

Assembly Instruction

GfS Door Terminal



Part No.: 790 000



INTRODUCTION/SAFETY INSTRUCTION

The GfS Door Terminal is a compact device to steer up to 2 holding magnets which are mounted on emergency exit doors. It includes emergency exit switch, flash light, buzzer and key switch. The housing is made out of solid stainless steel.

In order to make full use of all GfS Door Terminal features and to assure the safety of the operator it is important to act according to the following instructions.

Before connecting and operating the device please read the operating manual carefully.

- The electric installation must be executed by an authorized installer
- Before opening the device the external power supply has to be switched-off
- In case of system failure please disconnect the device and ask an authorized installer to repair it
- Please use the device just according to the following instruction

This assembly instruction should be handed on to the operator

Weitergabe oder Vervielfältigung dieser Bedienungsanleitung, Verwertung und Mitteilung ihres Inhalts sind nicht gestattet, soweit nicht ausdrücklich zugestanden. Zuwiderhandlungen verpflichten zu Schadenersatz. Alle Rechte für den Fall der Patenterteilung oder Gebrauchsmuster-Eintragung vorbehalten.

Die Angaben in dieser Bedienungsanleitung können ohne vorherige Ankündigung geändert werden. Die Zusammenstellung der Informationen in dieser Bedienungsanleitung erfolgt nach bestem Wissen und Gewissen. GfS – Gesellschaft für Sicherheitstechnik mbH übernimmt keine Gewährleistung für die Richtigkeit und Vollständigkeit der gemachten Angaben. Insbesondere kann GfS – Gesellschaft für Sicherheitstechnik mbH nicht für Folgeschäden aufgrund fehlerhafter oder unvollständiger Angaben haftbar gemacht werden. Da sich Fehler, bei aller Sorgfalt nie vermeiden lassen, sind wir für Hinweise jederzeit dankbar.

INSTALLATION

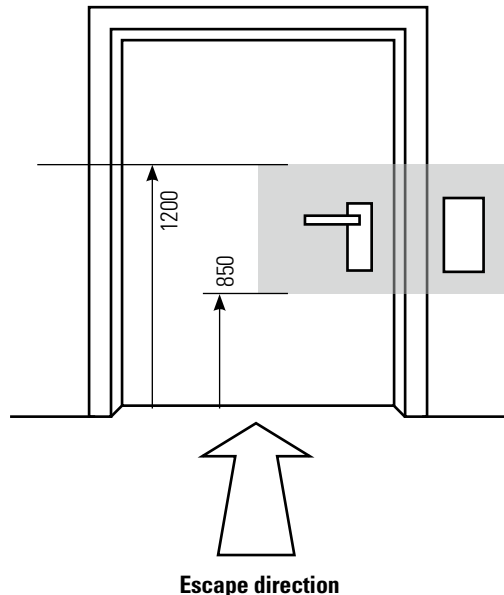
IMPORTANT:

Connect the GfS Door Terminal completely before applying voltage.

- Mount the GfS Door Terminal on the wall with the enclosed screws (see hole pattern). You can find the different measures on page 4)
- Connect all required cables
- Tighten the screws of the emergency exit button insertion (positioned horizontally)
- Tighten the screws of the cover of the LED-field (positioned vertically)
- Now, apply the voltage
- Carry out function test

ATTENTION

GfS recommends to check the functions of the GfS Door Terminal every 6 months.



TECHNICAL DATA

Power supply	12V-24V DC
Consumption	State of activation 365 mA (1 holding magnet) State of alarm 150 mA
Degree of protection	IP 20
Output	1 incident message relay
Max. contact load DC	30V/0,5A
Operating temperature	-20C bis +60C
Dimensions	90 x 240 x 80 mm
Weight	ca. 1,6 kg

- 2x 32 LED (red/green) for displaying the actual status
- integrated buzzer with 100dB/ 1m
- integrated flash light
- emergency exit switch acc. to EN60947-5-1
- integrated key switch
- 2 mm thick, robust stainless steel housing
- integrated control unit
- reusable cover for emergency exit switch made out of Macrolon

