

# **Roger Worldwide Limited Warranty**

(valid only with proof of purchase and when completely fulfilled)

#### Please note:

In the unlikely event you experience difficulties with your ROGER product, please contact ROGER's Technical Support Department to resolve the problem. Call us from Monday through Friday 8:00 A.M. to 4:00 P.M. (GMT + 1) or send email: support @roger.pl.

#### ROGER Sp.j.

Gosciszewo 59, 82-416 Gosciszewo pomorskie, Poland

Tel: +48 55 272 0132 Fax: +48 55 272 0133

Tech. support: +48 55 267 0126

http://www.roger.pl

## PRODUCT INFORMATION:

|                | Product Name:     |  |
|----------------|-------------------|--|
|                |                   |  |
|                |                   |  |
|                |                   |  |
|                |                   |  |
|                |                   |  |
|                | Sarial Number     |  |
|                | Seriai Number.    |  |
| te of Purchase | Purchase receipt: |  |

## WARRANTY TERMS:

ROGER sp.j. (Roger) Worldwide Limited Warranty is applicable worldwide and supersedes any other warranty.

#### WARRANTY

This limited warranty extends only to the original purchaser of the Roger product.

#### WARRANTY DURATION

Roger warrants to You (original purchaser) that for a period of one year (the "Warranty Period") from the date of original purchase, limited by the end of 3 years period starting with the date of manufacture, your Roger Product will be substantially free of defects in materials and workmanship under normal use.

#### WARRANTY COVERAGE

If the Product proves defective during the Warranty Period please contact Roger Technical Support. BE SURE TO HAVE YOUR PROOF OF PURCHASE ON HAND WHEN CALLING.

If ROGER receives defective product (together with a copy of your original proof of purchase and RMA Number), ROGER will either repair or replace parts which, under normal conditions of use and service, prove to be defective in material or workmanship.

No charge will be made for labor or parts with respect to defects covered by this warranty, provided that the work is done by Roger or a Roger authorized service center.

This warranty does not cover expenses incurred in the transportation, removal or reinstallation of the product, whether or not proven defective.

Replacements or repairs furnished under this warranty are subject to the same terms and conditions of the original warranty.

# **EXCLUSIONS AND LIMITATIONS**

This warranty does not apply if the Product (a) has been altered, except by Roger, (b) has not been installed, operated, repaired, or maintained in accordance with instructions supplied by Roger, or (c) has been subjected to abnormal physical or electrical stress, misuse, negligence, or accident. In addition, due to the continual development of new techniques for intruding upon and attacking networks, Roger does not warrant that the Product will be free of vulnerability to intrusion or attack.

This warranty does not cover repair or replacement where normal use has exhausted the life of a part or instrument.

ALL IMPLIED WARRANTIES AND CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO THE DURATION OF THE WARRANTY PERIOD. ALL OTHER EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF NON-INFRINGEMENT, ARE DISCLAIMED.

IN NO EVENT WILL ROGER BE LIABLE FOR ANY LOST DATA, REVENUE OR PROFIT, OR FOR SPECIAL, INDIRECT, CONSEQUENTIAL, INCIDENTAL OR PUNITIVE DAMAGES, REGARDLESS OF THE THEORY OF LIABILITY (INCLUDING NEGLIGENCE), ARISING OUT OF OR RELATED TO THE USE OF OR INABILITY TO USE THE PRODUCT (INCLUDING ANY SOFTWARE), EVEN IF ROGER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT WILL ROGER: LIABILITY EXCEED THE AMOUNT PAID BY YOU (original purchaser) FOR THE PRODUCT, WITH THE LIMITATION THAT THE AMOUNT CAN NOT BE HIGHER THAN ROGER'S RECOMMENDED ENDUSER PRICE (WHICH IS AVAILABLE ON REQUEST DIRECTLY FROM ROGER).

The foregoing limitations will apply even if any warranty or remedy provided under this Agreement fails of its essential purpose. The terms of this warranty may not be varied by any person, whether or not purporting to represent or act on behalf of Roger.

