

Akuvox Smart
Intercom



C315 Series Indoor Monitor Admin Guide

About This Manual

Thank you for choosing Akuvox's C315 series indoor monitor. This manual is intended for end users, who need to use and configure the indoor monitor. This manual provides an introduction of all functions and features of the product. It is suitable for 115.1.2.2xx version. Please visit Akuvox forum or consult technical support for any new information or latest firmware.

Note: Please refer to universal abbreviation form in the end of manual when meet any abbreviation letter.

FCC Caution:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

For headset, this part has been tested and meets the FCC RF exposure guidelines when used with an accessory designated for this product or when used with an accessory that contains no metal.

For baseband, this equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment .This equipment should be installed and operated with minimum distance 20cm between the radiator& your body.

Content

1. Product overview.....	1
1.1. Product Description.....	1
1.2. Power connection.....	2
2. Daily use.....	3
2.1. Making a call.....	3
2.1.1. Calling from digital keypad.....	3
2.1.2. Calling from phonebook.....	4
2.1.3. Calling from call log.....	5
2.2. Receiving a call.....	6
2.2.1. Receiving a incoming call.....	6
2.2.2. During the session.....	6
2.3. Live view.....	7
2.3.1. Checking the monitor.....	8
2.4. Message(s).....	9
2.4.1. Text Message.....	9
2.4.2. Creating a message.....	10
2.5. Arming.....	11

2.5.1. Arming Mode.....	11
2.5.2. Disarm Code.....	12
2.5.3. Alarm Log.....	13
2.5.4. Status.....	14
3. Basic Features.....	15
3.1. Accessing the system setting.....	15
3.2. Accessing the website setting.....	15
3.2.1. Obtaining IP address.....	15
3.2.2. Accessing the Device Website.....	16
3.3. Password Modify.....	16
3.3.1. System Code.....	16
3.3.2. Setting code.....	17
3.3.3. Website password.....	17
3.4. Phone Configuration.....	18
3.4.1. Language.....	18
3.4.2. Time.....	19
3.4.3. Network.....	20
3.4.4. Display settings.....	23
3.4.5. Sound settings.....	24

3.4.6. Doorbell Sound.....	24
3.4.7. DND.....	26
3.4.8. Capture.....	27
3.5. Phonebook.....	27
3.5.1. Adding a contact.....	27
3.5.2. Editing a contact.....	28
3.6. Intercom call.....	29
3.6.1. IP direct Call.....	29
3.6.2. Sip Call.....	29
3.6.3. Account Status.....	30
3.6.4. Sip Account.....	30
3.6.5. SIP Server.....	32
3.6.6. Outbound Proxy Server.....	33
3.6.7. Transport Type.....	33
3.6.8. Auto answer.....	34
3.6.9. Assistance call.....	34
3.7. Security.....	35
3.7.1. Live view.....	35
3.8. Access control.....	36

3.8.1. Local relay.....	36
3.8.2. Remote relay.....	36
3.9. Reboot.....	37
3.10. Reset.....	38
4. Advance Features.....	39
4.1. Intercom.....	39
4.1.1. Call forwarding.....	39
4.1.2. Audio codec.....	41
4.1.3. Video codec.....	41
4.1.4. NAT.....	42
4.1.5. User Agent.....	43
4.1.6. DTMF.....	43
4.1.7. Call Related.....	44
4.2. Security.....	44
4.2.1. Zone settings.....	45
4.3. Upgrade.....	46
4.3.1. Basic Upgrade.....	46
4.3.2. Autop.....	47
4.4. Log.....	50

4.4.1. Call log.....	50
4.4.2. System log.....	52
4.4.3. PCAP.....	53

1. Product overview

1.1. Product Description

C315 is an Android-based indoor monitor with a touch screen. It incorporates audio communications, access control sensor arming and obtaining video stream from door phones or IP cameras.

Its finely-tuned Android OS allows for better suiting the habit of usage of local people. C315's multiple ports, such as I/O and bell ports, can be used to easily integrate external arming systems, such as bell controller and fire alarm detector, helping to create a holistic control of home safety and access control, and giving occupants a great sense of security.

It is applicable to multi-storey residential buildings or villas.

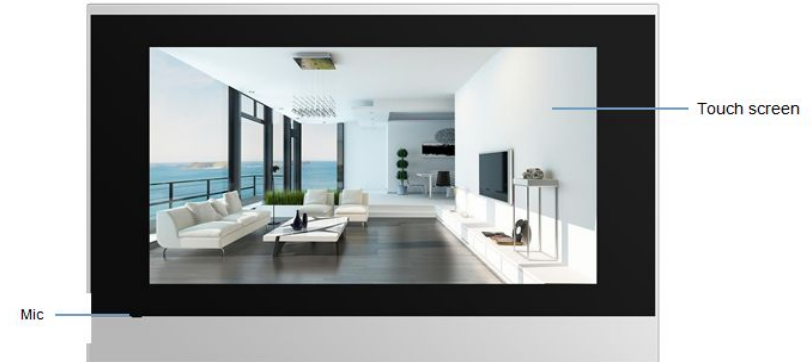


Figure 1.1-1 C315X

1.2. Power connection

Ethernet (POE): Ethernet (POE) connector which can provide both power and network connection.

RJ45 (PON): This is a special connector to provide power and network for E10 series.

12V/GND: External power supply terminal if POE is not available.

RS485-A/B: RS485 terminal.

Bell/GND: Connect a simple two-wire door bell.

RelayA/B (NO/COM/NC): Relay control terminal.

IO1-IO8/GND: Connect with different alarm detectors for 8 security zones.

Note: The general indoor monitor interface diagram is only for reference.

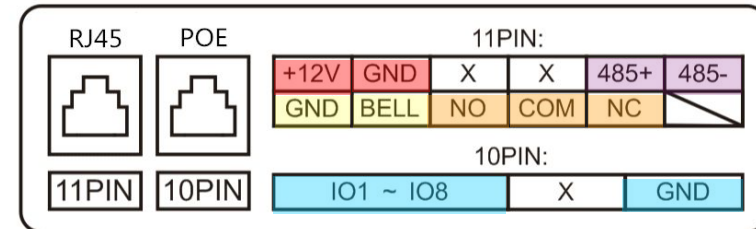


Figure 1.2-1 C315X interface

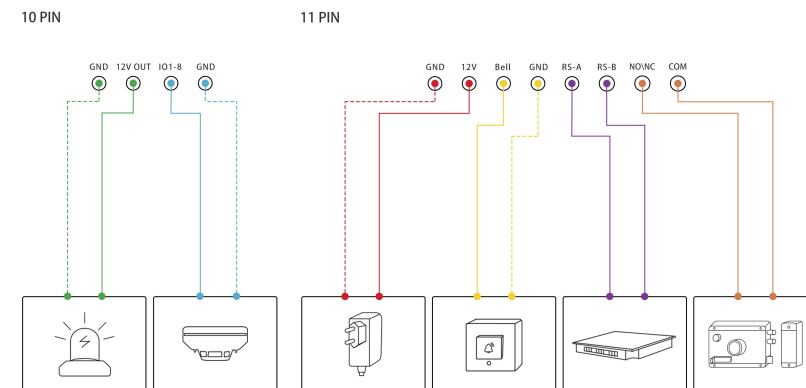


Figure 1.2-2 General interface

2. Daily use

2.1. Making a call

There are three ways to make a call from the indoor monitor to other units. Call from **Intercom**, **Contact** or **Call Log**.

2.1.1. Calling from digital keypad

Press **Intercom** in home page to enter the dial interface to dial the number directly.

- Choose a suitable **phone account** ① for the outgoing call.
- Note:** C315 supports 2 accounts. Please refer to chapter 3.6.2 for more account settings.
- Enter the number to call on the **digital keypad** ②.
 - Tap the dial key, users can choose **Audio Call** ③ or **Video Call** ④ to dial out.

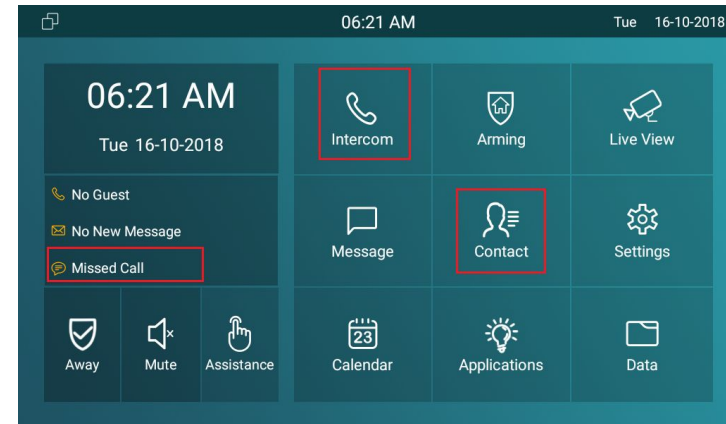


Figure 2.1-1 Call method

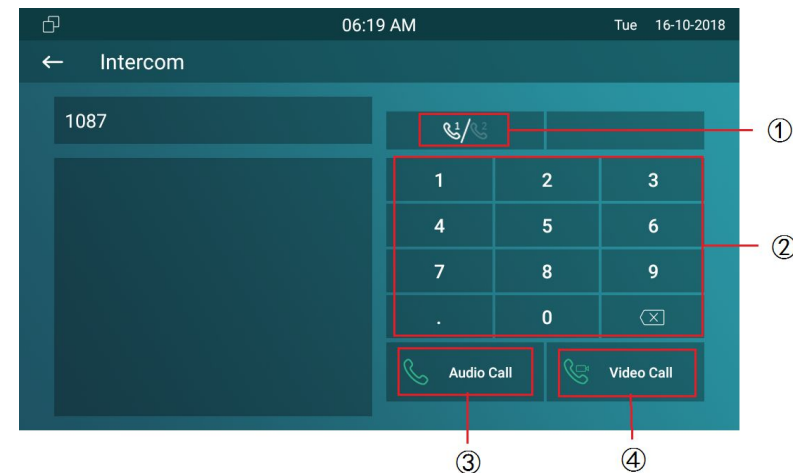


Figure 2.1.1-1 Dial number

2.1.2. Calling from phonebook

Enter the contact interface to make a call.

- C315 supports **fuzzy matching query** ①. To search the list by number or alphabet.
- Scroll up or down the pre-imported **contact list** ② to choose the contact you want to call.
- Select the right **phone number** ③ from the contact.
- Click **Audio mode** ④ or **Video mode** ⑤ to call out.

