

Using the CyberData Video Intercom with the Linphone App for Android and iOS



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Revision Information

Revision 931434A was released on August 31, 2017.

Hardware Information

Device	Firmware/Software Version
CyberData Video Intercom	1.2.0
CyberData Video Intercom with Keypad	1.1.0
Linphone App Android	3.2.7
Linphone App iOS	3.16.3

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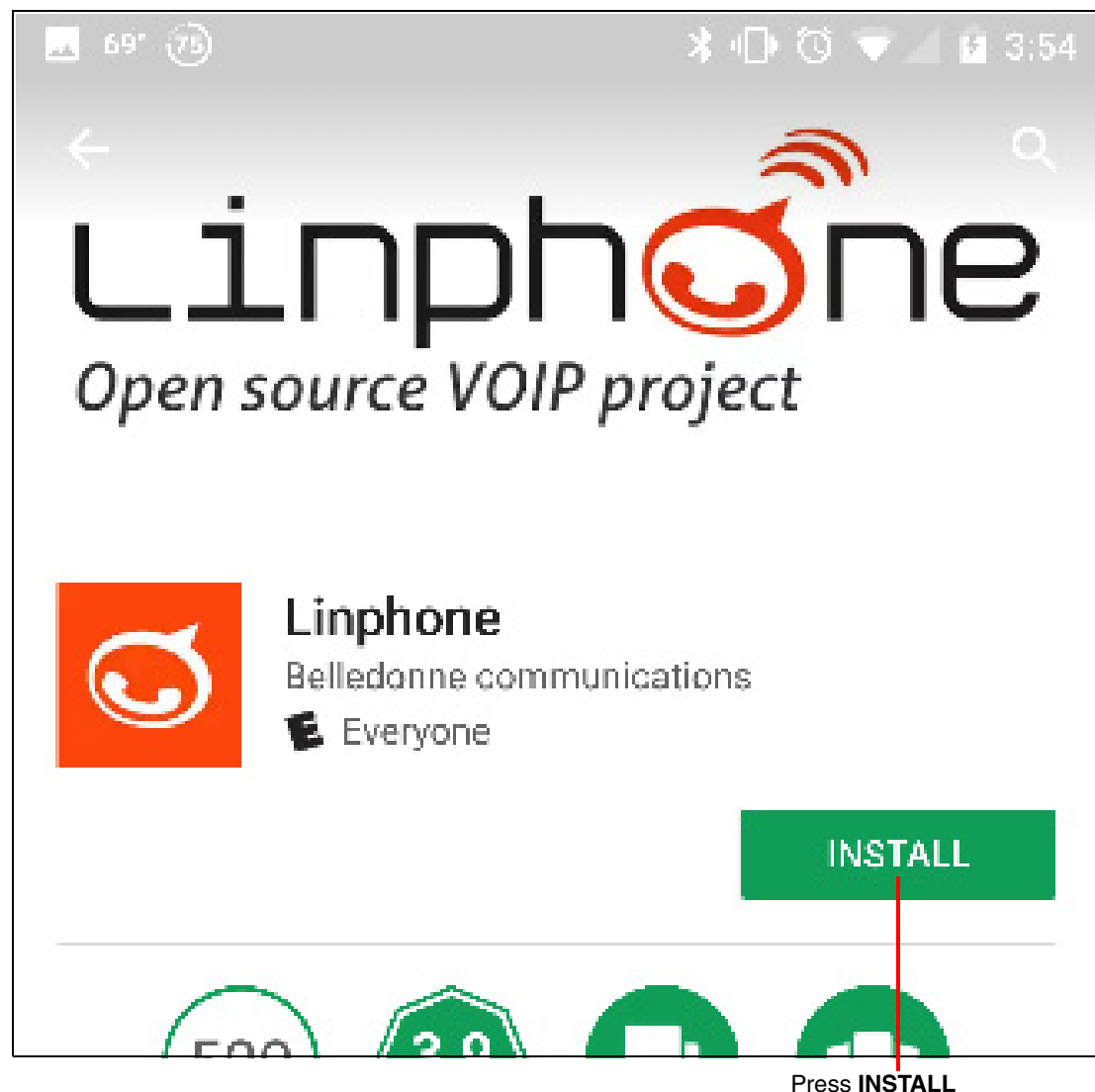
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1.0 Downloading the Application

