

**emea**

**iCall**  
**SIP 205/206**  
**V1.0.0**



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## Intended use

Use this product only for the purpose it was designed for; refer to the data sheet and user documentation for details. For the latest product information, contact IndigoCare Europe. This iCall SIP 205/206 guide is a working and supporting tool for certified engineers for installing and maintaining iCall installations.

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# Revision history

<b>  Date</b>	<b>  Revision</b>	<b>  Description</b>
<b>2020-04-09</b>	1.0.0	First version
<b>2020-11-20</b>	1.0.1	Layout changes
<b>2020-11-30</b>	1.0.2	Added dimensions from wall mounting

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# 1. Introduction

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The iCall SIP 205 (NWASIN0205) and iCall SIP 206 (NWASIN0206) are room terminals of the iCall call system. An integrated SIP audio client for voice communication between the rest home or hospital staff and the patient.

This unit is equipped with an iCall LB connection, ethernet, microphone, speakers and more. This makes the device ideal for VOIP communication, in addition of course, to the standard functioning call system.

The installation and configuration is easy, through for example, the various power connectivity options such as PoE, power injection or direct connection to external power. Furthermore the device supports up to 50 iCall LB products (max 5 where power supply takes place through PoE or power injection) per every appliance which can be set up via the web interface.

The combination of these factors means that this device is one of the most versatile and flexible products within the iCall range.



