Operating and Assembly Instructions

Door Intercom System

DoorLine TM4

Telegärtner
Elektronik GmbH
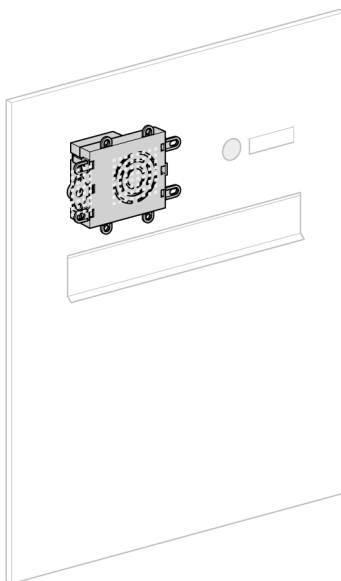
1   Preface

Congratulations for purchasing the TM4 from Telegärtner.

Read through these Operating Instructions carefully and attentively. They contain important information for your safety and valuable tips and additional application options of the device. The information on usage and care should guarantee that you have many years of satisfaction with our product. Please retain all documents, also for subsequent owners.

The content of these Operating Instructions has been prepared with great care. In spite of all checks, however, there is still a possibility that technical inaccuracies and typographical errors have been overlooked. All errors that come to our notice shall be eliminated in new editions. We highly appreciate your feedback at any time if you find a mistake that we overlooked.

These Operating Instructions also use the term "device" or "door intercom system" to refer to the TM4.

The private branch exchange system is also referred to as "PBX System".

1.1   Copyright

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2 Safety instructions

Before installing or using the product, it is essential to observe the instructions in this manual.

If you fail to follow these instructions, the manufacturer Telegärtner Elektronik GmbH will not accept any liability for any damage resulting from negligent or deliberate disregard of the instructions in this operating manual!

- Keep small parts and packaging well away from children. There is a danger of suffocation.

- Connect the product only to equipment that supplies SELV (Safety Extra Low Voltage).

- Only connect CE-certified end devices to the telephone system.

- Do not connect devices that have equipotential bonding including earthing on the lines. Do not connect the a/b lines with an earthing conductor because this can result in damage to the device.

- Do not use damaged devices. Have a damaged device repaired immediately.

- The lines must not be installed or connected during storms.

- The housing must not be opened under any circumstances. Unauthorised opening, incorrect repairs or modification can result in dangers to the user. Warranty claims shall also be rendered void.

- Protect the product against dust, aggressive liquids and vapours.

- Do not use the product in damp rooms or in potentially explosive areas.

- Do not install your product near heat sources or other electrical devices.

- Do not permit liquid to penetrate the interior of the product. This may result in electric shock or short-circuits.

- Route connecting lines and cables such that there is no risk of accidents!

3 Product information and description
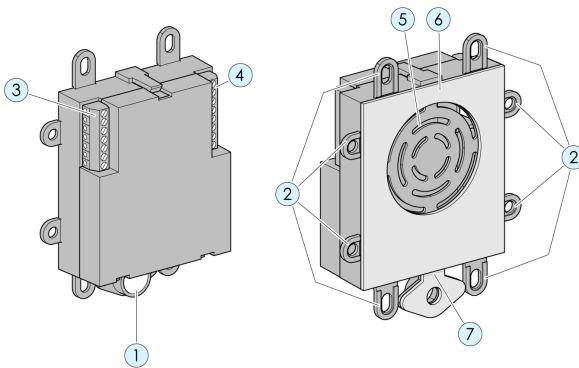
Item	Description
1	Microphone (break off for split installation)
2	Securing tabs
3	Connecting terminal 1 (for bell and buttons and amplifier module)
4	Connecting terminal 2 (for voltage supply, switching contacts and telephone line)
5	Loudspeaker
6	Adhesive holder
7	Predetermined breaking point for split installation of the microphone

3.1   Nameplate
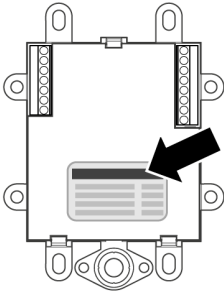
The nameplate contains the serial number, product coding and information on the device type.

3.2   Specified use

DoorLine Slim is designed for connection to analogue telephone systems.

It can be used

- as an intercom
- as an electronic door opener
- for remote-controlled opening of doors or gates
- for relaying door conversations to telephones
- for connection to other control systems

DoorLine has been developed for private as well as commercial use.

3.2.1 Notes on the use of an electronic door opener

There is an increased risk of burglary if you connect a door opener as the relay contacts for activation of the door opener are accessible following disassembly of the DoorLine.

An electric door opener does not substitute door closure by a locking bar, it is an intelligent, additional safety feature.

It is primarily intended for daytime operation, whereas at night time or in case of absence the relevant door is locked by the locking bar.

As far as insurance is concerned, a door that is held closed only by the use of the door opener is not regarded as locked!

3.3 Technical prerequisites

- The device is designed for connection to an analogue telephone connection (a/b-Port) of a PBX system.

- Both relay switching outputs of the device connect potential-free. This means that when a door opener or a similar device is activated, it may be necessary to provide an additional bell transformer (see chapter Connecting device [▸ 12]).

- The installation of your PBX system and its operation require the use of telephone plugs (e.g. TAE or RJ11), cables and lines that are not included in the scope of supply.

- Your PBX system and end devices (telephones) must support touch-tone dialling (DTMF).