Input

- 12-24V/DC supply
- 1x single remote opening
- 1x permanent remote opening
- 2x holding magnet signals
- 1x door-too-long-open alarm
- 1x intrusion-alarm (or bridge), clamps bridged = door closed
- 2x sabotage alarm
- 2x predefined brightnesses of LED
- 1x fire alarm control system (with bridge normal operation)
- 1x emergency exit switch with internal fail safe contacts
- 1x reserve input

Output

- 2x holding magnet (electric escape route strikes)
- 1x RS-485 interface (bi-directional, half duplex) for integration into building control systems
- 1x external sirène 24V, 0,5A OC
- 1x external flash light 24V, 0,5A OC
- 1x incident message relay (collective message) 30 V, 0,5 A

Conformity

This product complies with the essential requirements of the R&TTE guideline 1999/5/EG. The certificate of conformity you may request from your supplier.

Disposal

Dispose an obsolete GfS Door Terminal at a collecting point for electronic waste or at your supplier. Dispose the packaging material at a paper collecting point for paper resp. plastic. You may not dispose an obsolete device the general garbage.

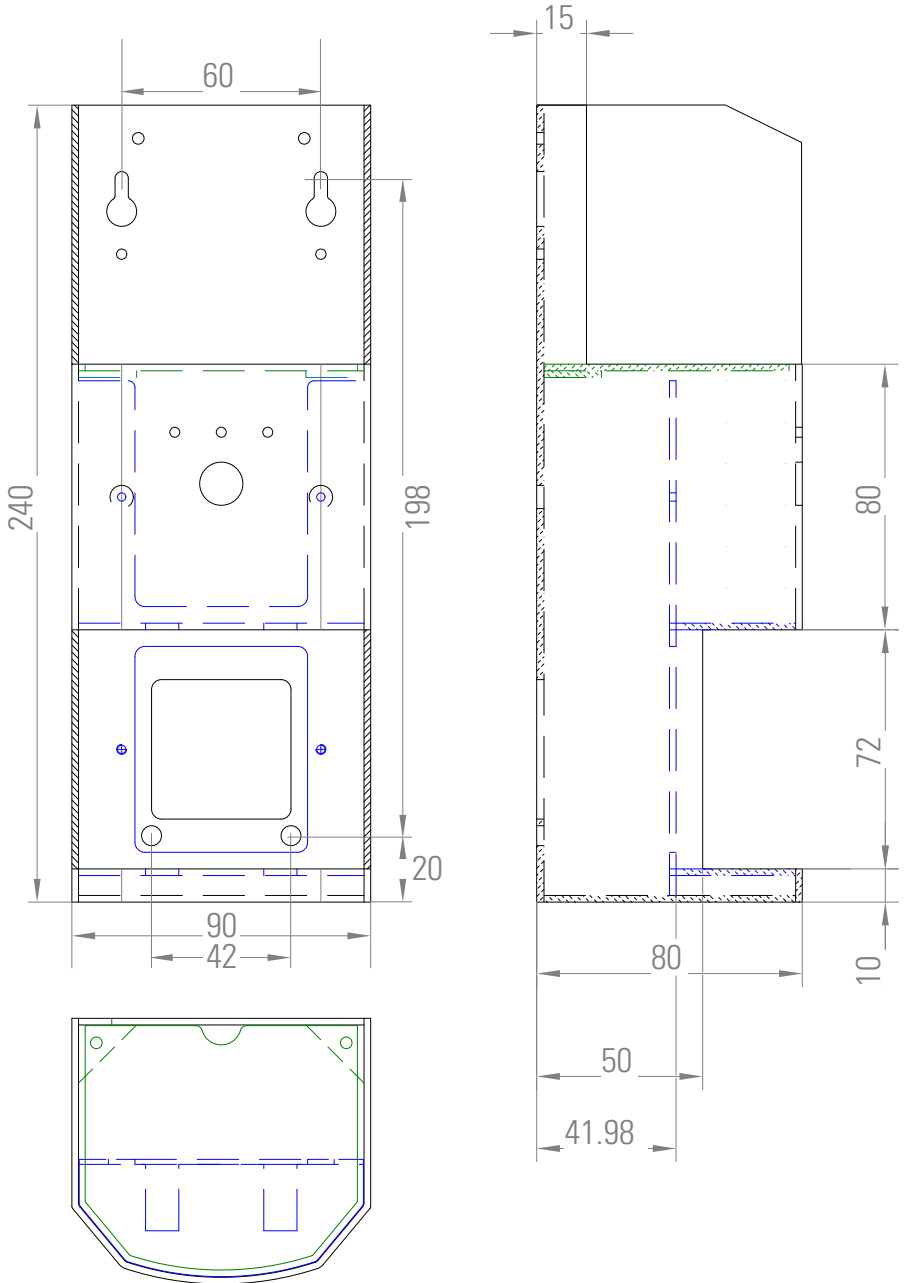
**Warrenty**

Within the legal warrenty time we intend to repair all defect devices, whether the defect is caused by the material or assembly, or replace them. The warrenty expires after a third-party repair.

