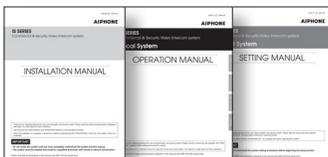
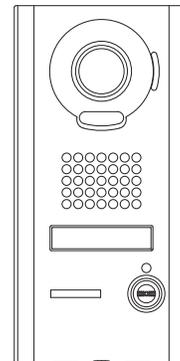
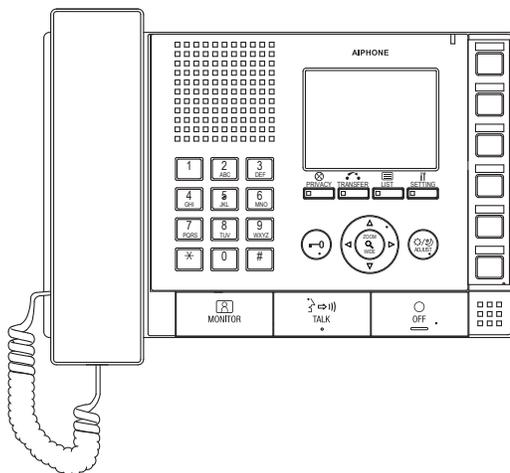
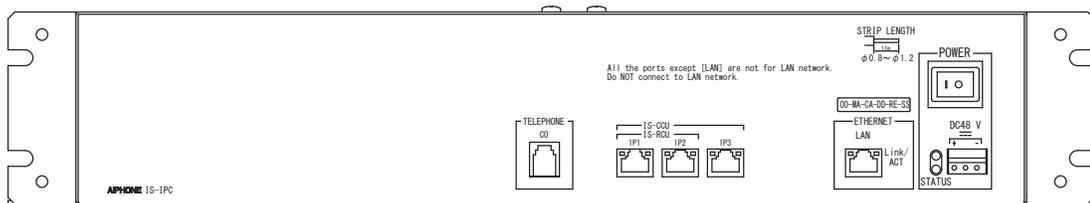




IS SERIES

Hybrid System with IS-IPC
Connecting IS Local with IS Network Based Equipment

QuikStart Programming Guide



ATTENTION:

This is an abbreviated programming manual, addressing basic program settings for an IS Series Hybrid (Local + IP) System. A complete set of instructions (*Standard (IP) Operation Manual / Standard (IP) Settings Manual*) can be found on the CD provided with the IS-IPMV, IS-SOFT, or IS-CCU.

Terminology

Area	An Area defines a location description to a common group of stations. Example: “High School,” “Front Office,” or “Warehouse.”
Site	A Site in an IS system is a LAN which contains a single Host and up to 31 Clients. While the IS system can have up to 32 Sites, this guide only covers a single Site system.
Host	A Host is the unit in an IS Site containing a configuration file used to control how each device in the Site behaves. Any IS-IPC, IS-IPMV, IS-IPDV, or IS-IPDVF can be a Host.
Client	A Client is a unit in an IS Site that does not contain a complete configuration file, and relies on the Host for operational instructions. Any IS-IPC, IS-IPMV, IS-IPDV, IS-IPDVF, or IS-SOFT can be a Client.
DHCP	DHCP (Dynamic Host Configuration Protocol) allows all DHCP configured devices to ask for an IP address when it powers on. In the context of an IS system, Clients may be DHCP, but a Host should always be Static. DHCP with a reservation configured by the DHCP server is possible, but not recommended.
LAN	A LAN (Local Area Network) is typically managed by a DHCP enabled router. Anything connected to the WAN port of the router is considered outside the Local Area Network. While there are numerous ways of connecting multiple LANs together, the only supported network layout for this guide is a LAN or a VPN.
VPN	A VPN (Virtual Private Network) is a method of allowing two isolated LANs to communicate with each other through a public network without losing privacy. For the purposes of the IS system, it can be considered a single LAN.
IGMP	IGMP (Internet Group Management Protocol) is the protocol used by Multicasting systems, including the IS system. This protocol must be supported by and enabled on the networking hardware.
Multicast	Multicasting is a method of communicating a single stream of information, such as video or paging announcements, from a single host to many hosts. This saves bandwidth compared with sending the same packets to each recipient one at a time. The IS system uses Multicast for video during the call-in, but not when a master monitors the door (since it is the single recipient when the MONITOR button is used).

General Precautions

HOW TO USE THIS GUIDE

This guide is intended to be used for a single site IS Hybrid system running on a IPV4 network that includes an IS-IPC control unit, IS-IP door stations, IS-IPMV master stations, and IS-SOFT PC master stations.

Note: Refer to the IS Series Standard (IP) Setting Manual when using a IPV6 network or when multiple sites are required.

