



DMX Joker
control software for
architectural lighting
and show light

Musikhaus Thomann
Thomann GmbH
Hans-Thomann-Straße 1
96138 Burgebrach
Germany
Telephone: +49 (0) 9546 9223-0
E-mail: info@thomann.de
Internet: www.thomann.de

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Table of contents

1	Introduction.....	5
1.1	Installation.....	6
1.2	First start.....	8
1.3	Interface Update.....	9
1.4	General Options.....	10
1.5	Interface.....	11
1.6	Audio & MIDI.....	12
1.7	Artnet.....	13
1.8	Network.....	15
1.9	Live Board.....	16
2	Creating a project.....	21
2.1	Patching devices.....	22
2.2	Patching the matrix.....	23
2.3	Creating / editing profiles.....	26
2.4	2D view.....	29
2.5	Tool bar.....	32

3	Programming scenes.....	35
3.1	Programming tips.....	38
3.2	Zones.....	40
3.3	Trigger.....	41
3.4	Media.....	43
3.5	Programming with effect generators.....	44
4	Live Board.....	55
5	Stand Alone.....	57

1 Introduction

Thank you very much for purchasing the Stairville DMX Joker. This software is characterized by simple operation, fast performance and resource-friendliness. It is designed in such a way that even users without prior knowledge of lighting technology can find their way in just a few minutes. The essential features are:

- Extensive device library, graphical profile editor
- Various generators for sensational effects
- Pixel mapping with user texts, pictures and videos
- Wi-Light app for remote control via network
- Stand alone scenes can be stored in the interface and played without a computer
- Trigger option via MIDI-IN, keyboard and switch contact

On the following pages we will explain step-by-step how to control your lighting system with the help of the DMX Joker and how to become familiar with it. We now wish you a lot of pleasure in the creative work with light.

1.1 Installation

The latest downloads for Windows, Mac and Linux can be found on the product pages of the interfaces at www.thomann.de.

Despite its excellent performance, the DMX Joker software requires only very little system resources. Therefore, parallel operation with other applications (e.g., music playback, DJ programme, etc.) is usually not a problem. However, for reliable lighting control, we recommend optimizing your computer to disable preventable events such as automatic Windows updates or energy-saving.



After you have loaded the appropriate installation files, you can start the installation and follow the further instructions of the setup. The interface drivers are also installed during this process and require your approval. After successful installation, you will find the following components in the programme directory:



The basic software "DMX Joker" to create scenes and effects that are fixed before the show begins or for stand-alone functions. (Can be used with all Stairville interfaces.)



The "DMX Joker Pro" for enhanced functionality and flexible intervention during the show. (Can be used with higher Stairville interfaces from 512 channels onwards.)



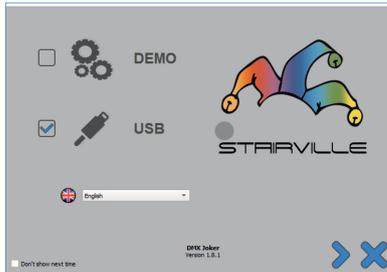
The "Studio DMX" to create a virtual stage and to visualize the DMX output in 3D. That is useful if you have to programme the sequences in advance and the "real" stage is not yet set up.



"Wi-Light" is a network remote control to call up the created scenes and programmes. This app is also available for iOS and Android in the respective stores.

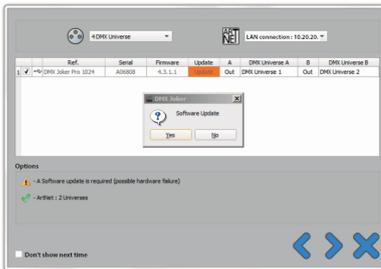
1.2 First start

Now connect the DMX Joker-Interface with the computer and briefly wait for the driver installation.



If you open the software now, a dialogue box appears, which allows you to select 'DEMO' or 'USB'. If a suitable interface is connected, 'USB' will be selected automatically. If no interface was detected or you would like to use the software without output, the option 'DEMO' should be selected.

1.3 Interface Update



In the next window, recognized interfaces are listed and possibly available firmware updates are shown.

Click 'Update' to perform an available update. Follow the instructions for the update process.

Important: Please never disconnect the USB connection while the interface is being flashed, otherwise it will no longer be accessible.

Specify how many universes the software should manage internally (depending on the interface).

Before you start programming, you should first go through all the settings to get the most out of the features. Many error sources, such as mismatched DMX outputs, can be solved that way often without further assistance.

1.4 General Options



Under the menu item *Tools* the *Options* can be opened. In this window you have the opportunity to make general adjustments. Firstly, appearance and language can be Individualized. You can also specify how many universes the software should manage internally. You can increase this setting at will, for example to create a project that requires a high number of universes.

- *'Lock the shutdown'*: You can assign any password to prevent the software from being shut down.
- *'Always on top'*: By enabling this feature, the DMX Joker can not be covered by other windows.
- *'Start with last project'*: By default, the last opened project is loaded at start-up.
- *'Display Steps while playing'*
- *'Display DMX levels as percentages'*: Instead of the actual resolution of 0-255, the DMX values are displayed as 0-100 %.
- *'Refresh 2D View every'*: Sets the refresh rate for the 2D view. The 2D view may show the colours of the spotlights as a preview.
- *'Wizard'*: Disables the interface wizard at program start-up.

1.5 Interface



In this tab you have the possibility to adjust the settings for connected interfaces. All detected interfaces are listed first and identified by their serial number. Select the corresponding interface and then make the respective settings. Note: Only by clicking 'Apply' the settings are written to the interface.

- 'DMX': Splitting the universes of the software to the available outputs of the interface. By default, universe 1 is assigned to output A and universe 2 to output B.
- 'Firmware': Manual update process to flash the interface with suitable firmware.
- 'Speed': (*Expert setting*) Here you can change important parameters of the DMX timing. "Break" changes the pause between the DMX frames. "Period" sets the repetition rate of a complete DMX frame. "Delay" delays the transmission from the PC to the interface. Although this is useful when "slow" DMX devices have difficulty decoding the signal, but can also cause a delayed and jerky output. So this setting should remain "Standard" during normal operation.
- 'Get Stand Alone triggers': Depending on the interface, external switch contacts or key presses can be detected. Check this box if you want to transfer these from the interface to the Joker.

