

IXG SERIES

IP Multi-Tenant Video Intercom

Quick Start Programming Guide for Commercial Applications

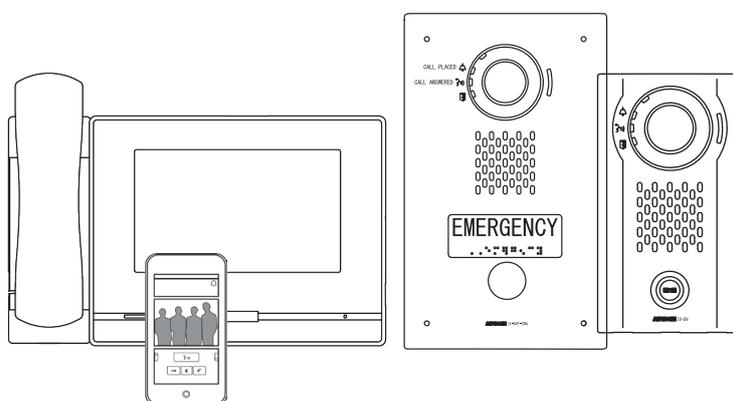


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ATTENTION:

This is an abbreviated programming manual addressing basic program settings for an IXG Series system using the IXG Support Tool. A complete set of instructions (*IXG Operation Manual / IXG Support Tool Setting Manual*) can be found at www.aiphone.net. In North America, visit www.aiphone.com/IXG for additional literature and media.

GENERAL OVERVIEW

Support Tool

The IXG Support Tool is designed to batch configure all stations simultaneously, finding each station on the network by its MAC address. The IXG Series is designed to function on a managed network, however, the broadcast method used to find stations during the programming process may require advanced network configuration or routing to function properly in this environment.

It is possible for Windows Defender or other firewalls and antivirus software to block the broadcast the Support Tool uses to search for stations. Disabling these temporarily during the programming process prevents interruption or failure. To ensure that IXG Support Tool uses the correct network connection, go to **File** from the top menu and select **IXG Support Tool Settings**. Find the **Select NIC** drop-down, select the correct NIC and click **OK**.

When possible, it is recommended that stations and the programming PC are placed on the same unmanaged network for initial programming. Once completed, the stations may be removed from this environment and deployed where needed.

Top Menu



This menu is located at the top of Support Tool, featuring quick access to support and integration settings. Use Alt+() to quickly access the menu options.

Side Menu



This accordion-style menu is where most station settings are located. Click + or - to expand or minimize a category.

Save



The **Save** button is used to save configured settings within the Support Tool. Clicking the Save button does not upload settings. The process of uploading settings to stations is covered later in this guide.

Hand Icon

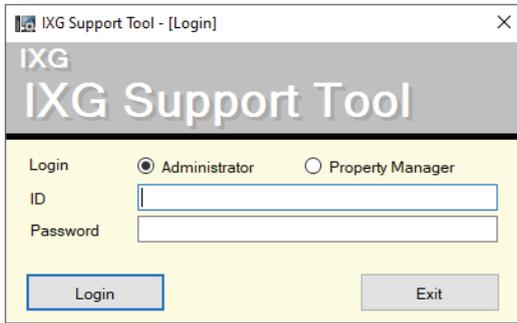


Look for the Hand Icon to indicate where to click to select or save a setting.

CREATING A NEW SYSTEM

Launching Support Tool

There are two login options for Support Tool, **Administrator** and **Property Manager**. For the purposes of this guide, login as Administrator. The default ID and Password is **admin/admin**.



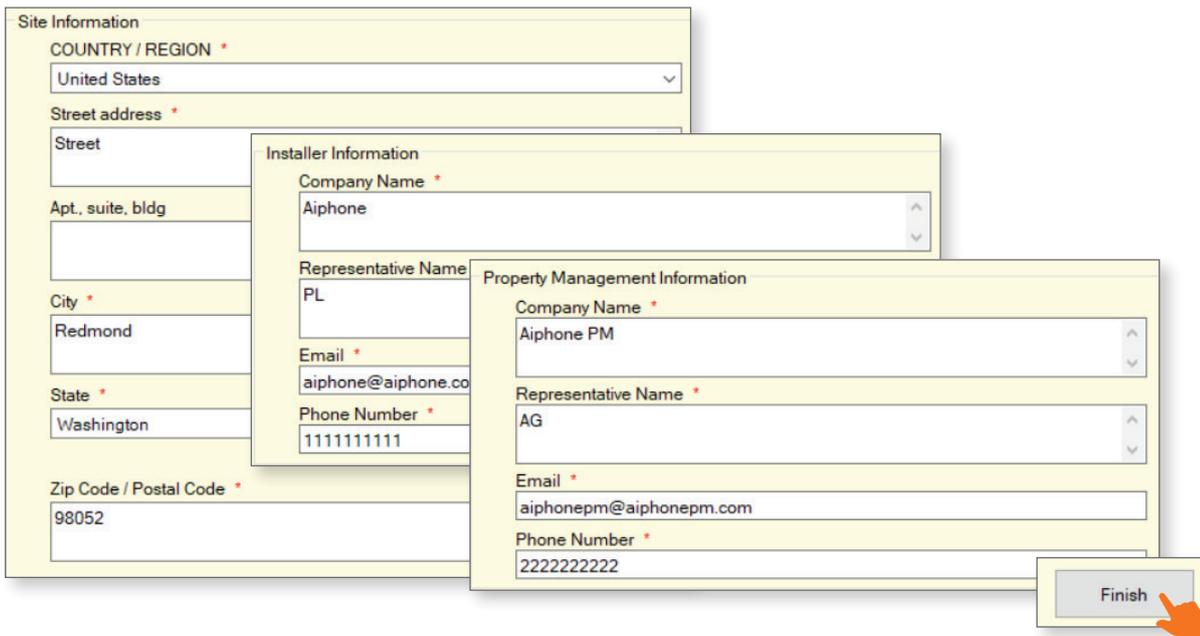
Getting Started

If this is the first time launching Support Tool, the Create a New System screen will automatically appear. Otherwise, click **File** and select **Create New System**.



i All ID and passwords should be recorded and saved in a secure location. Recovery of ID and passwords may be difficult or impossible in some situations.

