

Autonics LCD Display Counter/Timer CX SERIES INSTRUCTION MANUAL



Thank you for choosing our Autonics product. Please read the following safety considerations before use.

Safety Considerations

- Warning: Please observe all safety considerations for safe and proper product operation to avoid hazards. Caution: Failure to follow these instructions may result in personal injury or product damage. 1. Fall-safe device must be installed when using the unit with machinery that may cause serious injury or substantial economic loss. 2. Install on a device panel to use. 3. Do not connect, repair, or inspect the unit while connected to a power source. 4. Check 'Connections' before wiring. 5. Do not disassemble or modify the unit.

Caution

- 1. When connecting the power input and relay output, use AWG 20 (0.50mm²) cable or over, and tighten the terminal screw with a tightening torque of 0.74 to 0.90N·m. 2. Use the unit within the rated specifications. 3. Use the unit within the rated specifications. 4. Do not use the unit in the place where flammable/explosive/corrosive gas, humidity, direct sunlight, radiant heat, vibration, impact, or salinity may be present. 5. Keep metal chip, dust, and wire residue from flowing into the unit.

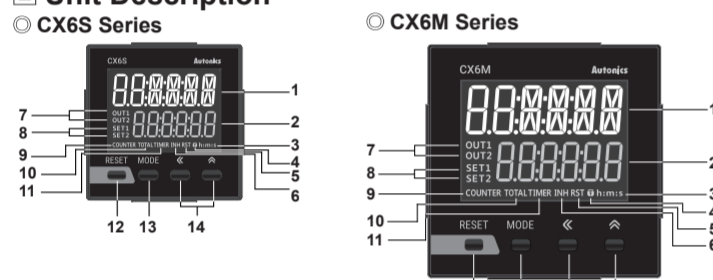
Manual

For the detail information and instructions, please refer to user manual and be sure to follow cautions. Visit our homepage (www.autonics.com) to download manuals.

Ordering Information

Table with columns: Model, Signal input method, Power supply, Output, Size, Display digit, Item.

Unit Description

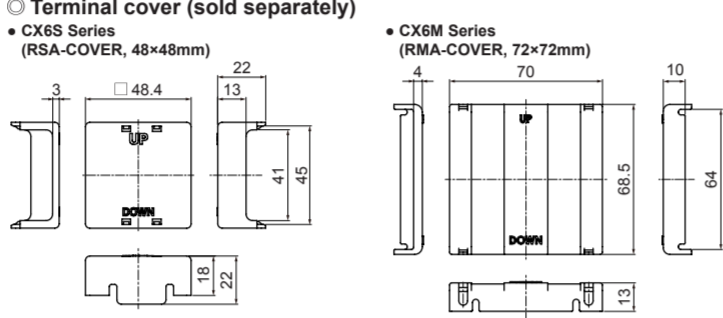
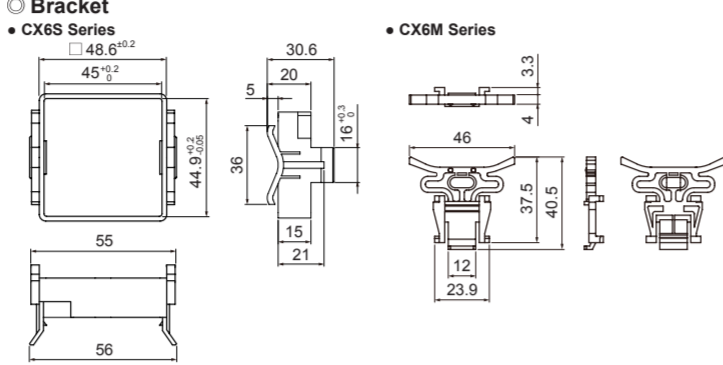
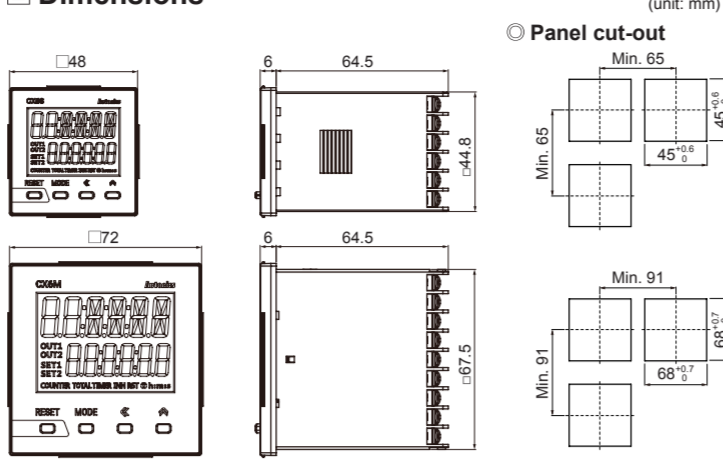


