

Index

A

Application, 7-2

- cut-to-length, 7-8
- sample ladder logic program, 7-9
- drilling operation, 7-4
- sample ladder logic program, 7-5

Assignment, 3-3

- of data types, 3-3
- automatic, 3-3
- manual, 3-3
- table for inputs and outputs, 3-4, B-4

Assistance

- technical, 1-3

B

Brake *See* **Outputs**, speed, OUT2

C

CCW (counter-clockwise), 5-4

Checkout, 7-2

- of HSC operation, 7-2
- ladder logic for, 7-3
- materials required, 7-2

CINH, 1-10, 4-11

Counting, 4-3

- current count, 4-9
- starting and reset, 4-9
- direction of, 4-4
- sample RLL, 4-4
- Y outputs for, 4-4
- inhibiting, 4-11
- ladder logic for selecting mode, 4-3
- latching, 4-11

offset, 4-7

- external method, 4-7
- internal method, 4-7

overflow, 4-12

preset, 4-8

- checking status, 4-8
- loading into shared memory, 4-8

resolution, 4-5

1x, 4-5, 4-6

2x, 4-5, 4-6

4x, 4-5, 4-6

default setting, 4-6

settings available, 4-5

Y outputs for, 4-5

selection of mode, 4-3

types of

quadrature, 1-5

standard UP/DOWN, 1-4

CW (clockwise), 5-4

D

Deceleration, *See* **Outputs**, speed, OUT1

Direction. *See* **Counting**

DirectSOFT, 4-2

edit mode, 4-2

watch window, 4-2

Drives, A-2

basic components, A-2

connecting to HSC, A-2

E

Encoders, A-3

- connecting to HSC, A-3
- how they work, A-3
- types of, A-3
- Z-marker, A-3

Equal Output, See Outputs, speed, OUT2

H

Home Search, 1-6, 6-2

- example, 6-2
- requirements for, 6-2
- setup of components for, 6-3
- timing diagram, 6-3

I

I/O Configuration, 3-3

- automatic, 3-3
- manual, 3-3

INA, 1-4,1-5,1-8,4-3,4-4,4-5

INB, 1-4,1-5,1-8,4-3,4-4,4-5

Indicators See LED Assignments

Inhibiting, 4-11

- overview, 4-11
- sample RLL, 4-11

Installation, 2-2

- avoiding electrical shock, 2-2

Introduction, 1-2

- 5 steps for using HSC, 1-12
- control outputs, 1-5
- home search, 1-6
- manual organization, 1-3
- overview of inputs and outputs, 1-10
 - internal versus external activation, 1-10
- physical characteristics of HSC, 1-8
- purpose of manual, 1-2
- sampling, 1-6
- shared memory, 1-7
- specifications of HSC, 1-8
- supplemental manuals, 1-2
- technical assistance, 1-2
- types of counting available, 1-4
- what is an HSC?, 1-4
- who needs an HSC?, 1-4
- X input assignments, 1-11
- Y output assignments, 1-11

L

Latching, 4-11

- how to trigger, 4-11
- overview, 4-11
- sample RLL, 4-11

LD, 1-8,4-7,6-2,6-3

LED Assignments, 1-8

Limit Switch See Home Search

LS1 See Home Search

LS2 See Home Search

M

Memory See Shared Memory

O

Offset. See Counting

Outputs, 5-2

- directional, 5-4
 - CCW(counter-clockwise), 5-4
 - CW(clockwise), 5-4
 - how HSC knows which to turn ON, 5-4
 - HSC RUN timing diagrams, 5-5
- overview, 5-2
- speed, 5-6
 - examples and diagrams, 5-7
 - how to initiate, 5-6
 - OUT1 (deceleration), 5-6
 - OUT2 (brake), 5-6
- two ways to control, 5-3
 - automatic, 5-3
 - manual, 5-3
- using internal relays, 5-2
- Y outputs for, 5-2

Overflow, 4-12

- flag status, 4-12
- output relays, 4-12
- overview, 4-12
- tracking, 4-12

P**Power Supply, 2–4**

- external, 2–4
- internal, 2–4

Preset. *See* **Counting**

R

RAM *See* **Shared Memory**

Resolution. *See* **Counting**

RST, 1–8, 4–7

RUN, 1–8, 5–3

S**Sampling, 1–6, 6–4**

- enabling, 6–4
- monitoring, 6–4
- summary of internal relays, 6–5
- timebase for, 6–4, 6–5
 - using decimal points, 6–5
- why use it?, 6–4

Shared Memory, 1–7, 3–8

- contents and data flow, 3–6
- how numbers are stored, 3–8
- map of, 3–6
- negative numbers, 3–9
 - sample RLL, 3–9
- reading and writing to, 3–6
- RLL for writing to, 3–7

T

Technical Assistance, 1–2

Testing, 7–2

- operation of HSC, 7–2
- test program, 7–2

Timebase. *See* **Sampling**

W**Wiring, 2–3**

- control input diagram, 2–6
- control output diagram, 2–7
- count input diagram, 2–5
- guidelines for, 2–3
- size of wire, 2–3
- terminal block, 2–3