

USER GUIDE

Doortello Home

Door phone with analogue
telephone line interface and
up to 6 chime buttons



 **ROCOM**

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Introduction

The Doortello Home is a door phone system for integration with new or existing telephone systems. The door phone has a analogue telephone line interface and can be connected to any type of transmission technology, as far as a specific adapter is available, like ISDN, VoIP, GSM, DECT and similar systems. Pressing a chime button a programmed telephone number is sent as DTMF tones to the telephone line. Up to 6 chime buttons can be connected to the system. Each of them can have a 16 digits long telephone number stored in the system. When the dialled extension will answer the call a speech connection is established. A smart tone detection program ensures that the connection is surely terminated recognizing a busy tone, or in case of a missing answer after a specified number of ring back tones.

The door phone is approved for the use within the european community as defined by the 98/482/EU (TBR 21) on the analogue telephone network. This is not a warranty that the device can work with all european telephone networks, which might be slightly differ from the standard.

If you notice functional problems with your telephone line please get in contact with your local dealer.

Description

The door phone is available in three different version: the DH 00 without chime buttons, the DH 01 with one chime button and the DH 02 with two chime buttons. Together with the modules of door station program Profilo different solution with up to 6 chime buttons and an access control device can be realised. A selection of different frames with boxes for the surface od flush installation are completing the product offer.

The door phone needs to be connected to a analogue telephone line using two wires, further an external power supply must be used to power the device, the illumination and the heating element.

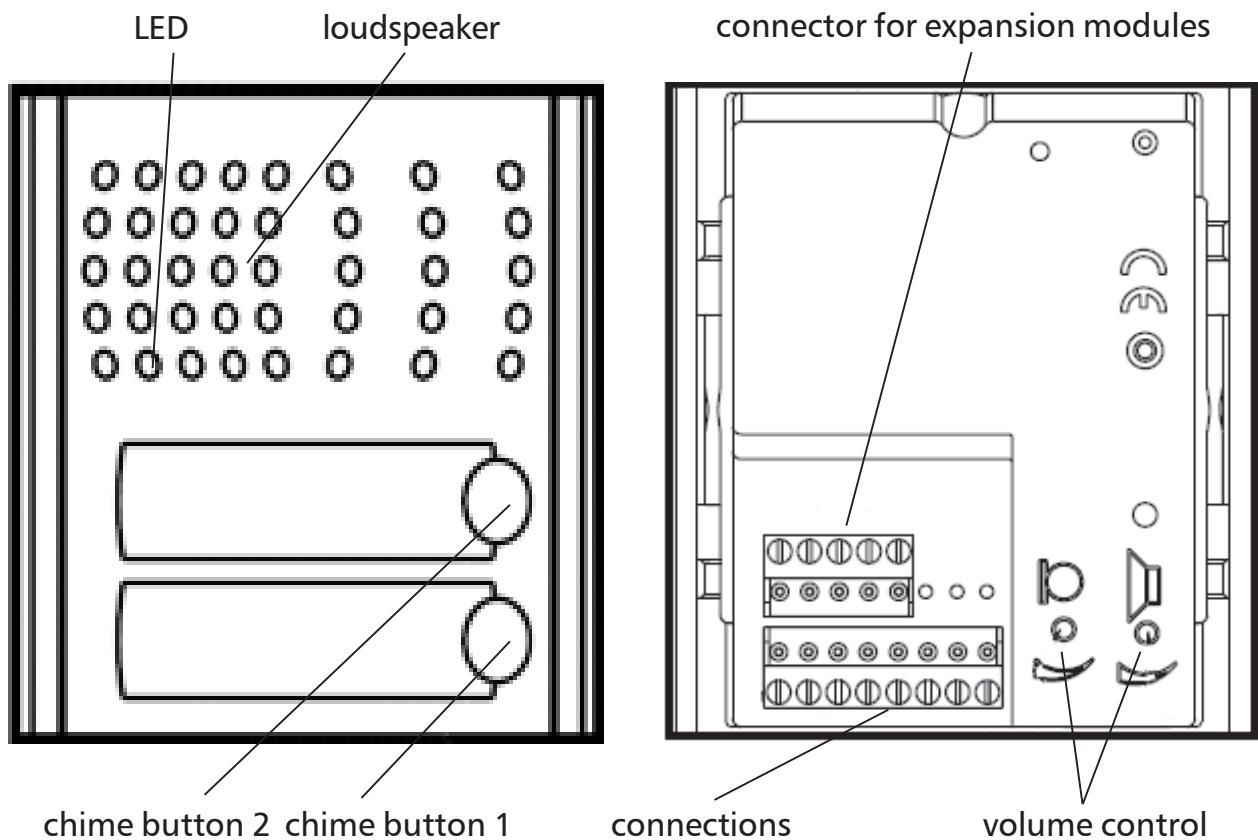
The unit has also two integrated dry driver contacts to command door openers or other applications, like video cameras.

The programming of the device is done using DTMF tones. A complete description of the programming procedures can be find in the chapter *Programmation*.

Package content

The content of the package for the DH 00/02 Doortello Home door phone includes:

- Door phone with aluminum front plate without chime buttons (DH 00), with one chime button (DH 01) or two chime buttons (DH 02)
- Multilanguage short user guide
- Return notice and error description



Door phone DH 02. Front and rear view.

Features

- Up to 6 chime buttons (dry contacts) can be connected. For each button a 1 to 16 digits long telephone number (1-0,*,#, flash, pause) can be stored.
- Programming using DTMF code with password function (remote programming)
- Programmable driver contacts activation time (0 to 99 seconds)
- RISC processor controlled state-of-the-art speaker phone
- Speech detection
- Programmable ring back and busy tone detection
- Programmable automatic call answer
- Programmable ringing time from 1 to 99 calls
- Volume adjustment for microphone and loudspeaker
- 2 integrated driver contacts with DTMF dial activation (door opener function)
- Programmable automatic driver contact activation with button pressure
- Programmable door opening codes
- Integrated heater
- Manual disconnection with DTMF dial
- Programmable automatic disconnection after door opening
- Suppression of DTMF tone input from outside
- Connection to a standard analogue telephone line, two wires
- DTMF dial
- Programmable max. connection time from 1 to 999 seconds

Installation

Before you start with the installation please read the following indications:

- The Doortello Home can, together with his modular door station program, has a IP 32 protection degree and can be installed also outside.
- If you plan an installation in a rainy environment we suggest the use of a weather shelter or a surface mounting box with weather shelter (IP 33).
- If a fluid gets inside the unit disconnect at once the telephone line and the external power supply (if installed).
- The device can only be maintained by instructed specialized technicians.
- Static discharges may damage the device. Please ensure that you are grounded before any activity with the unit.