- 1. Counting value display component (red) RUN mode: Displays counting value for counter operation or time progress value for timer operation. 2. Setting value display component (green) RUN mode: Displays setting value. 3. Time unit indicator (h-m-s): Turns ON for time unit for timer. 4. Key lock indicator (K): Turns ON for key lock setting. 5. Reset input indicator (RST): Turns ON for reset key input or reset signal input. 6. INH indicator (INH): For the voltage input (PNP)/no-voltage input (NPN) selectable model (CX6-□□□), it turns ON for INHIBIT signal input. 7. Output indicator (OUT1, OUT2): Turns ON for the dedicated control output ON. 8. SV checking and changing indicator (SET, SET1, SET2) (green): Turns ON when checking and changing SV. 9. COUNTER indicator (COUNTER): Turns ON for counter operation. 10. TOTAL indicator (TOTAL): In case of TOTAL counter display mode, it turns ON with the COUNTER indicator. 11. TIMER indicator (TIMER): Flashes (progressing time) or Turns ON (stopping time) for timer operation. 12. [MODE] key: RUN mode, Function setting mode. 13. [MODE] key: RUN mode: Hold the [MODE] key over 3 sec to enter function setting mode. 14. [MODE] key: RUN mode: Press the [MODE] key to change SV (SET, SET1, SET2) digits. Changing SV mode: Press the [MODE] key to change digits. Changing SV mode: Increases SV. Function setting mode: Changes the settings.

