

Release Notes

Ovation 4D/Micron 4D

December 2002

Version **OVD06R01.imf**
 OVD06R01.tim
 OSiD08B1.imf

Service Tools: **DROA28B3**

Last version: **OVD06B02.imf**

EPROM	S/W	PAL
Keyboard 330	KY330A02	CAN 4D A
Keyboard 331	KY331A08	CAN 4D A

CPU Board	PAL
output board - SB1000	SB1KU51 SB1KU642 (1 CRT) SB1KU64 (2 CRTs) SB1KU644 (3 CRTs)
output board - SB1001	SB10S10B, SB10S12C, SB10S13C, SB10S24C, SB10S25C, SB10S26C

IMPORTANT !!!!

READ BELOW BEFORE BURNING THIS SOFTWARE. FAILURE TO FOLLOW THESE INSTRUCTIONS WILL DAMAGE YOUR CONSOLE

Burn OVD06R01 only after burning OSiD08B1
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Notice for consoles delivered prior to January 1, 2000!!

Important! OVD04* must be installed before upgrading to OVD06. If you have never installed OVD04* read the Release Notes for OVD04R01 for instructions on installing OVD04* software.

Attention New Console Owners (consoles delivered starting January 1, 2000)!!

Your console has new Flash chips. Avoid burning old software (software previous to OVD04R05) on the new flash chip. If old software is burned on the new flash it becomes impossible to burn the system again and also impossible to modify the NOVRAM and the VC Table. If old software is accidentally burned, use the new Boot Kit (BkitD08) to burn the new software.

1. Go to the BIOS and disable the Cache.
2. Burn the new software using the Boot Kit.
3. Return to the BIOS and change the Cache to Write Back.

Important!!

After burning OVD06R01 switch the console off and on to enable the panel.

New Features

- **Call Libraries**
Library assignments are included calling an assignment from a specific playback device
- **Channel Controller**
The Channel Controller function allows each controller or fader to become a dedicated editor and once enabled, all modifications and editing will affect only the selected controller. The controller outputs will work in a non-forcing HTP mode. This means that when selected controller is in zero value it is like working in BLIND.
When modifications are complete the changes may be stored to the original memory or to a reference memory. Reference memories are stored automatically when moving from one controller to another or upon exit of Channel Controller function. The original memory may be retrieved and re-assigned to the controller at any time
When Channel Controller function is disabled the standard editor operation resumes.
- **Chasers**
Time out for Chase Fade
- **Controller On/Off**
“Virtually” force controller level to FL (Controller On) or to ZR (Controller Off) through the use of Events.
- **Device Definition**
Span parameter was added.
- **Display**
Display Library numbers for assignments on playback devices
Spots on Crt 1 allowing continuous display of spots or channels from monitor 1 to monitor 2
Scrolling through spot and channel displays on CRT 1
Chaser rate seen in single snap exam display
Text on LCD for faders and controllers simultaneously
- **DMX Device Maximized**
New bit R in Service Tools. Allows 16 Dmx devices in menu 19 Mix Output
- **Fan**
Apply spread values to selected spot parameters and channels. Fan is applied according to selection order
- **Flip**
Allows rotation of a moving-head fixture so that it may reach the same point on stage from the other end of its movement range
- **Grand Master Bypass**
A new bit is added in Service Tools to allow the disabling of the Grand Master
- **Last Enacted macro**
Indicate last enacted macro by blinking LED.
- **Libraries**
Color and gobo libraries have been expanded to include 12 parameters
- **Load/Record Device Files On Network Drives**
Allow user to load or record devices on the network drives as set in menu 26.
- **Mix Output Menu**
Dmx offset channel allowance has been extended to 60 channels for big spots and 44 for 22 parameter spots.
- **Pause**
Additional Macro option to ensure proper execution of macros

- **Scheduler**

Schedule automatic operation for Macros, Events, and Snaps using the console's internal clock

New Keys

Key	Description
[Chan Cont]	Located between the [HARD] and the [SUBM] keys. The key has a LED.
[FAN]	Located on the Touch Screen in the Parameter view and the Editing Keys view.
[FLIP]	Located on the Touch Screen in the Parameter view and the Editing Keys view.
[IGNITE ON\OFF]	Located on the Touch Screen on the parameter page. Access [Ignite Off] using [SHIFT]
[LIBRARY DISPLAY]	Located to right of [DESKLIGHT].
[PAUSE]	Located in macro menu 9.
[SCHEDULER]	Shares the [MACRO MODE/ ADD MACRO] key. Access using [SHIFT] only when echoline is clear!!
[SCHEDULER ON]	Located in macro menu 9.
[SCHEDULER OFF]	Located in macro menu 9.

New Features

1. Call Libraries

- Library assignments are included when using the Call function for a specific playback device.
- A General Call, **[CALL] [ENTER]**, or **[CALL #]** will NOT include library assignments.

➤Note

Fader must be at it's top end limit (100 %) in order for Library to be included in Call

1.1 Calling Library Assignments into Editor

Keypresses	Results/Comments
1. Press [CALL]	Call appears in the command line.
2. Press [BUMP KEY] for faders/controller or [A] , [B] , [C] , [D] .	The selected memory will be entered into the editor, and it will include the library assignment.

