

## Main Board Dipswitch Set-Up Chart for use with the LaserCon "Merlin" board

(Firmware 2.0)

The purpose of this chart is to find a single dipswitch setting for the Dragon's Lair / Space Ace main board that will work with all ROM versions. You *must* fill in this chart and set your switches before starting the game.

Instructions:

Use the *included* dipswitch charts to fill in the table. (Many switches have been changed from the originals) For each revision set, fill in its row with your preferred settings.

Use pencil. Place: 1 for ON, 0 for OFF, X for "don't care / not used"

When finished, each column must have only '1's or '0's (ignore any 'X's).

Copy those settings down to "Your Final Settings", and set the dip-switches on your main board.

	A0	A1	A2	A3	A4	A5	A6	A7	B0	B1	B2	B3	B4	B5	B6	
<b>Dragon's Lair Rev. F2</b>																
<b>Dragon's Lair Enhancement 2.1</b>																
<b>Space Ace Rev. A3</b>																
<b>Space Ace Enhancement 1.0</b>																
																<b>B7</b>
<b>Your Settings</b>																

**B7: ON** - ROM Selection menu is enabled.

At power-on, the ROM selection screen is displayed.

You may use the joystick to change the default game version.

Default game starts after 10 second timer or by pressing sword.

**B7: OFF** - Fixed ROM set

ROM selection menu is disabled.

The default game version starts immediately.

**\*Note:** The switch banks are printed with 1-8.

The circuit board is printed with 0-7.

**Ignore the incorrect numbers printed on the switch banks.**

**"DRAGON'S LAIR" Version-F2**  
**DIP-Switch settings chart:**

**LaserCon - Merlin**

A. Attract Mode Sound

Always on ..... B0=ON, B1=ON  
Always off ..... B1=OFF  
Plays every 8th time ..... B0=OFF, B1=ON

B. Number of Coins Required for One Credit

1 ..... A0=OFF, A4=ON  
2 ..... A0=ON, A4=ON  
free play ..... A4=OFF

C. Number of Lives Per Credit

3 ..... A5=ON, B2=ON  
5 ..... A5=OFF, B2=ON  
Unlimited lives for testing purposes B2=OFF

D. Game Difficulty

Always Easy ..... A1=OFF  
Easy at the onset of every game,  
difficulty increases to hard when a  
player survives 9 consecutive scenes. .... A1=ON, A2=ON, A3=OFF, B4=OFF  
Easy at the onset of every game,  
difficulty increases to hard when a  
player survives 5 consecutive scenes. .... A1=ON, A2=ON, A3=OFF, B4=ON  
Easy at the onset of every game,  
difficulty increases to very hard when a  
player survives 9 consecutive scenes. .... A1=ON, A2=ON, A3=ON, B4=OFF  
Easy at the onset of every game,  
difficulty increases to very hard when a  
player survives 5 consecutive scenes. .... A1=ON, A2=ON, A3=ON, B4=ON  
Always Hard ..... A1=ON, A2=OFF, A3=OFF  
Always Very Hard ..... A1=ON, A2=OFF, A3=ON

E. Pay-As-You-Go

Pay-as-you-go disabled The game ends when won ..... A6=ON, B5=ON  
Pay-as-you-go disabled. The game starts again from the  
beginning when won. .... A6=ON, B5=OFF  
Player must deposit 2 or 3 coins (depending on A0) to  
continue playing once, after 2/3 of the game is  
finished. The game ends when won ..... A6=OFF, B5=ON  
Player must deposit 2 or 3 coins (depending on A0) to  
continue playing three times during the game, and may  
deposit more coin(s) to continue again from the  
beginning after the game is won ..... A6=OFF, B5=OFF

**If pay-as-you-go is ON** and the game is set for 3 Dirks  
per credit:

If the player has less than 3 Dirks, he receives one  
additional Dirk after depositing coins to continue the  
game at any time during the first game. No extra Dirks  
are awarded after the first game is won. .... B6=ON  
No extra Dirks awarded ..... B6=OFF

Not Used: A7, B3, B7

**"Dragon's Lair Enhancement" Version 2.1**

**LaserCon - Merlin**

**DIP-Switch settings chart:**

A. Attract Mode Sound

Always on ..... B0=ON, B1=ON  
Always off ..... B1=OFF  
Plays every 8th time ..... B0=OFF, B1=ON  
Narrator voice on ..... B4=ON  
Narrator voice muted ..... B4=OFF