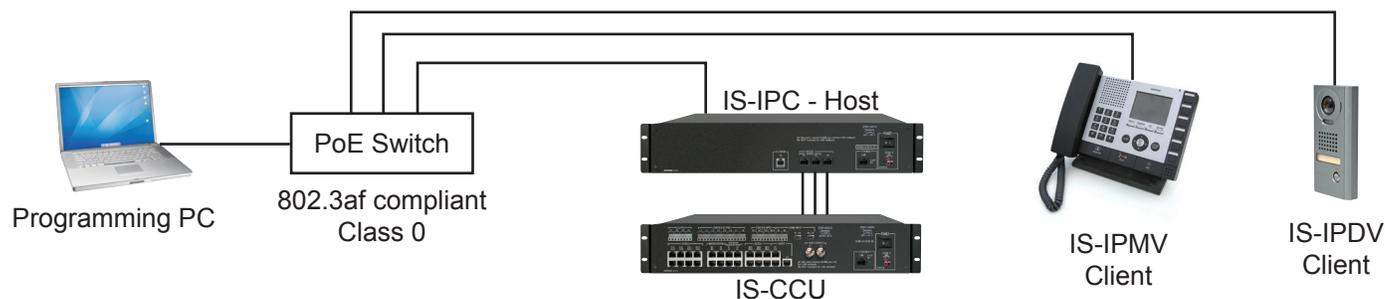
IMPORTANT:

When changes are made while programming, click **Temporarily stored** to save data prior to leaving each screen. The saved data will be applied to the system when the system is updated.

Step 1: System Layout

It is recommended that the IS-IPC be set as the **Host**. All other devices will be set as **Clients**. The final network needs to be a LAN or a VPN that supports Multicast. To program, use a network switch and CAT-5e cable to connect the PC to each device one at a time. When using a PoE switch, an 802.3af compliant PoE Class 0 switch is required.

Wiring Example:



Step 2: Configure PC's IP Address *(not required if using a DHCP server)*

The default IP address for each IS-IP device is <https://192.168.0.40>. The PC will need to be set in the same subnet in order to connect to the IS-IP devices.

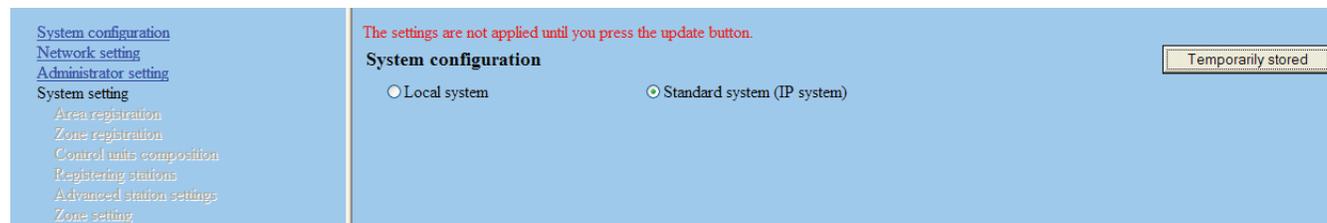
- A. Open **Control Panel**
 - Windows® XP (classic view) → **Network Connections** → Double click **Local Area Connection** to open **Connection Status** window.
 - Windows® 7 (Category View) → **Network and Internet** → **View network status and tasks** → Click **Local Area Connection** to open the **Local Area Connection Status** window.
 - Windows® 8 (Category View) → **Network and Internet** → **View network status and tasks** → Click the active network adapter to open the **Local Area Connection Status** window.
- B. Click the **Properties** button to open **Local Area Connection Properties** window.
- C. Scroll down and left click **Internal Protocol (TCP/IP)** then click **Properties** button to open **Internet Protocol Properties** window.
- D. Select the **Use the following IP address** radio button. Type in the IP address **192.168.0.100** (the last number can be any valid host address except 40) and change the subnet mask to **255.255.255.0**. Click [OK].
- E. Click [OK] in the **Connection Properties** window to accept these changes.

Step 3: Log into IS-CCU *(if using the IS-CCU)*

When using the IS-CCU with the IS-IPC, the IS-CCU will need to be changed from a “local” system to an “IP” system.

- A. Open a web browser and point the address bar to <https://192.168.0.30>. If using DHCP, enter the unit's IP address discovered with the IS_IPSEARCH program and hit [Enter].
Note: ensure that https (for security) is being used in the address bar.
- B. A security certificate error message will appear. Click “Continue to this website.”
- C. Choose preferred language.
- D. Log in to the unit using the default administrator ID “aiphone,” and default password “aiphone”.
- E. Click the **Standard system (IP system)** radio button.

Figure 3.1: System configuration setting



- F. Click **Temporarily stored** to save changes.
- G. Click **Updating the system** from the menu on left.
- H. Click **Update** to update the IS-CCU unit with all stored data.

