



Grandstream Networks, Inc.

Connecting GDS3710 with GRP261x IP Phones

Configuration Guide



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SUPPORTED DEVICES

Following table shows GRP261x products supporting GDS3710 integration:

Model	Supported		Firmware
	Audio	Video (JPEG)	
GRP2612 / GRP2612P / GRP2612W / GRP2613	Yes	No	1.0.1.23 or higher
GRP2614 / GRP2615 / GRP2616	Yes	Yes	1.0.1.23 or higher



INTRODUCTION

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 GDS3710 IP video door system features industry-leading SIP/VoIP for 2-way audio and video streaming to smart phones and SIP phones, allowing to receive calls from GDS3710 on associated SIP phones when doorbell is pressed, opening door from the SIP phone, initiate calls from the phone to GDS3710 to get real time Video/Audio stream with GRP2614/GRP2615/GRP16. and only Audio stream with GRP2612/GRP2613 series.

The GDS3710 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.

This guide illustrates needed configuration for integrating the GDS3710 with GRP261x Series for both peering and using SIP server scenarios.



PEERING SCENARIO

In this scenario, we assume that the GDS3710 is installed on a small warehouse at front door and GRP261x IP Phone inside to monitor and control the access of the premise. Visitors need to press the doorbell button on the GDS3710 to initiate a video/audio call, and the related person at the GRP261x IP Phone side can open the door remotely to allow the visitors to get in as shown in the figure below.

