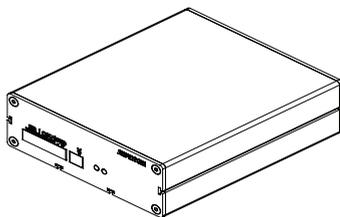


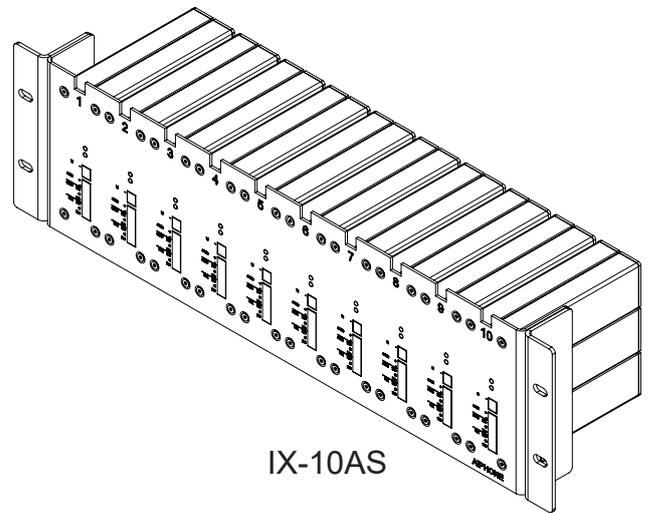
IX SERIES

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

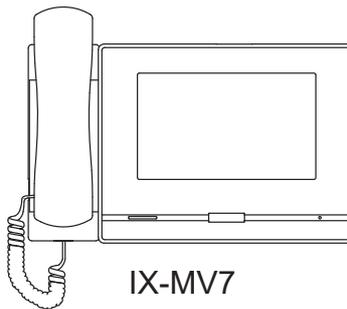
Installation & Programming Guide



IX-1AS



IX-10AS



IX-MV7

ATTENTION:

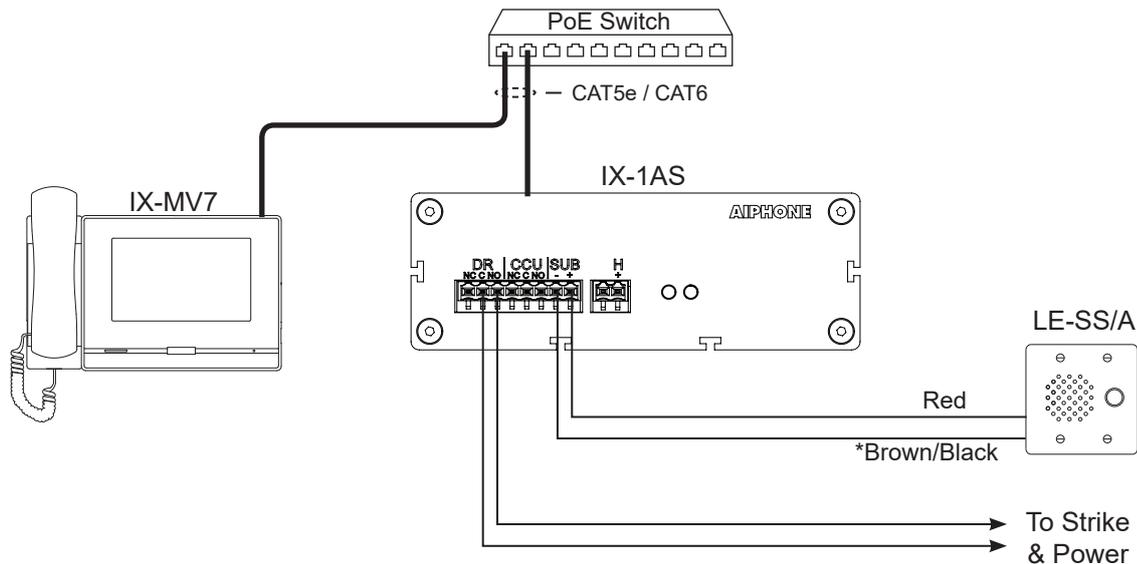
This is an installation and programming manual addressing wiring and programming for the IX-1AS/IX-10AS adaptor only. For general IX Series programming, refer to the IX Support Tool Setting Manual or IX Quick Start Programming Guide.

