

## Dragon's Lair - SpaceAce - Thayer's Quest Reproduction Display Board PCB Assembly Instructions For help, email to: share

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The Display PCB is a build it yourself project. LaserCon only provides the bare circuit board. You must supply the remaining parts, and solder the Display Board together. This project is for experienced technicians only.

## <u>Step 1:</u> Order the Bill of Materials in the chart below from either Mouser.com, Digikey.com, or find your own source.

Note: Part numbers for the passive components are provided for your convenience. Use your own discretion to find the best parts available at the time of your build.

QTY	Board	Part Name	Mouser part #	Digikey part #
Needed	Locations			
16	DS1 - DS16	SC08-21EWA - 7 segment LED	604-SC08-21EWA	754-2289-ND
2	U1, U2	ICM7218D - Driver IC	700-ICM7218DIPI	ICM7218DIPI+-ND
2	U1, U2	28 pin DIP Socket	571-1-2199299-2	AE10004-ND
1	J1	16 pin header	538-70246-1601	WM9221-ND
2	R1, R2	1k ohm 1/4W resistor	603-CFR-25JT-52-1K	RC14JB1K00-ND
1	C1	470uF Capacitor - electrolytic	80-ESC477M016AH1AA	493-1523-ND
2	C2, C3	0.1uF disc capacitor	594-K104K15X7RF53H5	478-4855-ND

Step 2: Solder in the Dip Sockets for U1 and U2, and all other parts except J1 (the 16 pin header). \*Note that C1 is installed lying on its side.

<u>Step 3:</u> Install the 16-pin Header to the BACK side of the circuit board. Before soldering in, check that the notch in the header shroud matches the ribbon cable connector when the red-stripe is DOWN.

<u>Step 4:</u> Insert the Driver ICs into the U1, U2 sockets. DONE!