

## Release Notes

### Spark4D

May 2004

**Version** SPD06R04.imf  
SPD06R04.tim  
OSiD08B1.imf  
**Service Tools:** DROA28B3  
**Last version:** SPD06R02.imf

CPU	486 DX4100
BIOS Version	SB510A03-U40

SB-510	Version
PAL U75	SB51S75P C/P
PAL U51	SB1KU51
PAL-SB510 U64	SB51U64B
Keyboard CAN S/W	PHOTOA09 (supports internal SMPTE)

### IMPORTANT !!!!

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

**Burn SPD06\* only after burning OSiD08B1!!!!!!**

### Notice for consoles delivered prior to January 1, 2000!

**Important!** SPD05.imf\* must be installed before upgrading to SPD06\*. If you have never installed SPD05\* read Release Notes SPD05R01 for instructions on installing SPD05\* software.

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

Your console has new Flash chips. Avoid burning old software (software previous to SPD04R05) 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 Internal Cache.
2. Burn the new software using the Boot Kit.
3. Return to the BIOS and change the Internal Cache to Write Back.

### Important!!

After burning SPD06\* switch the console off and on to enable the panel.

## New Features

- **Channel Controller**

The Channel Controller function allows each controller or fader to become a dedicated editor and once enabled, all modifications and editing affect only the selected controller. The controller outputs 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.

- **Faders / Controllers Dim Mode**

This feature allows the user to define whether the Faders / Controllers function as "X/fade" or "Dim" (Intensity Master).

When faders are set as X/fade, fading in a Memory with spots CROSS FADEs the lights from their current position to the Memory's position.

When faders are set as Dim, fading in a Memory with spots controls only the INTENSITY (Dim) of the Memory and all the parameters of the spots snap (jump) to their position upon initiation of the fade.

In the Sabre lighting desk this is known as the "X/fade" or "Dim" keys, for each fader.

Unlike in Sabre, when the fader is faded out to the bottom end limit, the PB is released.

- **Shift Lock**

When SHIFT is locked, pressing any of the system keys executes the upper case command/feature. S.K. modes behave according to the locked Shift (for example: Macro keys will be on page 21→40. Assign keys will function as GO buttons, etc...)

- **Change of Display**

The Macro text display for the soft keys in Macro mode is now black (instead of the hardly seen grey).

## New Features

### 1 Channel Controller

- The new key **Channel Controller** enables direct access to any controller. The key is **[CHANNEL CONTROLLER]** (**[ED1/ED2]** with **[SHIFT]**). 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 and has its own editor display, which shows only the controller's contents. That is the **Channel Controller Editor**.
- The controller potentiometer behaves as a local grandmaster. The display shows 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 0%.
- When modifications to the selected controller are complete there are several store options available. See below
- To exit the **Channel Controller** press **[CHANNEL CONTROLLER]** again.

#### 1.1 New terminology:

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

**Reference Memory (RM):** a temporary memory, which was created inside the Channel Controller editor, and keeps reference to its 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, i.e., standard editing operation.

#### 1.2 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.
-----F1-----F2-----F3-----F4-----F5-----F6-----					
Press <CLEAR> key to return to Channel Contr. mode.					
Press <STORE> to update S mem or < # STORE > to save new					
MEM # .					

► **Note**

Depending upon controller contents (group, memory, **Reference Memory** or empty) some F key options might not be available. If an option is highlighted in Gray, it is available. Whatever is not on 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.

1.2.1 Channel Controller Option window key function description

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

1.2.2 General Rules of Operation

1. In **Channel Controller Editor**, modifying a controller and then pressing another bump button results in the following:
  - A. Automatically creates **Reference Memory** if a memory or **Source Memory** was selected, without opening **Channel Controller Option window** and remaining in **Channel Controller Editor** for a newly selected controller.
  - B. Automatically updates the **Reference memory** if a **Reference Memory** was selected, without opening **Channel Controller Option window** and remaining in **Channel Controller Editor** for a newly selected controller.
  - C. Automatically updates contents as a group if an empty Controller or a group has 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] opens the **Channel Controller Option window**. Valid options are highlighted.
3. In **Channel Controller Editor**, pressing [STORE], [STORE] updates the **Source Memory**. On first press of [STORE] the window opens. On second press of [STORE] the window is closed.

