

# grandMA2 User Manual

Version 3.3



## Release Notes 3.3.2.2

2017-05-04

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You will find the latest system requirements for several products on [www.malighting.com](http://www.malighting.com)

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## Important Information for Updating

### **Update dimMA system:**

If you would like to update the dimMA system from any version below 7.x, contact your MA-dealer or MA directly for any update information. Should you use grandMA2 along with dimMA solutions, get in touch with us. A console update requires an NDP update and vice versa. We are happy to assist you.

### **Update grandMA2 onPC and MA 3D:**

The current versions of grandMA onPC and MA 3D require at least Windows® 7. Microsoft® .NET Framework (4.0) will be installed on your computer.

## Update MA VPU

If you would like to update the MA VPU basic or the MA VPU light from any version to v3.2 or higher, at least one screen and one mouse has to be connected to the MA VPU.

## Update MA Network Switch

If you would like to update the MA Network Switch in v3.1 or v3.2 to v3.3 or a subsequent version, execute the display reset after the update has been installed. As soon as Booting is displayed on the display of the MA Network Switch after the update:

1. Disconnect the power.
2. Then, press and hold the yellow menu button on the left side of the display.
3. While holding the button, power up the MA Network Switch again.
4. Release the button as soon as Booting appears on the display of the MA Network Switch.

To execute a fallback on v3.3 or a subsequent version in v3.1 or v3.2, proceed in the same manner.


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## New Features

The latest release of grandMA2 3.3.2.2 rolls out several new features and enhancements that enrich your lighting experience. Read on for a quick introduction and find links to resources that offer more information.

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### New help system

 Enhanced in this release of grandMA2

- Completely updated help
- New interface of the help in grandMA2
- New help page online

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### Improvements in Partial Show Read (PSR)

 Enhanced in this release of grandMA2

- PSR Prepare
  - Now supports the switchover of fixture or channel IDs of the source patch. Therefore, the new column "Match to ID" was introduced. This helps the user to configure the final setup in the PSR Prepare dialog.
    - It is only possible to set a new fixture ID or channel ID for a fixture or channel at a time.
  - The new buttons "Use My 3D Position" and "Use Other 3D Position" define which 3D positions of the imported fixtures will be taken.
  - Only fixtures/channels that have a ID entered in the "Match to ID" column will be imported when pressing the prepare button.

- PSR
    - After selecting a pool (for example Group pool), both pools (My Pool and Other Pool) are displayed 1:1 next to each other as lists. This helps to see where objects come from and where they will be merged in the show file. Both pool lists show also the names of the corresponding showfiles. The left list represents the actual showfile, while the list on the right hand side displays the content of the showfile to be imported.
    - Provides possibility to arrange the objects of the source before importing objects:
      - Arrow up, down buttons on the far right moves the selected item(s) up or down by one position. If the new position already contains an object, then both objects will exchange their positions.
      - Pressing the "move at" button and tapping a destination line in the list moves the selection to the destination.
      - The buttons "Match By Number", "Match By Name" and "Match Automatic." resort the entire list by matching the objects to the corresponding IDs, names or automatically.
      - Rearranging has to be done in the source list before selected items are added into the current show by pressing the "Add Select. Items " button.
    - Hints for importing objects with PSR:
      - Multi-width executors can only be imported correctly if you import the entire page.
      - Special masters cannot be imported with PSR.
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## MA Fixture Share

- The new MA Fixture Share can be found on <http://www.fixtureshare.malighting.com> (not accessible from a grandMA2 desk)
  - The MA Fixture Share provides the up-to-date MA Lighting fixture library and a many user created fixture types for grandMA2 to download.
  - This database provides nearly all kind of fixture types with relevant modes and firmware versions.
  - The MA fixture Share is constantly growing and with the help of users, who provide their fixture types it will grow even faster.
  - If you need help with the MA Fixture Share, please refer to the specific help section of the MA Fixture Share: <http://fixtureshare.malighting.com/help/start.htm>
  - Downloaded fixture types of the original MA library(\*.xmlp files) can only be imported into grandMA2 v3.3 or higher.
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## RDM via Art-Net

### + New in this release

- grandMA2 is now capable of RDM via Art-Net.
    - Art-Net node must be capable of RDM via Art-Net.
    - Fixtures capable of Art-Net must support RDM via Art-Net.
  - Furthermore, xPort nodes support RDM in Art-Net mode.
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## User Profiles

### + New in this release

- User profiles can now be limited to a specific world.

- This can be set:
    - In Setup/Console/User & Profiles Setup
    - Via command line
      - "Assign UserProfile X /World=<index or name or -1 for reset>"
  - Users whose user profile is limited to a world are not able to change to any other world.
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## Pan/Tilt Offsets

### + New in this release

- For the case, that fixtures are mounted on the real stage in a non-matching way to the setup prepared in the grandMA2, e.g., display as orientation of the fixture to the side instead of to the front, it is now possible to adjust a Pan and/or Tilt offset for every patched fixture.
  - This makes it redundant to adjust every single position preset by hand to correct the offset.
  - The Pan and/or Tilt offset can be adjusted for every patched fixture that has Pan and/or Tilt attributes.
  - The offset can be adjusted in Patch & Fixture Schedule or in the Patch only menu.
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## Store Mode for Position Values

### + New in this release

- Additional store filter to store every position preset or cue either with Pan/Tilt or XYZ values.
  - This option can be changed in the Store options, and has the states: Active position data, XYZ and Pan/Tilt.
  - Depending on the option selected, position values will be:
    - Active position mode: Stores position data as they are (as Pan/Tilt or XYZ values)
    - XYZ: Converts and stores position data as XYZ values
    - Pan/Tilt: Converts and stores position data as Pan/Tilt values
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### + Extensive Bug Fixing of MIB:

- After a station has left the session, MIB will not be reverted anymore and fixtures do not fall back to non-MIB values.
- If the next cue, containing fixtures that are preposition by MIB, is faded by crossfade with the fade not being completed and reverted, MIB will not be reverted anymore.
- After Goto, GoBack, etc. MIB was not executed again.
- MIB was not working if a playback was switched off and started again.
- MIB was reverted after updating a cue of the active sequence.