Enter the required configuration information above and fill in the **Site, Installer, and Property Management Company Information**. This information is required and must be accurate to activate the IXG Mobile app. Click **Finish** to continue.



Site Settings

Expand **Site Settings** on the side menu. Select Site Information to configure and customize the system.

Site Information

Site, Installer and End User information that is set when creating a new system can be found and edited here.

Building Information

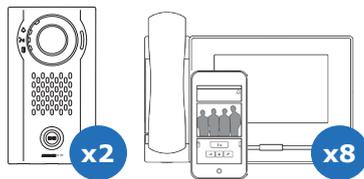
Name the building (or buildings) in which the units and their stations will reside. Place a check mark in the Enable column to add buildings. This is typically only needed in multi-building systems.

Building Number	Enable	Building Name
01	<input checked="" type="checkbox"/>	North Building
02	<input checked="" type="checkbox"/>	South Building

Units/Stations - Unit Types

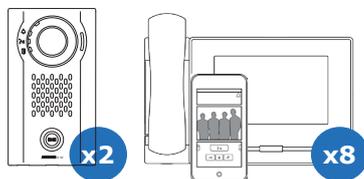
A typical IXG Commercial system will use four different Units or Areas: **Guard, Commercial, Inside Area**, and **Outside Area**. Each has their own purpose, available features, communication paths, and station types. There are no limitations to the number of Units a system can have, but each Unit type has station quantity limitations.

Commercial Unit



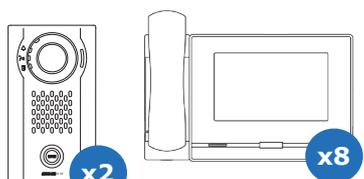
Commercial Units consist of up to eight IX-MV7-* master stations or IX-RS-* handset sub stations, eight IXG mobile apps, or a combination of both. These master stations can utilize many IX Series functions including internal paging, call transfer, speed dial buttons, and more.

Stations within a Commercial Unit can communicate with Inside Areas, Outside Areas, and Guard Units, as well as other Commercial Units. The two private door stations will only call to stations within their Unit.



Guard Unit

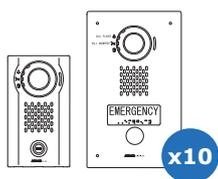
Guard Units consist of up to eight IXG-MK guard stations or IX-RS-* handset sub stations, up to eight IXG mobile apps, or a combination of both. The two private door stations will only call to stations within their Unit.



Inside Area Unit

Inside Area Units consist of up to eight IX-MV7-* master stations or IX-RS-* handset sub stations, and two IX Series door stations. These stations can utilize many IX Series functions including internal paging, call transfer, speed dial buttons, and more.

An Inside Area master station can communicate with all other Unit types, except for the Guard Unit. The two private door stations will only call to stations within their Unit.



Outside Area Unit

Outside Area Units consist of up to 10 door or emergency stations that can call Guard, Commercial, and Inside Area units.

Site Settings (cont.)

Units / Stations - Adding Units

Units and their stations will be added to the system here. First, look to the top of the screen for the Display Settings section. By default, each Unit is set to have one Master/Tenant Station, one Entrance/Door Station, and one Mobile App. Use the drop-down lists to select the number of stations the Units will have, then click **Apply**.

Number of Master Stations	<input type="text" value="1"/>	Number of Mobile Apps	<input type="text" value="1"/>	<input type="button" value="Apply"/>
Number of Door / Entrance Stations	<input type="text" value="1"/>			

i This is a universal setting. Select quantities that reflect your largest unit.

From left to right, select the Building Number the Unit will belong to, set the Unit Number, and click the Unit Type button to select a Unit type. Once all Units have been added, enter a Unit Name for each. At any point during this process, click **Save** to save the configured settings.

Building Nu	Unit Numbe	Unit Type		Unit Name
01	001	Outside Area	Select	Door Stations
01	101	Commercial	Select	Masters and Apps

i When adding multiple of the same Unit Type, select a completed Unit Number field and press the Enter key twice. This will auto-populate the next field.

Once all Units have been added, enter a Unit Name for each. At any point during this process, click **Save** to save the configured settings.

Building Nu	Unit Numbe	Unit Type		Unit Name
01	001	Commercial	Select	201
01	002	Commercial	Select	202

i When adding multiple of the same Unit Type, select a completed Unit Number field and press the Enter key. This will auto-populate the next field.

Continue by selecting the stations for each Unit, including Mobile apps. Once every unit has been created and stations have been added, click **Save**.

Building Num	Unit Numbe	Unit Type		Unit Name	First Name	Last Name	Master / Tenant S		Door / Entrance S	App 1	
01	001	Commercial	Select	201			IX-MV7-*	Select	Select	Intercom App	Select
01	002	Commercial	Select	202			IX-MV7-*	Select	Select	Intercom App	Select

When the Save button is clicked, the popup to the right will appear. Clicking **Yes** will automatically enable communication between all appropriate stations and units for new systems as well as configure and enable door release. Clicking **No** will require manual configuration of these settings.

IXG Support Tool

? Configure the call destination automatically? The group settings and called stations (Door/Sub Stations) settings that have already been set are overwritten.

i When adding a door station with an additional call button, such as the IX-DVF-2RA or IX-SSA-2RA, check with Emergency Button.

Select Station

with Emergency Button

with Emergency Button

Gateway Registration

If the system contains IXG mobile apps, the Gateway (IXGW-GW) is required. To add the Gateway to the system, select **Enable**, then optionally edit its Station Name, and review the other settings. Once configured, click **Save**.

Gateway Number	Station Type	Enable	Station Name	Cancel Priority Rule	Maximum Simultaneous Calls
1	IXGW-GW	<input checked="" type="checkbox"/>	Gateway 1	Enable	8

Gateway Selection

Use the drop-down menu under Gateway Number to select the Gateway added in the previous step.

Station Information

Identification

Edit the Station Number and the Station Name for each station in the system. The Station Name and Station Number are typically only seen by stations within the same Unit for internal communication, but it is recommended to give custom names to any Entrance or Door stations.

ID/Password (Optional)

Edit the Admin ID and Password for each station, as well as optionally create an ONVIF and RTSP ID and Password for each station. **It is recommended that the Admin ID and Password are not adjusted once set.**

Network Settings

IP Address

From the side menu, expand **Network Settings** and select **IP Address**. Each station can be manually assigned an IP address, or click **Batch IP Address Configuration** near the top of the screen to enter an IP address range to automatically assign all stations.