Security advices

Please read carefully this user guide before you install the unit. Take care about the security advices. Diregarding the warnings may be against existing laws or cause dangerous situations.



Please note!

Think any time during installation at your own safety! Be careful and disconnect the 230 V power supply before connecting the external power supply unit. Before you touch any cable ensure that no voltage is present on the line. Please consider that it can be against safety rules to run low and high power cables in the same duct. An installation of 230 V cable inside the door station is forbidden by law. If you have to drive high power circuits with the internal driver contact of the device you have to use external high power relais (like the 1471, see also the chapter *Options*)

Flush and wall mounted installation

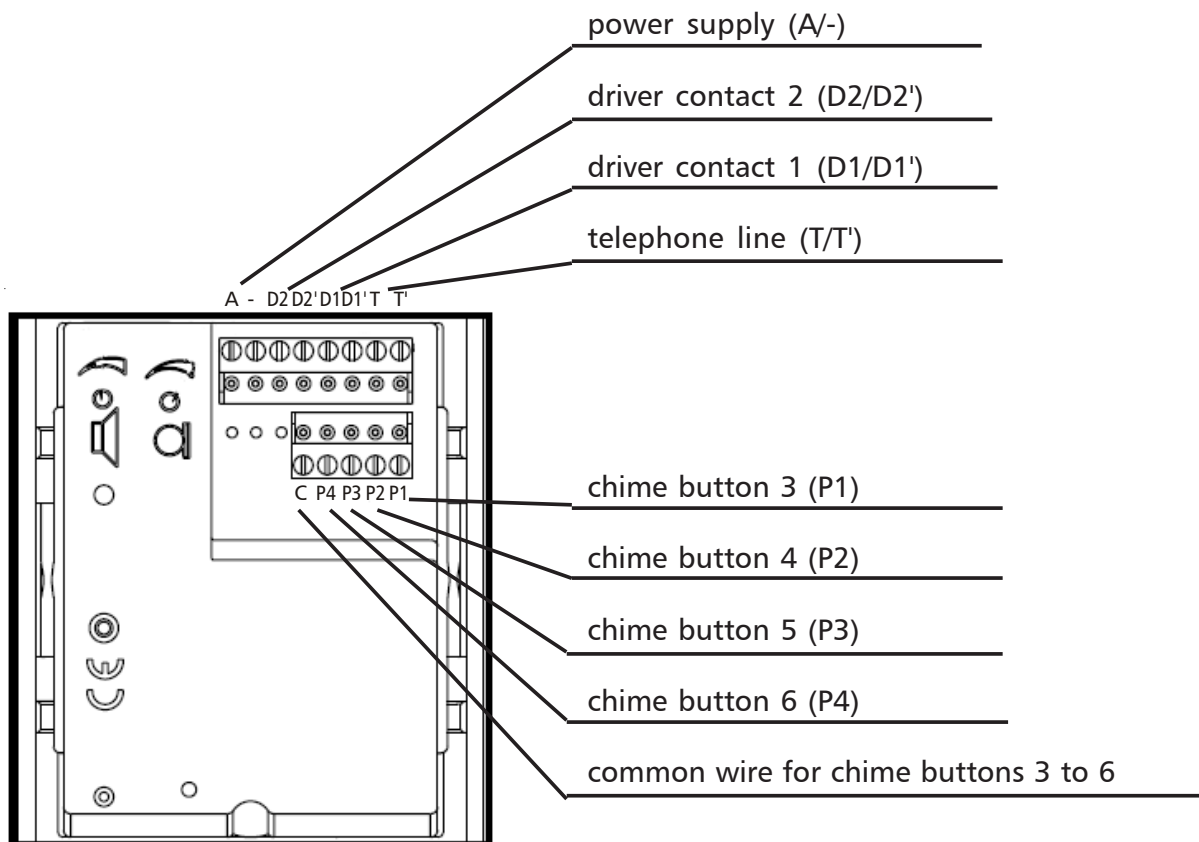
For the flush and wall mounted installation of the device the modular Profilo door station program has to be used. This program offers you a wide range of different flush and wall mounting cases. More details about the installation of the Doortello Business modular door station can be found in the documentation delivered with the cases and modules.

Cabling of the chime buttons

The two chime buttons in the units DH 02, and the one in th DH 01, are hardwired and can't be modified. The expansion button 3 to 6 are connected to the connectors P1 to P4. Each chime button has an decimal address from 1 to 6. Those addresses are hardwired with each button or connector. The chime button 1, the first from the bottom of the door phone module, has the address 1, the button 2, the second from below, has the address 2, the connector P1 the address 3 and so on the the connector P\$ which has the address 6.

If you have the door phone DH 00 with no chime buttons, and one button modul PL 11 with one button, this button will have the address 3, as far as it will be connected to the connector P1.

Connections



Connections Doortello Home basic bunit

External power supply (A/-)

The external power supply is used to power the door phone and other features. The external AC/DC power supply should be within a range of voltages between 8 and max. 12 Vrms. We suggest the use of our PRS 210 trasformator.

The power supply is used also to power the illumination of the door phone and the door opener.



Please note!

The voltage MUST NOT exceed 12 Vrms. Higher voltage will destroy the unit!



Please note!

If you are installing more door phone on the same site a separate power supply unit has to be used for each door phone. Connecting more door phone with the same power supply unit may damage the devices and will short circuit the telephone lines!

Driver contacts 1 and 2 (D1/D1'; D2/D2')

The driver contacts can be used to open doors or other functions like the activation of a video camera. As default the first driver contact is activated pressing the DTMF digit „7“ during the conversation, and the second driver contact with the digit „8“. Other ways to work are possible, like the automatic activation with line seizure. Also the activation codes can be programmed, i.e. to make the door opening dependent from the input of a code from the telephone. Read also the chapter *Programming* for more information.



