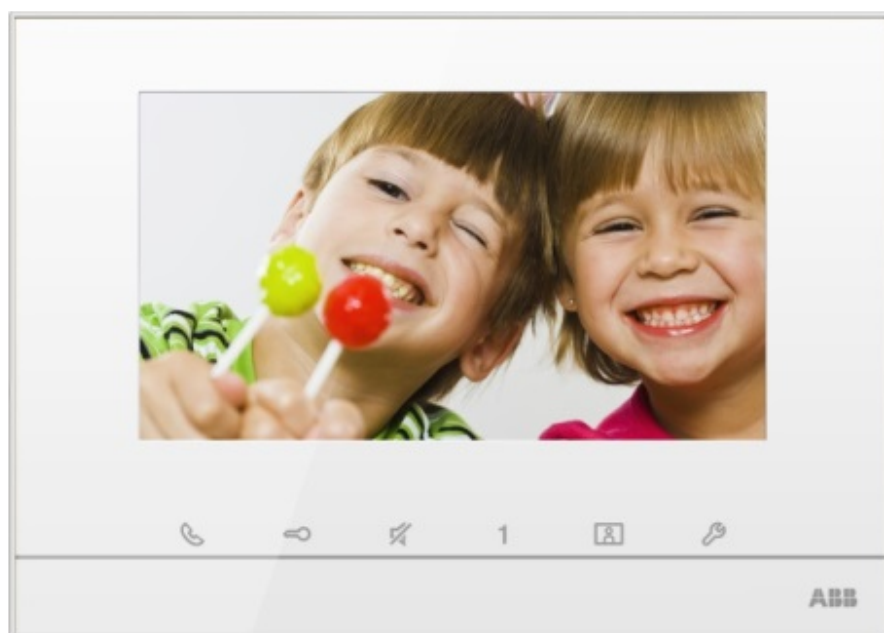


VER: 1.3 | 02.20.2017

ABB Welcome® **M2233.-.** **7" Video hands-free** **indoor station**



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1 Safety



Warning

Electric voltage!

Direct or indirect contact with live components can cause dangerous currents to flow through the body, which may result in electric shock, burns or even death.

- Always disconnect the main power supply prior to installation and/or disassembly.
- Work on the 110 V - 240 V supply system must be performed only by qualified personnel.

2 Intended use

This device is an integral part of the ABB Welcome door communication system and operates exclusively with components from this system. The device must only be installed in dry indoor rooms.

3 Environment



Consider the protection of the environment!

Used electric and electronic devices must not be disposed of with household waste.



- The device contains valuable raw materials that can be recycled and should be disposed of at an appropriate recycling facility.

3.1 ABB devices

All packaging materials and devices from ABB bear the markings and test seals for proper disposal. Always dispose of the packaging material, electronic devices and their components via an authorized recycling facility or disposal company.

4 Operation

4.1 Standard operations

4.1.1 Control elements

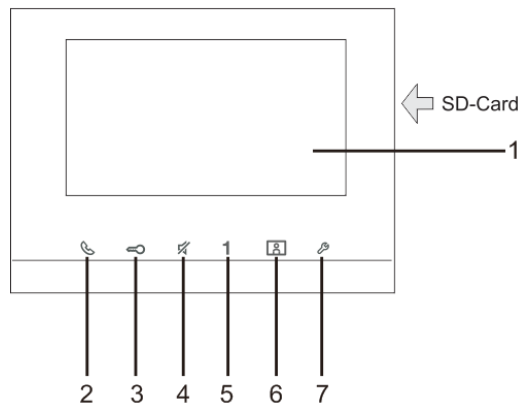


Fig. 1 Control elements

No.	Functions
1	7" Touch screen
2	Communication button 2A For incoming call, press this button within 30 seconds to activate communication. Press it again to end call. 2B In standby mode, press this button to set up the voice and video connections to the default outdoor station.
3	Unlock button 3A Press this button to open the door at any time. 3B Auto-unlock: The door is automatically opened after an incoming call. If the LED lights up, this indicates auto-unlock. If the LED flashes rapidly, it means the door is open over the set time. (The sensor must be connected first.)
4	Mute button 4A In standby mode, press this button to mute the ringtone for this indoor station. 4B In standby mode, hold this button to mute the ringtone for all indoor stations in the apartment. 4C Press this button to reject incoming call. 4D During a conversation, press this button to mute the microphone. If the LED lights, this indicates a mute status.
5	Program button 1 5A Release the lock connected with outdoor station (COM-NC-NO) (default function). 5B *Programmable for additional functions, e.g., call guard unit, intercom, etc.
6	History button 6A Press this button to display the "history" record. 6B When video is on the screen, press this button to take a snapshot manually.
7	System setting button Enter the system settings menu for various functions of the device.

*For use of this button, please contact your electrical installer.

4.1.2 Welcome screen and status bar

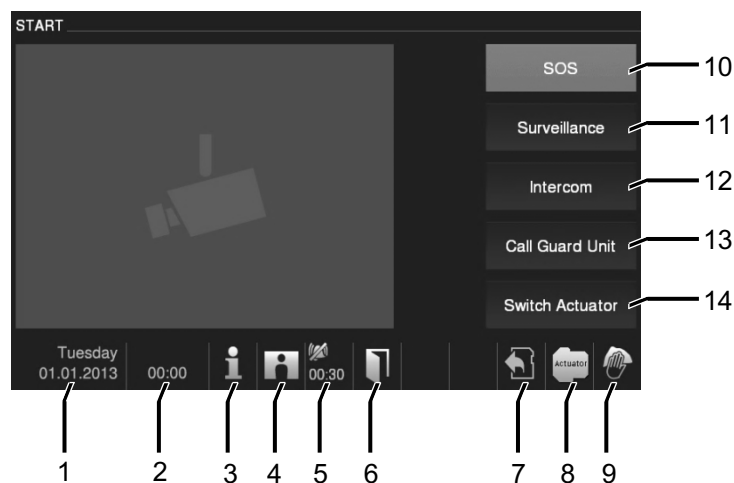


Fig. 2 Welcome screen and status bar

No.	Functions
1	Current date - Click here to set the current date.
2	Time - Click here to set the current time.
3	System information - Click on this icon to call up the address (number of the indoor station, default outdoor station, master or slave station) on this panel and the current software information.
4	History - New information (events or picture memory) is available when this icon flashes. This also indicates a missed call or a new voice message. - Click on this icon to display the events and picture memory.
5	Mute function - Icons "crossed-out handset" and "crossed-out bell" indicate the mute status of the microphone or the loudspeaker of the panel.
6	Open entrance door. - The "open door" icon is displayed when you press the door opener or activate the function "automatic door opener."
7	SD card - The icon shows whether or not you have inserted an SD card.
8	Switch actuator - The icon is shown after you activate the switch actuator.
9	Cleaning blockage - The icon is shown when the display is blocked to prevent functions being enabled during cleaning.
10	SOS - Hold this button for 3 seconds to send an SOS signal to a guard unit.
11	Surveillance - Click on this button to start to survey the default outdoor station.
12	Intercom - Click on this button to enter the intercom call menu.
13	Guard unit - Click on this button to call guard unit.


14	Switch actuator - Click on this button to enter the switch actuator menu.
----	--

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- 4.2 Control actions
- 4.2.1 Surveillance



Fig. 3 Surveillance

Click on this button to start to survey the default outdoor station. Only the video connection appears first.
Press  button to activate the voice connection.

No.	Function
1	Designation of camera.
2	Set volume with the “plus and minus” buttons.
3	Used when several outdoor stations or external cameras are connected. - Select a camera with the “forward and back” buttons
4	Click on the button to set the display. - Saturation of the display (plus and minus). - Contrast of the display (plus and minus).

4.2.2 Intercom

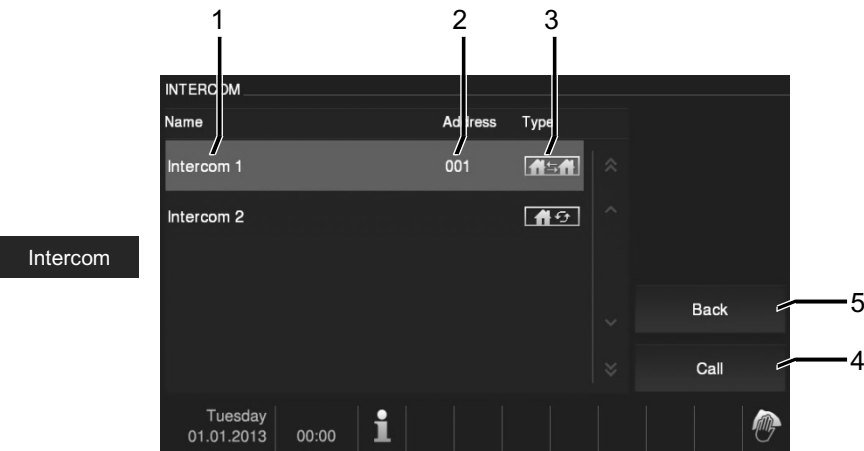




Fig. 4 Intercom

Click on this button to enter intercom call menu. The following functions are available:
(Set the intercom call lists in the “system setting-intercom setting” menu first.)

