

IXW-PBX

Programming Guide



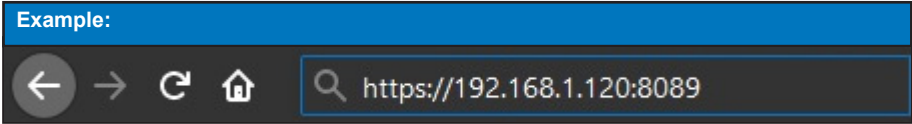
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Logging into the IXW-PBX

Access the IXW-PBX by entering its IP address and port in a browser. The IP address of the IXW-PBX will be shown on its LCD screen, and the port used is 8089.

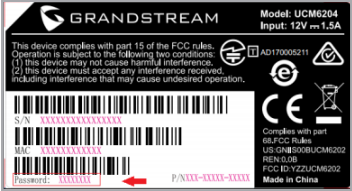
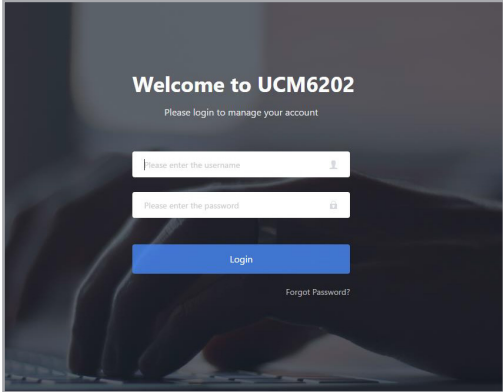
Example:



1.1 - Login

ID: admin (default)

Password: Found on a sticker on the back of the IXW-PBX, below the MAC address.



Setup Wizard - Change Password

When first logging into the IXW-PBX, you will be prompted to create a new password and enter a valid email address for password recovery.

Change Password

Enter Old Password:

Enter New Password:

Re-enter New Password:

Email Address:

Next Quit

Click Next

Setup Wizard - Network Settings

The network settings for the IXW-PBX will need to be changed in order for it to communicate with IX Series products. Change the Method to "Switch". The LAN settings will need to match your local network.

Network Settings

Method:

MTU:

Preferred DNS Server:

LAN

IP Method:

* IP Address:

* Subnet Mask:

* Gateway IP:

* DNS Server 1:

DNS Server 2:

Layer 2 QoS 802.1Q/VLAN Tag:

Layer 2 QoS 802.1p Priority Value:

Click **Next**

Setup Wizard - Time Zone

Change the Time Zone to match the location of the IX Series system. The date and time format can be changed to match your own preference.

Select Time Zone

Time Zone:

Self-defined Time Zone:

Date Format:

Time Format:

Language: English : en
 中文 : zh

Click **Next**

Setup Wizard - Extensions

Extensions are how the IX Series stations are assigned in the IXW-PBX. Once an extension is created the extension number cannot be edited. For this reason, select Disable Extension Range, and set the Create Number to 1. Set the Start Extension to your first station number, and use a custom SIP Password that will be assigned to all extensions.

Extensions

Can only set SIP extensions.

Disable Extension Range:

Start Extension:

Create Number:

SIP Password:

Use Random Password

Use as Password

Click **Next**

Setup Wizard - Trunk / Routes

The Trunks / Routes will be assigned in later steps in this guide with more in-depth information. Skip this step by clicking next.

Trunks / Routes

Existing Outbound Rules

Trunk Type	Trunks	Outbound Rule	Inbound Rule
No Data			

Click **Next**

Setup Wizard - Summary

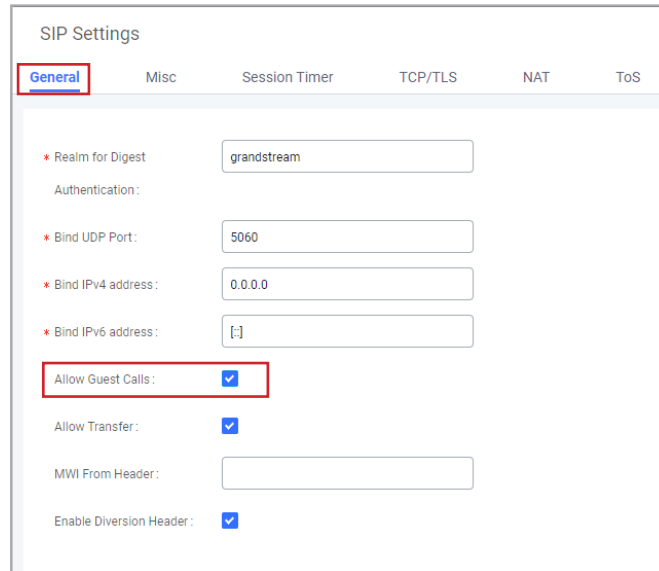
Review the information from each of the previous steps and click save to move on to the next step.