Please note!

The two driver contacts integrated in the Doortello Home door phone are dry but not galvanic contacts as they are electronic circuits. That means that driver voltage below 6 V may not work. In this case you need to use external relays, like the universal relay 1471 (see also *Options* for more information).

Telephone line (T/T')

The unit must be connected to an analogue telephone line to work. The telephone line can be a public line, an extension line or the input of a specific FXS adapter for special networks like GSM, DECT or VoIP. Please take care that the open line voltage should not be below 20 Vdc and it should be able to delivery a minimum of 18 mA during the seizure. For the best speaker phone functionality select also the correct line impedance (read also the chapter *Line impedance*).

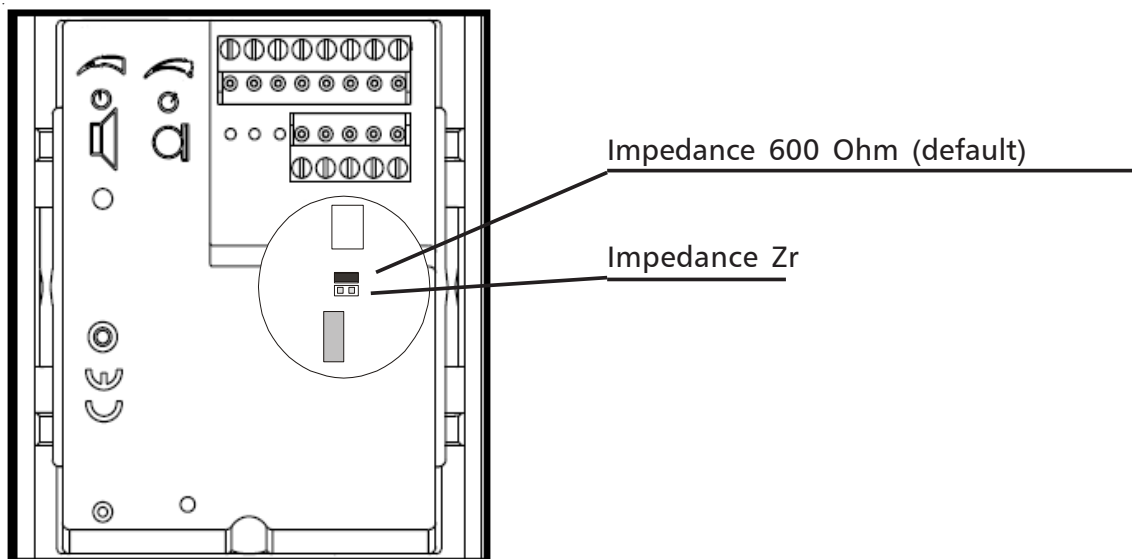


Please note!

The Doortello Home door phone has a „fine“ over voltage protection. This is useful only if more over voltage protection circuits are installed. If the unit is installed outside a building we suggest the installation of a over voltage protector with ground connection on the specific telephone line.

Line impedance

For a better sound quality of the speaker phone you need a perfect line impedance adaptation. The line impedance jumpers is therefore available to select the impedance of the telephone line you are using. You can choice between 600 Ohm (default) and Zr line impedance. You can normally read which type of line impedance you have in the technical documentation of the telephone switch or adapter you are using. Normaly small switches and adapter have 600 Ohm, larger switches and public telephone line (in Europe) have Zr. If you are not sure which line impedance you have just use the selection which gives you the best results.



Jumpers for line impedance adaptation

Automatic heating element

If the device has an automatic integrated heating element. This is used to ensure a correct functionality with outside temperature down to -20°C . The heating element is activated automatically at $+10^{\circ}\text{C}$ and will be deactivated at $+20^{\circ}\text{C}$.

First activation

Install and configure the door station as you wish. Ensure that you follow the instructions of the single modules for a correct installation. Connect the module together following the provided cabling instructions. After this you can connect the door phone with the telephone line and the external power supply.

- Connect **FIRST** the telephone line and then the external power supply.



Please note!

The external power supply voltage **MUST NOT BE HIGHER THEN 12 Vrms!** Check the voltage using a voltmeter! A higher voltage may seriously damage the device voiding you warranty! We suggest the use of our PRS 210 transformator.



Please note!

You need a separate power supply unit for each door phone you are going to install!

- After you switch on the power supply the unit will follow an internal start up procedure. This may take some seconds. Wait that the red LED goes off. After this the device is ready to be used.

Programmation

The entire programming, like storing the telephone numbers or the selection of the different operating modalities, is done using a telephone with DTMF dial capability.



Please note!

The device has two memories. A RAM and a flash memory. During the programming the unit will transfer all the data from the flash to RAM memory. At the end of the programming the data are transferred again back to the flash. This will be done at one step when terminating the programming mode using the digit **3**. Pressing this digit you will get a acknowledge tone, but the unit will disconnect the line and go back to stand by only after some seconds. If during this time the line is interrupted or the power will fail all the data programmed up this point will be lost. If you are doing a larger programming we suggest to make a data storage from time to time.

Activate the programming mode

If you want to program the Doortello Home you have to first activate the programming mode. Before you can program the device it has to be connected to a telephone line and to a power supply.

After the first power on of the power supply the device will follow an initialisation procedure. With this process the RAM memory is deleted and the telephone line checked, read also the chapter *First activation* for more information. During this time the device is not available. When the red LED will go off the device is ready to be used.

Call now the unit using a phone with DTMF dial capability. The device will answer the call and sent a short tone. The red LED will go on when the unit is ready for speech.



Please note!

It may be that the automatic call answer feature has been deactivated on the Doortello Home with a previous programming. In this case you will hear a ring back tone but the unit will not answer the call. To start the programming mode you have to press during the call one of the chime or functional buttons at the door station. The device will now answer the call and you can follow the programming procedure as described.

The programming mode is activated with the following input:

***#0** Password (default **1234**) *OK tone*

Now the programming mode is activated. The red LED is now flashing.



To terminate the programming mode dial **3**.

Please note!