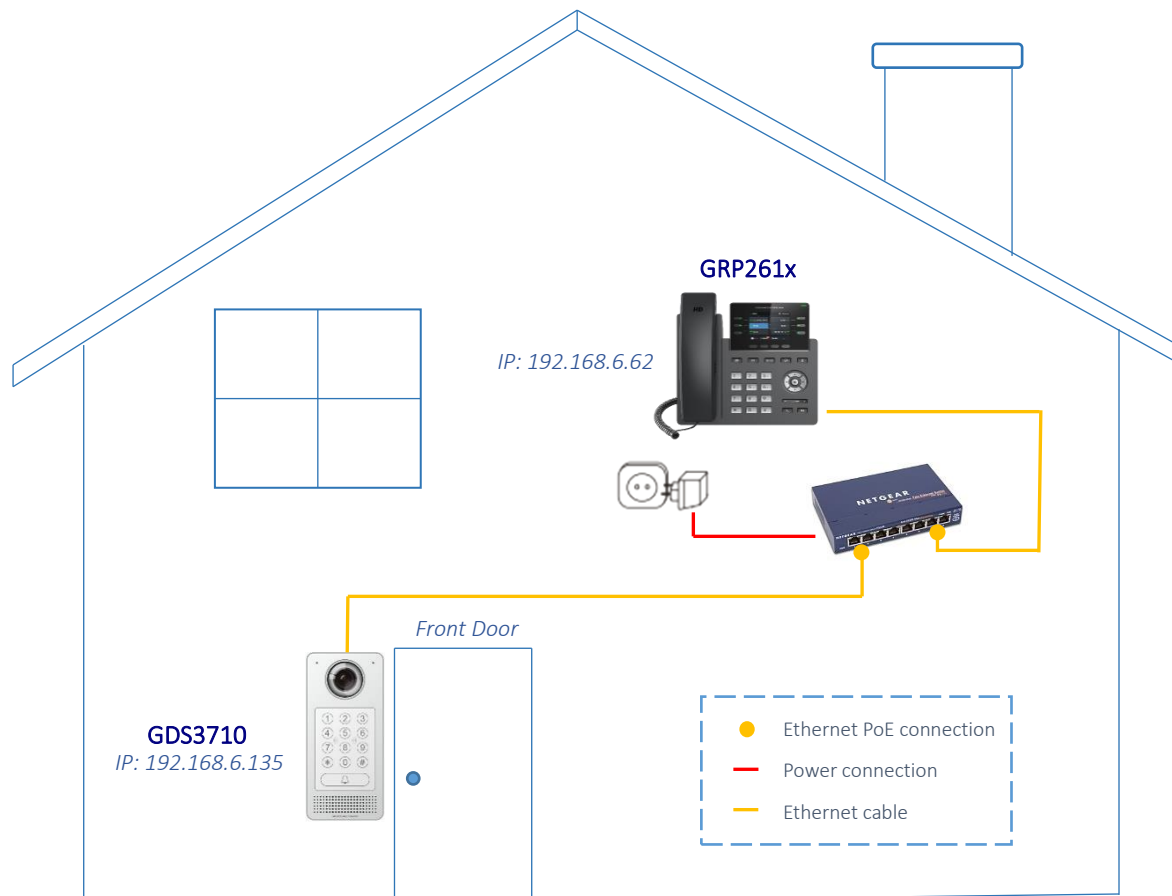



Figure 1: GRP261x IP Phone peered with the GDS3710

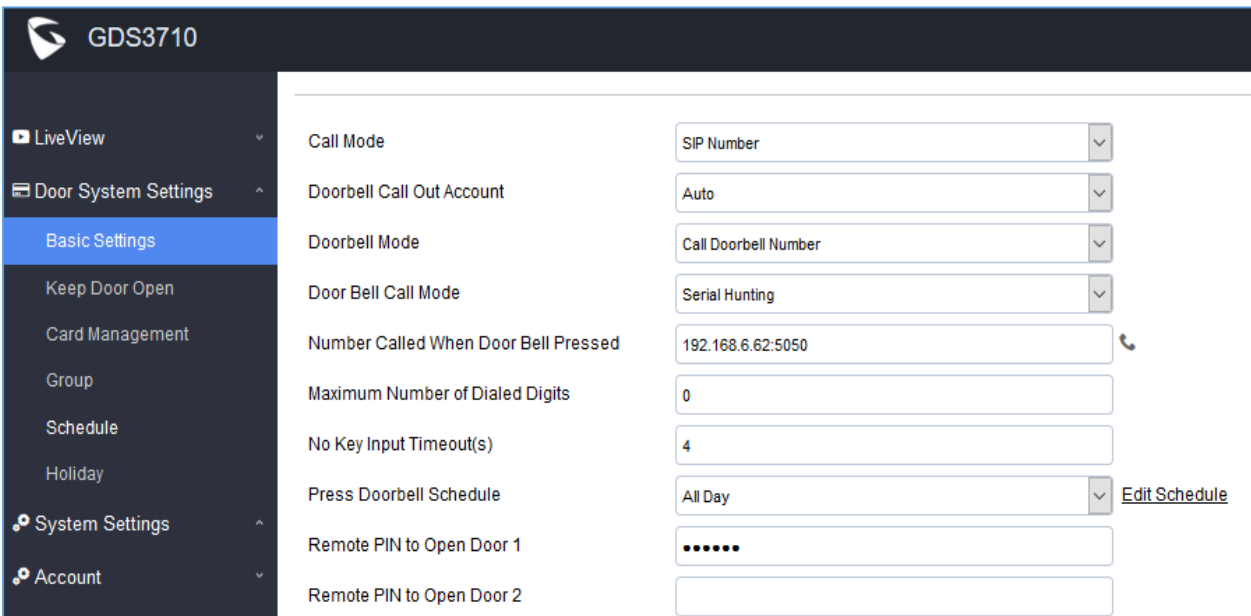
- The IP address used by the GDS3710 is 192.168.6.135.
- The IP address used by the GRP261x IP Phone is 192.168.6.62.

GDS3710 Configuration Settings

The GDS3710 needs to be configured with the IP address of the GRP261x IP Phone, the related SIP port, and remote PIN for door opening. Please refer to following configuration steps:

1. Access the GDS3710 Web GUI and navigate to “**Door System Settings→Basic Settings**”.

2. 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**”.
3. Under **Number Called When Door Bell Pressed** field, enter the GRP261x IP address and port number which is **192.168.6.62:5060** in our example.
4. Enter the “**Remote PIN to Open the Door**” in order to open the door via DTMF while in active call with the GDS3710, the remote PIN used in our example is “**123456**”.
5. Click  button to apply changes.