3.4 Technical data

Telecommunication technical data	Supply voltage	24 – 64 V DC
	Supply current	20 – 50 mA
	Call detection	20 - 50 Hz
Inputs for bell pushbuttons	Number	4
Call numbers	Number	per button 2 call numbers with 20 positions
Relay switching outputs	Relay switching output 1	potential-free, 24 V AC / DC 1 A
	Relay switching output 2	potential-free, 24 V AC / DC 1 A
General data	Power supply	9 - 24V, 0.5 A
	Cable length	max. 50 m
	Power supply	Standby 0.5 W
	Current consumption	Call state max. 1 W
	Degree of protection	IP20
	Operating temperature	-20 °C to +60 °C
	Weight	100 g
Dimensions	Cable length, micro	300 mm
	Device	84 x 109.5 x 29 mm

3.5 Accessories

- Wall power supply SNG DL article number 105248
  (For use as bell transformer, door opener current supply, etc. Cannot be used for power supply to the DoorLine TM4!)
- Power unit for carrier rail assembly (DIN rail) HDR-15-12,
  article number 116715 (for voltage supply to the DoorLine TM4).

4 Assembly and connection

4.1 For your safety

Assembly must only be carried out by specialists with corresponding skills and experience. These persons must be able to detect dangers and to avoid possible risks.

The statutory specifications at the place of installation must be observed.

Take care not to jam the connecting cables during installation.

Also observe the safety instructions at the start of the Operating Instructions.

4.2 Scope of supply

The scope of supply of the device includes:

- the device
- Assembly and Operating Instructions
- Adhesive holder (already preassembled)
- TAE adapter
- Cable RJ11 to open ends
- 2 x connection terminal
- Wall power supply

4.3 Prior to assembly

Check all parts for completeness and transport damage prior to assembly.

We recommend that you initially connect the DoorLine in the direct vicinity of your PBX system, try it out and make the basic configuration.

In this manner, you can install the wiring and configure the bell pushbutton quickly and easily.

After the DoorLine functions perfectly in this test setup with your PBX system and telephones, you can install the DoorLine in its final place of usage.

4.4 Place of installation

- The TM4 is used for concealed installation in letterbox system with already existing bell pushbuttons and intercom grilles.

- The ambient temperature must be between -20 °C and +60 °C.

- In the area of the installation location, no supply lines or similar must be installed.

4.5 Installing device

The device is installed via the existing securing tabs or via the adhesive pad in a letterbox system.

If you wish to assemble the DoorLine directly, first release the nuts in the securing tabs and remove the adhesive holder.
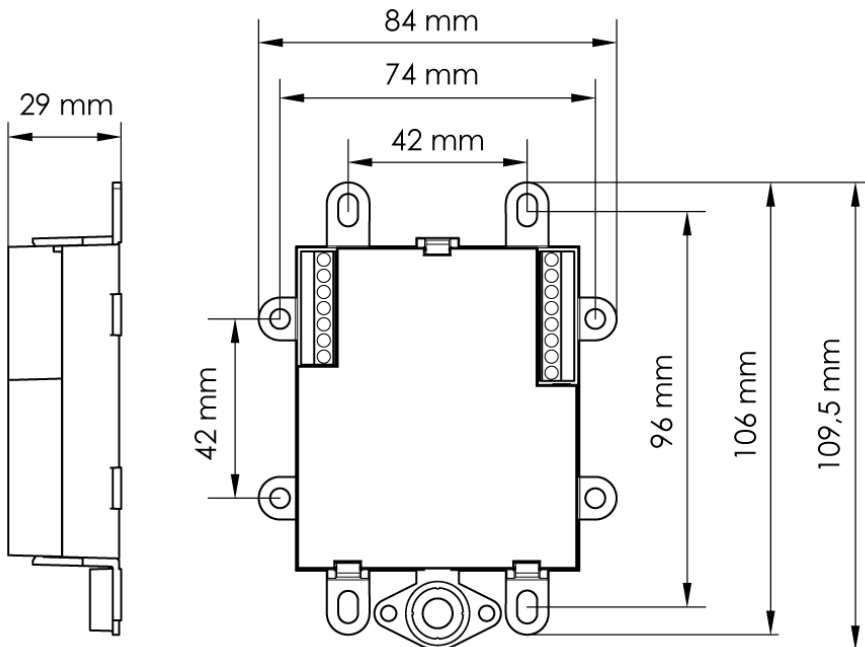
4.6 Connecting device

4.6.1 Important notes

- Before connecting the device to the PBX system, switch off all required components (PBX system, device, bell transformer).

- When wiring, ensure that the input voltage is correct (9-24 V). The polarity can be ignored.

- Do not insert the wall power supply into the socket until all cables are firmly connected and there is no risk of a short circuit of wire pairs.

- A bell transformer (e.g. 12 V alternating voltage) must not be used as a power supply for the device. This can result in destruction of the device!

- Both integrated relay contacts connect potential-free, i.e. an additional bell transformer is required to activate a door opener. Then connect the bell transformer voltage via the respective relay switching output to the door opener (see chapter Connection example for a door opener and a door bell [▶ 16]).

- Both switching relays can be loaded to a max. of 24 V AC / DC 1 A. Prior to initial operation of the device, ensure that these values are not exceeded by your door opener, door bell or other devices to be connected. Observe the Operating Instructions of the respective products.

4.6.2 Wiring

Use commercially available telecommunication cables for the installation wiring.

Please note that in order to meet general safety provisions and to avoid interference influences, the low-current telephone lines must be routed separately from power lines.