To view the library assignments on playback enable **[LIBRARY DISPLAY]** (SEE ITEM 4)

2. Channel Controller

- The new key **Channel Controller** will enable direct access to any controller. It is a toggle key. The LED blinks red when the function is enabled and is not lit when function is disabled.
- When **Channel Controller** is enabled a selected controller is isolated, has it's own editor display, which shows only the controller's contents which we refer to as **Channel Controller Editor**.
- The controller potentiometer will behave as a local grandmaster. The display will show the contents of the controller as if the potentiometer is at 100% regardless of the level of the potentiometer. In this way the user can edit in BLIND if potentiometer level is at 0%.
- When modifications to the selected controller are complete there are several store options available . See below

2.1 New terminology:

Source Memory (SM): an original memory, from which has been created a **Reference Memory**.

Reference Memory (RM): a temporary memory, which was created inside the Channel Controller editor, and keeps reference to it's original **Source Memory**.

Channel Controller Editor : mode of operation when Channel Controller is active.

Stage Editor : mode of operation when Channel Controller is not active. IE. standard editing operation.

2.2 Channel Controller Option window:

When pressing [**STORE**] in **Channel Controller Editor** the following window appears:

CHANNEL CONTROLLER					
Store as S mem.	Retrieve S mem	Update R mem.	Store as R mem	Store as Mem #	Cancel & Exit.
<div style="display: flex; justify-content: space-around; margin-bottom: 10px;"> -----F1----- F2 ----- F3----- F4----- F5----- F6----- </div> <div style="text-align: center;"> <p style="color: red; margin: 0;">Press <CLEAR> key to return to Channel Contr. mode.</p> <p style="background-color: #e0e0e0; margin: 0;">Press <STORE> to update S mem or <# STORE> to save new MEM #.</p> </div>					

►Note

Depending upon controller contents (group, memory, **Reference Memory** or empty) some F key options will not be available. If option is highlighted in Gray background, it is available. Whatever is not in a gray background is not a valid store option for that controller content.

“Press<STORE> to update S mem or <# STORE> to save new MEM #” message will not appear if controller content is a group.

2.2.1 Channel Controller Option window function key description

KEY	Function description
F1	If a memory was modified, this will create a Source Memory(Smem) and assign it on the selected controller. If a GRP or Source Memory was changed it will not be available.
F2	Re-assigns Source Memory on the selected controller and aborts all changes that were made to the Reference Memory (Rmem) . If a GRP was modified, it will not be available.
F3	Updates an existing Reference Memory on selected controller, without any new re-assignment.
F4	Stores memory as Reference Memory .
F5	Stores modifications as a new memory, and re-assigns this memory to selected controller.
F6	Aborts all modifications (unless previously stored), and exits Channel Controller Editor .

2.2.2 General Rules Of Operation

1. In **Channel Controller Editor**, modifying a controller, and then pressing another bump button will result in the following:
 - A. automatically create **Reference Memory** if a memory or **Source Memory** had been selected , without opening **Channel Controller Option window** and remaining in **Channel Controller Editor** for newly selected controller.
 - B. automatically update the **Reference memory** if a **Reference Memory** had been selected, without opening **Channel Controller Option window** and remaining in **Channel Controller Editor** for newly selected controller.

- C. automatically update contents as a group if an empty Controller or a group had been selected, without opening **Channel Controller Option window** and remaining in **Channel Controller Editor** for newly selected controller
- 2. In **Channel Controller Editor**, pressing [STORE] key will open the **Channel Controller Option window** .Valid options are highlighted.
- 3. In **Channel Controller Editor**, pressing [STORE] [STORE] will update the **Source Memory** . On first press of [STORE] window will open . On second press of [STORE] the window will close.
- 4. In **Channel Controller Editor**, pressing [STORE] [##] [STORE] will save to the new memory number entered and will assign it on the chosen controller.

2.3 Display

2.3.1 Channel Controller Editor:

- 2.3.1.1 At top center of monitor the information field appears in orange (controller color code) and following information is displayed: Controller/Fader/W (for SubmasterWing) # , Qlist # , and Grp, Memory # or **Reference Memory** #.
- 2.3.1.2 Editor display window frames appear in orange.
- 2.3.1.3 The content of the selected controller appears in orange. No tracking or other playback device content is displayed. All modified channels and spots will appear as in stage editor IE. active items appear in red, idle items in white.

2.3.2 Playback display

- 2.3.2.1 Controller item (**Rmem**, **Grp**, etc,) being modified will appear on an orange background in the controller section. Fader numbers will appear also on an orange background.
- 2.3.2.2 A **Reference Memory** will appear as “**R mem** # “ in orange background.
- 2.3.2.3 A Group will appear as “**Grp**” in an orange background

2.3.3 LCD display

- 2.3.3.1 Controllers/Faders containing **Reference Memories** will appear in this format: “### +” . The + represents a **Reference Memory** and the number is that of the original memory. (Note that point memories will not be represented due to lack of space.)

2.3.4 Exam Key

- 2.3.4.1 Pressing [EXAM] key will toggle between modified controller values and original controller values.
- 2.3.4.2 Pressing Shift [EXAM] key will toggle between **Channel Controller editor** display and Stage editor display.

