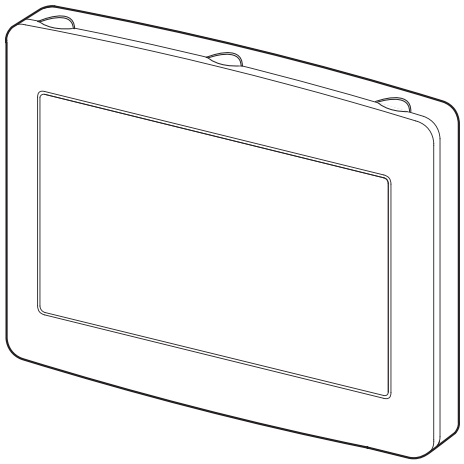
IX SERIES

IP Network-Compatible System

IXW-MA Programming Guide



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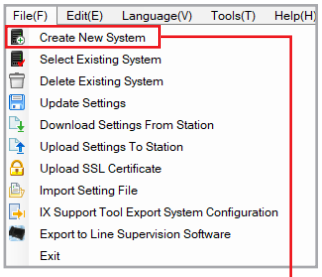
ATTENTION:

This is an abbreviated programming manual addressing basic IXW-MA program settings using 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.com/IX.

Programming a New System that Includes the IXW-MA

The IXW-MA adaptor has 10 relays that can be used to trigger when the change contact SIF event is sent from specific stations. This guide will walk through programming a system to include the IXW-MA and how to program the adaptor.

Step 1: System Settings



1.1 - Create New System

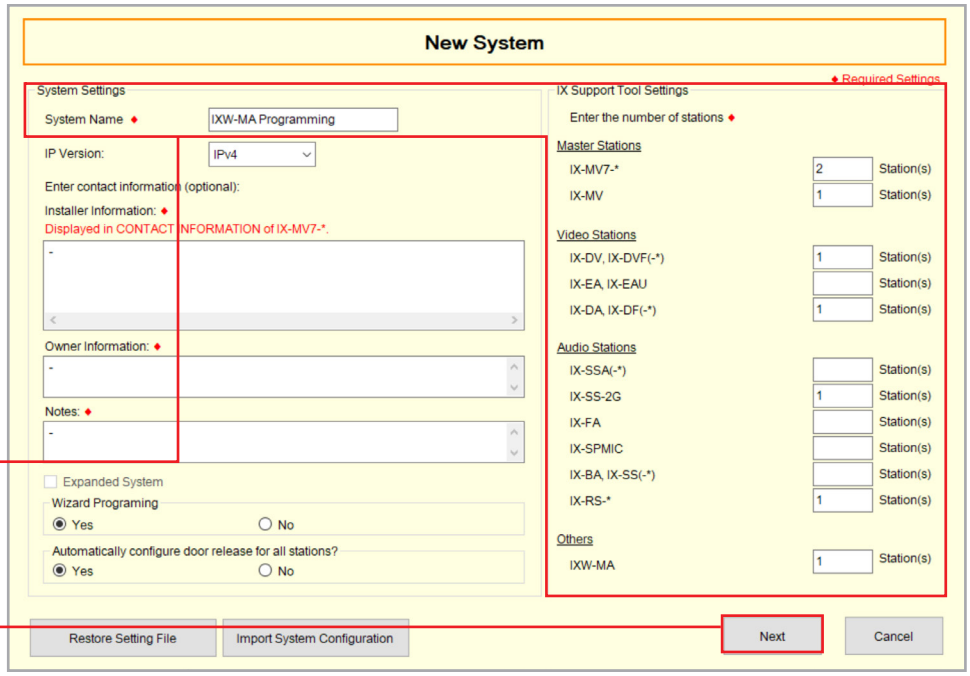
Open IX Support Tool. From the top menu bar click **File** and select **Create New System**.

1.2 - New System

Enter a **System Name** under **System Settings** and select the quantity for each station type under **IX Support Tool Settings**.

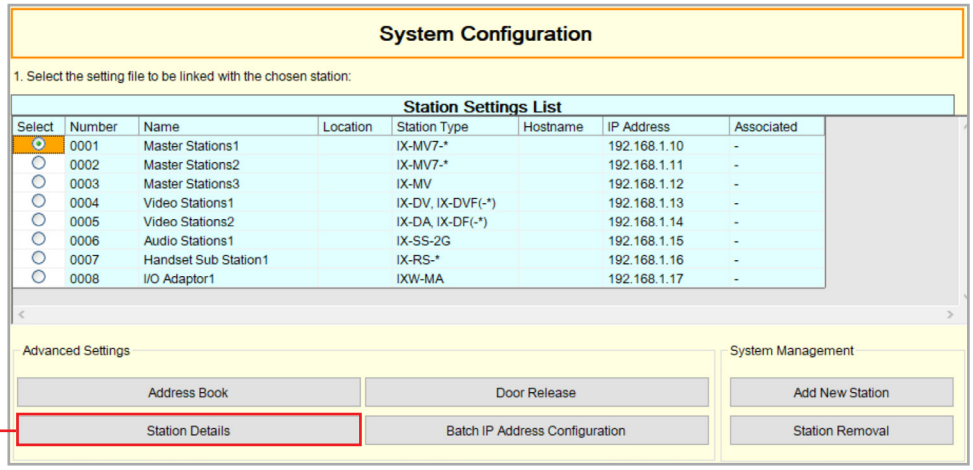
1.3 - Creating the System

Once each field of the New System page is filled appropriately, click **Next**.



Step 2: Station Customization

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.



2.1 - Station Details

Click **Station Details** to edit the Number, Name, and IP Address for each station.

Programming a New System that Includes the IXW-MA

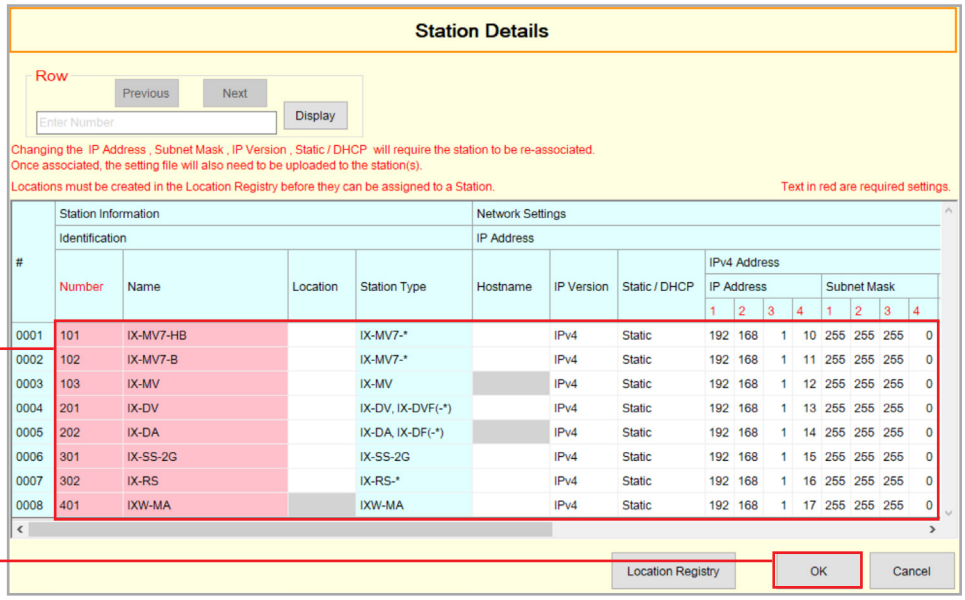
Step 2: Station Customization (continued)

2.2 - Edit Station Details

Edit the **Number**, **Name**, **IP Address**, and **Subnet Mask** for each station as needed.
Note: Do not fill in the Hostname.

2.3 - Update Station Details

Click **OK** to update the station details that were edited.



Step 3: Association

The association process will link the information created in Support Tool with a station found on the network. Once associated, the station will receive its station name and network information after a short power cycle.

3.1 - Select

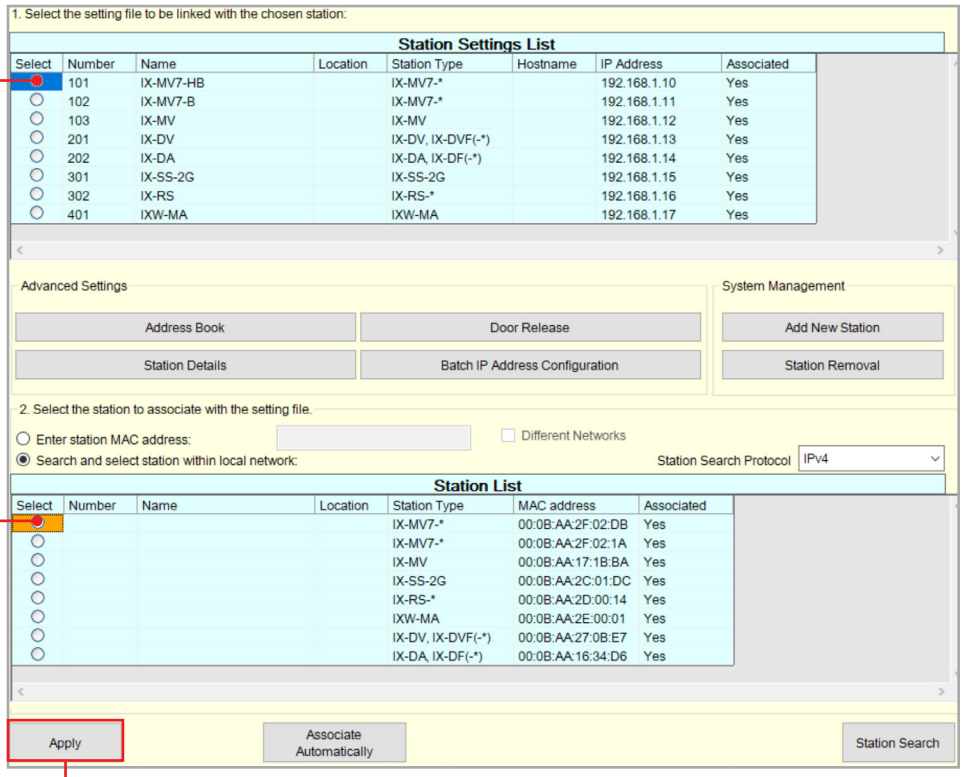
Select the setting file to be associated from the Station Settings List.

