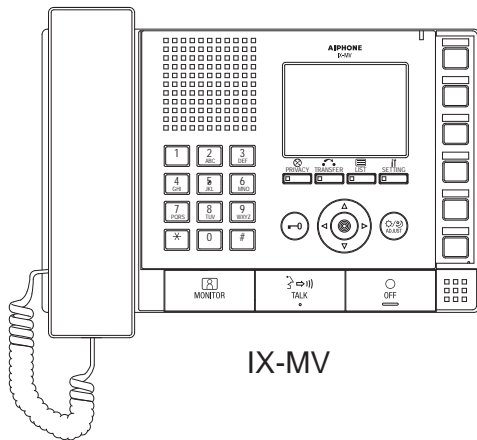


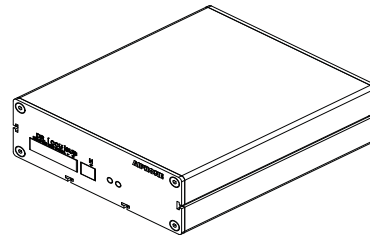
# IX SERIES

## IX-1AS / IX-10AS 2-Wire Network Adaptor

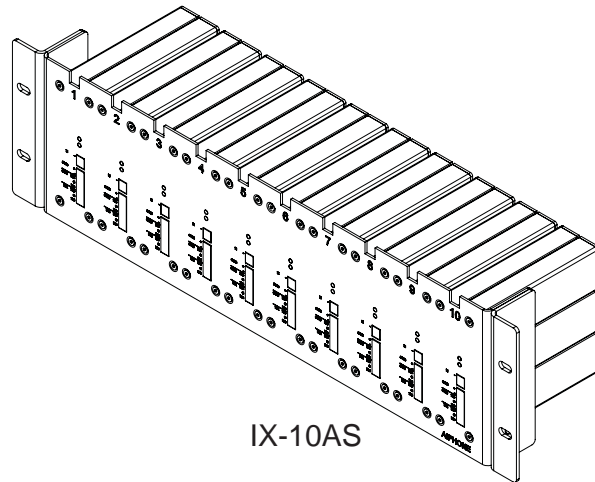
### Installation & Programming Guide



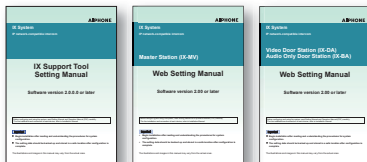
IX-MV



IX-1AS



IX-10AS



**ATTENTION:**

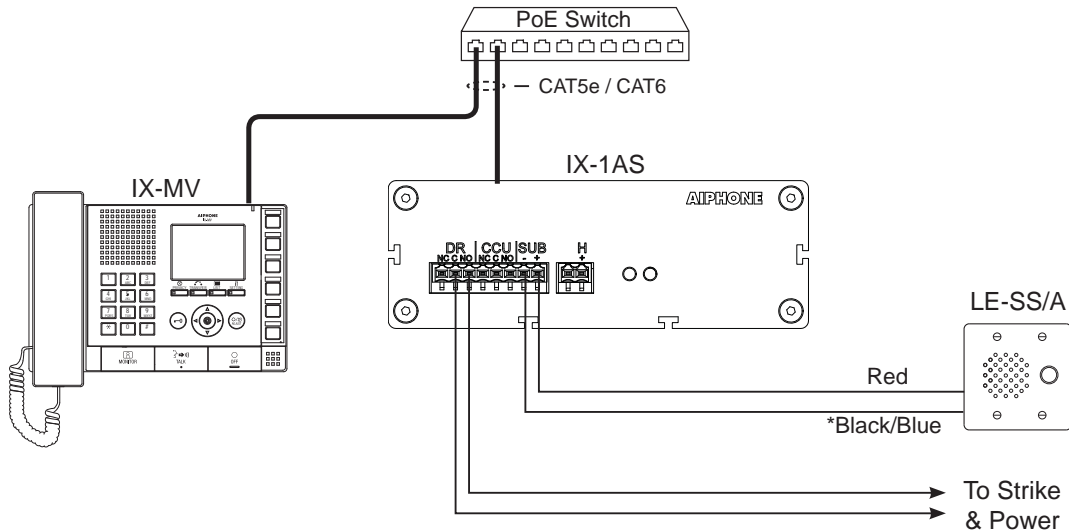
This is an installation and programming manual addressing wiring and programming for the IX-1AS / IX-10AS adaptor. For general IX Series programming, a complete set of instructions (*IX Web Setting Manual / IX Operation Manual / IX Support Tool Setting Manual*) can be found on the DVD-ROM provided with the IX-MV Master Station.