Step 4: Install and Configure IS-SOFT Application (OPTIONAL)

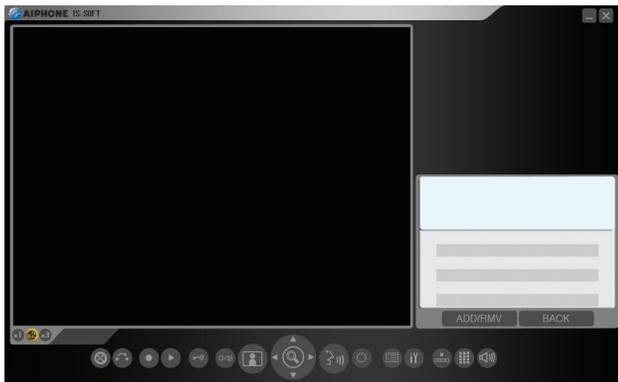
Note: *IS-SOFT is not required to program the system.* If using IS-SOFT, the application requires a PC with speakers  and a microphone , or a headset  in order to communicate with the stations in the system. *A USB style microphone / headset is recommended.*

- Click the **Setting** button and click the **Network** tab.
- Enter the Host's IP address, the Connection password "aiphone" and choose the Network Interface Card from the drop down list. Enter the license key provided in the CD case (limit one per PC).
- Click **Save**.

IMPORTANT:

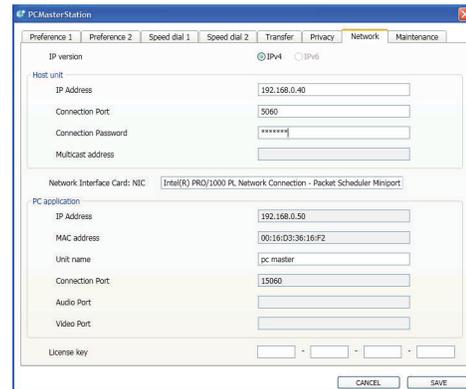
The software will attempt to make contact with the Host, but will give an error message because the Host isn't set up yet. Ignore this error and proceed to **Step 5: Log in to IS-IP Device**.

Figure 4.1: IS-SOFT



Note: Please register the IS-SOFT. See Step 14.

Figure 4.2: Network Tab



Step 5: Log in to IS-IP Device (IS-IPC, IS-IPMV, IS-IPDV, IS-IPDVF)

IMPORTANT:

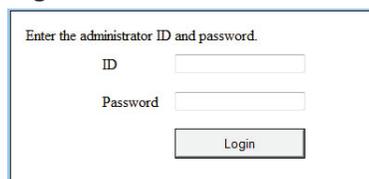
By default, the IS-IP devices will be set to DHCP. If using DHCP, use the IS_IPSEARCH program found on the CD to identify the IP address of the units. When not tied to a DHCP network, the units will have the default address of 192.168.0.40. By default, all units have the same address, making it important to hook up and program each station one at a time.

- Open a web browser and point the address bar to **https://192.168.0.40**. If using DHCP, enter the unit's IP address discovered with the IS_IPSEARCH program and hit [Enter].
Note: ensure that https (for security) is being used in the address bar.
- A security certificate error message will appear. Click "Continue to this website."
- Choose preferred language (see **Figure 5.1**).
- Log in to the unit using the default administrator ID "aiphone," and default password "aiphone" (see **Figure 5.2**).

Figure 5.1: Select Language



Figure 5.2: ID and Password



Step 6: Set Up Client Devices

- Select **Network setting** from the menu on left.
- Click the **Client unit** radio button.
- Enter the **Host unit IP address** (This will be the Static IP address assigned to the host unit in Step 7).
- By default DHCP is utilized. Aiphone recommends assigning a static IP address by clicking the **Static IP Address** radio button and entering a unique IP address and Subnet Mask. (see **Figure 6.1**)
- Enter a **Unit name** for the device (This is used for identifying the unit in programming only).
- Enter the **Connection port** and the **Connection password** for the system.
- Click **Temporarily stored** to save changes.
- Select **Updating the system** from the menu on left.

Repeat Steps 5 & 6 for all client devices, then do Step 5 to log in to the host.

Figure 6.1: Network Setting - Client

The screenshot displays the 'Network setting: Individual' configuration page for a client unit. The left sidebar contains a navigation menu with categories like Network setting, System setting, and Setting file. The main content area is titled 'Network setting: Individual' and includes a 'Temporarily stored' button. The configuration fields are as follows:

- IP version: IPv4
- Host unit setting: Client unit
- Host unit IP address: 192.168.0.40 *Required
- System name: (empty) (1-24 Alphanumeric characters)
- DHCP: DHCP
- Static IP Address: 192.168.0.41 *Required
- Subnet Mask: 255.255.255.0 *Required
- Default Gateway: (empty)
- Primary DNS Server: (empty)
- Secondary DNS Server: (empty)
- MAC address: 00:0B:AA:0B:03:C2
- Unit name: IS-IPMV (0-24 Alphanumeric characters)
- Web port: 443
- Connection port: 5060 *Required 1024-65535
- Connection Password: aiphone *Required (1-16 Alphanumeric characters)

Step 7: Set Up Host Device

- Select **Network setting** from the menu on left.
- Click the **Host unit** radio button.
- Enter the **System name** (max. 24 alphanumeric characters).
- By default DHCP is utilized. Aiphone recommends assigning a static IP address by clicking the **Static IP Address** radio button and entering a unique IP address and Subnet mask (see **Figure 7.1**).
- Enter a **Unit name** for the device (This is used for identifying the unit in programming only).
- Enter the **Connection port** and the **Connection password** for the system.
- Click **Temporarily stored** to save changes.