3.2 - Select

Select the scanned station to be associated with the selected file from the Station List.

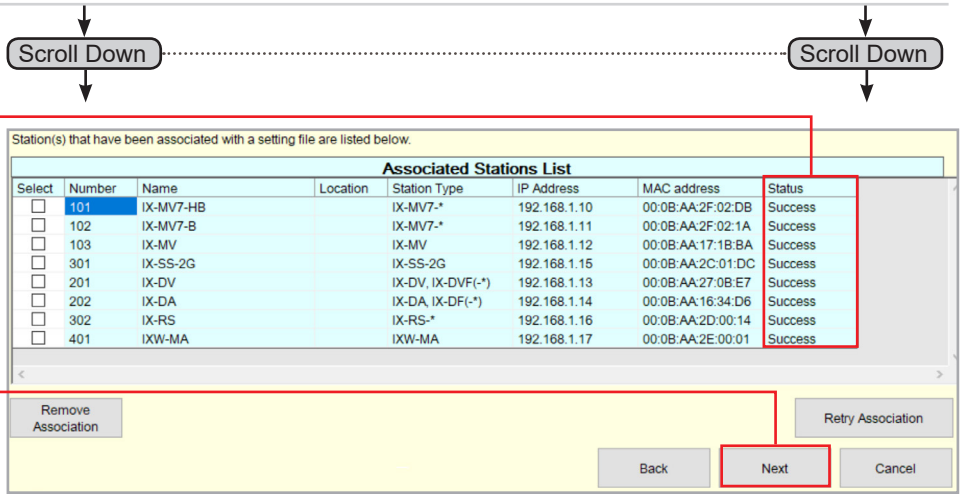
3.3 - Apply

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



Programming a New System that Includes the IXW-MA

Step 3: Association (continued)



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**.

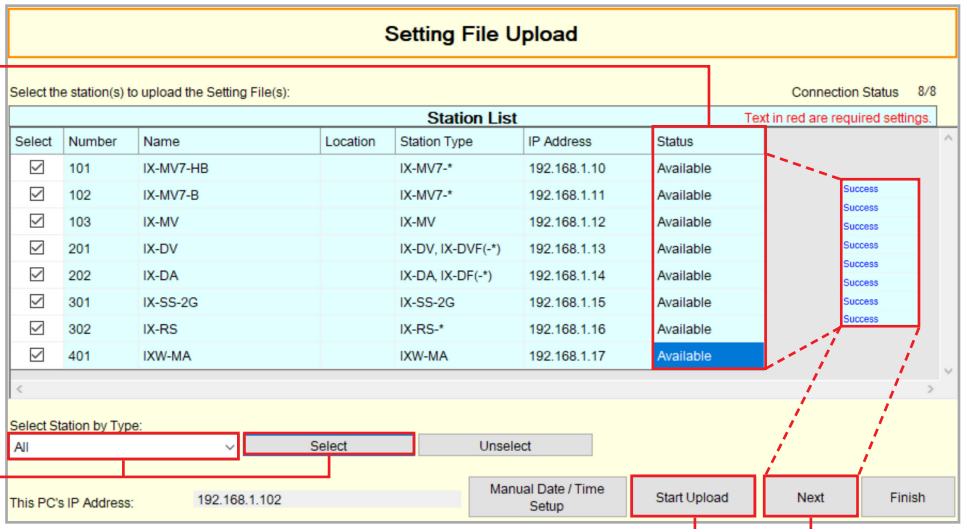
Step 4: Setting File Upload

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. 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.

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.



4.1 - 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**.

4.2 - Start Upload

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

4.3 - Next

After successful upload, click **Next**.

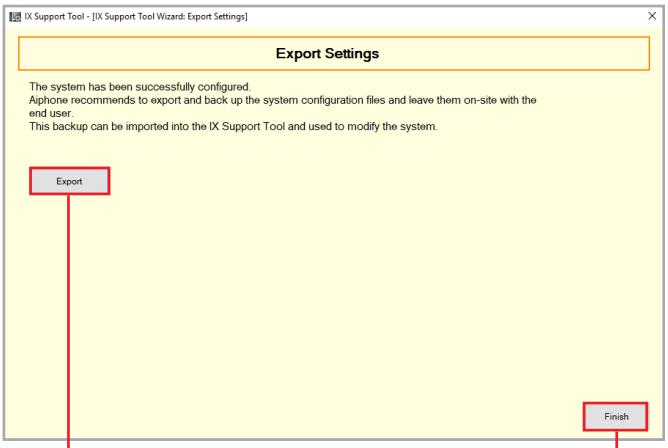
Programming a New System that Includes the IXW-MA

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.

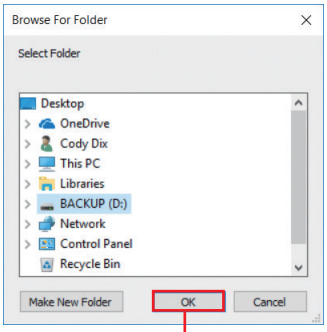
Note:

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.



5.1 - Export

Click **Export**.



5.2 - Select Folder

Select location to save the file then click **OK**.

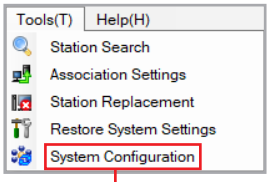
5.3 - Finish

Click **Finish**.

Adding IXW-MA (skip if IXW-MA was included from beginning)

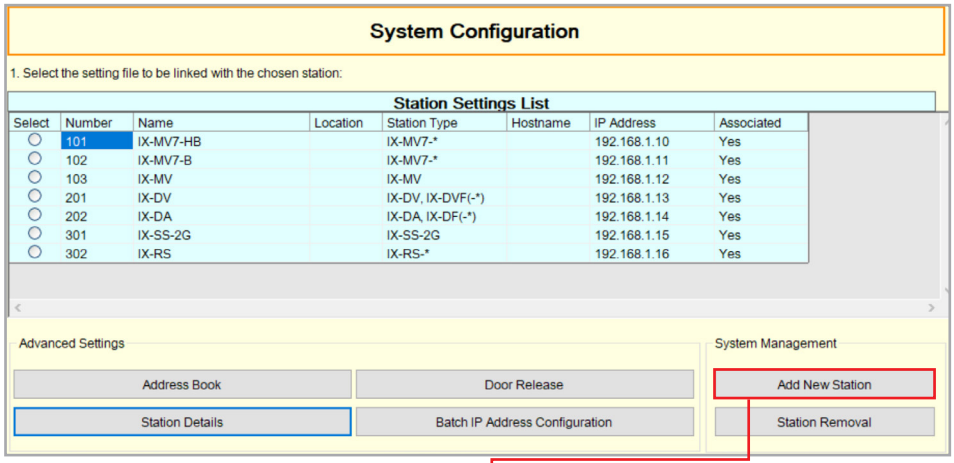
Do not proceed with this section if the IXW-MA was already included when creating the new system. The steps below will walk through adding an IXW-MA relay adaptor to an existing system. The IXW-MA should be connected to the same network as the existing system before proceeding.

Open IX Support Tool and select the existing system to be edited.



A- System Configuration

Click **Tools** from the top menu bar and select **System Configuration**.



B- Add New Station

Click **Add New Station**.

Continue on page 6.

Adding IXW-MA (skip if IXW-MA was included from beginning)

C- Select Station Type

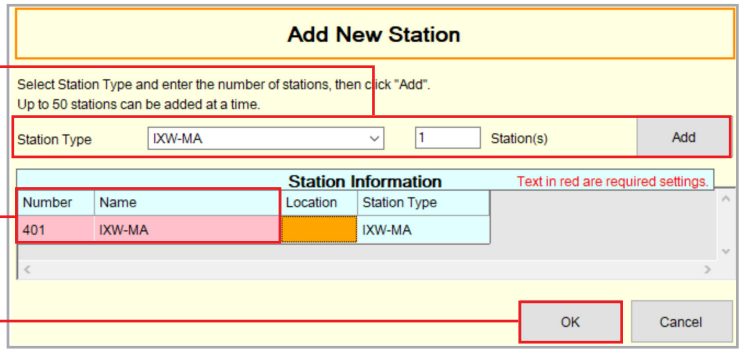
Select the IXW-MA using the **Station Type** drop down and enter the quantity of stations to be added. Click **Add**.

D- Edit Station Information

Edit the **Number** and **Name** for the new station to be added.

E- Add

Click **Ok** to add the station.



The added station will appear in the Station Settings list with the number and name assigned. The IP address assigned will be the next available in the IP address scheme of the existing system.

F - Select

Select the setting file for the IXW-MA from the **Station Settings List**.

G - Select

Select the IXW-MA to be associated with the selected file from the **Station List**.

