

Index

A

- AB object classes (AB_PLC2, AB_PLC5, AB_SLC500), 3-2 to 3-23
 - Allen-Bradley Parameters dialog box, 3-3 to 3-4
 - communication with Allen-Bradley controllers
 - PLC-2 family, 3-2
 - PLC-5 family, 3-2
 - SLC-500 family, 3-2 to 3-3
 - data members, 3-10 to 3-17
 - AB_PLC2 (table), 3-10 to 3-11
 - AB_PLC5 (table), 3-14 to 3-17
 - AB_SLC500 (table), 3-11 to 3-14
 - DH+ interface parameters, 3-5 to 3-8
 - error messages, 3-18 to 3-23
 - Ethernet interface parameters, 3-8
 - serial port interface parameters, 3-4
 - using 5136-SD card from S-S Technologies, Inc., 3-9 to 3-10
- Accumulator object class, 2-2 to 2-3
 - data members (table), 2-3
 - Definition Parameters dialog box, 2-2
 - description, 2-2
- \$Alarm global object, 2-7 to 2-9
 - data members (table), 2-8 to 2-9
 - description, 2-7 to 2-8
 - Edit Connections dialog box, 2-7
 - using with other objects, 2-9
- Alarm object class, 2-4 to 2-6
 - data members (table), 2-6
 - typical settings
 - logical style alarm, 2-4
 - numeric style alarm, 2-4 to 2-5
- Allen-Bradley PLC controllers. *See* AB object classes
- Animator object class, 2-10 to 2-14

- color animations, 2-12 to 2-14
 - creating moving animations, 2-10 to 2-12
 - data members (table), 2-14
 - Select graphic dialog box, 2-10
- APT tag file, importing, 3-91
- ASCII object class, 3-24 to 3-33
 - data members (table), 3-25 to 3-26
 - Definition Parameters dialog box, 3-24 to 3-25
 - error messages, 3-33
 - request and response format strings, 3-26 to 3-32
 - entering format string, 3-31
 - markers, 3-28 to 3-30
 - request frame construction examples, 3-31
 - response format examples, 3-31 to 3-32
 - using sum data members, 3-32
- Average object class, 2-15 to 2-16
 - data members (table), 2-15
 - definition Parameters dialog box, 2-15
- ## C
- colors
 - animations, 2-12 to 2-14
 - connecting objects
 - signals, DataTable object class, 2-23 to 2-26
 - control panels
 - See also* Panel object class
 - DataTables example
 - display panel, 2-27
 - multiplexing displays and graphics, 2-20 to 2-21
 - operating multiplexed panel, 2-28
 - conventions, manual, vii to ??
 - Counter object class, 2-17

- data members (table), 2-17
- Definition Parameters dialog box, 2-17
- cursors, for DataTables, 2-28 to 2-29
- multiple, 2-30

D

data members

- AB object classes (tables), 3-10 to 3-17
- AB_PLC2 object class, 3-10 to 3-11
- AB_PLC5 object class, 3-14 to 3-17
- AB_SLC500 object class, 3-11 to 3-14
- Accumulator object class, 2-3
- \$Alarm global object, 2-8 to 2-9
- Alarm object class, 2-6
- Animator object class, 2-14
- ASCII object class, 3-25 to 3-26
- Average object class, 2-15
- Counter object class, 2-17
- DataTable object class, 2-30 to 2-33
- DdeLink object class, 2-35
- DdeTable object class, 2-39
- DelayOff object class, 2-41
- DelayOn object class, 2-43
- DeltaTau object class, 3-36
- Derivative object class, 2-45
- DialGauge object class, 2-48
- DirectLogic object class, 3-37 to 3-47
- ElapsedTime object class, 2-49
- Event object class, 2-50
- Expression object class, 2-52
- Flipflop object class, 2-53
- Gauge object class, 2-55
- GE_Series90 object class, 3-50 to 3-51
- HyperTrend object class, 2-63 to 2-64
- Integral object class, 2-66
- Interval object class, 2-68
- \$Keyboard global object, 2-70
- L3Pot object class, 2-74
- L3Pushbutton object class, 2-78
- L3Switch object class, 2-81
- L3TextEntry object class, 2-84

