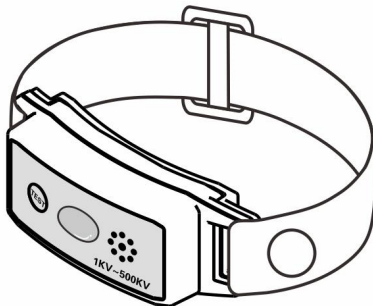


EITAI

APPROACH ELECTRIC ALARM(ARM TYPE)

EITAI 1870
EITAI 1870C



MANUAL

www.eitaiinst.com

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Precaution For Use

Thank you for purchasing our **ETC1870 Series High Voltage Approach Electric Alarm(Arm Type)**, In order to better for use of the product, please be certain:

- **Read this user manual carefully.**
- **Comply with the operating cautions in this manual.**

- ◆ This alarm is not a voltage detector. It is forbidden to use as a voltage detector.
- ◆ Due to the high voltage operation is very dangerous, the operator must pass strict training and obtain the national high voltage operation certification before using the instrument for field testing.
- ◆ The alarm is worn on the upper arm of the outermost overalls of the operator, and the front of the alarm toward the outside of the arm.
- ◆ This alarm only provide a safety auxiliary measure, do not overestimate the safety guarantee after wearing this alarm.
- ◆ Keep the alarm in a dry room and away from direct sunlight. Do not store in high temperature, humidity and dewy place. When dewy, the alarm should take off the battery cover, and dry with natural air.
- ◆ When the alarm is not in use for a long time, please remove the battery. A bad battery can cause battery fluid to leak and may damage the alarm.
- ◆ The equipped batteries in the alarm are used only for testing operational functions. It is

recommended to replace the new battery as soon as possible. Because the battery is expendable, it is not covered by the warranty.

- ◆ If the alarm is always indicated by sound and light, it may be affected by the surrounding environment, such as strong inductive voltage, static electricity, etc. When the alarm covers with both hands and shields the surrounding influence, the alarm operation (sound and light) stops, indicating that the alarm is working normal.
- ◆ When the alarm is exposed to a strong electric field, it may start automatically. Please remove the battery or put the alarm in a sealed storage bag.
- ◆ Use, disassembly and maintenance of this leakage current meter shall be handled by authorized personnel.

1. Introduction

ETC1870 Series Arm Type High Voltage Approach Electric Alarm provide a safe, practical and convenient new type high voltage alarm device for close-electric operator. During live electric working, the safe distance between operator and live body should not be closer than the requirement of relevant working regulations. After the operator wearing this alarm, when close to the high voltage charged body for a certain distance, according to the corresponding safe distance of voltage level, the alarm will make out the sound and light alarm to remind the electrical workers to pay attention to safety and avoid high voltage electric shock accidents.

ETC1870 Series Wist Type High Voltage Approach Electric Alarm develop with two model of high voltage alarm(above 1kV) and low voltage alarm(below 1kV), adopt non-contact induction technology, accurate alarm, power saving and durable, standby time up to 12 months. The alarm with unique automatic trigger detection function to ensure the safety of close-electric workers. The alarms are widely used in electric power, railway, industrial and mining enterprises and other close-electric working places.

Model Category

Product Name	Model	Voltage Alarm Range	Application
Arm Type HV Approach Electric Alarm	EITAI1870	1kV~500kV	High voltage alarm
Arm Type LV Approach	EITAI1870C	40V~1kV	Low voltage alarm

2. Caution

Note of using this alarm as follow:

2.1. This alarm is not a voltage detector, which is only provide a safety auxiliary measure, do not overestimate the safety guarantee after wearing this alarm,,it is forbidden to use as a voltage detector.

2.2. When in using, the alarm is worn on the upper arm of the outermost overalls of the operator, and the front of the alarm toward the outside of the arm.

2.3. In close proximity to grounding metal structures (such as transformers), the working distance of the alarm will be greatly reduced.

2.4. When the alarm is wet by rain, take out the battery and dry it naturally in the shade. Please do not use the alarm in the damp state, the working distance of the alarm will be greatly shortened at this time, and even the alarm may always make out the alarm.

2.5. If the alarm falls off by a strong external force or hit, should check the appearance of the alarm and press "TEST" key to testing, ensure the function normal working of alarm.

2.6. The area where the alarm make out sounds is covered with waterproof film. Please do not use pins or others sharp object to damage the waterproof film.

2.7. If the alarm is always indicated by sound and light, it may be affected by the surrounding environment, such as strong inductive voltage, static electricity, etc. When the

alarm covers with both hands and shields the surrounding influence, the alarm operation (sound and light) stops, indicating that the alarm is working normal.

