

SOFTWARE RELEASE NOTES



Product: Vx76 Control Consoles
Manufacturer: PRG
Subject: Vx76 Software Version 4.0
Bulletin No: VX76-012
Date: February 3, 2014

INTRODUCTION

Vx76 Software Version 4.0 Overview

Software version 4.0 is now available for the Vx76 Control Consoles.

New Features

- + **Tracking Cue Storage** - A new "tracking" method of storing and playing back cues is now available. Tracking-based cue storage records any values that have changed from their default or previous state, or are forced to a Manual state. (Refer to "[Tracking-Based Cue Storage](#)" on page 3 for more information.)
- + **Programmer Window** - A new Programmer window displays all values that have been made Manual (i.e., changed from a home or recorded value), therefore, showing what can/will be stored to cues while in Tracking mode. (Refer to "[Programmer](#)" on page 8 for more information.)
- + **Cue Sheet** - The desktop and front panel Cue Sheets have been enhanced with new features and functionality including a Cue Progress Indicator, Cue Time and Auto Mark fields, and Stack Settings. (Refer to "[Cue Sheet](#)" on page 11 for more information.)

Enhancements

- + **Timecode Windows** - The Timecode and Timecode Data windows have been updated to match the look of other Vx76 windows. The change is primarily to the user interface, but there are some minor functionality differences. (Refer to "[Timecode Windows](#)" on page 14 for more information.)
- + **Undo** - The Undo functionality has been expanded to include Cue, Preset, Palette, and Snapshot storing, deleting, copying, and moving. Undo also supports multiple levels up to 50.
- + **Effect Sequence Expansion** - The maximum number of steps in an effect sequence has been increased from 50 to 120.
- + **Visionary Control Shortcuts** - The following shortcuts have been added to enable faster palette management while running in Visionary mode:
 - CTRL + OPTION = Label
 - CTRL + CMD = Move
 - CTRL + SHIFT = Store
- + **V276 Shortcuts** - The following shortcuts have been added to enhance the V276 On Mac console functionality:
 - Holding [Shift] and pressing the [+] or [-] keys increments or decrements the selected cue, respectively.
 - While holding [Shift], press [Back] or [Go] for Effect Run or Effect Stop/Step respectively.
 - The Submaster and V276 HUD displays can be set to display either the cue number or label by right-clicking on the display area.

Corrected Issues

- + Fixed issue where entering the channel number would lose the fixture type in the Patch window.
- + Fixed issue where certain snapshots caused a crash.
- + Fixed bits error message.
- + Fixed corrupted cue data after moving presets.
- + Fixed potential crashes while switching show files.
- + Fixed an error selecting fixture types when patching.
- + Fixed an issue with the Media Server setup window not communicating with some servers.
- + Fixed issue with Pairing window sometimes showing the incorrect console.
- + Fixed a crash running CITP on multiple consoles simultaneously.
- + Front panel CPU will now update from software even if it has not been paired with a Mac.
- + QuickFocus now works on secondary consoles.
- + Fixed issue where the Planview would occasionally fail to update.
- + Fixed crash using groups in effect set editor.

NEW FEATURE DETAILS

Tracking-Based Cue Storage

A new "tracking" method for cue storage and playback is now available. Tracking-based cue storage records any values that have changed from their default or previous state, or are forced to a Manual state.

When opening a new show file, the cue data behavior can be defined by choosing between "Tracking-based" storage and "Intensity-based" storage.

To anticipate the new cue storage and playback features, the command-line keypad was modified during the v3.6 upgrade. (Refer to Tech Bulletin VX76-010.) The new configuration can be seen below with the changes highlighted in red.



Figure 1: Updated Layout for V476/V676 Command-Line Keypad

Choosing a Show File Type

When the Vx76 software is initially launched and the first show file is created, a Mac pop-up dialogue provides a choice between the two cue data storage methods:



When opening a new show from the desktop touchscreen, a confirmation dialogue provides a choice between the two cue data storage methods:



New Status Color States

Tracked (tracking) or Unchanged (intensity) values are light grey instead of the previous magenta.

Tracking Store Mode

In Tracking store mode, there are two types of cue store operations: Track and Cue Only.

- + **Track** store will save manual changes in the current cue, and those changes will track into subsequent cues until another change or block is reached.
- + **Cue Only** store will also store manual changes in the current cue, but the subsequent cue will be adjusted to stay at its current value.

An option in the Settings window can be used to change the default Track/Cue Only operation:



Any store operation will default to the Track/Cue Only mode defined in the Settings window. The Track/Cue Only button is used to specify the other mode. For example, if the default is set to Track, then [Store] [Cue] [1] [Enter] will store changes to Cue 1 and track into subsequent cues, and [Store] [Cue] [1] [Track/Cue Only] will store changes only into Cue 1 and not affect subsequent cues.

Track Back

Track Back can be used to update the original hard command (source cue) that controlled the parameter state in the indicated cue. The hard command in the source cue is updated with the new value that will then track forward to the indicated cue. Track Back can be used with either Track or Cue Only store actions.

