Astra-10 Ver.M2

Light and Sound Alerter

Operation Manual

The present operation manual is intended for studying operation principle, running conditions and maintenance of light and sound alerter Astra-10 ver.M2 (hereinafter “alerter”) (Figure 1).
The manufacturer reserves the right to make alteration regarding refinement of the product without prior notification. All changes will be imported into new edition of the operation manual.

1 Function

1.1 The alerter is intended for light ad sound alerting about current status of an object equipped with a control panel of a fire/intrusion detection and alarming system.
1.2 The alerter is designed for continuous 24-hours operation.
1.3 Power supply of the alerter is performed by $12V^{+3}_{-2}$ DC.
1.4 The alerter generates 4 types of alerting signals:
- LED indicators are ON;
- LED indicators are OFF;
- Piezoelectric acoustic emitter is ON;
- Piezoelectric acoustic emitter is OFF;

by means of voltage supply through control panel output relay contacts or through open collector outputs.
1.5 The alerter is not considered to be a source of interference as regards similar devices, alerters of other types and purposes, as well as regards domestic radio equipment.

2 Specifications

Contrast perception of light notification
against ambient light background, Lx, min..... 500
Acoustic pressure level at 10 cm distance, dB 85
Generated signal frequency, kHz, min..... 2.3
Viewing angle of light perception 180º
General Technical Parameters
Light channel, mA, max 15
Acoustic channel, mA, max 40
Overall dimensions, mm 62x37x28.5
Weight, kg..... 0,03
Operating Conditions
Temperature range, °C..... from -30 up to +55
Relative air humidity, % ..... up to 93 at +40 °C
Without moisture condensation

3 Delivery Set

Alerter Astra-10 ver.M2 ..... 1 pcs
Screw 2-3x30.01.096..... 2 pcs
Dowel 5x25..... 2 pcs
User Instruction..... 1 copy

4 Structure

The alerter consists of a base, printed circuit board (PCB) with radioelements, and removable cover (Figure 1).
Alerter’s design provides for possibility of installation on a wall surface.

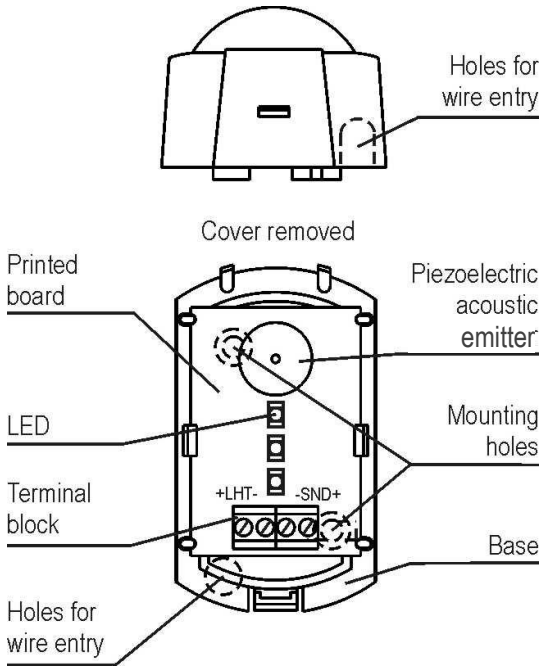


Figure 1

5 Installation and Pre-starting Procedure

5.1 Works on installation, mounting, maintenance and operation of the alerter should be performed by qualified persons only.

5.2 After transportation in conditions differing from those of operation keep the alerter packed under supposed operation conditions for at least 4 hours.

5.3 Installation Place

- Installation on a wall surface is allowed**;**
- Installation place should **avoid exposure to sunlight**;
- Inside permanent structures the preferable places of installation are those well viewed from outside;

5.4 Installation Procedure

5.4.1 Remove the cover of the alerter by inserting a flat blade screwdriver into the slot on the side of the housing and turning the blade so as to release the latch from cover slot.
5.4.2 Unbend the hooks and remove PCB.
5.4.3 Squeeze out plugs of selected mounting holes and wire entry holes (see Figure 1).
5.4.4 Make markings on installation surface by applying the base.
5.4.5 Lead wires from power supply through wire entry holes on the base or use additional wire entry holes on the cover (see Figure 1).
5.4.6 Fasten the base on installation surface.
5.4.7 Re-install the PCB.
5.4.8 Connect power supply source’s wires to the appropriate screw terminals in accordance with selected connection diagram (see Figure 2):