- LatchGate object class, 2-85
- Loader object class, 2-88 to 2-89
- Maximum object class, 2-91, 2-93 to ??
- Meter object class, 2-92
- Minimum object class, 2-95
- Modbus object class, 3-60 to 3-63
- Monitor object class, 2-96
- Multistate object class, 2-98
- National Instruments FieldPoint,
 - 3-67 to 3-68
- National Instruments FieldPoint, multiple discrete, 3-69
- National Instruments Lookout OPC
 - Client Driver (table), 3-76 to 3-77
- Neutralzone object class, 2-100
- Omron object class, 3-81
- OneShot object class, 2-102
- Pager object class, 2-104
- Panel object class, 2-114 to 2-115
- Pipe object class, 2-117
- Playwave object class, 2-118
- Pot object class (table), 2-121 to 2-122
- Pulse object class, 2-125
- Pushbutton object class (table),
 - 2-129 to 2-130
- RadioButton object class, 2-134
- Recipe object class, 2-140 to 2-141
- Run object class, 2-143
- Sample object class, 2-144
- SampleText object class, 2-146
- Scale object class, 2-148
- Sequencer object class, 2-151
- Spinner object class, 2-152
- Spreadsheet object class, 2-157
- summing, in ASCII object, 3-32
- Switch object class (table),
 - 2-160 to 2-161
- \$System global object class, 2-165
- TextEntry object class (table),
 - 2-168 to 2-169
- Timeofxxx object class, 2-171

- Tiwave object class, 3-88 to 3-91
 - Waveform object class, 2-173
 - DataTable object class, 2-18 to 2-33
 - connecting signals, 2-23 to 2-25
 - to cells, 2-24
 - to columns, 2-25
 - cursors, 2-28 to 2-30
 - data members (table), 2-30 to 2-33
 - Definition Parameters dialog box, 2-18 to 2-19
 - example, 2-22 to 2-27
 - connecting signals, 2-23 to 2-25
 - display panel, 2-27
 - reading cell value back to Lookout object, ?? to 2-26
 - reading cell value back to LookoutDirect object, 2-26 to ??
 - multiple cursors, 2-30
 - multiplexing displays and graphics, 2-20 to 2-21
 - operating your multiplexed panel, 2-28
 - SQL queries
 - SQL queries, DataTable, 2-20
 - DdeLink object class, 2-34 to 2-35
 - data members (table), 2-35
 - Definition Parameters dialog box, 2-34 to 2-35
 - remote computer, 2-34 to 2-35
 - same computer, 2-34
 - DdeTable object class, 2-36 to 2-39
 - data members (table), 2-39
 - Definition Parameters dialog box, 2-36 to 2-38
 - remote computer, 2-38
 - same computer, 2-36 to 2-38
 - DelayOff object class, 2-40 to 2-41
 - data members (table), 2-41
 - Definition Parameters dialog box, 2-40
 - Display Parameters dialog box, 2-41
 - DelayOn object class, 2-42 to 2-43
 - data members (table), 2-43
 - Definition Parameters dialog box, 2-42
 - Display Parameters dialog box, 2-43
 - DeltaTau object class, 3-35 to 3-36
 - configuration parameters, 3-35
 - data members (table), 3-36
 - Derivative, 2-44
 - Derivative object class, 2-44 to 2-45
 - data members (table), 2-45
 - Definition Parameters dialog box, 2-44 to 2-45
 - DH+ interface parameters, AB object classes, 3-5 to 3-8
 - DialGauge object class, 2-46 to 2-48
 - data members (table), 2-48
 - Definition Parameters dialog box, 2-46
 - Display Parameters dialog box, 2-47
- ## E
- Edit Connections dialog box
 - \$Alarm global object, 2-7
 - \$Keyboard global object, 2-69
 - ElapsedTime object class, 2-49
 - data members (table), 2-49
 - Definition Parameters dialog box, 2-49
 - error messages
 - See also* status messages
 - ASCII object class, 3-33
 - Ethernet interface parameters, AB object classes, 3-8
 - Event object class, 2-50
 - data members (table), 2-50
 - Definition Parameters dialog box, 2-50
 - Expression object class, 2-51 to 2-52
 - Create Expression dialog box, 2-51
 - data members (table), 2-52
- ## F
- FieldPoint object class. *See* National Instruments FieldPoint
 - Flipflop object class, 2-53
 - data members (table), 2-53
 - Definition Parameters dialog box, 2-53

format strings. *See* ASCII object class;
IPASCII object class

G

Gauge object class, 2-54 to 2-55
 data members (table), 2-55
 Definition Parameters dialog box, 2-54
 Display Parameters dialog box, 2-55
 GE_Series90 object class, 3-48 to 3-52
 data members (table), 3-50 to 3-51
 Definition Parameters dialog box,
 3-48 to 3-49
 status messages, 3-51 to 3-52

global object classes

 \$Alarm global object, 2-7 to 2-9
 \$Keyboard global object, 2-69 to 2-71
 \$System global object, 2-165

graphics

 animating. *See* Animator object class
 multiplexing displays and graphics, using
 Datatables, 2-20 to 2-21

H

HyperTrend object class, 2-56 to 2-64
 data members (table), 2-63 to 2-64

I

Integral object class, 2-65 to 2-66
 data members (table), 2-66
 Definition Parameters dialog box, 2-65
 Interval object class, 2-67 to 2-68
 data members (table), 2-68
 Definition Parameters dialog box, 2-67
 Display Parameters dialog box,
 2-67 to 2-68

