The CP1 Series PLC contains a lithium primary battery with a perchlorate content of 6 ppb or less. Doing either of these without confirming can result in electric shock.

Always heed these precautions. Failure to abide by the precautions described below in the Operating Environment Precautions section may result in malfunction or fire.

**General Precautions**

The user must operate the product according to the performance specifications described in the operating manual for it. If you are using the PLC as part of a larger system, or applying the product to nuclear control systems, railroad systems, avionics systems, combustion systems, medical equipment, factory automation systems, or other systems, machines, safety equipment, petrochemical plants, and other systems, machines, and equipment that may have a serious influence on the safety and property of life or health, please consult OMRON representative. Make sure that the ratings and performance characteristics of the product are sufficient for the systems, machines, and equipment, and be sure to provide the systems, machines, and equipment with double safety mechanisms.

**Safety Precautions**

Definition of Precautionary Information

- **DANGER** Indicates an immediately hazardous situation, which, if not avoided, will result in death or serious injury.
- **Caution** Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
- **Warning** Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.

**Warnings and Cautions**

Do not attempt to take any Unit apart while the power supply is being supplied. Doing so may result in electric shock.

Do not touch any of the terminals or terminal blocks of the Unit while the power is on. Doing so may result in electric shock.

Do not disassemble, repair, or modify any Units. Any attempt to do so may result in malfunction. Always use the following size wire when connecting I/O Units, Special I/O Units, and CPU Bus Units:

- CPU Bus Units: AWG22 to AWG18 (0.32 to 0.82 mm)

**Operating Environment Precautions**

Do not touch the mounted parts or the rear surface of PCBs because PCBs have sharp edges. Be sure to mount the end cover supplied with the CJ-series Unit Adapter to the rightmost PLC output. The emergency stop circuits, interlock circuits, limit circuits, and similar safety measures must be provided in external control circuits. It is possible to replace the battery without having to turn OFF the power while the power is on, in which case, please enter the replacement after discharge static electricity.

Do not do either of these without confirming.

**Caution**

- Tighten the screws on the terminal block of the AC PLC outputs to the torque specified in the operation manual. The loose screw may result in malfunction.

**WARNING**

- Do not touch near the power supply parts or I/O terminals while the power is ON, and immediately after turning OFF the power supply. The Unit’s internal surface may cause burn injury.

**Warning**

- Always use the power supply voltage specified in the operation manual. An incorrect voltage may result in malfunction.

- Take appropriate measures to ensure that the specified power with the rated voltage and inputs is supplied. Supplying the wrong power supply may result in malfunction. An incorrect power supply may result in malfunction.

**Caution**

- External terminals are measures against short circuit from external wiring. Insufficient safety measures against short-circuiting may result in a fire.

**WARNING**

- Do not apply voltages or connect leads to the output terminals in excess of the maximum permissible voltage of the PLC outputs. Doing so may result in malfunction.

**Caution**

- Disconnect the functional ground terminal when performing withstand voltage tests. Not doing so may result in malfunction.

**WARNING**

- Be sure to use class D grounding (The 3rd grounding) during installation work.

**Caution**

- Inserting or removing memory cards improperly may cause the Unit to malfunction in the specified PLC system of the Unit may result in malfunction.

**Warning**

- Be sure to mount the terminal block and cable connector screws to tightness to the torque specified in the relevant manuals. Incorrect tightening torque may result in malfunction.

**Caution**

- The DM Area, counter present values and up flags, and HR Area are used to control external operations, resulting in unexpected operation in machinery or equipment.

**Warning**

- The DM Area, counter present values and up flags, and HR Area are used to control external operations, resulting in unexpected operation in machinery or equipment.

**Caution**

- The DIP switches and data memory (DM) are properly set before starting operation.

**Warning**

- Be sure to install the following optional products in the PLC before use.

**Caution**

- Always use the following size wire when connecting I/O Units, Special I/O Units, and CPU Bus Units:

- CPU Bus Units: AWG22 to AWG18 (0.32 to 0.82 mm)

**Warning**

- Caution:

- Do not apply the voltage or current outside the specified range to this unit. It may cause a malfunction or damage.

**Caution**

- Pay careful attention to the polarities (+/-) when wiring the DC power supply. A wrong connection may cause a malfunction or damage.

**Caution**

- Execute online edit only after confirming that no adverse effects are caused by the power being turned OFF in an emergency, or by disconnection and reconnection of power supply or the like.

**Caution**

- Confirm the safety at the destination node before transferring a program to another node or editing the I/O areas of the Units these with confirming safety may result in injury.