If you terminate the call hanging up the handset without dialling the digit **3** all the data inserted up to this time will be lost!



Please note!

It may be that the programming mode activation using a password has been deactivated with a previous programming. In this case the programming mode is activated just after the input of the ***#0** digits.



Please note!

The password could have been changed. If you hear a *NOOK tone* you have a wrong password.



Please note!

As soon as the device will answer the call a maximum connection timer will start. This is set as default at a value of 60 seconds. At the end of this time the unit will disconnect the line. All data inserted until this time will be lost. We suggest you to change this time if you plan an extensive programming.



Please note!

When you terminate the programming mode with the digit **3** all programmed data will be transferred from the RAM to the flash memory. This will take about 30 seconds. During this time the device is not available.

Tones during programming

During programming you will hear the following tones:

Answer tone: 1 short tone. Is sent when the call is answered and the unit ready to accept more commands.

OK tone: 3 short tones. The data input or command is correct.

NOOK tone: 6 short tones. The data input or command is not correct, last data input is lost.

Error tone: 9 short tones. There was an error on the device memory. Data could not be stored and are lost.

Default data load

If you have to move the door phone, to change the complete programming or the unit was programmed wrong you can load the factory default data using the following procedure:

***#9** OK tone **#91234** OK tone

Please take care that the default data load will delete all programmed telephone numbers and values. If you want to delete or change just one telephone number is the default data reload not very useful. Use instead the procedure described in the chapter *Delete telephone number*.



Please note!

The above indicated procedure considers that the password has his standard value 1234. If the password was changed you have to use the new password instead of 1234.



Please note!

The default data are loaded only after the input of the digit 3 to terminate the programming mode.



Please note!

If the password has been lost it is possible the load the default data using a master password. In this case the factory default data a reloaded as well the standard password. Please contact your dealer for more details.

Chime buttons

Each of the 6 chime buttons can be programmed to dial a telephone number with up to 16 digits. Also special functions can be assigned to the buttons. The single chime buttons have a decimal address from 1 to 6. As digits inside a telephone number you can use all numbers from 1 to 0, as well the special codes *, # and the functions „flash“ and pause.

From factory no numbers or functions are programmed for the buttons.

To program the chime buttons and functional keys follow this procedure:

*#1 OK tone {telephone number of function} ** {button address} OK tone

As digit for the telephone number (max 16 digit for each telephone number) the following values can be entered:

Digits: 1,2,3,4,5,6,7,8,9,0;

Special dial functions: ##1, will dial the code # (is considered as 1 digit);

##2, will dial the code * (is considered as 1 digit);

##3, will make a dial pause of 2 seconds (default value) duration (is considered as 1 digit);

##4, will send a „Flash“ (short line interruption, „Recall“ button) of 80 ms (default value)

duration (is considered as 1 digit);

Examples:

n The chime button 1 must dial the number 13. As your PBX has an automatic trunk selection feature activated you must dial a flash to switch from external to internal dial. To ensure the correct dial after the flash a pause has to be inserted. Programming:

*#1 OK tone ##4##312**1 OK tone

This number will use 4 of the 16 available digits.

Delete telephone number

Each chime button can be deleted one by one. To delete one button please follow the procedure:

*#9 OK tone #1 {button address} OK tone

Example:

n You want to delete the chime button 5. Input:

*#9 OK tone #15 OK tone



Please note!

If you want to reprogram a chime or functional button you DON'T have to delete it first. The new programming will overwrite the existing one.

Automatic call answer

From factory the Doortello Home can answer the incoming calls automatically. This feature can be deactivated if needed. To deactivate the automatic call answer feature please follow this procedure:

*#3 OK tone #10 OK tone

De reactivate this feature:

*#3 OK tone #11 OK tone



Please note!

If the automatic call answer feature is deactivated no incoming call will be answered. If you want to answer a call (i.e. if you want to program the device) you have to press during the incoming call one of the chime buttons. A complete deactivation is not possible as in this case the unit can be

reprogrammed only from factory.

Loudspeaker status after line seizure

With the Doortello Home it is possible to define which status the loudspeaker has to have after the line seizure. You can define if it has to be on or off. From factory the loudspeaker is always on, but you can modify this, i.e. if you don't want to hear the dial and call progress tones. You can select between 5 different operating methods:

Loudspeaker always on ①

The loudspeaker is on as soon you press a button. All dial and call progress tone can be heard. The loudspeaker is switched by the speakerphone using the half- or full duplex modality as programmed. (Default)

Loudspeaker always on with manual switch activated ②

The loudspeaker is on as soon you press a button. All dial and call progress tone can be heard. The loudspeaker is switched by the speakerphone using the half- or full duplex modality as programmed. Using the DTMF digit ④ the loudspeaker can be manually activated (manual switched speakerphone). Using the digit ⑥ the speakerphone is switched back in the programmed automatic modality.

Loudspeaker off until call answer ③

The loudspeaker is off after pressing a button. All dial and call progress tone can not be heard. As soon as the called party answers the call (speech detection) the loudspeaker is switched on. Afterwards the loudspeaker is switched by the speakerphone using the half- or full duplex modality as programmed.

Loudspeaker off until manual activation ④

The loudspeaker is off after pressing a button. All dial and call progress tone can not be heard. Dialling the digit ⑥ after call answer the loudspeaker is manually activated. Afterward using the digit ④ the speakerphone is switched on manually, and with the digit ⑥ the speakerphone is switched back in the programmed automatic modality.

Loudspeaker always off ⑤

The loudspeaker is always off. This status is used for testing purposes only.

To change the operating method of the loudspeaker after line seizure please follow this procedure:

*#3 OK tone #2 {loudspeaker operating mode} OK tone

Example:

① You want that the loudspeaker is off after pressing a button and switched

only after the called party answers the call. Input:

*#3 OK tone #23 OK tone

Microphone status after line seizure

With the Doortello Home it is possible to define which status the microphone has to have after the line seizure. You can define if it has to be on or off. From factory the microphone is always off, but can modify this. You can choose between 5 different operating methods:

Microphone always on 1

The microphone is on as soon you press a button. The microphone is switched by the speakerphone using the half- or full duplex modality as programmed.