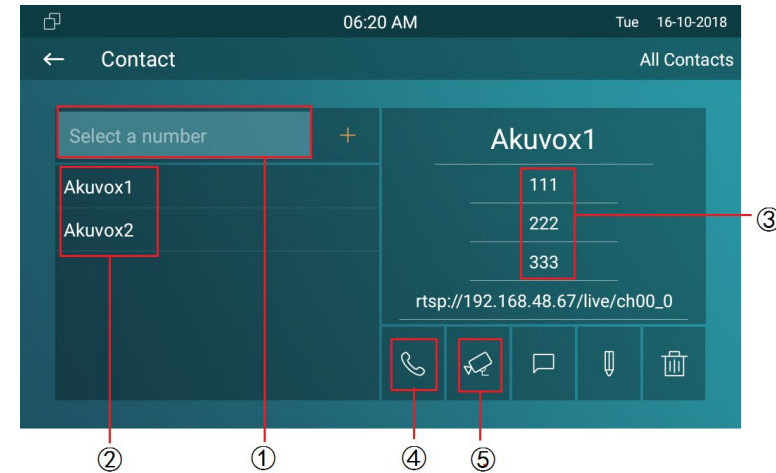
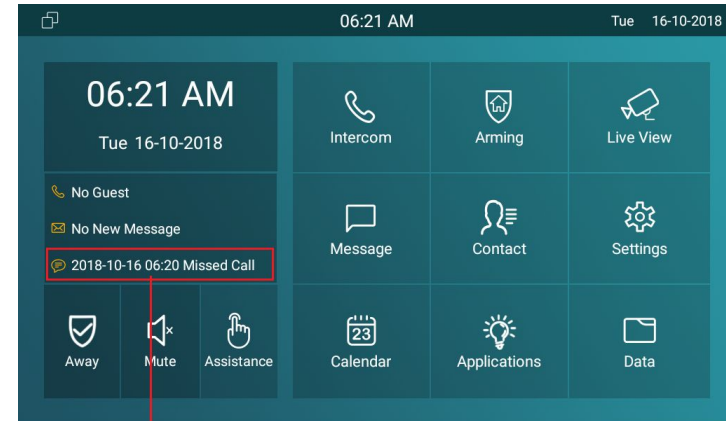


Figure 2.1.1-1 Phonebook

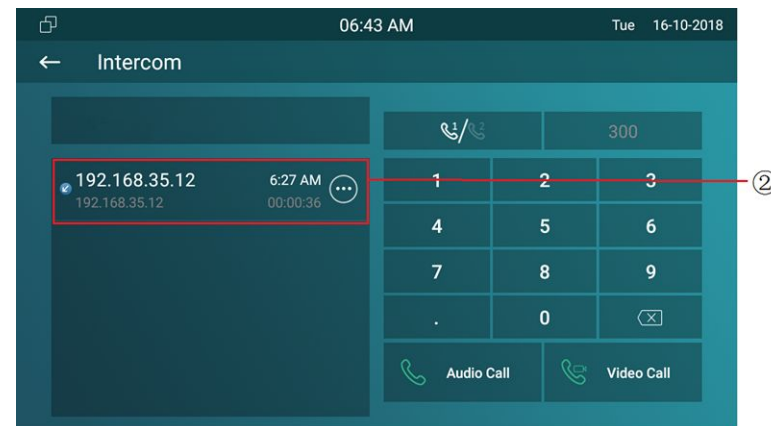
2.1.3. Calling from call log

- Press the **Miss Call note** ① to enter the call log interface.
- Users can also enter **Intercom** interface to choose **call log** ②.
Then choose audio or video call to dial out.



①

Figure 2.1.3-1 Miss call note



②

Figure 2.1.3-2 Miss log

2.2. Receiving a call

2.2.1. Receiving an incoming call

There will be a video preview in this window, when users receive an incoming call.

- Press **Video** or **Audio** key to pick up the incoming call.
- Press **Cancel** to reject the incoming call.
- Press **+** or **-** to adjust the ring tone volume in the right side.

2.2.2. During the session

The call video will be showed in this window.

- Press **Mute** key to mute the voice from yours.
- Tap **Capture** to capture the screenshot of the visitor.
- Press **Unlock** to unlock the corresponding door unit.
- Tap **Switch** to change to video or audio call.
- Press **Cancel** icon to hang up the current call.



Figure 2.2.1-1 Receive call



Figure2.2.1-1 During session

2.3. Live view

Live view feature is used to monitor the real-time video from IP cameras or door phones anytime. Click **Live View** in home page.

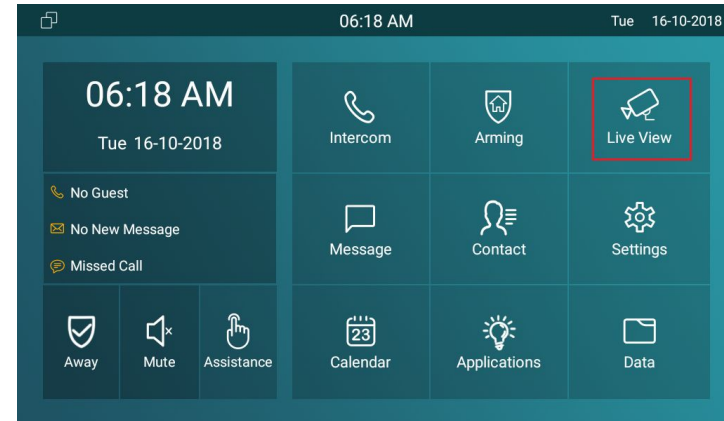


Figure 2.3-1 Live view

2.3.1. Checking the monitor

Choose the outdoor devices from the list .

The real-time video from the door phone or IP camera will show in the screen .

- Press **Unlock** to open the door which is connected with door phone.
- Press **Capture** to take a photo from the outdoor devices.
- Press **Cancel** to exit the monitor.
- Press **List button** in the bottom right corner to switch to different outdoor videos.
- Press the **Monitor list** in the right side to choose the outdoor videos.

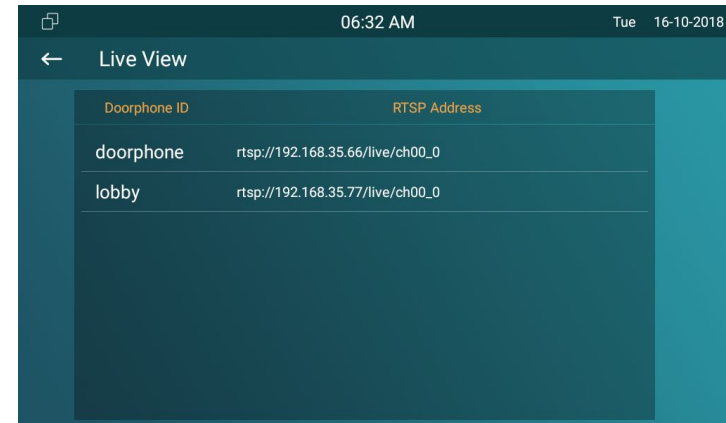


Figure 2.3.1-1 Live view list

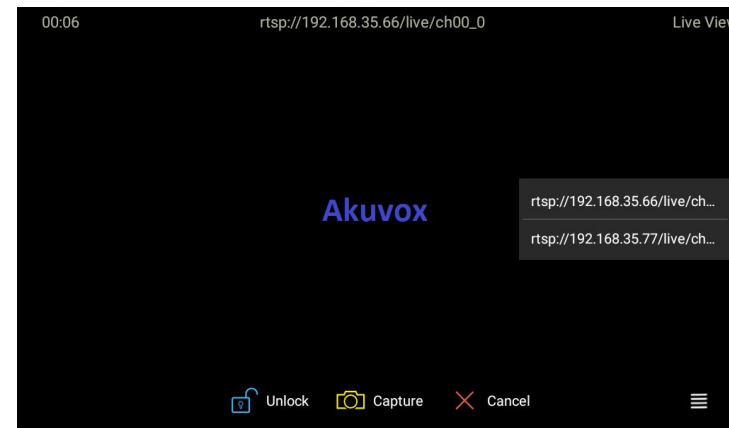


Figure 2.3.1-2 Live view video

2.4. Message(s)

Press **Message** ① to enter the message interface. Or click the **New Message notification** ② to check directly when there is any new message notification.

2.4.1. Text Message

There is text message list after entering the message interface. Users can check the message which is received or sent.

- Select a message to check the content.
- Hold the one of existed messages ①, it will show up delete prompt.
- Click **Select All** ② to delete all messages.
- Click **Delete** ③ to delete the message which is chosen.
- Click **Cancel** key ④ to cancel the deletion.

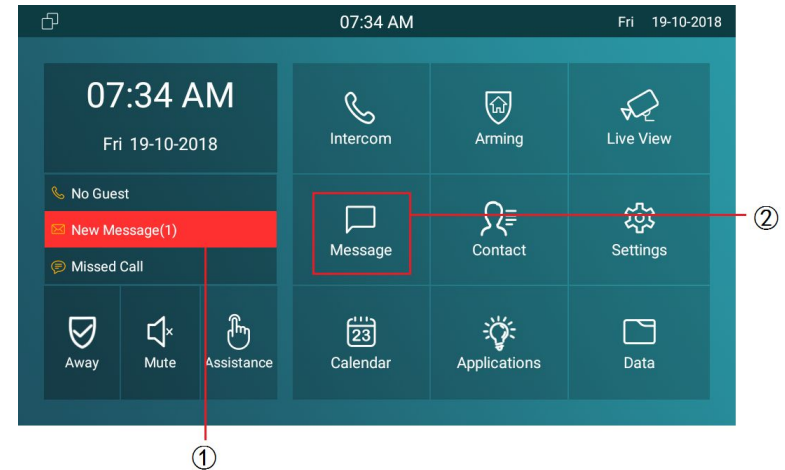


Figure 2.4-1 Message

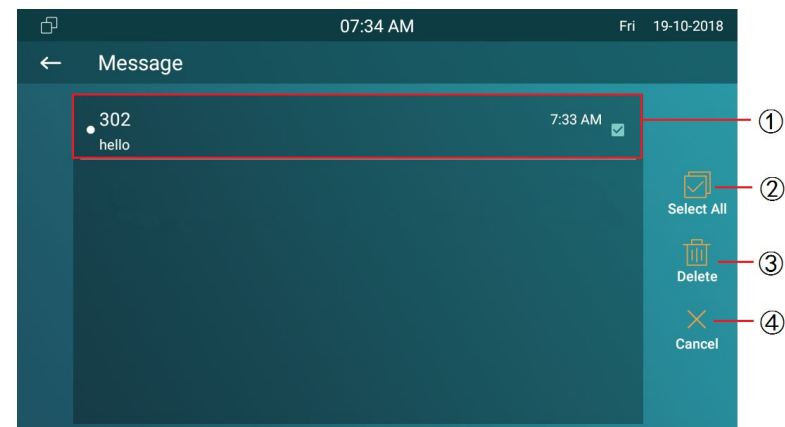


Figure 2.4-1 Edit message

2.4.2. Creating a message

- Press **New** key ① to create a new message.
- Choose the contact from the **contact list** ② or enter the destination number manually ③.
- Choose the **frequently used message** ④ , such as “Hello,” “Help.” Or input the message content you want to send ⑤.
- Select line 1 or line 2 account ⑥ to send out.

Note: C315 support 2 accounts. Please refer to chapter 3.6.2 for more account settings.

- Press **Send** key ⑦ to send.

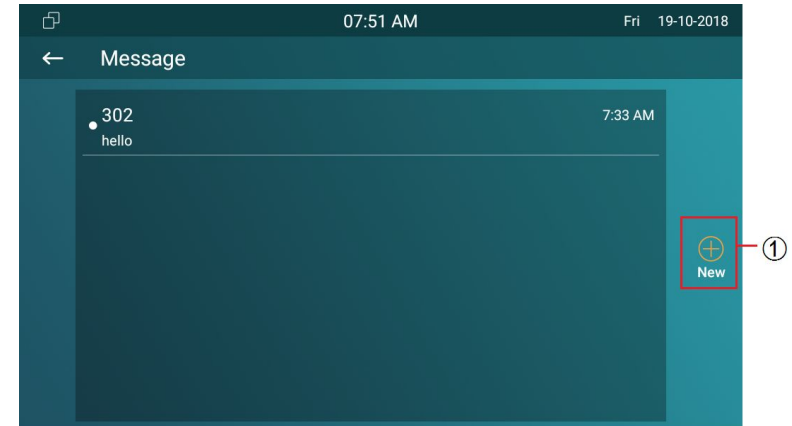


Figure 2.4.2-1 Create message

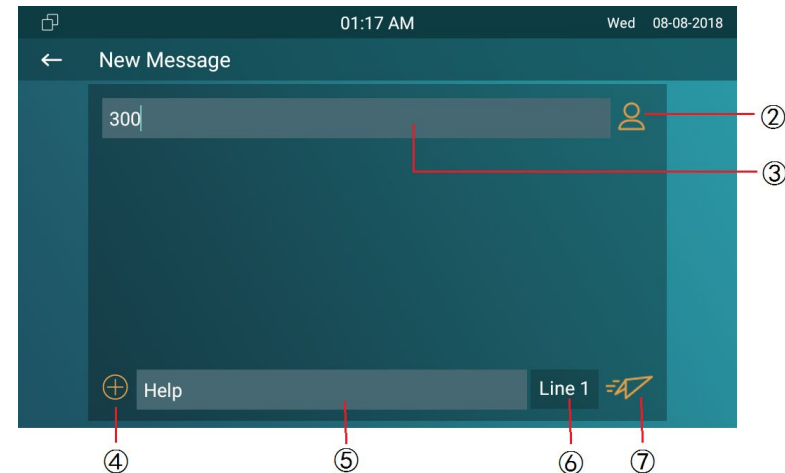


Figure 2.4.2-2 Create message

2.5. Arming

Tap **Arming** to enter the Arming interface.

