Grandstream Networks, Inc.

Connecting GDS37XX with GXV33XX
Configuration Guide

Table of Content

Table of Figures

SUPPORTED DEVICES

Following table shows Grandstream products supporting GDS37XX integration:

Model	Supported		Firmware
	Audio	Video (H.264)	
GXV3370	Yes	Yes	1.0.3.28 or higher
GXV3380	Yes	Yes	1.0.3.29 or higher
GXV3350	Yes	Yes	1.0.3.30 or higher

INTRODUCTION

GDS3705 is an audio door access system, an innovative IP based powerful door system. The GDS3705 was built for users looking for a strong audio-only facility access and security monitoring solution that can be deployed in environments of all sizes. This audio door system features dual microphones and HD loudspeaker with advanced AEC to offer intercom functionality, can support SIP calls to IP phones and has a built-in RFID chip reader and keypad for secured keyless or key entry.

GDS3710 HD is an IP video door system with a built-in hemispheric camera and some high-definition video capabilities. GDS3710 is ideal for monitoring from wall to wall without blind spots. Powered by an advanced Image Sensor Processor (ISP) and state of the art image algorithms, it delivers exceptional performance in all lighting conditions. It contains integrated PoE, LEDs, HD loudspeaker, RFID card reader, motion detector, lighting control switch, Alarm Input/output and more.

The GDS37XX can control two doors at once and this guide describes needed configuration for both peering and using SIP server scenarios. And the GXV3370, GXV3380 and GXV3350 support remote door opening to manage up to two doors connected to the GDS37XX.

The GDS37XX can be connected with a SIP phone in 2 different ways, either using peering mode (without a SIP server) or through a SIP server/registrar, and in this guide, GXV3370 will be used as SIP phone and UCM6XXX as SIP server.

PEERING SCENARIO

We assume that the GDS3710 is installed on a small warehouse controlling two doors and GXV3370 inside to monitor and control the access of the premise. Employees can swipe the RFID card to get in, while visitors need to press the Door Bell to initial video call and the related person at the GXV3370 side need to type the key PIN to open the door remotely to allow the visitors to get in as shown in the figure below.
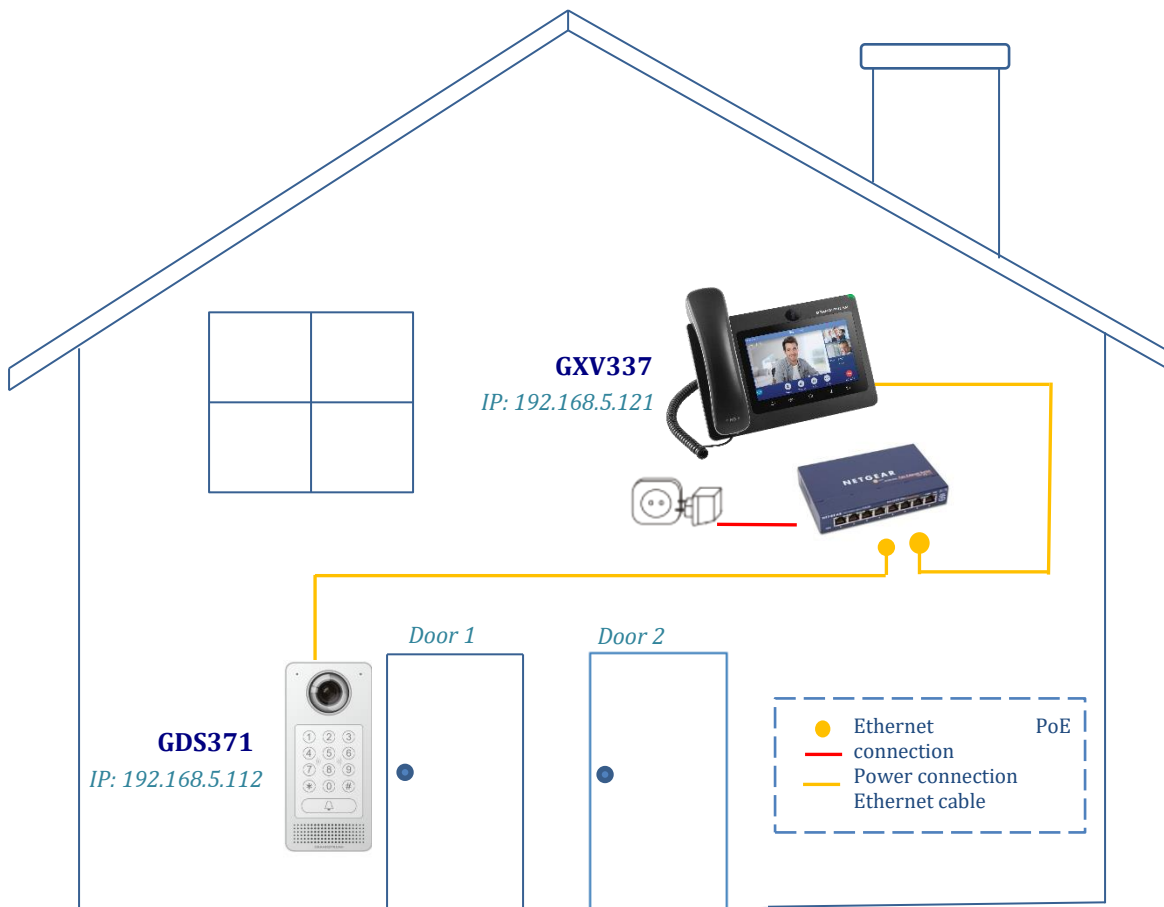

Figure 1: GXV3370 peered with the GDS3710

- The IP address used by the GDS3710 is 192.168.5.112.
- The IP address used by the GXV3370 is 192.168.5.121.