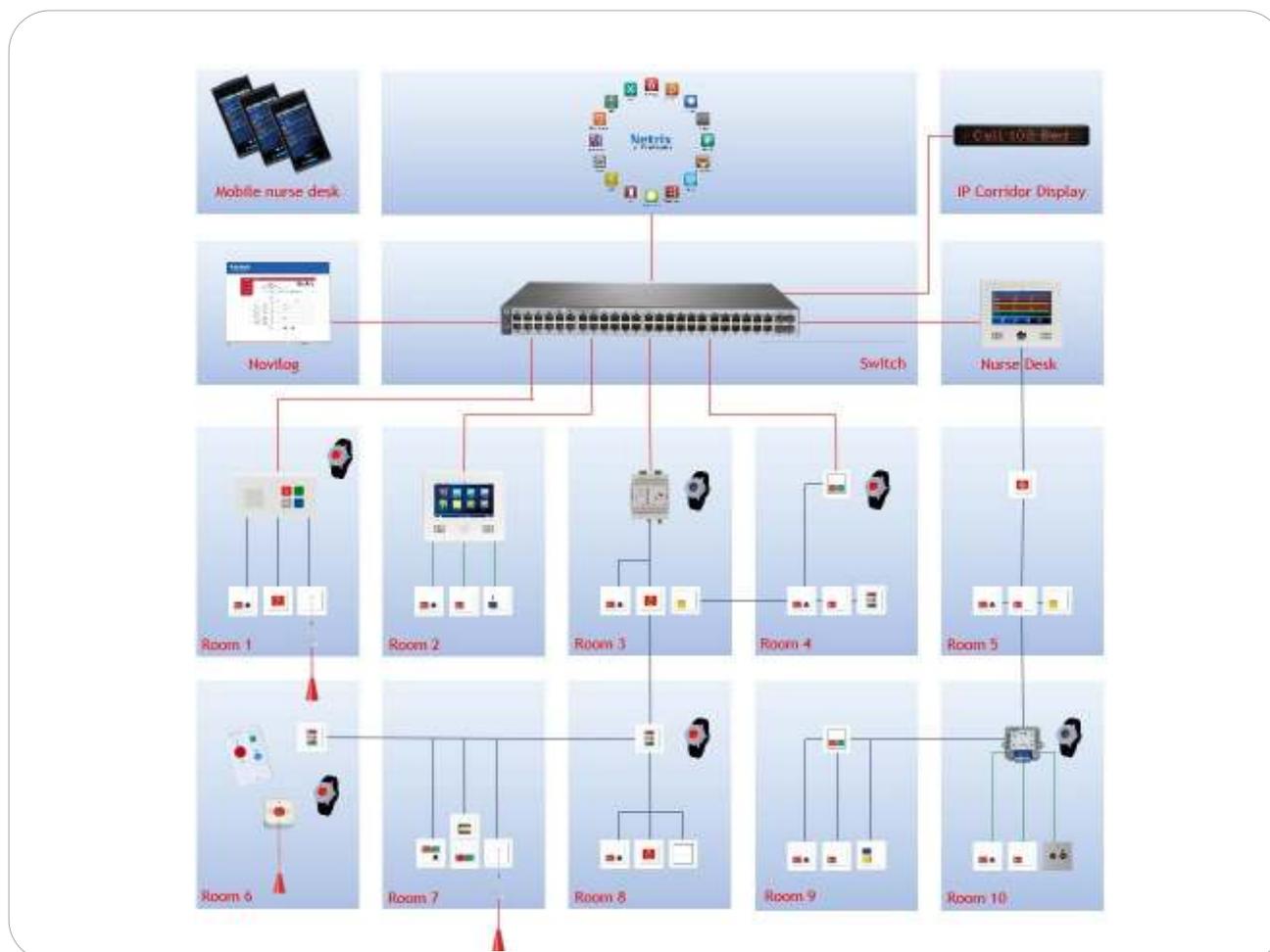
iCall SIP 206 (RGB)  
NWASIN0206



iCall SIP 205 (RGY)  
NWASIN0205

## 2. Installation

### 2.1. Topology

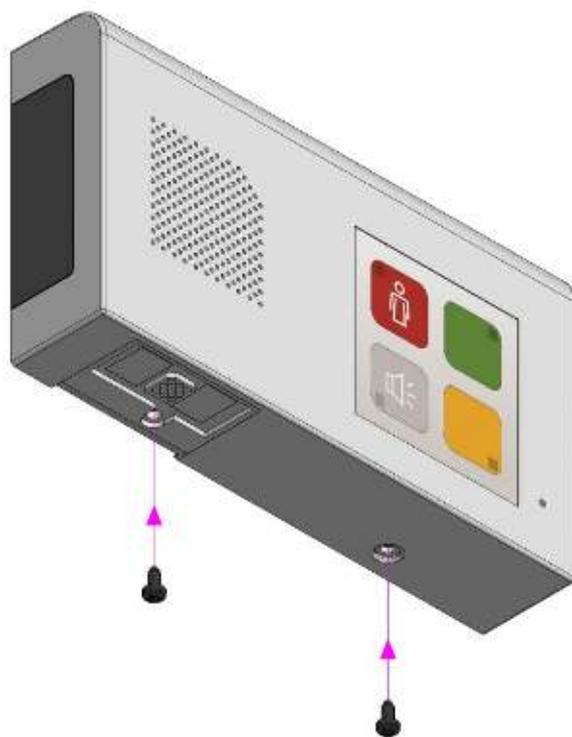
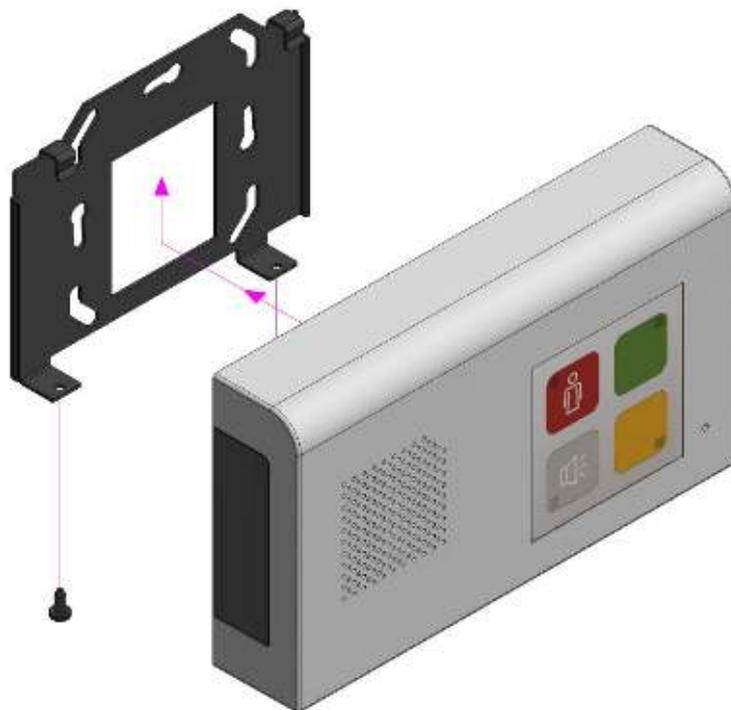


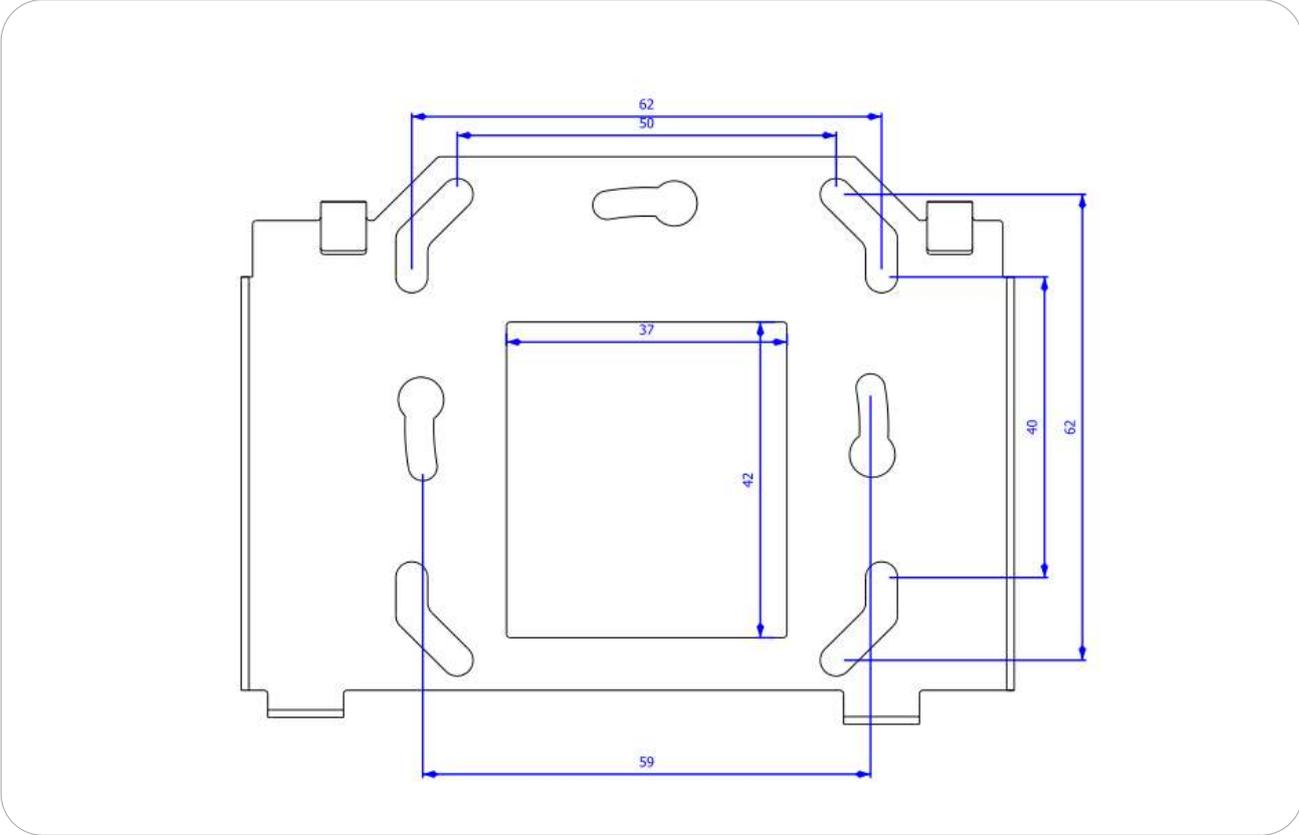
### 2.2. Wiring

A maximum of 50 local bus units can be attached to each iCall SIP 205 or iCall SIP 206 unit. The local bus units are connected using a four-wired cable connected to the four-pin plug connector at the back of the iCall SIP 205/206 units.

The data network is connected through the LAN connector, PoE is supported and can power the iCall SIP 205 or iCall SIP 206 unit and maximum 5 local bus units.