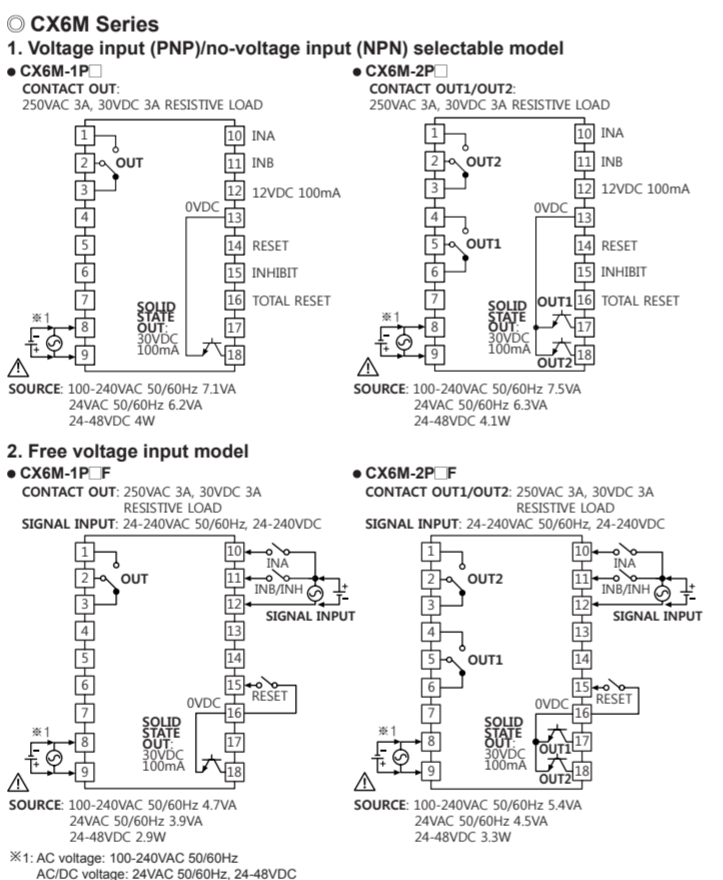
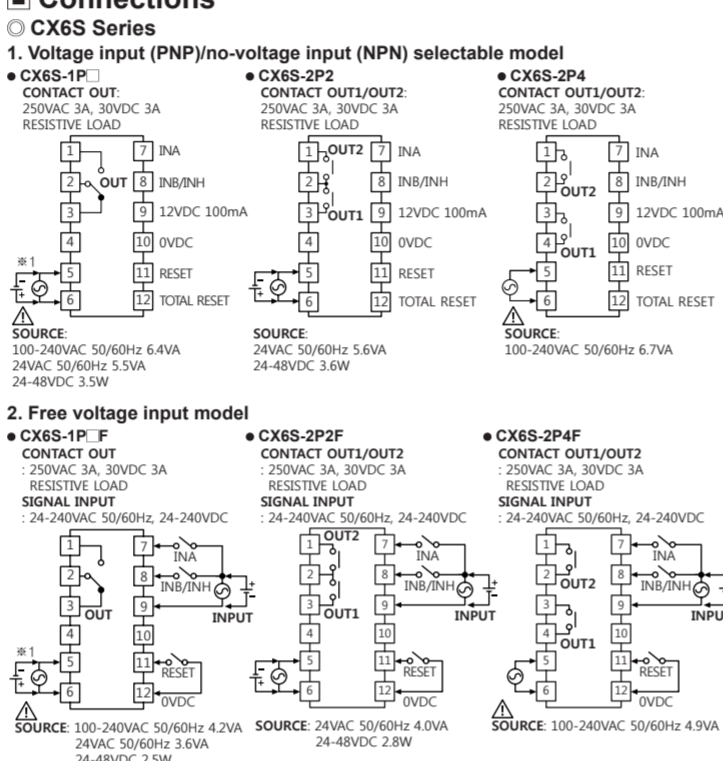
Specifications

Table with columns: Model, Display digits, Display method, Character size, Power AC voltage, AC/DC voltage, Permissible voltage range, AC voltage, AC/DC voltage, Max. INH/INH counting speed, Counter, Scale, Time range, Operation mode, Input method, One-shot output time, Control, Output, External power supply, Memory retention, Insulation resistance, Dielectric strength, Noise immunity, Vibration, Shock, Relay life cycle, Protection structure, Environment, Approval, AC voltage, AC/DC voltage.