This warranty represents the full extent of Roger's responsibility. This warranty shall become null and void in the event of a violation of the provisions of this limited warranty.

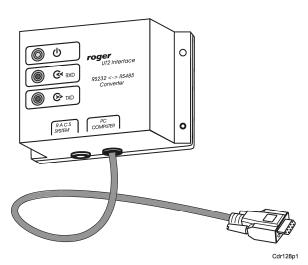
Date, sign and stamp of the seller

KG/rev.05/EN

X

# UT- 2

# COMMUNICATION INTERFACE



**INSTALLER MANUAL** 

roger

UT-2 v3.1 EN Rev.C.doc 2007-10-18

# **GENERAL DESCRIPTION**

The UT-2 operates as an electrical converter between RS232 and RS485 communication interfaces, it can be used for programming of single PR series access controller or for management of a networked access system *RACS* (*Roger Access Control System*). The UT-2 is delivered in black plastic case and offers three signalization LEDs. The UT-2 is equipped with 1.5m cable terminated with DB-9 connector which is dedicated for connection to PC, connection with an access system or individual controller is carried out through screw terminals.

# **RS485 Transmission Control**

Normally, the UT-2 operates in *receive* mode, it means that all data received by UT-2 through RS485 lines is shifted immediately to RS232 serial interface. With the first byte of data received from RS232, the UT-2 immediately switches the RS485 interface (lines A and B) into *transmit* mode. The RS485 remains in that mode as long as data is received through RS232. The RS485 returns automatically to *receive* mode after 1.5 ms time from the moment when last bit of data has been received from RS232.

Note: The method which is used for RS485 transmission control is developed for PR series of access controllers from Roger. Optionally, the UT-2 can be used in other application which require RS232-RS485 conversion but in such cases installer must perform adequate tests to ensure that UT-2 will operate satisfactory in given applications.

# **RTS AND CTS LINES**

Generally, the RTS and CTS lines are dedicated to improve communication between managing computer and access systems which are equipped with CPR32-SE. The use of RTS and CTS lines in such systems is not obligatory and may be omitted. When used both lines must be connected to adequate input and output of CPR32-SE network controller.

Note: The use of RTS and CTS lines requires PR Master v4.3 and CPR32-SE v30 or higher.

# **LED INDICATIONS**

The UT-2 is equipped with three LEDs which functions are characterized below.

| LED   | Symbol                  | Color | Function                           |
|-------|-------------------------|-------|------------------------------------|
| POWER | Ð                       | Amber | Power supply                       |
| TXD   | <b>(</b> \tilde{\Delta} | Green | Data send to RS485 comm. Bus       |
| RXD   | ૯<                      | Red   | Data received from RS485 comm. bus |

## INSTALLATION

Locate interface close to PC computer (max. distance is 15m) in a dry area, all electrical connections must be made with power supply off. UT-2 requires 12VDC supply and up to 150mA current. Interface can be supplied from any device installed in access system which offer DC supply output or from separate supply source. Note, that supply minus of UT-2 must have the same potential, in respect to earth, as other devices connected to the same RS485 bus. This condition can be assured by means of additional wire which will connect all supply minuses in a system or by adequate grounding arrangements. The UT-2 can be connected to RS485 communication bus in any, arbitrary selected location. The topology of RS485 communication bus in RACS system is free and may incorporate *tree*,



- 2 -

| Notes |                              |                             |  |
|-------|------------------------------|-----------------------------|--|
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
| No.   | Fault description            | Date of repair              |  |
| NO.   | (filled out by the customer) | (filled out by the          |  |
|       | (mod out by the customer)    | (filled out by the service) |  |
| 1.    |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
| 2.    |                              |                             |  |
| ۷.    |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
| 3.    |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
| 4.    |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
| 5.    |                              |                             |  |
| J.    |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |
|       |                              |                             |  |

. . .