## 2.3. Mounting instructions





## 2.4. Connections



1. Local bus connections
  - + , +24V DC
  - - , GND
  - Tx
  - Rx
2. LAN connection
  - 10/100/1000 Mbps
3. Auxiliary connector's  
Future use

## 2.5. Power Supply

There are 3 options as power supply to the iCall 205/206:

- PoE (Power over Ethernet)
- Power injection
- Standard 24V DC on the local bus connector

## 3. Components

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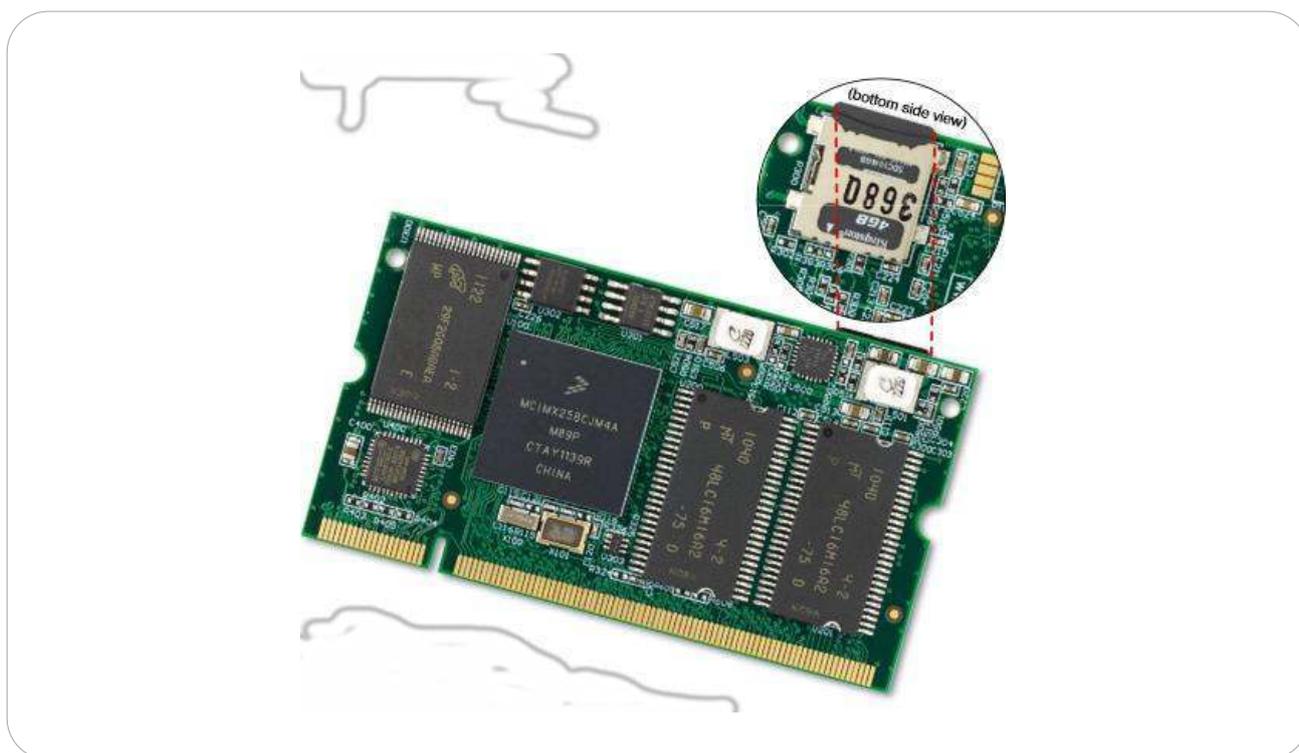
The iCall 205/206 SIP unit consists out of three modular components:

- Computer-On-Module (COM) with the processor
- $\mu$ SD card
- Motherboard.

The advantage of this modular design is that components are easily interchangeable and replaceable.

### 3.1. Computer on Module

The COM board contains the i.MX25, RAM and the various electronic components required for the functioning as a computer system. The boot loader, the OS (Linux) and the various drivers are installed on the internal flash memory of this module.



**Please note!**

**These electronics are very sensitive to electrostatic charges. Make sure you are ESD safe when touching this board.**

## 3.2. $\mu$ SD card

The  $\mu$ SD card contains the iCall application and the device settings. In addition the necessary files for the proper functioning of the Linux OS are located here.

The file system is EXT4 making these cards unreadable in a Windows environment; a Linux operating system is required.

These cards are perfectly interchangeable with each other, meaning a defective  $\mu$ SD card can be quickly replaced. We are currently using versions from 2GB to 16GB.



## 3.3. Motherboard

The motherboard is built into the housing and takes care of all connections between the processor and the outside world. It includes an microphone, speaker and ethernet port and a DIMM socket for connecting the COM module.



To remove the COM board from the motherboard the latches on the side need to be moved aside and the board removed from the connector at an angle. To place the daughter card back in the motherboard it must be slid into the connector at an angle of approximately 45° and pushed down.



# 4. Configuration

You can program the system via the web interface of the iCall 205/206 SIP, browse to <http://1.1.1.1>. The unit can be configured fully in accordance with your preferences. Via the menu on the left you can navigate to the specific components.

Default credentials to access the webpage of the iCall 205/206 SIP unit:

Default IP address: 1.1.1.1  
user: web  
password: web

## 4.1. Addresses

All local bus stations that are registered on the iCall 205/206 SIP unit can be located on the addresses page. To find out the registration process for a particular local bus stations it's advisable to consult the hardware installation guide. A maximum of 50 LB stations can be connected to the iCall 205/206 SIP unit, if powered on 24V DC, and maximum 5 LB Stations if powered on PoE.



**TIP:** The next ID can be changed by pressing the “Next ID:” field.

**TIP:** The address registration need to be enabled before new call stations can be added to the bus.

**ID:** This is the ID of the call station. This ID can be a value between 0 and 50. ID 0 is always reserved for the master, in this case the iCall 205/206 SIP unit. Local bus stations can therefore have an address of 1 to 50.

**Type:** Select here the type of station connected to the bus on this address. The system will automatically suggest a station type and will limit the types that can be chosen based on the serial number.

Type	Description	Part #
Bed	The button will be assigned as a bed call station, especially for call cord buttons	
Toilet	In this case the activation of the button will raise a toilet call	
Room + ID	The call button and present function by using ibutton identification	NWBAES2200 NWBAES2225
Emergency	In this case the activation of the button will raise an emergency call	NWBAES2600
IO	Old IO station from before January 2015	Not available
Light [3 fields]	Dome light with 3 light fields (red, yellow, green) or (red, white, green)	NWBAES3850 NWBAES3851
Emergency-Assistance	Special button offering yellow and blue function. Yellow = staff assist Blue = emergency	NWBAES2650
TeleAlarm receiver	Receiver for Telealarm wireless call points	NWBAES4900
Mini Display	Mini display for use in patient room, will indicate calls when the nurse is present	NWBAES2800
IO (V2)	IO station, can connect up to 5 inputs and 4 outputs	NWBAES3900
WZ Receiver	Old receiver from before December 2014	Not available
Cancel Toilet	Special pull string button to cancel Toilet call, no present function possible.	NWBAES2170
Acoustic	Call point that raise alarm based on acoustic thresholds.	NWBAES2401
RFID (Present)	RFID reader for present activation, this for nurse identification. Button function can be programed.	NWBAES2900 NWBAES2901
RFID (AccessControl)	RFID reader for access control, this button will use the RFID information to give access to a room or not.	NWBAES2903
iButton (AccessControl)	iButton reader for access control, this button will use the iButton information to give access to a room or not.	NWBAES2230
Light [5 fields]	Dome light with 5 light fields (red, yellow, green, white and blue).	NWBAES3856
Code Blue	In this case the activation of the button will raise a Code Blue call.	NWBAES2700
Extended light	Dome light with 3 light and additional output for 2 extra lights.	NWBAES3855
Present Toilet	Special pull string button to cancel Toilet call, by using first the present mode	NWBAES2180

State: This is the actual status of the specific button.

