

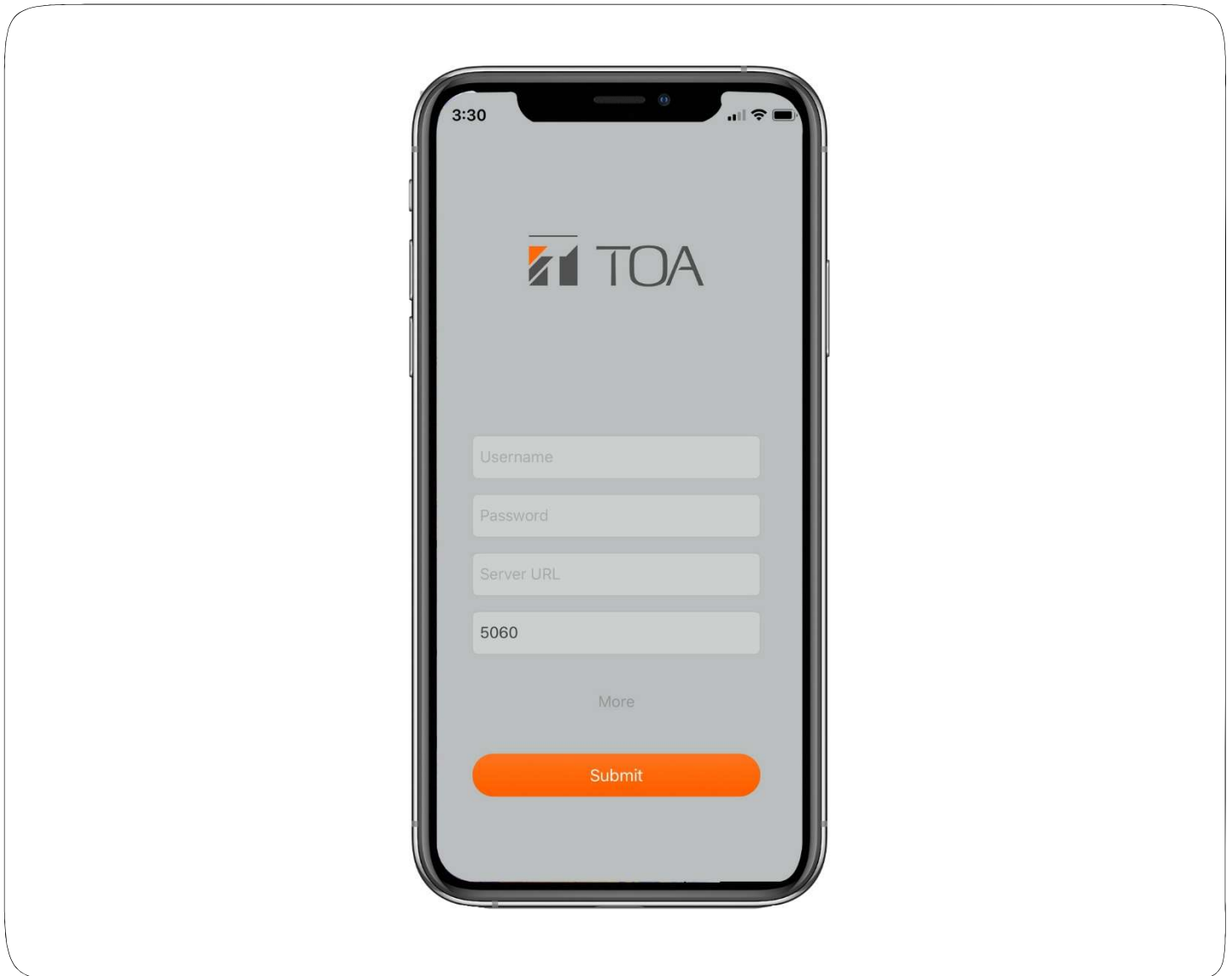
SIP Intercom Softphone Application**N-SP80****TOA Canada Corporation**

