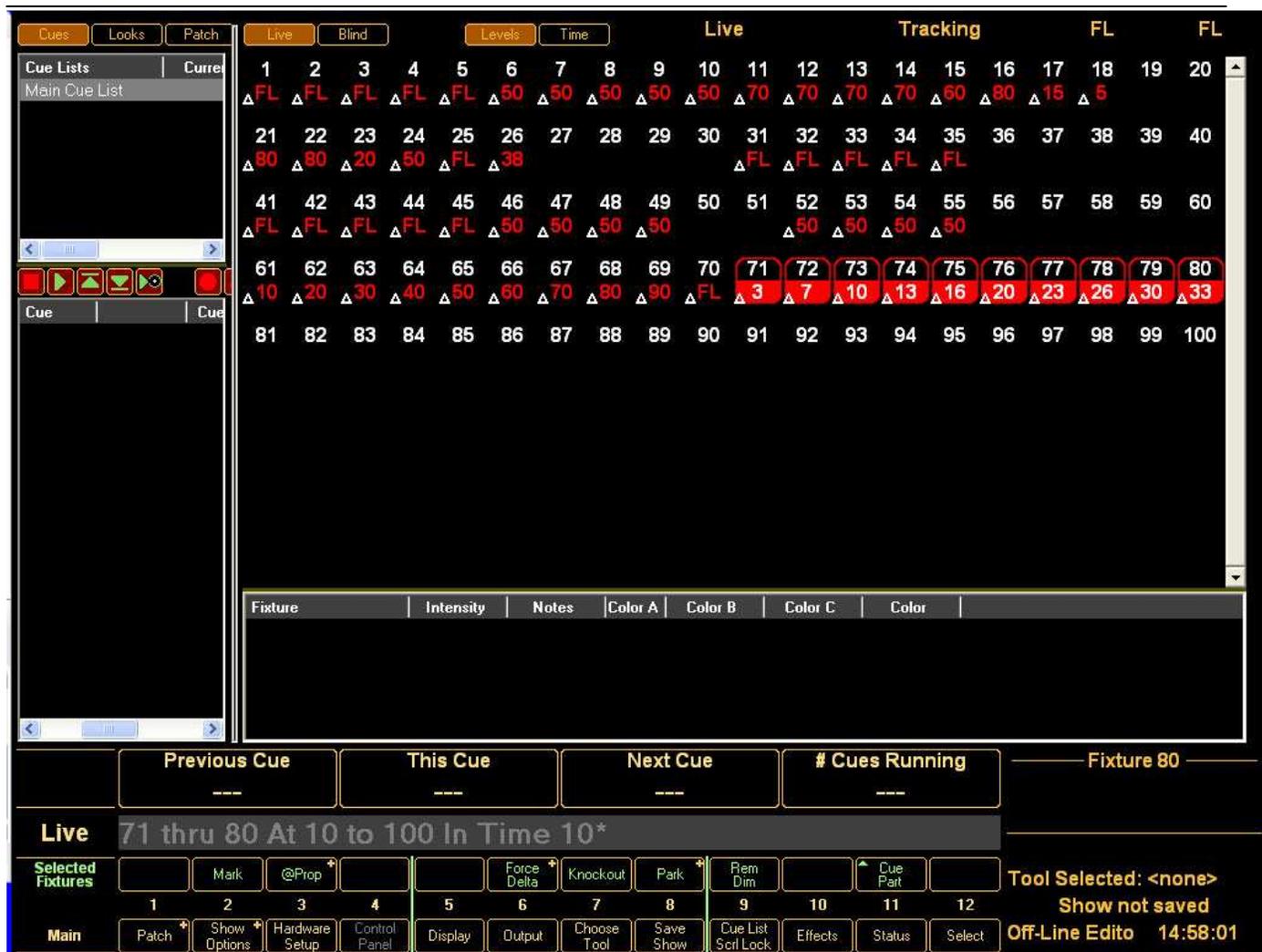
Selection order has an affect on applied range values. The way it woks is that ranges of levels get applied to the channel selection set in the order in which they were selected. So if you select 1 thru 10 then assign them a range of values that go from 10 to 100 then 1 gets 10, 2 gets 20 and so on. But if you select 1 then 3 then 5 then 7 then 9 then 2 then 4 then 6 then 8 then 10, and assign them a range of values that go from 10 to 100 then 1 gets 10, 3 gets 20, 5 gets 30, 7 gets 40, 9 gets 50, 2 gets 60, 4 gets 70, 6 gets 80, 8 gets 90 and 10 gets 100.

Try it and see!

## Assigning Level with Time

Another advanced feature is assigning channels level and time all in one command.

### 71 THRU 80 @ 10 TO 100 @ 10 ENTER



*Note: This screenshot was captured while the levels were moving after the command was entered.*

This will assign 71 to 10%, 72 to 20% and so on but everyone will move to their level in a time of 10. You can actually get more complex with this so that every range of channels has a range of levels over a range of time!

*Note: Notice the command line. When the second @ was entered the text says In Time.*

This next example shows how you can range time across a range of channels with a range of levels.

## 81 THRU 90 @ 10 TO 100 @ 1 TO 10 ENTER

You'll notice that 81 went to 10% in a time of 1 second while 90 went to Full in a time of 10 seconds and the software is smart enough to figure out all channels and levels and times within the range. Very slick.