4. In **Channel Controller Editor**, pressing **[STORE]**, **[##]**, **[STORE]** saves the new memory number entered and assigns it to the chosen controller.

## 1.3 Display

### 1.3.1 Channel Controller Editor:

- 1.3.1.1 At top center of monitor the information field appears in orange (controller color code) and the following information is displayed: Controller/Fader/W (for SubmasterWing) #, Qlist #, and Grp, Memory # or Reference Memory #.

- 1.3.1.2 Editor display window frame appears in orange.

- 1.3.1.3 The content of the selected controller appears in orange. No tracking or other playback device content is displayed. All modified channels and spots appear as in stage editor, i.e., Active items appear in red, idle items in white.

### 1.3.2 Playback display

- 1.3.2.1 A controller item (Rmem, **Grp**, etc.) being modified appears on orange background in the controller section. Fader numbers also appear on orange background.

- 1.3.2.2 A **Reference Memory** appears as "**R mem #**" on orange background.

- 1.3.2.3 A Group appears as "**Grp**" on orange background

### 1.3.3 Exam Key

- 1.3.3.1 The **[EXAM]** key toggles between modified controller values and original controller values.
- 1.3.3.2 Shift **[EXAM]** key toggles between **Channel Controller editor** display and Stage editor display.

## 1.4 General Information

- Snaps 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]** flashes the controller contents while in Channel Controller mode.
- It is possible to add existing memories to controllers: **[MEM], [#], [WHEEL]** controls memory levels relatively, and **[GROUP], [MEM], [#], [WHEEL]** controls memory levels but without relative values.
- **Channel Controller** works with Submaster Wing. Press assign key instead of bump key to select a controller for editing.

## 1.5 Editing in Channel Controller

### 1.5.1 Assign some groups and memories to controllers:

Keypresses	Results/Comments
1. Press <b>[CHANNEL CONTROLLER]</b>	1. Chan. controller appears in the command line. Message "ASSIGN KEY EXPECTED" appears in top left of monitor. <b>[CHANNEL CONTROLLER]</b> key LED is lit red.
2. Press <b>[BUMP KEY]</b> for controller	2. Display channel controller editor. <b>[CHANNEL CONTROLLER]</b> key LED blinks red. Selected controller LED blinks green.
3. Edit <b>Channel Controller</b>	3. Use valid editing keys
4. Press another <b>[BUMP KEY], [STORE], [CHANNEL CONTROLLER]</b> , or other valid key	4. If exiting Channel Controller Editor, display returns to stage editor. <b>[CHANNEL CONTROLLER]</b> 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** opens.

## 1.6 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 also closes 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

### **1.7 Exiting Channel Controller**

Press the [**CHANNEL CONTROLLER**] button again to exit Channel Controller.

## 2 Faders / Controllers Dim Mode

It is now possible to choose how Spots in memories, when the memories are assigned to faders will act when the fader is lifted. In X-fade Mode all the Spots parameters are affected. Fading in a Memory with spots CROSS FADEs the spots from their current position to the Memory's position. In Dim Mode, only the intensity parameter is affected. Fading in a Memory with spots controls only the INTENSITY (Dim) of the Memory and all the parameters of the spots snap (jump) to their position upon initiating the fade.

### 2.1 Setting Dim mode / X-fade mode

Keypresses	Results/Comments
1. Press [MENU], [8], [ENTER]	
2. Toggle to <b>Faders/Controllers Mode</b> using [F2]↑ or [F3]↓	
3. Press [F1] Enter	
4. Choose [F1] for <b>X-fade</b> or [F2] for <b>Dim</b>	
5. Exit menu mode by [RESET], [RESET] or [MENU]	

Example for Dim Mode:

1. All spots are at their HOME position and are released from the editor (as if RESET was pressed).
2. Memory 1 with all spots at Yellow color and positions set to Center Stage is assigned to fader/controller #20 (could be any controller).
3. The faders' mode is set to Dim.
4. Fade in the fader slowly. After a few percents (3%-5%) all spots snap to their position (Center stage and Yellow color). The rest of the fader travel controls only the intensity (dim) of the spots in the memory.
5. Taking the fader back down to its bottom end limit, releases all content and the spots return to their original position of the "gray tracking".