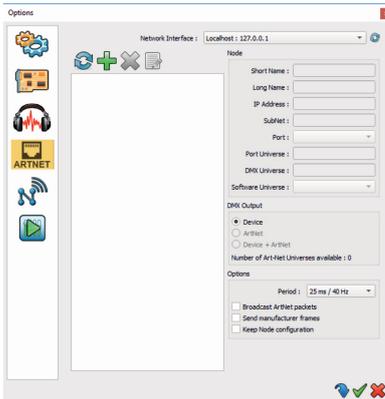
1.6 Audio & MIDI



This section is for configuring the audio inputs and outputs. If you want to analyse audio signal from the same computer, you can loop it through internally. Depending on the operating system, different approaches are possible here.

- **'Sound'**: All system audio inputs and outputs are listed here and can be selected by drop-down list.
- **'MIDI'**: All System MIDI devices are listed here and can be set by selection. The Pro version is also capable of outputting MIDI. This is particularly important with motorized faders and illuminated buttons. By using a suitable MIDI controller, you can achieve significantly faster response times when it comes to triggering multiple actions at the same time.
- **'BPM'**: The incoming audio signal is analysed for beats to check the speed of the song. The threshold between basic volume and peak can be set automatically or by yourself. If you notice that the BPM figure in the menu bar barely responds or constantly fluctuates, adjust the threshold. For manual operation, the beats per minute can also be "tapped" on a button. These buttons should be assigned for full function: "Power On / Off": Enable or disable the clock.
'Turn On / Off': Activate or deactivate the clock.
'Beat x 4': Counts four tabs and calculates the beat from the average.
'Beat on': Triggers an immediate beat when pressed. The clock is paused.
'Beat Fader': Setting the clock speed using faders.

1.7 Artnet



Want some more channels? Then you can do the ArtNet configuration here.

'*Network Interface*' lists all available network cards on the computer. Select the desired adapter and click the left '*Refresh*' button. Now a request (ArtPoll) is sent to all network devices and available ArtNet Nodes are listed. If this does not happen, check the manual IP addressing and network connections again.

Under "Node" current information about the identified node is displayed. Similar to the Joker interfaces, you can make an allocation of the software universes. To do this, select the port to be edited via the drop-down list and then the desired software universe. DMX output activates the output via USB interface and / or network. Under '*Options*' the repetition rate should be set, whereby 25 milliseconds are perceived as fluently. Instead of a point-to-point transmission (unicast), the broadcast transmission can be activated. This sends the ArtNet packets to the broadcast address of the network adapter, which is typically XXX.XXX.XXX.255. Here, the universe selection must be done on the ArtNet node itself.

'*Send Manufacturer Frames*': activates the manufacturer ID. '*Keep Node configuration*' prevents overwriting of the settings by a refresh.

Add virtual node ✕

Short Name :

IP Address :

Ports :

SubNet :

Universe :

DMX Universe :

Alternatively, you can manually add an ArtNet node. Click on the green '+'. In the following dialogue box, you can enter any name and the destination IP address. The number of ports needs to be selected depending on the features of the ArtNet node.

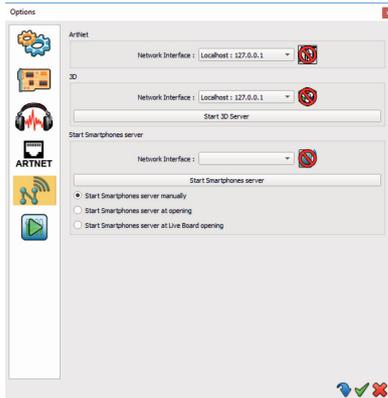
1.8 Network

In this section, you have the option to select network adapters required for the respective programme parts. For a successful configuration, certain structures must be adhered to when assigning IP addresses. In general, it is recommended to stay in the IP address class (2.0.0.XXX, subnet 255.0.0.0), as provided in the ArtNet standard.

Example: The computer running Joker has a direct LAN connection to an ArtNet node. In this case you assign the address 2 . 0 . 0 . 1 and the subnet 255 . 0 . 0 . 0 to your LAN adapter and the address 2 . 0 . 0 . 2 to the ArtNet Node and also the subnet 255 . 0 . 0 . 0.

Note: An IP address may only ever occur once, otherwise there will be a so-called IP conflict and the devices can no longer be identified.

- *'ArtNet'* - Select the network card that is connected to the ArtNet nodes. It is usually recommended to use a wired LAN connection here, as a wireless connection is rather unsuitable for such a real-time application.
- *'3D'* - Here you can choose via which network card the synchronization should run for 3D visualization. If you are running the 3D software on the same computer, select *'localhost'*. The data is then transferred internally. Click *'Start 3D Server'* to start the synchronization.

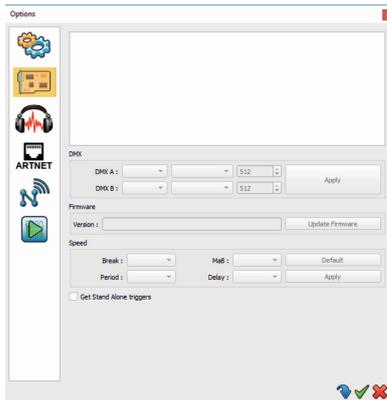


- *'Start Smartphone Server'* - If you want to remotely control the Joker via an app, it's best to choose a local wireless adapter (built-in Wi-Fi) or a network with an access point. The app automatically detects the Joker instance as soon as you start the smartphone server. Decide for yourself whether this process should be carried out automatically at startup or manually.

1.9 Live Board

In the last section, you can personalize the Live Board. Above all, this option concerns the basic DMX Joker variant, as the Live Board is fundamentally intended for its operation.

All scenes are displayed in this view and can be arranged by pressing the *[Shift]* button.



- *'Options'* - Here you can assign a password to block exiting the Live Board. Similarly, the window priority can be set to *'Always on top'* so that the Live Board can be used in kiosk mode. This is useful to provide a surface that only retrieves existing scenes but you can not edit anything.
- *'Starting'* - Here you determine whether and which scene should be started when opening the Live Board.
- *'Display'* - Select which of the following live commands should be present in the Live Board:
 - ➔ Live color - A colour picker that affects globally all colour mixing units in the scene.
 - ➔ Live bar - Shortcuts to Blackout, Full On, Pause, Next Scene and DMX values.
 - ➔ Live dimmer - A grandmaster that works well beyond 100% to brighten dark scenes later.
 - ➔ Live speed - A global speed master that affects all multi-step scenes.