The Linphone app is available for download for free from the [Google Play Store](#) and the [App Store](#) by completing the following steps:

1. Depending on the operating system of your phone, open the **Play Store** or the **App Store**.
2. Search for the **Linphone** application.
3. Select **Linphone** from the list of apps and press **INSTALL**. See [Figure 1](#).
4. Once the app has been installed, open the app.

Figure 1. Linphone App



2.0 Setting up the App: Android

If this is your first time opening this application, you will be greeted with the **Account Creation Assistant**. See [Figure 2](#).

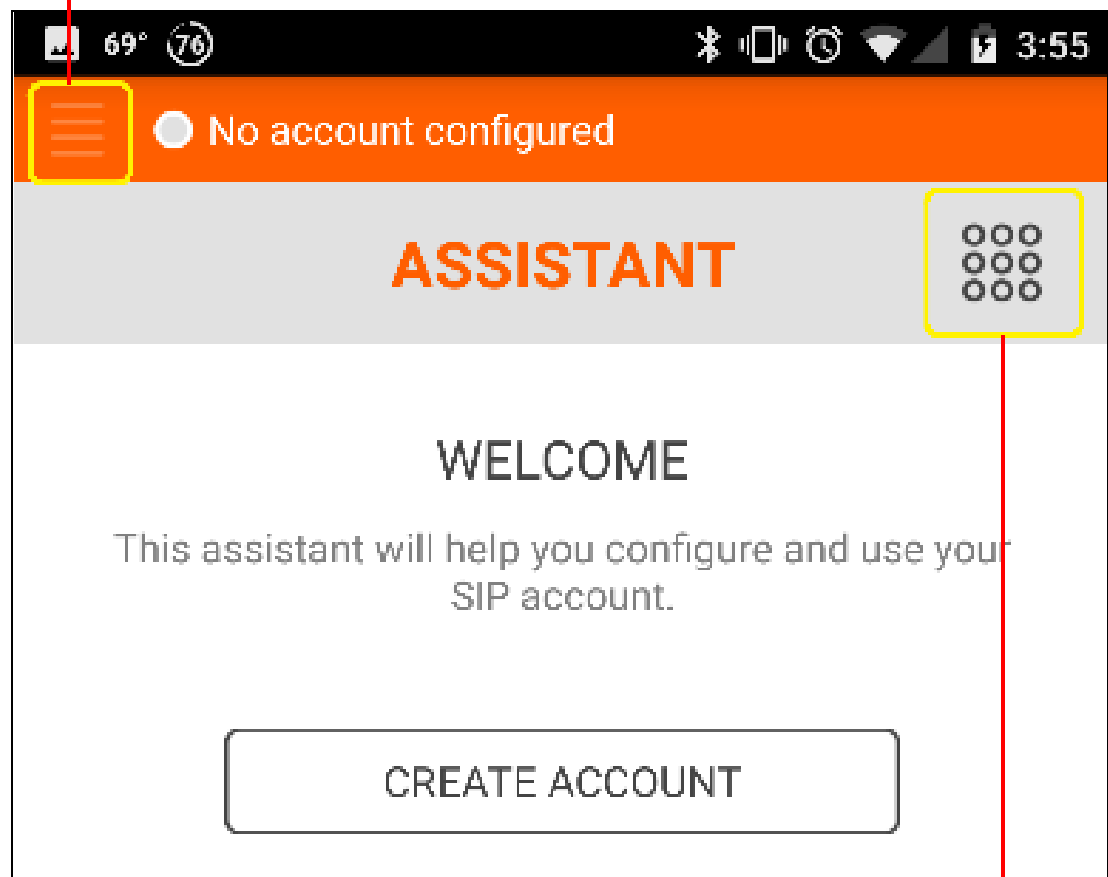
Note Dependent on your use case, it might be useful to setup a SIP account. We will get into account creation in [Section 2.2, "As an extension"](#).