## WIRING:

The IX-1AS / IX-10AS adaptor is designed for use with Aiphone's 2 wire LE and NE Series sub stations. This adaptor will allow these subs to be used with the IX-MV network master station. First, connect the door station to the adaptor as shown in the table below, then connect the adaptor to the network. The door station will announce its IP address once the network connection is made.

IX-1AS / 10AS	LEF Sub Stations		NEM Sub Stations	
	LE-x	LE-SS/A, LE-SSR, LS-NVP/C	NE-SS/A, NE-SSR, NE-NVP/C	NE-NVP-2DC/A
+	1	Red	Red	Red
-	*E, -	*Black/Blue	Black	Black
H	N/A	N/A	N/A	White

\* Terminals / wire leads are jumped.



### NOTE:

The IX-10AS contains ten adaptors in a rack mountable unit. Plug each adaptor into its own port on a switch, then program each one individually. Refer to the chart on page 8 of this manual to document station information for each adaptor.

## Step 1: Logging into the IX-1AS adaptor

### IMPORTANT

The IX Series equipment must be programmed and operational prior to programming the IX-1AS adaptor.

The IX-1AS adaptor is defaulted to DHCP. Once connected to the network, it will autosense network traffic and pick an unused IP address. The assigned IP address will be announced through the attached door station. Enter the announced IP address into a web browser address bar to access the IX-1AS.



## Step 2: Assigning Station Information

Once logged into the adaptor, the first screen shown is for assigning a Station Number, Station Name, and Location. An optional Web Password can also be assigned to the adaptor from this screen to prevent unauthorized access to this page.

After entering a unique Station Number and Station Name, click the **Update** button to update and restart the adaptor.

### Step 3: Network Settings

Select **Network Settings** from the menu on the left. Enter a unique IP Address\*, Subnet Mask, and Gateway IP Address for the adaptor. Consult with your IT department for the appropriate addresses to be assigned.

The screenshot shows the 'AIPHONE IX System Setting' web interface. The left sidebar contains a menu with 'Network Settings' highlighted. The main content area is titled 'NETWORK SETTINGS' and includes the following fields:

- SoniciP®:  Enable  Disable
- IP Address: 192 . 168 . 1 . 144
- Subnet Mask: 255 . 255 . 255 . 0
- Gateway IP Address: 0 . 0 . 0 . 0
- DHCP Host Name: [Empty field]
- MAC Address: 00:08:E1:04:B9:10
- Web Server Port: 80

Additional text on the right side of the network settings page includes: 'Speak IP address while booting', 'Default 0.0.0.0 for DHCP', and '1 to 65535'. An 'Update' button is located in the top right corner.

There are additional settings on the Network Settings page that can be adjusted: SIP Settings, Audio Settings, and Packet Priority. The default settings will work in most cases. Adjust as necessary.

This screenshot shows the 'SIP SETTINGS', 'AUDIO SETTINGS', and 'PACKET PRIORITY' sections of the web interface. The left sidebar menu has 'Network Settings' selected.

- SIP SETTINGS:** SIP Port: 5060 (range 1 to 65535)
- AUDIO SETTINGS:** Audio CODEC: uLaw / 8 kHz (G.711); RTP Idle Detection Time: 10 seconds (range 0 to 600; 0 means do not check for disconnected masters); Audio RTP Port: 20000 (range 1 to 65535)
- PACKET PRIORITY:** QoS/DSCP: 0 (range 0-63)

An 'Update' button is visible in the top right corner.

Click the **Update** button to update any Network Setting changes and restart the adaptor.

\* If changes are made to the IP address, the web browser will need to be redirected to the new IP address after updating.