Observe a minimum distance of 10 cm between both types of lines. If one of the connected lines is routed out-of-doors, you will have to provide sufficient lightning protection.

Lines types that can be used

- Telecommunication indoor cable
  - J-Y(ST)-Y 2 x 2 x 0.6
  - J-Y(ST)-Y 2 x 2 x 0.8
  - J-Y(ST)-Y 4 x 2 x 0.6
  - J-Y(ST)-Y 4 x 2 x 0.8
- Bell sheathed cable
  - YR 4 x 0.8
- Telecommunications cable
  - A-2Y(L)2Y 4 x 2 x 0.8

Maximum cable lengths for connection to the PBX system and to the door opener

Wire diameter		0.8 mm	0.6 mm
Ranges for voice and signal operation		320 m	140 m
Ranges for door opener operation from an external bell transformer to door opener (maximum current consumption 1A alternating voltage)	12 V	38 m	17 m
	16 V	76 m	34 m
	20 V	115 m	51 m
	24 V	177 m	78 m

Connection types

At the analogue connection of the PBX system, three connection types are usually used in Germany:

- Terminals
- RJ 11
- TAE plugs

On modern PBX systems such as the AVM Fritz!Box or Telekom Speedport, the two inner wires of the RJ 11 connection should be used.

On older PBX systems (before 2005), the two outer wires are also used.

4.6.3 Terminal assignment

The rear side of the device has two screw terminals.

Important: The connectors cannot be unplugged. The lines must be connected directly to the device.

Com	Common (common reference point for the pushbutton inputs)
Button 1 – Button 4	Input for bell pushbutton
Amplifier module	The loudspeaker signal for a separate amplifier module can be tapped here
9 - 24 V DC	Supply voltage (neutral polarity)
Contact 2	potential-free contact
Contact 1	potential-free contact
Telephone line	The two wires for the analogue telephone line are connected here

4.6.4   Wiring diagram
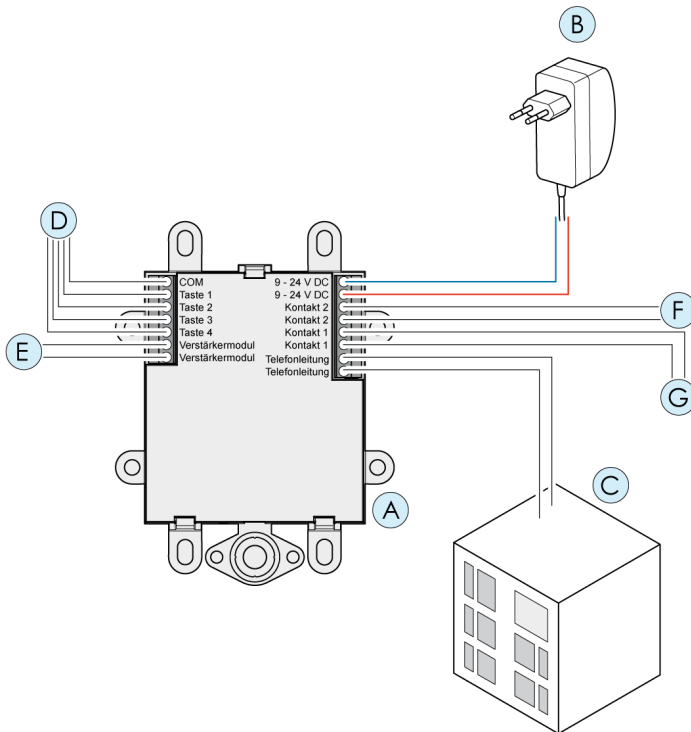
Item	Description
A	DoorLine TM4
B	Power unit connection (neutral polarity)
C	Connection to telephone system (neutral polarity)
D	Inputs for bell pushbutton 1-4
E	Output for amplifier module
F	Output for potential-free contact 2
G	Output for potential-free contact 1

4.6.5 Connection example for a door opener and a door bell
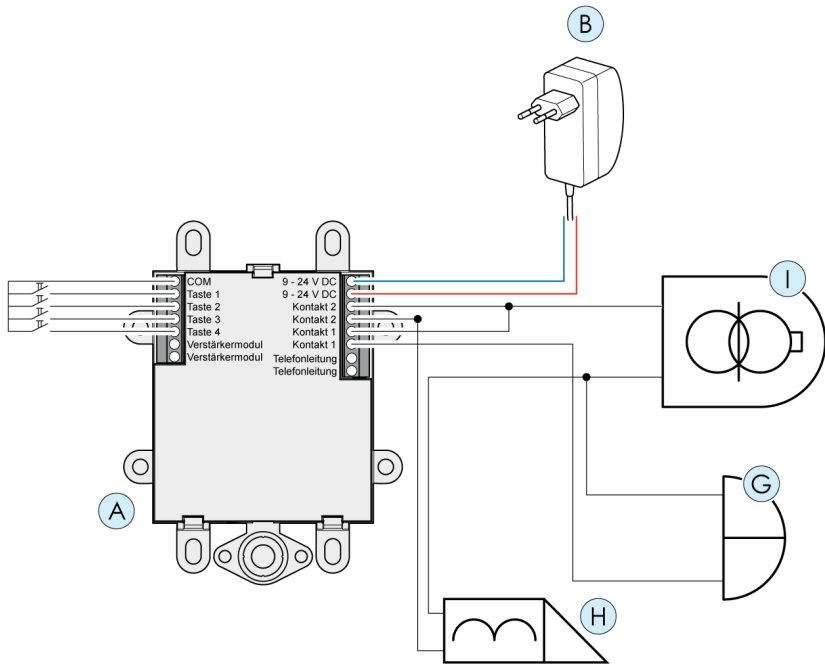
Item	Description
A	DoorLine TM4
B	Power unit
G	Door bell at contact 1
H	Door opener at contact 2
I	Bell transformer

4.6.6   Checking connection

How to check whether installation was successful:

1. Apply the voltage supply.
   - ⇨ The DoorLine starts up. After the voltage is applied, a tone sounds (beep).
2. Call the DoorLine from a telephone that is connected to your telephone system (see chapter Calling the DoorLine [▷ 42]).
   - ⇨ A double tone sounds in the telephone. The voice communication between telephone and DoorLine is then built up.

