

ComStation^{IP}

Order no. 76 0605 50

User Guide



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1 Safety instructions

This chapter covers the following topics:

- General safety instructions
- If a fault is displayed...
- If the connection to control unit is interrupted...
- If the indicator on the device is solid red...

1.1 General safety instructions



WARNING! Please follow the safety instructions below for the safety of staff and patients:

- Before the device can be used, it has to be put into operation by a technician, see page 97.
- This user guide assumes that you are familiar with the nursing procedures in hospitals.
- You must acquire sufficient knowledge about operating and using the nurse call system via suitable measures such as training sessions. The measures must be repeated if necessary. This user guide assumes that the reader possesses sufficient knowledge.
- Make sure that all connecting cables of the device are always connected.
- Never place the device in a humid environment. Take care that it does not become wet. The device is powered by electricity and thus should not be exposed to moisture.
- Bright sunlight can impair the readability of the display. Place the device in a non-reflective location.
- The device is under the prescribed limits regarding electromagnetic compatibility. Nevertheless, faults can occur in individual cases and under certain conditions. In this case, you must increase the distance between the affected devices or take appropriate measures to repair the faults.
- Never open the housing of the device. In case of a fault, return the device to the supplier.



WARNING! This device cannot be used to send an emergency call to a control centre, e.g. to alert the police or fire brigade. This means that you cannot call the European emergency number 112 with this device.

1.2 If a fault is displayed...



Fig. 1: Fault icon

If the fault icon appears in the status bar, you must deal with it immediately.

There is a fault in the nurse call system. This means that perhaps you can no longer be called from every room.

If the acoustic fault display on your device is enabled, you will also be acoustically alerted about the fault by a tone sequence.

You must immediately do the following:

1. Tap the fault icon in the status bar:

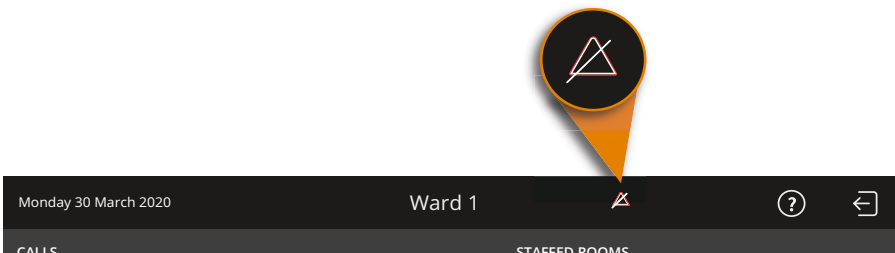


Fig. 2: Fault icon. Tap to find out about the fault.

- ✓ All rooms in your ward with faults are shown. The tone for the fault display is turned off.








SETTINGS		FAULT HANDLING	
	Ward coupling		
	Shift		
	Volume		
	Language English		
	Fault handling 1 fault 	Location	Fault description
	Information	101 (1)	Fault at location 101 with the address 1. Inform a responsible technician.

Fig. 3: Current faults on your ward



NOTE! In the online help of the "SystemOrganizer" configuration software, the technician is informed about the meaning of the location and the address.

2. Inform a responsible technician about the fault. S/he will then deal with correcting the fault.
3. Tap "HOME" to return to the Home screen.
 - ✓ The Home screen is displayed. You can resume work.
 - ✓ As long as not all faults have been rectified, the fault icon is displayed in the status bar.

1 Safety instructions



Fig. 4: Fault icon

4. Make sure that the patients in the rooms with a fault are still cared for optimally. Observe the signalling of the room lamps.

1.2.1 Fault acoustic

The acoustic fault indication sounds when a new fault occurs.

The acoustic fault indication is switched off when the fault has been eliminated or when you display the fault locations as described above. In the second case, the acoustic fault indication is switched off although the fault has not yet been eliminated.



NOTE! It is possible that the faults are not acoustically signalled, i.e. the fault acoustic is off. You can find out whether the fault acoustic is switched on or off by tapping "SETTINGS" in the Home screen. In the appearing window "SETTINGS" tap on "Configuration". On the right side of the screen you can see the current setting under the heading "Fault acoustic".

1.3 If the connection to control unit is interrupted...

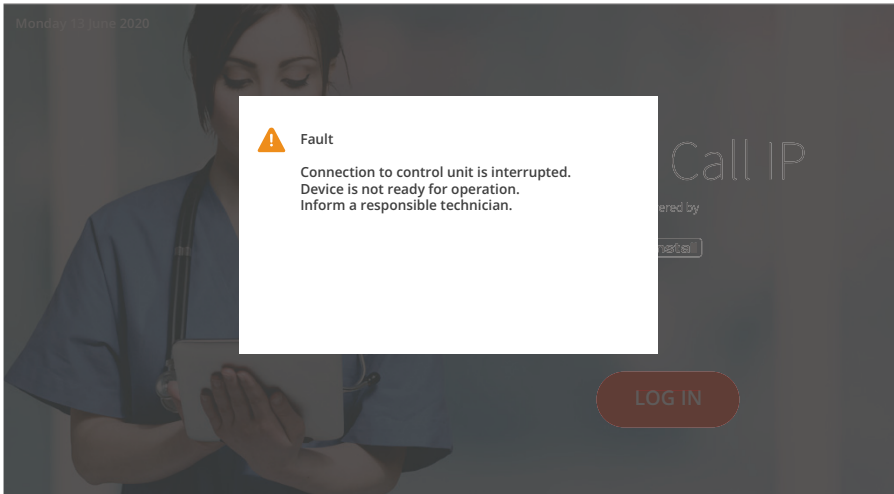


Fig. 5: "Connection to control unit interrupted" display

If "Connection to control unit interrupted" is displayed, call handling is not possible. You must act immediately.

The connection of the ComStation^{IP} to the IP-SystemManager control unit is interrupted. This means that the connection of the ComStation^{IP} to the nurse call system has failed. Calls are not displayed and cannot be handled.

You must immediately do the following:

- Inform a responsible technician about the fault. S/he will then deal with correcting the fault.
- Make sure that the patients are still cared for optimally. Observe the signalling of the room lamps.

1.4 If the indicator on the device is solid red...

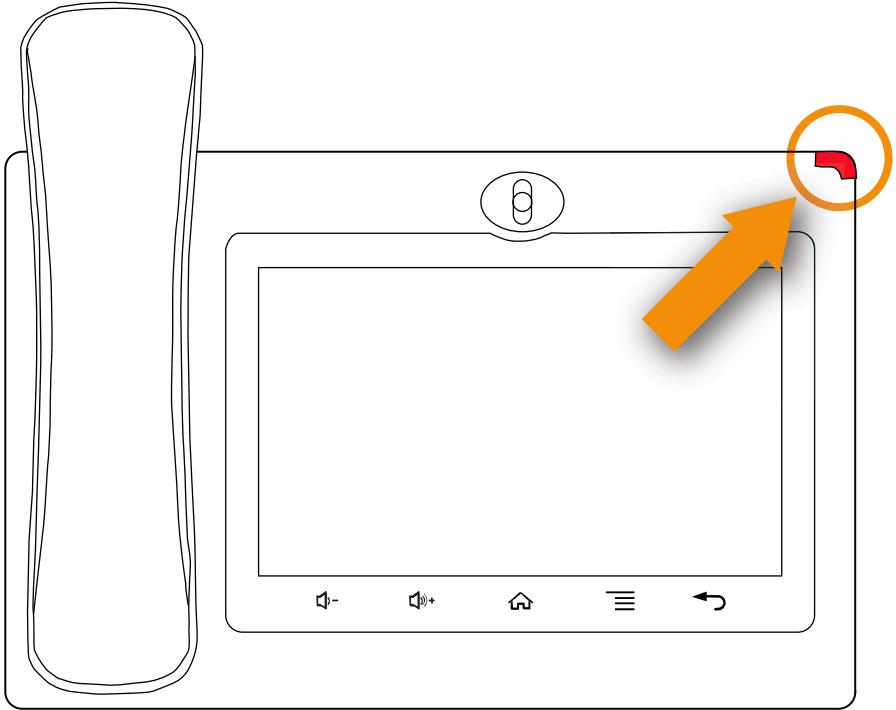


Fig. 6: Indicator on the device is solid red

The following message is displayed on the ComStation^{IP} screen:

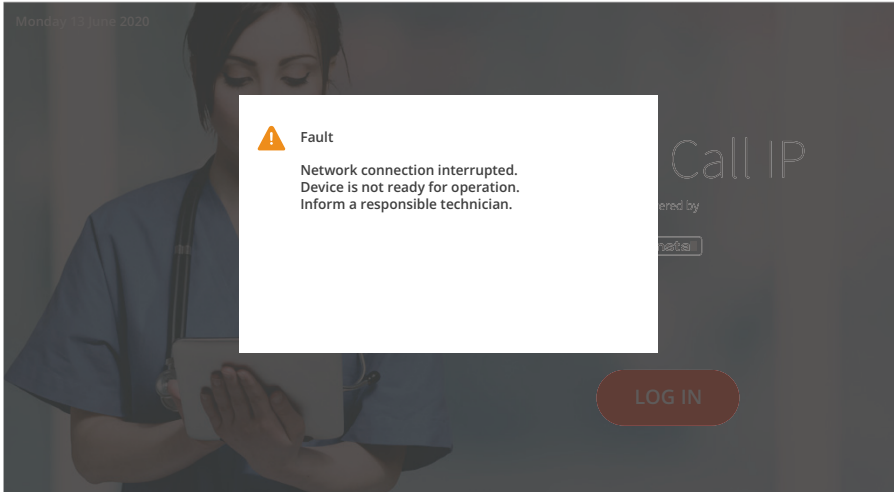


Fig. 7: "Network connection interrupted" display

If the device status indicator in the upper right corner is solid red, call handling is not possible. You must act immediately.

The network connection of the ComStation^{IP} is interrupted. This means that the ComStation^{IP} connection to the nurse call system has failed. Calls are not displayed and cannot be handled.

You must immediately do the following:

- Inform a responsible technician about the fault. S/he will then deal with correcting the fault.
- Make sure that the patients are still cared for optimally. Observe the signalling of the room lamps.

1 Safety instructions

2 Basic knowledge

This chapter covers the following topics:

- Flamenco^{IP+} nurse call system
- Sample ward
- What else you should know

2.1 Flamenco^{IP+} nurse call system

Flamenco^{IP+} systems are nurse call systems for hospitals, nursing homes and similar institutions.

If a patient needs help, s/he presses the call button on his/her call device (e.g. ePat^{®lite}). This call will be displayed on the call handling console, the so-called ComStation^{IP}, in the ward nurse station and answered.

The staff at the ComStation^{IP} ask the patient about the nature of the call and decide on appropriate action. Maybe medical attention or assistance is required. The ComStation^{IP} shows where staff is present in the rooms, as they press a presence button when entering a room. The staff at the ComStation^{IP} informs the staff in a room, where help is required.

The informed staff goes to the call location immediately. An illuminated room lamp above the door outside the room also identifies the call location. In the room, the medical staff takes care of the patient and then cancels the call when leaving the room. All signals indicating the call are reset.

Calls to which a speech connection has not yet been established, i.e. those which have not yet been answered are referred to as fresh calls. Calls which have been answered, but have not yet been cancelled, are referred to as answered calls.

2.2 Sample ward

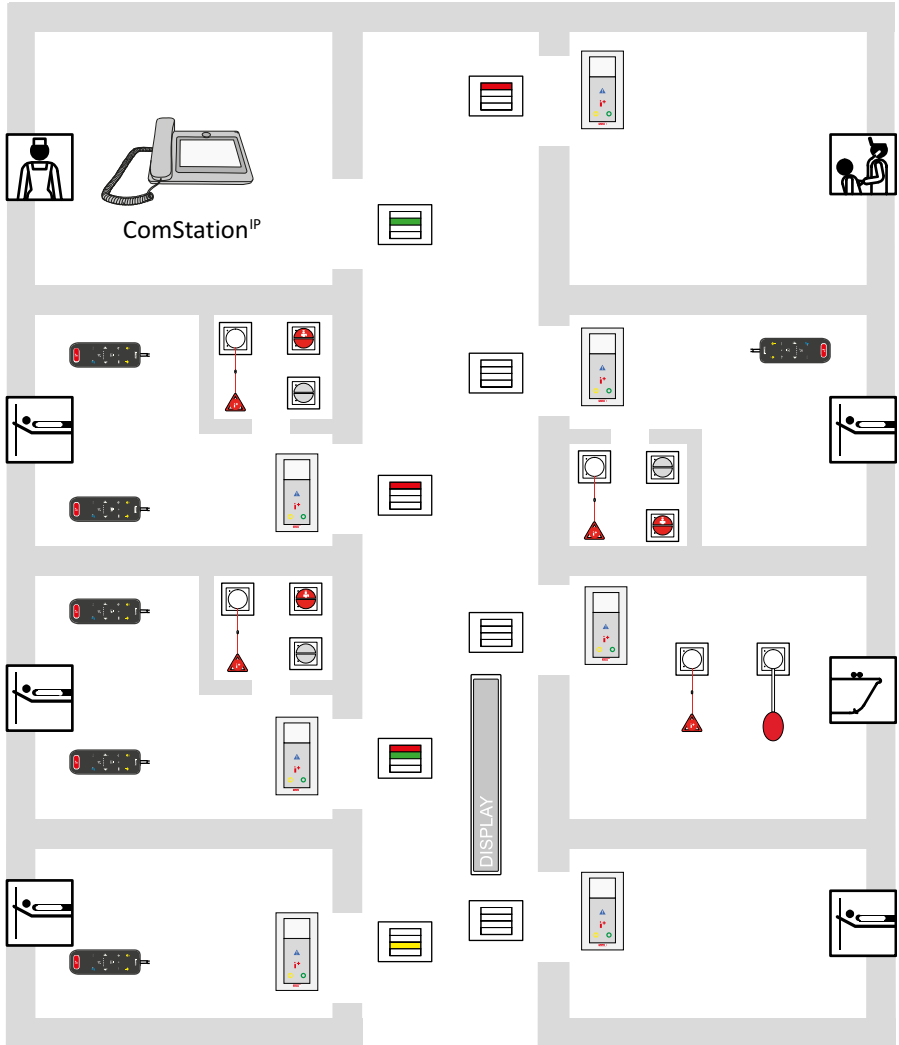


Fig. 8: Sample ward

2.2.1 Icons used in the sample ward drawing



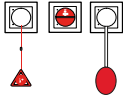
Room lamp



ComTerminal^{IP}



ePat[®]lite



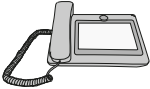
Various call switches



Cancel switch/WC



Corridor display^{IP}



ComStation^{IP}

2.3 What else you should know

2.3.1 Announcements

Aside from call handling, announcements can be made from the ComStation^{IP}; these can be made either exclusively to staff or to all rooms in the ward.

2.3.2 Staff groups

The medical staff can be divided into two groups (e.g. nurses and doctors). In order that the staff at the ComStation^{IP} address the appropriate medical staff, a distinction is made between both types. We have staff 1 and staff 2. Each staff group has its own presence button in the room (Staff 1 = green, Staff 2 = yellow). You have to ask your system administrator which type of staff is allocated to the respective group.

2.3.3 Privacy

Although it is possible to converse with rooms from the ComStation^{IP}, it is not possible to listen in on the rooms without this being noticed. The reason is, every room has a privacy function, a technical facility which makes listening in impossible. This will be cancelled if a call is triggered from the room or if staff are logged as present in the room. It is also possible to manually activate the privacy function, although staff are logged as present in the room.

Exception for children's rooms: It is possible that rooms are set as children's rooms in the nurse call system. In these rooms, the privacy function is always OFF. For optimum care of the patients in these rooms, you can listen in to these rooms if needed, even if there is no call and no staff is present in the room. Your system administrator will tell you which rooms are set up as children's rooms.

