

# Grid Control

## Introduction

Grid Control is a utility tool to help work with MA Lighting grandMA3 Selection Grid arrangements.

Grid Control provides a number of helpful tools to be able to make more complex adjustments to your Fixtures inside the Selection Grid.

Grid Control allows you to arrange and manipulate up to 25,000 fixtures inside the Selection Grid limited by your grandMA3 parameter count.

## First Time Use

When using this plugin for the first time, you will be required to activate your Licence Key provided to you at the time of purchase. You will need an internet connection to do this, either using MA onPC on a computer with an internet connection or on a console with a wired internet connection.

There are two types of Licence you can purchase. USB bound License Keys or Device bound License Keys.

For USB Licenses, you will need a USB drive connected to your grandMA3 system to authenticate as your USB drive holder for your Licence Key. You can use the same USB drive to hold all of your Matt Jones LD Plugin Licence Keys.

For Device License, you are able to authorise a MA Lighting grandMA3 console as the holder of your Device License. grandMA3 onPC systems, including grandMA3 onPC Command Wing XT systems are not available to be registered with a Device License.

It is possible to Remotely register and deregister a console using grandMA3 onPC connected in sessions with the console intended to be the Device Licence holder.

Once licenced, the plugin will open and you will be able to start using Grid Control with your Licensed USB is connected or on the Licensed grandMA3 Device.

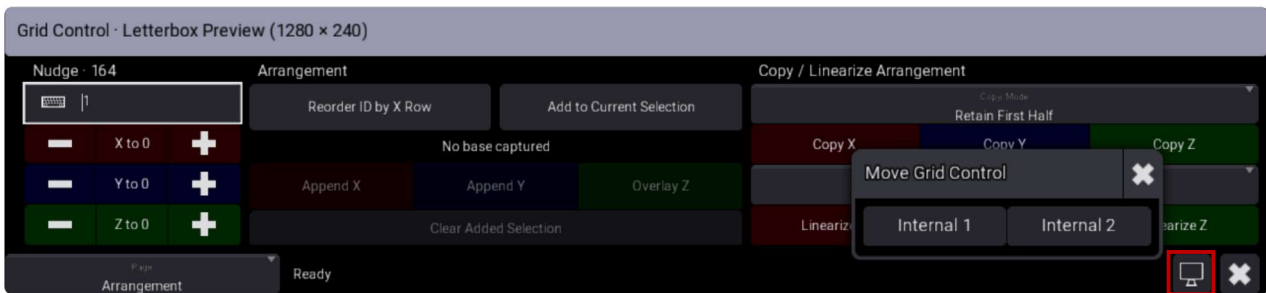
More information on the Device Licence procedure is documented at the end of this User Guide.

## Getting Started

Grid Control can be used in two different modes. Letterbox mode and Sidebar mode.

Letterbox mode displays the Grid Control UI on the Encoder Letterbox screen on consoles with letterbox screens. On consoles or onPC systems, the Letterbox mode will emulate the same style view in a popup window.

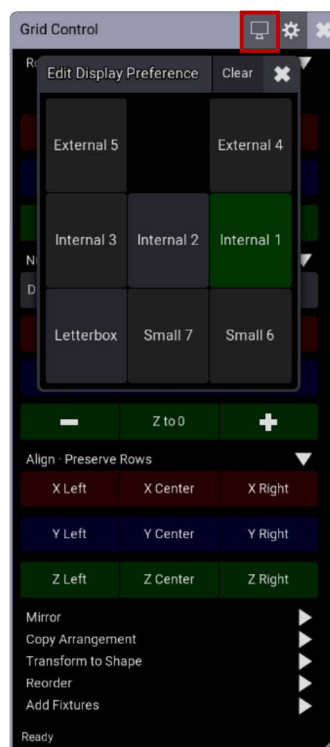
In Letterbox mode, functions are organised in view Pages that can be moved between to access the different functions offered by Grid Control.



Sidebar mode displays the Grid Control UI in a narrow vertical popup window that can be moved around the screen as needed and can be move to any of the main Internal screens as well as any connected External screens.

In Sidebar mode, all functions are visible in the one window, but the different function sets can be collapsed and expanded to display the functions you wish to interact with.

In either mode, the UI can be moved from Letterbox mode or Sidebar mode by choosing the desired Display you wish to interact with Grid Control.