2.4 General Information

- Snaps will retrieve all information including **Reference Memories**
- **Reference Memories** may be given text.
- All other playbacks and output devices, including Editor 1 and 2, remain intact, when this feature is enabled.
- An empty controller may be edited. In this case, a temporary GRP is created automatically until the user exits **Channel Controller Editor**. If F6- Cancel & Exit option is chosen, the system will clear this GRP from the selected controller.
- [**SHIFT**] [**BUMP BUTTON**] will flash the controller contents while in Channel Controller mode.
- It is possible to add existing memories to controllers:[**MEM** ,# , **wheel**] will control memory levels relatively, and [**GROUP** , **MEM** , # , **wheel**] will control memory levels but without relative values.
- **Channel Controller** works with Submaster Wing . Press assign key instead of bump key to select controller for editing.

2.5 Editing in Channel Controller

2.5.1 Assign some groups and memories to controllers:

Keypresses	Results/Comments
3. Press [CHAN CONTR]	Chan. controller appears in the command line. Message "ASSIGN KEY EXPECTED" appears in top left of monitor. [CHAN CONTR] key LED is lit red.
4. Press [BUMP KEY] for controller	Display channel controller editor . [CHAN CONTR] key LED blinks red. Selected controller LED blinks green.
5. Edit Channel Controller	Use valid editing keys
6. Press another [BUMP KEY], [STORE] , [CHAN CONTR], or other valid key	If exiting Channel Controller Editor, display returns to stage editor. [CHAN CONTR] key LED turns off. Controller LED stops blinking green .

➤Note

All Controller contents may be stored automatically when selecting another controller according to the contents of the controller. If there is more than one option of storing the **Channel Controller Option window** will open.

2.6 Valid Keys in Channel Controller Editor

- Reset- Resets editor as in stage editor but maintains Channel Controller mode.
- Clear- Clears prompt line entries as it does in **Stage Editor**. This key is also closing Channel Controller prompt window (F keys) if open.
- CE, Enter, Except, +\-, @, FL, ZR, ON, Visible, Release, Copy,
- Digit keys 0-9 & (.).
- Channel, Spot, and Frame.
- Soft keys & Touch Screen keys.
- Mode keys & Assign\ Free keys.
- Wheels.
- F keys.
- Effects editor

3. Chasers

3.1 Chase Fade Out

- It is now possible to assign a fade-out time for chasers.
- Chase fade out times are entered as 3 digits - ##.#.
- Pressing **[HOLD]** for a running chaser fades the chaser out according to the assigned fade out time. If no fade out time is assigned the chase fade out defaults to the chase fade in assignment. Pressing **[HOLD] [HOLD]** for a running chaser bumps the chaser out.
- Chase fade out times cannot be assigned to memories with Event, Macro, or Snap assignments. An attempt to do so generates the warning "*Memory # Auto Assign*" Press **[STORE]** to override this warning. In this case, the Auto Assignment is deleted. Press **[CLEAR]** or **[RESET]** to abort the operation.

3.1.1 Assigning ChaseFade-In and ChaseFade-Out Times To Chasers

Keypresses	Results/Comments
1. Select the first memory in the chaser	
2. Press [CHASE FADE] 3	<i>ChsFd Time-i 3</i> appears in the command line
3. Press [CHASE FADE] 4	<i>ChsFd Time-o 4</i> appears in the command line
4. Press [STORE]	The Chaser will fade in 3 seconds and fade out in 4 seconds The Chase Fade assignments are displayed in the Memory List.

3.2 Erasing Chaser Fade Out Times

Keypresses	Results/Comments
1. Select the first memory in the chaser	
2. Press [SHIFT] [CHASE FADE] [CHASE FADE]	<i>ChsFd Time-o #</i> appears in the command line
3. Press [ERASE]	The message " <i>Q # MEM. # Stored</i> " is displayed, the chase fade out time is erased.

➤Note

When a Chase Fade Out is assigned, erasing the Chase Fade In time automatically assigns the Chase Fade Out assignment as Chase Fade In.

4. Controller On/Off

- Controller On/Off function will force the controller level to Full (Controller On) or to Zero (Controller Off), by triggering an event. It gives the operator the ability to "move virtually" any controller's slider up/down through events, without regard to the physical slider's level.
- The Controller On/Off function may be manually over-ridden by matching the slider to the level that is forced by the function.
- When the Controller On/Off is active the level of the controller shall be displayed in red with a violet arrow near it. The violet arrow shows in which direction the slider should be moved in order to manually override the function.
- When a controller that is being forced by Controller On/Off is manually over taken its controller level display will change from red to white, and the violet arrow will disappear.
- The function works on the following types of assignments: chasers, auto-chases, memories, groups and submasters.
- If the Controller On/Off function is triggered during a Chase-Fade or a Go-Controller action, the Controller On/Off function will take over fade from the level at which it was interrupted. If a Chase-Fade or a Go-Controller function is triggered during a Controller On/Off action the new command will take over fade from the level at which it was interrupted.

