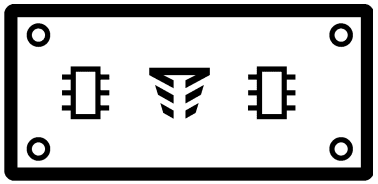
TIRAS technologies



# M-OUT2R

Outputs expansion module

User manual

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

More information on the site
[tiras.technology](tiras.technology)

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## 1 GENERAL INFORMATION

M-OUT2R is an outputs expansion module (further – module) designed to increase the number of relay outputs by 2 relays in security alarm systems. The module is compatible with the security control panels (further – SCP) Orion NOVA S (LTE), Orion NOVA M (LTE), Orion NOVA L (LTE) and M-ZP mBox module.

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

## 2 SPECIFICATIONS

Specifications of the module are shown in Table 2.1.

Table 2.1 – Specifications of the module

| Parameter | Value |
|---|---|
| Supply voltage, V | 10.3-15.2 |
| Maximum current consumption, mA | 40 |
| Maximum output switching voltage/ current (each):<br>▪ AC<br>▪ DC | <br>42 V / 10 A<br>30 V / 5 A |
| Cross-section of connection wires, $mm^2$ | 0.22-2.5 |
| Overall dimensions without stand legs (L×W×H), mm | 30×26×65 |
| Weight, g | 30 |
| Operating temperature range at relative humidity up to 75% without condensation | from -10 °C to + 40 °C |
| Average service life, years | 10 |

## 3 PREPARATIONS FOR OPERATION

The module is designed for installation in the universal slot of the SCP or M-ZP mBox module. At the bottom of the board, there are 2 holes for fixing the module on the SCP mainboard with the racks (supplied).

**Caution:**

1. Installation and connections must be carried out with the SCP or M-ZP mBox module power supply disconnected.
2. Do not apply power to the wires connected to relay terminals until connection is complete.
3. The wires connected to relay terminals should have cross-section corresponding to the current of the connected load.
4. The load current of devices connected to the module relay must not exceed its maximum switching current (see p.3, Table 2.1).
5. Printed circuit board of the module 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.

The module is configured in the SCP settings according to its user manual.

## 4 PACKAGE CONTENTS

After unpacking, visually inspect the module to make sure it has no mechanical damage, check the completeness according to Table 4.1.

Table 4.1 – Package contents of the module

| Name | Quantity, (pcs.) |
|---|---|
| M-OUT2R module | 1 |
| User manual | 1 |
| Stand leg | 2 |

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

## 5 REGULATORY COMPLIANCE

Hereby, "Tiras-12" LTD declares that the model M-OUT2R complies with EMC Directive 2014/30/EU, 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 module should be disposed of 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.

## 6 WARRANTY OBLIGATIONS AND REPAIR INFORMATION

The manufacturer guarantees compliance of the module 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 module - the warranty period is calculated from the date of manufacture of the module.

_____ _____ seller's stamp
(date of sale) (seller's signature)

The module is repaired by the manufacturer or its authorized representative. The module 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 module 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 module is not working properly, please contact technical support first, perhaps this problem can be resolved remotely.

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

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

## 7 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