No.	Functions
1	The name of an intercom.
2	The address of an intercom.
3	The type of an intercom (external or internal).  indicates an external intercom from a different apartment.  indicates an internal intercom from the same apartment.
4	Click on “call” button to make an intercom call.
5	Click on “back” button to return to the start screen.

4.2.3 Calling guard unit

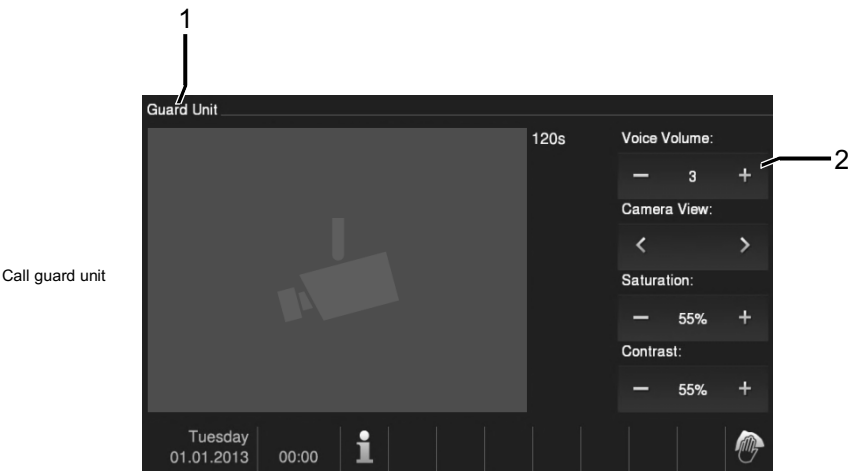


Fig. 5 Calling guard unit

Click on the “guard unit” button to call a guard unit. The following functions are available:

No.	Functions
1	Designation of a guard unit.
2	Set volume with the “plus and minus” buttons.

4.2.4 Switch actuator

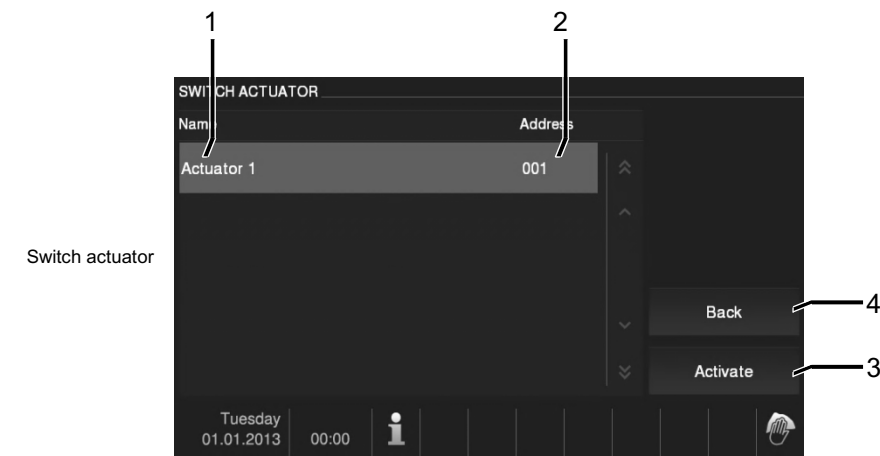


Fig. 6 Switch actuator

Click on “switch actuator” button to enter the switch actuator menu. The following functions are available: (Set actuator lists in the “system setting-switch actuator” menu first.)

No.	Functions
1	The name of an actuator.
2	The address of an actuator.
3	Click on this button to activate the selected actuator.
4	Click on this button to go back to the start screen.

4.2.5 Setting up the voice and video connections



Fig. 7 Setting up the voice and video connections

The following functions are available for setting up voice and video connections:
(Press the communication button.)

No.	Functions
1	Designation of the camera.
2	Set the volume with the “plus and minus” buttons.
3	If several outdoor stations or external cameras are connected, select the camera with the “forward and back” buttons.
4	Click on the buttons to set the display. - Saturation of the display (plus and minus). - Contrast of the display (plus and minus).

4.2.6 Opening the door



Fig. 8 Opening the door

Press the key button to activate the door opener. The following functions become available:

No.	Functions
1	The "open door" icon is displayed after you press the door opener or activate the function "automatic door opener."

4.2.7 Muting



Fig. 9 Muting

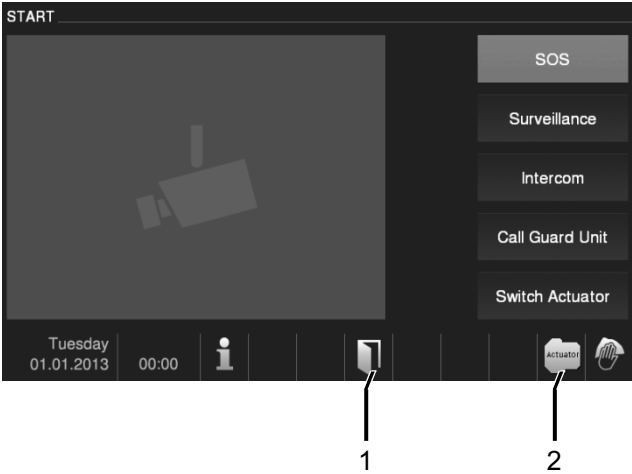
The muting menu (mute timer) has the following functions:

No.	Functions
1	No call is pending: If you press the "mute function" while no call is pending, the bell sound of the panel will be deactivated for a certain period. - If calls come in during this time, only the video image is displayed. - Missed calls are displayed in the events and pictures memory .
2	A call is pending: If you press the button "mute function" during a call, the microphone of the panel will be deactivated until the button is pressed again.

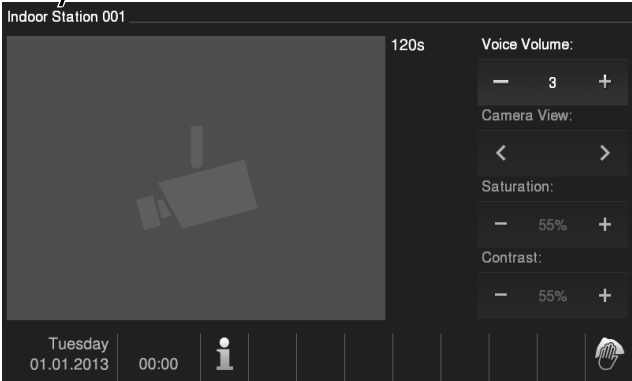
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4.2.8 Activating the custom function

1



3



4

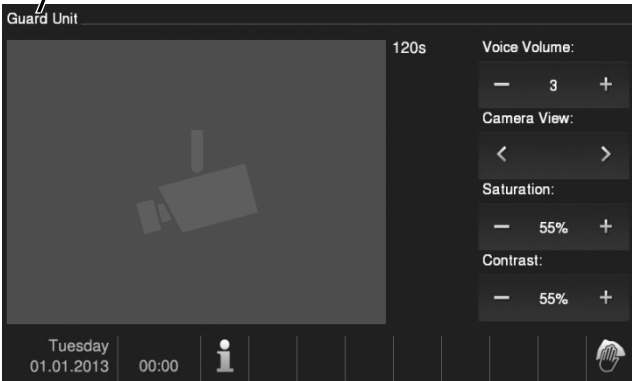


Fig. 10 Activating the custom function

The program button can be configured with different functions, e.g., call to guard unit, intercom call or control switch actuator. Its default function is the release of the second lock, which is connected with terminals COM-NC-NO of an outdoor station.

If no function is assigned to the program button, there will be no action after pressing this program button.

Only the existing intercom call list and switch actuator list can be assigned for the program button.

