

ABB-Welcome

M2233.-.

7" Video hands-free indoor
station



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1 Safety



Warning

Electric voltage!

Risk of death and fire due to electrical voltage of 100-240 V.

- Work on the 100-240V supply system may only be performed by authorised electricians!
- Disconnect the mains power supply prior to installation and/or disassembly!

2 Intended use

The M2233x-x 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 domestic waste.

- The device contains valuable raw materials which can be recycled. Therefore, dispose of the device at the appropriate collecting depot.

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 and electric devices and their components via the authorized collecting depots and disposal companies.

ABB products meet the legal requirements, in particular the laws governing electronic and electrical devices and the REACH ordinance.

(EU-Directive 2002/96/EG WEEE and 2002/95/EG RoHS)

(EU-REACH ordinance and law for the implementation of the ordinance (EG) No.1907/2006)

4 Operation

4.1 Standard operations

4.1.1 Control elements

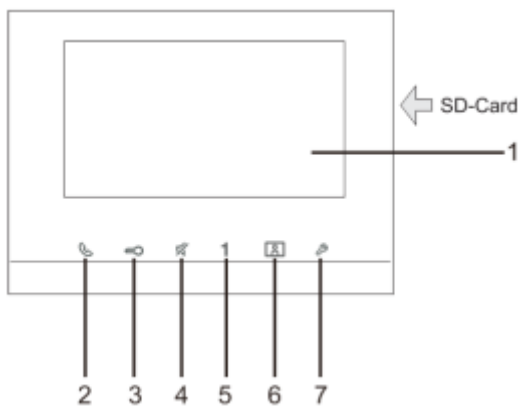


Fig. 1 Control elements

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

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

4.1.2 Welcome screen and status bar

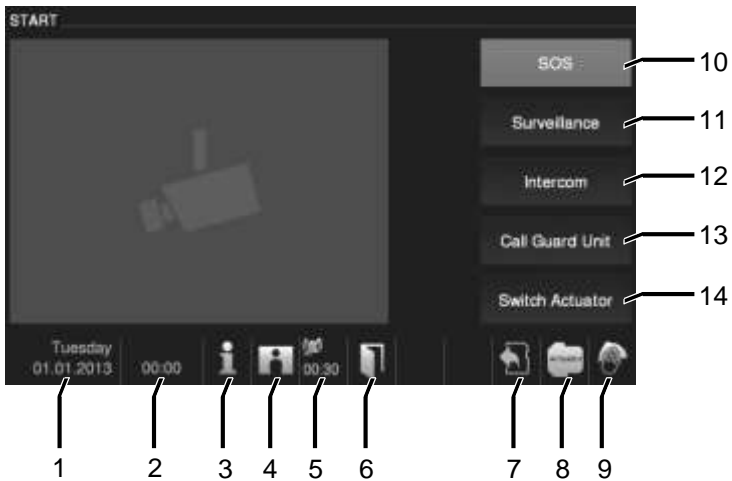


Fig. 2 Status bar

During the calling period, the following functions are available:

No.	Functions
1	Current date - Touch this button to set the current date..
2	Time - Touch this button to set the correct time .
3	System information - Touch this button 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	<p>History</p> <ul style="list-style-type: none"> - New information is available in History (events and picture memory) when this icon flashes. it means a missed call or a voice message. - Touch this button to display the events and picture memory .
5	<p>Mute function</p> <ul style="list-style-type: none"> - Icons "crossed-out handset" and "crossed-out bell" indicate the mute status of the microphone or the loudspeaker of the panel.
6	<p>Open entrance door</p> <ul style="list-style-type: none"> - The "Open door" icon is displayed when you press the door opener or activate the function "Automatic door opener".
7	<p>SD card</p> <ul style="list-style-type: none"> - The icon shows whether you have inserted an SD card.
8	<p>Switch actuator</p> <ul style="list-style-type: none"> - The icon is shown after you activate the switch actuator.
9	<p>Cleaning blockage</p> <ul style="list-style-type: none"> - The icon is shown when the display is blocked to prevent functions being enabled during cleaning.
10	<p>SOS</p> <ul style="list-style-type: none"> - Press this button for 3s to send an SOS signal to a guard unit.
11	<p>Surveillance</p> <ul style="list-style-type: none"> - Touch this button to start to survey the default outdoor station .
12	<p>Intercom</p> <ul style="list-style-type: none"> - Touch this button to enter the intercom call menu.
13	<p>Guard unit</p> <ul style="list-style-type: none"> - Touch this button to call a guard unit.
14	<p>Switch Actuator</p> <ul style="list-style-type: none"> - Touch this button to enter the switch actuator menu.

4.2 Control actions

4.2.1 Surveillance



Fig. 3 Surveillance

Touch 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 / minus" buttons.
3	If several outdoor stations or external cameras are connected. - Select a camera with the "Forward/back" buttons
4	Touch the button to set the display. • Saturation of the display (plus and minus). • Contrast of the display (plus and minus).

4.2.2 Intercom

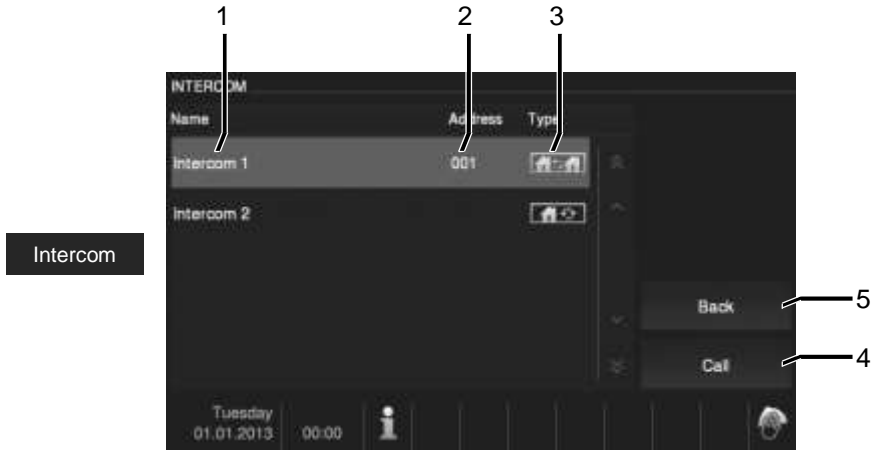




Fig. 4 Intercom

Touch this button to enter the intercom call menu . Then, 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).  means an external intercom from a different apartment.  means an internal intercom from the same apartment.
4	Make an intercom call.
5	Back to the START screen.