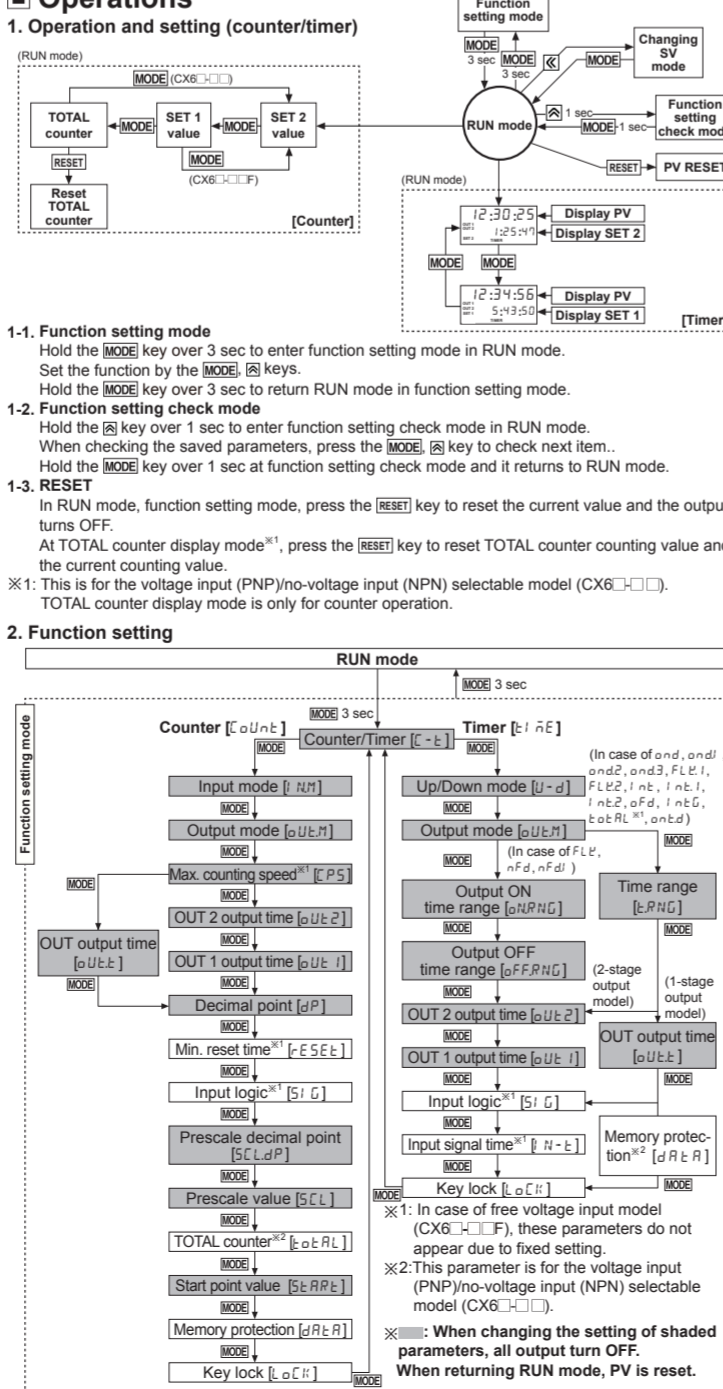
Dimensions



Connections

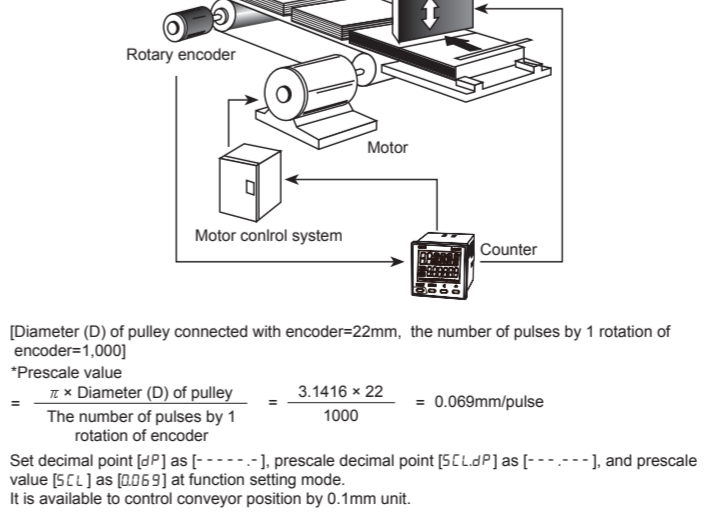
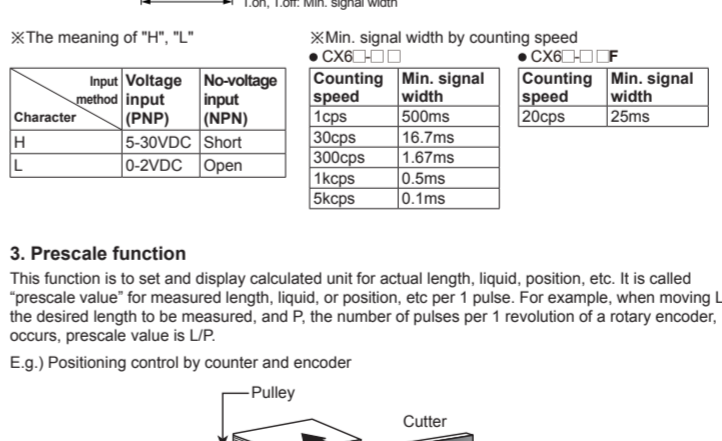
