

U-Prox-mini 485 proximity reader

User manual



Introduction

The proximity reader U-Prox-mini is intended to be applied in different access control systems, using RS-485 interface. The reader is placed in elegant plastic case with two color LED indicator on front panel.

Types of cards

Integrated Technical Vision Ltd manufactures readers operating with amplitude modulation (ASK) and/or frequency modulation (FSK) proximity cards and tags.

Benefits

Case	
Material	ABS plastic
Color	black, gray, white
Dimensions	80 x 45 x 12,5 mm
Weight	70 g
Ambient Conditions	
Oper. temp.	-35°C . . . +60°C
Stor. temp	-30°C . . . +80°C
Humidity	100% rel. at +25 °C
Electrical	
Voltage	+9. . . +16 VDC
Current	up to 30 mA
Max current	up to 50 mA
Voltage ripple	up to 500 mV _{p-p}

Distance of reading

Typical reading distance is 50-100 mm and depends on tag type used with it.

Wiring

Reader has 4 wire cable for connecting to the access control panel.

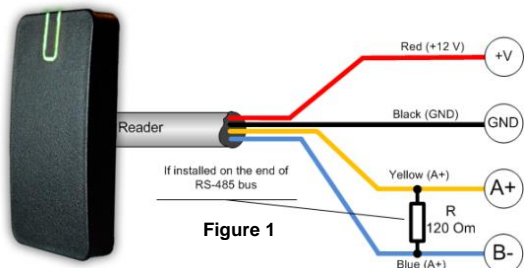
Table 1. The wires assignment.

Color	W2 / W3 / W4 / WS
Yellow	A+
Blue	B-
Red	+E (+V)
Black	GND

AWG22 multiwire signal cable is recommended. Using this cable the maximum length of 300 meters can be obtained.

To obtain longer length of cable increase the cross section of the power wires, or install a separate power supply directly at the reader.

Warning!!! When you connect the reader to the end of RS-485 bus, you have to set the terminating resistor between terminals A + and B-, as shown in Fig. 1. Terminator



resistor for the RS485 line is included.

Mounting

It is recommended to mount the reader on a wall closely to a door at appropriate height.

- ❗ Do not place the reader on the metal surfaces, since it causes decreasing of reading distance.
- ❗ If more than one reader is used in the system, place them not closer than 20 cm one from another to eliminate the effect of double reading.

Reader installation

- Loosen the screw at the bottom of the reader.
- Remove the top cover, remove the back plate.
- Mount the back plate of reader on the wall using the fixturing provided (see fig. 2).
- Prepare all wires for connection and connect them to the reader in according to Table 1 and User Manual of the access control panel to be utilized.
- Insert the reader in the back plate (see fig. 3).
- Put the top cover and tighten screw at the bottom of the reader.
- Ensure that all locking tabs are securely engaged.

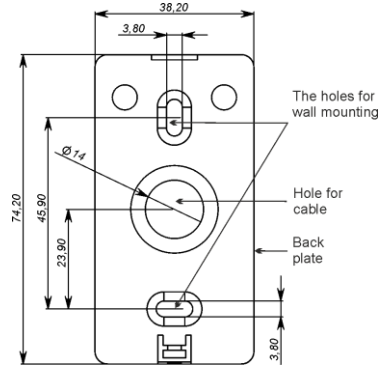


Figure 2

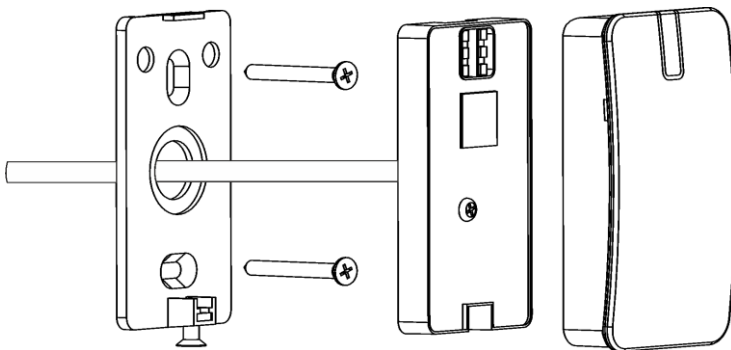


Figure 3

The Reader Operation

The RFID Card Code Reading

The card code reading is annunciated by built-in buzzer and LED lamp according to annunciation mode (see Section «Annunciation»). Repeated reading will be available after 0.75 sec if the card is removed from the reader sensing area.

Annunciation

The reader is provided with two-color LED indicators and buzzer. LED and buzzer work according to commands from control panel.

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Integrated Technical Vision Ltd. warrants that for a period of eighteen months from the date of purchase, the product shall be free of defect in materials and workmanship under normal use and that in fulfillment of any breach of such warranty, Integrated Technical Vision Ltd. shall, at its option, repair or replace the defective equipment upon return of the equipment to its repair depot. This warranty applies only to defects in parts and workmanship and not damages incurred in shipping or handling, or damages due to causes beyond the control of Integrated Technical Vision Ltd. such as lightning, excessive voltage, mechanical shock, water damage, or damage arising out of abuse, alteration or improper application of the equipment.

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