



Lynxmotion Quadrature Motor Encoder V2 (w/Cable)

**What's included:**

- 1x - US Digital E4T Miniature Optical Encoder Kit
- 1x - Quadrature Motor Encoder Cable
- 1x - Custom Lexan Spacer
- 1x - Custom 3M Foam Mount

Note: The Quadrature Motor Encoder V2 is intended to be used specifically with Lynxmotion spur gear motors with rear shaft. We cannot guarantee compatibility with other motors / shafts.

## 1 - Lexan Spacer

Separate the two spacers with a pair of pliers or by twisting them apart. **Only one spacer is needed.**



## 2 - Foam Mount

Remove the backing on one side of the 3M double sided foam tape and apply it to the lexan spacer taking care to match the screw holes. Glue the other side to the motor back as illustrated. It should self-center as shown. Note that you may need to flex the motor's pins outward slightly.



### **3 - US Digital Mount**

Screw (force thread) the US Digital plastic mount to the lexan spacer using the screws provided. Do not apply too much force to the screws as they will create threads in the plastic.



### **4 - US Digital PCB**

Insert the US Digital encoder PCB as shown - there are protruding pins to center it.



## 5 - Encoder Wheel

Push the center of encoder wheel on the motor shaft (**do not apply pressure to the clear plastic disk!!**) until it sits close to the encoder sensor / reader.



## 6 - US Digital Cover

Install the cover over the PCB assembly. Connect the cable.



## **7 - Wiring**

Red = +5vdc

Black = Ground

Green = Output A (digital)

Yellow = Output B (digital)