### + Adjustable xPort Node DMX Fail Behavior

- DMX fail mode for xPort nodes in case of not receiving DMX data via the network anymore.
- It is possible to choose between a hold (infinite hold of the last DMX frame) or various timeout periods (the last DMX frame is hold for the time chosen before the DMX port switches into the state High Z).
- Offered timeout periods are: 10s (default), 20s, 30s, 1m, 10m, 30m and 1h.
- For all timeout periods it is also possible to adjust an outfade time up to 10s. All DMX channels of the output universe will be then faded to 0 on their own.

- All these settings can be configured in the DMX nodes section of the MA Network Configuration. These options can be set per port individually.

## Additional Updates

- + Merge settings in Art-Net mode of xPorts nodes.

This setting can be configured in the section "DMX nodes" of the MA Network Configuration. This option can be set per port individually.

- + New command RemoveIndividuals for deleting individual values of effects and effect lines.

RemoveIndividuals Effect 1 removes all individual values for Effect 1.

RemoveIndividuals Effect 1.11.2 removes the individual values for the second effect line of effect 11.

- + New high contrast color scheme for programmer available.

It can be activated per user profile in Setup/User/Settings/Programmer Colors.

The command line option is called ProgrammerColors and has the states "Standard" and "HighContrast"

Assign Root "UserProfiles"."Default"."UserSettings" /ProgrammerColors="HighContrast"

- + Increased the limit of links between stage markers and PSN trackers from 64 up to 1024.

- + External touch screens have now the touch function if they are configured as internal screens.

### Requirements:

- The resolution of the external screen has to be set to 1280 x 800 before assigning the internal screen to it.
- The external screen has to be calibrated before assigning the internal screen.

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## onPC

- + Executing onPC.exe with parameter -s allows the user to specify a show file for loading.

Example: <path>/gma2onpc.exe -s my\_showfile

This loads the showfile my\_showfile.show.gz from the gma2/shows-folder of the corresponding software version.

- + onPC installer has the option to choose the install directory.

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## 3D

- + 3D: More models are available containing the manual zoom Arri Fresnel.

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## VPU

- Improved the Warper
  - Warper 3D object now supports three modes. These are "Stretched", "3D" and "Orthogonal".
  - The mode can be set creating the object and can be changed in the edit dialog of the warper 3D object in the warper editor. The default mode is "Stretched" which is also the behavior of prior versions of the MA VPU. When using a warper object on a camera the mode "3D" is not supported and behaves like "Stretched".

- Using the warper object on a layer:
  - Stretched: The warper object is stretched to fit the output and ignores the ratio of the warper 3D object. This mode does not support any 3D functionality such as positioning, rotation or scaling.
  - 3D: The warper object is drawn with its defined resolution. The center of the object matches the center of the output. This mode supports the entire functionality inside the 3D space. The object can be positioned, rotated and scaled like other 3D objects. However, remember that the warper object itself is still a two-dimensional object.
  - Orthogonal: The warper object is drawn with its native resolution. The center of the object matches the center of the output. This mode does only support positioning on the x- axis and the y-axis. Positioning in this mode moves the object without interpolating pixels so the mesh stays pixel-accurate. As the orthogonal mode is a two-dimensional mode, it is the most pixel-accurate one of the three modes.
- Using a warper object on a camera:
  - Stretched: The warper object is stretched to fit the output. 3D functionality such as positioning, rotation or scaling is not supported.
  - 3D: This mode can be used on a layer only. If it is used on a camera, it behaves like "Stretched".
  - Orthogonal: The object is drawn with its native resolution. The center of the object matches the center of the output. The object can be positioned with the PosX and PosY attribute of the cameras 3D Key feature. Orthogonal mode is also the most pixel-accurate one when using the object on a camera.
- Improved the UV mapping of a mesh. In prior versions, the calculation of UV mapping referred to the width and height of the parent warper 3D object. Now, the width and the height of a texture can be defined as base values of the calculation of the corresponding UV values.
  - E.g., a warper object has a dimension of 1920 x 1080 which also fits the resolution of the output.
  - The content has a resolution of 7680 x 1080 (4 times full HD).
  - In this example the warper object is used on a layer and shall "grab" the third full HD space from the texture using the UV mapping.
  - For this case the UV mapping is: U from 3841 to 5760 of 7680 and V from 1 to 1080 of 1080.
  - The UV parameters are based on pixels and are scaled to one. If you have a texture with a resolution of full HD, enter the parameters from 1 to 1920.
  - All position parameters of the warper are pixel-based and scaled to zero. Position 0,0 corresponds to the top left of the screen.
- Added a UV tool to graphically modify the UV mapping of a warper mesh. The tool can be used in grid mode only. Activate the button "UV mode" at the tool bar of the warper editor. You can also use the "u" key of a connected keyboard to toggle the UV mode. The controls "Move", "Rotate" and "Scale" then modify the UV mapping of selected spaces instead of the mesh itself.
- Vertex data of a mesh can now be edited numerically.
  - The vertex position as well as its UV coordinates can be modified.
  - To edit a vertex, change to the grid mode and select a vertex. Then click "Edit Vertex" the tool bar. The related keyboard short cut is "V".
  - Editing of vertex data requires knowledge in the field of UV mapping and vertex addressing conversion from pixel to texel.
- Increased the maximum size of warper objects. A warper object and a mesh can now have a maximum resolution of 16384 x 16384. Please note that using very high resolution meshes does cost performance.
- Increased the zoom range of the warper editor to improve the handling of very high resolution meshes.