4.2.3 Calling Guard unit



Call Guard unit

Fig. 5 Calling Guard unit

Touch the "Guard unit" button to call a guard unit . Then, the following functions are available.

No.	Functions
1	Designation of a guard unit
2	Set volume with the "Plus / minus" buttons.

4.2.4 Switch Actuator



Fig. 6 Switch Actuator

Touch this button to enter the switch actuator menu . Then, 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	Touch this button to activate the selected actuator.
4	Touch this button to go back to the START screen.

4.2.5 Setting up the voice and video connections



Fig. 7 Switch Actuator

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

No.	Functions
1	Designation of the camera.
2	Set the volume with the "Plus / minus" buttons.
3	On condition that several outdoor stations or external cameras are connected, select the camera with the "Forward/back" buttons.
4	Touch the buttons to set the display. <ul style="list-style-type: none"> <li data-bbox="277 1204 695 1236">• Saturation of the display (plus and minus). <li data-bbox="277 1241 678 1264">• 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. Then, the following function becomes 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



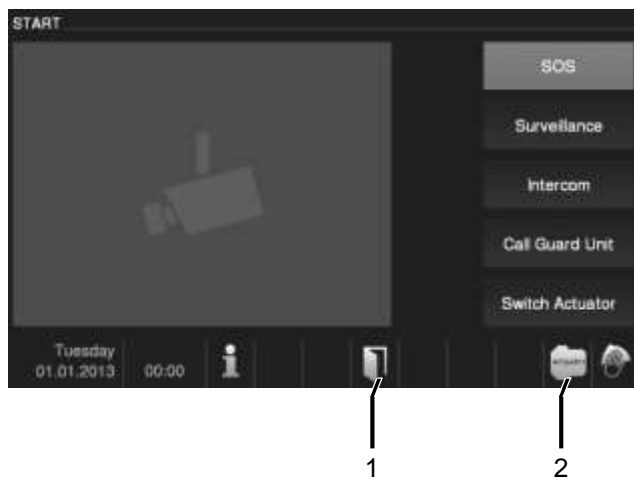
Fig. 9 Opening the door

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 period of 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.

4.2.8 Activating the custom function

1



3



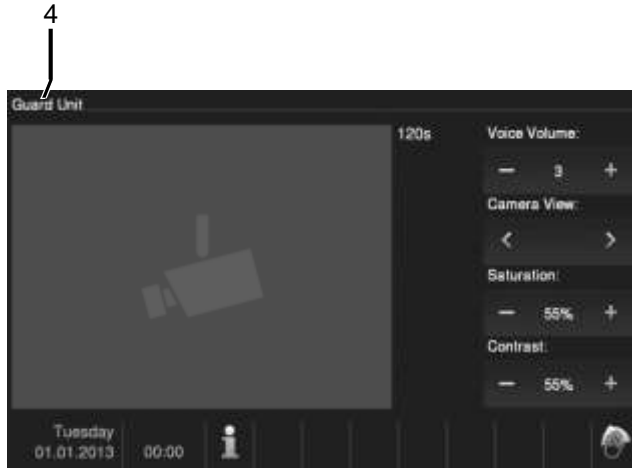


Fig. 10 Activating custom function

The program button can be configured with different functions, e.g. call to guard unit, intercom call or control switch actuator. And its default function is the release of the 2nd-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 & switch actuator list can be assigned for the program button.

No.	Functions
1	If the function “release 2 nd -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 directly when you press the program button.

4.2.9 Events and picture memory / history



Fig. 11 Events and picture storage / history

The panel records all events. Press the "History" button, then 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.

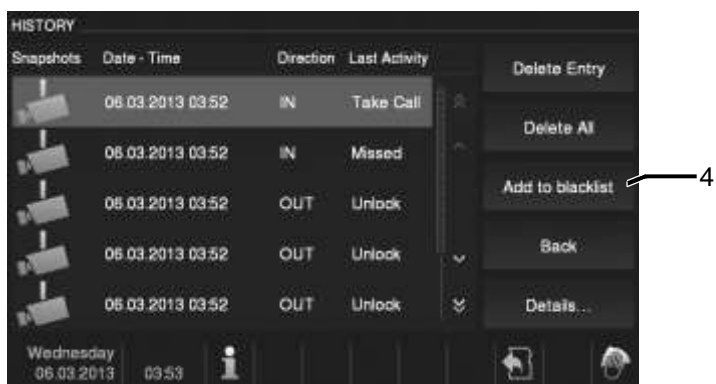
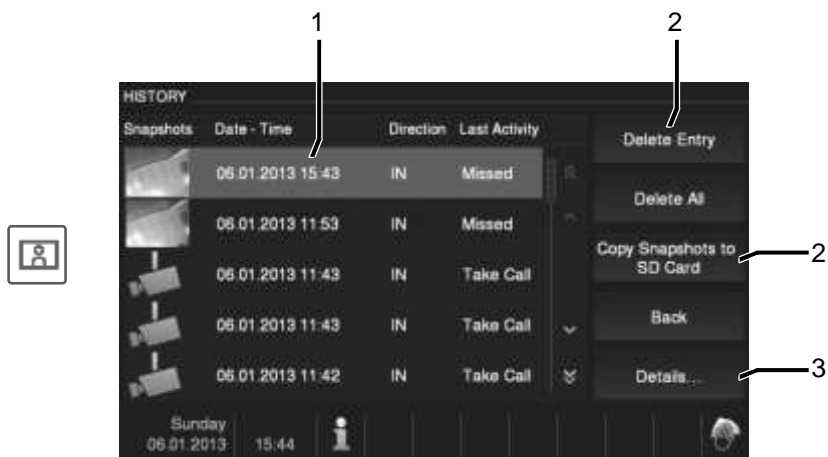