Configuration on the GDS37XX Side

The GDS37XX needs to be configured with the IP address of the GXV33XX and related SIP port, and remote PIN for door opening, when using second, third or fourth… accounts, the port number associated to each port is needed 5062, 5064, 5066…).

In order to enable the two door control on the GDS37XX, first navigate to "**Door System Settings → Basic Settings**" then set the following as shown on the figure below:
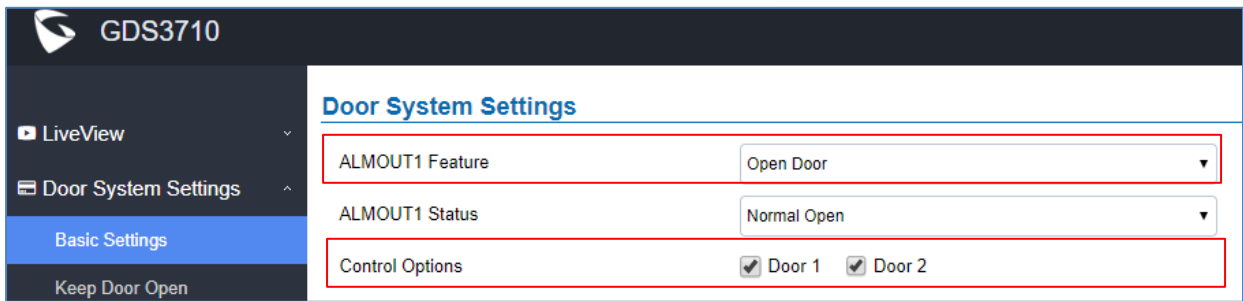
Figure 2: Door System Settings: Enabling two doors control

Then on the same page, proceed on setting the following as shown on the figure below:
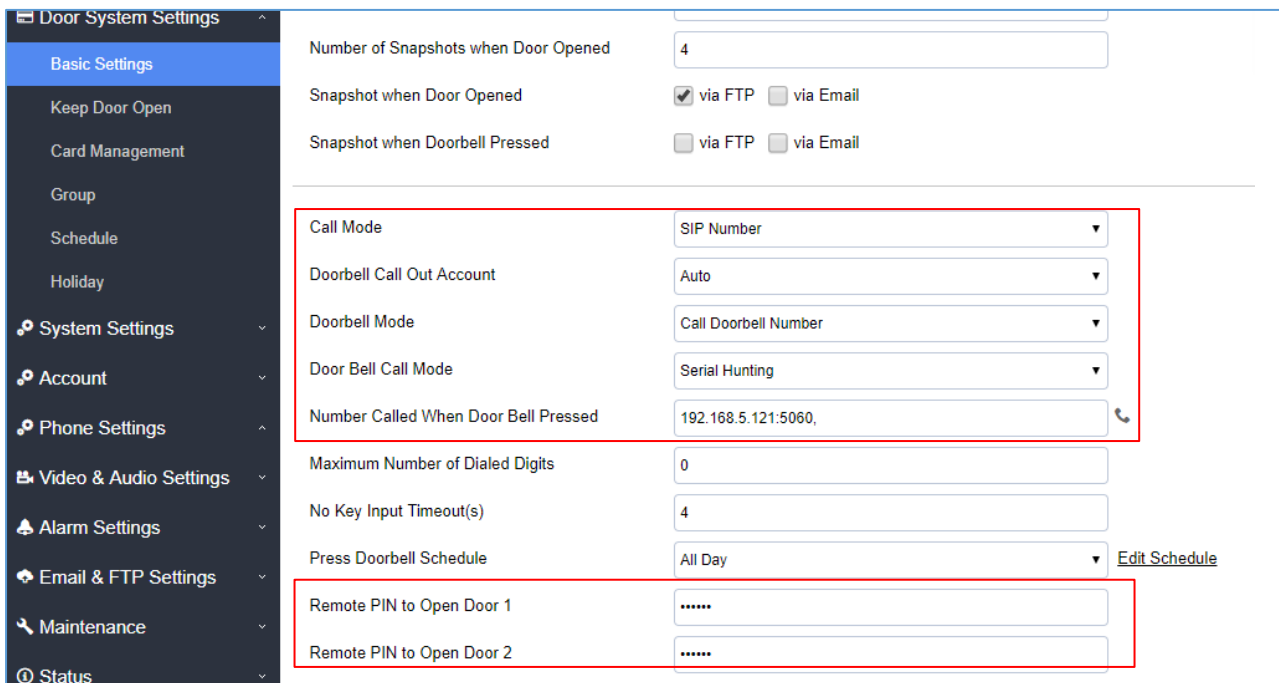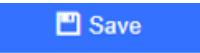