2.3.4 Call forwarding

As a rule, calls are displayed and answered by the ComStation^{IP} at the nurse station. If the ComStation^{IP} is unattended, the calls are automatically forwarded to the rooms where medical staff are logged as present. The calls can then be answered by the medical staff in the room via the ComTerminal^{IP}.

2.3.5 Ward coupling

During periods of low activity, two or more wards can be organisationally coupled. This means that in the coupled wards, all calls from the coupled wards will be displayed and answered.

2.3.6 Zones and shifts (zone nursing)

Wards can be organisationally divided into smaller entities (zones). Then the calls within one zone are only forwarded within that zone. The division into zones can be changed during the course of the day (shift operation).

3 Device description

The ComStation^{IP} is a call handling console for the ward nurse station. One ward is managed by the ComStation^{IP}.

In the following cases, the managed area is not the same as the ward:

- Ward coupling (see page 79)
- Shift operation (see page 85)

This chapter covers the following topics:

- Top view
- Bottom view
- Connections
- Touch keys on the device
- Home screen
- Status bar
- Menu bar
- Call list and staff list

3.1 Top view

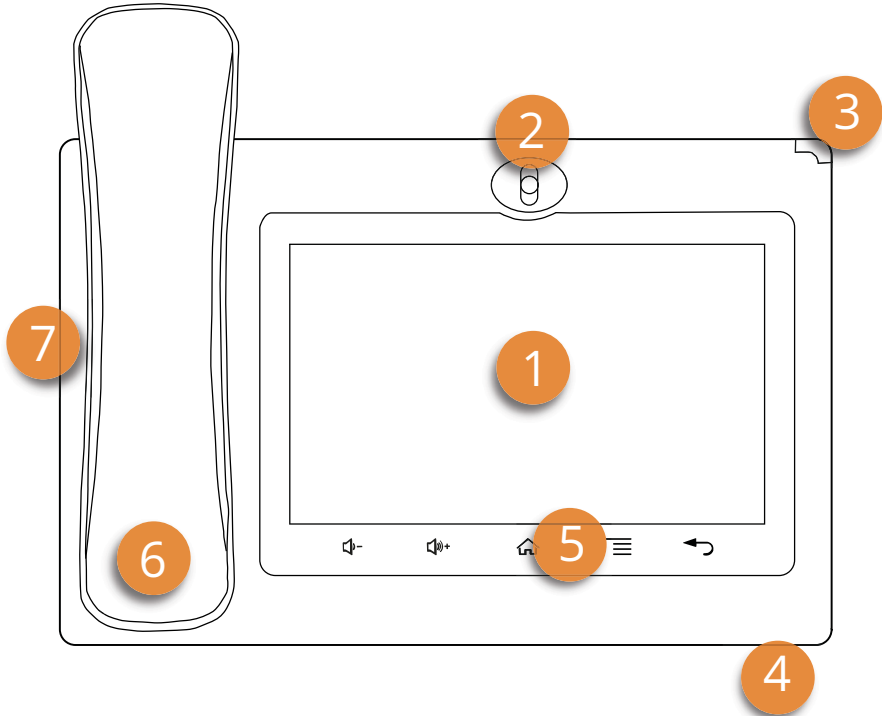


Fig. 9: Top view

-
- [1] Touch screen
 - [2] Camera (not used)
 - [3] Device status indicator, see page 14
 - [4] Microphone (for hands-free speech)
 - [5] Touch keys on the device
 - [6] Handset
 - [7] Loudspeaker under the handset (for hands-free speech)
-

3.2 Bottom view

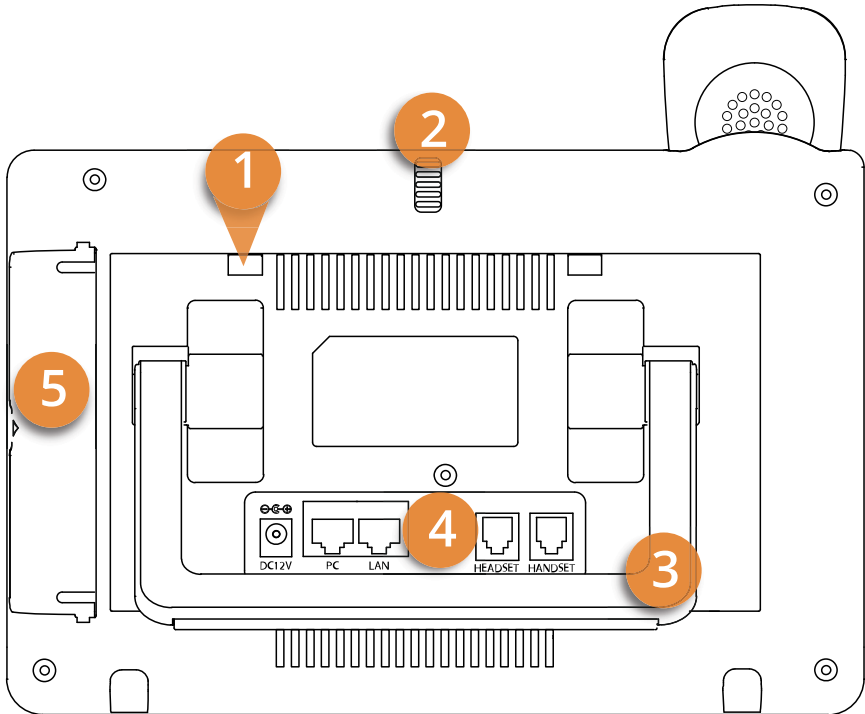


Fig. 10: Bottom view

-
- [1] Four slots for wall mount
 - [2] Camera adjusting wheel (not used)
 - [3] Built-in device stand for desktop installation
 - [4] Ports
 - [5] Cover for (unused) side ports
-

3.3 Connections

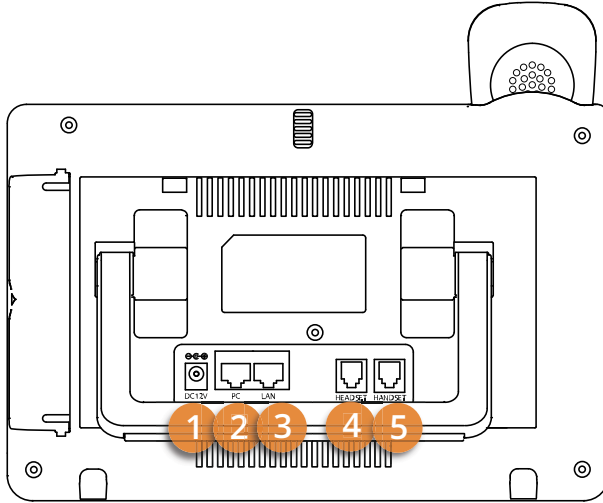







Fig. 11: Connections

-
- [1] Power jack for 12 V DC power adaptor
 - [2] PC port (not used)
 - [3] LAN port
 - [4] RJ9 headset connector port (not used)
 - [5] RJ10 handset connector port
-

3.4 Touch keys on the device



Fig. 12: Touch keys on the device

-
- [1]  **Current volume down**
Tap and hold to decrease the current volume of the ComStation^{IP}. For details see chapter "5.4 Volume keys" as of page 42.
- [2]  **Current volume up**
Tap and hold to increase the current volume of the ComStation^{IP}. For details see chapter "5.4 Volume keys" as of page 42.
- [3]  **Home**
Tap to return to the Home screen.
- [4]  **Menu**
Tap to open the ComStation^{IP} menu: Home, Announce, Call, Settings.
- [5]  **Back**
Tap to return to the previous screen.
-

3.5 Home screen

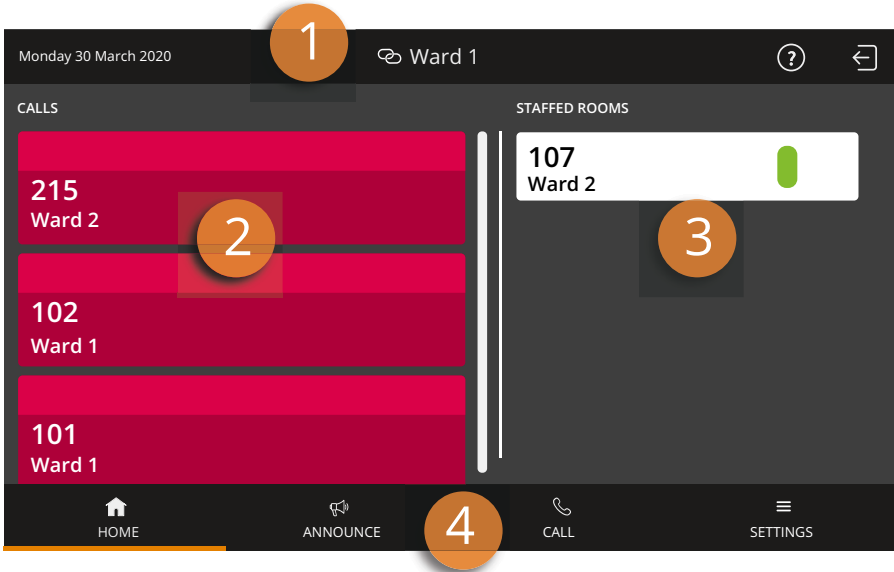







Fig. 13: Home screen

-
- [1] Status bar, see page 29.
 - [2] Call list, see page 31.
 - [3] Staff list, see page 31.
 - [4] Menu bar, see page 30.
-

3.6 Status bar



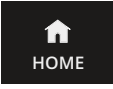
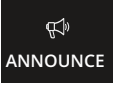
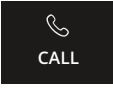
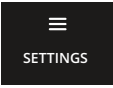
Fig. 14: Status bar

-
- [1] Date display
- [2] Display of the current operating mode:
-  **Ward coupling**
This ward is coupled with at least one other ward. For details see page 79.
 -  **Shift operation**
This ward is divided into zones. For details see page 85.
- [3] Ward name
- [4]  **Fault icon**
There is at least one fault in the nurse call system! Tap to find out about the fault. Read page 10!
- [5]  **Get help**
Tap to open this user guide.
- [6]  **Log out**
Tap to log out. For details see page 36.
-

3.7 Menu bar



Fig. 15: Menu bar

-
- [1]  **HOME**
Tap to return to the Home screen.
 - [2]  **ANNOUNCE**
Tap to open the announce menu, see page 61.
 - [3]  **CALL**
Tap to open the call menu, see page 65.
 - [4]  **SETTINGS**
Tap to open the settings menu.
-

3.8 Call list and staff list

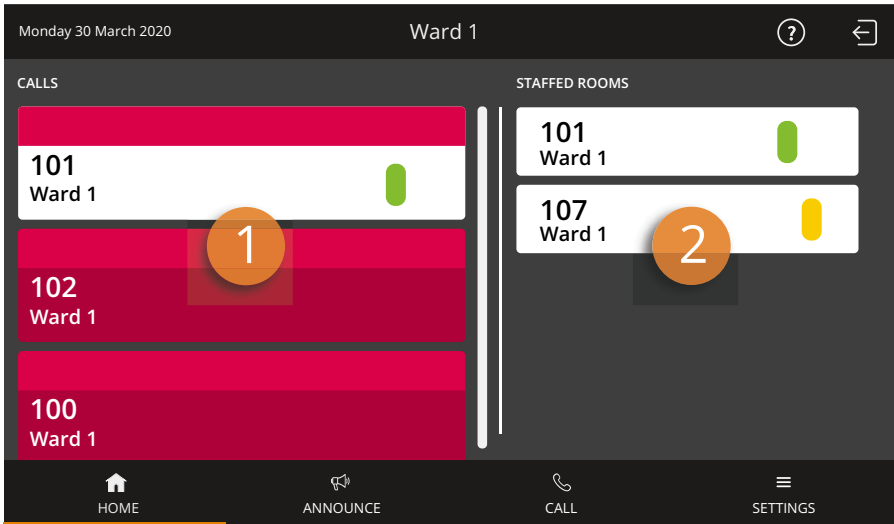


Fig. 16: Call list and staff list

[1] Call list

Display of calls in the managed rooms. Fresh calls flash.

By tapping a call, you answer the call, see page 46.

[2] Staff list

Display of presence messages in the managed rooms. Chronological order. The oldest message is shown at the top.

By tapping a presence message, you establish a speech connection to the staff, see page 55.

 Staff 1

 Staff 2

3 Device description

4 Log in / Log out

Before you start working on the ComStation^{IP}, you must log in. When you leave the nurse station, you must log out.

This chapter covers the following topics:

- Log in
- Log out

4.1 Log in

The ComStation^{IP} is always turned on. Before you log in, you see the following window in the screen:

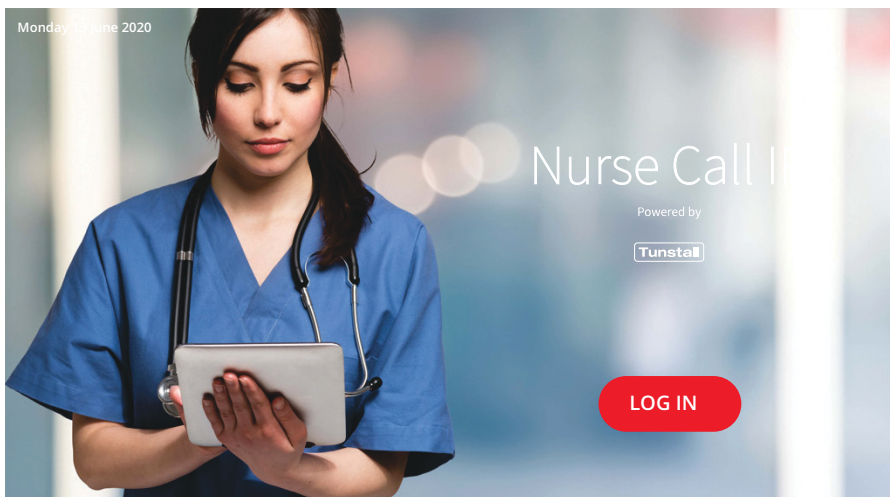


Fig. 17: Log in screen

- Tap "LOG IN".
- ✓ You are logged in. The Home screen of the ComStation^{IP} appears:

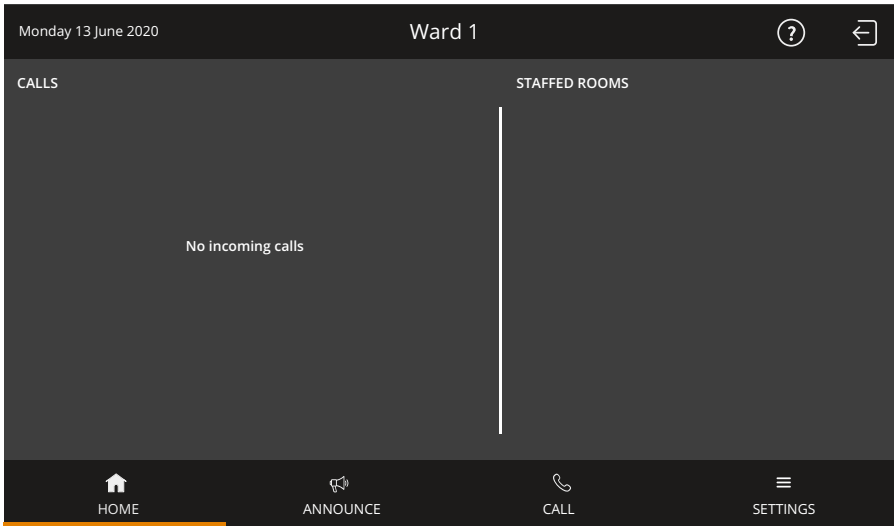


Fig. 18: Home screen

4.2 Log out

Each time you leave the nurse station, you should log out. Calls for your ComStation^{IP} will then be transferred to another call handling console or will be forwarded to the ward.

If you do not log out when you leave the ComStation^{IP}, the calls will still be forwarded but only after a pre-set time delay.