No.	Functions
1	If the function "release second lock" is assigned to the program button, the "open door" icon will be displayed when you press the program button.
2	If the function "control switch actuator" is assigned to the program button, the "actuator" icon will be displayed when you press the program button.
3	If the function "make an intercom call" is assigned to the program button, the call will be activated directly when you press the program button.
4	If function "call guard unit" is assigned to the program button, the call will be activated when you press the program button.

4.2.9 Event and picture memory and history

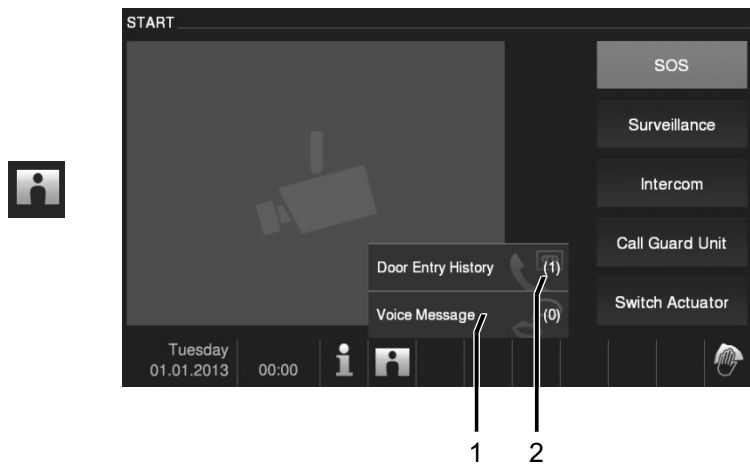


Fig. 11 Event and picture memory and history

The panel records all events. Press the “history” button, and the last 100 events will be displayed (prior events are overwritten).

No.	Functions
1	If you have activated the function “auto snapshots activated” in the system settings, the flashing icon in the status bar signals a newly taken snapshot. - The symbol stops flashing when you call up the events and pictures memory.
2	Voice message - Press the flash button to enter the voice message settings menu.

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1

2

HISTORY			
Snapshots	Date - Time	Direction	Last Activity
	06.01.2013 15:43	IN	Missed
	06.01.2013 11:53	IN	Missed
	06.01.2013 11:43	IN	Take Call
	06.01.2013 11:43	IN	Take Call
	06.01.2013 11:42	IN	Take Call

2

3

2

3

Sunday
06.01.2013

15:44

i

HISTORY			
Snapshots	Date - Time	Direction	Last Activity
	06.03.2013 03:52	IN	Take Call
	06.03.2013 03:52	IN	Missed
	06.03.2013 03:52	OUT	Unlock
	06.03.2013 03:52	OUT	Unlock
	06.03.2013 03:52	OUT	Unlock

4

4

4

4

Wednesday
06.03.2013

03:53

i



Fig. 12 Event and picture memory/history

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During a call, you can take a snapshot at any time by pressing the “history” button, even when the “automatic snapshots” function is not activated.

The event and picture memory and history menu offers the following functions:

No.	Functions
1	If you have activated the system setting menu “automatic snapshots,” a mini window will be displayed in the events list after an incoming call is missed. <ul style="list-style-type: none">- Date, time and type of the event are recorded together with the snapshot.- If no automatic snapshots are activated, a camera icon will be displayed in the mini window.
2	Individual entries or the entire list can be deleted at any time. <ul style="list-style-type: none">- Snapshots that you would like to archive can be copied onto an SD card (SD, SDHC).
3	Three photos are taken each time a visitor rings the bell. This helps to ensure that an acceptable photo has been taken. <ul style="list-style-type: none">- All recorded photos are accessed via the details window.
4	If a call is on an intercom call list, it can be added to the blacklist, which is used to prevent unwanted calls from other apartment(s).
5	Display the details window of a record.
6	Select an event with the “forward and backward” buttons.
7	Press the button (1/2/3) to select a single photo.
8	If there is a voice message left from a visitor, touch the play or stop button play or stop the voice message.

4.2.10 Information



SYSTEM INFORMATION


Firmware Version:
MSI10_V0.08_20131202_ES_TIDM365 Debug
Build at 16:20:22 Dec 4 2013
Board_V0.07_20131021

Address of Indoor Station:
1 Master


Default Outdoor Station:
1

Hardware Version:
MSI10_V1.00

Number of Reboots:
5



Tuesday
01.01.2013 00:00






Fig. 13 Information

Items above will be shown on the information menu.

4.2.11 Inserting an SD card

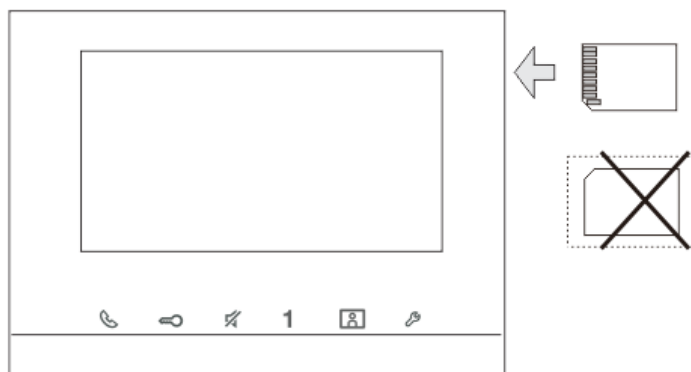


Fig. 14 Inserting an SD card

4.2.12 Settings

4.2.12.1 Overview

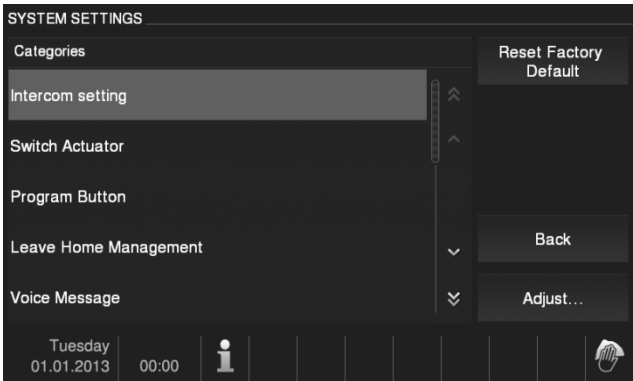


Fig. 15 Overview

Touch the “settings” button to make the following functions available:

No.	Functions
1	Intercom <ul style="list-style-type: none">- Set intercom lists among different apartments or within the same apartment.
2	Switch actuator <ul style="list-style-type: none">- Set the actuator list in the menu.
3	Program button <ul style="list-style-type: none">- Set functions for the program button.
4	Leave home management <ul style="list-style-type: none">- Call forward setting: Set the target (e.g., other indoor stations or guard units) to whom you wish to forward calls when you are away.- Message leaving: If you are not at home, you can record and leave a message before leaving home to notify possible visitors; and vice versa.
5	Voice message <ul style="list-style-type: none">- Create voice messages for family members or set as an away message to notify possible visitors.

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6	Set door open password - Set the customized door open password, which can be used at an outdoor station with keypad.
7	Blacklist - Set the blacklist, which is used to prevent unwanted calls from other apartment(s).
8	Audio settings - Set the ringtone for the outdoor stations, the doorbell and others. - Set the volume for the ringtone.
9	Auto-unlock - Set the automatic unlock time range.
10	Display settings - Different display settings.
11	Date and time - Different time settings.
12	Language - Set the local language.
13	Set-up - Other settings, e.g., automatic snapshots.
14	Firmware update
15	Reset the factory default

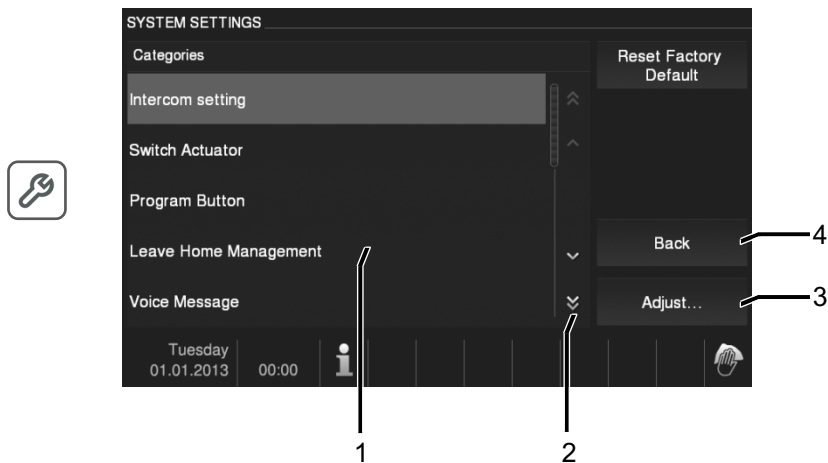


Fig. 16 Overview of settings

To go to the setting areas of list field (1), do the following:

No.	Function
1	To display the hidden functions, click on the scroll buttons (2).
2	Touch one of the setting areas.
3	Touch the button "set" (3). <ul style="list-style-type: none">- The device turns to the selected settings area.- The individual functions are described in the upcoming chapters.- Device returns to start page when "back" button is pressed.
4	Select this button to go back to start page.