The screenshot shows the 'Door System Settings' page for a GDS3710 device. The left sidebar contains navigation options: LiveView, Door System Settings (expanded), Basic Settings (selected), Keep Door Open, Card Management, Group, Schedule, Holiday, System Settings, and Account. The main content area lists various settings:

Call Mode	SIP Number
Doorbell Call Out Account	Auto
Doorbell Mode	Call Doorbell Number
Door Bell Call Mode	Serial Hunting
Number Called When Door Bell Pressed	192.168.6.62:5050
Maximum Number of Dialed Digits	0
No Key Input Timeout(s)	4
Press Doorbell Schedule	All Day Edit Schedule
Remote PIN to Open Door 1	*****
Remote PIN to Open Door 2	

Figure 2: Door System Settings

6. You need to make sure that the Direct IP Call feature is enabled from the GDS3710 Web GUI under **Phone Settings → Enable Direct IP Call**.

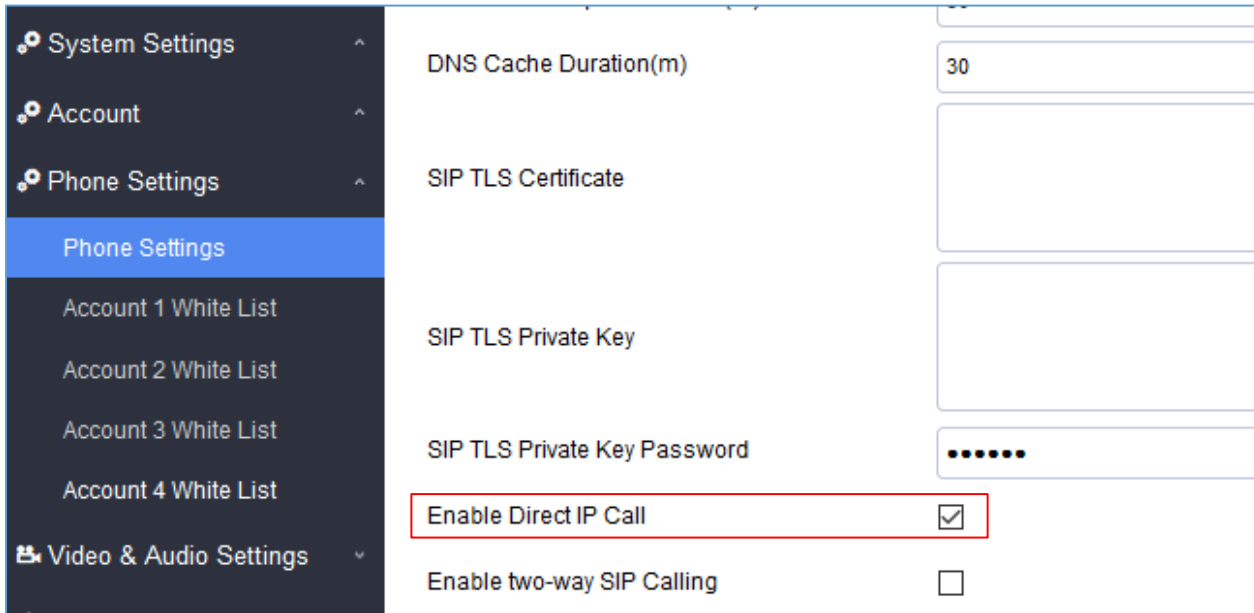


Figure 3: Enable Direct IP Call

GRP261x IP Phone Configuration

The GRP261x IP Phone related account needs to be set as “Active”, and the “Local SIP Port” needs to match the port configured on GDS3710. Please refer to following steps for configuring the GRP261x IP Phone in order to interconnect with the GDS3710.

1. Access GRP261x IP Phone Web GUI→**Account**→**General Settings** and set “Account Active” to **Yes**, then click on **Save and Apply** button to apply the new changes.

