# ER750A Lib User Manual

Version: 1.0.0

Release date: 2023/6/26

# FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/ TV technician for help.

## CAUTION:
Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

## RF exposure warning

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provide with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

## Canada, Industry Canada (IC) Notices

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

(1) This device may not cause interference; and

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

## Canada, avis d'Industry Canada (IC)

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) l'appareil ne doit pas produire de brouillage, et

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

## Radio Frequency (RF) Exposure Information

The radiated output power of the Wireless Device is below the Industry Canada (IC) radio frequency exposure limits. The Wireless Device should be used in such a manner such that the potential for human contact during normal operation is minimized.

This device has also been evaluated and shown compliant with the IC RF Exposure limits under mobile exposure conditions. (antennas are greater than 20cm from a person's body).

## Informations concernant l'exposition aux fréquences radio (RF)

La puissance de sortie émise par l'appareil de sans fil est inférieure à la limite d'exposition aux fréquences radio d'Industry Canada (IC). Utilisez l'appareil de sans fil de façon à minimiser les contacts humains lors du fonctionnement normal.

Ce périphérique a également été évalué et démontré conforme aux limites d'exposition aux RF d'IC dans des conditions d'exposition à des appareils mobiles (antennes sont supérieures à 20 cm à partir du corps d'une personne).

## DEMOSTRATION SOFTWARE LICENSE

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# LIMITED WARRANTY

GIGA-TMS warrants that the products sold pursuant to this Agreement will perform in accordance with GIGA-TMS's published specifications. This warranty shall be provided only for a period of **one year** from the date of the shipment of the product from GIGA-TMS (the "Warranty Period"). This warranty shall apply only to the "Buyer" (the original purchaser, unless that entity resells the product as authorized by GIGA-TMS, in which event this warranty shall apply only to the first re-purchaser).

During the Warranty Period, should this product fail to conform to GIGA-TMS's specifications, GIGA-TMS will, at its option, repair or replace this product at no additional charge except as set forth below. Repair parts and replacement products will be furnished on an exchange basis and will be either reconditioned or new. All replaced parts and products become the property of GIGA-TMS. This limited warranty does not include service to repair damage to the product resulting from accident, disaster, unreasonable use, misuse, abuse, negligence, or modification of the product not authorized by GIGA-TMS. GIGA-TMS reserves the right to examine the alleged defective goods to determine whether the warranty is applicable.
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# Contents

# Programming

## Broadcast

The broadcast command is used to get the all the readers' information connected in the same segment of host PC.

Interface: UDP

Remote port: 23

Request command: {0xFF, 0x04, 0x02, 0xFB}

Reply command: See below about the format of reply command.

| Fields | Size |
|---|---|
| Reserved | 2 |
| Command Code | 1 |
| Board type | 1 |
| Board ID | 1 |
| IP Address | 4 |
| MAC Address | 6 |
| Firmware Version | 4 |
| Device Name | 64 |
| Reserved | 1 |
| Subnet Mask | 4 |
| Gateway IP | 4 |
| Reserved | 3 |

**Note**:

- The fields with yellow background is supported by the firmware PGMT1379_V1_3R2_201007 or later

version.

# ER750A Event Data Structure

TCP Port Number: 2168 (Default)