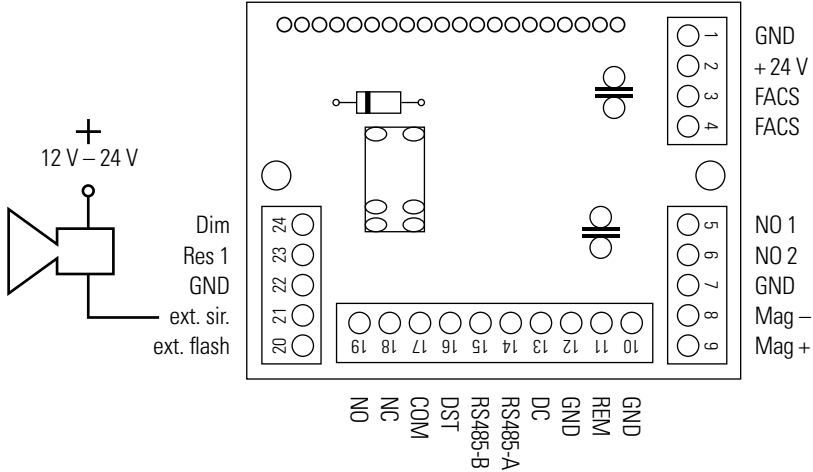
Service

In case of a system failure or a defect GfS Door Terminal please contact the following address:

DIMENSION



TERMINAL DIAGRAM



Pos	Abb.	Function	Signal
1	GND	Operating voltage minus	Ground
2	+24V	Operating voltage plus	+24 V
3	FACS	Fire alarm control system	Floating contact or bridge to 4
4	FACS	Fire alarm control system	Floating contact or bridge to 3
5	NO1	Response magnet 1	Ground is switched, holding magnet 1 is energized (Hall Relay NO)
6	NO2	Response magnet 2	Ground is switched, holding magnet 2 is energized (Hall Relay NO). In case that there is just 1 magnet, 6 and 7 must be bridged!
7	GND	Common GND Magnets	GND-Signal (Hall Relais COM)
8	Magnet-	Magnet- Coil 1 and 2	Negative connection for magnets
9	Magnet +	Magnet+ Coil 1 and 2	Positive connection for magnets
10	GND	Reference for remote opening	Signal ground
11	REM	Remote opening input Switch-on	GND resp. bridge 10 and 11 Opening command
12	GND	Reference contact for door contact	Signal GND
13	DC	Contact	Switch-on GND resp. bridge 12 and 13. Door closed
14	RS-485A	Communication	Data signals
15	RS-485B	Communication	Data signals
16	DST	Communication multi function port	Acc. to the required functions as input or output, also usable for communication purposes with 1 wire
17	COM	Incident message relay COM	Floating contact 30 V/0,5 A max
18	NC	Incident message relay NC	Floating contact 30 V/0,5 A max
19	NO	Incident message relay	Floating contact 30 V/0,5 A max
20	ext. flash	External flash light	Open collector-output, 30V/ 0,5A max
21	ext. sir.	External siren	Open collector-output, 30V/ 0,5A max
22	GND	Reference for reserve and dim input	Signal GND
23	Res1	Reserve input	Free function
24	Dim	Dim input	Switch-on GND resp. bridge 24 with 22. Dim command

FUNCTIONS

Alarm secured**LED ring with cross shines red**

Incident message relay is activated, emergency exit switch is illuminated, magnet is activated, door contact closed (DC connected) as well as magnet 1 and 2.

**Opening time delay**

At the end of the opening time delay (5 sec. preset, adjustable)

the green LEDs blink slowly twice

and the GfS Door Terminal is activated again.

Precondition: Holding magnet and door contact are closed.