4.2.12.2 Intercom

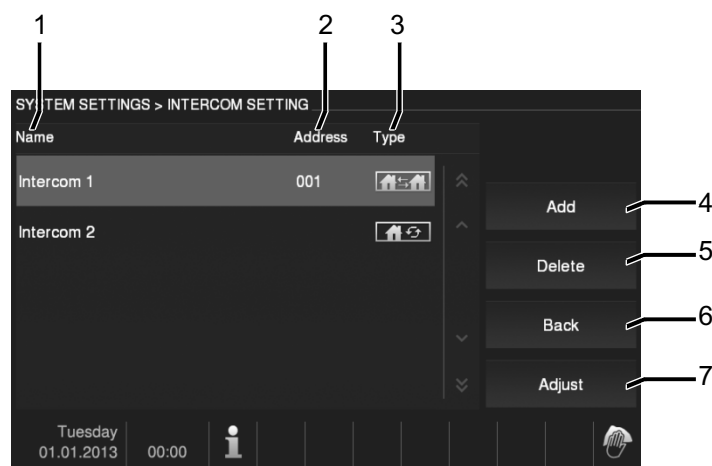




Fig. 17 Intercom

The intercom menu offers the following functions:

No.	Functions
1	The name of an intercom.
2	The address of an intercom.
3	<div>The type of an intercom.</div> <div> indicates an external intercom from a different apartment.</div> <div>To establish an external intercom, each apartment must have a master indoor station.</div> <div> indicates an internal intercom from the same apartment.</div>
4	<div>Add</div> <div>- Add a new intercom list. Up to 32 intercom lists can be added.</div>
5	<div>Delete</div> <div>- Click on this button to delete an existing intercom entry. Confirm via the dialog box displayed.</div>
6	<div>Back</div> <div>- Click on this button to return to the system settings menu.</div>
7	<div>Adjust</div> <div>- Click on this button to edit the existing intercom.</div>

Pressing “Add” or “Adjust”

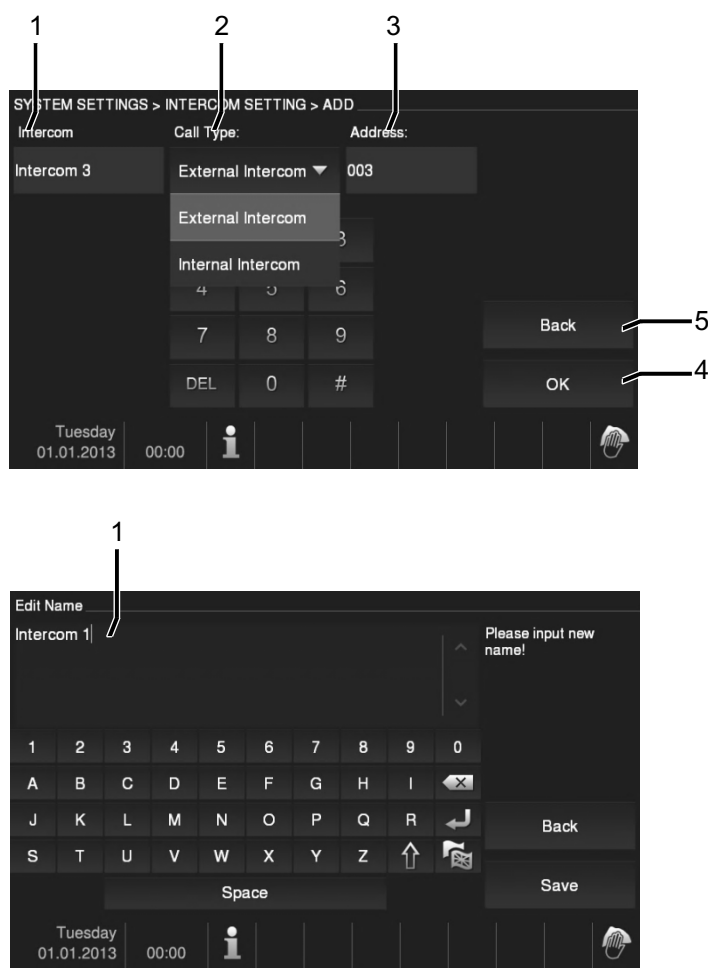


Fig. 18 Intercom

The intercom offers the following functions:

No.	Functions
1	- Click on the name box so you can edit the name.
2	- Change the call type through the drop-down menu. *external intercom indicates a call from a different apartment. *internal intercom indicates a call from the same apartment.
3	- Edit the address via the numeric keyboard, from 001 to 250. *If the call is to an internal intercom, there is no need to set the target address.
4	- Click on the OK button to activate the settings.
5	- Click on the back button to return to the intercom settings menu without saving the settings.

4.2.12.3 Switch actuator

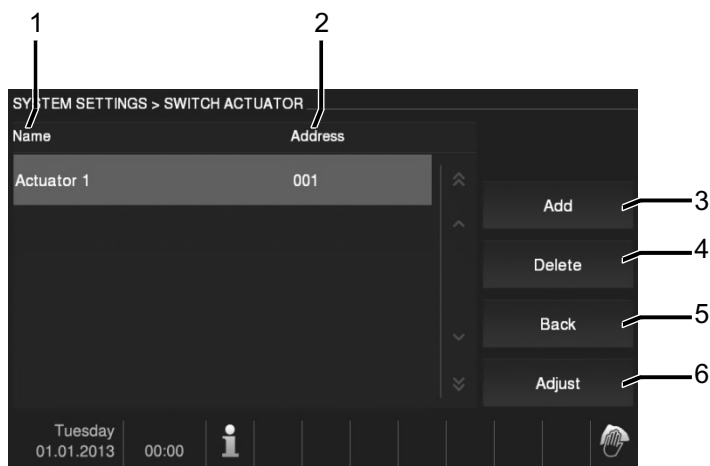


Fig. 19 Switch actuator

The switch actuator offers the following functions:

No.	Functions
1	Name of an actuator.
2	Address of an actuator.
3	Add - Click on this button to add a new actuator entry.
4	Delete - Click on this button to delete an existing actuator. Confirm via the dialog box displayed.
5	Back - Click on this button to return to system settings.
6	Adjust - Click on this button to edit the name and address.

Pressing "Add" or "Adjust"

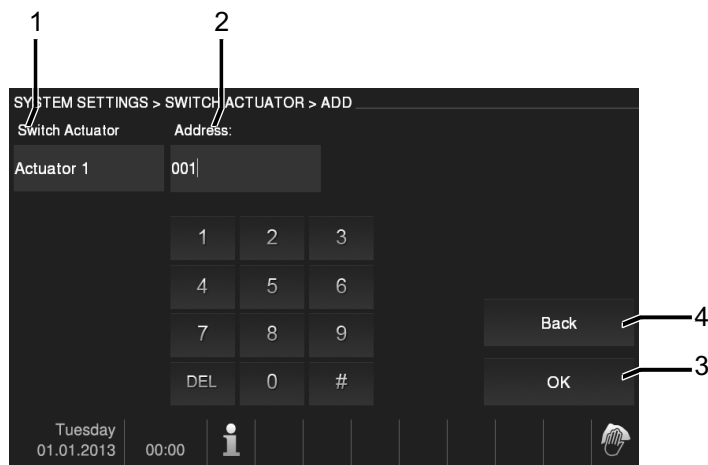


Fig. 20 Switch Actuator

The intercom menu offers the following functions:

No.	Functions
1	Click on this edit box to rename the relay actuator.
2	Edit the address via the numeric keypad, from 001 to 199.
3	Click on the "OK" button to activate the settings.
4	Click on the back button to return to the relay actuation settings menu without saving the settings.