In Event Menu 21 several new event options have been added:

Key	Description
[ALL CNTR ON]	Located on 2nd page of options. When selected, Event will turn on all controllers.
[ALL CNTR OFF]	Located on 2nd page of options. When selected, Event will turn off all controllers.
[ON]/[OFF]	Under F4 assign controller #. When selected, Event will turn on/off assigned controller only.
[ABSOLUTE ON]	Located under F4 assign controller #. Shift of [ON]. When selected, Event will turn on assigned controller and turn off all other controllers.
[ABSOLUTE OFF]	Located under F4 assign controller #. Shift of [OFF]. When selected, Event will turn off assigned controller and turn on all other controllers.

➤ **Note**

CONTROLLER MUST HAVE AN ASSIGNMENT FOR CONTROLLER ON/OFF EVENT TO OPERATE.

Below is displayed Controller On/Off Assignment Types and Behavior:

Type of Assignment	Fade Behavior
GROUP	Fades in default fade time (as set in menu 8)
MEMORY	Fades in recorded Time-in memory time
HARD CHASER	Fades In Cut Time
SOFT CHASER	Fades In Memory Time
CHASERS WITH CHASE FADE TIME	Fades in chase fade time.

➤ **Note**

Hard chase time has not been implemented yet. Must assign Chase Fade-In of cut time to achieve bump in/ out of hard chase.

5. Device Definition

5.1 Span parameter

This parameter indicates spot horizontal and vertical range.

6. Display

6.1 Library Display

This feature displays the Library numbers assigned to playback devices.

The **[LIBRARY DISPLAY]** key is located to right of the desk light key.

6.1.1 Displaying Library numbers

Keypresses	Results/Comments
1. Assign memory with libraries to A, B, C, D or controller	Standard Playback device display appears.
2. Press [LIBRARY DISPLAY]	Library numbers appear in color appropriate to the playback device on a field in the library color.
3. Press [LIBRARY DISPLAY] again to return to the standard display	Parameter values appear in color appropriate to playback device

6.1.2 Color code

Library → Output from ↓	Position	Color	Gobo
A/B	Blue numerals Light red field	Blue numerals Dark red field	Blue numerals Orange field
C/D	Green numerals Light red field	Green numerals Dark red field	Green numerals Orange field
Controllers	Orange numerals Light red field	Orange numerals Dark red field	Orange numerals Orange field

6.1.3 Viewing Library values

Keypresses	Results/Comments
1. Press [LIBRARY DISPLAY]	Skip this step if already active.
2. Press [EXAM] [EXAM]	The library values are displayed.
3. Press [EXAM] [EXAM] again	The Library number and type are displayed.

6.2 Spots on Crt 1 allowing continuous display of spots or channels from monitor 1 to monitor 2

Not valid for systems with 1 CRT.

- The Display Status option *Stage CRT 1* enables display of spots on CRT 1. This will result in continuous display of spots from one monitor to another. Example: When 48 spots of 22 parameters are configured, monitor 1 displays spots 1 –24 and monitor 2 displays spots 25 – 48.
- The lower left of the Display Format options window shows the setting (spots or channels) for monitor 1. The default after coldstart is channels.

6.2.1 Enabling the “Stage crt1” option for viewing spots on CRT 1

Keypresses	Results/Comments
1. Press [STAGE]	The Display Format options are on view.
2. Press F2 until the cursor is on <i>Stage CRT1</i>	
3. Press F3 to enable	<i>Stage CRT1</i> is highlighted. The area under the “Display format on CRT 1 “ changes from “channels” to “spots”.
4. Press [STAGE] to refresh the display	CRT returns to stage displays. Spots will be displayed on CRT 1 .

6.2.2 Paging the displays

- When *Stage CRT 1* is enabled, use **[DOWN 1]** to page through spots on CRT 1. Use **[DOWN 2]** or **[PAGE SPOT]** to page through spots on CRT 2

6.3 Scrolling through spots and channels on CRT 1

- The Display Status option *Scroll page* enables scrolling from channel through spot displays on monitor 1.
- Applying *Stage CRT 1* and *Scroll Page* functions together will cause the *Stage CRT 1* setting to be dynamic. IE. If spots are scrolled to on CRT 1 then in Stage display option window the “Display format on crt1” will automatically change from channels to spots, regardless of original setting.

6.3.1 Enabling the “Scroll Page” option on CRT 1

Keypresses	Results/Comments
1. Press [STAGE]	The Display Format options are on view.
2. Press F2 until the cursor is on <i>Scroll page</i>	
3. Press F3 to enable	<i>Scroll page</i> is highlighted.
4. Press [STAGE] to refresh the display	Monitor returns to stage display

6.3.2 Paging the displays

- Use **[DOWN 1]** to page down through all spots and channels on CRT 1. Use **[UP 1]** to page up through all channels .
- Use **[DOWN 2]** to page down through channels on CRT 2 . Use **[UP 2]** to page up through all channels. Use **[PAGE SPOT]** to page spots on CRT 2.
- **[UP 1]** and **[UP 2]** do not work for spots.
- What is actually displayed on each monitor depends on what Stage display window is defined and what additional display format options are enabled for CRT 2.

6.4 Chaser Rate Seen in Single Snap Display

Chaser rate is displayed in **[SNAP] [#] [EXAM]**. Press **[DOWN 1]** to display chaser rates. Also displays new beat rates.

6.5 Text on LCD for faders and controllers displayed simultaneously

Text may be seen on LCD for both faders and controllers at the same time.
Press **[DISPLAY SELECT]** 3 times.