When the door is opened during the opening time delay and no opening contact active, the status changes directly into "Waiting for door to be closed"

**Opening command 1**

Turn key switch to the right.

LED ring with corners blink green.

Magnet is deactivated, the door may be opened once without causing an alarm.

**Opening command 2**

Input "Remote" activated.

Opening command remains active as long as the GfS Door Terminal receives the signal plus opening time delay.



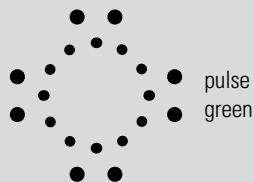
FUNCTIONS

Permanent opening

Permanent opening is active as long as Input "Remote" is activated.
Permanent opening with key switch: Turn key switch clockwise for at least 5 sec., till LEDs expire. Remove key.

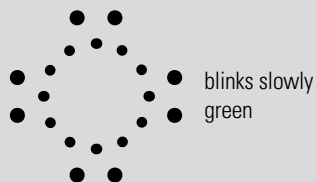
LEDs and emergency exit switch illumination are pulsing.

Door may be opened as long and as often as desired.
Magnets are permanently deactivated.

**Waiting for door to be closed****The LEDs blink slowly green**

at the end of the opening time.

In case that the holding magnet and door contact are not closed the
LEDs blink green for another 15 sec
(till conditions for activation are met).

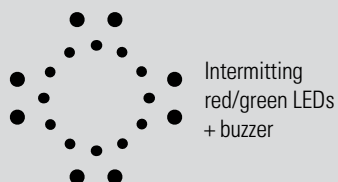
**Door-too-long-open**

If the door stays open for more than 15 sec. an alarm
"Door-too-long-open" is triggered.

Every 3 secs the green LEDs change for 200 ms into red,
while the internal and external buzzers are activated.

Deactivation of alarm

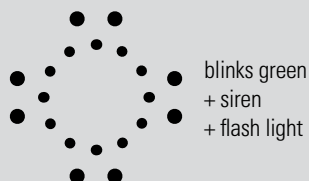
Close door (door reed contact, counter plate) or give again an
opening command (opening command 1 and 2 possible)

**Emergency exit switch alarm****Push emergency exit switch**

Flash-light, buzzer (internal and external) are activated, deactivation
of incident message relay, magnets are separated and deactivated
by the processor.

LEDs blink quickly green (as after opening command).

Reset of alarm just possible with key switch. Unlatch emergency
exit switch.



FUNCTIONS

Intrusion, sabotage

In case that one of the two feedback loops of the holding magnets or door contacts are interrupted, an intrusion alarm is triggered.

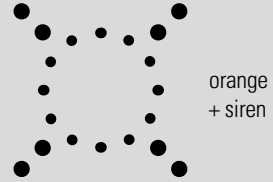
LEDs change from red to orange.

The incident message relay is deactivated, the external siren is activated.

The magnet stays active!

Reset just possible with key switch (turn right).

In case that the PCB is removed (sabotage on the GfS Door Terminal) the same alarm is triggered.

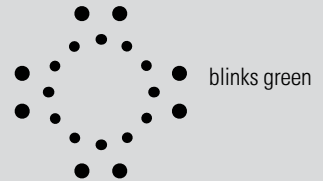


Fire alarm

In case of a central fire alarm clamp 3 and 4 are separated, the failure relay is deactivated. Holding magnets are separated and deactivated by the processor.

LEDs blink quickly green (like open). The emergency exit switch illumination blinks in push-pull.

The deactivation of the alarm only with key switch (turn right) possible.






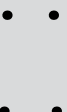


PROGRAMMING

Programming

- 1 Turn key switch to the right (create status open)
- 2 Hold key switch left at least for 5 sec. till orange ring shines
- 3 Turn key switch to the left, release
- 4 Turn briefly key switch to the left. Repeat this in order to enter other programming modes
- 5 Turn key switch to the right in order to confirm the correct programming mode
- 6 Turn key switch to the right in order to change the status/ value
- 7 Turn key switch to the left in order to store the value and finish programming mode

Programming mode

1	Open time delay	2	Silent alarm	3	Accoustic alarm switch-off
	orange  1x 	orange  1x 	orange  1x 		

Change opening time

Execute programming steps 1-3

Orange LED ring shines. Programming mode: opening time.

