

Contents

About This Manual

- Document Conventions..... vii
- Technical Support viii
 - Phone viii
 - World Wide Web..... viii

Chapter 1

Introduction to the LookoutDirect Object Class Reference

Chapter 2

System Objects

- Accumulator..... 2-2
 - Accumulator Data Members..... 2-3
- Alarm 2-4
 - Alarm Data Members 2-6
- \$Alarm 2-7
 - \$Alarm Data Members 2-8
 - Using \$Alarm with Other Objects 2-9
- Animator 2-10
 - Animations 2-10
 - Color Animation..... 2-12
 - Animator Data Members 2-14
- Average..... 2-15
 - Average Data Members 2-15
- Counter..... 2-17
 - Counter Data Members..... 2-17
- DataTable..... 2-18
 - Multiplexing Displays and Graphics 2-20
 - DataTable Example 2-22
 - Connecting Signals to DataTables 2-23
 - The Display Panel 2-27
 - Operating Your Multiplexed Panel 2-28
 - DataTable Cursors 2-28
 - Using Multiple Cursors 2-30
 - DataTable Data Members 2-30
- DdeLink 2-34
 - DdeLinks on Same Computer 2-34
 - DdeLinks to Remote Computer..... 2-34

DdeLink Data Members	2-35
DdeTable	2-36
DdeTable on Same Computer	2-36
DdeTable to Remote Computer	2-38
DDETable Data Members.....	2-39
DelayOff.....	2-40
DelayOff Data Members	2-41
DelayOn.....	2-42
DelayOn Data Members.....	2-43
Derivative	2-44
Derivative Data Members	2-45
DialGauge.....	2-46
DialGauge Data Members.....	2-48
ElapsedTime	2-49
ElapsedTime Data Members	2-49
Event.....	2-50
Event Data Members.....	2-50
(expression)	2-51
Flipflop	2-53
Flipflop Data Member.....	2-53
Gauge.....	2-54
Gauge Data Members.....	2-55
HyperTrend.....	2-56
HyperTrend Data Members	2-63
Converting LookoutDirect 3.xx HyperTrends to LookoutDirect 4.....	2-64
Integral.....	2-65
Integral Data Members.....	2-66
Interval.....	2-67
Interval Data Members.....	2-68
\$Keyboard	2-69
\$Keyboard Data Members	2-70
L3Pot	2-72
L3Pot Data Members	2-74
L3Pushbutton.....	2-76
L3Pushbutton Data Members.....	2-78
L3Switch.....	2-79
L3Switch Data Members	2-81
L3TextEntry	2-82
L3TextEntry Data Members	2-84
LatchGate	2-85
LatchGate Data Members	2-85
Loader.....	2-86
Loader Data Members.....	2-88
Loader Error Messages	2-89

Maximum.....	2-91
Maximum Data Members.....	2-91
Meter.....	2-92
Meter Data Members.....	2-93
Minimum.....	2-94
Minimum Data Members.....	2-95
Monitor.....	2-96
Monitor Data Members.....	2-96
Multistate.....	2-97
Multistate Data Members.....	2-98
Neutralzone.....	2-99
Neutralzone Data Members.....	2-100
OneShot.....	2-101
OneShot Data Members.....	2-102
Pager.....	2-103
Pager Data Members.....	2-104
Pager Object Modes.....	2-105
Numeric Only.....	2-105
Alphanumeric Mode.....	2-105
Pager Queueing.....	2-106
Pager Status Messages.....	2-106
Panel.....	2-107
Manipulating Panels.....	2-110
Panel Switching.....	2-110
Special Considerations for “Home Panel”.....	2-112
Panel Print.....	2-112
Screen Resolution and LookoutDirect Graphics.....	2-113
Panel Data Members.....	2-114
Pipe.....	2-117
Pipe Data Members.....	2-117
Playwave.....	2-118
Playwave Data Members.....	2-118
Pot.....	2-119
Pot Data Members.....	2-121
Pulse.....	2-124
Pulse Data Members.....	2-125
Pushbutton.....	2-126
Pushbutton Data Members.....	2-129
RadioButton.....	2-131
RadioButton Data Members.....	2-134
Recipe.....	2-135

Recipe Data Members	2-140
Run	2-142
Sample	2-144
Sample Data Members	2-144
SampleText.....	2-146
SampleText Data Members.....	2-146
Scale	2-147
Scale Data Members	2-148
Sequencer	2-149
Programming the Sequencer	2-150
Sequencer Data Members	2-151
Spinner.....	2-152
Spreadsheet.....	2-154
Spreadsheet Data Members.....	2-157
Switch.....	2-158
Switch Data Members.....	2-160
Symbolic Links.....	2-162
\$System	2-165
\$System Data Members	2-165
TextEntry.....	2-166
TextEntry Data Members.....	2-168
TimeOfxxxx	2-170
Timeofxxxx Data Members	2-171
Waveform.....	2-172
Waveform Data Members.....	2-173
Waveform Comments	2-173

Chapter 3

Driver and Protocol Objects

AB_PLCS,	
AB_SLC500	3-2
Allen-Bradley Serial Port Interface Parameters.....	3-4
Allen-Bradley DH+ Interface Parameters.....	3-5
Allen-Bradley Ethernet Interface Parameters	3-8
Using the 5136-SD card from S-S Technologies, Inc.....	3-9
Allen-Bradley Register Addressing	3-10
Allen-Bradley Data Members	3-10
Allen-Bradley Error Messages.....	3-18
ASCII.....	3-24
ASCII Data Members.....	3-25
Request and Response Format Strings.....	3-26
ACSII Object Markers	3-28
Entering ASCII Object Format String	3-31

Request Frame Construction Examples	3-31
Response Format Examples	3-31
Using Sum Data Members.....	3-32
ASCII Error Messages.....	3-33
DeltaTau.....	3-35
DeltaTau Data members	3-35
DirectLogic	3-37
DirectLogic Protocol Status	3-41
105/205/350/405 DirectLogic PLC Family Data Members	3-41
305/305S Direct Logic PLC Family Data Members	3-45
GE_Series90	3-48
GE_Series90 Data Members	3-49
GE_Series90 Status Messages.....	3-51
Modbus	3-53
Advanced Modbus Parameters	3-56
Modbus Protocol Statistics	3-58
Modbus Data Members	3-60
National Instruments FieldPoint	3-65
FieldPoint Data Members.....	3-67
FieldPoint Multiple Discrete Data Members.....	3-69
FieldPoint Error Messages	3-70
National Instruments LookoutDirect OPC Client	3-72
OPC Client Data Members.....	3-75
Examples	3-77
Omron	3-79
Omron Data Members	3-80
Omron Status Messages	3-81
Omron Models Supported	3-82
Tiway	3-83
Update Write Settings.....	3-84
Communication Techniques.....	3-84
Local Port.....	3-85
Unilink Host Adapter	3-85
Unilink PC Adapter.....	3-86
CTI TCP/IP	3-87
Tiway Data Members	3-88
Importing APT Name Files	3-91

Glossary

Index