IX SYSTEM
IP Network-Compatible System

Quick Start Programming Guide

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

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System Preparation

Before beginning the programming process, ensure the following steps have been completed:

- Support Tool has been downloaded and installed
- The programming PC and the IX Series stations have been connected to a PoE switch (not router) and have completed their boot up process.
- The programming PC is in the same subnet (default 192.168.1.x) as the IX Series stations.

Network Information and Installation Requirements

IX Series stations are set to the same default IPv4 address of 192.168.1.160. The Support Tool programming software is designed to batch configure all IX stations simultaneously, finding each device on the network via its individualized MAC address. Note that the IX Series is designed to function on a managed network, but the broadcast protocol used to find IX stations may not function properly in this environment.

It is possible that a secondary NIC card, such as a VPN or WiFi connection, may prevent Support Tool from finding stations on a network during programming, including the association and uploading processes. Disabling these network interface cards before programming may prevent these issues.

System functionality when using programming Wizard

The Support Tool Programming Wizard is designed to quickly configure IX Series stations, automating the programming steps needed to configure a basic system. This configuration gives each station a default Station Name, Number, and IP address, as well as enables door release. Additional settings are available once the programming has been completed using the wizard.

Note: Support Tool can be downloaded from www.aiphone.net
Programming a New System

Getting Started

To create a New System using the Programming Wizard, launch Support Tool and enter the ID (Username) and Password. If this is the first time Support Tool is launched, the New System programming window will automatically open. However, if an existing program file is currently in use, choose File (F) > Create New System.

Launch IX Support Tool

Select Create New System

Default Settings
ID: admin
Password: admin

Step 1: System Settings

1.1 - System Settings
Fill in all fields.
System Name, Installer Information, Owner Information, and Notes are all customizable fields that uniquely identify information about the system being created.

Protocol
IPv4 is the default. If using IPv6, select it from the drop down menu.

*This Guide will explain network and system settings using IPv4 examples.

1.2 - Wizard Programming
Confirm that Yes is selected.

1.3 - Door Release Setting
Select Yes to automatically configure door release for all stations.

1.4 - Entering Station Quantities
Enter the quantities of each station type* that will be a part of the system.
Station types without values should remain blank.
Note: IX-EA, IX-EAU, IX-SPMIC are only available in Japan.

1.5 - Creating the System
Once each field of the New System page is filled in appropriately, click Next.

* Station Type Key
IX-MV7:* IX-MV7-HB, IX-MV7-HW, IX-MV7-B, IX-MV7-W
IX-DV, IX-DVF(*): IX-DVF-P, IX-DVF-2RA, IX-DVF-RA
IX-DA, IX-DF(*): IX-DF-HID, IX-DF-RP10, IX-DF-2RA
IX-SSA(*): IX-SSA-2RA, IX-SSA-RA
IX-BA, IX-SS(*): IX-SS-2RA, IX-SS-RA
IX-RS(*): IX-RS-B, IX-RS-W
Programming a New System

Step 2: Station Customization - Optional

Support Tool will provide each station a default Station Name, four-digit Number, and IP Address starting from 192.168.1.10. To edit this information, click [Station Details] in the Advanced Settings section, shown below. To use the default information created by Support Tool, skip to Step 3.

**Optional Settings**
- **Door Release**
  Individually partition, enable, or disable door release access.
- **Batch IP Address Configuration**
  Batch configure network information by station type or for the entire system.
- **Address Book**
  Select which stations are displayed in each Master Station’s address book.

**2.1 - Station Details**
Edit Number, Name, IP Address by clicking on [Station Details].

**2.2 - Station Number**
Enter a 3-5 digit station number for each of the stations in the system.

**2.3 - Station Name**
Enter a name for each of the stations in the system (24 characters max).

**2.4 - IPv4 Address**
Enter a static IP Address and Subnet mask for each of the stations in the system.

**2.5 - Update Station Details**
When done making changes, click [OK].

**Note:** Changes made during this step will not be applied until the programming process has been completed.
Programming a New System

Step 3: Association

The association process is where the station information created in Support Tool is associated with a station found on the network. Choose one of two methods, Automatic (recommended) or Manual (page 6). Once associated, the station will receive its Station Name, Number, and network information after a short power cycle.

Automatic

Clicking the Associate Automatically button will pair a station from the top Station Settings List to the same type of station in the Station List below it. The stations are chosen at random. When the stations have been associated, scroll to the bottom of this page to review the Associated Station List, and confirm each station’s status. This list will show each station’s newly associated information, as well as it’s MAC address. This is the recommended association method for stations in a bench scenario.