H - Apply

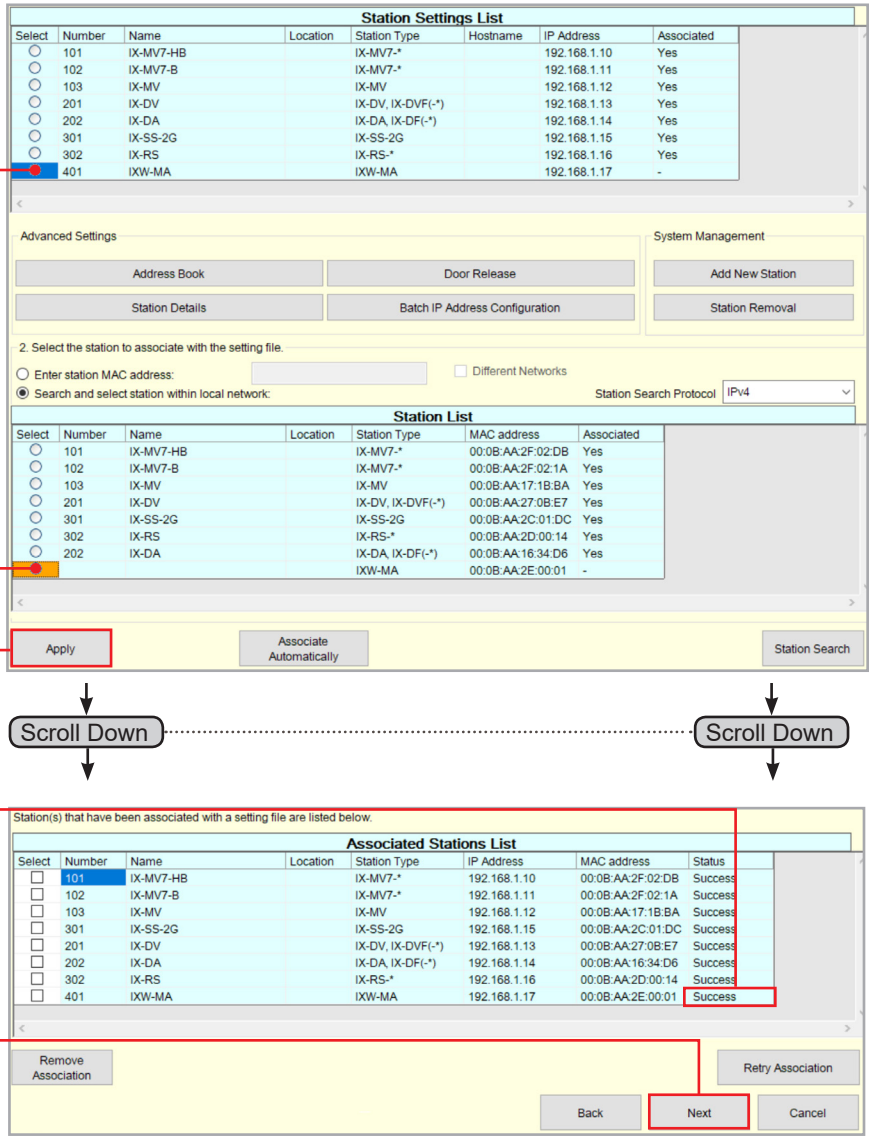
Click **Apply** to associate the selected station with the selected file.

I - Status

Confirm that the IXW-MA has been successfully associated in the **Status** column.

J - Next

If station show **Success**, click **Next**.

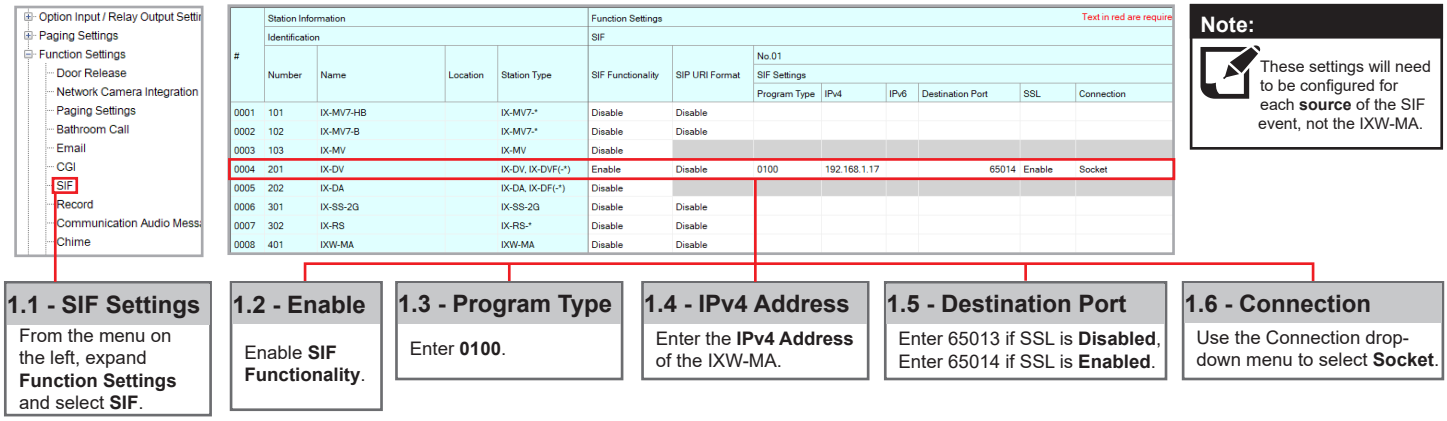


The setting file will need to be uploaded to each station. Refer to page 12 for this procedure.

Configuring IX Series 2 Stations to Communicate with the IXW-MA

Step 1: Enabling SIF Functionality for IX Series 2 Stations

The IXW-MA will only recognize the **change contact** transmission trigger. All other transmission triggers will be ignored by the adaptor. The transmission trigger is sent from the station receiving the release command to the IXW-MA. The following process outlines the settings required to send this SIF event by the door station.



Note:
These settings will need to be configured for each **source** of the SIF event, not the IXW-MA.

1.1 - SIF Settings
From the menu on the left, expand **Function Settings** and select **SIF**.

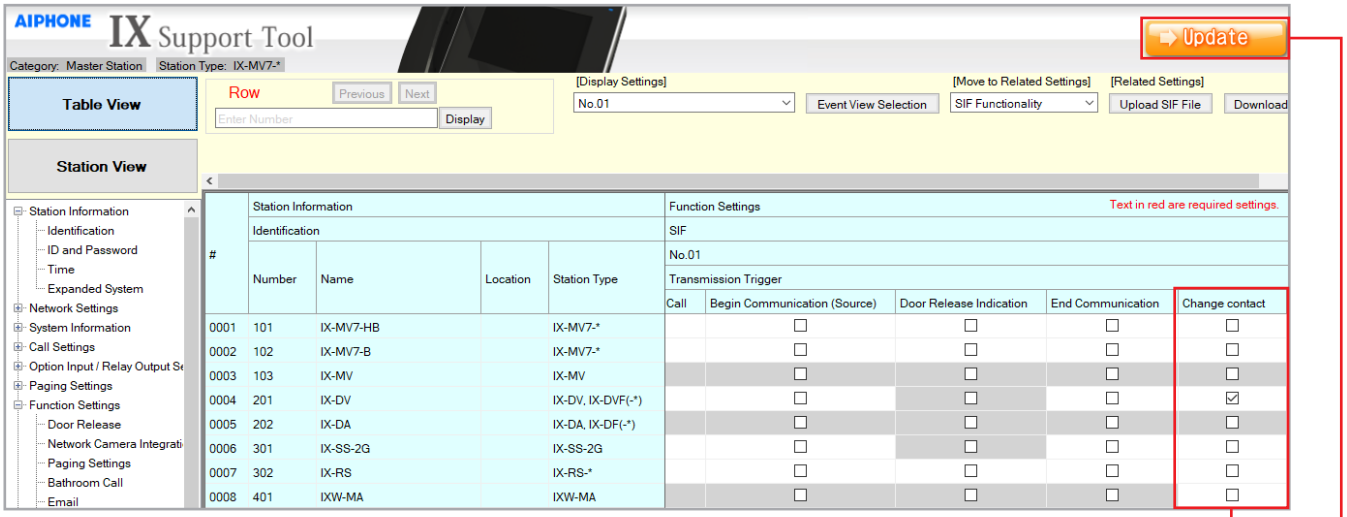
1.2 - Enable
Enable **SIF Functionality**.

1.3 - Program Type
Enter **0100**.

1.4 - IPv4 Address
Enter the **IPv4 Address** of the IXW-MA.

1.5 - Destination Port
Enter 65013 if SSL is **Disabled**, Enter 65014 if SSL is **Enabled**.

1.6 - Connection
Use the Connection drop-down menu to select **Socket**.



1.7 - Scroll Right
Scroll the window to the right until the **Change contact** column is displayed.

1.8 - Change Contact
Check the **Change contact** box for each station that will communicate with the IXW-MA.

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

Configuring IX Series 1 Stations to Communicate with the IXW-MA

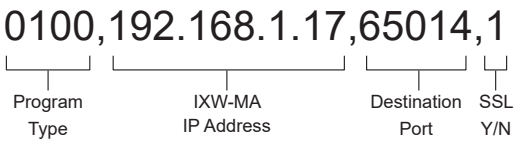
IMPORTANT
The IX Series 1 stations will only work with the IXW-MA adaptor loaded with firmware version 2.01 or later. Ensure that the IXW-MA being used has a compatible firmware.

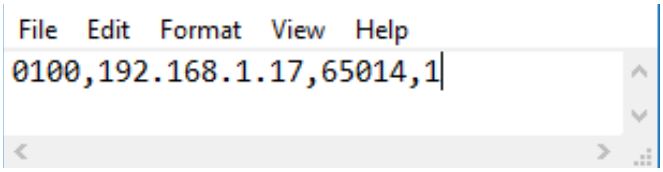
Step 1: Creating the SIF.ini File

Creating a line of code, in the form of a .ini file, is required to allow an IX Series 1 (IX-DA, IX-BA, IX-MV) device to communicate to the IXW-MA. The example below is shown using a common text editor (i.e. Notepad), and saving it with a .ini extension.

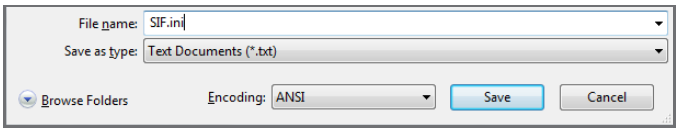
Program Type: Must be binary number 0100.
IXW-MA IP Address: IP address assigned to the IXW-MA .
Destination Port: Port number assigned on the IXW-MA. **Enter 65013 if SSL is disabled, enter 65014 if SSL is enabled**.
SSL Y/N : Input 0 if disabled, input 1 if enabled.