Click **Save**

SIP Settings

From the menu bar on the left, expand PBX Settings and click SIP Settings. Adjust the following values pictured below.

General Tab



SIP Settings

General Misc Session Timer TCP/TLS NAT ToS

* Realm for Digest: grandstream

Authentication:

* Bind UDP Port: 5060

* Bind IPv4 address: 0.0.0.0

* Bind IPv6 address: [-]

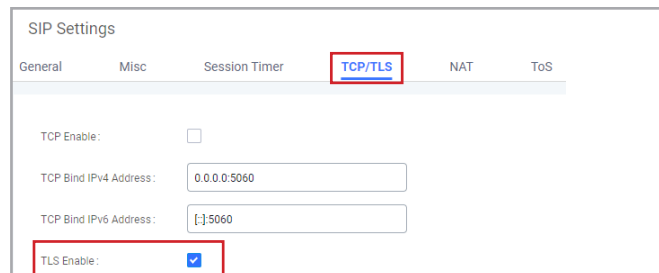
Allow Guest Calls:

Allow Transfer:

MWI From Header:

Enable Diversion Header:

TCP/TLS Tab



SIP Settings

General Misc Session Timer TCP/TLS NAT ToS

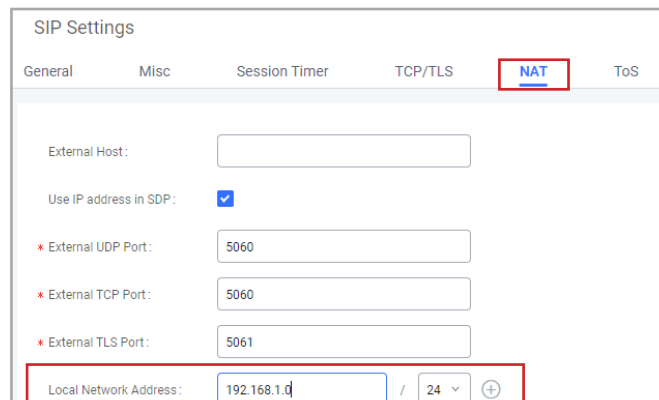
TCP Enable:

TCP Bind IPv4 Address: 0.0.0.0:5060

TCP Bind IPv6 Address: [-]:5060

TLS Enable:

NAT Tab



SIP Settings

General Misc Session Timer TCP/TLS NAT ToS

External Host:

Use IP address in SDP:


* External UDP Port: 5060

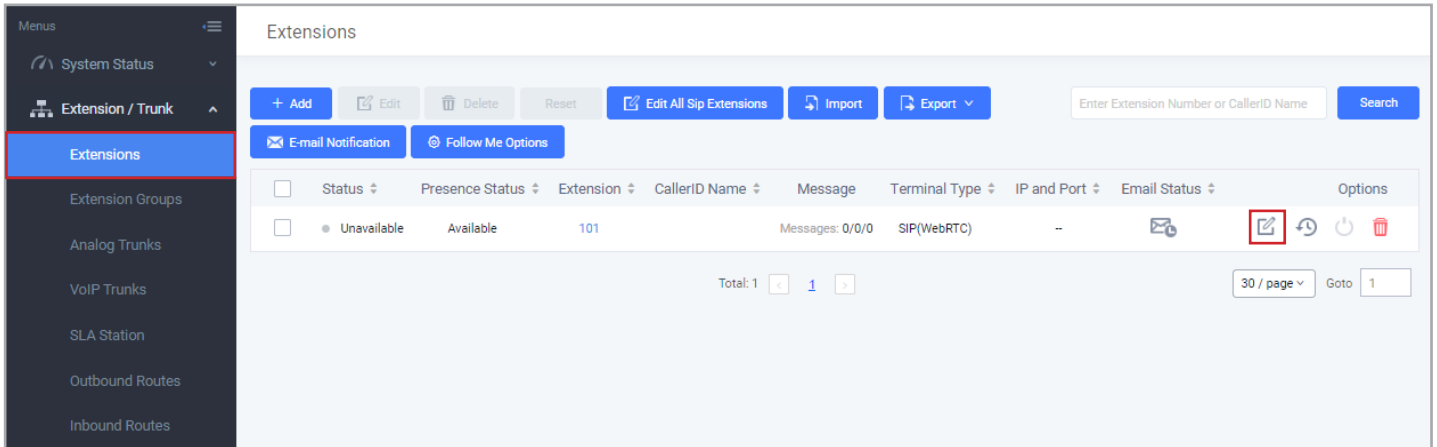
* External TCP Port: 5060

* External TLS Port: 5061

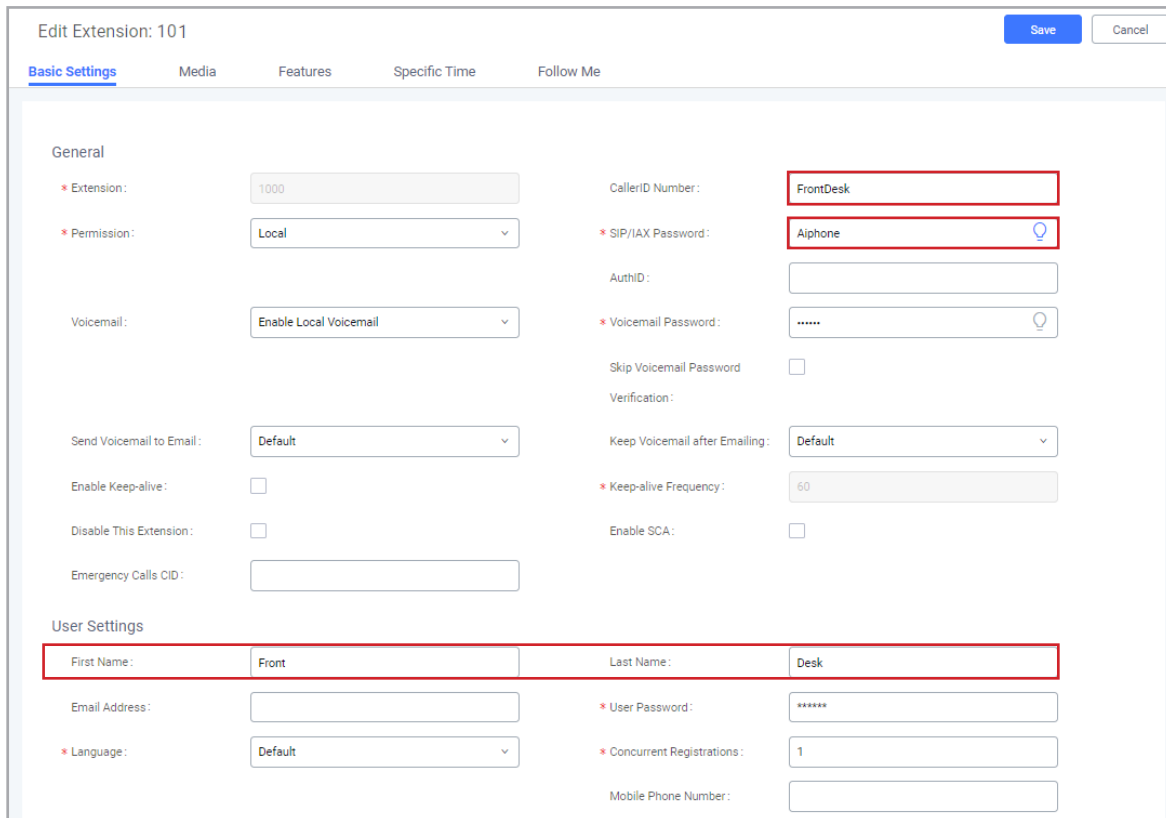
Local Network Address: 192.168.1.0 / 24 +

Editing Extensions

An extension is necessary for each IX Series station to be registered with the IXW-PBX. The extension number will be assigned to the station in the IX Support Tool in the following steps. To configure this, expand Extension/Trunk and click Extensions. Click  highlighted below to make changes to the existing extension.



Set the **CallerID Number** to match the Station Name in the IX Support Tool for consistency. The SIP/IAX password was assigned in the previous steps. Make note that this password will be needed when registering the IXW-PBX.