- Warper meshes with a low grid resolution can now be rendered with a higher sub grid resolution to reduce artifacts. This option is enabled by default.
  - The maximum size of a tile in the grid can be adjusted in the options of a mesh. The default is set to a maximum size of 32 pixels.
  - The higher the value of the maximum size, the coarser the sub grid. If the value is set to "none", the mesh resolution equals the grid resolution. Use this value to improve the performance if you do not warp the mesh.
- A mesh now can also be rotated and scaled using the arrow keys.
- Added Mixmodes
  - Mixmodes define how a layer is mixed with other layers that are behind its z-position.
  - Added feature "Mixmode" to the MA VPU Layer fixture type.
  - This feature contains an attribute called "Blending" which, on the other hand, contains 9 mixmodes. The default "none" is the known behavior from prior versions of the MA VPU. The new mix modes are: Add, Sub, Darken, Lighten, Multiply, Negative Multiply, Sub Soft and Add Inverse.
- Improved the functionality "Take a screenshot".
  - In the MA VPU go to "File -> Take a screenshot". A target path can be set in the upcoming dialog.
  - Further screenshots will be stored in this path.
  - Also, it can be defined from which outputs a screenshot is taken.
- Masking: You can now add a mask to a camera. E.g., a mask can be used to define blank parts of a projection.
  - Masks can be added to the camera in the Content Editor, Tab VPU Camera, Tab Mask.
  - All specified image files can be used as a mask. These are: .bmp, .png, .jpg and .tga.
  - White parts of the image become transparent while black parts stay opaque. Grey scales can be used to create semi-transparent spaces.
  - We recommend that the resolution of the mask fits the resolution of the output. Otherwise, the mask is scaled to full output resolution ignoring the ratio of the mask. The mask will always be drawn full screen.
  - A mask attribute was added to the MA VPU camera fixture type to select a mask.
  - Screenshots can be used as a mask. Take some layers to create your mask, go to File - Take a screenshot and enable the "Add as mask to camera" button. If this option is enabled for every screenshot taken, a channel set is created at the channel function of the mask attribute. So the screenshots are automatically added to the camera as a mask. If you want to invert the screenshots used as a mask, you can do this by enabling the "invert" option in the screenshot dialog.
  - There are several ways to take a screenshot or create a mask. In all four cases a screenshot will be taken with the settings given at the "Take a screenshot" dialog of the MA VPU.
    - 1) Go to "File -> Take a screenshot" and use the "Take a screenshot" button.
    - 2) Attach a keyboard to the MA VPU and press the [Print] key.
    - 3) In the desk, go to "Setup -> MA Network Configuration -> Tab VPU", select an MA VPU and tap the "Take a screenshot" button.
    - 4) In the command line use the command `VPUScreenshot <IP>` or `vs <IP>` e.g., `VPUScreenshot 192.168.0.10`

- Content distribution can now be triggered in the command line.
    - The command is contentdistribution or cdist.
    - If you use the /nc command, the content distribution will be started with the last defined settings. Using /nc the content distribution will be executed even if some of the receivers are not online.
    - Content distribution can now be fully configured and started at any MA VPU in the session.
      - To set MA VPUs as distributor or receiver go to "File -> Settings -> Network". There is a new column called "Content" to set the state. Cells that are editable display an orange triangle.
    - The content distribution can be started by a button called "Content Distribution" in the tool bar of the Content Editor or the network settings. Also, there is a button in the network settings at the internal touch screen of an MA VPU Plus.
  - No parameter highlight: Fixtures that are stored to an output of a pixel mapper can now be highlighted from the desk by using the highlight key.
    - Even if the fixtures are set to "no parameter" in the patch. If a fixture is set to "no parameter" and stored to an output of a pixel mapper, the highlight values of the channels are calculated and output at the network output of the MA VPU which is rendering the output.
    - If a fixture is NOT set to "no parameter" and stored to the output of a pixel mapper, the highlight values of the channels are calculated and output in the MA VPU only if the protocol of the pixel mapper is set to Art-Net or sACN. If the protocol is set to MA-Net2, the highlight values are calculated by the desk.
    - The highlight functionality belongs to the user who is currently logged in in the MA VPU
  - Increased the maximum dimensions of virtual outputs and pixel mapper outputs. The new maximum dimensions in X and Y are 8192 pixels.
  - Hap Converter target path: It is now possible to define a target path for the converted files of the Hap Converter.
  - Hap Converter now offers the option to discard the audio track of a media clip during conversion. For that matter, an additional option called "Discard Audio" was added to the Hap conversion options.
  - A progress bar was added to the media preview window at the Multi Preview which indicates the playback position of the preview window.
  - Added a chessboard background to the preview of the layers in the multi preview. The background can be switched off with a button called "Chessboard Background" in the tool bar of the Multi Preview.
  - Updated fixture type "VPU Camera". Attribute "Mask" added.
  - Updated fixture type "VPU Layer". Feature "Mixmode" added.
  - The mode of the MA VPU fixture types now displays the minimum required version of the MA VPU.
  - Updated VPU demo show, VPU teaser show and VPU new show.
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## Network Switch

### + Port Mirror

- It is now possible to mirror several source ports to one destination port.
- Only one port mirror destination is possible at a time.
- Configuring the port mirror is possible via web interface (Tools/Edit General Settings - Edit Port Mirroring) or MA Network Configuration menu.

### + Link Aggregation Group (LAG)

- Link Aggregation Group collects several physical ports to act and to behave as if they were one connection.



- Configuring the LAG is possible via web interface (Edit Ports/Groups) or MA Network configuration menu.
  - It is possible to choose between 6 different Link Aggregation Groups. Their names can be set individually.
  - Setting a port to a LAG can be done in the same manner as setting a group to a port.
  - If a port is set to LAG, its settings, such as groups and speed, are adjusted to the default settings of the LAG.
  - The first port joining a LAG sets its settings (group, speed setting, etc.) as the default settings for the LAG.
  - Changing settings on a port that has an LAG membership also changes these settings for the other ports of the LAG.
- + Presets and filters block or forward now the traffic of a port in both directions.
- + Password pop-ups for MA Network Switches in the Software Update menu show now the IP of the switch for a better recognition in case of multi selections.
- + New screens available that show the port names respectively the LAG membership in the display. New order of screens: Group membership, Names, Load and LAG membership.
- + RSTP status for each port(active or blocking) is now displayed in webinterface of the switch.