C315 supports 4 modes, which are “Home mode,” “Night mode,” “Away mode” and ‘Disarm mode.’”

2.5.1. Arming Mode

Go to **Arming - Arming mode**. Users can see all of the 8 zones and corresponding sensor types. Slide down to check more information in this interface.

- Adjust **Defence delay time**. It means when users change the arming mode from other modes, there will be 90 seconds delay time.
- To setup the **Alarm delay**. It means when the sensor triggered, there will be 90 seconds delay time to announce the notification.

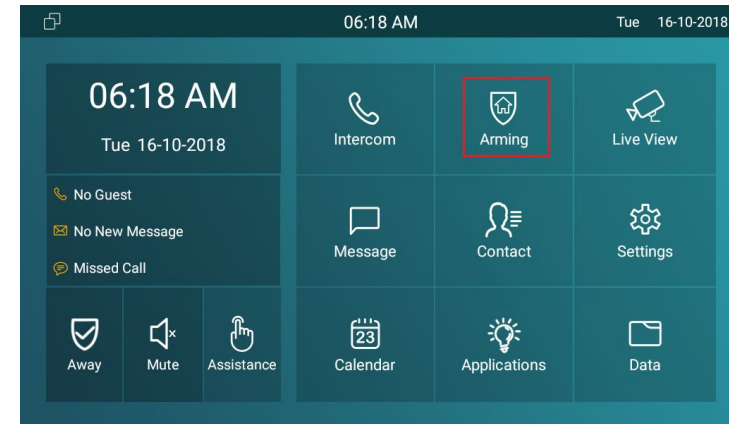


Figure 2.5-1 Arming

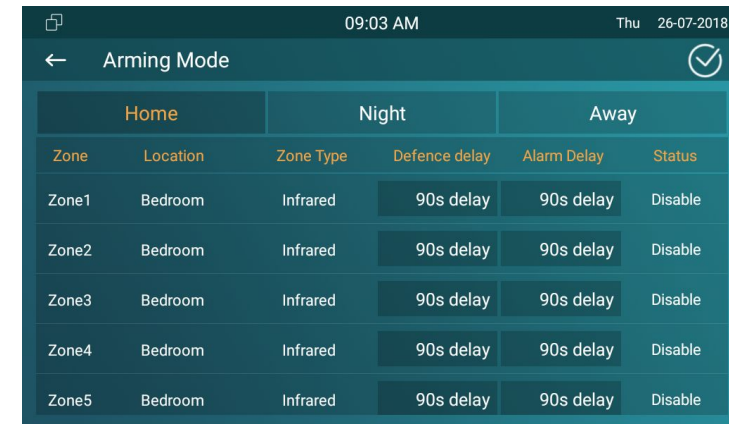


Figure2.5-1 Arming mode

- The **Status** in the corresponding zone means whether the zone is available or not.
- Press **Save** in the top right corner to save the modification.

2.5.2. Disarm Code

Go to **Arming - Disarm Code** to enter the disarm code settings interface. Users can modify the disarm code here.

- Enter the **original disarm code** ① first, and it is 0000 as default.
- Enter the **new disarm code** ②.
- Enter the new disarm code again ③ for confirming.
- Press **Save** to save the modification.

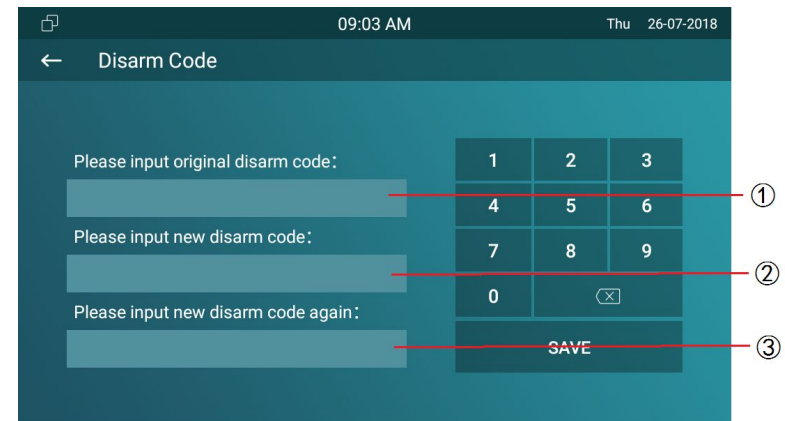


Figure 2.5.2-1 Disarm code

2.5.3. Alarm Log

Go to **Arming - Alarm Log** to enter the alarm log interface. Users can check the alarm log, including “location,” “zone,” “zone type” and “alarm time.”

- Hold an **alarm log** ①, and it will show up delete prompt.
- Press **Select All** ② and click **Delete** ③ to delete all alarm log.
- Press **Cancel** ④ to cancel to deletion.

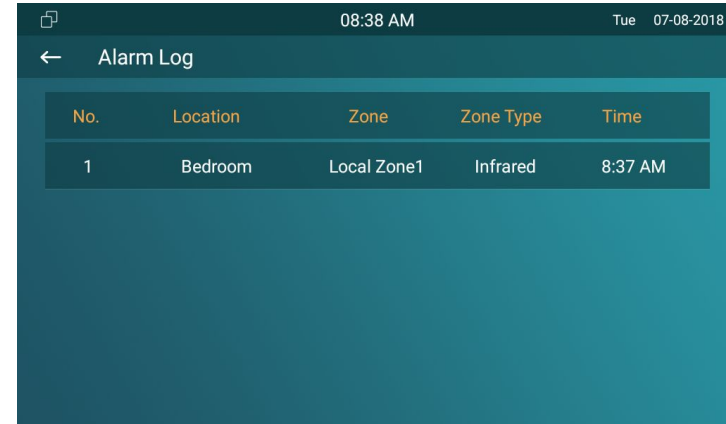


Figure 2.5.3-1 Alarm log

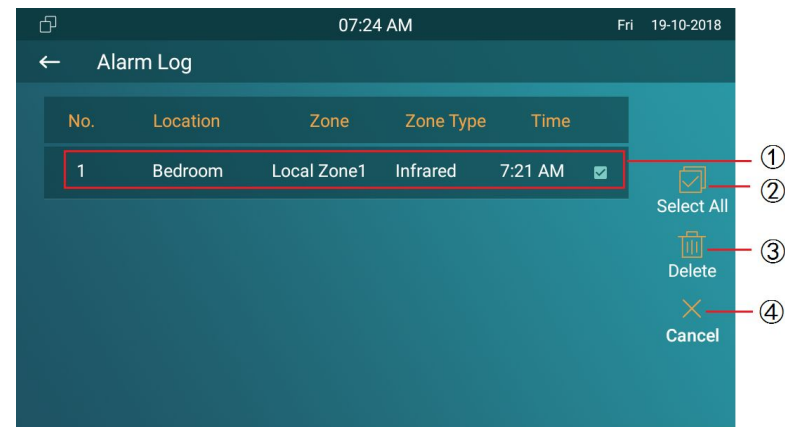



Figure 2.5.3-2 Edit alarm log

2.5.4. Status

Go to **Arming - Zone Status** to enter the zone status interface. Users can check the status of zones, including “location,” “zone type,” “trigger mode” and “status.”



Zone	Location	Zone Type	Trigger	Status
Zone1	Bedroom	Infrared	NC	Disable
Zone2	Bedroom	Infrared	NC	Disable
Zone3	Bedroom	Infrared	NC	Disable
Zone4	Bedroom	Infrared	NC	Disable
Zone5	Bedroom	Infrared	NC	Disable
Zone6	Bedroom	Infrared	NC	Disable

Figure2.5.3-1 Zone status

3. Basic Features

3.1. Accessing the system setting

Go to **Settings - More** (Password is 123456 by default) to setup more configurations, like Network, Account and so on.

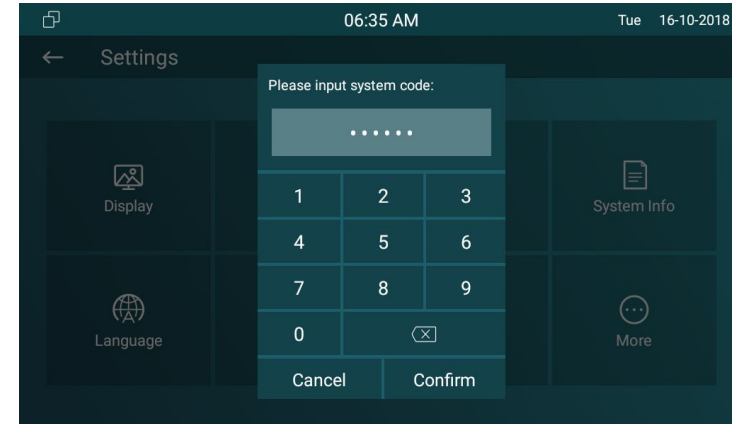


Figure 3.1-1 System setting

3.2. Accessing the website setting

3.2.1. Obtaining IP address

Go to **Phone Settings - System Info - Network** to check the device's IP address.

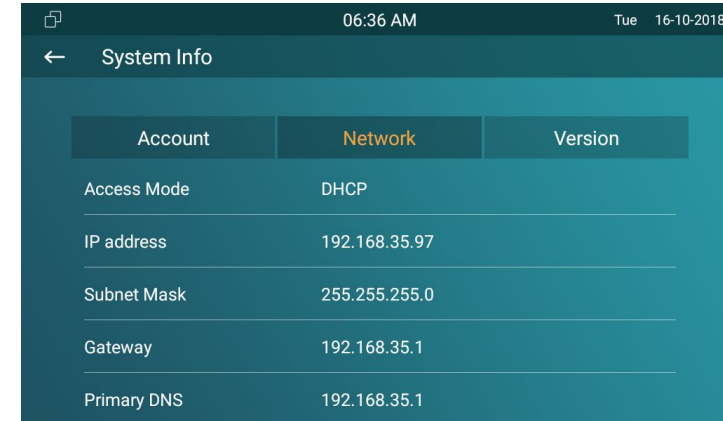


Figure 3.2.2-1 Network status

3.2.2. Accessing the Device Website

Type the device's IP address on browser, and input default user name and password: **admin/admin** to access the web interface.

Note: The recommended browser is Google Chrome.

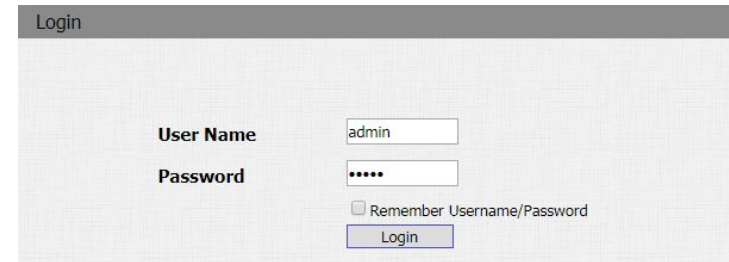


Figure3.2.2-1 Login web

3.3. Password Modify

3.3.1. System Code

Go to **Settings - More - System Code**. System code is used to enter “More interface,” and the **original system code** ① is 123456. Administrator can edit a **new system code** ② to prevent someone from tampering with the advanced configurations, and then confirm the new one ③ and click submit ④ to save.