Microphone always on with manual switch activated 2

The loudspeaker is on as soon you press a button. The microphone is switched by the speakerphone using the half- or full duplex modality as programmed. Using the DTMF digit 5 the microphone can be manually activated (manual switched speakerphone). Using the digit 6 the speakerphone is switched back in the programmed automatic modality.

Microphone off until call answer 3

The microphone is off after pressing a button. As soon as the called party answers the call (speech detection) the microphone is switched on. Afterwards the microphone is switched by the speakerphone using the half- or full duplex modality as programmed. (Default)

Microphone off until manual activation 4

The microphone is off after pressing a button. Dialling the digit 6 after call answer the microphone is manually activated. Afterward using the digit 5 the microphone is switched on manually, and with the digit 6 the speakerphone is switched back in the programmed automatic modality.

Microphone always off 0

The microphone is always off. This status is used for testing purposes only.

To change the operating method of the microphone after line seizure please follow this procedure:

*#3 OK tone #3 {microphone operating mode} OK tone

Example:

n You want that the microphone on as soon as a button is pressed. Input:

*#3 OK tone #31 OK tone



Please note!

If you switch on the microphone as soon as the line is seized the device may have problems to detect the call progress tone correctly.

Automatic hang up after driver contact activation

The Doortello Home will, from factory, hang up as soon as a driver contact is activated. This function can be deactivated, i.e. if you want to activate more time the driver contact during a conversation. To deactivate the automatic hang up functionality please follow this procedure:

*#3 OK tone #50 OK tone

To switch this feature back on:

*#3 OK Ton #51 OK Ton



Please note!

This feature is applied to ALL driver contacts

Password

To activate the programming mode you have to enter a password. As default the password is 1234. It is possible to change this value or to deactivate the password input request. To modify the password please follow this procedure:

*#4 OK tone *1 {new password} ** {new password} OK tone

Values between 0000 and 9999 can be programmed.

To enter the programming mode without the need of a password please follow this procedure:

*#4 OK tone #10000**0000 OK tone

Example:

∩ You want to change the password to the value "5678" . Input:

*#4 OK tone #15678**5678 OK tone



Please note!

If you lose the password it is possible to upload the factory default data using a master password. Please contact your dealer for more details about this procedure.

Driver contacts activation codes

The two driver contact can be activated with the DTMF digits 7 and 8 during a conversation. This two codes can be changed if needed. To change a driver contact activation code follow this procedure:

*#4 OK tone #3 {activation code} ** {driver contact no.} OK tone

As activation code the values from 7 to 9999 can be programmed. If you program the value 0 the driver contact will be deactivated.

As driver contact no. the value 1 (driver contact 1) and 2 (driver contact 2) can be used.

Example:

□ You want to program that the driver contact 2 should be activated using the code "702". Input:

*#4 OK tone #3702**2 OK tone



Please note!

The device will verify if the code you are programming is not already used. If you will get a NOOK tone after the new code input, this may be already used. You have then to use another code. Only code starting with the digits 7, 8 and 9 can be used. If you are using codes with only one digit no other code with more digits can be programmed using the same starting digit (i.e. you can use "71" and "72", but not "7" and "71"). If you want to program a new code as described in the example you have then first to delete the existing code "7" for the driver contact 1, or modify it to another value (i.e. "701").

Maximum line seizure time

The Doortello Home speakerphone has a timer to control the maximum line seizure time. This timer is activated a soon as the line is seized and will terminate the connection when the programmed time is counted down. As default this timer is set to 60 s. This can be changed or deactivated. To modify the maximum line seizure time please follow this procedure:

*#7 OK tone *1 {max. seizure time in s} OK tone

Value between 030 and 999 can be selected. With the value 000 the timer is deactivated.

Example:

□ You want to enhance the max. seizure time to 2 minutes. Input:

*#7 OK tone *1120 OK tone



Please note!

This timer is a security feature. If the connection (i.e. using VoIP) doesn't send a busy tone after the called party hangs up the connection termination is

ensured only by this timer. This security will be lost if you deactivate this feature. If you have connection error it can happen that the device will be blocked on the line. In this case you need to separate the telephone line and the power supply to reset the device.



Please note!

Connection time below 30 seconds will not be accepted as then a reprogramming of the device is no more possible.

Dial pause time

It is possible to program using the code `#*#3` a dial pause within the telephone numbers programmed for the chime button and speed dial codes. This time as a default value of 2 seconds, but can be changed using the following procedure:

`*#7` OK tone `#2` {dial pause time in s} OK tone

Values from `1` to `9` can be used. The input of the value `0` will deactivate the dial pause feature.

Example:

□ You want to change the dial pasue to 5 seconds. Input:

`*#7` OK tone `#25` OK tone

Interdigit dial pause

The Doortello Home will dial the programmed telephone numbers using an interdigit dial pause. This has a value of 150 ms as default. It is possible to change this value following this procedure:

`*#7` OK tone `#3` {interdigit pause time in ms} OK tone

You can use values between `100` and `999`.

Example:

□ You want to change the interdigit dial pause to 300 ms. Input:

`*#7` OK tone `#3300` OK tone



Please note!

You need to change this value only if you are experiencing problems with the dial, i.e. wrong dialling.

Driver contacts activation time

The driver contacts can be activated for a programmed time. As default the activation time for all contacts is set to 5 seconds. Also the contacts can be programmed to be automatically activated for all the duration of the conversation. To modify the activation time of the driver contact please follow this procedure:

*#7 OK tone #4 {Activation time in s} ** {Driver contact no.} OK tone

Values from 01 to 98 can be programmed. The value 99 will enable the automatic activation of the contact for all the line seizure duration.

As driver contact no. the values 1 (contact 1) and 2 (contact 2) can be used.

Example:

∩ You want to program the contact 2 to be activated for all the line seizure duration (i.e. to switch on a video camera). Input:

*#7 OK tone #499 OK tone **2

Flash time

You can insert a flash signal in the telephone number you store for the chime buttons or speed dial numbers. The flash signal is set programming the code ##4 instead of a digit. As default the flash has a duration of 80 ms. If need you can enhance or reduce this time using the following procedure:

*#7 OK tone #9 {flash time in ms} OK tone

You can use values from 001 to 100. The value 000 will deactivate the flash function.