To set up the app, complete the following steps:

1. Press the small dial pad button in the upper right-hand corner. See [Figure 2](#).
2. Press the menu button in the top left corner. See [Figure 2](#).

Figure 2. Account Creation Assistant

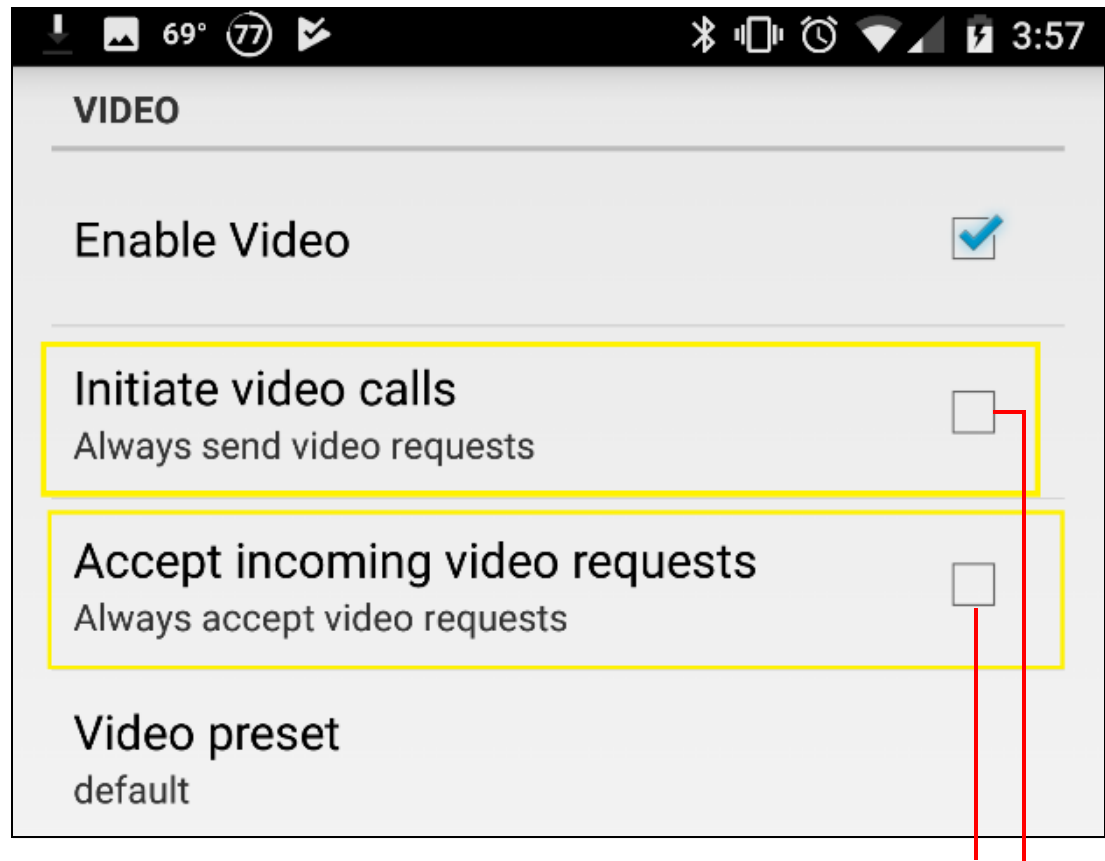
Press the menu button in the top left corner



Press the small dial pad button in the upper right-hand corner.