Select	Building Number	Unit Number	Station Name	Station Type	IP Address (IPv4)	IP Address (IPv6)
<input checked="" type="checkbox"/>	01	001	Entrance Station	IXG-DM7(-*)		
<input checked="" type="checkbox"/>	01	101	Master Station1	IX-MV7-*		
<input checked="" type="checkbox"/>	01	201	Tenant Station1	IXG-2C7(-*)		
<input checked="" type="checkbox"/>	01	202	Tenant Station1	IXG-2C7(-*)		
<input checked="" type="checkbox"/>	01	203	Tenant Station1	IXG-2C7(-*)		
<input checked="" type="checkbox"/>			Gateway 1	IXGW-GW		

For systems with the IXGW-GW Gateway Adaptor, a **Default Gateway** must be added for the adaptor, and optionally for all other stations. Consult the Network Administrator for more information if needed.

DNS

For systems with the IXGW-GW Gateway Adaptor, a **DNS Address** is required for the adaptor, and optionally for all other stations. Consult the Network Administrator for more information if needed.

NTP

It is recommended to enable and configure NTP settings for each station when possible. **For systems with the IXGW-GW Gateway Adaptor**, it will have NTP enabled and an Aiphone NTP server address set by default. Adjusting this default server address is possible and recommended for sites with their own server.

Association Settings

From the top menu, select **Connection** and click **Association Settings**. Here, stations created in the previous steps will be associated to stations found on the network. Select a station from the **Station Settings List** and one from the **Station List** below. Clicking **Apply** will assign the Station Name and IP Address to the station, and that station will quickly reboot.

Association Settings

1. Select the setting file to be linked with the chosen station.

Station Settings List						
Select	Building Number	Unit Number	Station Name	Station Type	Hostname	IP Address
<input checked="" type="radio"/>	01	001	Entrance Station	IXG-DM7(-*)		192.168.1.10
<input type="radio"/>	01	101	Master Station1	IX-MV7-*		192.168.1.11
<input type="radio"/>	01	201	Tenant Station1	IXG-2C7(-*)		192.168.1.12
<input type="radio"/>	01	202	Tenant Station1	IXG-2C7(-*)		192.168.1.13
<input type="radio"/>	01	203	Tenant Station1	IXG-2C7(-*)		192.168.1.14
<input type="radio"/>			Gateway 1	IXGW-GW		192.168.1.15

Station List						
Select	Building Number	Unit Number	Station Name	Station Type	MAC Address	Associated
<input checked="" type="radio"/>			IXGW-GW		00:0B:AA:44:00:28	-
<input type="radio"/>			IXG-2C7(-*)		00:0B:AA:3C:00:7F	-
<input type="radio"/>			IXG-2C7(-*)		00:0B:AA:3C:00:7F	-
<input type="radio"/>			IXG-2C7(-*)		00:0B:AA:3C:00:7F	-
<input type="radio"/>			IX-MV7-*		00:0B:AA:3C:00:7F	-
<input type="radio"/>			IXG-DM7(-*)		00:0B:AA:41:00:77	-

i Typically, stations deployed across a managed network cannot be found by Support Tool unless the network is configured to allow this broadcast search. In this case, it may be easier to move the stations to a switch local to the programming PC than it would be to configure the network to allow a network-wide broadcast.

If a Station Search fails immediately, go to **File** from the top menu and select **IXG Support Tool Settings**. Find the **Select NIC** drop-down and select the correct NIC Support Tool should use, and click **OK**. Return to **Association Settings** to try again. If the Station Search continues to fail immediately, a local antivirus or firewall may be preventing this action. Disabling one or both of these may be a simple solution in quickly finishing the initial system configuration.

Associated Station List

Scroll down to confirm the stations were successfully associated. If the wrong station information was associated to a station, select that station on this list and click **Remove Association**. Once removed, scroll up and associate the station correctly.

Station(s) that have been associated with a setting file are listed below.

Associated Stations List							
Select	Building Number	Unit Number	Station Name	Station Type	IP Address	MAC Address	Status
<input type="checkbox"/>			Gateway 1	IXGW-GW	192.168.1.15	00:0B:AA:44:00:28	Success
<input type="checkbox"/>	01	101	Master Station1	IX-MV7-*	192.168.1.11	00:0B:AA:3C:00:7F	Success
<input type="checkbox"/>	01	201	Tenant Station1	IXG-2C7(-*)	192.168.1.12	00:0B:AA:3C:00:7F	Success
<input type="checkbox"/>	01	202	Tenant Station1	IXG-2C7(-*)	192.168.1.13	00:0B:AA:3C:00:7F	Success
<input type="checkbox"/>	01	203	Tenant Station1	IXG-2C7(-*)	192.168.1.14	00:0B:AA:3C:00:7F	Success
<input type="checkbox"/>	01	001	Entrance Station	IXG-DM7(-*)	192.168.1.10	00:0B:AA:41:00:77	Success

Door Release Settings

Option Input/Relay Output - Relay Output

Scroll to the right until the Door Release Key column, then change the 20-digit key as needed. The Door Release Key can be 1-20 digits long.

Option Input / Relay Output Settings Required settings.									
Building Nu	Unit Number	Station Name	Relay Output						
			Latch Trigg	Relay Output 1	Relay Output 1 (Output Time is valid when Relay Output function is set to Door Release or is controlled by CGI.			Authentication Key	
			Reset Trigg	Contact Change SIF Event	Option Relay Con	Output Time Range	Output Time	Door Release Key	Tone Settings
			Station Nu	Select Station				Door Release	Option Relay Control Authentic
01	100	Entrance Station1	on Input		Disable	3-600 [sec]	5	5	Audio Guidance
01	300	Guard Station1			Disable	3-600 [sec]	5	5	Operation Sound
01	400	Master Station1			Disable	3-600 [sec]	5	5	Operation Sound
01	400	Video Door Station1	on Input		Disable	3-600 [sec]	5	5	Operation Sound

Function Settings - Door Release

If the Door Release Key on a door station is changed, this change will also need to be made for any master station that will interact with that door station. Expand **Function Settings** and select Door Release, then change the Door Release Keys to reflect the changes made in the Relay Output section.

