Thermometer & Humidity DIY Solder Kit
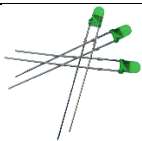
Cat #: DIY-008

Learn to solder with easy-to-follow instructions. Ideal for hobbyists and education institutes.
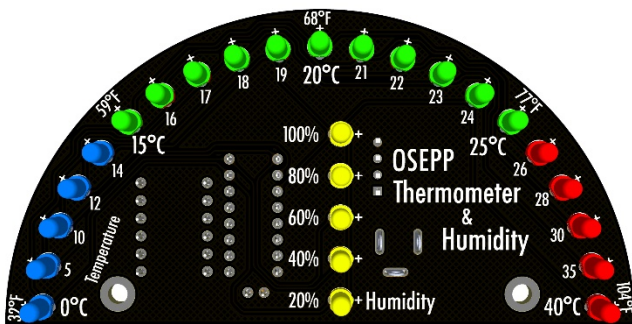
- ✓ 26x LED Temperature Indicator
- ✓ Temperature Range: 0°C/32°F to 40°C/104°F
- ✓ 5x LED Humidity Indicator
- ✓ Humidity Range: 20% to 100%
- ✓ DHT11 Humidity Sensor
- ✓ Microprocessor Technology
- ✓ Front image to come.
- ✓ 91 Solder Points

Kit Contents:

Device	Value	Qty	Designator	Important Info.	
LED 3mm	Green	11	LED6 – LED16	Watch the polarity. Long leg is positive (+)	
LED 3mm	Red	5	LED17 – LED21	Watch the polarity. Long leg is positive (+)	
LED 3mm	Yellow	5	LED22 – LED26	Watch the polarity. Long leg is positive (+)	

LED 3mm	Blue	5	LED1 – LED5	Watch the polarity. Long leg is positive (+)	
Humidity Sensor	DHT11	1	DHT11	Watch the position	
Ceramic Capacitor	100nF	1	C1	No polarity	
Resistor	330 ohm	7	R1 – R7	No polarity	
IC	STC15W204S	1	U1	Watch the position of the notch	
DC Jack	5.5 x 2.1mm	1	DC1	Watch the position	
Plastic Standoff	M3 x 20mm	2	n/a	n/a	
Screws	M3 x 6	2	n/a	n/a	
PCB	100 x 50 mm	1	n/a	n/a	
Desoldering Braid	6"	1	n/a	For removing solder when correction mistakes	

DC Jack Battery Holder	2xAAA	1	n/a	Batteries not included	

Resistor colour code

4 - band code   5   6   000   ± 5 %   56 kΩ ± 5 %

1st Digit	2nd Digit	3rd Digit	Multiplier	Tolerance
0	0	0	1	
1	1	1	10	1%
2	2	2	100	2%
3	3	3	1000	
4	4	4	10000	
5	5	5	100000	
6	6	6	1000000	
7	7	7		
8	8	8	0.1 Gold	5% Gold
9 White	9 White	9 White	0.01 Silver	10% Silver

