RELEASE NOTES

Version History

Version	Release Date	Details
9.0	30/04/15	New features, improvements and fixes.

Version 9.0

Upgrade Procedure

1. **Upgrading from: Consoles Before 6.0::**

   For consoles on versions prior to 6.0, the instructions in the V6 Upgrade Guide must be followed before installing version 9.0. A copy of the guide and all the files required can be found here. After V6 Upgrade is complete, please follow the instructions below to upgrade from version 6 to version 9.0.

2. **Upgrading from: Consoles 6.0 and above:**

   For consoles there the software must be upgraded by running a version 9.0 recovery stick. You can download the 9.0 recovery stick from here. Please follow the instructions given when downloading the recovery stick to install version 9.0. When running the recovery stick, selecting Standard Recovery will retain any shows saved on the console and preserve your previous licence. If you are running a Full Erase recovery then you can reuse the licence which was emailed to you previously.

3. **Upgrading from: PC any version:**

   Please note that as of version 7.0 Windows XP and Vista operating systems are no longer supported. Supported versions on Windows are Windows 7 and Windows 8. This affects Titan One, Titan Mobile, Titan Simulator and Personality Builder. Please ensure you save and backup your shows before attempting to upgrade any software. An automated upgrade path from Titan 6.x is provided. You can download the latest Titan software by clicking on the relevant console here. Please download the setup file to your computer. When it has finished downloading find the setup file and double click to run it. Follow the instructions presented by the installer, taking care to read each step carefully. Once the setup completes you need to restart the computer.

4. **Upgrading from: Titan Remote Apps:**

   Users wishing to use Titan Remote should download the new Titan Remote V9 app from the relevant app store. The existing apps will continue to work with version 8 consoles.

New Features

1. **Key frame shapes:**

   A new option has been added to the [Shapes And Effects] menu called [Key Frame Shapes].

   Selecting this brings up an option to [Create] or [Edit].

   - [Edit] will open the Effect Editor workspace providing a way to edit any effects currently in the programmer.
   - [Create] will open the 'Record Key Frames' menu.

   Unlike traditional shapes which 'modify' current control values, Key Frame Shapes work by fading between 'absolute' values or 'key frames'. Each key frame can contain an unlimited combination of fixtures and attributes and can include references to palettes which will, in-turn, update dynamically if the source palette is updated.

   There are two record mode options - [Record Mode Channel] (default) and [Record Mode Quick Build].

   - In [Record Mode Channel] pressing <enter> or softkey A will record anything currently in

the programmer to the chosen frame. By default this will be the next available frame slot and this will be reflected in the softkey as [Add Frame]. If the frame number is changed to an existing frame the option will change to [Replace] accordingly allowing you to change the contents of a frame.

- In [Record Mode Quick Build] selecting a palette or playback will immediately create a key frame based on its contents. Pressing <enter> will act as a shortcut to [Finish Recording Frames]
- In either mode selecting an existing frame number will also reveal an option to [Delete] the frame on softkey B. Alternatively you can delete frames by pressing the Delete function key then selecting a frame or range of frames followed by [Confirm] or selecting the frame or range of frames a second time.

With the option [Playbacks Display Hidden] enabled (default) the page touch area will change to 'Layer' and created key frames will appear on the playback masters. Each key frame will be automatically legended from the last selected palette, adjusted attribute or, when recording in Quick Build mode, the legend of the source playback. Selecting a key frame with any of the associated buttons or touch area provides a shortcut to setting the frame number on softkey C and reveals the [Replace] and [Delete] softkey options. Each time a new page is created it will be added to the page touch area and you can switch between pages using the standard page +/-1 buttons or by touching above or below the current page. The key frame contents of each page are denoted next to the page number.

With the option [Playbacks Display Visible] enabled the page and playback touch area will switch back to normal providing a way to access or regain control of held playbacks along with a way to select playbacks in quick build record mode.

You can switch between the two freely during creation and you can also toggle the option to hide or show playbacks via the Unfold function key.

Once you have created all of your frames pressing [Finish Recording Frames] will open the Effect Editor and the shape will run. Note that if you cannot see the shape live you can use the locate dimmer button at the bottom-left.

Each shape can consist of multiple layers.