3. Navigate to the **video settings** page (Figure 3) by going from **settings** to **video settings**.
4. Check the boxes **Initiate Video Calls** and **Accept incoming video requests**. See Figure 3.

Figure 3. Video Settings Page



Check the boxes **Initiate Video Calls** and **Accept incoming video requests**.

5. Scroll down and confirm that the video codec **h264** is checked.
6. When finished, press the **back** button on your device.
7. Select **Audio** and uncheck **Adaptive rate control**.
8. Press the **back** button on your device.

9. Select the **Network** section and uncheck the **Use Random Port** box, so that the **SIP port to use** field defaults to the value **5062**. Your Linphone app is now ready to begin making calls.

Note Some android phones use or block port **5060** so we are using **5062** to ensure the app can be called.

Figure 4. Network Settings

The screenshot shows a settings interface with two main sections. The top section, titled 'Use random ports', contains an unchecked checkbox. This section is enclosed in a red rectangular border. The bottom section, titled 'SIP port to use', contains a text input field with the value '5062'. This section is enclosed in a yellow rectangular border. Two red lines originate from the text labels below: one points from 'The SIP port to use field defaults to the value 5062' to the input field, and the other points from 'Uncheck the Use Random Port box' to the checkbox.

The **SIP port to use** field defaults to the value **5062**

Uncheck the **Use Random Port** box

2.1 Point to Point

Point to Point mode can be very useful in many different situations. It can be used to diagnose issues between endpoints because this mode does not use a PBX. Point to Point mode can be used without creating an account in Linphone.

Note This will require your phone and the device to be on the same sub-net on the local network.

To make a Point to Point call to your Video Intercom, complete the following steps:

1. Open the dialer ([Figure 5](#)) in Linphone by pressing the dial pad buttons.
2. On this screen, tap on the Gray bar that shows the words, **Enter a number or an address**. This will open the on-screen keyboard.
3. On the on-screen keyboard, type the following:
sip:<IP ADDRESS OF YOUR DEVICE>:5060

Note Put the IP address of your device in place of **<IP ADDRESS OF YOUR DEVICE>**.

Note **5060** is the default local sip port used by the CyberData Video Intercom. Please change this port if you have changed it on your device.

Figure 5. Dialer



2.2 As an extension

Linphone can also be used as its own endpoint in your VoIP environment. To set up an account on Linphone, complete the following steps:

1. Press the menu button.
2. Press the grey bar that shows the words **No Account Configured**. This will take you to the **Account Creation Page**. See [Figure 6](#).
3. On the **Account Creation Page**, there are three fields that are required: **Username**, **Password**, and **Domain**. See [Figure 6](#).

Note Unless **Auth userid** is different from the **username**, it is not required. The **Auth userid** is shown filled in [Figure 6](#) for illustration purposes.

Figure 6. Account Creation Page

The screenshot shows the 'Account Creation Page' in the Linphone app. At the top, there's a status bar with '69° 78' and a menu icon. Below that, an orange bar says 'No account configured'. The main title is 'SETTINGS' with a grid icon. The 'SIP ACCOUNT' section contains the following fields:

- Username***: A text field containing '311'. A red line connects this label to the 'Username' label on the right.
- Auth userid**: A text field containing '311'.
- Password***: A text field. A red line connects this label to the 'Password' label on the right.
- Domain***: A text field containing '10.0.1.50'. A red line connects this label to the 'Domain' label on the right.
- Display name**: A text field.