Example Text File:

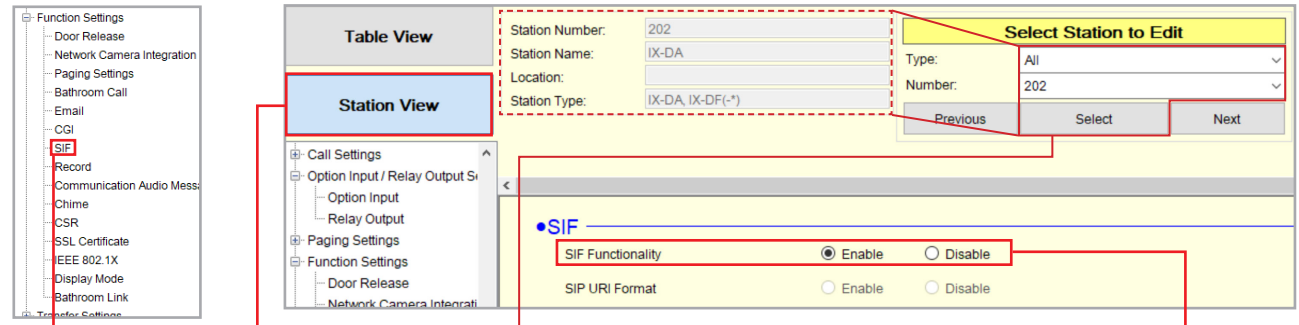




Save the SIF file with a .ini extension (.ini must be typed manually) to a location on the PC being used for programming the IX Series 1 stations. This file must be uploaded to each device associated with the IXW-MA using the instructions that follow.



Step 2: Enabling SIF Functionality for IX Series 1 Stations



2.1 - SIF Settings
From the menu on the left, expand **Function Settings** and select **SIF**.

2.2 - Station View
Click the **Station View** button at the top of the left menu.

2.3 - Select Station
Use the Number drop-down under **Select Station to Edit** and choose the IX Series 1 door station. Click **Select** and ensure that the door station is shown in upper left of the screen.

2.4 - Enable SIF
Select the **Enable** radio button for SIF Functionality.

Configuring IX Series 1 Stations to Communicate with the IXW-MA

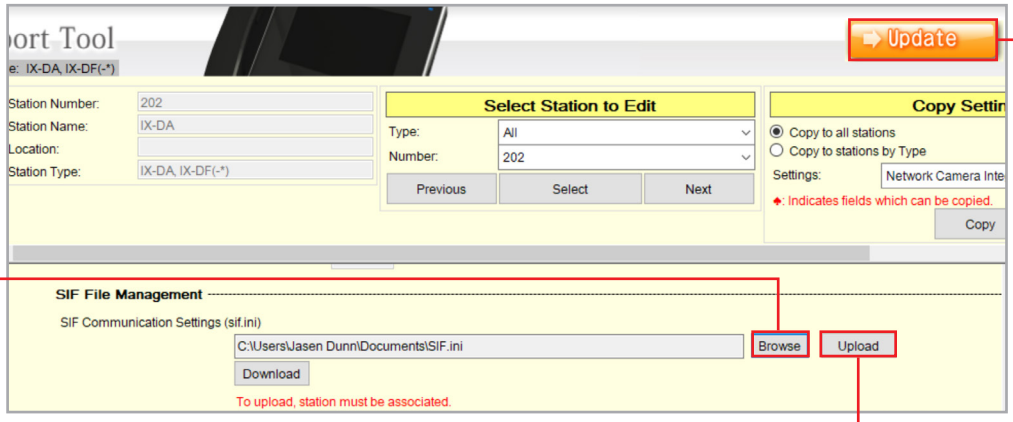
Step 2: Enabling SIF Functionality for IX Series 1 Stations (continued)

2.5 - Scroll Down

Scroll down until **SIF File Management** is displayed.

2.6 - Browse

Click the **Browse** button select the SIF.ini file that was created in Step 1.



2.7 - Upload

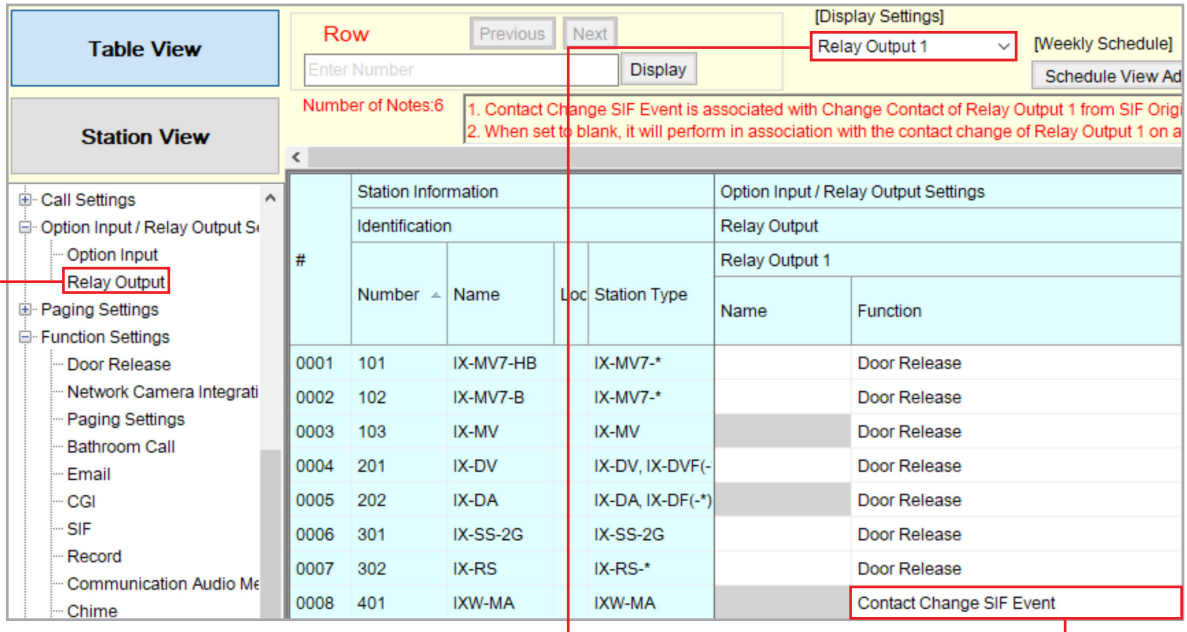
Click the **Upload** button to send the selected file to the station.

2.8 - Update

Click **Update** to save changes.

Configuring the IXW-MA

Step 1: Configuring the individual IXW-MA Relays



1.1 - Relay Output

From the menu on the left, expand **Option Input / Relay Output Settings** and select **Relay Output**.

1.2 - Select Relay Output

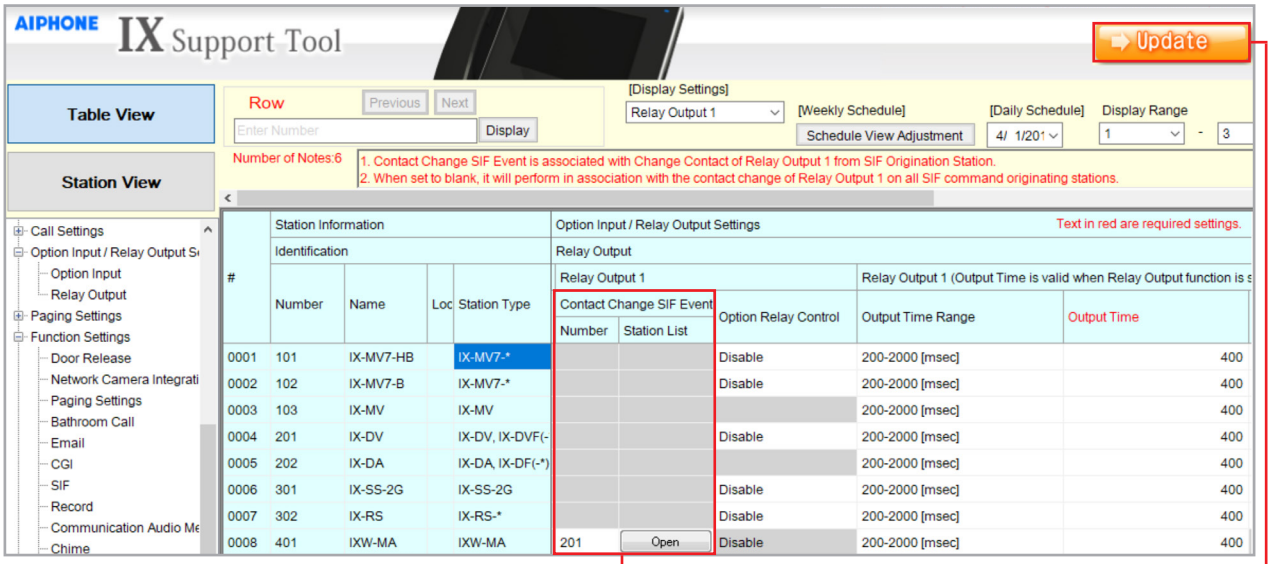
Use the Relay Output drop-down menu to select a relay output.

1.3 - Function

Use the Function drop-down menu to select **Contact Change SIF Event** for the IXW-MA.

Configuring the IXW-MA

Step 1: Configuring the individual IXW-MA Relays (continued)



1.4 - Contact Change SIF Event

Scroll the window to the right until **Relay Output 1, Contact Change SIF Event** is displayed.

1.5 - Select a Station

Click **Open** and select the **Station Number** of the station to communicate with the IXW-MA.

1.6 - Update

Click **Update** to save changes.

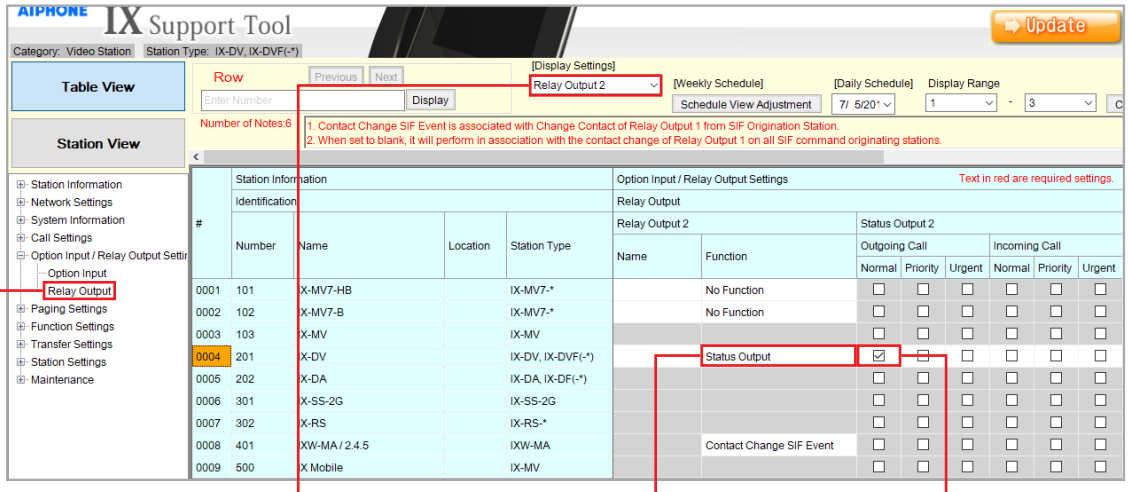
Associating Relay Output 2

Configure relay 2 of the door station to trigger when the door places a call. This could in turn be used to trigger a relay on the IXW-MA for the purpose of external signaling.

