INDEX

A
Accessing the System Setup Screens, 5–3
Accessories, 3–2
   EA-MG-BZ1, 3–2, 3–9, 3–10
   EA-MG-BZ2, 3–2, 3–12
   EA-MG-COV-CL, 3–2
   EA-MG-P1, 3–2
   EA-MG-PGM-CBL, 3–2
   EA-MG-PGMSW, 3–2
   EA-MG-SP1, 3–2
Agency Approvals, 1–5
Available Models, 2–2
Available PLC Protocols, 6–2

C
Cables, 6–22
   Available Purchased, 6–22
   User Constructed, 6–34
   Wiring Diagrams, 6–24
Chemical Compatibility, 2–8
Communications Ports, 2–7
   Port 1 (built-in), 2–7
   Port 2 (optional), 2–7
Conventions Used, 1–3

D
DC Power Adapter, 3–15
   Dimensions, 3–15
Index

EA-MG-P1, 3–15
Installed onto a Panel, 3–17
Installed onto a Panel with 8-Button Keypad Bezel, 3–18
Panel Overall Depth with Adapter Installed, 3–15
Specifications, 3–16
Wiring Diagram, 3–15

Dimensions, 2–6
DirectLOGIC PLCs TERM Mode & Password Protection, 6–5

E
Enclosure Thickness, 2–6
Error Code P499 Explanation, A–7
   Allen-Bradley, A–8
   DirectLOGIC, A–7
   GE, A–13
   Modbus Protocols, A–4
      AutomationDirect CLICK, A–4
      AutomationDirect DirectLOGIC - Modbus (Koyo), A–4
      Entivity Modbus RTU, A–4
      Modicon Modbus RTU, A–4
   Omron, A–25
   Siemens, A–30

F
Function Keys Insert Label, 9–4
   Customizing, 9–4

I
Installation and Wiring, 4–3
   Cutout Dimensions, 4–4
   Enclosure Mounting Thickness Ranges, 4–4
   Introduction, 4–3
   Mounting Bracket Screw Torque, 4–4

K
Keypad Bezel, 3–9
Index

20-button, 3–12
- Assembly, 3–14
- Dimensions, 3–12
- Panel Cutout, 3–12
- Panel Thickness, 3–12
- Specifications, 3–13

8-Button, 3–9
- Assembly, 3–11
- Dimensions, 3–9
- Panel Cutout, 3–9
- Panel Thickness, 3–9
- Specifications, 3–10

M

Maintenance, 7–2
- Check Operating Environment, 7–2
- Check Operating Voltage, 7–2
- Check Physical Conditions, 7–3
- Check Project Functionality, 7–6
- Check Settings under the System Setup Screens, 7–5
- Check Transmit and Receive Indicators, 7–3
- Checks from the C-more Micro-Graphic Programming Software, 7–6
- Cleaning the Display Screen, 7–5
- Project Backup, 7–2
- Run Tests under the System Setup Screens, 7–4

Mounting Clip Screw Torque, 2–6

P

Panel & PLC Error Code Tables, A–2
- Allen-Bradley DF1 Protocol, A–9, A–10
- AutomationDirect Do-more, A–6
- AutomationDirect Productivity3000, A–5
- C-more Micro-Graphic Panel, A–3, A–4
- DirectLOGIC – K-Sequence PLC, A–7
- Introduction, A–2
Index

Mitsubishi FX Protocol, A–23
Mitsubishi Q/QnA Series, A–23
Omron Host Link Protocol, A–26
Siemens PPI Protocol, A–31

Panel Objects, 3–5
  Adjust Display Contrast, 3–6
  Analog Meter, 3–5
  Bar Meter, 3–5
  Bitmap Button, 3–5
  Circle, 3–5
  Dynamic Bitmap, 3–6
  Dynamic Text, 3–6
  Frame, 3–5
  Function, 3–6
  Graphic Indicator Light, 3–5
  Increment/Decrement Value, 3–5
  Indicator Button, 3–5
  Indicator Light, 3–5
  Line, 3–5
  Line Graph, 3–5
  Lookup Text, 3–6
  Numeric Display, 3–5
  Numeric Entry, 3–5
  Pushbutton, 3–5
  Real Time Graph, 3–5
  Recipe, 3–6
  Rectangle, 3–5
  Screen Change Pushbutton, 3–6
  Screen Selector, 3–6
  Scroll Text, 3–6
  Static Bitmap, 3–5
  Static Text, 3–6
  Switch, 3–5

Part Number Key, 1–5
PC Requirements, 3–4
PLC Communications, 6–2
## Introduction, 6–2

PLC Compatibility and Connection Charts, 6–5

- Allen-Bradly PLCs, 6–18
- CLICK, 6–8
- DirectLOGIC DL05, DL06, D0-DCM Module & DL105 PLCs, 6–10
- DirectLOGIC DL205 PLCs, D2-DCM Module and WINPLC, 6–12
- DirectLOGIC DL305 PLCs and D3-DCM Module, 6–14
- DirectLOGIC DL405 PLCs and D4-DCM Module, 6–16
- Do-more, 6–8
- GE, Mitsubishi, Omron, Modicon and Siemens PLCs, 6–20
- GS Drives, 6–8
- Instructions for using, 6–7
- Productivity Series, 6–8
- SOLO Temperature Controller, 6–8

