## Appendix A

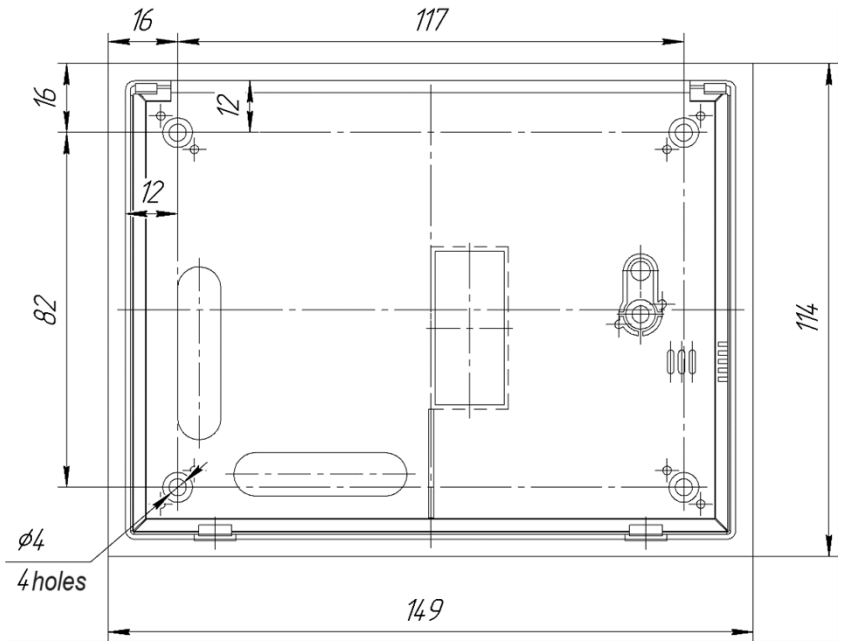



Figure A.1 – Installation dimensions of the keypad

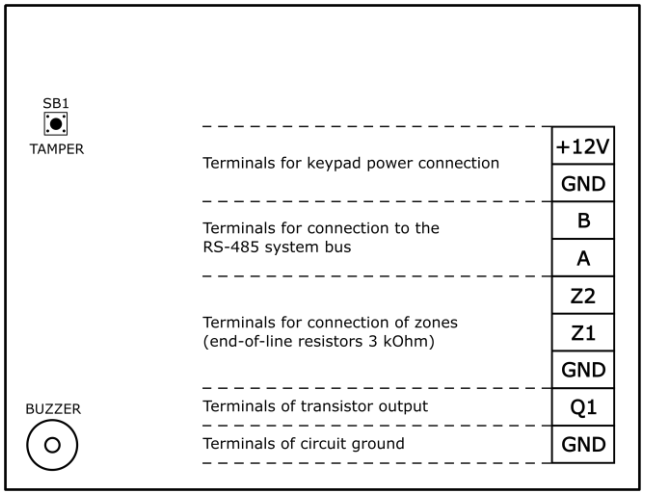
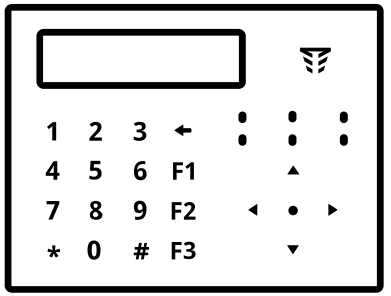



Figure A.2 - Appearance of keypad board elements

TIRAS technologies




# K-GLCD+

Keypad

User manual

**“Tiras-12” LTD**
Ukraine, Vinnytsia,
Khmelnytskoho Shose lane 2, b. 8

More information on the site
**tiras.technology**

Edition: 20.02.25

## 1 GENERAL INFORMATION

K-GLCD+ is a keypad designed to control the security alarm system (arming, disarming, control of automation, etc.) and review its state. The keypad is compatible with Orion NOVA S (LTE), Orion NOVA M (LTE), Orion NOVA L (LTE) security control panels (further – SCP).

Touch buttons on the front panel are used to control the alarm system. The keypad is equipped with OLED display and LED indicators to display the status of the system (arming, faults, alarms). The keypad has terminals for connecting two zones and transistor output that can operate in open collector or remote LED mode.

The keypad has a built-in contactless reader, which allows the use of NFC tags (cards and key fobs) operating at 13.56 MHz as a user access ID. Identifiers that meet ISO14443A, and ISO14443B (MIFARE Classic, MIFARE Ultralight, etc.) are supported. The contactless reader is located at the top of the keypad under the logo.

The keypad is intended for 24h work in premises with regulated climatic conditions without the direct influence of climatic factors of the environment.

## 2 SPECIFICATIONS

The specifications of the keypad are shown in the table below.