TCP Data Payload (Event Packet) ：

| TCP | Data Payload |
|---|---|
| Header | Event Data |

| Fields | Size (Byte) | Description |
|---|---|---|
| Time | 4 | Reserves |
| Data Type | 1 | 1 = MIFARE UID<br>2 = DESFIRE UID<br>3 = 125K UID<br>4 = MIFARE SECTORE<br>5= DESFIRE APP<br>6= PIN CODE<br>7= FINGERPRINT<br>8= ULTRALIGHT UID<br>9 = UNKNOW UID |
| Data Size | 1 | The size of the data buffer array (0~16). |
| Data Buffer | 16 | The data buffer array (Card UID or Sector Data). |
| Device Name | 16 | Name (String Type) |
| XID | 4 | Reserves |
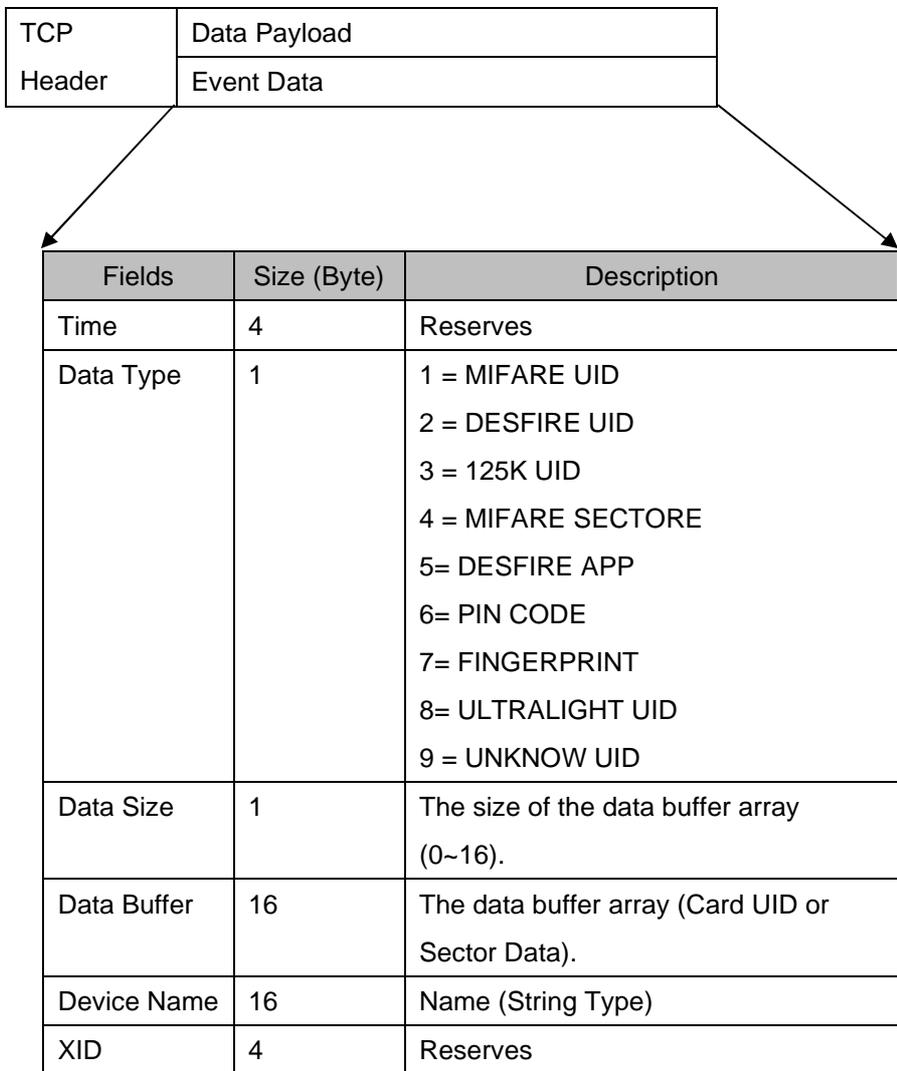
# ER750 Manager