7. DMX Device Maximized

Bit **R** in Service Tools set to yes will allow user to edit 16 Dmx devices in menu 19 Mix Output.

Coldstart is required after changing bit setting.

Care must be taken when loading shows of 8 DMX devices to a 16 DMX device console and vice versa.

8. Fan

- The Fan feature applies spread values to spot parameters and channels according to the selection order. The parameter wheel (for the selected parameter) is used to assign the spread.
- Spot parameters, scrollers, and channels can be fanned from the side, center, or mirrored.
- The **[FAN]** key accesses all of the Fan feature functions.
- When the Center or Mirror fan is applied, system assigns values to the spot parameter, scroller, or channel according to their distance from the center of the range selection.
- The Side fan uses the first spot/channel of the selection as the base reference. The Fan is applied to the rest of the selection.
- Fan may be applied to all spot parameters, as well as channels and scrollers. **Exception:** Mixed steps are supported within the range of a single step (1.0 → 1.f). Discrete steps are not supported.
- **ONLY ONE PARAMETER CAN BE FANNED AT A TIME.**
- When **[FAN]** is active the parameter wheel assigns Fan spread values. Selecting another parameter turns off the Fan feature. You must press **[FAN]** again to reactivate.
- The exception to this rule is the trackball. You can select pan (x), for example, assigning the Fan with the X wheel. If you then use the trackball the Fan is applied to tilt (y) also.
- Fan is interactive with the Effects Editor. You can use the Fan within the Effects Editor to change the Base values, thus retaining the fan formation.

➤Tip

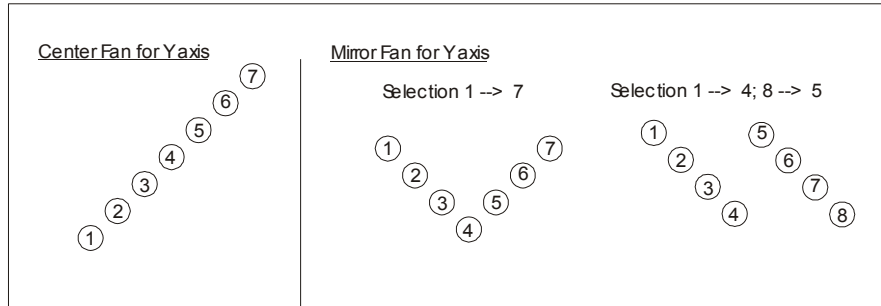
Use the Fan feature for quick programming of Palettes and Libraries.

Fan is useful for position, iris, dimmer, and color mixing.

Number of presses	Fan Feature	Command line display	Result/comments
[FAN]	Side fan	<i>Fan</i>	Assigns spread in order of first to last in selection
[FAN] [FAN]	Center fan	<i>Cen</i>	Assigns spread using center of selection as a dividing reference point. Wheeling up effects higher selection, down effects lower selection.
[FAN] [FAN] [FAN]	Mirror fan	<i>Mir</i>	Assigns spread starting from center of selection
The fourth (4 th) press disables the Fan feature	Disabled		

Examples:

- Colors Apply the fan to cyan. The result is light cyan to dark cyan according to the selection order. You can add to this a Fan applied to yellow and get graduated shades of green.
- Iris Applying the Fan to the Iris when the starting value of the first spot in the selection is a small Iris gives you beams that ascend or descend in size.
- Position See diagram below:



►Note

It is recommended when first testing fan function to home spots before applying the Fan to x and y.

8.1 Assigning A Fan Spread

Keypresses	Results/Comments
1. Select a range of spots/channels	
2. If you selected spots, select a parameter and set the starting values. Working with channels, set the start value.	The start value is the base reference for the fan spread.
3. Press [FAN] until the desired Fan type is displayed in the command line.	Side, center or mirror.
4. Move the parameter wheel to Fan the selection.	Spread values are assigned according to the selected Fan type and the spot/channel selection order.

➤Note

Fan is not applicable to the following special parameters:

Cyberlight	Intellabeam	Summa
P6	Focus	CL1
P8	Gobo	CL2
P14	Color	Gobo
P12		
P13		

9. Flip

- Applying this function flips the x/y 180 degrees returning it to its current position.
- This is a particularly useful function for yokes or moving devices whose heads have 360-degree movement.
- Example: In its current position a yoke is at the limit of its pan movement and you want to continue to move the yoke on its pan axis. Apply the flip function. The yoke reverses the x/y axes 180 degrees, returning to its current position and freed from the constraints of the movement limits. Now you can continue the movement as desired without being hampered by the limit switch.

9.1 Applying Flip function

Keypresses	Results/comments
1. Select a spot or a range of spots.	
2. Press the [FLIP] key	Spot flips to same stage position with different values.
3. Continue wheel or trackball movement.	

➤Note

A new parameter was added in the device definition called **span**. When working with flip function the correct span values must be entered.

10. Grand Master Bypass

There is a new bit S in Service Tools under System Configuration, Special Functions. When set to "Yes" the Grand Master is disabled, setting the value at a constant 100%. The Black Out button is also disabled. After setting the bit in Service Tools the system must be cold started. If Grand Master setting is value of 200% the constant value will remain 100%.