Go to page 7 "Setting File Upload"
Programming a New System

Step 3: Association

Manual Association allows the selection of a station by MAC address to pair with a station of the same type from the top Station Setting List and the Station List below it. When the stations have been associated, scroll to the bottom of this page to review the Associated Station List, and confirm each station’s status. This is the recommended association method for stations that have already been deployed.

3.1 - Select
Select the setting file to be associated.

3.2 - Select
Select the scanned station to be associated with the selected file.

3.3 - Apply
Click Apply to associate the selected station with the selected file. Repeat until all stations are associated.

3.4 - Status
Confirm that each station has been successfully associated in the Status column.

3.5 - Next
If all stations show Success, click Next.
Programming a New System

**Step 4: Setting File Upload**

Once each station has been associated with its individual station information, the setting file containing the rest of the system’s information will need to be uploaded to each station. To upload the setting file, the programming PC will need to be in the same subnet as the associated stations (refer to Step 3). The PC’s current IP address is listed in the bottom left-hand side of this window.

*Note: without uploading a setting file, most functions and features will be unavailable to the stations.*

**Step 5: Export Settings**

The final step in the Programming Wizard is to create a copy of the system’s setting file and export it to a secure location or external drive.

*Note:*

If the original program file is lost, or Support Tool is moved to a different PC, this copy can be used to access the system programming to add or remove a station, or to make programming changes.
Network Camera Integration

Getting Started

The IX Series allows integration of network cameras that are ONVIF profile S compliant. These cameras can be called up by either audio or audio and video stations, as well as individually monitored by master stations.

Step 1: Opening Network Camera Registry

Network Cameras must be registered in Support Tool prior to associating with a station.

1.3 - Open Network Camera Registry

Step 2: Registering a Network Camera

Support Tool will search for available Network Cameras on the network, and any camera found will be listed in the Network Camera Search List. If a known camera is not found, place the programming PC on the same network switch as the camera(s), and attempt the search again.

1.2 - Open Network Camera List

2.1 - Add Camera

Select Add Camera and the Support Tool will search the network of all compatible network cameras.

2.2 - Select a Camera

Check the box of each network camera you wish to register to the system.

2.3 - ID and Password

Enter the ID and Password required for each selected network camera.

2.4 - Get Network Camera Information

and the Support Tool will find the network camera's video profile information.

2.5 - Select a Profile

Check the box of each network camera video profile you wish to use with the system.

2.6 - Register

Click Register to apply the selected settings and register chosen network cameras.

Optional Settings

A Network Camera's IP Address and ID/Password may be entered to manually add the device.

From the menu on the left expand System Information, and select Address Book.
Network Camera Integration

Step 3: Registering a Network Camera to a Master Station

For a Master Station to interact with a Network Camera, either during a camera call-up or while monitoring, it must be registered to a Master Station's Network Camera List.

3.1 - Select

Use the Select drop-down menu to select each Master Station you wish to register the network camera to.

3.2 - Update

Click Update to store the settings and continue to the next step.

Step 4: Assigning a Network Camera to a Station

To allow a Network Camera to be used in conjunction with an IX Series station for camera call-up, the camera must be registered to each station it will interact with.

4.1 - Address Book

From the menu on the left expand System Information and select Address book.

4.2 - Open Station List

Click Open Station List to bring you to the Station List screen.

4.3 - Network Camera Selection

Click Network camera selection to open a new window where you may select a registered network camera.

4.4 - OK

Click OK.

4.5 - Update

Click Update to store the settings and continue to the next step.
Step 5: Setting File Upload

The final step in this process is uploading the setting file to each station. This program file contains the Network Camera information, as well as the Network Camera settings configured for each station.

Note that without uploading a setting file, most functions and features will be unavailable to the stations.

5.1 - Upload Settings To Station

From the menu bar, select File then Upload Settings To Station.

5.2 - Select Stations

Click Select to check all stations in the system.

5.3 - Upload Settings

Click Settings to begin the upload process.

5.4 - Confirm Status

Using the Status column, confirm that each station has received its setting file.

Note:

It is recommended that a copy of the settings be saved after uploading settings to the stations. Refer to page 7 of this guide for the procedure to export and save settings.
SIP Server and VoIP Phone Integration

Getting Started

For SIP server and VoIP phone integration, configuration is needed both within the SIP Server as well as Support Tool. IX Series stations must be registered within the SIP server and given an extension, and the SIP server information must also be added to Support Tool. SIP server configuration varies by manufacturer. Refer to the manufacturer's literature for more information or support.