The selection *'Buttons'* gives you the option to show or hide the scene names on the buttons. You can also set the button size.

With *'Shortcuts'* you can put some live commands on an external trigger, like e.g. MIDI or the computer keyboard. To do this, select the appropriate command and move the desired MIDI fader or press the desired key for automatic applying.

You can also define a background image for the Scene or Program area. In combination with specially created button images, you can create a completely individual surface, which not only looks good, but will also be a real relief for inexperienced operators.

For more illustration options, follow the tips at [↗ Chapter 3.1 'Programming tips' on page 38](#).
Here are two examples of how the Live Board could be arranged:

Nebelmaschinen Testcenter

Wählen Sie Ihr Modell aus !

Nebelfluid nachfüllen

1 Stairville AF-40

2 SF Spaceball II

3 Stairville AF-150

4 Stairville AF-250

5 Stairville AF-180

6 Steam Wizard 1000

7 Stairville VF-1200

8 Stairville M-1000

9 Stairville M-1500

10 Stairville M-2500

Stairville HF-900

Fog

Haze

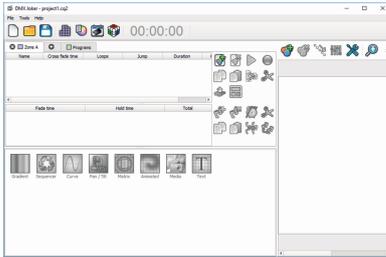
th•mann
MUSIC IS OUR PASSION

Fig. 1: As a selection for our exhibited fog machines.



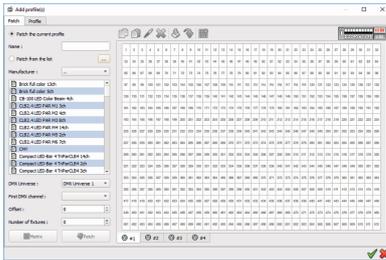
Fig. 2: Or for ambient lighting in our backstage lounge.

2 Creating a project



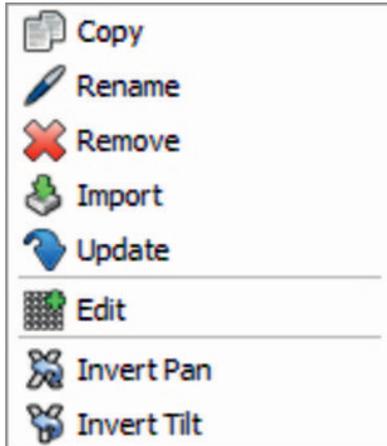
When opened up for the first time, an empty project appears. We recommend to provide the project with a clear name right from the start and to save it if necessary with other media required for the show. The more complex a project becomes, the more important it is to have backup copies just in case. For this, it is sufficient to copy the project file to a USB stick, since all required device profiles are stored in this file.

2.1 Patching devices



Click  to open the patch window. On the right side you can see the DMX channels of the respective universe, while the available profiles are in the left column. Simply drag & drop the selected profile from the list to the desired DMX channels. For a larger number of devices, there is a quick patch, which adds the appropriate number for you. Simply select the desired profile and then enter the number and if necessary an offset (free channels between two devices). Confirm the procedure by clicking on 'Patch'.

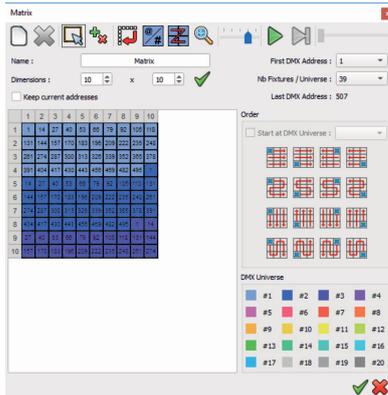
You can later easily move the devices. Here is only to note that two devices can never overlap.



You can perform additional actions by right-clicking on a patched profile: Inverting the pan / tilt axes or importing the profile into the editor for editing.

2.2 Patching the matrix

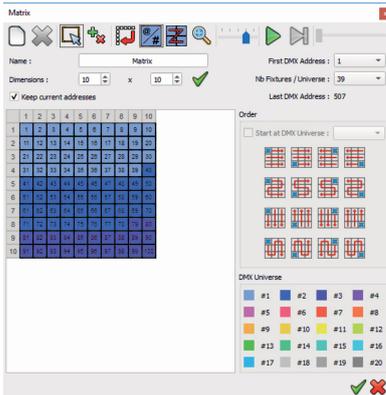
This powerful tool allows you to create a large number of devices as a logical matrix. This way, you can use contiguous LED surfaces to display text, images or videos. First select a device profile with colour mixing unit and / or dimmer channel (RGBW / RGB / CMY) and then click the *'Matrix'* control.



Now you can enter the dimensions of the matrix and select the correct pixel order (depending on the actual orientation of the LED panel, LED strip, etc.). Click  to show the pixel order.

Clicking on  activates the pixels one after the other live. You can remove or add individual pixels if this tool is selected: 

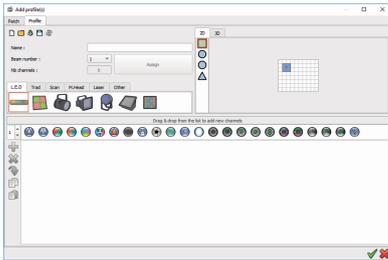
To toggle between the 'Device address' display and the 'Device number' click on .



If you want to patch across multiple universes, first select the number of devices per universe, then enter the dimensions of the first panel. Confirm the entry with  and tick the box "Keep current addresses".

Now increase the matrix width by the second panel and confirm again with . More pixels are created in the next universe without changing the previous pixels. This feature is essential for creating pixel panels, pixel trails or the like.