- The layers and associated frames are shown on the left-hand side along with the their legend. The frames for each layer can be shown or hidden by touching the arrow button to the left of the layer header. Additionally if the frames of a particular layer are hidden, touching the layer header will automatically show them. The preview section of the window shows a time-line of all the key frame layers of visible effects with a visual representation of the fade transition between each frame and the proportional length of each frame relative to the total shape cycle. The start of each frame is denoted with a vertical bar with the frame number in the centre. The background of odd/even frames alternates between dark and light grey to help. Where there are multiple layers these are stacked showing the effect of the phase offset and length (shape speed) relative to one another. The yellow line underneath each layer represents the phase offset with the arrow terminator denoting the start/end of the cycle. Dragging this directly adjusts the phase offset for the associated layer.
- Shapes can be toggled in or out of the preview by toggling the eye icon to the left of the shape header. By default all key frame shapes in the programmer will be visible. At any time you can pause, play or restart the selected shape or layer via the transport controls located top-right.
- The bottom-right area contains sliders to control various properties with the associated value shown in the box immediately to the right of the slider. Clicking on this box will provide a way to input value numerically and a [Reset to default value] softkey. You can also reset default values by double-tapping this box. While selected the associated control will connect to the wheels to allow adjustment by wheel if required.

Initially the shape will be selected revealing controls appropriate to the entire shape. Speed, phase, spread, phase-offset and the reverse switch work in much the same way as traditional shapes. The spread slider will restrict to the total number of fixture selected but this can be overridden numerically or by wheel if required. Fixture overlap provides a way to set how much of a frame transition is complete before the next fixture begins. The speed, phase, spread and overlap values for each shape are also displayed directly underneath the shape header and touching these will provide another way to access the associated numeric entry and wheel control options. Additionally you can set a direction for each shape. Touching the direction button under the shape header will reveal a pop-up where you can choose between various direction options.

Selecting a layer header will reveal controls independent to the global shape properties. These are identical with the exception of speed.

Selecting a key frame, either by touching the frame in the list on the left or in the timeline, will reveal the properties associated with the selected transition curves. By default the transition curve will be linear. Touching the transition icon to the right of a key frame will pop-

up various alternatives. The chosen transition curve will be represented in the timeline and in the transition icon. The effect of changing any of the associated properties will be reflected live in the timeline and in the transition icon. In addition the proportional start time of each frame is detailed in the list on the left-hand side and touching this will provide another way to adjust via numeric entry or wheel. It is also possible to adjust the start time by touching and dragging a key frame directly in the timeline.

It is also possible to adjust the properties of multiple frames at once. To select multiple frames you can either drag a marquee rectangle over the required frames or use the multiple select toggle button at the bottom-left of the editor window. When enabled you can select multiple frames by touching them one-by-one. Where the selected frames have different transition curves all of the possible controls will be revealed. With shared controls, changing by slider or wheel will adjust values proportionally. Numeric entries will be absolute. Using the [Reset to default] option will reset controls the their respective defaults.

Touching the edit button (pencil icon) will return you to the creator where you can add, delete or replace frames as required. If you touch the edit button next to a frame it will load this into the programmer and automatically set this as the frame number ready to replace or delete if required. Pressing [Finish Recording Frames] will return you to the editor.

Frames can be reordered with a layer by using the up/down buttons at the bottom-left of the window. This can be either individual or multiple frames.

Selected frames, layers or shapes can be deleted by touching the trash icon at the bottom.

Pressing the Add ('+') button reveals options to create a new layer in the current key frame shape, add a new key frame shape or add a new pixel map effect. Choosing to add a new layer or key frame shape will return you to the creator. Selecting pixel map will put you in the pixel mapper menu ready to begin creating a pixel map effect. Where key frame and pixel map effects co-exist in the programmer the effect editor window will show the pixel map preview at the top with key frame(s) stacked underneath. This can be toggled between visible and hidden using the eye icon next to the pixel map effect header in the same way as key frame shapes.

Once your effect is complete it can be recorded to a playback handle in the usual way. By default faders will proportionally fade key frame shapes where appropriate and Where a playback containing key frame shapes is set to have speed on fader the fader will master the speed of all the associated shapes.

A new global user setting and per playback option to toggle the behaviour of key frame shapes in playbacks has been added. The user setting toggles between [Shape Behaviour = Overlay] (default) and [Shape Behaviour = LTP]. In Playback Options you can set these behaviours locally or to follow the global setting as defined in user settings.