Fig. 12 Events and picture storage / history

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 events and pictures memory / history menu has 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 the 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 which you would like to archive can be copied on an inserted SD card (SD, SDHC).
3	Three pictures are made each time when a visitor rings the bell. This ensures that an optimum snapshot is taken. <ul style="list-style-type: none"> - All recorded pictures are accessed via the details window.
4	Only if a call is an intercom call list, the list 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/backward" buttons.
7	Press the button (1/2/3) to select a single picture .
8	If there is a voice message left from a visitor,,touch the play or stop button to play or stop the voice message.

4.2.10 Information



Fig. 13 Information

Above items will be shown on the “Information” menu.

4.2.11 Inserting the SD card

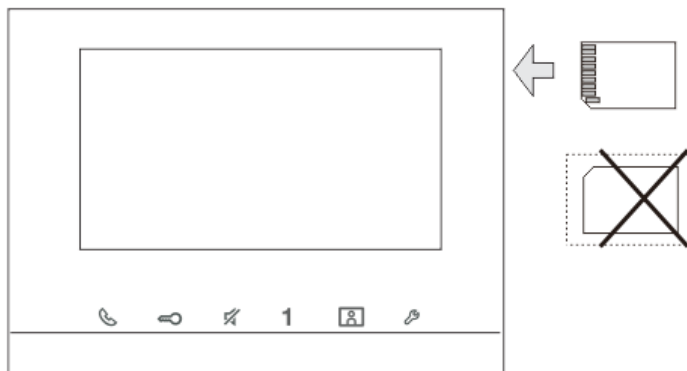


Fig. 14 Inserting the SD card

4.2.12 Settings

4.2.12.1 Overview

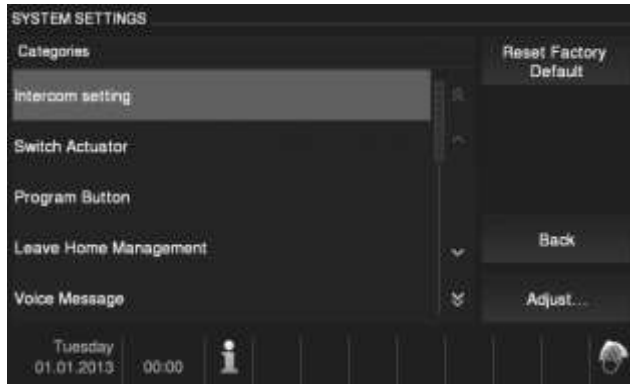


Fig. 15 Overview

Touch the “Settings” button, to make the following areas available:

No.	Functions
1	Intercom - Set intercom lists among different apartments or within the same apartment
2	Switch Actuator - Set the actuator list in the menu.
3	Program Button - Set functions for the program button.
4	Leave Home Management - Call forward setting: Set the target (e.g. other indoor stations or guard units) who you want to forward the call from visitors when you are not at home. - 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 absence message to notify possible visitors.
6	<p>Set Door Open Password</p> <ul style="list-style-type: none"> - Set the customized door open password, which is available together with a keypad of an outdoor station.
7	<p>BlackList</p> <ul style="list-style-type: none"> - Set the blacklist, which is used to prevent unwanted calls from other apartment(s)
8	<p>Audio Settings</p> <ul style="list-style-type: none"> - Set the ringtone for the outdoor stations, the doorbell and others; - Set the volume for the ringtone
9	<p>Auto Unlock</p> <ul style="list-style-type: none"> - Set the automatic unlock time range.
10	<p>Display Settings</p> <ul style="list-style-type: none"> - Different display settings.
11	<p>Date and Time</p> <ul style="list-style-type: none"> - Different time settings
12	<p>Language</p> <ul style="list-style-type: none"> - Set the local language
13	<p>Set-up</p> <ul style="list-style-type: none"> - Other settings, e.g. automatic snapshots
14	<p>Firmware Update</p>
15	<p>Reset the Factory Default</p>

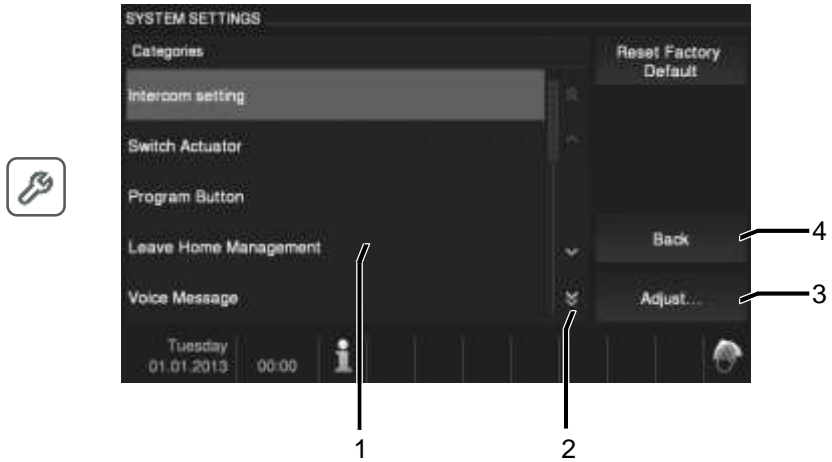


Fig. 16 Overview of settings

To turn to the setting areas of the list field (1), carry out the following steps:

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 following chapters. - The device turns back to the start page when pressing the button "Back".
4	By tipping on this button you back to the start page.