Figure 3: Door System Settings

1. Choose the action to be taken when the doorbell is pressed, three options are available:

   • **Call Doorbell Number**: when Doorbell is pressed, a call will be made to the "Number Called When Door Bell Pressed"
   • **Control Doorbell Output (Digital Output 1)**: when Door Bell is pressed electronic lock for Output 1 is opened.
   • **Both Of Above**: When selected, both Call Doorbell Number and Control Doorbell Output options are enabled.

In our case we will choose "**Call Doorbell Number**".

2. The option "Door Bell Call Mode" can be used when multiple phones are configured to be called when pressing the doorbell button. Users can set this option to:

Connecting GDS37XX with GXV33XX Configuration Guide

- **Serial Hunting:** The configured extensions and/or IP addresses will ring one after one by order.

- **Parallel Hunting:** The configured extensions and/or IP addresses will ring simultaneously (up to 4 simultaneous SIP calls).

3. The Enter the IP address and port number of the GXV33XX under "Number Called When Door Bell Pressed".

4. Enter the "Remote PIN to Open the Door" for both door 1 and door 2 in order to be opened by dialing the **DTMF** sequence for each door while in active call with the GDS3710. (Format: **PIN#**)

5. Click 💾 Save in order to apply changes.

Make sure that the Direct IP Call feature is active from the GDS3710 Web GUI under "**Account ➔ Phone Settings**" then click on "**Enable Direct IP Call**".
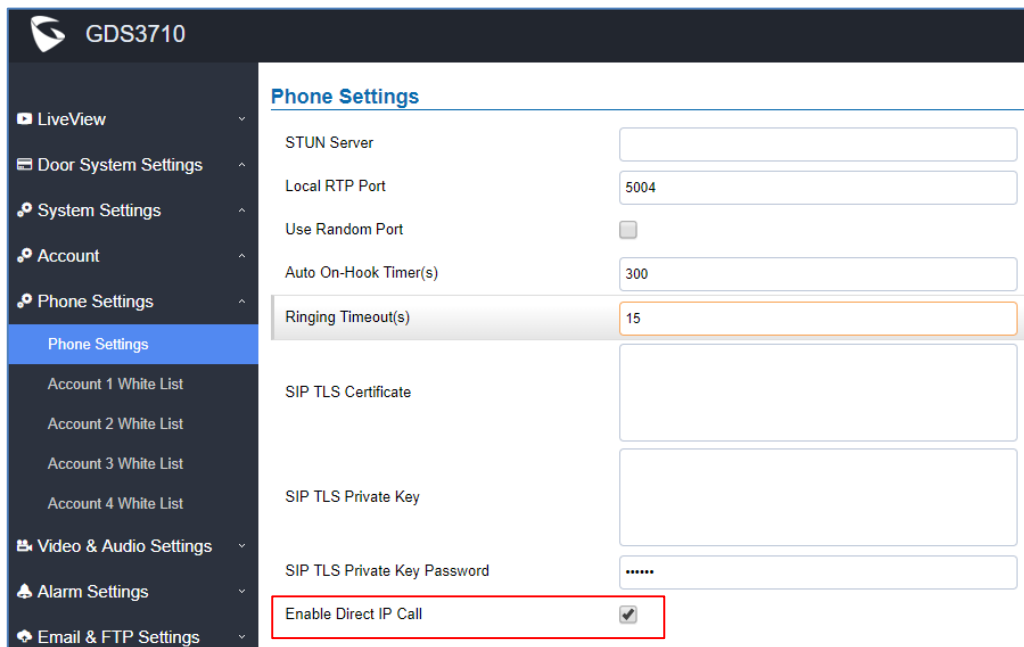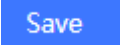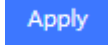

Figure 4: Enable Direct IP Call

Settings Configuration on the GXV33XX Side

The GXV33XX related Account need to be set as "Active", and correct "Local SIP Port" need to be configured at the GDS37XX side. These are the basic settings to make the peering scenario work.