4.2.12.4 Program button

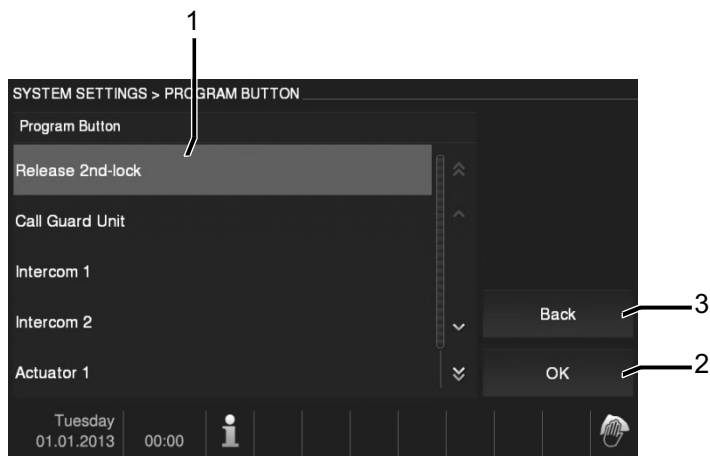


Fig. 21 Program button

The program button menu offers the following functions:

No.	Functions
1	<p>Set the functions for the program button, <i>e.g.</i>, release the second lock, call to the guard unit, intercom call, enabling the switch actuator.</p> <p>*Second lock means a lock that is connected with an outdoor station (NC-NO-COM).</p> <p>*Only the existing intercom call list and switch actuator list can be assigned for the program button.</p>
2	<p>Click on this button to activate the settings.</p>
3	<p>Click on this button to return to the system settings menu without saving the settings.</p>

4.2.12.5 Leave home management

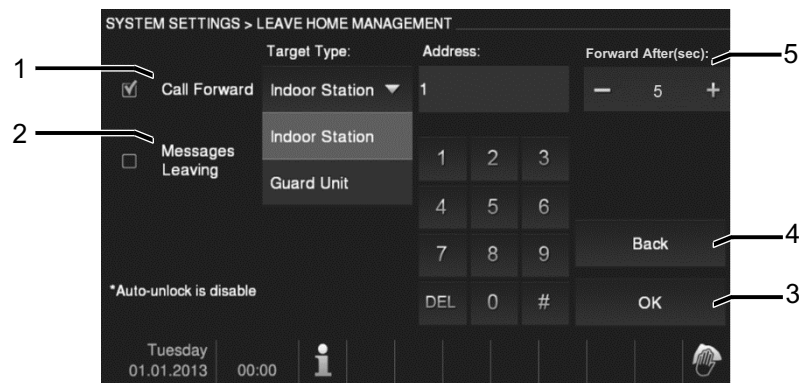


Fig. 22 Leave home management



Information about the settings

The user can only choose between “call forward” and “message leaving.” These two functions cannot be activated at the same time.

A warning will be given once “call transfer” or “message leaving” is activated.

The “leave home management” menu is available only from a master indoor station and offers the following functions:

No.	Functions
1	Call forward <ul style="list-style-type: none">- Tick the checkbox to activate or deactivate the call forward command.- Choose the target type through the drop-down menu.- Tick address numeric keyboard to edit the address if a call comes from an indoor station.- If the call forward function is activated, the auto unlock function will be disabled.
2	Message leaving <ul style="list-style-type: none">- Tick the checkbox to activate or deactivate the message leaving command.- If the message leaving function is activated, the auto unlock function will be disabled. <p>* Away message must be set first. If no away message is set, a warning will prompt the user to set the absence message first in the “voice message” menu.</p>
3	OK <ul style="list-style-type: none">- Click on this button to activate the settings.
4	Back <ul style="list-style-type: none">- Click on this button to return to the system settings menu without saving the settings.
5	Call forward time can be set from 1 to 30 seconds.

4.2.12.6 Voice message

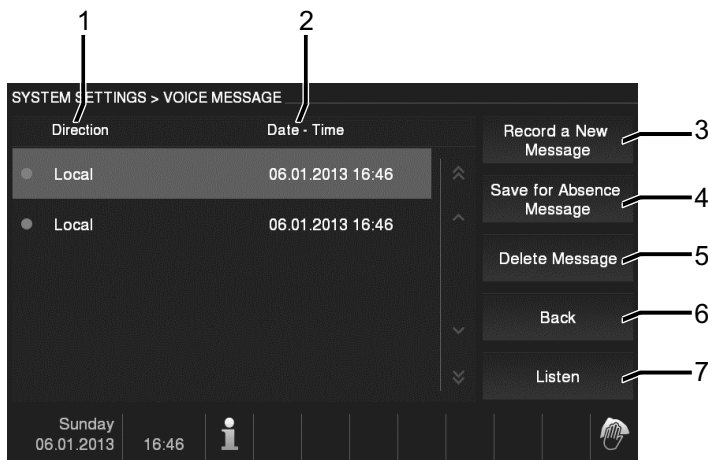


Fig. 23 Voice message

A total of 30 voice messages can be recorded.
The voice message menu offers the following functions:

No.	Functions
1	Direction <ul style="list-style-type: none">- Local messages: Message can be heard locally.- Away message: The message can be played for visitors when the “message leaving” function is activated.
2	Date - Time <ul style="list-style-type: none">- The date and time when voice messages are created.
3	Record a new message <ul style="list-style-type: none">- Click on this button to create a new voice message.
4	Save for absence message <ul style="list-style-type: none">- Set a selected voice message as the away message.
5	Delete message <ul style="list-style-type: none">- Click on this button to delete an existing voice message. Confirm via the dialog box displayed.
6	Back <ul style="list-style-type: none">- Click on this button to return to the system settings menu.
7	Listen <ul style="list-style-type: none">-Touch the button to play the voice message.

Choose “record a new message” to create a new voice message.

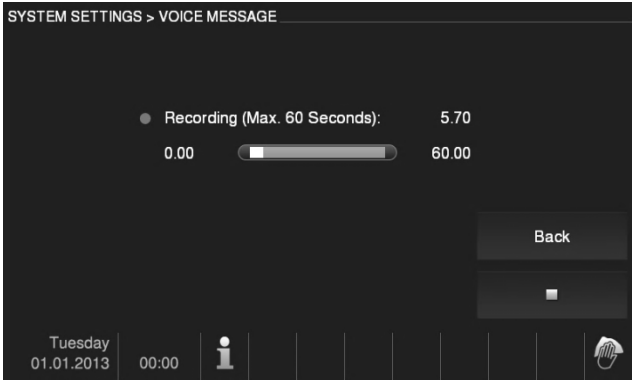


Fig. 24 Voice message

Choosing “Listen”→“▶ ” to play a voice message.

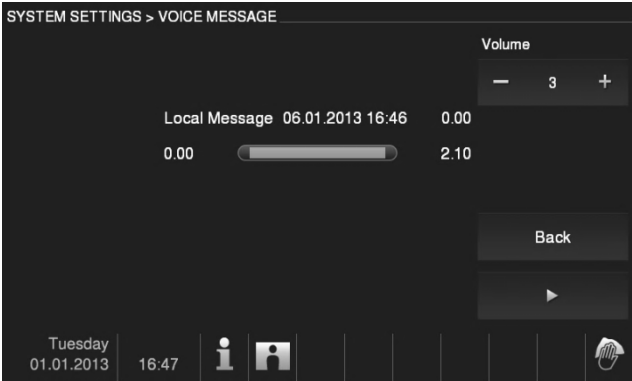


Fig. 25 Voice message

4.2.12.7 Setting door open password



Fig. 26 Setting door open password

The “set door open password” menu can only be used from a master indoor station and offers the following functions:

No.	Functions
1	Tick the checkbox to activate or deactivate the password function.
2	Set a 3- to 8-digit password.
3	OK - Click on this button to activate the settings.
4	Back - Click on this button to return to the system settings menu.

*Available only with the keypad.

4.2.12.8 Blacklist

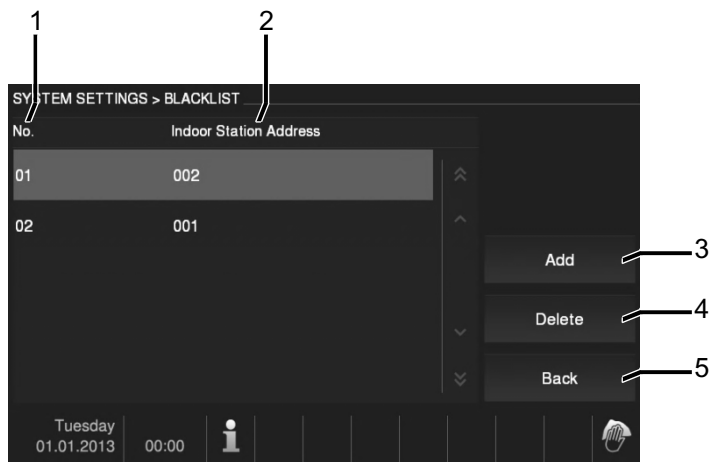


Fig. 27 Blacklist

The blacklist menu can only be accessed from a master indoor station and offers the following functions:

No.	Functions
1	No. - Order of list.
2	Indoor station address - Set the address of the target indoor station, from 001 to 250.
3	Add - Click on this button to add a new blacklist. - A total of 32 blacklists can be added.
4	Delete - Click on this button to delete an existing blacklist. Confirm via the dialog box displayed.
5	Back - Click on this button to return to the system settings menu.

