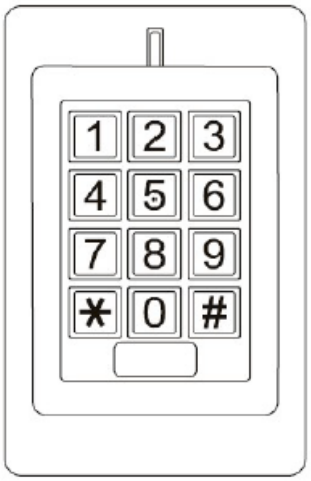
Instruction manual for Gelikom SK1

Code lock for indoor and outdoor use



GELIKOM
MIT SICHERHEIT IHR PARTNER

Note:

These operating instructions contain the installation instructions and programming instructions for the Gelikom SK1 (from March 2020). It also contains important information on commissioning and handling. Please keep these operating instructions in a safe place, even if you sell them to third parties!
A list of the contents can be found in the table of contents with indication of the corresponding page numbers on page 3.
If you have any questions or problems, please first look for a possible solution in the Questions & Answers section. If this remains unsuccessful, you are welcome to contact us by phone or email.

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Please read the following operating instructions carefully before connecting or commissioning. It not only shows you the correct operating sequence, but also helps you to take full advantage of all the technical possibilities of the system.

Content:

1. Introduction

1a) properties

- Waterproof according to IP 66
- Vandal-proof metal housing
- 2 programmable relay outputs
- Stand-alone operation via direct relay output
- Various access settings (RFID or PIN/RFID and PIN/RFID only)
- Switching mode, for example to keep the door open/closed.
- Wiegand 26 bit input & output
- Integrated alarm buzzer and alarm output
- Energy saving (55mA)
- Tamper alarm
- Key backlight
- LED status display
- Lighting and sounds can be switched off
- 125KHz RFID reader
- 12-24V DC / 12-28V AC power supply

1b) Intended use

This code lock is used to secure access to doors (e.g. front door). It is ideal for retrofitting and / or upgrading your entrance door (s). The access system has two relay outputs (NO / COM / NC; max. 3 amps) for connecting an electric door opener. A door opening button can also be connected.

The connected electric door opener can thus be activated via PIN/RFID recognition or via the closed door open button. A maximum of 1,100 users can be saved in the access system. The access system is programmed using the keyboard (key combination) or the master cards.

The access system is supplied with power via 12 ~ 24V DC / 12-28V AC. The access system is suitable for outdoor use (IP66).

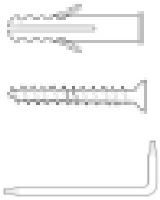
Any use other than that described above is prohibited and may damage the product, which is associated with risks such as short circuit, fire, electric shock, etc. The entire product may not be changed or converted. The safety instructions in these operating instructions must be observed. Please read the operating instructions carefully and keep them in a safe place for future queries.

1c) Safety instructions

- In the event of damage caused by non-observance of these operating instructions, the warranty / guarantee expires! For further damages we do not accept liability!
- We do not accept any liability for damage to property or personal injury caused by improper handling or failure to observe the safety instructions. In such cases, not only does the approval (CE) expire, but also the warranty / guarantee.
- The access system must not be changed or converted, otherwise the guarantee / warranty will expire.
- The access system must not be exposed to extreme temperatures, intense vibration or heavy mechanical loads.
- Falling from a small height can lead to defects.
- If the access system is used in conjunction with other devices, e.g. If a door opener is used, the operating instructions and safety instructions for these devices must also be strictly observed.
- Electronic devices are not toys and should be kept out of the reach of children!
- If you have any doubts about the correct use of this product or its safety, please contact qualified personnel.
- Never leave packaging material lying around carelessly. Plastic sheets / bags, etc. can become dangerous toys for children and there is a risk of suffocation.
- If it can be assumed that safe operation is no longer possible, the device must be taken out of operation and secured against unintentional operation.
- It can be assumed that safe operation is no longer possible if:
  a) the device shows visible damage
  b) the device stops working and
  c) after prolonged storage under unfavorable conditions or
  d) after heavy transport loads.
- In commercial facilities, the accident prevention regulations of the association of commercial employers' liability insurance associations for electrical systems and equipment must be observed.
- The access system is suitable for outdoor use (IP66).
- Power is supplied via 12 ~ 24V DC / 12-28V AC
- Make sure that all electrical connections, connecting cables between the devices and any extension cables have been installed correctly and in accordance with the operating instructions.
- When setting up / mounting, make sure that the connection cables are not squashed or damaged by sharp edges.
- Never pour liquids onto electrical devices.
- Maintenance, adjustment and repair work may only be carried out by a qualified specialist or a specialist workshop.
- If you have any questions that are not answered in these operating instructions, please contact our technical customer service or other specialists.