## Main Window
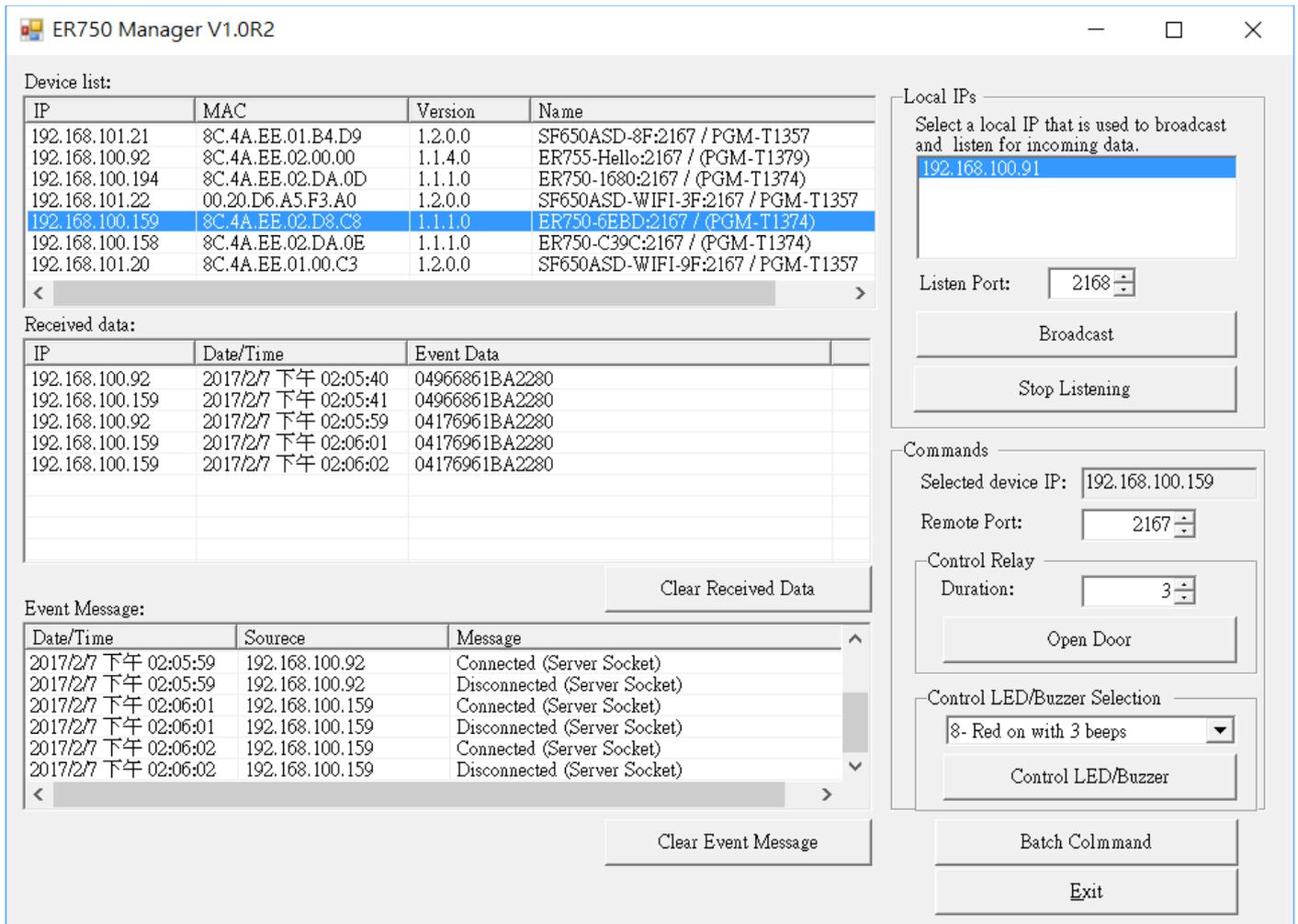


The **Main Window** has following components:

- **Device list**    Show the readers connected in the same network segment of host PC.
- **Local IPs list**    Show the available local IPs of network cards of host PC. Click to select the IP that is used to receive the incoming data.
- **Broadcast button**    Click to scan all available devices connected in the same network segment of host PC and shows them in the **Device list**.
- **Listen Port**    Click to select or type the port number that use to receive incoming data.
- **Start Listening/Stop Listening button**    Click to bind or release the Local IP which is selected in the **Local IPs list**.
- **Received Data list**    Show the incoming data that is sent by the device.
- **Selected device IP box**    Show the device IP that is selected in **Device list** or **Incoming data list**.
- **Remote Port box**    Click to select or type the device port number where the open command will send to**.**
- **Duration box**    Click to select or type the duration number that the **Open Door** command uses to

keep the device relay open in specified duration.

If the duration value is 0, it means the relay is always closed (off). If the duration value is 255, it means the relay is always open (on).

- **Open Door button**    Click to make the selected device to trigger the relay.
- **Control LED/Buzzer Select list**    Click to select the way of controlling LED and/or buzzer.
- **Control LED/Buzzer button**    Click to start controlling the LED/Buzzer with specified way.
- **Batch Command button**    Click to send Open Door and then Control LED/Buzzer commands to selected device.

# Getting Started

1. Click **Broadcast** to scan the devices and show them on the **Device list**.
2. Click to select Local IP in the **Local IPs list**.
3. Click **Start Listening**.
4. Place the card on the device, the data will show in the **Received data list**.
5. Select the reader in the **Device list** or **Received data list**.
6. Click **Open Door** to trigger the relay.

# Update History

**2023/6/26 V1.0.0**
- Original release