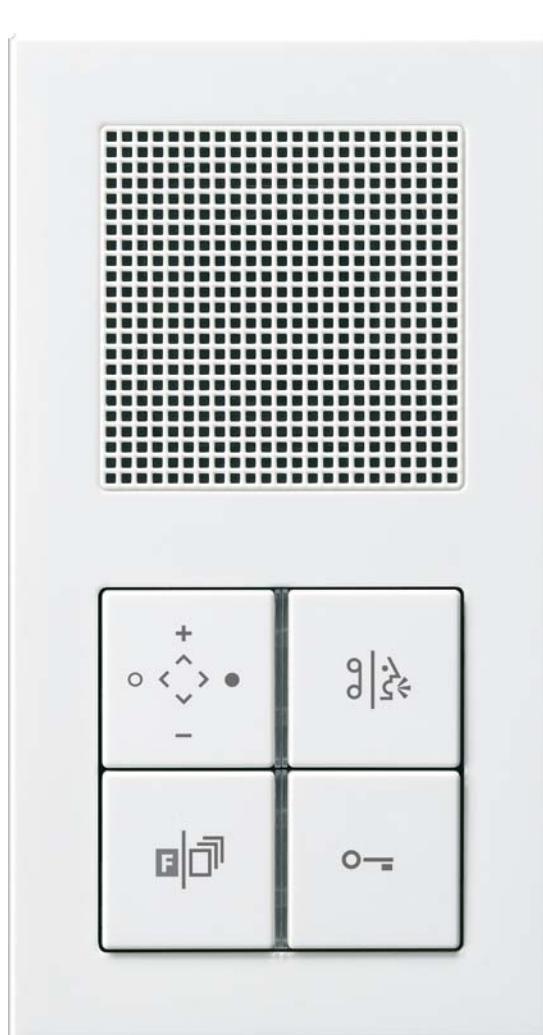


# JUNG

## Product Information

DCM Comfort indoor station  
TK IS xx x14 x



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## Table of content

Information about this manual .....	3
Safety instructions .....	3
Application / Brief description .....	4
Application .....	4
Brief description .....	4
Device overview .....	5
Indication and operation .....	6
Wiring and installation .....	7
Wiring example .....	7
Connecting diagram .....	7
Installation .....	8
Connection of wires .....	8
Mounting .....	8
Commissioning .....	9
Device settings .....	9
Storing the device settings .....	9
Factory settings .....	9
Function button .....	10
Internal call .....	10
Call diversion .....	11
Automatic door release .....	12
Control function 8 .....	12
Light switching .....	13
Reloading the factory settings .....	13
Adjusting the function button with the service device .....	14
Additional functions .....	15
Automatically hands-free operation after internal call .....	15
Automatic floor door release, control function 11 .....	16
Resetting of the additional functions .....	16
Settings .....	17
Voice volume .....	18
Volume of voice memo recorder .....	19
Ring tone volume .....	19
Ring tone OFF / ON .....	20
Ring tone selection .....	21
Ring tone 1 (for Outdoor station = 0) .....	21
Ring tone 2 (for Outdoor station > 0) .....	22
Ring tone for internal call .....	23
Ring tone for floor bell button .....	24
Ring tone selection for sub door call .....	25
Operation .....	27
Start communication, door release, switching light .....	27
Record, play or delete a ring tone .....	30
Voice memo function: Record, play and delete message .....	33
Explanation of terms and definitions .....	35
General notes on the wiring in DCM audio systems .....	37
Technical data .....	38
Cleaning .....	38
Acceptance of guarantee .....	39

## Information about this manual

**On pages 35 and 36 you can read the "terms and definitions" of this manual. We recommend to read these explanation carefully before you start the adjustment of the indoor station.**

### Safety instructions

**!** Assembly, installation, and commissioning must only be carried out by a qualified electrician!

For work on systems with 230 V AC mains current the safety requirements of DIN VDE 0100 must be observed.

When installing DCM BUS systems the general safety rules for telecommunication systems in accordance with VDE 0800 must be observed:

- separate cabling for high and low voltage lines
- minimum distance of 10 cm for joint cabling arrangements,
- use of separators between high and low voltage lines in joint cable ducts,
- use of standard telecommunication cables, e. g. J-Y (St) Y with 0.8 mm diameter

**!** Suitable lightning protection must ensure that a voltage of 32 V DC will not be exceeded at the DCM BUS wires a and b.

DCM = Door Communication Management

## Application / Brief description

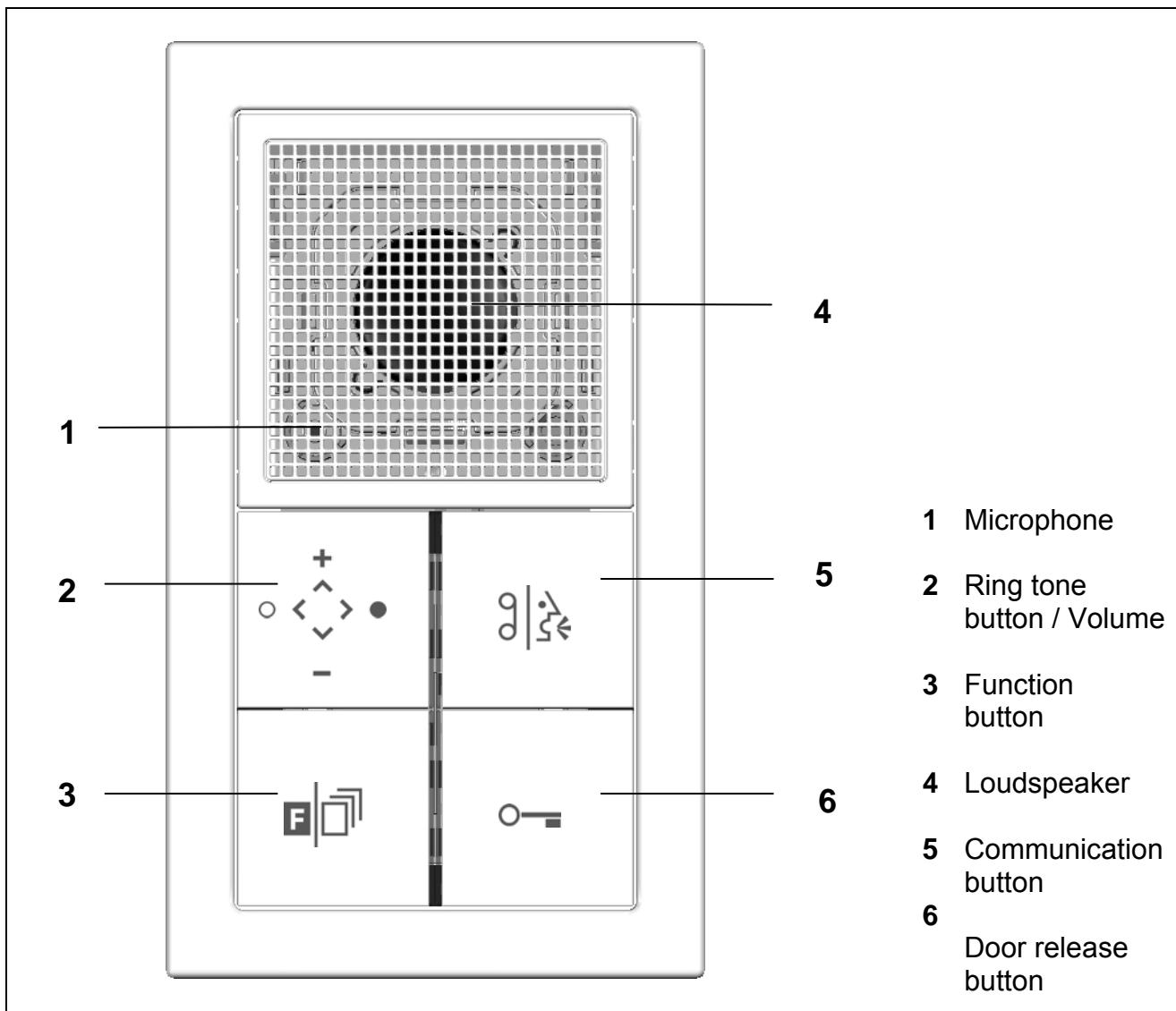
### **Application**

- acoustical and optical indication of front door and internal calls
- hands-free communication with high audio quality (full duplex)
- door release function
- switching light
- integrated frame for the design ranges AS 500, A creation and CD 500  
Combination with other devices possible for the LS design ranges (up to 5-gang frames) and the Flat Design (up to 3-gang)