11. Last Enacted Macro

Last enacted macro is indicated via blinking LED. This can be seen on Touch screen and NSK banks when in macro mode. The blinking LED is also seen on macro extension adapter.

12. Libraries

- 12.1 Color and gobo libraries have been expanded to include up to 12 parameters. In Mix Output Menu 19 in the legend at bottom left of display, the added parameters that may be included in the color and gobo libraries are listed. When loading playacts made on earlier software versions the library parameters will remain as before. Only new playacts will be loaded with the new library parameters.

13. Load/record device files on network drives

Allow user to load or record devices on the network drives as set in menu 26. To utilize this function the user must map drive to PC in Menu 26 Networks Setting. Once drive is mapped Menu 19 Mix Output Menu load or record device options will display mapped drive when pressing F4 change drive.

14. Mix Output Menu

Dmx offset channel allowance has been extended to 60 channels for big spots and 45 for 22 parameter spots. The total amount of Dmx channel allotment remains as it was for each spot type.

15. Pause

- This new function when added to a macro will "pause" the command string. In essence the macro will wait for the next "interrupt" before executing the next key command. This means that inserting a "pause" command will not slow down the macro appreciably but will ensure the key commands have time to execute properly. This will solve some problems with macro commands lost when a long string of commands are used.

15.1 Using Pause option

Insert pause option in the middle of a string of commands :

Keypresses	Results/Comments
1. Press [MENU] [9] [ENTER] [F1] [F1]	Enter menu 9 and begin to create macro 1.
2. Press desired keys	
3. Press [F6,MORE] [F2,PAUSE]	Pause enters into chain of commands
4. Press remaining keys and store macro.	

16. Scheduler

- Use the Scheduler to schedule automatic operation of Macros, Events, and Snaps on specified days, at specified times and intervals, within a specific time period or ad infinitum. Scheduler's parameters include start and stop date, start time and stop time, intervals, and days. The automatic operation schedule is entered in the Scheduler table.
- The Scheduler table is saved in the show file, so now there is a new file type added to the show, "xxx.x. MAC.
- Scheduler tables can be loaded separately, using the Scheduler Table Only option in the Load menu.
- In menu 9 there are two new keys, **[SCHEDULER ON]** and **[SCHEDULER OFF]** which allow for executing absolute on and off commands to Scheduler operation.

16.1 Accessing And Navigating The Scheduler

The Scheduler table is available only when the editor is idle.

Keypresses	Results/Comments
1. [SHIFT] [MACRO]	The Scheduler table is displayed. A number of panel keys are enabled for navigating and entering information (see following table).

16.2 Keys for editing Scheduler

Keys	Function
ON	Toggle to turn ON/OFF Scheduler – When Scheduler is ON system clock is displayed in purple.
Time	Set system clock – When active the clock is displayed in yellow on a red field.
Loop	Access 3 displays showing the frequency of occurrences.
= / thru	Left/Right – Move the cursor to the next or previous field in the line. The [=] key (equal) moves cursor to left. The [→] key (thru) moves the cursor to the right. Or use arrow keys.
+ / -	Up/down- Move the cursor to the field above or below. The [+] key (plus) moves cursor up. The [-] key moves the cursor down. Or use arrow keys
• (dot)	Increase/Toggle – Increment the number selection by one (1) or toggle selections.
Shift •	Decrease – Decrement the number selection by 1 (1).

16.3 Scheduler Information Fields And Information Formats

Macro , Event, Snap #	Status	Start Date	Stop Date	Start Time	Interval	Stop Time	Days							Text
M/E/S #	On Boot Off	dd.mm	dd.mm	hh.mm	hh.mm	hh.mm	M	T	W	T	F	S	S	

16.4 Explanation of Scheduler Information Fields And Information Formats

Field	Function	Data format	Data entry	Remarks
Macro, Event, Snap #	Type of operation	Macro/event/snap # Use [●] (dot) to toggle.	Field must be filled in order to access table.	Scheduler allows programming the schedule before programming the Macros, Events, and Snaps so no warning message is given entering a M/E/S not existing in the system.
Status	Status of operation	On –operation enabled Off –operation is ignored. Boot –operation to execute after powering up the console.	In boot mode: No value required. Start time may be entered	Start Time refers to time elapsed since boot. Example: 15:00 is fifteen hours after booting. If no start time given operation is executed 60 seconds after boot
Start date	Date to begin operation	Day(dd)and month(mm) in 2 digit format	When no value assigned -today's date will appear after storing	If only day is entered operation executed at same day of every month. The display shows the day entered and mm (e.g. 12/mm)
Stop date	Date to stop operation	Day(dd) and month(mm) in 2 digit format	If not specified assumes permanent operation	
Start time	Time to start operation	Hour (hh) and minute(mm) in 24 hour format.	Start time is midnight (appears after storing)	
Interval	Intervals between operation	Hour (hh) and minute (mm) in absolute value	Specify intervals. If not specified, item operates once at start time.	Will operate from start time until stop time
Stop time	Time to stop	Hour (hh) and minute (mm) in 24 hour format (e.g. 1 o'clock in the after noon is 13:00)	If not specified stop time is midnight (appears after storing)	
Weekdays	Specific days of week of operation	+ is on Blank is off. Use (Dot) to toggle on or off.		All days enabled by default
Text	Text	Use alphanumeric keyboard		

16.5 Scheduling Options

The table below contains examples of the information necessary for different operation frequency. In all of the examples below, adding Stop Date limits the operation to the specified period. When no Stop date is specified the operation repeats ad infinitum.