Step 1: Configuring door station's relay output 2

1.1 - Relay Output

From the menu on the left, expand **Option Input / Relay Output Settings** and select **Relay Output**.



1.2 - Select Relay Output

Use the **Relay Output** drop-down menu to select **Relay Output 2**.

1.3 - Function

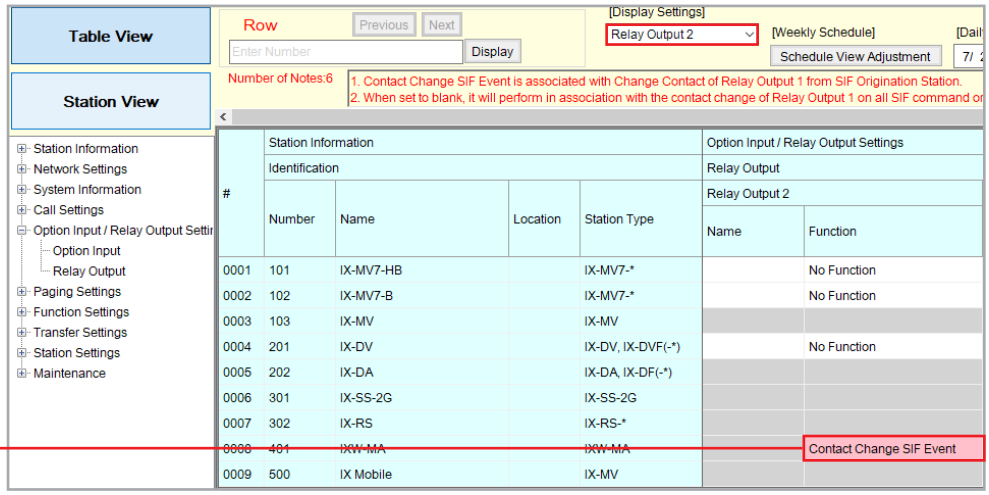
Use the **Function** drop-down menu to select **Status Output**.

1.4 - Status Output

Locate Outgoing Call column and check the Normal box.

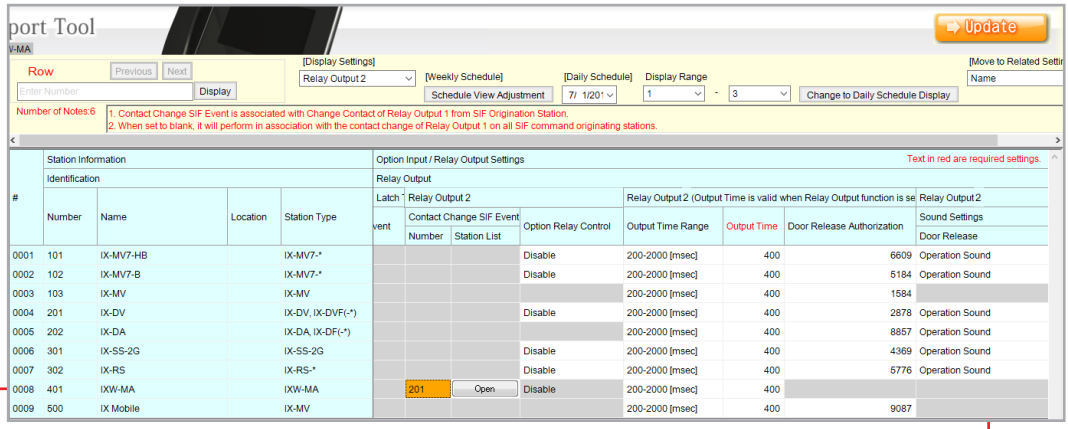
Associating Relay Output 2 (cont.)

Step 2: Configuring IXW-MA's relay output



2.1 - Function

Use the **Function** drop-down menu to select **Contact Change SIF Event**.



2.2 - Scroll Right

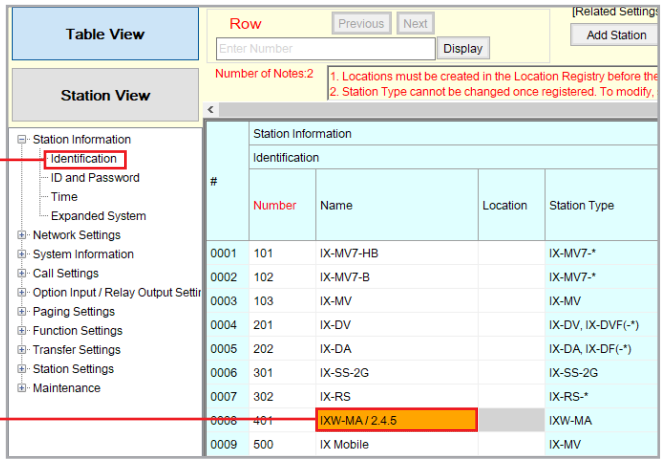
Scroll the window to the right until the **Contact Change SIF Event** column is displayed.

2.3 - Station Number

Enter the Station Number of the device that will communicate with the IXW-MA.

2.4 - Update

Click **Update** to save changes.



2.5 - Identification

From the menu on the left, expand **Station Information** and select **Identification.**

2.6 - Name

Enter the relay output number associated with other device's relay output 2. *See note for example.*

Note:

The only way the IXW-MA can recognize the door station's 2nd output is by following this naming convention.

A situation when you would name the IXW-MA would be: "When relay output 2 of IX-DV is fired, then IXW-MA fires relay output 4", enter "/ 4" in the Name column.

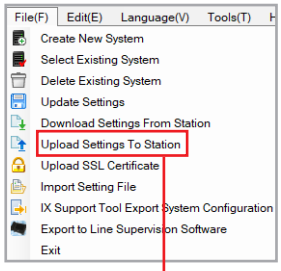
If you would like to use multiple relay output 2, you can combine the number seperated by "."

Example: / 2.4.6.8.10

2.7 - Update

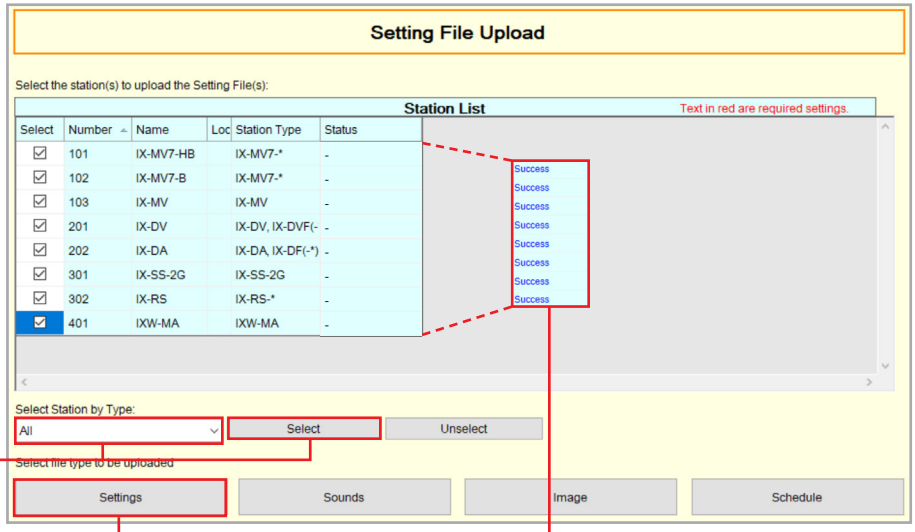
Click **Update** to save changes.

Uploading Settings to Stations



1.1 - Upload

Click **File** from the top menu bar and select **Upload Settings to Station.**



1.2 - 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**.

1.3 - Settings

Click **Settings** to upload the Setting Files to the selected stations.

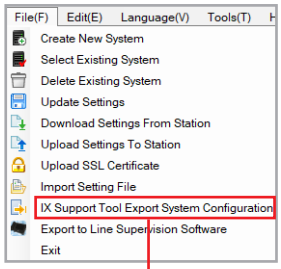
1.4 - Success

Verify that each station was uploaded successfully in the **Status** column.

Exporting the Settings

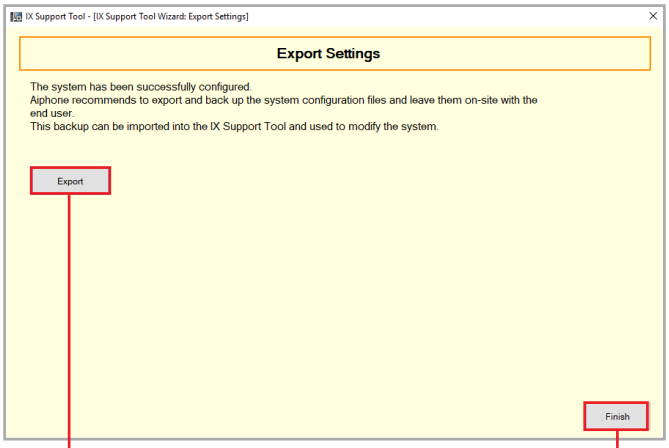
Note:

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.



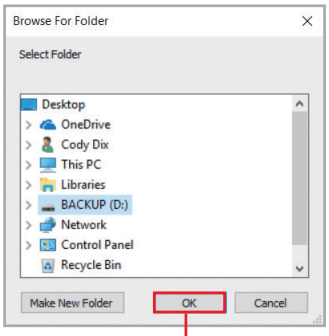
1.1 - Export Settings

Click **File** from the top menu bar and select **Export System Configuration.**



1.2 - Export

Click **Export**.