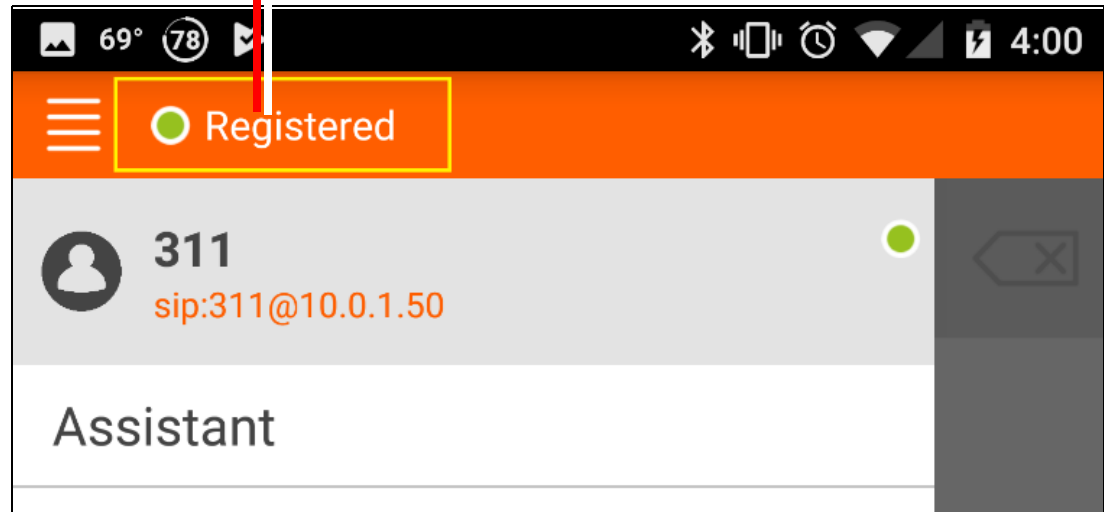
Below the 'SIP ACCOUNT' section is the 'ADVANCED' section, which includes:

- Transport**: A dropdown menu showing 'UDP'.
- Proxy**: A text field with the placeholder 'SIP proxy hostname or ip address (optional)'.
- Outbound proxy**: A text field with a checkbox to its right.

4. Once you have filled out the required fields (**Username**, **Password**, and **Domain**), press the back button on your device, and you will see the top bar show the account as registered. See [Figure 7](#).
5. You can now make calls to any other registered phones or endpoints on your PBX.

Figure 7. Linphone Registered

You will see the top bar show the account as registered



3.0 Setting up the App: iOS

After the application has finished installing, open the app. Once the app has been opened, you will be greeted by the Account Creation Assistant.

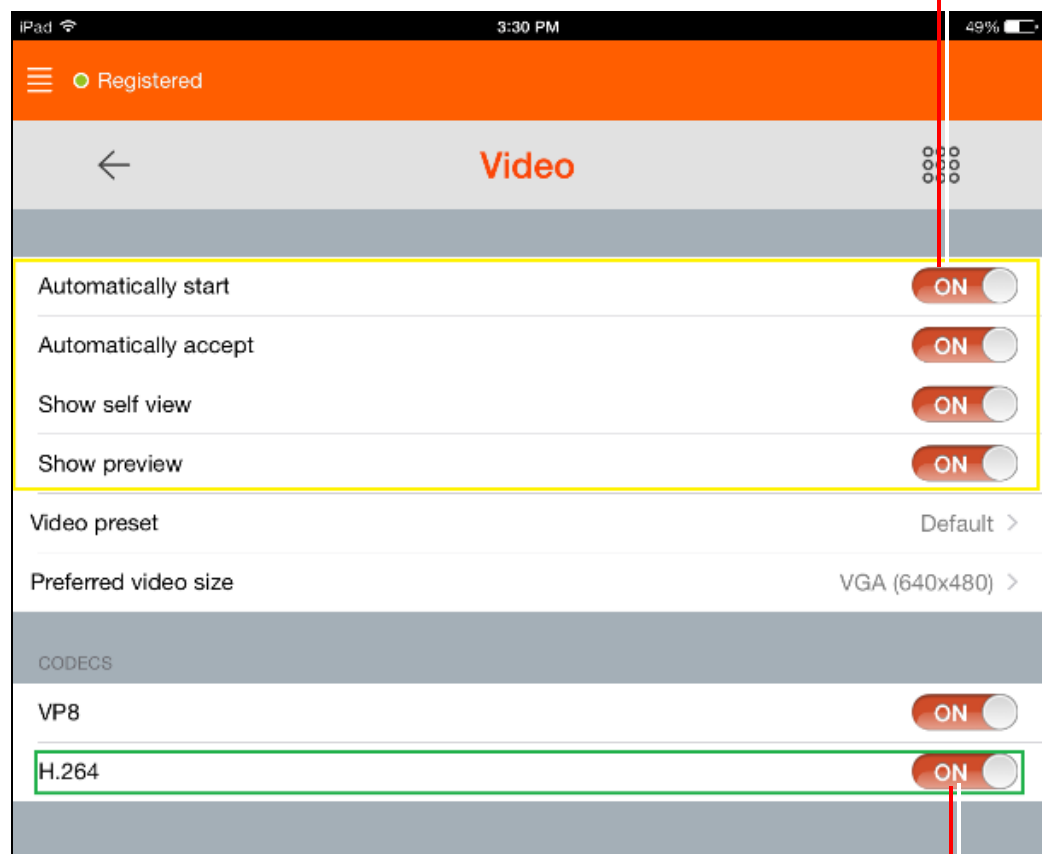
Note Dependent on your use case, it might be useful to setup a SIP account. We will get into account creation in [Section 3.2, "As an extension"](#).

