



TABLE OF CONTENTS

Chapter 1: Getting Started

| | |
|---|------|
| Introduction..... | 1-2 |
| Conventions Used..... | 1-3 |
| Product Overview - EA1-T4CL..... | 1-4 |
| Product Overview - EA1-T6CL..... | 1-5 |
| Agency Approvals..... | 1-5 |
| Part Number Key..... | 1-6 |
| Product Label Examples..... | 1-6 |
| Serial Number and Date Code format..... | 1-6 |
| Quick Start Steps..... | 1-7 |
| Step 1 – Unpack and Inspect..... | 1-7 |
| Step 2 – Install Optional Hardware Accessories (EA1-T6CL)..... | 1-8 |
| Step 3 – Become Familiar with Available Communication Ports..... | 1-9 |
| Step 4 – Install C-more Color Micro-Graphic Panel..... | 1-10 |
| Enclosure Clearances..... | 1-12 |
| Step 5 – Install the Programming Software and Develop a Project..... | 1-13 |
| Step 6 – Connect C-more Color Micro-Graphic Panel to Computer..... | 1-14 |
| Step 7 – Providing Power to the C-more Color Micro-Graphic Panel..... | 1-15 |
| Step 8 – Accessing the C-more Color Micro-Graphic Panel Setup Screens..... | 1-16 |
| Step 9 – Choose C-more Color Micro-Graphic Panel to PLC Protocol & Cables..... | 1-17 |
| Step 10 – Connect C-more Color Micro-Graphic Panel to PLC..... | 1-18 |

Chapter 2: Specifications

| | |
|--------------------------------|------|
| Available Models..... | 2-2 |
| EA1-T4CL Specifications | 2-3 |
| EA1-T6CL Specifications | 2-5 |
| EA1-T4CL Panel Dimensions..... | 2-7 |
| EA1-T6CL Panel Dimensions..... | 2-8 |
| Communications Port..... | 2-9 |
| Chemical Compatibility | 2-10 |

Chapter 3: Accessories

| | |
|--|------|
| Accessories | 3-2 |
| C-more Micro-Graphic Programming Software..... | 3-3 |
| 20-Button Landscape (Horizontal) Keypad Bezel for 6-inch Panels..... | 3-6 |
| 21-Button Portrait (Vertical) Keypad Bezel for 6-inch Panels | 3-9 |
| D-SUB 15-pin 90-degree Communication Port Adapter | 3-12 |
| D-SUB 15-pin to Terminal Block Adapter | 3-12 |
| Clear Screen Overlay | 3-13 |

Chapter 4: Installation and Wiring

| | |
|-------------------------------|-----|
| Safety Guidelines | 4-2 |
| Introduction..... | 4-3 |
| Panel Cutout Dimensions | 4-4 |
| Wiring Guidelines | 4-5 |

Chapter 5: System Setup Screens

| | |
|--|-----|
| Introduction..... | 5-2 |
| Accessing the System Setup Screens | 5-3 |
| System Setup Screens Flowchart | 5-4 |
| Setup Menu | 5-5 |
| Information Menu | 5-6 |

Setting Menu 5-7

 Setting – Brightness..... 5-7

 Setting – Touch/Key Beep 5-8

 Setting – Calibration..... 5-9

 Setting – Clear User Memory 5-10

 Setting – Reset to Factory Default..... 5-10

 Setting – Hourglass 5-11

 Setting – Rotation 5-12

Test Menu 5-13

 Test Menu – Serial Port - Loop Back Test..... 5-14

 Test Menu – PLC Enquiry Test..... 5-15

 Test Menu – Buzzer Test 5-15

 Test Menu - Touch Panel Test 5-16

 Test Menu - Display Test..... 5-16

Exit 5-17

Chapter 6: PLC Communications

Introduction..... 6-2

 Available PLC Protocols 6-3

C-more Micro-Graphic Communication Ports..... 6-4

DirectLOGIC PLCs Password Protection..... 6-5

Compatibility and Connection Charts 6-5

 AutomationDirect Controllers..... 6-5

 RS-422A/RS-485A Communications 6-5

 Allen-Bradley 6-5

 GE, Mitsubishi, Omron, Modicon and Siemens 6-5

Cables from AutomationDirect..... **6-14**

Cables from AutomationDirect – Wiring Diagrams 6-16

User Constructed Cables – Wiring Diagrams..... 6-24

RS-422A Multi-Drop Wiring Diagram Example 6-34

RS-485A Multi-Drop Wiring Diagram Example 6-36

Chapter 7: Maintenance

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

Chapter 8: Troubleshooting

| | |
|---|------|
| C-more Micro-Graphic Panel does not Power up | 8-2 |
| Display is Blank | 8-2 |
| Display is Dim | 8-3 |
| No User Program | 8-3 |
| Lost Firmware – ‘Update Mode’ Screen Displayed..... | 8-4 |
| Updating Firmware | 8-4 |
| No Communications between Panel and PC (Personal Computer)..... | 8-5 |
| No Communications between Panel and PLC | 8-7 |
| Panel & PLC Error Codes..... | 8-8 |
| C-more Micro-Graphic Panel Runtime Errors..... | 8-9 |
| Panel Errors | 8-9 |
| Reset to Factory Default | 8-10 |
| Electrical Noise Problems..... | 8-10 |

Chapter 9: Replacement Parts

| | |
|--|-----|
| Replacement Parts Overview | 9-2 |
| Replacement Parts..... | 9-2 |
| Customizing the Function Keys Insert Label | 9-3 |

Appendix A: Panel & PLC Error Code Tables

| | |
|--|------|
| Introduction | A-2 |
| C-more Micro-Graphic Panel Error Code Table | A-3 |
| Modbus Protocols Error Code P499 Explanation | A-4 |
| Productivity3000 Error Code P499 Explanation | A-5 |
| Do-more Error Code P499 Explanation | A-6 |
| Direct LOGIC Error Code P499 Explanation | A-7 |
| Direct LOGIC – K-Sequence PLC Error Code Table..... | A-7 |
| Direct LOGIC – Direct NET PLC Error Codes..... | A-7 |
| Allen-Bradley Error Code P499 Explanation | A-8 |
| Allen-Bradley DF1 Protocol – PLC Error Code Tables..... | A-9 |
| Allen-Bradley DH485 Protocol – PLC Error Code Tables..... | A-11 |
| GE Error Code P499 Explanation | A-13 |
| GE SNPX Protocol – PLC Error Code Tables | A-14 |
| Mitsubishi FX Protocol – PLC Error Codes..... | A-23 |
| Mitsubishi Q / QnA Series – PLC Error Codes | A-23 |
| Omron Error Code P499 Explanation | A-25 |
| Omron Host Link Protocol – PLC Error Code Table | A-26 |
| Omron FINS Protocol – PLC Error Code Table | A-27 |
| Siemens Error Code P499 Explanation | A-30 |
| Siemens PPI Protocol – PLC Error Code Table..... | A-31 |

Appendix B: C-more Micro Graphic Panel Runtime Errors

| | |
|--------------------|-----|
| Introduction | B-2 |
| Panel Errors..... | B-2 |

Index

