

\*\*\*\*\*THANK YOU FOR PURCHASING\*\*\*\*\*  
\*OMIINDUSTRIIES DUAL DIGITAL SHIFT REGISTER EURORACK\*  
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#### BILL OF MATERIALS

2	47R	0805 RESISTOR
2	1K	0805 RESISTOR
16	2K	0805 RESISTOR
23	10K*	0805 RESISTOR SEE NOTES
10	20K	0805 RESISTOR
15	100K	0805 RESISTOR
2	200K	0805 RESISTOR
2	400K	0805 RESISTOR
2	100nF	0805 CERAMIC CAPACITOR
1	CD4015	SOIC TEXAS INSTRUMENTS
1	CD4070	SOIC TEXAS INSTRUMENTS
4	TL074	SOIC ANY COMPATIBLE PART
14	WQP-PJ301M-12	INLINE THONKICONN JACK
12	LED	3MM LED ANY COLOR YOU LIKE
1	2x5 IDC	SHROUDED HEADER

#### \*NOTE ABOUT LED RESISTORS

This PCB has 12 10K resistors that set the brightness of the LED's. You don't need to change this if 10K will work with your desired choice of 3mm LED at +12v single supply. If you need to find the location of the LED resistors, you can carefully trace the anode of the 3mm LED to find the correct 10K resistor that you would like to change. Anodes are located away from the euro power header. If you make a mistake in the build, changing resistor values later is easy with a decent soldering iron.

#### BUILD INSTRUCTIONS

STEP 1: inspect the pcb for damage. clean the pcb with isopropyl alcohol and a lint free cloth. place the pcb in your vise or on your workbench. now is the time to wear protective gloves, turn on ventilation equipment, protective eye wear, or any other device you decide to use for safety.

STEP 2: solder all surface mounted components using a correct soldering method. if you need more information on soldering you can do an internet search for "0805 soldering" and "SOIC soldering".

STEP 3: install jacks to the opposite side of the PCB. jacks should be all alone on the front side of the PCB. do not solder the jacks. install panel and panel nuts. notice the bottom of the panel should be lined up with the bottom of the pcb and the power header location on the pcb. after placing the assembly in a vise, you can now solder all the jacks. do not solder all 3 pins on one jack at one time. instead, solder one pin on each jack then repeat. this will prevent melted plastic on the jacks.

STEP 4: you may remove the panel

STEP 5: with an old flush cutter or a tile nipper, cut the soldered jack pins that encroach the power header area. now you can install the shrouded power header according to the orientation of the silk screen. the shrouded power header is installed on the same side as the resistors. the header does not need to be fully seated to provide power to the module. the header is soldered from the jack side, front side. be carefull to solder only one pin at a time. let the power header cool completely after soldering each pin.

STEP 6: place your 3mm LED's in the LED holes on the green pcb. the cathode (short pin) of the LED should be toward the power header. the anode (long pin) should be placed in the direction away from the power header. LED's are placed on the same side as the jacks. do not solder the LED's.

STEP 7: install the panel again. check to make sure the bottom of the panel matches the power header on the bottom of the pcb. carefully turn the module so that the panel is face down without having any of the LED's fall out. check to make sure the LED's are extended all the way to the panel drill holes for the LED's. place the entire assembly in a vise. if the 3mm LED's are seated correctly and centered in the panel drill holes, you can now solder the 3mm LED's.

STEP 8: cut away the LED leads with a flush cutter. DON'T MAKE A MESS!

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