

IX Series 2 Door Stations

Asterisk-based IP PBX Registration

GENERAL OVERVIEW:

This document describes the basic configuration for registering IX Series door stations to unspecified Asterisk-based IP PBXs. Please refer to the relevant manual provided by the IP PBX manufacturer for further information.

IX stations compatible with SIP 2.0 and can be registered to an Asterisk-based IP PBX are as follows; **IX-DV**, **IX-DVF-***, **IX-SSA-***, and **IX-SS-2G**. Note that IX-MV7-***** master stations are not currently compatible with Asterisk-based IP PBX systems.

Asterisk and Asterisk Systems logos are registered trademarks or trademarks of Digium, Inc. or its affiliates United States and certain other countries.



Getting Started

IX Series stations require basic configuration to be completed before proceeding with the following steps explained in this document. This configuration can be quickly done using the IX Support Tool programming software, its programming wizard, and the IX Series 2 Quick Start Guide.

The IX Series 2 Quick Start Guide and the latest version of Support Tool can be found at www.aiphone.com/ix

Alternatively, each station has the option for browser-based configuration. Browser-based configuration is not the preferred method, as there is limited documentation for doing so. As such, this document and its contents show all steps using Support Tool with accompanying screenshots.

Login with Support Tool

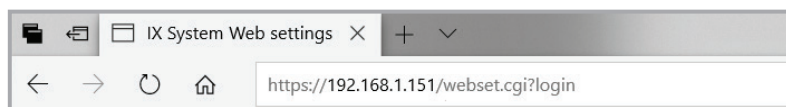
Launch IX Support Tool (version 4.0 or higher) and enter the ID and Password. All future steps are shown using the IX Series Support Tool. Any browser-based configuration will not be reflected in Support Tool.

The image shows two components. On the left is a screenshot of the 'IX Support Tool - [Login]' window. It has a title bar with a close button. The main area is titled 'IX Support Tool Login' and contains two input fields: 'ID' and 'Password'. Below the fields are two buttons: 'Login' and 'Cancel'. On the right is a box titled 'Default Login Information' which contains the text 'ID: admin' and 'Password: admin'.

Optional: Login via Browser

To log into the station, open a web browser and in the address bar type, "**https://[IP Address]/webset.cgi?login**". The Default IP address of every IX station is **192.168.1.160**. If this station has been previously configured, enter in the known IP address in its place.

Depending on the chosen browser, a certificate error and warning may appear. Choose to proceed to the web page and continue to the login screen. Select a language, and enter the login information above.



Setting Station Information

Each station's **Station Number** should be set to the **Extension Number** assigned to it in the IP PBX. The station's Name may be changed here, too. *More information about Location and other settings can be found in the IX Series 2 Quick Start Guide.*

1.1 - Identification

On the left-hand menu, expand **Identification**, and select **Identification**.

- Station Information
 - Identification**
 - ID and Password
 - Time
 - Expanded System
- Network Settings
- System Information
- Call Settings
- Option Input / Relay Output
- Paging Settings
- Function Settings

1.2 - Station Number

The Station Number / Extension cannot exceed 5 digits.

Station Information				
Identification				
#	Number	Name	Location	Station Type
0001	0586	Security Desk		IX-MV7-*
0002	4595	Front Door		IX-DV, IX-DVF(-*)
0003	9877	Parking Garage		IX-SS-2G

Click **Update** to save your settings. 

If the Station Number and Extension Number do not match the station will be unable to register to the IP PBX.

Adding SIP Server Information

Each station's **End User ID / Password** and the primary SIP server's information is entered here. Secondary and Tertiary SIP server information is found by scrolling to the right on this screen.

2.1 - SIP


On the left-hand menu, expand **Network Settings** and select **SIP**.

- Station Information
- Network Settings**
 - IP Address
 - DNS
 - SIP**
 - Multicast Address
 - Video
 - Audio
 - Packet Priority
 - NTP


2.2 - Primary Server

Enter the unique **ID** and **Password** created for each station, and the IP Address of the IP PBX under **IPv4/IPv6**.

Station Information			Network Settings			
Identification			SIP			
Number	Name	Station Type	Primary Server			
			ID	Password	IPv4 Address	Port
0586	Security Desk	IX-MV7-*	AiphoneMV7	*****	172.10.2.254	5060
4595	Front Door	IX-DV, IX-DVF(-*)	AiphoneIXDV	*****	172.10.2.254	5060
9877	Parking Garag	IX-SS-2G	AiphoneIXSS	*****	172.10.2.254	5060

Click **Update** to save your settings. 