## Fixed Bugs

### Description

Improved - Fixture editor: Edit row button is grayed out until an editable row is available.

Fixed - "Locate" on multi-width executors is displayed in an incorrect manner.

Fixed - Edit macro: Calculator for the waiting period does not display the unit for the input.

Fixed - Special Dialog Shaper does not fade.

Fixed - Replace fails depending on the order of the fixture ID entered. There is also existing data.

Fixed - If an object is linked to a stage marker, the box of the object will be displayed in the stage view.

Fixed - Content sheet in "manual" Mode: The screen encoder does not work in cues.

Fixed - Using next and previous keys with only parts of multi instance fixtures in a world does not work correctly.

Added- Folder-up button is missing for the Lua importer.

Fixed - Newly imported images do not show the file type in the label.

Fixed - New command ListCANFirmware for showing the firmware of CAN-Bus modules in the system monitor.

Fixed - Entering ranges for low and/or high values of effects are incorrectly calculated.

Fixed - Not all executor or sequence options are taken by PSR.

Fixed - The agenda shows events that are repeated daily in combination with the last day setting also on dates where it should not be executed anymore.

Improved - RDM switch is incorrectly labeled in Setup/Show/Patch & Fixture Schedule/RMD Devices. Relabeled to RDM Off and RDM On

Improved - Enable RDM switch is incorrectly labeled in Setup/Console/Global Settings. Relabeled to RDM.

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## Description

Improved - Additional title bar text "use ONLY to assign profiles to multipatch DMX addresses" is obsolete.

Improved - Fixture and Channel labels are incorrectly labeled in the Patch to- and Match to-dialogs.

Added - New attributes CONGOBLUE(ColorRGB20), ROYALBLUE(ColorRGB21) and LIGHTGREEN(ColorRGB22)

Fixed - Effect line editor is not taking selection properly.

Fixed - Downdate to v3.1 does not work.

Fixed - Appearance /? does not list all possible options.

Fixed - Cloning sequences with effects can add additional attributes to the destination.

Fixed - Trying to enter a fixture ID of an multi instance fixture for a fixture object in a layout does not work.

Fixed - Labels of presets are not centered.

Fixed - Store pop-up for presets is not displayed by the web remote.

Fixed - Fixed executors are not displayed properly in the web remote.

Fixed - Console can crash if the web remote has the executor sheet opened with a large data in it.

Fixed - Update pop up for presets is not displayed by the web remote.

Fixed - Global Autofix is displayed in the message center if a dot2 show file will be loaded.

Fixed - Not all preset pools have the symbol options.

Fixed - If multiple USB sticks have the same name, only one is listed in the backup menu.

Fixed - Empty macros show a play symbol if the user tries to start them.

Fixed - Fixed executors cannot be controlled in the web remote.

Improved - Preset pool sheet style column label "Preset Mask" is incorrect. Relabeled to "included Preset Types"

Fixed - Load and Goto without function on special masters of section default masters.

Improved - Filter option "Reset Filter on Clear" was incorrect and got relabeled to "Keep Filter until Clear".

Added - On screen keyboard for the name field of the fixture wizard is missing.

Improved - Record Macro is incorrectly indicated by blinking Learn and Macro buttons. This is changed to blinking Store and Macro buttons.

Fixed - Deleting a cue in a timecode show creates unexpected event reference when storing a new cue.

Fixed - Cue trigger Timecode triggered cue fades too fast.

Fixed - Copy timecode pool elements missed goto values.

Fixed - If a external screen is remapped to be an internal one, screen encoder does not work.

Fixed - Text is not completely readable if a mask was loaded in the tab "mask" of the options of a fixture or channel sheet.

Fixed - Address encoder of the DMX patch window in Patch & Fixture Schedule displays incorrect value for address 512.

Fixed - Edit timecode slot pop-up on screens 2-4 will also hide the mini executor bar.

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## Description

Fixed - Color picker in swatch book mode shows always scrollbars.

Fixed- Image pool IDs are marked cyan if the corresponding picture is used in the show.

Fixed - Edit Selection does not work.

Fixed - Under special circumstances, color presets may not be converted correctly if the fixture type is exchanged.

Improved - Temporary store options pop-up is labeled incorrectly.

Fixed - Position attributes in the incorrect order can cause a crash when using XYZ.

Fixed - If a camera is attached to a stage marker, it does not take the position and rotation of the stage marker.

Fixed - Entering Patch & Fixture schedule while a special dialog is opened, brings the special dialog back to the front if a fixture was patched.

Fixed - Changing desk light intensity via command line does not update the desk lights menu, if it is open.

Improved - Executing combinations of Previous, Set and Next hardkeys is difficult.

Fixed - Special dialog shaper does not work correctly while dragging the corners or turning the encoders.

Fixed - Changing the focus between sheets with different readouts does not change the encoder readout.

Improved - Editing a fixture type offers now the possibility to change the readout of Mode Start and Mode End between natural and DMX values.

Fixed - Locate command does not respect the setting "Link Fader & Button Page".

Fixed - Move Cue Part 0 crashes the desk.

Fixed - Malformed layouts can cause a crash.

Fixed - Setting RDM parameters Clear Status ID and Reset Device do not work properly in the user interface.

Fixed - Color pool may not always show the thumbnails of each preset.

Fixed - If more than 100 single fixture groups are selected, the number of the selection order is not shown properly.

Fixed - If the selection frame in the fixture sheet of a connected desk is drawn over the borders of the view, it stays on the screen.

Fixed - The button "Merge Same Values" contains a typo in the options of sheets.

