

Non-contact type live line alarm
DEA-6C

Operation and Safety Notices Instruction Manual





Thank you very much for the purchase of the non-contact type live line alarm.

For safety operation, please read this instruction manual carefully to use this product correctly. Keep this manual always on hand while using this product. Should you lose this manual, please contact us.

Safety Instructions









This instruction manual uses safety alert symbols to ensure safe operation by users. The instructions with these symbols alert you to important notices to prevent potential hazards or damages to you or other people.

The instructions with the warning symbols are used to alert you to the following hazards. Please understand them well before reading the main text of this manual.

Warning		Operating this product incorrectly without following the messages with this "Warning" symbol could result in death or serious injury.
Caution		Operating this product incorrectly without following the messages with this "Caution" symbol could cause incorrect voltage detection. Depending on situation, it may result in serious results. So be sure to observe these messages.
Prohibition		This indicates that the operations with this symbol are "Prohibition" items that must be strictly avoided.
Compulsory		This indicates that the operations with this symbol are "Compulsory" items that must be followed without fail.



Warning

-  1. Do not use the product if the main body case has cracks, breaks, or chips.
-  2. The detection distance varies depending on the target electrical circuit voltage.
-  3. Do not use batteries other than alkaline batteries LR6 (AA size).
-  4. This device is not drip-proof and water-proof. Do not use this device in the rain or when the surface of the main unit case is covered with condensation, water droplets, or a water film.
-  5. This device is used by attaching the back, right side, or left side to a grounded metal plate. Do not use it in any other way.
-  6. Do not allow this device to come into contact with high-voltage live line directly.
-  7. Before use, be sure to check that the power switch and selector switch operate normally.
-  8. Do not use the instrument in the way not specified in this manual.



Caution

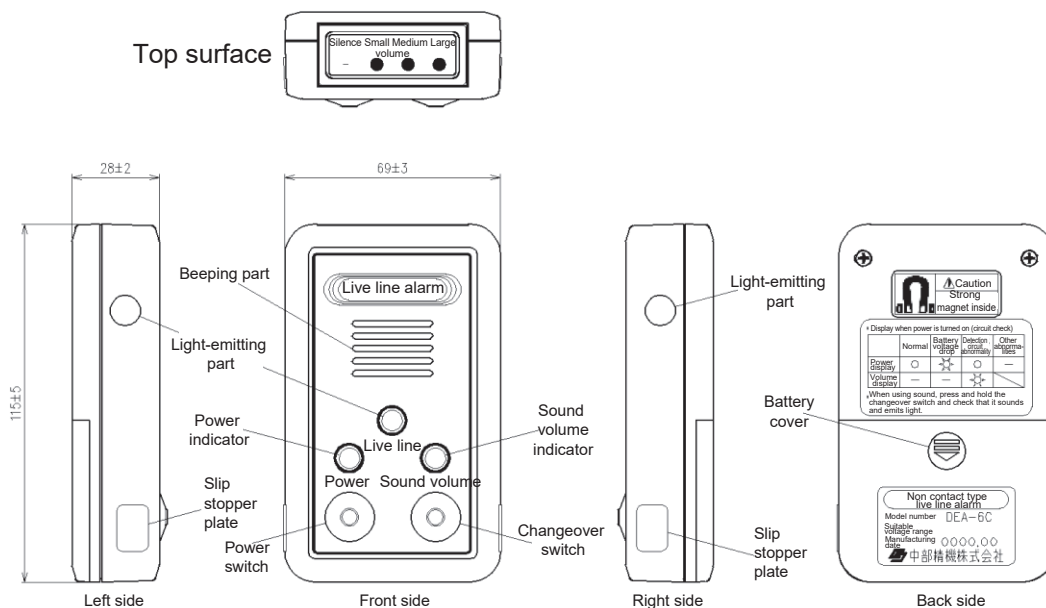
- ❗ 1. As the operating temperature range is $-10^{\circ}\text{C}\sim+50^{\circ}\text{C}$, do not use this device at the temperature beyond this range.
- ⊘ 2. Do not leave the instrument in the place with direct sunshine and high temperature like in the car.
- ⊘ 3. Do not subject it to strong shock or vibration.
- ❗ 4. In case that the moisture contents are adhered on the surface of the instrument, use this device after wiped off clean.
- ⊘ 5. Use pure water for washing and do not apply wastewater and or organic solvent like as thinner, benzene, etc. for cleaning.
- ⊘ 6. It has a built-in strong magnet. Be careful not to get your hands caught or get injured by magnetized metal pieces. Also, do not bring it close to the equipments that are sensitive to magnetic fields, then those equipments may be damaged.
- ⊘ 7. Replace exhausted batteries.
- ⊘ 8. Do not disassemble, modify or repair this product by yourself.