Table of Contents

1. Product Overview	4
1.1. Product Description	4
2. Functions	4
2.1. Account	4
2.1.1. Register an Account	4
2.2. Make a Call	5
2.2.1. Calling from Keypad	5
2.2.2. Calling from Call log	5
2.2.3. Calling from Contact	5
2.3. Receive a Call	6
2.3.1. Receive an Incoming Call	6
2.3.2. During the Session	7
2.4. Call Log	8
2.4.1. Edit the Call Log	8
2.5. Contacts	9
2.5.1. Add a New Contact	9
2.5.2. Modify a Contact	11
2.5.3. Delete a Contact	11
2.6. Live View	12
2.6.1. Add a Door Station	12
2.6.2. Delete a Door Station	13
2.6.3. Monitor a Door Station from Contacts Interface	14
2.7. Messages	15
2.7.1. Create a Message	15
2.7.2. Delete a Message	15
3. Settings	16
3.1. SIP Account Settings	16
3.1.1. Status	16
3.1.2. Basic	16
3.1.3. Proxy and Offline Push	17
3.1.4. Codec Settings	17
3.2. Preferences Settings	18
3.2.1. Audio (<i>Android only</i>)	18
3.2.2. Video (<i>Android only</i>)	18

3.2.3.	Network	19
3.2.4.	Advanced (<i>Android only</i>).....	19
3.2.5.	Log	19
3.2.6.	About	20

1. Product Overview

1.1. Product Description

TOA N-SP80 is a smart app, based on SIP standard. It can be directly connected to an Internet Telephony Service Provider or to an IP PBX. Often be used with TOA intercom series.

Note: TOA N-SP80 can support the Android platform. For the Android APK contact TOA Canada technicalsupport@toacanada.com



2. Functions

2.1. Account

2.1.1. Register an Account

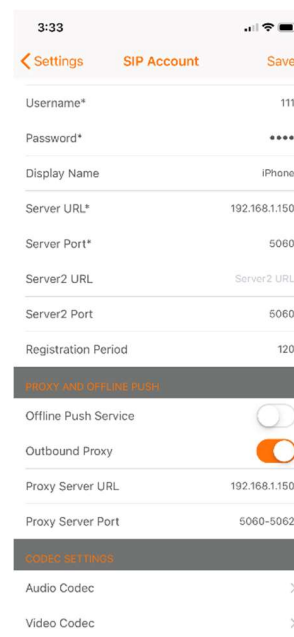
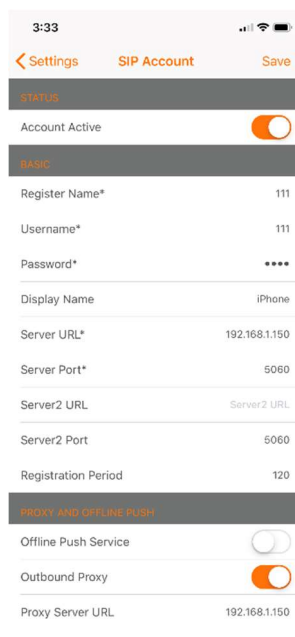
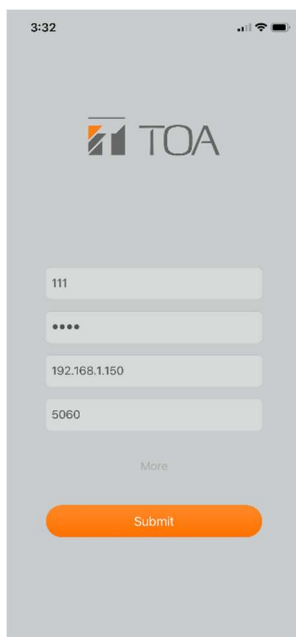
When users open N-SP80 app for the first time, they need fill account information to register a SIP account. Press “**More**” to set detailed information. Then click Submit to save the configuration and enter the app.

User Name: The user name of the registered SIP account.

Password: The password of the registered SIP account.



Server URL: The IP address of the SIP server.