## Shortcut Access

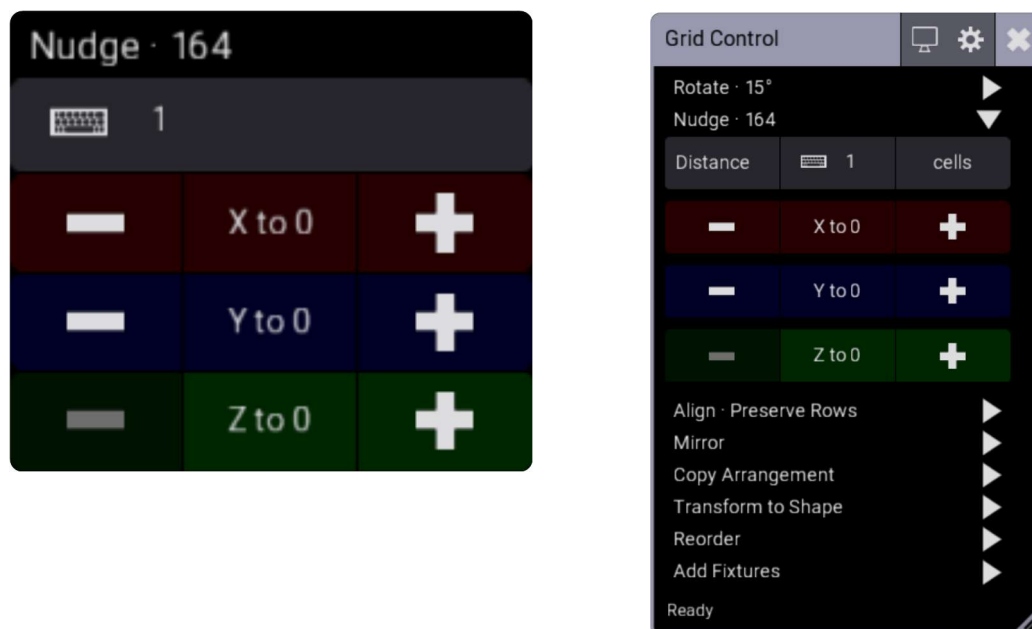
It is possible to open Grid control any time by pressing and holding the MA key and X3 (Grid). The Grid Control UI will open in the last mode you used Grid Control.

## Grid Control Functions

Grid Control offers many helpful operations to make placing you fixtures in the Selection Grid faster and easier – in particular on multiple axis, something that is not natively easy in the grandMA3 software natively.

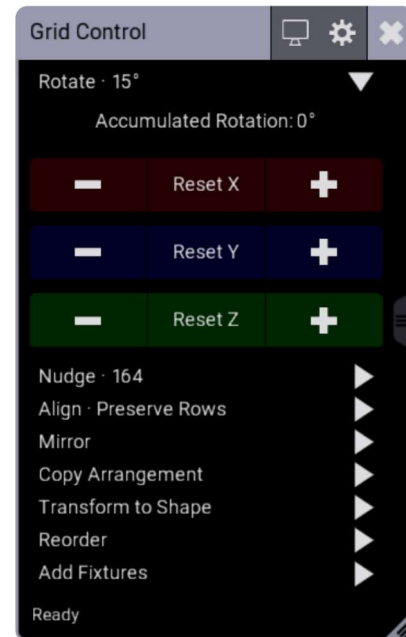
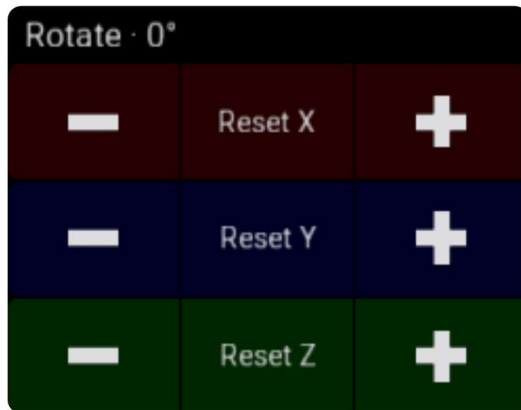
### **Nudge**

Nudge your entire Fixture Selection in any direction, on the X, Y and Z axis. The Nudge Distance field allows you to define the number of Cells the nudge operation should nudge your selection, up to 64 cells.