Edit Extension: 101

Save Cancel

Basic Settings Media Features Specific Time Follow Me

General

* Extension: 1000

* Permission: Local

Voicemail: Enable Local Voicemail

Send Voicemail to Email: Default

Enable Keep-alive:

Disable This Extension:

Emergency Calls CID:

CallerID Number: FrontDesk

* SIP/IAX Password: Aiphone

AuthID:

* Voicemail Password:

Skip Voicemail Password:

Verification:

Keep Voicemail after Emailing: Default

* Keep-alive Frequency: 60

Enable SCA:

User Settings

First Name: Front Last Name: Desk

Email Address:

* Language: Default

* User Password: *****

* Concurrent Registrations: 1

Mobile Phone Number:

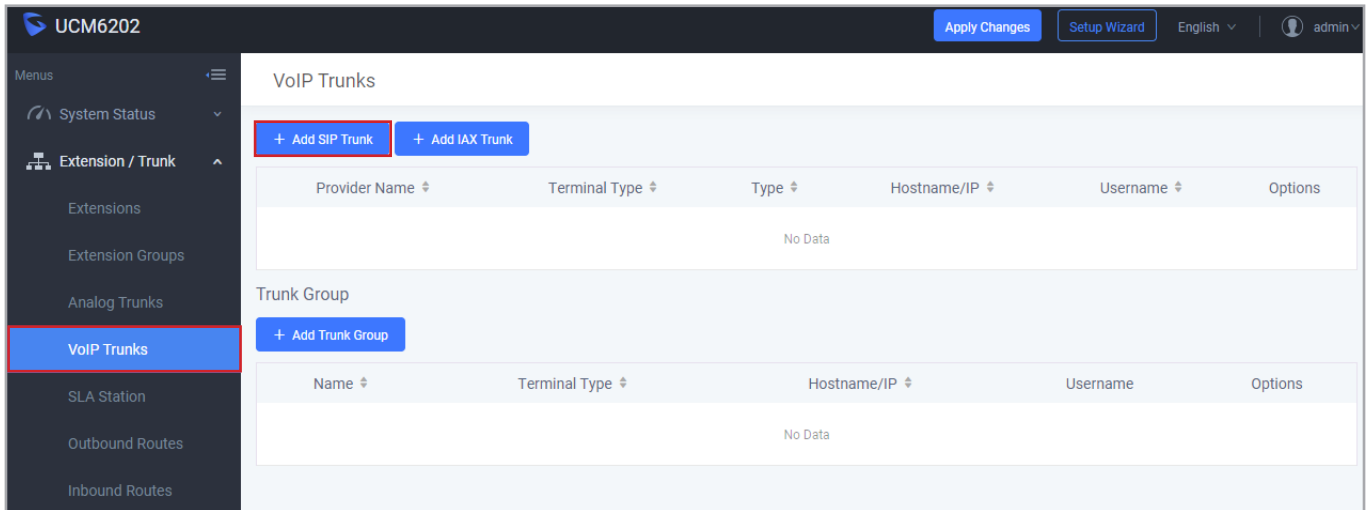
Adding Additional Extensions



Click  and copy the configuration above for each additional station to be registered.

VoIP Trunk Settings

The IXW-PBX will allow SIP Trunks to be used for outbound calls. To configure this, expand Extension/Trunk and click VoIP Trunks. At the top of the page click the **Add SIP Trunk** button.



Use the Type drop-down and select **Register SIP Trunk** and enter the **Provider** and **Host Name** of the SIP Trunk service provider. The username and password is also required to create a SIP trunk. Verify this information with the provider of the SIP Trunk.