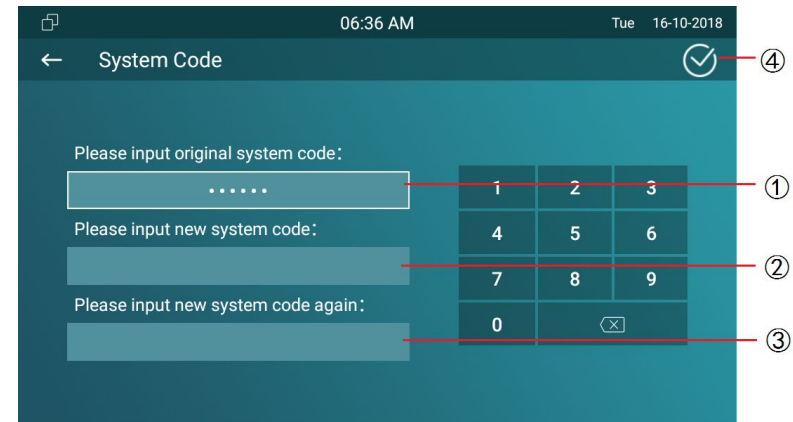


Figure3.3.1-1 System code

3.3.2. Setting code

Go to **Settings - More - Settings Code**. Setting code is used to enter “Setting interface,” and the **original setting code** ① is null. Administrator can edit a **new setting code** ② to prevent someone from entering the setting interface, and then confirm the new one ③ and click submit ④ to save.

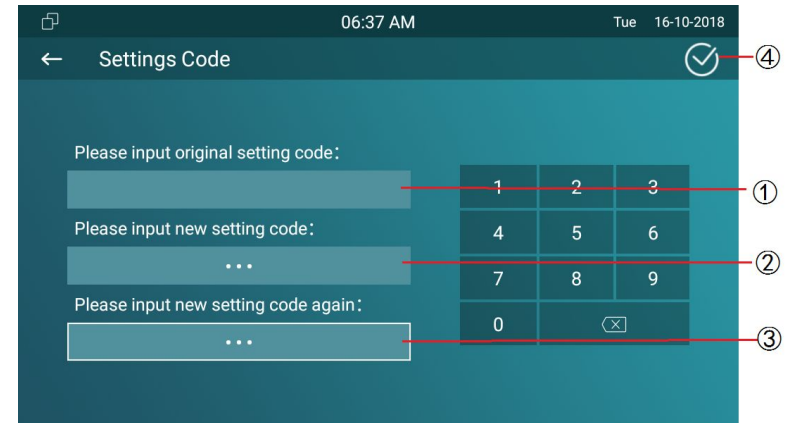


Figure3.3.2-1 Setting code

3.3.3. Website password

Access the website, go to **Security - Basic** to modify the default website password “admin.” Enter the original password and new password, and confirm the new password again.



Figure3.3.3-1 Web Password

3.4. Phone Configuration

3.4.1. Language

In the “Phone interface,” go to **Settings - Language** to choose a suitable phone screen display language, and it is English by default.

In the website, go to **Phone - Time/Lang** to select a web language, and it is English by default.



Figure3.4.1-1 Language

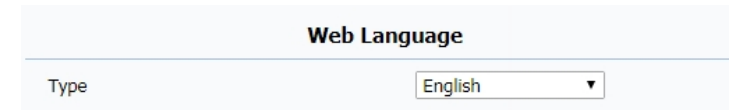


Figure 3.4.1-2 Web language

3.4.2. Time

In the “Phone interface,” go to **Settings - Time** to enter the time setting interface.

- NTP (Network Time Protocol) is enabled by default. C315 will get the date and time automatically. Users can also setup “NTP server,” a suitable “Time Zone,” “Time format” and “Date Format.”
- Or set time manually by disabling the NTP, users can set exact time for the C315.
- Click **Save** key in the top right corner to save.

In the website, go to **Phone - Time/Lang** to setup the corresponding time zone according to users location. If users have their own server for time calibration, users can also enter the server address in the primary server.

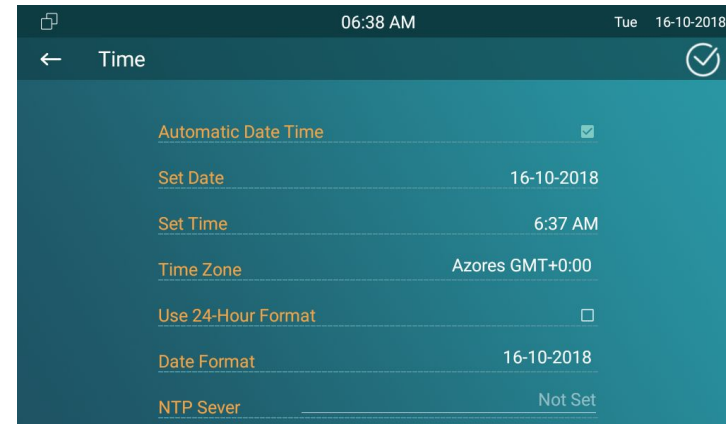


Figure 3.4.2-1 Time

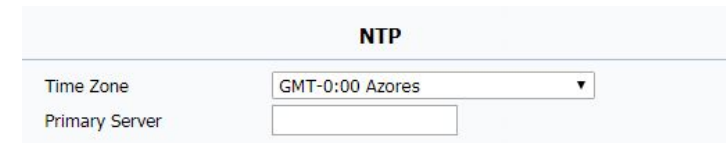


Figure 3.4.1-2 NTP

3.4.3. Network

3.4.3.1. Network Status

In the device, go to **Settings - System Info** to check the basic network status, including “Access mode,” and “IP address parameters.”

Users can also check in website from **Static - Basic**.

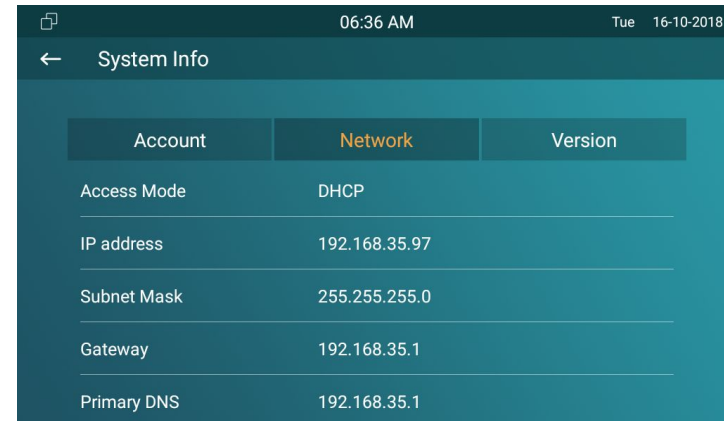


Figure 3.4.3.1-1 Network status

Network Information	
LAN Port Type	DHCP Auto
LAN Link Status	Connected
LAN IP Address	192.168.35.97
LAN Subnet Mask	255.255.255.0
LAN Gateway	192.168.35.1
LAN DNS1	192.168.35.1
LAN DNS2	

Figure 3.4.3.1-2 Network information

3.4.3.2. Wire Network Setting

Go to **Settings - More - Network** in the device to setup the network settings.

DHCP: Ticking the DHCP option to configure the network as DHCP mode, and then C315 will obtain the IP address, and other network parameters automatically.

Static: Enter suitable network parameters manually to setup the network as Static IP mode.

Users can also choose to modify in the website from **Network - Basic**.

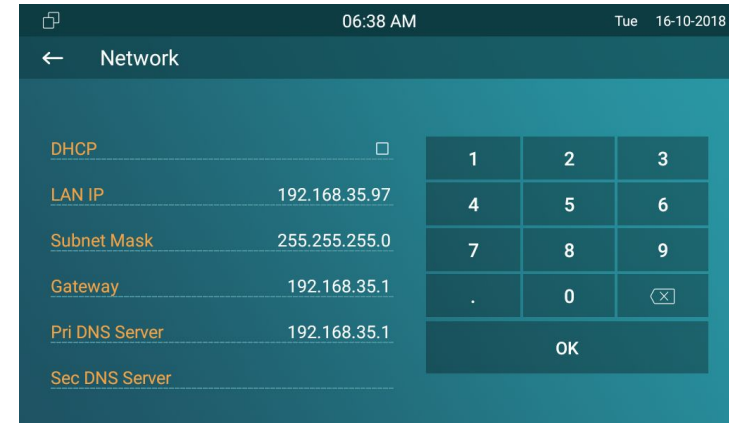


Figure3.4.3.2-1 Wire network

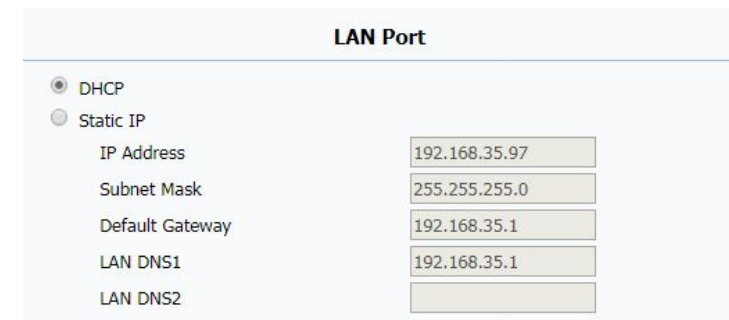


Figure 3.4.3.2-1 Wire network

3.4.3.3. Wifi setting (optional)

Enable the Wifi feature, choose the suitable AP (Wireless access point), and then enter the password to connect it.

3.4.3.4. Local RTP

In the website, go to **Network - Advance** to display and configure local RTP settings.

Max RTP Port: Determine the maximum port that RTP stream can use.

Starting RTP Port: Determine the minimum port that RTP stream can use.

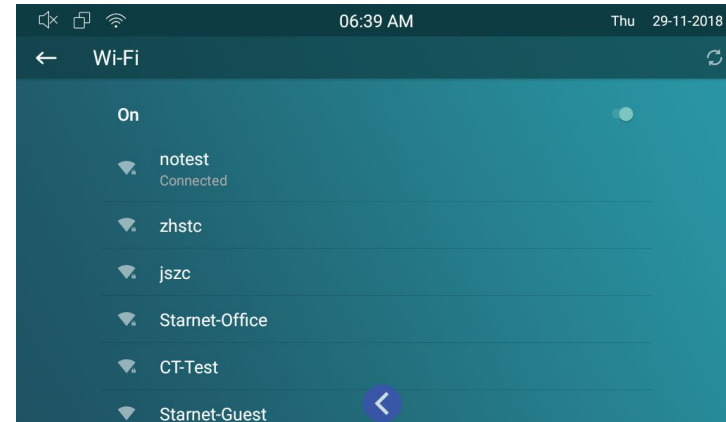


Figure 3.4.3.3-1 Wireless network

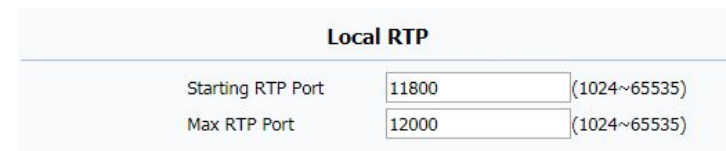


Figure 3.4.3.4-1 RTP setting

3.4.4. Display settings

In the device, go to **Settings** - **Display**, users can adjust all configurations about the screen display.

- To adjust the brightness. It is 145 level as default, and the bigger value means the lighter screen.
- To setup sleep time, when it keep idle over the time, C315 will enter sleep mode.
- To set up screen saver active time.
- To select whether to enable the screen saver.
- Press screen clean to clean the C315's screen, and it will keep users from misusing.
- To adjust the display font size. There are 4 types, “small,” “normal,” “large” and “huge.”
- Click **Save** key in the top right corner to save.

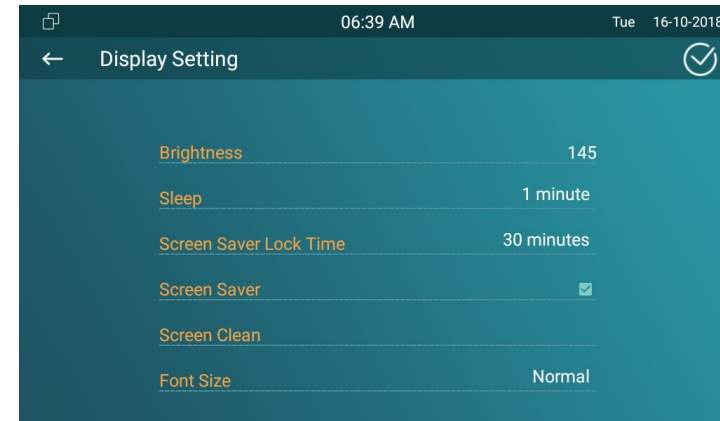


Figure 3.4.4-1 Display setting

3.4.5. Sound settings

Go to **Settings - Sound** to enter the sound settings interface.

