

# LaserCon

## LaserDisc Player Conversion Card Instructions for use with Super Don Quix-ote

Design and Firmware by Shaun D. Wood

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**LaserCon** is an adaptor card for the replacement of the laser disc player used in arcade lasergames. These instructions are for Super Don Quix-ote.

### **Supported Replacement Players:**

Pioneer - LD-V8000, LD-V4400, LD-V4300D

### **Parts List**

LaserCon board, LD-V1000 interface adaptor, Player interface serial cable.

### **Installation Instructions**

#### **1. Configure your new player:**

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

**Baud Rate: 9600, No Parity, 1 stop bit, Data Length: 8 bits,**

**TxD terminator: <CR>.**

#### **LD-V4400, LD-V4300D:**

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: 9800, 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-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: 9600, 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>.

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

LD-V8000 - Optional Setting:

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.**

**2. Set Dipswitches:**

On LaserCon, set switch ....    1    2    3    4  
**OFF ON    OFF ON**

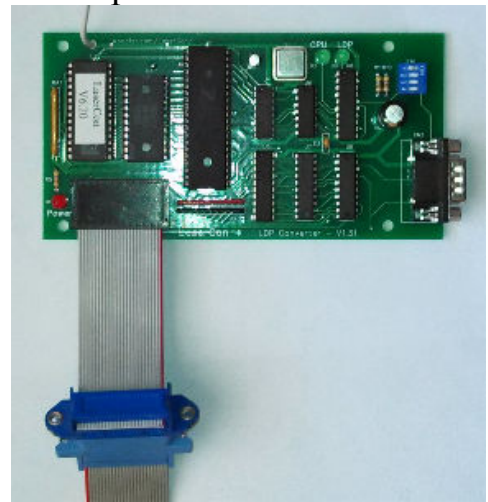
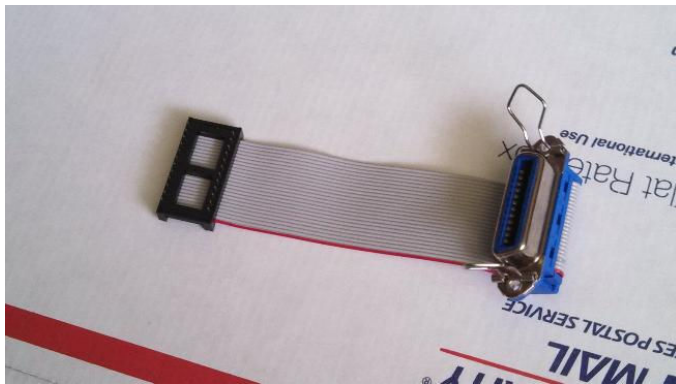
**LaserCon Dip-switch settings (Ver. 7.0 firmware)**

SW 1	SW 2	SW 3	SW 4	Original Player	Games	Baud Setting for new player
0	0	0	0	PR-7820	Dragon's Lair, Space Ace	4800
0	0	1	1	LD-V1000	Dragon's Lair, Space Ace (required if using MultiROM) Thayer's Quest, Interstellar	4800
0	1	0	1	LD-V1000	Dragon's Lair, Space Ace Thayer's Quest, Super Don Quixote Esh's Aurunmillia, Interstellar, Casino Strip, Astron Belt Cobra Command, Galaxy Ranger	9600
0	1	1	1	LD-V1000	1983 Space Ace using a 1991 disc	4800
1	0	0	0	PR-8210 LD-1100	Cliff Hanger, Cobra Command, MACH3, Goal to Go, Us vs Them, Quarter Horse	4800
1	0	1	0	22VP932	Dragon's Lair, Space Ace (Europe)	9600
1	1	0	0	22VP932	Space Ace with 1983NTSC disc (Europe)	9600
1	1	1	0	22VP932	Space Ace with 1991NTSC disc (Europe)	9600

### 3. Install the LaserCon card:

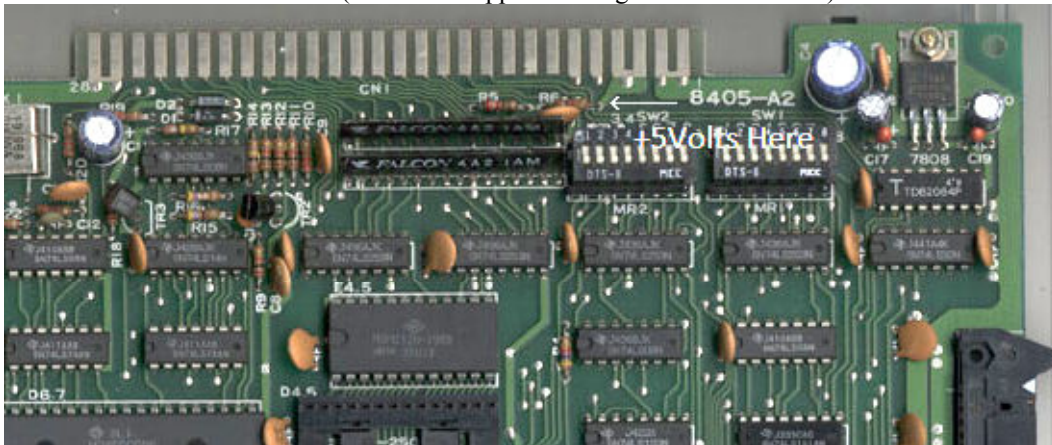
Using your LaserCon card as a template, mark and drill pilot holes in the cabinet near the main board, being careful not to drill all the way through. Be aware of the length of the ribbon cable. Mount the LaserCon card using wood screws and spacers.

Install the V1000 adaptor (provided) to LaserCon's "CN1". Connect the original player ribbon, from the main board, to the V1000 adaptor.



Attach the alligator lead wire to +5Volts.

You can attach to any point supplying +5V power that you like. My recommendation is to **attach to the leg of R6 on the side closest to C4.** (Ground is supplied through the ribbon cable.)



### 4. Install the player into the game cabinet.

Connect AC power, audio and video cables as usual. If necessary, use a BNC to RCA adaptor for the video connection...

(Radio Shack #278-250, <http://www.radioshack.com/product/index.jsp?productId=2104079> )

Do not connect to "Sync in" or "Sync out" on the LD-V8000.

Connect the supplied serial cable from LaserCon's CN2 and the player's 15-pin connector.

This is a custom cable. You **cannot** use any other serial cable. If you need to replace the cable for any reason, the pin connections are as follows...

	9-pin Female		15-pin Male	
GND	pin-1	-----	pin-11	GND
TxD	Pin-2	-----	pin-10	RxD
RxD	Pin-3	-----	pin-9	TxD

### **Operation**

Power on your machine.

The red LED should light, indicating that the LaserCon board is properly powered.

After a one second delay, the "LDP" LED should light, indicating that LaserCon has established serial communication with the player.

After a short time, the "CPU" LED should light, indicating that LaserCon has received the "PLAY" command from the main board.

The Player should now begin to spin-up and play. The "LDP" LED will go dark, indicating that the player is busy.

Once the game is up and running, all three LEDs should remain lit, with only momentary blinking of the "LDP" LED during searches.

Enjoy!

### **Disclaimer**

Use at you own risk. By accepting this product, user also accepts all responsibility for the use of this product and releases its manufacturer, Shaun D. Wood, from all possible responsibilities for damages of any kind that the user may incur due to use or misuse of this product.

### **And Finally...**

If you need any help or have any questions, comments, or suggestions, please contact me: [shaun@wood1st.com](mailto:shaun@wood1st.com).