There are a few settings that need to be changed to ensure proper operation with the CyberData Video Intercom. To change these settings, complete the following steps:

1. Go to the **Settings** page by pressing the menu button on the top left corner.
2. From the **Settings** page, navigate to **Video**.
3. In the **Video** section, move the slider for **Automatically start** and **Automatically accept** to the **ON** position. See [Figure 8](#).
4. Ensure that the **H.264** video codec is enabled. See [Figure 8](#).

Figure 8. Video Settings

Move the slider for **Automatically start** and **Automatically accept** to the **ON** position



Ensure that the H.264 video codec is enabled.

5. Press the back arrow when finished, and then go to the **Network** section.
6. In the **Network** section, clear the **Stun Server** field.
7. Move the sliders for **ICE** and **Random Port** to the **OFF** position.

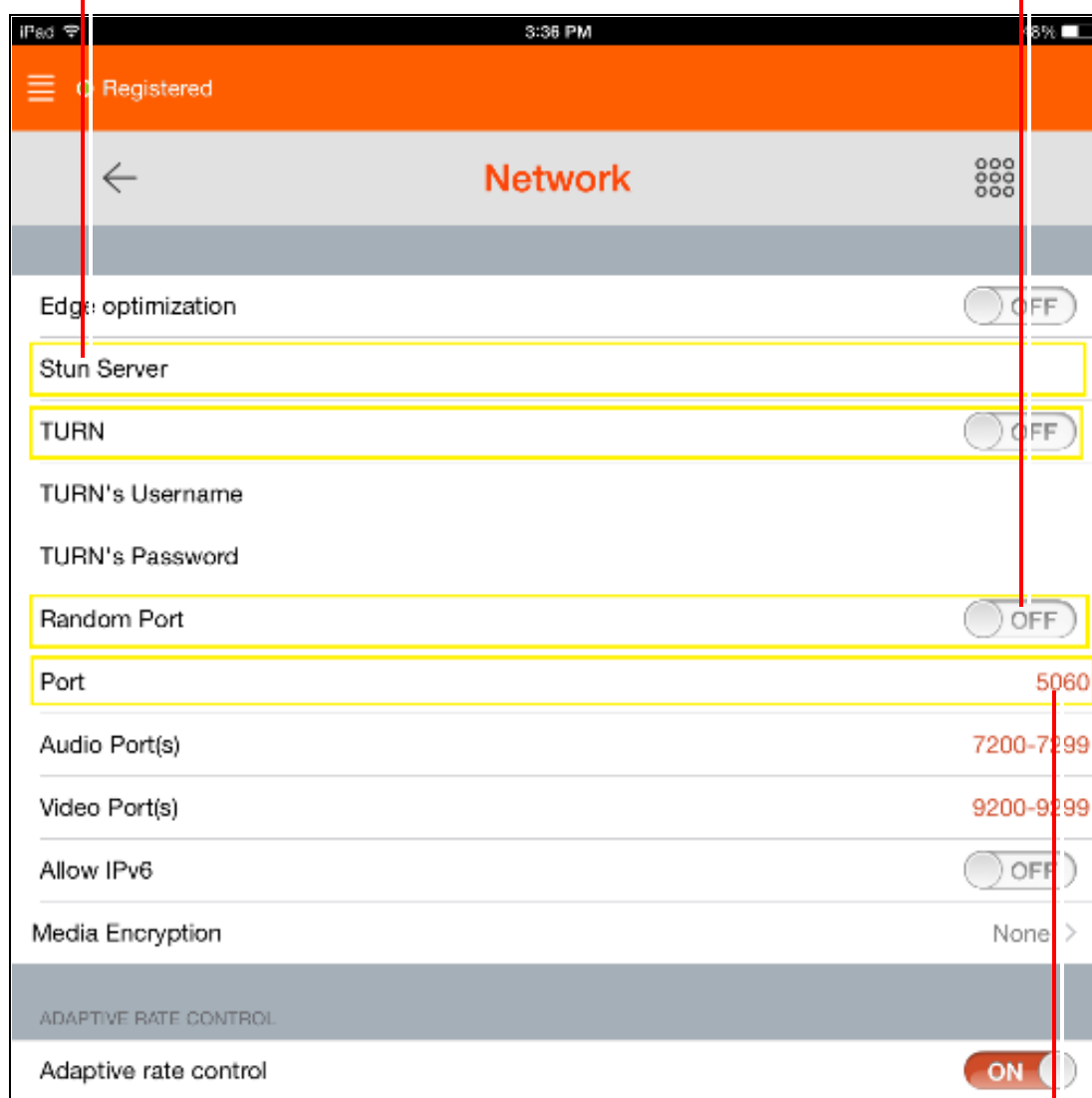
Note The Slider for **ICE** will disappear when the **Stun server** field is cleared and ICE is set to the **OFF** position.

8. Type **5060** into the **Port** field.
9. After these settings have been changed, your app is ready to begin making calls.

Figure 9. Network Settings

Clear the **Stun Server** field

Move the sliders for **ICE** and **Random Port** to the **OFF** position



Type **5060** into the Port field.

3.1 Point to Point

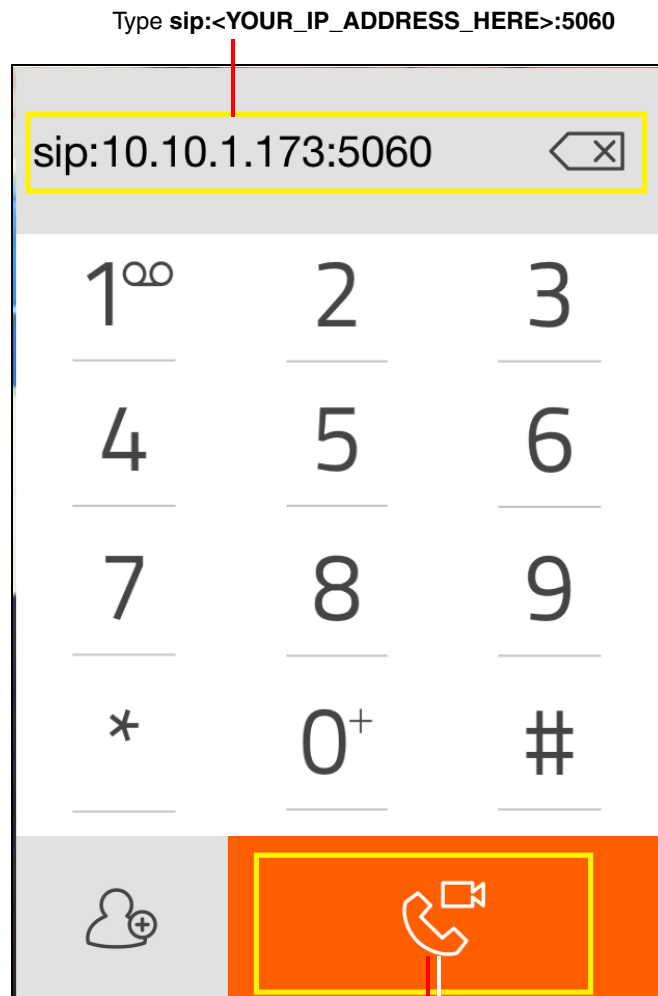
To make a call in Point to Point mode, complete the following steps:

1. Go to the dialer by pressing the small dialer button.
2. Once at the dial screen, press on the grey field labeled **Enter a number or address**. This will bring up the on-screen keyboard. See [Figure 10](#).
3. Type the following:
sip:<YOUR_IP_ADDRESS_HERE>:5060

Note Replace the section <YOUR_IP_ADDRESS_HERE> with the IP address of the Video Intercom.

4. To make the call, press the orange button that shows a phone with a camera. This will start a video call to the IP address you configured.

Figure 10. Dialer



To make the call, press the orange button that shows a phone with a camera

3.2 As an extension

Linphone can also be registered as an endpoint to take advantage of your PBX system. To setup an account, complete the following steps:

1. Press the menu button in the top left corner.
2. Press the **assistant** button.
3. From the **assistant** screen, press **Use SIP Account**.
4. There are two required fields: **Username** and **Domain**. Fill out the appropriate fields with the information from your PBX system.
5. Once the information has been entered, press the **Login** button.

Note If the device registers, you will notice the small grey dot in the orange bar turn to green. If registration failed, the dot will appear red and the text will say **Registration Failed**.

4.0 Using the app

Since Linphone has support for DTMF, it can be used to take advantage of all the features of a CyberData Video Intercom. Whether using Linphone in Point to Point mode or as an extension, DTMF can be utilized. DTMF tones can be used to activate different features on the Intercom like the on-board relay. For example, if Linphone was used to receive a call from an Outdoor Video Intercom with Keypad, you could see who was making the call with the video functionality and then using DTMF to toggle the door lock that is attached to the internal relay. Linphone is a great free application that would be a great asset to any user of a CyberData product.

5.0 Additional Resources

CyberData VoIP Discovery Tool

<http://www.cyberdata.net/assets/common/discovery.zip>

Linphone website

<http://www.linphone.org/>

Linphone Google Play store Linphone Page

<https://play.google.com/store/apps/details?id=org.linphone&hl=en>

Apple App Store Linphone Page

<https://itunes.apple.com/us/app/linphone/id360065638?mt=8>

6.0 Contact Information

Contact	<p>CyberData Corporation 3 Justin Court Monterey, CA 93940 USA www.CyberData.net Phone: 800-CYBERDATA (800-292-3732) Fax: 831-373-4193</p>
Sales	<p>Sales 831-373-2601, Extension 334</p>
Technical Support	<p>The fastest way to get technical support for your VoIP product is to submit a VoIP Technical Support form at the following website:</p> <p>http://support.cyberdata.net/</p> <p>The Support Form initiates a ticket which CyberData uses for tracking customer requests. Most importantly, the Support Form tells us which PBX system and software version that you are using, the make and model of the switch, and other important information. This information is essential for troubleshooting. Please also include as much detail as possible in the Comments section of the Support Form.</p> <p>Phone: (831) 373-2601, Extension 333</p>