Figure 7.1: Network Setting - Host

The screenshot displays the 'Network setting: Individual' configuration page for a host device. The left sidebar contains a navigation menu with categories like Network setting, System setting, and Setting file. The main content area is titled 'Network setting: Individual' and includes a 'Temporarily stored' button. The configuration fields are as follows:

- IP version: IPv4
- Host unit setting: Host unit
- Host unit IP address: (empty)
- System name: Example *Required (1-24 Alphanumeric characters)
- DHCP: DHCP
- Static IP Address: 192.168.0.40 *Required
- Subnet Mask: 255.255.255.0 *Required
- Default Gateway: (empty)
- Primary DNS Server: (empty)
- Secondary DNS Server: (empty)
- MAC address: 00:0B:AA:0C:05:D3
- Unit name: Host (0-24 Alphanumeric characters)
- Web port: 443
- Connection port: 5060 *Required 1024-65535
- Connection Password: aiphone *Required (1-16 Alphanumeric characters)

Step 8: IP Unit Registration - Host

- Select **IP unit registration** from the menu on left.
- Scroll down and click **IP unit search** in the lower right (see **Figure 8.1**).
- Check the station(s) needing to be added to the **Imported IP units list**. Click **Add to the imported IP units list** to add them. Any units not appearing can be manually entered (see **Figure 8.2**).

Figure 8.1: IP Unit Registration - IP Unit Search

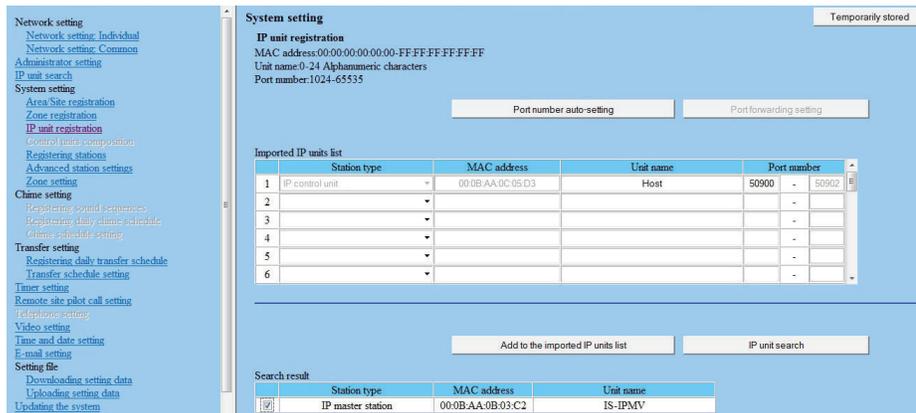


Figure 8.2: Manual Entry

Station type	MAC address	Unit name
IP control unit	00:0B:AA:0C:05:D3	Host
IP master station	00:0B:AA:0B:03:C2	IS-IPMV
PC master station	04:7D:7B:35:17:C2	PC-Maste
IP control unit		
IP master station		
IP video door station		

- Click **Port number auto-setting** to assign the required ports to all stations that need to communicate (see **Figure 8.3**).
- Click **Temporarily stored** to save changes.

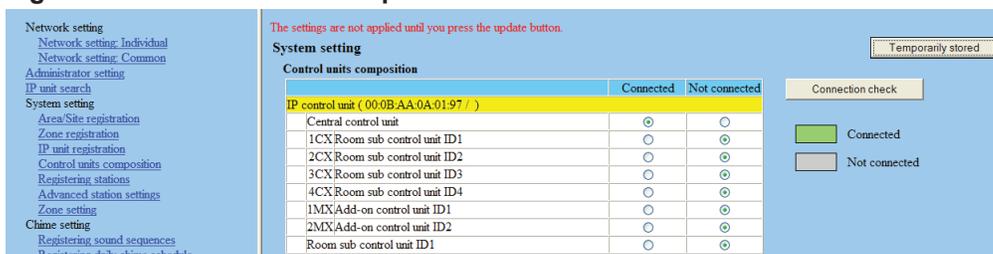
Figure 8.3: Port Number Auto-setting



Step 9: Control Units Composition

- Select **Control units composition** from the menu on left.
- For each IS-IPC in this Site, select which control units will be used (see **Figure 9.1**).
Each IS-IPC can connect to a single IS-RCU or an IS-CCU with up to 2 IS-SCU and 4 IS-RCU control units.
- Click **Temporarily stored** to save changes.