#### Please note:

In the unlikely event you experience difficulties with your ROGER product, please contact ROGER's Technical Support Department to resolve the problem.

They may be reached at +48 55 2670126 or support@roger.pl Monday through Friday 8:00 A.M. to 4:00 P.M. (GMT + 1).

You can also contact the Technical Support Department by fax at +48 55 2720133.

If it is determined that you need to return the product, the following procedure must be followed to ensure prompt service

- Any product returned to ROGER must have an RMA number. ROGER will refuse any package that is returned without a valid RMA number.
- 2. ROGER products cannot be returned for any reason other than defective
- 3. Defective products will only be accepted in accordance with the ROGER's warranty requirements.
- 4. All RMA numbers will be valid for a period of not longer than 14 days.

Any package send to ROGER after 14 days of issuance will be refused and shipped back to you at additional cost.

- If you purchased Roger product not directly from Roger company, please return it to the place where you bought it.
- 6. In order to receive RMA number please fill out the following form.
- Once the completed form has been received and processed it will be returned to you with a RMA number appended. This is your authority to return the product.
- 8. Please ensure that this document accompanies the product when it is returned and that a copy is retained such that you can refer to it when requesting an update on the progress of a repair.
- 9. Use one RMA number per one returned product.
- 10. Put your RMA number on the shipping/address label
- 11. Please make sure that you always return product in appropriate packaging together with a RMA form in order to avoid damages during transit, You are advised to get proof of delivery
- 12. Some repairs may be chargeable and you will receive formal advice if this is the case.
- 13. If product returned as defective is found not to be defective, it will be returned back to the customer at his expenses. In that case the customer will be also charged with costs which may arise after triggering the RMA procedure.
- 14. If the product is beyond economical repair then the following options will be given:

**Scrapped** – This will occur automatically if ROGER does not receive a reply to three notices send to the customer at least in 5 days interval.

(There may be some exceptions to this) or if you instruct us during these communications.

Returned - However this will incur shipping charges.

**Note:** All repairs are dealt with as rapidly as possible although repair time is not guaranteed. Please contact us and we will try our best to suggest an estimated lead-time.

UT-2 v3.1 EN Rev.C.doc 2007-10-18

star or any combination of them. Also, no terminating resistors are required on the ends of communication bus.

Note: Some PC computers with Windows operating system may detect the UT-2 unit as **Microsoft BallPoint** or similar pointing device. Such a faulty detection leads to problem with computer mouse and finally corrupts computer operation entirely. In order to fix this problem installer should enter **Windows Device Manager** and switch off detection of mentioned pointing device.

# **EXTENDING COMMUNICATION DISTANCE**

The UT-2 may be used for successful communication on distances up to 1200m. When longer distance is required a UT-3 interface can be used. The use of two UT-3 interfaces creates communication link and extends communication distance by next 1200m. For communication between access networks or controllers located in different buildings or even cites the UT-4 interface can be used. The UT-4 interface enables communication with access controller(s) or entire access networks through 100/10BaseT Ethernet network with TCP/IP communication protocol.

| Ordering |                                                       |  |
|----------|-------------------------------------------------------|--|
| UT-2     | UT-2 interface with plastic case and 1.5m cable to PC |  |

| History   |                                                                                                                       |  |
|-----------|-----------------------------------------------------------------------------------------------------------------------|--|
| UT-2 v3.0 | The RTS and CTS control lines to CPR network controller added.                                                        |  |
| UT-2 v3.1 | The polarity of RTS and CTS line to CPR network controller reversed, low level on RTS and CTS is now an active state. |  |

| Connection terminals assignments |       |                                         |  |
|----------------------------------|-------|-----------------------------------------|--|
| Name                             |       | Function                                |  |
| GND                              |       | Supply minus                            |  |
| +12V                             | RS485 | Supply plus                             |  |
| SHLD                             |       | RS485 cable shield                      |  |
| Α                                |       | RS485 interface, line A                 |  |
| В                                |       | RS485 interface, line B                 |  |
| RTS                              |       | RTS line to CPR32-SE network controller |  |
| CTS                              |       | CTS line to CPR32-SE network controller |  |
| GND                              |       | RS232 interface, ground                 |  |
| TXD                              |       | RS232 interface, line TXD               |  |
| RTS                              | 232   | RS232 interface, line RTS               |  |
| RXD                              | RS232 | RS232 interface, line RXD               |  |
| CTS                              |       | RS232 interface, line CTS               |  |
| SHLD                             |       | RS232 cable shield                      |  |