To track back values:

- + [Store] <cueExpression> [Track Back] [Enter]

Track editing in intensity-based mode:

The track editing features in Intensity-based show files are available with the Update command:

- + [Update] [Cue] [#] [Track] [Track Back]

Delete Channel

Delete Channel can be used to limit changes to specified channels and parameters. Otherwise, the command operates the same as a normal Delete command.

Guidelines:

- + Delete Channel commands can be preceded by an optional channel selection expression.
- + Delete Channel will apply the current channel selection and function filter.
- + Delete Channel removes any "move" instructions for the specified channel(s) in a specified cue or range of cues.

Delete Channel in a tracking showfile:

- + [Delete] [Chan] <cueExpression> [Enter]
- + [Delete] [Chan] <cueRange> [Enter]

Update

Update can be used to record any manual values and timing into the (modified) active cues.

Guidelines:

- + Update only edits existing cues and cannot be used to create new cues.
- + Update without a specified cue updates all source cues with manual changes. Update to a specific cue updates manual changes to that particular cue only.
- + Channels that do not have an active cue, but do have manual changes, will store into the specified cue or the lowest selected submaster's active cue. In this case, Track Back would not apply to that channel.

Updating Presets continues to follow the current rule set. Updates are recorded without regard to the filter selection. Update applies to all channels with manual values.

Update in a tracking showfile:

- + [Update] [Enter]
- + [Update] <cueExpression> [Enter]

Update back to source cue in tracking showfile:

- + [Update] <cueExpression> [Track Back] [Enter]

Blocks

There are three types of blocks: Cue, Hard and Soft.

Cue Block - A cue block is set at the cue level.

To block a cue:

- + [Block] <cueExpression> [Enter], or...
- + Select (Insert Block) from the Cue Sheet with a cue selected.

To unblock a cue:

- + [Block] [Block] <cueExpression> [Enter], or...
- + Select (Remove Block) from the Cue Sheet with a blocked cue selected.

Hard Block - A hard block is set at the channel/parameter level. It is an additional attribute of the cue that stops tracking like a hard command. The Block Channel commands can be preceded by an optional channel selection expression. The command will use the current channel selection and function filter.

To hard block channels in a cue:

- + [Block] [Chan] <cueExpression> [Enter]

To un-hard block channels in a cue:

- + [Block] [Block] [Chan] <cueExpression> [Enter]

Soft Block - A soft block is a hard command in a cue where the previous cue has the same value. Soft blocks may be created by making a value manual and storing, or may come about when a change is made where a previous cue tracks a value into a cue with a matching hard command. A soft block can be explicitly created by recalling a cue using [Manual], then storing a cue. Soft blocks can be removed (along with hard blocks) by using the Delete Channel command (refer to "Delete Channel" on page 5).

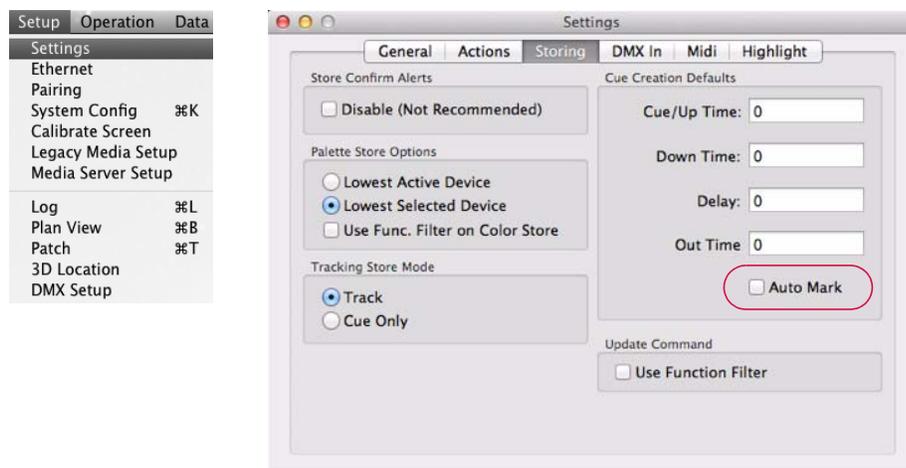
Mark (Move In Black)

When Mark is enabled on a cue, channels that are inactive and present in a recalled pending cue will recall the pending non-intensity cue parameters (with pending cue timing).

Mark can be enabled and disabled on a cue-by-cue basis by double-clicking the Mark field on the desired cue in the Cue Sheet. (Refer to "Cue Sheet" on page 11.)

A Cue Stack may be placed in Auto Mark mode, wherein all cues are marked during playback. This is accomplished by enabling the "Auto Mark" option in the stack settings. (Refer to "Stack Settings" on page 13.)

A new setting in the Settings window can be used to change the default Auto Mark option:



Force

The Force feature "forces" the playback of all tracked values, which would otherwise not be executed.

Force is available as a cue attribute and a manual command using the [Force] key.

A Cue Stack may also be placed in Force mode by enabling the "Force" option in the stack settings. (Refer to "[Stack Settings](#)" on page 13.)