Fixed - Changing specific user defaults for the color picker, changes also other color picker defaults.

Fixed - Echo for NACKs and retransmissions in the system monitor are missing.

Fixed - Import and export of DMX nodes have an incorrect sorting of node entries.

Fixed - Patching fixtures with a DMX offset that would go over multiple universes does not respect the offset from the second universe onward.

Fixed - Encoder grouping of bitmap fixture can be changed.

Improved - Improvements for storing presets with selective, global or universal data in one preset.

Fixed - Universe info is not stored in show files and is not streamed into the network.

Added - New predefined mask w/o Fixture Types.

Fixed - Crash when exchanging fixture types.

Fixed - Universe pool Show empty button does not work.

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## Description

Fixed - Screen saver is not stopped when touching the executor faders.

Fixed - Pools can overlap.

Fixed - Delete pop-up does not remember its last setting.

Fixed - Markers for sequence pool objects show incorrect state for High and Low priorities.

Fixed - Single fixture groups are relabeled when loading a show file from former versions.

Fixed - Waiting time in a macro is not shown in red if timing is disabled for the macro.

Fixed - Smart view shows incorrect channel sets after clearing and selecting a different fixture.

Fixed - Crash when using dynamic preset pool.

Fixed - Crash when switching off a sequence.

Fixed - Edit Next Cue and Edit Previous Cue inside the edit sequence dialog do not work if cues are not consecutively numbered.

Fixed - Canceling the update of a preset does not cancel, but updates it.

Improved - Global and universal presets work per attribute and not per feature.

Fixed - Store remove does not work if only a part of fixtures is used to remove data of a preset.

Added - Layout view contains rulers. Switch can be found in the layout view options.

Fixed - Effect encoder bar does not show all parameters possible if the form was changed.

Added - DMX fail option for xPort nodes implemented. This setting can be set per port individually.

Fixed - Session members can drop receiving channel information before processing them in large environments.

Fixed - Delete cue pop-up allows to deactivate both options.

Fixed - Crash when copying channel types in edit setup.

Fixed - Extract destroys link of former activated preset so that no preset can be updated.

Fixed - Crash when executing illegal syntax in edit setup.

Fixed - Crash when loading a show with a damaged user profile.

Improved - Text for match fixture/channel ID pop-up in PSR prepare.

Added - Match fixture/channel ID pop-up has a channel button to input the colon for matching to channels.

Fixed - Copying agenda entries via command line does not copy all information.

Fixed - Effect values are activated when changing values in the color picker.

Fixed - Incorrect color output in effects if global presets are used.

Fixed - Incorrect color calculation for colors mixed with white.

Added - Possibility to set gMA2 devices and xPort nodes via the MA Network Configuration to DHCP.

Fixed - Crash when pressing Oops while operating the Network Config Select Station pop-up.

Fixed - Cloning to fixtures does not always add selective data to presets.

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## Description

Fixed - Incorrect color of CongoBlue in the attribute definition.

Improved - Commands RdmSetPatch and RdmSetParameter work only in the current selection. Now all of them can be used in combination with these keywords:

RdmFixtureType, RdmFixture, Sequence, Cue, Fixture, Subfixture, FixtureType, Group, Executor, Preset and Selection.

Fixed - DMX in and out of the same universe at one xPort node causes a incorrect output if a session master is present.

Fixed - Fixtures marked as "no parameters" are removed from world 1.

Added - PSR shows no progress bar if you PSR many objects.

Added - Creating many multi patch fixtures does not show a progress bar.

Fixed - PSR overwrite of macros does not work properly.

Fixed - Web remote floods the browser cache on some devices. This causes delays when operating the web remote.

Added - New Carallon library 13.1

Fixed - Changing the fixture type to one with a different patch order of the instances needs a manual repatch of the fixture.

Fixed - Fixtures always show the DMX patch address of the first instance and not the smallest DMX patch address.

Removed - Command FlightRecording is available via shortcut.

Fixed - PSR does not respect the input filter of a sequence.

Fixed - PSR: 1 cue sequences do not show the correct sequence and executor label.

Fixed - Crash when changing DMX from/to values of fixture types with class marker.

Fixed - Cloning sequences adds additional selective data to global presets anywhere needed.

Fixed - Fade and delay times are not converted from P/T to XYZ and vice versa with the new store option. Now the fade time of the first attribute is taken.

Fixed - Store /Overwrite of presets while being in a world does not work correctly.

Fixed - Fixture at fixture and combinations with channel, group, etc. does not work correctly if the source values come from a playback.

Fixed - 2Port (grandMA1 series): Node sends 0 after uploading a show if a station joined the session with higher priority and became master.

Fixed - Goto Cue X Executor \*.'Name' does not work correctly if there are multiple sequences with the same name.

Fixed - Real time editing of multi line effects does not always update the output correctly.

Fixed - Updating embedded presets does not update the output of the sequence.

Fixed - LUA Plugin 1 'LUA' is able to be imported via PSR.

Fixed - Crash when loading show with cue link to embedded preset.

Fixed - Crash when assigning channels or fixtures with multi patches to DMX addresses.

Fixed - Double characters inserted for info column in universe pool.

Fixed - Multi user access conflict when oopsing the move of a cue in a multi user environment.

Fixed - Import/export of special values in presets if created with preset reference.

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Version 3.3



## Description

Fixed - New presets cannot be stored if update preset default is set to Original content only.

Fixed - Incorrect color for ColorRGB15 by default.

Added - Web remote: Moved Highlight buttons to be more consistent.

Fixed - Typo in Aleda K20 fixture types.

Fixed - Crash when logging in with a user profile that does not have view pages.

Fixed - xPort nodes do not report the correct state of RDM, NetIndex and WebConfig in ArtPollReply-packets.

Fixed - Web remote: Cancelling the login pop-up will suppress the login promptly.

Fixed - Configuring port settings in the MA Network Config on screen 1 can cut off the pop-up.