This is how you log out:

1. Tap the log out icon at the top right of the Home screen:

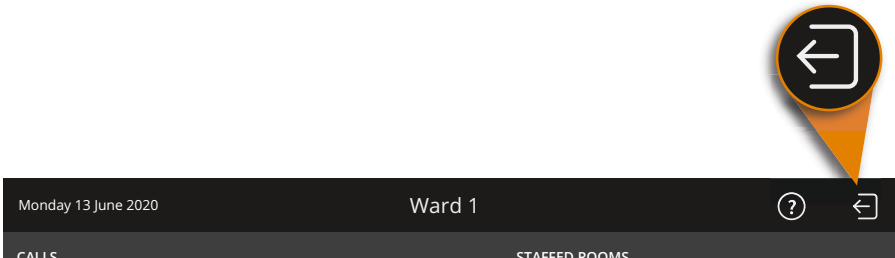


Fig. 19: Log out icon

- ✓ The following message is displayed: "Are you sure you want to log out?"
2. If you want to log out, tap "YES, LOG OUT".
- ✓ You are logged out. The log in screen is displayed.

5 Speech connections

This chapter covers the following topics:

- Speech connections on the ComStation^{IP}
- Status of the speech connection
- Hands-free speaking or using the handset
- Volume keys

5.1 Speech connections on the ComStation^{IP}

You can establish speech connections to rooms on your ward from your ComStation^{IP}. For example, you speak to patients who have called, or with medical staff, to organize help.

You will learn how to establish speech connections in various situations in this user guide. In all cases, a window will appear when a speech connection has been established.

Example:

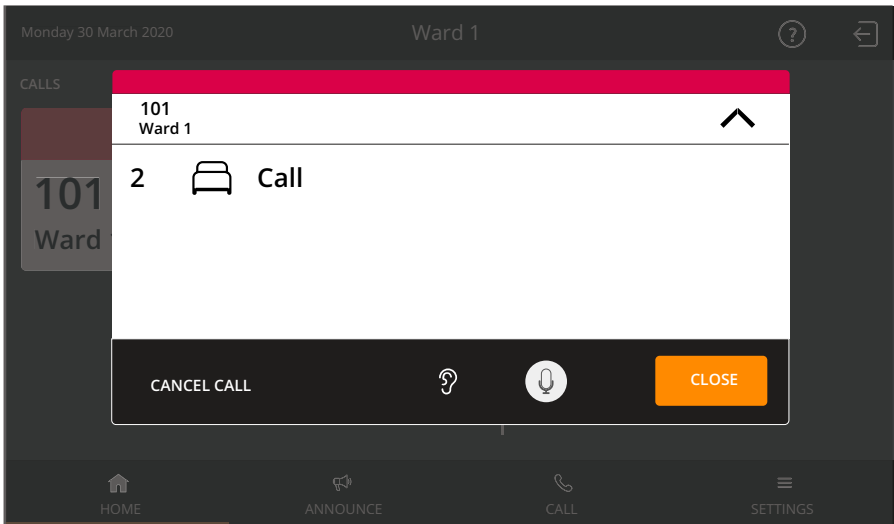


Fig. 20: Window during speech connection

5.2 Status of the speech connection

The status of the speech connection is shown in the window using the following icons:

**Privacy in the room**

You cannot listen to what is said in the room.

**No privacy in the room**

You can listen to what is said in the room.

**No privacy on the ComStation^{IP}**

Your microphone is turned on. The person in the room can hear you.

**Privacy on the ComStation^{IP} (Mute)**

Your microphone is turned off. The person in the room cannot hear you.



NOTE! If you do not close a speech connection within one minute, it is automatically closed.

5.3 Hands-free speaking or using the handset

The ComStation^{IP} provides you with two speech facilities: The hands-free facility, i.e. microphone and loudspeaker, and the handset.

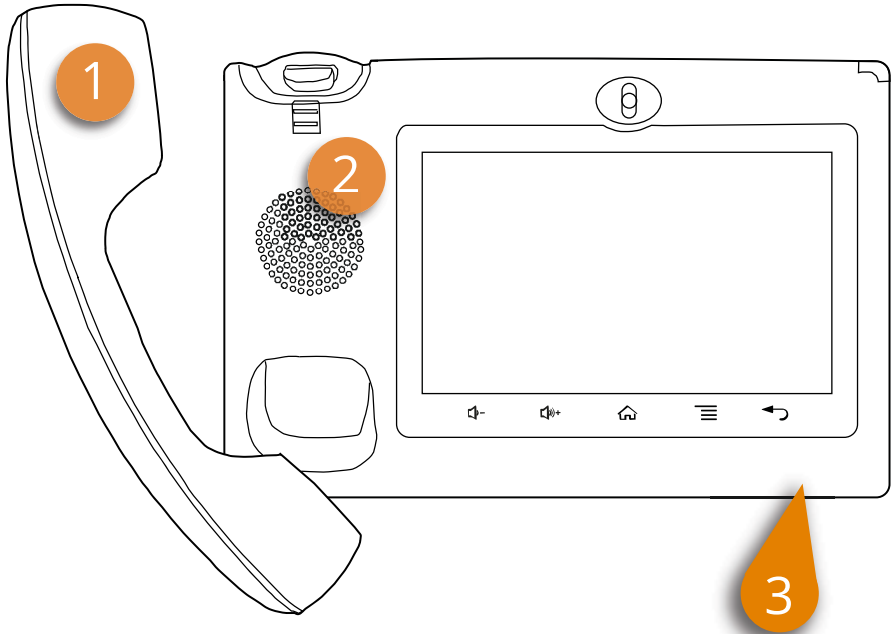




Fig. 21: Speech facilities

-
- [1] Handset
 - [2] Loudspeaker
 - [3] Microphone
-

If the handset is picked up when establishing a speech connection, the call is conducted with the handset. When you replace the handset, the speech connection is closed.

If the handset is on-hook when the speech connection is established, the call is conducted via the hands-free facility. You can switch to the handset during this speech connection by lifting the handset.

5.4 Volume keys

	Current volume up Tap and hold to increase the current volume of the ComStation ^{IP} .
	Current volume down Tap and hold to decrease the current volume of the ComStation ^{IP} .

Tab. 1: Volume keys

You can adjust three different volume settings with the volume keys:

- If there is no speech connection, tapping the volume keys adjusts the volume of the system tones (calls, faults).
- If there is a speech connection via the handset, tapping the volume keys adjusts the volume of the handset.
- If there is a speech connection via the hands-free facility, tapping the volume buttons adjusts the volume of the loudspeaker.



NOTE! The sound cannot be turned off completely. It can only be reduced to a minimum volume.

The settings are permanent, i.e. they only change if you change the setting.

6 Handling calls

This chapter covers the following topics:

- Call types and categories
- How calls are displayed
- Basic procedure for call handling
- This is how you handle a call

6.1 Call types and categories

We differentiate various call types. It is important that you know these types of calls as they will give you a hint towards the kind of assistance the patient requires. The call types are divided into three categories: Calls, emergency calls and alarms. The call categories are distinguished by their level of urgency.

Call category	Call type	
Call (low priority)	Call	A patient has raised a call or the plug of the patient unit has been disconnected from the connection socket.
	WC call	A call was raised in a WC room.
	Door call	Somebody “rang” at the entrance door.
Emergency call (medium priority)	Emergency call 1	A call was raised with presence of staff 1 logged.
	Emergency call 2	A call was raised with presence of staff 2 logged.
	WC Emergency	A WC call was raised with presence of staff logged.
	Telephone call	The telephone in the duty room is ringing.
	Diagnostic call	A medical monitoring device has raised a call. That can be, for example, a monitor that has automatically raised a call when values have exceeded specified parameters. See the note below this table.
Alarm (high priority)	Cardiac alarm	Staff has pressed a special cardiac alarm button to call for assistance, e.g. a re-animation team.

Tab. 2: Call types



NOTE! Your system administrator can change the names of the call types (SystemOrganizer) to adapt them to the special requirements of your hospital. For this reason, the names may differ from the names listed above.

NOTE on the call type “Diagnostic call”

The transmission of alarm conditions of medical electrical equipment (e.g. monitoring devices) to the nurse call system as Diagnostic call serves only as supporting, additional information. This is a distributed information system.

- The user of the medical electrical equipment must not rely on the nurse call system displays.
- The user of the medical electrical equipment must not leave the hearing and visual range of the medical monitoring equipment.
- Due diligence for the operation of such medical electrical equipment remains unaffected in case of the connection to the nurse call system.

6.2 How calls are displayed

The calls from the rooms managed by this ComStation^{IP} are displayed in the call list on the left-hand side of the Home screen.

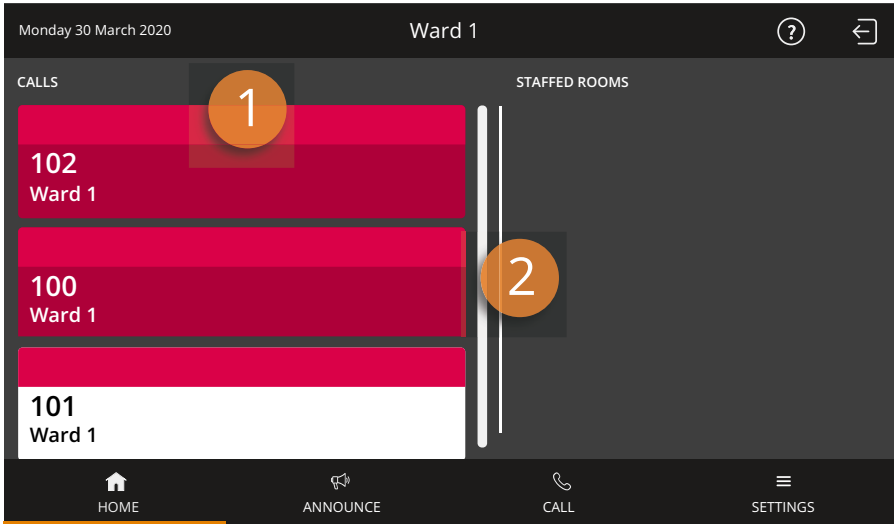


Fig. 22: Call list

-
- [1] Call list
 - [2] Scroll bar
-



NOTE! If the list is longer than the visible area, a scroll bar is displayed to the right of the list. To scroll down the list, swipe your finger up the list.

6.2.1 How the call categories are displayed

You can see from the flashing sequence of the fresh call to which call category a call belongs:

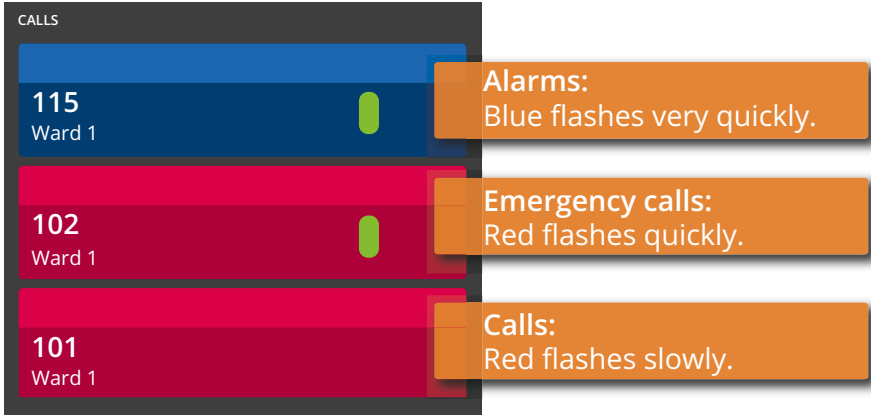


Fig. 23: How the call categories are displayed

The calls are arranged according to call categories, i.e. priority levels. The most urgent call is at the top. This means that alarms are at the top, emergency calls below and calls at the bottom. Within the call categories, the oldest call is at the top.

Call tone

You can also identify the category of a call by listening:

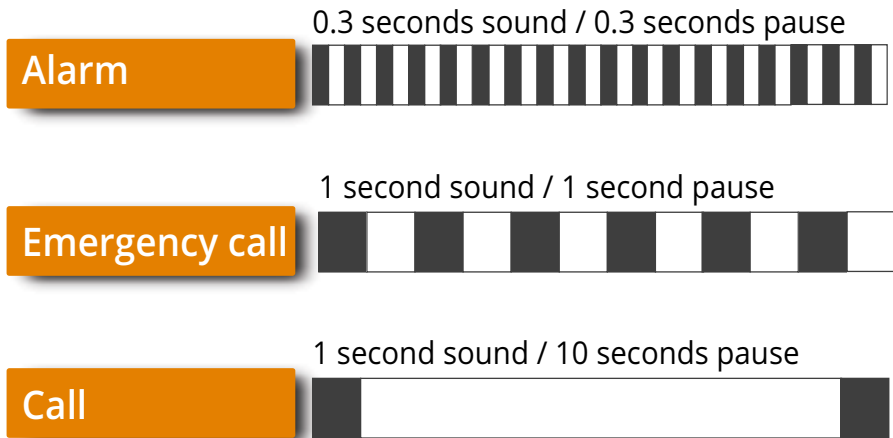


Fig. 24: Tone sequences for the call categories

The more urgent the call, the faster the sequence of sounds. If there are several calls, you will only hear the most urgent call.



NOTE! The sound sequences may differ from the displayed sound sequences if this has been configured specifically for your hospital. Ask your system administrator.

6.2.2 How the call type is displayed

You see the call type of an incoming call when you answer the call, i.e. establish a speech connection to the room.

1. Tap on the call in the call list.
- ✓ The window for the speech communication appears. The speech connection is established.

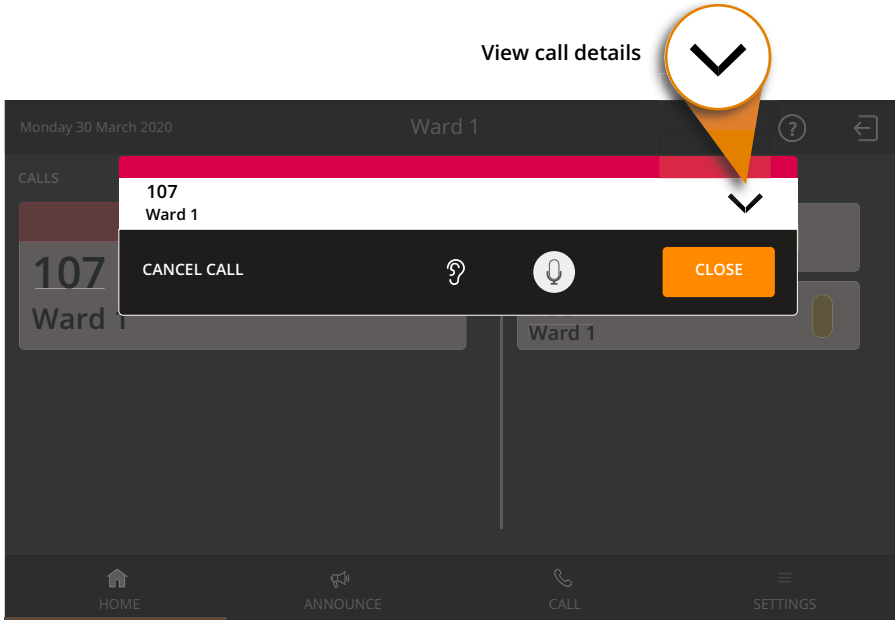


Fig. 25: Window during the speech connection to the call location

2. Tap the down arrow, to view the call type and other details about the call.
- ✓ The call details view appears:

6 Handling calls



Fig. 26: Window with the call details

[1] Call location

[2] Staff present at the call location:



Staff 1



Staff 2

[3] Call type

[4] Bed no.

[5] "CLOSE" to close the speech connection

[6] Status of the privacy function on the ComStation^{IP} and possibility to switch it over.



No privacy: The person in the room can hear you.