SIP Server Registration

Step 1: SIP Server Registration

Enter the network information and ID/Password for the SIP server the IX Series station is registered to.

1.1 - SIP
From the menu on the left expand Network Settings, and select SIP.

1.2 - ID and Password
Enter the ID and Password required for the SIP server.

1.3 - IPv4 Address
Enter the IPv4 Address of the SIP server.

1.4 - Update
Click the Update button to store the settings and continue to the next step.

Step 2: Setting File Upload

2.1 - Upload Settings To Station
From the menu bar, select File then Upload Settings To Station.

2.2 - Select Stations
Click Select to check all stations in the system.

2.3 - Upload Settings
Click Settings to begin the upload process.

2.4 - Confirm Status
Using the Status column confirm that each station has received its setting file.
SIP Server and VoIP Phone Integration

VoIP Phone Registration

Step 1: VoIP Phone Registration

Note:
Register SIP Server prior to registering VoIP Phone.

1.1 - VoIP Phone List
From the menu bar, select Edit then VoIP Phone List.

1.2 - Number
Enter a 3-32 number (must match SIP server extension number) to each VoIP Phone added to the system.

1.3 - Name
Enter a name for each station in the system (24 characters max).

1.4 - Update
When done making changes, click Update.

Step 2: Door Station Call List

Enabling a door station to call a registered VoIP phone.

2.1 - Called Stations (Door/Sub Stations)
From the menu on the left, expand Call Settings and select Called Stations (Door/Sub Stations).
SIP Server and VoIP Phone Integration

Step 2: Door Station Call List (cont.)

2.2 - Call Settings
Use the drop-down menu to select U for each door station. (Only one VoIP Phone may be registered to each door station.)

2.3 - Update
Click the Update button to store the settings and continue to the next step.

Note:
Registered VoIP Phones are automatically added to all Master Station address books. To remove a VoIP Phone from a Master Station's address book, refer to page 14, "Partitioning Master Station's Address Book".

Step 3: Setting File Upload

3.1 - Upload Settings To Station
From the menu bar, select File then Upload Settings To Station.

3.2 - Select Stations
Click Select to check all stations in the system.

3.3 - Upload Settings
Click Settings to begin the upload process.

3.4 - Confirm Status
Using the Status column, confirm that each station has received its setting file.

Note:
It is recommended that a copy of the settings be saved after uploading settings to the stations. Refer to page 7 of this guide for the procedure to export and save settings.
Partitioning a System

**Getting Started**

An IX Series system can be partitioned into smaller groups of stations within a single system by editing Master Station Address Books, as well as individual Door Station call groups.

**Master Station**

**Step 1: Address Book**

Each Master Station has an address book that, by default, contains the station information for every station that is part of the system. A station must exist in a Master Station's address book if the Master Station should be able to call that station directly, activate a Door Station’s door release, transfer a call to another Master Station, or any other feature requiring interaction by the Master Station.

1. **Address Book**
   - From the menu on the left, expand System Information and select Address book.

2. **Open Station List**
   - Click Open Station List to open the Station List.

3. **Select**
   - Use the Select drop-down menu to remove the check mark of each door station you wish to remove from the Master Station's Address Book.

4. **Update**
   - Click the Update button to store the settings and continue to the next step.

**Step 2: Open Station List**

By default, all stations within a system are in each Master Station’s Address Book, represented on this page by a check mark. To remove a station from the Address Book, choose a Master Station and remove the check mark of a station from its list.

**Door Station**

**Step 1: Called Stations**

To partition door/sub stations, find Call Settings on the left-hand menu and select Called Stations (Door/Sub Stations).

1. **Called Stations (Door/Sub)**
   - From the menu on the left, expand Call Settings and select Called Stations (Door/Sub Stations).
Partitioning a System

Step 2: Call List Partitioning

Station Type: IX-DV, IX-DVF(-*), IX-SSA(-*), IX-SS-2G, IX-RS-*

The above station types will default to calling Group 1. On the Called Station for Door/Sub Stations page, select Group 1 from the Display Settings drop down. There will be a list of all Door and Master Stations, with a "U" between each by default. A "U" represents call-in between these stations is enabled; a blank space means call-in is disabled.