Fixed - Stage view calibration rectangle can be hidden by the stage plane.

Fixed - Loading dot2 show files locks Effects.

Fixed - Multi patches are not always created as a child of the correct fixture.

Fixed - Copying user profiles does not copy the labels of the sequence executor sets.

Fixed - If a preset type is deleted, the sequence executor sheet continues to display it.

Fixed - xPort does not respect the MA-Net2 merge mask if input and output is on the same device.

Improved - Pop-up after importing patch with PSR if the complete patch addresses could not be imported.

Improved - NPU IP configuration dialog has no possibility to set the IP to DHCP.

Fixed - Not all running timecode shows are switched off if everything off in the off menu is used by different station in the session.

Fixed - Web remote: Not all options of pop-ups are applied.

Fixed - Changes in the setup can disarrange fixture positions.

Fixed - Storing more than 10000 objects at the same time crashes the desk. Limit is now changed to 10000 objects. If the user tries to add more than 10000 objects, they will get an error in the command line feedback.

Fixed - Effects which are created in the programmer and then stored into the effect pool may differ from the effect originally created.

Fixed - ID collisions pop-up can appear if there is no collision.

Fixed - Using the shaper special dialog can crash the desk if you use shaper attributes that were not expected.

Fixed - Updating presets does not work if you have user right preset.

Fixed - Predefined effect BMP Pos Y contains an incorrect low value.

Fixed - Edit Sequence pop-up loses information and scrollbars disappears when changing the screen.

Fixed - RDM is tuned off in all universes if you load show files from v3.1.2.5.

Fixed - Unpatching fixtures via command line creates a warning pop-up only if executing the command twice.

Fixed - Ooping the auto creation of groups does not work correct.

Fixed - Label of the assign mask in the title bar of a sheet is not reset when changing to the option "follow mask".

Fixed - Auto create channel pages do not apply page names entered.

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Version 3.3



## Description

Fixed - Drawing a lasso selection in sheets and pressing the screen encoder keeps the lasso frame on screen.

Fixed - Entering ranges for high and low values in effects is no longer possible.

Fixed - Web remote login can be omitted by pressing ESC.

Fixed - Web remote pop-up does not apply settings selected in the checkbox.

Fixed - Web remote cancel button in pop-ups does not work.

Improved - The time span during a show upload in which no network protocols are sent has been reduced.

Fixed - New 2Port node version v1.81.

Fixed - Crash caused by network protocols during show load.

Fixed - Assigning options to effects on executors does not work.

Fixed - Crash when exchanging fixture type to exceed parameter limit.

Fixed - Possible crash when initializing a show file in PSR.

Fixed - Removed - Web remote does not support the function Align.

Fixed - Crash when oopsing the deletion of fixtures in the patch & fixture schedule.

Fixed - The mode Start/End values is displayed incorrectly at times.

Fixed - Crash when editing sets in the sequence executor sheet in a new show.

Fixed - Sorting by name in the load show menu does not work at the first attempt.

Fixed - Goto and pressing a cue x.y in the pop-up does not go to the correct cue.

Fixed - Typos in the message center.

Fixed - Preview with XYZ values does not work in preview mode.

Fixed - PSR with XYZ values does not work.

Fixed - Network status after PSR initialization is incorrect.

Fixed - Improved - Sequence executor sheet now shows the cue number of the cue loaded.

Fixed - Executor and encoder labels do not show a correct label if an executor with an effect was switched off using the release mode in the menu Running Effects.

Fixed - Backup on FTP servers does not work if there is less than 40 % of free memory.

Fixed - Pause does not work for macros.

Fixed - Crash when deleting a temporary view.

Fixed - Better handling of colors in the color picker.

Fixed - Page title bar of the web remote overlaps with other elements.

Fixed - Fixtures are doubly created in the layout when cloning.

Fixed - Layout of numeric pad does not correspond to the keys of the desk.

Fixed - Typos in the web remote.

Fixed - Labels of temporary assigned mask are not transmitted in the session.

Fixed - Copying user profiles does not copy all settings of sheets.

Fixed - If attributes of the same feature does not fit into the wheels screen, the feature pages are labeled incorrectly.

Added - PSR menu lists the corresponding show file names.

Fixed - Fixtures having deviant firmware versions are not displayed as separate RDM fixture types.

Fixed - Crash when using smart view.

Fixed - xPort nodes merge modes

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## Description

Fixed - MA Network Configuration displays a merge mode for 2Port nodes in Art-Net mode.

Improved - 2Port nodes version 1.77 and the following versions do not support MA-Net1. Also, MA-Net1 is not displayed in the MA Network Configuration.

Fixed - xPort node brings back old DMX frame if a new signal from a different source is input.

Fixed - xPort node holds the last signal if merge mode is switched over from LTP to HTP.

Fixed - Goto fades differently using Speed 1 speed group compared to using other speed groups.

Fixed - xPort web remote has no possibility to change IP to DHCP.

Fixed - xPort web remote clear button does not clear all unsaved settings.

Fixed - "From values" and "to values" differ from each other in natural and physical values of Clay Paky fixture types.

Improved - Sending empty messages via telnet will add a CRLF to these messages.

Fixed - MIB drop-down does not open when pressing Please on the internal keyboard in the sequence executor sheet.

Fixed - Crash when opening the image importer.

Fixed - Update file is not available on the desk after network update.

Fixed - Crash when deleting an executor, which is locked by the assign executor-tab of the tracking sheet.

## onPC - Fixed Bugs

### Description

Fixed - Time stamps of shows are changed by selecting them in the menu Load Show in an onPC.

Fixed - onPC: If you export plugins, they are written on the internal disk only.

Fixed - Crash in onPC when trying to change values in the tracking sheet.

Fixed - onPC button labels for button page up and down are not the same as displayed on the desk.

Fixed - Changing sheets into vertical style can crash the onPC.