If the device does not react, disconnect it immediately from the power-supply system. Then check the connection to the power unit for a wiring fault.

If installation was successful, start the configuration of the device as described in the following chapters.

5 Configuration

5.1 Factory settings

The following parameters are preset ex works:

PIN Code	0000
Door opener function	Blocked
Door opener time	3 seconds
Call duration	1 minute
Door call duration	30 seconds
Call number bell pushbutton 1	11
Call number bell pushbutton 2	12
Call number bell pushbutton 3	13
Call number bell pushbutton 4	14
Call reception	Reception by button redial
Configuration of contact 1	External gong for all bell pushbuttons
Configuration of contact 2	Door opener
Automatic door opener	deactivated
Call duration after door opener	deactivated

5.2 Restoring factory settings

1.		Enter the configuration mode (see chapter Entry to configuration mode [▶ 20])
2.	(#)(*)	Actuate the hashtag button and star button on the telephone
3.	(9)(9)	Enter configuration command "99" at the telephone
	♪♪	A melody rings out. After approx. 3 seconds you hear the positive acknowledgement tone. The device is now in delivery status.

5.3   Acknowledgement tones

During programming, you will be informed about the positive and negative acknowledgement tones via the programming status.

Each note symbol corresponds to a beep:

neutral	Key input is expected	♪
positive	The programming has been accepted	♪♪
negative	The programming has not been accepted	♪♪♪♪♪♪♪♪

5.4   Saving and ending configuration

To end the configuration, it is sufficient to hang up the telephone receiver. The device then detects the end of the call automatically and saves the changed configuration.

5.5   Information on the entry of call numbers

Input	Effect
*	Does not result in the selection of this character but rather a dialling pause of one second
**	Results in one-time dialling of a "*" character If you reach your desired telephone via the call number "**1", you have to enter "****1" in the call number input of the DoorLine
#	The DoorLine generates a flash pulse of 100 ms
##	Results in one-time dialling of a "#" character

5.6   Entry to configuration mode

For configuration, you have to call your DoorLine with a touch-tone dialling telephone. The way you can call the DoorLine depends on the configuration of your PBX system.

When the connection to the device has been established, you can start with the configuration.

Notes

▪ Write down the corresponding codes for your own reference before you start the configuration.

▪ If the programming is rejected by the device (negative acknowledgement tone), you will have to repeat the incorrect programming step.

▪ If you entered the wrong PIN three times in succession, the connection is disconnected.

1	☏	Pick up the receiver
2	⌨	Call the device
	♪♪	You will hear the positive acknowledgement tone
3	(#)(#)	Actuate the hashtag button twice on the telephone
	♪	You will hear the neutral acknowledgement tone
4	⌨	Enter the PIN
	♪♪	You will hear the positive acknowledgement and are now in programming mode

If you hear the positive acknowledgement tone, you can start with the programming. Otherwise the procedure must be repeated.

If you are in programming mode, you can carry out all configuration options one after the other.

5.7　Automatic adjustment to the PBX system

To guarantee optimum hands-free talking in all PBX systems, your device can adjust automatically to the respective system.

The adjustment takes around 3 seconds. An adjustment tone sounds during this procedure. During this period, you should not talk into the receiver because this can interfere with the automatic adjustment.

> We recommend that you always carry out this step after restoring the factory settings or following a new installation.

1.		Enter the configuration mode (see chapter Entry to configuration mode [▶ 20])
2.	(#)(*)	Actuate the hashtag button and star button on the telephone
3.	(0)(0)	Enter configuration command "00" at the telephone
		Wait approx. 3 seconds until the adjustment tone ends.
	♪♪	You will hear the acknowledgement tone. The device is now adjusted to your PBX system

After the adjustment, you can adapt the volume and the microphone sensitivity as desired.

5.8　Defining microphone sensitivity and volume

The microphone sensitivity can be adjusted in 10 stages; the loudspeaker volume in 20 stages. When the maximum or minimum possible value is reached, you will hear an acknowledgement tone. Each correct key input is confirmed by a neutral acknowledgement tone.

The following code numbers are possible:

(2)	Code number 2 reduces the microphone sensitivity
(3)	Code number 3 increases the microphone sensitivity
(5)	Code number 5 reduces the loudspeaker sensitivity
(6)	Code number 6 increases the loudspeaker sensitivity

5.9   Change the PIN Code

In delivery status, the PIN Code for the configuration is "0000". To prevent the settings of your DoorLine from being changed by unauthorised persons, you should change the PIN Code as follows:

1.		Enter the configuration mode (see chapter Entry to configuration mode [▶ 20])
2.	(#)(✳)	Actuate the hashtag button and star button on the telephone
3.	(8)(8)	Enter configuration command "88" at the telephone
	♪	You will hear the neutral acknowledgement tone
4.	⬚⬚⬚	Enter new 4-digit PIN Code
	♪	You will hear the neutral acknowledgement tone
5.	⬚⬚⬚	Repeat new PIN Code
	♪♪	You will hear the positive acknowledgement tone

ℹ️ If changing of the PIN Code is not completed with the positive acknowledgement tone, check whether the correct PIN Code was input when you entered the configuration mode. This is not checked by the DoorLine until the end of the complete procedure.