B. Number of Coins Required for One Credit

1 ..... A0=OFF, A4=ON  
2 ..... A0=ON, A4=ON  
free play ..... A4=OFF

C. Number of Lives Per Credit

3 ..... A5=ON, B2=ON  
5 ..... A5=OFF, B2=ON  
Unlimited lives for testing purposes B2=OFF

D. Pay-As-You-Go

Pay-as-you-go disabled The game ends when won..... A6=ON, B5=ON  
Pay-as-you-go disabled. The game starts again from  
the beginning when won. .... A6=ON, B5=OFF

Player must deposit 1 or 2 coins (depending on A2) to  
continue playing once, after 2/3 of the game is  
finished. The game ends when won ..... A6=OFF, B5=ON, A4=ON

Player must deposit 1 or 2 coins (depending on A2) to  
continue playing two times during the game, and may  
deposit more coin(s) to continue again from the  
beginning after the game is won ..... A6=OFF, B5=OFF, A4=ON

***If pay-as-you-go is ON:***

The player receives one additional Dirk after depositing  
coin(s) to continue (during first game only). .... B6=ON  
No extra Dirks awarded ..... B6=OFF

The price to continue is 1 coin ..... A2=ON  
The price to continue is 2 coins ..... A2=OFF

Not Used: A1, A3, A7, B3, B7

**"Space Ace" Version A3**  
**DIP-Switch settings chart:**

**LaserCon - Merlin**

- A. Attract Mode Sound
  - Always on ..... B0=ON, B1=ON
  - Plays every 8th time ..... B0=OFF, B1=ON
  - Always off ..... B1=OFF
  
- B. Number of Coins Required for One Credit
  - 1 ..... A0=OFF, A4=ON
  - 2 ..... A0=ON, A4=ON
  - free play ..... A4=OFF
  
- C. Number of Lives Per Credit
  - 3 ..... A5=ON, B2=ON
  - 5 ..... A5=OFF, B2=ON
  - Unlimited lives for testing purposes B2=OFF
  
- D. Game Difficulty Level\*
  - Difficulty will increase when a  
player survives 3 consecutive scenes B4=ON
  - Difficulty will increase when a  
player survives 5 consecutive scenes B4=OFF
  - Fast Difficulty increase ..... A7=ON
  - Slow Difficulty increase ..... A7=OFF
  
- E. Skill Level Selection
  - Normal Mode (control panel skill  
level buttons are enabled) ..... B3=ON, B6=ON
  - Always SPACE ACE skill level ..... B3=ON, B6=OFF
  - Always CAPTAIN skill level ..... B3=OFF, B6=ON
  - Always CADET skill level ..... B3=OFF, B6=OFF

Not Used: A1, A2, A3, A6, B5, B7

**"Space Ace Enhancement" Version 1.0**  
**DIP-Switch settings chart:**

**LaserCon - Merlin**

- A. Attract Mode Sound  
Always on ..... B0=ON, B1=ON  
Plays every 8th time ..... B0=OFF, B1=ON  
Always off ..... B1=OFF
- B. Number of Coins Required for One Credit  
1 ..... A0=OFF, A4=ON  
2 ..... A0=ON, A4=ON  
free play ..... A4=OFF
- C. Number of Lives Per Credit  
3 ..... A5=ON, B2=ON  
5 ..... A5=OFF, B2=ON  
Unlimited lives for testing purposes B2=OFF
- D. Game Difficulty Level  
Easy: when a life is lost, gameplay  
resumes immediately after the point  
the player died. The fatal move is  
not replayed. .... A7=OFF  
Hard: when a life is lost, gameplay  
resumes back at the beginning of  
the scene. All moves must be  
replayed. .... A7=ON
- F. Skill Level Selection  
Normal Mode (control panel skill  
level buttons are enabled) ..... B3=ON, B6=ON  
Always SPACE ACE skill level ..... B3=ON, B6=OFF  
Always CAPTAIN skill level ..... B3=OFF, B6=ON  
Always CADET skill level ..... B3=OFF, B6=OFF
- .....

Not Used: A1, A2, A3, A6, B4, B5, B7