5 - band code   47 kΩ ± 1 %

4   7   0   00   ± 1 %
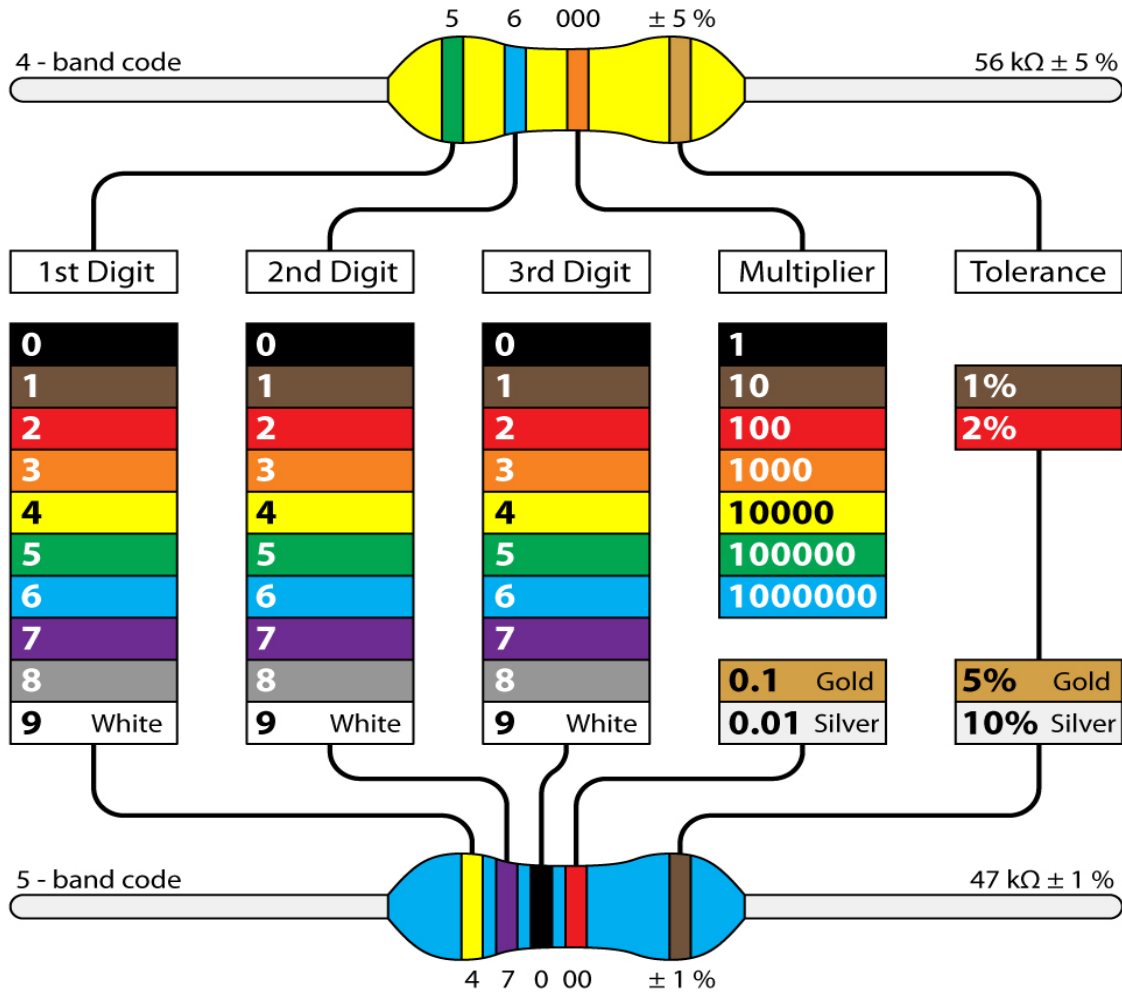
| **100 ohms**	**1K ohms**	**1 MEG**
Brown/Black/Brown/Gold	Brown/Black/Red/Gold	Brown/Black/Green/Gold
300 ohms	**10K ohms**	
Orange/Orange/Brown/Gold	Brown/Black/Orange/Gold	

Step-by-Step Instruction

STEP 1: Place and solder **IC** into place

- Match the 'notch' on the IC to the notch on the PCB silkscreen image.

STEP 2: Place and solder the resistors into place.