4.2.12.2 Intercom

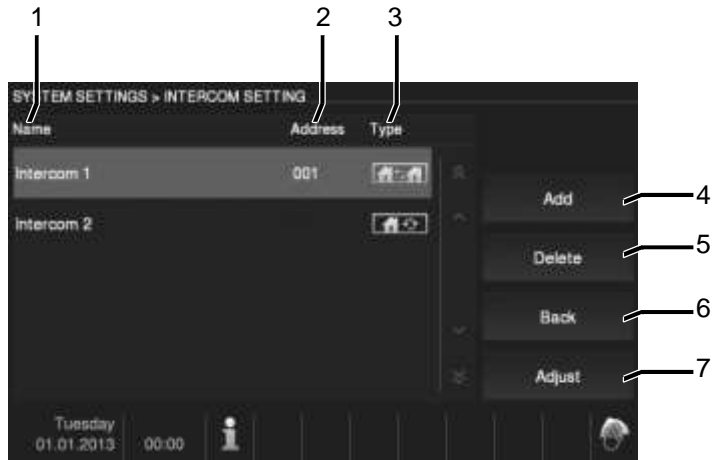




Fig. 17 Intercom

The “Intercom” menu has the following functions.

No.	Functions
1	The name of an intercom.
2	The address of an intercom.
3	The type of an intercom.  means an external intercom from different apartments. To make an external intercom, each apartment must have a master indoor station.  means an internal intercom from the same apartment.
4	Add - Add a new intercom list . A total of up to 32 intercom lists can be added.
5	Delete - Click on this button to delete an existing intercom entry. Finally, confirm the dialogue box displayed.

6	Back - Click on this button, so you can return to the system settings menu.
7	Adjust - Click on this button to edit the existing intercom.

Pressing “Add” or “Adjust”

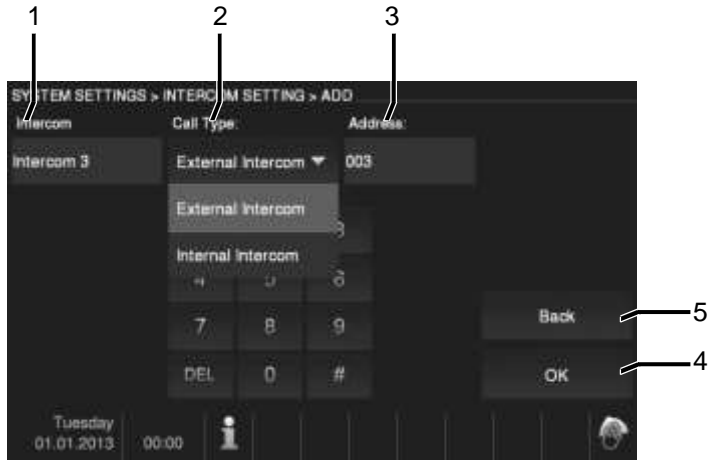


Fig. 18 Intercom

The “Intercom” has the following functions:

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

4.2.12.3 Switch Actuator



Fig. 19 Switch Actuator

The “Switch Actuator“ has the following functions:

No.	Functions
1	Name of an actuator.
2	Address of an actuator.
3	Add - By touching the button you can add new actuator entry.
4	Delete - By tipping the button to delete an existing actuator. Finally confirm the dialogue box displayed.
5	Back - By touching the button you return to system settings.
6	Adjust - By touching the button you can edit the name and address.

Pressing “Add” or “Adjust”



Fig. 20 Switch Actuator

The “Intercom” menu has 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,so you can return to the relay actuation settings menu without saving the settings.

4.2.12.4 Program button

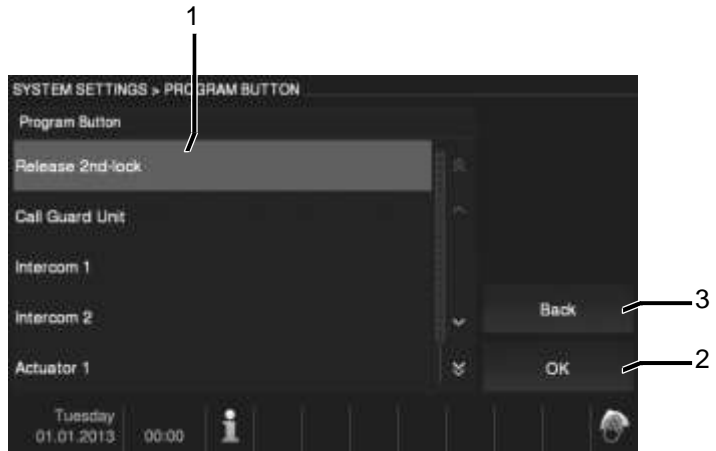


Fig. 21 Program button

The "Program button" menu has the following functions:

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

4.2.12.5 Leave Home Management

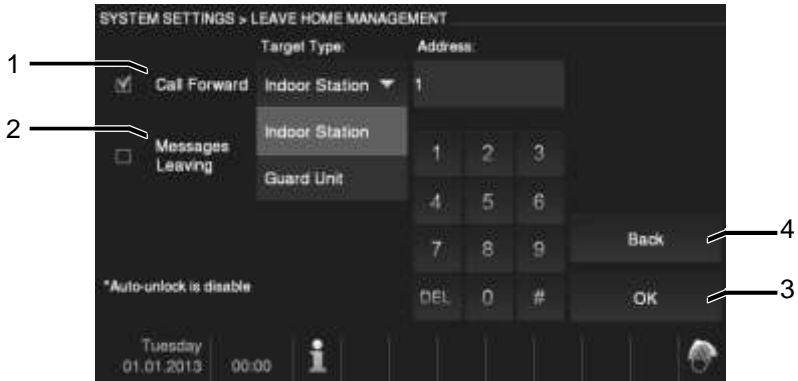


Fig. 22 Leave Home Management



Information about the settings

User can only choose “Call forward” or “Message leaving”. Two functions can’t be activated at the same time!