Privacy (Mute): The person in the room cannot hear you.

[7] Status of the privacy mode at the call location (see page 21):



No privacy: You can listen to what is said in the room.



Privacy: You cannot listen to what is said in the room.

[8] "CANCEL CALL" to cancel a call of type Call.

If several calls have been raised in a room, they are displayed one below the other in a single window.

6.2.3 How fresh and answered calls are displayed

After you have established the speech connection to a call location, the call is termed answered call. Previously, it was a fresh call. Answered calls appear in the call list below the fresh calls. Answered calls are not signalled acoustically and do not flash.

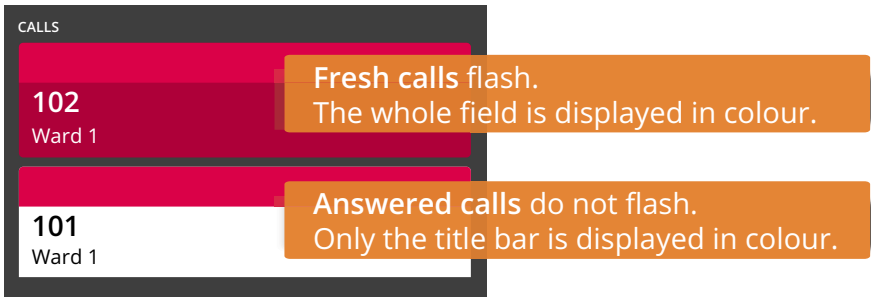


Fig. 27: How fresh and answered calls are displayed

If there are several fresh calls or several answered calls, the calls are sorted chronologically. The oldest call is at the top.

6.3 Basic procedure for call handling

Call handling always follows the same pattern. You will see this pattern here. Then, we will explain how you carry this out in practice.

On your ComStation^{IP}, one or several calls are shown in the call list. You will handle these calls one after the other.

Calls which you have not yet dealt with are named **fresh calls**. They are flashing in the screen.

You establish a speech connection to a caller. On the screen, the speech connection window appears. You obtain details about the call from this display.

You speak to the caller. In the conversation, you find out which type of assistance is required. Perhaps, a small piece of advice from you will suffice in dealing with the matter. If this is not sufficient, or you cannot speak to the caller at all, for example, if s/he is not responding, you must send staff to assist him/her. You must decide whether this involves staff from group 1 or group 2 and this depends on the situation.

You establish a speech connection with a room where staff is present, and you speak to the staff.

It could be the case that several speech connections are required for the handling of one call. That depends on the individual situation. As long as the call has not been entirely dealt with it is called an **answered call**.

Only when no more action is required the call is **cancelled**. As a rule, the staff cancel the call in the room (by pressing the presence button). The call type "Call" can also be cancelled at the ComStation^{IP}. All other types of calls must be cancelled at their location. After cancelling the call, the call handling procedure is finished.

6.4 This is how you handle a call

6.4.1 Answer the call

Calls are displayed in the call list. Fresh calls flash. The most urgent call is at the top of the call list. You hear the call tone for the most urgent call.

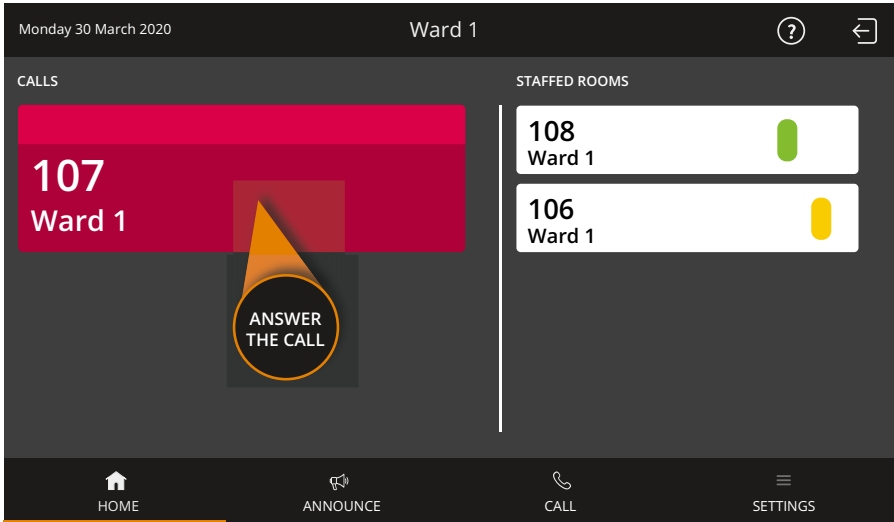


Fig. 28: Answer the call

- Answer a call, i.e. establish a speech connection with the call location. To do this, tap the call.
- ✓ The speech connection window for the call appears. The speech connection is established:

6 Handling calls

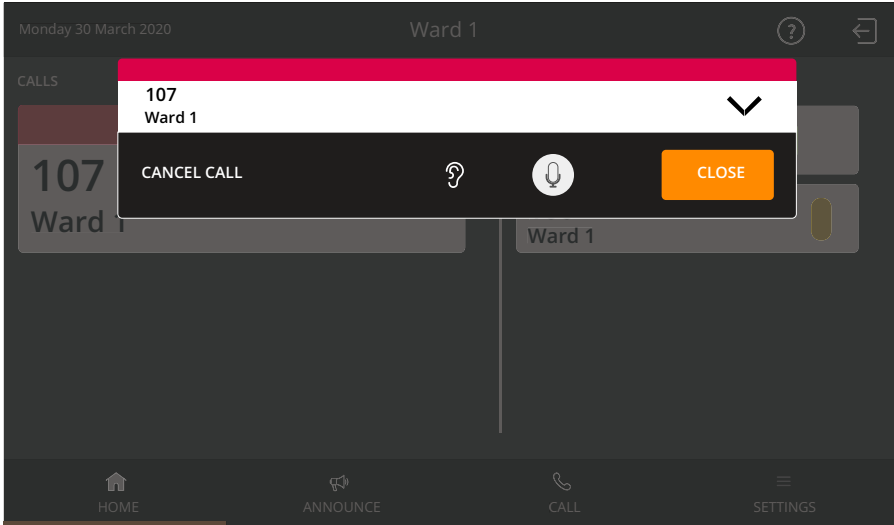


Fig. 29: Speech connection with the call location

- To view details of the call, tap the down arrow:

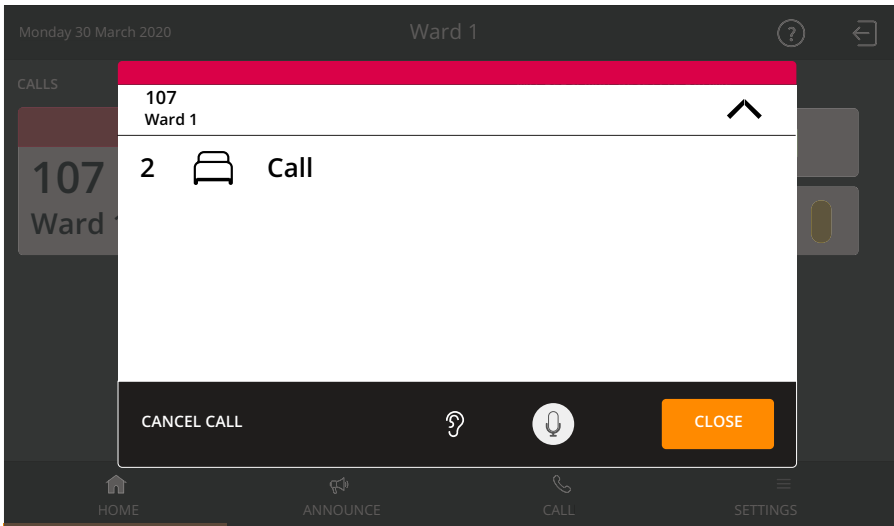


Fig. 30: Call details

Speak to the caller

- To speak to the caller, use the handset or the hands-free facility.
- If you want to hear the person at the other end louder or softer, adjust the volume with the corresponding touch keys on the device, see chapter "5.4 Volume keys" as of page 42.

Closing the speech connection

- To close the speech connection without cancelling the call, tap "CLOSE". Alternatively, if you made the conversation with the handset, you can simply hang up the handset.
- ✓ The window for speech communication disappears. The call appears in the call list as an answered call.
- You can re-establish a speech connection at any time by tapping on the call.

6.4.2 Speaking to staff

- Close the speech connection to the call location by tapping "CLOSE" or by hanging up the handset.
- Choose appropriate staff from the staff list and tap on the staff.

6 Handling calls

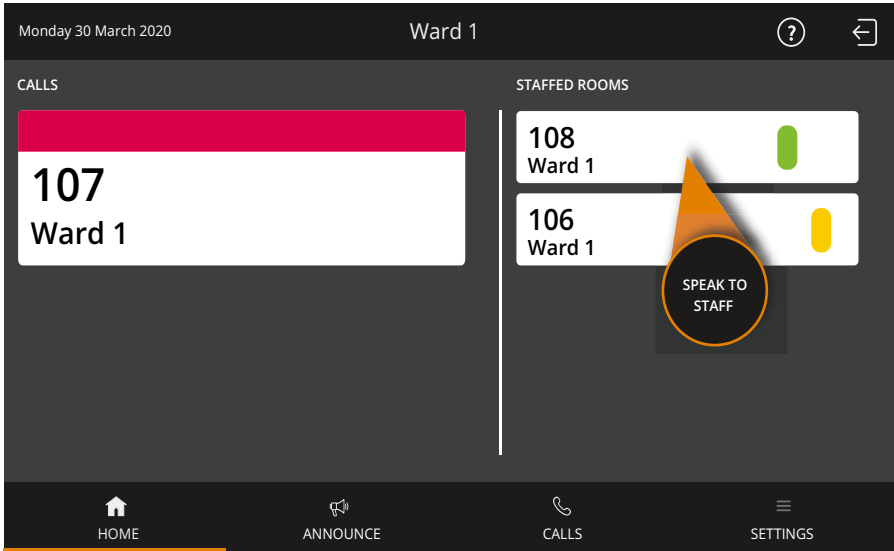


Fig. 31: Establish a speech connection to staff

- ✓ The speech connection window with staff appears. The speech connection is established:

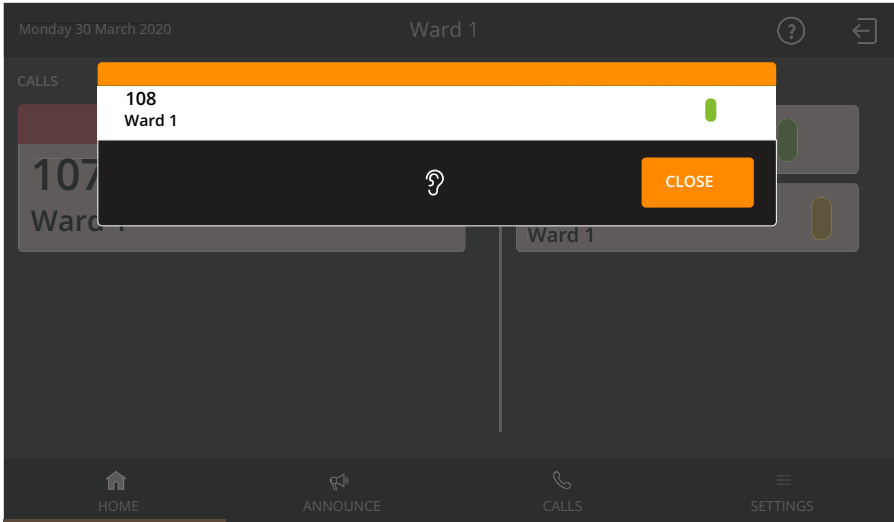


Fig. 32: Speech connection to staff

- To speak to the staff, use the handset or the hands-free facility.
- If you want to hear the person at the other end louder or softer, adjust the volume with the corresponding touch keys on the device, see chapter "5.4 Volume keys" as of page 42.
- To close the speech connection tap "CLOSE". Alternatively, if you made the conversation with the handset, you can simply hang up the handset.
- If you now want to speak to the caller again, re-establish the speech connection to the call location by tapping on the answered call.

6.4.3 Cancelling the call



NOTE! You can only carry out remote call cancelling with call type "Call". All other call types must be cancelled by pressing the presence button in the room or by pressing the cancel switch locally in the WC area.

- Tap "CANCEL CALL".

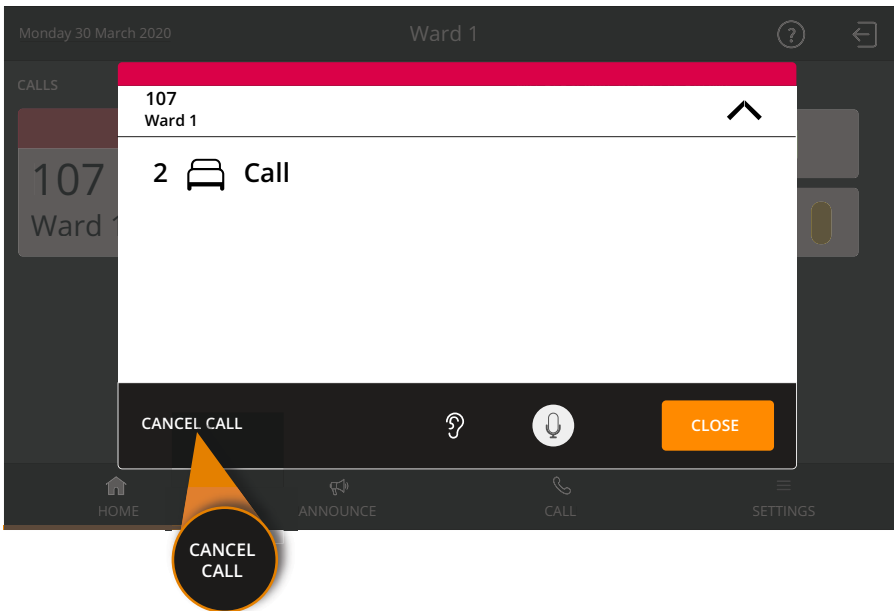


Fig. 33: Cancel a call

- ✓ The call display disappears. The call is cancelled.

6.4.4 Special case: Door call

If you have answered a door call, i.e. have established a speech connection to the door entry speaker, the following window is displayed on the screen:

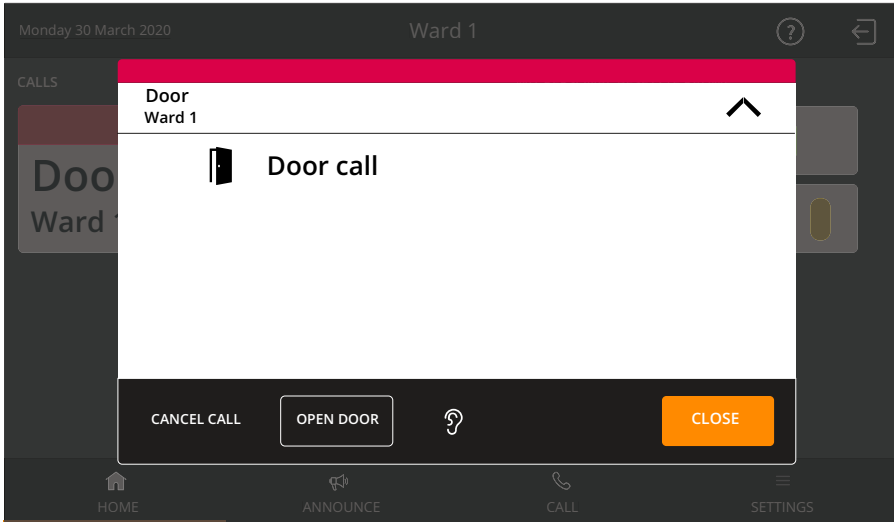


Fig. 34: Speech connection to a door call

You have the option of triggering the door opening mechanism to let the person at the door in, or cancel the call without letting the person in.

