

**Tag Reader**



---

**User Manual**

## Introduction

---

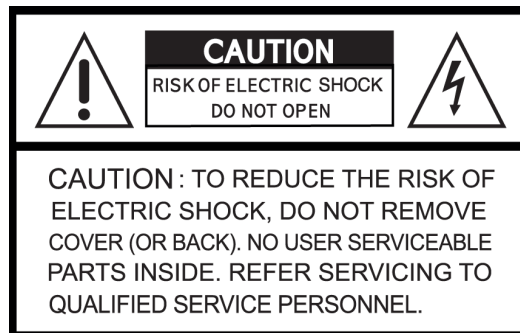
Thank you for purchasing the KATHREIN Digital Systems GmbH tag reader. Please take the time to read the following safety and installation information carefully and attentively before using the tag reader. It is imperative to comply with these instructions in order to ensure the safe operation of the device. If you have any further questions, please contact your local retailer or KATHREIN Digital Systems GmbH directly. Your tag reader was developed and built with state-of-the-art technology and complies with European and German standards.

Please keep this manual safe to be able to answer possible questions in the future. The manual is an integral part of the product even in case it is resold to a third party.

## Disclaimer

---

All technical details and descriptions in this manual were compiled with the greatest care. However, KATHREIN Digital Systems GmbH cannot entirely exclude mistakes in this manual. Therefore, we do not assume any legal responsibility or liability resulting from wrong information in this manual. Descriptions, technical illustrations and technical data are subject to change without notice according to technical progress. In addition, KATHREIN Digital Systems GmbH reserves the right to change the product and the manual without prior notice. We do not assume any guarantee with regard to the content of this document. We appreciate any comments on mistakes or inaccuracies which may help us to improve this product and this manual.



This symbol is intended to attract the user's attention to the potential risk of dangerous unprotected voltage inside the housing. This may lead to electric shock.



This symbol is intended to attract the user's attention to user and maintenance instructions in the manual and documents enclosed with the product.

## WARNING:

TO MINIMISE THE RISK OF ELECTRIC SHOCK, YOU MUST NOT EXPOSE THIS PRODUCT TO WET AND MOIST CONDITIONS AT ANY TIME.



All KATHREIN Digital Systems GmbH products are lead-free and meet the requirements stated under the European Directive on the Restriction of Hazardous Substances (RoHS). This guarantees that the entire production process and the product itself are free of lead and of all listed hazardous substances.



This product was tested and complies with the regularities for a class of digital devices stated under FCC part 15. These limits were specified to provide reasonable protection against harmful exposure when operating the device in a commercial environment. This product generates, uses and may emit radio energy. It may in addition interfere with other radio communication systems if not installed or used according to this manual. Using the device in residential areas may cause disturbances to be possibly remedied at the user's expense.



Hereby KATHREIN Digital Systems GmbH declares that the tag reader FTR 100 (order number 2220000012, EAN 4021121548895) is in conformity with the relevant provisions of Directive 1999/5/EG.

## Conformity:

The declaration of conformity is available at <http://www.kathrein-ds.com> in the download section of the respective product. Alternatively, you can request the declaration of conformity directly from us:

KATHREIN Digital Systems GmbH

Anton-Kathrein-Str. 1-3

83022 Rosenheim, Germany

## Important Safety Information

---



### **WARNING**

**The warranty claim will expire in case of damages resulting from the non-observance of this manual.**

**We do not assume any liability for consequential damages.**

**We do not assume any liability for damages to persons and/or material whatsoever which result from improper handling or noncompliance with the safety instructions. The warranty claim will expire in such cases!**

The tag reader FTR 100 is equipped with a high-quality housing. However, please observe the following safety instructions:

- Operate the tag reader only with the provided batteries.
- Handle the tag reader with care, heavy vibrations or bumps may damage the tag reader.
- Do not use the tag reader close to strong electric power lines or magnetic fields, as this may impair the transmission quality significantly.
- Do not install the tag reader directly on iron or aluminium surfaces, as this may impair the wireless transmission significantly. Use a non-conducting material to insulate the device from the installation surface.
- Do not expose the tag reader to direct sunlight or strong sources of heat, e.g. heaters.
- Do not expose the tag reader to moist, very cold or very hot environments. Please observe the maximum humidity and temperature limits.
- Persons (including children) with limited physical, sensory or mental abilities and/or lacking experience and/or knowledge must not use this product.
- Keep children away from the tag reader and other connected electrical appliances at all times. The tag reader includes cables, which may strangle children, and small parts they can swallow. Assemble the tag reader out of children's reach. Do not leave packaging materials unattended, as they may be dangerous for playing children.
- Use a damp cloth to clean the tag reader's surface. Afterwards, dry the surface. Cleaning agents will damage the surface.