A warning will be given once “call transfer” or “Message Leaving” is activated.

The “Leave Home Management” menu has the following functions (The function only can be set in master indoor station):

No.	Functions
1	<p>Call Forward</p> <ul style="list-style-type: none"> - Tick the checkbox to activate or deactivate the call forward command. - Choose the target type through the fold-down menu. - Tick address numeric keyboard to edit the address if a call type comes from an indoor station. - If the call forward function is activated, the auto unlock function will be disabled.

2	<p>Message Leaving</p> <ul style="list-style-type: none"> - Tick the checkbox to activate or deactivate the call forward. - If the messages leaving function is activated, the auto unlock function will be disabled. <p>* Absence message must be set first . If no absence message is set, there will be a warning which prompts the users to set the absence message first in the “Voice Message” menu.</p>
3	<p>OK</p> <ul style="list-style-type: none"> - Touch this button to activate the settings.
4	<p>Back</p> <ul style="list-style-type: none"> - Touch this button to return to the system settings menu without saving the settings.

4.2.12.6 Voice Message

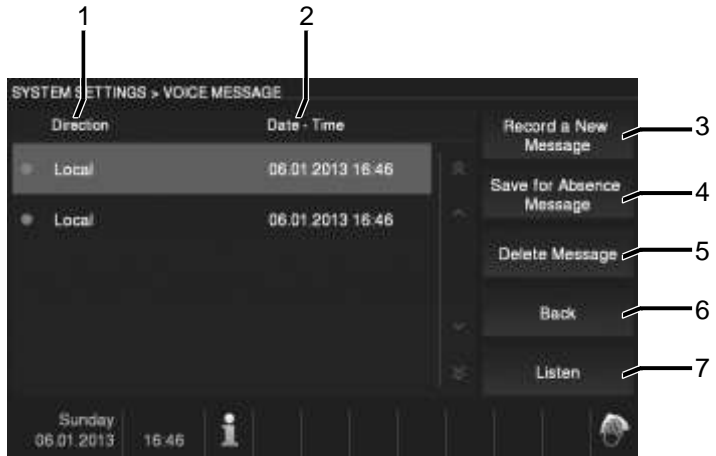


Fig. 23 Voice Message

In totally, 30 voice messages can be recorded.

The “Voice Message” menu has the following functions:

No.	Functions
1	Direction - Local messages: Message can be heard locally - Absence message: the message can be played for visitors when the “message leaving” function is activated.
2	Date - Time - The date and time when voice messages are created.
3	Record a New Message - Touch the button to create a new voice message.
4	Save for Absence Message - Set a selected voice message as the absence message
5	Delete Message

	- Click on this button to delete an existing voice message. Finally, confirm the dialogue box displayed.
6	Back - Touch the button to return to the system settings menu..
7	Listen -Touch the button to play the voice message.

Choosing the “Record a New Message” to create a new voice message.

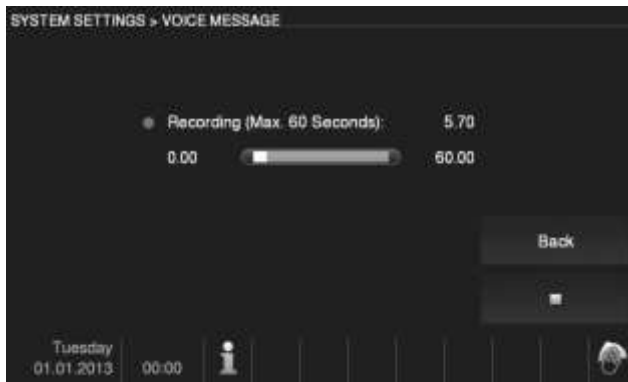


Fig. 24 Voice Message

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

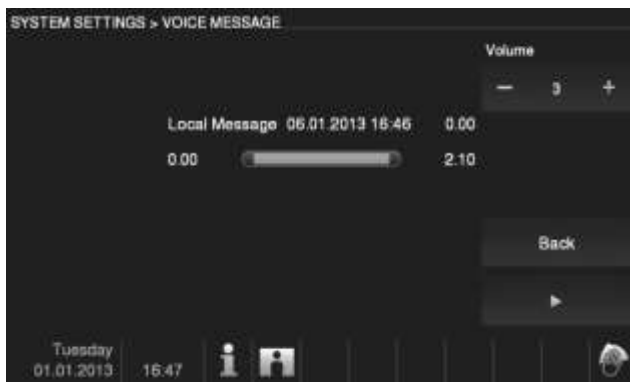


Fig. 25 Voice Message

4.2.12.7 Setting Door Open Password



Fig. 26 Setting Door Open Password

The “Set Door Open Password” menu has the following functions (The function only can be set in master indoor station):

No.	Functions
1	Tick the checkbox to activate or deactivate the password function.
2	Set the password as you wish in 6-8 digits.
3	OK - Click on this button to activate the settings.
4	Back - Tick this button to return to the system settings menu.

*Available only with the keypad.