Function Settings			
Building Nu	Unit Number	Unit Name	Door Release
Door Release Assignment			
100 / 1000 / Entrance Station 1 / IXG-DM7(-*)			
Contact Assignment		Door Release Key	Option Output Key
01	300	Guard	Destination Station 5 -
01	400	Office	Destination Station 5 -

Upload Settings

Once associated, each station will need to have its setting file uploaded to it. This setting file contains all other system information and is required for the station to function. To upload the settings to each station, select **Connection** on the top menu and click Upload Settings.

Setting File Upload

Select each station by placing a check mark next to it, or click **Select** to select all stations. Click **Settings** to upload station settings. If Sounds, Images, or Schedules were configured, click their respective buttons.

Setting File Upload

Select the station(s) to upload the Setting File(s):
The Gateway Adaptor will restart when uploading the settings after changing the Maximum Simultaneous Calls. It may take up to 10 minutes to complete.

Select	Building Number	Unit Number	Station Name	Station Type	Status
<input checked="" type="checkbox"/>	01	001	Entrance Statik IXG-DM7(-*)	-	-
<input checked="" type="checkbox"/>	01	101	Master Station IX-MV7(-*)	-	-
<input checked="" type="checkbox"/>	01	201	Tenant Station IXG-2C7(-*)	-	-
<input checked="" type="checkbox"/>	01	202	Tenant Station IXG-2C7(-*)	-	-
<input checked="" type="checkbox"/>	01	203	Tenant Station IXG-2C7(-*)	-	-
<input checked="" type="checkbox"/>			Gateway 1 IXGW-GW	-	-

Select Station by Type:

Select file type to be uploaded.

i If any stations fail, they may still be booting up from the Association Settings step. It is also important to ensure that the programming PC is in the same subnet range as the stations. For example, if the stations are set to 192.168.1.xx, the PC should also be set to this.

Exporting System Configuration

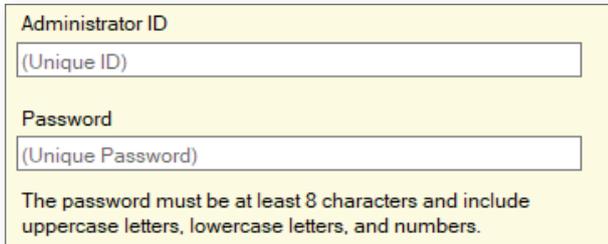
Once the upload is complete, select **File** from the top menu and click Export System Configuration. Export this system's configuration to save as a backup if the settings are lost, or if they need to be moved to a new PC with IXG Support Tool.

Mobile App Integration

If IXG mobile apps are to be part of the system, the first step in many situations is to create an administrative account for the app server. However, **if this is one of multiple existing sites the installing company is responsible for, skip the "Create a New Administrator Account" step.** Use existing IXG cloud server account credentials in the step "Upload Settings to IXG Cloud Server" to add this site to the installation company IXG cloud server account.

Create a New Administrator Account

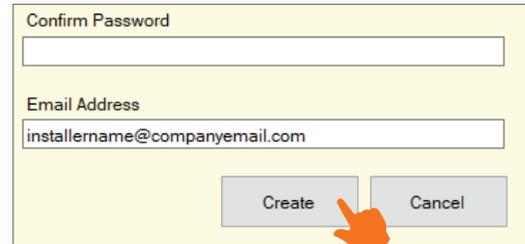
Select **App Integration** from the top menu and click Create a New Administrator ID. Create or enter an ID, Password, and Email Address. Click **Create** to continue.



Administrator ID
(Unique ID)

Password
(Unique Password)

The password must be at least 8 characters and include uppercase letters, lowercase letters, and numbers.



Confirm Password

Email Address
installername@companyemail.com

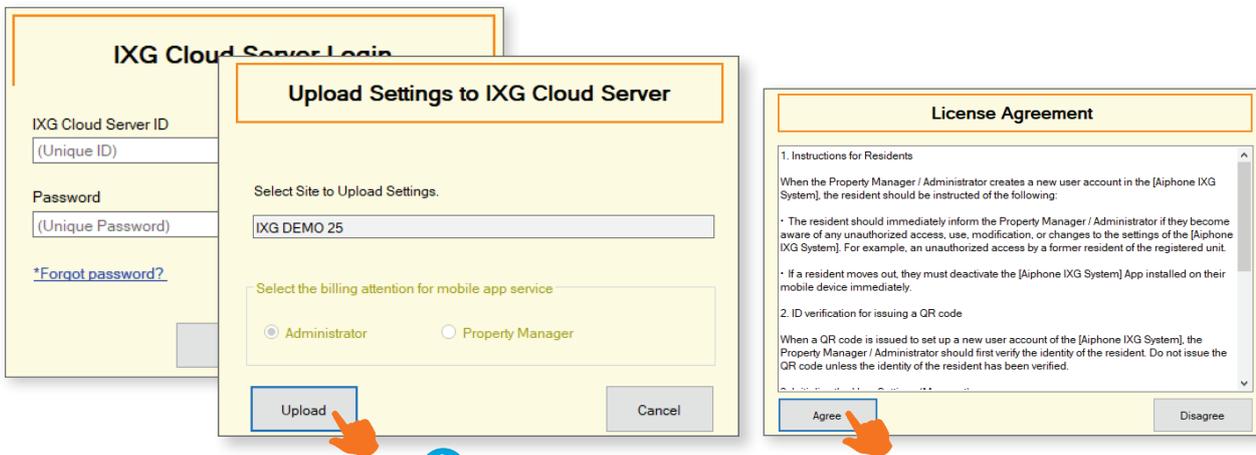
Create Cancel

i The IXG cloud server will send a verification email from noreply@ixg.iphone-app.net. Insure that this email is whitelisted prior to creating the account. This verification code is only sent at the time of account creation.

A verification code will be sent to the registered email. IXG Support Tool will automatically switch to an activation prompt to enter the code, otherwise it can be input later by clicking on **App Integration** from the top menu and select Activate. Enter the previously created Administrator ID and Verification Code and click **Activate**.

Upload Settings to IXG Cloud Server

The system settings must be uploaded to the IXG cloud server. To do this, select **App Integration** from the top menu and select Upload Settings to IXG Cloud Server. From there, follow the prompts.