Figure 9.1: Control Units Composition



Step 10: Registering Stations

- Select **Registering stations** from the menu on left.
- The **Registering stations** table will be populated based on the settings made in **Steps 8 & 9**. Enter a **Station number** and **Station name** for each door/master unit (see **Figure 10.1**).
- Click **Temporarily stored** to save changes.

Figure 10.1: Registering Stations

Area	Station number	Station name	Station type
IP video door station (00:0B:AA:0C:05:D3 / Host)	001	Back Door	IP video door station
IP master station (00:0B:AA:0B:03:C2 / IS-IPMV)	002	Reception	IP master station
PC master station (04:7D:7B:35:17:C2 / PC-Master)	003	Security Office	PC master station

Step 11: Advanced Station Settings

- Select **Advanced station settings** from the menu on left.
- The **Advanced station settings** table is populated based on the stations registered in **Step 10** (see **Figure 11.1**).
- To program a door, check box and click **Advanced settings**. A new window will open. If multiple units need to call the same master station(s), check appropriate units and click **Advanced settings**.

Figure 11.1: Advanced Station Settings

Area	Station number	Station name	Station type
IP video door station (00:0B:AA:0C:05:D3 / Host)	001	Back Door	IP video door station
IP master station (00:0B:AA:0B:03:C2 / IS-IPMV)	002	Reception	IP master station
PC master station (04:7D:7B:35:17:C2 / PC-Master)	003	Security Office	PC master station

- Click **Called stations** (see **Figure 11.2**). A new window will open.

Figure 11.2: Advanced Settings Video Door Station

- Select the **Call priority** level from the drop-down list (see **Figure 11.3**). Click **Reference** to open a new window to select the masters to be called (see **Figure 11.4**). Once the masters have been selected, click **Close**.

Figure 11.3: Called Stations - Priority

Area/Site	Station number	Station name	Reference

Figure 11.4: Called Stations

Area	Station number	Station name	Station type
IP video door station (00:0B:AA:0C:05:D3 / Host)	002	Reception	IP master station
IP master station (00:0B:AA:0B:03:C2 / IS-IPMV)	003	Security Office	PC master station
PC master station (04:7D:7B:35:17:C2 / PC-Master)	003	Security Office	PC master station

- Click **Close** to go back to the main **Advanced station settings** window.
- Repeat Steps C through G for all door stations.
- Click **Temporarily stored** to save changes.

Step 12: Time and Date Setting

- Click the **Time and date setting** from the menu on left.
- If the PC's date and time is correct, click **Synchronized with PC**. If not, set it manually then click **Manual setting** (see **Figure 12.1**).

Figure 12.1: Time and Date Setting

Step 13: Updating the System

- Click **Updating the system** from the menu on left.
- Click **Update** to update the unit with all stored data. The system will restart with all updated information. The update may take up to 10 minutes. The update will be complete when the LEDs on all door stations and master stations stop flashing.

Step 14: Register Products (Recommended)

We recommend that the IS hardware and IS-SOFT be registered. This will enable Aiphone to send alerts to the end user of firmware and software updates. Registering the software will also enable Aiphone to easily retrieve the License Key for the IS-SOFT should it ever be misplaced. Please use the following website to register all products in the installation. **Register the products using the end user's contact information.**

www.aiphone.com/IS_Sys_Reg.htm

Troubleshooting

Problem	Possible Cause	Solution
Can't access IS IP device	Secure address prefix	Make sure you are typing "https:///" and then the unit's IP address in the address bar of your browser.
	IP range not the same	Make sure your PC and the devices are in the same IP range (step 2 in this guide). Disable WiFi and any additional Network Interface Cards on the PC.
IS_IPSearch not working	Multicast not enabled	IS_IPSearch utilizes multicast to search for and retrieve the IS-IP device's IP and MAC address. Enable multicast address 239.197.40.41 on your network.
	IP range not the same	The IS_IPSearch program will search within the PC's domain, then filters results via MAC Address. If IS_IPSearch does not find the IS-IP devices, ensure that the PC is set to the same IP range as the IS-IP devices (default range is 192.168.0.xxx).
No video from IP door station when calling	Multicast address issue	In the event the IS-IPDV/F is able to call in and establish an audio connection to the IS-MV, IS-IPMV, or IS-SOFT master stations, but fails to establish video, this is a sign that the video multicast address is not being routed*. The specific multicast address used for video broadcast from the door to master is 239.0.1.4 (Network Settings: Common) . This address must be routed between subnets for the system to work correctly. * Note: When a master calls a door station, video most likely will be present. This is because master to door calls utilize unicast.
Door station LED indication	Steady Amber	Standby mode
	Flashing Amber	Applying setting changes after programming
	Steady Red	Network / connection issue
	Flashing Red when call button pushed	Door station has a connection but is not programmed to call a master (step 11)
	Solid Green	Active Communication

This operation guide describes the basic functions of your IS Series Master Station

For a complete operation manual (1.61 MB), scan QR code to download it from the manufacturer's website: www.aiphone.com/is-op-man