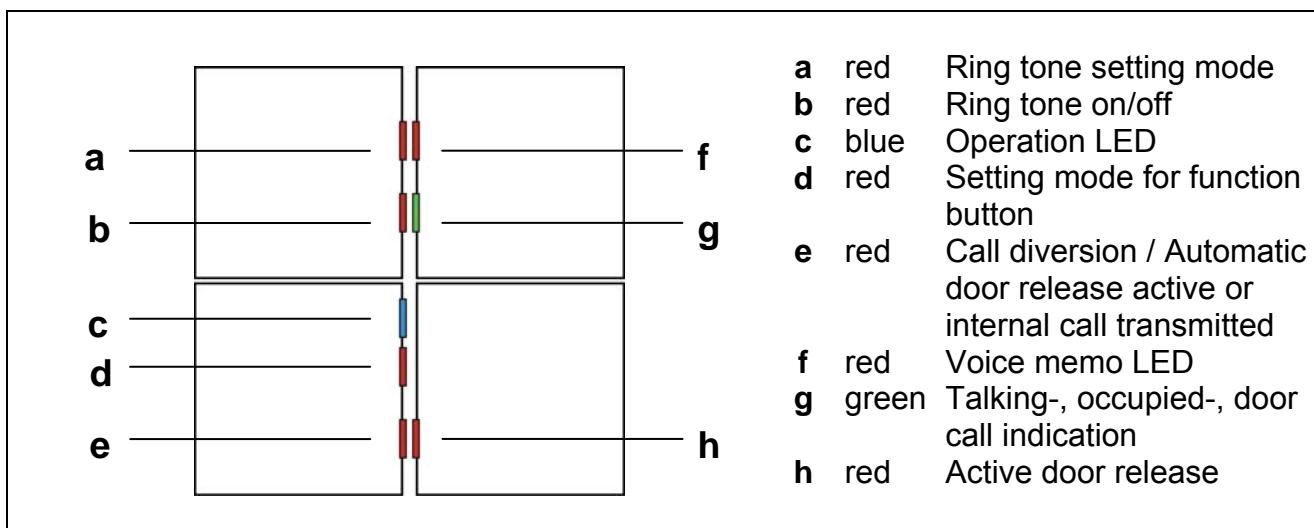
### **Brief description**

- full duplex operation
- digital voice quality due to active noise rejection
- AEC (Acoustic Echo Cancellation), electronic method for acoustic echo reduction
- automatic calibration of the ambient and network conditions
- high quality sound and great speaker dynamic
- optimised acoustic due to bass-reflex speaker system
- hands-free communication
- volume manually adjustable
- internal call
- internal call with automatically hands-free communication
- door release button
- automatic door release (main door)
- automatic door release (floor door)
- function button switches lighting (Basic settings)  
Alternative assignment: Control function, internal call, automatic door release, call diversion
- voice memory function for storing messages with a length up to 30 seconds
- 15 real sound ring tones (polyphone)
- 1 individual ring tone can be recorded with the internal microphone
- ring tone differentiation between main door, floor door and internal call
- sub door call: 4 bell buttons of the outdoor station can be assigned to 4 different ring tones of the indoor station
- ring tone differentiation of 2 outdoor stations
- ring tone volume manually adjustable
- ring tone mute with optical display
- parallel call can be activated
- integrated connection for floor door bell
- optical short-term memory of door calls (LED illuminated for max. 30 sec.)
- optical status indication if system is occupied (existing communication)
- audio privacy function
- connection: 3-wire-technique
- automatic call cut-off
- electret capacitor microphone
- audio- and video indoor stations can be combined in the same installation

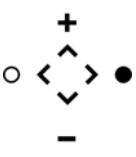
## Device overview



### LED indication



## Indication and operation

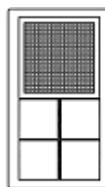
	<b>Ring tone button</b>	<ul style="list-style-type: none"> <li>• Adjustment of ring tone volume</li> <li>• Ring tone deactivation</li> <li>• Adjustment of talking volume</li> <li>• Initiate setting mode for ring tones</li> </ul>
	Indication LED red (b)	<ul style="list-style-type: none"> <li>• LED on = Ring tone deactivated</li> </ul>
	<b>Communication button</b>	<ul style="list-style-type: none"> <li>• Start/end of hands free communication</li> <li>• Recording / recall voice memo</li> </ul>
	Indication LED green (g) LED red (f)	<ul style="list-style-type: none"> <li>• (g) off: no communication</li> <li>• (g) on: talking mode</li> <li>• (g) flashing: incoming door call</li> <li>• (g) flashing fast: communication occupied</li> <li>• (f) flashing: voice memo function, new message</li> </ul>
	<b>Function button</b>	<ul style="list-style-type: none"> <li>• Activation of the assigned function</li> <li>• Initiate the setting mode of the function button</li> </ul>
	Indication LED red (e)	<ul style="list-style-type: none"> <li>• (e) on: Call diversion or automatic door release is activated</li> <li>• (e) flashing: Internal call transmitted</li> </ul>
	<b>Door release button</b>	<ul style="list-style-type: none"> <li>• Activation of door release (and light, if light switch function is activated)</li> </ul>
	Indication LED red (h)	LED on: for approx. 3 s when door release is activated
	<b>LED blue</b>	Operation LED
	Indication LED blue (c)	Ready for operation

## Wiring and installation

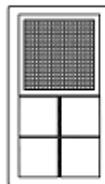
### Wiring example

Please observe cable length and loop resistance.