Select the blank field from the drop-down to remove the station from the Door Station's call list.

Station Type: IX-DA, IX-DF(-*), IX-BA, IX-SS(-*)

The above station types will default to calling Group 10. On the Called Station for Door/Sub Stations page, select Group 10 from the Display Settings drop down. There will be a list of all Door and Master Stations, with a "U" between each by default. A "U" represents call-in between these stations is enabled; a blank space means call-in is disabled.

Select the blank field from the drop-down to remove the station from the Door Station's call list.

Note:
"U" stands for unicast, the default communication method for the IX Series.

2.1 - Display Settings
Select Group 01 from the Display Settings drop down.

2.2 - Call Settings
Select the blank field from the drop-down to remove the station from the Door Station's call list.

2.3 - Update
Click the Update button to store the settings.

2.4 - Display Settings
Select Group 10 from the Display Settings drop down.

2.5 - Call Settings
Select the blank field from the drop-down to remove the station from the Door Station's call list.

2.6 - Update
Click the Update button to store the settings and continue to the next step.
Partitioning a System

Step 3: Setting File Upload

The final step in this process is uploading the setting file to each station. This program file contains the system partitioning created in the previous steps, as well as any other setting configuration changes made.

*Note that without uploading a setting file, most functions and features will be unavailable to the stations.*

3.1 - Upload Settings To Station

From the menu bar, select **File** then **Upload Settings To Station**.

3.2 - Select Stations

Click **Select** to check all stations in the system.

3.3 - Upload Settings

Click **Settings** to begin the upload process.

3.4 - Confirm Status

Using the **Status** column, confirm that each station has received its setting file.

**Note:**

It is recommended that a copy of the settings be saved after uploading settings to the stations. Refer to page 7 of this guide for the procedure to export and save settings.
Call Transfer

Getting Started

The IX Series offers three types of call transfers: Absent, Delay, and Schedule. Before configuring a Transfer Setting, refer to page 14 for help partitioning an IX Series system.

The amount of time set for each station’s Call Timeout (Call Settings > Call Origination) should take into consideration the longest possible time a call will need to reach the final transfer destination. For example, a Door Station calling into a Master Station using a Delay Transfer to up to two other Master Stations should have a Call Timeout set to 90 seconds. 30 seconds for the initial call, up to 30 seconds for the first transfer, and 30 seconds for the second.

Absent Transfer

Absent Transfer is meant to be turned “On” or “Off” by manually pressing the Transfer button on the Master Station. If Absent Transfer is “On”, an incoming call will immediately be transferred when received by the Master Station.

Note: To avoid call transfer loops, two stations should not be set to transfer to the other. Every station should have a unique transfer destination.

Step 1: Opening Absent Transfer

Step 2: Enabling Absent Transfer
Call Transfer

Delay Transfer

Delay Transfer should be used if a station should receive an incoming call and then transfer that call to another Master Station after a predetermined amount of time (in seconds).

Step 1: Opening Delay Transfer

1.1 - Delay Transfer

From the menu on the left, expand Transfer Settings and select Delay Transfer.

Step 2: Enabling Delay Transfer

2.1 - Delay Transfer

Use the Delay Transfer drop-down menu to select Enable or Disable.

2.2 - Delay Time

Enter the Delay Time.

2.3 - Transfer Destination

Select the Station Number of the station receiving the transfer.

2.4 - OK

Click OK.

2.5 - Update

Click the Update button to store the settings and continue to the next step.

Note:

Re-transfer allows incoming transferred calls to be transferred to another destination.
Call Transfer

Schedule Transfer

Schedule Transfer can be used in scenarios when a call should be transferred from a Master Station based on a predetermined daily or weekly schedule.

Note: To avoid call transfer loops, two stations should not be set to transfer to the other. Every station should have a unique transfer destination.

Step 1: Opening Schedule Transfer

1.1 - Schedule Transfer
From the menu on the left, expand Transfer Settings and select Schedule Transfer.

1.2 - Weekly or Daily Schedule
[Weekly Schedule]
Select specific day of the week from Schedule View Adjustment.

[Daily Schedule]
Select specific date from [Daily Schedule].

1.3 - Schedule Transfer
Use the Schedule Transfer drop-down menu to select Enable or Disable.

1.4 - Transfer Destination
Select the Station Number of the station receiving the transfer.

1.5 - OK
Click OK.
**Call Transfer**

**Step 2: Schedule Transfer Start and End Time**

Scroll the window to the right until the **Start Time** and **End Time** columns are displayed. Enter a **Start Time** and **End Time** to the specific day of the week or date that the transfer is scheduled for.