To enable force on a cue:

- + [Cue] <cueExpression> [Force] [Enter]

To force the execution of a single cue:

- + [Force]+[Go]
- + [Force]+[Back]

To Force and re-execute a current cue:

- + [Force]+[Run]

Manual / Revert

The Manual and Revert features can be used to apply a manual state to a channel or parameter.

Guidelines:

- + These commands only affect the selected channels.
- + The function filter settings will determine which parameters are affected.

To make selected channels and parameters go to a manual state:

- + [Manual] [Enter]

To revert manual parameters to the source state (equivalent to Undo Channel):

- + [Manual] [Manual] [Enter]

Programmer

The new Programmer window displays all values that have been made Manual (i.e., changed from a home or recorded value), therefore, showing what can/will be stored to cues while in Tracking mode. (Refer to "[Tracking-Based Cue Storage](#)" on page 3.)

As manual changes are made, the channel and affected parameter, dynamic, and timing information are added to the display. When channels are stored, they become non-manual and drop from the Programmer.

Operation	Data	Special
Cue Sheet		
Board Cue Sheet		
Plan View		⌘B
3D Graphic		⌘G
Luminaire Status		⌘S
Programmer		⌘P
Intensity		⌘I
Timecode		

- + To open the Programmer window, select **Programmer** from the **Operation** menu.

Channel	Device	Focus	Pan	Tilt	Color	Cyan	Yellow	Magenta	Wheel	Beam	Edge	Frost	Zoom	Shutter	WhlCtrl	CyanCtr	YeloCtr	MagCtr
1	BadBoyCM	Pr 2 Small Fan	32768	26188	Co 2 Red	0	65535	65535	0	65535	65535	0	0	0	0	0	0	0
2	BadBoyCM	Pr 2 Small Fan	32768	26188	Co 2 Red	0	65535	65535	0	65535	65535	0	0	0	0	0	0	0
3	BadBoyCM	Pr 2 Small Fan	32768	26188	Co 2 Red	0	65535	65535	0	65535	65535	0	0	0	0	0	0	0
4	BadBoyCM	Pr 2 Small Fan	32768	26188	Co 2 Red	0	65535	65535	0	65535	65535	0	0	0	0	0	0	0
5	BadBoyCM	Pr 2 Small Fan	32768	26188	Co 2 Red	0	65535	65535	0	65535	65535	0	0	0	0	0	0	0
6	BadBoyCM	Pr 2 Small Fan	32768	26188	Co 2 Red	0	65535	65535	0	65535	65535	0	0	0	0	0	0	0
7	BadBoyCM	Pr 2 Small Fan	32768	26188	Co 2 Red	0	65535	65535	0	65535	65535	0	0	0	0	0	0	0
8	BadBoyCM	Pr 2 Small Fan	32768	26188	Co 2 Red	0	65535	65535	0	65535	65535	0	0	0	0	0	0	0
9	BadBoyCM	Pr 2 Small Fan	32768	26188	Co 2 Red	0	65535	65535	0	65535	65535	0	0	0	0	0	0	0
10	BadBoyCM	Pr 2 Small Fan	32768	26188	Co 2 Red	0	65535	65535	0	65535	65535	0	0	0	0	0	0	0
11	BadBoyCM	Pr 2 Small Fan	32768	26188	Co 2 Red	0	65535	65535	0	65535	65535	0	0	0	0	0	0	0
12	BadBoyCM	Pr 2 Small Fan	32768	26188	Co 2 Red	0	65535	65535	0	65535	65535	0	0	0	0	0	0	0

Cell Contents

The Cell Contents buttons are used to display different types of data:

- + **Value (V)** - displays the numeric value currently being received by the luminaire for each parameter.
- + **Preset (P)** - displays the Preset being received by the luminaire.
- + **Label (L)** - displays the value label for the cell.
- + **Timing (T)** - displays any associated timing information.
- + **Dynamic (D)** - displays any associated dynamic state information and continuous action such as wheel spins.

Reverting Changes in the Programmer

There are two ways to clear data from the Programmer and return values to their previous state: Channel Revert and Programmer Revert.

Channel Revert - selectively reverts specific channel and functions to their previous state. Select the desired channels and functions to be undone and enter the command as follows:

- + [Manual] [Manual] [Enter]

Programmer Revert - reverts values for selected channels and parameters in the Programmer to their previous, non-manual state.

- + Click the **Revert** button at the top of the Programmer window.

Adding Data to the Programmer

Any manual change from a recorded or homed value will be added to the Programmer.

Parameters can be added to the Programmer (i.e., set to the manual state from their source cue data) by selecting the channels, setting the desired function filters, and entering:

- + [Manual] [Enter]

Compare

Compare allows the comparison of the Programmer's manual values against the source cue information. When enabled, all Programmer values return to their previous source state and are highlighted with an olive background. Disabling Compare will return to their manual values as previously indicated in the Programmer.

- + Enable/disable Compare by clicking the **Compare** button at the top of the Programmer window.

Guidelines:

- + Manual changes made while Compare is enabled will show live on stage and be added to the Programmer when Compare is disabled.
- + When Compare is enabled, there are effectively no values in the Programmer. Thus, storing a cue with Compare enabled will not include any previously active manual changes.