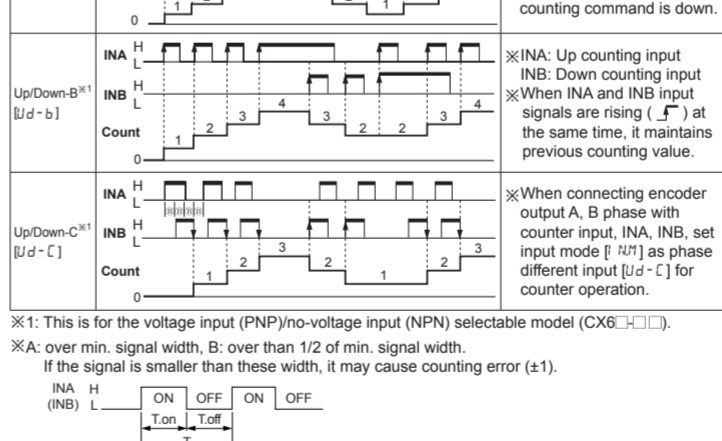
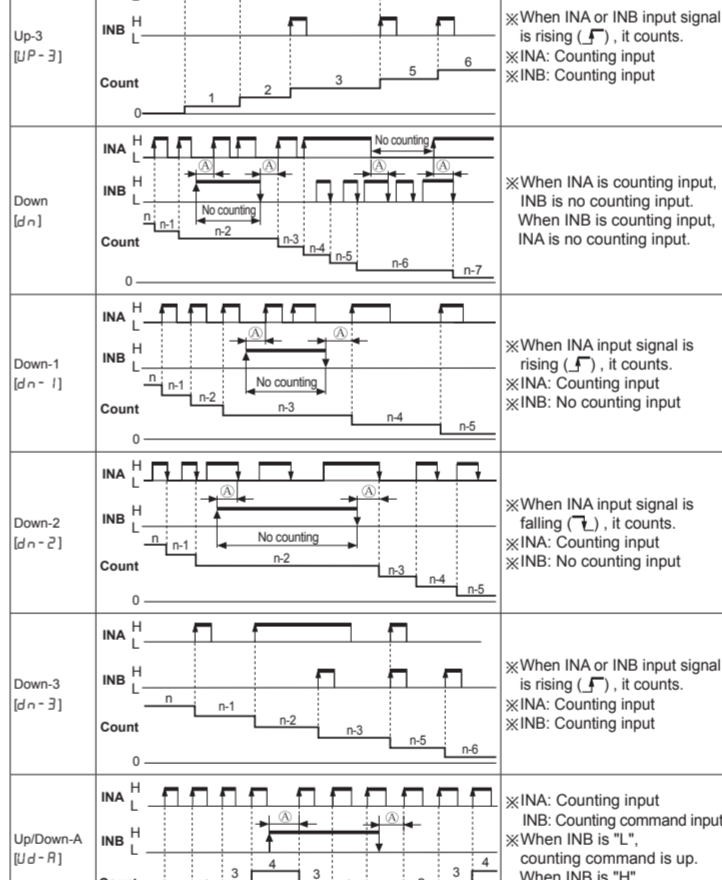
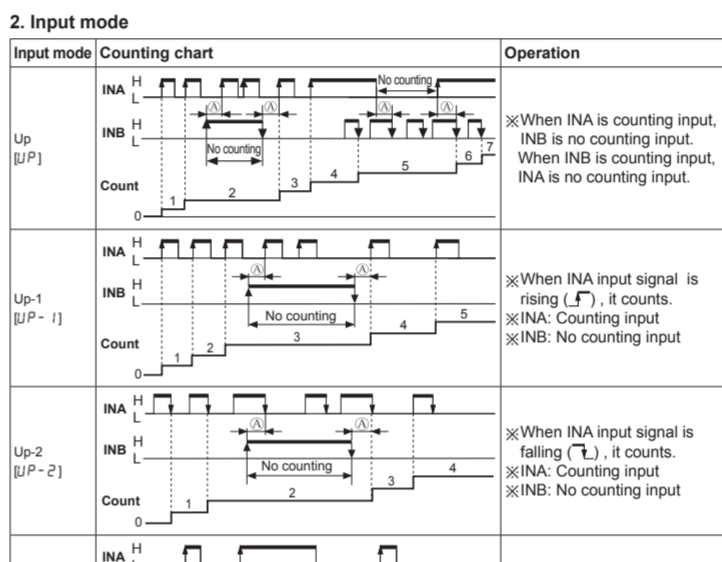