1. On the GXV33XX web GUI navigate under "**Account ➔ Account Settings**" and set "**Account Active**" to **Yes**, then click on Save and Apply in order to apply new changes.
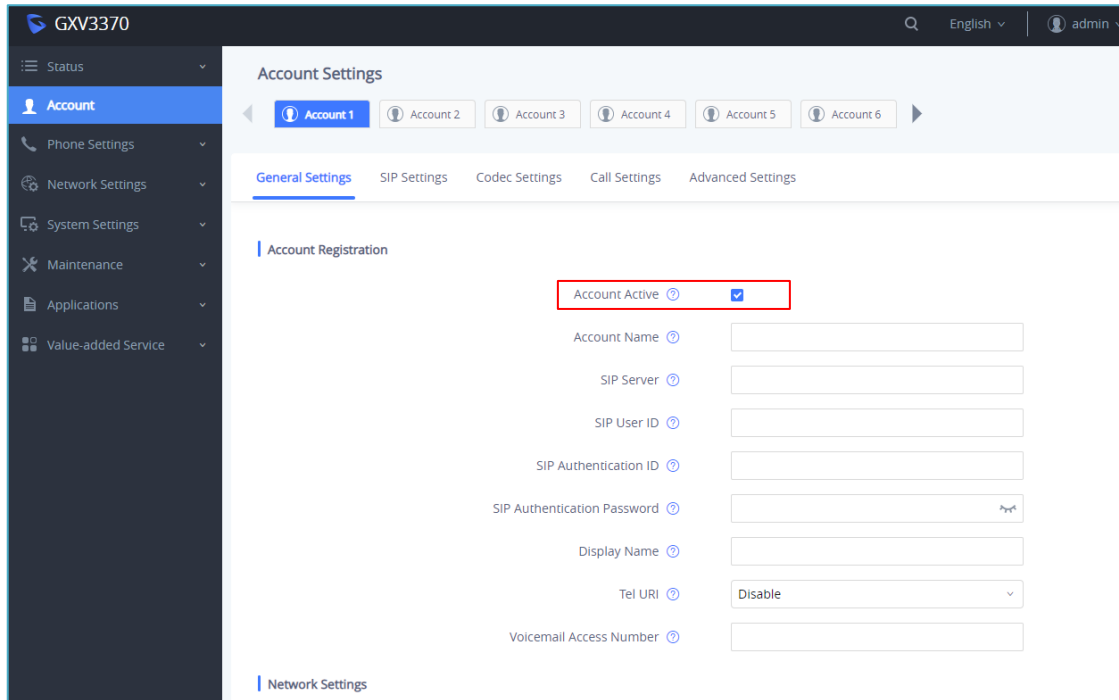
Figure 5: GXV33XX General Settings

2. Navigate to "**Account → SIP Settings**" and verify that the "**Local SIP Port**" set on the GXV33XX side is the same as the one set with the GXV33XX IP address under "**Number Called When Door Bell Pressed**" on the GDS37XX.
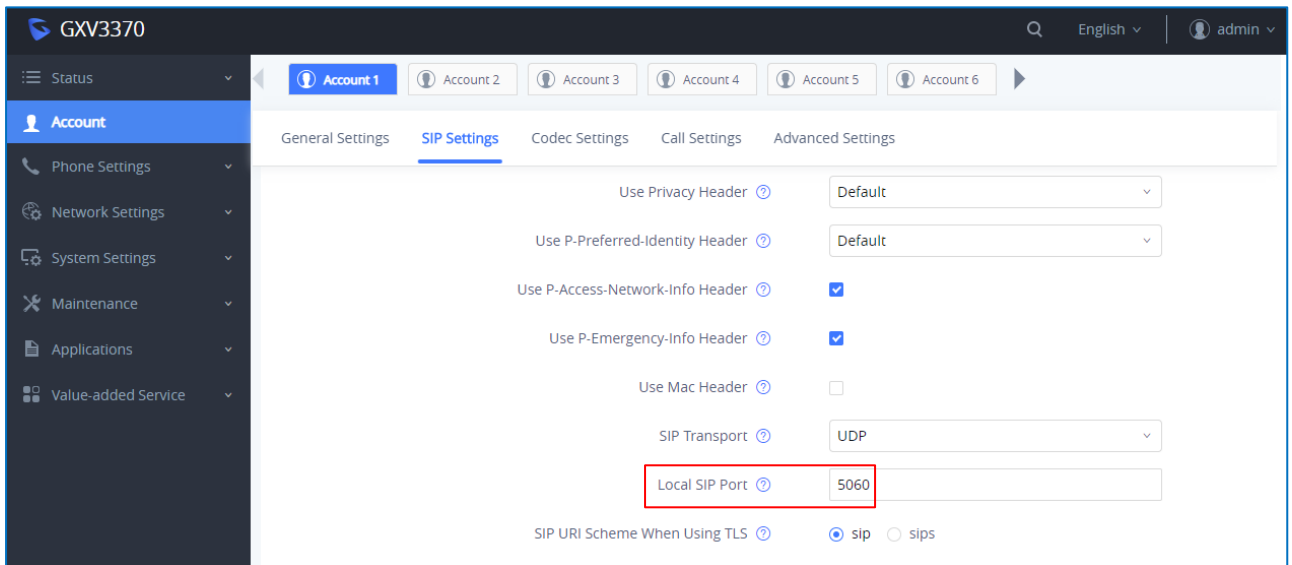

Figure 6: GXV33XX SIP Settings

CONNECTION USING SIP SERVER

In case of multiple GDS37XX and GVX33XX are available, a SIP server needs to be set in order to communicate between different devices.