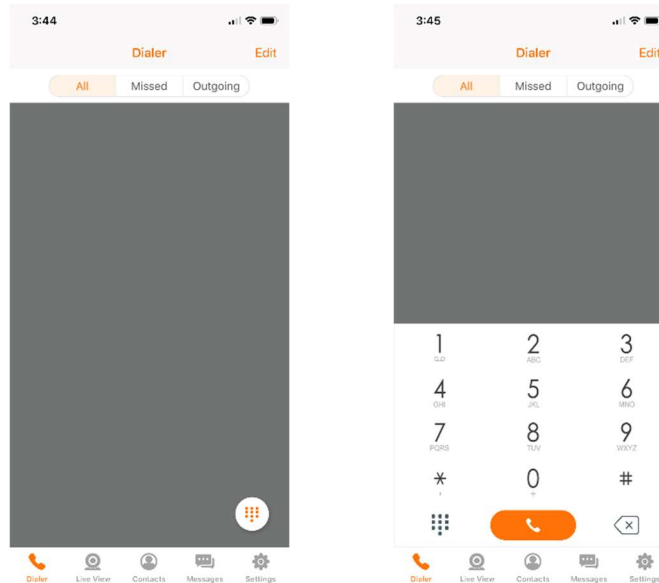
Server Port: The server port of the SIP server.



2.2. Make a Call

2.2.1. Calling from Keypad


On the **Dialer** page, press the right-down  icon to expand the keypad, insert the IP or SIP number, and then press  button to call.

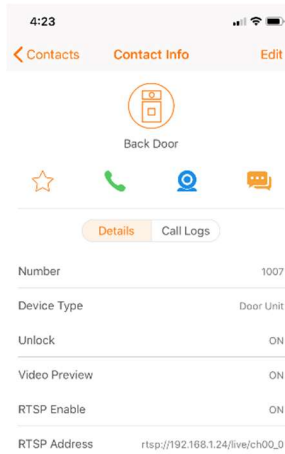


2.2.2. Calling from Call log

In the **Dialer** page, there are three types of call log (All log, missed log and outgoing log). Users can press the contact on the call log that they want to call.

2.2.3. Calling from Contact

Go to the **Contacts** page and choose a contact you want to call. Press the  button to make a call out.



2.3. Receive a Call

2.3.1. Receive an Incoming Call

Tap **Accept** to pick up the incoming call.

Tap **Exit** to reject the incoming call.

*N-SP80 supports to preview the caller when it receives an incoming call from door phone.



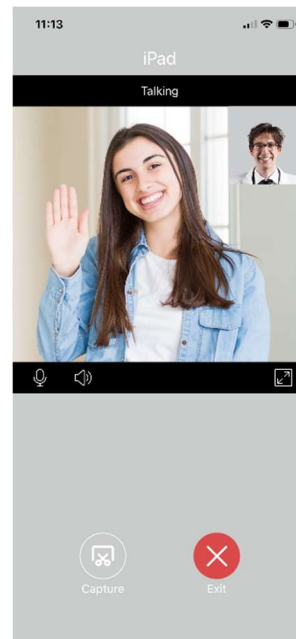
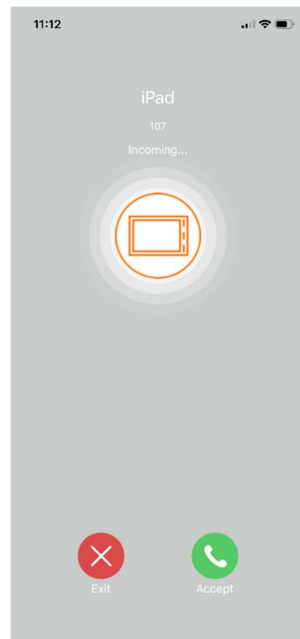
: Tap it to mute the microphone.



: Tap it to switch to speakerphone.



: Tap it to go full screen.