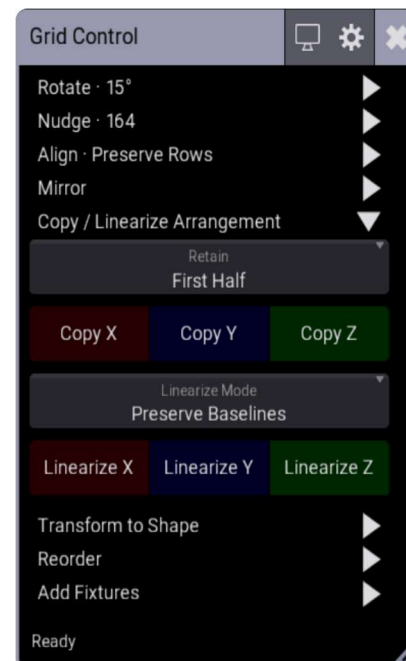
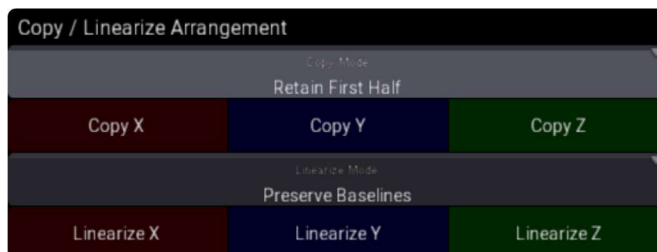
## **Rotate**

Rotate your entire Fixture Selection on any axis in increments of 15°. The sum of the rotation on each axis is displayed.



## **Linearize**

Linearize offers two modes on the X, Y and Z axis.



### Preserve Baseline

Fixtures are arranged on the chosen axis, from lowest ID to highest ID, preserving any other axis's placement.

### Single Origin

Fixtures are arranged on the chosen axis, from lowest ID to highest ID, away from the Selection Grid's Origin.

### Copy Arrangement

Copy Arrangement offers two apply options.

### Retain First Half

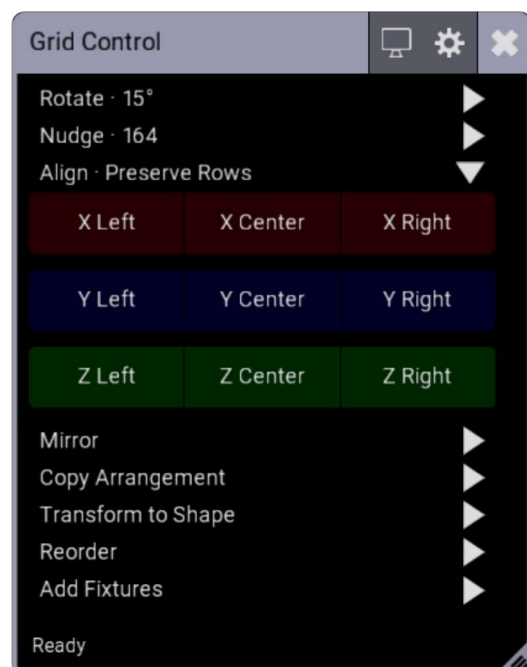
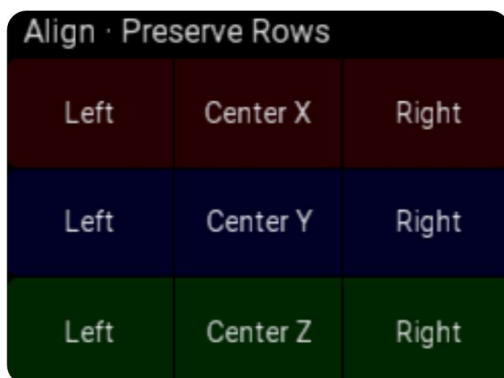
This operation allow you to arrange the first half of your Fixture Selection and apply it in a mirror copy to the other half of the Fixture Selection.

### Retain Second Half

This operation does the inverse of the other mode option, retaining the Second Half of the Selection, and applying it to the First Half of the Selection in a mirror copy.

### Align

The Align function Aligns your Fixture Selection to the Left, Centre or to the Right on any axis, while Preserving Rows on other axis.