- Overlay functions much like traditional shapes. In this mode an active key frame shape will take priority of any included fixtures/controls and keep running until killed, regardless of priority levels. So, for example, if you have an active key frame shape that changes colour and fire a colour cue in a playback, the cue will have no immediate effect on the output to stage. Similarly, attempting to apply quick palettes or adjusting associated controls in the programmer will not interfere with the output. When the shape is killed it will then return to the colour that you fired in the playback, the quick palette you recalled or the values you placed in the programmer. This makes it possible to preset controls in the background while ensuring the shape keeps running.
- LTP functions much like a chase. In this mode items on the same priority level can override an active key frame shape. For example, if you have an active key frame shape that changes colour set to normal priority and fire a colour playback also set to normal priority, the colour playback will take control and block the key frame from output. Killing the colour playback will allow the key frame to continue outputting again. Similarly, firing a quick palette will override the key frame shape in this example and you would need to re-fire it to restore output. However, quick palettes are set to 'High Priority'. Therefore if you set the key frame shape playback to high or higher it will prevent quick palettes from taking control. Similarly, setting the priority to 'Very High' will prevent the programmer from taking over.

When viewing a playback containing a key frame shape an option to view [Key Frame Shape] will appear in the view shapes column. Where multiple shapes exist in a cue the button will show [...]. Selecting this will open Shape View with a list of all the shapes contained. When the cue contains key frame shapes they are listed as 'Key Frame Shape' in the name column and selecting the associated [View] button will open the Key Frame Shape Effect View. Here you can find and edit all the relevant properties for the shape, layers and frames. Touching a relevant cell provides an option to input a new value numerically, by wheel and a softkey to reset to default. Where properties are not relevant they are shown with a dash ('-'). Key frames are shown with their legend and selecting the [View] button will open the frame in Cue View where values can be viewed and edited in the same way as any other cue.

2. **Colour model improvements:**

Amber, White, Warm White and Cold White colour mixing has now been incorporated into the colour picker model. Where a fixture contains one or more of these attributes they will be associated with the 'Colour Mix' group and values will included in the calculation when using the colour picker, both in the Attribute Editor and in Pixel Map effects.

3. **Autoload fade times:**

A new 'Autoload Times' column has been added to Cue List Playbacks View.

This provides a way to control the fade in, fade out and delay times for autoloaded playbacks.

By default this is set to 'Cue Time'. In this mode Autoloaded playbacks will use the associated cue list cue times.

Selecting an Autoload Times cell will open the 'Edit Cue Autoload Times' menu. By selecting the Delay, Fade or Fade Out softkeys you can enter times independent to the cue instead. Selecting the [Use Cue Times] softkey will change the selected property back to using the cue times and the [Use Individual Target Times] will take the property from the target playback.

If all three properties are set to use Cue Times or Individual Target Times then the cell will reflect this with 'Cue Time' or 'Target Time' respectively. Where all three properties are set to local independent times the cell will display the values in the format <delay>/<fade in>|<fade out>. Where there is a mixture this will be reflected in the cell with a '*'.

4. **Sound to Light:**

A new option called [Audio] has been added to trigger types. This allows items to be triggered by an line input on supporting consoles (this is not the line in on the motherboard!). This signal is divided into frequency 'bands' and the audio stimulus menu has a [Band] softkey where you can set which band will trigger the item. The triggers from the audio input can be assigned to various functions in the console using the same method as the other trigger types.

A new [Audio Triggers] workspace has been added to allow adjustment of the audio triggers parameters. This displays a live visualisation of the audio bands and overall input level. The following parameters can be adjusted.

- On/Off - disables all audio triggers.
- Audio Gain - this is the overall gain for the input audio, if the signal is weak then this can be used to boost the signal.
- Auto Gain - automatically adjusts the gain for the current input level. This will disable the gain level setting.
- Trigger On/Off - disables triggers on a specific audio band.
- Trigger Level - each band has a manual trigger level which you can set to the desired threshold. When the level for this band exceeds the threshold it will send a trigger.
- Trigger Auto - automatically adjusts the trigger level when no triggers are occurring on this band.

You can assign playbacks to a specific band trigger by selecting the top band button in the audio workspace and then selecting a playback to trigger from that band.

5. **Filters:**

New options have been added to filter the data in Cue View, Palette View and Channel Grid.

On the left-hand side of all the views there are now buttons to filter by attribute and fixture type. These can be toggled on or off independently of the workspace properties.

By default the display will show all attributes and all fixtures. Selecting one of the IPCGBES buttons will filter the display to attributes associated with the group. Selecting one of the fixtures will filter the display to show just the information associated with that fixture type.

When viewing cues or palettes there is a new context menu option to always show cells, always hide or show when recorded.

When viewing the Channel Grid in addition to the existing 'Programmer' and 'All' (previously known as 'Output'), two new options have been added to the context menu toggle - 'Stage' will filter to show only fixtures whose intensity is above zero and 'Selected' will filter to show selected fixtures only. You can also toggle the sorting of the window between 'User Number' and 'Last Selected'. 'User Number' will order the rows by user number. 'Last Selected' will order with the last selected fixture at the top.