Users can set **Ring Tones** for incoming calls, and even to set a special ring tone for door units, or set the “Ring Volume,” “Talk Volume,” “MIC Volume” and “Notification Sound.” Remember to click **Save** key in the top right corner to save.

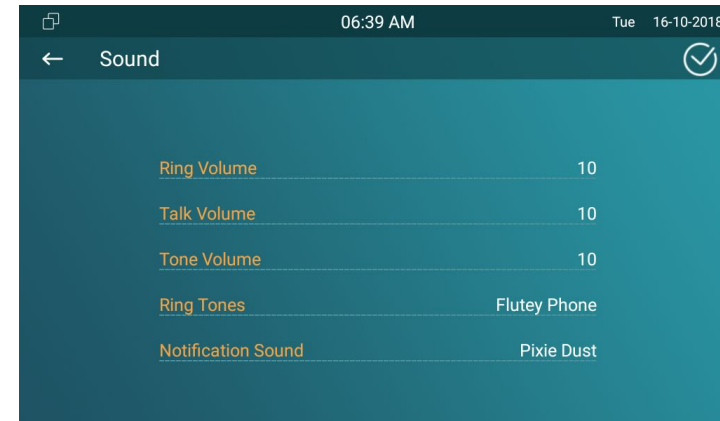


Figure 3.4.5-1 Sound setting

3.4.6. Doorbell Sound

C315 supports to connect extra door bell button which is used to remind the resident when someone comes.

To customize the doorbell voice by the users in the website, go to **Phone - Audio**.

Upload: To choose the suitable sound file from the local folder, click Import to save, and when it shows “Import sound file successfully,” it means the file has already imported. Please notice



Figure 3.4.6-1 Web doorbell setting

the tip about the voice file format.

Sound File: Choose one file from sound list which is imported before.

In the device, go to **Settings - More - Doorbell**, please choose a suitable ringtone and timeout for the doorbell.

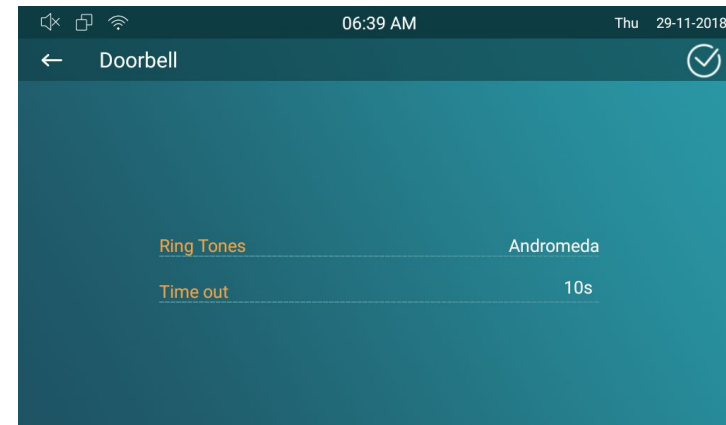


Figure 3.4.6-2 Phone doorbell setting

3.4.7. DND

Go to **Phone - Call Feature** to configure DND feature.

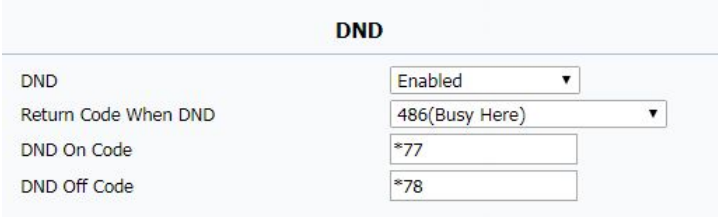
DND: DND (Do Not Disturb) allows the phone to ignore any incoming calls.

Return Code when DND: Determine what response code should be sent back to server when there is an incoming call if DND on.

DND On Code: The code is used to turn on DND on server's side, if configured, the phone will send a SIP message to server to turn on DND on server side if users press DND when DND is off.

DND Off Code: The code is used to turn off DND on server's side, if configured, the phone will send a SIP message to server to turn off DND on server side if users press DND when DND is on.

Note: Different sip servers support different feature codes. Whether the feature code is valid or not ,please check in the network capture.



DND	
DND	Enabled
Return Code When DND	486(Busy Here)
DND On Code	*77
DND Off Code	*78

Figure 3.4.7-1 DND

3.4.8. Capture

C315 will automatically take a screenshot of the visitor during the calling, or users can tap the **Capture** key during the live view or calling manually. The capture photos will be saved in default path. Users can go to **Settings - Call Features** to change the default path in the device.

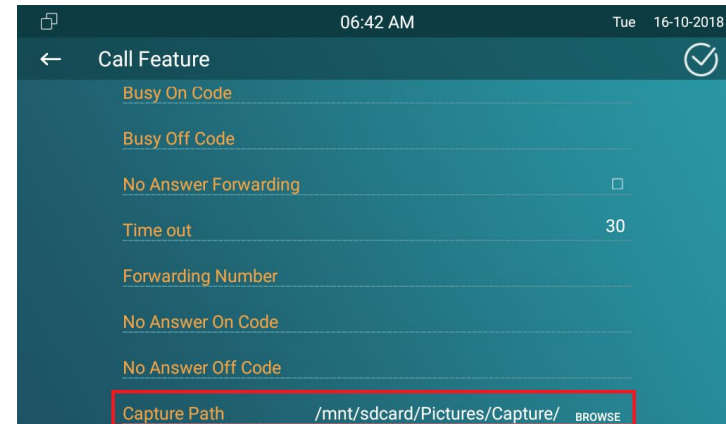


Figure 3.4.8-1 DND

3.5. Phonebook

Click **Contact** interface.

3.5.1. Adding a contact

In **Contact** interface, tap **+** symbol to add a new contact information.

- Enter the **contact name** ①.

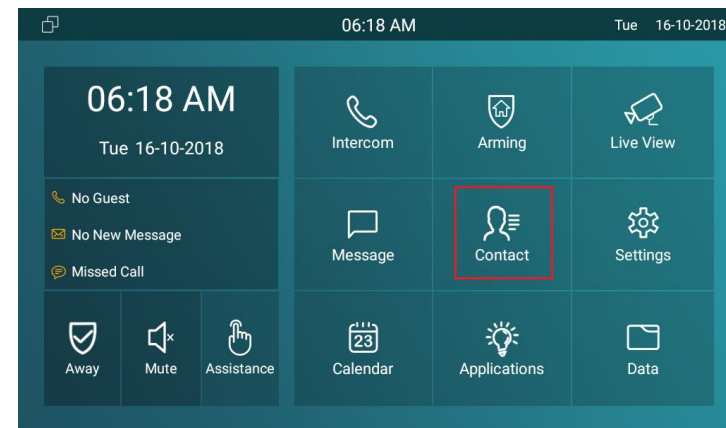


Figure 3.5-1 Contact

- Enter the **number** ②.
- Enter the door phone **RTSP URL** ③ for video preview.

Note: The RTSP URL of Akuvox door phone is rtsp://device IP/live/ch00_0.

- Press **Confirm** ④ to save the contact. Press **Cancel** ⑤ to cancel the operations.

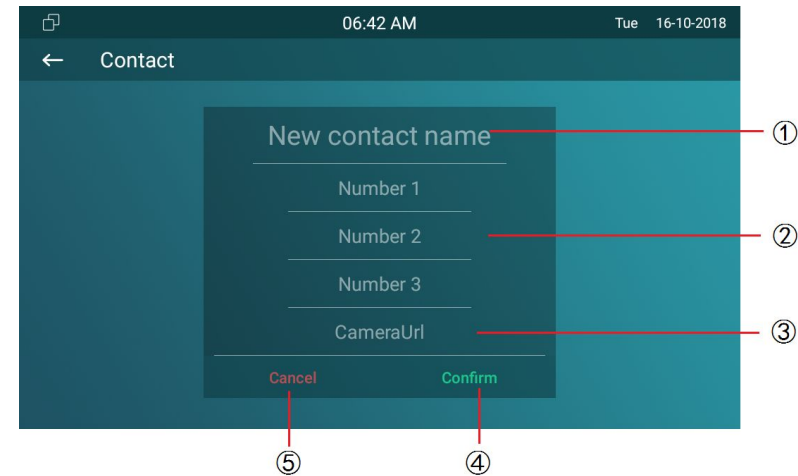


Figure 3.5.1-1 Add a contact

3.5.2. Editing a contact

In Contact interface, select one existed contact.

- Press **Edit** key ① to modify the existed contact.
- Press **Delete** key ② to create a new contact.

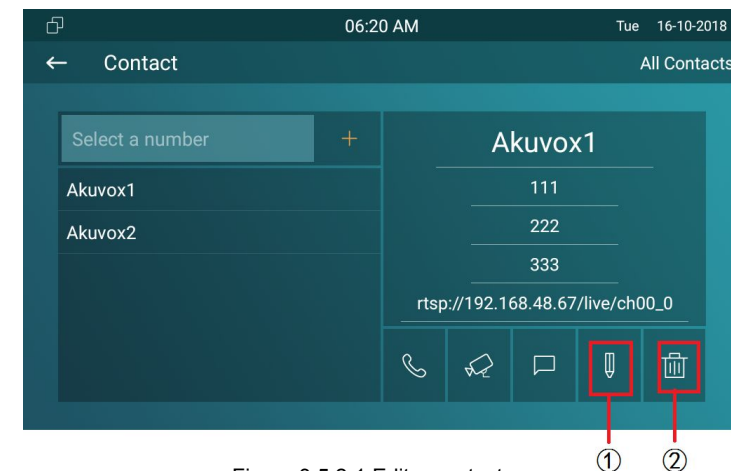


Figure 3.5.2-1 Edit a contact

3.6. Intercom call

3.6.1. IP direct Call

Without sip server, users can also use IP address to call each other, but this way is only suitable in the LAN.

Enter the IP address of the caller, and then press **Audio Call** or **Video Call** to make a call.

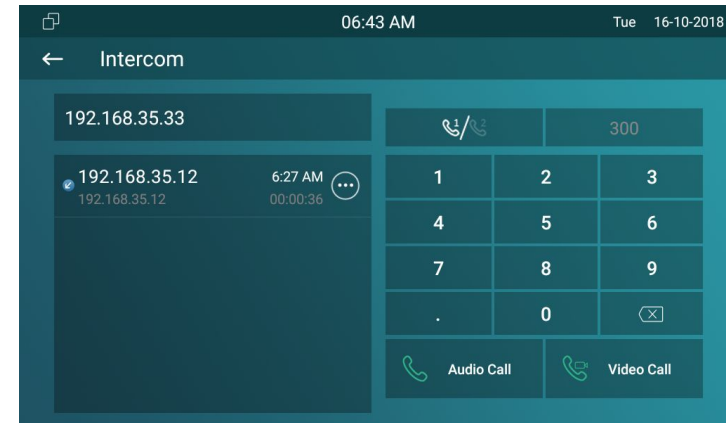


Figure 3.6.1-1 IP call

3.6.2. Sip Call

Sip call uses sip number to call each other and it should be supported by sip server. C315 need to register an account and fill some sip feature parameters before using sip call.