## **Mirror**

Mirror allows you to flip your Fixture Selection on any axis, using two modes.

### **Arrangement**

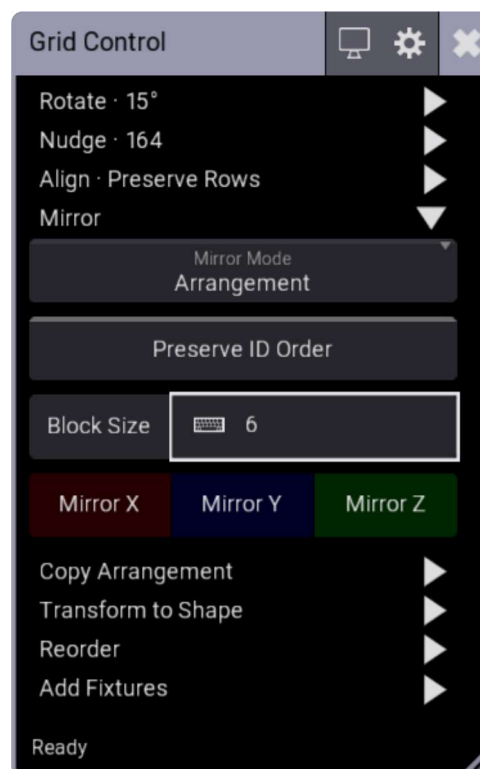
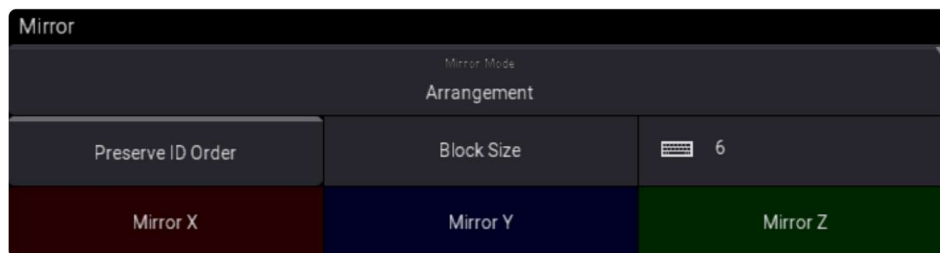
Mirror Arrangement will flip you entire Fixture Selection on the chosen axis.

### **Blocks**

Mirror Blocks will flip your Fixture Selection on the chosen axis, in Blocks. You are able to define the Block size. This function is particularly useful for rearranging Fixture Cells so that the cell arrangement in your Selection Grid match your real world orientation of your Fixtures.

### **Preserve ID Order**

There is an additional setting for Mirror, that allows you to Preserve ID order. This setting will flip your Selection Grid arrangement but will retain the original order of your Fixtures in the Selection Grid. This setting can be applied in the Arrangement and Blocks mode.



## **Reorder**

The Reorder function sorts Fixtures by ID along the selected X, Y, or Z axis. The existing arrangement—including occupied Grid cells, spacing, gaps, and positions on the other two axes—is preserved. Only Fixture that occupies each existing grid position are changed.