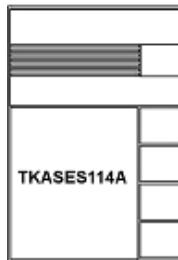
Indoor station



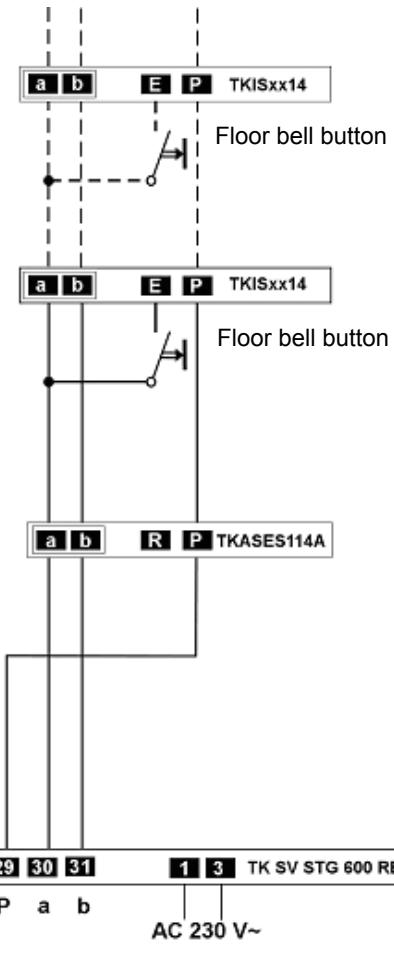
Indoor station



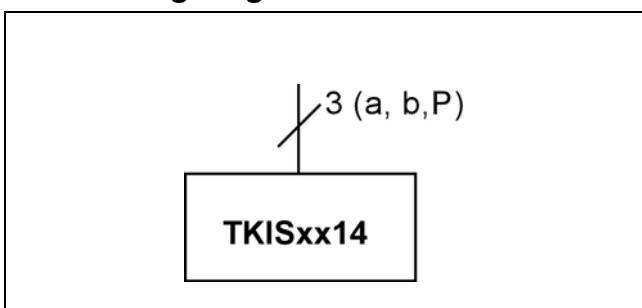
Outdoor station



Power supply & control unit

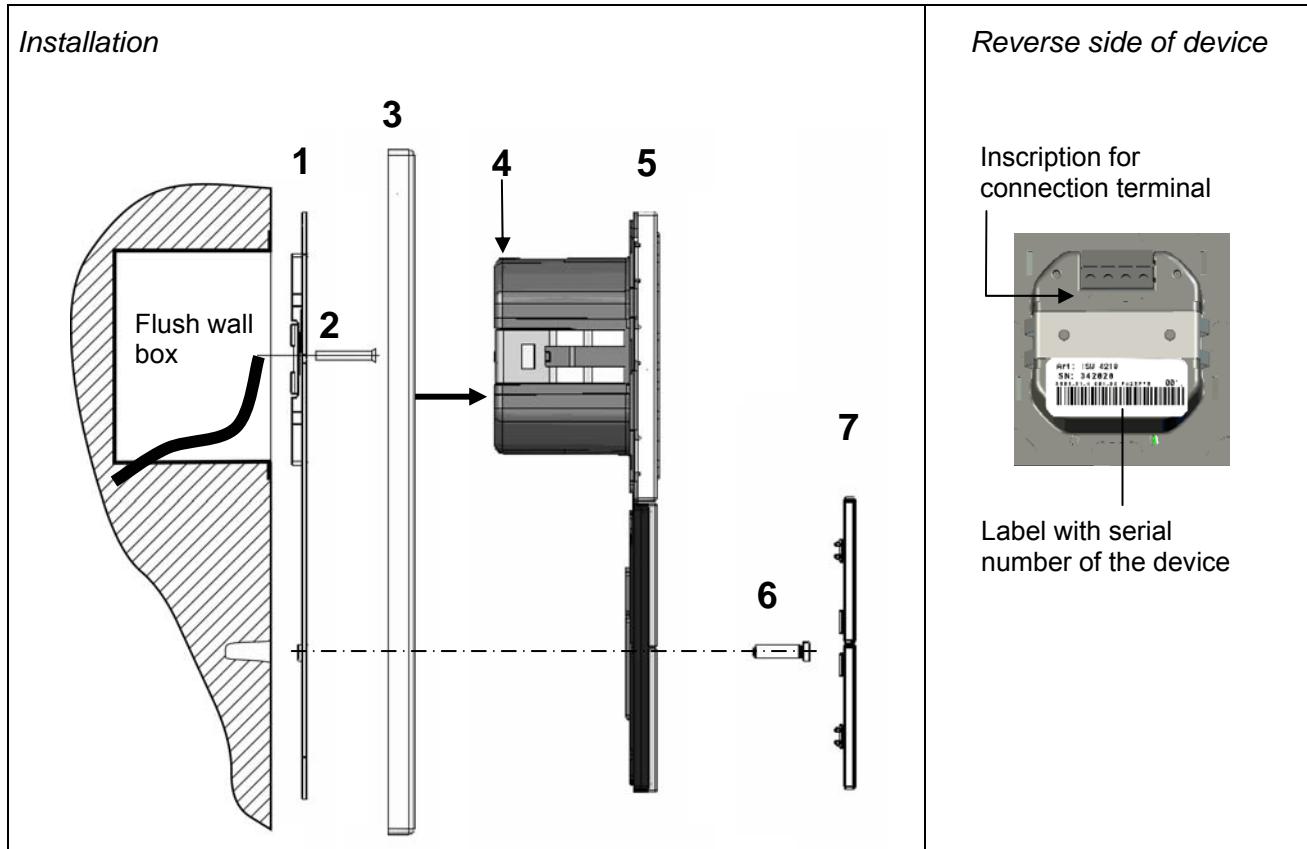


### Connecting diagram



## Installation

- Installation into flush wall boxes according to DIN 49 073.  
Do not paint or wallpaper over the supporting frame (1).
- Connection as wiring example (page 7).



1 Supporting frame, 2 Wall box screws, 3 Design frame,  
4 Connection terminal with connection block, 5 Main unit, 6 Plastic screws, 7 Cover kit

## Connection of wires

Type of wire: Telecommunication cable J-Y (St) Y with twisted pairs.

The usual diameter is 0.6 mm or 0.8 mm (see chart on page 37)

- Remove the connection block (4).
- Connect the wires to the connection block as inscribed (A B E P) on the reverse side of the device.

## Mounting

- For the connection of the device with the plastic screws (6) drilled holes of 6 x10 mm are required. Please use the supporting frame to mark the holes.
- Connect the supporting frame (1) with the delivered screws (2) onto the wall box.
- Put the design frame (3) onto the main unit (5) and plug the wired connection block onto the connection terminal (4).
- Latch the main unit (5) with the design frame (3) onto the supporting frame (1).
- Connect the main unit (5) to the supporting frame (1) with the delivered plastic screws. Tighten the plastic screws only finger tight.
- Clip on the cover kit (7) as shown in the device overview on page 5.

## Commissioning

- Install all devices of the DCM system
- Short-circuit test for a-, b- and P-wires
- Switch on supply voltage

Following functions should work without programming the indoor station:

- Communication of indoor station with outdoor station
- Door release function
- Switching light

- Programming of entire DCM system is described in the manual of the outdoor station

## Device settings

### ***Storing the device settings***

The indoor station is equipped with an EEPROM. After mains voltage failure following remains saved in the EEPROM: Selected ring tone, ring tone volume/mute, activated call diversion, internal call, automatic door release, control functions and light switching and voice memo.

### ***Factory settings***

Limited communication time	approx. 1 min
Timeout setting mode	approx. 8 s
Indication of green LED after pushing communication button when communication is occupied	3 x
Stand-by after internal call	approx. 30 s

### ***Signs and symbols***

	acknowledge tone
	ring tone
	slow LED flashing: 0.5 s ON / 0.5 s OFF
	fast LED flashing: 0.125 s ON / 0.125 s OFF
	LED illuminated
	LED pulse flashing: 0.5 s ON / 1.5 s OFF
	LED OFF
	short centrically push of button
	short push of button section
	push button until ....
	release the button
	sound of loudspeaker / indoor station
	voice, talking massage

## Function button

One function can be assigned to the **function button**.

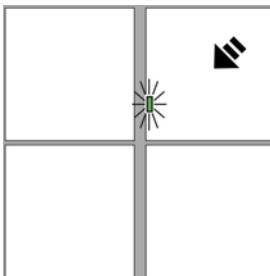
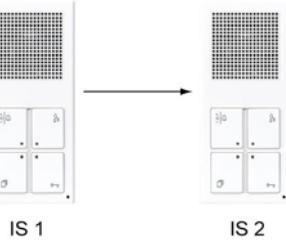
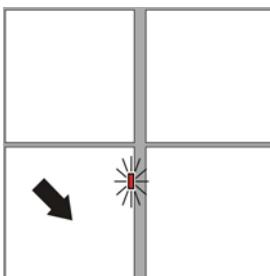
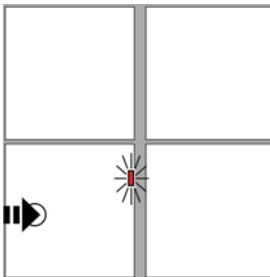
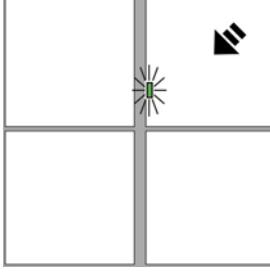
An additional function can be adjusted:

- "automatic **main** door release" with additional function "automatic **floor** door release" or
- automatic hands-free operation after internal call

### ***Internal call***

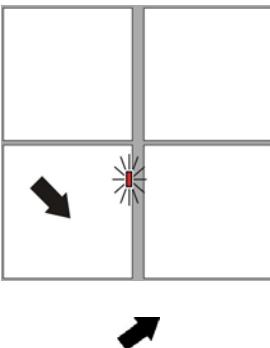
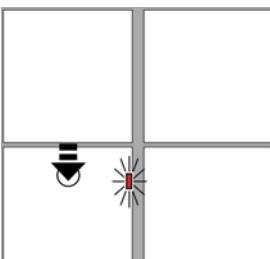
Now you can activate an **internal call** to call indoor station (**IS2**) by means of pushing the function button (**IS1**).

## Call diversion

	<p><b>Preparation</b> DCM system is in idle mode.</p>  <p>Target indoor station (<b>IS2</b>): Push communication button.</p>
 	<p><b>Starting setting mode at indoor station (IS1)</b></p> <ul style="list-style-type: none"> <li>Push function button (for approx. 8 s) until you can hear acknowledge tone.</li> <li>fast LED flashing</li> </ul> <p>release the function button</p>
 	 <ul style="list-style-type: none"> <li>fast LED flashing</li> <li>Push function button at LEFT section</li> <li>acknowledge tone</li> </ul> <p>LED is illuminated for approx. 3 s</p> <p>LED is OFF</p>
	<p>Target indoor station (<b>IS2</b>): If green LED is illuminated push communication button. Green LED is OFF.</p> <p>After 60s the target indoor station (<b>IS2</b>) automatically switches into idle mode.</p>

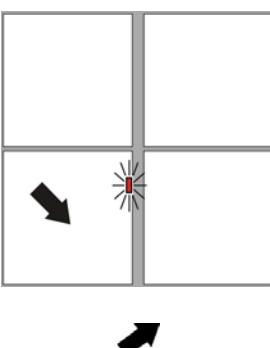
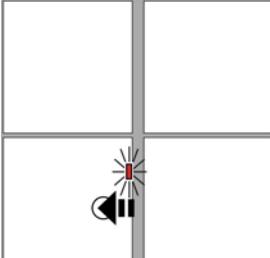
Now you can activate/deactivate a **call diversion** to a selected indoor station (**IS2**) by means of pushing the function button (**IS1**).