1.3 - Select Folder

Select location to save the file then click **OK**.

1.4 - Finish

Click **Finish**.

IX Mobile

IX Mobile is an app for iOS (v8.0+) and Android (v4.1+) turning a mobile device into an IX Series sub master. This allows 2-way audio communication, video, and door release. Four shortcut buttons can be configured to initiate a call to specific stations, groups, or page.

The following steps assist in the configuration of an IX Series system with IX Mobile and the configuration of IX Mobile on a mobile device.

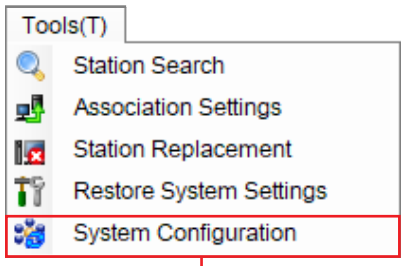
Requirements: A system must contain at least one IX-MV/MV-7 and one IXW-MA for every 8 instances of IX Mobile. IX Mobile also requires a constant connection to the network the IX Series system is deployed on, utilizing either a Wi-Fi or VPN connection.

Note Station Information here to refer to later		
Number	Name	IP Address
		. . .
		. . .
		. . .
		. . .
		. . .
		. . .
		. . .
		. . .

Adding a Mobile Device to the Support Tool

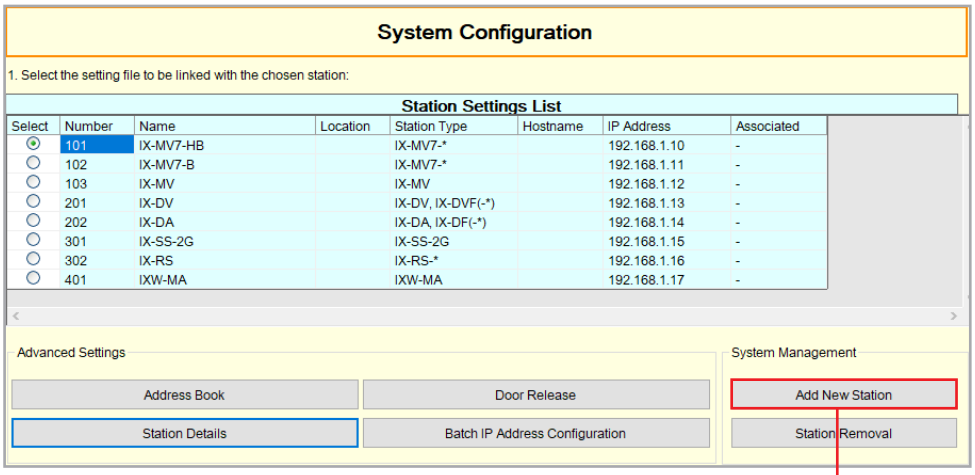
Connect all IX Series stations and the programming PC to a PoE switch. Open IX Support Tool on the programming PC.

Step 1: Adding a Mobile Device as an IX-MV



1.1 - System Configuration

From the tool bar, click Tools(T) and select System Configuration to open a new window.



1.2 - Add New Station

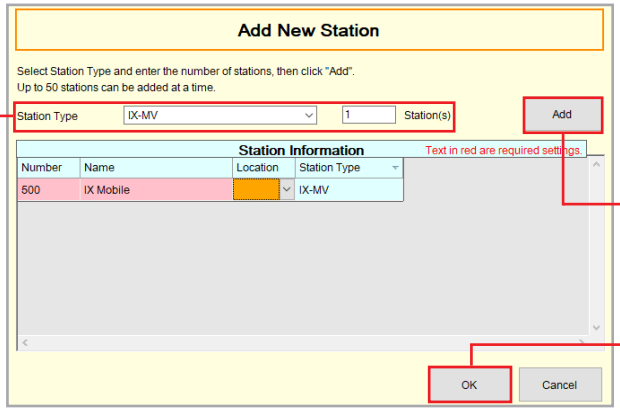
Click **Add New Station**.

1.3 - Adding a Station

Use the Station Type drop-down to select IX-MV, and enter the quantity of mobile devices being added.

Note:

Aiphone recommends assigning a unique station **Number** and **Name**.



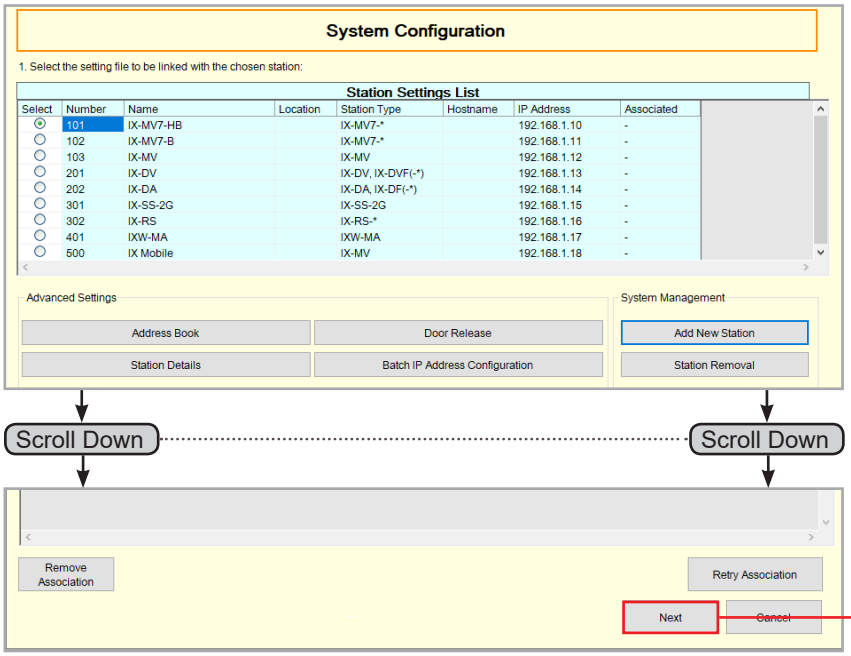
1.4 - Add

Click **Add**.

1.5 - OK

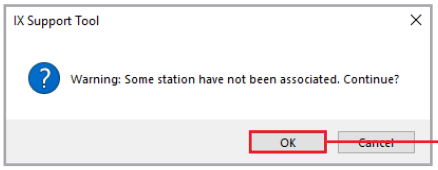
Click **OK**.

Adding a Mobile Device to the Support Tool (cont.)



1.6 - Next

Click **Next**.

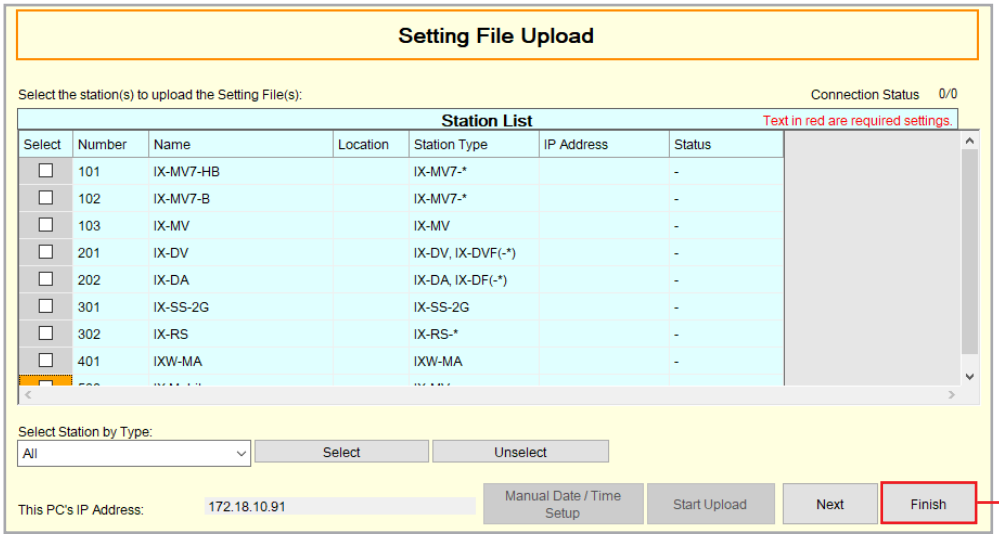


1.7 - OK

Click **OK**.

Note:

IX Mobile will never need to be associated or uploaded to through the Support Tool. The setting files will be transferred manually.

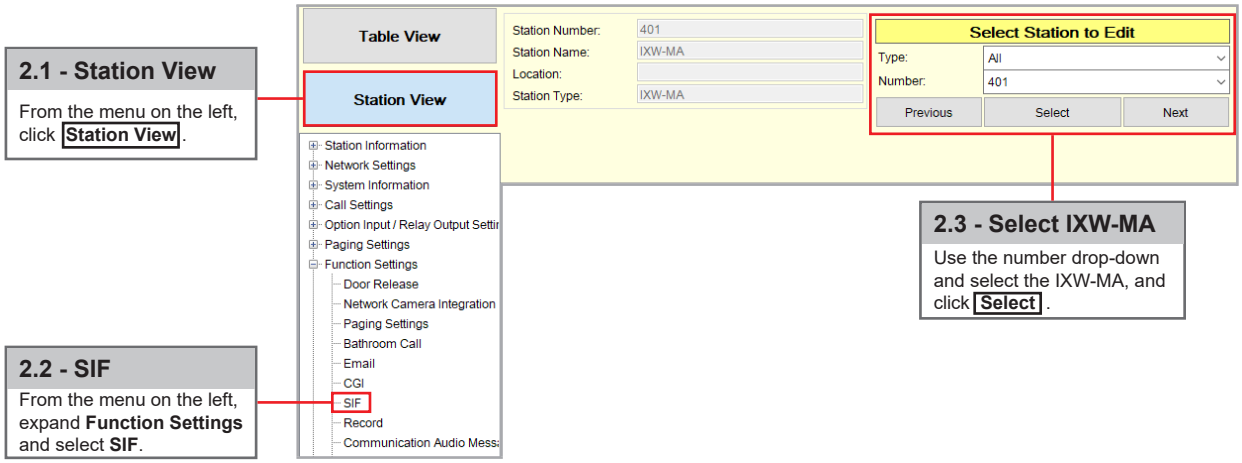


1.8 - Finish

Click **Finish**.