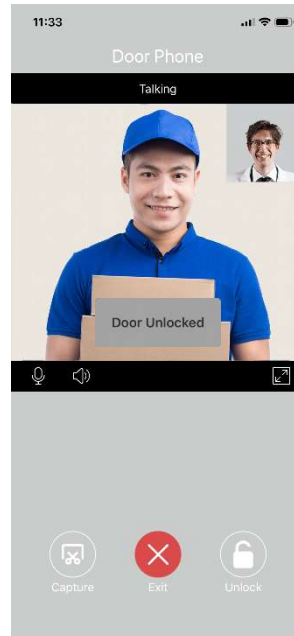
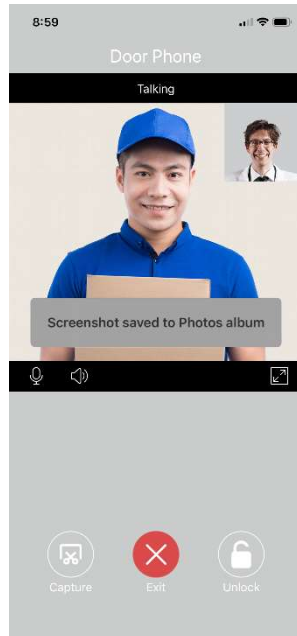


2.3.2. During the Session

Once the call is answered, you can take a screenshot for the caller by pressing **Capture** button.

Tap **Unlock** to open the corresponding door (if the call is from outdoor unit).

Tap **Exit** to hang up the current call.



2.4. Call Log

On the **Dialer** page, Users are able to view all / missed / outgoing calls.

2.4.1. Edit the Call Log

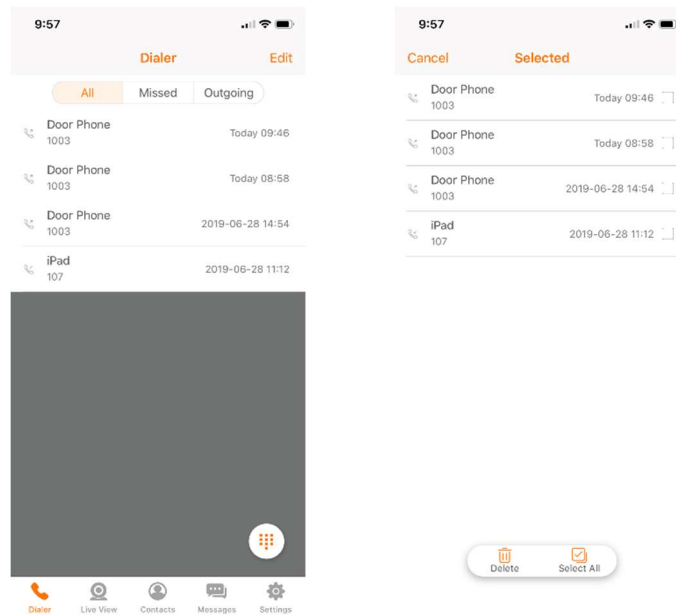
On the **Dialer** page, press **Edit** button to enter the edit interface.

1) If you want to delete one call record:

- Select the call log you want to delete;
- Press **Delete**;
- Press **OK** to confirm the deletion.




2) If you want to delete all call logs:

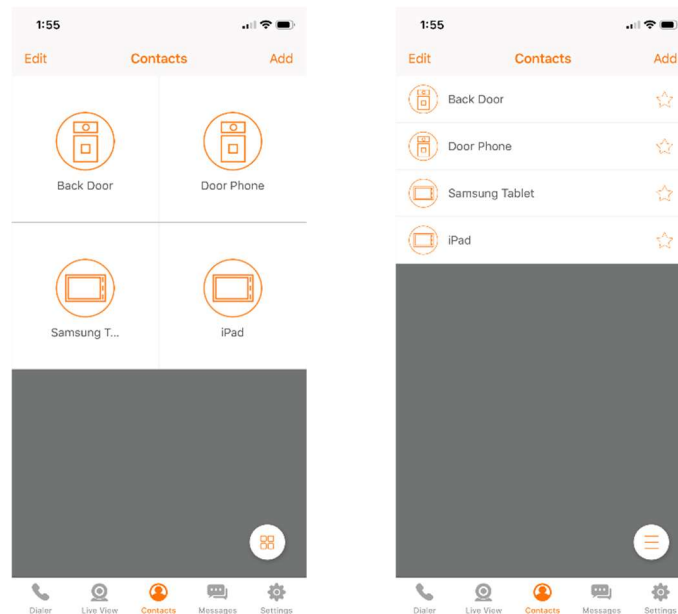
- Press **Select All**;
- Press **Delete**;
- Press **OK** to confirm the deletion.



