

# Operating instructions

Fingerprint reader  
5551 ..



# GIRA

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## Start-up procedure

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For start-up the fingerprint reader, the following steps must be implemented in the order shown below:

### I. Create first administrator (Seite 6)

Admin<sub>NEW</sub> (7x) → Progr.<sub>NEW</sub> (7x)

### II. Create user finger (from S. 8)

Admin → Progr. → Admin → User<sub>NEW</sub> (7x)

### III. Carry out configurations on the fingerprint reader (from Seite 9)

### IV. Use in door communication system (from S. 29)

or

Use without door communication system  
(from S. 29)

## Optimal positioning of finger

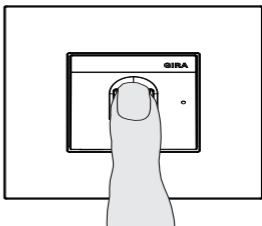
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In order to ensure proper functioning of the fingerprint reader, the finger must be correctly laid on during both teaching-in and subsequent operation. It is important that the finger area with the greatest fingerprint movement (middle of fingertip) is registered by the fingerprint sensor.

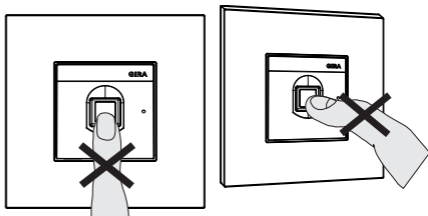
Therefore position the finger as shown.

Optimal:

The area of greatest fingerprint movement centrally on sensor.



Incorrect:

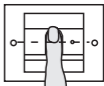


## Basics for the teaching-in of a finger

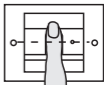
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For the teaching-in of a finger, the finger to be taught-in is repeatedly laid on. It is important to vary the position of the finger with repeated laying on by a few millimetres each time, so that the fingerprint reader can register the largest possible finger area.

1. Place the finger to be taught-in centrally until an acknowledgement tone is heard.

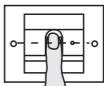


2. Shift the finger slightly upwards.



3. Shift the finger slightly downwards.

4. Repeat steps 1 – 3 until 1 long acknowledgement tone is heard and the LED lights up green



With "difficult" fingers (e.g. those of small children or those with very dry skin) it may be necessary to lay on the finger to be taught-in up to 7 times. If a negative acknowledgement is heard after the seventh attempt (3 short sounds), the teach-in of the finger was not successful.

In this case position the finger again (step 1) or use another finger.

## Teaching-in first administrator

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Admin<sub>NEW</sub> (7x) → Progr.<sub>NEW</sub> (7x)

Before first start-up, an administrator must be created. If no administrator has been taught-in, the LED of the fingerprint reader flashes green.

An administrator consists of an administrator finger and a programming finger.



### Administrator and programming fingers

Administrator and programming fingers cannot be used for subsequent switching actions.

### Teaching-in first administrator:

- ✓ The LED flashes green.

### Teaching-in new administrator finger:

1. Lay the administrator finger on until a short acknowledgement tone is heard.
- ✓ During laying on the LED lights up red, after removal orange.
2. Lay the administrator finger on again (vary position slightly) until a short acknowledgement tone is heard.
3. Repeat step 2 until 1 long acknowledgement tone is heard and the LED lights up green.  
The administrator finger was taught-in successfully.

- ✓ The LED lights up orange. Now teach-in the programming finger within 10 s.

### Teaching-in new programming finger:

4. Lay the programming finger on until a short acknowledgement tone is heard.
  - ✓ During laying on the LED lights up red, after removal orange.
5. Lay the programming finger on again (vary position slightly) until a short acknowledgement tone is heard.
6. Repeat step 5 until 1 long acknowledgement tone is heard and the LED lights up green.  
The programming finger was taught-in successfully.
  - ✓ The first administrator was taught-in successfully.
7. Enter administrator with administrator and programming finger into the table on Seite 22.