Configuring the IXW-MA for IX Mobile

Each mobile device added to Support Tool will need to be listed in the IXW-MA. Fill out the SIF Settings table with each mobile device's IPv4 address.



2.1 - Station View

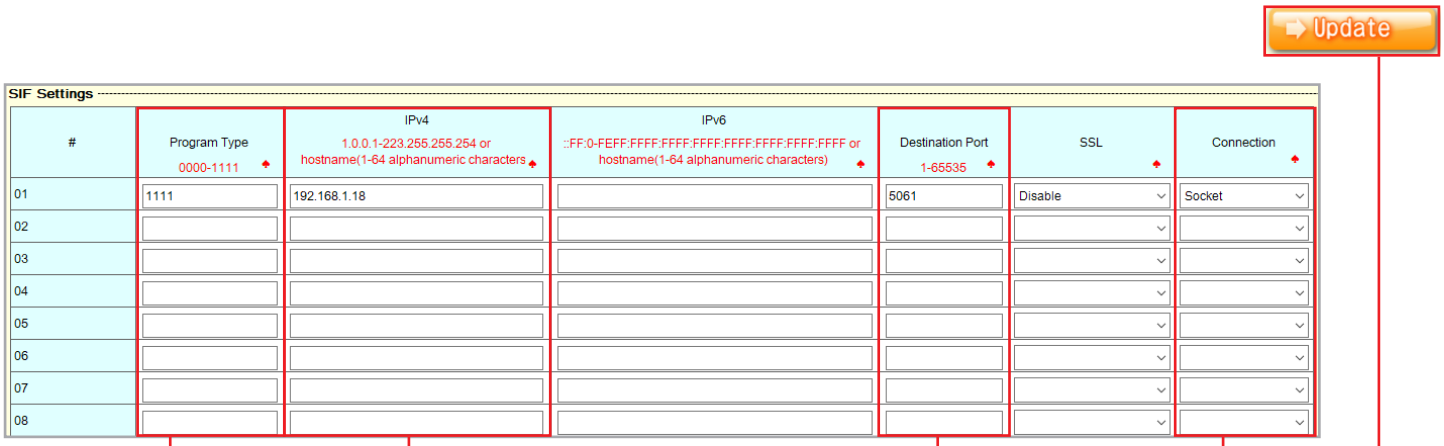
From the menu on the left, click **Station View**.

2.2 - SIF

From the menu on the left, expand **Function Settings** and select **SIF**.

2.3 - Select IXW-MA

Use the number drop-down and select the IXW-MA, and click **Select**.



2.4 - Program Type

Enter **1111** as the Program Type.

2.5 - IPv4

Enter the IP Address of the Mobile Device(s).

2.6 - Destination Port

Enter **5061** as the Destination Port.

2.7 - Connection

Use the drop-down and select **Socket**.

2.8 - Update

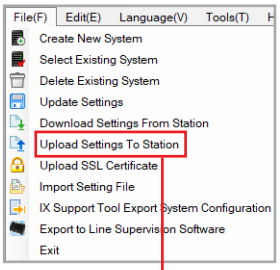
Once all Mobile Devices have been added to the list, click **Update**.

Note:

A maximum of **8 Mobile Devices per IXW-MA** can be added to the system.

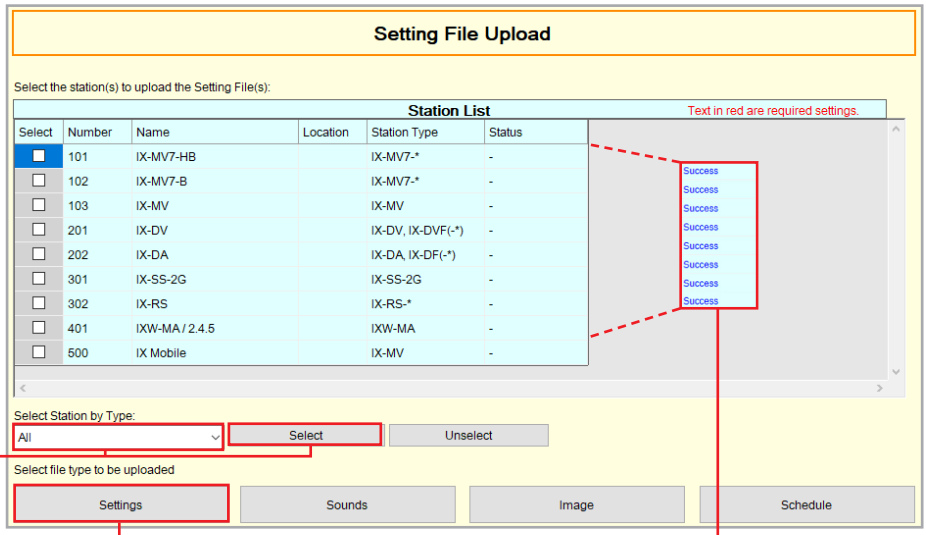
Uploading the Setting File

The setting changes made in the previous steps will need to be uploaded to every station with the exception of the IX Mobile devices.



3.1 - Upload

Click **File** from the top menu bar and select **Upload Settings to Station.**



3.2 - 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**.

3.3 - Settings

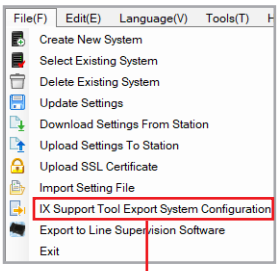
Click **Settings** to upload the Setting Files to the selected stations.

3.4 - Success

Verify that each station was uploaded successfully in the **Status** column.

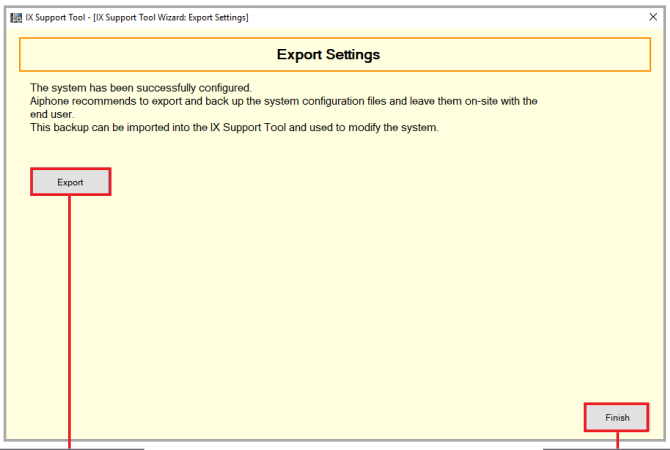
Exporting the Setting File

Each mobile device configured in the Support Tool will have a setting file generated. To upload the setting file to the mobile device it is required to export the settings from the Support Tool.



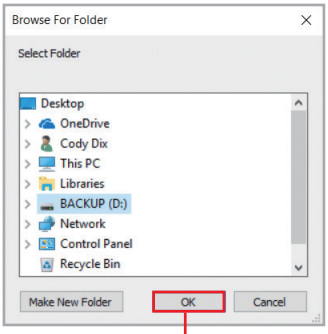
1.1 - Export Settings

Click **File** from the top menu bar and select **Export System Configuration.**



1.2 - Export

Click **Export**.



1.3 - Select Folder

Select location to save the file then click **OK**.

1.4 - Finish

Click **Finish**.

Navigate to the location that you exported the system settings to. Open the file and click on the Setting folder. Locate the configuration file with the same number that was assigned to the mobile station in IX Support Tool.
Copy the configuration file to a location on the programming PC that can easily be transferred to the mobile device.

Configuration File Example:

Downloading IX Mobile (iOS)

In order to continue you will need iTunes on the programming PC, as well as IX Mobile on each mobile device.

Download IX Mobile from the App Store℠

App Store is a service mark of Apple Inc.

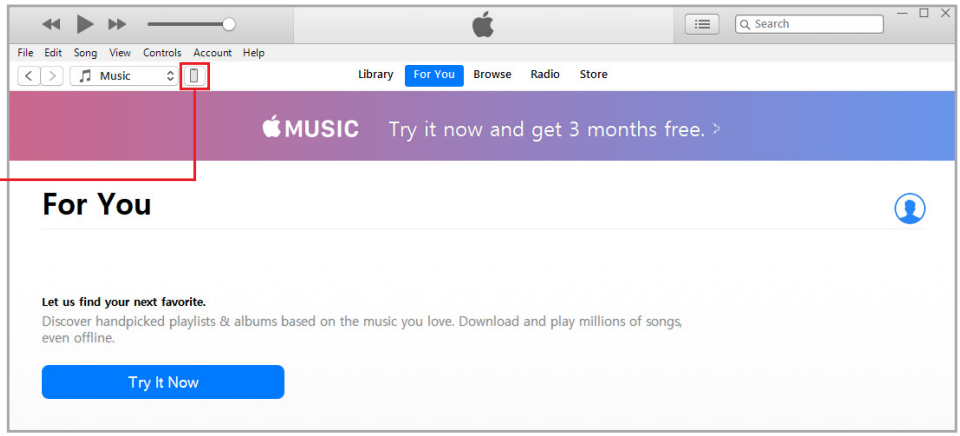
Transferring the Setting File (iOS)

1.1 - Transfer File

Open iTunes and connect the Mobile Device to the PC.