4.2.12.8 Black list

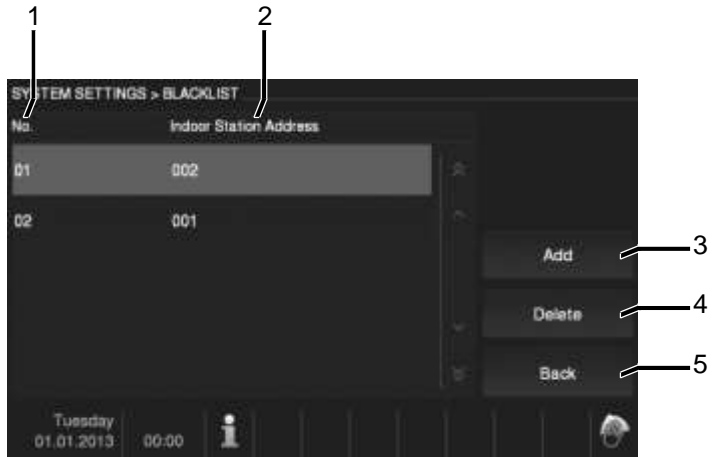


Fig. 27 Black list

The “Black List” menu has the following functions (The function only can be set in master indoor station):

No.	Functions
1	No. - The order of a list.
2	Indoor Station Address - Set the address of the target indoor station, from 001 to 250.
3	Add - Touch the button to add a new black list. - A total of up to 32 black lists can be added.
4	Delete - Touch the button to delete an existing black list. Finally, confirm the dialogue box displayed.
5	Back

	- Touch this button to return to the system settings menu.
--	--

4.2.12.9 Audio Settings



Fig. 28 Audio Settings

The "Black List" has 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, or an intercom call from other

	apartments.
5	<p>Bell-sound volume</p> <ul style="list-style-type: none"> - Set the volume of the bell sound with the "Plus / minus" buttons.
6	<p>Mute timer</p> <ul style="list-style-type: none"> - Use the " Plus / minus " buttons to set the time of the mute function which you activate with the "mute" button. - Before adjusting the "Hours" or "Minutes", the active range is highlighted with a frame.
7	<p>Touch Feedback</p> <ul style="list-style-type: none"> - Tick the checkbox to activate or deactivate the feedback tone which sounds when the display or the button is touched.
8	<p>OK</p> <ul style="list-style-type: none"> - Touch this button to activate the settings.
9	<p>Back</p> <ul style="list-style-type: none"> - Touch this button to return to the system settings menu.

4.2.12.10 Auto Unlock

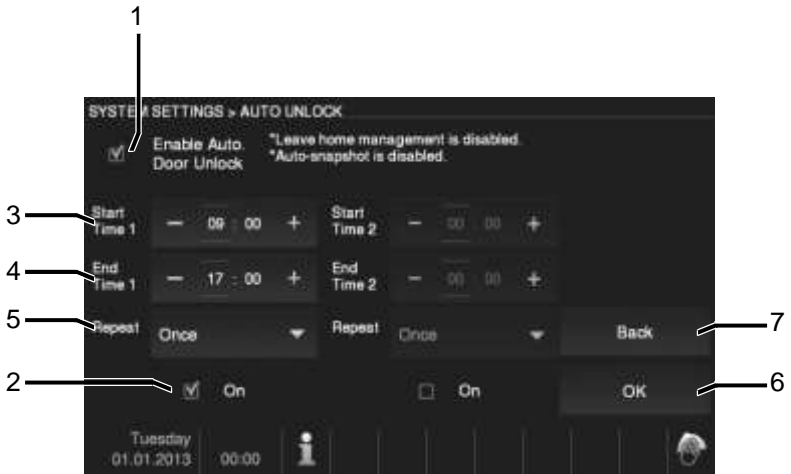


Fig. 29 Auto Unlock

The “Black List” menu has the following functions (The function only can be set in master indoor station):

No.	Functions
1	Enable Auto Door Unlock - Tick the checkbox to activate or deactivate the 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 / minus” button when you activate the timer. - Before adjusting the “Hours” or “Minutes”, the active range is highlighted

	with a frame.
4	<p>End Time</p> <ul style="list-style-type: none"> - Set the end time with the “Plus / minus” button when you activate the timer. - Before adjusting the “Hours” or “Minutes”,. the active range is highlighted with a frame.
5	<p>Repeat</p> <ul style="list-style-type: none"> - Set the repeat frequency with the fold-down menu when you activate the timer. - If you choose “Once”, the function will be disabled after a period of time. - If you choose “Everyday”, the function will be activated at the period of time everyday. - If you choose “Weekday”, the function will be activated at the period of time only on weekdays (from Monday to Friday).
6	<p>OK</p> <ul style="list-style-type: none"> - Touch this button to activate the settings.
7	<p>Back</p> <ul style="list-style-type: none"> - Touch this button to return to the system settings menu without saving the settings.

4.2.12.11 Display Settings

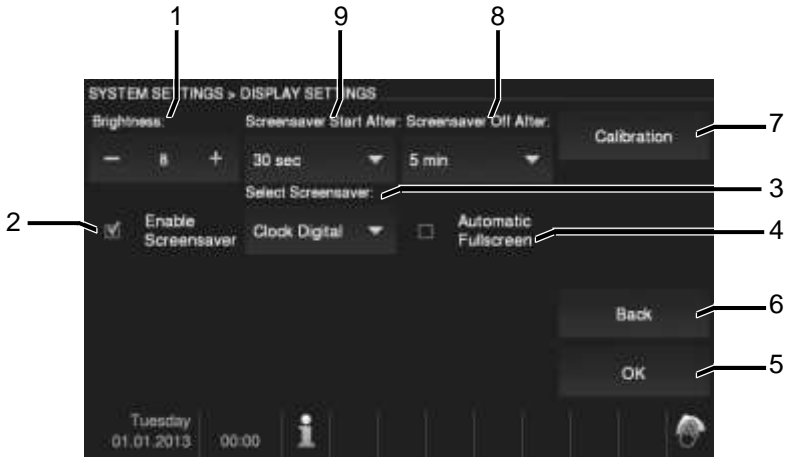


Fig. 30 Display Settings

The "Display Settings" menu has the following functions:

No.	Functions
1	Brightness - Set the brightness of the display with the "Plus / minus" buttons.
2	Enable screensaver - By tick the checkbox to activate or deactivate the screen saver.
3	Select Screensaver - The display is preset as digital clock - If an SD card with suitable pictures is located in the device, you can select a screen saver through the fold-down menu. If several pictures are stored in the SD card they are displayed as a slide show. Slide show (electronic picture frame) - Each picture appears for 20 seconds. Picture requirements:

	<ul style="list-style-type: none"> - The pictures must be stored in the SD card in the directory "DCIM" (Digital Camera Images) on the first level. - The maximum admissible size of a picture is 2048 x 1960 pixels. - The maximum admissible resolution of a picture is 800 x 480 pixels. - The resolution of the display is 800 x 600. Larger pictures will be reduced to this size. - The format supported is ".jpg".
4	<p>Automatic Fullscreen</p> <ul style="list-style-type: none"> - 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 picture of the visitor is shown after the door bell rings.
5	<p>OK</p> <ul style="list-style-type: none"> - Click on this button to activate the settings.
6	<p>Back</p> <ul style="list-style-type: none"> - Click on this button to return to the start page without saving the settings.
7	<p>Calibration</p> <ul style="list-style-type: none"> - If the buttons and the associated graphics of the display are no longer superimposed, the monitor must be calibrated. - Click on the calibration button and then consecutively click on the 5 displayed position crosses. Finally confirm the dialogue 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 fold-down menu until it switches off automatically. - Available for 5 / 15 / 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 fold-down menu. - Available for 30 / 60 / 120 seconds.

4.2.12.12 Date and Time



Fig. 31 Date and Time

The "Display Settings" menu has the following functions:

No.	Functions
1	Time - Select the format of the displayed time via the fold-down menu. - Available are 12 h am/pm / 24 h.
2	Date - Select the format of the displayed date via the fold-down menu.
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.
5	Summer Time - Activate or deactivate during summertime by clicking on the checkbox (automatic switchover).

6	Date <ul style="list-style-type: none">- Set the date via with "Plus / 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 / minus" buttons.- Before adjusting the "Hours", "Minutes" or "Seconds", the active area is highlighted with a frame.

4.2.12.13 Language

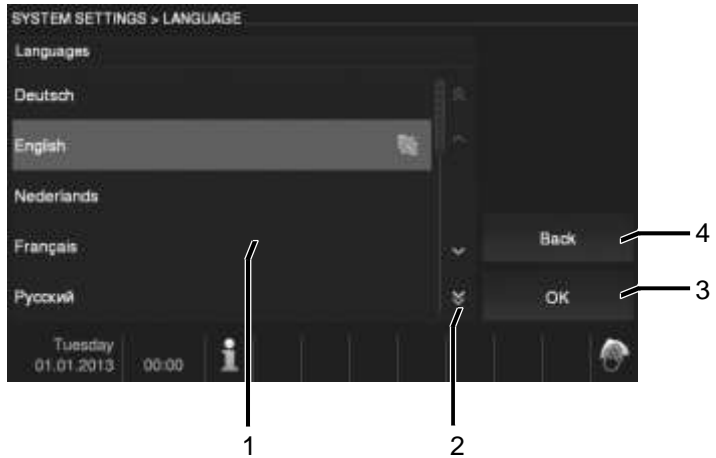


Fig. 32 Language

The "Language" menu has the following functions:

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

4.2.12.14 Setup



Fig. 33 Setup

The "Set-up" menu has the following functions:

No.	Function
1	Automatic Snapshots - 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 periods.
2	Door status Check - Tick the checkbox you activate or deactivate the door status check. If activating the function, the outdoor station with a sensor installed will send alarm signal to indoor station when the door is open over time.
3	Key Illumination - Tick the checkbox to activate or deactivate the key illumination. If activating the function, the key will be illuminated during operation. Or else, the key illumination will be off all the time.

4	<p>Indoor Station Address</p> <ul style="list-style-type: none"> - This option is enabled only when the last two rotary switches of IS are set as "00", and it can be set from 001 to 250.
5	<p>OK</p> <ul style="list-style-type: none"> - By tipping on this button you activate the settings.
6	<p>Back</p> <ul style="list-style-type: none"> - By tipping on this button you return to the start page without saving the settings.

4.2.12.15 Firmware Update

If the firmware for your device is to be updated, carry out the following steps:

1. Get the new version of firmware from your electrical installer, and copy it into a 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 "Updating"
5. Confirm the popup with "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 surfaces using a soft cloth and commercially available glass cleaner.
- Never use abrasive cleaning agents.

4.4 Adjusting the device

4.4.1 Terminal resistor

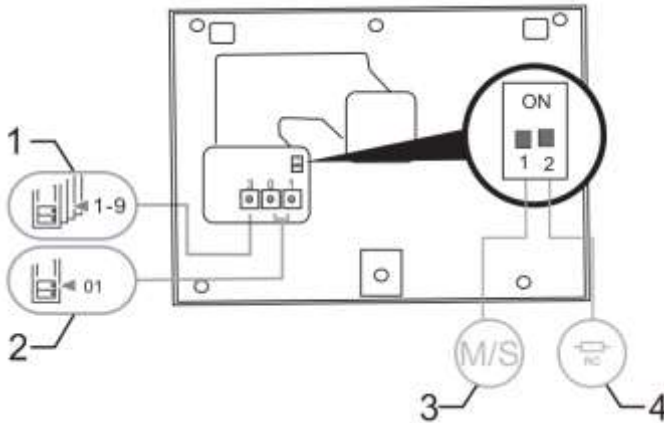


Fig. 34:

No.	Functions
1	Station Selector switch to set the address of default outdoor station.
2	X10 X1 Selector switches to set the address (tens and units digits) of the indoor station. Setting hundreds digits need to enter system menu.
3	Master /Slave function Only one indoor station in each apartment must be set as "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

	must be set as 'RC on' on the last device of the line.
--	--

4.4.2 Connection

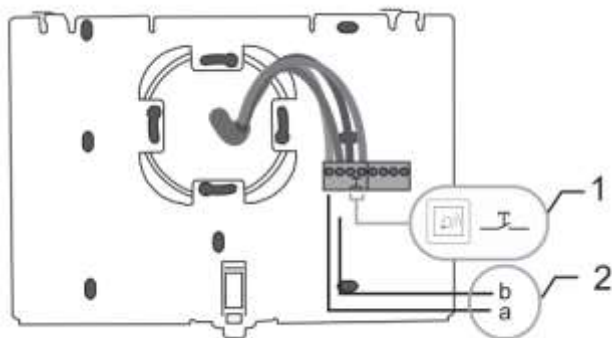


Fig. 35:

No.	Functions
1	Connection for the door bell push-button
2	<ul style="list-style-type: none"> • 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:	17.8 cm (7")
Operating temperature	-10° C to +55° C
Storage temperature	-40° C – +70° C
Protection	IP 30
Single-wire clamps	2 x 0.28 mm ² – 2 x 1 mm ²
Fine-wire clamps	2 x 0.28 mm ² – 2 x 1 mm ²
Bus voltage	20-30 V

6 Mounting / Installation



Warning

Electric voltage!