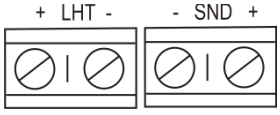


Figure 2

Wiring options:

- when connecting to control panel Astra-712/x – see Figure 3;
- when connecting to control panel of third party manufacturer – see Figure 4;

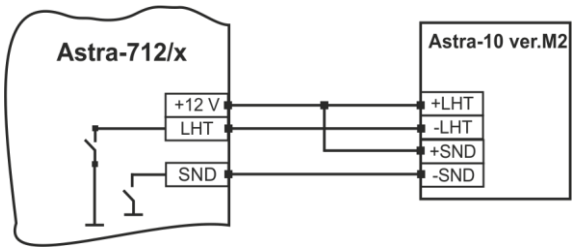


Figure 3

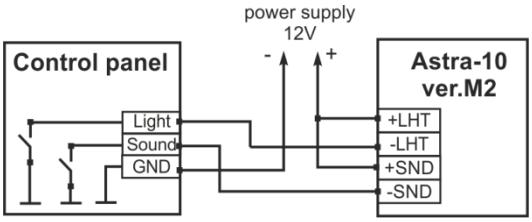


Figure 4

5.4.9 Seal hermetically the wire insertion hole to protect the alerter from ingress of dust and insects.
5.4.10 Re-install the cover.

6 Maintenance

To provide failsafe operating of an alarm system, do the maintenance works **at least one time per month**.
Maintenance of the alerter includes the following works:
– Inspection of alerter's housing integrity;
– Inspection of reliability of alerter's fixation on installation surface;
– Inspection of reliability of wire connections;
– Cleaning from contaminants;
– Inspection of alerter's operability by connecting it to a power supply source. LEDs should light on with equal brightness, embedded piezoelectric acoustic emitter should issue sound signals.

7 Labeling

On the label attached to the housing of the alerter are:
– manufacturer's trademark;
– abbreviated name of the alerter;
– firmware version;
– month (the first three letters) and year (the last two digits) of manufacture;
– conformity mark (if certificate is available);
– bar-code duplicating the textual information.

8 EC Conformity Declarations

This product is in conformity with the provisions of:
EMC 89/336/EEC
EN 61000-6-3:2005 Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments
EN 50130-4/1995 + A1:1998 + A2:2003 + Corrig. 2003 Alarm systems - Part 4: Electromagnetic compatibility - Product family standard: Immunity requirements for components of fire, intruder and social alarm systems
EN 60950-1: 2001+A11:2004+Corrig.2004 Safety of information technology equipment

9 Recycling

The alerter is not dangerous for people's life and health and safe for environment; at expiry of working life it should be recycled without special measures concerning environmental protection.

10 Warranty

10.1 Quality Management System meets provisions of ISO 9001-2011.
10.2 The manufacturer guarantees compliance with the technical requirements of the siren provided the customer observes the standards of operation, transportation, storage and installation of the device.
10.3 The warranty retention cycle is 2 years and 6 months from the date of manufacturing.
10.4 The warranty lifetime is 2 years from the date of operation startup but not longer than 2 years 6 months from the date of manufacturing.
10.5 The manufacturer commits to replace or repair the product during the warranty period.
10.6 The warranty does not come into effect in following cases:
- operating manual is missing;
- mechanical damage of the product;
- repair of the alerter by any other party except the manufacturer.

10.7 The warranty is applied to the alerter only, not to equipment of third part manufacturers used jointly with the alerter.
The manufacturer bear no responsibility for death, injury, damage of property or any other kinds of accidental or premeditated damages, based on user's statement that the device failed to implement its function.

Warranty service and technical support:
TEKO-TD

Prospekt Pobedy str. 19
420138 Kazan, Russia
Phone: +7 (843) 261-55-75
Fax: +7 (843) 261-58-08
E-mail: info@teko.biz
support@teko.biz
Web: www.teko.biz

Made in Russia