The button can be in the following state:

- Idle
- Present
- Call
- Toilet
- Assistance
- Emergency
- Code Blue
- Search
- Error
- Unknown

Room: Room number, up to 5 alphanumeric characters can be entered.

This is the room number to which this address belongs. In this way various Local bus stations that are physically installed in the same room can be linked to a specific room. You can link a maximum of 10 addresses to one room number.

**TIP:** For a dome light the "\*" function can be used to allocate more beds (rooms) to the same dome light.

Example:

Bed 1 = room number	: 100A
Bed 2 = room number	: 100B
Dome light = room number	: 100*

Addition: Any additional information up to 15 characters can be entered. The information in this field can be transported through the system, no system operation is influenced by this data.

Serial: The serial number associated with the specific call station.

Last Press: The last time indication where the unit was activated.

**Buttons at the bottom of the addresses page:**

Refresh: By pressing the refresh button the webpage will refresh and show the latest available info, the page will also automatically refresh on its own.

Clear all calls: Pressing this button will clear all calls currently in the system.

Group edit: When selecting the checkbox in front of the audiounit or registered local bus units, you can alter multiple settings at the same time ( roomnumber, type and addition) for the selected units.

Enable/disable address registration:

You can activate the address registration, when the button is red the registration is activated.

## 4.2. Rooms

All rooms programmed on this device can be found on the room's page. The list of visible rooms is automatically generated based on the room numbers assigned in the addresses page. All addresses associated with one room number are grouped in this way. You can manually add virtual rooms if you only wish to use wireless call stations.

Room	State	Resident Name	Location	Routes	Addresses	Callback #	TeleAlarm ID
<input type="checkbox"/> 1000	Idle		Floor 1		0	1000	
<input type="checkbox"/> 1100	Idle		Floor 1		-		
<input type="checkbox"/> 2100	Idle		Floor 2		-		

Group edit

Add Room

**State:** This is the actual status of the room.  
The room can be in the following state:

- Idle
- Present
- Call
- Toilet
- Emergency
- Assistance
- Code Blue



This icon will activate the automatic learn function for the wireless call stations.

This icon indicates that automatic learn function is active, by activating the icon the automatic learn function will be disabled.

If the automatic learn function is active a call action on the wireless call station will result in adding the ID from this wireless call station to the room. A maximum of 4 wireless call stations can be added to a room.



When a room is in a Call state the clear call icon will appear at the back, pressing this icon will set the room in the idle state

**Add Room:** To add a new room where no wired buttons are available. If for example the system is mainly used in wireless environments, the call stations are connected to virtual rooms. A maximum of 150 virtual rooms can be assigned per iCall 205 /206 SIP unit.

**Group edit:** You can select multiple rooms and change the location for all the selected rooms. The rooms can be selected by the selection box before the room number. Also the periods-route coupling can be made for multiple rooms.

**Edit room 1000**

Resident 1:

Resident 2:

Room:

Location:

Callback #:

TeleAlarm ID 1:

TeleAlarm ID 2:

TeleAlarm ID 3:

TeleAlarm ID 4:

Periods:

Routes:

Addition:

RSSI:

Cancel:

SingleTrigger:

**Resident 1 or 2:** If desired the name/names of the room occupants can be provided here. Up to two names can be entered. This info will be sent via broadcast when a room call is made.

**Room:** The number of the room. Max 5 alphanumeric characters

**Location:** A room location can be provided here. Calls are always filtered by location, so, if for example there is a room 100 on the first and second floor, one would, for example, enter location **1<sup>st</sup> FL** and **2<sup>nd</sup> FL** for the rooms on the first and second floor respectively. A call from room 100 from the 1st floor will not affect the status of the room 100 on the second floor.

**Callback #:** Extension number connected to this room, for the one iCall 205/206 sip unit this value is the SIP registration number.

**TeleAlarm ID 1-4:** Assign the ID of the wireless transmitter related to this room, and the addition for this transmitter. A maximum of 4 transmitters can be assigned per room.

**Addition:** Any additional information up to 15 characters can be entered. The information in this field can be transported through the system, no system operation is influenced by this data.

**RSSI:** This is an indication on the value of the signal strength for the last transmission of the wireless call station.

**Cancel:** Activating this function will result in a direct cancel of the call if the cancel command is send out by the transmitter. (example: magnetic cancel on the wireless call station)

If this function is active, no present mode is possible.

**Single trigger:** Activating this feature will result in a single events send out to the message server if a call state is activated. The room will not go in call state.

**Routes:** These are the routes followed for every period for this room. The route indicate which flow must be followed to the Netrix Server.

**TIP:** The room number and the location are the most important parameters. Especially if you need to make different departments on the nurse station. The nurse station can show calls per different department.

## 4.3. Routes

Routes indicate the group or profile on the Netrix to which the calls will be sent. For each type of call a different group or profile can be configured. The call is sent X (repetition) times to this group or profile before proceeding to the following group or profile. An indicative name can be assigned to each route. This name is only used as a label. The repetition time can be programmed in the setting section. A maximum of 20 routes can be assigned.

ID	Name	Profile	repetitions	Assist	Emergency	Code blue	Door	In#1	In#2	In#3	In#4	In#5	1	2	3	4	5	6	Buzzer	Present	CF Buzzer		
1	Route 1	100:1	100:0	100:0	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

Add

To edit, click the icon.

To delete this route, click the icon.

Press add button to create a new route

### Edit route: 1

Route name:	<input type="text" value="Route 1"/>	Repetitions:	<input type="text" value="1"/>
First address:	<input type="text" value="100"/>	Repetitions:	<input type="text" value="0"/>
Second address:	<input type="text" value="100"/>	Repetitions:	<input type="text" value="0"/>
Third address:	<input type="text" value="100"/>		
Last address:	<input type="text" value="100"/>		
Assistance:	<input type="text" value="100"/>		
Emergency:	<input type="text" value="100"/>		
Code blue:	<input type="text" value="100"/>		
Door:	<input type="text" value="0"/>		
Input 1:	<input type="text" value="0"/>		
Input 2:	<input type="text" value="0"/>		
Input 3:	<input type="text" value="0"/>		
Input 4:	<input type="text" value="0"/>		
Input 5:	<input type="text" value="0"/>		

### Room display settings

Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Buzzer	Present	CF Buzzer
<input type="checkbox"/>								

Save

Route name: An indicative name can be assigned to each route.