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 Series 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, -	*Brown/Black	Brown	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 text box]
- MAC Address**: 00:08:E1:04:B9:10
- Web Server Port**: 80

Additional information on the right side of the network settings page includes: 'Speak IP address while booting', 'Default 0.0.0.0 for DHCP', and a range indicator '1 to 65535'.

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 'AIPHONE IX System Setting' interface. The left sidebar menu is visible with '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)

Click the  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 the following fields:

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

Click the  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/IX-MV7 master(s) in IX Support Tool.

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

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
Ringback Tone	Normal
Ringback Count	<input checked="" type="radio"/> Play tone until answered <input type="radio"/> 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 for an AIPHONE IX system. On the left is a navigation menu with options: Station Information, Network Settings, Contact Output Settings, Call Settings, **Function Settings**, Station Hardware Settings, and Maintenance. Below the menu is a 'Clear Changes' button. The main content area is divided into two sections: 'SIF REPORTING' and 'SIF EVENTS'.
SIF REPORTING includes:
- SIF Destination 1: 0 . 0 . 0 . 0
- SIF Port 1: 0 (with red text '1 to 65535')
- SIF Program 1: 0100
- SIF Destination 2: 0 . 0 . 0 . 0
- SIF Port 2: 0 (with red text '1 to 65535')
- SIF Program 2: 0101
SIF EVENTS includes:
- Begin Call: Enable Disable (with red text 'Reports start and end of calls')
- Begin Communication: Enable Disable (with red text 'Reports start and end of communication')
- Change Contact: Enable Disable (with red text 'Reports door release')
- Unit Error: Enable Disable (with red text 'Reports when masters fail to acknowledge call')
- Periodical Transmission: Disable (with red text 'Reports at specified interval')

Click the  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. At the top, it says 'AIPHONE IX System Setting' and 'Model: IX-1AS'. On the right is an 'Update' button. The left 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 includes:
- Communication Volume: 100 %
- Microphone Sensitivity: Normal
- Paging Volume: 100 %
COMMUNICATION SETTINGS includes:
- Communication Pretone: Communication Pretone
- Communication Timeout: 60 seconds (with red text 'Play tone before communication begins 0 to 600; 0 means no timeout')
VOX SETTINGS includes:
- VOX Sensitivity: 3 (with red text 'Raise to ignore background noise at master')
- VOX Delay: 200 milliseconds (with red text '0 to 2000; Wait time to switch from listening to talking')

If any changes are made, click the  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.

AIPHONE IX System Setting

Model: IX-1AS

MAINTENANCE

Syslog Address: 0 . 0 . 0 . 0

Debug Mode: Enable Disable

Initialization:

Firmware: Version: 1.0 August 7th, 2015

Update Firmware:

Reboot:

Default 0.0.0.0 sends to broadcast address
Send additional syslog messages

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

Step 9: Adding the IX-1AS to the IX-MV/IX-MV7

The IX-MV7 and/or IX-MV master station 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.

Click the **Add Station** button on the top of the page.

AIPHONE IX Support Tool

Table View | Row | Previous | Next | [Related Settings] | Add Station | Remove Station | Location Registry

Enter Number: [] | Display

Number of Notes: 3

1. Locations must be created in the Location Registry before they can be assigned to a Station.
2. Station Type cannot be changed once registered. To modify, station must be removed.

Text in red are required settings.

#	Number	Name	Location	Station Type
0001	101	Front Door		IX-DV, IX-DVF(-*)
0002	102	Back Door		IX-SS-2G
0003	201	Master 1		IX-MV7-*
0004	202	Master 2		IX-MV7-*

A new window will open. Select IX-BA from the **Station Type** drop-down, enter 1 in the station(s) box, then click **Add**. Enter the number and name to match what was assigned to the IX-1AS adaptor in Step 2. Click **OK** when done.