## Malfunctions and Defects

---

If you notice any kind of defect, remove the batteries from the tag reader FTR 100 and contact your retailer or KATHREIN Digital Systems GmbH directly. Any further usage of the tag reader may lead to fire or electric shock!

## Intended Use

---

The KATHREIN Digital Systems GmbH FTR 100 tag reader is intended to arm or disarm your FAZ 100 alarm panel. Any other use than that described in this manual is not permitted and will lead to the expiry of any warranty or guarantee as well as to the exclusion of liability. The same applies to modifications and retrofitting.

## Disposal

---



### **Do not dispose of the device with domestic waste!**

This product complies with the EU Directive on waste electrical and electronic equipment (WEEE) and therefore must not be disposed of with domestic waste. Dispose of the device via your local collection point for waste electronic equipment!

## **This product contains software programs subject to the GPL free software license.**

This product contains software that was developed by third parties and/or software subject to the GNU General Public License (GPL) and/or the GNU Lesser General Public License (LGPL). We will send you the source code of these programs on request. The GPL and/or LGPL code used and offered in this product is EXCLUSIVE OF ANY GUARANTEE WHATSOEVER and is subject to the copyright of one or several authors. For further details, please refer to the GPL and/or LGPL code of this product and to the terms of use of GPL and LGPL.

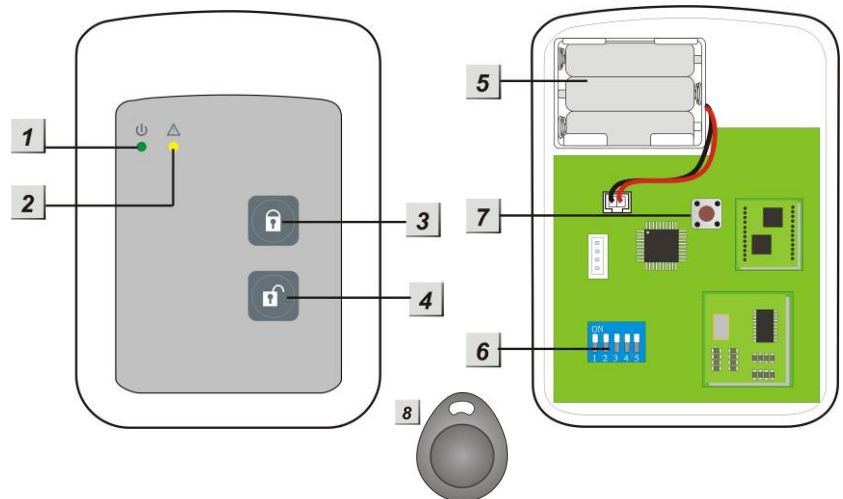
You can read the complete license text at <http://www.gnu.org/licenses/gpl-2.0.html>.  
For an unofficial German translation, please go to  
<http://www.gnu.de/documents/gpl.de.html>.

## Tag reader FTR 100

---

### Product description:

1. Power LED (green)
2. Status LED (red)
3. Arm button
4. Disarm button
5. Batteries
6. Function switches
7. Tamper contact
8. Tag (watertight)



### LED indicators:

In stand-by mode, both LEDs are off.

- Power LED (green):
  - If a button is pressed, the power LED lights up for 5 seconds to indicate the readiness of the tag reader.
  - The power LED flashes instead of being on constantly to indicate a low battery level.
- Status LED (red):
  - Flashes fast upon signal transmission.
  - Is permanently on in tag learn mode.
  - Flashes in installation mode.

### Battery:

- The tag reader requires three AAA 1.5 V alkaline batteries. The average battery life is approx. four years (two activations per day).
- The tag reader indicates the low battery status by the power LED flashing. The alarm panel is additionally informed about the battery status.

### Power saving function:

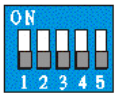
- As long as the tag reader is not used, it does not consume any electric power. Only when a button is pressed is the tag reader activated for 5 seconds.
- The tag reader automatically switches off again after 5 seconds.