First address: First group that will be activated for a call or toilet call or medallion call, if present and away to Netrix is active in the settings screen also the present and away will activate this group in the Netrix.

Repetition: Counter that indicates how many times the first address group must be executed

Second address: Second group that will be activated for a call or toilet call or medallion call  
 Repetition: Counter that indicates how many times the second address group must be executed

Third address: Third group that will be activated for a call or toilet call or medallion call  
 Repetition: Counter that indicates how many times the third address group must be executed

Last address: Last group that will be activated for a call or toilet call or medallion call, if the call is active for a very long time this group will be activated every x time (see setting page) until the call is canceled.

**TIP:** The time between the group call escalations is programmed in the settings page.

Assistance: The group that will be activated for a staff assist call  
 Emergency: The group that will be activated for an emergency call  
 Code Blue: The group that will be activated for a code blue call  
 Door: The group that will be activated for a door activation  
 Input 1: The group that will be activated for an input 1 activation  
 Input 2: The group that will be activated for an input 2 activation  
 Input 3: The group that will be activated for an input 3 activation  
 Input 4: The group that will be activated for an input 4 activation  
 Input 5: The group that will be activated for an input 5 activation

**TIP:** Door and Input 1-5 will not change the room status, these inputs will activate a group in the Netrix.

The following settings are related to the iCall local bus mini display NWBAES2800 and Call following feature.

Group 1-6: Depending on the active route the display will show group number locations. The groups are allocated in the “Room display groups” section.

Buzzer: The buzzer can be activated or deactivated, depending on the time of the day the display’s buzzer will be sounding or not.

Present: Activating the present checkbox will show the present information on the iCall local bus mini display. Disable this if the display must indicate only active calls.

CF Buzzer: The call following feature can be enabled in this route, the call following function will work only for the selected locations configured in Group 1-6

**TIP:** To use the call following function, the call following selection box in the settings page must be activated.

## 4.4. Periods

The periods are used for selecting the time of the day, depending on the active period the related route for a room call will be followed. The result is that depending on the room and the period of the day a different group can be activated in the Netrix server.

Example:

In “day mode” the mobile devices from the day nurses will get the annunciation of the call, in another period “night mode” other mobile devices get the annunciations.

### Periods

Active period: (Day mode)

ID	Name	Time	M	T	W	T	F	S	S		
1	Day mode	08:00	1	1	1	1	1	0	0		
2	Night mode	20:00	1	1	1	1	0	0	0		
3	Weekend	20:00	0	0	0	0	1	0	0		

Add

By clicking the icon a different name (label) can be assigned to each period. The time indicates when the period begins. You can also specify the days to which this applies. By clicking the icon the period will be removed. On top the indication from the period which is currently active.

### Edit period: 1

Period name:

Time:

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Sunday

Save

PS is enabled:

Time and date don't have to be filled in because this information is sent from the period selector to the iCall 205 / 206 SIP, the period selector determines the switching of the period of the day. The active period selector is programmed in the settings page.

## Periods

Active period: (Day mode)

ID	Name		
1	Day mode		
2	Night mode		
3	Weekend		

## 4.5. SIP

All settings can be adapted for use of the integrated SIP client in the SIP page. The client needs to register with a PBX and support the following codes: **G.711 A-law** and **μ-law**. It is also possible to apply an Acoustic Echo Cancellation (AEC) filtering during a conversation.

### SIP

#### General settings

Server:	192.168.10.13
Port:	5060
Username:	1000
Password:	1234
Register:	<input checked="" type="checkbox"/>
Registered:	Yes

#### Volume settings

Ringtone Volume:	10
SIP Volume:	35
PA Volume:	50
Buzzer Volume:	50
MIC:	75

#### Other settings

Block all calls:	<input type="checkbox"/>
Ringtone in idle:	<input type="checkbox"/>
Max. duration call(s):	120
Re-reg time:	3600
Ringtone:	Ring

#### Echo cancellation

Enable:	<input checked="" type="checkbox"/>
Frame:	128
Tail:	2048
Delay:	2200

#### Echo suppression

Enable:	<input type="checkbox"/>
Threshold:	0,05
Speed:	0,1
Force:	100
Sustain:	250

#### DTMF settings

Enable:	<input checked="" type="checkbox"/>
Char for room cancellation [RFC2833]:	8
Dtmf send mode:	RFC2833

#### Multicast groups

Select All:	<input type="checkbox"/>
Channel 1:	<input type="checkbox"/>
Channel 2:	<input type="checkbox"/>
Channel 3:	<input type="checkbox"/>
Channel 4:	<input type="checkbox"/>
Channel 5:	<input type="checkbox"/>
Channel 6:	<input type="checkbox"/>
Channel 7:	<input type="checkbox"/>
Channel 8:	<input type="checkbox"/>
Channel 9:	<input type="checkbox"/>
Channel 10:	<input type="checkbox"/>
Channel 11:	<input type="checkbox"/>
Channel 12:	<input type="checkbox"/>
Channel 13:	<input type="checkbox"/>
Channel 14:	<input type="checkbox"/>
Channel 15:	<input type="checkbox"/>
Channel 16:	<input type="checkbox"/>
Channel 17:	<input type="checkbox"/>
Channel 18:	<input type="checkbox"/>

Save

Server:	IP address of the sip server. The SIP client is tested and released on NEC, Alcatel, Grandstream UCM6202 and FreePBX (Asterisk based).
Port:	Port on the SIP server where the client has to make the registration. By default 5060 is used.
Username:	The username for the SIP registration.
Password:	The password for the SIP registration.
Register:	If enabled the SIP client will try to make registration on the SIP server.
Registered:	Status on the SIP registration.
Ringtone volume:	Volume of the sounder for an incoming voice call and the announcement tone for incoming handsfree call.
SIP volume:	Volume of the SIP conversation.
PA volume:	Volume of the public announcements page.
Buzzer Volume:	Volume of the buzzer for incoming nurse call.
MIC:	Sensitivity of the microphone.
Block all calls:	Totally block incoming SIP conversations.
Ringtone in idle:	When enabled, incoming SIP calls need to be accepted by pressing the gray button. If the room is not in idle mode the incoming call will automatically be answered.
Max.duration Call(s):	The maximum duration of SIP call. After expiring of this time the SIP conversation will be disconnected.
Re-reg time:	Re registration time for the SIP registration on the sip server.
Ringtone:	Selection box for selecting the ringtone.
Echo Can. enable:	Echo Cancellation ON/OFF.
Echo Can. frame:	Frame size for echo canceller (should be 128 or 160)
Echo Can. tail:	Tail length for echo canceller (should be 800=100ms)
Echo Can. delay:	Delay time between speaker and microphone (should be 2200)
Echo sup. enable:	Acoustic echo suppression ON/OFF.
Echo sup Threshold:	Acoustic echo suppression threshold.
Echo sup Speed:	Acoustic echo suppression speed.
Echo sup Force:	Acoustic echo suppression strength.
Echo sup. Sustain:	Acoustic echo suppression length of suppression.
DTMF enable:	Enable or disable the function to cancel a call from remote. This function is only available during a conversation.
Char for room can.:	The digit to press for activating the room cancellation function.
DTMF send mode:	The mode of DTMF encoding for the use of this feature.
Multicast groups:	UP to 18 public announcement groups (multicast groups) can be programmed. The group with the lowest number has the highest priority. The volume of the public announcement group can be programmed in the previous settings. Public announcement groups can be activated from the Netrix server or from the software "Audio gate".