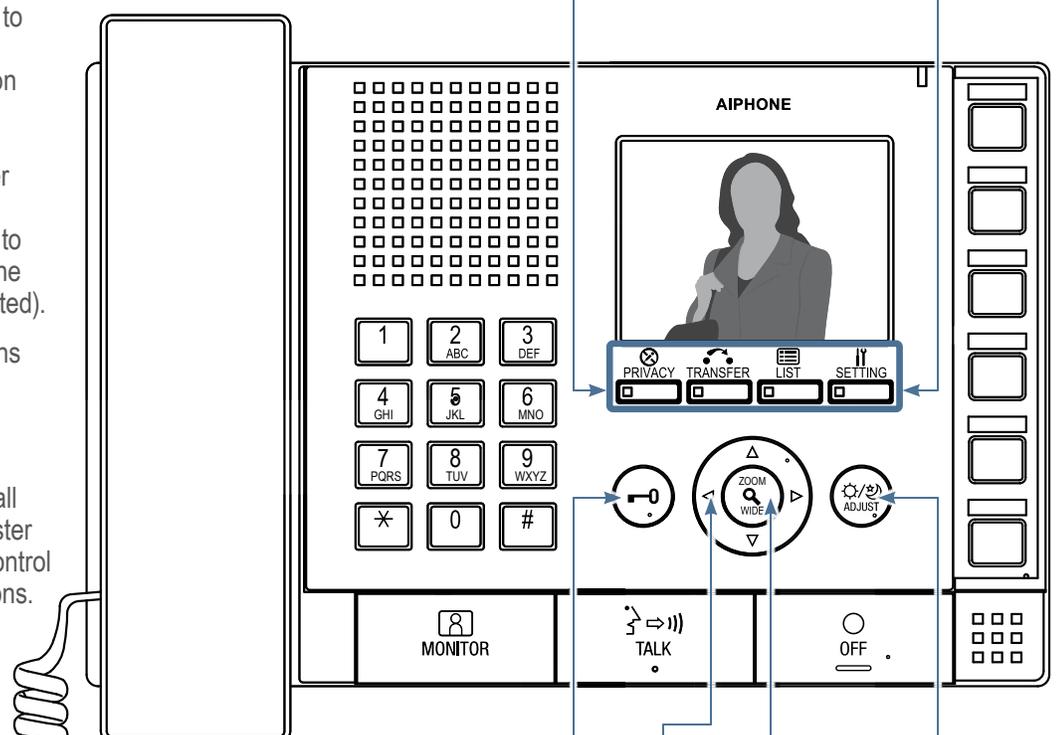
Operation Buttons

PRIVACY There are three privacy settings: OFF, 1, and 2. If set to OFF, a call from another master station can be answered by a voice response. If set to 1, a call from another master station can be answered by pushing the TALK Button or picking up the Handset. If set to 2, a call from another master station will provide a sound notification to you and the caller, indicating the station is in "do not disturb" mode. Push the PRIVACY Button to activate the selected setting (a red LED on the button remains lit when the feature is activated).

TRANSFER To manually send an answered call to another master station within the system, push the TRANSFER Button and select a destination (a red LED on the button blinks when transferring). To automatically send incoming calls to another master station within the system (CALL TRANSFER), push the TRANSFER Button to select your transfer options (a red LED on the button remains lit when the feature is activated).

LIST Push the LIST Button to view stations and zones within the system. Use the Camera/Cursor Control and ZOOM/WIDE Buttons to make selections.

SETTING Push the SETTING Button to view all setting options for your specific master station. Use the Camera/Cursor Control and ZOOM/WIDE Buttons to make selections. A status icon appears on screen when a function is in operation (see chart below).



Icon	Status
	Communication in progress (G=Normal Y=Priority R=Urgent)
	Receiving a call (G=Normal Y=Priority R=Urgent)
	Receiving calls in queue (002=2 stations calling)
	Microphone on (PRIVACY mode off)
	Microphone off (PRIVACY mode on)
	Transferring a call
	Receiving a transferred call
	Paging in progress (G=Normal Y=Priority R=Urgent)
	Paging alert in progress (Pre-recorded voices or sounds)
	Monitoring in progress
	Scan monitoring in progress
	Door release activated (unlocking)
	Settings screen is displayed
	Screen adjustment in progress
	Search in progress
	An error has occurred
	Processing selected function

Door Release Button

Push the Door Release Button to unlock the entrance during a call.

ADJUST Button

Push the ADJUST Button to compensate for low or bright backlight conditions when viewing video from a door station.

Camera/Cursor Control Button

Push Δ , ∇ , \triangleleft , or \triangleright to change the camera view (zoom-view only) or to scroll the cursor through the menu.

ZOOM/WIDE Button

Push the ZOOM/WIDE Button to change the screen view during a video call or while monitoring video. When scrolling through a menu, push the ZOOM/WIDE Button to make a selection.