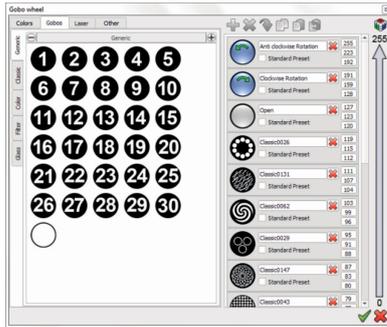
2.3 Creating / editing profiles



Despite a constantly growing device library, it can happen that rare devices are not available. Therefore the DMX Joker provides a helpful editor. This is not only useful for creating, but also to import existing profiles and to optimize them at own discretion.



Get the instruction manual of your desired device ready and open the page with the DMX channels. If your device has multiple DMX modes, choose the channel mode that covers all the features you need. Now start recreating the functions in the profile editor step by step. To do this drag and drop the corresponding function into the lower area.

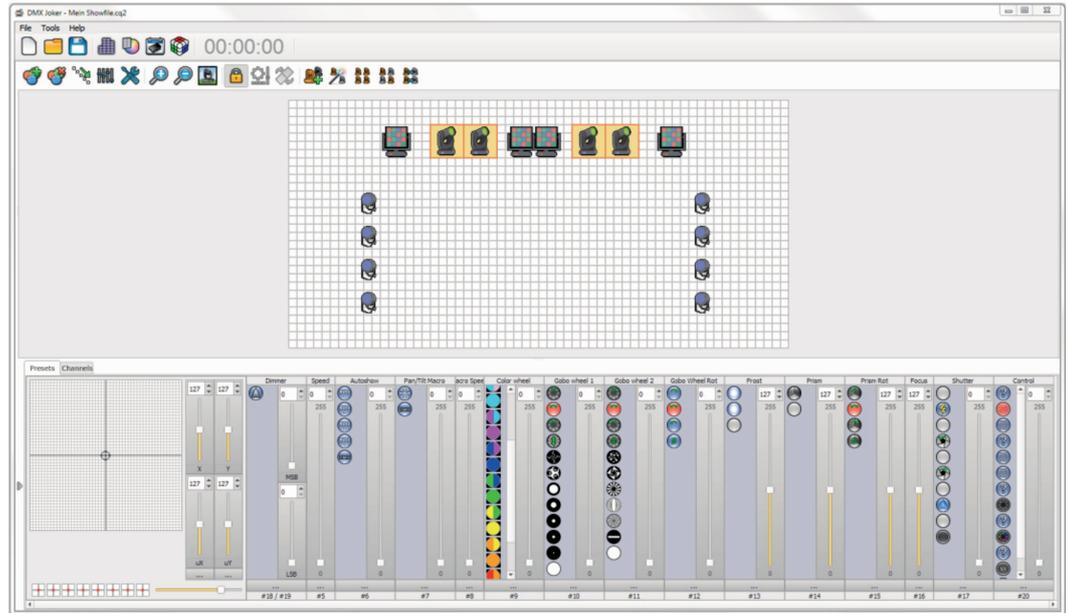


Depending on the function, further options are available. By activating the option '16 Bits' the so-called "Fine" channels can be mapped. In the advanced options, enter the full DMX scale with the corresponding function of the channel. This will allow you to later select even the gobos or colours of a Moving Head with a mouse click.

Tip: To familiarize yourself with the structure of a device profile, it is helpful to open an already existing profile and modify it if necessary.

2.4 2D view

After successfully patching the devices, their icons have also been put to the preview. The 2D view is intended as a guide to the location of the devices. This means that the devices will at best be arranged as they actually are on stage. This has the advantage that the corresponding lamp can be found much faster, plus, the order of the spotlights is needed for the correct calculation of the effects.



Selecting one or more devices will bring up the dynamic channels of the devices (here called presets) in the lower area. The more carefully the profile has been created, the more detailed all the presets are displayed here. When clicking on a preset, the value is output immediately, so that a reaction of the connected spotlights takes place.

If different devices are selected at the same time, the DMX Joker displays only matching presets. Therefore, it may be necessary to set these devices sequentially.

In addition, the pure DMX channels can be pushed via the *'Channels'* tab. A previous patch is not necessary here. This feature works well for testing unknown devices.

2.5 Tool bar



Customize the 2D view with these useful features and create meaningful device groups to quickly access multiple devices via shortcut.

Adding or removing devices.



Setting the effect order. The lamps are renumbered by selecting, so that chases run properly.



Loading the default values for the selected devices. These values can be set in the profile editor. Example: Centring pan / tilt position.



Further settings for background image, dimensions, raster display.



Zooming in / out of the selected device icon.



Changing the device icon between: Icon, colour, number (ID).



Locking moving positions.



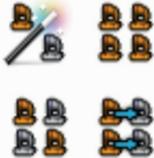
Automatic arrangement by device number (ID).



Rotating the device icon by 90 °.



Setting current selection as group (function key as hotkey).

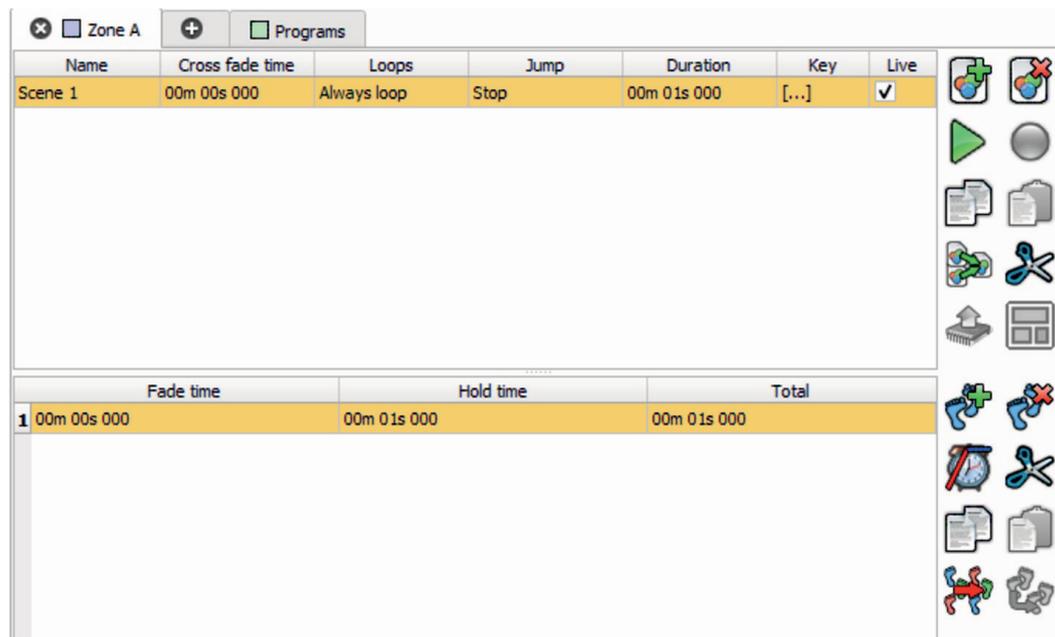


Automatic selection functions to select devices that are active in the scene, select all, odd / even or invert.