## Teaching-in user finger

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Admin → Progr. → Admin → User<sub>NEW</sub> (7x)

### Start mode:

1. Lay the **administrator finger** on until a short acknowledgement tone is heard.  
✓ The LED briefly lights up green, then flashes orange.
2. Lay the **programming finger** on until a short acknowledgement tone is heard.  
✓ The LED briefly lights up green, then flashes orange twice.
3. Lay the **administrator finger** on until a short acknowledgement tone is heard.  
✓ The LED briefly lights up green, then orange.

### Teaching-in new user finger:

4. Lay the user finger on until a short acknowledgement tone is heard.  
✓ During laying on the LED lights up red, after removal orange.
5. Lay the same finger on again (vary position slightly) until a short acknowledgement tone is heard.
6. Repeat step 5 until 1 long acknowledgement tone is heard and the LED lights up green.  
✓ The user finger was taught-in successfully.
7. Enter the user in the table on Seite 23.  
✓ The LED lights up orange, further user fingers can now be taught-in.





### **Teaching-in new administrator finger:**

1. Lay the administrator finger on until a short acknowledgement tone is heard.
- ✓ During laying on the LED lights up red, after removal orange.
2. Lay the administrator finger on again (vary position slightly) until a short acknowledgement tone is heard.
3. Repeat step 2 until 1 long acknowledgement tone is heard and the LED lights up green.  
The administrator finger was taught-in successfully.
- ✓ The LED lights up orange. Now teach-in the programming finger within 10 s.

### **Teaching-in new programming finger:**

4. Lay the programming finger on until a short acknowledgement tone is heard.
- ✓ During laying on the LED lights up red, after removal orange.
5. Lay the programming finger on again (vary position slightly) until a short acknowledgement tone is heard.
6. Repeat step 5 until 1 long acknowledgement tone is heard and the LED lights up green.  
The programming finger was taught-in successfully.
- ✓ An administrator was taught-in successfully.
7. Enter the administrator in the table on S. 22.

## Deleting administrator

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An administrator is deleted by deleting one of the two fingers (programming or admin finger). When one of the fingers is deleted, the other finger of the administrator also loses its function.



**The final administrator cannot be deleted.**

If there is only one taught-in administrator remaining in the Fingerprint reader, it cannot be deleted.

Admin. → Progr. → Progr. → Progr. → Deleting administrator

or

Admin. → Progr. → Progr. → Admin. → Deleting administrator

### Starting mode:

1. Lay on the administrator finger until a short acknowledgement tone is heard.
  - ✓ The LED briefly lights up green, then flashes orange.
2. Lay on the programming finger until a short acknowledgement tone is heard.
  - ✓ The LED briefly lights up green, then flashes orange twice.
3. Lay on the programming finger until a short acknowledgement tone is heard.

- ✓ The LED briefly lights up green, then flashes red.

#### **Deleting administrator:**

4. Lay on the programming or administrator finger to be deleted until a short acknowledgement tone is heard.
  - ✓ The LED lights up orange. The Fingerprint reader generates a positive acknowledgement signal: Deleting the administrator was successful.
  - ✓ Three brief acknowledgement tones signify that an unknown finger was laid on or there is only one taught-in administrator remaining in the Fingerprint reader, and it cannot be deleted.
5. Remove the deleted administrator from the table on Seite 22.

## Deleting user finger

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Admin. → Progr. → Progr. → Delete user

### Start mode:

1. Lay the **administrator finger** on until a short acknowledgement tone is heard.
  - ✓ The LED briefly lights up green, then flashes orange.
2. Lay the **programming finger** on until a short acknowledgement tone is heard.
  - ✓ The LED briefly lights up green, then flashes orange twice.
3. Lay the **programming finger** on until a short acknowledgement tone is heard.
  - ✓ The LED briefly lights up green, then flashes red.

### Delete user finger:

4. Lay on the user finger to be deleted until a short acknowledgement tone is heard.
  - ✓ The LED lights up orange. The fingerprint reader generates a positive acknowledgement signal:  
The finger was deleted successfully.
  - ✓ 3 brief acknowledgement tones signify that an unknown finger was laid on.
  - ✓ The LED flashes red. Further user fingers can be deleted.  
After approx. 10 s the procedure is terminated.
5. Remove deleted user fingers from the table on Seite 23.

