

The LaserCon "Merlin" Board

Laserdisc Player replacement and Multi-ROM Board For Dragon's Lair and Space Ace

Version 1 - Design and Control Firmware By
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The Merlin board is a replacement for the original ROM board found on any 1983 Cinematronics' main control board for Dragon's Lair or Space Ace. Once installed, you will be able to use a newer Pioneer Laserdisc player and select any of 5 different control romsets at boot up.

Supported Replacement Players:

Pioneer - LD-V8000 LD-V4400 LD-V4300D LD-V4200
LD-V2200 CLD-2600 CLD-2400

Installed ROM sets are:

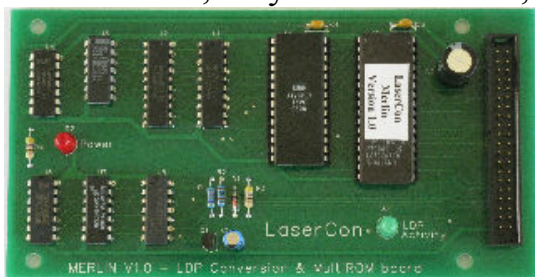
Dragon's Lair – F2 (This is the final factory version)
Dragon's Lair Enhancement 2.1
Dragon's Lair Enhancement 2.1 – With prototype animation
(Limited Edition disc required)
Space Ace – A3 (This is the final factory version)
Space Ace Enhancement 1.0

* "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>

Merlin 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.

Parts List:

Merlin board, Player control cable, Dip-Switch sheets and these instructions.



Installation Instructions:

1. Configure your new player:

All players must be configured for proper serial communication as follows:

**Baud Rate: 4800, No Parity, 1 stop bit, Data Length: 8 bits,
TxD terminator: <CR>.**

LD-V8000:

Connect the player to a TV or monitor.

Press and hold the "DISPLAY" button while powering-on the player.

Press "SCAN FORWARD" to reach Page-5 "**RS-232 SWITCH P-5**"

Verify: Baud Rate: 4800, No Parity, 1 stop bit, Data Length: 8 bits

To make changes, press "STEP FORWARD" to highlight an item, then press "STEP REVERSE" to change the setting.

Press "SCAN FORWARD" to reach Page-6 "**RS-232 SWITCH P-6**"

Verify: TxD terminator: <CR>.

LD-V8000 - Other Settings:

P-7: Memory Control

(The LD-V8000 player has the ability to hold and "freeze" the last displayed frame of video during a search operation. Thereby eliminating the blackout screen between scene searches. Some people prefer this mode, while others consider it a change from the "original" feel of the game.)

For "Original" blackout searches:

Video Memory Mode: CONTROL DISABLE, Auto Memory: OFF

For "Freeze frame" searches:

Video Memory Mode: CONTROL ENABLE, Auto Memory: ON

* Press "DISPLAY" to save your settings and exit.

LD-V4200:

Open the cover on the front of the player. Set all switches-OFF (up).

LD-V4400:

Connect the player to a TV or monitor.

Press and hold the "DISPLAY" button while powering-on the player.

Press "SCAN FORWARD" to reach Page-3 "**RS-232 SWITCH P-3**"

Verify: Baud Rate: 4800, TxD terminator: <CR>.

To make changes, press "STEP FORWARD" to highlight an item, then press "STEP REVERSE" to change the setting.

* Press "DISPLAY" to save your settings and exit.

LD-V2200 & CLD-2400:

On the back of the player, set both dip-switches – OFF (up)

CLD-2600:

On the back of the player, set dip-switches 1 & 2 – OFF (up)

5. Install the replacement player control cable:

Remove and save the original player cable. Install the replacement cable. Please take notice of the orientation in the photo.



6. Connect the control, video and audio cables to the player.

In some cases, you may need a "BNC to RCA" adaptor to connect the video.

Operation:

Power on your machine. The red LED should light, indicating that the Merlin board is properly powered. After a one second delay, the "LDP" Activity light will flicker, indicating serial communication with the player.

The default game version (the one last played before shutdown), will be displayed on-screen and in player-2's score. 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. After changing the game setting, you may press "sword", or wait for the timer to elapse to start the game.

Important Information

DLE2.1 has been provided twice to eliminate the need to change dipswitches: one version for Standard play, and another with prototype animation when using the newer 2003 disc.

*Note- a prototype disc (2003) can be operated in either Standard or Prototype mode. Do not select "Prototype Animation" if you have a standard (1983) disc installed. If you do, no harm will be done, but the game will fail to start.

I hope you enjoy your new "Merlin" 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.com/>