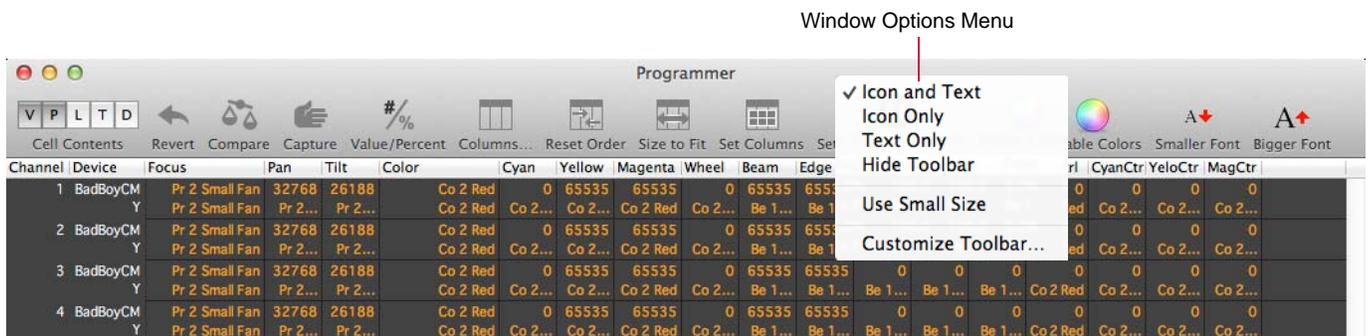
Capture

When enabled, Capture withholds all values in the Programmer from playback (i.e., Programmer values are not affected by cue playback).

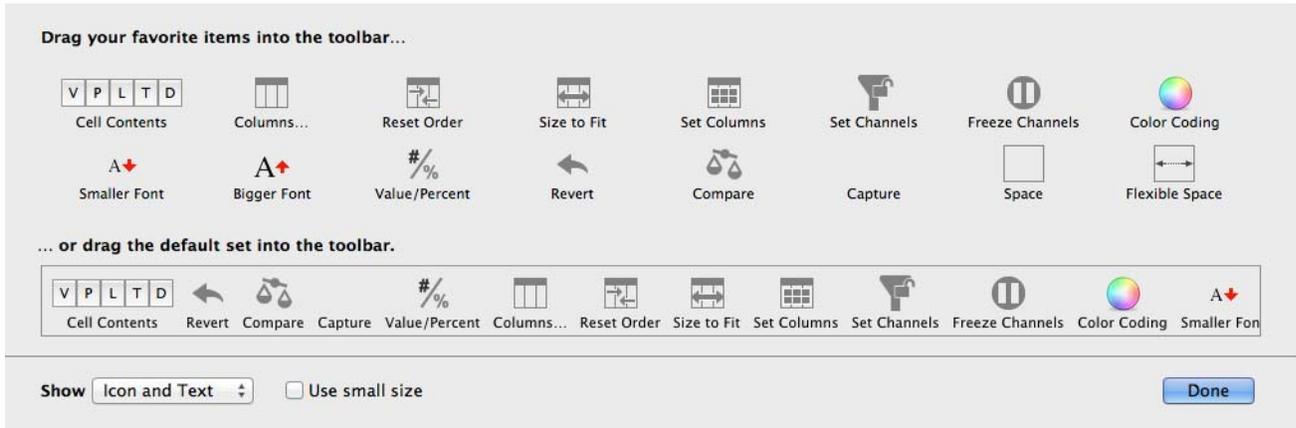
- + Enable/disable Capture by clicking the **Capture** button at the top of the Programmer window.

Miscellaneous Controls

- + **Value/Percent** - toggles between showing the value line as an absolute value or as a percentage of the parameter's range. (Note that Pan/Tilt are shown in degrees.)
- + **Columns** - sets the columns from a list of available columns.
- + **Reset Order** - resets the column order to the default.
- + **Size-To-Fit** - resizes all visible columns to fit the currently displayed data.
- + **Set Columns** - sets the columns from the current function filter.
- + **Set Channels** - sets the channels from the current channel selection. The actual set of channels displayed will be the intersection of the current display filter and the channels set in the window.
- + **Freeze Channels** - freezes/un-freezes the channel display. When frozen, the channels are set to the currently visible channels and are not affected by subsequent changes to the the global display filter.
- + **Disable Colors** - Enable/disables data color coding.
- + **Smaller Font / Bigger Font** - scales the font size.
- + **Window Options** - right-clicking at the top of the Programmer window, brings up the options menu.