- There is no polarity with the resistors
- Bend the component legs to hold in place for soldering
- A diagonal cutter is required (not Incl.) to cut off the leads after soldering.
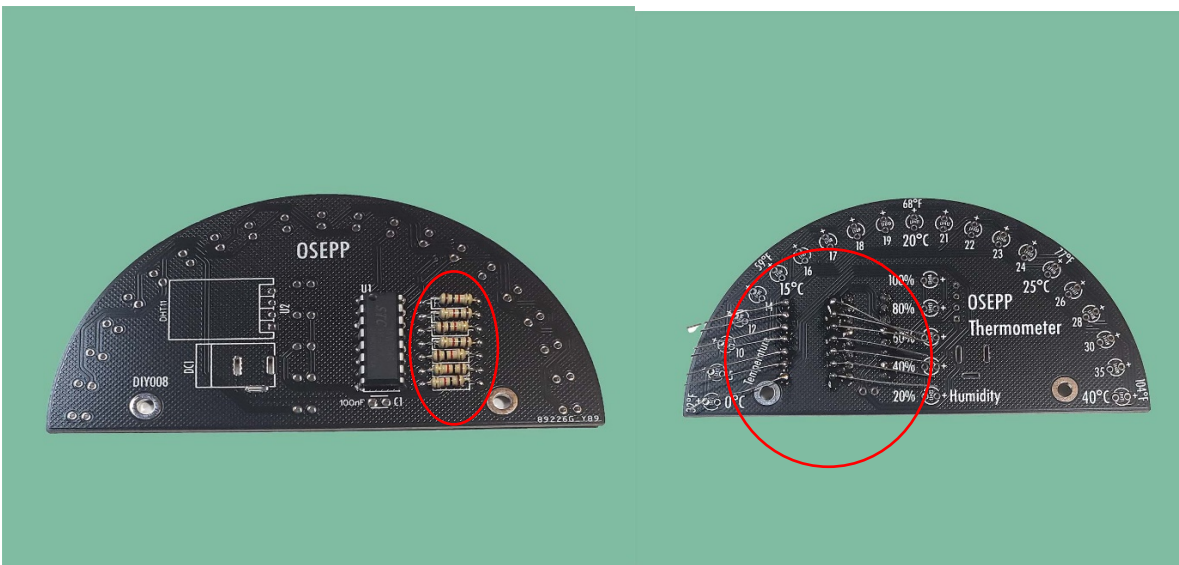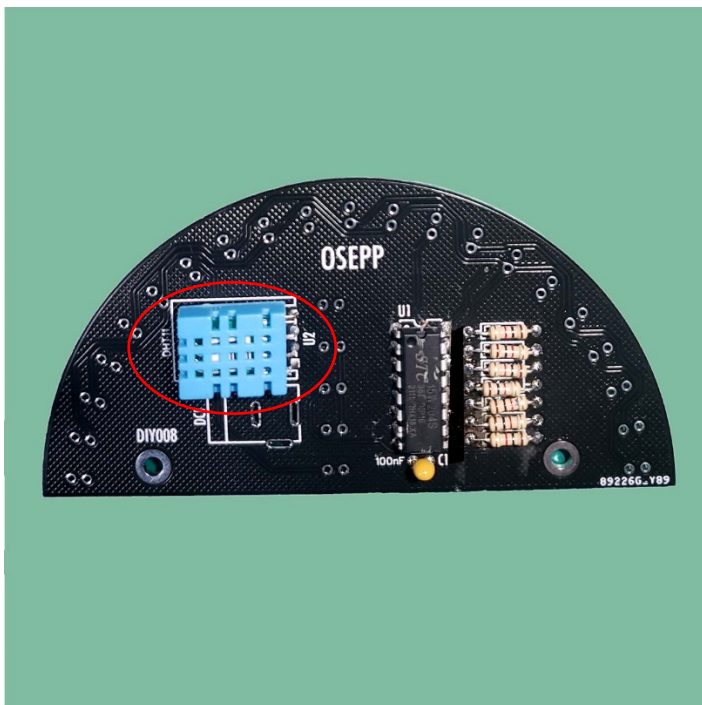
Step 3: Place and solder the **capacitor** in place.