Tip: By locking the positions with , it is easier to select multiple devices by clicking them.

3 Programming scenes

To record the changes and actions of the connected fixtures, the settings can be stored as a step in a scene or programme. The difference between a scene and a programme is that only one scene can be active at a time. Programs, on the other hand, can be active simultaneously.



Name	Cross fade time	Loops	Jump	Duration	Key	Live
Scene 1	00m 00s 000	Always loop	Stop	00m 01s 000	[...]	<input checked="" type="checkbox"/>

	Fade time	Hold time	Total
1	00m 00s 000	00m 01s 000	00m 01s 000

Click  to create a new scene or programme. Then click  to create a new step. As long as the step is marked, changes in the preview are saved immediately and do not need to be applied. With the functions "Copy"  and "Paste"  you can quickly and easily duplicate the entire scene or steps at various places in the list.

The transition time determines how long the transition from one step to the next takes. The wait time determines how long the step will be held before the next step is displayed.

When a new step is added, the times of the previous step are automatically applied. Use the "Time"  setting to set the default values. Using loops, you can set how often the scene is repeated in all its steps until it deactivates itself.

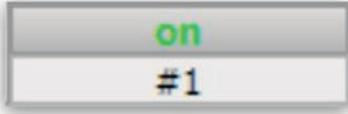
With the play button  you can check the scene for correct sequence. The steps will now be played according to the specified times.

You can continue to select several steps by holding down the Shift key on your keyboard and inverting the selection with a click on . The step sequence is thus reversed.

You can also import scenes from the Interface memory. Click on the interface symbol .

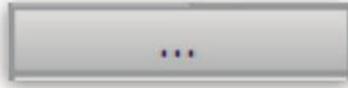
From interface model 512 upwards, the DMX output can be reversed (XLR gender changer is required) and switched as an input. Present DMX values can be recorded and saved as a scene. First set the port to 'Input' in the interface settings and then start recording with the Record button.

3.1 Programming tips



Unlike scenes (saving all values), it is possible to specify in programmes for each preset whether the value should be saved. First, create a new program.

Click *'on'* or *'off'* for the corresponding preset or channel if you want to pick or ignore the value.



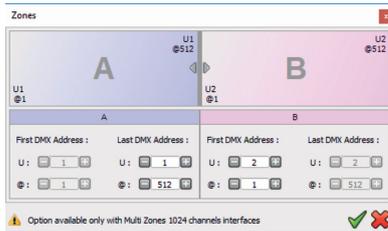
You can directly assign a trigger to individual presets or channels. Click on the three points in the lower part of the object. This is especially useful for effects that are usually close at hand on faders, for example: Audience blinder or front light.



To test un-patched devices or to control DMX channels, you can select the 'Channels' tab. On the right side, select the universe in which you want to make changes.

The number of channels allows you to limit the channels displayed in one go. However, only the visible channels respond to inputs through triggers. Therefore it is recommended to set the number of channels from the beginning to 512.

3.2 Zones

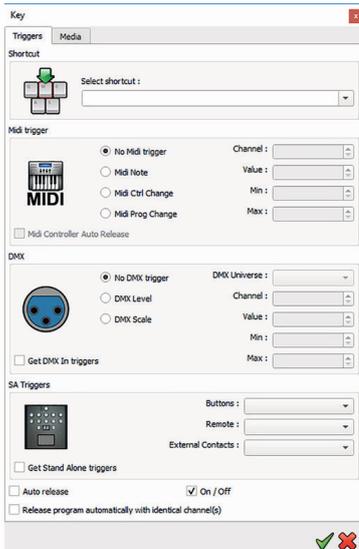


(Only for the 1024 Standalone Interface)

You can divide the two available DMX universes into different zones. This is especially useful if you want to control several rooms with one interface. The zones are then independent of each other, allowing each one active scene at a time. Click the zone icon  to divide the zones.

Drag the columns back and forth according to the desired layout. A zone can stretch over several universes. Additional zone tabs can be added via the plus symbol or closed via the minus symbol.

3.3 Trigger



You have the possibility to start scenes or programmes in the Live Board by various triggers. To do this, double-click in the *[Key]* field. The trigger window opens.

Use the *[Shortcut]* key to put a shortcut on your keyboard, for example: Function buttons

[Midi Trigger] can learn the incoming MIDI signals of a controller. To this, you must have a MIDI device enabled in the settings. By briefly moving a fader or pressing a button, the action is learned automatically.

[DMX] reads the incoming DMX values of any DMX console. You can specify from which DMX value (DMX level) of a channel should be triggered. Alternatively, you can specify a range of values that is considered a trigger. Thus you can divide a fader into several areas and select multiple scenes with one fader.

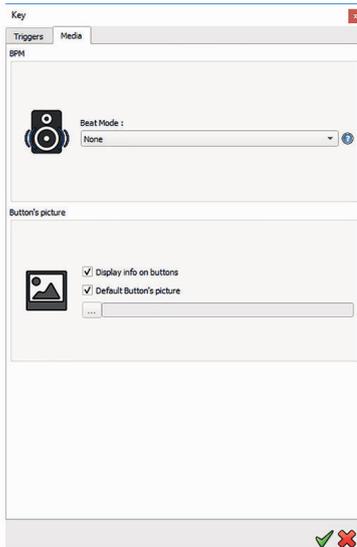
[SA Triggers] reads the switching contacts of the connected interface. Put the checkmark at *'Get Standalone Trigger'*. Select the desired contact from the available drop-down lists.

If you activate the *'Auto release'*, the scene or program exits automatically when the button is released (flash function).