Table 2.1 – Specifications of the keypad

| Parameter | Value |
|---|---|
| Sensor Type | Capacitive |
| Display Type | OLED |
| Supply voltage, V | 9.3 – 15.2 |
| Max. current consumption, mA | 220 |
| Number of zones | 2 |
| Number of transistor outputs | 1 |
| Max. current switched by transistor output, mA | 50 |
| Radiofrequency band of the NFC reader, MHz | 13.553 – 13.567 |
| Magnetic field strength measured at a distance of 10 m, dBmkA/m, not more than | 42 |
| Overall dimensions without stand legs (L×W×H), mm | 149×114×18 |
| Overall dimensions with stand legs (L×W×H), mm | 149×114×25 |
| Weight, g | 250 |
| Operating temperature range at relative humidity up to 75% without condensation | from –10°C to +40°C |
| Average service life, years | 10 |

## 3 INSTALLATION AND PREPARATION FOR WORK

### 3.1 Mounting

The keypad is designed for wall mounting. At the base of the case, there are six holes for mounting on the wall (see Figure A.1, Appendix A). The maximum permissible deviation of the mounting points should not exceed 1 mm.

### 3.2 Connections

**Caution:**

1. All connections must be carried out by qualified personnel in accordance with the electrotechnical regulations and fire safety regulations.
2. Installation and connections must be carried out with the power supply disconnected.
3. The stranded wires must be crimped by tips.
4. Printed circuit board of the keypad contains static-sensitive components. To avoid damage to sensitive components before handling any boards you should discharge static electricity in your body by touching the ground.

Enter the wires via appropriate holes of the keypad case and make all connections in accordance with SCP user manual. Make sure that the wires are securely fixed in the keypad terminals. After installation and connection are complete, close the keypad case.

The appearance and description of the elements of the keypad board are shown in Figure A.2 of Appendix A.

**Warning!** For the correct operation of the touch key of the keypad when it is turned on there should be no foreign objects on the touch-field, the keypad case should be closed. After installing the keypad, the protective film should be removed from the front panel before turning it on.

### 3.3 Assigning

Each keypad has a unique nine-digit serial number. This number is used to assign the keypad to the SCP using the oLoader II software. The serial number of the keypad is specified on its printed circuit board and duplicated on the keypad case.

## 4 OPERATION WITH THE KEYPAD

Operation with the keypad is carried out in accordance with the SCP User manual.

The keypad has a built-in buzzer (Figure A.2 of Appendix A), which beeps when you press the keys and execute commands with beeps.

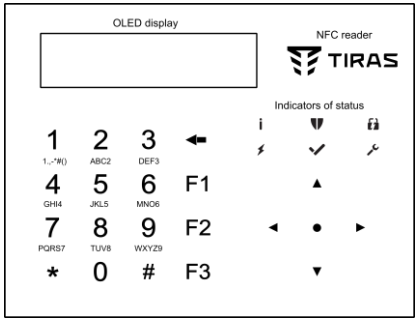



Figure 4.1 - Appearance of the K-GLCD+ keypad

## 5 PACKAGE CONTENTS

After unpacking, visually inspect the keypad to make sure it does not have mechanical damage and check the completeness according to the table below.

Table 5.1 – Package contents of the keypad

| Name | Quantity, (pcs.) |
|---|---|
| K-GLCD+ keypad | 1 |
| User manual | 1 |
| Stand legs | 5 |

*ATTENTION! The characteristics and package contents of the keypad may be changed by the manufacturer without additional notification.*

## 6 REGULATORY COMPLIANCE

Hereby, "Tiras-12" LTD declares that the radio equipment model K-GLCD+ is in accordance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: tiras.technology.

The K-GLCD+ keypad is designed so that it can be operated as intended in the EU countries, without violating the applicable requirements for the use of the radio spectrum.

The K-GLCD+ keypad has no restrictions on commissioning in EU countries and does not require obtaining a permit for use.

In accordance with the EU Directive 2012/19/EU on waste electrical and electronic equipment, the keypad should be disposed separately from household waste. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points.

## 7 WARRANTY OBLIGATIONS AND REPAIR INFORMATION

The manufacturer guarantees compliance of the keypad with the declared characteristics during the warranty period of operation and under the conditions of transportation, operation and storage.

The warranty period is 36 months and is valid from the date of sale specified below or in other accompanying documents (contract, invoice, etc.). If you do not provide a document confirming the date of sale of the keypad - the warranty period is calculated from the date of manufacture of the keypad.

_____ _____ seller's stamp

(date of sale) (seller's signature)

The keypad is repaired by the manufacturer or its authorized representative. The keypad is repaired for free in case the warranty period has not expired, and it was operated in accordance with the accompanying documentation. For repairs, the keypad is sent together with the document, which indicates the date of sale, and with a letter stating: the nature of the fault, the place of operation, contact person for repair.

If the keypad is not working properly, please contact technical support first, perhaps this problem can be resolved remotely.

The date of manufacture of the keypad and/or its serial number are indicated on the keypad label and packaging.

Information about limitation of liability is available in the "Warranty" section on the website: tiras.technology.

## 8 CONTACTS OF THE MANUFACTURER

**"Tiras-12" LTD, Ukraine, Vinnytsia, Khmelnytskoho Shose lane 2, b. 8**

**Sales department:** market@tiras.ua

**Technical support:** support@tiras.ua

**Warranty and post-warranty service:** otk@tiras.ua