You want to let the person at the door in

- As long as you keep "DOOR OPEN" pressed, the door opening mechanism on the door is triggered. When you release, the door call is cancelled.

You do not want to let the person at the door in

- Tap on "CANCEL CALL".
- ✓ No door opening mechanism is triggered. The door call is cancelled.

6 Handling calls

7 Announcements

This chapter covers the following topics:

- Announcement targets
- This is how you make an announcement

7.1 Announcement targets

You can make announcements to the following rooms in your ward:

Target	Meaning
All Staff	To all rooms in your ward where staff are present.
Staff 1	To all rooms in your ward where staff 1 are present.
Staff 2	To all rooms in your ward where staff 2 are present.
Complete Ward	To all rooms in your ward.

Tab. 3: Announcement targets

7.2 This is how you make an announcement

1. Tap "ANNOUNCE" in the Home screen:

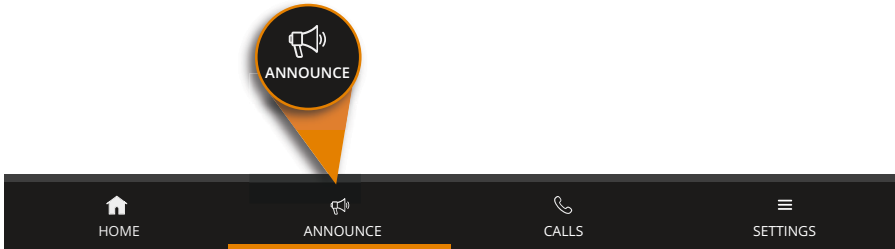


Fig. 35: Tap "ANNOUNCE"

- ✓ The possible announcement targets are displayed:

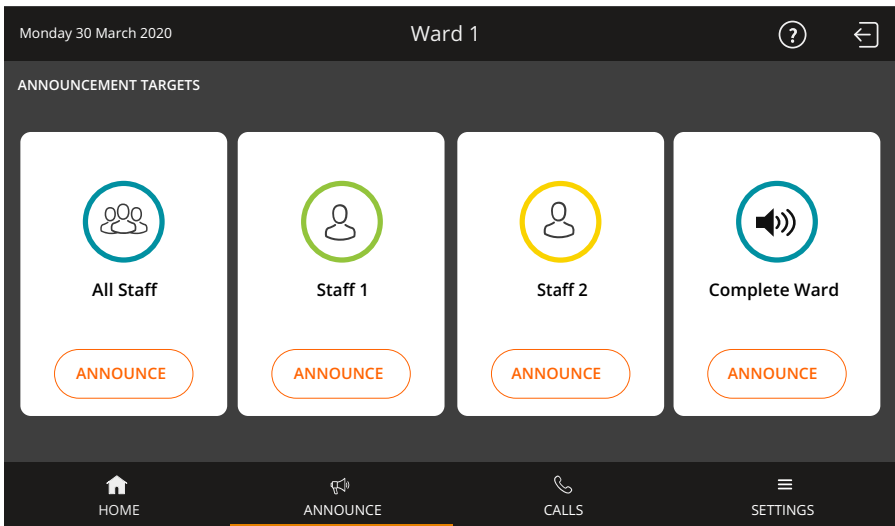


Fig. 36: Announcement targets

2. Tap "ANNOUNCE" for the desired announcement target.

7 Announcements

- ✓ The announcement window appears. The speech connection is established.

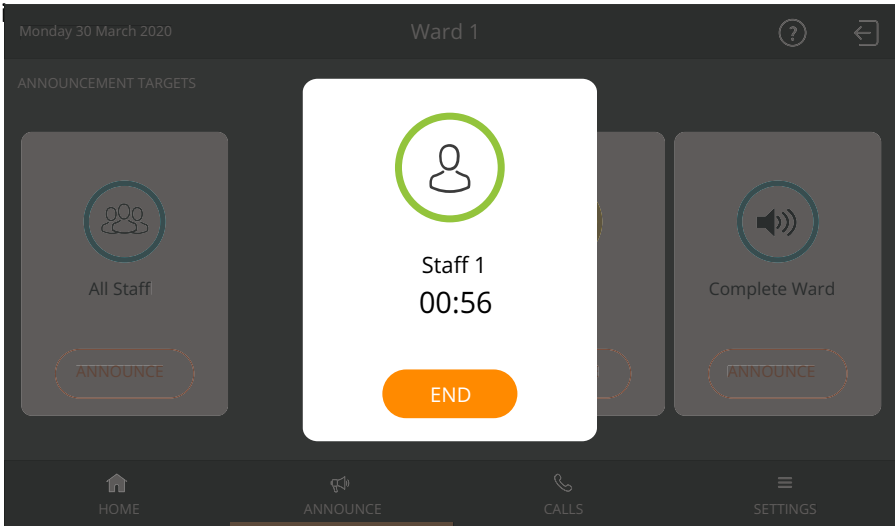


Fig. 37: Announcement window

3. Make your announcement into the microphone or the handset.



NOTE! The maximum speaking time is 60 seconds. After 60 seconds the announcement is automatically ended. A timer indicates the remaining time.

4. When you have finished your announcement, tap "END". Alternatively, if you have made the announcement via the handset, you can simply hang up the handset.
5. The announcement is finished.

8 Calling

This chapter covers the following topics:

- Call destinations
- Calling a room in your ward
- Calling another ComStation^{IP} in your ward
- Calling the ManagementCenter
- Receiving a call

8.1 Call destinations

You can call the following destinations:

- Rooms in your ward
- Other ComStations^{IP} in your ward
- The ManagementCenter (if there is one)

You can also be called from other ComStations^{IP} in your ward and the ManagementCenter (if there is one).

8.2 Calling a room in your ward

This is how you call:

1. Tap "CALL" in the Home screen.

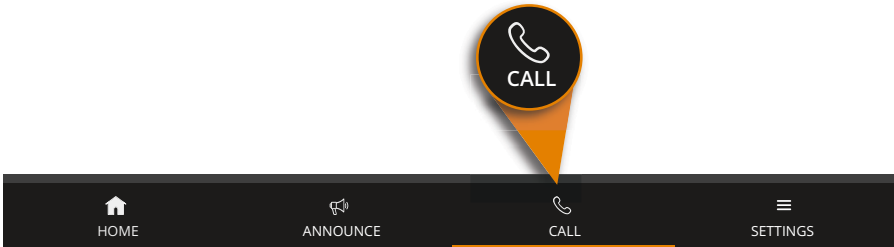


Fig. 38: Tap "CALL"

- ✓ All possible call destinations are listed:

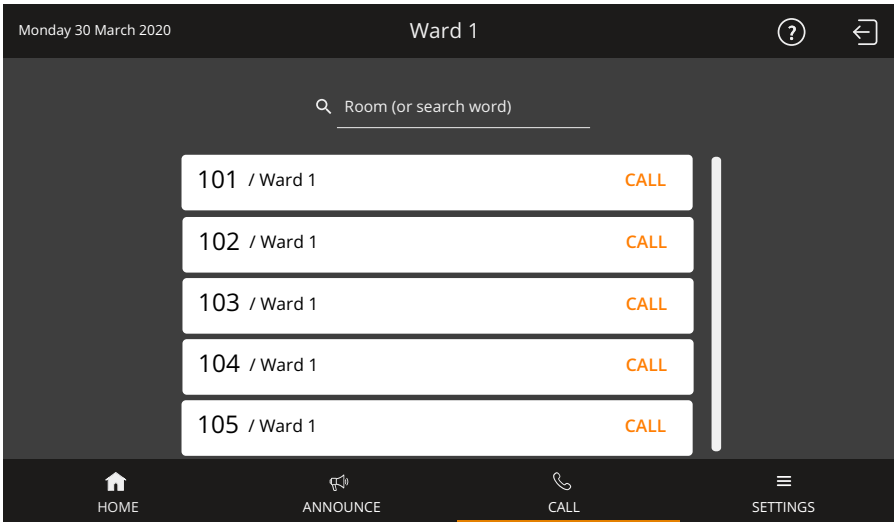


Fig. 39: Call destinations



NOTE! If the list is longer than the visible area, a scroll bar is displayed to the right of the list. To scroll down the list, swipe your finger up the list.

2. Tap "CALL" next to the desired call destination.
- ✓ The speech connection window appears. The speech connection is established.

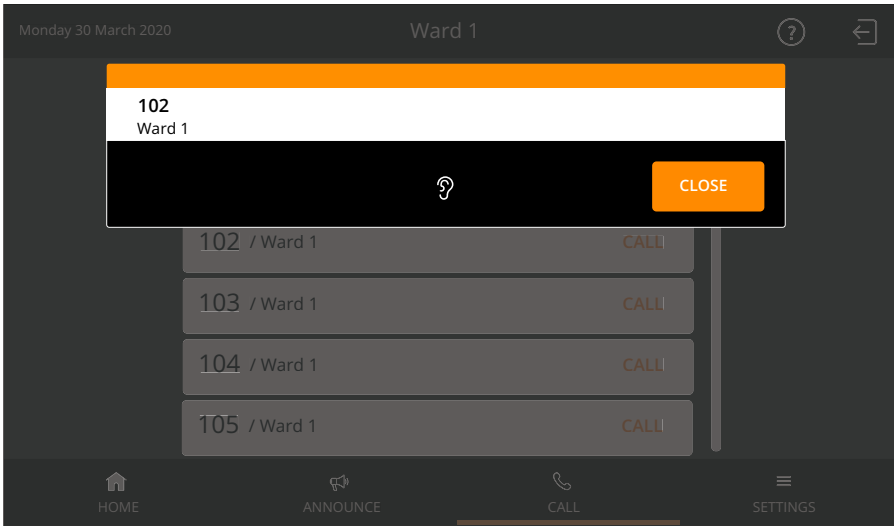


Fig. 40: Speech connection to the call destination



If Privacy is displayed in the window, it is not possible for you to hear an answer. If you want to receive an answer, ask the patient to press a call button. This will deactivate the privacy function and you will be able to hear the patient. When you have finished the call, it will appear as an answered call in the call list. Cancel it as described in chapter "6 Handling calls" as of page 43.

3. To talk to the person on the other end, use the handset or the hands-free facility.
 4. To close the speech connection tap "CLOSE". Alternatively, if you made the conversation with the handset, you can simply hang up the handset.
- ✓ The call is finished.

8.3 Calling another ComStation^{IP} in your ward

This is how you call:

1. Tap "CALL" in the Home screen.

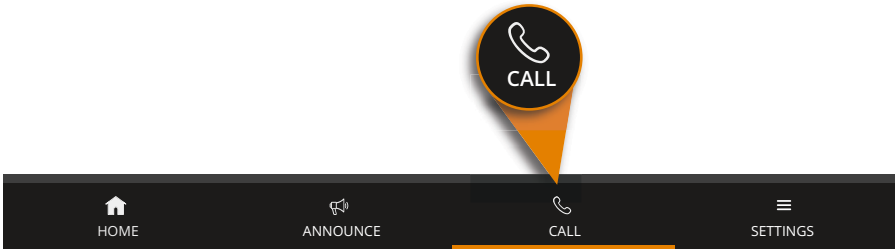


Fig. 41: Tap "CALL"

- ✓ All possible call destinations are listed:

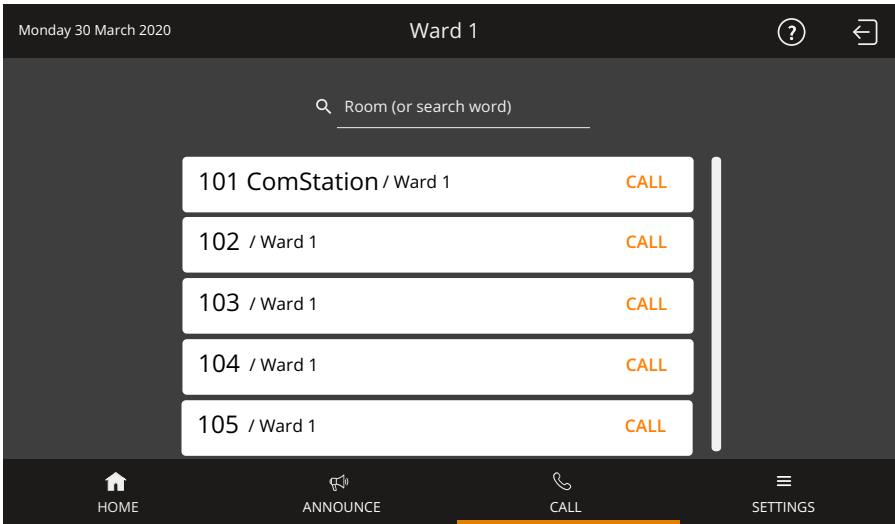


Fig. 42: Call destinations



NOTE! If the list is longer than the visible area, a scroll bar is displayed to the right of the list. To scroll down the list, swipe your finger up the list.

2. Tap "CALL" next to the desired call destination. Note: The destination is not necessarily labelled "ComStation". The labelling depends on the setting in your nurse call system.
- ✓ The speech connection window appears. The speech connection is established.

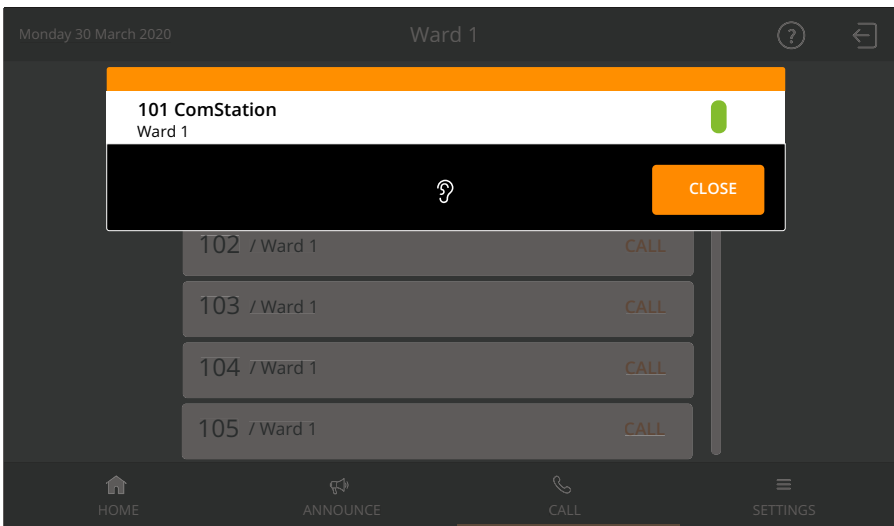


Fig. 43: Speech connection to the other ComStation^{IP}



If Privacy is displayed in the window, it is not possible for you to hear an answer. If you want to receive an answer, ask the staff at the ComStation^{IP} to deactivate the privacy.

8 Calling

3. To talk to the person on the other end, use the handset or the hands-free facility.
 4. To close the speech connection tap "CLOSE". Alternatively, if you made the conversation with the handset, you can simply hang up the handset.
- ✓ The call is finished.