2.5. Contacts

Press **Contacts** page to enter the contacts interface.

- Click  or  icon to change the layout of the Contacts interface. There are two layouts for users to choose.
- Click  icon to mark your favorite contact.




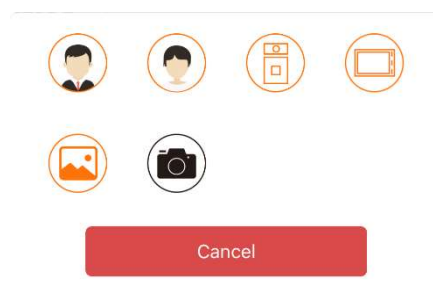
2.5.1. Add a New Contact

On the **Contacts** page, click **Add** to add a new contact.

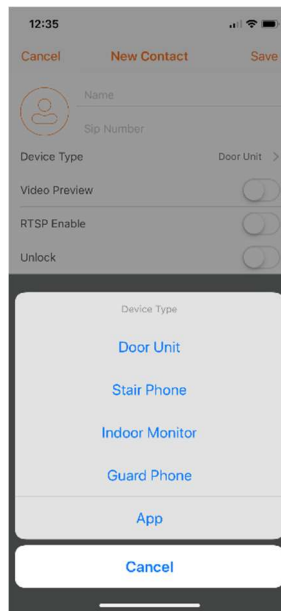
Name: The name of the contact's device.

SIP Number: The SIP number or IP address of the devices.

 : Tap to change the contacts' profile picture. There are four default pictures for users to choose: male, female, door unit and indoor monitor. Users can also choose local pictures or take a photo.



Device Type: Choose the corresponding type according to the contact's device. There are five types of users.



Video Preview: If enabled, users can preview before the call.

RTSP Enabled: If enabled, users can get the video preview and monitor the video from door unit and stair phone.

*Note: The main difference between the video preview and RTSP preview is that their video stream is different. The video preview get the video from the SIP video stream, but the RTSP preview get the video from the RTSP stream. The video preview can be used when the other side cannot support RTSP.

RTSP Address: Type in the RTSP URL of door phone using the following format: **rtsp://Door Phone's IP/live/ch00_0**.

Unlock: If enabled, there will be an Unlock icon in the talking interface when the device type is door unit or stair phone.

Relay Name: To set a name for the relay.

Unlock Method: It supports DTMF and HTTP commands.

When choose the HTTP, then the N-SP80 app can unlock the devices in the monitor interface, either.

*Note: The HTTP control feature should be enabled on the devices first. For example, the configuration path of TOA door phone is **Web - Intercom - Relay - Open Relay via HTTP**. The unlock HTTP command format is:

http://IP_address/fcgi/do?action=OpenDoor&UserName=&Password=&DoorNum=1.

DTMF Code: To setup corresponding DTMF code of DTMF code type.

More Relay: To add a new option to control the relay. The N-SP80 app can support up to 3 relays.

2.5.2. Modify a Contact

- Select the contact need to modify in the contact list.
- Click **Edit**.
- Enter into contact edit page, edit the contact information.

2.5.3. Delete a Contact

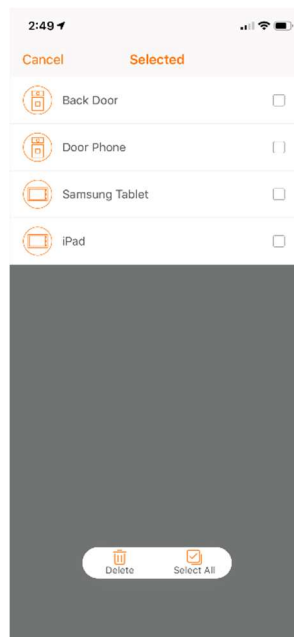
On the **Contacts** page, press **Edit** to enter the edit interface.

1) If you want to delete one contact:

- Select the contact you want to delete;
- Press **Delete**;
- Press **OK** to confirm the deletion.

2) If you want to delete all contacts:

- Press **Select All**;
- Press **Delete**.
- Press **OK** to confirm the deletion.

