

```

net x-pos-fb      => joint.0.motor-pos-fb
net x-index-enable joint.0.index-enable <=> hm2_5i25.0.encoder.00.index-enable
net x-pos-rawcounts <= hm2_5i25.0.encoder.00.rawcounts

```

```

#*****
# AXIS Y JOINT 1
#*****

```

```

setp pid.y.Pgain [JOINT_1]P
setp pid.y.Igain [JOINT_1]I
setp pid.y.Dgain [JOINT_1]D
setp pid.y.bias [JOINT_1]BIAS
setp pid.y.FF0 [JOINT_1]FF0
setp pid.y.FF1 [JOINT_1]FF1
setp pid.y.FF2 [JOINT_1]FF2
setp pid.y.deadband [JOINT_1]DEADBAND
setp pid.y.maxoutput [JOINT_1]MAX_OUTPUT
setp pid.y.error-previous-target true

```

```

net y-index-enable <=> pid.y.index-enable
net y-enable      => pid.y.enable
net y-pos-cmd     => pid.y.command
net y-vel-cmd     => pid.y.command-deriv
net y-pos-fb      => pid.y.feedback
net y-output      <= pid.y.output

```

```

# ---PWM Generator signals/setup---

```

```

setp hm2_5i25.0.7i77.0.1.analogout1-scalemax [JOINT_1]OUTPUT_SCALE
setp hm2_5i25.0.7i77.0.1.analogout1-minlim [JOINT_1]OUTPUT_MIN_LIMIT
setp hm2_5i25.0.7i77.0.1.analogout1-maxlim [JOINT_1]OUTPUT_MAX_LIMIT

```

```

net y-output      => hm2_5i25.0.7i77.0.1.analogout1
net y-pos-cmd     <= joint.1.motor-pos-cmd
net y-enable      <= joint.1.amp-enable-out

```

```

# ---Encoder feedback signals/setup---

```

```

setp hm2_5i25.0.encoder.01.counter-mode 0
setp hm2_5i25.0.encoder.01.filter 1
setp hm2_5i25.0.encoder.01.index-invert 0
setp hm2_5i25.0.encoder.01.index-mask 0
setp hm2_5i25.0.encoder.01.index-mask-invert 0
setp hm2_5i25.0.encoder.01.scale [JOINT_1]ENCODER_SCALE

```

```

net y-pos-fb      <= hm2_5i25.0.encoder.01.position
net y-vel-fb      <= hm2_5i25.0.encoder.01.velocity
net y-pos-fb      => joint.1.motor-pos-fb
net y-index-enable joint.1.index-enable <=> hm2_5i25.0.encoder.01.index-enable
net y-pos-rawcounts <= hm2_5i25.0.encoder.01.rawcounts

```

```

#*****
# AXIS Z JOINT 2
#*****

```

```

setp pid.z.Pgain [JOINT_2]P

```