Description of the non-contact type live line alarm

This device is attached on the grounded metal cabinet such as an electrical room, and is designed to ensure safety by notifying workers of the current status with sound and light. Built-in magnets allow easy installation into metal cabinets and contactless monitoring of energization status.

The Specification of the live line alarm

T y p e	DEA-6C
Reference operating distance	Operates within 1m at AC6600V ground voltage
Alarm action	① Blinks twice with “Beep beep” ⇒② “Charging(Japanese)” ⇒③ Blinks twice ⇒④ “Beep beep beep beep” ⇒⑤ “Charging (Japanese)” ⇒⑥ Blinks twice ⇒⑦ “Beep beep”: From ② onwards Repeat ⑦ (when “no sound”, only light emission operation)
Operating frequency	50Hz/60Hz (Common)
Representation level	Sound: 70dB or more (at the distance of 1m from sound port) Light: to be visible at the luminance of 8,000lx.
Battery to be used	LR06(1.5V AA)*2ea
Operating temperature	$-10^{\circ}\text{C} \sim +50^{\circ}\text{C}$
Weight	Approx. 200g (including battery)



Handling method

1. Check before live line detection

- ❗ (1) Ensure that the appearance and structure are normal (no crack, break or chip etc).
- ⊘ (2) Never use this device if something abnormal is found.
- ❗ (3) If the surface of this device case is dirty, wipe it off with a clean, dry cloth before use.
- ❗ (4) Press and hold the power switch and make sure that the light emitting part flashes twice and the power indicator lights up. (Power ON)

This device performs a circuit check when the power is turned on, and displays the following on the power display and volume display.

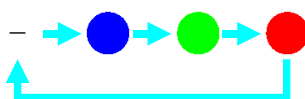
	Normal	Battery voltage drop	Battery consumption	Detection circuit abnormality	Other abnormalities
Power display	● Light	☀ Blink	— lights out	● Light	— lights out
Volume display	— lights out	— lights out	— lights out	☀ Blink(Red)	⚡

❗ *If the power indicator is blinking or off, replace the battery.

- ❗ (5) If the device does not function properly even after replacing the battery, remove the battery and press the changeover switch for 2 to 3 seconds. (CPU reset)
- ⊘ (6) If the device does not return to normal even after you insert the battery after resetting the CPU, the device may be malfunctioning and should not be used.
- ❗ (7) If turn on the sound alarm operation, press the changeover switch and set the volume. After turning on the power, it is in a "silent" state.

In each time press the switch, the volume changes in the following order and is displayed in the color of the volume display.

Silent Small Medium Large



When press and hold the changeover switch, the alarm will operate at the set volume while hold it down.

- ❗ (8) When activating the sound alarm, be sure to press and hold the changeover switch and make sure that the alarm operations (sounds and emits light).
- ⊘ (9) If the alarm does not operate, please do not use it as it may be malfunctioning.

2. How to use

(1) Open the door of the electrical room or other electrical equipment (under live line condition).

- ❗ (2) Attach the turned on this device on the housing of electrical equipment such as an electrical room in a position that will activate the alarm without allowing it to come into contact with high-voltage charging parts.