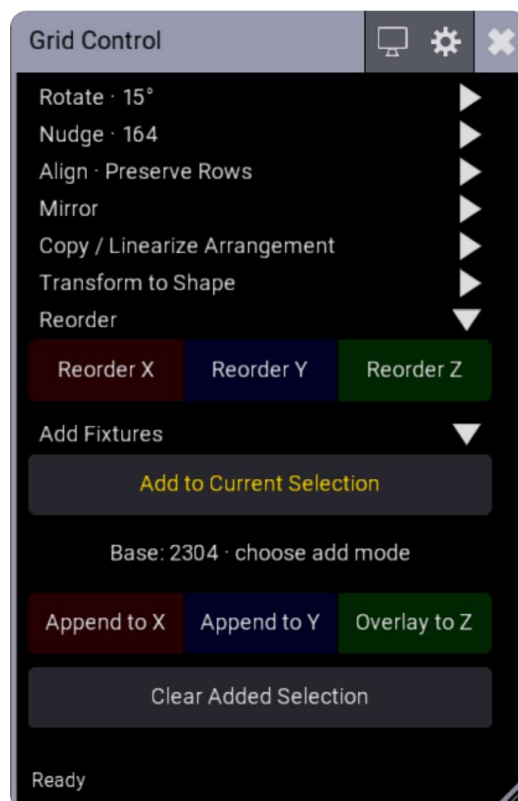
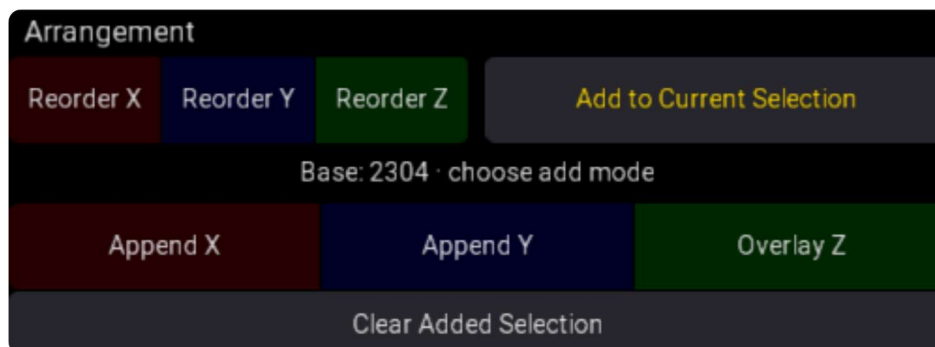
## **Add to Current Selection**

Add to Current Selection allows you to add a new Selection Grid arrangement to the existing arrangement in the Selection Grid. It is possible to add this new Selection to either the X, Y or Z axis.

Adding to the X axis, is similar in nature to the native ‘Append X’ function in grandMA3.

Adding to the Y axis, is similar in nature to the native ‘New Line’ function in grandMA3.

Adding to the Z axis is a new option not available in grandMA3, that allows you to overlay a new Selection on top of the existing Grid arrangement, on a separate Z coordinate.



## Shapes

Grid Control allows you to create some basic Shape arrangements in your Selection Grid.

These Shapes can be created with a number of different options.

### Shape

Circle, Square and Triangle

### Transform Axis

XY, YZ and XZ

### Transform Style

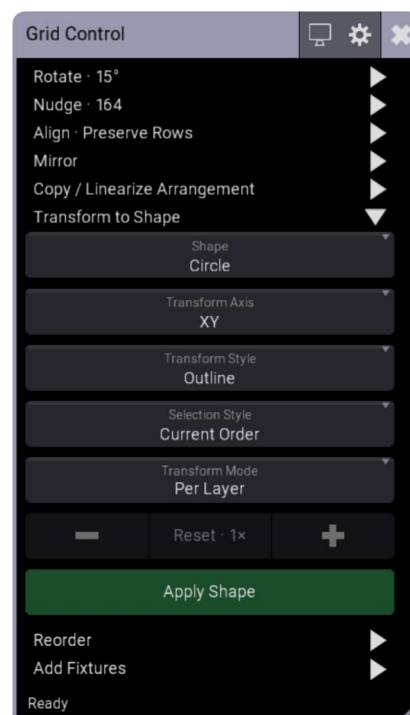
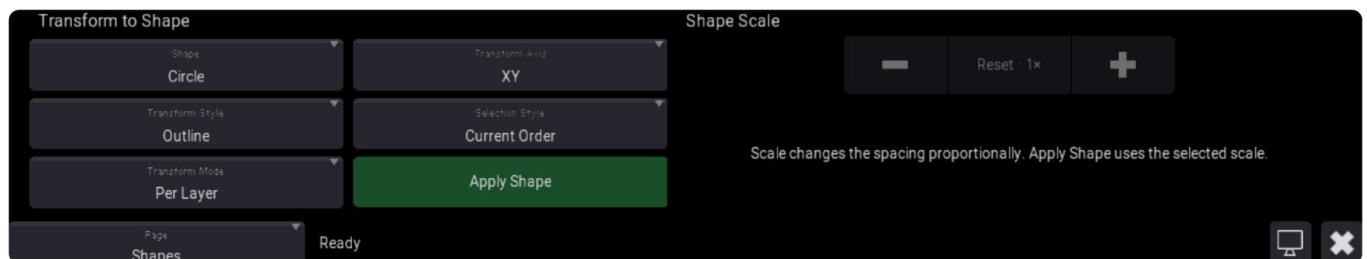
Outline or Fill

### Selection Style

Current Order (preserves current Fixture ID order) or ID Order (lowest to highest ID)

### Transform Mode

Per Layer (Fixtures on other axis layers are preserved and only the Transform Axis directions are adjusted) or Flatten (Fixtures are flattened onto a single axis and are arranged on the Transform Axis directions).



