

Index

A

AC Output 3-5
Active Program 8-25
ALT FCN 7000: Restore Factory Defaults and Clear 7-7
ALT FCN 7001: Clear all Output Channel Setpoints 7-7
ALT FCN 7002: Watchdog Timer Test 7-7
ALT FCN 7999: Extensive EEPROM Test 7-7
Alternate Functions 7-7
Analog Output 1-4, 8-20
Analog Output Modules 1-5, 3-3
Analog Output Wiring 3-6
Assigning Outputs 2-1

B

BCD Format 3-13
Binary Format 3-13

C

Cam Logic 1-1
Cam Switch Operation 1-1
Channel Key, LED and Display 4-3
Checksum 8-12
CLR/CLE Key 4-3
CN 3: Active Program 5-3
Communication Pins 3-14
Communication Ports 3-14
Communication Wiring 3-15
Component Parts List 2-4
Configuration Commands 8-5
Current Sinking Input Wiring 3-11
Current Sourcing Input Wiring 3-12

D

DC Output 3-5
dd - Display Fault 6-5
Default Program 8-18
Dip Switches 3-16
Discrete I/O 8-16
Display Configuration 8-22
Display Commands 8-10
Displays 4-4
dr - Direction of Rotation 6-1

E

EEPROM Clearing 8-26
Electrical Problems 7-2
ENT Key 4-3
Error Codes 8-12

F

FCN 0: Program Enable Code 5-1
FCN 1: Analog Output Signal Levels 5-2
FCN 1: Motion Detection/Analog Output 5-1
FCN 101: Unit Configuration #1 6-1
FCN 102: Unit Configuration #2 6-4
FCN 103: Display Configuration 6-5
FCN 104: Communication Parameters 6-6
FCN 105: Setup and Operator Enable Codes 6-6
FCN 106: Output Channels and Functions 6-7
FCN 107: Motion ANDing 6-8
FCN 108: Subdividing Outputs into Groups 6-8
FCN 109: Output Group Enable Modes 6-9
FCN 110: Outputs ANDed with Output Enable Input 6-10
FCN 111: Channel Setpoint Memory (Monitor Only) 6-10
FCN 2: Offset (Position) 5-3
FCN 200: Manually Turn on Individual Outputs 7-5
FCN 201: Monitor Status of Inputs 7-5
FCN 202: Monitor Actual Resolver Position 7-5
FCN 203: Test All Keyboard LEDs 7-6
FCN 204: Test Individual Keyboard Keys 7-6
FCN 300: "L" & "G" Options, Outputs & Model # 7-8
FCN 301: "C" & "H" Options, Software Rev. # 7-8
FCN 302: Remote Display and Output Update 7-8
FCN 4: Gray Code Speed Compensation A-14
FCN 4: Negative Speed Compensation 5-6
FCN 4: Speed Compensation (Standard) 5-4
FCN 4: Speed Comp (Leading/Trailing) 5-5
FCN 5: Timed Outputs 5-6
FCN 6: Absolute Offset 5-7
FCN 7: Program Copy 5-7
FCN 8: Pulse Copy 5-8
Flange Mount Resolver 2-3
Foot Mount Resolver 2-2
Function Key and Display 4-3
Fuses and Fuse Tester 2-4

G

"G" Option A-14
Getting Started 2-1
gL - Gray Code Logic Type 6-4
Gray Code 3-13
Gray Code Position Output 1-6
Gray Code Speed Compensation 8-20
Group Programming 8-24

H

Hardware Configuration 8-21
High Resolution 1-6
Host Communications Setup 8-25

I

I/O Control 8-25
INC and DEC Keys 4-3
Initial Programming 4-1
Input Function Descriptions 3-9
Input Power Wiring 3-1
Input Wiring 3-9
Inputs 1-5

K

Keyboard Boot - NEMA 4X 1-6
Keyboard Enable Codes 4-5
Keyboard Layout 4-3
Keyboard/Controller 1-2

L

Leading / Trailing Edge Speed Compensation 1-6

M

Mapping Registers 8-20
Master Level 4-5
Mechanical Contacts 3-11
Mechanical Problems 7-2
Mode 0 Operation A-2
Mode 1 Operation A-3
Mode 2 Operation A-5
Mode 3 Operation A-7
Mode 4 Operation A-9
Mode 5 Operation A-11
Model Information 8-21
Motion ANDing 1-4, 8-24
Motion Detection 8-19
Mounting the Control 2-1
Multiple Programs 1-4

N

nA - Number of Analog Outputs 6-2
nO - Number of Group Offsets 6-2
Number Keys 4-3

O

Offset 8-19
ON and OFF keys 4-3
Operator Function Enable 8-23
Operator Level 4-5
ORing and ANDing 8-16
Output Enable ANDing 8-24
Output Grouping and Modes of Operation 1-4
Output Setpoint Programming 4-6
Output Speed Compensation 1-4
Output Types 3-3
Output Wiring 3-4

P

Parts and Accessories A-16
Password ID Numbers 8-23
Per Channel Enable 8-23
PLμsNet II Upload/Download Program 8-1
Position 8-17
Power Output Module Wiring 3-5
Power Output Modules 1-5, 3-3
Program Key, LED and Display 4-3
Program Select Information A-13, 3-13
Programming Access Levels 4-5
Programming Error Messages 7-3
PS - Program Select Format 6-3
PS-5144-24-M17 System Overview 1-3
PS-5144-24-X16M09 System Overview 1-2
Pulse Copy 8-26
PULSE key 4-3
Pulse Programming 8-17

R

Registers 8-14
Remote Display A-15
Resolver Installation 2-2
Resolver Theory 1-1
Resolver Troubleshooting 7-2
Resolver Wiring 3-1
RPM 8-17
RS-232 Cable Wiring 3-15
RS-485 Communication Wiring 3-15
rt - Resolver Type 6-3
ru - RPM Update (Rate) 6-5
Run Time Control 8-24

S

Sc - Speed Comp Type 6-4
Scalable Position Resolution 1-4
Serial Commands 8-4
Serial Communication 1-4, 8-3
Serial Communications Using Modbus ASCII Protocol 8-13
Setpoint Commands 8-9
Setup Level 4-5
SF - Scale Factor 6-1
Slimline Power Output Modules 2-4
Solid State Devices 3-11
SP - Shaft Position 6-2
Special Commands 8-11
Special Functions 8-26
Speed Compensation 8-18
Standard PS-5144 Features 1-4
Status Commands 8-4
Supervisory Commands 8-4
System Error Messages 7-4

T

tb - Time Base 6-4
Terminal Block Details 2-6
Terminal Identification 3-11
Timed Outputs 1-4, 8-19
tr - Toggle RPM 6-5
Transistor Output Array Chips 2-4
Transistor Output Wiring 3-7
Transistor Outputs 1-5, 3-3
Troubleshooting Introduction 7-1
Troubleshooting Problems 7-1
Troubleshooting Transistor Outputs 7-9

U

Unpluggable Screw Terminal Connectors 2-4

V

Value Display 4-3
VIEW keys 4-3

W

Wiring Guidelines 2-1