Note: We recommend using Stateless SIP server in this type of installations, Stateful SIP servers may not work.
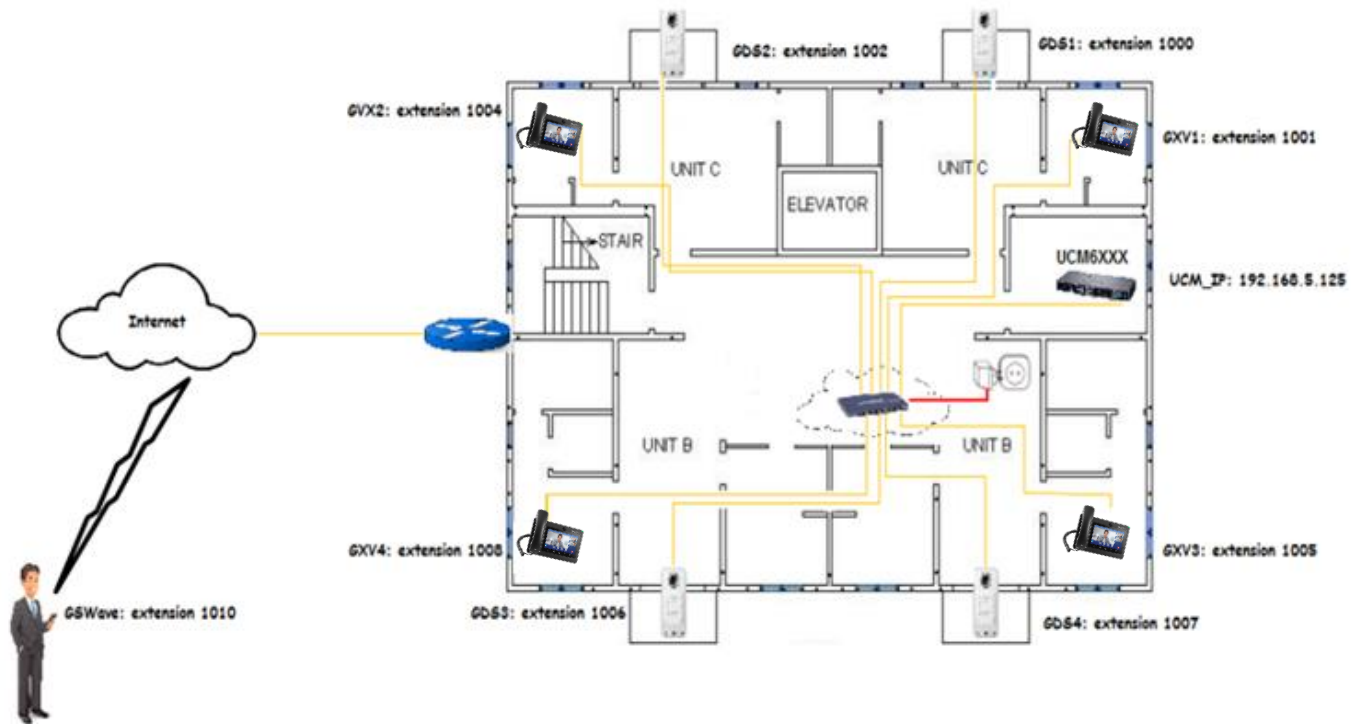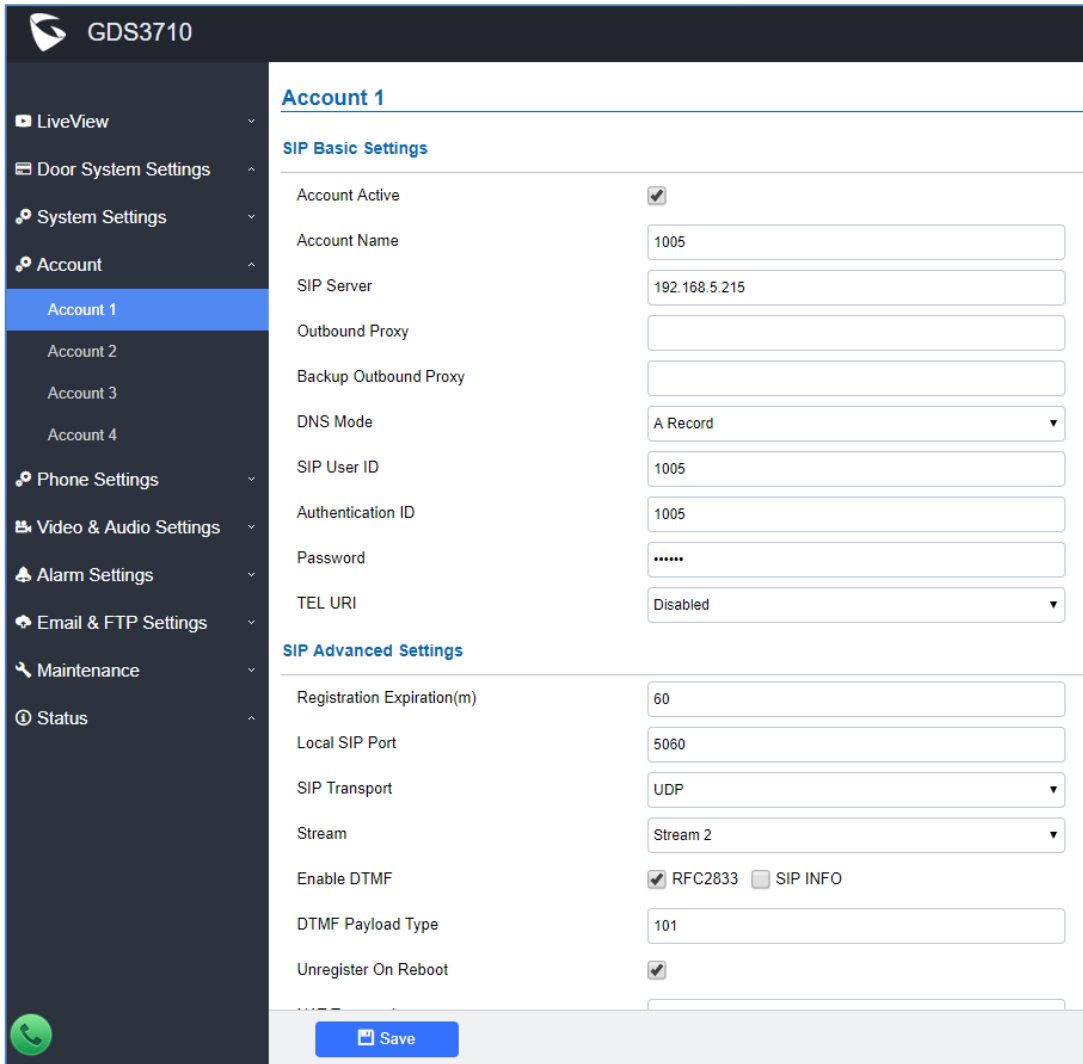
The following shows a sample setup.