Example:

∩ You want to enhance the flash time to 100 ms. Input:

*#7 OK tone #9100 OK tone

Busy tone detection

The Doortello Home door phone can detect a busy tone to terminate the call and the end of a conversation. As default the device can detect three different busy tones: standard CO busy tone 500/500, standard PBX busy tone 200/400 and

special busy tone 220/220. If needed, you can reprogram the tones. To reprogram a busy tone please follow this procedure:

*#8 OK tone #1 {make busy tone 1 in ms x 10} OK tone {break busy tone 1 in ms x 10} OK tone {No. of busy tone to be detected before hang up} OK tone
 *#8 OK one #2 {make busy tone 2 in ms x 10} OK tone {break busy tone 2 in ms x 10} OK tone {No. of busy tone to be detected before hang up} OK tone
 *#8 OK tone #3 {make busy tone 3 in ms x 10} OK tone {break busy tone 3 in ms x 10} OK tone {No. of busy tone to be detected before hang up} OK tone

For the make (tone duration) and the break (tone pause) values from 00 to 99 can be inserted. For the number of tone to detect before call termination values from 1 to 9 can be programmed.

Example:

□ You have to program the detection of a busy tone with a make of 200 ms (20 x 10) and a break of 200 ms, the call has to be terminated after the detection of min. three tones. Input

*#8 OK tone #120 OK tone 20 OK tone 3 OK tone



Please note!

The number of tone to be detected before terminating the call should not have a too small value. If this is the case it might be that the device can detect normal speech as a busy tone and truncate the call. We suggest to not use values below 3.

Ring back tone detection

The Doortello Home can count the numbers of rings sent to the called party by detecting the ring back tone. As default the ring back tone detected is the standard 1000 make and 4000 break tone. If needed you can change this tone following this procedure:

*#8 OK tone #4 {make 1 in ms x 10} OK tone {break 1 in ms x 10} OK tone {make 2 in ms x 10} OK tone {break 2 in ms x 10} OK tone

The make values 1 and 2 (duration of the tone) and the break value 1 (pause of the tone) can be between 000 and 255, the break value 2 can be between 000 and 999.

Example:

□ You want to detect a double ring back tone with a make of 250 ms (25 x 10), a break of 500 ms (50 x 10), a second make of 250 ms (20 x 10) and a second break of 4000 ms (400 x 10) duration. Input:

*#8 OK tone #4025 OK tone 050 OK tone 025 OK tone 400
OK tone



Please note!

If you want to program a ring back tone with a single make and break you have to use only the values make 1 and break 2. The values break 1 and make 2 have to have in this case a value of 000.

Number of rings

If the unit calls a telephone which doesn't answer within a programmed number of calls the connection will be automatically disconnected. As default the number of call before disconnection is 7. To change the number of calls before disconnection, please follow this procedure:

*#8 OK tone #5 {number of calls} OK tone

You can use values from 02 to 99.

Example:

□ You want that a extension should be called for 18 times before the call is automatically disconnected: Input:

*#8 OK tone #518 OK tone



Please note!

The device will detect the ring back tones and not the real rings to the telephone. Some switches can send ring back tones which don't correspond exactly to the ring back tones sent.



Please note!

The number of call is also limited by the maximum connection time programmed. If you want to increase the ring time (i.e. to use a call diversion feature) you might also have to increase the maximum connection time programmed.

Tone tables

To make the tone programming easier the system has 30 predefined tone table which can be loaded on request. Loading the table all the specific busy and ring back tone are set at once. A single programming of each tone is then no more necessary. As default the table 01 is loaded. If you want to change the tone table please follow this procedure:

*#8 OK tone #9 {table number} OK tone

Values from 01 to 30 can be used.

Example:

1 You want to load the tone table 11 (Panasonic PBX). Input:

*#8 OK tone #911 OK tone

Following tables are available today in the system:

Table 01 *CO Germany, Italy, Norway, Mexico, Luxembourg*

Busy tone 1: 50/50

Busy tone 2: 25/25

Busy tone 3: 22/22

Ring back tone: 1000/4000

Table 02 *CO Sweden, Denmark, Iceland, Portugal*

Busy tone 1: 25/25

Busy tone 2: 50/50

Busy tone 3: 20/40

Ring back tone: 1000/5000

Table 03 *CO Austria, Finnland, Greece, Hungary*

Busy tone 1: 30/30

Busy tone 2: 20/20

Busy tone 3: 50/50

Ring back tone: 1000/5000

Table 04 *CO UK, Australia*

Busy tone 1: 38/38

Busy tone 2: 35/25

Busy tone 3: 50/50

Ring back tone: 400/200/400/2000

Table 05 *CO Spain, France*

Busy tone 1: 20/20

Busy tone 2: 50/50

Busy tone 3: 00/00

Ring back tone: 1500/3200

Table 06 *CO Singapur*

Busy tone 1: 75/75

Busy tone 2: 50/50

Busy tone 3: 20/40

Ring back tone: 1000/4000

Table 07 *CO Belgium*

Busy tone 1: 50/50

Busy tone 2: 20/20

Busy tone 3: 00/00

Ring back tone: 1000/3000

Table 08 *CO Cech Republik*

Busy tone 1: 33/33

	Busy tone 2: 16/16
	Busy tone 3: 00/00
	Ring back tone: 1000/4000
Table 09	<i>CO USA, Canada, Ireland, Turkey</i>
	Busy tone 1: 50/50
	Busy tone 2: 25/25
	Busy tone 3: 20/20
	Ring back tone: 2000/4000
Table 10	<i>Agfeo PBX</i>
	Busy tone 1: 20/40
	Busy tone 2: 50/50
	Busy tone 3: 00/00
	Ring back tone: 400/2000
Table 11	<i>Panasonic PBX</i>
	Busy tone 1: 20/20
	Busy tone 2: 25/25
	Busy tone 3: 10/10
	Ring back tone: 500/300/500/2800
Table 12	<i>Siemens PBX</i>
	Busy tone 1: 53/53
	Busy tone 2: 16/44
	Busy tone 3: 00/00
	Ring back tone: 1000/4000
Table 13	<i>T-Com PBX</i>
	Busy tone 1: 25/25
	Busy tone 2: 50/50
	Busy tone 3: 00/00
	Ring back tone: 1000/4000
Table 14	<i>Avaya PBX</i>
	Busy tone 1: 16/48
	Busy tone 2: 50/50
	Busy tone 3: 00/00
	Ring back tone: 1000/4000
Table 15	<i>Auerswald PBX</i>
	Busy tone 1: 23/23
	Busy tone 2: 50/50
	Busy tone 3: 00/00
	Ring back tone: 1000/4000
Table 16	<i>Gesko PBX</i>
	Busy tone 1: 50/50
	Busy tone 2: 00/00
	Busy tone 3: 00/00
	Ring back tone: 500/2000



Please note!
All other tables are empty.