**Automatic door release**

	<p><b>Preparation</b> DCM system is in idle mode.</p> <ul style="list-style-type: none"> <li>Push function button (for approx. 8 s) until you can hear acknowledge tone.</li> <li>fast LED flashing</li> </ul> <p>release the function button</p>
	<p>fast LED flashing</p> <ul style="list-style-type: none"> <li>Push function button at TOP section</li> <li>acknowledge tone</li> </ul> <p>LED is illuminated for approx. 3 s</p> <p>LED is OFF</p>

Now you can activate/deactivate the **automatic door release** by means of pushing the function button.

**Control function 8**

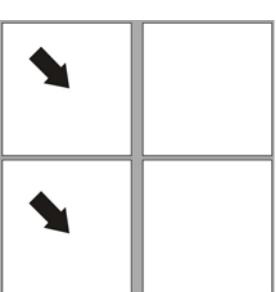
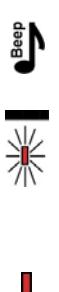
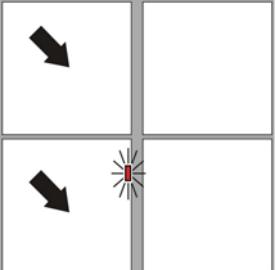
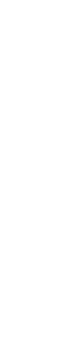
	<p><b>Preparation</b> DCM system is in idle mode.</p> <ul style="list-style-type: none"> <li>Push function button (for approx. 8 s) until you can hear acknowledge tone.</li> <li>fast LED flashing</li> </ul> <p>release the function button</p>
	<p>fast LED flashing</p> <ul style="list-style-type: none"> <li>Push function button at RIGHT section</li> <li>acknowledge tone</li> </ul> <p>LED is illuminated for approx. 3 s</p> <p>LED is OFF</p>

Now you can activate the **control function 8** by means of pushing the function button.

## Light switching

Resetting the function button to the function „light switching“ takes place by means of re-loading the factory settings.

### Reloading the factory settings

		<p><b>Attention !</b>  <b>All settings are reset to factory settings.</b></p>
		<ul style="list-style-type: none"> <li>Push ring tone button and function button (for approx. 8 s) until you can hear acknowledge tone.</li> <li>LED is illuminated for approx. 3 s then the LED is OFF</li> <li>The indoor station switches into idle mode. release the buttons</li> </ul>

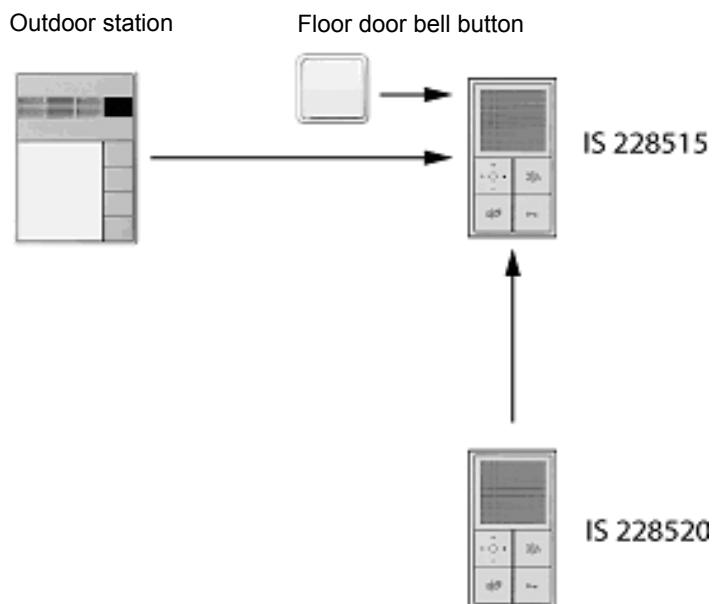
Now you can switch the **light** by means of pushing the function button.

## Adjusting the function button with the service device

The initiation starts always with the key combination **\*95#Ser.-Nr.#**.

<b>Initiation</b>	<b>(*) (95) (#)Ser.-Nr. (#)</b>
<b>Call diversion</b>	<b>(*) (90) (#)Ser.-Nr. (#)ZielSNr. (#)</b>
<b>Automatic door release</b>	<b>(*) (91) (#)Ser.-Nr. (#)</b>
<b>Internal call</b>	<b>(*) (92) (#)Ser.-Nr. (#)IntSNr (#)</b>
<b>Control function 8</b>	<b>(*) (93) (#)Ser.-Nr. (#)</b>
<b>Parallel function</b>	<b>(*) (99) (#)Ser.-Nr. (#)ParSNr (#)</b>

### Example:



IS (228515) is assigned to a bell button of the outdoor station.

IS (228520) will be parallel assigned to the IS (228515).

With the following key combination IS (228520) operates parallel with IS (228515).

**\* 99 # 228520 # 228515 #**

### Note:

Deleting the parallel function with ParSNr = 0.

**\* 99 # 228520 # 0 #**

Ser.-Nr. = Serial number of the indoor station which should be adjusted.

ZielSNr. = Serial number of the target indoor station for a call diversion

IntSNr. = Serial number of the target indoor station for an internal call

ParSNr. = Serial number of the (first) indoor station to which the additional indoor station should be assigned.

## Additional functions

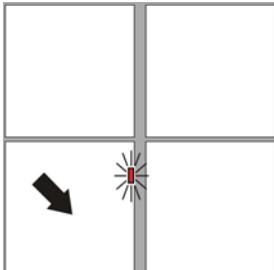
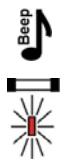
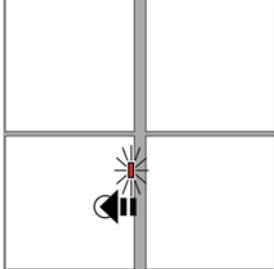
One of the following functions can be additionally adjusted:

- Automatically hands-free operation after internal call
- Automatic floor door release, control function 11

### ***Automatically hands-free operation after internal call***

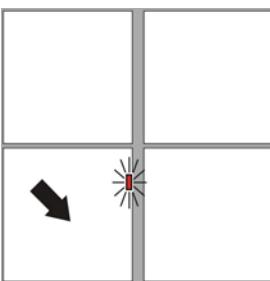
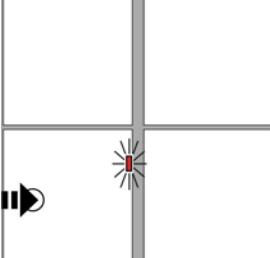
When an indoor station receives an internal call, an automatically hands-free operation will be activated. It is not required to accept the call by means of pushing a button. The person at the calling indoor station can directly start talking.

(This function will be adjusted at the "receiving" indoor station.)

 	 	<p><b>Preparation</b> DCM system is in idle mode.</p> <ul style="list-style-type: none"> <li>• Push function button for longer than 12 s.</li> <li>• After approx. 8 s you can hear an acknowledge tone and the LED is flashing fast.</li> <li>• After further 4 s you can hear a second acknowledge tone and the LED of the ring tone button starts pulse flashing.</li> <li>• release the function button</li> </ul>
	  	<ul style="list-style-type: none"> <li>• Push function button at RIGHT section</li> <li>• acknowledge tone</li> </ul> <p>LED is illuminated for approx. 3 s</p> <p>LED is OFF</p>

### Automatic floor door release, control function 11

When the function button is adjusted with the function automatic door release (e.g. for the main entrance door in a clinic centre) then the additional control function 11 involves another door release relay (e.g. for the floor entrance door of the clinic centre). This relay will be activated by means of pushing the floor bell button.

 	 	<p><b>Preparation</b> DCM system is in idle mode.</p> <ul style="list-style-type: none"> <li>Push function button for longer than 12 s.</li> <li>After approx. 8 s you can hear an acknowledge tone and the LED is flashing fast.</li> <li>After further 4 s you can hear a second acknowledge tone and the LED of the ring tone button starts pulse flashing.</li> <li>release the function button</li> </ul>
	  	<ul style="list-style-type: none"> <li>Push function button at RIGHT section</li> <li>acknowledge tone</li> </ul> <p>LED is illuminated for approx. 3 s</p> <p>LED is OFF</p>

Now you can activate/deactivate the **automatic door release** for the floor door and the main entrance door together.

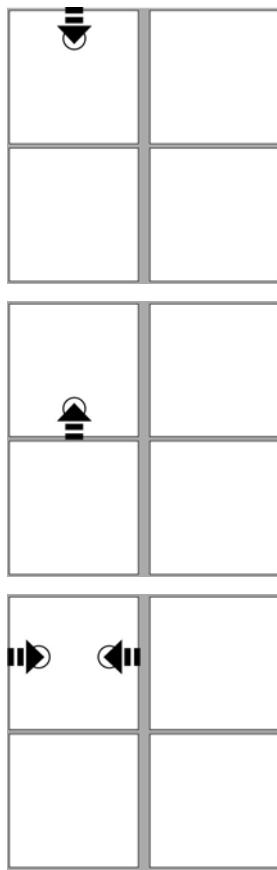
### Resetting of the additional functions

The resetting of the additional functions takes place by means of loading the factory settings. Attention! All settings will be reset.