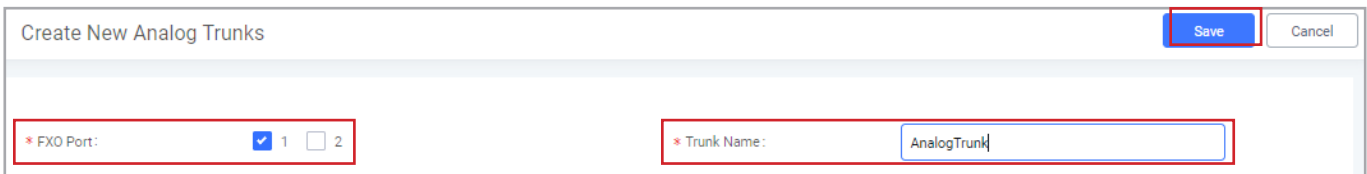
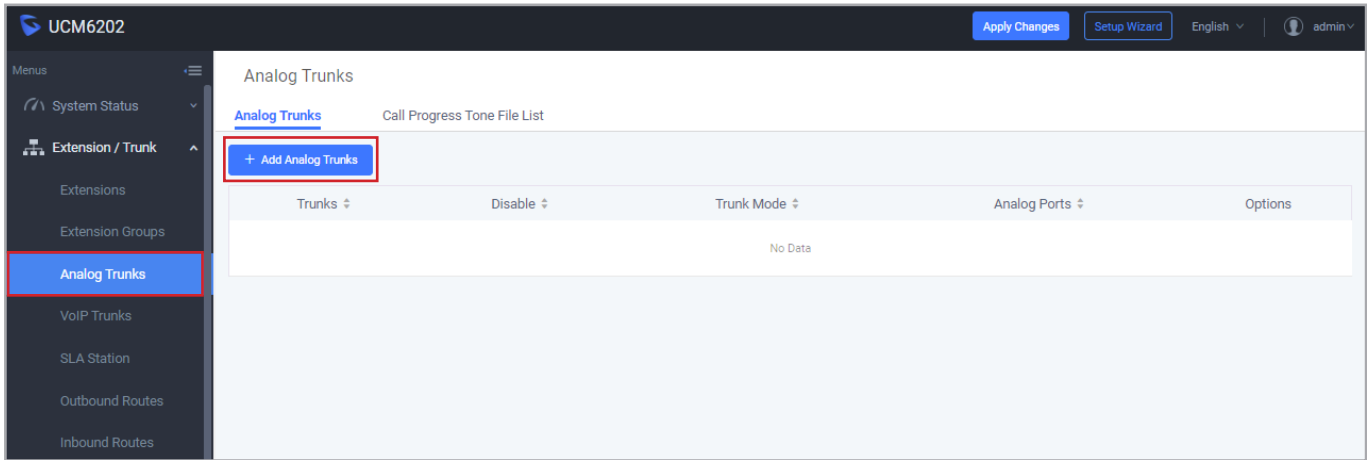
The screenshot shows the 'Create New SIP Trunk' form. At the top right are 'Save' and 'Cancel' buttons. The form contains the following fields and options:

- Type: Register SIP Trunk (dropdown menu)
- * Provider Name: Please select a provider (dropdown menu)
- * Host Name: (text input field)
- Keep Original CID:
- Keep Trunk CID:
- NAT:
- Disable This Trunk:
- TEL URI: Disabled (dropdown menu)
- Need Registration:
- Allow outgoing calls if registration fails:
- CallerID Name: (text input field)
- * Username: (text input field)
- * Password: (text input field)

Red boxes highlight the 'Type', 'Provider Name', 'Host Name', 'Username', and 'Password' fields.

Analog Trunk Settings

The IXW-PBX will also allow for Analog Trunks for outbound calls utilizing a POTS line plugged into one of the FXO Ports on the back of the device. To configure this, expand Extension/Trunk and click Analog Trunks. At the top of the page click the Add Analog Trunks button. Once the Create New Analog Trunks page is open, select a FXO Port and enter a trunk name.



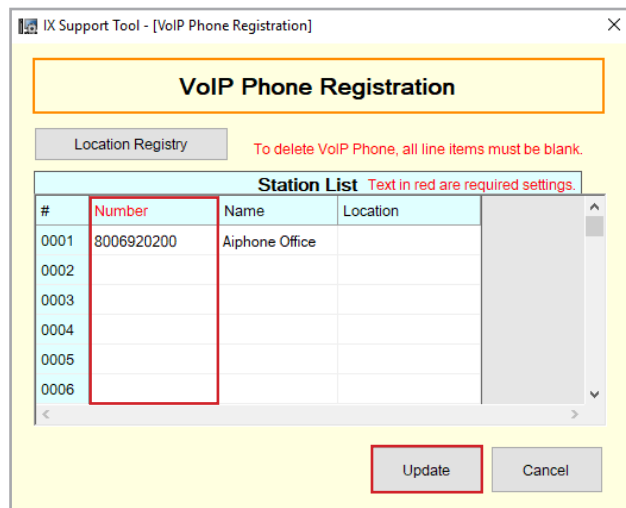
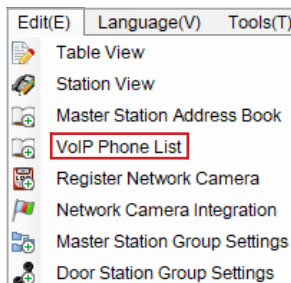
Note:



The FXO Delay(ms) may need to be adjusted to match the quality of the analog line being used for dial-out.