## 4.6. Room display groups

The room display entries are used in the route to determine which location must be displayed on the local bus mini display (NWBAES2800) and its also determine the call following for the room calls. A maximum of 6 groups and maximum 3 locations per group can be assigned. The use of "\*" will allow to show all locations. In the routing program can be decided which locations (groups) can be shown.

**TIP:** In the page routes you can select which groups you want to see on the mini display for each route.

### Room display groups

ID	Location 1	Location 2	Location 3		
1	Floor 1				
2	Floor 1	Floor 2	Floor 3		
3	Floor 4	Floor 5			

Add

## 4.7. Internet radio

From Q4 2020 there will be a multimedia handset available. On this handset you can select 8 different internet streaming radio channels. The name and internet link can be programmed in this menu.

### Internet Radio

Channel	Enabled	Name	URL
1	<input checked="" type="checkbox"/>	HF FM	http://94.23.48.124:8000
2	<input checked="" type="checkbox"/>	Q Music	https://20103.live.streamtheworld.com:443/QMUSIC.mp3
3	<input checked="" type="checkbox"/>	MNM	http://icecast.vrtcdn.be/mnm_high-high.mp3
4	<input checked="" type="checkbox"/>	Klare	http://icecast.vrtcdn.be/klare-high.mp3
5	<input checked="" type="checkbox"/>	Stu Bru	http://icecast.vrtcdn.be/stubru-high.mp3
6	<input checked="" type="checkbox"/>	Radio 1	http://icecast.vrtcdn.be/radio1-high.mp3
7	<input checked="" type="checkbox"/>	Radio 2	http://icecast.vrtcdn.be/radio2-high.mp3
8	<input checked="" type="checkbox"/>	Top Radio	http://loadbalancing.topradio.be/topradio.mp3

Save

## 4.8. Access control

The Access control list is an only view screen, no changes can be made in this screen. The list is an overview from all ID card or buttons that have access to some rooms. The programming from the access can be done by using the Veripass software (NWAAIN0100).

### Access Control

Last update: 7/04/2020 10:40:54

Room	Location	Keys
1004	Floor 4	1234567890 0000000940002c

## 4.9. Telealarm locations

The TeleAlarm locations are used to identify the ID's from the TeleAlarm beacons. Every beacon can have his own name. So the staff does not have to remember the number, but will get a name indication. The beacons are used to locate medallions if the patient raises a call, in case of wandering alarm to indicate at which door the patient is located.

### TeleAlarm locations

ID	Location	
122	Front door	X
123	Back door	X
85	Floor 1	X
86	Floor 2	X

Save

Add

## 4.10. Settings

### Settings

#### IP settings

IP address	192.168.10.30
Subnet	255.255.255.0
Gateway	192.168.10.1
DNS	8.8.8.8

#### Web settings

Language	English
Clientname	IndigoCare
Devicename	Audio-Link
Username	web
Web password	
Repeat web password	

#### Server settings

State primary Netrix	-
State backup Netrix	-
Calls to Netrix	<input checked="" type="checkbox"/>
Calls to	<input checked="" type="radio"/> Group <input type="radio"/> Profile
Primary Netrix IP	192.168.10.11
Secondary Netrix IP	192.168.10.11
Netrix Port	6000
Cyclic Sending	<input type="checkbox"/>
Cyclic Group	999
Cyclic Time (s)	3600
State iLink	Not used
Calls to iLink	<input type="checkbox"/>
iLink IP	192.168.10.12
iLink Port	7475
Broadcast calls	<input checked="" type="checkbox"/>
UDP broadcast IP	255.255.255.255
UDP broadcast Port	7475
NTP timeupdate	<input checked="" type="checkbox"/>
NTP server IP	192.168.10.12

#### Call settings

Rep. time calls	180
Rep. time assistance	180
Rep. time emergency	30
Rep. time code blue	30
Profile/group errors	100
No errors	101
Telealarm Group [other types]	103
24H Group	102
CF Buzzer mode	Default
Call following	<input type="checkbox"/>
Trunkcall	<input type="checkbox"/>
Present to Netrix	<input checked="" type="checkbox"/>
Away to Netrix	<input checked="" type="checkbox"/>
Disable input deactivation to Netrix	<input checked="" type="checkbox"/>
Boot info to Netrix	<input type="checkbox"/>

#### Period Selector

PS enabled	<input checked="" type="checkbox"/>
PS location	Home

#### SD card protection

Read-Write System	<input type="checkbox"/>
Read-Write iCall	<input type="checkbox"/>

#### TeleAlarm

TeleAlarm to Netrix	<input type="checkbox"/>
Show RSSI	<input type="checkbox"/>
Accompany enabled	<input type="checkbox"/>
Accompany time (ms)	3100

#### CF Buzzer Settings

Buzzer Call	<input checked="" type="checkbox"/>
Buzzer Toleret	<input checked="" type="checkbox"/>
Buzzer Assistance	<input checked="" type="checkbox"/>
Buzzer Emergency	<input checked="" type="checkbox"/>