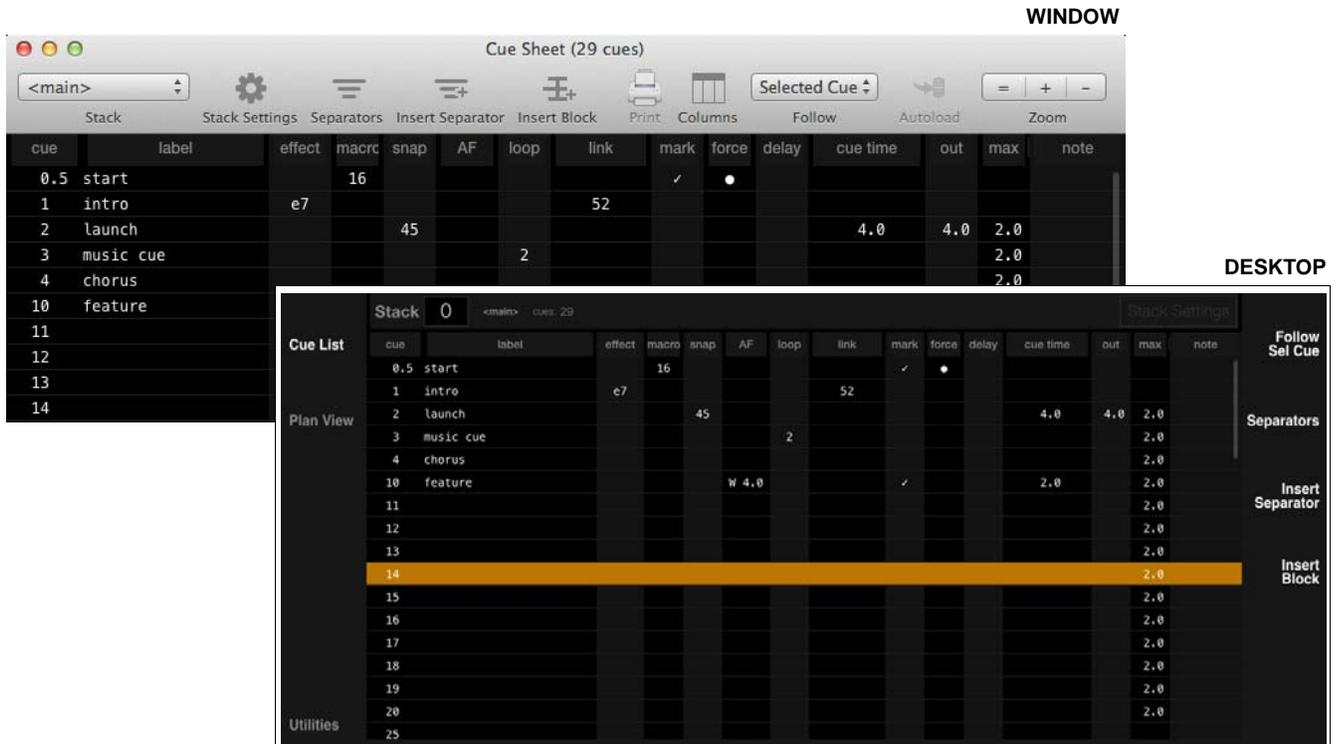


- When **Customize Toolbar** is selected from the options pop-up menu, the customizing window will be displayed. This can be used to define which icon buttons are displayed in the Programmer window.



Cue Sheet

The Cue Sheet has been enhanced with new features and functionality. These include a Cue Progress Indicator, Cue Time and Auto Mark fields, and Stack Settings. The changes can be seen in both the desktop and front panel Cue Sheets. (All other functions are the same as previous versions of the Cue Sheet.)



Cue Sheet columns:

- + **cue** - cue number.
- + **label** - cue label.
- + **effect** - linked effect.
- + **macro** - linked macro.
- + **snap** - linked snapshot.
- + **AF** - autofollow type (wait, trail, or none) and time
- + **loop** - number of loop cycles for the cue.
- + **link** - linked cue.
- + **mark** - if checked, channels that are inactive and present in a recalled pending cue will recall the pending non-intensity cue parameters.
- + **force** - if enabled, forces the playback of all tracked values, which would otherwise not be executed.
- + **delay** - global cue delay time used by parameters with Null timing. (See next page for more details.)
- + **cue time** - global cue execution or up/down time used by parameters with Null timing. (See next page for more details.)
- + **out** - cue out time.
- + **max** - maximum cue execution time for all channels/parameters in the cue.
- + **note** - cue notes.

Cue Progress Indicator

A new cue progress animation activates on cue execution. The animation displays a graphic bar representing the cue's progress. The cue progress bar will always show the greatest combined time of the given cue, whether it be Cue Time or Parameter Time, including Delay.

Cue Time (Null Time)

A Cue Time column has been added to allow timing to be set for all Null Time values in a cue. A value in a cue has a Null Time as long as no specific Parameter Time has been assigned to it via the timing function filter. For example, if Gobo and Color Wheel have a parameter time of 0s, no other values have timing assigned to them, and a cue time of 3s is set, Gobo and Color Wheel will move in 0s and all other parameters will move in 3s. It is possible to change other parameters to have specific parameter timing and not affect the overall cue time for null time values in the cue.

To set a parameter back to null/cue time:

- + Select the desired channels and functions in the timing filter and press [Time] [Cue Time] [Enter].

Auto Mark

A Mark column has been added to allow enabling/disabling of the Auto Mark feature on a cue-by-cue basis. (Refer to "[Mark \(Move In Black\)](#)" on page 6.)

