



AX SERIES

Integratable Audio
& Video Security



**Versatile Intercom Communication
for any Security Demand**

COMPLETE SECURITY

Over half of all medium to large sized business establishments **limit access** into their building.

- Bureau of Labor Statistics



AX SERIES

gives you the
power to...

- **CONTROL**

entry security and
regulate access
into a building

- **COMMUNICATE**

easily and efficiently
while keeping your
facility secure

- **CONFIRM**

identity with crisp
audio and clear,
up-close video



COMMERCIAL



HEALTHCARE



EDUCATIONAL



GOVERNMENT

SYSTEM LAYOUT: STANDARD

CEU (AX-084C shown)

AX Series: Versatile System



Flexible system allows expansion up to 8 master stations and 120 door/sub/adaptor stations for complete building security.

Protect Remote Areas

Reduce exposure to risk in remote locations by adding door stations to parking garages, stanchions, gates, etc.

CAT-5e

IE-SSR



AX-DVF



CAT-5e

Monitor Interior Doorways

Secure access to restricted areas within a building by using the video door stations at interior locations.

Safeguard All Exterior Entrances

Protect front and rear doorways, loading docks, and service entries with video door stations.

CAT-5e

Scan Monitoring

Systematically listen to programmed door or sub stations, saving on labor and ensuring security.

CAT-5e

Vandal Resistant Door Stations

Enhance overall building security with vandal resistant video door stations at perimeter gates and outdoor entrances.

CAT-5e

Door Strikes & Magnetic Door Locks

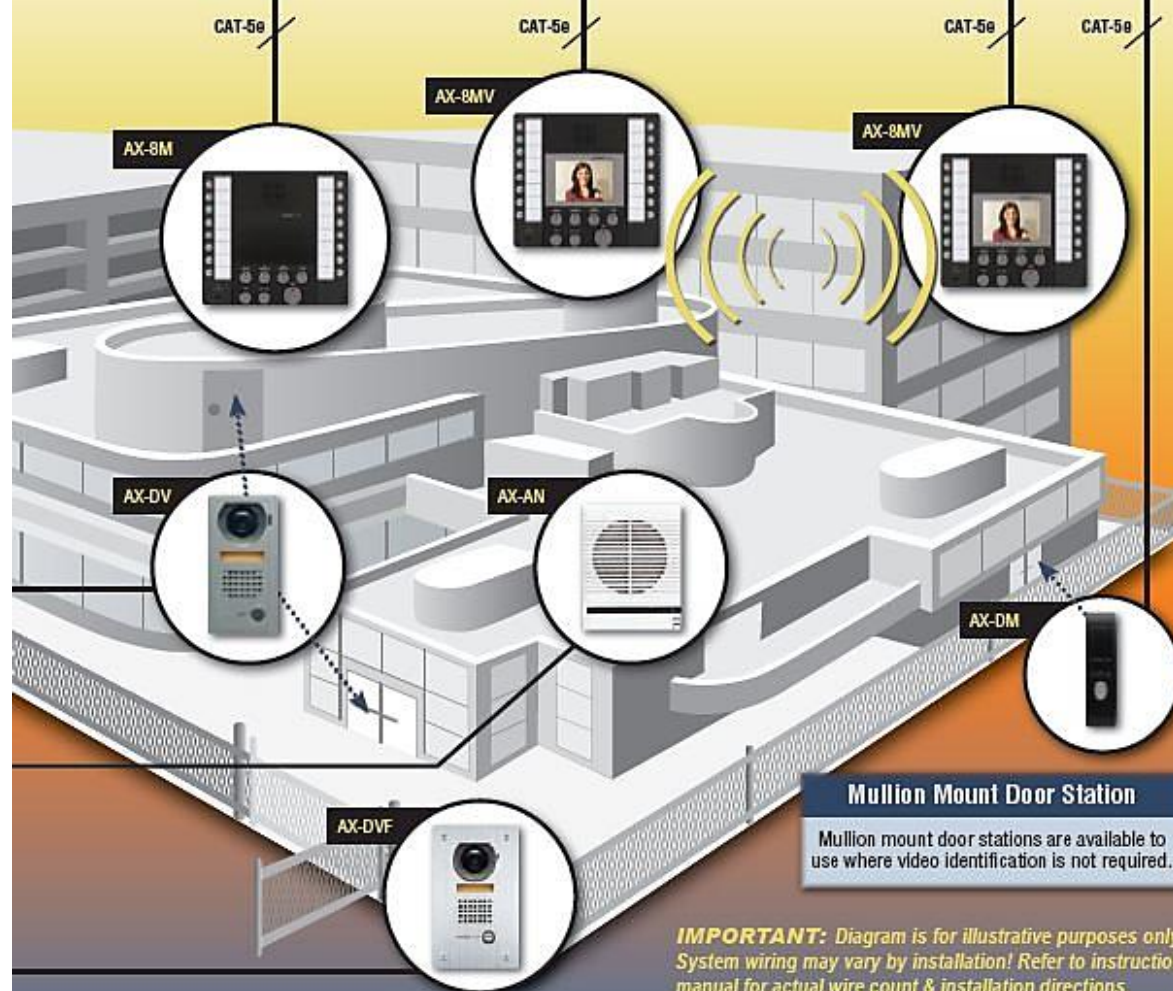
Door strikes or magnetic door locks can be controlled by the master stations.
(Requires additional wire)

Selective Calling

Use the master stations to selectively call all other master, door, and sub stations throughout the facility.