How to use

The following use description is based on the default functionality. The described procedure may change if the device has been reprogrammed.

Calling a phone using a chime button

Press the chime button at the doorstation. The red LED will flash and the stored number will be dialled. When the called party answers the call the red LED will go steady on and you can now talk to the called party.

Incoming call to the door phone

The door phone can be called any time. The call will be answered automatically. After the call answer you can speak with the visitor or start the programming mode using a password.



Please note!

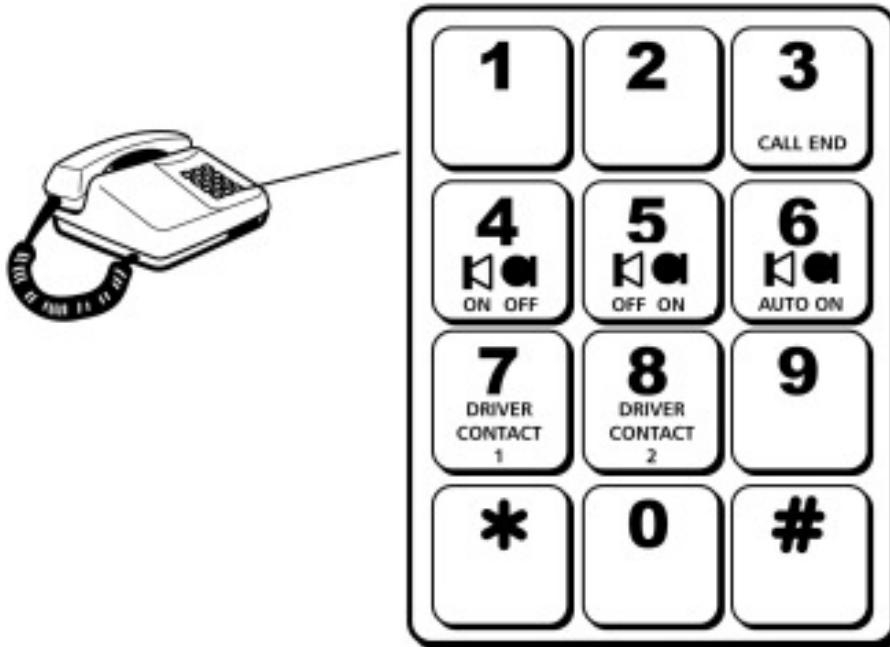
The programming mode can be activated only within 5 s after call answer.

Call termination

The call will be terminated if:

- The called party will not answer the call within 7 rings;
- The called party is busy;
- The called party dial a driver contact activation code;
- The called party dial the digit **3** to terminate the call;
- The called party hangs up and a busy tone is recognized;
- The maximum line seizure timeout is reached.

Code digits for the phones



Optical indicators

Type of indication	Information
Off	Stand-by
During initialisation (after power failure or first installation)	
Red LED on	Line seizure and testing, measurement of line noise level
Red LED flashing	Data/default data are uploaded into the working RAM
Programming mode	
Red LED flashing	Programming mode active, password OK
Red LED on	Data are uploaded into the FLASH memory
Chime button activation	
Red LED flashing	Line is seized, number is dialed
Red LED on	Call has been answered, microphone is on

Trouble shooting

The door phone can not be programmed

1. Check if you are using the right password.
2. Check if the automatic answer feature was deactivated. In this case you have to answer the call manually at the door phone.
3. The DTMF tones your system is sending may have a too high level. Try to program the device using an incoming external call.

The door phone does not dial

1. Check if a telephone line is connected to the device.
2. Check if the the telephone line has a open circuit voltage between 20 and 60 V dc.
3. May be that the initialisation procedure was not correctly completed. Please call again the door phone, wait for a busy tone and try then again.
4. Check if the chime button you are using is programmed and has the correct address.

After connecting the telephone line the device will size the line all the time

1. Disconnect the DB bus connector on the unit, may be that one of the chime buttons has a short circuit.
2. Check if the the telephone line has a open circuit voltage between 20 and 60 V dc.
3. Disconnect and reconnect the telephone line and the external power supply if installed. Make a new initialisation of the device.

After a telephone connection a loud feedback tone is heard at the door phone

1. Check volume of loudspeaker and microphone.
2. Check that the microphone is in aligned with the hole in the casing.

The door opener can not be activated

1. Check if the door opener has a adequate power supply. The contact in the door phone is a dry contact and doesn't have power to supply the door opener. Try to short circuit the screw contacts to see if the door opener works correctly.
2. Check if the driver contact is supplied with min. 6 Vac/dc. If the voltage is below this value (i.e. TTL driver) the driver contact doesn't work. In this case you have to use an external relay unit (i.e. 1471).
3. Check is the driver contact is correctly programmed.
4. The driver contact can be activated only after a call answer and speech detection (red LED and microphone must be on).

Technical support

Use the telephone number or e-Mail address on the last page of this manual for more information.