## Settings

### Signs and symbols

	acknowledge tone
	ring tone
 	slow LED flashing: 0.5 s ON / 0.5 s OFF
 	fast LED flashing: 0.125 s ON / 0.125 s OFF
 	LED illuminated
 	LED pulse flashing: <b>0.5 s ON / 1.5 s OFF</b>
	LED OFF
	short centrically pushing of button
	short pushing of button section
	push button until ....
	release the button
 	sound of loudspeaker / indoor station
	voice, talking message

**Voice volume****Preparation**

The indoor station must be in talking mode.

8 voice volume levels can be adjusted:

**Increase voice volume**

- Push ring tone button at the TOP section (for approx. 1 s).
- the voice volume increases

**Decrease voice volume**

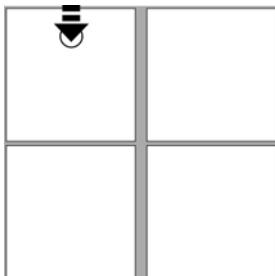
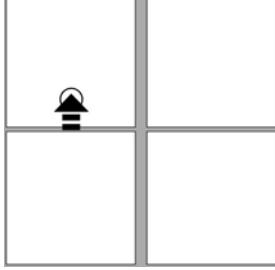
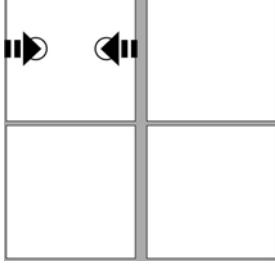
- Push ring tone button at the BOTTOM section (for approx. 1 s).  
the voice volume decreases

Repeat the action as long as the desired volume is reached.

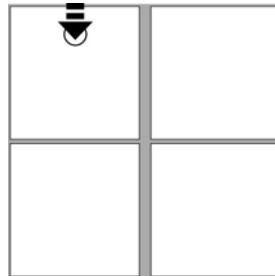
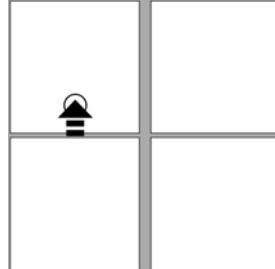
**Average voice volume (= factory setting)**

- Push ring tone button LEFT or RIGHT.

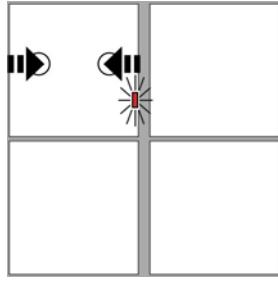
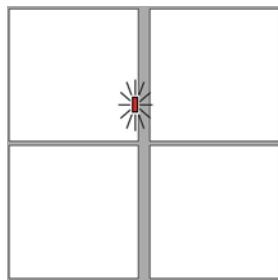
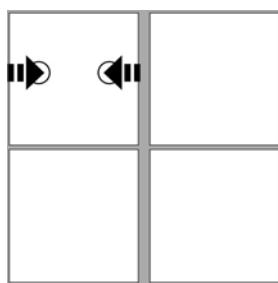
## Volume of voice memo recorder

		<b>Preparation</b>	Start the voice memo (see Voice memo function: , page 33)
		<b>Increase voice volume</b>	<ul style="list-style-type: none"> <li>Push ring tone button at the TOP section (for approx. 1 s).</li> <li>the voice volume increases</li> </ul>
		<b>Decrease voice volume</b>	<ul style="list-style-type: none"> <li>Push ring tone button at the BOTTOM section (for approx. 1 s).</li> <li>the voice volume decreases</li> </ul>
			Repeat the action as long as the desired volume is reached.

## Ring tone volume

		<b>Preparation</b>	DCM system is in idle mode.
		<b>Increase ring tone volume</b>	<ul style="list-style-type: none"> <li>Push ring tone button at the TOP section (approx. 1 s).</li> <li>you can hear the adjusted ring tone</li> <li>now the volume is one level louder</li> </ul>
		<b>Decrease ring tone volume</b>	<ul style="list-style-type: none"> <li>Push ring tone button at the BOTTOM section (approx. 1 s).</li> <li>you can hear the adjusted ring tone</li> <li>now the volume is turned down one level</li> </ul>
			Repeat the action as long as the desired volume is reached.

## Ring tone OFF / ON



### Preparation

DCM system is in idle mode.

### Ring tone OFF

- Push ring tone button LEFT or RIGHT.

The LED is illuminated, the ring tone is OFF.

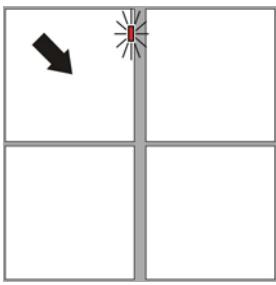
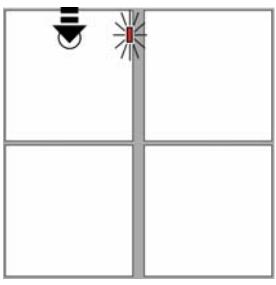
### Ring tone ON

- Push ring tone button LEFT or RIGHT.
- the LED turns off, the ring tone is ON again.

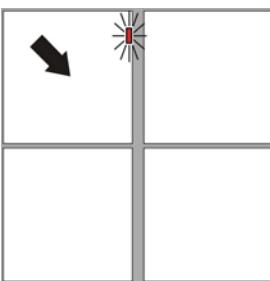
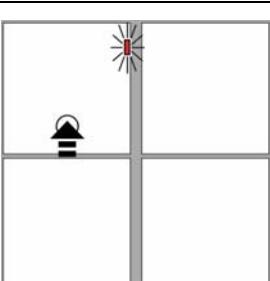
## Ring tone selection

Various outdoor station can be installed into a DCM system, e.g. in buildings with various entrances. At the indoor station you can assign 2 different ring tones for the entrances. The first ring tone can be assigned to the main outdoor station. The second ring tone can be assigned to all other connected outdoor station.

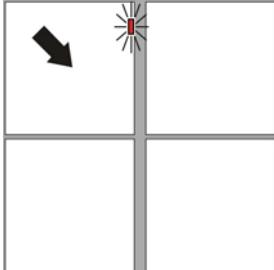
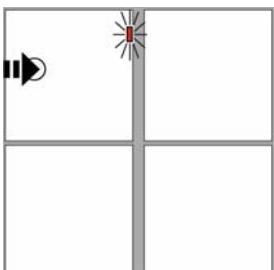
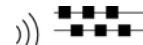
### ***Ring tone 1 (for Outdoor station = 0)***

 	  	<p><b>Preparation</b> DCM system is in idle mode.</p> <ul style="list-style-type: none"> <li>Push ring tone button (for approx. 8 s) until you can hear acknowledge tone.</li> <li>fast LED flashing</li> </ul> <p>Release the ring tone button.</p>
	  	<p>The TOP LED of the ring tone button flashes fast.</p> <ul style="list-style-type: none"> <li>Push ring tone button at the TOP section.</li> <li>You can hear the next ring tone. Now this ring tone is selected as the main ring tone 1.</li> </ul> <p>Repeat the action until the desired ring tone is selected. After approx. 8 s the indoor station turns into idle mode. The LED turns off.</p>

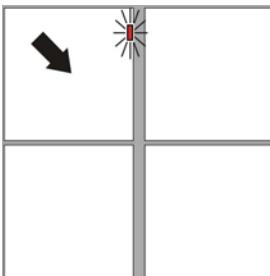
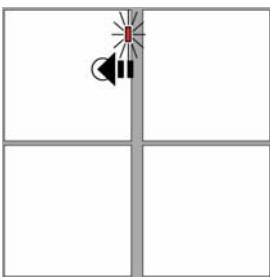
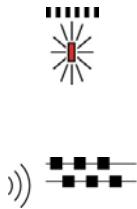
**Ring tone 2 (for Outdoor station > 0)**

 	 	<p><b>Preparation</b> DCM system is in idle mode.</p> <ul style="list-style-type: none"> <li>Push ring tone button (for approx. 8 s) until you can hear acknowledge tone.</li> <li>fast LED flashing</li> </ul> <p>Release the ring tone button.</p>
	 	<p>The TOP LED of the ring tone button flashes fast.</p> <ul style="list-style-type: none"> <li>Push ring tone button at the BOTTOM section.</li> <li>You can hear the next ring tone. Now this ring tone is selected as the ring tone 2.</li> </ul> <p>Repeat the action until the desired ring tone is selected. After approx. 8 s the indoor station turns into idle mode. The LED turns off.</p>

