

#### **APPLICATION NOTE**

# IX | IXG Series

## General SIP Registration Guide

### **Overview**

This guide explains how to integrate IX|IXG Series stations to SIP servers from compatible IP PBX providers. These instructions are focused on the settings in IXG Support Tool. Consult resources provided by the IP PBX provider for more information.

More detailed instructions for select IP PBX providers can be found here: <a href="https://www.aiphone.com/partners/integrations/">https://www.aiphone.com/partners/integrations/</a>

These instructions assume that the IX IXG Series stations have already been programmed using IXG Support Tool, and that a copy of the system's configuration is available.

IXG Support Tool can be downloaded from here: https://www.aiphone.com/IXG-SupportTool.

See this link for instructions on exporting and importing a configuration from another PC: https://www.aiphone.com/ixg-export-import.

For more programming instructions, see the IX|IXG Series Quick Start Guide: https://www.aiphone.com/IXG-Series-QuickStartGuide.

For full SIP functionality, stations should be updated to the newest firmware version, using the newest version of IXG Support Tool.

Firmware Downloads: https://www.aiphone.com/kbtopic/ix-ixg-firmware/

## **Networking Information**

Addressing: Hostname, IPv4 (default) or IPv6, Static (default) or DHCP

SIP Server: Primary, Secondary, or Tertiary servers available

Audio Codec: G.711

**Audio Port:** 20000 (start) - 21000

Video: H.264/AVC (default) or MJPEG

**Video Port:** 30000 (start) - 31000

**SIP:** 5060

For more detailed networking information, see the IX IXG Series Network Security Summary: <a href="https://www.aiphone.com/ix-ixg-network-security-summary">www.aiphone.com/ix-ixg-network-security-summary</a>

## **IXG Support Tool Settings**

Open IXG Support Tool, log in, and select the appropriate site. On the top menu, select View(V), Advanced.



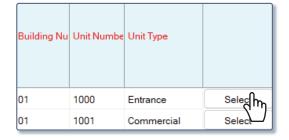
#### Registering the IP PBX Provider

To allow the stations to call the IP PBX, navigate to **Network Settings**, <u>SIP</u> on the side menu. For each station to be registered, enter its extension under the <u>ID</u> column, the SIP password under <u>Password</u>, and the IP PBX's IP address under <u>IPv4 Address</u>. Secondary and tertiary IP PBXs can be selected by scrolling right, as needed. Click **Save** in the top left corner of IXG Support Tool.



#### **Adding VolP Phones to Units**

The VoIP Phones or extensions called by IX|IXG Series stations are added to units as a type of answering station. To assign the extension to a unit, navigate to **Site Settings**, <u>Units / Stations</u> on the side menu. Select a commercial or guard unit to contain the VoIP phone. If a unit does not exist, create one by filling in the building number, assigning a unit number, and clicking **Select** to choose a unit type.



If there is not a free slot under one of the Master / Tenant Station columns, use the Display Settings menu at the top of the page to increase the number of master stations and click Apply.

Once a unit has been chosen, click **Select** under one of the <u>Master / Tenant Station</u> columns and select **VoIP Phone** as the station type.

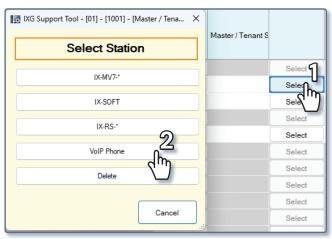
Repeat these steps for each extension. Once all VoIP phones have been added, click **Save** .



Each unit can only contain one VoIP phone. If multiple phones need to be called at once, use the IP PBX's settings to create an extension for a ring group.

Create a single VoIP Phone in a single unit to represent the group.





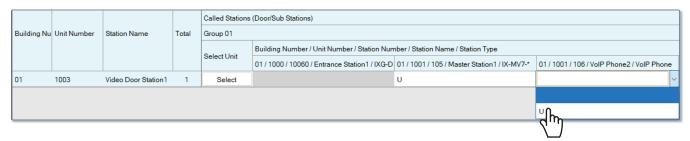
To assign an extension to the VoIP phones, navigate to **Station Information**, <u>Identification</u> on the side menu. Change the station number of each VoIP phone to match the desired extension.

Change the station numbers of the IX | IXG Series stations to match their assigned extensions in the IP PBX. Click **Save** .