- 3 -



UT-2 v3.1 EN Rev.C.doc 2007-10-18

| Technical specification               |                                  |  |  |
|---------------------------------------|----------------------------------|--|--|
| Power supply                          | 1015VDC                          |  |  |
| Average current consumption           | ~ 60mA                           |  |  |
| Maximum current consumption           | ~ 150mA                          |  |  |
| Operating temp. range                 | 0+55° C.                         |  |  |
| Max. communication distance for RS232 | 15m                              |  |  |
| Max. communication distance for RS485 | 1200m                            |  |  |
| Relative humidity                     | 10 to 95% (without condensation) |  |  |
| Dimensions                            | 100 x 68 x 35 mm                 |  |  |
| Weight                                | ~80g                             |  |  |



The symbol of a crossed-through waste bin on wheels means that the product must be disposed of at a separate collection point. This also applies to the product and all accessories marked with this symbol. Products labeled as such must not be disposed of with normal household waste, but should be taken to a collection point for recycling electrical and electronic equipment. Recycling

helps to reduce the consumption of raw materials, thus protecting the environment.

roger

roger

# **RMA Form**

# Please note:

In the unlikely event you experience difficulties with your ROGER product, please contact ROGER's Technical Support Department to resolve the problem. They may be reached at +48 55 2670126 or <a href="mailto:support@roger.pl">support@roger.pl</a> Monday through Friday 8:00 A.M. to 4:00 P.M. (GMT + 1). You can also contact the Technical Support Department by fax at +48 55 2720133. If it is determined that you need to return the product, the following procedure must be followed to ensure prompt <a href="mailto:support">septice</a>.

Company Name: .....