## ***Ring tone for internal call***

	 	<p><b>Preparation</b> DCM system is in idle mode.</p> <ul style="list-style-type: none"> <li>Push ring tone button (for approx. 8 s) until you can hear acknowledge tone.</li> <li>fast LED flashing</li> </ul> <p>Release the ring tone button.</p>
	 	<p>The TOP LED of the ring tone button flashes fast.</p> <ul style="list-style-type: none"> <li>Push ring tone button at the LEFT section.</li> <li>You can hear the next ring tone. Now this ring tone is selected for the internal call.</li> </ul> <p>Repeat the action until the desired ring tone is selected. After approx. 8 s the indoor station turns into idle mode. The LED turns off.</p>

## Ring tone for floor bell button

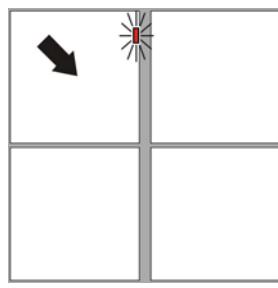
 	 	<p><b>Preparation</b> DCM system is in idle mode.</p> <ul style="list-style-type: none"> <li>Push ring tone button (for approx. 8 s) until you can hear acknowledge tone.</li> <li>fast LED flashing</li> </ul> <p>Release the ring tone button.</p>
		<p>The TOP LED of the ring tone button flashes fast.</p> <ul style="list-style-type: none"> <li>Push ring tone button at the RIGHT section.</li> <li>You can hear the next ring tone. Now this ring tone is selected for the floor bell button</li> </ul> <p>Repeat the action until the desired ring tone is selected. After approx. 8 s the indoor station turns into idle mode. The LED turns off.</p>

## **Ring tone selection for sub door call**

### **Note:**

The assignment of a **sub door call** at the **outdoor station** is only possible with the service device (see product information of TK-SERVICE).

### **Start setting mode**



#### **Preparation**

DCM system is in idle mode.

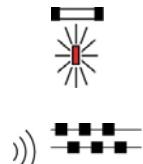
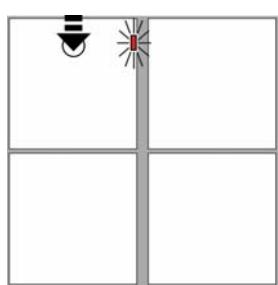
- Push ring tone button for longer than 12 s.
- After approx. 8 s you can hear acknowledge tone.
- fast LED flashing ...
- After further 4 s you can hear a second acknowledge tone.

LED starts fast pulse flashing

- Release the ring tone button.

Now the indoor station is ready for the following assignment:

### **Selection sub door call 1 (Serial-no.+1)**

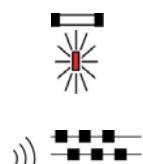
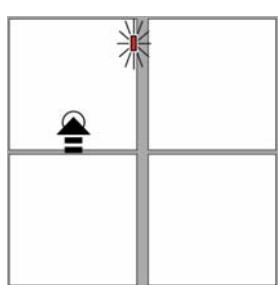


LED pulse flashing

- Push ring tone button at the TOP section.
- You can hear the next ring tone.  
Now this ring tone is selected for the sub door call 1

Repeat the action until the desired ring tone is selected.

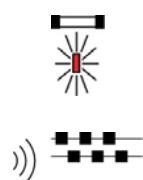
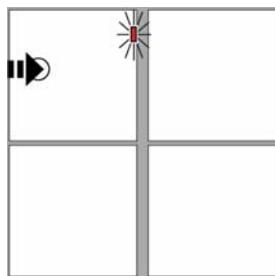
### **Selection sub door call 2 (Serial-no.+2)**



LED pulse flashing

- Push ring tone button at the BOTTOM section.
- You can hear the next ring tone.  
Now this ring tone is selected for the sub door call 2

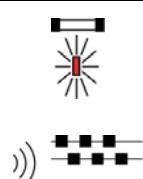
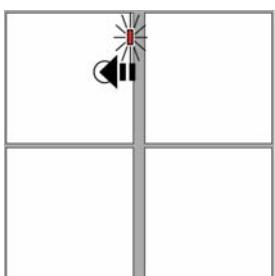
Repeat the action until the desired ring tone is selected.

**Selection sub door call 3 (Serial-no.+3)**

LED pulse flashing

- Push ring tone button at the LEFT section.
- You can hear the next ring tone.  
Now this ring tone is selected for the sub door call 3

Repeat the action until the desired ring tone is selected.

**Selection sub door call 4 (Serial-no.+4)**

LED pulse flashing

- Push ring tone button at the RIGHT section.
- You can hear the next ring tone.  
Now this ring tone is selected for the sub door call 4

Repeat the action until the desired ring tone is selected.

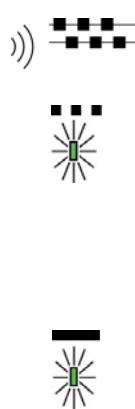
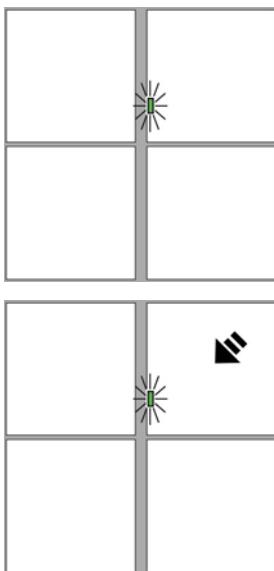
**Finish setting mode**

After approx. 8 s the indoor station turns into idle mode. The LED turns off.

## Operation

### Start communication, door release, switching light

#### Start communication after incoming call (Door call or internal call)



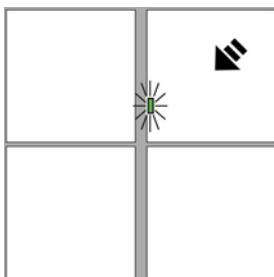
- Incoming call  
You can hear the selected ring tone and the green LED of the communication button flashes.

- Push the communication button to start the connection (max. 1 s).  
The green LED is illuminated.  
Hands-free operation: Full duplex operation, pushing the button is not required.

The communication will be stopped:

- by means of pushing the communication button,
- when the preset communication time of the outdoor station is elapsed (factory setting: 1min.)
- by means of pushing the door release button.

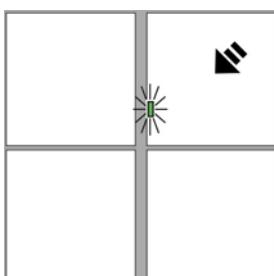
#### Start communication without incoming call



This function can be deactivated with the SERVICE DEVICE (Communication only after incoming call).

- Push the communication button to start the connection (max. 1 s).  
The green LED is illuminated.  
Now communication is possible.

#### Stop communication

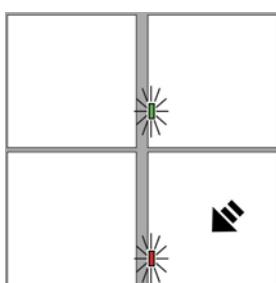


The communication will be stopped:

- by means of pushing the communication button (max. 1 s)
- when the preset communication time of the outdoor station is elapsed (factory setting: 1min.)
- by means of pushing the door release button.

Disconnected communication: The LED turns off.

## Door release

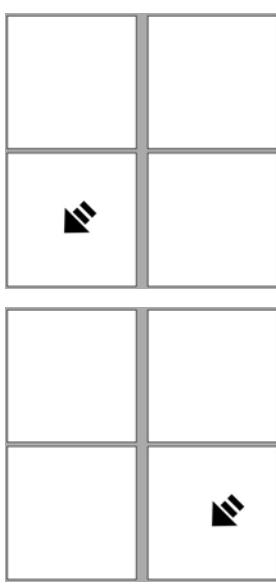


- Push the door release button to open the door.

When **light switching function\*** is activated:

- Push communication button
- Push the door release button to open the door.

## Light switching



- Push the function button, when function button is adjusted with light switching (factory setting).

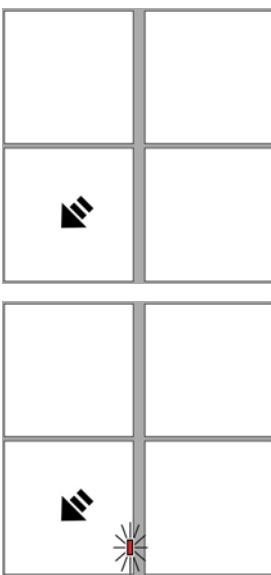
or

When **light switching function\*** is activated:

- Push the door release button, if no communication is activated. The LED is not illuminated.

