## **Operator Interface consists of**

**4** (4 digit 7 segment displays) on I2c. Each with their own address Address 0=Velocity, Address 1=Power, Address 2=Rep Cnt, Address 3=Weight Value

- 1 Start/Stop Toggle switch
- 1 Encoder with chnA, chnB and pressing it inwards provides an "enter" input

20 segment led array

## 3 Modes

## 1-Set Up

- A Default to set up at boot up
- **B** set up allows user to spin an encoder and enter the weight value which displays range is 0 to 995lbs and increments by 5's.

\*\*Nothing else happens in this mode, excepting the changing of 1 variable.

## 2-Work Out

- A This mode starts by turning the selector switch ON
- **B** show led arrays (already working)
- **C** Count Repetitions and post for user after the rep is complete.
- **D** Calculate Peak Velocity and post 1 time for each rep after the rep is complete
- **E** Calculate Peak Power and post 1 time for each rep after the rep is complete

\*\*Turning the encoder in this mode still allows the weight val to change \*\*More than 1 sensor blocked at a time results in a "----" on address 3 <u>3-Review</u>

- A This mode starts by turning the selector switch OFF
- **B** do not show led arrays (already working)
- **C** user spins the knob and reviews his data from rep 1 to rep N -starting at rep1
- **D** pressing enter bounces it back to set up