### 3 Shift Lock

When **[SHIFT]** is locked, pressing any of the system keys executes its upper case command / feature. S.K. modes behave according to the locked Shift (for example: Macro keys are on page 21→40. Assign keys function as GO buttons, etc.)

#### 3.1 Enabling SHIFT lock

Keypresses	Results/Comments
1. Press <b>[MENU]</b> , <b>[8]</b> , <b>[ENTER]</b>	
2. Toggle to <b>Sticky SHIFT</b> using <b>[F2]</b> ↑ or <b>[F3]</b> ↓	
3. Press <b>[F1]</b> Enter	
4. Choose <b>[F1]</b> for <b>On</b> or <b>[F2]</b> for <b>Off</b>	
5. Exit menu mode by <b>[RESET]</b> , <b>[RESET]</b> or <b>[MENU]</b>	

After enabling the Shift Lock function, pressing the **[SHIFT]** locks the shift, and only upper case functions function. A red Shift on the bottom right display indicates that the shift is locked. Pressing the **[SHIFT]** again releases its lock.

➤ **Note/ Warning:** Channels and Spots selection is not available while shift is locked because **[CHANNEL]** functions as **[AUTOCHASE]** and **[SPOT]** functions as **[CALL]**

## New Keys

### Channel Controller

The **[ED1/ED2]** key when toggled is editor-1 and editor-2. Its upper case is the **[CHANNEL CONTROLLER]** key.

## Fixed Bugs

1. After creating and using Macros, Groups and Snaps the Led of the last selected Macro blinked in other modes regardless of the Group/ Snap selection. This is fixed. Thank you Michiel Moolenaar from BEO.
2. After connecting Master/ Slave between Spark 4D and SP19 4D with RCU, the Slave ignored the RCU (the echo-line showed disconnected peripheral), and the 20 controllers did not track/sync with the Master Spark 4D. This does not happen anymore. Thank you TRT Studios, Istanbul.
  - \* Several other Master/Slave bugs were brought to our attention and are fixed in the current release.
3. The sequence **[Ch/Spot #, Dimmer/Wheel, Ch/Spot #, Dimmer/Wheel]** caused the echo-line to display the intensity without the fixture number. This is fixed now. Thank you Stagetec U.K.
4. After using the sequence **[Pos #, Spot #→#, Full, Spot #, Rem Dim, Move x/y, Store]** it was not possible to store the position. Also, after pressing **[Clear]** all the parameters would be forced to full. This does not happen anymore. Thank you Ofer Brum, Israel.
5. The sequence **[Spot #, Parameter #, Fan, Wheel, Flip]** caused the Flip function to affect all parameters rather than affect only Pan/Tilt parameters. This is fixed now. Thank you Mattias (MatteMat) Franzon.
6. After using the sequence **[Assign Memory # to a Fader, Press Memory #, Wheel ↑]**, the user had to roll the wheel ↑ (up) until it reached the level of the memory and only then the wheel affected the intensity derived from that fader. This does not happen anymore. Thank you Channel-9, Sydney.
7. The sequence **[Store, Pos(F2), Store to a Memory on A/B]** used to cause a display corruption. This does not happen anymore.

## Known Bugs

1. In a configuration of 8 Dimmers and 8 Channels Menu 1-Channel Patch and Menu 11-Test cannot be opened. The work around is to define a larger configuration (more than 8 Dimmers and Channels).
2. After taking all spots out of the configuration using Service Tools, the Parameter Button LED stays on.
3. When using Editor2 to run live X/Y effect on one of the spots: go to Editor1, select a different spot (not the one that runs on Editor2) and play with it, then press **[RESET]**. The **[RESET]** affects the spot from Editor2 and the effect returns to its base values and stops running.
4. Scheduler assignments between two years do not function (i.e. December 29<sup>th</sup> **2003** to January 3<sup>rd</sup> **2004**).
5. In Warning Difference window, the "Scrollers/frame" line appears twice, so the rest of the lines are pushed downwards. This is only a display corruption and does not affect the actual configuration.