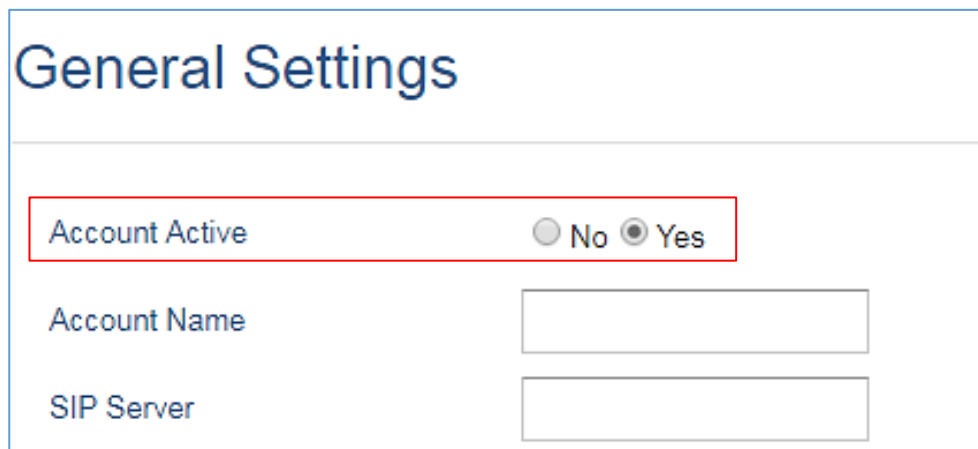


Figure 4: GRP261x Account(x) Settings

2. Navigate to **Account**→**SIP Settings** and verify that the **Local SIP Port** configured on the GRP261x IP Phone is the same as the one on the GDS3710.

Note: Make sure the option “Use Random Port” is set to “No” under **Settings** → **General Settings**

Accounts	Basic Settings	
Account 1		
General Settings		
Network Settings		
SIP Settings		
Basic Settings	TEL URI	<input checked="" type="radio"/> Disabled <input type="radio"/> User=phone <input type="radio"/> Enabled
Custom SIP Headers	SIP Registration	<input type="radio"/> No <input checked="" type="radio"/> Yes
Advanced Features	Unregister on Reboot	<input checked="" type="radio"/> No <input type="radio"/> All <input type="radio"/> Instance
Session Timer	Register Expiration	<input type="text" value="60"/>
Security Settings	Subscribe Expiration	<input type="text" value="60"/>
Audio Settings	Reregister before Expiration	<input type="text" value="0"/>
Call Settings	Enable OPTIONS Keep Alive	<input checked="" type="radio"/> No <input type="radio"/> Yes
Intercom Settings	OPTIONS Keep Alive Interval	<input type="text" value="30"/>
Feature Codes	OPTIONS Keep Alive Max Lost	<input type="text" value="3"/>
Account 2	Local SIP Port	<input type="text" value="5060"/>
Account 3		

Figure 5: Account(x) SIP Settings

- Navigate to **Settings**→**External Service** to configure GDS settings as explained on the following:
 - Set the **Service Type** to **GDS**.
 - Select the related account, in our example, the account used is **Account 1**.
 - Specifies the **System Identification**, to identify the GDS3710, in our example its “**GDS3710_Front_Door**”.
 - Specifies the **System Number** which is the GDS3710 number, the system number used in our example is **192.168.6.135**.
 - Configures the **Access Password** for opening the door remotely and it should match the password configured under “**Remote PIN to Open the Door**” on the GDS3710 Web GUI settings. The password used in our example is “**123456**”.

Grandstream Door System

Order	Service Type	Account	System Identification	System Number	Access Password
1	GDS ▾	Account 1 ▾	GDS_Front_Door	192.168.6.135
2	GDS ▾	Account 1 ▾			
3	GDS ▾	Account 1 ▾			

Figure 6: GDS3710 Configuration Settings on GRP261x IP Phone

4. Press  button to apply the new settings.

Note: The GRP261x IP Phones support up to 10 GDS3710 items.



CONNECTION USING SIP SERVER

In this scenario, we assume that the GDS3710 is configured with a SIP account and the GRP261x IP Phone is also configured with a SIP account under the same SIP server.

Note: We recommend using Stateless SIP server in this type of installations, Stateful SIP servers may not work.

