

## MultiROM - Dipswitch set-up chart for the game's main board

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 *attached* dipswitch charts to fill in the table. (Some switches have been changed from the originals)

For each revision set, fill in its row with your preferred settings.

Use pencil. Place a 1 for ON and a 0 for OFF

Look at each column and find a single setting that will work for all versions. Some compromises will be necessary.

If you find a major conflict, contact me.

	A0	A1	A2	A3	A4	A5	A6	A7	B0	B1	B2	B3	B4	B5	B6	B7
Dragon's Lair - Rev. #1 & Beta																
Dragon's Lair - Rev. A, B, C, D																
Dragon's Lair - Rev. E, F2, DLE1.1																
Dragon's Lair Enhancement 2.1																
Space Ace – Rev. A, A2, A3																
Space Ace Enhancement 1.0																
Your Final Settings																

**\*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.**

**\* These Switch Settings are for the MultiROM card ONLY  
- Keep with machine.**

**DRAGON'S LAIR DIP switch settings chart**

**For the Beta ROM versions: DL Serial #1 and Beta-1:**

A. Attract Mode Sound

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

B. Number of Coins Required for One Credit

2 ..... A0=ON, A1=ON  
3 ..... A0=OFF, A1=ON  
4 ..... A0=ON, A1=OFF  
5 ..... A0=OFF, A1=OFF  
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. Playtest and Diagnostics

Normal operation ..... A3=ON, A7=ON  
Playtest for engineering use ..... A3=OFF  
Diagnostics: power up the game. After  
you hear two beeps, turn A7 to OFF. .... A7=first ON, then OFF

E. Game Difficulty

Easy ..... B7=OFF  
Hard ..... B7=ON

F. Pay-As-You-Go

Pay-as-you-go disabled The game ends when won ..... A6=ON

At the completion of the first third of the game and the  
second third of the game, each, the player must insert an  
additional two coins to continue play. Pay as you go can  
only be used with the 2 coins per credit setting. .... A6=OFF

G. Disc Player Model Selection

Pioneer PR-7820 ..... B3=ON  
Pioneer LD-V1000 ..... B3=OFF

Not Used: A2, B4, B5, B6

**DRAGON'S LAIR DIP switch settings chart**  
**For the ROM versions: A, B, C, & D**

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

2 ..... A0=ON, A1=ON  
3 ..... A0=OFF, A1=ON  
4 ..... A0=ON, A1=OFF  
5 ..... A0=OFF, A1=OFF  
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. Playtest and Diagnostics

Normal operation ..... A3=ON, A7=ON  
Playtest for engineering use ..... A3=OFF  
To run diagnostics, set A7 to ON, and power up the game.  
After you hear two beeps, turn A7 to OFF. Turn A7  
back to ON to end diagnostics. .... A7=first ON, then OFF

E. Game Difficulty

Easy ..... B7=OFF  
Easy at the onset of every game, difficulty increases to  
hard when a player survives 9 consecutive scenes. .... A2=ON, B4=OFF, B7=ON  
Easy at the onset of every game, difficulty increases to  
hard when a player survives 5 consecutive scenes. .... A2=ON, B4=ON, B7=ON  
Hard ..... A2=OFF, B4=ON, B7=ON

F. Pay-As-You-Go

Pay-as-you-go disabled The game ends when won ..... A6=ON  
Player must deposit more money to continue playing after  
2/3 of the game is finished. If the player has less than  
3 Dirks, he receives one additional Dirk. The game ends  
when won ..... A0=ON, A1=ON, A6=OFF, B5=ON, B6=ON  
Player must deposit more money to continue playing after  
2/3 of the game is finished. The player receives no  
additional Dirks. The game ends when won ..... A0=ON, A1=ON, A6=OFF, B5=ON, B6=OFF  
Player must deposit more money to continue playing three  
times during the game. If the player has less than  
3 Dirks, he receives one additional Dirk. Player may  
deposit more coin(s) to continue again from the beginning  
after the game is won ..... A0=ON, A1=ON, A6=OFF, B5=OFF, B6=ON  
Player must deposit more money to continue playing three  
times during the game. No additional Dirks are awarded.  
Player may deposit more coin(s) to continue again from  
the beginning after the game is won ..... A0=ON, A1=ON, A6=OFF, B5=OFF, B6=OFF

G. Disc Player Model Selection

Pioneer PR-7820 ..... B3=ON  
Pioneer LD-V1000 ..... B3=OFF

## DRAGON'S LAIR DIP switch settings chart

### For the ROM versions: E, F2 & DLE 1.1

#### 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

2 ..... A0=ON, A4=ON  
3 ..... A0=OFF, 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. Playtest and Diagnostics