The context menu options work in conjunction with the fixture and attribute filters.

6. **Held over playbacks:**

A new user setting has been added to define how playbacks behave when active from another page:

- [Playback Paging = Normal] (default) is the standard behaviour for the console type.
- [Playback Paging = Always Hold] is the standard behaviour for non-motorised faders where the fader retains control of an active playback across pages and must be lowered before a playback from another page can be fired.
- [Playback Paging = Never Hold] is the standard behaviour for motorised faders. In this mode the fader only controls an active playback when on the page it was fired from. This makes it possible to fire playbacks from more than one page in the same fader location. To regain control of a playback fired from another page you must return to that page and level match the fader. When a playback is active from another page the touch display will change to a purple background with the page number(s) of the active playbacks shown at the top in light blue. When cycling through pages those containing active cues are shown with the cue legend in light blue.

7. **Timed go on cue:**

You can now override a cue fade in time in a cue list. To fire the next cue in a connected cue list with a new time input the time in seconds on the numeric keypad followed by GO. To fire a different cue first select the cue with the syntax <n> CUE <enter> or CUE <n> <enter> (where <n> is the cue number) then the time in seconds followed by GO.

8. **Record Cue Only, Track Forwards, Track Both:**

When updating cues in a cue list you can now choose how the information will be tracked. When pressing Rec Step or after selecting [Update Cue x] in the record cue list menu there is a new softkey where you can toggle between [Update Mode Forwards], [Update Mode Backwards], [Update Mode Both] and [Update Mode Cue Only]. The various options include visual representations of the associated behaviour. Updating with 'Forwards' will update the control in the current cue and track subsequent cues until it is next changed. The controls in preceding cues will remain in their previous values. Updating with 'Backwards' will update the control in the current cue and track back until the control was last changed. Controls in subsequent cues will remain in their previous values. Updating with 'Both' will update the control in the current cue, tracking backwards until the control was last changed and forwards until the next change. Updating with 'Cue Only' will update the control in the current cue only without affecting previous and subsequent cues.

You can use the command short-cut [Record] [Cue] [@] to record as Cue Only.

9. **Cue list playback view live cue position:**

Two new display property options have been added to playbacks view. 'Windows Scroll = Next Cue' will automatically advance the cue list view where it contains more cues than fit in current window. 'Window Scroll = Manual' will stay static and remain in the scroll position set manually. When the view is in manual mode a 'SCROLL MANUAL' reminder is shown in the view header bar. 'Scroll Offset from Top = x Cues' sets the number of cues to retain at the top of the display when in auto scroll mode. For example in a large cue list with 'Scroll Offset from Top = 5 Cues', once the cue has advanced past number 5 the window will start to scroll. This provides a way to control the balance between previous and following cues across different screen and window sizes.

10. **Align Groups:**

You can now align one group of fixtures to another. After selecting the fixture(s) you would like to align, press the ML Menu button and select [Align Fixtures] from the menu. Then select the fixtures you would like to align to followed by [Align] to execute. There are a number of additional options in the Align Fixtures menu: [Auto Reset Mask] will always reset the mask to include all whenever you enter the Align Fixtures menu. [Remember Mask] will restore the last mask set. [Spread Attributes] will distribute the attributes as evenly as possible where there is a difference between the number of source and target fixtures. Where the source selection is larger than the target [Repeat Attributes] will mirror the fixtures where possible. Where the target selection is larger than the source [Repeat Attributes] will repeat the source selection to fill the excess. [Align Programmer Attributes] will only align attributes currently in the programmer. [Align All Attributes] will align all attributes regardless of the programmer. With [Palette References Maintained] enabled, any palettes references in the programmer for the source fixtures will be mirrored in the target fixtures. With [Palette References Lost] enabled the target fixtures will contain hard values only. In all instances the fixture order of the source and target fixtures is used to determine how the fixtures are aligned. Fixtures can be selected using groups or manually.

11. **Randomise fixture order:**

A new [Random Order] function has been added to the Apply Group and Selection Pattern menus. This provides a method to quickly randomise the fixture order for selected fixtures. By holding a group and selecting [Random Order] the fixtures in the group will have a randomised order. Alternatively, selecting fixtures and then pressing the All key will open the selection pattern menu where you can apply a random order. You can also use this function when in the

shape fixture order menu and in the cue fixture order menu. Note that when editing an existing order in the cue fixture order menu this relies on [Auto Increment] being turned on and will use the step number as a base.