## Reset to factory settings – delete all assignments

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The fingerprint reader can be reset to the state of delivery. In this case, all user and administrator assignments are lost.

Admin → Admin → Admin (5 s) = State of delivery

### Resetting fingerprint reader:

1. Lay the **administrator finger** on until a short acknowledgement tone is heard.
  - ✓ The LED briefly lights up green, then flashes orange.
2. Lay the **administrator finger** on until a short acknowledgement tone is heard.
  - ✓ The LED briefly lights up green, then flashes orange twice.
3. Lay the **administrator finger** on for 5 s.
  - ✓ During these 5 s brief acknowledgement tones are heard, the LED simultaneously flashes red.
  - ✓ 1 long acknowledgement tone is heard, the LED lights up green.
  - ✓ The LED flashes green.  
The device is now in the state of delivery. All previous settings have been reset, all user- and administrator fingers have been deleted.



### **Important!** **Administrator also deleted**

Before reprogramming, an administrator must first be created (see Seite 6).

## Switching illumination of contact surface on/off

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Factory setting: The night illumination of the fingerprint reader contact surface is activated.

Progr. → Admin → Admin = Setting changes

### Changing illumination setting:

1. Lay the **programming finger** on until a short acknowledgement tone is heard.
  - ✓ The LED briefly lights up green, then flashes orange.
2. Lay the **administrator finger** on until a short acknowledgement tone is heard.
  - ✓ The LED briefly lights up green, then flashes orange twice.
3. Lay the **administrator finger** on until a short acknowledgement tone is heard.
  - ✓ The fingerprint reader generates a positive acknowledgement signal.  
The night illumination changes its status.

## Switching acknowledgement tones on/off

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Factory setting: Acknowledgement tone is activated.

Progr. → Admin → Progr. = Setting changes

The acknowledgement tones are activated/deactivated as follows:

1. Lay the **programming finger** on until a short acknowledgement tone is heard.  
✓ The LED briefly lights up green, then flashes orange.
2. Lay the **administrator finger** on until a short acknowledgement tone is heard.  
✓ The LED briefly lights up green, then flashes orange twice.
3. Lay the **programming finger** on until a short acknowledgement tone is heard.  
✓ The fingerprint reader generates a positive acknowledgement signal.  
The acknowledgement tone is switched over.



## Switch system programming mode on/off

Progr. → Progr. → Progr.

### Start mode:

1. Lay the **programming finger** on until a short acknowledgement tone is heard.
  - ✓ The LED lights up red while the finger is being placed and flashes orange when it is lifted.
  - ✓ The LED briefly lights up green, then flashes orange.
2. Lay the **programming finger** on until a short acknowledgement tone is heard.
  - ✓ The LED lights up red while the finger is being placed and flashes orange when it is lifted.
  - ✓ The LED briefly lights up green, then flashes orange twice.
3. Lay the **programming finger** on until a short acknowledgement tone is heard.
  - ✓ The fingerprint reader generates a positive acknowledgement signal. The system programming mode is switched on.
  - ✓ The LED flashes orange.
4. The system programming mode is switched off automatically after 7 min or after entering:

Progr. → Progr. → Progr.

- ✓ The fingerprint reader generates an acknowledgement tone. The system programming mode is switched off.
- ✓ The LED stops flashing.

## Use without door communication system

### Switch DCS bus power supply on/off

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Progr. → Progr. → Admin.

1. Lay the **programming finger** on until a short acknowledgement tone is heard.
  - ✓ The LED lights up red while the finger is being placed and flashes orange when it is lifted.
  - ✓ The LED briefly lights up green, then flashes orange.
2. Lay the **programming finger** on until a short acknowledgement tone is heard.
  - ✓ The LED lights up red while the finger is being placed and flashes orange when it is lifted.
  - ✓ The LED briefly lights up green, then flashes orange twice.
3. Lay the **administrartor finger** on until a short acknowledgement tone is heard.
  - ✓ The fingerprint reader generates a positive acknowledgement signal. The DCS bus power supply is switched on.