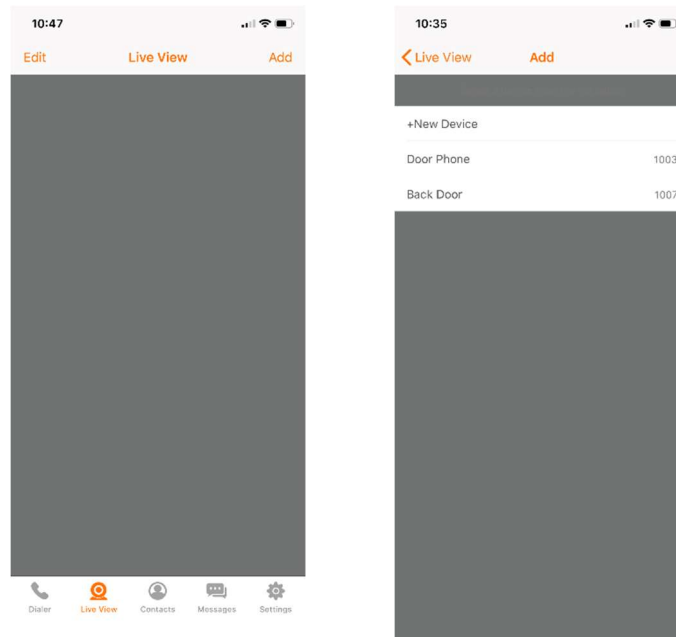


2.6. Live View

2.6.1. Add a Door Station

On the **Live View** page, click **Add** to add a new door station.

Users are able to select door station that already defined on the **Contacts** page, or by adding a new device.

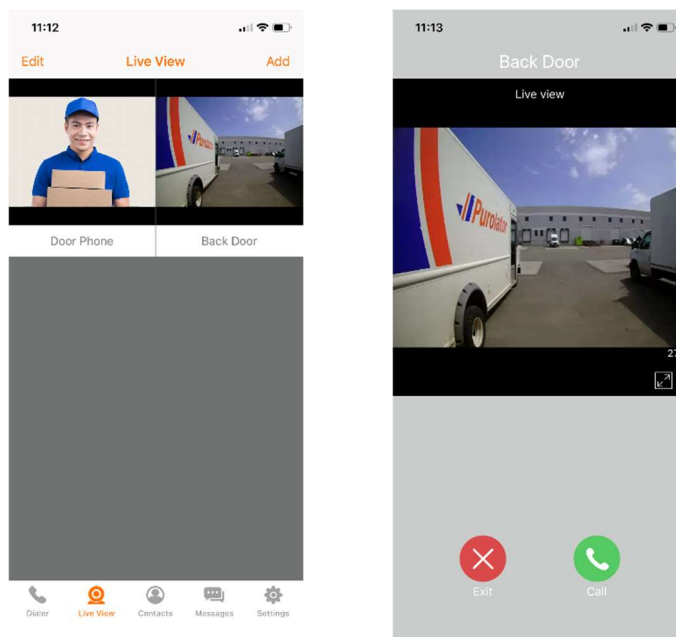


On the **Live View** page, users can view the selected door stations with a video preview for each one.

Press on one of the door stations to go into a full screen mode.

Tap **Call** to call the door station.

Tap **Exit** to exit the full screen mode.



To add a door station not present on the **Contacts** page, press “+New Device” from the menu list to add a new device.

Device Name: The name of the new device.

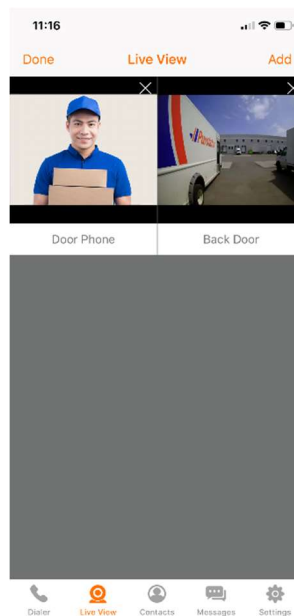
Number: The SIP number or IP address of the devices.

RTSP URL: The RTSP URL of door phone by using the following format: **rtsp://Door Phone’s IP/live/ch00_0**.