## Device Licence Registration

Device Licences allow Matt Jones LD plugins to be registered to eligible MA Lighting grandMA3 hardware.

There are two ways to complete Device Licence registration and deregistration. In both instances, a connection to the internet and the Matt Jones LD Licence server is required.

### Console Connected to Internet

Device Licence registration / deregistration and verification can be completed when a eligible console is connected directly to a wired Internet connection. This will allow the Licence registration/deregistration to be completed on the console directly.

You will be required to manually enter the Device Licence Key when prompted.

Via onPC Connected in Session with a Console

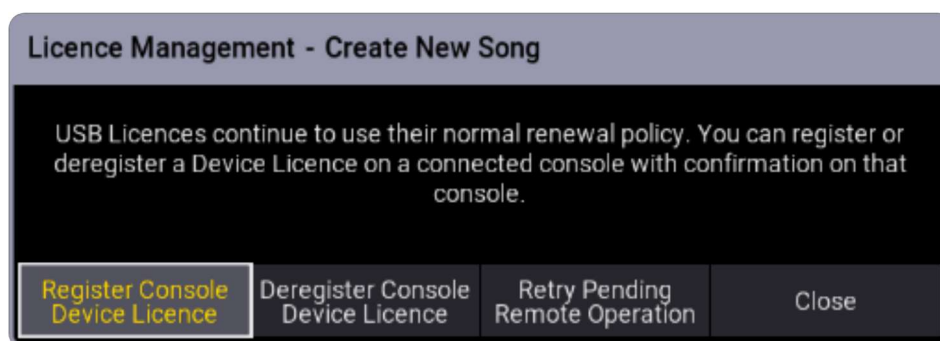
It is possible to perform a Device Licence registration / deregistration via grandMA3 onPC with an Internet connection, connected in a Session to the console you wish to register or deregister.

The Console and onPC stations need to be in a connected grandMA3 session, sharing the same show file.

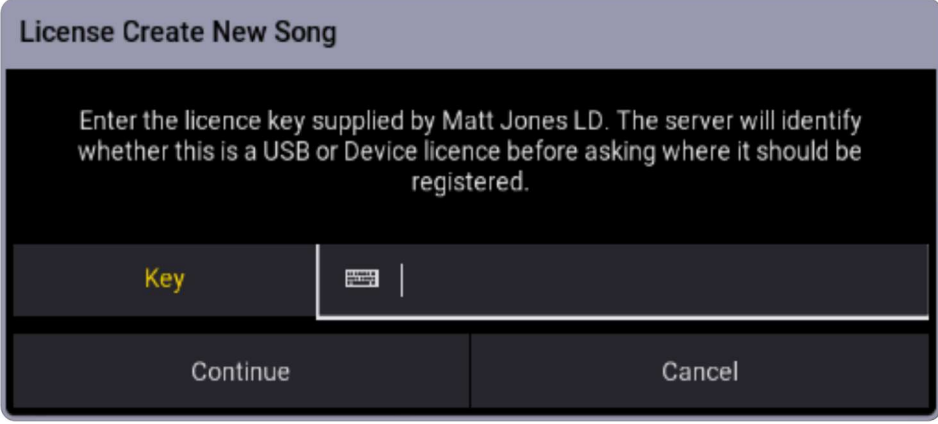
It is **not** required to have a valid USB Licence to perform a Device Licence registration or deregistration.

To initiate a Device Licence registration, open the Plugin from the onPC station.

If you have a USB Licence connected, navigate to the Plugin Settings in the Plugin's Title Bar. In the Settings window, open Licence Management. You will be prompted with the following options. The name of the Plugin in the title bar will change depending on the Plugin you are performing the Device Licence registration for.