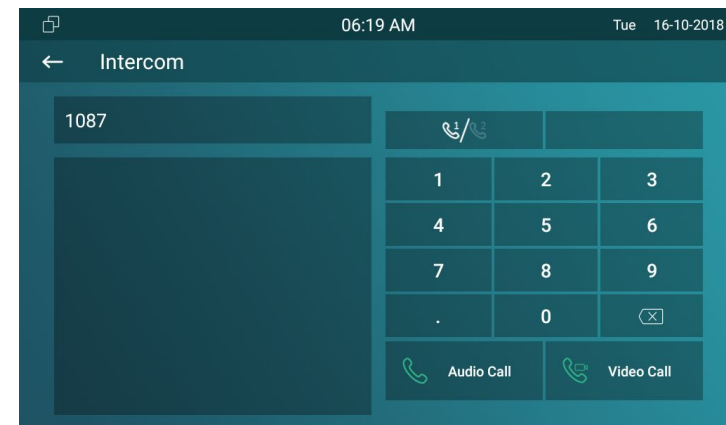


Figure 3.6.2-1 Sip call

3.6.3. Account Status

Users can check the sip account and its registration status.

In the device, go to **Settings - System Info - Account**.

In the website, users can also check in **Status - Basic - Account information**.

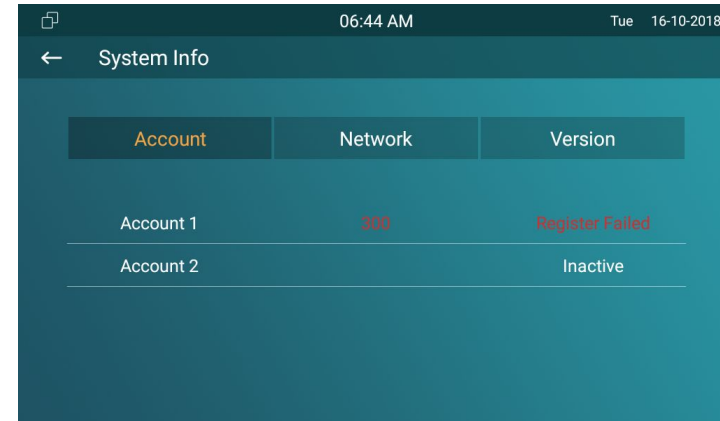


Figure 3.6.2-1 Account status

3.6.4. Sip Account

Most of sip features, like sip call, call park, BLF and so on, their using need the support of sip server. Firstly users need to register a sip account in the device. According to the sip server parameters, enter the corresponding sip account informations. And then users can use any sip features which is supported by sip server.

In the device, go to **Settings - More - Account** to setup the sip account.

Account Information	
Account1	None@None Disabled
Account2	None@None Disabled

Figure 3.6.2-2 Account information

Users can go to **Account - Basic Features** to see more accurate account settings in the website.

Status: To display the registration result.

Display Label: Which is displayed on the phone's LCD screen.

Display Name: Which is sent to the other call party for displaying.

Register Name: Enter the extension number which is allocated by sip server provider.

User Name: Allocated by sip server provider, and it is used for authentication.

Password: Used for authorization.

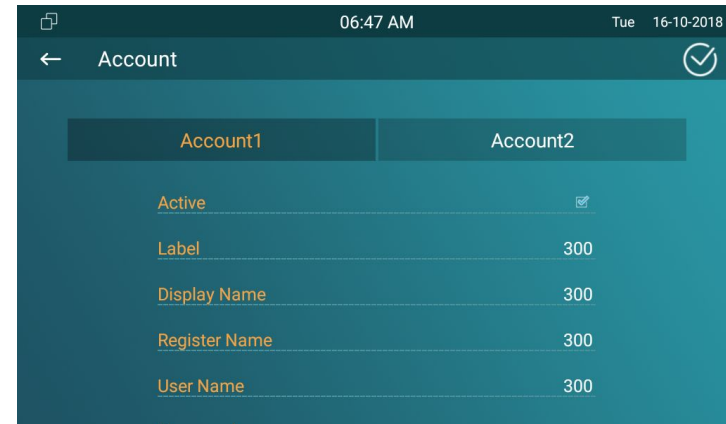


Figure 3.6.4-1 Sip account



Figure 3.6.4-1 Web sip account

3.6.5. SIP Server

There is only one sip server item in the device, users can also check in the website.

Server IP 1: To enter sip server's IP address or URL.

Port: The specified port number for the sip server.

Registration Period: The registration will expire after registration period, the phone will re-register automatically within registration period.

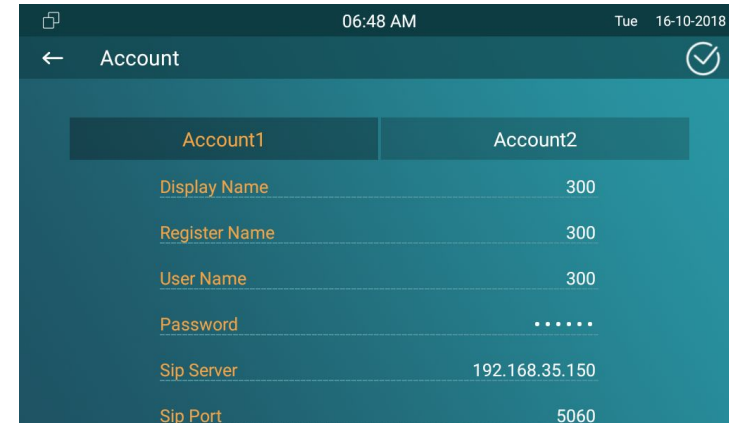


Figure 3.6.5-1 Sip server

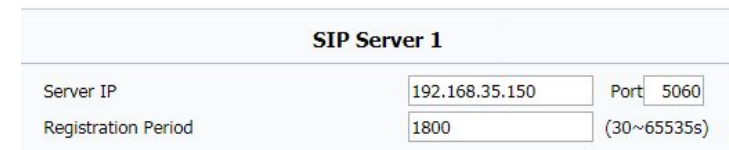
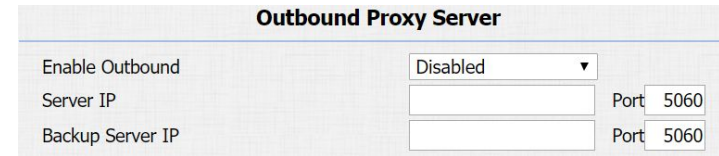


Figure 3.6.5-2 Sip server

3.6.6. Outbound Proxy Server

An outbound proxy server is used to receive all initiating request messages and route them to the designated SIP server. Users can only go to **Account - Basic** to add in the website.



Outbound Proxy Server		
Enable Outbound	Disabled	
Server IP		Port: 5060
Backup Server IP		Port: 5060

Figure 3.6.6-1 Outbound proxy server

3.6.7. Transport Type

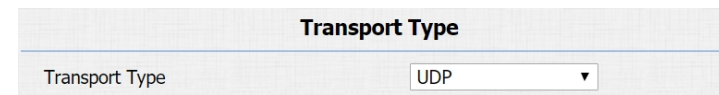
Go to **Account - Basic** to display and configure transport type for SIP messages in the website.

UDP: UDP is an unreliable but very efficient transport layer protocol.

TCP: Reliable but less-efficient transport layer protocol.

TLS: Secured and Reliable transport layer protocol.

DNS-SRV: A DNS record for specifying the location of services.



Transport Type	
Transport Type	UDP

Figure 3.6.7-1 Transport type

3.6.8. Auto answer

The indoor monitor will be auto-answered when there is an incoming call for designated account.

In the website, go to **Account - Advance - Call** to enable it.

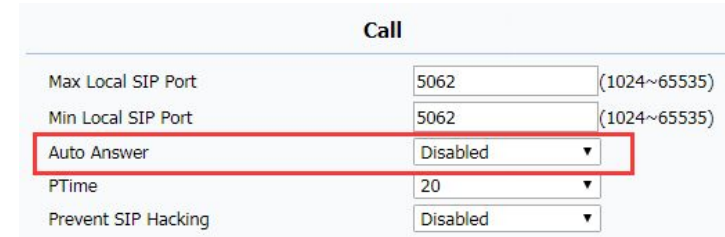


Figure 3.6.8-1 Auto answer

3.6.9. Assistance call

This function is used to call out the emergency numbers in loop time when someone needs help.

Call Number: Setup 3 SOS numbers. Once users press SOS key, the phone will call out the number in order.

Call Timeout: Setup the timeout for each number. Once users call out, if the other side will not answer within the timeout time, the phone will continue to call the next number.

Loop Times: To setup the call loop times.

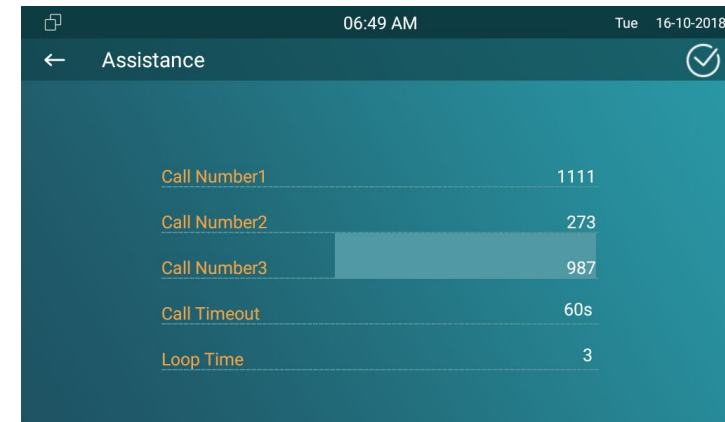


Figure 3.6.9-1 Assistance call

3.7. Security

3.7.1. Live view

Live view will help users to check real-time video of the surrounding environment of house.

In the device, enter the RTSP or ONVIF URL of the door phone or IP camera.

Doorphone ID: Enter the name for the door phone or IP camera.

RTSP Address: To set the RTSP URL for the door phone. The RTSP format of Akuvox door phone is **rtsp://device IP/live/ch00_0**.

Username/Password: For authentication, please enter the correct user name and password.

All outdoor units information will show in the live view list after added.

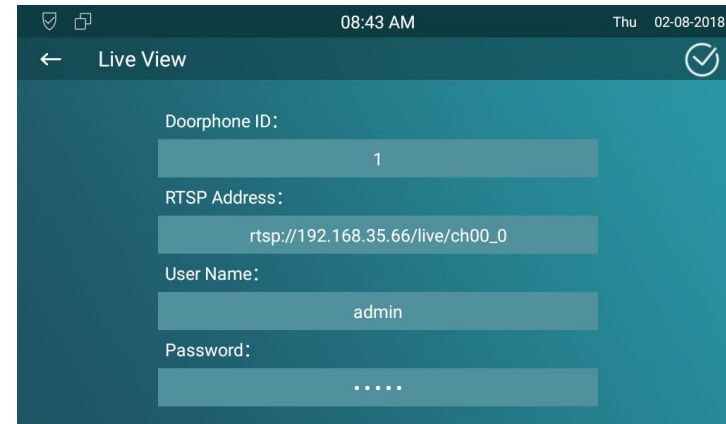


Figure 3.7.1-1 Live view

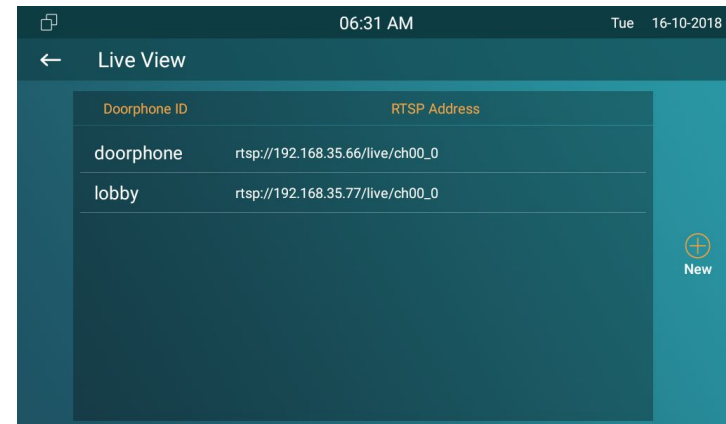


Figure 3.7.1-2 Live view list

3.8. Access control

3.8.1. Local relay

C315 has NO/NC/COM three terminals which supports to connect to lock.