This operation guide describes the basic functions of your IS Series Master Station

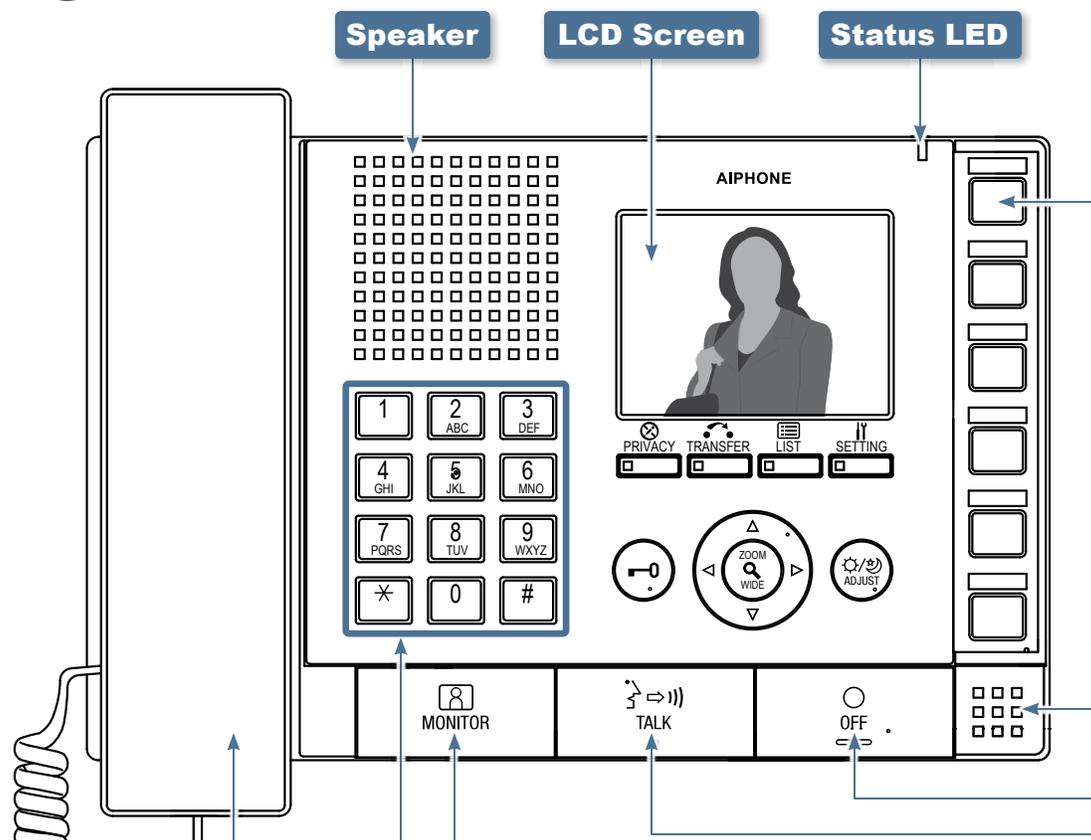
For a complete operation manual (1.61 MB), scan QR code to download it from the manufacturer's website: www.aiphone.com/is-op-man



Camera/Cursor Control and ZOOM/WIDE Buttons



See "IS-MV/IS-IPMV Master Station Operation Guide | 1 of 2" to read how the Camera/Cursor Control and ZOOM/WIDE Buttons operate.



Speed Dial Buttons

Speed Dial Buttons can be programmed to quickly select a station for calling and monitoring. They can also be programmed to quickly select a zone for paging. To program, use the SETTING Button. When programmed, push a Speed Dial Button to display the assigned station. To call/page the selected station at a normal priority level, push the TALK Button or lift the Handset. To call/page the selected station at a different priority level, push the ZOOM/WIDE Button to select the level before pushing the TALK Button. To monitor the selected station, push the MONITOR Button.

Microphone

OFF Button

Push the OFF Button to end a call (this does not turn off the device). If in MONITOR mode, push the OFF Button to stop monitoring. If receiving a page, push the OFF Button to stop the page from going to your specific master station.

TALK Button

Push the TALK Button to answer an incoming call or respond to an incoming page*. Once answered, the conversation becomes hands-free. To make a call, search for the station or zone using the Keypad Buttons or the LIST Button. Once selected, push the TALK Button to establish the call.

Handset

Pick up the Handset to answer an incoming call or respond to an incoming page*. Hang up the Handset to end the conversation. To make a call, search for the station or zone using the Keypad Buttons or the LIST Button. Once selected, push the TALK Button to establish the call. Pick up the Handset for private communication.

Keypad Buttons



Use the Keypad Buttons to search for a station or zone by number. To search by name, push the LIST Button and use the Camera/Cursor Control and ZOOM/WIDE Buttons to select name search. Once selected, use the Keypad Buttons to type the name of the station or zone.

MONITOR Button

Push the MONITOR Button to scan through all connected stations (if enabled). To pause, push the MONITOR Button again. Door release is not available while scanning. To monitor a specific station, push the LIST Button and use the Camera/Cursor Control and ZOOM/WIDE Buttons to select a desired station. Once selected, push the MONITOR Button to begin monitoring activity where the station is located.

