Index

Α

Address, searching, 3–3 Auxiliary, diagnostics, 2–7 AUXiliary Function, overview, 2–6

Β

Beeper, on/off control, 2–7 Bit Override display indicators, 6–7 forcing, 6–5 set/reset, 6–8

С

Changing timer/counter current values, 6–10 V–Memory, 6–9 watchdog timer, 6–11

Control Relay, bit map, A-6

Counter accumulating counters, 3–10 counter status bit map, A–8

CPU

hardware clock, 2–12 locking/unlocking, 5–3 mode change, 2–4 mode description, 2–3 network address, 2–9 password protection, 5–3

D

Delete, instruction, 4–8 Display auxiliary displays, 1–12 clearing, 2–2 cursor control, 2–2 screen format, 1–10 test/run display, 1–12 Displaying, program, 4–3 DL130, memory map overview, A–2 DL230, memory map overview, A–3 DL240, memory map overview, A–4

Ε

Editing in the Run mode, 4-11 modes, 4-2 programs during Run mode, 4-10 **EEPROM** checking EEPROM size, 5-6 compare to CPU, 5-10 EEPROM blank check, 5-6 erasing EEPROM, 5-7 installation, 5-5 location, 5-4 program backups, 5-7 program upload, 5-9 saving programs, 5-4 selecting memory to copy, 5-8 verification, 5–11 operations with a DL105, 5-5 Element compare, 3-12 parallel branch, 3-6 series/parallel, 3-7

Entering

combination logic, 3–9 elements in parrallel, 3–6 elements in series, 3–5 normally closed elements, 3–5 octal/hex numbers, 3–14 parallel branches, 3–8 parallel elements, 3–6 series elements in parallel, 3–7

Error Code, message list, 6-23

F

Find instruction type, 4–5 specific reference, 4–5

Force

bit force with direct access, 6–6 bit force with status, 6–6 bit status, 6–4 direct bit forcing, 6–7 discrete I/O points, 6–4 during bit override, 6–5

Forcing, decrete bit, 6-4

I

I/O configuration, 2-5 diagnostics, 6-17 monitoring, 6-3 Input, bit map, A-5 Insert, inserting instruction, 4-7 Instruction ASCII character, 3–13 changing an instruction, 4-6 delete, 4-8 element type, 3-3 insert key, 4-7 load address (LD,LDA), 3-14 message instruction, 6-18 number (#...), 3-13 octal/hexadecimal, 3-14 Overview, 3-2 search, 3-3 search and replace, 4-9

timer/counter, 3-10

K

Keypad keys, 1–9 layout, 1–8

L

LED, indicator status, 1-10

Μ

Memory changing rententive range, 2-11 initializing, 2-8 retentive ranges, 2-10 scratchpad, 2-8 Message error code table, 6-21 error codes, 6-23 error history, 6-22 error table, 6–22 instructions, 6-19 overview, 6-18 program example, 6-20 Mode program mode, 3-4 selecting Run-time Edit, 4-11 selecting Run-time Edit mode, 4-10 selection, 3-4 Monitor, bit status, 6-3 Monitoring CPU scan, 6-11 pointer locations, 6-10 timer/counter values, 6-10 V-memory, 6-9

Ν

Networks combination example, 3–9 combination logic, 3–9 limitations, 3–9

0

Output, bit map, A-5

Ρ

Program ACON (ASCII) instructions, 3-13 changing an instruction, 4-6 clearing, 2-8 comparision, 5-10 display screen, 4-3 duplicate reference check, 3-16 editing a program, 4-2 EEPROM backups, 5-4 element types, 3-4 entering a network, 3-4 error checking, 3–15 finding an instruction, 4-5 Instructions, 3-2 mnemonic instructions, 3-2 naming a program, 5-2 navigation, 3-3 networks, 3-2 password protection, 5-2 run-time edit, 4-2 saving offline programs, 5-11 searching start of program, 4-4 storage, 5-4 storage to EEPROM, 5-4 syntax check, 3-15 transfering from EEPROM to CPU, 5-9 using instruction numbers, 3-13 Programming counters, 3-10 parallel branches in series, 3-8

gramming counters, 3–10 parallel branches in series, 3relational contacts, 3–12 timers, 3–10 two input timers, 3–11

R

Reference, duplicate reference check, 3-16

S

Saving, program to EEPROM, 5-4 Search/Replace, memory address, 4-9 Searching end of program, 3-3 instruction addresses, 3-3 instruction elements, 3-3 specific address, 4-4 start of program, 3-3, 4-4 Special Relays, B-2-B-8 Special Relays (SPxxx) DL130/DL230, B-2 DL240, B-4 Specifications cable, 1-7 CPU, 1-7 display screen, 1-7 enviromental, 1-7 physical, 1-7 Stage, control/status bit map, A-7 Status bit force, 6-6 displays information, 1-11 Status Monitor, displays, 6-2 Syntax, program syntax check, 3–15 System Memory DL130 system V-memory, A-9 DL230 system V-memory, A-9 DL240 system V-memory, A-11

Т

Test output conditions, 6–14 test–PGM mode, 6–12 test–run display, 6–13 test–Run mode, 6–12

Test Operation how to use, 6–15 indicators, 6–15



Timer accumulating timers, 3–10 timer status bit map, A–8 Trap, function, 6–16 Trapping address, 6–16 word, 6–16

Troubleshooting, using the monitor options, 6-2

V

V–Memory, monitoring, 6–9 Viewing, messages, 6–22

W

Watchdog, monitor, 6-11