



[oLoader II](#)
(Android)



[oLoader II](#)
(iOS)



[oLoader II](#)
(Windows/MacOS)



[Control NOVA II](#)
(Android)



[Control NOVA II](#)
(iOS)

APPENDIX A

Table A.1 – Technical specifications of detectors, key fob

Parameter	Value
X-Motion	
Sensor type	PIR
Maximum motion detection distance, m	12
The angle of motion detection, horizontal	88.5°
Weight, g	75
Overall dimensions (W×H×D), mm	61×98×50
Battery, lithium battery	1×CR123A
Supply voltage, V	3
Maximum range of radio communication in open space and in the absence of radio interference, m	3000
X-Shift	
Sensor type	Magnetic
Maximum distance between the magnet and the detector on a non-metallic surface, mm	15
Maximum distance between the magnet and the detector on a metal surface, mm	4
Net weight (with magnet), g	32
Overall dimensions of the detector (W×H×D), mm	20×89×20
Overall dimensions of the magnet (W×H×D), mm	11×45×7
Battery, lithium battery	1×CR123A
Supply voltage, V	3
Maximum range of radio communication in open space and in the absence of radio interference, m	3000
X-Key	
Number of buttons	4
Weight, g	14
Overall dimensions (L×W×H), mm	36×63×12
Battery, lithium battery	1×CR2032
Supply voltage, V	3
Maximum range of radio communication in open space and in the absence of radio interference, m	1200
Common values for detectors	
Radio frequency range, MHz	868.0-868.6
Maximum transmitter power, mW	25
Maximum bandwidth, kHz	100
Maximum deviation of the channel frequency, kHz	6
Encryption	AES
Protection class	IP 30
Operating temperature range at relative humidity up to 75% without condensation	from -10 °C to +40 °C
Average battery life, years	5
Average service life, years ¹	10

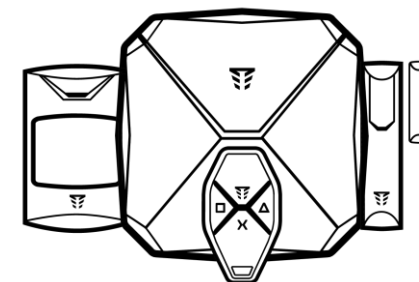
Note. 1. Does not apply to the battery.

Table A.2 – Technical specifications of the SCP

Parameter	Value
Maximum number of wireless detectors	64
Maximum number of wireless key fobs for control the system	32
Maximum numbers of wireless keypads	4
Maximum number of wireless sirens	4
Maximum number of repeaters	4
Maximum SRD transmitter power, mW	25
Maximum bandwidth, kHz	100
Maximum deviation of the channel frequency, kHz	6
Maximum number of groups in the system	16
Maximum number of users in the system	32
Communication protocol with ARC ¹	NOVA, Sur-Gard (Contact ID)
Radio technology, max RF output power	EGSM900 (max RF output power 33 dBm ± 2 dB): (TX:880.1–915.0) / (RX:925.1–960.0) MHz, DCS1800 (max RF output power 30 dBm ± 2 dB): (TX:1710.0–1785.0) / (RX:1805.0–1880.0) MHz, LTE-FDD (max RF output power 23 dBm ± 2 dB): B20 (TX:832–862) / (RX:791–821) MHz, B8 (TX:880–915) / (RX:925–960) MHz, B7 (TX:2500–2570) / (RX:2620–2690) MHz, B3 (TX:1710–1785) / (RX:1805–1880) MHz, B1 (TX:1920–1980) / (RX:2110–2170) MHz, Wi-Fi (max RF output power 20 dBm): 2412.0 – 2484.0 MHz, SRD (max RF output power 13.98 dBm): 868.0 – 868.6 MHz
Main power source: ▪ supply voltage (AC), V ▪ frequency, Hz	187-253 50 ± 1
Alternative power source (via USB Type-C cable): ▪ voltage, V ▪ current, A	5 1.5
Maximum current consumption from main power source, mA	100
Alternative (backup) power supply (battery): ▪ voltage, V ▪ capacity, mA-h	3.7 2600
The operation time from a fully charged battery, hours, not less than	24
Protection class	IP 30
The operating temperature range with relative humidity up to 75% without condensation	from -10°C to +40°C
Dimensions (L×W×H), mm, (± 5 mm)	170×170×34
Net weight (without battery), kg	0.4
Average service life, years ²	10

Note. 1. Alarm Receiving Center.

2. Does not apply to the battery.



Orion NOVA X (LTE). Basic kit

Wireless security system kit

User manual



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



More information on the site
tiras.technology

1 GENERAL INFORMATION

Orion NOVA X (LTE). Basic kit is a wireless security system kit that consists of devices designed to protect the entrance group (front door and corridor). If necessary, the kit can be expanded with additional detectors, sirens, keypads, repeaters, and key fobs – up to 64 devices in total.