IXG Cloud Server Login

IXG Cloud Server ID
(Unique ID)

Password
(Unique Password)

[*Forgot password?](#)

Upload Settings to IXG Cloud Server

Select Site to Upload Settings.
IXG DEMO 25

Select the billing attention for mobile app service

Administrator Property Manager

Upload Cancel

License Agreement

1. Instructions for Residents

When the Property Manager / Administrator creates a new user account in the [Aiphone IXG System], the resident should be instructed of the following:

- The resident should immediately inform the Property Manager / Administrator if they become aware of any unauthorized access, use, modification, or changes to the settings of the [Aiphone IXG System]. For example, an unauthorized access by a former resident of the registered unit.
- If a resident moves out, they must deactivate the [Aiphone IXG System] App installed on their mobile device immediately.

2. ID verification for issuing a QR code

When a QR code is issued to set up a new user account of the [Aiphone IXG System], the Property Manager / Administrator should first verify the identity of the resident. Do not issue the QR code unless the identity of the resident has been verified.

Agree Disagree

i When site settings are initially uploaded to the cloud, it will need to know whether the Administrator or Property Manager will be responsible for mobile app billing. This can be changed later if necessary.

Downloading the IXG Mobile App

Before registering the IXG Mobile App to a Unit, it will need to be downloaded to the mobile device. Search for "Aiphone IXG" in the Apple® App Store® for iOS devices, or Google Play™ store for Android™ devices. Once the app is installed and the privacy policy is agreed to, it will ask to scan a QR code for registration.

Mobile App Integration (Cont.)

Export App Registration QR Code as a PDF

To register mobile devices to the IXG system, a QR code is generated for each specific Unit. Select **App Integration** from the top menu and click [Export QR Code for App Registration](#). Place a check mark next to the desired Units and click **Export QR Code for App Registration**. This will create PDF documents with the QR codes for each of the selected units.

Select	Building Nu	Unit Number	Unit Name	Registered Master Static	Available App(s)
<input type="checkbox"/>	01	001	North Entrai	0	0
<input checked="" type="checkbox"/>	01	101	Cobalt Inc	0	1
<input checked="" type="checkbox"/>	01	201	201	1	1

Syncing the IXGW-GW with the IXG Cloud Server

Once the upload is complete and the IXGW-GW Gateway has finished its reboot, it will have a solid green status LED and is ready to be synced with the Cloud Server. If the status LED is flashing or solid orange for more than 10 minutes, it may require a manual reboot. To reboot the adaptor, disconnect its PoE connection and reconnect it after 5 seconds.

To Sync, return to **App Integration** in the top menu and select [Manual IXG Cloud Server and Gateway Sync](#). Select the Gateway and click **Sync**.

To ensure proper App functionality, the IXG Cloud Server and the Gateway settings must be synchronized.

Select	Gateway Number	Station Type	Status
<input checked="" type="checkbox"/>	1	IXGW-GW	

IXG Portal

Once the IXG settings have been uploaded to the cloud, the IXG mobile app licenses will need to be activated through the IXG Portal at portal.ixg.aiphone-app.net/. For additional information on this process, please refer to the [IXG Management guide](#).

AIPHONE
IXG Portal

IXG Cloud Server ID or Email Address

Password

[Forgot Password?](#)



In addition to activating and paying for mobile licenses, the IXG Portal website also provides tools for remote management of IXG sites, including the ability to connect or disconnect mobile apps without the need of the IXG Support Tool.

Advanced Settings

The IXG Support Tool has a collection of optional features accessed by changing the top menu option **View** from the default Basic to Advanced.

Door Call Destination and Station List

These settings control which masters and apps a door station calls, and which door and master stations are in a master or app's address book.

i If a door and master station are part of the same Commercial or Residential Unit, Door Call Destination and Station List are configured by default.

Door Call Destination

Expand **Call Settings** and select Called Stations (Door/Sub Stations). By default, Call Group 01 will be displayed, which is correct for most station types. If using an IX-DA or IX-BA door station, switch to Call Group 10 under Display Settings.

The table will show a row for each configurable door station, and a column for each master and door station. If there is a U in the cell where a door station and a master station intersect, the door will call the master station when the call button is pressed. If the cell is blank, the door will not call the master station. If a cell is greyed out, it is an invalid selection and does not need to be configured. Click on the appropriate cell to reveal a drop-down and make the selection.

Building Nu	Unit Number	Station Name	Total	Call Settings
				Called Stations (Door/Sub Stations)
				Group 01
				Station Number / Station Name / Station Type
				1110 / Office 101 Master / IX-MV7-*
01	112	Front Door	2	U

The Mobile App field at the far righthand side of the table displays which unit's apps that the door station will call. Click the Select box at the far right to bring up the Select Unit window. Check off the desired unit and click **OK**. Once finished, click **Save**.

				Mobile App
Building Nu	Unit Number	Unit Name		
1131 / Office 102 Door / IX-DV,IX-DVF(-*)				Select
01	113	Office 102		Select

Station List

Once the Call Settings have been applied, the Station List will need to be configured. These settings control which door stations are in a master station's Address Book.

Building Nu	Unit Number	Station Name	1110			
			Office 101 Master / IX-MV7-*			
			Select	Network Camera	r Release Bu	Select
01	111	Office 101 Master				<input checked="" type="checkbox"/>
01	111	Office 101 App				<input type="checkbox"/>
01	113	Office 102 Master				<input checked="" type="checkbox"/>

Expand **System Information** and select Station List. There is a row for each master station and group of mobile apps, and a column for each master and door station. If there is a check mark where the master station or apps meet a door station, the door will appear in their address books. Click on the field to make the drop-down appear. Once everything is configured, click **Save**.

To apply the settings, navigate to **Connection** and select Upload Settings. Find more information on **page 8**.

Option Input Calling

When an additional call button is being used with a door station, it uses an option input on that door station to initiate the call. This option input call can be configured to operate differently from the door station's normal call button, and can be enabled when the door station is initially configured or after.

Site Settings - Unit/Station

To add a door station with option inputs already enabled, expand **Site Settings** and select Unit/Station. Open **Select Station** for the door station (as detailed on page 3) and check **with Emergency Button** before clicking on the appropriate door station button. Click **Save** to save the configured settings.

i For any other door stations besides IX-DV, DVF or IX-SSA, the Option Input will be enabled manually.