12. **Tap tempo on rate master:**

It is now possible to tap the tempo of rate masters.

This provides a way to synchronise associated playbacks while retaining proportional control by fader and local wheel adjustment where required. Tempos tapped are translated to the BPM display in the target playbacks. Tapping the tempo of the rate grand master will synchronise all rate masters. The tapped tempo is proportionally mastered by the master fader level and associated scale. Therefore with a scale of 0-100% and a fader at full, the tapped tempo will be reflected directly in the output. With a fader at 50% the output will be half the tapped tempo. With a scale of 0-200% and a fader at full, the output will be twice the tapped tempo. Finally, if you had rate master 1 set to 0-100% and rate master 2 set to 0-200% with both faders at full and then tap the tempo on a rate grand master at full and set to 0-100%, the output of targets set to rate master 1 will output at the tapped tempo and those set to rate master 2 will output at double the speed.

13. **Park – remember line patched:**

When fixtures are parked they now remember the line and address they were originally patched to. When re-patching or selecting the address of one or more parked fixtures there is a new softkey option to [Unpark] showing the original line and address. Selecting this option will restore the parked fixture or fixtures to their original location. There is also a new context menu option in patch view that toggles between 'Show/Hide Parked Fixtures'. With 'Show Parked Fixtures' enabled, parked fixtures will show as greyed-out in their original lines when filtered and with the line and address shown in the address column.

14. **Exchange – option to leave DMX address.:**

When exchanging fixtures there is a new option to toggle between [Use Source Fixture Address] and [Use Specified Address]. When set to [User Source Fixture Address] the new fixture will be set to the same address as the source. This provides a quick way to exchange fixtures in place without worrying about having to set the address.

15. **Block pixel map:**

There is now a new switch in pixel map effect properties that toggles block on/off. When set to on this will override pixel maps running on the associated fixtures (according to priority) and temporarily stop the effect. This works in the same way as block shapes.

16. **Pixel mapper – Gradient fill:**

Two new animation types are available in pixel map effects. 'Linear Gradient' and 'Radial Gradient'. These provide a way to achieve smooth and 'pulse' fade transitions. In each type you can control the start and end opacity and the relative offset between them. Touching the spread button will reveal three pop-up spread types - 'Pad', 'Reflect' and 'Repeat'. Pad is the default and applies a single gradient fill. Repeat repeats the fill pattern indefinitely. Reflect repeats the fill indefinitely inverting the fill at each repetition for a smooth transition. X and Y control the horizontal and vertical offsets respectively. When using Radial Gradient the Width, Height and Zoom controls scale the fill. When using Linear Gradient 'Length' scales the width of the fill and 'Direction' rotates.

17. **Layout editor improvements:**

New options have been added to assist with the layout of fixtures for pixel mapping.

In the Layout Editor context menu there are two new toggle options. 'Wheels Rotate Selection' treats the selection as a single object and adjusting the angle by wheel will adjust the position of the fixtures around a center origin. Adjusting the angle with 'Wheels Rotate Individual Fixtures' enabled will spin all of the selected fixtures around an origin centered on each individual fixture.

'Wheels Move Sub Pixel' allows the selected fixture(s) to be positioned across grid line boundaries when adjusting by wheel. Adjusting position with 'Wheels Move Full Pixel' enabled moves the selection by whole grid cells. The 'Snap' context menu option will cause the selected fixture(s) to center on their nearest whole grid cell.

In the Arrange Fixtures menu two new options have been added: [Selected Fixtures] will apply the auto-arrange function to the selected fixtures only. [Entire Group] will auto-arrange all the fixtures regardless of selection. [Shape = Rectangle] will arrange the fixtures in a standard rectangular format. [Shape = Triangle] will arrange the fixtures into a triangle. [Shape = Oval] will create a circular layout.

The Fan function can also be used when adjusting positions and angles by wheel to spread layouts evenly. This works most effectively when in [Wheels Move Sub Pixel] mode.

18. **Quick build cue-list auto legend:**

   When quick building cue lists the text legend from the source playback or palette is now automatically used where available.

19. **Theatre key profile:**

   There is now a new factory key profile available called 'Theatre' where Grey = Go, Blue = Go back and Black = Stop.

20. **Release without home:**

   A new toggle option has been added to the Release menu. When set to [Release To Home = Enabled] releasing will result in controls returning to locate values where there are no associated controls active elsewhere. With [Release To Home = Disabled], controls will only release to relevant active playbacks or quick palettes. This provides a way to prevent fixtures returning to their locate values when released in situations where this is undesirable.