If you disable *[On/Off]*, the trigger can only start the scene or programme, but not stop it.

Depending on the function, further options are available. By activating the option '*16 Bits*' the so-called "Fine" channels can be mapped. In the advanced options, enter the full DMX scale with the corresponding function of the channel. This will allow you to later select even the gobos or colours of a Moving Head with a mouse click.

3.4 Media



You can configure further interactions via the *'Media'* tab. *'Beat Mode'* determines the behaviour when there is a clock signal from an audio source.

[No]: This scene does not react to beats.

[Beat on steps]: The scene skips to the next step and stops when another beat is detected.

[Beats with Fade and Hold]: The scene skips to the next step and goes on when another beat is detected.

[Loops on beats]: The scene plays a loop and stops until a new beat is detected and restarts.

[Restart on Beat]: The scene loops until a new beat is detected and restarts.

[Beats on/off]: The scene plays or stops every time a new beat is detected.

You can change the appearance of the button in the Live Board. Select *'Show Info on button'* if the name should be displayed.

Disable *'Default picture for button'* if you want to use your own picture button. Furthermore, you can store a sound that will be played when the scene is activated.

3.5 Programming with effect generators

Creating scenes manually is the ideal way to learn about how steps work and how to edit them. However, when effects run across multiple devices and moving heads are to move fluidly, effect generators are a real relief.

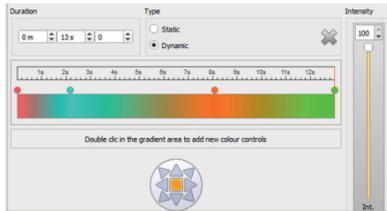
The following generators are available:



The availability of the generators depends on the currently selected devices. For example, *[Pan/Tilt]* is only available if one or more devices support the feature. The same applies to the Matrix effects. As soon as you create a matrix in the patch, you automatically have access to this type of effect.

Disable *[Default picture for button]* if you want to use your own picture button. Furthermore, you can store a sound that will be played when the scene is activated.

Colour gradient



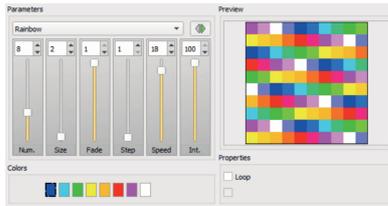
This effect allows you to create a linear gradient. Specify at least two colours by clicking on the markers. Additional markers can be added by clicking. By moving you can change the distance to the adjacent colour.

For both 'Static' and 'Dynamic' types, the direction can be specified. If 'Dynamic' is selected, the set time factor will apply to one pass. The overall brightness can be adjusted with the Intensity fader.

Click  to generate the steps for the effect and paste them into the scene or programme.

Click  to create a new scene or programme with the effect.

Sequencer



With this effect, predefined Chasers can be combined with your own colours.

Select several spotlights with colour mixing and look at the different Chasers. With the displayed parameters, the effects can be adjusted as desired.

'*Num.*' determines how many individual colours the Chase consists of. Click on a colour box and set the desired colour with the colour picker. Some Chasers allow less colours. The number will decrease automatically in this case.

Use '*Size*' to change the size of the continuous colour block. The more spotlights are set up, the better Chasers with larger blocks work.

'*Fade*' is the blending of two colours. When Fade is set to 0, there is no smooth transition between the colours and the colours change abruptly.

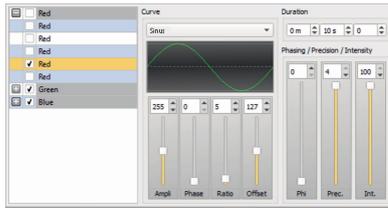
'*Step*' reduces the number of single steps. As a result, the Chase runs faster and with a lower resolution.

'*Speed*' is the speed of the Chaser. Consider this speed as 100 %. If you try to set all the effects to about the same basic speed, you can later adjust the effect speed via the Speed Master (see Live Board) and go beyond 100 %.

'*Int.*' (Intensity) is the overall brightness of the Chase. This intensity parameter affects the RGB values. If the spotlights also have a separate dimmer channel, set the brightness via this separate channel and keep the intensity at 100 %.

Depending on the Chase, further options are available. This could e.g. be the running direction or let the Chase go back and forth.

Curve



This effect represents the prototype of all effects. With it, it is possible to use a mathematical curve, e.g. Sine, Triangle, Rectangle or Sawtooth to calculate the values.

Selecting the desired preset in the left column will periodically output the DMX values through the waveform. Choose from the various curve types the one that achieves the best result for the desired effect.

Again, you can play with the parameters to adjust the effect. Select *'Ampli'* to affect the deflection of the curve.

'Phase' allows you to move the starting point of the curve.

'Ratio' is the frequency with which the curve is repeated.

'Offset' moves the midpoint up or down on the Y axis.

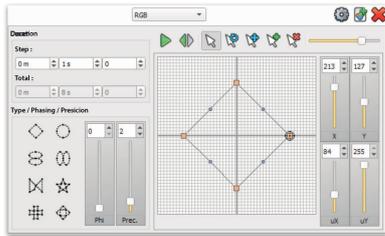
'Phasing' produces a shift of the effect when multiple spotlights are selected at the same time. Thus, impressive wave movements can be programmed. The more spotlights available, the better they will appeal. By selecting the direction, the phasing can be steered in a direction.

'Prec.' is the precision with which the curve is calculated. Increasing this value may result in more individual steps. This especially applies to the case when the scenes should later fit into the memory of an interface.

'Int.' is another intensity master available to limit the maximum effect size (brightness).

With '*Duration*' you can set the entire step duration.

Pan/Tilt



"Now let's bring in movement!" This effect lets you use geometric shapes to create complex movement patterns for moving lights.

To get started, select a given type and set the number of steps. The higher this number, the more accurate the movement will be executed, but it will take up more memory space. Now you can start the movement by clicking on Play . Next, it's best to roughly adjust the range of motion. To do this, select the scaling tool , reduce the entire shape and slide it into an area in which the spotlights are pointing symmetrically and straight in the desired direction. Adjust the step duration so that the movement speed is satisfactory.