Figure 7: GXV33XX Connected to GDS37XX through UCM6XXX

Settings Configuration on the GDS37XX Side

A SIP account needs to be registered on the GDS37XX to interact with other devices.

This can be done by entering the GDS37XX WebGUI under "**Account → Account 1**", then type the SIP account related information and click on [**Save**].

Figure 8: SIP Basic Settings

Go to "**Door System Settings → Basic Settings**" then set the following:

1. Doorbell Mode set to "Call Doorbell Number".

2. Number Called When Door Bell Pressed (assuming 1007 is the GXV3370 number in our example).

3. Remote PIN to Open the Door 1 and Door 2 respectively.

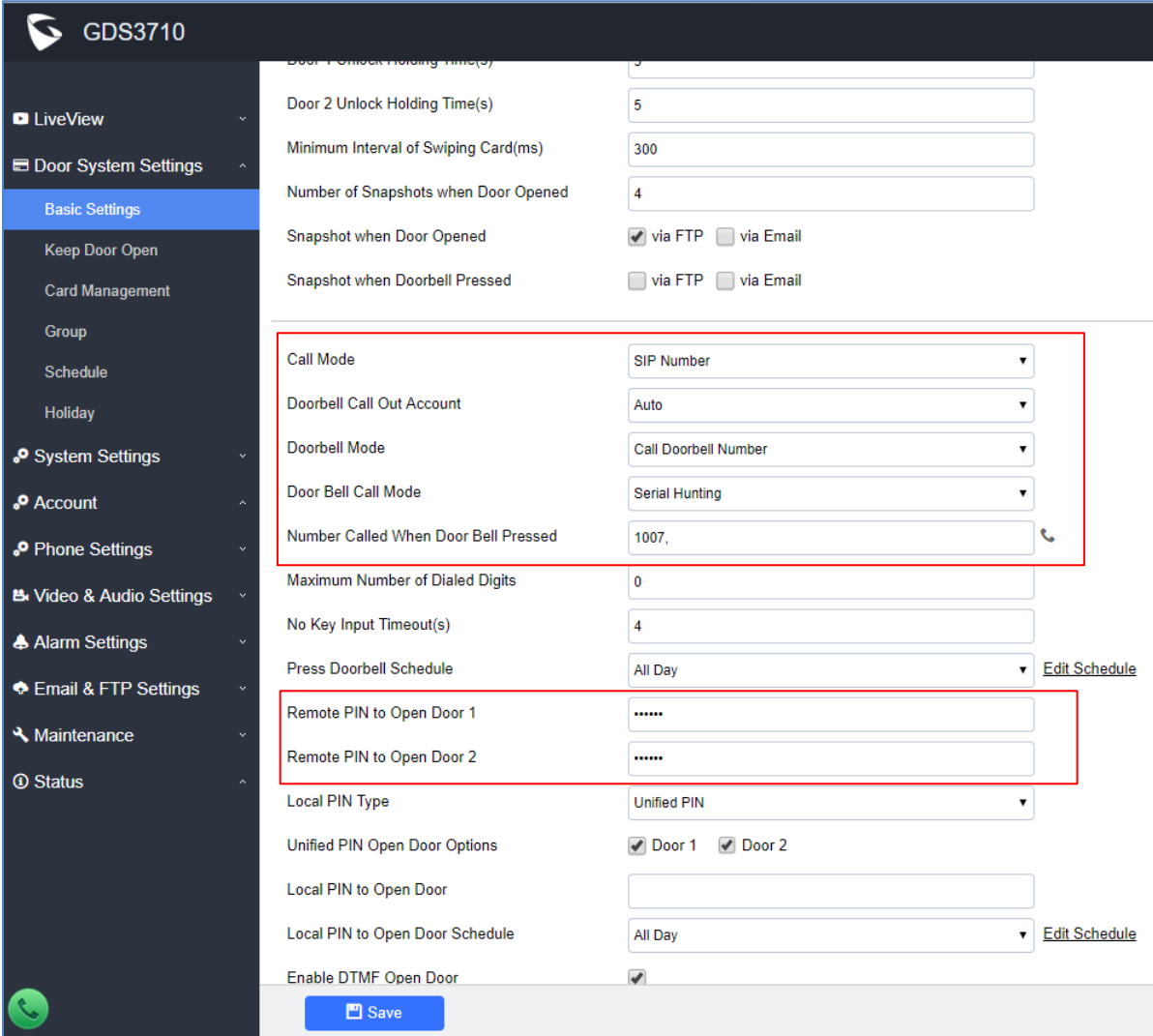The following figure shows an example of the configuration done:

Figure 9: Door System Settings

White List Settings

Any number calling the GDS37XX extension will have its call auto answered. To restrict allowed numbers to call the GDS37XX, user needs to navigate under "**Phone Settings → Account 1 White List**".

1. Check **Enable White Number List**.

2. Click on **Add** to add numbers allowed to dial the GDS37XX.

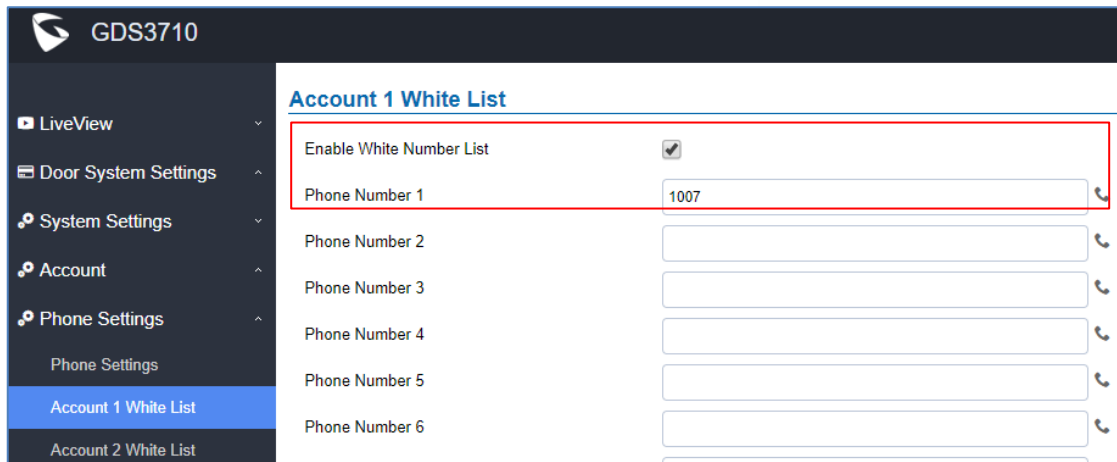3. Click [💾 Save] to apply the settings.

Figure 10: White List

The example above shows that only phone number 1001 is allowed to call the GDS37XX.

Settings Configuration on the GXV33XX Side

A SIP account needs to be registered on the GXV33XX side as well to interact with other devices available on the local network.