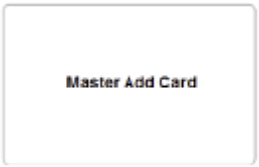
1d) Scope of delivery

1x Gelikom SK1 terminal



2x screws 2x dowels 1x screwdriver

1x diode for relay protection (not required)



1x Master Add card (Add = add)

1x Master Delete card (Delete = delete)

2) installation

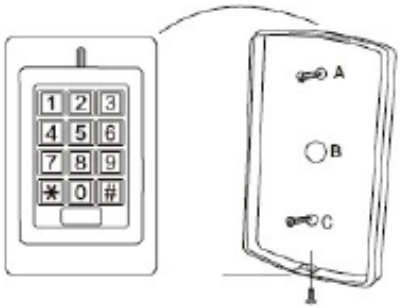
Kinked or squeezed cables may result in malfunctions, short circuits and a device defect.
When drilling holes in the wall or tightening screws, make sure that no cables or lines are damaged.
When selecting the mounting position, note that this must not be exposed to direct sunlight and the product must be protected from vibrations.

Make sure that the connection cables are routed backwards through the wall into a dry interior. This prevents sabotage and vandalism.

Tamper alarm
The code lock uses a light sensor for the tampering alarm. When the keyboard is removed from the base plate, the tamper alarm is triggered.

2a) Assembly

- Use the supplied tool and remove the housing screw on the underside of the access system.
- Remove the rear mounting plate and hold it at the desired mounting location
- Draw the mounting holes on the wall (hole A & C)
- Drill the mounting holes and the connection cable feed-through.
- Fasten the base plate with 2 screws at the installation location.
- Close the screw holes with the enclosed rubber plugs
- Guide the connection cables through the connection cable duct of the mounting plate (hole B).
- Connect the cable harness plug to the access system.
- Place the access system on the mounting plate and close the housing by fastening the previously removed fixing screw on the underside.