## 3D - Fixed Bugs

### Description

Fixed - Progress bar of show download is not displayed properly at times.

Fixed - Bug with complex multi instances fixture structures can cause problems in the UI.

Fixed - Rotation of multi instance fixtures in 3D does not work correctly.

Fixed - 3D parameter \_XAQ is not exported with fixture types.

Fixed - Deleting a stage marker also deletes the 3D objects of the fixtures connected.



## VPU - Fixed Bugs

### Description

Fixed - Hap clips which were converted to Hap in the file browser of the Hap converter does not display the warning message that the media file is not specified any more if they are added to a show.

Fixed - Make a screenshot: Screenshots do not show a watermark if a valid dongle is attached.

Fixed - Make a screenshot: In some cases no screenshot was taken from output 1 if more than one output was enabled.

Fixed - The termination of a running content distribution works again.

Fixed - Fixtures which were set to "no parameter" in the patch could not be selected in the desk. This is fixed. These fixtures can be selected again e.g., for moving them in the pixel mapper.

Fixed - Changing the UV mapping of a mesh while the mesh is set to grid mode works again.

Fixed - Changing the resolution of a mesh while the mesh is set to grid mode works again.

Fixed - Two or more meshes of one warper 3D object are not shifted anymore if they are on top of each other.

Fixed - Increase resolution in grid mode does now work properly if faces have been deleted.

Fixed - A mesh now shows the correct UV mapping even if the UV coordinates indicate a field near the border of a texture e.g., 1900 to 1920 of a full HD texture.

Fixed - Editing a warper mesh does not cause other MA VPUs in the same session to crash any longer.

Fixed - Pixel Mapper status message is not visible any longer if the warper GUI is toggled off in the warper editor.

Fixed - The "delete" key of an attached keyboard is working again as a short cut to delete faces at the grid mode of the warper editor.

Fixed - The dialog "delete faces" displays the proper amount of faces.

Fixed - Switching between bezier and grid mode does now force a proper refresh of the GUI.

Fixed - There is no artifact line at the lower end of a warper object any longer if the object is used on a camera and the camera is moved with VCamPos.

Fixed - An MA VPU does not render a Pixel Mapper output any longer if the rendering of the Pixel Mapper is enabled, but the render IP which is set does not match.

Fixed - An MA VPU now does only render a virtual output if it is used or if the GUI is active and showing the Multi Preview.

Fixed - Selection of virtual output 9-16 added to the render settings of an MA VPU at the network settings of the desk.

Fixed - A video clip does not contain an incorrect time base any longer if the dimmer is opened during preload.

Fixed - The VPU application does not crash any longer if the value of the clip frame cache is changed while the layer dialog of the docking frame is maximized.

## Description

Fixed - The MA VPU application does not crash any longer if thumbnails of MPEG-2 media clips are created while the MPEG-2 memory limit is exceeded. No thumbnails from MPEG-2 video clips will be created in this case.

Fixed - The MA VPU application does not crash any longer if MPEG-2 media clips are converted to Hap with the Hap Converter while the MPEG-2 memory limit is exceeded. In this case MPEG-2 clips will not be converted until enough memory is released for this operation.

Fixed - Default setting for inserting content folders by drag and drop is "fill gaps" now. There will be no collisions of channel functions any longer if using drag and drop.

Fixed - A Pixel Mapper output does not flash white any longer if a fixture is moved in the Pixel Mapper view of the desk and a delay > 0 is set for the output.

Fixed - An output of a Pixel Mapper that contains unpatched fixtures now works flawlessly.

Fixed - The view does not change to the Preview after importing function blocks.

Fixed - Frame blending for SDI inputs now work flawlessly again.

Fixed - Possible crash when entering external video-in configuration.

## Appendix



Downdating the MA Network Switch from v3.3 or higher to older version will reset the configuration to factory defaults. It is possible to backup the configuration before the downdating and restore it afterwards.



Using the Bitmap Fixture in sequences with several cues causes the bitmap fixture to restart the playback with every cue the bitmap fixture is programmed in. If the bitmap fixture is to be used in a sequence with several cues, we suggest programming it in single cue sequences and call these sequences within the master sequence with cue links.



Import of all kinds of XML-files is only possible if the files were exported from the same or an older grandMA2 version.



If a World is edited while a user has entered this specific world, the changes are not applied to the user. The user has to change to a different world to see the changes of the world.



RDM: Connecting 2 outputs of a grandMA2 System with one cable can cause trouble in RDM.



Down dating to grandMA2 release v3.0.0.5 and previous versions requires a factory reset (Format and Install). Please backup your show files before down dating.



Inserting the command "store /remove" or pressing [store][cue][2] and select [remove] in the pop-up will remove the whole attribute with all (!!) its layers of fixtures having any value or effect layer of this attribute active in programmer. It can be filtered to only remove values, value timings or effects by using the buttons in the stored encoder bar. To remove only specific layers, for example only individual effect fade, the operator needs to open the calculator for these layers and select "remove" in the calculator. Afterwards, the operator needs to update the cue, or has to use store /merge to remove the specific layers.



If multiple fixtures are selected with a lasso in the layout view, the snap grid settings are applied to interpolate small position differences of fixture icons. The order of selection is always made inside of one snap grid cell first. Afterwards following the succession, line by line in the direction of the lasso movement.



The network switch IGMP Snooping functionality has to be switched off in order to be able to update MA 2Port nodes.



A grandMA1 compatibility mode is no part of grandMA2 console software 3.0 and subsequent versions. If grandMA1 compatibility mode is needed, grandMA2 consoles and MA NPUs have to be down dated to grandMA2 v2.9.1.1



The MA-Net2 protocol has changed to support the 8Port Node devices. All MA devices need a new network streaming protocol in the 2.9 software. Once updated to the correlating version to grandMA2 v2.9, 2Port, 4Port, 8Port, NSP 4Port Node and the NDP will no longer work in a session with an older network streaming protocol (e.g., grandMA2 v2.8). Down dating MA 2Port Nodes or NSP running in 4Port Node Mode to be v2.8 compatible is only possible via grandMA1 v 6.801. All other devices can be down dated via USB or windows installer only.