To toggle Auto Mark on a cue, double-click in the field. (A checkmark indicates that the feature is enabled.)

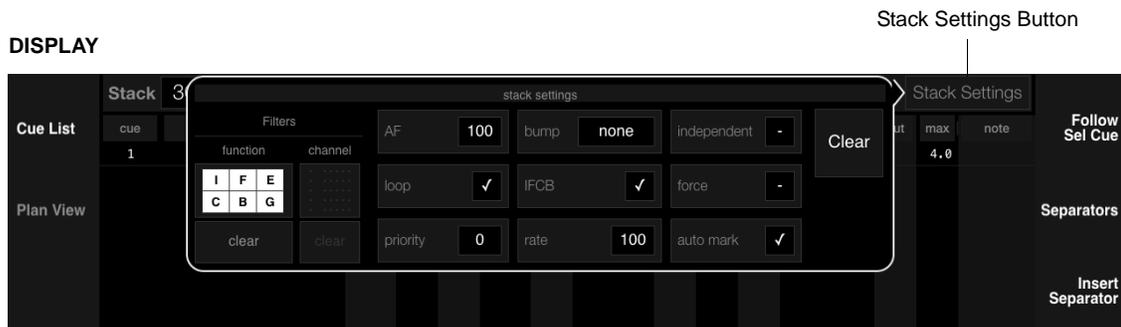
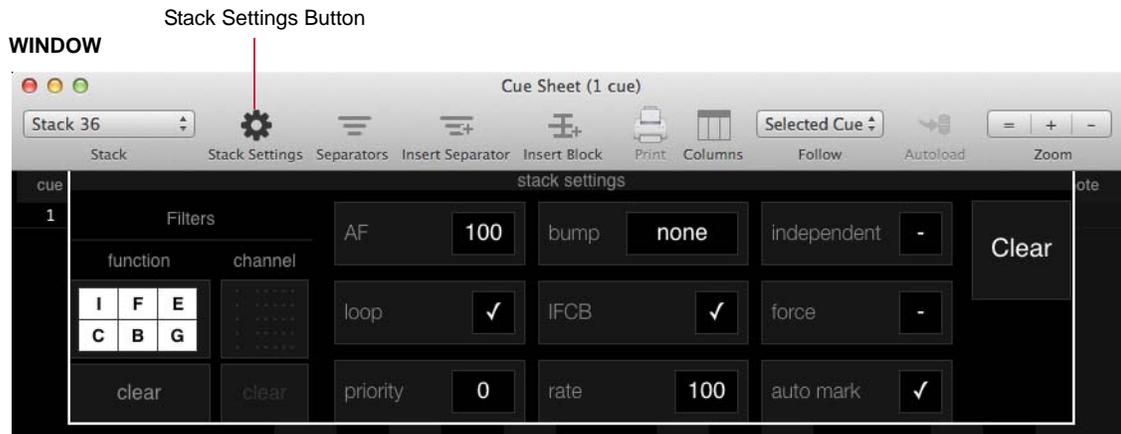
Force

A Force column has been added to force the playback of all tracked values, which would otherwise not be executed. (Refer to "[Force](#)" on page 7.)

To toggle Force on a cue, double-click in the field. (A dot indicates that the feature is enabled.)

Stack Settings

Stack options are now accessed via the **Stack Settings** button. (Stack settings are a collection of playback attributes assigned to a stack and automatically applied to a submaster whenever the stack is loaded.)



Stack settings:

- + **AF** - auto follow type and time for all cues in stack.
- + **loop** - sets stack to automatically link the last cue to the first cue.
- + **priority** - sets the submaster priority level (from 0-10) when loaded.
- + **bump** - sets a submaster Bump mode when loaded.
- + **IFCB** - sets function filter for submaster when loaded.
- + **rate** - sets submaster rate when loaded.
- + **independent** - sets submaster Independent mode when loaded.
- + **force** - forces the playback of all tracked values, which would otherwise not be executed. (Refer to "Force" on page 7.)
- + **auto mark** - all cues are "marked" during playback. (Refer to "Mark (Move In Black)" on page 6.)

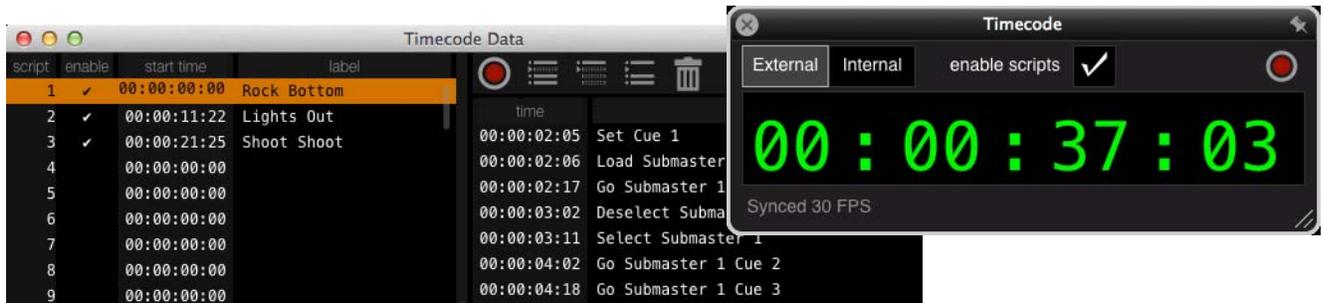
To edit stack settings:

- Step 1. At Cue Sheet window, click **Stack Settings** button... or press <Stack Settings> on the desktop display Cue Sheet.
- Step 2. Adjust attributes as desired. They will automatically be saved to the stack.
- Step 3. Close Stack Settings pop-up by pressing the **Stack Settings** button again.