21. **Timed clear:**

   It is now possible to fade HTP values from the programmer over time when clearing. <x> Clear will cause dimmers in the programmer to fade out over x seconds.

22. **Clear selected syntax:**

   You can now select fixtures to clear from the command line using the syntax <x> THRU/AND <y> Clear

23. **Shape re-sync:**

   There is now a new [Restart Shapes] option in the Shape Generator Edit menu. Pressing this will re-sync the shapes in the programmer. This is particularly useful when adding multiple shapes and you need to see how the relative offsets interact.

24. **Shape palette view:**

   It is now possible to view and edit shape parameters in palettes. After choosing a palette to view selecting the new context menu item 'View Shapes' will open shape view listing all the shapes contained along with their parameters. You can adjust parameter values directly by selecting the associated cell and then input the new value numerically. Selecting the [View] button will open the 'Shape Fixture View' where you can see and edit the individual fixtures and parameters for the associated shape. The 'Add Fixtures' context menu item will add any selected fixtures into the shape.

25. **Pixel map palette view:**

   It is now possible to view and edit pixel map effects in palettes. After choosing a palette to view selecting the new context menu item 'View Effects' will open the Pixel Mapper Effect View where you can see and edit all the layers, elements, animations and associated parameters. Selecting a cell provides a way to input values numerically and a [Reset to default values]. Additionally the wheels will connect to the selected parameter to allow adjustment by wheel if required.

26. **sACN merge:**

   There is now a new option in system menu called [DMX Merge Settings] and selecting this will open the DMX merge window. A window opens representing all the connected consoles and their physical outputs. Select [Patch Titan Lines], input universe number and then select port to assign. Select [Patch External sACN Merge], input universe number and then select port to assign. Marquee select will assign incremental lines automatically. Select [Clear sACN Merge] then select port to remove sACN universe assignment. Marquee select will remove multiple port assignments. DMX Output can be toggled on and off using the switch at the top of the window.

27. **HH:MM:SS syntax:**

   A new time format user setting has been added to toggle between [HH:MM:SS] (default) and [s]econds. When in [HH:MM:SS] mode the first two digits input as seconds. If three or four digits are input the first two are minutes and the last two are seconds. If five or six are input then the first two are hours, the third and fourth are minutes and the fifth and sixth are seconds. In all cases where values are outside acceptable limits (i.e. 23:59:59) then the correct time will be calculated. For example, 80 will become 1:20 and 6500 will become 1:05:00. When in [s]econds mode all times input are in seconds. Times shown in views will reflect the current mode and times adjusted by wheel will follow the relevant rules according to the mode selected.

28. **Precision user setting:**

   A user setting has been added to toggle the accuracy of values displayed in cue and palette

views. [Number Style = Dynamic] (default) will show accurate values but remove any trailing zero's from decimal places. For example '5.20' will be displayed as '5.2', '5.0' will be displayed as '5' but '5.21' will be displayed in full as '5.21'. [Number Style = Rounded] will round any decimal places up or down to the nearest integer. For example '5.1' will be displayed as '5' and '5.5' will be displayed as '6'. [Number Style = Precise] will always display the value in full with the number of decimal places for any given function defined in the fixture personality.

29. **Playback user numbers:**

Playbacks now have user numbers like fixtures, palettes and groups. These can be edited via [Set Legend]. The default legend is now Cue/Chase/Cue List <user number>.

30. **MIDI show control:**

There is now a factory trigger mapping for MIDI Show Control (MSC). The device ID can be set via the [MIDI] option in user settings. The following MSC commands are supported.

- GO - Fire the specified Playback or Cue
- STOP - Pause the specified Playback or Cue
- RESUME - Un-Pause the specified Playback or Cue
- LOAD - Set the playback level to full.
- ALL OFF - Release all playbacks
- RESET - Same as ALL OFF
- GO OFF - Same as RESUME

The MSC device ID can be set in the users settings in the MIDI section. The console will always respond to the all call ID (7F).

31. **ST track ball wheel assign:**

Pressing [Assign] followed by the @ button next to a wheel assigns the Sapphire Touch track ball to control the attribute currently associated with that Satellite Wheel and X/Y Axis.

32. **New priority level:**

An extra priority level called 'Programmer' has been added between 'High' and 'Very High'. This, as the name suggests, is the same priority level as the programmer.

33. **Tracked type cue view column:**

With the cue list cue view context menu item 'View Tracking Information' selected there is a new column called 'Tracking'. Where tracking is enabled this shows the type of tracking information contained for each fixture where applicable. Where a fixture has a mixture of tracking types across attributes this is denoted as 'Mixed'.