### Step 4: Contact Output Settings (optional)

The IX-1AS has two built-in contact outputs: one for Door Release and one for Camera Call-Up. Select **Contact Output Settings** from the menu on the left. From this screen, adjust the door release output time (1-300 seconds). When using the Camera Call-Up relay, select the appropriate radio button for when the relay is to trigger: Calling and Communication or Communication Only.

The screenshot shows the 'AIPHONE IX System Setting' web interface with 'Contact Output Settings' selected in the left sidebar. The main content area is titled 'CONTACT OUTPUT SETTINGS' and includes:

- Door Release Output Time: 1 seconds (range 1-300)
- Camera Call-Up Output:  Active During Calling and Communication;  Active During Communication Only

An 'Update' button is located in the top right corner.

Click the **Update** button to update any Contact Output Setting changes and restart the adaptor.

## Step 5: Call Settings

Select **Call Settings** from the menu on the left. From this screen, enter the station number and IP address of the master(s) that this door station needs to call. A maximum of 20 master stations can be entered (example: 101@192.168.1.165). These station numbers and IP Addresses must match what is assigned to the IX-MV master(s) in IX Support Tool.

Called Stations	Station Number	IP Address
Destination 1	<input type="text"/>	0 . 0 . 0 . 0
Destination 2	<input type="text"/>	0 . 0 . 0 . 0
Destination 3	<input type="text"/>	0 . 0 . 0 . 0
Destination 4	<input type="text"/>	0 . 0 . 0 . 0
Destination 5	<input type="text"/>	0 . 0 . 0 . 0
Destination 6	<input type="text"/>	0 . 0 . 0 . 0

The adaptor will work with the following settings left at default. Adjust as necessary. From the **Call Settings** screen, select the call priority (Normal, Priority, Urgent) for this door station. Enter the Call Timeout value, the length of time that the door will call in for (0-600 seconds, 0 = infinite). Select the Ringback Tone heard at the door from the appropriate drop down menu. Click on the preferred Ringback Count radio button (until answered, only once). Select the Busy Tone from the drop down menu that will be heard when calling a master that is currently in use. Select the Error tone from the drop down menu that will be heard when an error occurs during calling.

Call Priority: Normal

Call Timeout: 60 seconds *0 to 600; 0 means no timeout*

Ringback Tone: Normal

Ringback Count:  Play tone until answered  Play tone only once

Busy Tone: Busy

Error Tone: Error

Click the **Update** button to update the Call Setting changes and restart the adaptor.

## Step 6: Function Settings (optional)

Select **Function Settings** from the menu on the left. From the Door Release Tone drop down menu, select the tone that will be heard at the door station when the door release contact is activated. From the Paging Pretone drop down menu, select the pretone that will be heard at the door prior to any paging announcement.

Door Release Tone: Operation

Paging Pretone: Paging Pretone

## Step 6: Function Settings *(continued)*

SIF Reporting and SIF Events can be enabled from the same **Function Settings** screen. This is used when integrating with access control platforms (i.e. RY-IP44). Enter the IP address (of 3rd party device), Port (of 3rd party device), and Program number for each destination under SIF Reporting. Under SIF Events, use the appropriate radio buttons to enable events to be sent to the destination addresses. When enabling Periodical Transmission, select the transmission interval from the drop down menu.

The screenshot shows the 'Function Settings' screen with a left-hand navigation menu. The 'Function Settings' menu item is highlighted. The main content area is divided into two sections: 'SIF REPORTING' and 'SIF EVENTS'.  
**SIF REPORTING:**  
- SIF Destination 1: 0 . 0 . 0 . 0  
- SIF Port 1: 0 (Note: 1 to 65535)  
- SIF Program 1: 0100  
- SIF Destination 2: 0 . 0 . 0 . 0  
- SIF Port 2: 0 (Note: 1 to 65535)  
- SIF Program 2: 0101  
**SIF EVENTS:**  
- Begin Call:  Enable  Disable (Note: Reports start and end of calls)  
- Begin Communication:  Enable  Disable (Note: Reports start and end of communication)  
- Change Contact:  Enable  Disable (Note: Reports door release)  
- Unit Error:  Enable  Disable (Note: Reports when masters fail to acknowledge call)  
- Periodical Transmission: Disable (Note: Reports at specified interval)  
A 'Clear Changes' button is located at the bottom left of the settings area.

