

# Z-2 EHR

Desktop RFID / iButton reader/writer 125KHz and 433.92MHz with USB connection

## User Manual

### 1. OVERVIEW

Z-2 EHR Desktop Reader is used for quick transfer of token databases from controllers to PC and back; this reduces service costs and makes easier using controllers for installers.

The adapter can also be used to read and transmit to PCs serial numbers of various tokens: both contactless (cards, key fobs etc.) and touch (iButton, DS1990A, DS1996L compliant) via the USB interface.

### 2. FEATURES

Adapter works with Z-5R/Z-5R 5000 controllers and Matrix-II K reader/controller.

Supported software: BaseZ5R, Guard Commander, GuardLight, CopyCard, PlaceCard, Guard SaaS.

Allows creating of token databases (for cards, key fobs etc.) with support of storing in the .dbff format files.

When filling databases manually, acquires serial numbers of tokens and automatically adds them to the databases.

Allows loading and storing the key/cards databases from/to DS1996L-compliant keys, so that databases can further be written to/read from the controllers.

Can directly read and write databases from/to internal memory for Z-5R/Z-5R 5000 controllers and Matrix-II K reader/controller via proprietary cable/adapter.

Allows to read serial numbers from: EM-Marine, HID (ProxCard II), Atmel (T5557) tokens, 433,92 MHz radio key fobs (IL-100), DS1990A/DS1996L compliant keys.

Connects to a PC via USB interface.

Can enter to PC the identification codes of various token types.

May be used in discount systems, payment systems, rental outfits, ACS, identification, personalisation and other projects using RFID technologies.

Allows firmware updates by users.

### 3. MOUNTING AND CONNECTION

Install the adapter in a convenient place for reading cards.

Connect the adapter to a PC USB port.

Install drivers from a supplied disk, or from [www.ironlogic.me](http://www.ironlogic.me) website.

Install the software required for adapter operation (BaseZ5R, CopyCard, PlaceCard, Guard Commander, GuardLight).

### 4. OPERATION

This adapter works with all abovementioned software, in accordance to their corresponding manuals.

#### Software and its purposes.

**BaseZ5R** - maintains the cards/key fobs/keys databases in PCs, and transfers the databases into Z-5R, Z-5R 5000, Matrix-II K via DS1996L-compliant keys or special adapter.

**PlaceCard** - transmits the serial numbers from cards/key fobs/keys to PCs and transfers the databases into Z-5R, Z-5R 5000, Matrix-II K via DS1996L-compliant keys or special adapter.

**CopyCard** - to create and copy EM-Marine/HID (ProxCard II) cards and key fobs onto Atmel (T5557) tokens.

Adapter can also be used as a desktop reader to enter tokens into the following software:

**Guard Commander, GuardLight and Guard SaaS.**

### Adapter Indication meaning:

When working with BaseZ5R software, the adapter's LED is green to confirm that adapter is powered. When a token is brought into working zone, the LED shortly changes colour to red, and a buzzer sounds. While holding the token in working zone, the green LED stays on. Also, when a token is in the working zone, an information exchange happens between the token and the adapter. As a result, either only token serial number is acquired, or data are read or written to/from Atmel (T5557) token memory.

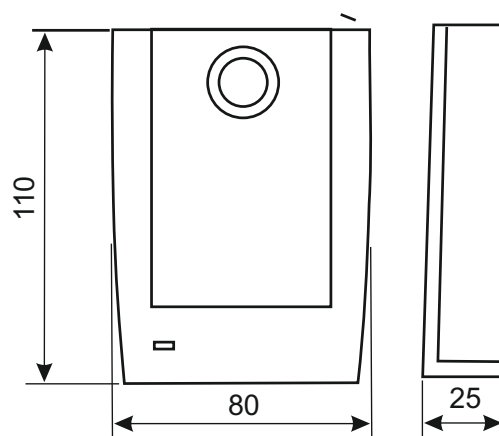
When working with PlaceCard, CopyCard and other software, the LED is red to confirm that adapter is powered. When a token is brought into working zone, the LED shortly changes colour to green, and a buzzer beep sounds. While holding the token in working zone, green LED is on. Also, when a token is in the working zone, an information exchange happens between the token and adapter which results into either only token serial number being acquired, or data are read or written to/from Atmel (T5557) token memory.

## 5. SPECIFICATIONS

Operating Frequencies: ..... 125 kHz, 433 MHz.  
Ability to store information into Atmel (Temic T5557) token memory: ..... Present.  
Supported token types: ..... EM-Marine, HID (ProxCard II), Atmel (T5557),  
433,92 MHz radio key fobs (IL-99, IL-100), DS1990A and DS1996K keys.  
Max. reading distance:  
- With EM-Marine, HID (ProxCard II), Atmel (T5557) tokens: ..... <4 cm;  
- With 433,92 MHz radio key fobs: ..... 10 m  
Interface to PC: ..... USB 2.0 Full-speed.  
Max. adapter to PC distance: ..... 1.8 m.  
Token reading indication: ..... buzzer signal, bicoloured LED.  
Casing material: ..... ABS coated plastic.  
Dimensions, mm: ..... 110 x 80 x 25.  
Weight: ..... 230 g max.

## 6. PACKAGE CONTENTS

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| Z-2 EHR Desktop Reader .....                        | 1 |
| Driver and software disk .....                      | 1 |
| Z-5R and Matrix-II K controller adapter cable ..... | 1 |
| USB 2.0A to mini-B5P Cable .....                    | 1 |
| DS1996L-compliant Key .....                         | 1 |
| CARD IL-05T card .....                              | 1 |
| IL-100 key fob .....                                | 1 |



## 7. OPERATIONAL CONDITIONS

Recommended air temperature: 5...40°C.

Humidity: ≤ 80% at 25°C.

If operational conditions are differing from described above, device specifications can deviate from specified values.

The controller is to be operated in absence of: precipitation, direct sunlight, sand, dust, water condensation.

## 8. LIMITED WARRANTY

This device is covered by a limited warranty for 24 months from the date of sale.

The warranty becomes void if:

- This Manual is not followed;
- Device has physical damage;
- Device has visible traces of exposure to moisture and aggressive chemicals;
- Device circuits have visible traces of being tampered with by unauthorised parties.

Under active warranty, the Manufacturer will repair the device or replace any broken parts, FREE of charge, if the fault is caused by manufacturing defect.

## 9. CONTACTS

### Authorized representative in the European Union:

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The symbol of 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.