2.6.2. Delete a Door Station

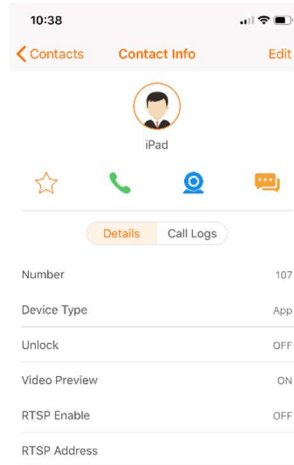
To delete a door station, press “Edit” and tap the “x” mark on the top right of the required door station(s). When finished, press “Done”.



2.6.3. Monitor a Door Station from Contacts Interface

Monitor feature enables users to view the real-time video from IP cameras or door phones anytime.



Click  in the Contacts page.




2.7. Messages

2.7.1. Create a Message

2.7.1.1. Create a Message on the Contacts Interface

- Choose a contact and enter its contact info interface.
- Click  icon to enter the **Messages** interface.
- Type your message.
- Click  icon to send the message out.

2.7.1.2. Create a Message on the Messages Interface

- On the **Messages** page, click **Add**.
- Enter the destination number manually or select the device quickly from the below list.
- Type your message.
- Click  icon to send the message out.

2.7.2. Delete a Message

On the **Messages** page, press **Edit** to enter the edit interface.

1) If you want to delete one message:

- Select the message you want to delete;
- Press **Delete**;
- Press **OK** to confirm the deletion.

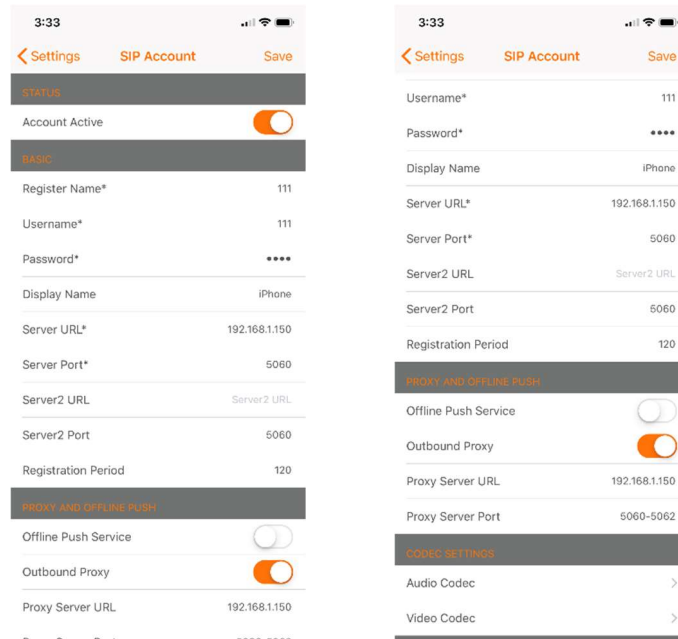
2) If you want to delete all messages:

- Press **Select All**;
- Press **Delete**;
- Press **OK** to confirm the deletion.

3. Settings

3.1. SIP Account Settings

After login, if users need change SIP account information, go to **Settings - SIP ACCOUNT**.



3.1.1. Status

Enable it to active the SIP account.

3.1.2. Basic

Register Name: The registered name of the SIP account.

User Name: The user name of the registered SIP account.

Password: The Password of the registered SIP account.

Display Name: The display name of the registered SIP account.

Server URL: The IP address of the SIP Server.

Server Port: The Server Port of the SIP Server.

Server2 URL: The IP address of the backup SIP Server.

Server2 Port: The Server Port of the backup SIP Server.

Registration Period: The period time to register the SIP Server.

3.1.3. Proxy and Offline Push

Offline Push Service: Enable it then the mobile phone will still receive the incoming call even the N-SP80 app run in the background or will be killed.

Outbound Proxy: Enable it to configure the proxy server to receive all initiating request messages and route them to the designated SIP server.

Proxy Server URL: To configure the URL of the proxy server.