\* = please see *explanation of terms and definitions* on page 35

## Features of the function button



Short push of the function button (max. 1 s). Depending on the set function the indoor station indicates the action with visual or acoustic signals:

Light switching	-	-
Internal call	✓	flashing
Call diversion ON	-	✓
Call diversion OFF	-	-
Automatic door release ON	-	✓
Automatic door release OFF	-	-

## Automatic floor door release function

When the function button is adjusted with the function automatic door release (e.g. for the main entrance door in a clinic centre) then the additional control function 11 involves another door release relay (e.g. for the floor entrance door of the clinic centre). This relay will be activated by means of pushing the floor bell button.

Now you can activate/deactivate the **automatic door release** for the floor door and the main entrance door together.

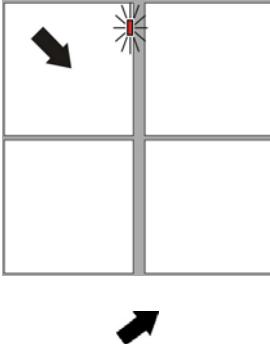
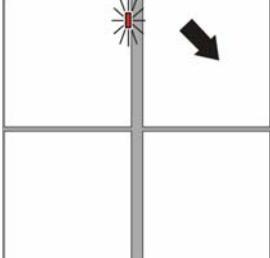
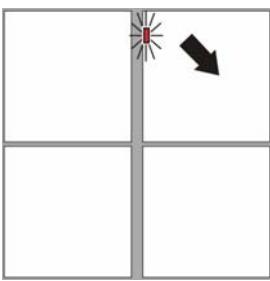
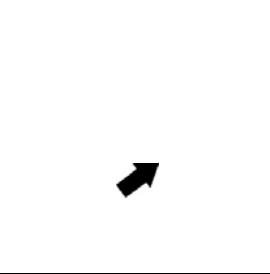
## Automatically hands-free operation after internal call

When an indoor station receives an internal call, an automatically hands-free operation will be activated. It is not required to accept the call by means of pushing a button. The person at the calling indoor station can directly start talking.  
(This function will be adjusted at the "receiving" indoor station)

## Record, play or delete a ring tone

You can record a sound or ring tone with the microphone of the indoor station. The max. recording time is approx. 3 s. After recording the new ring tone / sound has to be selected as a new ring tone (see "ring tone selection").

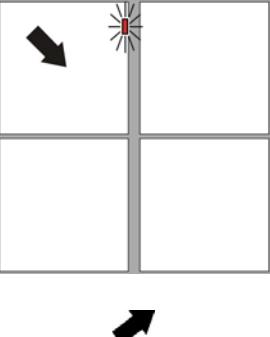
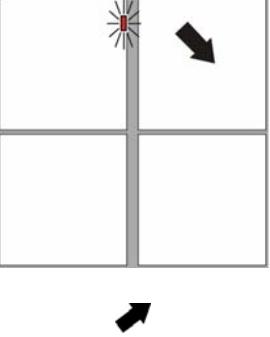
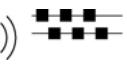
### Recording a ring tone

	<p><b>Preparation</b> DCM system is in idle mode.</p> <p> </p> <ul style="list-style-type: none"> <li>Push ring tone button (for approx. 8 s) until you can hear acknowledge tone.</li> <li>fast LED flashing</li> </ul> <p>release the tone button button</p>
  	<p> Fast flashing of the TOP LED of ring tone button.</p> <p><b>Note:</b> Push the communication button until your ring tone stops !</p> <ul style="list-style-type: none"> <li>Push the communication button:       <ul style="list-style-type: none"> <li>You can hear first acknowledge tone, ...</li> <li>... now the LED of the communication button starts flashing,...</li> <li>... with the second acknowledge tone starts the recording time of your ring tone. The LED is illuminated during the recording time.</li> </ul> </li> <li>Play your ring tone / sound in front of the microphone with normal volume.</li> <li>The recording stops automatically after 3 s or by means of releasing the communication button.</li> </ul>

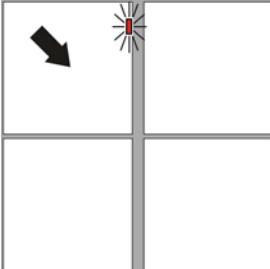
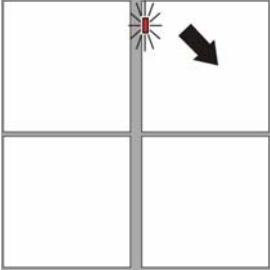
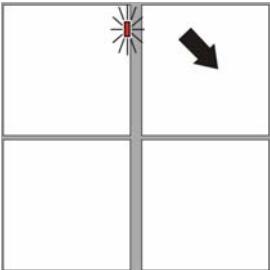
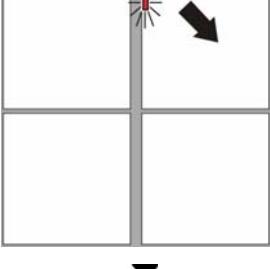
### End of setting mode

The indoor station turns automatically back into idle mode. The LED turns OFF.

## Play recorded ring tone

	 	<p><b>Preparation</b> DCM system is in idle mode.</p> <ul style="list-style-type: none"><li>Push ring tone button (for approx. 8 s) until you can hear acknowledge tone.</li><li>fast LED flashing</li></ul> <p>release the ring tone button</p>
	  	<p>Fast flashing of the TOP LED of ring tone button.</p> <ul style="list-style-type: none"><li>Push communication button (for approx. 4 s) until you can hear acknowledge tone.</li><li>release the communication button</li></ul> <p>Now you can hear the recorded ring tone.</p>

## Delete the recorded ring tone

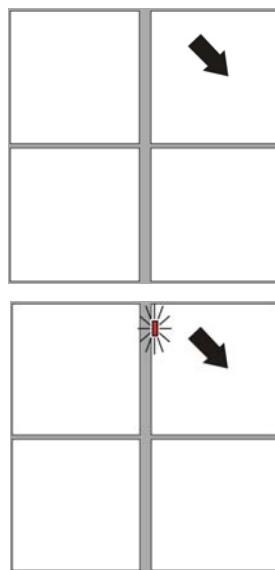
 	<p><b>Preparation</b> DCM system is in idle mode.</p> <p>    </p> <ul style="list-style-type: none"> <li>Push ring tone button until you can hear acknowledge tone (after 8 s).</li> <li>fast LED flashing</li> </ul> <p>release the ring tone button</p>
 	<p>      </p> <p>Fast flashing of the TOP LED of ring tone button.</p> <ul style="list-style-type: none"> <li>Push communication button:</li> </ul> <p>You can hear the first acknowledge tone, ...</p> <p>... now the LED of the communication button starts flashing,...</p> <p>release the communication button</p> <p>The ring tone is deleted.</p>

## Voice memo function: Record, play and delete message

You can record a voice memo with the microphone of the indoor station. The max. recording time is approx. 30 s. After recording, the new voice memo will be indicated by means of the flashing LED. It is possible to save one voice memo.

You will delete the old voice memo by means of recording a new memo.

### Record a voice memo



#### Note:

Push the communication button until you have finished talking the voice memo.

- Push the communication button:

You can hear first acknowledge tone, ...

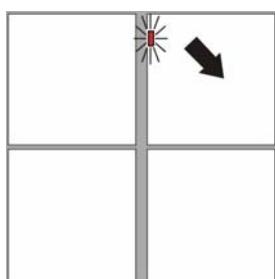
... now the TOP LED of the communication button starts flashing, ...

... with the second acknowledge tone starts the recording time of the voice memo. The LED is illuminated during the recording time.

- Speak the voice memo in front of the microphone with normal volume.
- The recording stops automatically after 30 s or by means of releasing the communication button.

*The max. time of the voice memo is 30 s. When the LED starts flashing you have reached the max. recording time. The recording stops automatically.*

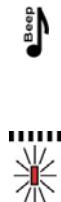
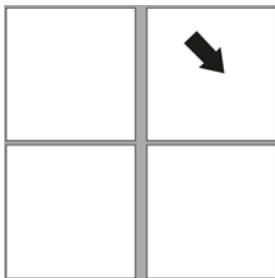
- Slow LED flashing:  
The LED indicates a new voice memo.  
The LED flashes until you play the memo.

**Play voice memo**

Slow LED flashing:  
The LED indicates a new voice memo.  
The LED flashes until you play the memo.

- Push communication button until you can hear acknowledge tone (after 4 s).
- release the communication button
- The voice memo will be played.

After you played the voice memo, the LED turns off.  
You can play the voice memo again.

**Delete voice memo**

- Push communication button until ...  
... you can hear acknowledge tone.