## ROGER Sp.j.

Gosciszewo 59, 82-416 Gosciszewo, pomorskie, Poland

Tel.: +48 55 272 0132 Fax: +48 55 272 0133

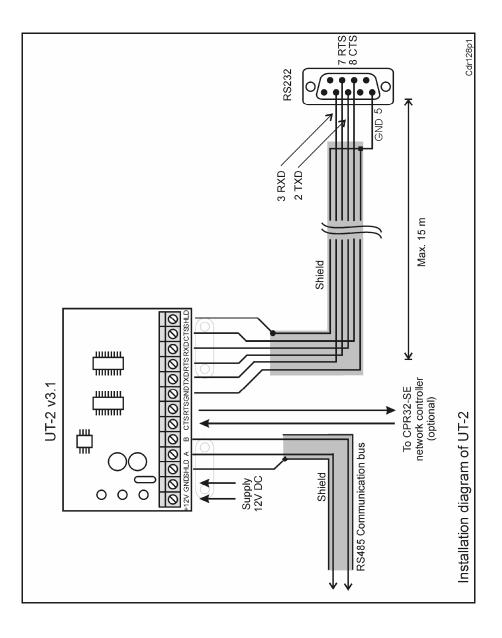
Tech. Support: +48 55 267 0126

http://www.roger.pl

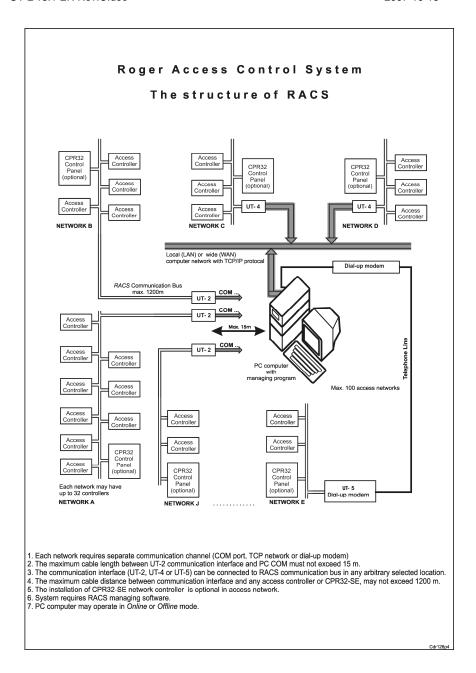
RMA no.

| _    |      |        |     |       |
|------|------|--------|-----|-------|
| CHIS | tome | er int | orm | ation |

| Contact Name:        | <del>.</del> .                                                                   |
|----------------------|----------------------------------------------------------------------------------|
| Street:              |                                                                                  |
| Code, City:          |                                                                                  |
| Country:             |                                                                                  |
| E-mail:              |                                                                                  |
| Contact phone:       |                                                                                  |
| Fax:                 |                                                                                  |
|                      |                                                                                  |
| Product information: | Fault description:                                                               |
| Product Name:        | what does not work, what is the reason for complaint, what can ROGER do for you? |
| Date of Purchase:    |                                                                                  |
|                      |                                                                                  |
| December returns     |                                                                                  |
| Reason for return:   |                                                                                  |
| Warranty repair:     |                                                                                  |
| Repair:              |                                                                                  |
| Complaint:           |                                                                                  |
| Wrong delivery:      |                                                                                  |
| Others:              |                                                                                  |
| (please specify)     |                                                                                  |



UT-2 v3.1 EN Rev.C.doc 2007-10-18



roger

- 6 -

# Deklaracja Zgodności EC Declaration of Conformity EC

 $\epsilon$ 

Producent urządzenia / manufacturer:

ROGER sp.j.

#### 82-416 Gościszewo 59, Poland

deklaruje z pełną odpowiedzialnością, że produkt: declares under his sole responsibility that the product:

## UT-2 Interfejs Komunikacyjny RS232-RS485 / RS232-RS485 Interface

nazwa produktu, nazwa handlowa, model / product name, trade name, model

jest zgodny z postanowieniami następujących dyrektyw: complies to the essential requirements and other relevant requirements of the directive:

| Numer dyrektywy / Number of directive | 1. 2004/108/EC (EMC) | Dotyczy / Applicable | 2. 99/05/EC (R&TTE) | Nie dotyczy / Not applicable | 3. 2006/95/EC (LVD) | Nie dotyczy / Not applicable |

oraz z wymienionymi poniżej normami, co zostało potwierdzone przez testy przeprowadzone przez laboratorium notyfikowane:

and is compliant with the following standards and/or other normative documents, what is confirmed by tests in accredited laboratory:

| Norma / Normative document | Dyrektywa / Directive                                                               | Laboratorium / Laboratory |
|----------------------------|-------------------------------------------------------------------------------------|---------------------------|
|                            | Kompatybilność elektromagnetyczna/<br>Electromagnetic compatibility (EMC)           |                           |
|                            | Wyposażenie radiowe i terminali<br>telekomunikacyjnych / Radio directive<br>(R&TTE) |                           |
|                            | Niskonapięciowe wyroby elektryczne/<br>Low voltage directive (LVD)                  |                           |

Informacje dodatkowe / Additional information:

Miejsce przechowywania dokumentacji technicznej: Roger Sp.j. 82-416 Gościszewo 59. The technical documentation is kept by Roger Sp.j. in 82-416 Gościszewo 59, Poland.

Gościszewo 20/07/2007

Miejsce i data wystawienia deklaracji Place and date of issue of this declaration Gragor Lawler
Grzegorz Wensker

Grzegorz Wensker

Dyrektor Techniczny / Technical Manager