Timecode Windows

The Timecode and Timecode Data windows have been updated to match the look of other Vx76 windows. The change is primarily to the user interface, but there are some minor functionality differences:

- + It is now possible to edit timecode values freely to move them out of sequence.
- + Timecode edit changes are now effective immediately. (Stop/restart is no longer required.)
- + The Timecode window Record button is now an on/off toggle. (There is no Stop button.)
- + Scripts are enabled for playback by checking their Enable column (instead of a "Link" column).
- + If the Record button is pressed while timecode is running, the new actions will be added/inserted into the script instead of erasing it.



The following instructions have been updated to include the new window functionality:

Timecode Window

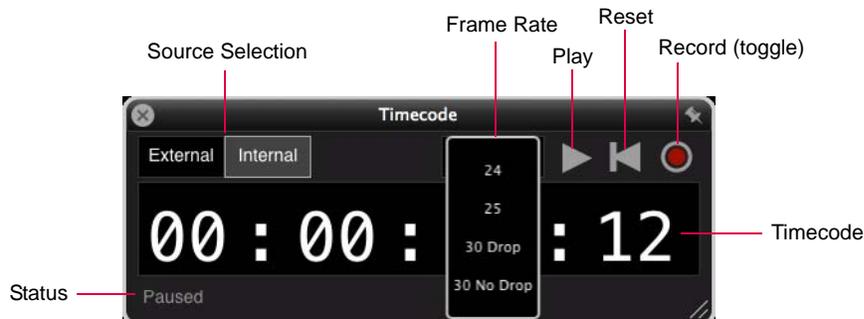
Timecode is recorded using the Timecode window. The timecode and corresponding event steps are stored in a Timecode Script which can be viewed and edited using the Timecode Data window (see next page). By default, the script will be stored as Number 1. To record timecode into a script other than 1, select its number at the Timecode Data window before starting the record process.

To record using internal timecode:

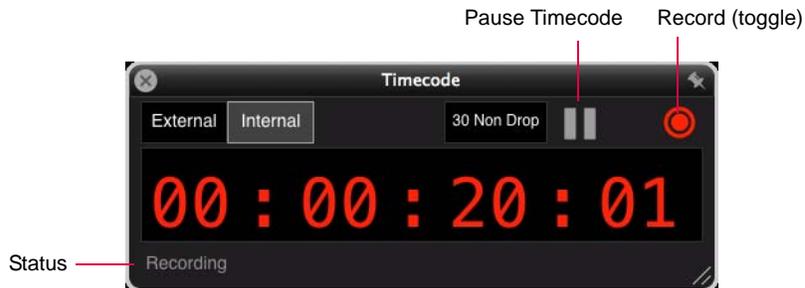
- Step 1. At **Operation** menu, select **Timecode**. Timecode window will open.
- Step 2. Click **Internal** button.



Step 3. Using dropdown menu, select a frame rate.



- Step 4. Click <Record> button to begin recording. Internal timeclock will start.
- Step 5. Execute cues.
- Step 6. Click <Record> button to stop recording. (Timecode will continue running.)
- Step 7. Click <Pause> button to pause timecode.

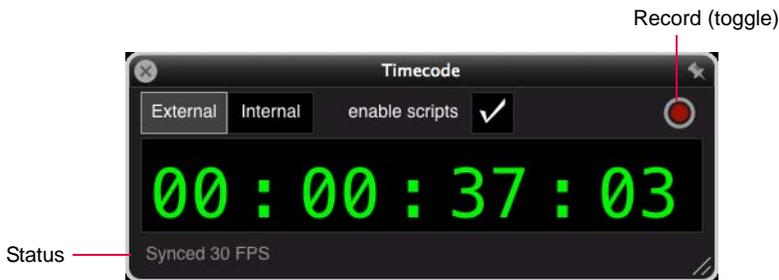


To record using external timecode:

- Step 1. At Operation menu, select Timecode. Timecode window will open.
- Step 2. Click <External> button.



- Step 3. At external device, start timecode.



- Step 4. Click <Record> button to begin recording.
- Step 5. Execute cues.
- Step 6. Click <Record> button to stop recording.

Timecode Window Control

There is an option to "pin" the Timecode window to keep it on top of other windows. To pin a window, click on the pin icon at the top-right corner. When pinning is active, the pin icon will turn from gray to white.

The window can also be resized by dragging from the bottom-right corner.