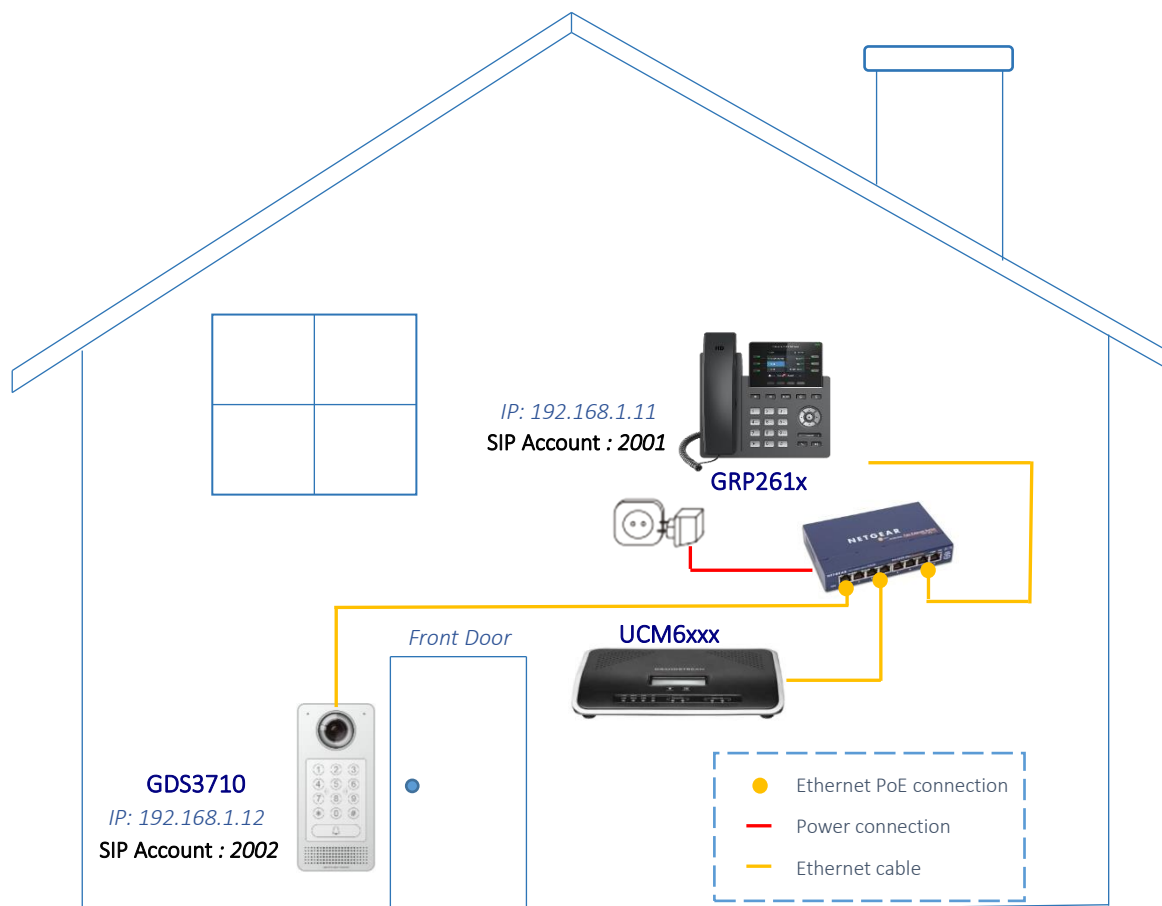


Figure 7: GRP261x Connected to GDS3710 through UCM6XXX

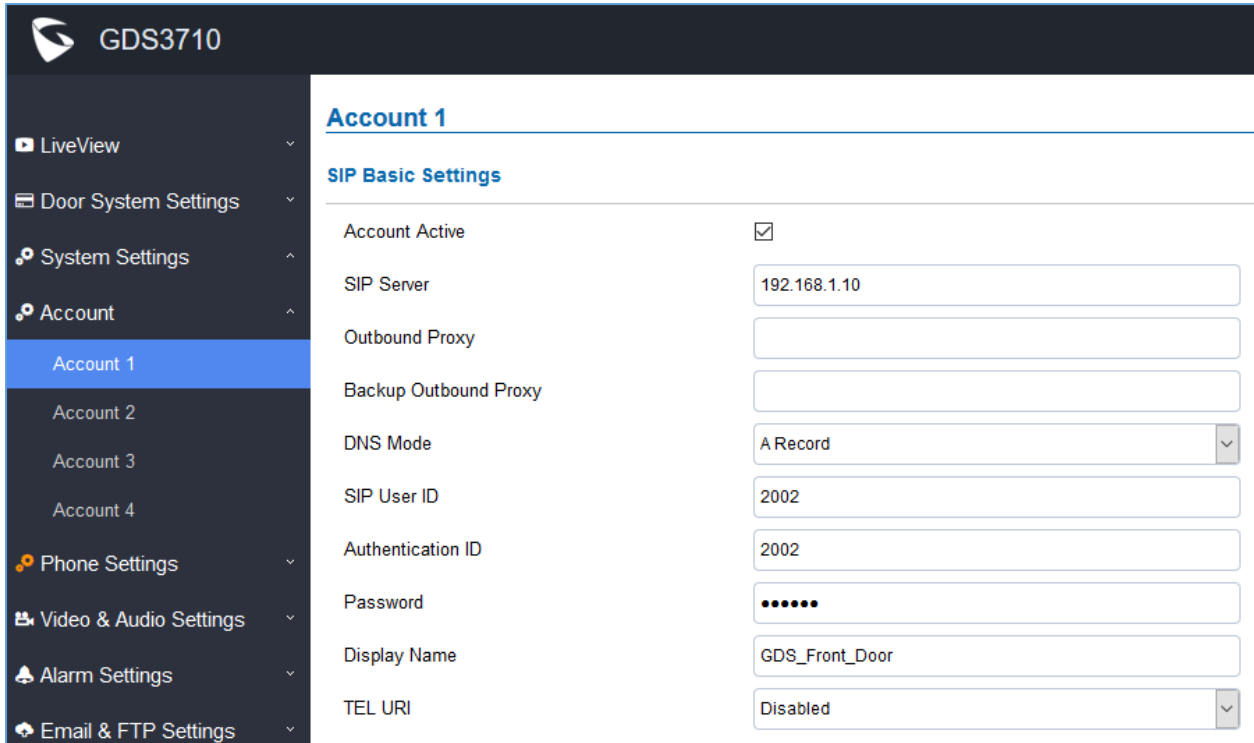
- The IP address used by the GDS3710 is 192.168.1.12 and it is configured with SIP account **2002**.
- The IP address used by the GRP261x IP Phone is 192.168.1.11 and it is configured with SIP account **2001**.
- The SIP server has the IP address 192.168.1.10.



GDS3710 Configuration Settings

As mentioned on the previous diagram, the GDS3710 should be registered with a SIP account in order to interact with the GRP261x IP Phone through the SIP server.

The GDS3710 SIP settings are available under the Web GUI → **SIP Settings** → **SIP Basic Settings**.



The screenshot shows the GDS3710 Web GUI interface. On the left is a navigation menu with options: LiveView, Door System Settings, System Settings, Account, Account 1 (selected), Account 2, Account 3, Account 4, Phone Settings, Video & Audio Settings, Alarm Settings, and Email & FTP Settings. The main content area is titled 'Account 1' and 'SIP Basic Settings'. It contains the following configuration fields:

Account Active	<input checked="" type="checkbox"/>
SIP Server	192.168.1.10
Outbound Proxy	
Backup Outbound Proxy	
DNS Mode	A Record
SIP User ID	2002
Authentication ID	2002
Password	••••••
Display Name	GDS_Front_Door
TEL URI	Disabled