4.2.12.9 Audio settings

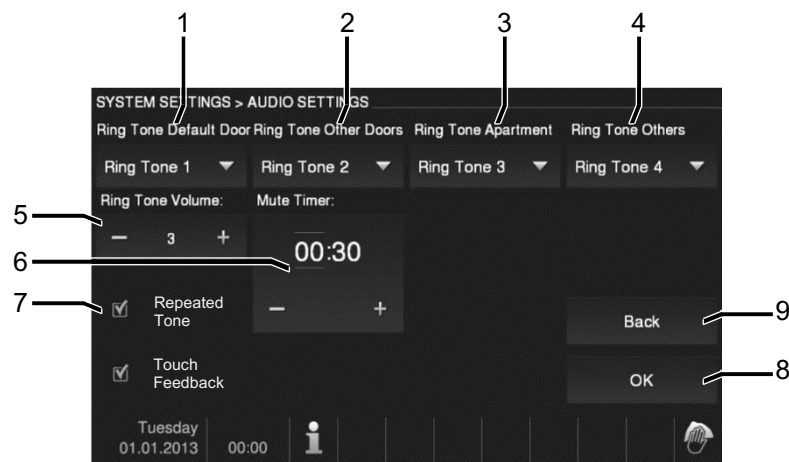


Fig. 28 Audio settings

The audio settings offer the following functions:

No.	Functions
1	Bell sound for the default door - Select a bell sound for the default door by clicking on one of the buttons in the list field.
2	Bell sound for other doors - Select a bell sound for other doors by clicking on one of the buttons in the list field.
3	Bell sound for apartments - Select a bell sound for apartments by clicking on one of the buttons in the list field.
4	Bell sound for others - Select a bell sound for others by clicking on one of the buttons in the list field, e.g., a call from a guard unit, intercom call or calls from other apartments.
5	Bell-sound volume - Set the volume of the bell sound with the plus or minus buttons.
6	Mute timer - Use the plus and minus buttons to set the time of the mute function that you activate with the mute button. - Before adjusting the hours or minutes, the active range is highlighted with a frame.
7	Repeated tone - Set the ringtone to ring once or continuously. Touch feedback - Tick the checkbox to activate or deactivate the feedback tone that sounds when the display or the button is touched.
8	OK - Click on this button to activate the settings.
9	Back - Click on this button to return to the system settings menu.

4.2.12.10 Auto-unlock

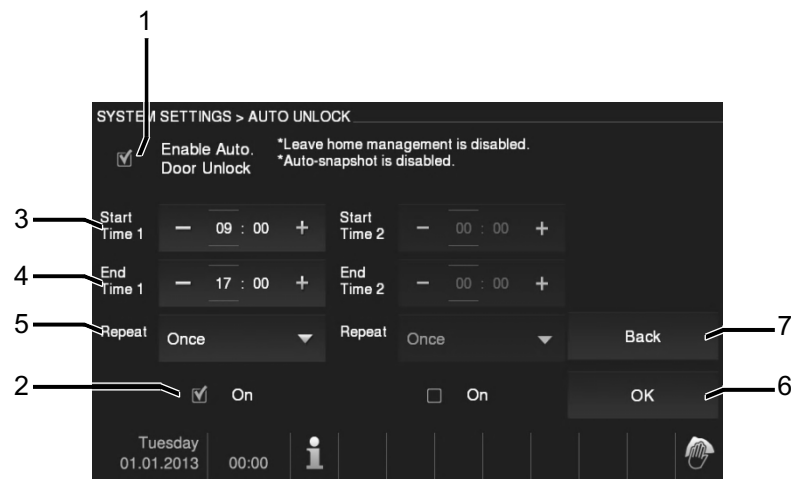


Fig. 29 Auto-unlock

The auto-unlock menu is available only from a master indoor station and offers the following functions:

No.	Functions
1	Enable auto door unlock - Tick the checkbox to activate or deactivate auto unlock. - When auto unlock is activated, the functions “leave home management” and “auto-snapshot” are disabled.
2	On - Activate or deactivate the time range when the automatic door opener is activated.
3	Start Time - Set the start time with the plus and minus buttons when you activate the timer. - Before adjusting the hours or minutes, the active range is highlighted with a frame.
4	End Time - Set the end time with the plus and minus buttons when you activate the timer. - Before adjusting the hours or minutes, the active range is highlighted with a frame.
5	Repeat - Set the repeat frequency with the drop-down menu when you activate the timer. - If you choose “once,” the function will be disabled after a period of time. - If you choose “every day,” the function will be activated at this period of time every day. - If you choose “weekday,” the function will be activated at this period of time only on weekdays (from Monday through Friday).
6	OK - Click on this button to activate the settings.
7	Back - Click on this button to return to the system settings menu without saving the settings.

4.2.12.11 Display settings

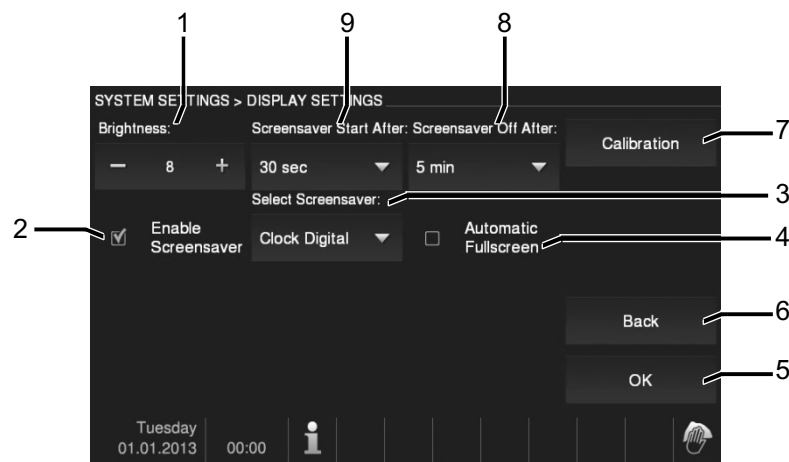


Fig. 30 Display settings

The display settings menu offers the following functions:

No.	Functions
1	Brightness - Set the brightness of the display with the plus and minus buttons.
2	Enable screen saver - Tick the checkbox to activate or deactivate the screen saver.
3	Select screen saver - The display is preset as a digital clock. - If an SD card with suitable pictures is located in the device, you can select a screen saver through the drop-down menu. If several photos are stored on the SD card, they are displayed as a slideshow. Slideshow (electronic photo) - Each photo appears for 20 seconds. Photo requirements: - The photo must be stored on the SD card in the directory "DCIM" (digital camera images) on the first level. - The maximum allowable size of a picture is 2048 x 1960 pixels. - The maximum allowable resolution of a photo is 800 x 480 pixels. - The resolution of the display is 800 x 600. Larger photos will be reduced to this size. - The picture file format supported is jpg.
4	Automatic fullscreen - Activate or deactivate the full-page mode of the door camera by ticking the checkbox. The full-page mode remains active during the period when the photo of the visitor is shown after the doorbell rings.
5	OK - Click on this button to activate the settings.
6	Back - Click on this button to return to the start page without saving the settings.
7	Calibration - If the buttons and the associated graphics of the display are no longer superimposed, the monitor must be calibrated.

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	<ul style="list-style-type: none">- Click on the calibration button and then click on the five displayed position crosses. Confirm via the dialog box displayed. The display has been calibrated.
8	<p>Screen saver off after</p> <ul style="list-style-type: none">- Select the active period for the screen saver via the drop-down menu until it switches off automatically.- Available for 5, 15 or 30 minutes.- To protect the display, the maximum operating time is limited to 30 minutes.
9	<p>Screen saver start after</p> <ul style="list-style-type: none">- Select the start time for the screen saver via the drop-down menu.- Available for 30, 60 or 120 seconds.