8.4 Calling the ManagementCenter

This is how you call the ManagementCenter:

1. Tap "CALL" in the Home screen.

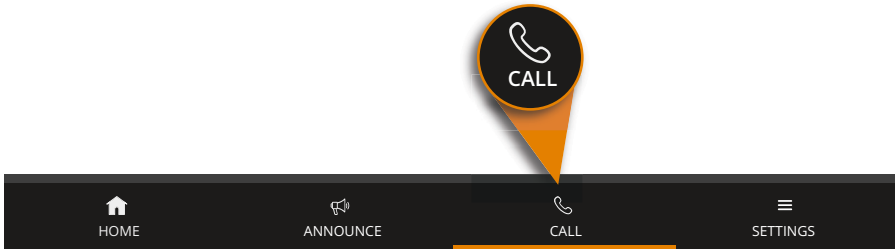


Fig. 44: Tap "CALL"

- ✓ All possible call destinations are listed:

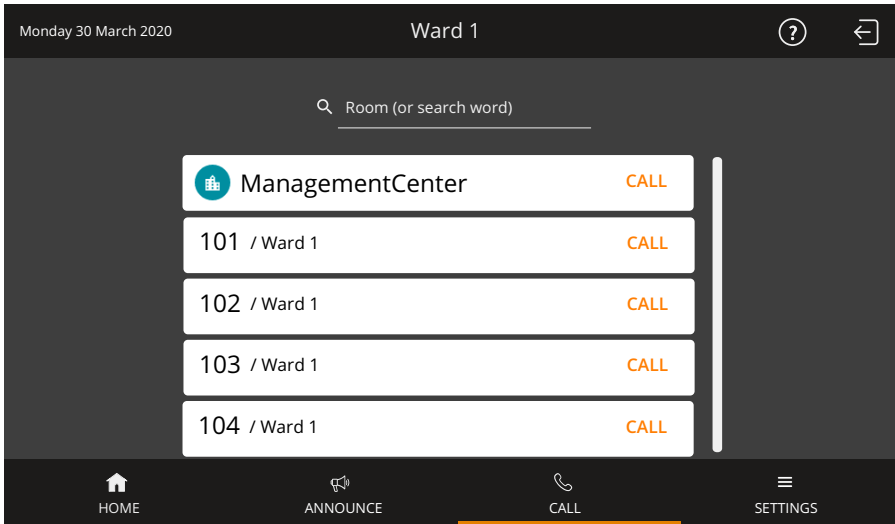


Fig. 45: Call destinations

2. Tap "CALL" next to "ManagementCenter".

8 Calling

- ✓ At the ManagementCenter your call will not be answered directly. Your request will simply be signalled as so-call organisational call on the ManagementCenter. The word "ManagementCenter" is marked on your ComStation^{IP}.
- ✓ As soon as the ManagementCenter staff has the time, s/he will establish a speech connection and speak to you. The screen shows:

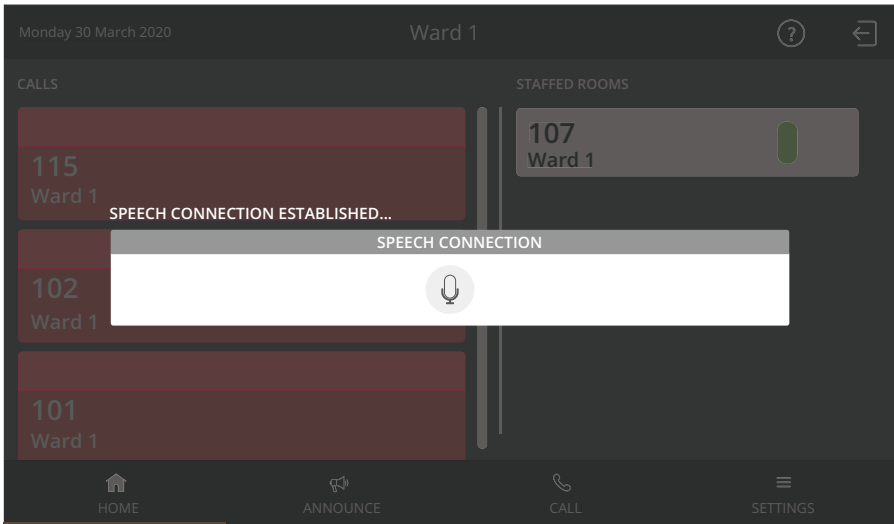


Fig. 46: Speech connection to the ManagementCenter

3. Talk to the staff and communicate your request.
4. If you do not want to be heard temporarily, you can temporarily turn on the privacy function by tapping the microphone icon (for mute).
5. To remove the privacy function, tap the crossed-out microphone icon.



NOTE! The ComStation^{IP} can be configured so that the privacy function is activated when a speech connection is established from the ManagementCenter (see page 110). Only when you deactivate the privacy function by tapping the crossed-out microphone icon you can be heard by the ManagementCenter staff.

- ✓ After clarifying your request, the staff at the ManagementCenter will cancel the call.
- ✓ The call is cancelled. The marking of the word "ManagementCenter" disappears.

NOTE! If necessary, e.g. if you have accidentally triggered the call, you can cancel the call. To do this, tap on "CALL" of the marked word "ManagementCenter". The marking disappears. Your call is cancelled.

8.5 Receiving a call

You can be called from other ComStations^{IP} in your ward and from the ManagementCenter by the staff there establishing a speech connection to you.

- ✓ If staff at another ComStation^{IP} or at the ManagementCenter establishes a speech connection to you, the following window appears:

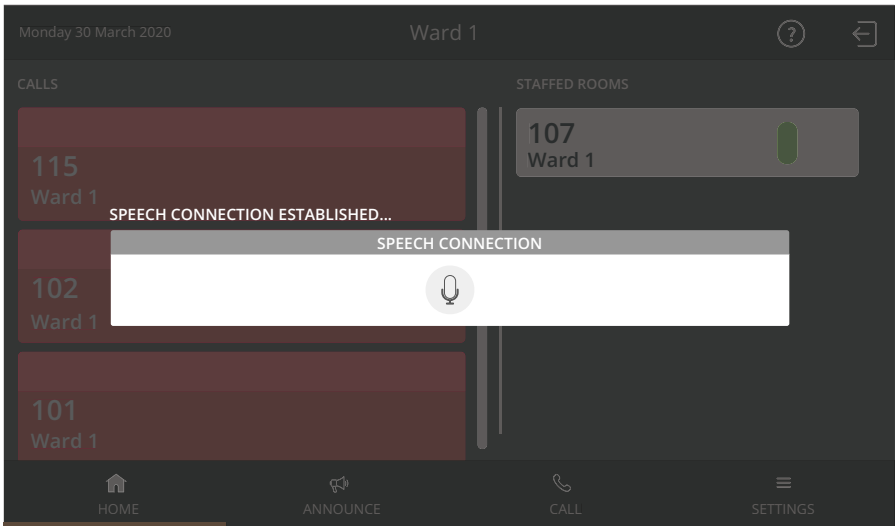


Fig. 47: Call from another ComStation^{IP} or from the ManagementCenter

6. Talk to the staff.
7. If you do not want to be heard temporarily, you can temporarily turn on the privacy function by tapping the microphone icon (for mute).
8. To remove the privacy function, tap the crossed-out microphone icon.



NOTE! The ComStation^{IP} can be configured so that the privacy function is activated when a speech connection is established from another ComStation^{IP} or the ManagementCenter (see page 110). Only when you deactivate the privacy function by tapping the crossed-out microphone icon you can be heard by the staff on the other end.

- ✓ At the end of the call, the staff on the other end closes the speech connection.

9 Ward coupling

This chapter covers the following topics:

- Basic knowledge on ward coupling
- Activating / deactivating a ward coupling

9.1 Basic knowledge on ward coupling

Usually, you look after only those rooms in your ward with your ComStation^{IP}. If necessary, for example when there are few staff, several wards can be coupled.

- All calls and staff registrations in the coupled area are displayed on all ComStations^{IP} in the area.
- All calls in the coupled area are forwarded to all of the area.

Wards can be coupled by you or by another call handling console.

If one or more wards are coupled with your ward, you will see the following icon in the status bar of the Home screen:



Fig. 48: Ward coupling icon



NOTE! Ward coupling disables shifts. This means that if a shift is active, it will be disabled. The ward is no longer divided into zones., see chapter "Shift operation" as of page 85.

Your system administrator has set up several ward couplings, from which you can select. There is a coupling of certain wards behind every ward coupling. Ask you system administrator which wards will be coupled with which ward coupling.

You can activate these ward couplings. At the same time, other ward couplings can be activated, which you cannot influence. If a ward coupling is active, the appropriate wards are coupled.

9.2 Activating / deactivating a ward coupling

This is how you activate an inactive ward coupling or how you de-activate an active ward coupling:

1. Tap "SETTINGS" in the Home screen.

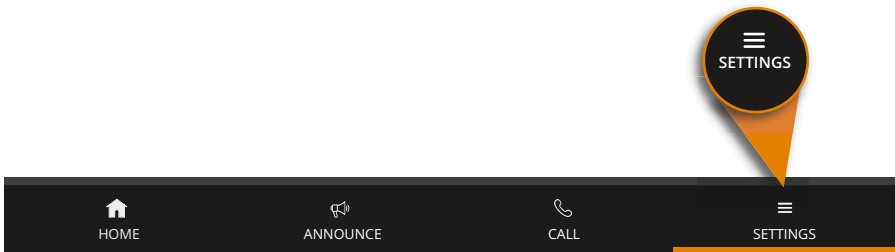


Fig. 49: Tap "SETTINGS"

2. Tap on "Ward coupling" in the appearing "SETTINGS" window.
- ✓ Ward couplings that you can activate are displayed.

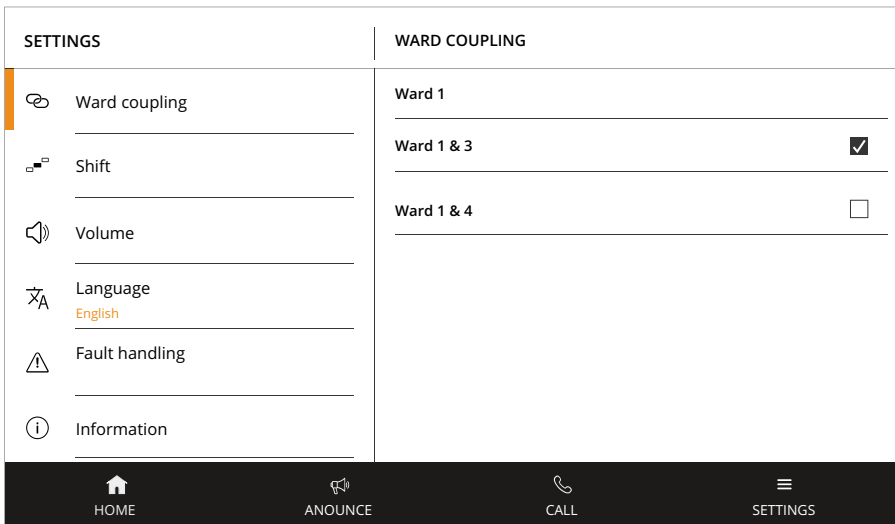


Fig. 50: Activating/deactivating a ward coupling

The check box of active ward couplings is checked; these have been activated either by you or by another console. The check box of inactive ward couplings is unchecked.

You can activate or deactivate ward couplings:

- If you want to activate an inactive ward coupling, tap this ward coupling so that the check box is checked. The ward coupling is active immediately.
 - If you want to deactivate an active ward coupling, tap this ward coupling so that the check box is unchecked. The ward coupling is immediately inactive.
 - Tap "HOME" to return to the Home screen.
- ✓ The process is complete.

If a ward coupling is still active for your ward, you will find the ward coupling icon in the status bar:

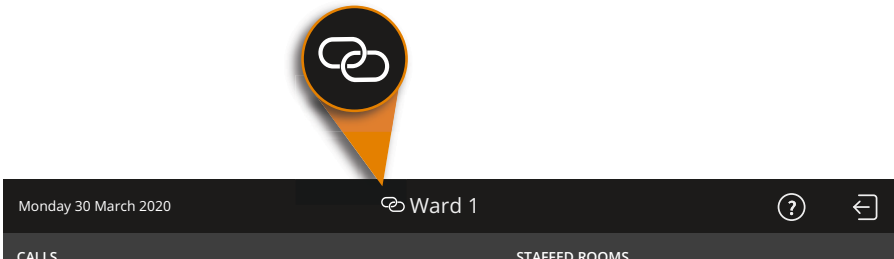


Fig. 51: Ward coupling icon

9 Ward coupling

10 Shift operation

You only need to read this chapter, if shifts are assigned to your ward. Ask your system administrator.

This chapter covers the following topics:

- Basic knowledge on shift operation
- Activating/deactivating a shift

10.1 Basic knowledge on shift operation

To support zone nursing Tunstall has developed the concept of zones and shifts:

10.1.1 Zone

A zone is a part of a ward within which calls are forwarded. Calls which are triggered within the zone are not forwarded to rooms in the ward which lie outside the zone. Usually, certain nursing staff are responsible for one zone.

10.1.2 Shift

The zones of a ward are not set for the long-term. The zone organisation can change. Each division of the ward into zones is classed as a "shift".

A shift refers to the division of a ward into zones. Thus, the zones may overlap each other, i.e. certain rooms can belong to several zones.

Your system administrator has set up several shifts from which you can choose. You activate shifts using the ComStation^{IP}.

10.1.3 ComStation^{IP}

One or more ComStation^{IP} units are installed in each ward. According to the shift, the consoles can belong to different zones.

If a ward is divided into zones, but only has one ComStation^{IP}, the system is usually programmed that the ComStation^{IP} belongs to all zones.