Exec Time can be used for Executor buttons and Executor Faders. The new Executor option "Ignore Exec Time" has been added. If this option is enabled, the referring executor uses its own off time instead of the Exec Time Fader Timing. Show files stored in grandMA2 v2.9.1 and previous versions are converted. This option is then enabled in all fader executors. Executor option defaults are valid for fader and button executors. If storing new fader executors, these executors listen to Exec Time by default.



Fixture type preset reference contains values only. It is not possible to add any fade, delay or effect data to fixture type preset references.



ASCII show import supports Strand, Transtechnik and ADB ASCII show files.



A CIP connection is not possible when running CIP sender and CIP receiver at the same computer.



The Pixel Mapper of an MA VPU works best if the resolution X of the output can be divided by 8.



Lua 5.3 is implemented in grandMA2 v3.1 or subsequent versions. LuaSocket is approved for Lua 5.1 only. Therefore, not all functions of LuaSocket are supported within Lua 5.3.



Following syntax can be used to switch off faders only or buttons only of current page or of all pages except the current page:

- **Off Executor 1 thru 100** - This switches off all faders of current page.
- **Off Executor 101 thru 240** - This switches off all buttons of current page.
- **Off Executor 1 thru 100 Page Thru - \$faderpage** - This switches off all faders of all pages except the current page.
- **Off Executor 101 thru 240 Page Thru - \$buttonpage** - This switches off all buttons of all pages except current the current page.



Addressing executors via command line has been improved to provide support for addressing by name or number. This can be used when sending playback commands to specific executors or when storing to a specific executor, sequence or cue for example. All existing cue links and macros of show files stored with former grandMA2 versions will be converted as far as possible. Please check cue links and macros of existing shows when loading them the first time with this version. Some cue links and macros may have to be adjusted. When creating new macros or cue links or editing existing ones, the new syntax as described below has to be used.

- Go Exec "exec name" - starts executor with specified name on current page.
- Go Exec "exec number" - starts executor with specified number on current page.
- Go Exec "\*"."exec name" - starts executor with specified name on all pages.
- Go Exec "\*"."exec number" - starts executor with specified number on all pages.
- Go Exec "page name"."exec name" - starts executor with specified name on specified page.
- Go Exec "page name"."exec number" - starts executor with specified number on specified page.
- Go Exec "page number"."exec name" - starts executor with specified name on specified page.
- Go Exec "page number"."exec number" - starts executor with specified number on specified page.

## Known Limitations

- Pan/Tilt offsets should not be set to higher values than the fixture type provides due to its physical limitations. Setting values out of the physical range can affect the correct visualization in the stage view of the grandMA2 and MA 3D.
- Active dimmer values given from the desk do not cause the VPU to send its merge defaults for the color attribute. This may cause an unexpected output if only the dimmer of a fixture is controlled by the desk. To avoid this and to gain full control, just set the color attribute actively in the programmer. Or store the color information to an executor which is set to a higher priority than the pixel mapper output. Do not forget to switch off this executor if the output of the pixel mapper is to be active again.

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- If using the Set button in the web remote, the command line default will be changed to MATricks.
- At the initial start after the installation or the update of the VPU application, the end user license agreement is shown. The MA VPU application will not start, until the end user license agreement is confirmed. If you are using a VPU Plus, the end user license agreement is shown at the internal touch display. If you are using a VPU basic or VPU light, the end user license agreement is shown at the first external DVI-output - so please make sure you have a display and a mouse attached to the VPU Basic or VPU Light.
- Ma-Net1 is not supported for MA 2Ports Version 1.77 or higher.
- MA onPC command wing DMX input is supported for the ports "DMX In" and "DMX out A" only. The port "DMX out B" can only be used as DMX out!
- Before loading show files stored with grandMA2 **v2.7.x** the first time with grandMA2 v2.9.x, attribute Colormix4 and 5 and Colordim4 and 5 of self-made fixture types have to be manually adjusted to fulfill the color specification. Amber has to be Colormix 4 invert or Colordim 4 without invert, and White has to be Colormix 5 invert or Colordim 5 without invert. Otherwise, color information of these fixture types will be lost after loading show file with v2.9.
- The feature name for ColorDim/ColorMix has changed into MixColor. Macros using one of these feature names have to be adjusted.
- Known limitation when loading show files stored with **v2.8.x** for the first time in v2.9
  - Special Masters have a new data structure in grandMA2 software.
    - All Special Master custom labels will be reset to MA default labels
    - Assignment of 100mm faders will be reset to default.
    - Macros referring to special masters have to be adjusted and have to use the new naming and numbering of special masters.
  - Macros referring to relative values have to be adjusted according to new relative/absolute syntax.
  - User profiles exported to USB drives using v2.8 and previous versions have to be manually moved from folder importexport to user\_profile folder in order to import these profiles using grandMA2 v2.9 and subsequent versions.
- 4Port and 8Port Nodes have to be updated to v1.0.9 or subsequent versions to be compatible with grandMA2 v2.9. 2-Port Nodes have to be updated to 1.77 or subsequent versions in order to be compatible to grandMA2 v2.9.
- Channel set labels of fixture types have to be unique to be visible and accessible in calculator. E.g., if channel sets of Attribute Shutter are closed, open, open, open, only one open is visible in the calculator. Changing channel set labels to closed, open, open(2), open(3), results in all channel sets being visible in the calculator.
- Astronomical clock always calculates time according to standard time zone. Additional summer times are not recognized and cannot be adjusted manually when using sunset, dusk, dawn, and sunrise in the agenda.
- Bitmap fixtures can be applied to physical parameters only. Virtual parameters such as a virtual dimmer or XYZ attributes are not supported.