Click the **Update** button to update the Function Settings changes and restart the adaptor.

## Step 7: Station Hardware Settings *(optional)*

Select **Station Hardware Settings** from the menu on the left. From this screen, the Volume Settings, Communication Settings, and VOX Settings can be adjusted. In most environments, the default settings will work, but should the environment warrant a change, make it here.

The Communication and Paging Volumes are set to the max level. Should they need to be lowered, use the appropriate drop down to select the desired volume level.

Adjust the Microphone Sensitivity to lower or increase the sub station's sensitivity when speaking to the master station.

Select which tone will be heard upon receiving a call from a master station from the Call Answer Tone drop down.  
Select the Communication Timeout for this station (0-600 seconds, 0 = no timeout)

Change the VOX Sensitivity to adjust for background noise at the master station.  
Change the VOX Delay to adjust how long it takes the unit to switch to talk from listen mode.

The screenshot shows the 'Station Hardware Settings' screen for an AIPHONE IX System. The left-hand navigation menu has 'Station Hardware Settings' highlighted. The main content area is divided into three sections: 'VOLUME SETTINGS', 'COMMUNICATION SETTINGS', and 'VOX SETTINGS'.  
**VOLUME SETTINGS:**  
- Communication Volume: 100 %  
- Microphone Sensitivity: Normal  
- Paging Volume: 100 %  
**COMMUNICATION SETTINGS:**  
- Communication Pretone: Communication Pretone (Note: Play tone before communication begins)  
- Communication Timeout: 60 seconds (Note: 0 to 600; 0 means no timeout)  
**VOX SETTINGS:**  
- VOX Sensitivity: 3 (Note: Raise to ignore background noise at master)  
- VOX Delay: 200 milliseconds (Note: 0 to 2000; Wait time to switch from listening to talking)  
An 'Update' button is located at the top right of the settings area.

If any changes are made, click the **Update** button to update the Station Hardware Settings changes and restart the adaptor.

## Step 8: Maintenance (optional)

Select **Maintenance** from the menu on the left. If a Syslog server is being used on the network, the IP address for the server can be entered here. If Syslog Address is left to the 0.0.0.0 address, the log will be broadcast. Enable debug mode for additional syslog messages to aid in troubleshooting.

The adaptor can also be restored to factory defaults, the firmware can be updated, or can be rebooted from the maintenance screen.

Click the  button to save Syslog Address / Debug Mode settings and restart the adaptor.

## Step 9: Adding the IX-1AS to the IX-MV

Now that the IX-1AS has been programmed, the IX-MV master(s) address book will need to be updated to reflect the newly added sub station.

Open **IX Support Tool** and select the system to be updated.

Select **Identification** from the **Station Information** tree on the left.

On the next available line, enter the number and the name of the sub assigned in Step 2.

Select Audio Only Door Station from the Type drop down.

#	Number	Name	Name (furigana)	Type
001	101	Front Door		Video Door Station
002	102	Back Door		Audio Only Door Station
003	201	Master 1		Master Station
004	202	Master 2		Master Station
005	103	Audio Door		Audio Only Door Station

Click the  button to save the changes.

## Step 10: Assigning IP Address

Now that the station has been added, the IP address will need to be assigned. From the menu on the left, select **IP Address** from the **Network Settings** tree. The newly added station will be in the list of stations but the IP address and Subnet Mask will be blank. Enter the IP address and subnet mask, making sure it matches what was set to the IX-1AS during its initial programming (Step 3).

#	Number	Name	Type	IP Version	IP addressing method	IP Address Subnet Mask							
						1	2	3	4	1	2	3	4
001	101	Front Door	Video Door Station	IPv4	Static	192	168	1	5	255	255	255	0
002	102	Back Door	Audio Only Door Station	IPv4	Static	192	168	1	4	255	255	255	0
003	103	Audio Door	Audio Only Door Station	IPv4	Static	192	168	1	144	255	255	255	0
004	201	Master 1	Master Station	IPv4	Static	192	168	1	1	255	255	255	0
005	202	Master 2	Master Station	IPv4	Static	192	168	1	2	255	255	255	0

Click the  button to save the changes.