Frequency of Operation	Required Values To Assign
One time occurrence	Start date Start time Stop date (Enter the same date as Start Date)
Once daily for an unlimited period	Start date Start time
Once daily for a limited period	Start date Start time Stop date
Once daily except for selected day of the week	Start date Start time Disable selected day
At specific intervals within a 24-hour period	Start date Start time Interval
At specific intervals in a specified period	Start date Start time Stop time Stop date Interval
At specific intervals for an unlimited period of time	Start date Start time Stop time Interval
After system boot (When Boot is specified in the Status field)	Start time only (optional).

16.6 Programming Scheduler

Active fields appear in red.

Keypresses

1. Press **[SHIFT] [MACRO]**
2. Press **[•]** to toggle between selection
3. Enter **Macro, Event, or Snap Number**
4. Press **[→]** and toggle the status **[ON/BOOT/ OFF]**.
5. Press **[→]** and enter **Start Date**.
6. Press **[→]** and enter **Stop Date**
7. Press **[→]** and enter **Start Time**
8. Press **[→]** and enter **Interval**
9. Press **[→]** and enter **Stop Time**
10. Press **[→]** and then use **[•]** to **Enable/Disable Weekdays**
11. Type text on the alphanumeric keyboard
12. Press **[STORE]**

Results/Comments

The scheduler Table is displayed.

Select Macro, Event, or Snap.

This field must be filled in to continue.

Going to the next or previous line generates the message Store Definition? Press **[STORE]** to store or **[CLEAR]** to abort the store operation.

16.7 Viewing the Schedule

There are 4 displays showing the frequency or exact time of operation. The display is per item.

Name of Display	Information Viewed	Keypresses
Next Occurrence	Countdown to next occurrence.	[EXAM]
Exact Time	Day/Date/Hour of next occurrence.	[LOOP]
Additive Time	Number of days/hours countdown to next occurrence.	[LOOP] [EXAM]
Intervals	The first entry is a countdown to the next occurrence. The remaining entries show the amount of time between the occurrence.	[LOOP] [EXAM] [EXAM]

➤Note

To exit these displays, press **[LOOP]**.

➤**Note**

1. While Scheduler table window is open, Macros will not be executed, but Events, and Snaps will be executed.
2. While Scheduler table window is open, and the Loop/Exam display is viewed, any scheduled macros, events, and snaps will **not** be executed.
3. When a monthly occurrence is scheduled, it only appears for the current month.

16.8 Printing the Schedule

Use Print Screen to print the scheduler.

16.9 Loading a Schedule table only

A new function key was added to the LOAD menu, under F1- Play Act#, F6- More..., F5- Schedule Only.

Bugs Fixed

1 Add Macro

- 1.2 Using [add macro] sometimes generated a trap. This is now fixed.

2. Blind Editor

- 2.1 When the display was set at Active Channels, some channels were not correctly displayed in the blind editor.
- 2.2 In the blind editor, when the display was set at Active Channels, it was possible to select only channels present in the live editor. Thank you Ramon at BEO, Holland.

3. Channel Patch

- 3.1 Various problems using the clear key (Undo function) are now fixed. Thank you Steve Plotkin , Canada.

4. Crossfader

- 4.1 When crossfader B was the active fader, looped memories with wait times did not sequence correctly. This is now fixed. Thank you Pauli at Hedcom, Finland.
- 4.2 When looped memories had cut and delay times, and go was pressed multiple times , go key would become disabled. This does not happen anymore. Thank you Pauli at Hedcom, Finland.
- 4.3 When a looped memory had cut as wait in time, all the channels in the memory flashed to Full. This does not happen anymore. Thank you Fausto at Coemar, Italy.
- 4.4 When the console was in menu mode, [back] on the crossfaders was disabled. This does not happen anymore. Thank you Stephen Plotkin, Canada.
- 4.5 When go was pressed, faders moved out of limit, and automatic fade completed, the go key was disabled when faders were taken to limit. This is now fixed. Thank you to BEO, Holland.
- 4.6 If updating the time of an incoming memory on A/B or C/D, the memory would run in the previously recorded time and not the modified time when [GO] was initiated. This no longer happens. Thank you to BEO, Holland.

5. CRT

- 5.1 Russian characters were not supported on the third CRT of a 3 CRT system. This has been fixed. Thank you to Vladimir Michailov at Soyuzkultmontah, Russia.

6. Cyberlight and Intellabeam

- 6.1 Some problems with S-Mix addressing and output are now fixed.

7. Display

- 7.1 Paging sometimes jammed the console. This does not happen anymore.

8. Editing

- 8.1 Selecting another channel immediately after programming a Group bumped out channels that were intentionally left in the editor. This is now fixed.
- 8.2 When overwriting an existing memory using +Store, the command line jumped to its default mode. This does not happen anymore.

9. Exam

- 9.1 Exam for channels or spots required many presses on exam key to toggle between group or library numbers. This is now fixed.