ℹ️ Changes to the configuration are only possible with knowledge of your PIN Code. For security reasons, enter your new PIN Code in the configuration table (see Overview of programming table [▶ 37]).

5.10 Call numbers for bell pushbuttons

Each bell pushbutton can be assigned 2 call numbers.

With call reception by button redial, the second call number serves as an alternative number. This number is dialled if the call to the first number is not answered or the call destination is currently busy.

With call reception in direct mode, only the first call number is selected.

5.10.1 Defining call numbers for bell pushbuttons

Configuration example: Call number 1 for bell pushbutton 1:

1.		Enter the configuration mode (see chapter Entry to configuration mode [▶ 20])
2.	(#)(✳)	Actuate the hashtag button and star button on the telephone
3.	(1)(1)	Enter configuration command for call number bell pushbutton 1 "11" at the telephone
4.	♩	Neutral acknowledgement tone
5.	📱	Enter call number (max. 20 digits) that is to be assigned to the bell pushbutton (see Information on the entry of call numbers [▶ 19])
	♩♩	If no input is made for 5 seconds, you will hear the acknowledgement tone and the call number will be saved

The remaining call numbers are configured in the same manner. The following commands must be used to do this:

(#)(✳)(1)(2)	Configuration of call number 2 for bell pushbutton 1
(#)(✳)(2)(1)	Configuration of call number 1 for bell pushbutton 2
(#)(✳)(2)(2)	Configuration of call number 2 for bell pushbutton 2
(#)(✳)(3)(1)	Configuration of call number 1 for bell pushbutton 3
(#)(✳)(3)(2)	Configuration of call number 2 for bell pushbutton 3
(#)(✳)(4)(1)	Configuration of call number 1 for bell pushbutton 4
(#)(✳)(4)(2)	Configuration of call number 2 for bell pushbutton 4

5.10.2 Deleting call numbers

You can delete a call number that is saved on a button.

Configuration example: Deleting call number 1 for bell pushbutton 1:

1.		Enter the configuration mode (see chapter Entry to configuration mode [▸ 20])
2.	(#)(✳)	Actuate the hashtag button and star button on the telephone
3.	(1)(1)	Enter configuration command for call number bell pushbutton 1 "11" at the telephone
4.	♩	Neutral acknowledgement tone
5.	♩♩	If no input is made for 5 seconds, you will hear the positive acknowledgement tone and the call number will be deleted

The remaining call numbers are deleted in the same manner. The following commands must be used to do this:

(#)(✱)(1)(2)	Deletion of call number 2 for bell pushbutton 1
(#)(✱)(2)(1)	Deletion of call number 1 for bell pushbutton 2
(#)(✱)(2)(2)	Deletion of call number 2 for bell pushbutton 2
(#)(✱)(3)(1)	Deletion of call number 1 for bell pushbutton 3
(#)(✱)(3)(2)	Deletion of call number 2 for bell pushbutton 3
(#)(✱)(4)(1)	Deletion of call number 1 for bell pushbutton 4
(#)(✱)(4)(2)	Deletion of call number 2 for bell pushbutton 4

5.11 Enabling door opener function

For security reasons to prevent unauthorised opening, the door cannot be opened if the connection was set up from the telephone to the door intercom. This function can be deactivated if desired.

1.		Enter the configuration mode (see chapter Entry to configuration mode [▸ 20])
2.	(#)(✱)	Actuate the hashtag button and star button on the telephone
3.	(0)(4)	Enter configuration command "04" at the telephone
	♩	As confirmation, you will hear a neutral acknowledgement tone
4.	(1)	Enter digit 1 to enable the door opener function or
	(0)	digit 0 to block the door opener function
	♩♩	Finally, you will hear the positive acknowledgement tone

5.12 Defining door opener time

Actuation time of the door opener.

Possible values: 1 to 9 seconds or deactivate with 0
Delivery status: 3 seconds

With door opening with redial #9

If relay contact 2 was defined as door opener.

1.		Enter the configuration mode (see Entry to configuration mode [▶ 20])
2.	(#)(✳)	Actuate the hashtag button and star button on the telephone
3.	(0)(5)	Enter configuration command "05" at the telephone
	♪	As confirmation, you will hear a neutral acknowledgement tone
4.	⌨	Define the switching time of the door opener by entering the digits 1 to 9 (digit corresponds to the duration in seconds, 0=deactivated)
	♪♪	Finally, you will hear the positive acknowledgement tone

With door opening with redial #8

If relay contact 1 was defined as door opener.

1.		Enter the configuration mode (see Entry to configuration mode [▶ 20])
2.	(#)(✳)	Actuate the hashtag button and star button on the telephone
3.	(0)(3)	Enter configuration command "03" at the telephone
	♪	As confirmation, you will hear a neutral acknowledgement tone

4.	📟	Define the switching time of the door opener by entering the digits 1 to 9 (digit corresponds to the duration in seconds, 0=deactivated)
	♪♪	Finally, you will hear the positive acknowledgement tone

5.13   Defining call duration

Definition of the call duration for the DoorLine.
When this time has elapsed, the door conversation is disconnected automatically.