Operations



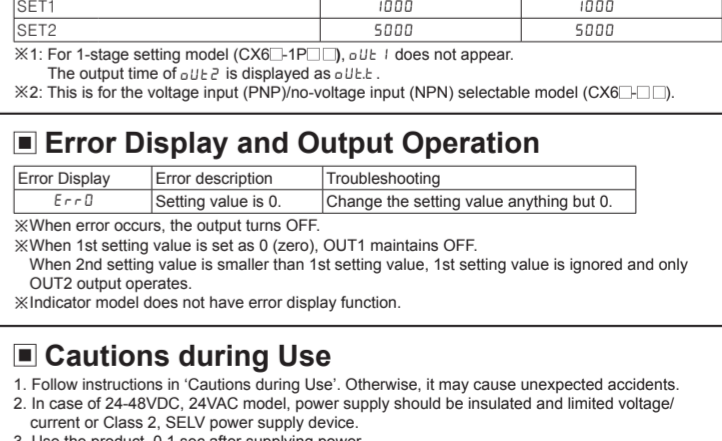
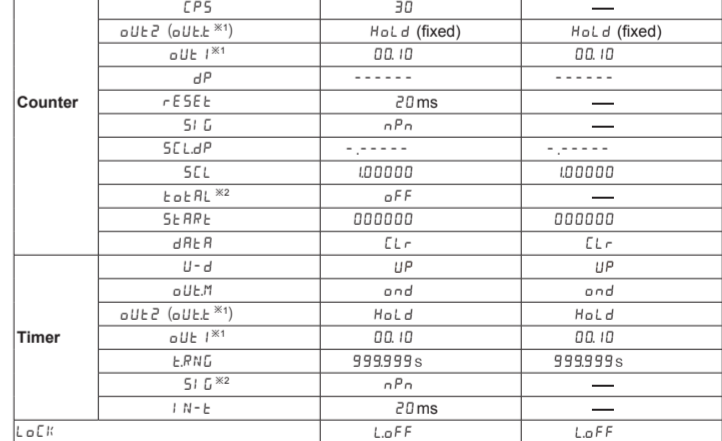
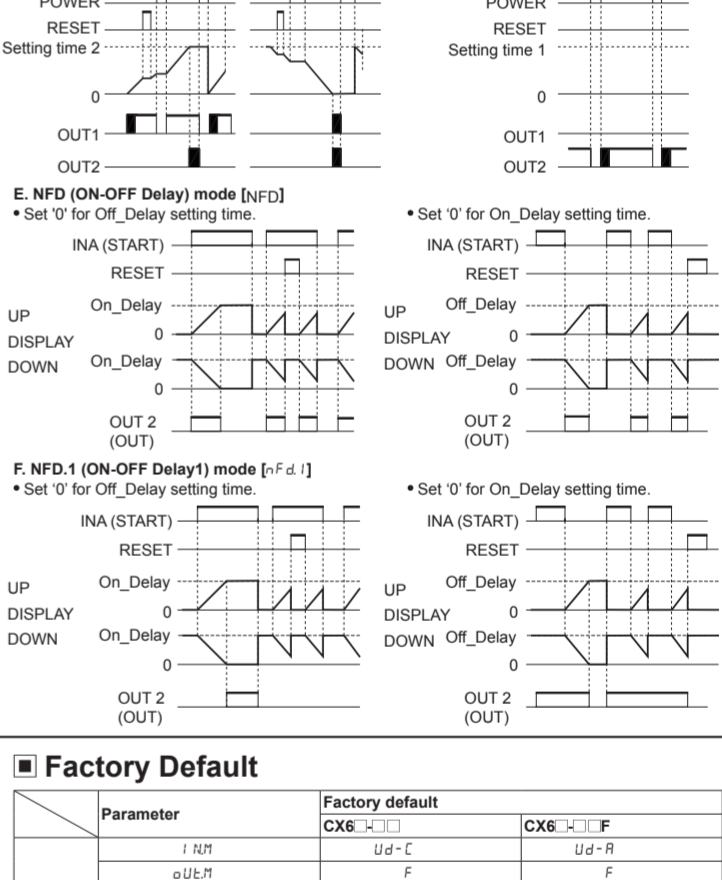
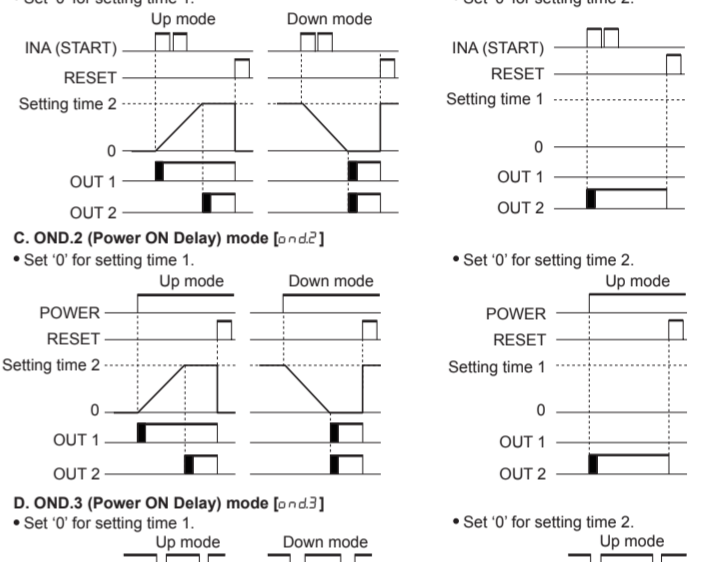
Counter Mode