*Responding to a page while in broadcast mode is not an option.

This operation guide describes the basic functions of your IS Series PC Master Station Software

For a complete operation manual (1.25 MB), scan QR code to download it from the manufacturer's website: www.iphone.com/soft-op-man



AIPHONE®



**IS-SOFT
PC Master Station Software**



Talk Button



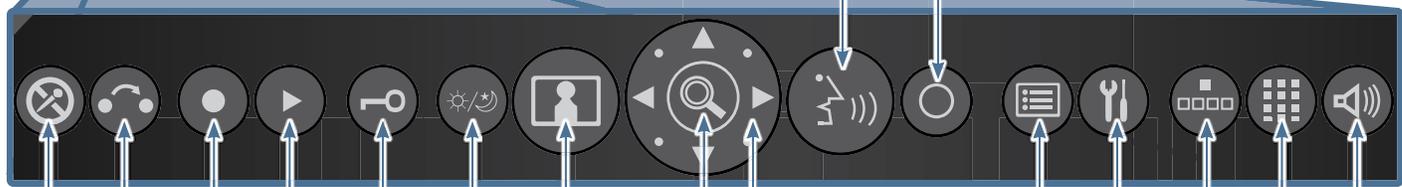
Click the Talk Button to answer an incoming call or respond to an incoming page. Once answered, the conversation becomes hands-free. To make a call, search for the station or zone using the Keypad Buttons or the LIST Button. Once selected, click the TALK Button to establish the call. The spacebar also functions as the Talk Button.

**Responding to a page while in broadcast mode is not an option.*

Off Button



Click the Off Button to end a call (this does not turn off the software). If in Monitor mode, click the Off Button to stop monitoring. If receiving a page, click the Off Button to stop the page from going to your specific master station software. The escape key also functions as the Off Button.



Privacy Button



There are three privacy settings: OFF, 1, and 2. If set to OFF, a call from another master station can be answered by a voice response. If set to 1, a call from another master station can be answered by clicking the Talk Button. If set to 2, a call from another master station will provide a sound notification to you and the caller, indicating the station is in "do not disturb" mode. Click the Privacy Button to select the desired setting (the button remains lit when the feature is activated).

Monitor Button



Click the Monitor Button to scan through all connected stations (if enabled). To pause, click the Monitor Button again. Door release is not available while scanning. To monitor a specific station, click the LIST Button and use the Camera / Cursor Control and Zoom / Wide Buttons to select a desired station. Once selected, click the Monitor Button to begin monitoring activity where the station is located.

Adjust Button



Click the Adjust Button to compensate for low or bright backlight conditions when viewing video from a door station.

Door Release Button



Click the Door Release Button to unlock the entrance during a call.

Play Button



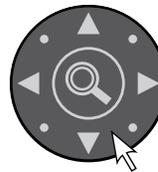
Click the Play Button once to view the list of recorded images. Select the desired file and click the Play Button again to see the snapshot or motion JPEG video. Audio will play if the audio option was set to record along with the video images.

Record Button



There are three ways to record a call: Snapshot, Video, and Auto Recording. If set to Snapshot, click the Record Button to save one image from the call. Audio Recording is not possible in Snapshot mode. If set to Video, click the Record Button to save motion JPEG from the entire call. If set to Auto Recording, one image (Snapshot) or motion JPEG (Video) will automatically be saved once a call comes in. The button remains lit when set to Auto Recording. To set the location for storing saved images, use the Setting Button.

Camera / Cursor Control Button



Click ▲, ▼, ◀, or ▶ to change the camera view (zoom-view only) or to scroll the cursor through the menu.

Zoom / Wide Button



Click the Zoom / Wide Button to change the screen view during a video call or while monitoring video. When scrolling through a menu, click the Zoom / Wide Button to make a selection.

List Button



Click the List Button to view stations and zones within the system. Use the Camera / Cursor Control and Zoom / Wide Buttons to make selections.

Setting Button



Click the Setting Button to view all setting options for your specific master station software. Use your computer mouse to make selections. Click SAVE to keep any changes.

Volume Button



Click the Volume Button to view the digital volume window. Once displayed, adjust the call tone, speaker, and microphone volumes until the desired levels are reached.

Keypad Button



Click the Keypad Button to view the digital keypad window. Once displayed, use the Keypad Buttons to search for a station or zone by number. To search by name, click the List Button and select the name search option. Once selected, use the Keypad Buttons to type the name of the station or zone.

Speed Dial Button



Speed Dial Buttons can be programmed to quickly select a station for calling and monitoring. They can also be programmed to quickly select a zone for paging. To program, use the Setting Button. When programmed, click a Speed Dial Button to display the assigned station. To call/page the selected station at a normal priority level, click the Talk Button. To call/page the selected station at a different priority level, click the Zoom / Wide Button to select the level before clicking the Talk Button. To monitor the selected station, click the Monitor Button.