

Dragon's Lair \ Space Ace Multi-ROM Replacement Board

Version 2

Design and Control Firmware By

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The MultiROM board is a direct replacement for the original ROM board found on any 1983 Cinematronics' main control board for Dragon's Lair or Space Ace, for use in the United States. By installing this board, you will be able to select any one of 15 different control romsets at boot up.

Installed Romsets are:

Dragon's Lair – Serial number 1

Beta X

A, B, C, D, E, F2

Dragon's Lair Enhancement 1.1

Dragon's Lair Enhancement 2.1 – No prototype animation.

Dragon's Lair Enhancement 2.1 – With prototype animation
(Limited Edition disc required)

Space Ace – A, A2, A3, Space Ace Enhancement 1.0

***Notes on versions and players**

The original early versions of these romsets were designed to support the PR-7820 player only. These MultiROM versions have been corrected to support both players. All ROM-sets will work, regardless of the player you are using. Use dipswitch B3 to configure your player.

* "Dragon's Lair Enhancement" and "Space Ace Enhancement" are the intellectual property of "The Dragon's Lair Project" and are used with permission. You can find more information here: <http://www.dragons-lair-project.com/tech/enhancements/dle.asp>

MultiROM will allow you to play either "Dragon's Lair" or "Space Ace" in the same game cabinet. Simply install a Dragon's Lair disc in your Space Ace machine, or install a Space Ace disc in your Dragon's Lair machine, and select an appropriate ROM set.

Board installation – Disconnect the 40-pin ribbon cable and remove the four nuts holding the original board in place. Reverse the process to install the new MultiROM board.

To get the greatest satisfaction from the MultiROM board, it is very important to find a single dip-switch setting for all ROM sets. To do this, I have provided you with a “Dip-Switch Set-Up Chart”. After all, what good is a switchless ROM board if you must change the switches on the main board?

Please take the time to fill in this chart and find that one setting that works best for you. To make it easier, I have re-mapped a few of the switch settings on some ROM sets. Therefore, you *must* use the included switch settings sheets. **The original settings charts from the manuals are no longer valid when using the MultiROM card.**

For those of you who just can't take the time to fill in the chart, here are my recommended settings...

	01234567	01234567
For a LD-V1000 player:	switch A - 11111011,	switch B – 11101101
For a PR-7820 player:	11111011,	11111101

Operation:

At power-up, the default game version will be the one last played before shutdown. It will be displayed in player-1's score and on-screen*.

A ten second timer (displayed in the credits) will begin to tick down. At this time, you may press “sword” to begin the default game immediately, or wait for the ten seconds to elapse for the default game to start.

Moving the joystick up or down will change the default game setting. View the selection on player-1's score. After changing the game setting, you may press “sword”, or wait for the timer to elapse to start the game.

If your machine has a “LaserCon - Laserdisc Player Conversion Card” installed, you will view the selected ROM version on the video screen.

(* Note - the MultiROM firmware must be version 2 or later and the LaserCon firmware must be version 4 or later to use the on-screen feature. Contact me if you need a firmware update or have questions about this configuration.)

Important Information about the Scoreboard Display

The selected ROM set will be displayed in the Player One score area.

DLE2.1 has been provided in two versions to eliminate the need to change dipswitch B7: one version for normal play (without any prototype animation), and another with prototype animation when using the newer 2003 disc.

When selecting DLE2.1: a 'P' in the "lives" area indicates that the 'P'rototype version is selected and the extra scenes will be played.

*Note- a prototype disc (2003) can be operated in either Standard or Prototype mode. Do not select "Prototype Animation" if you have a standard disc (1983) installed or you are using a PR-7820 player which is unable to play the last tracks on the newer 2003 disc.

If you wonder why certain letters are displayed strangely...

The display controller chips used on the Dragon's Lair or Space Ace scoreboard have limitations for what can be displayed. Each digit has 16 possible settings and nothing else is allowed. The 16 settings are the digits 0-9, a hyphen, a blank space (off), and the capital letters H, E, L, and P. (Why they chose the letters for "help", I don't know.)

In order to display a few extra characters, I did a few tricks...

A – alternately displaying 9 and P

B – 8

C – L and hyphen (I'm not happy with this one, but it's the best I could do)

D – 0

F – 7 and hyphen (appears backwards)

S - 5

If you have a "LaserCon LDP Converter" installed, then you can read the selected ROM version "on screen", and this is not a problem.

That's it. I hope you enjoy your new ROM controller. If you have any questions, comments or suggestions, contact me at shaun@wood1st.com or by posting a note on the message board at the Dragon's Lair Project website. <http://www.dragons-lair-project/>