Go to **Phone - Relay** to setup the DTMF code of local relay in website. Users can press the **Unlock** key during the talking.

3.8.2. Remote relay

Indoor monitor can use the unlock key during the calling to unlock the door in doorphone's site. Users need to setup the same DTMF code in the door phone and indoor monitor.

Also users can setup the unlock softkey shown in the talking interface. According to the relay connection, users can choose to

The screenshot shows the 'Relay Setting' and 'Softkey In Talking Page' configuration interface. The 'Relay Setting' section includes a 'Local Relay' section with a 'Relay Delay(sec)' dropdown set to '3', and a 'Remote Relay' section with a 'DTMF code' input field containing '#'. The 'Softkey In Talking Page' section contains a table with columns for 'Status', 'Display Name', and 'Relay'.

	Status	Display Name	Relay
Key 0	Enabled	Unlock1	Local Relay
Key 1	Enabled	Unlock2	Remote Relay

Figure 3.8-1 Relay setting

show only one unlock key or two unlock keys to display in the talking page.

3.9. Reboot

Press **Reboot** in settings interface to reboot C315, click **Confirm** when users see the prompt. The phone will reboot.

Or users can also go to **Upgrade - Basic** to do the operation in the website.

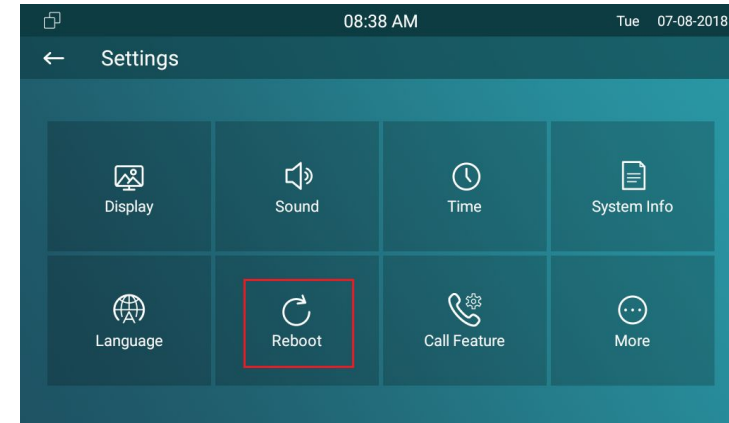


Figure 3.9-1 Reboot

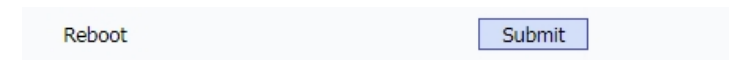


Figure 3.9-2 Web Reboot

3.10. Reset

In device, go to **Setting - More**, click **Reset**, it will show up a prompt. Choose a suitable reset mode.

Reset to factory setting: Clear all datas.

Reset Config To Factory setting: Only reset all settings which are show in the phone template.

Or go to **Upgrade - Basic** to reset in the website.

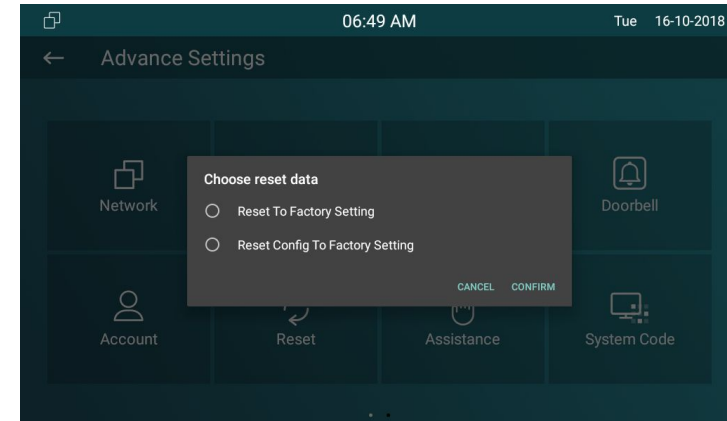


Figure 3.10-1 Reset



Figure 3.10-2 Reset

4. Advance Features

4.1. Intercom

4.1.1. Call forwarding

Users can setup the static forward to switch all the incoming calls to specified number, also users can use dynamic forward to switch all the incoming calls forward to the number which users input when the phone is ringing.

In device, go to **Settings - More - Call Feature** to setup.

Users can also go to **Phone - Call Feature** to setup in the website.

Always forward: All the incoming calls will be forwarded unconditionally to a specified number.

Busy Forward: The incoming calls will be forwarded to a specified number when the phone is busy.

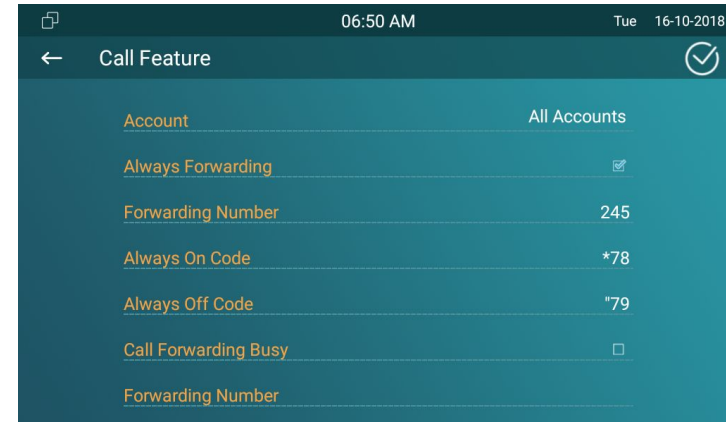


Figure 4.1.1-1 Call forwarding



Figure 4.1.1-2 Call forwarding

No answer Forward: The incoming calls will be forwarded to a specified number when the ring tone is time out without answer.

Always/Busy/No answer Forward: Tick which forward users want to setup.

Forwarding Number: Enter the target numbers which users want to forward.

On/off Code: The code used to turn on/off forward feature on server's side, if configured, the phone will send a sip message to server to turn on/off forward feature on server side if users press forward when forward feature is off/on.

4.1.2. Audio codec

In the website, go to **Account - Advanced** to display and configure available/unavailable audio codecs list.

Codec means coder-decoder which is used to transfer analog signal to digital signal or vice versa.

Familiar codecs are PCMU(G711U), PCMA(G711A), G722 (wide-bandth codecs), G723,G726,G729 and so on.

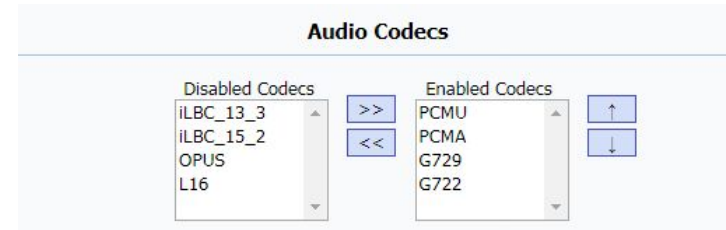


Figure 4.1.2-1 Audio codec

4.1.3. Video codec

In the website, go to **Account - Advanced** to display and configure available/unavailable video codecs list.

C315 can support 3 video codecs, H263, H264 and VP8.

Codec Resolution: It can support QCIF, CIF, VGA, 4CIF, and 720P.

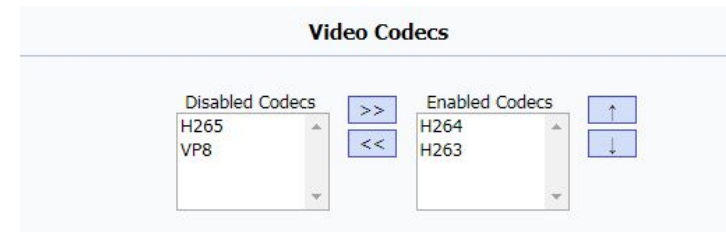


Figure 4.1.3-1 Video codec

Video Codec			
Codec Name	H263	H264	VP8
Codec Resolution	CIF	CIF	CIF
Codec Bitrate	320	320	320
Codec Payload	34	104	96

Figure 4.1.3-2 Video codec

Codec Bitrate: The lowest bitrate is 128, and the highest bitrate is 2048.

Codec payload: From 90 to 119.

4.1.4. NAT

In the website, go to **Account - Advanced** to configure NAT related settings.

UDP Keep Alive message: If enabled, the phone will send UDP keep-alive message periodically to router to keep NAT port alive.

UDP Alive Msg Interval: Keep alive message interval.

Rport: Remote Port, if enabled, it will add Remote Port into outgoing SIP message for designated account.



The screenshot shows a configuration panel titled "NAT". It contains three settings:

NAT	
UDP Keep Alive Messages	Enabled ▼
UDP Alive Msg Interval	30 (5~60s)
RPort	Disabled ▼

Figure 4.1.4-1 NAT

4.1.5. User Agent

In the website, go to **Account - Advanced**. Users can customize **User Agent** field in SIP message. If user agent is set to specific value, users could see the information from PCAP. If user agent is not set by default, users could see the company name, model number and firmware version from PCAP.

4.1.6. DTMF

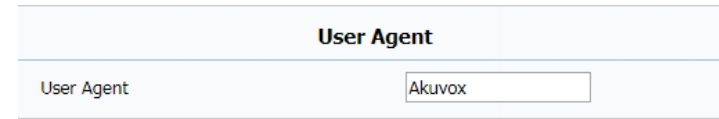
In the website, go to **Account - Advanced** to display and configure DTMF settings.

Type: Support Inband,SIP Info, RFC2833 or their combination.

How To Notify DTMF: Only available when DTMF type is Info.

DTMF Payload: To configure payload type for DTMF.

Note: DTMF type is **RFC2833** by default. DTMF type **Inband** uses inband frequency to indicate DTMF tone which is most used to be



The screenshot shows a configuration form titled "User Agent". It contains a single input field labeled "User Agent" with the text "Akuvox" entered inside it.

Figure 4.1.5-1 User agent



The screenshot shows a configuration form titled "DTMF". It contains three rows of settings: "Type" is a dropdown menu set to "RFC2833"; "How To Notify DTMF" is a dropdown menu set to "Disabled"; and "DTMF Payload" is a text input field containing "101" with a range "(96~127)" indicated to its right.

Figure 4.1.6-1 DTMF

compatible to traditional telephone server. DTMF type **SIP Info** uses SIP Info message to indicate DTMF message.

4.1.7. Call Related

Max/Min sip port: To configure maximum/minimum local sip port for designated account.

Ptime: Interval time between two consecutive RTP packets.

Prevent SIP Hacking: Enable to prevent SIP from hacking in the Internet.

4.2. Security

In this chapter, we will let users know how to setup advance arming settings. C315 support 8 I/O terminals to connect different alarm detection devices for different zones. C315 does not provide the

Call		
Max Local SIP Port	5062	(1024~65535)
Min Local SIP Port	5062	(1024~65535)
Auto Answer	Disabled	▼
PTime	20	▼
Prevent SIP Hacking	Disabled	▼

Figure 4.1.7-1 Call related

power for detection devices. Just connecting alarm detection devices, like smoke sensor or infrared sensor to the GND and I/O terminal, then enable the corresponding area.

4.2.1. Zone settings

In the device, go to **Settings - More - Arming** to enter the zone settings interface.

To choose a zone to set corresponding parameters. C315 supports up to 8 zones, users can connect up to 8 sensors to C315.

- Press Location to setup the corresponding zone including Bedroom, Guest room, Hall, Window, Balcony, Kitchen, Study and Bathroom.
- Press Zone Type to set the type of the sensor including Infrared, Drmagnet, Smoke, Gas, Urgency.
- Press Trigger to set the trigger mode for the sensor including NC and NO.