Registering a Phone Number

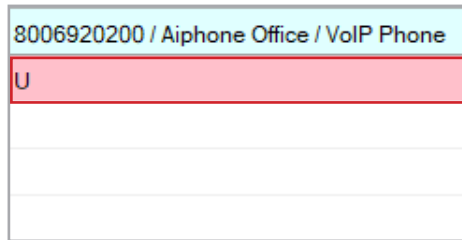
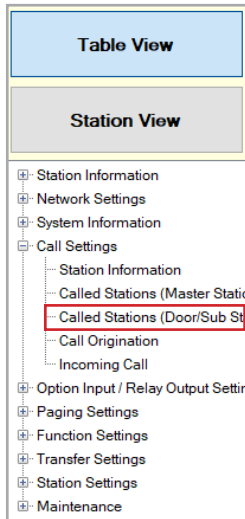
To call a phone number from an IX Series station using an analog trunk, the phone number will need to be registered as a VoIP Phone in the Support Tool. Open Support Tool and navigate to Edit > VoIP Phone List, and enter the phone number on the next available row.



For more details about the features and information above, please contact Technical Support.

Registering a Phone Number (cont.)

Now assign the newly registered phone number to the door station that will be placing the call. From the menu on the left, expand Call Settings and click Called Stations (Door/Sub Stations). Scroll the window to the right and locate the registered “VoIP Phone”, and use the drop down box to select **U** in the row of the designated door station.



Click **Update** to save your settings. 

Outbound Routes

For a station to call out to the registered phone number, it is required to create an outbound route rule for the analog trunk. Expand Extension / Trunk from the menu on the left and click on Outbound Routes. Once the Outbound Routes page opens click on the Add button.

A screenshot of the 'Create New Outbound Rule' form. The form contains the following fields:

- Calling Rule Name: Analog_Dial_Out
- Pattern: -xxxxxxxx
- Disable This Route:
- Password:
- Enable Filter on Source Caller ID:
- Call Duration Limit:
- Main Trunk: AnalogTrunks - Analog
- Strip:
- Prepend:

A red box highlights the 'Calling Rule Name', 'Pattern', and 'Main Trunk' fields. A 'Save' button is located in the top right corner of the form.

Click **Save** 

Registering the IXW-PBX

The IXW-PBX must be registered to the IX Series stations for the stations to call out. From the menu on the left, expand Network Settings and click SIP. Enter the extension number in the ID column, the SIP password in the password column, and the IP address of the IXW-PBX in the IPv4 Address column.

Table View

Station View

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

Station Information					Network Settings Text in red are required settings.						
#	Identification				SIP						
	Number	Name	Location	Station Type	SIP Connections		Primary Server				
					SIP Signaling Port	User Agent	ID	Password	IPv4 Address	IPv6 Address	Port
0001	101	Front Desk		IX-MV7-*	5060		101	*****	192.168.1.140		5060
0002	102	Security Office		IX-MV7-*	5060						5060

Click **Update** to save your settings.

Uploading the Settings

In this step, upload the newly configured settings to the IX Series stations. To test your system, press the call button on the door station. The phone extension that was programmed to ring should receive the call. Answer it and ensure that you have 2-way communication between the phone extension and the door station.

File(F) Edit(E) Language(V) Tools(T) Help(H)

- Create New System
- Select Existing System
- Delete Existing System
- Update Settings
- Download Settings From Station
- Upload Settings To Station**
- Upload SSL Certificate
- Import Setting File
- IX Support Tool Export System Configuration
- Export to Line Supervision Software
- Exit

Setting File Upload

Select the station(s) to upload the Setting File(s):

Station List						Text in red are required settings.	
Select	Number	Name	Location	Station Type	Status	Status	Status
<input checked="" type="checkbox"/>	101	Front Desk		IX-MV7-*	-	In Process	Success
<input type="checkbox"/>	102	Security Office		IX-MV7-*	-	In Process	Success
<input type="checkbox"/>	201	Front Door		IX-DV, IX-DVF(-*)	-	In Process	Success
<input type="checkbox"/>	202	Employee Entrance		IX-DV, IX-DVF(-*)	-	In Process	Success

Select Station by Type: All

Select file type to be uploaded

Settings

Sounds

Image

Schedule

For more details about the features and information above, please contact Technical Support.