Lighting Controls – Technical Note

Changes to operation of Solution consoles within ZerOS 7.9.2 and later

Introduction

ZerOS 7.9.2 introduces significant changes to the operation of some Zero 88 lighting consoles, as Eaton work to consolidate operation of all products running the ZerOS Operating System into a single, coherent range. Please familiarise yourself with the new features before running a show with the new ZerOS 7.9.2.

Please Note: It is possible to downgrade to a previous version of ZerOS, but it is not possible to load showfiles saved in ZerOS 7.9.2 into previous versions of ZerOS (even if they were originally created in previous versions). It's highly recommended to keep a backup file of your old showfiles, and save any updates with different file names.

Products Affected

✓ Solution
✓ Solution XL
✓ Leap Frog 48
✓ Leap Frog 96

Acronyms

The following acronyms are used throughout this document:

MFKs – Multi-Functional Keys – The 20 blank keys (with LCDs) on the right hand side of the console

Compatibility

When loading older showfiles into ZerOS 7.9.2, ZerOS automatically makes significant alterations to ensure they are compatible. Therefore, it's strongly suggested to carefully review showfiles before using them in show critical situations. Any changes made are displayed in detail when loading the showfile, so please review these carefully. More information can be found on the Release Notes of ZerOS 7.9.2, available at zero88.com/software/zeros

Update Instructions

Please see the ZerOS 7.9.2 Release Notes for detailed update instructions. These are available alongside the software download at zero88.com/software/zeros

"Playbacks" and "Cues"

"Memory X" is now called a "Playback 0". Memories are now called "Cues". There is little difference apart from this terminology, except when recording chases. Please see "Chases" below for more information.

"Submasters" have been replaced with "Playbacks", each of which can contain one or more "Cues". This allows each and every Playback to store multiple Cues, with the button below each fader acting as individual GO buttons.

An old "Submaster" would be the equivalent of a Playback with only one Cue.

Setup

The Setup menu has been significantly reorganised and simplified, with a single set of options along the left hand side. "Load file" is used to load any type of supported file – including showfiles, ASCII showfiles, custom fixture profiles, new fixture libraries and future ZerOS updates.

Recording, Updating, Deleting, Naming

Steps two and three of the "three step programming process" have been reversed, so recording a cue is now as follows:

Step	Previous Method	New method
1	Creating a lighting state (using faders for generics and the MFKs and encoders for fixtures)	Creating a lighting state (using faders for generics and the MFKs and encoders for fixtures)
2	Select where to record (by pressing "submaster" or "memory" and then selecting which submaster / memory to record)	Press "record"
3	Press "record"	Select where to record (by pressing the GO button of any Playback. To record a specific cue (such as Cue 5.5), type "5.5" on the MFKs before pressing a GO button).

Updating, deleting and naming cues are all very similar. Therefore, the following commands work:

Option	RECORD	UPDATE	DELETE	NAME
1	… Record Enter … (This will record the next available cue, within the playback you are currently viewing)	… Update Enter … (This will update the current cue (green bar), within the playback you are currently viewing)	… Delete Enter … (Invalid – nothing will be deleted)	… Name Enter … (Invalid – nothing will be deleted)
2	… Record Go … (This will record the next available cue, within the playback of the Go button you press - this could be the Master Go button, or any one of the other new Playbacks)	… Update Go … (This will update the current cue (green bar), within the playback of the Go button you press)	… Delete Go … (This will delete the whole playback of the Go button you press, including all the cues within that playback)	… Name Go … (This will name the whole playback of the Go button you press)
3	… Record 5 Enter … (This will record cue 5 within the playback you are currently viewing. When you press "Record", a number pad is displayed on the MFKs allowing the cue number to be defined)	… Update 5 Enter … (This will update cue 5 within the playback you are currently viewing)	… Delete 5 Enter … (This will delete cue 5 within the playback you are currently viewing)	… Name 5 Enter … (This will name cue 5 within the playback you are currently viewing)
4	… Record 5 Go … (This will record cue 5 within the playback of the Go button you press)	… Update 5 Go … (This will update cue 5 within the playback of the Go button you press)	… Delete 5 Go … (This will delete cue 5 within the playback of the Go button you press)	… Name 5 Go … (This will name cue 5 within the playback of the Go button you press)

Where "Go" is written in the table above, this refers to the flash/Go button below each of the Playback faders.

Identical logic as above is used when working with "point cues". Typing Record 5.5 Enter will record a cue between Cue 5 and Cue 6.

When recording a second cue (on any Playback except "Playback 0") using options one or two above (ie, not defining the cue number), ZerOS will ask if you wish to "Overwrite", "Merge", "Create 2nd Cue", "Create Chase" or "Cancel". Choose "Create 2nd Cue", unless one of the other options is specifically required.

Chases

Previously on Solution, chases were built of multiple "steps" which were all stored directly within a Memory or a Submaster. In ZerOS 7.9.2, chases are built up of multiple cues. All the cues within an individual Playback are "turned into a chase". When this happens, individual cue fade times are ignored, and instead global chase settings are applied to those cues.

To record a chase, record the first "step" onto an empty Playback fader as Cue 1. Record the second "step" as Cue 2. At this point, choose "Create Chase" when prompted. Continue recording additional "steps" until the chase is complete.

To change the chase settings (speed, direction, etc), hold SETUP and press the flash/GO button of the playback. This will open the Playback Settings window. Along the top, choose "Chase", which will display all the chase settings available.

To "trigger" (start) this chase in a cue (for example, for a theatrical performance), choose the cue you wish to trigger the chase, go across to the "Cue Settings" column and press ENTER. Choose "Macros", choose "Trigger Cues" and then choose the Playback with the chase.

To "release" (stop) this chase, go to the cue you wish to release the chase, go across to the "Cue Settings" column and press ENTER. Choose "Macros", choose "Release Cues" and then choose the Playback with the chase.

Front panel buttons

To support these changes, the functionality of some front panel buttons have changed. These are detailed below. Buttons not listed have not had their functionality *significantly* changed (with the exception of Record, Update, Delete and Name which are detailed above).

Front Panel Button	Description of new functionality
MEMORIES	MEMORIES opens the Cue List of the selected Playback. To select a different playback, hold MEMORIES and press the flash/GO button of any Playback. See "Playbacks and Cues" above for more information.
SUBMASTERS	SUBMASTERS displays information on the current page of "Playbacks" (previously "Submasters").
PGM WIN	PGM WIN opens the "Fixture Levels" window of the selected Playback, which displays the value of every fixture in every cue. To select a different playback, hold PGM WIN and press the flash/GO button of any Playback.
TIME	TIME is used in combination with other keys to perform various functions over the internal fade time (eg outputting palettes over a time)
LOAD	To load a cue into the programmer, press LOAD, type the cue number on the MFKs, and then press the flash/GO button of the playback containing the cue you with to load.
INSERT	INSERT is no longer required, as cue numbers can be defined during the record command. Therefore, INSERT has a range of new functionality, customisable by the user by holding SETUP and pressing INSERT.
STEP (both)	Both STEP buttons now act as the "Global Tap Tempo" input for chases. See "chases" above for more information.
PRESET CONTROL	The PRESET CONTROL button (and two faders) are now disabled by default. This can be changed by pressing SPECIAL, and changing the "Preset Mode" on the MFKs
SPECIAL	The options on the MFKs when SPECIAL is pressed have been updated to be clearer, and to offer more useful functionality. It's suggested users become familiar with the layout before operation.