### Tamper protection:

- The tag reader is protected from unauthorised opening or removal.
- If the tamper contact is triggered, the power LED lights up and a warning signal sounds. The alarm panel is informed about the tampering.
- If the alarm panel is armed, opening the tamper contact triggers an alarm.
- In learn mode, the tamper contact is deactivated.

## Function switches:

If the tag reader's housing is open, you will see the function switch block with five switches. These switches are all set to OFF by default.



Switch no.	Position	Description
SW 1	ON	Learn / add mode
	OFF	Normal operation (default)
SW 2	ON	Factory settings
	OFF	Normal operation (default)
SW 3	OFF	System settings MUST be <b>OFF</b> , as otherwise no function
SW 4	OFF	
SW 5	OFF	Reserved

## Installation of the tag reader:

1. Install the tag readers only indoors.
2. Remove the front of the tag reader by unscrewing the lower screw.
3. Use both screw holes to mark the drill holes at the wall.
4. Make sure that the tamper contact of the tag reader lies flat against the mounting surface.
5. Screw the tag reader to the wall.
6. Insert the batteries. The power LED lights up for a few seconds and a signal sounds.

## Connecting the tag reader FTR 100 and putting it into operation

---

1. Open the menu "Sensors" → "Add" and press "Start" in the web interface of the alarm panel.
2. Start the installation mode of the Tag Reader by pressing the Arm or Disarm button and then promptly setting switch 1(SW1) to ON. The Status LED starts flashing and one long signal is followed by two short signal sounds.
3. Press the Disarm button of the tag reader.
4. The alarm panel indicates the tag reader as "Keypad" (XT1) or "Tag reader."
5. Add the tag reader to the alarm panel.
6. End the installation mode of the tag reader by setting SW1 to OFF again, which is acknowledged with four short signals. Then reinstall the front of the tag reader by tightening the lower screw.

### **Note:**

- The installation mode ends automatically after five minutes. To restart the installation mode, you need to set SW1 to ON again.
- Make sure that the tampering contact of the tag reader is not pressed in during the add process!

### Add a tag to the tag reader:

1. Start the installation mode by pressing the Arm or Disarm button and then promptly setting switch 1 (SW1) to ON. The status LED starts flashing and one long signal is followed by two short signal sounds.
2. Press the Arm button once to start the tag learn mode. The status LED lights up for five seconds and one signal sounds.
3. During this time, hold a tag in front of the tag reader. The status LED flashes fast three times and two signals sound, indicating the successful integration of a tag in the tag reader.

#### *Please note:*

- Only one signal indicates that this tag was already added.
- If you want to add several tags, hold them one after the other (at intervals of 5 seconds) in front of the tag reader or restart the entire process.
- Exit the installation mode of the tag reader by setting SW1 back to OFF.

### Range test:

To test the signal strength at the desired installation location, perform a range test.

1. Open the alarm panel menu "Sensors" → "Range" and press "Start".
2. Switch SW1 to "ON".
3. The sensor and the signal strength should be indicated. The higher the indicated number the better the reception (1 – 9).
4. Switch SW1 to "OFF".

#### *Please note:*

If there is no signal at the installation location or the signal strength is below 4 or frequently falls below this level (signal fluctuations of 2 to 3 are normal), we recommend using a repeater to improve the signal.

### How to use the tag reader:

After having completed the tag reader installation as described above, you can use the tag reader as follows:

1. Arming/disarming:  
Press the Arm or Disarm button once to activate the tag reader.
2. You have five seconds to hold a tag in front of the tag reader. If the tag is recognized within this time, the alarm panel is armed or disarmed.



#### **Caution:**

If there are system errors in the alarm panel when the system is armed, repeat the arming process within 10 seconds, since otherwise the alarm panel remains disarmed! Alternatively, you can activate the menu force "arming with failure" in the web interface of your alarm panel.



### **Restoring the factory default:**

1. Open the housing. Remove the batteries, and then press any button to discharge any residual voltage.
2. Set switch 2 to ON, reinsert the batteries. The tag reader signals the reset (including the deletion of the added tags) with an audio signal followed by two more signals.
3. The status LED starts flashing. Set switch 2 to OFF again and close the housing.
4. Delete the tag reader from the sensor list of the alarm panel.

### ***Please note:***

- After a reset, all added tags are also deleted from the tag reader.
- Tags can only be deleted by resetting the tag reader to the factory default. It is impossible to delete individual tags from the configuration of the tag reader.
- You can add an unlimited number of tags to the tag reader.
- You can add a tag to an unlimited number of tag readers.