10.1.4 Example with one ComStation^{IP} on the ward

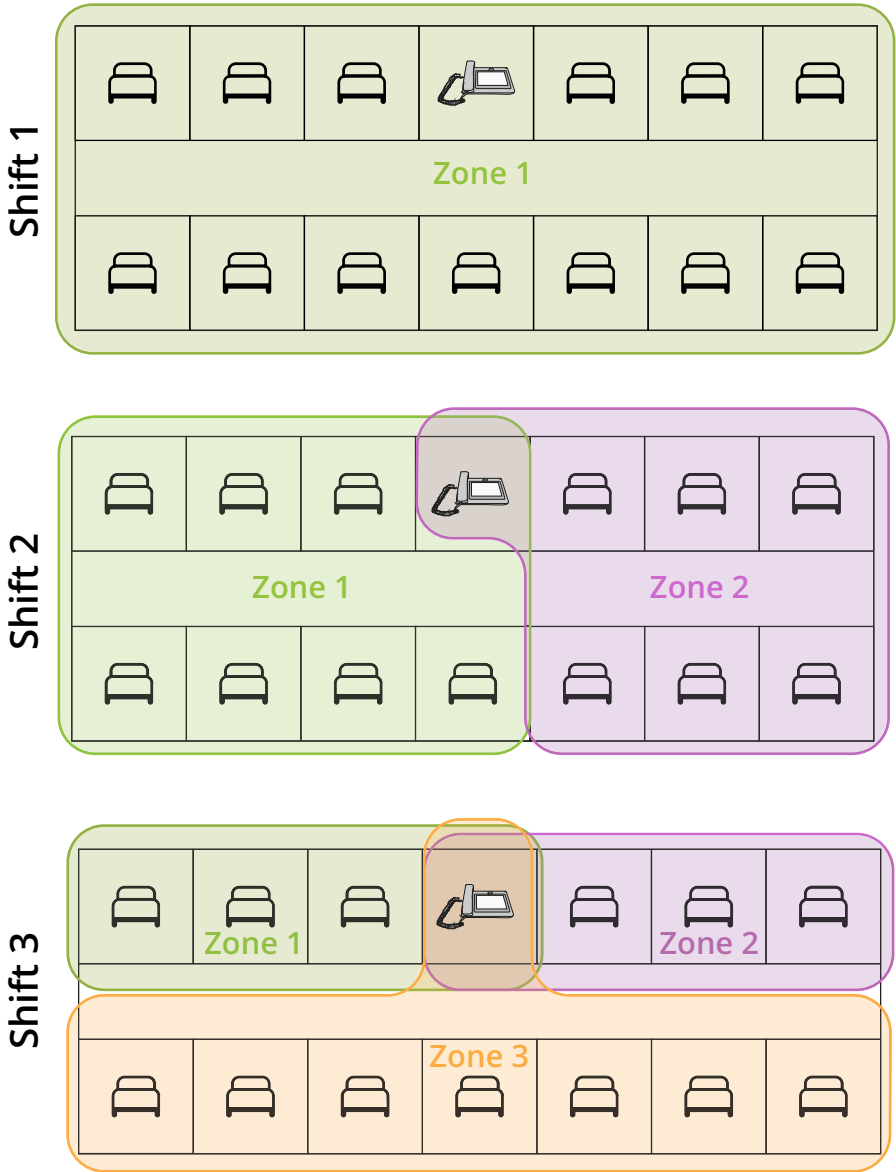


Fig. 52: Example with one ComStation^{IP} on the ward

10.1.5 Example with several ComStation^{IP} units on the ward

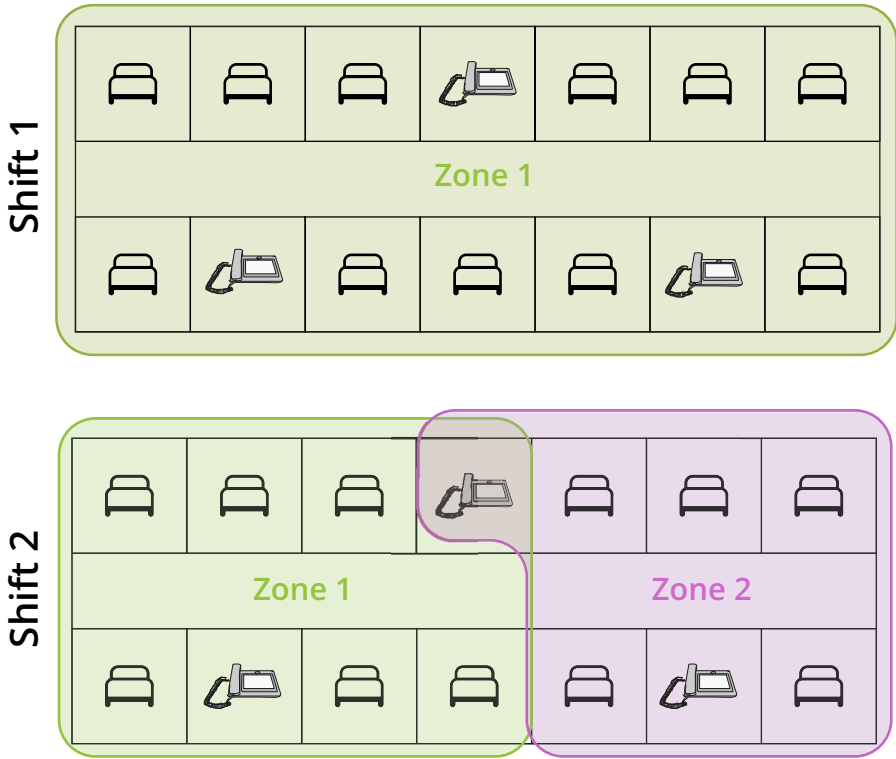


Fig. 53: Example with several ComStation^{IP} units on the ward

Ask your system administrator how the shifts are assigned on your ward.

10.2 Activating/deactivating a shift

This is how you activate and deactivate a shift:

1. Tap "SETTINGS" in the Home screen.

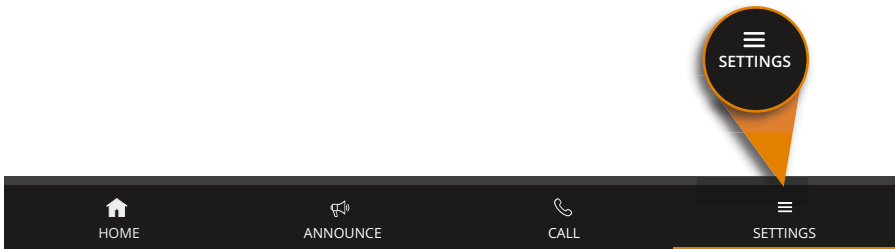


Fig. 54: Tap "SETTINGS"

2. Tap on "Shift" in the appearing "SETTINGS" window.
- ✓ The shifts that are available for your ward are displayed. The radio button for the active shift is selected. If no shift is active, the "None" radio button is selected. Only one radio button is selected at a time.

10 Shift operation

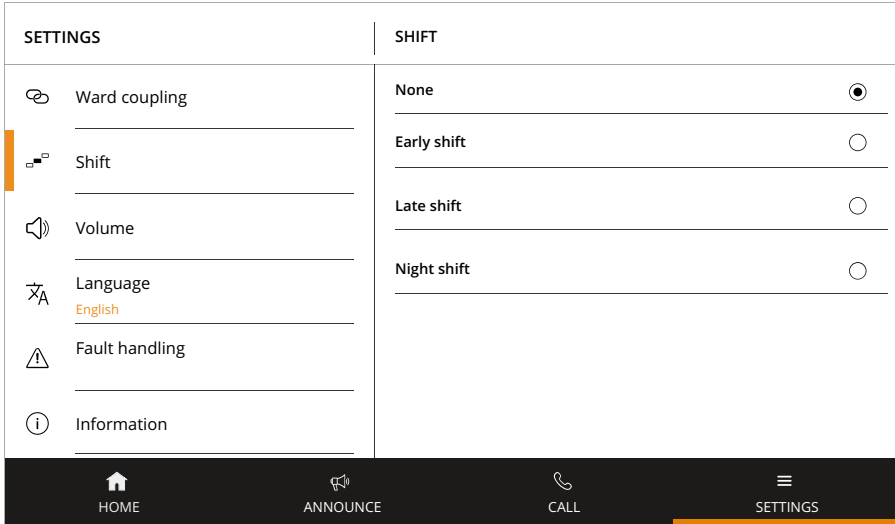


Fig. 55: Activating/deactivating a shift

3. Tap on the shift you want to activate. If you want to deactivate shift operation, i.e. no shift should be active, tap on "None".
- ✓ The radio button for the shift is selected. The shift is active.
4. Tap "HOME" to return to the Home screen.
- ✓ The process is complete.
 - ✓ If a shift is still active for your ward, you will find the shift icon in the status bar.



Fig. 56: Shift operation icon



NOTE! Ward coupling cancels shifts. This means that if a shift was active on your ward, it will be deactivated. The ward is no longer divided into zones. The status bar displays the ward coupling icon, see chapter "Ward coupling" as of page 79.

10 Shift operation



11 Adjusting the volume

You can set the following volumes of the ComStation^{IP}:

- System sounds (calls, faults)
- Volume of the handset
- Volume of the loudspeaker of the hands-free facility

You can adjust the respective volume when it is currently being output or when the ComStation^{IP} is in standby mode.

11.1 Adjusting the current volume

	Current volume up Tap and hold to increase the current volume of the ComStation ^{IP} .
	Current volume down Tap and hold to decrease the current volume of the ComStation ^{IP} .

Tab. 4: Volume keys

- If there is a speech connection via the handset, tapping the volume keys adjusts the volume of the handset.
- If there is a speech connection via the hands-free facility, tapping the volume buttons adjusts the volume of the loudspeaker.
- If there is no speech connection, tapping the volume keys adjusts the volume of the system sounds (calls, faults).



NOTE! The sound cannot be turned off completely. It can only be reduced to a minimum volume.

The settings are permanent, i.e. they only change if you change the setting.

11.2 Adjusting volumes in standby mode

You can set all three volume levels if there is no speech connection at the moment. Proceed as follows:

1. Tap "SETTINGS" in the Home screen:

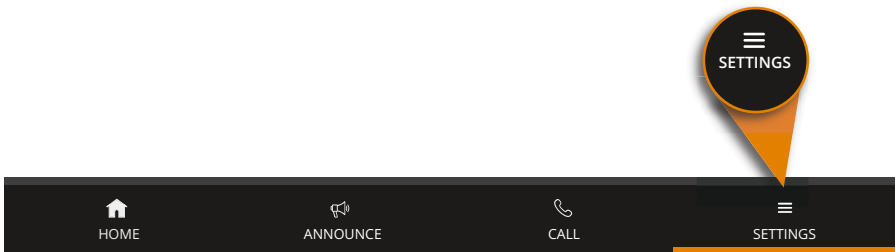


Fig. 57: Tap "SETTINGS"

1. Tap on "Volume" in the appearing "SETTINGS" window.
- ✓ The current volume settings are displayed:

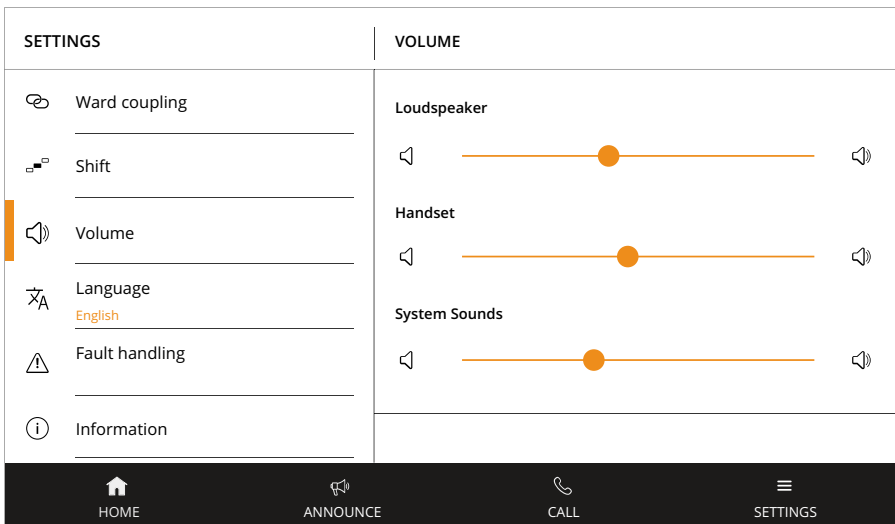


Fig. 58: Adjust volumes

11 Adjusting the volume



NOTE! The sound cannot be turned off completely. It can only be reduced to a minimum volume.

2. Adjust the desired volume levels by moving the respective control.

The settings are permanent, i.e. they only change if you change the setting.

3. Tap "HOME" to return to the Home screen.

12 Putting the device into operation

This chapter is for technicians who put ComStation^{IP} devices into operation.

This chapter covers the following topics:

- Scope of supply
- Location for the device
- Power supply
- Desktop installation or wall mounting
- Configuring the nurse call system
- Connecting the device
- Changing default setting for fault acoustic
- Changing default setting for privacy mode

The ComStation^{IP} is based on the IP desk telephone from the GRAND-STREAM company with adapted Android operating system. The nurse call functionality is pre-installed as an application. All other functions are inactive (kiosk mode).

12.1 Scope of supply

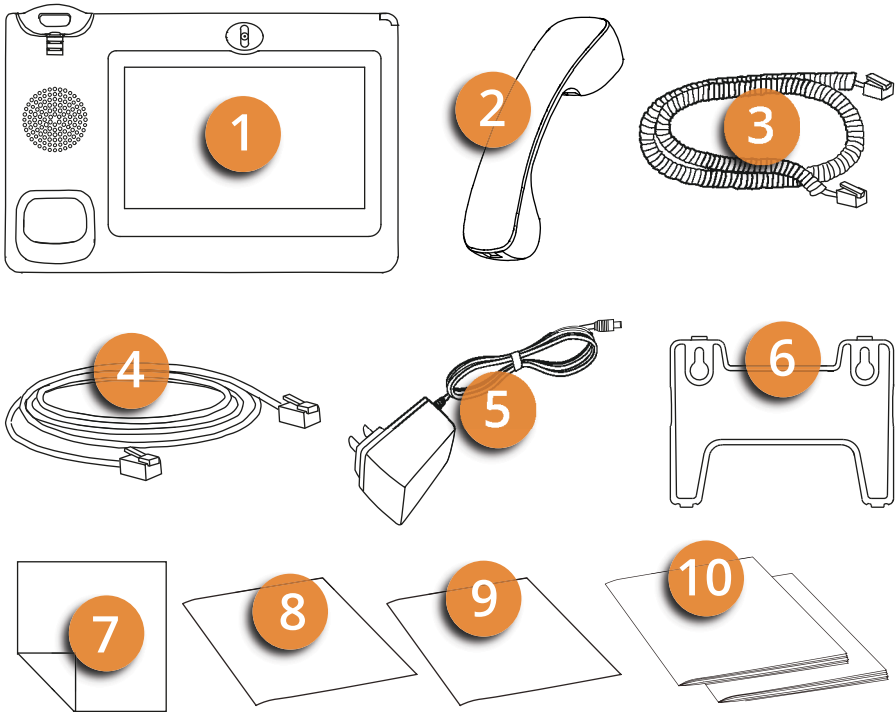


Fig. 59: Scope of supply

-
- [1] Main case
 - [2] Handset
 - [3] Handset cord
 - [4] Ethernet cable
 - [5] 12 V power adaptor
 - [6] Wall mount
 - [7] Screen cleaning cloth
 - [8] Installation Instructions for the ComStation^{IP}
 - [9] Quick reference guide for the ComStation^{IP}
 - [10] Documents by the GRANDSTREAM company (for technicians only!)
-

12.2 Location for the device

- This equipment should be installed and operated with minimum distance of 20 cm between the radiator and the body of the user.
- The device should be operated in a temperature range between 5°C and 40°C.
- For good hands-free quality, the area in front of the microphone (front right) should be kept clear. The optimum distance for hands-free talking is 50 cm.
- Do not place the device in a room with high dust generation, as this can considerably reduce the service life of the device.
- Do not expose the device to direct sunlight or other heat radiation, as this can damage the electronic components and the plastic housing.
- Do not operate the device in environments where steam is generated.

12.3 Power supply

The device can optionally be supplied with power as follows:

- with the supplied 12 V power adaptor (input: 100 – 240 V AC, 50 – 60 Hz; output 12 V DC, 1.5 A)
- in a LAN with PoE or PoE+ (PoE 802.3af Class 3, PoE+ 802.3at, Class 4)

12.3.1 Backup power supply

Observe the following protective measures both for the power supply via the 12 V power adaptor and via PoE:

The German standard DIN VDE 0834 stipulates that in the event of a failure of the general power supply, the nurse call system must be supplied from a power source for safety purposes according to DIN VDE 0100-200 and DIN VDE 0100-560. This power source shall take over the supply to the nurse call system no later than 15 s after failure of the general power supply and shall maintain operation for at least 1 hour. The operator has to ensure the safe operation even after the expiry of 1 hour by means of appropriate technical and organisational measures.

12.4 Desktop installation or wall mounting

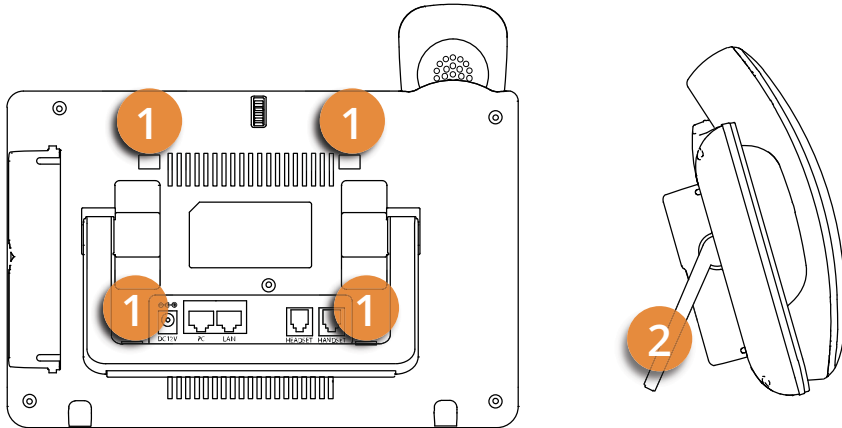


Fig. 60: Set up the device

-
- [1] Four mounting slots for fixing the wall mount
 - [2] Built-in stand for desktop installation
-

The device has an integrated stand [2] (figure 60). To use it, fold it out of the back of the device and adjust it to the desired angle. Ensure that the device is in a secure position.

12.4.1 Wall mounting

1. Attach the wall mount to the four mounting slots [1] (figure 60) on the back of the device.
2. Attach the device to the wall via the two key holes in the wall mount.
3. Pull out the tab below the handset cradle.
4. Rotate the tab and plug it back into the slot with the extension up [1] (figure 61) to hold the handset while the device is mounted on the wall.