Delivery status: one minute
Possible values: 1 to 9 minutes in steps of 1 minute or 0 for "without limitation".

1.		Enter the configuration mode (see Entry to configuration mode [▶ 20])
2.	(#)(✱)	Actuate the hashtag button and star button on the telephone
3.	(0)(7)	Enter configuration command "07" at the telephone
	♪	As confirmation, you will hear a neutral acknowledgement tone
4.	📟	Define the call duration by entering the digits 1 to 9 (digit corresponds to the duration in minutes, 0=without limitation)
	♪♪	Finally, you will hear the positive acknowledgement tone

5.14 Defining call duration to extension line

Definition of the duration of the door call to the extension line of your PBX system.

Delivery status: 30 seconds
Possible values: 1 to 99 seconds.

> The duration of the door call to the extension line can only be adjusted if the call reception is set to "button redial". If call reception is set to "direct mode", the setting of the call duration has no effect. When a bell pushbutton is actuated, the set time for the call duration starts running immediately.

1.		Enter the configuration mode (see Entry to configuration mode [▶ 20])
2.	(#)(✳)	Actuate the hashtag button and star button on the telephone
3.	(0)(8)	Enter configuration command "08" at the telephone
	♩	As confirmation, you will hear a neutral acknowledgement tone
4.	▦☞	Enter call duration with digits 01, ... 99 (in steps of one second). The input must have two digits
	♩♩	Finally, you will hear the acknowledgement tone

5.15 Defining type of call reception

Determines the way a call is received at the telephone after a bell pushbutton is pressed at the DoorLine.

5.15.1 Call reception by button redial

The voice connection between door intercom system and telephone is not established until the receiver has been picked up and a random digit key has been pressed on the telephone.

1.		Enter the configuration mode (see chapter Entry to configuration mode [▸ 20])
2.	(#)(✱)	Actuate the hashtag button and star button on the telephone
3.	(7)(0)	Enter configuration command "70" at the telephone
	♪♪	You will hear the acknowledgement tone

5.15.2 Call reception in direct mode

The voice communication between door intercom system and telephone is built up immediately after the receiver has been picked up.

1.		Enter the configuration mode (see chapter Entry to configuration mode [▸ 20])
2.	(#)(✱)	Actuate the hashtag button and star button on the telephone
3.	(7)(1)	Enter configuration command "71" at the telephone
	♪♪	You will hear the acknowledgement tone

5.16 Preparing call forwarding

Two call numbers can be saved to which door calls can be redirected as required ("pharmacy line").

With call reception by button redial, the second call number serves as an alternative number. This number is dialled if the call to the first number is not answered or the call destination is currently busy.

With call reception in direct mode, only the first call number is selected.

Call forwarding to these call numbers can be activated/deactivated for each bell pushbutton as required (see chapter Activating/deactivating call forwarding [▶ 42]).

Precondition for call forwarding to an external destination

The analogue extension line to which the DoorLine is connected must have an authorisation for receiving external telephone calls.

In most telephone systems this function is referred to as "direct outward dialling".

5.16.1 Defining call numbers for call forwarding

1.		Enter the configuration mode (see chapter Entry to configuration mode [▶ 20])
2.	(#)(✳)	Actuate the hashtag button and star button on the telephone
3.	(5)(1)	Input of the first call number: enter configuration command "51" at the telephone or
	(5)(2)	Input of the alternative number: enter configuration command "52" at the telephone
4.	♩	Neutral acknowledgement tone
5.	📱	Enter target call number (max. 20 digits) (see Information on the entry of call numbers [▶ 19])
	♩♩	If no input is made for 5 seconds, you will hear the acknowledgement tone and the call number will be saved

5.16.2 Deleting call numbers for call forwarding

1.		Enter the configuration mode (see chapter Entry to configuration mode [▶ 20])
2.	(#)(✳)	Actuate the hashtag button and star button on the telephone
3.	(5)(1)	Delete the first call number: enter configuration command "51" at the telephone or
	(5)(2)	Delete the alternative number: enter configuration command "52" at the telephone
4.	♩	Neutral acknowledgement tone
5.	♩♩	If no input is made for 5 seconds, you will hear the positive acknowledgement tone and the call number will be deleted

5.17 Configuring relay contacts

The two relay contacts can be used

- as a door opener or
- to activate a door gong.

Each contact can be assigned to one or several bell pushbuttons.

The relay contact is connected when a bell pushbutton is pressed. The contact remains connected as long as the bell pushbutton is pressed.

5.17.1 Configuration of relay contact 1

1.		Enter the configuration mode (see chapter Entry to configuration mode [▶ 20])
2.	(#)(✳)	Actuate the hashtag button and star button on the telephone
3.	(6)(1)	Enter configuration command "61" at the telephone
	♩	Neutral acknowledgement tone
4.		Enter switching command in accordance with the following table with two digits
	♩♩	You will hear the acknowledgement tone as confirmation

Switching command	Bell pushbuttons				Redial	Comments
	1	**2**	**3**	**4**	**#8**	
00	-	-	-	-	🚪	Relay contact 1 switches with redial of #8 during voice communication (door opener).
01	🔔					
02		🔔				
03	🔔	🔔				
04			🔔			
05	🔔		🔔			
06		🔔	🔔			
07	🔔	🔔	🔔			
08				🔔		
09	🔔			🔔		
10		🔔		🔔		
11	🔔	🔔		🔔		
12			🔔	🔔		
13	🔔		🔔	🔔		
14		🔔	🔔	🔔		
15	🔔	🔔	🔔	🔔		Factory setting
16						Switching contact 1 is activated if voice communication is established.