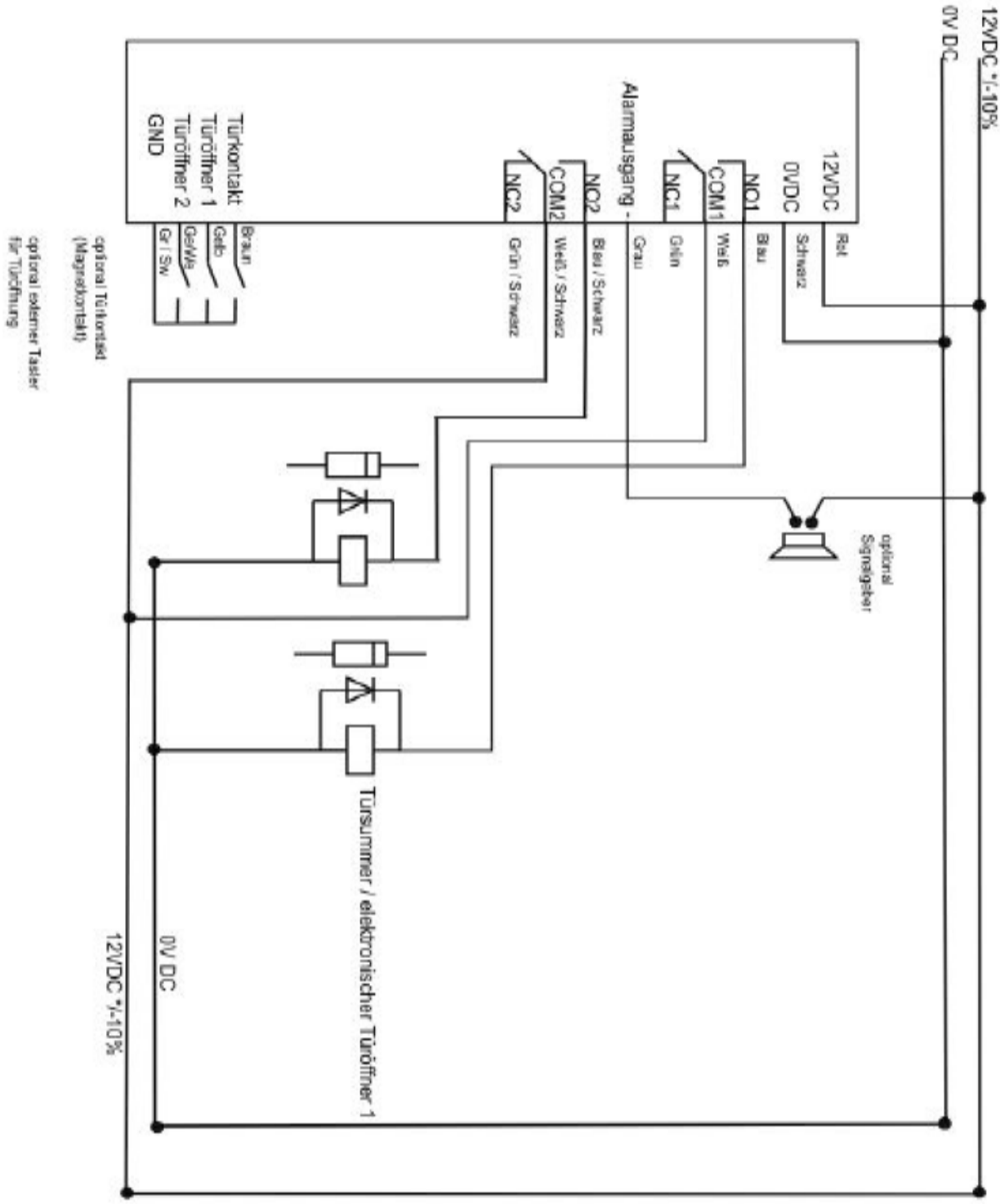
2b) Connections

Basic wiring stand alone		
Wire color	**function**	**description**
red	AC & DC	12-24V DC / 12-28V AC
black	AC & DC	12-24V DC / 12-28V AC
Grey black	GND	Minus (only for door contact)
blue	NO 1	Relay connection 1 (normally open)
White	COM 1	Relay connection 1 (common contact)
green	NC 1	Relay port 1 (normally closed)
yellow	OPEN 1	Connection ext. Button for door opener 1
Blue / black	NO 2	Relay connection 2 (normally open)
White black	COM 2	Relay connection 2 (common contact)
Green / black	NC 1	Relay port 2 (normally closed)
Yellow black	OPEN 2	Connection ext. Button for door opener 2
Advanced features		
Gray	alarm	Alarm minus
brown	D_IN	Door contact

2c) Restore factory settings

To restore the factory settings, please switch off the voltage, press * and hold this down and switch the voltage on again. You will now hear two beeps and the LED will glow orange. Now read in two RFID transponders. The LED now lights up red. Factory settings are now established. Of the two imported RFID transponders, the first is the master add card and the second is the master delete card.
Note: If you do a factory reset, users will be retained.

2d) Connection example
DC voltage



Function	Red LED	Green LED	Blue LED	Beep
Operational	Steady light			Short tone
Stand by	Steady light			
Keystroke	flash			Short tone
Action successful	flash	Flash once		Short tone
Action failed				3 short beeps
Program mode	flash	Flash once		Short tone
Relay switch 1		Steady light		Short tone
Relay switch 2			Steady light	
Alarm	flash			Permanent tone

Note
To change the sound and light settings, please refer to 8a

3) Introduction to programming

3a) Terms & Notes

Terminology

• In the following, **RFID** stands for RFID transponder with chip EM4100/EM4200 or TK4100 (transponder with a suitable chip can be found on ZutrittsShop.de)

• In the following, **user ID** stands for the storage space on which the user is created. The user ID is determined by you and can be selected from the number range from 1-1100.
(Zone/Relay1: 1-998 + panic user 999-1000; Zone/Relay2: 1001-1098 + panic user 1098-1100)