Orion NOVA X (LTE). Basic kit includes the following devices:

SCP Orion NOVA X (LTE)



Orion NOVA X (LTE) is a wireless security control panel (further – SCP) designed to build an autonomous or console security alarm system in combination with wireless devices manufactured by “Tiras-12” LTD (further – system).

Wireless opening detector X-Shift



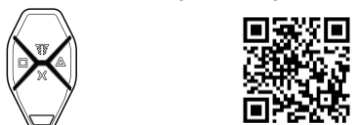
X-Shift is a wireless opening detector (further – detector) designed to detect the opening of a window or door using a digital magnetic field sensor. The X-Shift is equipped with the terminals for the wired opening detector connecting.

Wireless motion detector X-Motion



X-Motion is a wireless motion detector (further – detector) with immunity to animals weighing up to 20 kg, is designed to detect the motion of persons in a protected premises. The motion is determined by the level of infrared radiation of the object using a pyroelectric infrared sensor.

Wireless key fob X-Key



X-Key is a wireless key fob (further – key fob) designed to control burglary alarm system modes (arming, disarming, arming in "I'm home" and "Hold-up button" modes).

Technical specifications of the control panel, opening detector, motion detector, and key fob are given in Tables A.1 and A.2.

2 OPERATION WITH THE SYSTEM

Before installing the SCP, detectors, and key fob, you must read this document and the corresponding document for each device, which can be downloaded by scanning the QR codes above.

When installing or operating devices, follow general electrical safety rules for appliances and relevant electrical safety regulations. Do not disassemble the SCP while powered on and never use a damaged power cable.

For configuration devices of the system, there is the specialized oLoader II software. It can be installed on operating systems Windows/macOS and iOS/Android.

The system can be controlled using the key fob and X-Pad wireless keypad (not included in the kit) or the Control NOVA II software for Android and iOS devices.

Links to the software are provided in the QR codes at the end of this document.

Information on setting up and operating the system is provided in the SCP user manual.

The user manual is available at the link in the QR code below.



3 PACKAGE CONTENTS

After unpacking, visually inspect each device to ensure it does not have mechanical damage, and check the completeness according to Table 3.1.

Table 3.1 – Package contents of Orion NOVA X (LTE). Basic kit

Name	Quantity, (pcs.)
User manual	1
Orion NOVA X (LTE)	
SCP Orion NOVA X (LTE)	1
Bracket ¹	1
Power cord ¹	1
Dowel 6×30	3
Screw for dowel 3×30	3
Screw 2.2×6.5	1
X-Motion	
X-Motion detector	1
Bracket ¹	1
Battery CR123A (VARTA) ¹	1
Dowel 6×30	3
Screw for the dowel 3.0×30	3
Double-sided glue tape 9×30×1	2
X-Shift	
X-Shift detector	1
Bracket ¹	1
Magnet	1
Battery CR123A (VARTA) ¹	1
Screw 3.0×12	4
Double-sided glue tape 9×30×1	2
X-Key	
X-Key key fob	1
Battery ¹ CR2032	1

Note.1. Pre-installed in the device.

ATTENTION! The specifications of each device and package contents of Orion NOVA X (LTE). Basic kit may be changed by the manufacturer without additional notification.

WARNING - KEEP OUT OF REACH OF CHILDREN!



If the battery is swallowed or placed inside any part of the body, it can cause severe or fatal injuries within 2 hours. Seek medical attention immediately.

4 REGULATORY COMPLIANCE



Hereby, “Tiras-12” LTD declares that the radio equipment models Orion NOVA X (LTE), X-Motion, X-Shift, and X-Key are in accordance with Directive 2014/53/EU.

Orion NOVA X (LTE), X-Motion, X-Shift, and X-Key are designed so that they can be operated as intended in the EU countries, without violating the applicable requirements for the use of the radio spectrum.

Orion NOVA X (LTE), X-Motion, X-Shift, and X-Key has no restrictions on commissioning in EU countries and do not require obtaining a permit for use.

Orion NOVA X (LTE), X-Motion, X-Shift, and X-Key comply with RoHS Directive 2011/65/EU.

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



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



In accordance with EU Directive 2006/66/EC, batteries (included in the products) should be disposed of separately from household waste. For proper recycling, return the batteries to your local supplier or dispose of them at designated collection points.

5 WARRANTY OBLIGATIONS AND REPAIR INFORMATION

The manufacturer guarantees compliance with the devices included in Orion NOVA X (LTE). Basic kit with the declared specifications 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 Orion NOVA X (LTE). Basic kit – the warranty period is calculated from the date of manufacture of each individual device.

(date of sale)

(seller's signature)

seller's stamp

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

If the device or devices are not working properly, please contact technical support first, perhaps this problem can be resolved remotely.

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

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



6 CONTACTS OF THE MANUFACTURER

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

Sales department: market@tiras.ua

Technical support: support@tiras.ua

Warranty and post-warranty service:

otk@tiras.ua