## Step 11: Removing the IX-1AS from the IX-MV Address Book (optional)

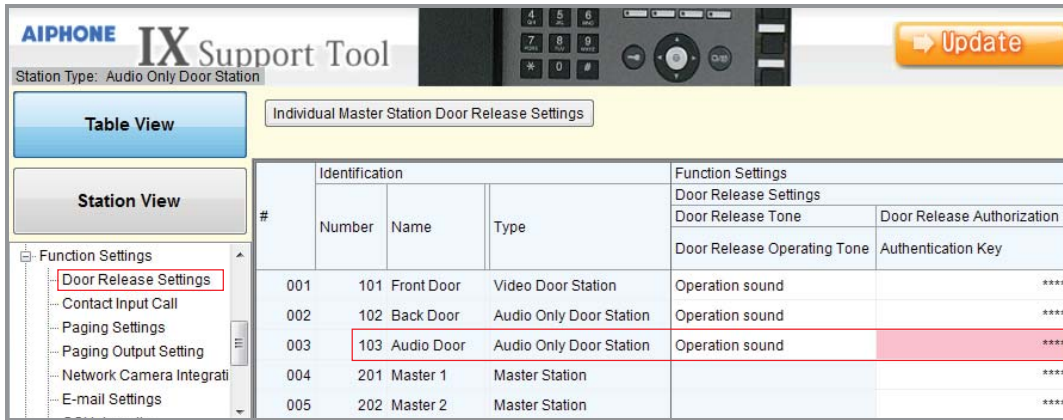
Select **Address Book** from the **System Information** tree on the left. Each master station in the system will be listed on the left and all devices in the system will be listed across the top. By default, the newly added station will be listed in each master station's address book. If a station is not to appear in a master station's address book, uncheck the appropriate box.

#	Station Information			Available Stations				
	Identification			101	102	103	201	202
	Number	Name	Type	Front Door	Back Door	Audio Door	Master 1	Master 2
001	201	Master 1	Master Station	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
002	202	Master 2	Master Station	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Click the  button to save the changes.

## Step 12: Door Release Settings

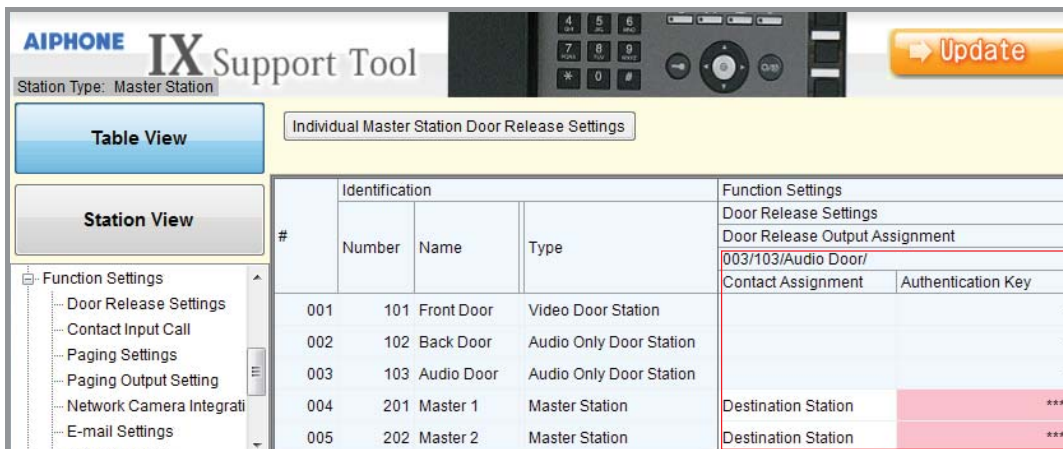
Select **Door Release Settings** from the **Function Settings** tree on the left. The newly added station will not have an Authentication Key assigned. Enter any 4 digit number (ie: 1234) into the Authentication Key field for the new station. The field will turn pink when modified.