SAVE

REBOOT

REBOOT MINI DISPLAYS

UPDATE MINI DISPLAYS

RESET TO FACTORY SETTINGS

NETWORK ANALYSIS

FIRMWARE UPGRADE

RESET FUSE

Buzzer Emergency	<input checked="" type="checkbox"/>
Buzzer Code Blue	<input checked="" type="checkbox"/>
Buzzer Info1	<input checked="" type="checkbox"/>
Buzzer Info2	<input checked="" type="checkbox"/>
Buzzer Info3	<input checked="" type="checkbox"/>
Buzzer Info4	<input checked="" type="checkbox"/>
<b>Handset relay</b>	
Pulse length	100 ms
Relay 1 pulse	<input type="checkbox"/>
Relay 2 pulse	<input type="checkbox"/>
Relay 3 pulse	<input type="checkbox"/>
Relay 4 pulse	<input type="checkbox"/>
<b>Other Settings</b>	
Address Registration	<input type="checkbox"/>
UTF-8 encoding	<input type="checkbox"/>
Show Mini-Display time	<input type="checkbox"/>
Broadcast Relay	<input checked="" type="checkbox"/>
VDE toilet LED	<input type="checkbox"/>
Do not disturb	<input type="checkbox"/>
Speed dial extension	1112
Custom button	Default
Code Blue/Emergency delay (s)	0
Service group (start)	110
Service group (end)	111
Service rep. time	180

#### IP settings:

- **IP address:** IP address of the unit. Enter the new IP address in the web browser to reconnect to the iCall 205 /206 SIP- unit.
- **Subnet:** Subnet corresponding to the IP address and the connected network.
- **Gateway:** The IP address of the Gateway for outgoing connections from the connected network.
- **DNS:** The IP address of the DNS server (domain name system)

#### Web settings:

- **Language:** Select the language the unit must use, this language is for the user displays and the programming website.
- **Client name:** Name of the client. This name appears on every web page in the top right corner.
- **Devicename:** Name used in the network environment
- **Username:** User name for web access.
- **Web password:** Password for web access.
- **Repeat web password:** Repeat the password for the web access.

#### Server settings:

- **State primary Netrix:** Indicates status of the Netrix server connection.
- **State backup Netrix:** Indicates status of the secondary Netrix server connection
- **Calls to Netrix:** Switches the Netrix server connection ON or OFF.
- **Calls to:** Choose between group or profile to send calls to the Netrix.
- **Primary Netrix IP:** IP address of the first Netrix server.
- **Secondary Netrix IP:** IP address of the second Netrix server (used for the backup Netrix).
- **Netrix Port:** Port number where the IP-unit will make his connection to the Netrix server.
- **Cyclic Sending:** Enable or disable cyclic sending. Sends a message to the Netrix periodically.

- *Cyclic group*: Cyclic group in the Netrix.
- *Cyclic Time(s)*: Repetition time between the messages send to the Netrix
- *State iLink*: Indicates status from the iLink server connection.
- *Calls to iLink*: Switches the iLink server connection ON or OFF.
- *iLink IP*: IP address of the iLink server.
- *iLink port*: Port of the socket connection.
- *Broadcast calls*: Send calls over the network (must be ON to make call following possible and displaying the info on the nurse stations).
- *UDP Broadcast IP*: Broadcast IP address for calls. Default: 255.255.255.255
- *UDP Broadcast port*: Port for broadcast. Default: 7475
- *NTP time update*: enable or disable update time via NTP server.
- *NTP server IP*: IP address of the NTP server.

**! Only the IndigoCare NTP server may be used !**

Call settings:

- *Rep. Time Calls*: repetition time between calls send to Netrix server.
- *Rep. Time Assistance*: repetition time between assistance calls send to the Netrix server.
- *Rep. Time Emergency*: repetition time between emergency calls send to the Netrix server.
- *Rep. Time Code Blue*: repetition time between Code Blue calls send to the Netrix server.
- *Profile/Group errors*: Profile or group in the Netrix server for error message.
- *No errors*: Profile or group in the Netrix server if the error is solved
- *Telealarm Group [other types]*: group in the Netrix for all other than the standard type of call Telealarm supports.
- *24H Group*: The group in the Netrix where the daily check messages from the Telealarm devices are send to.
- *CF BuzzerMode*: determine which buzzer must be active in the room.
  - o *Default*: First call station in the room will annunciate
  - o *All*: All call stations will annunciate
  - o *Selectable*: The annunciate call station can be selected in the addresses page
- *Call following*: Enable or disable the call following programmed in the display groups and routes.
- *Toiletcall*: If enabled a toilet call will only be visible on the dome light and the toilet buttons. Room calls are not visible on the toilet call stations. If disabled a toilet call will be indicated on all room call stations and toilet call stations as a call.
- *Present to Netrix*: Send present status to the Netrix server.
- *Away to Netrix*: Send away status to the Netrix server.
- *Disable input deactivation to Netrix*:
  - o *Enabled*: For all inputs programed to the Netrix server will send a Netrix message on an activation of the input 1-5
  - o *Disabled*: For all inputs programed to the Netrix server will send a Netrix message on an activation and deactivation of the input 1-5
- *Boot info to Netrix*: Send every time the IP-unit starts a message to the Netrix server.

Period Selector:

- *PS enabled*: Sets external period selector ON or OFF.
- *Location*: The location from the period selector.

#### SD Card protection:

- Read-Write FS: If disabled the SD card is protected against writing. This include also the home directory.
- Read-Write Home: If enabled the SD card home directory has no protection against writing.

**TIP:** For a longer lifetime and reliability of the system the SD card protection must be secured.

#### TeleAlarm:

- *TeleAlarm to netrix*: If enabled all wireless calls will be send to the netrix server direct
- *Show RSSI*: This will indicate the signal strength received from the wireless call station. This feature is supported from access point firmware version 2.1. If enabled the value of the RSSI will be added at the end of the addition.
- *Accompany enabled*: Enable the accompany function in the system, if disabled wireless calls will be handle faster.
- *Accompany time (ms)*: Timeout for accompany function (S37E)

#### CF Buzzer Settings:

- *Buzzer Call*: enable or disable the buzzer in the room for the call following feature in case of a normal call.
- *Buzzer Toilet*: enable or disable the buzzer in the room for the call following feature in case of a toilet call.
- *Buzzer Assistance*: enable or disable the buzzer in the room for the call following feature in case of a staff assist call.
- *Buzzer Emergency*: enable or disable the buzzer in the room for the call following feature in case of an emergency call.
- *Buzzer Code Blue*: enable or disable the buzzer in the room for the call following feature in case of a Code Blue call.
- *Buzzer Info1*: enable or disable the buzzer in the room for the call following feature in case of an external information Info1.
- *Buzzer Info2*: enable or disable the buzzer in the room for the call following feature in case of an external information Info2.
- *Buzzer Info3*: enable or disable the buzzer in the room for the call following feature in case of an external information Info3.
- *Buzzer Info4*: enable or disable the buzzer in the room for the call following feature in case of an external information Info4.