Building Nu	Unit Number	Station Type	Identification	
			Station Nu	Station Name
01	1000	IXG-DM7(-*)	10060	Entrance Station1
01	1001	IX-MV7-*	105	Master Station1
01	1001	VoIP Phone	1000	VoIP Phone2
01	1002	IXG-MK	10020	Guard Station1
01	1002	VoIP Phone	1001	VoIP Phone2
01	1003	IX-DVM	107	Video Door Station1
01	1004	IXG-2C7(-*)	10040	Tenant Station1
		IXGW-(T)GW	00012999	Gateway Adaptor1

#### **Adding VolP Phones to Door Station Call Settings**

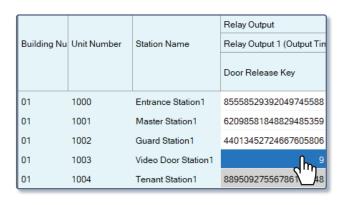
Navigate to **Call Settings**, <u>Called Stations (Door/Sub Stations)</u> on the side menu. To assign a door station to call a VoIP phone, find the cell where the door station row and VoIP Phone column intersect in the table. Use the drop-down menu in the cell and select **U**. Do this for all desired door stations and click **Save**.



#### **Assigning Door Release Codes (optional)**

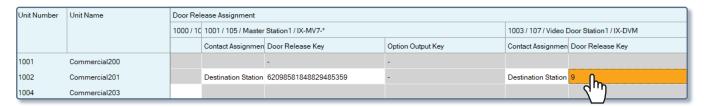
Door and entrance stations are automatically assigned a twenty digit **Door Release Key** when they are created. The key can be entered manually into the keypad on a telephone to unlock the door. To shorten the key, navigate to **Option Input / Relay Output**, Relay Output on the side menu. Scroll right and find the **Door Release Key** column. Replace the key for the desired door stations and click **Save** .

Next, the answering stations that release the door will need to have their settings adjusted. Navigate to Function Settings, <u>Door Release</u> on the side menu. Use the Display menu to select the building and group of stations that includes the door stations. Click **Apply**.





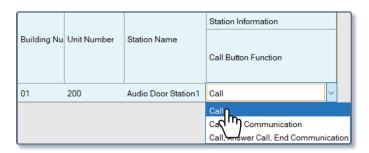
Find the column for the door or entrance station. Replace the key wherever it intersects with an answering station that needs to unlock it. Repeat these steps for all door and entrance stations that were adjusted. Click **Save** .



#### Configuring a Door Station to Answer Calls (Optional)

Door stations registered to the IP PBX can receive calls from VoIP phones, but they are not able to auto-answer. The station's call button will need to be configured to answer calls.

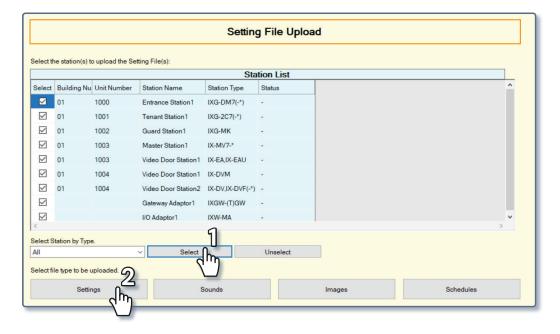
Navigate to **Call Settings**, <u>Station Information</u> on the side menu. Adjust the **Call Button Function** to <u>Call</u>, <u>Answer Call</u>, <u>End Communication</u>. Click **Save**. When the door station received a call, press the button to answer it.



#### **Uploading Settings to Stations**

To upload settings to the stations, navigate to Connection(S), <u>Upload Settings</u> on the top menu.

Select each station by placing a check mark next to it, or click **Select** to select all stations at once. Click **Settings** to upload station settings, which will complete the programming steps.



#### **Exporting System Configuration**

Once the upload is complete, it is best practice to create a copy of the system configuration. This allows the settings to be restored, or moved to a new programming PC as needed.

Select **File(F)** from the top menu and click <u>Export System Configuration</u>. Click <u>Export</u> on the new window that appears. If the configuration file needs to be emailed, compress the folder first.

## **Testing the System**

Once the settings have been uploaded to the stations, place a test call from a door station. The door should be able to reach the programmed extension. Answer the call and verify two-way communication between the phone extension and door station. If there is not, verify the settings on the IP PBX and in IXG Support Tool.

#### **Enabling Video (Optional)**

Door and entrance stations will send video to compatible SIP phones during a call. If the video shows up on answering stations, but not on the site's SIP phones, changing the video profile can resolve the issue.

Navigate to **Network Settings**, <u>Video</u> on the side menu. Scroll right to **Select Profile**. Use the drop-down menu to change the door and entrance stations' profile to <u>Baseline</u>. Click **Save**, then upload settings to all stations again.