Individual Master Station Door Release Settings

#	Identification			Function Settings	
	Number	Name	Type	Door Release Settings	Door Release Authorization
001	101	Front Door	Video Door Station	Operation sound	****
002	102	Back Door	Audio Only Door Station	Operation sound	****
003	103	Audio Door	Audio Only Door Station	Operation sound	****
004	201	Master 1	Master Station		****
005	202	Master 2	Master Station		****

Scroll to the right and find the newly added station from the stations listed across the top. The master stations in the system will also not have an Authentication Key entered. Enter the same key that was entered for the door station here. This will allow the master station to open the door when communicating with the station. If door release is not desired for a specific master station, leave the Authentication Key field blank.



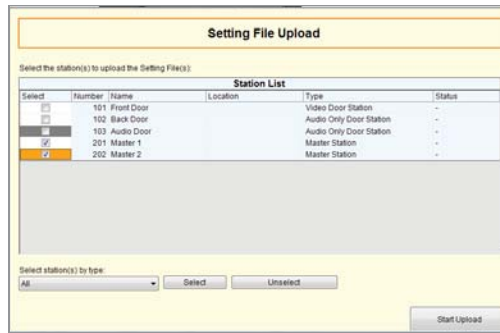
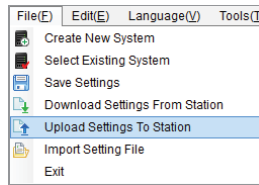
Individual Master Station Door Release Settings

#	Identification			Function Settings	
	Number	Name	Type	Door Release Settings	Door Release Authorization
001	101	Front Door	Video Door Station	Door Release Output Assignment	-
002	102	Back Door	Audio Only Door Station	Door Release Output Assignment	-
003	103	Audio Door	Audio Only Door Station	003/103/Audio Door/ Contact Assignment	Authentication Key
004	201	Master 1	Master Station	Destination Station	****
005	202	Master 2	Master Station	Destination Station	****

Click the  button to save the changes.

## Step 13: Uploading Settings

The IX Series master stations will now need to be updated with the saved changes. Select **Upload Settings To Station** from the **File** menu. Select the master stations from the list and click Start Upload.



The master stations will update and the Status column will show if the update was successful.

Station List					
Select	Number	Name	Location	Type	Status
<input type="checkbox"/>	101	Front Door		Video Door Station	-
<input type="checkbox"/>	102	Back Door		Audio Only Door Station	-
<input type="checkbox"/>	103	Audio Door		Audio Only Door Station	-
<input checked="" type="checkbox"/>	201	Master 1		Master Station	Success
<input checked="" type="checkbox"/>	202	Master 2		Master Station	Success

## IX-10AS Chart

The IX-10AS is 10 IX-1AS adaptors in a rack mount enclosure. Each adaptor will need to be programmed individually. Use the chart below to enter the station information for each adaptor.

Adaptor Number	Station Number	Station Name	IP Address
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

## Specifications

<b>Power:</b>	Power-over-Ethernet (IEEE 802.3af, class 0)
<b>Current Consumption:</b>	Maximum 250mA per IX-1AS
<b>Door Release Relay:</b>	24V DC, 500mA
<b>Camera Call Up Relay:</b>	24V DC, 500mA
<b>Communication:</b>	Hands-free Half duplex, VOX
<b>LAN:</b>	Ethernet (10BASE-T, 100BASE-TX)
<b>Audio Codec:</b>	G.711
<b>Protocol:</b>	IPv4, TCP, UDP, SIP, HTTP, RTP, RTCP, IGMP, DHCP
<b>Operating Temperature:</b>	32°F ~ 122°F (0°C ~ 50°C)
<b>Material:</b>	Aluminum (IX-1AS) Steel (IX-10AS)
<b>Color:</b>	Silver (IX-1AS) Black (IX-10AS)
<b>Dimensions:</b>	1-1/2" H x 4-1/4" W x 4-15/16" D (IX-1AS) 5-1/4" H x 16-3/4" W x 4-15/16" D (IX-10AS)