Example: you wish to assign a door gong to relay contact 1. The door gong is to sound when bell pushbutton 2 is pushed. After entry to configuration mode, enter the following: # ✳ 61♪ 02 ♪♪

5.17.2 Configuration of relay contact 2

Configuration of relay contact 2

1.		Enter the configuration mode (see chapter Entry to configuration mode [▶ 20])
2.	(#)(✳)	Actuate the hashtag button and star button on the telephone
3.	(6)(2)	Enter configuration command "62" at the telephone
	♩	Neutral acknowledgement tone
4.		Enter switching command in accordance with the following table
	♩♩	You will hear the acknowledgement tone as confirmation

Switching command	Bell pushbuttons				Redial	Comments
	1	**2**	**3**	**4**	**#9**	
00	-	-	-	-	🚪	Relay contact 2 switches with redial of #9 during voice communication (door opener). Factory setting
01	🔔					
02		🔔				
03	🔔	🔔				
04			🔔			
05	🔔		🔔			
06		🔔	🔔			
07	🔔	🔔	🔔			
08				🔔		
09	🔔			🔔		
10		🔔		🔔		
11	🔔	🔔		🔔		
12			🔔	🔔		
13	🔔		🔔	🔔		
14		🔔	🔔	🔔		
15	🔔	🔔	🔔	🔔		
16						Switching contact 2 is activated if voice communication is established.

5.18   End of call after door opening

If you wish that the connection to the door is disconnected immediately after activation of the door opener, the option "End of call after door opening" can be activated.

1.		Enter the configuration mode (see chapter Entry to configuration mode [▶ 20])
2.	(#)(✱)	Actuate the hashtag button and star button on the telephone
3.	(7)(2)	Deactivated (factory setting)
	(7)(3)	activated
	♩	Neutral acknowledgement tone

6 Overview of programming table

The following table contains an overview of all programming commands. For these programming commands, prior entry to configuration mode via the PIN code is required.

When entering call numbers, note the Information on the entry of call numbers [▶ 19].

Programming command	Own settings	Description
##<PIN Code>		**Entry to configuration mode.** Factory setting of PIN Code: 0000
#∗00		Automatic adjustment to PBX system
#∗04 <Door opener function>		Door opener function: 0=disabled 1=enabled Factory setting: disabled
#∗05 <Door opener time>		Switching time for door opener: 1 to 9 seconds or 0 (door opening not possible) Factory setting: 3 seconds
#∗07 <Call duration>		Defining maximum call duration: 1 -9 minutes or 0=without limitation Factory setting: 1 minute
#∗08 <Call duration>		Call duration to extension line: 01-99 seconds (double-digit entry) Factory setting: 30 seconds
#∗11 <Call number>		Call number to be called from bell pushbutton 1
#∗12 <Call number>		Alternative number to be called from bell pushbutton 1
#∗21 <Call number>		Call number to be called from bell pushbutton 2

Programming command	Own settings	Description
#✳22 <Call number>		Alternative number to be called from bell pushbutton 2
#✳31 <Call number>		Call number to be called from bell pushbutton 3
#✳32 <Call number>		Alternative number to be called from bell pushbutton 3
#✳41 <Call number>		Call number to be called from bell pushbutton 4
#✳42 <Call number>		Alternative number to be called from bell pushbutton 4
#✳51 <Call number>		Call number to be called during active call forwarding
#✳52 <Call number>		Alternative number to be called during active call forwarding
#✳61 <Command 00-16>		Configuration of relay contact 1. See Configuring relay contacts [▶ 32]
#✳62 <Command 00-16>		Configuration of relay contact 2. See Configuring relay contacts [▶ 32]
#✳70		Call reception by pushbutton (factory setting)
#✳71		Call reception in direct mode
#✳88 <PIN><PIN>		Enter new PIN Code twice
#✳99		Reset to factory setting
2		Reduce microphone sensitivity
3		Increase microphone sensitivity
5		Reduce loudspeaker volume
6		Increase loudspeaker volume

Ending programming

☎	Hang up the receiver or enter #0.

7   Everyday use

7.1   Receiving a door call

A bell pushbutton at the door intercom system is pressed.
The saved call number is called.
The telephone of the called connection rings.

With presetting "Call reception by pushbutton"

1.	☎	Pick up telephone. An attention tone (beep) indicates a call from the door intercom system
	⌨	Actuate a random numeric key
	👤	Voice communication is established
2.	☎	Simply hang up the receiver to end the voice communication or
	(#)(0)	enter digits #0 (disconnects the connection immediately) or
	🕐	the maximum call duration is reached. The connection is then disconnected automatically

With presetting "Call reception in direct mode"

1.	📞	Pick up telephone
	👤	Voice communication is established directly
2.	📞	Simply hang up the receiver to end the voice communication or
	# 0	enter digits #0 (disconnects the connection immediately) or
	🕐	the maximum call duration is reached. The connection is then disconnected automatically

7.2   Opening a door

1.	👤	A door call takes place
2.	# 8	enter button command #8 (if relay contact 1 is set as door opener) or
	# 9	Enter button command #9 (if relay contact 2 is set as door opener)
		The door opener is activated

Important:

- In delivery status of the DoorLine, the door cannot be opened from the telephone during a call setup. If this security measure is not required, it can be cancelled by a corresponding configuration (see chapter Enabling door opener function [▸ 25]).