- ❗ (3) Be sure to wear the PPE as necessary and install safely. When activating the sound alarm, set it to the desired volume.



Attached on the back side



Attached on the right side

- ❗ (4) Turn off the power to the electrical equipment in the electrical room and confirm that the alarm operation of this device stops.
- ❗ (5) Use the voltage detector to confirm that the electrical equipment in the electrical room is out of power.
- ❗ (6) Carry out inspections, etc.
- ❗ (7) After completing the work, turn on the electrical equipment in the electrical room and check that the alarm is activated.
- ❗ (8) Remove the device and turn off the power. (Press and hold the power switch)
- ⊘ (9) Close the doors of electrical equipment in the electrical room.

3. Precautions when using

- ⊘ (1) If this device does not activate an alarm even if it is attached to electrical equipment that is energized (the position where the alarm activates cannot be found), do not use it.

- ⊘ (2) If the alarm operation of this device does not stop even if the electrical equipment etc. is cut off, do not use it. An alarm may be activated due to induced from the other live line, etc.
- ⚠ (3) Depending on the arrangement of power distribution lines, shielding objects, etc., the distance over which the alarm operates will vary even if the live line voltage is the same. Detection within 1m at AC6600V ground voltage is the value tested by the manufacturer under certain conditions.
- ⚠ (4) In order to reduce battery consumption, the interval between sounding and flashing the alarm will increase to about twice as long as time passes. This is not a malfunction.
- (5) This device is not intended for same usage with voltage detectors.
- ⊘ (6) Do not touch this device to the energized parts like a voltage detector and be sure to use the voltage detector to check the voltage.
- ❗ (7) It contains a strong magnet, so be careful not to get your hands caught or get injured by magnetized metal pieces.
- ⊘ (8) Do not bring it close to devices that are sensitive to magnetic fields. The equipment may be damaged.
- ⊘ (9) Do not use the product in the rain or when the surface of the main unit case is covered with condensation, water droplets, or a film of water.
- ⊘ (10) Do not subject it to strong shock or vibration.
- ⊘ (11) Do not use batteries other than alkaline batteries LR6 (AA size). When using batteries other than alkaline batteries, the battery voltage may drop during use and the power may turn off.

4. How to replace the battery

- ❗ (1) Press the mark on the battery replacement part and slide it in the direction of the arrow to remove the battery cover.
- ❗ (2) Be careful when replacing the battery, being sure to match the polarity (indicated in the battery compartment).
- ❗ (3) Close the battery cover.
- ❗ (4) To confirm that the batteries are installed correctly, press and hold the power switch to check the circuit.
- ❗ (5) If it does not operate normally, remove the battery and press the selector switch for 2 to 3s. (CPU reset)
- ⊘ (6) If the device does not function normally even after inserting the battery after resetting the CPU, the device may be malfunctioning and should not be used.

5. Repair, maintenance and management

- ❗ (1) Keep the product in a dry place away from direct sunlight.
- ❗ (2) If there is dirt on the surface of the main unit case, wipe it off with a clean, dry cloth.
(If not cleaned, insulation may deteriorate faster.)
- ⊘ (3) Do not clean with organic solvents such as alcohol, thinner, benzene, etc.
- ❗ (4) Remove the battery when storing this device for long periods of time.
- ❗ (5) Dispose used batteries adequately according to the regulation in each country or district.
- ❗ (6) When disposing of this device, treat it as an industrial waste.

(Note) The specifications of this voltage detector are subject to change without prior notice for further improvement of the product.

Measuring Instrument Division, CHUBU SEIKI Co., Ltd.

〒487-8650 Kibuki-cho 3-5-1, Kasugai City, Aichi Prefecture

TEL.(0568) 51-7477・7478 FAX.(0568) 51-5032

E-mail. keisoku1@chubuseiki.co.jp

HP. <http://www.chubuseiki.co.jp>