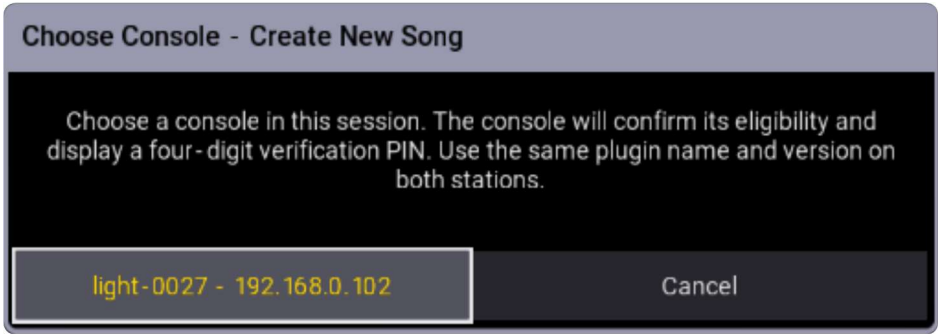
When Registering a Console, choose 'Register Console Device Licence'. You will be then prompted to enter your Device Licence Key.



The dialog box has a title bar 'License Create New Song'. The main text area contains the instruction: 'Enter the licence key supplied by Matt Jones LD. The server will identify whether this is a USB or Device licence before asking where it should be registered.' Below the text is a text input field with a yellow label 'Key' on the left and a small icon of a USB drive on the right. At the bottom are two buttons: 'Continue' and 'Cancel'.

The Licence Server will validate the provided Licence Key and verify that it is a Device Licence key. Entering a USB Licence Key will cause the Licence Server to reject the request and the process will be aborted.

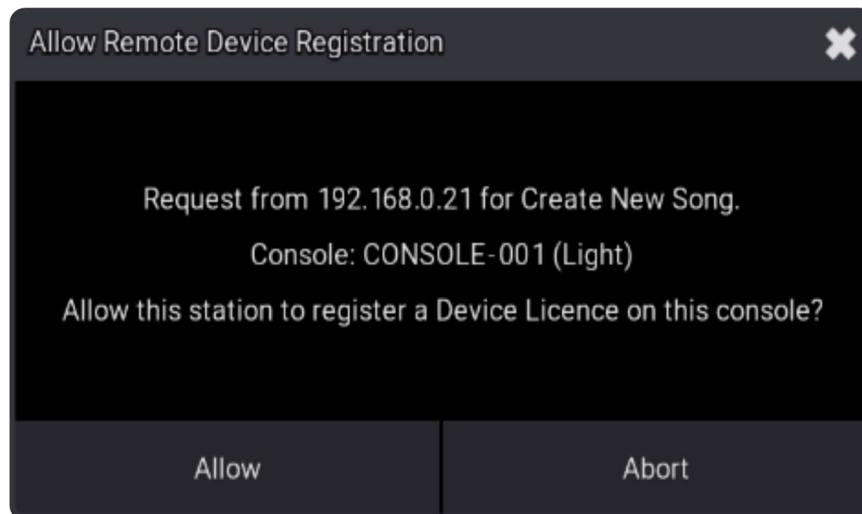
Once a valid Device Licence Key is entered, you will be presented with a list of available eligible consoles to assign the Device Licence Key to.



The dialog box has a title bar 'Choose Console - Create New Song'. The main text area contains the instruction: 'Choose a console in this session. The console will confirm its eligibility and display a four-digit verification PIN. Use the same plugin name and version on both stations.' Below the text is a text input field with the text 'light-0027 - 192.168.0.102' and a 'Cancel' button.