Figure 8: SIP Basic Settings

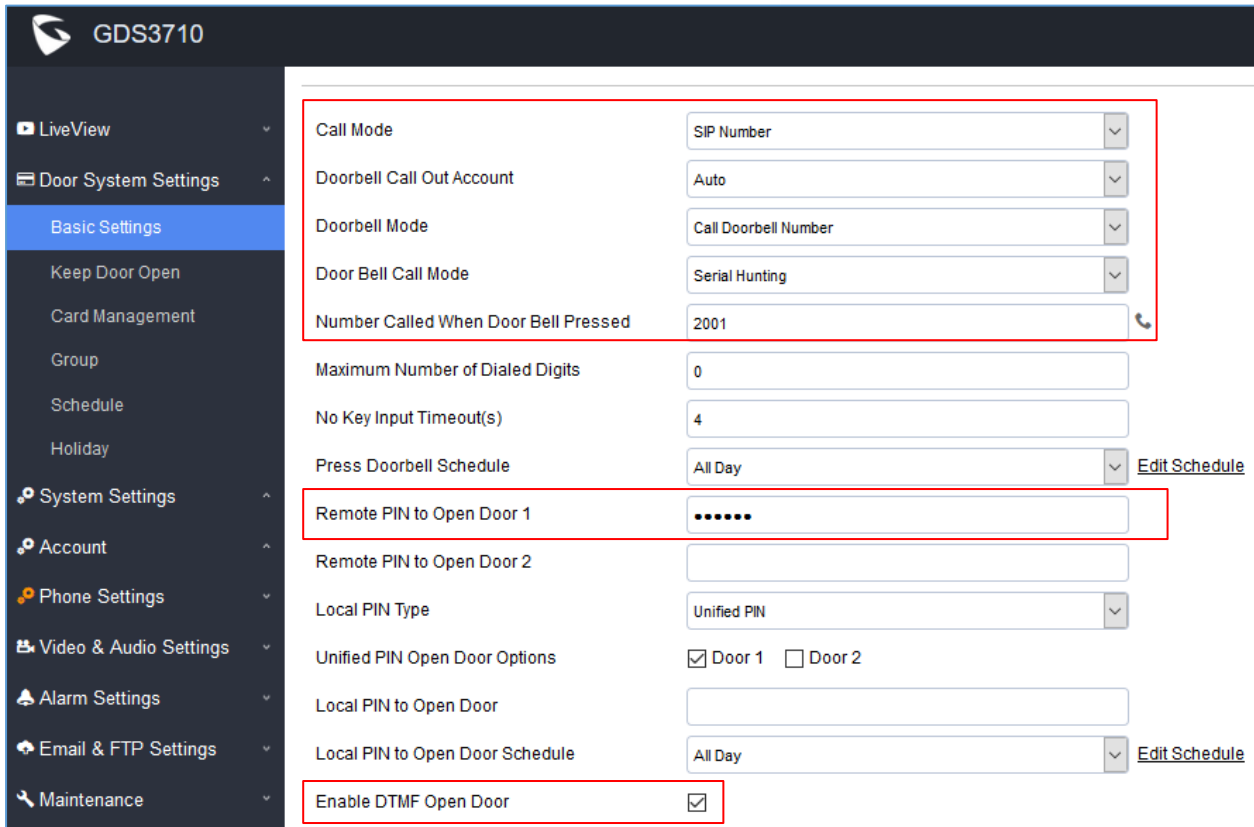
After configuring the SIP account correctly, user needs to configure the door system settings as detailed on the following steps:

- Navigate to **Door System Settings** → **Basic Settings** then set the following:
 - Doorbell Mode:** Call Doorbell Number.
 - Number Called When Door Bell Pressed:** the GRP IP Phone number which is **2001** in our example.
 - Remote PIN to Open the Door:** the remote PIN used in our example is “**123456**”.

Note: Please make sure to check “**Enable DTMF Open Door**”

- Click  button to apply changes.

The following figure shows an example of the configuration.



Setting	Value
Call Mode	SIP Number
Doorbell Call Out Account	Auto
Doorbell Mode	Call Doorbell Number
Door Bell Call Mode	Serial Hunting
Number Called When Door Bell Pressed	2001
Maximum Number of Dialed Digits	0
No Key Input Timeout(s)	4
Press Doorbell Schedule	All Day Edit Schedule
Remote PIN to Open Door 1	*****
Remote PIN to Open Door 2	
Local PIN Type	Unified PIN
Unified PIN Open Door Options	<input checked="" type="checkbox"/> Door 1 <input type="checkbox"/> Door 2
Local PIN to Open Door	
Local PIN to Open Door Schedule	All Day Edit Schedule
Enable DTMF Open Door	<input checked="" type="checkbox"/>

Figure 9: Door System Settings

GRP261x IP Phone Configuration Settings

A SIP account needs to be registered on the GRP261x IP Phone side as well to interact with the GDS3710 through the same SIP server.

The GRP261x SIP settings are available under the Web GUI → **Accounts** → **Account(x)** → **General Settings**.