Risk of death and fire due to electrical voltage of 100-240 V.

- Low-voltage and 100-240 V cables must not be installed together in a flush-mounted socket!

In case of a short-circuit there is the danger of a 100-240 V load on the low-voltage line.

6.1 Requirements for the electrician



Warning

Electric voltage!

Install the device only if you have the necessary electrical engineering knowledge and experience.

- 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:

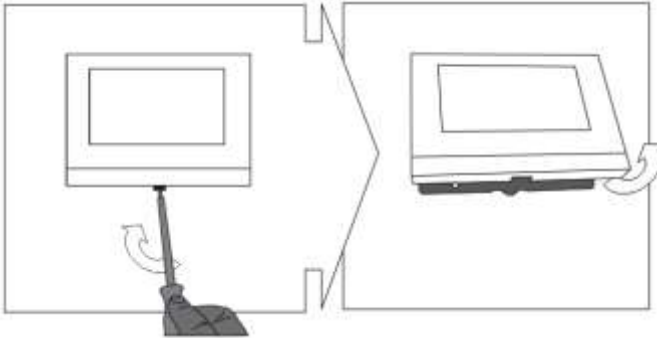
- Apply the "five safety rules" (DIN VDE 0105, EN 50110):
 1. Disconnect from power;
 2. Secure against being re-connected;
 3. Ensure there is no voltage;
 4. Connect to earth;
 5. Cover or barricade adjacent live parts.

- Use suitable personal protective clothing.
- Use only suitable tools and measuring devices.
- Check the type 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.).

6.2 General installation instructions

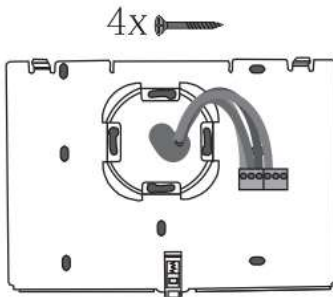
- Terminate all branches of the wiring system via a connected bus device (e.g., indoor station, outdoor station, system device).
- Do not install the system controller directly next to the bell transformer and other power supplies (to avoid interference).
- Do not install the wires of the system bus together with 100-240 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.

6.3 Mounting
Dismantling



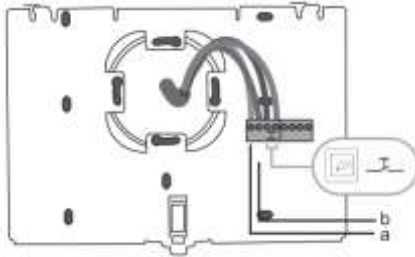
Open the housing of the panel by pulling the clamp at the bottom of the device.

Mounted on the wall or flush-mounted box



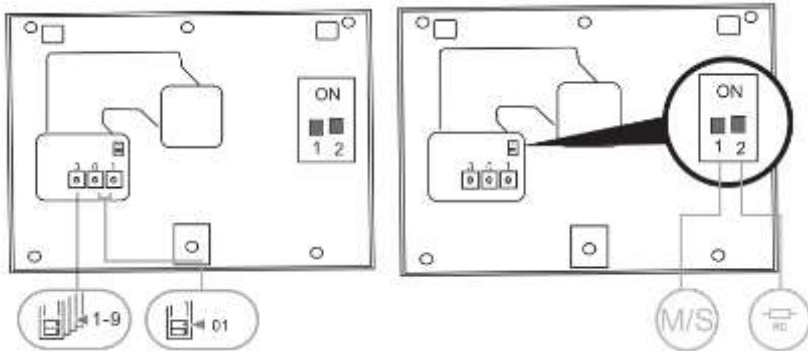
Fix the bottom of the device directly on a level wall surface or on an flush-mounted socket according to DIN 49073-1.

Wiring



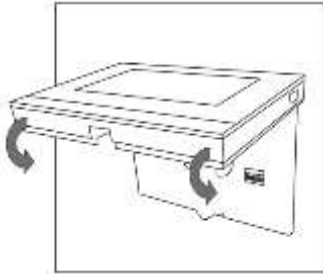
Connect the bottom part of the device according to the graphics (see chapter "[Connection](#)").

Setting

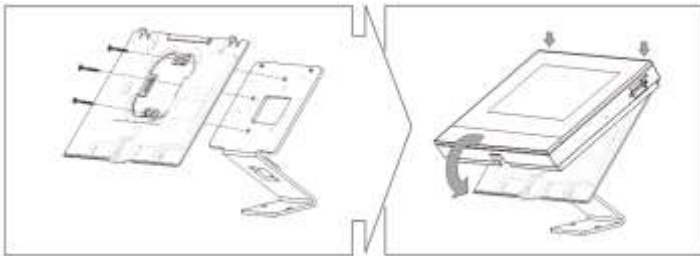


Set the address of the preferred outdoor stations and the address of the indoor station on the rotary switches.

Set the master/slave function and the terminal resistor on the switches at the rear of the top part of the housing (see chapter "[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 it is caught by the clamp.

Mounted with desktop bracket

1. Fix 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 it is caught by the clamp.

The installation of the indoor station is now complete.

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