10. Fan

- 10.1 When selecting another parameter after applying FAN to a parameter, the parameter that had been fanned jumped to a different value. This no longer happens.

11. Group

- 11.1 Various problems of scrollers in Groups were fixed.

12. Group Memory

- 12.1 The sequence [GROUP] [MEM] [ASSIGN] [BUMP KEY] [WHEEL] for memories that contained only channels resulted in "illegal number" message . This is now fixed. Thank you BEO, Holland.

13. Loading

- 13.1 When loading a show with 16 DMX devices table to a system with standard 8 DMX (old) table (bit R set to no) there was no warning message that there was a discrepancy in the type of table. Now there is a warning message.
- 13.2 When loading a playact from an earlier version to the Beta version, the Flip function was disabled due to no span values in the device definitions. Now there is a warning message.

14. Libraries

- 14.1 There was a disparity between the display and the actual output when using the sequence [spot #] [pos #] [+] or [-]. This is now fixed. Thank you Gino at Spotlight, Italy and Andy Stone at Stagetec, Great Britain..

15. LTP

- 15.1 When operating under LTP On, immediately after Store Store the output was not according to the last playback device used. Thank you Alon at Danor, Israel.

16. Memory Modification

- 16.1 Memory range modification did not work when there was an Effect in the editor. This is now fixed.
- 16.2 Applying Delta modification deleted Effects in the modified memories.
- 16.3 Erasing a part for parameters with a library assignment also erased the library assignment. This does not happen anymore. Thank you BEO, Holland.
- 16.4 Memory range modification for some scroller frames would sometimes modify all scrollers in memory range. This does not happen anymore. Thank you BEO, Holland.

17. Mix Output menu

- 17.1 Under Define Device the first line of the device appeared entirely in white making it impossible to tell what was being edited. This is now fixed. Thank you Andy at Stagetec, Great Britain.
- 17.2 Access was blocked to High End fixtures addresses directly after warm start. This is now fixed.
- 17.3 The device list has been expanded to include up to 300 devices .
- 17.4 It was impossible to save a device definition with new extended library parameters. This has been fixed.

18. Palettes

- 18.1 Palettes with scrollers were not applied correctly when, in the Palette, there was no intensity assignment to the scroller channel. This is now fixed.

19. Print

- 19.1 Memories with more than 36 spots in them were not printed correctly. Now the print is correct. Thank you Peter Tatarek at Lysis, Hungary.
- 19.2 Not all channels in memories were printed out. This has been fixed. Thank you to BEO, Holland.

20. Protect Mode

- 20.1 Events, Macros, and Snaps assigned to memories did not work when Protect mode was enabled. This does not happen anymore.

21. Rem Dim

- 21.1 Rem Dim was not working correctly. It is now fixed.

22. Snap

- 22.1 Memories with chaser fade times started running immediately after assignment in Snap+ mode ignoring the Hold command as recorded in the Snap. Thank you Andy Stone at Stagetec, Great Britain.
- 22.2 Reprogramming a Snap with a change in the controller mode for a chaser assignment was not accepted by the Snap. This is now fixed.
- 22.3 In certain instances enter of snap on top of another snap resulted in no display of memory assignments on upper controllers. This is now fixed.

23. Spots

- 23.1 Spots with Ignition value of 99 would sometimes cause random disruption or cessation of output for other spots. This has been fixed. Thank you to Peter Tatarek at Lysis, Hungary.

24. Teach Macro

- 24.1 Using F6 (more) in Channel patch menu during a Teach Macro would erase all the previous keystroke entries. This no longer happens. Thank you to Pauli at Hedcom, Sweden.

25. Touch Screen

- 25.1 When exiting through the backdoor (via Menu 8) to Service Tools and coldstarting immediately, the touch screen keys were disabled . This no longer happens.

26. Text

- 26.1 Storing text to a Group using ENTER on the alphanumeric keyboard would not work if [SHIFT, NSK] was used to enter text mode. This has been fixed.
- 26.2 Various translation corrections and additions have been made to the German versions. Many thanks to Rudi Burgstaller and Gerhard Feiner at Lichttechnik, Germany.

27. Scheduler

- 27.1 Scheduler boot function would not work if no start time were given. This has been fixed.

28. Software upgrading

- 28.1 When upgrading new software the message "Press any key" was displayed at end of operation, however the console had to be turned off and on to complete upgrade. This has been fixed.

Known Bugs

1. Manual crossfades of memories with delay on A/B may sometimes result in a blackout. Crossfaders must be traveling together and fader traveling to zero limit must reach its end stop first. Workaround: Always complete fade of incoming memory first when crossfading memories with delay.
2. Ratemaster is affected by controller on/off function.
3. Hard chases ignore Chase- Fade time in/out when used in conjunction with Controller On/OFF function .
4. It is impossible to define flip to big spot values.
5. When changing to Q list 2 while in memory exam of Q list 1 , the sequence { mem #, mem #}, shows incorrectly Q list 1 instead of Q list 2.
6. When a ChaseFade time out is being stored to a memory with an existing auto-assignment there is no warning message given . The auto-assignment is automatically erased and replaced with the ChaseFade time out upon store.
7. In some instances after pressing bump key “cntr #” is stuck in the command line.