Option Input/Relay Output Settings - Option Input

When with Emergency Button is checked, option inputs 1 and 6 are automatically configured to place calls. To manually configure this, expand **Option Input/Relay Output Settings** and select Option Input. Choose the Option Input to set in the Display drop-down, then set the Function to **Call** for the door station. Click **Save** to save the configured settings.

01	301	Video Door Station1	No Function	Make	<input type="checkbox"/>	<input type="checkbox"/>
01	600	Video Door Station1	Call	Break	<input type="checkbox"/>	<input type="checkbox"/>

i The red button on the IX-DVF-RA/2RA and IX-SSA-RA/2RA stations uses Option Input 6 and type set to **Break**.

Called Stations - Called Stations (Door/Sub Stations)

By default the option input call will call to the same location as the normal call button. If this needs to be changed, expand **Called Stations** and select Called Stations (Door/Sub Stations), then select a different group in the Display settings drop-down and add a U to the master stations and apps that will be called. Click **Save** to save the configured settings.

Building Nu	Unit Number	Station Name	Total	Group 02		
				Station Number / Station Name / Station Type		
				1000 / Master Station1 / IX-MV7-*	1001 / Master Station2 / IX-MV7-*	2000 / Master Station1 / IX-MV7-*
01	300	Video Door Station1	0			
01	301	Video Door Station1	2	U		U
01	600	Video Door Station1	0			

Called Stations - Call Origination

To assign a new call group to the option input, expand **Called Stations** and select Call Origination. Use the Display settings drop-down to select the Option Input, then set the Standard Mode Settings **Call Destination** and **priority level**. Click **Save** to save the configured settings.

Video Door Station1	Call Pattern 2	10-600 sec	60	Infinite		Normal
Video Door Station1	Call Pattern 2	10-600 sec	60	Infinite	01	Normal
Video Door Station1	Call Pattern 2	10-600 sec	60	1	02	Priority

Upload Settings to Stations

The final step is to upload these setting changes to the IXG Series stations. To upload the settings to each station, select **Connection** on the top menu and click Upload Settings. Find more information on **page 8**.

Additional Settings

The following are simple feature or function settings that can be quickly adjusted, enabled, or disabled. Each of the following are found under the Advanced View in Support Tool. Click **View** on the top menu and select [Advanced](#) to switch views.

Always click the **Save** button in the top left corner to save the setting changes in Support Tool, and **Upload Settings** to each station once all changes have been made (page 10). **The stations will not reflect the setting changes without doing this.**

Adjusting Audio Volumes

Some stations can adjust their inbound and outbound audio volumes. Adjust these by expanding **Station Settings** and selecting [Volume](#).

Door Station Release Timer

The time the door release relay output is triggered can be adjusted for the Entrance Station and other private door stations on the system. Adjust these times by expanding **Option Input / Relay Output Settings** and selecting [Relay Output](#).

By default, the output timers are set to 400msec. Use the drop-down under [Output Time Range](#) to select a time range of either **200-2000msec** or **3-600sec**. Then, manually enter the amount of time the relay should trigger.

Door Station Call Timeout and Ringback Tone

Adjust the amount of time an entrance or door station calls in for, as well as select the ringback tone (which includes audio guidance), by expanding **Call Settings** and selecting [Call Origination](#).

The Call Timeout duration is set to 60 seconds by default for door stations and 45 seconds for entrance stations. Adjust this by manually entering a time under [Call Timeout \(10-600sec\)](#).

Use the drop-down under [Ringback Tone](#) to select a pre-loaded or custom ringback tone, or audio guidance.

Door Station Communication Start Tone

The door station can play a "Communication Start Tone" to let the visitor know the call is connected and it is time to speak. Enable this and choose a tone to play by expanding **Station Settings** and clicking [Communication](#).

Disable Door Station Monitoring

To prevent any station in any Unit from monitoring a door station, expand **Station Settings** and click [Monitoring](#). Scroll to the right to adjust the prevent monitor setting.

Door Station Recording

The door station can record audio and video to a local microSD™ card when a call is placed, when communication is established with a station, or 24/7. Enable these functions by expanding **Function Settings** and selecting [Recording](#).

Upload Settings to Stations

The final step is to upload these setting changes to the IXG stations. To upload the settings to each station, select **Connection** on the top menu and click **Upload Settings**. Find more information on **page 8**.

IXW-MA Configuration

Use the following steps for configuring the IXW-MA for use with the IXG Series. The IXW-MA has 10 configurable relay outputs than can be used for several functions, including remote door release and external signalling. *Note that the IXW-MA is not compatible with the IXG-DM7-HID Entrance Panel, only IX Series door stations.*

Station Numbers

The station number of any station interacting with the IXW-MA must be 3 to 5 digits long. For door release, this would be the station number of the door station, as it is what sends the SIF event to the IXW-MA relay. To confirm or adjust station numbers, expand **Station Information** on the side menu and select Identification.

SIF

In Advanced View (found under **View** on the top menu), expand **Function Settings** on the side menu and select SIF. The example shown will be setting up remote door release, in which these settings will primarily be configured for the door stations, and not the master stations.

Building Number	Unit Number	Station Name	Function Settings									
			SIF									
			SIF Functionality	SIP URI Fc	No.01							
					SIF Settings							
Program Type	IPv4	IPv6	Destination Port	SSL	Connection							
01	001	Front Door	Enable	Disable	0100	192.168.1.15		65014	Enable	Socket		
01	100	Reception Desk	Disable	Disable								

Enable SIF Functionality, enter **0100** for the Program Type, set the IPv4 address to the IP address that will later be assigned to the IXW-MA, enter **65014** for the Destination Port, **Enable SSL**, and select **Socket** as the Connection. Click **Save** before continuing to Transmission Trigger.

Transmission Trigger

Scroll to the right and select the Transmission Trigger that will send the SIF event. Continuing with the previous example, **Change Contact** should be selected for remote door release activation.

Building Number	Unit Number	Station Name	Function Settings								
			SIF								
			No.01								
			SIF Settings			Transmission Trigger					
SSL	Connection	Begin Out	Begin Cor	Door Rele	End Comr	Change contact	Unit error	Begin Broadcas			
01	001	Front Door	Enable	Socket	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
01	100	Reception Desk			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

Relay Output Time (Optional)

To increase the time the relay is closed on the IXW-MA when used for remote door release, expand **Option Input/Relay Output** and select Relay Output. Scroll to the right and adjust the **Output Time** for the door station accordingly.