Parameter setting table for Counter Mode with columns: Parameter, Parameter setting value, and detailed notes for Counter/Timer, Input mode, Output mode, Max. counting speed, etc.



Timer Mode

Parameter setting table for Timer Mode with columns: Parameter, Parameter setting value, and detailed notes for Counter/Timer, Output mode, Time range, etc.



Factory Default

Table with columns: Parameter, Factory default, and notes for Counter and Timer settings.

Error Display and Output Operation

Table with columns: Error Display, Error description, Troubleshooting, and notes for error handling.

Cautions during Use

- 1. Follow instructions in 'Cautions during Use'. 2. In case of 24-48VDC, 24VAC model, power supply should be insulated and limited voltage/current or Class 2, SELV power supply device. 3. Use the product 0.1 sec after supplying power. 4. When supplying or turning off the power, use a switch or etc. to avoid chattering. 5. Install a power switch or circuit breaker in the easily accessible place for supplying or disconnecting the power. 6. Keep away from high voltage lines or power lines to prevent inductive noise. 7. In case installing power line and input signal line closely, use line filter or varistor at power line and shielded wire at input signal line. 8. Do not use near the equipment which generates strong magnetic force or high frequency noise. 9. This unit may be used in the following environments.

Major Products

- Photoelectric Sensors, Temperature Controllers, Infrared Sensors, Temperature/Humidity Transducers, Door Sensors, Gas/Power Controllers, Area Sensors, Timers, Proximity Sensors, Transmitters, Pressure Sensors, Tachometer/Pulse (Ratio) Meters, Encoder/Decoder, Sensor Controllers, Switching Mode Power Supply, Relay, Relay Controller, Relay Switches/Lamps/Buttons, I/O Terminal Blocks/Cables, Stepper Motors/Inverter Controllers, Graphic Logic Panels, Field Network Devices, Laser Marking System (Fiber, Co., Nd: YAG), Laser Welding/Cutting System.

