

```
loadrt trivkins
loadrt [EMCMOT]EMCMOT servo_period_nsec=[EMCMOT]SERVO_PERIOD num_joints=[TRAJ]AXES
loadrt hostmot2
loadrt hm2_pci config=" num_encoders=6 num_pwmgens=0 num_stepgens=0 sserial_port_0=000xxx"
setp hm2_5i25.0.watchdog.timeout_ns 5000000
loadrt pid names=pid.x,pid.y,pid.z,pid.b,pid.c,pid.s
```

```
# ---Encoder feedback signals/setup---
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```
setp hm2_5i25.0.encoder.00.counter-mode 0
setp hm2_5i25.0.encoder.00.filter 1
setp hm2_5i25.0.encoder.00.index-invert 0
setp hm2_5i25.0.encoder.00.index-mask 0
setp hm2_5i25.0.encoder.00.index-mask-invert 0
setp hm2_5i25.0.encoder.00.scale [AXIS_0]ENCODER_SCALE

net x-pos-fb <= hm2_5i25.0.encoder.00.position
net x-vel-fb <= hm2_5i25.0.encoder.00.velocity
net x-pos-fb => axis.0.motor-pos-fb
net x-index-enable axis.0.index-enable <=> hm2_5i25.0.encoder.00.index-enable
net x-pos-rawcounts <= hm2_5i25.0.encoder.00.rawcounts
```

```
# ---setup home / limit switch signals---
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#load manual override encoders
loadrt encoder num_chan=3
addf encoder.capture-position servo-thread
addf encoder.update-counters servo-thread

# connect feed-override encoder
setp encoder.0.x4-mode 1
net fo-chanA hm2_5i25.0.7i77.0.0.input-15 => encoder.0.phase-A
net fo-chanB hm2_5i25.0.7i77.0.0.input-16 => encoder.0.phase-B
net output encoder.0.counts => halui.feed-override.counts
setp halui.feed-override.count-enable 1
setp halui.feed-override.scale 0.02

# connect rapid-override encoder
setp encoder.1.x4-mode 1
net ro-chanA hm2_5i25.0.7i77.0.0.input-17 => encoder.1.phase-A
net ro-chanB hm2_5i25.0.7i77.0.0.input-18 => encoder.1.phase-B
net ro-output encoder.1.counts => halui.rapid-override.counts
setp halui.rapid-override.count-enable 1
setp halui.rapid-override.scale 0.05
```