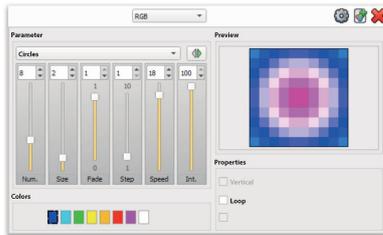
With the parameter '*Phi*' the so-called Phasing (shift between several heads) can be adjusted. Increase the value gradually and observe how the behaviour of the spotlights changes. With the proper setting, interesting wave movements or groups can be formed. Furthermore, the precision of the intermediate steps can be set with '*Prec.*'.

The starting position of the movement can be set with this tool . First click on the tool and then on an orange dot in the coordinate system.

Of course, you can also move individual points. To do this, select the standard tool and drag the corresponding point to the desired position. Thus, you could place an otherwise uniform motion in a position, that briefly illuminates e.g. a mirror ball.

To add or remove points, select the appropriate tool and click on the point to be edited.

Matrix



With this effect, you create area-wide matrix animations. For this, a matrix of any size must have been created in the patch. Select the matrix in the preview.

Similar to the sequencer, run patterns and parameters are given here. Choose a suitable pattern and adjust the colours as needed.

'*Num.*' (number) determines how many individual colours the pattern consists of. Click on a colour box and set the desired colour with the colour picker. Some patterns allow less colours. The number will decrease automatically in this case.

Use '*Size*' to change the size of the continuous colour block. The more pixels in the matrix, the better the larger blocks appeal.

'*Fade*' is the blending of two colours. When '*Fade*' is set to 0, there is no smooth transition between the colours and the colours change abruptly.

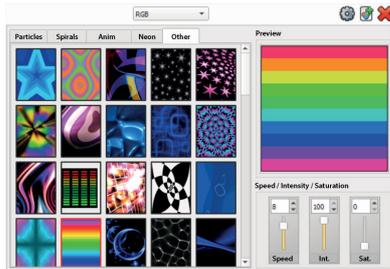
'*Step*' reduces the number of single steps. As a result, the pattern runs faster and with a lower resolution.

'*Speed*' is the speed of the pattern. Consider this speed as 100 %. If you try to set all the effects to about the same basic speed, you can later adjust the effect speed via the Speed Master (see Live Board) and go beyond 100 %.

'*Int.*' (Intensity) is the overall brightness of the pattern. This intensity parameter affects the RGB values. If the spotlights also have a separate dimmer channel, set the brightness via this separate channel and keep the intensity at 100 %.

Depending on the animation, further options are available. This could e.g. be the running direction or let the pattern go back and forth.

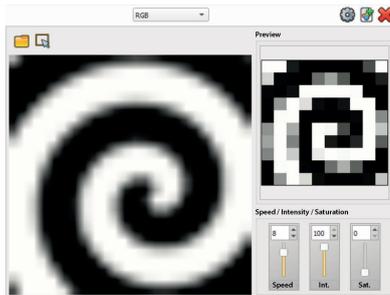
Animations and media



Another possibility to record a coherent matrix are animations and media. A selection of ready-made animations is included and available immediately.

The animations consist of individual frames, which repeat themselves seamlessly (loop). Select the matrix and look at the different animations. The output is directly on the matrix and can be assessed directly.

If you want to play your own media, you can choose the *'Media'* effect. Click on the folder icon  to open suitable images or videos. Select the desired image section with this tool .

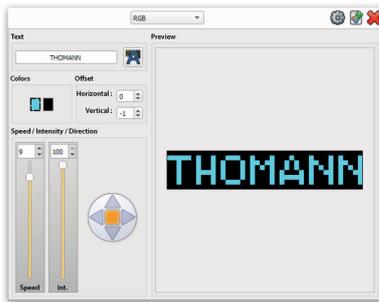


You can affect the following parameters: *'Speed'* is the speed of the animation. If you try to set all the effects to about the same basic speed, you can later adjust the effect speed via the Speed Master.

'Int.' (Intensity) is the overall brightness of the animation. This intensity parameter affects the RGB values. If the spotlights also have a separate dimmer channel, set the brightness via this separate channel and keep the intensity at 100 %.

'Sat.' (Saturation) allows a fine adjustment of the brightness.

Text



If your matrix is particularly oblong, you can use the text generator to make a meaningful scrolling message.

Enter the desired text in the text box and select a suitable character size and a well-readable font, such as: Arial Black.

The direction of movement can be set with the arrow keys.

Both the foreground and the background colour can be specified with the colour tick boxes.

You can also adjust the vertical and horizontal orientation (when the text is stopped).

You can affect the following parameters: *'Speed'* is the speed of the scrolling message. If you try to set all the effects to about the same basic speed, you can later adjust the effect speed via the Speed Master.

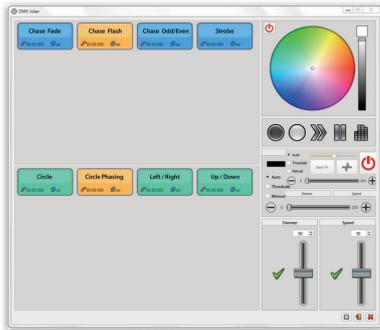
'Int.' (Intensity) is the overall brightness of the animation. This intensity parameter affects the RGB values. If the spotlights also have a separate dimmer channel, set the brightness via this separate channel and keep the intensity at 100 %.

4 Live Board

The Live Board is the place where you retrieve the prepared scenes and programmes. You can get there by clicking on the 'Live' icon in the menu bar.



The Live Board starts by default in full screen, but can also be reduced to a window. Now you will see the previously programmed scenes in blue and the programmes in green. If you have assigned triggers, they are now active. On the right side you can see the 'Live Commands'. These serve to intervene during shows in various ways.



With the colour picker you can override the colour values of the active spotlights. To return to the previous value, click the 'On / Off' icon .

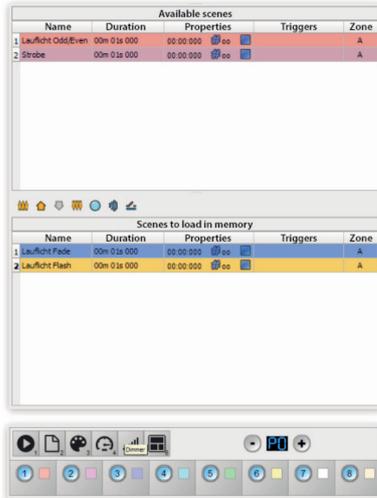
In the BPM engine you can observe the audio level and use the Tap functions. (see [Chapter 1.6 'Audio & MIDI' on page 12](#)).