Upload Settings

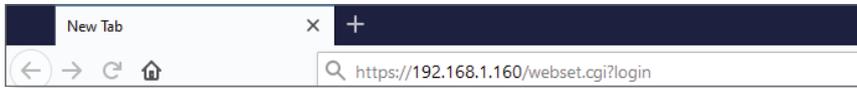
Once the previous steps are configured, each affected station will need to have the updated settings uploaded to it. For best practice, upload to all station to ensure consistent and up to date settings. To upload the settings to each station, select **Connection** on the top menu and click Upload Settings. See **page 10** for more information.

IXW-MA Configuration Cont.

Configuring the IXW-MA

The IXW-MA will now need to be configured, which is done via web browser. Open any modern browser (*iPhone recommends Microsoft Edge or Google Chrome*) and enter the following: **https://192.168.1.160/webset.cgi?login**

Depending on the chosen browser, a certificate warning or error may be given. Choose to proceed anyway to reach the login screen.

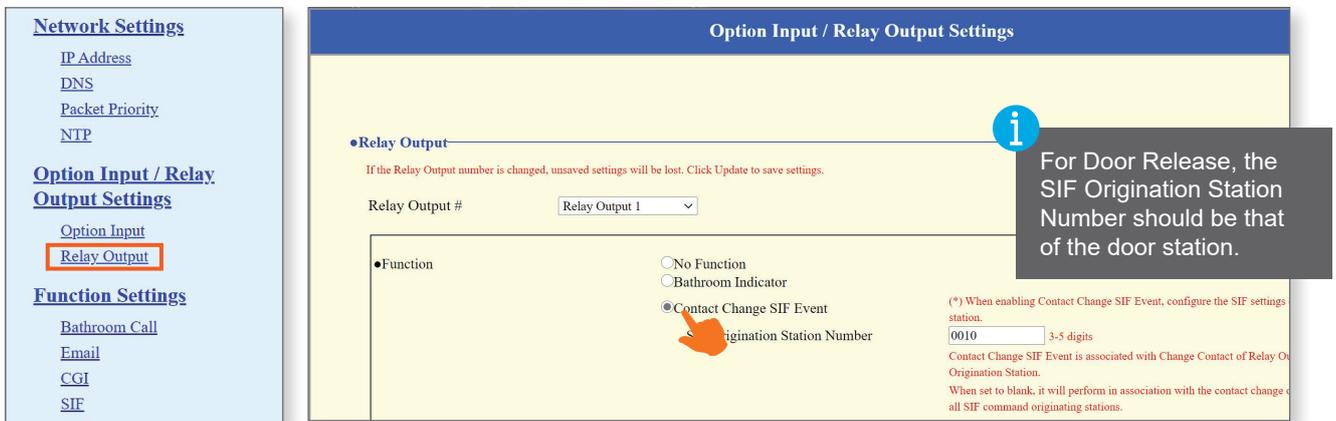


ID and Password

Once the login screen is reached, enter **admin** for both the ID and Password. The IXW-MA will then require that a new ID and Password be created. For best practice, use the same ID and Password created in IXG Support Tool for the other stations in the system.

Relay Settings

From the left hand side menu, find **Option Input/Relay Output** and select **Relay Output**.

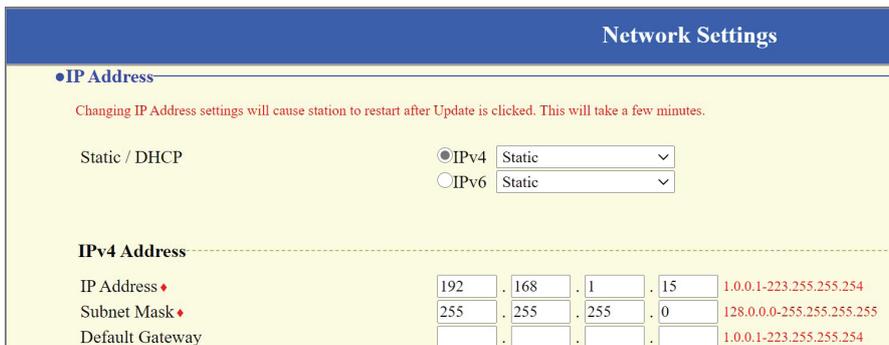


Starting with Relay Output 1, select Contact Change SIF Event and then specify the Station Number of the station activating the Relay Output 1. Once these values are set, click **Update**. Depending on the browser, the IXW-MA may return to the login screen when Update is clicked.

Repeat these steps for each Relay Output, which selected from the drop-down at the top of the Relay Output section.

Network Settings

For the final step, find **Network Settings** and select **IP Address** from the left hand side menu. Assign the adaptor the desired IP Address, Subnet Mask, and Default Gateway. The given IP address **must match** the value entered in Support Tool under **Function Settings, SIF**. When finished, click **Update**. Updating the network settings will cause the adaptor to reboot, which may take up to 5 minutes.



Once all of the hardware is rebooted, the system is ready to test.

IXG Series Network Security Summary

Stations and Devices

IX and IXG Series stations are PoE-powered and require a wired connection and must reside on the same logical network. with the exception of the Aiphone IXG Mobile App.

Entrance Station:	IXG-DM7-HID
Tenant Station:	IXG-2C7
Master Stations:	IX-MV7-*, IX-RS-*, IXG-MK
Door Stations:	IX-EA, IX-DV, IX-DVF-*, IX-SSA-*, IX-SS-2G
Adaptors:	IXGW-GW, IXGW-LC
Mobile App:	"Aiphone IXG"

Support Tool Software Information

The IXG Support Tool is used to batch configure all stations simultaneously, by finding each station on the network by its MAC address. The IXG Series is designed to function on managed or enterprise-level networks, however, the broadcast method used to find stations during the programming process may require advanced network configuration to allow network-wide broadcasts.

It is possible **Windows Defender or other firewalls and anti-virus software may prevent this broadcast search for stations**. Typically, temporarily disabling these for a short time during the programming process prevents interruption or failure.

It is recommended, when possible, that stations and adaptors are placed on the same unmanaged network as the programming PC for initial programming. Once configured, the stations may be removed from this environment and deployed where needed.