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**Step 3: Setting File Upload**

**3.1 - Upload Settings To Station**

From the menu bar, select **File** then **Upload Settings To Station**.

**Note:** If stations do not appear in the Station List, verify each station’s physical and network connections, and refer to System Preparation on page 2.

**3.2 - Select Stations**

Click **Select** to check all stations in the system.

**3.3 - Upload Settings (For IX-MV)**

Click **Settings** to begin the upload process.

**3.4 - Confirm Status**

Using the **Status** column, confirm that each station has received its setting file.

**Note:** Re-transfer allows incoming transferred calls to be transferred to another destination.

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The final step in this process is uploading the setting file to each station. This program file contains the transfer settings created in the previous steps, as well as any other setting configuration changes made.

*Note that without uploading a setting file, most functions and features will be unavailable to the stations.*
Adding a New Station

Getting Started

To add a new station to an existing system, the existing program file is needed as well as network connection to all existing stations. Ensure the new station is connected to the network and has completed its initial boot up before starting step one.

Step 1: Opening the "Add New Station" Window

There are several ways to add a new station in Support Tool. The following method is done by returning to the System Configuration page.

1.1 - System Configuration

From the menu bar, select Tools(T) followed by System Configuration.

1.2 - Add New Station

Click Add New Station to open the Add New Station Window.

Step 2: Adding a New Station

New stations can be added in batches by station type.

2.1 - Station Type

Use the Station Type drop down menu to select the correct station type for the new station.

2.2 - Station Quantities

Enter the number of stations that are being added to the system.

2.3 - Add

Click Add to apply settings to the Station Information table below.

2.4 - OK

Click OK.
Adding a New Station

Step 3: Station Customization - Optional

Support Tool will provide each station a default Station Name, four-digit Number, and IP Address starting from 192.168.1.10. To edit this information, click [Station Details] in the Advanced Settings section, shown below. To use the default information created by Support Tool, skip to Step 4.

3.1 - Station Details
Edit Number, Name, IP Address by clicking on [Station Details].

3.2 - Station Number
Enter a 3-5 digit station number for each of the stations in the system.

3.3 - Station Name
Enter a name for each of the stations in the system (24 characters max).

3.4 - IPv4 Address
Enter a static IP Address and Subnet mask for each of the stations in the system.

3.5 - Update Station Details
When done making changes, click [OK].

Note: Changes made during this step will not be applied until the programming process has been completed.
Adding a New Station

Step 4: Association

The association process is where the station information created in Support Tool is associated with a station found on the network. Choose one of two methods, Automatic (recommended) or Manual (page 6). Once associated, the station will receive its Station Name, Number, and network information after a short power cycle.

4.1 - Station Search
Click Station Search

4.2 - Associate Automatically
Click Associate Automatically

4.3 - Status
Confirm that each station has been successfully associated in the Status column.

4.4 - Next
If all stations show Success, click Next

Note:
If stations do not appear in the Station List, verify each station’s physical and network connections, and refer to System Preparation on page 2.
Adding a New Station

Step 5: Setting File Upload

Once each station has been associated with its individual station information, the setting file containing the rest of the system’s information will need to be uploaded to each device. To upload the setting file, the programming PC will need to be in the same subnet as the associated stations (refer to Step 4). The PC’s current IP address is listed in the bottom left-hand side of this window.

*Note that without uploading a setting file, most functions and features will be unavailable to the stations.*

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Step 6: Export Settings

The final step in this section is to create a copy of the system’s setting file and exporting it to a secure location or external drive.

*Note:*

If the original program file is lost, or Support Tool is moved to a different PC, this copy can be used to access the system programming to add or remove a station, or to make programming changes.

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**Note:**

The progress of each station will be displayed in the Status column. Unavailable stations may still be rebooting from the association process. If a station has rebooted and is still unavailable, ensure the programming PC is in the same subnet as the station.

**5.3 - Next**

After successful upload, click Next.

**5.1 - Select**

Stations can be selected individually, or by Type. Choose All from the Select Station by Type drop-down menu to upload to all stations. Then, click Select.

**5.2 - Start Upload**

Once station Status shows Available (may take a few minutes), click Start Upload.

**6.1 - Export**

Click Export.

**6.2 - Select Folder**

Select location to save the file then click OK.

**6.3 - Finish**

Click Finish.