Note:

 If the Password of the station contains special characters (!,\$,&, etc), ensure the station is using firmware version 2.0 or higher. The latest firmware can always be found at www.aiphone.com/ix

VoIP Phone Registration

Each station may have a single SIP call-in destination, whether that destination is an IP Phone or a Hunt Group's extension. However, multiple stations can call the same SIP extension.

3.1 - VoIP Phone List
From the tool bar at the top of the screen, click **Edit** and select **VoIP Phone List**.

3.2 - Number and Name
Enter the extension of the IP Phone or Hunt Group destination. *IX Stations should not be added to this list.*

3.3 - Update
Click **Update** to save.

Calling an IP Phone (Door / Sub Station)

Once an IP Phone or Hunt Group has been added to Support Tool it may be set as a call destination. Note that multiple stations can call to the same extension, but each station may only call one extension.

4.1 - Station View
On the left-hand menu, expand **Call Settings**, and select **Called Stations (Door/Sub)**.

4.2 - Scroll Right
Scroll right until you find the column of the **IP Phone** to be called by the Door / Sub station.

4.3 - Select
Use the drop-down option under the desired IP Phone to select **"U"**.

Click **Update** to save your settings.

Note:
 Settings will not take effect until the setting files have been uploaded to the stations. Refer to page 6 of this guide for the procedure of uploading the settings.

Configuring Door Release (Optional)

IX Series 2 intercoms have two built-in relay outputs, with **Relay Output 1** enabled and set for door release by default. 3rd Party IP Phones can activate this output using dial-pad commands with some minor adjustments to the default configuration. *Repeat this process for each station.*

5.1 - Station View
On the left-hand menu, click **Station View** then expand **Option Input / Relay Output**, and select **Relay Output**.

5.2 - Select a Station
Use the drop-down menu under **Select Station to Edit** and choose the first door station to configure. Click **Select**.

5.3 - Authentication Key
Find **Door Release Authorization** and **Authentication Key**. This key is the number(s) that will be used to activate the relay for door release. Replace the default 4 to 20 digit key with the desired access code.

Click **Update** to save your settings.

Note: Door Release Command

To activate door release from an IP phone, press **** [Authentication Key] *** while in communication with the door station.

If the **Door Release Authorization Authentication Key** is adjusted from its default value by following **steps 5.1 to 5.3** above, this new key must be set for any IX Series Master Station (IX-MV / IX-MV7-*). *Repeat this process for each Master Station.*

Station List	Contact Assignment	Authentication Key
		1-20 digits
0001 / 4595 / Front Door / / IX-DV, IX-DVF(-*)	Destination Station	9
0002 / 9877 / Parking Garage / / IX-SS-2G	Destination Station	9

5.4 - Door Release
On the left-hand menu, click **Function Settings** and select **Door Release**.

5.5 - Select a Station
Use the drop-down menu under **Select Station to Edit** and choose the first master station to configure. Click **Select**.

5.6 - Authentication Key
Find **Door Release Assignment** and **Authentication Key**. Replace the default value with the key created in **step 5.3**.

Click **Update** to save your settings.

Configuring a Door Station Call Button to Answer an Incoming Call (Optional)

Auto-answer is not available for incoming SIP calls to a door or sub station. To answer an incoming call, the call button will need to be configured to also answer an incoming call and ending communication.

6.1 - Station Info.
On the left-hand menu, click **Station View** then **Call Settings** and select **Station Information**.

6.2 - Button Function
Use the drop-down menu to select **Call, Answer Call, End Communication**.

- Station Information
- Network Settings
- System Information
- Call Settings
 - Station Information
 - Called Stations (Master S
 - Called Stations (Door/Su
 - Call Origination
 - Incoming Call

Station Information				Call Settings
Identification				Station Information
#	Number	Name	Station Type	Call Button Function
0002	4595	Front Door	IX-DV, IX-DVF(-*)	Call, Answer Call, End Communication
0003	9877	Parking Garage	IX-SS-2G	Call

Click **Update** to save your settings. 