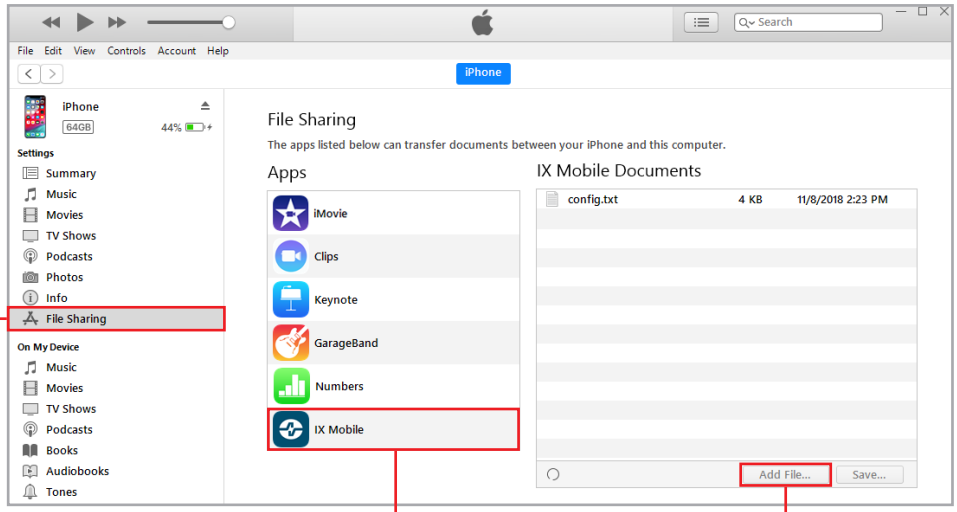
1.2 - Device

Click the icon of the Mobile Device.



1.3 - File Sharing

Click **File Sharing**.



1.4 - Select IX Mobile

Click the icon of **IX Mobile**.

1.5 - Add File

Click **Add File..** and select the mobile device's setting file.

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Downloading IX Mobile (Android)

In order to continue you will need IX Mobile on each mobile device.

Download IX Mobile using Google Play™

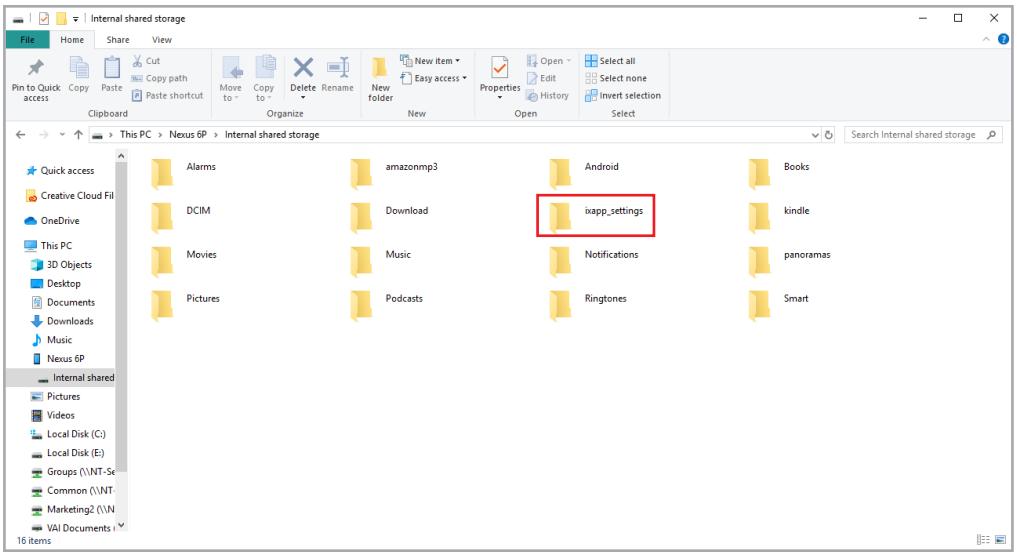
Transferring the Setting File (Android)

1.1 - Transfer File

Connect the Mobile Device to the PC.

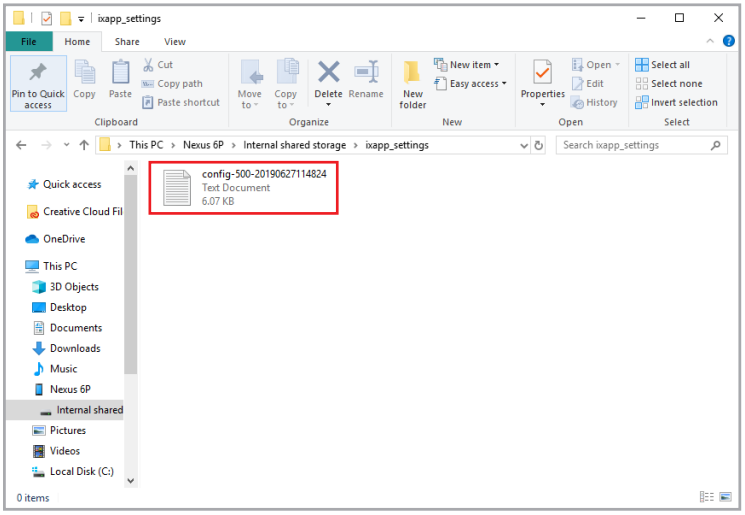
1.2 - ixapp_settings

Locate and open the **ixapp_settings** folder.



1.3 - Transfer File

Paste the mobile device's setting file in this folder.



Note:

If the mobile device is connected to the PC and no folders are displayed, ensure that the Android device is set to "Use USB to transfer files" and not "Charging". Refer to the manufacturer's manual for further instructions.

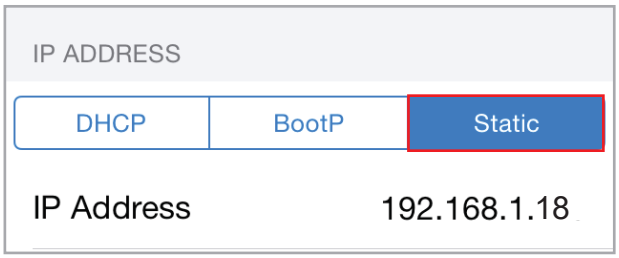
Setting a Static IP Address (iOS)

1.1 - Connecting

Connect to the WiFi network associated with the IX Series system installation. Once connected, tap on ⓘ icon of the connected network.

1.2 - Assigning IP Address

Tap **Static** and enter the IP Address that was assigned when configuring the mobile device with the IX Support Tool.



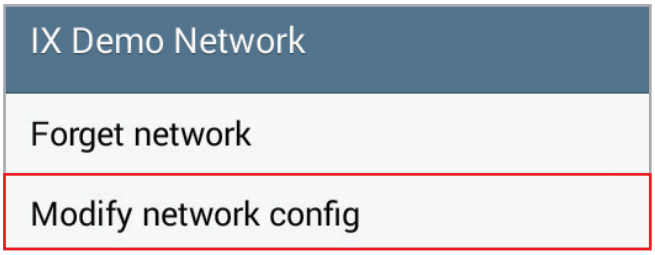
Setting a Static IP Address (Android)

1.1 - Connecting

Connect to the WiFi network associated with the IX Series system installation. Once connected, tap and hold on the connected network.

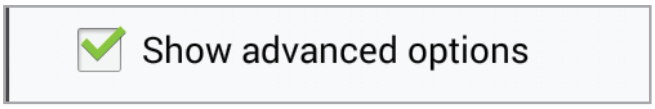
1.2 - Modify Network Config

A pop-up will appear. Tap **Modify network config**.



1.3 - Advanced Options

Check the box beside **Show advanced options**.



1.4 - Assigning IP Address

Under IP settings, select **Static** and enter the IP Address that was assigned when configuring the app with the IX Support Tool. Once entered, tap Save.

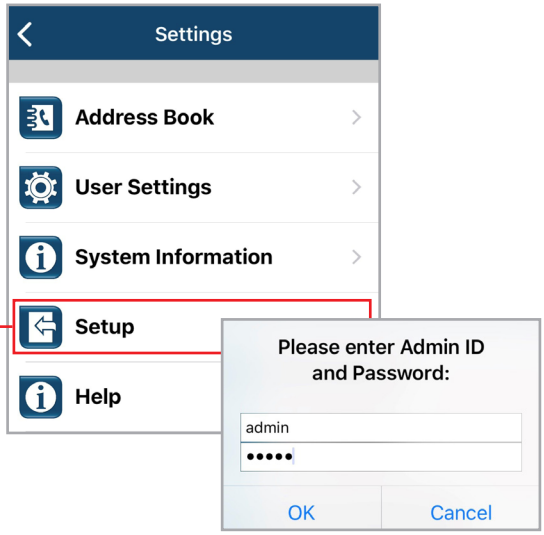
Configuring IX Mobile

1.1 - Transfer File

Open IX Mobile, and tap the settings icon.

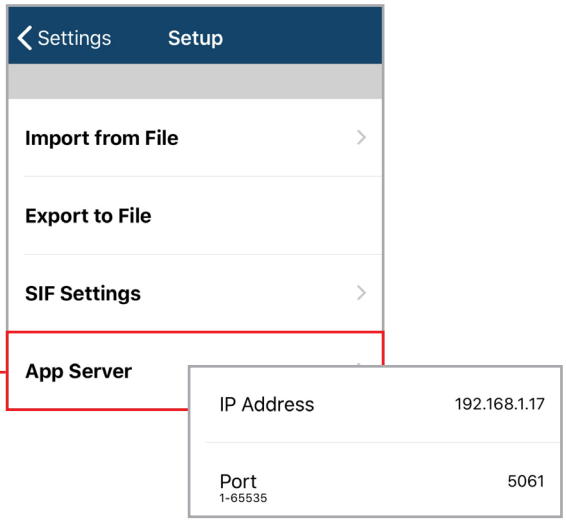
1.2 - Setup

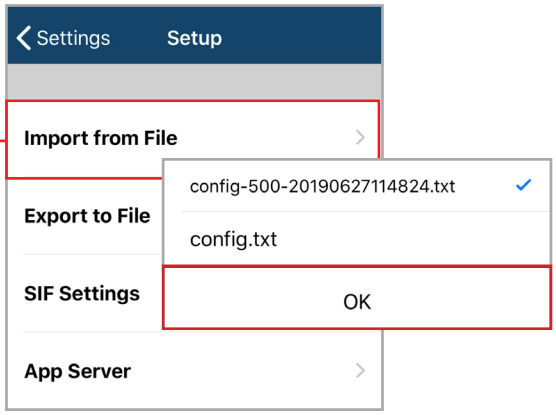
Tap **Setup**.
Enter the Admin ID and Password and tap **OK**.
Default ID: admin
Default Password: admin



1.3 - App Server

Tap **App Server**.
Enter the **IP Address** of the IXW-MA and **Port Number.**
Default Port: 5061



1.4 - Import Setting File

Tap **Import from File**.
Select the setting file that was transferred to the mobile device in previous steps and tap **OK**.