#### Handset relay:

- *Pulse length*: The length in ms the contact will be closed if the relay is set to pulse
- *Relay 1 pulse*: enable or disable the pulse function for relay 1
- *Relay 2 pulse*: enable or disable the pulse function for relay 2
- *Relay 3 pulse*: enable or disable the pulse function for relay 3
- *Relay 4 pulse*: enable or disable the pulse function for relay 4

#### Other settings:

- *Address registration*: enable or disable the address registration. (if this selection is disabled no additional call stations can be registered on the local bus)

**TIP:** At the end of the installation the address registration must be turned OFF

- *Show Mini-Display time*: enable or disable the time indication on the mini display
- *Broadcast Relay*: When enabled a received broadcast IP message will be send out again if the iCall 290 SIP Touch has a room with the right credentials. If disabled only local bus calls from the own bus will be broadcasted.
- *VDE toilet LED*: Enable this function will result in a change on the dome light for a toilet call.
  - o Enabled: red and yellow/white indicator on the dome light will be active for a toilet call
  - o Disabled: yellow/white indicator on the dome light will be active for a toilet call
- *Do not disturb*: If enabled, the gray button can be activated for DND, if DND is active the LED on the gray button will be active.
- *Speed dial extension*: If the yellow or blue button function is changed to "Speed Dial", this extension number is dialed in case the yellow or blue button is activated.
- *Custom button*:
  - o Default (blue button: code blue / yellow button: Emergency)
  - o Mute
  - o Code Blue or Emergency depending on the default
  - o Speed dial
  - o Service
  - o No Function
- *Code Blue/Emergency delay*: time the button need to be pressed before alarm is raised.
- *Service group (start)*: The group that will be activated for a service call
- *Service group (end)*: The group that will be activated at the end of a service call
- *Service rep. time*: Repetition time between calls send to Netrix server

#### Buttons:

- "Save" button saves the settings.
- "Reboot" button will restart the iCall 290 SIP Touch unit.
- "Reboot Mini displays" all local bus mini displays will reboot
- "Update Mini displays" the IP unit will send the selected language to the local bus mini displays
- "Restore to factory settings": go back to factory default settings.

- “Network Analysis”: this menu will give you access to some tools for getting more details on the network traffic. The result can be downloaded for analyzing, the recommend analyzing tool is “Wireshark” ([www.wireshark.org](http://www.wireshark.org)).

**Network analysis**

**Settings**

Netrix packets:

iLink packets:

Broadcast packets:

NTP packets:

Multicast packets:

SIP packets:

All packets:

Save

**Capture**

Start Stop Download

- “Firmware upgrade”: this menu can be used for installing new software in the unit

**Software Update**

**Software Upload**

Update Firmware : Bladeren... Geen bestand geselecteerd.

Status Messages

- “Reset Fuse”: If the unit is powered on PoE, the reset fuse can be used. A maximum of 5 LB buttons can be connected on the bus if the unit is powered on PoE and protected against shortcut.

## 4.11. Log

All important events and errors that have taken place in the system can be found under the page entitled Log. Calls, registrations, period switches and ping and server problems can be found in this overview. It is important to look at this list in case of problems.

All events are listed with date and time indicated, making it easy to refer back and see when the system wasn't functioning as it should. This list is only maintained locally and will be empty following every reboot of the system.

### Log

```
01/01/2020 00:00:07 Unit startup complete
08/04/2020 14:08:10 PRESENT BTN PRESSED.
08/04/2020 14:08:10 Present room 1000 address 0.
08/04/2020 14:08:10 Present address 0 to broadcast.
08/04/2020 14:08:10 Present address 0 to Netrix group 100.
08/04/2020 14:08:11 CALL BTN PRESSED.
08/04/2020 14:08:11 Assistance room 1000 address 0.
08/04/2020 14:08:11 Assistance room 1000 address 0 to broadcast.
08/04/2020 14:08:12 Changing buzzer state to 3, volume = 50
08/04/2020 14:08:12 Assistance address 0 to Netrix => group 100.
08/04/2020 14:08:33 Starting sip call with 4000
08/04/2020 14:08:33 Saving SIP conversation to /icall/sip_recording.wav
08/04/2020 14:08:33 Changing buzzer state to 0, volume = 50
08/04/2020 14:08:53 Sip call ended
08/04/2020 14:08:54 Changing buzzer state to 3, volume = 50
08/04/2020 14:09:16 Starting sip call with 4000
08/04/2020 14:09:16 Saving SIP conversation to /icall/sip_recording.wav
08/04/2020 14:09:16 Changing buzzer state to 0, volume = 50
08/04/2020 14:09:24 Sip call ended
08/04/2020 14:09:24 Changing buzzer state to 3, volume = 50
08/04/2020 14:09:29 Starting sip call with 4000
08/04/2020 14:09:29 Saving SIP conversation to /icall/sip_recording.wav
08/04/2020 14:09:30 Changing buzzer state to 0, volume = 50
08/04/2020 14:09:35 Sip call ended
08/04/2020 14:09:35 Changing buzzer state to 3, volume = 50
08/04/2020 14:09:41 PRESENT BTN PRESSED.
08/04/2020 14:09:41 Present room 1000 address 0.
08/04/2020 14:09:41 Present address 0 to broadcast.
08/04/2020 14:09:41 Present address 0 to Netrix group 100.
08/04/2020 14:09:41 Changing buzzer state to 0, volume = 50
```

## 4.12. Info

More information can be found on the current state of the system and the Indigo Care contact details on the page entitled Info.

The following details can be found here:

- System time: Current system time
- Uptime: System running time
- Device type: What device the software detected
- iCall Version: Current firmware version of iCall software
- Kernel Version: Current kernel version
- RAM usage: Current amount of MB RAM in use
- Board ID: Hardware identification from HW version 0.5
- MAC: Mac address of the ethernet port
- 5V Line: Readback value of the 5V line
- 24V line: Readback value of the 24V line
- Current: Indication on the current consumption
- POE: Indication if the unit is running on POE or 24V
- Temperature: Readback of the internal temperature.
- Foil type: Readback on the detected keypad foil

### Info

#### Device



#### Indigo Care Europe

Schoebroekstraat 48  
3583 Paal, Belgium  
(T) +32(0)11 24 70 90  
(F) +32(0)11 24 70 99

#### Status

Systemtime: 16:07:25 02/04/2020  
Uptime: 1 days, 01:06:42  
Device type: Audio-Unit  
iCall version: 1.0.10  
Kernel version: 2.6.35.8 [#203 PREEMPT Sun Mar 29 18:29:19 CEST 2020]  
RAM usage: 35 MB  
Board ID: 29410048B0B0  
MAC: 00:0D:15:01:AD:3D  
5V line: 4.96V  
24V line: 23.47V  
Current: 0.66mA  
POE: Yes  
Temperature: 54.0 C  
Foil type: Emergency

## Contact us for more info

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