IPASCII object class

See also ASCII object class

K

\$Keyboard global object, 2-69 to 2-71
 data members (table), 2-70
 description, 2-69
 Edit Connections dialog box, 2-69
 KT cards. *See* AB object classes

L

L3Pot object class, 2-72 to 2-75
 data members (table), 2-74
 Definition Parameters dialog box,
 2-72 to 2-73
 Display Parameters dialog box, 2-73
 L3Pushbutton object class, 2-76 to 2-78
 data members (table), 2-78
 Definition Parameters dialog box,
 2-76 to 2-78
 Display Parameters dialog box, 2-78
 Verification Message dialog box,
 2-76 to 2-77
 L3Switch object class, 2-79 to 2-81
 action verification, 2-79
 data members (table), 2-81
 Definition Parameters dialog box,
 2-79 to 2-80
 displaying
 graphics for switches, 2-80
 Verification Message dialog box,
 2-79
 L3TextEntry object class, 2-82 to 2-84
 data members (table), 2-84
 Display Parameters dialog box,
 2-83 to 2-84
 Parameters dialog box, 2-82 to 2-83
 LatchGate object class, 2-85
 data members (table), 2-85
 Definition Parameters dialog box, 2-85
 Loader object class, 2-86 to 2-90
 data members (table), 2-88 to 2-89
 status messages, 2-89 to 2-90

M

Maximum object class, 2-91
 data members (table), 2-91, 2-93 to ??
 Definition Parameters dialog box, 2-91,
 ?? to 2-92
 meter object, 2-92
 Meter object class, 2-92
 Minimum object class, 2-94 to 2-95

- data members (table), 2-95
- Definition Parameters dialog box, 2-94
- Modbus and ModbusMOSCAD object classes
 - advanced parameters, 3-56 to 3-58
 - Configuration Parameters dialog box, 3-54 to 3-56
 - data members
 - 6-digit address coding (table), 3-60
 - Modbus (table), 3-60 to 3-63
 - Modbus Protocol Statistics, 3-58 to 3-59
 - overview, 3-53
- Monitor object class, 2-96
 - data members (table), 2-96
- multiplexing displays and graphics, using DataTables, 2-20 to 2-21
- Multistate object class, 2-97 to 2-98
 - Configuration Parameters dialog box, 2-97
 - data members (table), 2-98

N

- National Instruments Fieldpoint, 3-65 to 3-72
 - Configuration Parameters dialog box, 3-65 to 3-67
 - data members (table), 3-67 to 3-68
 - multiple discrete data members (table), 3-69
 - error messages, 3-70 to 3-72
 - multiple discrete data members, 3-69 to 3-70
- National Instruments Lookout OPC Client Driver, 3-72 to 3-78
 - Configuration Parameters dialog box, 3-73 to 3-74
 - OPC item ID format, 3-77 to 3-78
- Neutralzone object class, 2-99 to 2-100
 - data members (table), 2-100
 - Definition Parameters dialog box, 2-99

O

- object classes

- See also* individual object classes, *e.g.*, *Animator object*
- alphabetical list
- object databases
 - See also* data members
- object parameters
 - See also* individual object classes, *e.g.*, *Animator object*
- objects
 - connecting
 - signals, DataTable object class, 2-23 to 2-26
- Omron object class, 3-79 to 3-82
 - data members (table), 3-81
 - Definition Parameters dialog box, 3-79 to 3-80
 - models supported, 3-82
 - status messages, 3-81 to 3-82
- OneShot object class, 2-101 to 2-102
 - data members (table), 2-102
 - Definition Parameters dialog box, 2-101
 - Display Parameters dialog box, 2-102
- OPC Client Driver. *See* National Instruments Lookout OPC Client Driver

P

- Pager object class, 2-103 to 2-106
 - Alphanumeric Definition Parameters dialog box, 2-103 to 2-104
 - data members (table), 2-104
 - Numeric Only Definition Parameters dialog box, 2-103 to 2-104
- object modes
 - Alphanumeric, 2-105
 - Numeric Only, 2-105
 - serial port settings, 2-105
- queueing, 2-106
- status messages, 2-106
- Panel object class, 2-107 to 2-115
 - data members (table), 2-114 to 2-115
 - Definition and Display Parameters dialog box, 2-107 to 2-110