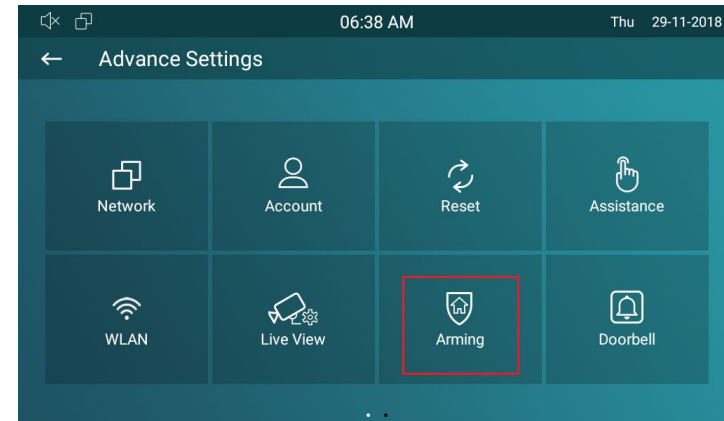


Figure 4.2-1 Arming

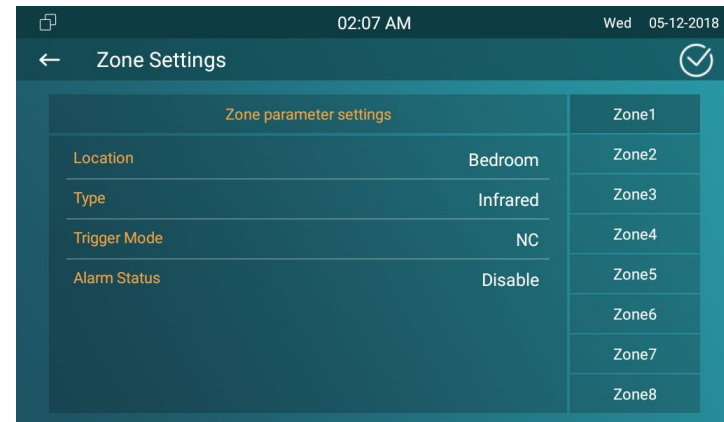


Figure 4.2.1-1 Zone setting

- Press Status to set the status for the sensor including disable, enable and 24H.

Note: The status will matter the arming mode. **Disable** status means it cannot be triggered, **24H** status means it cannot be disabled, and **Enable** status means it depends on arming mode.

4.3. Upgrade

4.3.1. Basic Upgrade

In the website, go to **Upgrade - Basic**.

Upgrade: To select upgrading .rom format file from PC manually, and then click the **Submit** to start update.

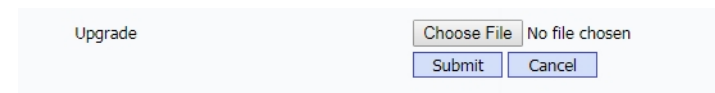


Figure 4.3.1-1 Basic upgrade

4.3.2. Autop

Autop (Auto-Provisioning), this feature is used to configure or upgrade C315 in batch via the support of third party servers.

To use DHCP/PNP/TFTP/FTP/HTTP/HTTPS servers to get URL, and then download firmware and/or its corresponding configuration files from servers. These configuration files and firmware will be used to update firmware and the corresponding parameters on the phone.

4.3.2.1. PNP

To display and configure PNP settings for auto provisioning.

PNP: Plug and Play, once PNP is enabled, the phone will send SIP subscription message to PNP server automatically to get auto provisioning server's address.

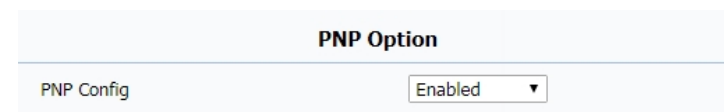


Figure 4.3.2.1-1 PNP

By default, the SIP message is sent to multicast address 224.0.1.75 (PNP server address by standard).

4.3.2.2. Manual Autop

To display and configure manual update server's settings.

URL: Auto provisioning server address.

User name: If server needs an username to access, configure it, otherwise left blank.

Password: If server needs a password to access, configure it, otherwise left blank.

Common AES Key: Used for the phone to decipher common auto provisioning configuration file.

AES Key (MAC): Used for the phone to decipher MAC-oriented auto provisioning configuration file (For example, file name could be 0c1105888888.cfg if the phone's MAC address is 0c1105888888).

Manual Autop	
URL	tftp://192.168.35.48
User Name	admin
Password
Common AES Key
AES Key(MAC)
<input type="button" value="AutoP Immediately"/>	

Figure 4.3.2.2-1 Manual autop

Note: AES is one of many encryption, it should only be configured when configure file is ciphered with AES, otherwise left blank.

4.3.2.3. Automatic Autop

To display and configure auto provisioning mode settings.

This auto provisioning mode is actually self-explanatory.

For example, mode “Power on” means the phone will go to do provisioning every time when it powers on.

The screenshot shows a web interface for configuring 'Automatic Autop'. The title is 'Automatic Autop'. There are two main sections: 'Mode' and 'Schedule'. The 'Mode' dropdown is set to 'Power On'. The 'Schedule' dropdown is set to 'Sunday'. Below the 'Schedule' dropdown are two input fields: 'Hour(0~23)' with the value '22' and 'Min(0~59)' with the value '0'. At the bottom of the form are two buttons: 'Submit' and 'Export'.

Figure 4.3.2.3-1 Automatic autop

Note: Please check more details in auto provisioning feature guide.

4.4. Log

4.4.1. Call log

To display call history records. Available call history types are “All calls,” “Dialed calls,” “Received calls,” “Missed calls,” and “Forwarded calls.”

In the device’s Intercom interface, users can check all call logs in the log list. Click the **Edit key** to manage the selected call log, for example, add the number to a new contact, or send message to this number, or add it to black list, or delete it.

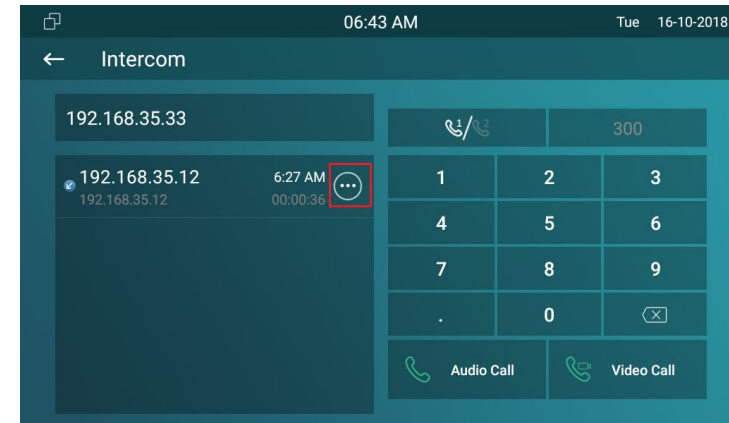


Figure 4.4.1-1 Call log

In the website, go to **Phonebook - Call Log**, users can check more details.

HangUp: Click to hangup ongoing call on the phone.

Note: For “HangUp” feature, users need to have the remote control privilege to control the phone via Web UI. Please go to “Remote Control” in the **Web UI - Phone - Call Feature** page to setup a available IP address from the controller.

Call Log							
Call History							
Index	Type	Date	Time	Local Identity	Name	Number	
1	Dialed	2018-10-16	10:55:02	192.168.35.9 7@192.168.35.97	192.168.35.44	192.168.35.4 4@192.168.35.44	<input type="checkbox"/>
2	Dialed	2018-10-16	10:54:55	192.168.35.9 7@192.168.35.97	192.168.35.44	192.168.35.4 4@192.168.35.44	<input type="checkbox"/>
3	Dialed	2018-10-16	10:54:46	192.168.35.9 7@192.168.35.97	192.168.35.44	192.168.35.4 4@192.168.35.44	<input type="checkbox"/>
4	Dialed	2018-10-16	10:52:58	192.168.35.9 7@192.168.35.97	192.168.35.44	192.168.35.4 4@192.168.35.44	<input type="checkbox"/>
5	Dialed	2018-10-16	10:52:34	192.168.35.9 7@192.168.35.97	192.168.35.44	192.168.35.4 4@192.168.35.44	<input type="checkbox"/>
6	Dialed	2018-10-16	10:48:09	192.168.35.9 7@192.168.35.97	192.168.35.44	192.168.35.4 4@192.168.35.44	<input type="checkbox"/>
7							<input type="checkbox"/>
8							<input type="checkbox"/>
9							<input type="checkbox"/>
10							<input type="checkbox"/>
11							<input type="checkbox"/>
12							<input type="checkbox"/>
13							<input type="checkbox"/>
14							<input type="checkbox"/>
15							<input type="checkbox"/>

Figure 4.4.1-2 Call log

Remote Control	
Allowed Access IP List	<input type="text" value="192.168.35.48"/>

Figure 4.4.1-3 Remote control

4.4.2. System log

System log is used to debug by administrator. It will record action information about the phone.

To display system log level and export system log file.

System log level: From level 0~7. The higher level means the more specific system log is saved to a temporary file. It's level 3 by default.

Export Log: Click to export temporary system log file to local PC.

Remote System Log: Export log to the specified server.

Remote System Server: Point to to target server.



The screenshot shows a configuration panel titled "System Log". It contains four rows of controls:

- LogLevel:** A dropdown menu currently showing the value "7".
- Export Log:** A blue button labeled "Export".
- Remote System Log:** A dropdown menu currently showing the value "Disabled".
- Remote System Server:** An empty text input field.

Figure 4.4.2-1 System log

4.4.3. PCAP

PCAP is a network capture tool of C315 itself. Network capture is also another way to quick locate some issues. To start, stop packets capturing or to export captured packet file.

Start: To start capturing all the packets file sent or received from C315.

Stop: To stop capturing packets.

Note: C315 will save captured packets file to a temporary file, this file maximum size is 1M (Mega bytes), and it will stop capturing once reaching this maximum size.

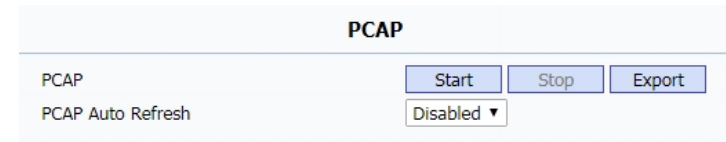


Figure 4.4.3-1 PCAP

Abbreviations

ACS: Auto Configuration Server

Auto: Automatically

AEC: Configurable Acoustic and Line Echo Cancelers

ACD: Automatic Call Distribution

Autop: Automatical Provisioning

AES: Advanced Encryption Standard

BLF: Busy Lamp Field

COM: Common

CPE: Customer Premise Equipment

CWMP: CPE WAN Management Protocol

DTMF: Dual Tone Multi-Frequency

DHCP: Dynamic Host Configuration Protocol

DNS: Domain Name System

DND: Do Not Disturb

DNS-SRV: Service record in the Domain Name System

FTP: File Transfer Protocol

GND: Ground

HTTP: Hypertext Transfer Protocol

HTTPS: Hypertext Transfer Protocol Secure

IP: Internet Protocol

ID: Identification

IR: Infrared

LCD: Liquid Crystal Display

LED: Light Emitting Diode

MAX: Maximum

POE: Power Over Ethernet

PCMA: Pulse Code Modulation A-Law

PCMU: Pulse Code Modulation μ -Law

PCAP: Packet Capture

PNP: Plug and Play

RFID: Radio Frequency Identification

RTP: Real-time Transport Protocol

RTSP: Real Time Streaming Protocol

MPEG: Moving Picture Experts Group

MWI: Message Waiting Indicator

NO: Normal Opened

NC: Normal Connected

NTP: Network Time Protocol

NAT: Network Address Translation

NVR: Network Video Recorder

ONVIF: Open Network Video Interface Forum

SIP: Session Initiation Protocol

SNMP: Simple Network Management Protocol

STUN: Session Traversal Utilities for NAT

SMTP: Simple Mail Transfer Protocol

SDMC: SIP Devices Management Center

TR069: Technical Report069

TCP: Transmission Control Protocol

TLS: Transport Layer Security

TFTP: Trivial File Transfer Protocol

UDP: User Datagram Protocol

URL: Uniform Resource Locator

VLAN: Virtual Local Area Network

WG: Wiegand

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We highly appreciate your feedback about our products.