Add New Station

Select Station Type and enter the number of stations, then click "Add".
Up to 50 stations can be added at a time.

Station Type: IX-BA, IX-SS(-*) | 1 Station(s) |

Text in red are required settings.

Number	Name	Location	Station Type
103	Audio Door		IX-BA, IX-SS(-*)

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. Enter the IP address and subnet mask, making sure it matches what was set to the IX-1AS during its initial programming (Step 3).

#	Station Information				Network Settings										
	Identification				IP Address										
	Number	Name	Location	Station Type	Hostname	IP Version	Static / DHCP	IP Address				Subnet Mask			
								1	2	3	4	1	2	3	4
0001	101	Front Door		IX-DV, IX-DVF(-)		IPv4	Static	192	168	1	12	255	255	255	0
0002	102	Back Door		IX-SS-2G		IPv4	Static	192	168	1	13	255	255	255	0
0003	103	Audio Door		IX-BA, IX-SS(-)		IPv4	Static	192	168	1	144	255	255	255	0
0004	201	Master 1		IX-MV7-*		IPv4	Static	192	168	1	10	255	255	255	0
0005	202	Master 2		IX-MV7-*		IPv4	Static	192	168	1	11	255	255	255	0

Click the button to save the changes.

Step 11: Removing the IX-1AS from the Master Station Address Book (optional)

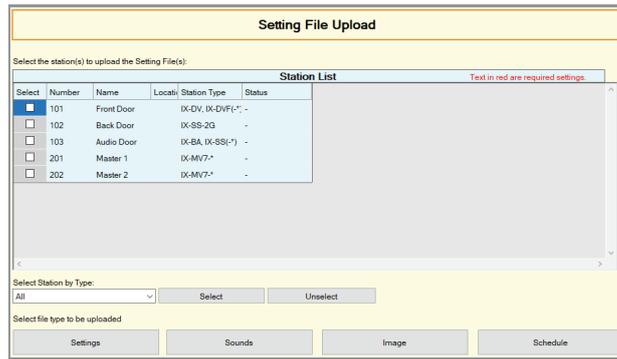
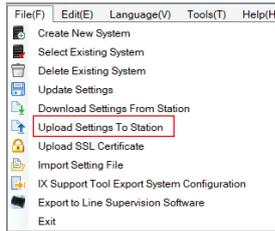
Select **Address Book** from the **System Information** tree on the left. Click the **Open Stations List** button. Each master station in the system will be listed on the left and all devices in the system will be listed across the top. By default, the newly added station will be listed in each master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

#	Station Information				Address Book									
	Identification				101		102		103		201		202	
	Number	Name	Location	Station Type	Front Door / IX-DV, IX-DVF(-)		Back Door / IX-SS-2G		Audio Door / IX-BA, IX-SS(-)		Master 1 / IX-MV7-*		Master 2 / IX-MV7-*	
					Select	Network Camera	Select	Network Camera	Select	Network Camera	Select	Network Camera	Select	Network Camera
0004	201	Master 1		IX-MV7-*	✓		✓		✓		✓		✓	
0005	202	Master 2		IX-MV7-*	✓		✓		✓		✓		✓	

Click the button to save the changes.

Step 12: 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 **Settings**.



The settings will upload to the master stations and the Status column will show if the upload was successful.

Station List					
Select	Number	Name	Location	Station Type	Status
<input type="checkbox"/>	101	Front Door		IX-DV, IX-DVF(-*)	-
<input type="checkbox"/>	102	Back Door		IX-SS-2G	-
<input type="checkbox"/>	103	Audio Door		IX-BA, IX-SS(-*)	-
<input checked="" type="checkbox"/>	201	Master 1		IX-MV7-*	Success
<input checked="" type="checkbox"/>	202	Master 2		IX-MV7-*	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

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