Timecode Data Window

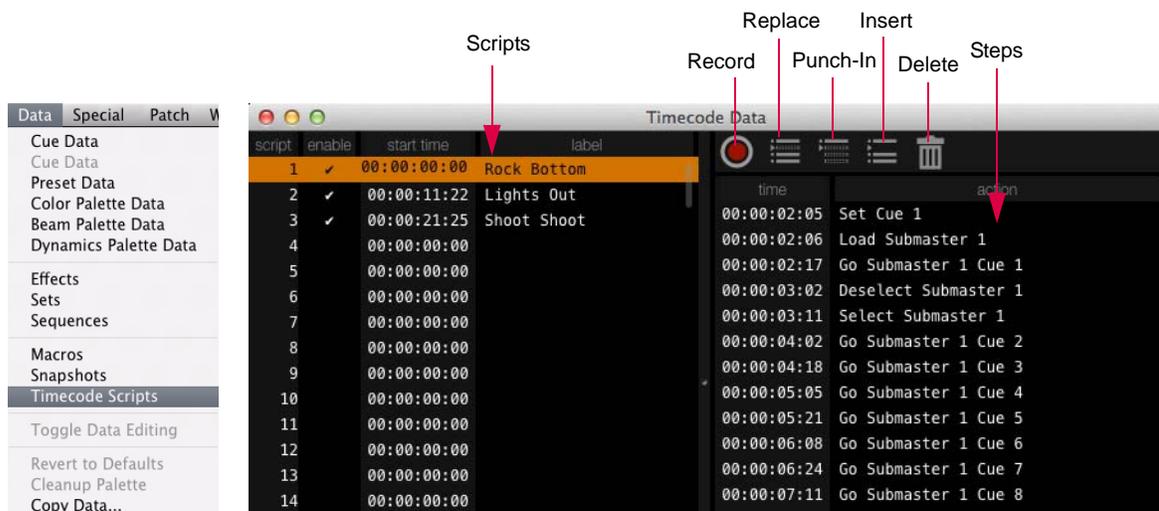
Timecode Scripts can be viewed and edited in the Timecode Data window. The window provides editing features such as Replace, Punch-In, Insert, and Delete, so that an entire script does not have to be re-recorded in order to make a change. Scripts can also be labeled and enabled for playback using the window.

Guidelines:

- + If the <Record> button is pressed while timecode is running, the new actions will be added/inserted into the script.
- + To insert a step, select a step, click the Insert icon, and press a single action to be added. To save an action, use the sequence [Update] [Macro] [Enter].
- + The Punch-In feature bases the new steps/events on the previous timecode and does not record based on external timecode. Therefore, it may be necessary to edit the times manually once the new section is added.
- + The Timecode Data window calculates timecode for steps based on the frame rate selected in the Timecode window. When the frame rate is changed in the Timecode window, the Timecode Data window will recalculate values according to the frame rate selected.
- + Multiple playback scripts are possible. Because of this, only the scripts which are enabled in the Timecode Data window (i.e., checked in the Enable column) will be played back.
- + Individual hour/minute/second/frame times of a step can be edited without affecting any other step times in the script.
- + Timecode will only be visible if the <Play> or <Record> buttons are pressed. If the signal is expected from an external source then 'Waiting' will be displayed.

Using the Timecode Data window:

- + Open the window by selecting **Timecode Scripts** from the **Data** menu.
- + Click on a script to view its content.
- + Edit as necessary.



Label a script:

- Step 1. Select script.
- Step 2. Click in Label column to activate field.
- Step 3. Enter label.

Enable a script for playback:

- + At selected script, click in the Enable column. (Only checked scripts will be played back.)

Delete a step:

- Step 1. Select step(s) to be deleted. (Use mouse and keyboard Shift to select multiple rows.)
- Step 2. Click Delete icon. Step(s) will be removed.

Replace a step:

- Step 1. Select step to be replaced.
- Step 2. Click Replace icon.
- Step 3. At console front panel, perform a replacement action. The first action taken will replace the selected step and editing will end.

Replace all steps starting from Step n (through remainder of script):

- Step 1. Select last "good" step. (Steps after this selection will be replaced.)
- Step 2. Click Punch-In icon.
- Step 3. At console front panel, perform a new series of actions.
- Step 4. Click <Record> button to stop recording.

Insert new step(s):

- Step 1. Select step prior to where you wish to insert the new step.
- Step 2. Click Insert icon.
- Step 3. At console front panel, perform new action(s).
- Step 4. Click <Record> button to stop recording.

Edit timecode in single step:

- Step 1. Select step to edit.
- Step 2. Click in Time field. (Hour, minute, seconds, and frame fields may be edited.)
- Step 3. Using keyboard, enter new value.
- Step 4. Press [enter] to save and advance to next script.

Edit timecode in multiple steps:

- Step 1. Select multiple steps using mouse and keyboard Shift.
- Step 2. Click in Time field of first step. (Hour, minute, seconds, and frame fields may be edited.)
- Step 3. Using keyboard, enter new value.
- Step 4. Press [enter]. All subsequent steps in the selected set will automatically be updated.

Editing a Field