- The time duration for the electric door opener can be set from 1-9 seconds (see chapter Defining door opener time [▸ 26]).

7.3 Calling the DoorLine

The DoorLine can also be called directly.

Setting up connection

1.	(icon)	Pick up telephone
2.	(icon)	Enter the call number of your DoorLine
	(icon)	You will hear the positive acknowledgement tone
	(icon)	Voice communication is established directly

Ending connection

1.	(icon)	Simply hang up the receiver to end the voice communication or
	(# 0)	enter digits #0 (disconnects the connection immediately) or
	(clock icon)	the maximum call duration is reached. The connection is then disconnected automatically

> (i) In case of loud interfering noise, it is possible that the connection is not disconnected immediately. In this case, use option #0 to disconnect the connection. The connection is then disconnected after the defined time.

7.4 Activating/deactivating call forwarding

Example:

You leave the house and are expecting a parcel service or important visitor. When you leave your house, you can now simply forward the door call to your mobile telephone or another telephone.

Prerequisites:

The call numbers for call forwarding must be defined in advance (see chapter Preparing call forwarding [▶ 30]).

Activating call forwarding

1.	☎	Pick up telephone
2.	▦	Call the door intercom system
	♪♪	You will hear the acknowledgement tone
3.	(#)	Press the hashtag button
4.	▦	Enter digit (1-4) for the relevant bell pushbutton
5.	(1)	Enter digit 1 for activation
	♪♪	You will hear the acknowledgement tone. Forwarding is active
6.	☎	Hang up the receiver

Deactivating call forwarding

1.	☎	Pick up telephone
2.	▦	Call the door intercom system
	♪♪	You will hear the acknowledgement tone
3.	(#)	Press the hashtag button
4.	▦	Enter digit (1-4) for the relevant bell pushbutton
5.	(0)	Enter digit 0 for deactivation
	♪♪	You will hear the acknowledgement tone. Forwarding is de-activated
6.	☎	Hang up the receiver

7.5 Direct commands during voice communication

During a door call, you have the following additional input options on your telephone:

(#)(0)	Disconnects the connection immediately. DoorLine moves to standby
(#)(1)(0)	Deactivate call forwarding pushbutton 1
(#)(1)(1)	Activate call forwarding pushbutton 1
(#)(2)(0)	Deactivate call forwarding pushbutton 2
(#)(2)(1)	Activate call forwarding pushbutton 2
(#)(3)(0)	Deactivate call forwarding pushbutton 3
(#)(3)(1)	Activate call forwarding pushbutton 3
(#)(4)(0)	Deactivate call forwarding pushbutton 4
(#)(4)(1)	Activate call forwarding pushbutton 4

(#)(8)
or
(#)(9)
	Activates the door opener
	Function is only available if
	▪ a relay contact is configured as door opener and
	  – the door call was set up by the DoorLine
	    or
	  – the door opener function was enabled in the configuration of the DoorLine

(#)(6)(0)	automatic door opening deactivated (factory setting).
(#)(6)(1) (0)	automatic door opening with actuation of bell pushbutton 1, without call signalling
(#)(6)(1) (1)	automatic door opening with actuation of bell pushbutton 1, with call signalling.

⌗ 6 2 0	automatic door opening with actuation of bell pushbutton 2, without call signalling.
⌗ 6 2 1	automatic door opening with actuation of bell pushbutton 2, with call signalling.
⌗ 6 3 0	automatic door opening with actuation of bell pushbutton 1 or 2, without call signalling.
⌗ 6 3 1	automatic door opening with actuation of bell pushbutton 1 or 2, with call signalling.
⌗ 9	if switching contact 2 is set as a door opener (factory setting).
⌗ 8	if switching contact 1 is set as a door opener.

Important:
The contacts can only be switched via these direct commands if they have been assigned the function "Redial" in the configuration.

8   Malfunctions and fault elimination

The following table contains the most frequently occurring malfunctions and their correction. In case of further malfunctions, please contact your specialist dealer or our technical Hotline (see rear side of device).

No function	No operating voltage	Check installation. Check Connections at the terminals for correct connection order.
Incorrect bell signalling No dialling	Incorrect programming of the call numbers for the bell pushbuttons	Check programming of buttons, repeat if necessary
Voice communication is not established after picking up the telephone	Call reception by button is programmed (factory setting)	Activate "Direct mode" is desired

9 Maintenance, care and disposal

9.1 Storage

If the device is not installed, store it in a condensate-free area at an ambient temperature of -20 °C to +60 °C.

9.2 Disassembly

Prior to disassembly of the device, de-energise all components used.

Disconnect all lines and remove the device.

9.3 Disposal

9.3.1 Disposing of packaging material

All packaging materials are environmentally compatible and recyclable. The packaging material can be returned to the sales outlet or the local collection centres for used paper and plastic materials.

9.3.2 Disposing of old device

The product belongs to the category electrical and electronic equipment. In accordance with the EC Directive 2012/96/EC, it must not be disposed of together with household waste but must be delivered to the local return system for electrical and electronic equipment.

Technical Hotline

If you have questions on the operation or configuration of your DoorLine that cannot be answered in these Operating Instructions, please contact your specialist dealer.

If your specialist dealer cannot help, our Hotline is at your disposal.

Usage of the Hotline incurs the normal connection costs.

Telegärtner Elektronik Hotline

Tel.:   +49 7951 488 9200
Monday-Thursday: 7:00 - 16:30 hours
Friday: 7:00 - 13:00 hours
service@telegaertner-elektronik.de

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