When the LED starts flashing, release the communication button immediately.

The TOP LED of the communication button turns off.  
The voice memo is deleted.

## Explanation of terms and definitions

AS-address	Every outdoor station is assigned with an <b>outdoor station address</b> . The address enables the differentiation between the various installed outdoor station. Selective communication or door release of e.g. main- or side entrance can be realised.
Ready for operation	Incoming door call - You can hear a ring tone and the LED at the communication button flashes. You can activate a communication with the outdoor station by means of a short push of the communication button.
Hands-free operation (Full duplex)	Simultaneous communication in both directions.
Door call	You release a door call at the assigned indoor station by means of pushing the bell button. A bell button can release a door call at two indoor stations (parallel call).
Internal call	An indoor station can call another assigned indoor station for an internal communication.
Automatic light switching  <i>Programming at the outdoor station.</i>	The light will be switched depending on the ambient brightness when you push the bell button of the outdoor station. The limited brightness value is adjustable.
Light switching	The function button of the indoor station is assigned with the function "light switching" (factory setting). A bell button of the outdoor station will switch the light, if the bell button is not assigned to an indoor station.
Light switching function  <i>Programming at the power supply and control unit.</i>	The door release button can be assigned with an extra function, when the light switching function is activated at the power supply and control unit: You first have to push the communication button before you can release the door with the door release button. Without pushing the communication button you will switch the light with the door release button.
Parallel call	A second indoor station can be programmed to a bell button of the outdoor station.
Parallel function  <i>Programming only with the service device.</i>	Multiple indoor station can respond to one bell button of the outdoor station or the floor bell button. Each further indoor station respond just as the first indoor station.
Programming mode	The system has to be in programming mode to assign the indoor stations to the desired bell buttons of the outdoor station.
Acknowledge tone	Acoustical confirmation
Idle mode	The device is ready for a door call or other operation.
Call diversion	An incoming door call will be forwarded from one indoor station to another indoor station. The call diversion has to be activated with the function button. The illuminated LED of the function button indicates the activated call diversion.

Talking mode	A communication between indoor and outdoor station will be activated by means of pushing the communication button. The LED of the communication button is illuminated. The LED of the communication button is flashing, when another indoor station is already communicating with the outdoor station. After elapsed talking time, activating the door release or pushing the communication button again, the device turns back into idle mode.
Talking only after incoming door call  <i>Programming only with the service device.</i>	A communication between indoor and outdoor station can only be activated after an incoming door call.
Talking time	The communication between indoor and outdoor station will be interrupted after a pre-defined talking time (60 s factory setting). The talking time is adjustable.
Control function	Command for the control of various relays in the door communication system.
Sub door call  <i>Programming only with the service device.</i>	The sub door call enables to assign 4 additional bell button of the outdoor station to the same indoor station. Each bell button can be assigned to a separate ring tone (e.g.: individual ring tones for each family member).
Automatic door release	The door release relay will be activated by means of pushing the bell button. The automatic door release can be activated/deactivated with the function button of the indoor station. The LED of the function button indicates the status. LED ON = automatic door release activated LED OFF = automatic door release deactivated
Door release time	The door release relay can be activated for an adjusted time.
Voice memo-function	Record and play a voice memo (message) up to a length of 30 s.

## General notes on the wiring in DCM audio systems

The cabling depends on the building situation and is only limited by its length.

- When selecting the cable length consider: the loop resistance must not exceed max. 20 Ω (table)
- To keep within the max. permissible loop resistance the wire cross section can be doubled, i.e. two lines are used for one wire (figure). The lines must be twisted.
- When using screened cables: connect the screens to each other and connect on one side to earth (b wire) on the power supply unit
- Choice of line or star wiring

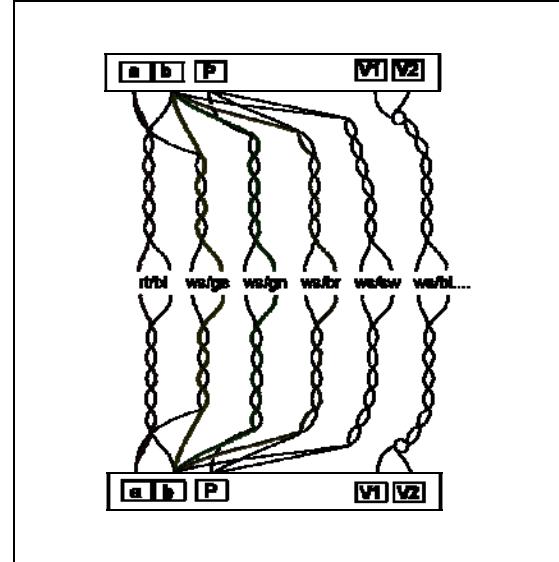


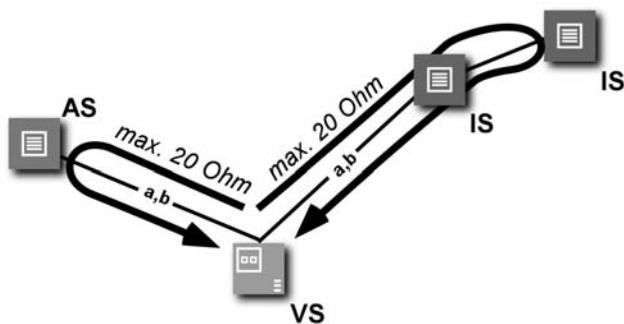
Table: Loop resistance

Wire length in m	Diameter	
	0.6 mm	0.8 mm
10	1.22	0.69
20	2.45	1.38
30	3.67	2.07
40	4.90	2.76
50	6.12	3.44
60	7.35	4.13
70	8.57	4.82
80	9.80	5.51
90	11.02	6.20
100	12.24	6.89
150	18.37	10.33
200	24.49	13.78
250		17.22
300		20.66

## Principle of loop resistance

Rule:

No door communication device shall have a longer distance from the power supply & control unit than 20 Ohm !



20 Ohm:

160 m wire length AS-VS (IS-VS) at a diameter of 0.6 mm

300 m wire length AS-VS (IS-VS) at a diameter of 0.8 mm

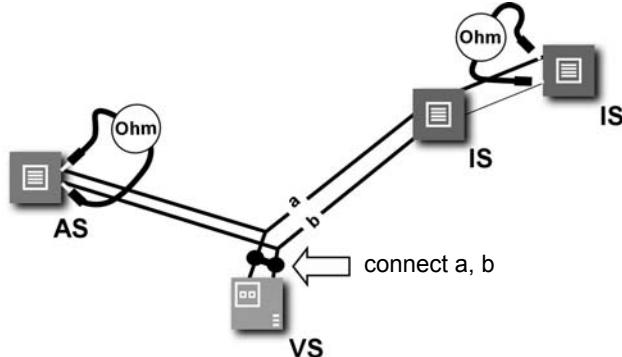
## Measuring loop resistance

Rule:

Turn OFF 230 V / 50 Hz of the VS.

Connect a and b short circuit at the VS.

All other devices do not disturb the measuring process and remain connected.



AS: Outdoor station

IS: Indoor station

VS: Power supply and control unit

## Technical data

Supply voltage:	+24 V DC $\pm$ 8 % (Power supply & control unit) 24 V (a-b) / 26 V (P-b) in idle state
Current:	
3-wire:	$I(a) = 0.1 \text{ mA}$ , $I(P) = 6.5 \text{ mA}$ in idle state
Max. input current:	$I(P_{max}) = 32.5 \text{ mA}$
Protection class:	III
Admissible ambient temperature:	0 °C to 40 °C
Operation humidity:	0 to 93 % r. h., no condensation
Installation height:	Recommended 1.50 m

## Cleaning

! Avoid the penetration of water into this device!  
Do not use any aggressive or abrasive cleaning supplies!

Please clean the device with a dry or slightly moist rag.  
Intense dirt can be removed with a mild cleaning supply.

## Acceptance of guarantee

We accept the guarantee in accordance with the corresponding legal provisions.  
**Please return the unit postage paid to our central service department giving a brief description of the fault:**

### ALBRECHT JUNG GMBH & CO. KG

#### Service-Centre

Kupferstr. 17-19

44532 Lünen

Germany

Service-Line: 0 23 55 . 80 65 51

Fax: 0 23 55 . 80 61 89

E-Mail: mail.vka@jung.de

#### Technique (DCM)

Service-Line: 0 23 55 . 80 65 52

Fax: 0 23 55 . 80 62 55

E-Mail: mail.vka@jung.de

# JUNG

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[www.gb.jung.de](http://www.gb.jung.de)  
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 The CE-sign is a free trade sign addressed exclusively to the authorities and does not include any warranty of any properties.

Technical subjects to change.  
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