Download and install the IXG Support Tool programming software. The latest version of Support Tool and IXG Series station firmware can always be found here <https://www.aiphone.net/support/software-documents/ixg/>

Support Tool and Line Supervision Software Minimum System Requirements

OS: Windows 7 (Professional, Enterprise, Ultimate), Windows 8 (Pro, Enterprise), Windows 8.1 (Pro, Enterprise) Windows 10 (Home, Pro, Enterprise)

CPU: 32 bit (x86) or 64 bit (x64) of 1 GHz

RAM: 4GB or more

Screen Resolution: 1280 x 768

Support Tool and Line Supervision Software ID and Passwords

Administrator ID: admin (*max. 32 characters*)

Administrator Password: admin (*max. 32 characters*)

Property Management ID: admin (*max. 32 characters*)

Property Management Password: admin (*max. 32 characters*)

Security and Communication

The IXG Series supports the use of **HTTPS** and **SSL/TLS (v1.0, 1.1, and 1.2)**, providing the ability to upload signed certificates to encrypt and secure authentication. Support Tool allows centralized certificate management, with the ability to upload **CA certificates**.

SSH (SFTP over SSH) is used when uploading a setting file to stations using the IXG Support Tool, but not during typical operation. This is a critical function, therefore SSH cannot be disabled.

HTTPS is used when uploading from IXG Support Tool to the IXG Cloud server. This may require whitelisting the following URL: ***.ap-northeast-1.amazonaws.com** (this * is a wildcard representing multiple subdomains).

IEEE 802.1X authentication is supported.

Hash Algorithms: MD5, SHA1, SHA256

Communication

SIP Connection Port: 5060

Audio codec: G.711 (μ -law, A-law)

Video codec: H.264/AVC, Motion JPEG

Video Encoder 1 (Intercom Communication)

RTP Video: Start 30000 - End 31000

RTP Audio: Start 20000 - End 21000

Video Encoder 2 (Secondary HD Streaming)

RTP Video: Start 32000 (1-65534) - End 33000 (1-65535)

RTP Audio: Start 22000 - End 33000

Minimum / Maximum Frame Rate (FPS): 1 / 30

Minimum / Maximum Bitrate: 32 / 2048

Minimum / Maximum Resolution (Encoder 2): 320x240 / 1280x960

By default, **IXG stations use Unicast when placing outbound calls to other stations**, but may utilize Multicast in network environments that would benefit from the method. When Paging to more than 50 stations Multicast is required, and a Multicast address must be set in Support Tool. If Multicast is used, either for calling or when required for large paging groups any address in the 224.0.0.0 to 239.255.255.255 range may be used.

Addressing

The IXG Series offers Batch IP addressing or can be manually set for each device using the 'IXG Support Tool'. Each IXG station is set to the same default static IP address (*192.168.1.160*) that can be manually changed or set to DHCP during the programming process.

IPv4: 192.168.1.160 (*1.0.0.0-223.255.255.254*)

Subnet Mask: 255.255.255.0 (*128.0.0.0-255.255.255.254*)

Default Gateway: - (*1.0.0.0-223.255.255.254*)

IPv6: - (*2000::0-3FFF:FFFF:FFFF:FFFF:FFFF:FFFF:FFFF:FFFF or FD00::0-FDFF:FFFF:FFFF:FFFF:FFFF:FFFF:FFFF:FFFF*)

IPv6 Default Gateway: - (*::FF:0-FEFF:FFFF:FFFF:FFFF:FFFF:FFFF:FFFF*)

DNS Primary Server IPv4: - (*1.0.0.1-233.255.255.254*)

IPv6: - (*::FF:0-FEFF:FFFF:FFFF:FFFF:FFFF:FFFF:FFFF*)

Secondary Server IPv4: - (*1.0.0.1-233.255.255.254*)

IPv6: - (*::FF:0-FEFF:FFFF:FFFF:FFFF:FFFF:FFFF:FFFF*)

NTP IPv4: ntp.jo.iphone-app.net (*1.0.0.0-223.255.255.255 or Hostname*)

IPv6: - (*::FF:0-FEFF:FFFF:FFFF:FFFF:FFFF:FFFF:FFFF or Hostname*)

Ports and Protocols

The information below contains the most common and critical ports and protocols for the IXG Series. Some are used only during the initial programming process, others during general use and optional feature functions.

Port	Type	Service or Protocol	Notes
5060	UDP	Internal SIP communication between Aiphone devices	
8740	UDP	Keep-alive during door release	
8620	TCP	Door release command	SSL Door Release
65011	TCP	Option Relay Output control	
65030	UDP	Lift Control Adaptor control	
123**	UDP	NTP	IXGW-GW Gateway must have an assigned NTP server address to function
53**	UDP	DNS	IXGW-GW Gateway must have an assigned DNS server address to function
25	TCP	SMTP	Email notifications
443	TCP	HTTPS (TLS 1.2)	Secure Web Access for certification server control
22*	TCP	SFTP over an SSH session	Setting File Upload for Support Tool
8883**	TCP	Secure MQTT	Call control server connection to Cloud Server
8700*	UDP	Broadcast	Station Search and Association functions with Support Tool
55550	UDP	Paging Delivery	
59900	TCP	Message Page Delivery	
65000	UDP	Multicast Paging Delivery	
55552 - 56552	UDP	RTP Range used when paging	
10000-20000**	UDP	SRTP/SRTCP, DTLS, ICE(STUN)	IXG-GW and IXG Mobile App cloud server communication
20000 - 21000 30000 - 31000	UDP	RTP Audio and Video ranges for Encoder 1	Intercom to Intercom communication
22000 - 23000 32000 - 33000	UDP	RTP Audio and Video ranges for Encoder 2	Intercom to 3rd Party Streaming

* IXG Support Tool function / ** IXG App functionality

Additional IXG App Information

A reachable DNS and NTP server must be assigned to the IXGW-GW Mobile App Gateway. A generic DNS server, such as 8.8.8.8, may be used. Note that the IXG Support Tool has a preset NTP server for the IXGW-GW Gateway. However, this NTP server is located outside of the United States and using a local NTP server is suggested.

Reference the following Hostnames if firewall white-listing is required for external network communication.

*.ixg.aiphone-app.net : 443

iot.us-east-1.amazonaws.com : 8883

*.compute-1.amazonaws.com : 10000-20000

*: wildcard representing multiple subdomains