4.2.12.12 Date and time

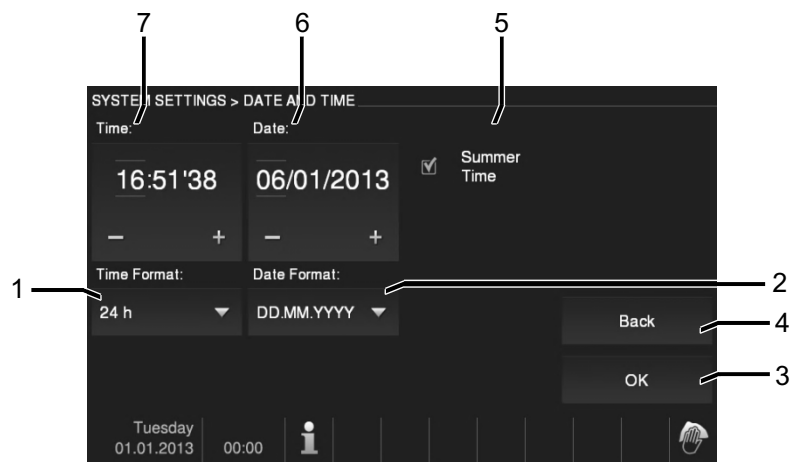


Fig. 31 Date and time

The date and time menu offers the following functions:

No.	Functions
1	Time <ul style="list-style-type: none">- Select the format of the displayed time via the drop-down menu.- Available are 12 h, am/pm and 24 h.
2	Date <ul style="list-style-type: none">- Select the format of the displayed date via the drop-down menu.
3	OK <ul style="list-style-type: none">- Click on this button to activate the settings.
4	Back <ul style="list-style-type: none">- Click on this button to return to the start page without saving the settings.
5	Summertime <ul style="list-style-type: none">- Activate or deactivate during summertime by clicking on the checkbox (automatic switchover).
6	Date <ul style="list-style-type: none">- Set the date using the plus and minus buttons.- Before adjusting the day, month or year, the active area is highlighted with a frame.
7	Time <ul style="list-style-type: none">- Set the time with the plus and minus buttons.- Before adjusting the hours, minutes or seconds, the active area is highlighted with a frame.

4.2.12.13 Camera list

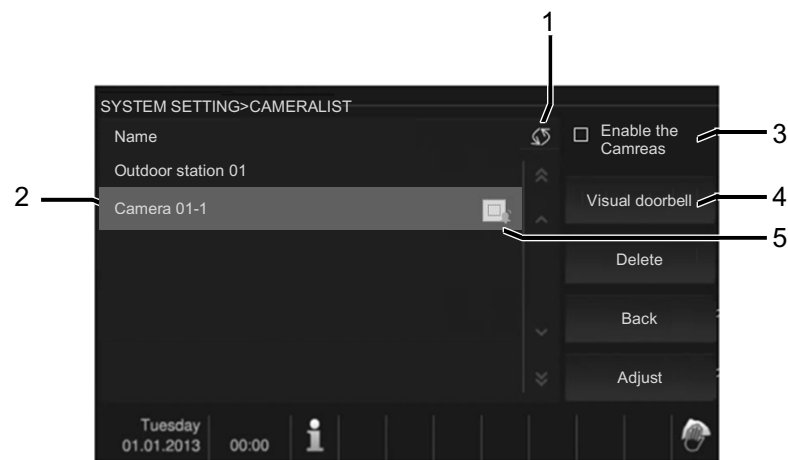


Fig. 32 Camera list

No.	Functions
1	Refresh camera list - Scan the outdoor station cameras from the camera interface, and generate camera list.
2	Name of camera.
3	Enable or disable camera list.
4	Visual doorbell If the camera connected to the camera interface is associated with an indoor station, click on this button to activate "visual doorbell" function. When the doorbell is pressed, the image from the camera connected to the camera interface will display on the indoor station.
5	When the camera is set as "visual doorbell," this icon will display to show the status. Only one camera can be set as "visual doorbell."

4.2.12.14 Language

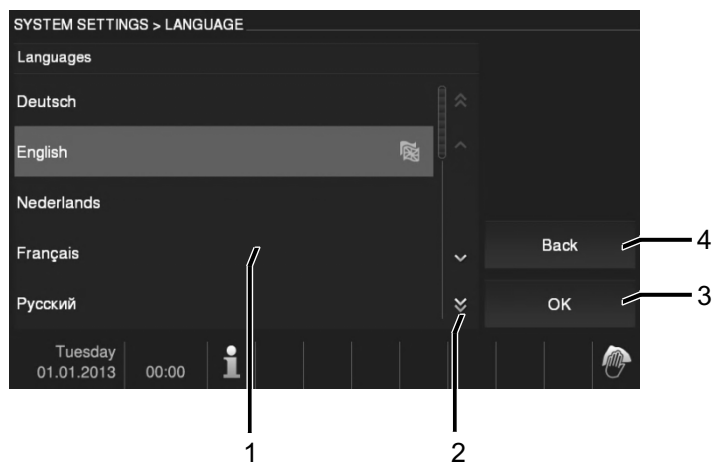


Fig. 33 Language

The language menu offers the following functions:

No.	Functions
1	Language (list field) - Available languages are listed.
2	Scroll - To display the hidden languages, tick the scroll boxes.
3	OK - Click on this button to activate the settings.
4	Back - Click on this button to return to the start page without saving the settings.

4.2.12.15 Setup

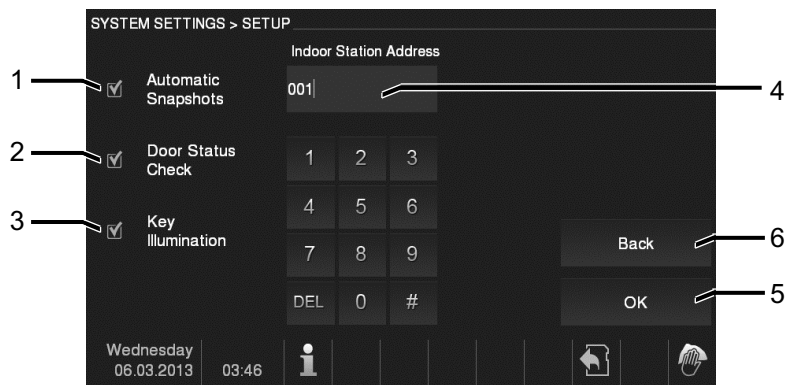


Fig. 34 Setup

The setup menu offers the following functions:

No.	Function
1	Automatic snapshots <ul style="list-style-type: none">- When the bell is pressed, three snapshots are automatically taken and stored in the history.- This function can only be activated when the automatic door opener is deactivated. Otherwise, too many snapshots would be stored during busy times.
2	Door status check <ul style="list-style-type: none">- Tick the checkbox to activate or deactivate the door status check. If activating this function, the outdoor station with a sensor installed will send alarm signal to indoor station when the door is open for longer than 120 seconds.
3	Key illumination <ul style="list-style-type: none">- Tick the checkbox to activate or deactivate the key illumination. If activating the function, the key will be illuminated during operation. Otherwise, key illumination will be off all the time.
4	Indoor station address <ul style="list-style-type: none">- This option is enabled only when the last two rotary switches of the indoor station are set as "00," and it can be set from 001 to 250.
5	OK <ul style="list-style-type: none">- Click on this button to activate the settings.
6	Back <ul style="list-style-type: none">- Click on this button to return to the start page without saving the settings.

4.2.12.16 Firmware update

If the firmware for your device requires an update, complete the following steps:

1. Get the new version of firmware from your electrical installer, and copy it onto an SD card.
2. Insert the SD card into the card slot on your indoor station.
3. Select "firmware update."
4. Execute the firmware updated by selecting "update."
5. Confirm via the pop-up dialog box by choosing "yes."

4.3 Cleaning



Caution

Risk of damage to the screen surface.

The screen surface can be damaged by hard or sharp objects.

Never use such objects for entries on the touch screen monitor.

- Use your finger or a plastic stylus.

The screen surface can be damaged by cleaning fluids or abrasive agents.

- Clean the surface using a soft cloth and commercially available glass cleaner.
- Never use abrasive cleaning agents.