This can be done by entering the GXV33XX Web GUI under "**Account ➔ General Settings**", then type the SIP account relater information and click on **Save** and **Apply** to apply new changes.
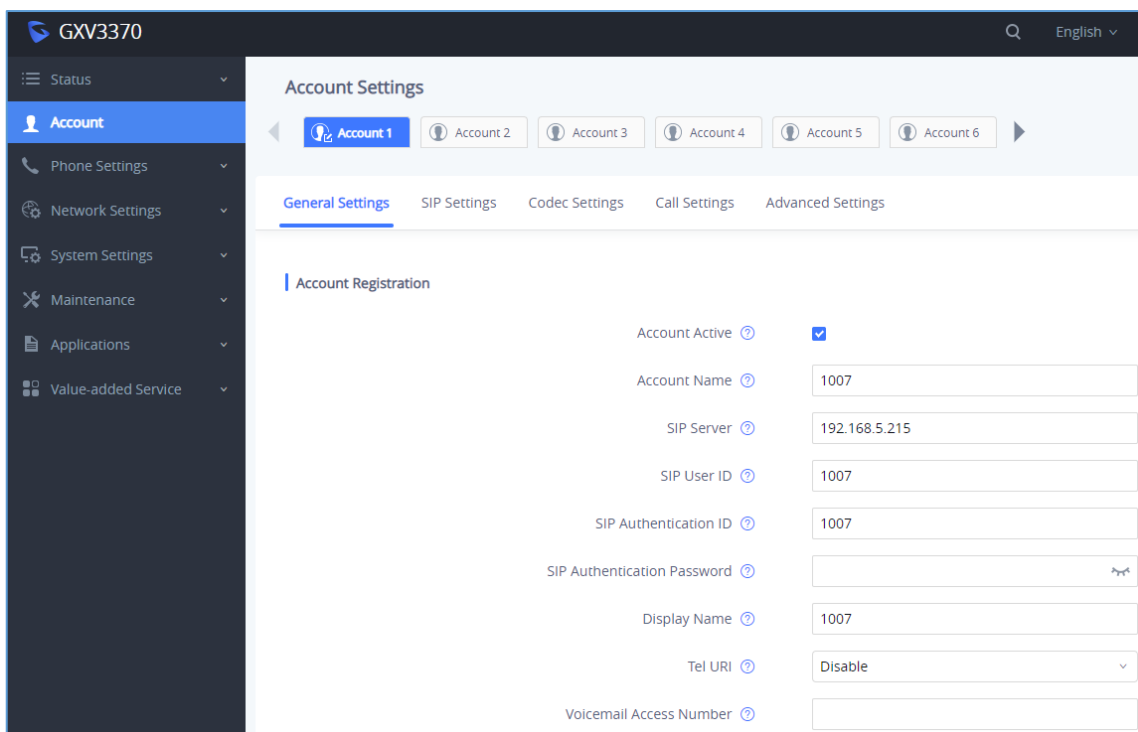

Figure 11: General Settings

Users could configure "Remote PIN to Open the Door" on the GXV33XX Web GUI to open the door with a single click.

This can be done from the GXV33XX web UI → **Value-added Service** and set the following:

1. Click on [Add] button (The GXV33XX supports up to 10 GDS37XX devices).

2. Set Service Type to "Door System Type" to "GDS".

3. Enter the "System Number", the Extension of the remote GDS37XX.

4. Enter the "Related Display Name", it can be any name to identify the door being controlled in our case are "Door1" and "Door2".

5. Enter the "Access Password" which is the password set for each door on "Remote PIN to Open the Door 1" and "Remote PIN to Open the Door 2" respectively on the GDS37XX.
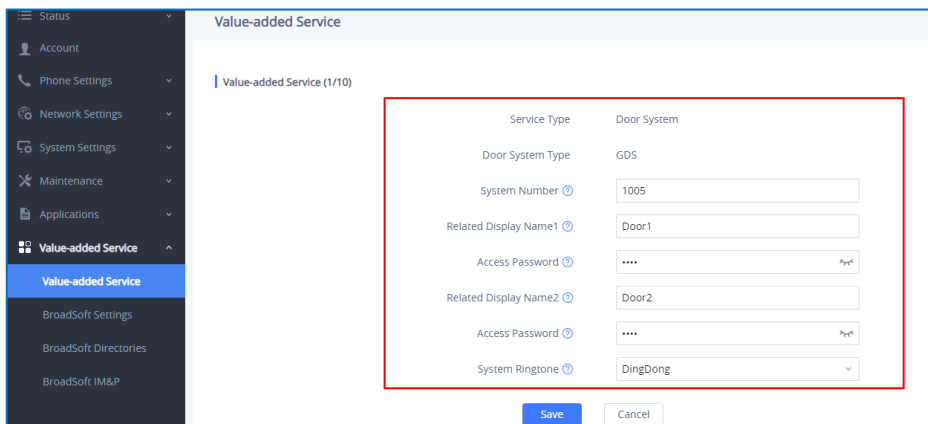

Figure 12: GXV Settings

Once the user presses the ring button on the GDS37XX, an INVITE will be sent to the GXV phone, the GDS3710 stream will be played on the GVX phone and two buttons will appear on the left side panel named "Door1" and "Door2". If users press the "open" button, SIP MESSAGE will be sent to the GDS3710 in order to open the door as shown below.
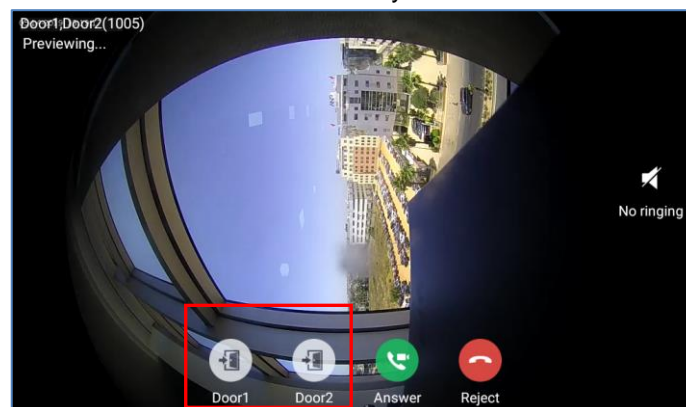**Note:** Camera feed is available on the GDS3710 only.

Figure 13: Open Door from GVX33XX