Technical data

External power supply:	8 to 12 Vrms (MAXIMUM), max. 150 mA
Power consumption on telephone line:	ca. 15 μ A (standby) 18-60 mA (nominal)
Optical indicators:	One red LED
Speakerphone:	Speech driven half-duplex speakerphone, manual switching speakerphone
Dial:	DTMF
DTMF tone detection:	min. 50 ms duration
Busy tone detection:	350 - 480 Hz fully programmable
Ring back tone detection:	350 - 480 Hz fully programmable
Line impedance:	600 Ohm or Zr selectable
Programming:	using a phone and DTMF tones
Call answer:	automatic or manual (programmable)
Ring voltage detection:	24 to 90 Vac (with or without dc voltage superimposition), 25 to 50 Hz
Integrated driver contact power:	40 V ac/dc, 2 A max.
Casing:	ABS case and 2 mm aluminium plate
Protection degree:	IP 34
Dimensions HxLxD:	110 x 100 x 50 mm
Weight:	192g
Working temperature:	-20° bis +50°C (with external power supply)
Humidity:	30 to 90% relative humidity without condensing
Security:	EN 60950
EMC:	EN 55022:2006; EN 61000-6-1:2002
Telecom:	ETSI EN 301 437; TBR 21
Approvals:	R&TTE, CE
Further norms compliance:	WEEE, RoHS

Programming codes overview

Following an overview of all the programming code used to configure the Doortello Business unit. In the right column (DEFAULT) you can read the information about the factory default data programmed for the related code. (*T*: you will hear a tone).

Nr.	Programming code	Function	DEFAULT
1.	*#0T<PW>T	Programming mode activation	1234
2.	*#9T#9<PW>T	Factory default data load	1234
3.	*#1T<tel.no.>*#<button>T	Telephone no. of the buttons	see list
4.	*#9T#1<button>T	Delete telephone no.	-
5.	*#3T#1<1 on,0 off>T	Automatic call answer	1
6.	*#3T#2<value>T	Loudspeaker status at line size	1
7.	*#3T#3<value>T	Microphone status at line size	3
8.	*#3T#5<1 on,0 off>T	Automatic disconnection after door opening	1
9.	*#4T#1<PW>T*#<PW>T	Password programming	1234
10.	*#4T#3<code>T*#<contact>T	Contacts activation codes	7, 8
11.	*#7T#1<time>T	Max. line seizure	60 s
12.	*#7T#2<time>T	Dial pause time	2 s
13.	*#7T#3<time>T	Interdigit time	150 ms
14.	*#7T#4<time>T*#<contact>T	Contacts activation time	5 s
15.	*#7T#9<time>T*#<contact>T	Flash signal time	80 ms
16.	*#8T#<tone 1,2,3>T<make>T <break>T<count>T	Busy tone detection	see description

Nr.	Programming code	Function	DEFAULT
17.	*#8T#4T<make1>T <break1>T<make2>T<break2>T	Ring back tone detection	see description
18.	*#8T#5<count>T	Max. no. of calls	7
19.	*#8T#9<table>T	Tone table load	01

Overview of programmed values

Key	Telephone no.	Default
1		-
2		-
3		-
4		-
5		-
6		-

Options

The following options are available for the Doortello Home door phone:

Expansion modules

20-6913-8200	PL 20 Spare module
20-6913-8210	PL 21 chime button module with 1 button
20-6913-8250	PL 22 chime button module with 2 buttons
20-6913-8290	PL 23 chime button module with 3 buttons
20-6913-8330	PL 24 chime button module with 4 buttons
20-6913-8700	PL 50 information modul with blue illumination
20-6930-0750	FC 52PL access control keypad unit
20-6930-1140	FP 52PL access control transponder receiver unit with 5 cards
20-6930-1800	Set with 10 slaves card for FP 52PL
20-6930-1830	Set with 10 key holder transponder for FP 52PL

Mounting frame and boxes

20-6913-8810	PL 71 flush mounting case with frame for 1 module
20-6913-8820	PL 72 flush mounting case with frame for 2 modules
20-6913-8830	PL 73 flush mounting case with frame for 3 modules
20-6916-7010	PL 81 rain shelter aluminium for 1 module
20-6916-7040	PL 82 rain shelter aluminium for 2 modules
20-6916-7070	PL 83 rain shelter aluminium for 3 modules

20-6916-7510	PL 91 aluminium wall mounting case with rain shelter and frame for 1 module
20-6916-7540	PL 92 aluminium wall mounting case with rain shelter and frame for 2 modules
20-6916-7570	PL 93 aluminium wall mounting case with rain shelter and frame for 3 modules

External devices and PSU

20-6913-0100	PRS 210 VDE transformator 12 Vac 15 VA
20-6916-2010	1471 universal relais 230 Vac

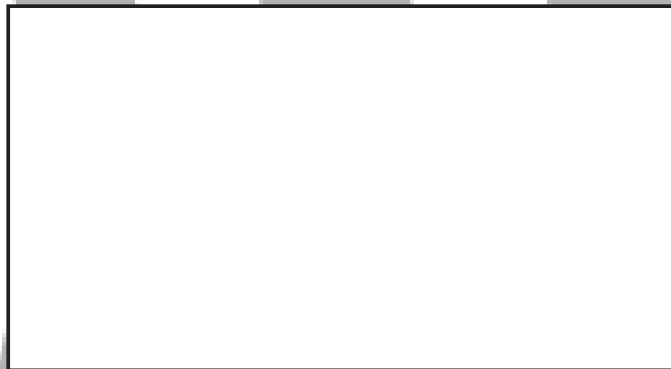


This symbol indicates that this electric device has to be collected separately and not disposed with the normal home waste. The European Union has arranged a collection and recycling system where the manufacturer is responsible for the disposal of this equipment. This device has been manufactured using high-quality and recyclable materials and components. The components used inside the electrical and electronic items may harm, in case of a wrong disposal, the environment and the healthy. Please do not dispose this device in your home waste. If you are the owner bring the not more used device at the hazardous waste collecting point nearest to you, or to your dealer where you buy the new device.

- If you are using the device as a professional user please follow the indications of the manufacturing company.
- If the device is part of a leasing contract or you have hold it on stock, please follow the indications of your distributor.

Please help us to keep our environment healthy! Thank you.

Your dealer:



 **ROCOM**

Energie- und Kommunikationssysteme GmbH
Lessing Str. 20, 63110 Rodgau, Deutschland
Tel. +49- (0) 6106 - 6600-0 Fax +49-(0) 6106 - 6600-66
HOTLINE +49-(0)6106-646041
E-Mail: info@rocom-gmbh.de
<http://www.rocom-gmbh.de>