- “home panel” considerations, 2-112
 - manipulating panels, 2-110
 - printing, 2-112 to 2-113
 - screen resolution and graphics, 2-113
 - switching between panels, 2-110 to 2-112
- Pipe object class, 2-117
 - data members (table), 2-117
 - Definition Parameters dialog box, 2-117
- Playwave object class, 2-118
 - data members (table), 2-118
 - Definition Parameters dialog box, 2-118
- PLCs
 - See also* AB object classes
- Popup control panels
 - parameter settings, 2-107 to 2-108
- Popup no icon control panels, 2-108
- Pot object class, 2-119 to 2-123
 - data members (table), 2-121 to 2-122
 - Definition Parameters dialog box, 2-119 to 2-121
 - Display Parameters dialog box, 2-121
- printing
 - panels, 2-112 to 2-113
- Pulse object class, 2-124 to 2-125
 - data members (table), 2-125
 - Definition Parameters dialog box, 2-124
 - Display Parameters dialog box, 2-125
- Pushbutton object class, 2-126 to 2-130
 - data members (table), 2-129 to 2-130
 - Definition Parameters dialog box, 2-126 to 2-128
 - Display Parameters dialog box, 2-129
 - Verification Message dialog box, 2-127
- R**
- RadioButton object class, 2-131 to 2-134
 - data members (table), 2-134
 - RadioButton Definition Parameters dialog box, 2-131 to 2-132
 - RadioButton Display Parameters dialog box, 2-133 to 2-134
 - RadioButton Display Parameters dialog box with custom graphics chosen, 2-133
- Recipe object class, 2-135 to 2-141
 - data members (table), 2-140 to 2-141
 - Definition Parameters dialog box, 2-136 to 2-137
 - Display Parameters dialog box, 2-139
 - example, 2-135 to 2-136
 - file selection dialog box (figure), 2-137
 - omitting ingredients (comment), 2-141
 - reloading files for changed recipe (note), 2-138
- request and response format strings
 - ASCII object class, 3-26 to 3-32
 - entering format string, 3-31
 - object markers, 3-28 to 3-30
 - request frame construction examples, 3-31
 - response format examples, 3-31 to 3-32
- Run object class, 2-142 to 2-143
 - data members (table), 2-143
 - Definition Parameters dialog box, 2-142
- S**
- Sample object class, 2-144 to 2-145
 - data members (table), 2-144
 - Definition Parameters dialog box, 2-144
- SampleText object class, 2-146
 - data members (table), 2-146
 - Definition Parameters dialog box, 2-146
- Scale object class, 2-147 to 2-148
 - data members (table), 2-148
 - Definition Parameters dialog box, 2-147
 - Display Parameters dialog box, 2-148
- security
 - Panel object class, 2-107 to 2-115
 - viewing security
 - Panel object class, 2-107 to 2-115
- Select graphic dialog box, Animator object class, 2-10

- Sequencer object class, 2-149 to 2-151
 - data members (table), 2-151
 - Programming the Sequencer, 2-150
 - Sequencer Definition Parameters dialog box, 2-149 to 2-150
- serial port interface parameters
 - AB object class, 3-4
- Spinner object class, 2-152 to 2-153
 - data members (table), 2-152
 - Definition Parameters dialog box, 2-152
- Spreadsheet object class, 2-154 to 2-157
 - Configuration Parameters dialog box, 2-154 to 2-157
 - data members (table), 2-157
- S-S 5136-SD card, 3-9 to 3-10
- status messages
 - GE_Series90 object class, 3-51 to 3-52
 - Loader object class, 2-89 to 2-90
 - Omron object class, 3-81 to 3-82
 - Pager object class, 2-106
- sum data members, ASCII object, 3-32
- Switch object class, 2-158 to 2-161
 - action verification, 2-158
 - data members (table), 2-160 to 2-161
 - Definition Parameters dialog box, 2-158 to 2-159
 - displaying
 - graphics for switches, 2-160
 - Verification Message dialog box, 2-158
- Symbolic Link, 2-162 to 2-164
- \$System global object, 2-165
 - data members (table), 2-165
 - description, 2-165
- T**
- TextEntry object class, 2-166 to 2-169
 - data members (table), 2-168 to 2-169
 - Display Parameters dialog box, 2-168
 - Parameters dialog box, 2-166 to 2-168
- TimeOfxxx object class, 2-170 to 2-171
 - data members (table), 2-171
- Definition Parameters dialog box, 2-170
- Display Parameters dialog box, 2-171
- Tiway object class, 3-83 to 3-91
 - communication techniques, 3-84 to 3-88
 - CTI TCP/IP, 3-87 to 3-88
 - local port, 3-85
 - Unilink Host Adapter, 3-85 to 3-86
 - Unilink PC Adapter, 3-86 to 3-87
 - Configuration Parameters dialog box, 3-83 to 3-84
 - data members (table), 3-88 to 3-91
 - importing APT tag files, 3-91
- V**
- viewing security
 - control panels, 2-108
- W**
- Waveform object class, 2-172 to 2-174
 - data members (table), 2-173