Accounts

Account 1 -

General Settings

Dialplan

Network Settings

SIP Settings +

Audio Settings

Call Settings

Intercom Settings

Feature Codes

Account 2 +

Account 3 +

Account Swap

General Settings

Account Active No Yes

Account Name

SIP Server

Secondary SIP Server

Outbound Proxy

Backup Outbound Proxy

BLF Server

SIP User ID

Authenticate ID

Authenticate Password

Name

Voice Mail Access Number

Picture

Account Display User Name User ID

Figure 10: General Settings

After configuring the SIP account correctly, users need to configure the door system settings as detailed on the following steps:

1. Navigate to **Settings**→**External Service** and set the following:
 - Set the **Service Type** to **GDS**.
 - Select the related account, in our example, the account used is **Account 1**.
 - Specifies the **System Identification**, to identify the GDS3710, in our example its "**GDS3710_Front_Door**".
 - Specifies the **System Number** which is the GDS3710 number, the system number used in our example is **2002**.
 - Configures the **Access Password** which is the "**Remote PIN to Open the Door**" configured on the GDS3710 Web GUI settings. The password used in our example is "**123456**".

2. Press **Save and Apply** button to apply the new settings.

Grandstream Door System

Order	Service Type	Account	System Identification	System Number	Access Password
1	GDS	Account 1	GDS3710_Front_Door	2002	
2	None	Account 1			
3	None	Account 1			
4	None	Account 1			
5	None	Account 1			
6	None	Account 1			
7	None	Account 1			
8	None	Account 1			
9	None	Account 1			
10	None	Account 1			

Figure 11: GDS Settings

Notes:

- The GRP261x IP Phones support up to 10 GDS3710 items.
- GRP2612 and GRP2613 series support audio only.
- GRP2614/GRP2615/GRP2616 series support audio and video (JPEG) when integrated with GDS3710.

OPEN DOOR FEATURE

GRP261x IP Phones offer a powerful integration with GDS3710 Door System and allow users to remotely open the door, initiate calls to the GDS3710 and get real time audio/video or only audio stream.

Once someone presses the ring button on the GDS3710, the door system will initiate automatically a call to the configured destination. In both cases, the users will have the ability to either answer the call, reject it or press the **OpenDoor** softkey.

Users can open the door using the following methods:

1. **Pressing the “OpenDoor” Softkey without answering the call:**

Once the users press the “OpenDoor” softkey, a SIP Message containing the code for “Remote PIN for Open the Door” will be sent to the GDS3710 to remotely open the door.

2. **OpenDoor after answering the call:**

- Press the “**OpenDoor**” Softkey, then a SIP Message containing the code for “Remote PIN for Open the Door” will be sent to the GDS3710 to remotely open the door.
- Dial the code for “**Remote PIN for Open the Door**” followed by “#” (for example “**123456#**”), and then DTMF codes will be sent to open the door.

Note: Pressing the “**Reject**” Softkey will reject the call received from the GDS3710.

GRP2614/GRP2615/GRP2616 IP Phones



Figure 12: GDS3710 Video/Audio Call on GRP2614/GRP2615/GRP2616

GRP2612/GRP2613 IP Phones

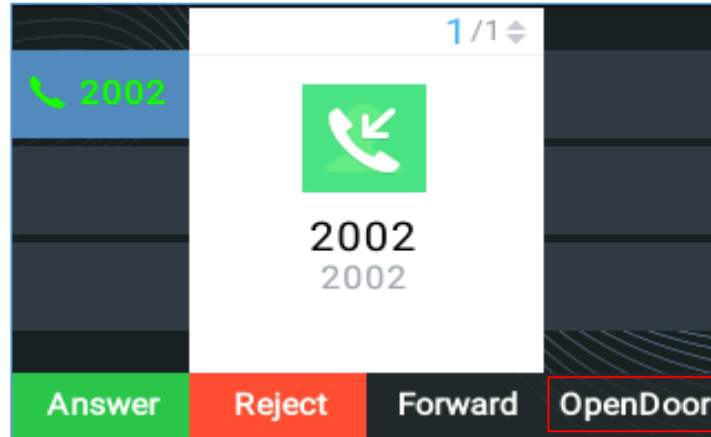


Figure 13: GDS3710 Audio Call on GRP2612/GRP2613