Start programming – execute step 5 (turn to the right)

(Confirm programming mode by turning key to the left)

Orange LED ring changes to red

1 green LED means 5 sec. opening time. By turning the key switch to the right the opening time increases each time by additional 3 sec.

1 turns to the right: 8 sec

2 turns to the right: 11 sec

8 turns to the right: 29 sec

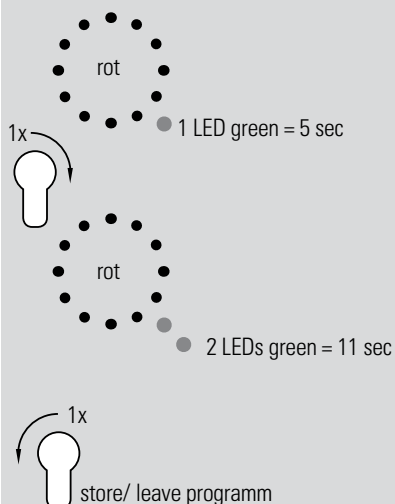
Each turn leads to 1 more LED to shine green (max. 8).

9 turns to the right: 5 sec

When the required opening time delay is set, turn key switch briefly to the left (step 7 – end programming mode)

The LEDs blink quickly 4 times.

The new values are set. In case of a power break down, the opening time remains stored.



PROGRAMMING

Silent alarm

Execute programming steps 1-3
Execute step 4 once. (turn to the left)

The LED cross shines orange.

Execute programming step 5 (turn to the right).

Orange cross changes into green

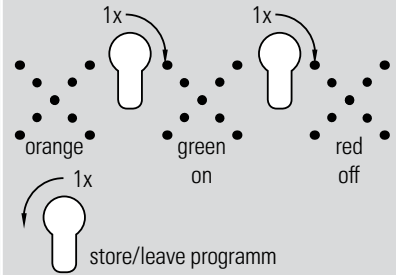
(sirène will be triggered in case of an alarm)

Execute programming step 6 once in order to change to silent alarm (turn to the right).

The LED cross shines red.

With any further execution of programming step 6 the setting changes from green/accoustic alarm to red/silent alarm.

Execute programming step 7 in order to end the programming.



Automatic acoustic alarm switch-off

Execute programming step 1-3.
Execute step 4 twice (turn to the right).

Two orange half circles shine.

Execute step 5 (turn to the right).

Two half circles shine green.

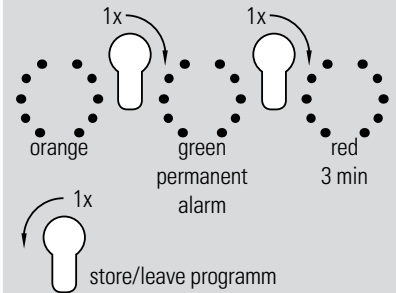
Execute step 6 once (turn to the right).

LED half circles shine red.


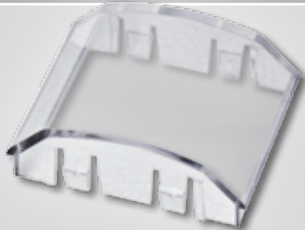



Siren is automatically switched-off after 3 min.

With any further execution of programming step 6 the setting changes from green/no automatic alarm switch-off to red/automatic alarm switch-off.

Execute programming step 7 in order to end the programming.



SPARE PARTS

Replacement cover for flash-light		Part No.
	for the flash-light of the GfS Door Terminal, red	799 000
Replacement cover for emergency exit switch		Part No.
	for emergency exit switch of the GfS Door Terminal made out of unbreakable Macrolon, transparent	799 001
European Cylinder		Part No.
	for insertion into GfS Door Terminal, incl. 2 keys	901 375
	2 replacement keys	901 376
Pictos	Part No.	
for marking the use of the emergency exit switch		
	Regular print quality, adhesive	921 390
Pictos	Part No.	
for marking the use of the emergency exit switch		
	fluorescent, adhesive	921 490

www.gfs-online.com



Stamp



GfS – Gesellschaft für Sicherheitstechnik mbH

Tempowerkring 15 · 21079 Hamburg · Fon 0 40-79 01 95 0 · Fax 0 40-79 01 95 11 · info@gfs-online.com · www.gfs-online.com