## Port 1, Built-in, 6–3

Port 2, EA-MG-SP1 Optional, 6–4

Product Label Examples, 1–6

Product Overview, 1–4

Programming Cable Assembly, 3–7

- Converter, 3–7
  - Dimensions, 3–7
  - Status LEDs, 3–7
  - USB Connectivity, 3–7
  - USB to RS-232, 3–7

Programming Software, 3–3

## Quick Start Steps, 1–7

- Step 1 – Unpack and Inspect, 1–7
- Step 10 – Connect C-more Micro-Graphic Panel to PLC, 1–16
- Step 2 – Install Optional Hardware Accessories, 1–8
- Step 3 – Become Familiar with Available Communication Ports, 1–9
- Step 4 – Install Micro-Graphic Panel, 1–10
- Step 5 – Install the Programming Software and Develop a Project, 1–11
- Step 6 – Connect C-more Micro-Graphic Panel to Computer, 1–12
- Step 7 – Provide Power to the C-more Micro-Graphic Panel, 1–13
- Step 8 – Accessing the C-more Micro-Graphic Panel Setup Screens, 1–14
Step 9 – Choose C-more Micro-Graphic Panel to PLC Protocol & Cables, 1–15

R
Replacement Parts, 9–3
  DC Power Connector Part No. EA-MG-DC-CON, 9–3
  Function Keys Label Inserts Part No. EA-MG-S3ML-FKL, 9–3
  Keypad Bezel 1 Gasket Part No. EA-MG-BZ1-GSK, 9–2
  Keypad Bezel 1 Mounting Clips Part No. EA-MG-BZ1-BRK, 9–2
  Keypad Bezel 2 Gasket Part No. EA-MG-BZ2-GSK, 9–3
  Keypad Bezel 2 Mounting Clips Part No. EA-MG-BZ2-BRK, 9–3
  Panel Gasket Part No. EA-MG-S3ML-GSK, 9–2
  Panel Mounting Clips Part No. EA-MG-S3ML-BRK, 9–2
Replacement Parts at a Glance, 9–2
Replacement Parts Overview, 9–2
RS-422A/RS-485A Multi-Drop Wiring Diagram Examples, 6–44
Runtime Errors, B–2
  Introduction, B–2
  Panel Errors, B–2

S
Safety Guidelines, 4–2
  Plan for Safety, 4–2
Screen Overlay, 3–22
  Dimensions, 3–22
  EA-MG-COV-CL, 3–22
  Installation, 3–22
Serial Number and Date Code formats, 1–6
Serial Port with DC Power Adapter, 3–19
  Available PLC Protocols, 3–21
  Dimensions, 3–19
  EA-MG-SP1, 3–19
  Installed onto a Panel with 20-Button Keypad Bezel, 3–21
  Panel Overall Depth with Adapter Installed, 3–19
  PLC Serial Communications Port 1, 3–21
  Specifications, 3–20
  Wiring Diagram, 3–19
Setting – Hourglass, 5–13
Specifications, 2–4
System Setup Screens, 5–2
  Exit, 5–17
  Information Menu, 5–6
    Extensions, 5–6
    Memory, 5–6
    Protocol, 5–6
    Versions, 5–6
  Introduction, 5–2
    Information, 5–2
    Setting, 5–2
    Test Menu, 5–2
  Setting – Backlight, 5–8, 5–9
  Setting – Beep, 5–10
  Setting – Calibration, 5–11
  Setting – Clear User Memory, 5–12
  Setting – LCD Contrast, 5–7
  Setting – Reset to Factory Default, 5–12
  Setting Menu, 5–7
  Setup Menu, 5–5
    Exit, 5–5
    Information, 5–5
    Setting, 5–5
    Test Menu, 5–5
System Setup Screens Flowchart, 5–4

T

Technical Support, 1–2
Test Menu, 5–14
  Buzzer Test, 5–16
  PLC Enquiry Test, 5–16
  Serial Port1 - Loop Back Test, 5–14
  Serial Port2 - Loop Back Test, 5–15
  Touch Panel Test, 5–17
Troubleshooting, 8–2
  Display is Blank, 8–2
Index

Display is Dim, 8–3
Electrical Noise Problems, 8–10
Lost Firmware – Red ‘Update Mode’ Screen Displayed, 8–4
Micro-Graphic Panel does not Power up, 8–2
  Powered from 12-24 VDC, 8–2
  Powered from 5 VDC, 8–2
No Communications between Panel and PC, 8–5
No Communications between Panel and PLC, 8–7
No User Program, 8–3
Panel Runtime Errors, 8–9
PLC Protocol Error Codes, 8–8
  PLC Protocol Error Example, 8–8

U
User Manual Introduction, 1–2

W
Wiring Guidelines, 4–5
  Panel Powered from a DC Power Adapter, 4–6
    Wiring Diagrams, 4–6
  Panel Powered from Direct LOGIC PLC, 4–5
  Providing Power to the Micro-Graphic Panel, 4–5