



Feeder should initialise in the full South position and carrier in the full West position. This will be the normal "Park" position.  
 When a sequence begins the carrier moves East and when the prox sensor is tripped the mill motor should be energised.  
 When carrier reaches East micro the mill motor stops.  
 Feeder then moves to position 3 heading North.  
 When the position 3 micro is tripped the mill motor starts and the carrier moves West.  
 When the carrier reaches mill motor prox sensor the feed motor stops and the Feeder moves to position 2 micro.  
 When position two micro is tripped mill motor starts and the carrier moves East etc etc.  
 At the end of the cycle the feeder and carrier return to the "Park" Position

Using arduino mega as board  
 mill motor is controlled by L298N H- Bridge on pin 12 using PWM. Input from Potentiometer is on A0.

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5
4 // pin definitions
5 const uint8_t EASTSWITCH = 41;
5 const uint8_t WESTSWITCH = 39;
7 const uint8_t SOUTHSWITCH = 40;
3 const uint8_t NORTHSWITCH = 38;
3 const uint8_t POSITION 2 = 42
3 const uint8_t POSITION 3 = 43
1 const uint8_t PROXSSENSOR = 5;
2
3 // buttons
4 const uint8_t EASTBUTTON = 23;
5 const uint8_t WESTBUTTON = 25;
5 const uint8_t NORTHBUTTON = 27;
7 const uint8_t SOUTHBUTTON = 29;
3
3 // motor controller
3 const uint8_t CARRIERPWR = 22;
1 const uint8_t CARRIERFWD = 24;
2 const uint8_t CARRIERREV = 26;
3
4 const uint8_t FEEDERPWR = 28;
5 const uint8_t FEEDERFWD = 30;
5 const uint8_t FEEDERREV = 32;
7
3 // feeder motor
3 const uint8_t SUPPLY PWR = 2;
3 const uint8_t SUPPLYACT = 3;
1
  
```