Video Settings


Video from an IX station can be viewed on an IP Phone during communication by default. However, depending on the IP Phone, the H.264 profile setting may need to be adjusted. *Note that this setting change will not affect the video quality.*

- Station Information
- Network Settings
 - IP Address
 - DNS
 - SIP
 - Multicast Address
 - Video
 - Audio
 - Packet Priority
 - NTP

Station Information			Network Settings		
Identification			Video		
Number	Name	Station Type	Video Encoder 1		
			Resolution	Frame Rate [fps]	Select Profile [H.264 / AVC]
0586	Security Desk	IX-MV7-*			
4595	Front Door	IX-DV, IX-DVF(-*)	640x480(VGA)	15	Baseline

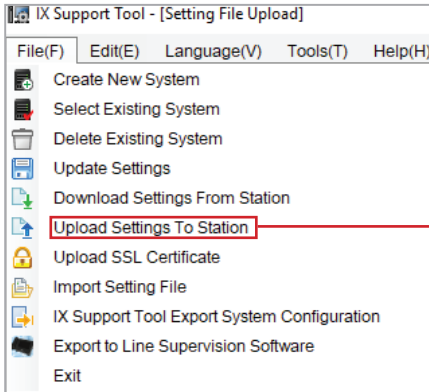
7.1 - Video
On the left-hand menu, expand **Network Settings**, and select **Video**.

7.2 - Profile
Select the H.264 profile. *Baseline is the most commonly used.*

Note:  Settings will not take effect until the setting files have been uploaded to the stations. Refer to page 6 of this guide for the procedure of uploading the settings.

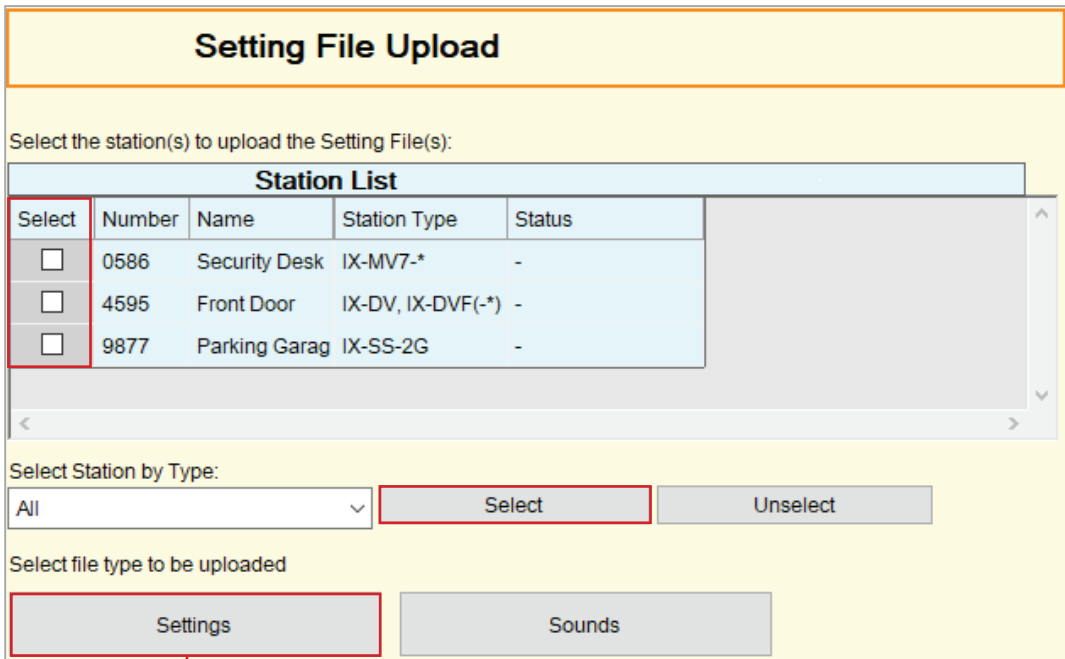
Upload Settings to Stations

To apply any setting changes made in Support Tool, the setting file must be uploaded to each station.



8.1 - Uploading Station Settings

From the tool bar at the top of the screen, click **File** and select **Upload Settings To Station**.



8.2 - Select Stations

Click **Select** to check all stations in the system, or individually select the stations to upload to.

8.3 - Upload Settings

Click **Settings** to upload the setting file to each station.

Note: The **Status** column will show whether the setting file upload was successful or has failed for each station. If the upload has failed, ensure the programming PC and the station are in the same IP range. The station's IP address can be confirmed by going to **Tools > Station Search** in Support Tool.