• In the following, **PIN** stands for the code that you want to use for verification. The PIN can contain 4-6 digits and can be selected from the range of numbers from--999999. (Exception 1234)

• The **Fast** or **Simple** method below stands for the possibility of managing users without assigning an ID (advantage: quick creation of new users; disadvantage: sometimes difficult administration of existing users)

• The **Recommended** method below stands for the possibility of managing users with the individual assignment of IDs. (Advantage: easier management of users; disadvantage: it takes a little longer to create new users)

• In the following, **programming** mode stands for the mode in which changes to users and settings can be made. Enter the programming mode
* 123456 # (Important: This is the standard value on delivery from the factory; please change the master code as described in 3b to avoid access by third parties)
To exit programming mode, please press *

Note
To open the door/switch the relay, the # key must be pressed after entering the PIN. This is not necessary when opening via RFID

3b) Changing the master code

Please change the master code immediately after entering the programming mode for the first time and make a note of the newly selected code or make a note of it. The master code can be freely selected from the number range 000000-999999 (must be 6 digits)

I. Start programming mode
* 123456 #

II. Change master code
0 New master code # New master code #

III. Exit programming mode
*

3c) Changing the access options (RFID, PIN)

Determine how the door can be opened, the following options are available. (RFID or PIN is set by default, if you do not want to change this you can skip this step)

1. RFID or PIN: Zone/Relay1 410 #; Z/R2 420 # (standard value / factory setting)

2. RFID and PIN: Zone/Relais1 411 #; Z/R2 421 # (access only after verification of both)

3. RFID only: Zone/Relay1 412 #; Z/R2 422 # (access only through RFID verification)

I. Start programming mode
* Master code #

II. Enter the desired access option
410 # or 421 # or etc.

III. Exit programming mode
*

4) User administration under "RFID or PIN" [see 3c]

4a) Add PIN user (please read point 3a carefully beforehand)

Recommended method

I. Start programming mode
* Master code #

II. Enter user ID and PIN
Zone1: 1 user ID # PIN # or
Zone2: 2 user ID # PIN #

III. Exit programming mode
*

Multiple method

I. Start programming mode
* Master code #

II. Enter user ID and PIN
Zone1: 1 first user ID # PIN # second user ID # PIN # or
Zone2: 2 first user ID # PIN # second user ID # PIN #

III. Exit programming mode
*

4b) Changing the PIN of a PIN user

I. Programming mode must be exited
II. Enter user ID, old PIN and new PIN
* User ID # Old PIN # New PIN #

4c) Delete PIN user

Recommended method

I. Start programming mode
* Master code #

II. Enter user ID
3 User ID #

4d) Adding RFID users (please read point 3a carefully beforehand)

Recommended method

I. Start programming mode
* Master code #

II. Enter user ID and read RFID
Zone1: 1 user ID # read RFID # or
Zone2: 2 user ID # read RFID #

III. Exit programming mode
*

Simple method

I. Start programming mode
* Master code #

II. Input & read RFID
Zone1: 1 RFID read # or
Zone2: 2 RFID read #

III. Exit programming mode
*

Fast method

I. Read master card Add

II. Read RFID

III. Read master card Add

4e) Delete RFID users

Recommended method

I. Start programming mode
* Master code #

II. Input & read RFID
3 read RFID #

III. Exit programming mode
*

Simple method

I. Start programming mode
* Master code #

II. Enter user ID
3 User ID #

III. Exit programming mode
*

Fast method

I. Read master card Delete

II. Read RFID

III. Read master card Delete

5) User administration under "RFID and PIN" [see 3c]

5a) Adding RFID & PIN users (please read point 3a carefully beforehand)

I. Add RFID as with RFID users [see 4d]

II. Exit programming mode
*

III. Assign PIN to RFID
* Read RFID 1234 # PIN # PIN #

5b) Change PIN user

Recommended method

I. Programming mode must be exited

II. Read RFID & enter PIN
* Read RFID Old PIN # New PIN # New PIN #

Simple method

I. Programming mode must be exited

II. Enter PIN & user ID
* User ID # Old PIN # New PIN # New PIN #

5c) Delete RFID and PIN users

I. Start programming mode
* Master code #

II. Enter user ID
3 User ID #

III. Exit programming mode
*

6) User administration under "RFID only" [see 3c]