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4.4 Adjusting the device

4.4.1 Terminal resistor

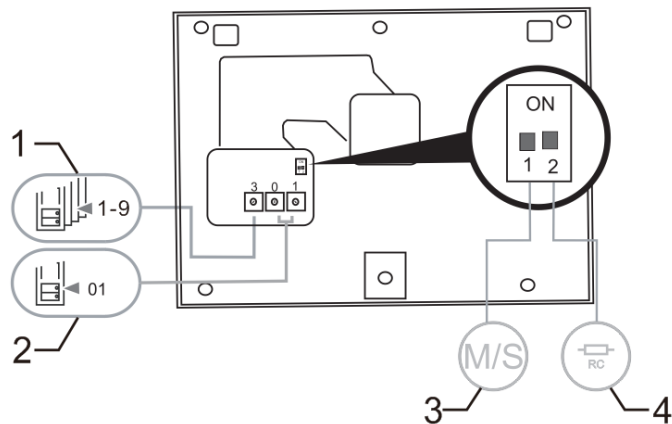


Fig. 35: Terminal resistor

No.	Functions
1	Station Select switch to set the address of the default outdoor station.
2	X10 X1 Select switches to set the address (0-99) of the indoor station. For setting addresses that range into the hundreds, see Chapter 4.2.12.15, setup.
3	Master or slave function Only one indoor station in each apartment should be set as the "master." (Switch should be set as "M/S on.") All additional indoor stations in the same apartment must be set as "slave." (Switch should be set as "M/S off.")
4	Terminal resistor In video installations or mixed audio and video installations, the switch should be set as "RC on" on the last device of the line.

4.4.2 Connection

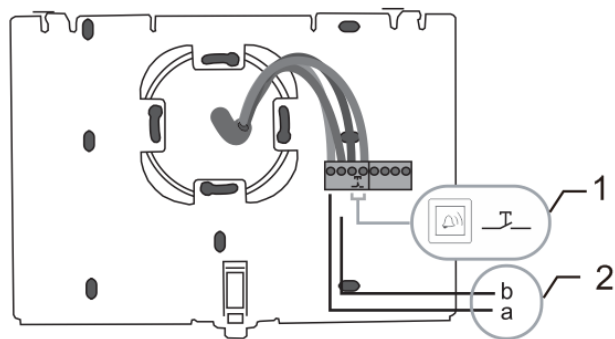


Fig. 36: Connection

No.	Functions
1	Connection for the doorbell pushbutton
2	Connection for the system controller - When using several indoor stations: connection for the internal bus

5 Technical data

Designation	Value
Display resolution:	800 x 480
Display size:	7"
Operating temperature	+14 °F to +131 °F
Storage temperature	-40 °F to +158 °F
Protection	IP 30
Single-wire clamps	2 x 22 AWG - 2 x 18 AWG
Fine-wire clamps	2 x 22 AWG - 2 x 18 AWG
Bus voltage	20 V - 30 V
Size	6.10" x 8.58" x 1.14"

6 Mounting and installation



Warning

Electric voltage!

Direct or indirect contact with live components can cause dangerous currents to flow through the body, which may result in electric shock, burns or even death.

- Always disconnect the main power supply prior to installation and/or disassembly.
- Work on the 110 V - 240 V supply system must be performed only by qualified personnel.

6.1 Requirements for the electrician



Warning

Electric voltage!

Install the device only if you have the necessary qualifications.

- Incorrect installation endangers your life and that of the user of the electrical system.
- Incorrect installation can cause serious damage to property, e.g., due to fire.

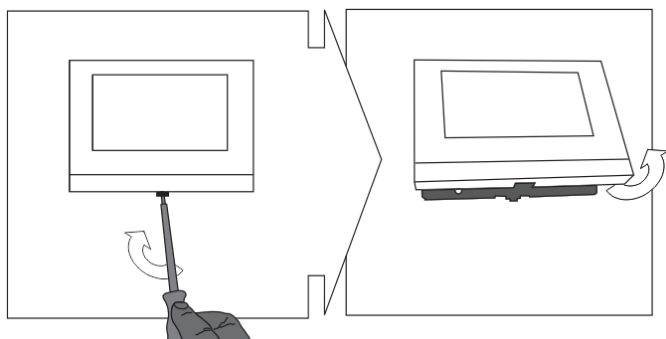
The minimum necessary expert knowledge and requirements for the installation are as follows:

- Apply the "five safety rules" (DIN VDE 0105, EN 50110):
 1. Disconnect from power;
 2. Secure against being re-connected;
 3. Ensure there is no voltage;
 4. Connect to earth;
 5. Cover or barricade adjacent live parts.
- Wear suitable personal protective clothing.
- Use only suitable tools and measuring devices.
- Check the type of supply network (TN system, IT system, TT system) to secure the following power supply conditions (classic connection to ground, protective earthing, necessary additional measures, etc.).
- Terminate all branches of the wiring system via a connected bus device (e.g., indoor station, outdoor station, system device).
- Do not install the system controller directly next to the bell transformer or other power supplies (to avoid interference).
- Do not install the wires of the system bus together with 100 V - 240 V wires.
- Do not use common cables for the connecting wires of the door openers and wires of the system bus.
- Avoid bridges between different cable types.
- Use only two wires for the system bus in a four-core or multi-core cable.
- When looping, never install the incoming and outgoing bus inside the same cable.
- Never install the internal and external bus inside the same cable.

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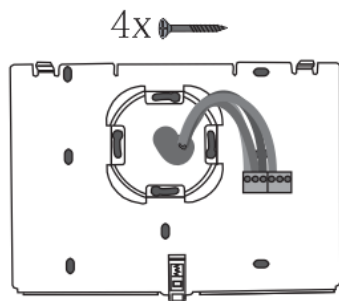
6.2 Mounting

Dismantling



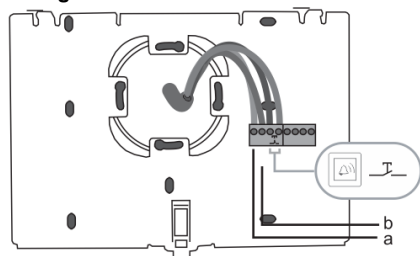
Open the housing of the panel by pulling the clamp at the bottom of the device.

Mounted on the wall or flush-mounted box



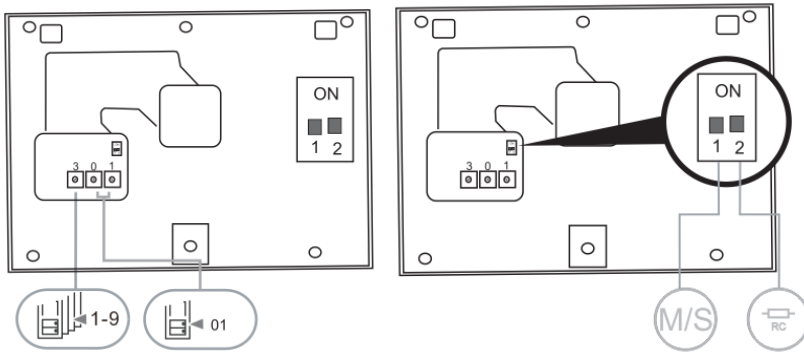
Affix the bottom of the device directly on a level wall surface or on a flush-mounted socket according to DIN 49073-1.

Wiring



Connect the bottom part of the device according to the illustration. See Chapter 4.4.2, Connection.

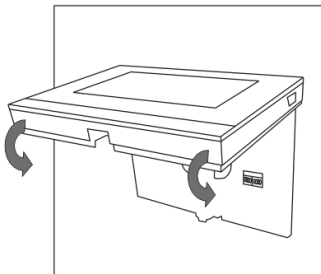
Setting



Set the address of the preferred outdoor stations and the address of the indoor station on the rotary switches.

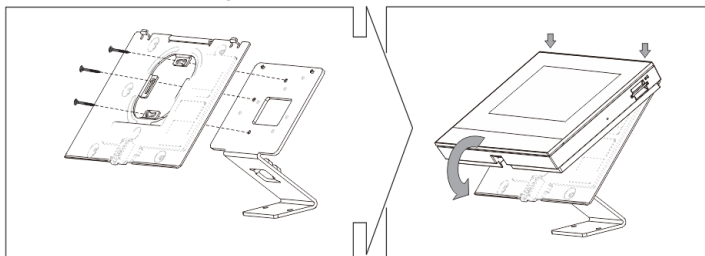
Set the master/slave function and the terminal resistor on the switches at the rear of the top part of the housing. See Chapter 4.4.1, Terminal Resistor.

Latch the device



Latch the upper part of the device onto its bottom part. Place the upper side of the device on the lock-in lugs, and then press the bottom side onto the bottom part of the device until the clamp catches.

Mounted with desktop bracket



1. Affix the bottom of the device to the desktop bracket.
2. Latch the upper part of the device onto its bottom part. To do this, place the upper side of the device on the lock-in lugs, and then press the bottom side onto the bottom part of the device until the clamp catches.

The installation of the indoor station is now complete.

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