For switching off, repeat steps 1. to 3..



### **First, start-up the door communication system**

Before programming of the fingerprint reader is begun, the door communication system must be started up.

### **Direct assignment/group assignment**

Assignment differentiates between:

- **direct assignment** of individual user fingers to an individual switching actuator
- **group assignment** of all user fingers to a switching actuator.

With group assignments, all user fingers assigned to the fingerprint reader trigger a switching action with the switching actuator.

During programming, an admin finger is laid on instead of a user finger.



### **Advantage of group assignment**

With group assignments, all taught-in user fingers in a programming step are assigned a common switching actuator. User fingers that are also assigned at a later date to the fingerprint reader can switch this common switching actuator without further programming.

## Assignment

### User-specific switching actuator/door opener

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User fingers must be taught-in in the fingerprint reader beforehand (from Seite 8).

1. Press the "Systemprogr." button on the control device for 3 s to start programming mode.
  - ✓ The LED at the control device flashes. The fingerprint reader generates an acknowledgement tone and the LED flashes orange. The operating mode LED of the switching actuator flashes.
2. Press the button "Progr." at the switching actuator (or the button "Türöffnerprogr." of the control device), until the LED next to the button flashes.
  - ✓ The fingerprint reader again generates an acknowledgement tone.
3. Lay on the user finger to be assigned.
  - ✓ The fingerprint reader generates a positive acknowledgement signal:  
The switching actuator was assigned successfully.
4. Press the "Systemprogr." button on the control device to exit the programming mode.



#### Delete assignment of user - switching actuator

To delete the user - switching actuator assignment, the teach-in procedure is repeated.

The assignment cannot be deleted via the switching actuator (press programming button 6 s)

## Assignment of user - group switching actuator/door opener

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Assigning all taught-in user fingers in the fingerprint reader to a group switching actuator:

1. Press the "Systemprogr." button on the control device for 3 s to start programming mode.
  - ✓ The LED at the control devices flashes.  
The fingerprint reader generates an acknowledgement tone and the LED flashes orange. The operating mode LED of the switching actuator flashes.
2. Press the button "Progr." at the switching actuator (or the button "Türöffnerprogr." of the control device), until the LED next to the button flashes.
  - ✓ The fingerprint reader again generates an acknowledgement tone.
3. Lay on admin finger.
  - ✓ The fingerprint reader generates a positive acknowledgement signal.  
The switching actuator was assigned successfully.
4. Press the "Systemprogr." button on the control device to exit the programming mode.



### Delete assignment of user - switching actuator

To delete the user - switching actuator assignment, the teach-in procedure is repeated.

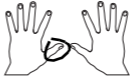







The assignment cannot be deleted via the switching actuator (press programming button 6 s).

## Table for start-up documentation







In the following tables the fingers of the administrators or users can be marked as references.

The example administrator selects the thumb of the left hand as the admin finger, and the index finger of the right hand as programming finger.

### Administrators

Administrator	Admin finger	Programming finger
Example administrator		
		
		
		

## Users

User / Function	User finger
	
	
	
	
	
	

## Procedure when the administrator is no longer available.

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If an administration finger is lost or the system administrators are no longer available, the fingerprint modules can no longer be administered. For this reason it is recommended to teach-in an admin/programming finger pair from two or even three people (see Seite 9).



If an administrator is no longer available, the fingerprint reader along with the accompanying security card should be sent to the Gira Service Center. A resetting to factory settings is carried out there, meaning all administrators and users are deleted.



## Warranty

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The warranty is provided in accordance with statutory requirements via the specialist trade.

Please submit or send faulty devices including the corresponding safety card, postage paid together with an error description, to your responsible salesperson (specialist trade/installation company/specialist electrical trade).

This will forward the devices to the Gira Service Center.

## Gira

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