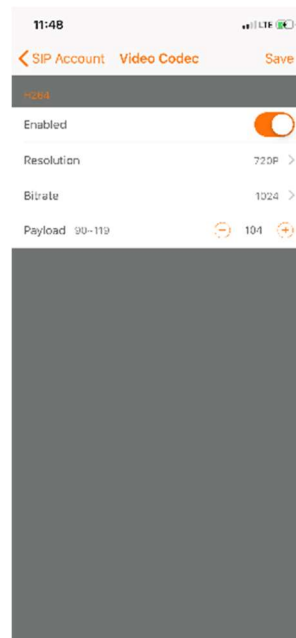
Proxy Server Port: To configure the proxy server port.

3.1.4. Codec Settings

Audio Codec: To configure the codecs by pressing the corresponding buttons. N-SP80 app supports 3 types audio codec: PCMU, PCMA, G729, and G722.

Video Codec: To configure the codecs by pressing the corresponding buttons. N-SP80 app supports H.264.

- **Codec Resolution:** To adjust the resolutions for different video codecs.
- **Codec Bitrate:** To adjust the bitrate for different video codecs.
- **Codec Payload:** To adjust the codec payload for video codec.



3.2. Preferences Settings

3.2.1. Audio *(Android only)*

Users can set audio parameters.

3.2.1.1. Echo Cancellation

Echo Cancellation: Enable to optimize audio and to cancel echo.

CNG: Only work when VAD is enabled, enable CNG function to judge whether still in a session while other side have no response.

VAD: Enable to detect and cancel long time Silent.

3.2.1.2. Auto Gain Control

AUTO GAIN CONTROL: AGC enable to set AGC Target volume, including receiving side and sending the maximum volume can set up to 20dB.

3.2.2. Video *(Android only)*

Users can set video parameters.

3.2.2.1. General Settings

IP Direct Video Preview: Enable to display preview pictures when an IP call comes.

IP Direct Video Resolution: Choose the resolution of preview pictures when an IP call come, totally 6 options, and the maximum is 720P, 4CIF by default.

3.2.2.2. RTSP

Catching 100-5000ms: Increase delay time to make RTSP stream more smoothly when network environment is not stable enough. For example, set the parameters to 5000ms, the stream will delay 5 seconds.

3.2.2.3. Media Feedback

NACK (Negative Acknowledgement): If system detect packet loss at the receiving side, NACK function will help to notify to resend the packet.

Tmubr (Temporal Max Media Bitrate Request): Enable to help the sender to control Bitrate.

3.2.2.4. Other Settings

Color Enhancement: Enable to increase display brightness.

Image Quality: Three options: Low, Middle, and High. The higher you choose, the clearer the video during a video call.

Show frame rate and bit rate: Enable it to show current frame rate and bit rate on the left-upper corner.

3.2.3. Network

Users can set the transport type and NAT in the network interface.

3.2.3.1. Transport Type

Transport Type: There are two types for users to choose: UDP and TCP.

- **UDP:** UDP is an unreliable but very efficient transport layer protocol.
- **TCP:** Reliable but less-efficient transport layer protocol.

3.2.3.2. NAT

UDP Keep Alive: Enable to send UDP keep alive message periodically to router to keep NAT port alive.

RPort (Remote Port): Enable to add remote port in to outgoing SIP message for designated account.

3.2.4. Advanced *(Android only)*

Auto Rotation: When users enable auto rotation function on their phones/tablets, then this will allow all the sub-pages to turn to landscape mode.

3.2.5. Log

Log function provides a professional method for administrator to debug.

3.2.5.1. Log Level

LOG LEVEL: To adjust the system log level, which ranges from 0 to 7 and it is 3 by default. The higher level means the more specific system log is saved to a temporary file.

3.2.5.2. Sync Settings with the Cloud

To sync log to the server.

Log Server: Fill the IP address of the PC.

Log Port: The default value is 106.

*Note: Phone and Computer should connect to same LAN, then open log tool on PC (for example: Wireshark).

3.2.5.3. Export Log *(Android only)*

Export log to your phone.

Log file storage location: Press **Browser** to choose the storage location, then press **Export** Log to export it to that location.

3.2.6. About

This interface shows TOA logo and current version information.

Call us: Click it to call our Canadian Office 1-800-263-7639.

Contact us: Click it to visit our website www.toacanada.com