Improvements

1. **Dimmer shape intensity by fader:**

A new (default) mode has been added to the shape & effect size toggle in playback options. [Size = HTP] allows dimmer shapes intensity to be controlled by fader while the size of any other shapes remains fixed

2. **Master limit:**

Setting a limit on a master control now applies to linked cells

3. **Fire cue on record:**

When appending or inserting a cue into a cue-list, the new cue will now automatically be fired in place so that the next cue will be the one after the one you have just recorded.

4. **Multiple previews in effect editor:**

New show/hide icons have been added to the pixel map effect editor. For pixel map effects these toggle which are shown in the effect editor preview

5. **Grey-out disabled cue-list cues:**

When cues in cue lists have been set to disabled they now appear as greyed-out to help make it clearer

6. **Wing page legend:**

It is now possible to set page legends for the Titan Mobile Wing and Tiger Touch Wing (top and bottom) by pressing [Set Legend] followed by the 'Go Page' key

7. **Mapped fixtures legend:**

   When importing shows the mapped fixture column now shows the legend of the source fixture rather than just the fixture type. This makes it easier to identify exactly which fixtures are mapped

8. **Pixel map output:**

   Improved the smoothness of the pixel map output

9. **Channel grid optimisation:**

   Improvements have been made to the channel grid code to make it more efficient

10. **Capture patch sync:**

    The auto-patch synchronisation with Capture has been improved so that it now handles fixture delete and new show better

11. **Mask toggle rules:**

    Various mask menus have been aligned so that the behaviour when toggling via the attribute group buttons is more consistent

12. **Network adapter by mac address:**

    The network adapter MAC address is now stored in addition to the index. This ensures the order of network adapters remains constant after a recovery operation in situations where there is more than one adapter

13. **Active fixture refresh layer information:**

    Improvement to the handling of active fixtures to patch extra layers when they change on the linked fixture

14. **Removed revert to replace from edit times:**

    When entering inputting times in the edit times menu they no longer revert to replace after a few seconds meaning you can take as long as you want. This is particularly useful for timecode values. If you need to correct values you can use the backspace key (cursor left) to delete

15. **Exchange address conflict:**

    When exchanging fixtures with the user setting [Warn Before Parking Fixtures Always] enabled if the address conflicts it will now prompt asking if you want to [Park Conflicting Fixtures], [Select Another DMX Address] or [Always Park Conflicting Fixtures]. Selecting [Always Park Conflicting Fixtures] changes the user setting to [Warn Before Parking Fixtures Never] and in the future it will park conflicting fixtures automatically without asking unless the user setting is changed

Changes

1. **Align rules:**

   As part of an overhaul of the align function the rules have changed so that you now select the fixture(s) you want to align (target) first before entering the align menu where you then select the fixture(s) you want to align to (source). Previously it was the other way around

2. **SNAP is a terminator in syntax:**

   SNAP, SNAP BACK and SNAP NEXT now function as terminators in the command line syntax meaning you no longer have to press enter

3. **RemDim is a terminator:**

   RemDim is now a terminator in the command line meaning you no longer have to press enter

4. **Removed show/hide tracking from non cue-list items:**

   Tidied up the options for non-cue list items so that show/hide tracking only appears where relevant

5. **Remove convert to chase/list from unfold:**

   Cleaned up the unfold menu so that it no longer suggests options to change unfolded cues into chases or cue lists

Bugs Fixed

1. **Shapes in lists don't fade out:**

   In previous versions it was not possible to set a fade out time for a shape without a fade in. This has been fixed

2. **Tracking and MID:**

   Resolved an issue where move in dark would function incorrectly where the list contained solo cues.

3. **Group masters don't work on celled fixtures:**

   Previously group masters would not master the intensity of multi-cell fixtures correctly. This has now been fixed so that group masters control multi-cell masters and subsequently the cells as expected

4. **Fixture user numbers lost after update personality:**

   After updating a personality you could no longer select them numerically or using the groups. This has been resolved

5. **ALL ALL sets random fixture order:**

   Fixed issue where pressing ALL ALL would result in a random fixture order. It now restores the programmer order as expected

6. **Fire palettes with times option reset on load show:**

   Resolved an issue where the palette key profile option to fire palettes with times would not save correctly and would always reset to fire without times on load show

7. **Set List - parked tracks become unparked on show load:**

   Fixed an issue where parked tracks did not save correctly and would unpark on show load

8. **Record cue number forgotten after changing record mode:**

   Previously when in the record cue list menu changing record mode would reset an inputted cue number to the next available. It now retains the value correctly