There is also a 'Grandmaster' (overall brightness) and a 'Speedmaster' (overall speed). Both correspond to 100% in the middle position. They can be set to over 100% in order to lighten or speed up scenes that are too dark or too slow. Clicking on the green tick resets to middle position.



The [Live Commands] are composed of a 'Blackout' and a 'Full On'. In addition, you can jump to the next scene or pause the current sequence. For control, all DMX values can be displayed as bar graphs.

5 Stand Alone



Each DMX Joker interface has a standalone feature to varying degrees. This means that scenes can be saved in the interface and can be played without a computer. All you have to do is power the interface with a USB power supply.

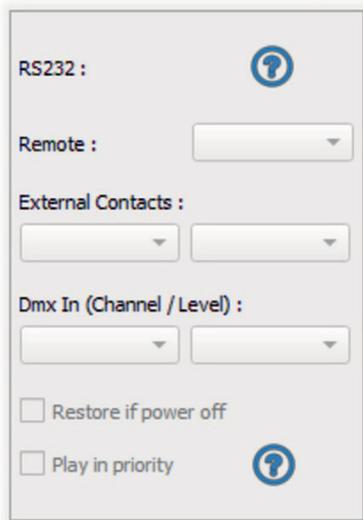
Click on the 'Standalone' icon  to go to the view.

In the upper left field you see the available scenes. The lower field represents the interface memory. Drag and drop the desired scene into the lower field. Alternatively, you can move the entire list down with this icon .

You can also automatically assign a standalone trigger to all scenes. The following quick assignments are possible:

-  Assigning interface keys
-  Assigning remote control buttons
-  Assigning switching contacts (RJ45 / PCB)

For control or manual assignment, the interface buttons including the Page buttons are shown in the illustration. With drag'n'drop you can save individual scenes from the list to a key. If necessary, change the page with '+' / '-' to save more scenes.



RS232 : 

Remote :

External Contacts :

Dmx In (Channel / Level) :

Restore if power off

Play in priority 

Furthermore, external triggers are available, which can be configured here. The interface models 128, 512 and 1024 have four solder points on the PCB where you can connect your own switches. These contacts are labelled A, B, C and D.

'Restore after power failure' ignores the actual start scene and continues to play the scene if it has been played back.

The *'Live Commands'* are composed of a *'Blackout'* and a *'Full On'*. In addition, you can jump to the next scene or pause the current sequence. For control, all DMX values can be displayed as bar graphs.

Calendar event

The real-time clock in the 512 and 1024 stand-alone interface makes it possible to set up a time- and date-controlled event. First select the desired scene in the left column.

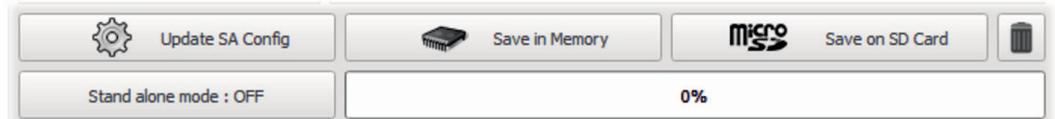
Now you can choose all the conditions that should lead to the start or stop of the scene. A graphic representation of the events can be seen in the lower time line.



Memory management

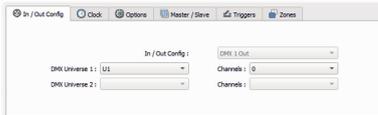
When all scenes are set correctly, they can be flashed directly to the interface memory. Alternatively, a special file can be prepared for an SD card, which will then be plugged into the interface.

Click 'Save to Memory' to start writing. Use the bar graph to check the memory usage. To clear the memory, click on the trash bin icon.

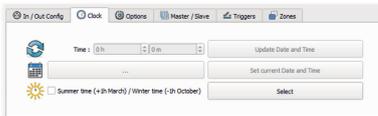


The interface checks at startup whether there is a data connection and switches to PC mode. For testing, the interface can be manually set to standalone mode. Click 'Stand Alone Modus'. After 5 seconds the standalone mode starts.

Expanded options



With the 1024 Standalone Interface DMX ports can also be used for input. The appropriate port / universe assignment can be found on this page. Select the appropriate input / output configuration in the drop-down list *'In / output configuration'*.



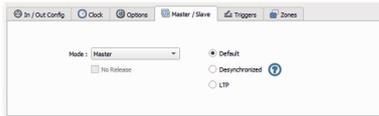
The standalone interfaces 512 and 1024 have a built-in battery-backed real-time clock and can be synchronized with the system time of the computer. This allows the interface to handle complex automation tasks.



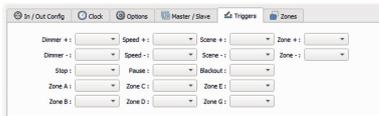
Define here the start scenes which should be started after switching on. If more than one zone has been set up, you can set an independent startup scene for each zone. You can also deactivate the interface display. If no button has been pressed on the interface for more than 4 seconds, the 7-segment display switches off automatically.

If you want to use the merge function of the interface, tick the box. You can use the 1024 standalone with its two ports as a 2/1 merger. The DMX input is calculated with the values generated by the interface and in turn output via the remaining DMX port.

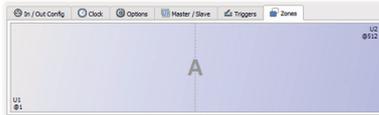
Select the dimmer channels of your DMX universe to set the brightness of the scenes in stand-alone mode. If your lights do not have a separate dimmer channel, you can also mark the RGBW channels as Virtual Dimmers.



Several interfaces can be operated in a network. Connect the interfaces with an RJ45 cable. Only one interface can be defined as master. All other interfaces are automatically slaves. Select the required mode from the list.



You can also apply general functions to an external switch contact, for example, to switch to the next scene. Select the corresponding assignment.



The 1024 standalone interface can handle multiple zones. This graphic shows the split point. See [Chapter 3.2 'Zones'](#) on page 40 how the zones can be divided.