3. Technical Specifications

3.1. Alarm Voltage And Distance

Model	Voltage Level	Working Distance
EITAI1870	6.6kV	0.6m
	10kV	0.8m
	35kV	1.4m
	66kV	1.8m
	110kV	2.2m
	220kV	3.0m
	330kV	3.6m
	500kV	4.2m
EITAI1870C	40V	5cm
	110V	10cm
	220V	15cm
	600V	40cm
	1kV	60cm

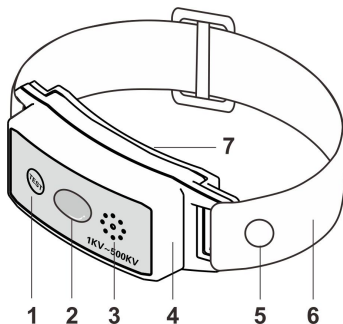
3.2. Technology Parameter

Function	Approach Electric Alarm
Power Supply	CR1632 (140mAH) button cell 2PCS
Alarm Voltage Range	EITAI1870: 1kV~500kV(high voltage alarm) EITAI1870C: 40V~1kV(low voltage alarm)
Alarm Distance Error	±10cm (23℃±1℃, 80%Rh,under base condition)
Working Frequency	50Hz/60Hz
Electricity Testing Mode	Non-contact mode
Detection Mode	Automatic trigger
Battery Life	Continues working (sound and light alarm) : about 24 hours
	Standby time: about 12 months
Alarm Mode	Indicator: LED light visibility under 8000LX visible light
	Buzzer: above 60dB (60CM apart)
Weight	351g(include battery)
Dimensions	88mmX32mmX30mm
Protection Level	IP54

Working Temperature	-10℃～40℃； below 80%rh
Store Temperature	-10℃～60℃； below 70%rh

*Base condition refers to under laboratory standard conditions, in practical application, the operating distance error of the alarm may change according to the situation on the field.

4. Meter Structure



- | | | | |
|---------------------|--------------------------|-------------------|------------------|
| 4.1. Test key | 4.2. Alarm indicator | 4.3. Alarm buzzer | |
| 4.4. The alarm host | 4.5. Elastic belt buckle | 4.6. Elastic belt | 4.7. Back Rubber |

5. Operation

5.1. Check the appearance and structure of the alarm to ensure it is in good condition.

5.2. Press the "TEST" key to confirm the normal operation of the sound and light indicator. Hold down the test key for 5 seconds to confirm that the state of sound and light indication does not change constantly. If there is no light and sound, or the sound and light indication state is unstable, please replace the new battery.

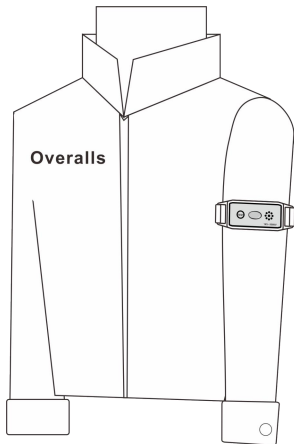
5.3. The equipped batteries in the alarm are used only for testing operational functions. It is recommended to replace the new battery as soon as possible. Because the battery is expendable, it is not covered by the warranty.

5.4. Wear the alarm on arm of the operator.

5.5. To ensure safety, inspect the automatic trigger function of the alarm which using the confirmed live circuit. For example, the alarm will be activated when it touches the AC220V power line.



Live electric working, extremely dangerous! Must be operated by trained and authorized personnel. The operator must strictly follow the safety rules, otherwise there would be danger of electric shock, causing personal injury or injury accident.



The alarm is worn on the upper arm of the outermost overalls of the operator, and the front of the alarm toward the outside of the arm

6. Replace Battery



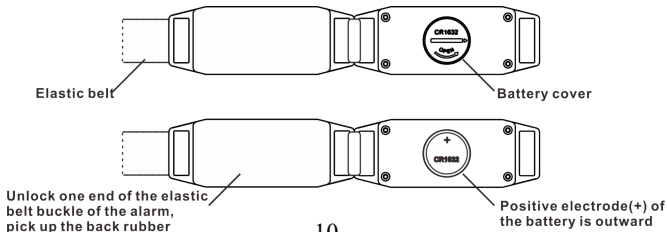
Press the "TEST" key to confirm the normal operation of the sound and light indicator. Hold down the test key for 5 seconds, If there is no light and sound, or the sound and light indication state is unstable, please replace the new battery

Pay attention to the battery polarity, the battery + electrode is facing outwards, otherwise will damage the alarm.

The alarm is not in use for a long time, please remove the battery. A bad battery can cause battery fluid to leak and may damage the alarm.

After replacing the battery, tighten the battery cover, otherwise water will seep in and damage the alarm.

6.1. Unlock one end of the elastic belt buckle of the alarm, pick up the back rubber, insert the plastic coin into the groove of the battery cover on the back of the alarm, then rotate it (counterclockwise) toward with the "OPEN" arrow to remove the battery cover.



6.2. Wipe the lithium battery clean with a dry cloth or other cleaner, then embed it make the "+" mark is facing outwards. Turn the battery cover with the plastic coin in the opposite direction (clockwise) of the "Open" arrow, and then screw it tight. If not tightened, water may seep in and damage the alarm.

6.3. Install the back cover rubber and elastic belt of the alarm and fasten the buckle.

7. Accessories

Alarm	1 PCS
Button Battery CR1632	2 PCS
Plastic Coin (use for replace battery)	1 PCS
Package Box	1 PCS
Manual/Warranty card / Certification	1 SET

The company is not responsible for other losses caused by use.

The contents of this user manual cannot be used as a reason to use the product for special purposes.

The company reserves the right to modify the contents of the user manual. If there are any changes, no further notice will be given.

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