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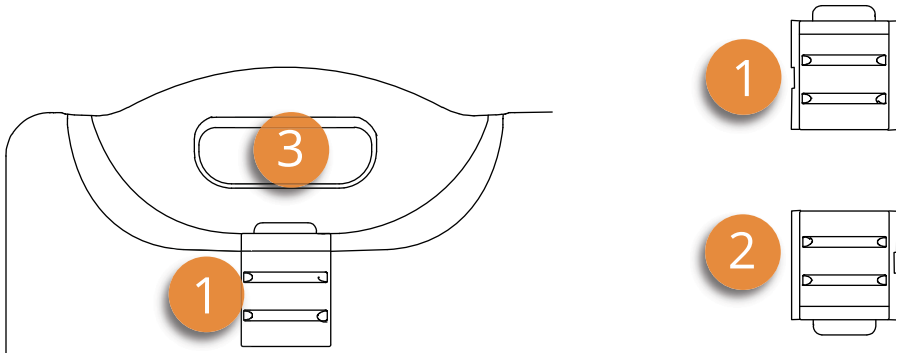


Fig. 61: Tab in the position for wall mounting or desktop installation

-
- [1] Tab in the position for wall mounting (tab with extension up)
 - [2] Tab in the position for desktop installation (tab with extension down)
 - [3] Handset cradle
-

12.5 Configuring the nurse call system

A prerequisite for using the ComStation^{IP} is that the nurse call system has been configured with the SystemOrganizer configuration software for using the ComStation^{IP}.

For configuration, the MAC address of the ComStation^{IP} must be known. This can be seen from a label on the ComStation^{IP}.

If the ComStation^{IP} is already in operation, the MAC address can also be found out from the "SETTINGS" menu.

1. Tap "SETTINGS" in the Home screen.
2. In the appearing "SETTINGS" window tap "Setup".

✓ The following view appears:

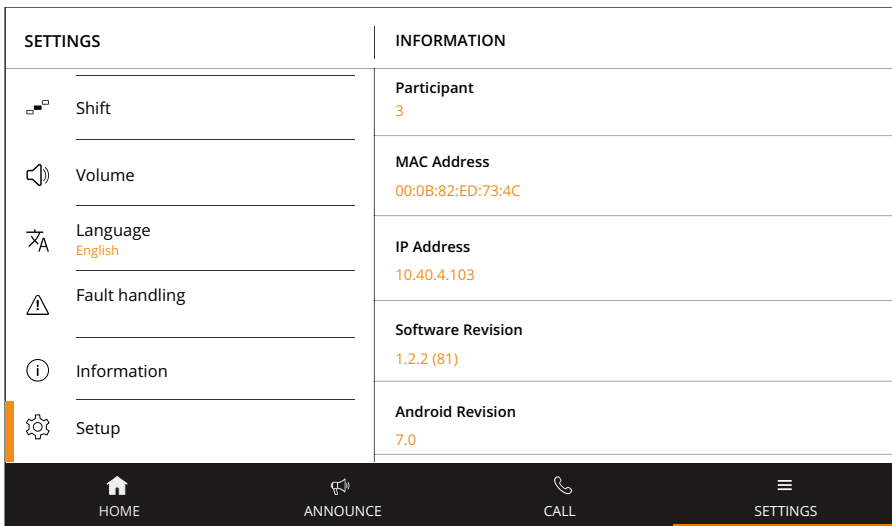


Fig. 62: INFORMATION



NOTE! If "(static)" is noted behind the IP address, a static IP address has been set on this device. This static IP address must also be entered in the SystemOrganizer for this ComStation^{IP}.

12.6 Connecting the device

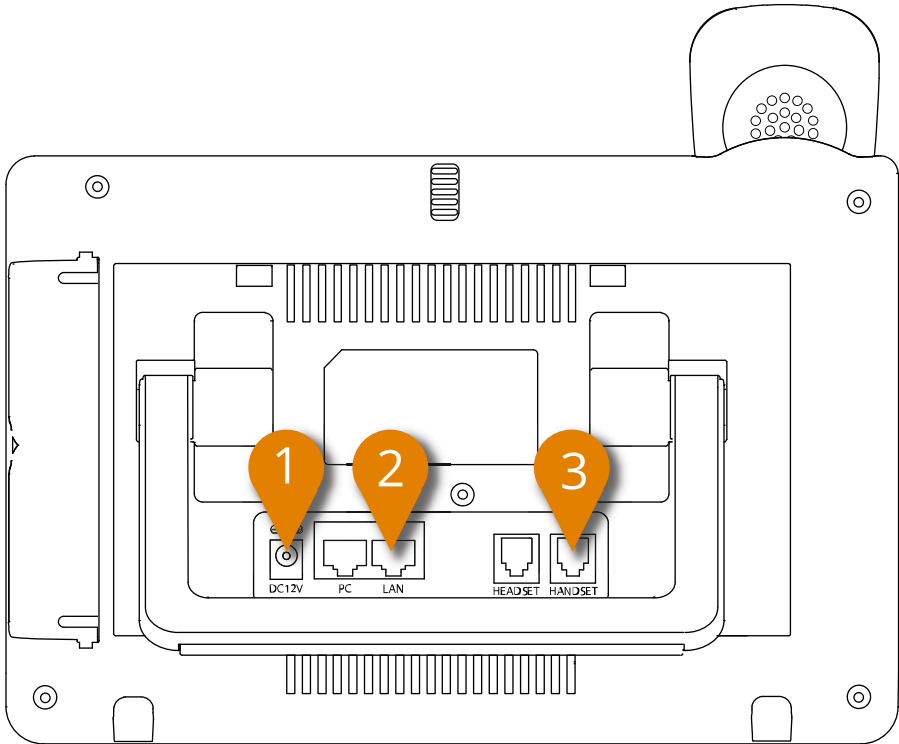


Fig. 63: Ports

-
- [1] Power jack for 12 V DC power adaptor (only required if the device is not powered via the Ethernet cable (PoE))
 - [2] LAN port
 - [3] RJ9 handset connector port
-

1. Connect the handset cord to the handset and to the port for handset cord [3] (figure 63).
2. Connect the Ethernet cable to the LAN port [2] (figure 63) and to the RJ45 connection box in the room. The RJ45 connection box must be

12 Putting the device into operation

connected to the nurse call system according to the Flamenco^{IP+} Technical Manual.



CAUTION! Only use the 12 V DC power adaptor included in the scope of delivery. Use of another power adaptor may damage the unit.

3. If the device is not powered by PoE or PoE+ (PoE switch), connect the 12 V DC power adaptor to the power jack [1]] (figure 63) and to a 230 V socket.
-



CAUTION! DO NOT switch off the device during system start-up or when updating the firmware. Doing so may damage the firmware.

- ✓ The device is starting up. The ComStation^{IP} app login screen appears automatically. The ComStation^{IP} is ready for operation.

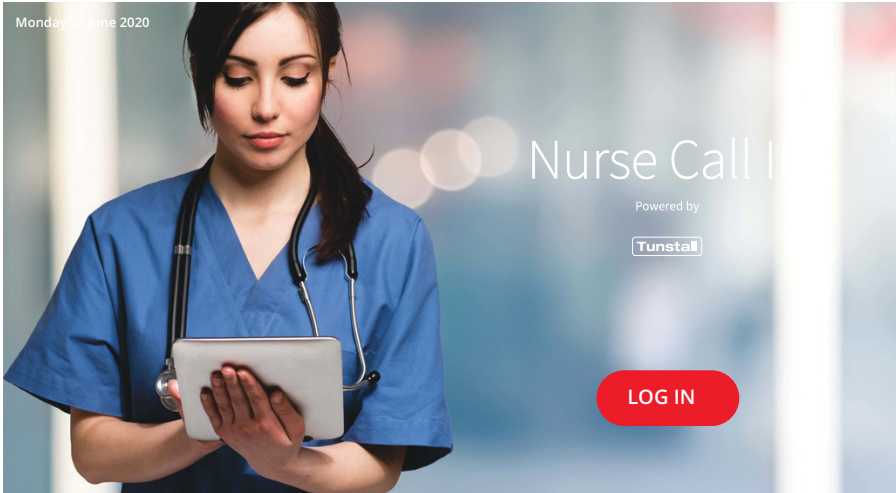


Fig. 64: Log in screen

12.7 Changing default setting for fault acoustic



NOTE! The described configuration setting is password protected because it may only be performed by a system administrator. The password can be obtained from Tunstall GmbH.

Faults are indicated by a special icon in the status bar and by a sound sequence, see chapter "1.2 If a fault is displayed..." as of page 10. It is possible to change the default setting with regard to the fault acoustic, i.e. in the event of a fault no sound sequence will sound (no fault acoustic).



WARNING! If there is a fault, it is possible that not all calls will reach the nursing staff. In the worst case, a patient dies if his or her call does not arrive.

▶ You may only switch off the fault acoustic if it is ensured that nursing staff and technicians are informed about all faults even without fault acoustic.

1. Tap "SETTINGS" in the Home screen.
 2. In the appearing "SETTINGS" window tap "Setup".
- ✓ The following view appears:

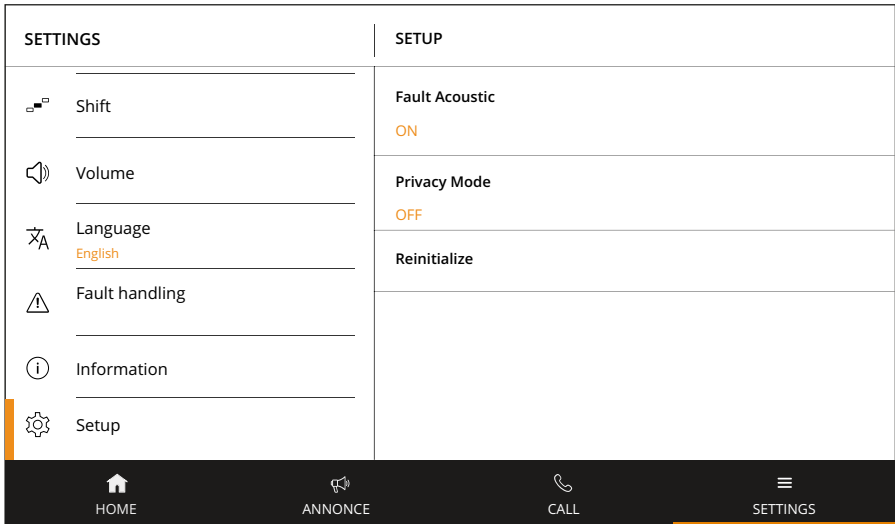


Fig. 65: SETUP

3. Tap on "Fault Acoustic".
 - ✓ The window for entering the password appears.
4. Enter the password. Then tap "CONFIRM".
 - ✓ The "Set fault acoustic" window appears.
5. Tap "OFF" to turn off the fault acoustic, or tap "ON" to turn on the fault acoustic.
6. The fault acoustic is set according to your selection. The current setting is displayed in the "SETUP" window.
7. Tap "HOME" to return to the Home screen.

12.8 Changing default setting for privacy mode



NOTE! The described configuration setting is password protected because it may only be performed by a system administrator. The password can be obtained from Tunstall GmbH.

If a speech connection to this ComStation^{IP} is established from another ComStation^{IP} or from the ManagementCenter, the privacy function is switched off, see chapter "8.5 Receiving a call" as of page 76. This means that the staff at this ComStation^{IP} is heard directly by the staff at the other end.

This default setting can be changed so that the privacy function is switched on first. Only when the staff at the ComStation^{IP} tap the crossed-out microphone icon, the privacy function is turned off.

1. Tap "SETTINGS" in the Home screen.
 2. In the appearing "SETTINGS" window tap "Setup".
- ✓ The following view appears:

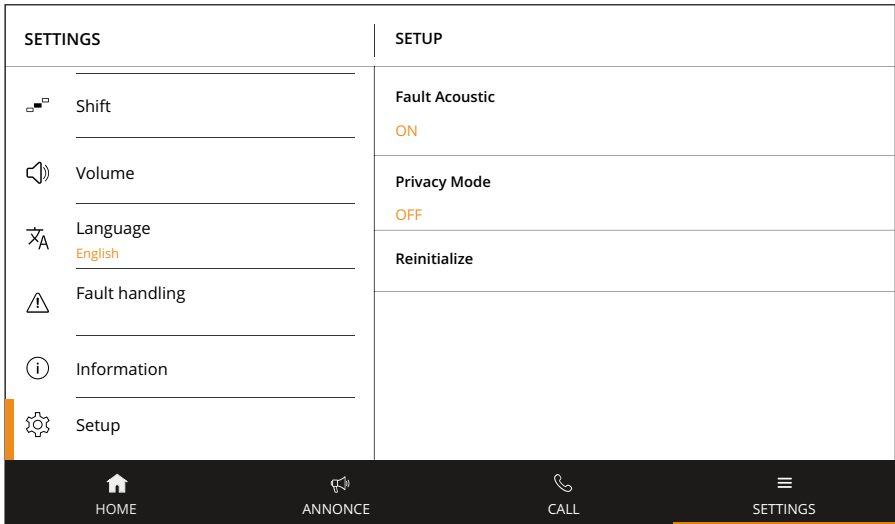


Fig. 66: SETUP

3. Tap on "Privacy Mode".

✓ The window for entering the password appears.

4. Enter the password. Then tap "CONFIRM".

✓ The "Set Privacy Mode" window appears.

5. Tap "ON" to turn on the privacy function, or tap "OFF" to turn off the privacy function.

6. The privacy function is set according to your selection. The current setting is displayed in the "SETUP" view.

7. Tap "HOME" to return to the Home screen.

12 Putting the device into operation

13 Cleaning and disinfection

Clean and disinfect the device when it is logged out so that no undesirable functions are triggered. To log out the device, see chapter "4.2 Log out" as of page 36.



NOTE! If the "LOGIN" button is accidentally activated when cleaning or disinfecting the device, the Home screen will be displayed. Log out again, see chapter "4.2 Log out" as of page 36.

CAUTION!



- ▶ Keep the device clean and dry, or may lead to electric shock or other perils.
 - ▶ DO NOT use disinfectant too frequently.
 - ▶ DO NOT use high degree or even pure disinfectant. It could damage the device.
-

For daily dust removal and fingerprint removal, please use the screen cleaning cloth in the scope of supply to wipe the device.

The housing of the device and the handset are made of ABS. The touch screen is made of glass. The spiral cable of the handset is sheathed with soft PVC.

For disinfection, you can use medical alcohol or isopropanol.

1. Spray a small amount of disinfectant on screen, handset, and other places that are easily touched by users.
2. Wipe the device with screen cleaning cloth.

13 Cleaning and disinfection

14 Technical data



NOTE! The ComStation^{IP} is an app that runs on a device from the GRANDSTREAM company. For detailed information about the device please refer to the documentation of the GRANDSTREAM company.

ComStation ^{IP}	
Order no.	76 0605 00
Dimensions (HxWxD)	84 x 252 x 211 mm
Weight	1080 g
Housing material	ABS
Touch screen	Glass
Power supply	PoE/PoE+ or using supplied power adaptor
Power consumption	– via PoE: approx. 11 W – via power adaptor: approx. 9 W
Power adaptor	– Input: 100 – 240 V AC, 50 – 60 Hz – Output: 12 V DC, 1.5 A
Ambient temperature:	
- Transport, storage	-10 °C to +60 °C
- Operation	0 °C to +40 °C
Relative humidity	10 % to 90 % (non condensing)

Tab. 5: Technical data

14.0.1 Disposal of the device



The device should not be disposed of via the normal household waste stream.

According to the European Directive 2012/19/EU on waste electrical and electronic equipment and its transposition into national law, equipment that is no longer fit for use must be collected separately and recycled in an environmentally sound manner.

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