6a) & 6b) Adding RFID users & deleting RFID users
Please see 4d) & 4e)

7) Delete all users

I. Start programming mode
* Master code #

II. Input
Zone/Relay1: 30000 #
Zone/Relay2: 90000 #

III. Exit programming mode
*

8) General programming settings

8a) Set LED, lighting, sounds

Determine which settings you want to make

- LED always on — 841 # (standard value / factory setting)
- LED always off — 840 #
- Keyboard lighting always on — 851 #
- Keyboard lighting always off — 850 #
- Automatic keypad lighting — 852 # (standard value / factory setting) (on when a button is pressed, off after 20 seconds)
- Sound / tones at — 86 # (standard value / factory setting)
- Sound / tones from — 87 #

I. Start programming mode
* Master code #

II. Enter desired setting option
841 # or 87 # or etc.

III. Exit programming mode
*

8b) Setting the relay switching time
The switching time can be set from 1-99 seconds.

I. Start programming mode
* Master code #

II. Enter the desired switching time
Zone/Relay1: 51 switching time in sec. #
Zone/Relay2: 52 switching time in sec. #

III. Exit programming mode
*

8c) Switch hold mode on/off

I. Start programming mode
* Master code #

II. Input
Zone/Relay1: 510 #
Zone/Relay2: 520 #

III. Exit programming mode
*

8d) Door contact-switch alarm setting on/off

Door open detection

Door open too long (DOTL) warning. If a door contact is connected and the function is activated, the internal buzzer starts to sound after one minute to remind you to close the door. After a minute the buzzer switches itself off again.

Door opened without authorization Warning: If a door contact is connected and the function is activated, the alarm output is set in the event of unauthorized opening or if the door is not closed again after 120 seconds (according to DOTL). Alarm output adjustable from 0-3 minutes. The default is one minute.

Deactivation of keyboard & alarm options: If 10 unauthorized cards or PINs are entered in a period of 10 minutes, the keyboard is deactivated for 10 minutes or the alarm is set for 10 minutes.

- Deactivate door open too long — 60 # (standard value / factory setting)
- Activate door open too long — 61 #
- No deact. Keypad or alarm — 70 # (standard value / factory setting)
- Deactivation of keyboard — 71 #
- Deactivation of alarm — 72 # (standard value / factory setting)
- Alarm time — 8 0-3 minutes # (factory setting 1 min)
- Reset alarm — Read card or PIN or Master code #

I. Start programming mode
* Master code #

II. Input
60 # or 70 # or etc.

III. Exit programming mode
*

9) Problems & Solutions

- **Code lock alarm sounds**
  The manipulation switch on the back of the device detects manipulation. This often happens when the incidence of light is low. Cover the light sensor with some dark adhesive tape, or seal the code lock with silicone.

- **User cannot be registered**
  You have probably already added cards with the Master Add card. Some user IDs have already been assigned as a result.
  Create users from user ID 100.

- **Code lock does not open after entering the PIN**
  After entering the PIN, the # key must always be pressed. If the relay does not switch after that, the PIN is probably not learned.

- **Zone/Relay2 does not open after entering the PIN**
  Create the PIN / RFID user for the second relay (user ID 1001-1100; see point 3a)

10) Technical characteristics

User capacity	1100 RFID/PIN
Power supply Quiescent current Operating current	12-24V DC / 12-28V AC 55mA 80mA
keyboard PIN length	12 buttons (3 * 4) 4-6 digits
Card reader Reading technology Reading distance	EM 125KHz standard EM (e.g. EM4200) 3 - 6cm
connections	Electric door opener, open button, DOTL, external alarm
Relay Relay time door opener Relay time alarm Door relay load capacity Load capacity alarm relay	One (NO, NC, COM) 1-99 seconds (5 seconds default) 0-3 minutes (1 min. Standard) 3 amp max 3 amp max
Application area	Protection class IP66
operating temperatur	-40 ° C - 60 ° C
humidity	10% - 90%
Housing material Size (LxWxH) in mm Weight Shipping weight	Powder coated 120x76x25 600g 700g

11) Disposal

Electronic and electrical products do not belong in the household waste. At the end of their service life, dispose of the products in accordance with the applicable statutory provisions.