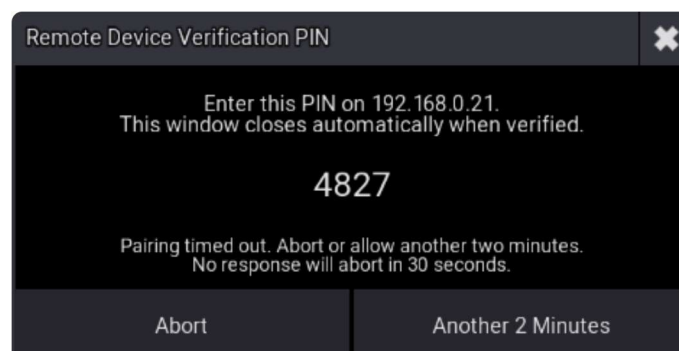
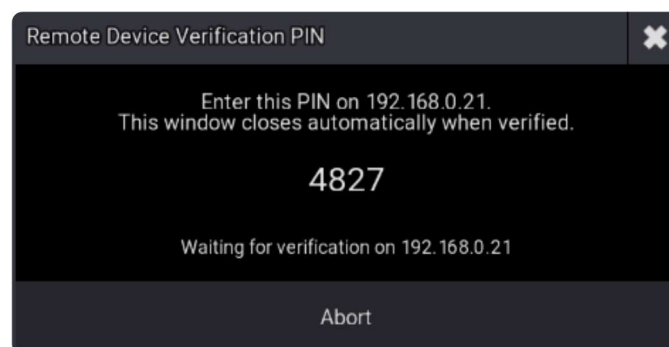
This dialog will display the console type, it's serial number and the station's IP address.

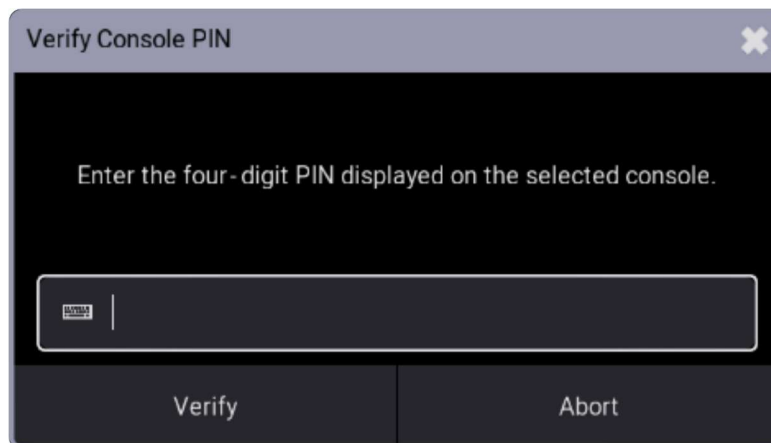
Once you select the Console, a popup will appear on the selected Console asking for permission to install the Device Licence.



This request dialog will remain only for 2 minutes. After 90 seconds, a new popup will appear, informing you that there is only 30 seconds remaining, and provide you the option to request a further 2 minutes. If no action is taken, the process will automatically be aborted, all dialogs will close and the registration of the Device Licence will be cancelled.

After you click Allow, a second popup will appear shortly after that provides a unique one time 4 digit Pin that you will need to input on the popup that will appear on the onPC station. This verifies the Device Licence install request and permits the Licence Server to initiate the Device Licence installation on the selected Console.

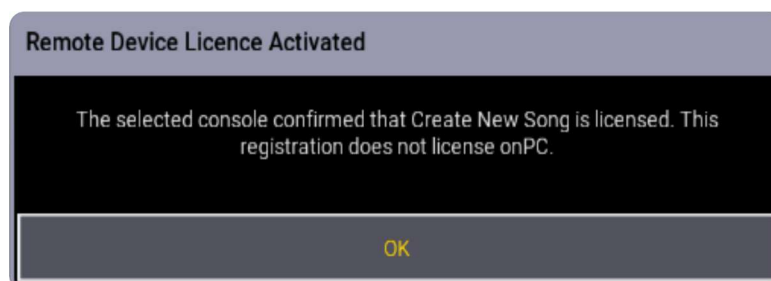




Once the Pin is correctly entered, the console will authorise the onPC station to perform the necessary validation checks with the Matt Jones LD server and will provide the authorisation to the console to install the Device Licence Key on that device.

An incorrect Pin will abort the process, and you will be required to restart the process.

When the onPC station has completed its authorisation checks with the server and console, and the console verifies that the Device Licence is successfully installed, you will be required to confirm your acceptance of the EULA. Once you do, a confirmation message will appear on the onPC station confirming the successful validation and installation of the Device Licence on the selected Console.



## Device Deregistration

The process for deregistering a Device is much the same. You will be prompted to Allow the deregistration on the console, provide the Pin from the Console and input the Pin into the prompt on the onPC station.

Once Device deregistration is complete, you will receive a similar confirmation message confirming the Device Licence seat has been released and the Console no longer holds the Device Licence Key.