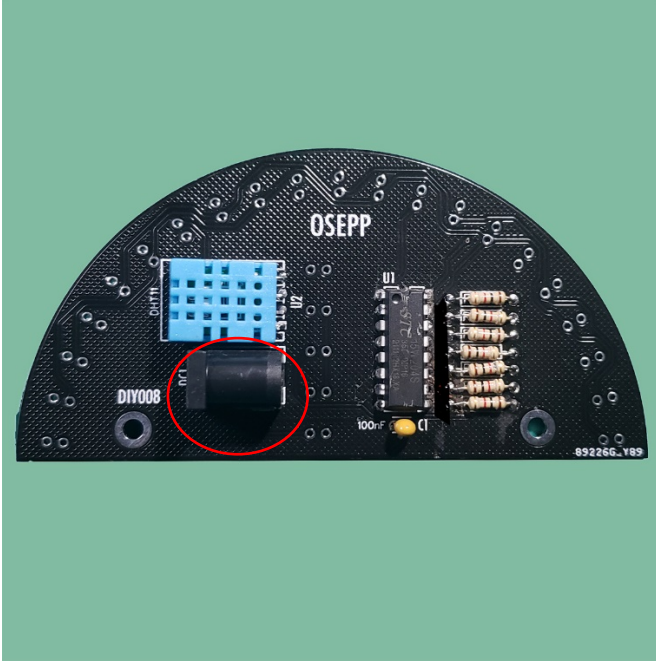- There is no polarity with the capacitor.
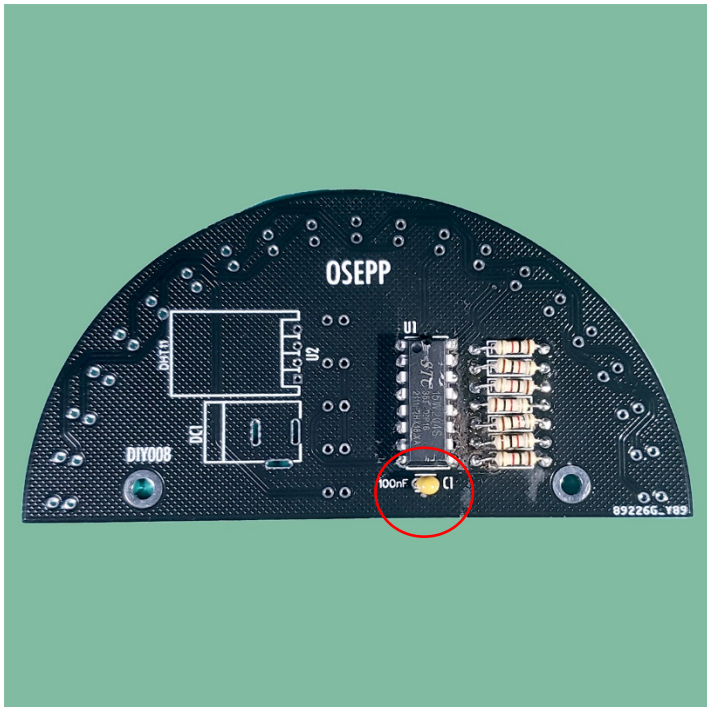
Step 4: Place and solder the **Humidity Sensor** into place.

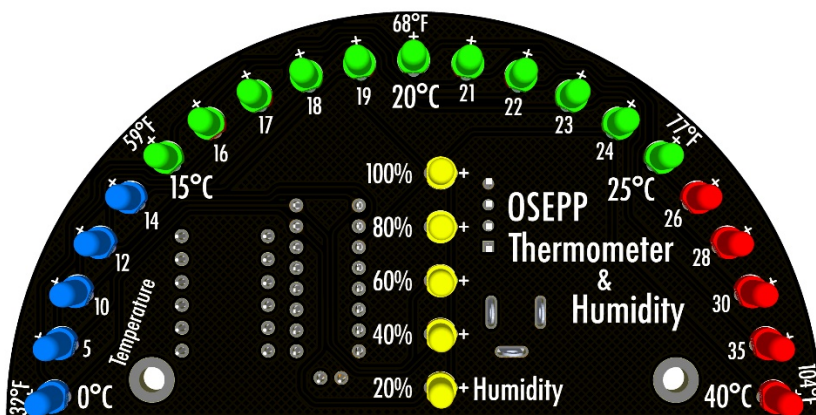- Need to pay attention to the polarity.

Step 5: Place and solder the **DC Jack**.

- Please pay attention to the placement position.
- TIP: bend the sensor flush to the PCB *before* soldering into place.

Step 6: Place and solder the **LEDs** into place (there will be spare LEDs left).

- The longer lead on the LED is positive (+).
- To hold the LED in place to solder, bend the lead on the back of the PCB.
- Refer to the image below for placement locations.

Finished image reference