## Adding Delay

This can be taken one step further.

**91 THRU 100 @ 10 TO 100 @ 0 TO 9 / 5**

This complex command will take 91 to 10% with 0 delay and a time of 5, 92 will go to 20% with a delay of 1 and a time of 5 and all the way up to 100 at Full with a delay of 9 and a time of 5.

Wow...that's a lot of power. But let's come back down to earth and talk about a more common feature in the next section.

## ***Advanced Features***

### **REM DIM**

Rem Dim (Remaining Dimmer) will turn off all non-selected channels and leave the selected set as the remaining dimmer. It's a quick way to go down to just a selection set to determine if there is a focus problem with one light. I often will be programming and quickly type **1 REM DIM** to look for a problem on channel 1. When done, just do a full **UNDO / RELEASE** to return.

### **Park**

There are many times in the theatre when you need a channel on because the light needs to be worked on or it need to be on for an actor to see by but you don't need it on for cueing. In fact, it gets in the way and you are afraid to continue recording because you don't want that light to be stored in the cue. Park is a great feature to help with this.

I'll start fresh in case you have Release the channels that you have up.

**1 FULL      1 M8 (Park) ENTER**



*Note: to achieve M8 on Palette II series hardware, you press and hold ALT while selecting S8.*

You'll notice that you have a little green "P" next to that channel.



That indicates that the fixture is parked. You'll notice that the adjusted value of Full has disappeared. However the channels is still outputting at full.

*Note: You can confirm this by going into Patch and selecting S11 (Patch By Fixture) if need be.*

### **Unpark**



Shift Park will give you Unpark. This will restore the parked channel to normal response.

*Note: Any key that has a plus sign in the corner signifies that Shift and the key will give you a different selection option.*

**1 SHIFT M8 (Unpark) ENTER**

## Move / Copy Fixture Data

What if you wish to copy fixture data from one channel to another? Select the fixture or group of fixtures beforehand then press the COPY key and you'll get this dialogue box.

The selected or "source" fixture will be inserted into the *S1 (Source Fixtures)* box. Just type the "destination" fixture into the prehighlighted *S5 (Destination Fixtures)* box and press OK or ENTER. Done.



If you want to select a Group of fixtures or use the Select Recall, the buttons are available for that. *S9 (Attributes+)* is there to filter out attribute families for moving lights.

If you prefer to "move" the data, just press the *Move* button first. A similar dialogue box will appear with similar options.

## Tools

At this time, I'll only go through the tools that pertain to conventional channel control.  
*Note: Moving light tools will be covered in a moving light tutorial.*

### Highlight

Another powerful and intelligent feature is Highlight. Highlight is one of many Tools that can be assigned to the Tools button.



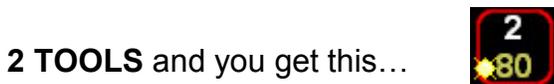
#### S7 (Choose Tool)



*Note: The LightPalette hardware has a dedicated Highlight button.*

#### S8 (Highlight)

Now the status area says *Tool Active: Highlight* so when you press the Tools button, it will activate the selected tool.



To deactivate the Tools key just press TOOLS again.

*As you activate and deactivate the Tools key, you'll see the status area toggling between Tool Active: Highlight and Tool Selected: Highlight.*

### Channel Check

To do a channel check, take the Highlight tools that you have just learned about and continue with...

**NEXT**      **NEXT**      **NEXT**

This will advance to the next channel for you.

*Note: you can also use PREV to go back to the previous channel.*

## Fan

I'll let you experiment with fan, but it will allow you to activate a fan tool that gives you lots of fanning methods to apply. Just select the appropriate fan tool and roll the wheel.

- Fan Center
- Fan Right
- Fan Left
- Fan Ends
- Fan Random +
- Fan Random +/-
- Fan Sine
- Fan Tangent

## Lowlight

Lowlight allows you to take the selected channel to full and all other live channels will glow at 20%. This helps you to still see the other channels in identifying a light or a problem.

## Auto Fixture Check

This is dialogue box solution for an auto-incrementing channel check. Please select **S7 (Choose Tool) S12 (More)** and you'll see additional tools.

Select **S1 (Auto Fixture Check)** and a dialogue box will appear.

Just populate the boxes accordingly and your off and running! If you select *Automatic Advance*, nothing else needs to be done.

To stop the procedure, close the dialogue box.

## Fixture Check

This is a dialogue box solution for a channel check. Please select **S7 (Choose Tool)**, if you are not already on the second page of tools, select **S12 (More)**, if you are already there, then just select **S2 (Fixture Check)**.

Just populate the box accordingly and use the softkeys **S2 (Go Back)** or **S3 (Go Forward)** to advance.

*Note: An additional feature here is S4 (Flash) that will flash the channel's level on and off if selected.*



The rest of the tools don't really fall under the heading of channel control but here is what they do.

## Output Check

Output check allows you to perform a dimmer check much as you would a channel check. See *Fixture Check* for pertinent info.

## Fixture Offset

Fixture offset allows you to offset certain parameters of the fixture when moving a show from one venue to another and attributes can be globally offset.

## Snapshot

Snapshot allows you to capture the state of the lighting system when it is being controlled by the input of another console.

With the next tutorial, you'll learn about storing these complex commands and having them playback as cues.

Happy Programming!