Normal operation ..... A3=ON, A7=ON  
Playtest for engineering use ..... A3=OFF  
To run diagnostics, set A7 to ON, and  
power up the game. After you hear  
two beeps, turn A7 to OFF. Turn A7  
back to ON to end diagnostics. .... A7=first ON, then OFF

#### E. Game Difficulty

Easy ..... B7=OFF  
Easy at the onset of every game, difficulty increases to  
hard when a player survives 9 consecutive scenes. .... A1=OFF, A2=ON, B4=OFF, B7=ON  
Easy at the onset of every game, difficulty increases to  
hard when a player survives 5 consecutive scenes. .... A1=OFF, A2=ON, B4=ON, B7=ON  
Easy at the onset of every game, difficulty increases to  
very hard when a player survives 9 consecutive scenes. .... A1=ON, A2=ON, B4=OFF, B7=ON  
Easy at the onset of every game, difficulty increases to  
very hard when a player survives 5 consecutive scenes. .... A1=ON, A2=ON, B4=ON, B7=ON  
Hard ..... A1=OFF, A2=OFF, B7=ON  
Very Hard ..... A1=ON, A2=OFF, B7=ON

#### F. 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

#### G. Disc Player Model Selection

Pioneer PR-7820 ..... B3=ON  
Pioneer LD-V1000 ..... B3=OFF

**DRAGON'S LAIR DIP switch settings chart**  
**For Dragon's Lair Enhancement - DLE 2.1**

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, A1=OFF, A4=ON  
2 ..... A0=ON, A1=ON, A4=ON  
3 ..... A0=OFF, A1=ON, A4=ON  
4 ..... A0=ON, A1=OFF, 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. Playtest and Diagnostics

Normal operation ..... A3=ON, A7=ON  
Playtest for engineering use ..... A3=OFF  
To run diagnostics, set A7 to ON, and  
power up the game. After you hear  
two beeps, turn A7 to OFF. Turn A7  
back to ON to end diagnostics. .... A7=first ON, then OFF

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 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  
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

F. Disc Player Model Selection

Pioneer PR-7820 ..... B3=ON  
Pioneer LD-V1000 ..... B3=OFF

Not Used: B7

**SPACE ACE DIP switch settings chart**  
**For ROM versions: A, A2, A3**

- .....
- 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
- 2 ..... A0=ON, A4=ON
  - 3 ..... A0=OFF, 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. Playtest and Diagnostics
- Normal operation ..... A3=ON, A7=ON
  - Playtest for engineering use ..... A3=OFF
  - To run diagnostics, set A7 to ON, and  
power up the game. After you hear  
two beeps, turn A7 to OFF. Turn A7  
back to ON to end diagnostics. .... A7=first ON, then OFF
- E. 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 ..... B7=ON
  - Slow Difficulty increase ..... B7=OFF
- F. Skill Level Selection
- Normal Mode (control panel skill  
level buttons are enabled) ..... B5=ON, B6=ON
  - Always SPACE ACE skill level ..... B5=ON, B6=OFF
  - Always CAPTAIN skill level ..... B5=OFF, B6=ON
  - Always CADET skill level ..... B5=OFF, B6=OFF
- G. Disc Player Model Selection
- Pioneer PR-7820 ..... B3=ON
  - Pioneer LD-V1000 ..... B3=OFF
- .....

Not Used: A1, A2, A6

**SPACE ACE Dip-switch settings chart**  
**For Space Ace Enhancement - SAE 1.0**

- 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  
2 ..... A0=ON, A4=ON  
1 ..... A0=OFF, A4=ON  
2 credits at all times/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. Playtest and Diagnostics  
Normal operation ..... A3=ON, A7=ON  
Playtest for engineering use ..... A3=OFF  
To run diagnostics, set A7 to ON, and  
power up the game. After you hear  
two beeps, turn A7 to OFF. Turn A7  
back to ON to end diagnostics. .... A7=first ON, then OFF
- E. Game Difficulty Level\*  
Normal: when a life is lost, gameplay  
resumes immediately after the point  
the player died. The fatal move is  
not replayed. .... B7=OFF  
Hard: when a life is lost, gameplay  
resumes back at the beginning of  
the scene. All moves must be  
replayed. .... B7=ON
- F. Skill Level Selection  
Normal Mode (control panel skill  
level buttons are enabled) ..... B5=ON, B6=ON  
Always SPACE ACE skill level ..... B5=ON, B6=OFF  
Always CAPTAIN skill level ..... B5=OFF, B6=ON  
Always CADET skill level ..... B5=OFF, B6=OFF
- G. Disc Player Model Selection  
Pioneer PR-7820 ..... B3=ON  
Pioneer LD-V1000 ..... B3=OFF  
.....

Not Used: A1, A2, A6, B4