9. **Entering fixture order menu bunches up group layout:**

   Fixed fixture order bunching up layouts

10. **Removing shapes via shape view sets tempo to infinity BPM and other values to zero:**

    Fixed an issue where deleting fixtures in shape fixture view would result in it setting infinity BPM and zero values elsewhere instead of removing fixtures

11. **Temporary chase speed resets when trying to change speed:**

    Previously with the user setting chase sets temporary speed if you attempted to adjust the speed of a connected chase by wheel it would constantly reset meaning it was impossible to change. This has now been fixed

12. **Attribute times not showing on wheels in Titan Net:**

    Previously attribute times would not appear on wheels connected to fixtures patched on TitanNet. This has been fixed

13. **Cue list playback view doesn't show all cues:**

    Fixed problem where playback view would not open all the cues in a list which had missing shape ID's

14. **Time palette references persist in cue view:**

    Previously merging new time values into palettes would not propagate to the controls that referenced them in cue view. This has now been fixed so that the values shown in cue view are accurate

15. **Playbacks fired on the tiger touch wing don't appear in active playbacks:**

    Resolved an issue where playbacks fired from the tiger touch wing would not appear in the active playbacks workspace

16. **Time only palettes always filter as not relevant:**

    Fixed issue where palettes that only contained time values would always filter as not relevant, even when they were

17. **Snap next wouldn't fire first cue:**

Fixed an issue where Snap Next (AKA 'Snap Forward') would not fire the first cue in a cuelist

18. **Cue legend doesn't update in unfolded steps:**

Previously if you changed the legend of cues while unfolded the legend would not update live. This has now been fixed

19. **Shape value truncation:**

Fixed a rounding error which could result in whole values appearing as the number minus 0.1 when input numerically

20. **THC doesn't report out of date panel firmware:**

Previously Titan Health check could fail to report out-of-date panel firmware. This has now been resolved

21. **ArtNet subnet ignored when polling nodes:**

Fixed an issue where ArtPoll ignored the subnet field and therefore assigned the incorrect universe and limited the number of possible universes to 16

22. **Console gets stuck in palette quick record menu:**

Previously if, where a fixture had both colour mixing controls and hue/saturation, the hue was greater than zero and the saturation was anywhere between zero and 100%, quick record could get confused and the menu would hang around. This has now been fixed

23. **Pending dimmers don't show in patch view line occupation:**

Fixed an issue where lines containing only pending dimmers would appear as empty in the patch view line occupation indicator

24. **PC Suite PDF export:**

Fixed various issues when exporting PDF files on PC

25. **Copy cuelist by syntax:**

Previously when copying a range of cue-list cues by syntax the copies would by re-ordered in the order they were created rather than the actual order. The copied cues now stay in the correct order

26. **Import would incorrectly show cells in the destination:**

Previously when importing into a show containing multi-celled fixtures the mapper would incorrectly show the cells as individual target fixtures and could result in imported fixtures being mapped onto the cells. This has been fixed so that it only shows master fixtures

27. **Pixel mapper numeric input:**

Fixed issues where sometimes you could not enter control values numerically in the effect editor

28. **Cropping layouts of auto groups containing multi-cell fixtures:**

Previously the layout grid would not take into account multi-cell fixture sizes and would crop incorrectly. This has now been fixed

29. **Can't select pixel map layer colour in editor:**

Fixed issue where sometimes it was not possible to select the pixel mapper layer colour for editing without first selecting another layer

30. **Set list page mode gets stuck on empty list:**

Fixed an issue where setting page mode to set list with an empty set list would cause the page display to get stuck

31. **Autosave setting reset on load show:**

Previously autosave would always reset to enabled on load show. It now remembers when it has been disabled

32. **Active fixture update personality:**

Fixed an issue where update personality for some active fixtures would not recognise that new clips had been added for CITP thumbnails

33. **Can't change release time back to global in playback options:**

Previously there was no way to change the release time back to global in playback options once a time had been input. Now deleting a value will automatically reset it to global

34. **Can't reconnect backup after reset:**

Fixed issue where, after resetting a backup console, there was no option to reconnect as backup or takeover

35. **Remotes disappear after restart:**

Fixed issue where, after restarting a master console with multiple remotes, one or more of the remotes never come back

36. **Tiger touch wing reboot loop:**

Fixed an issue where starting the Virtual Panel on a Tiger Touch with a Tiger Touch Wing connected would result in the wing going into a reboot loop

37. **Shape merge:**

Fixed issue where including shapes, removing and merging would not remove the shape as expected

38. **Macro in cuelist failing:**

Resolved issue where macros fired from cue lists could fail