All Call & Group Call

Master stations have the ability to use All Call and Group Call features between other master stations.



Mullion Mount Door Station

Mullion mount door stations are available to use where video identification is not required.

IMPORTANT: Diagram is for illustrative purposes only. System wiring may vary by installation! Refer to instruction manual for actual wire count & installation directions.

SYSTEM LAYOUT: INTEGRATED

CEU (AX-248C shown)

AX Series: Mainstream Integration



Integrate the AX Series into existing security components including CCTV systems, electronic access control, and telephone transfer.

Viking Model K-1900-5
Programmable Dialer*

Telephone wire

Outside telephone line

CCTV Cameras

Monitor parking garages and other remote areas by integrating with a CCTV system.

IE-SSR

CCTV Camera*

CAT-5e

CAT-5e

CAT-5e

AXW-AZ

CAT-5e

Variable wire
(determined by product used)

AXW-AVR

Variable wire
(determined by product used)

Electronic Access Control

Authorize or deny access into a building, or areas within a building, using the electronic access control function.
(May require additional wire)

Keyless Entry

HID® embedded door stations are ideal for any location where keyless entry is wanted or required. (Host controller required for card readers. Not supplied by Aliphone)

Increase Wire Distance

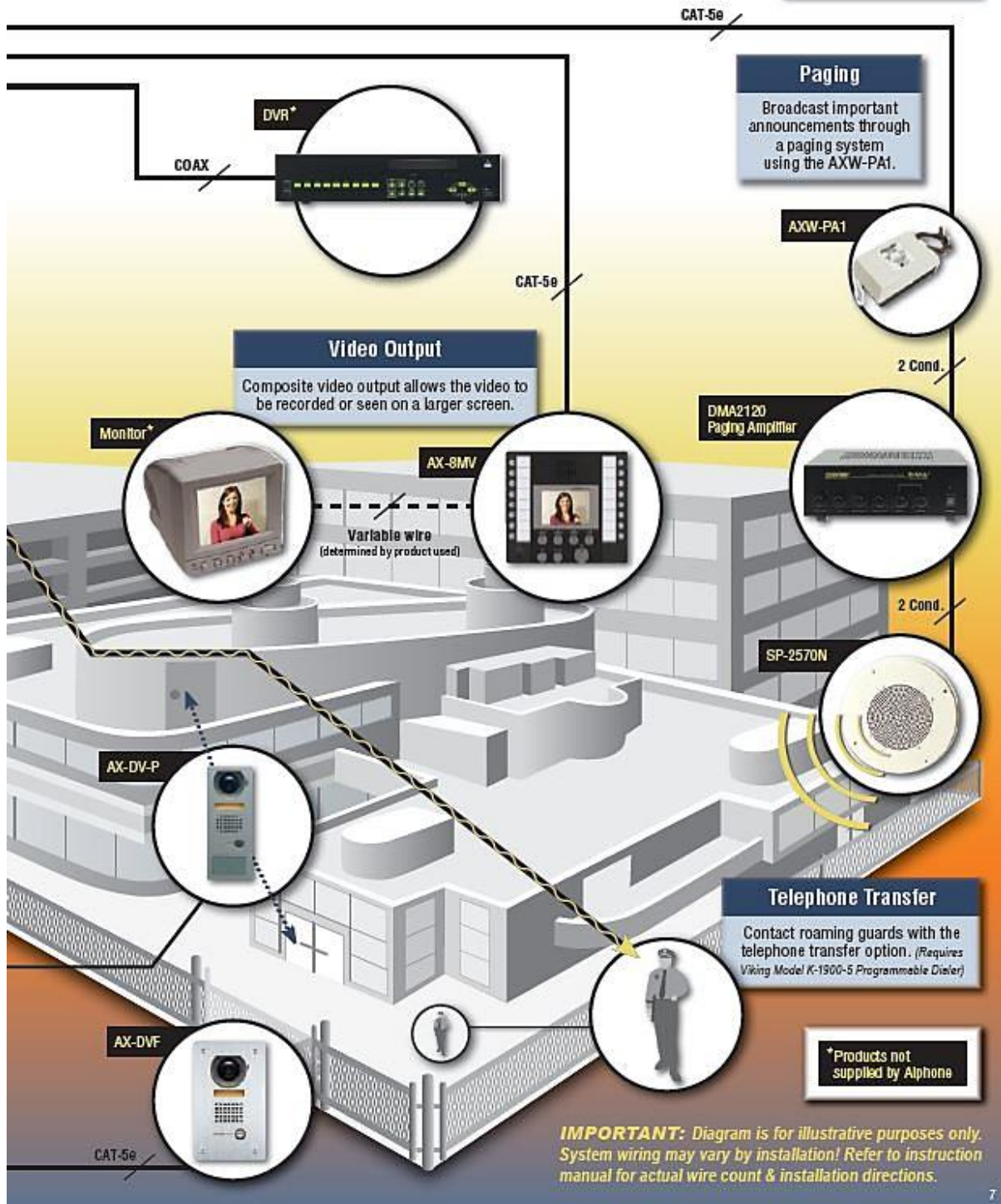
If a perimeter gate exceeds 980 ft., use the AXW-AVT and AXW-AVR along with fiber optic or other devices to extend the distance.
(Please see page 11 for a current list of compatible devices)

Utilize Infrastructure

The AXW-AVT and AXW-AVR allows the use of a facility's **existing** technologies and wiring systems.

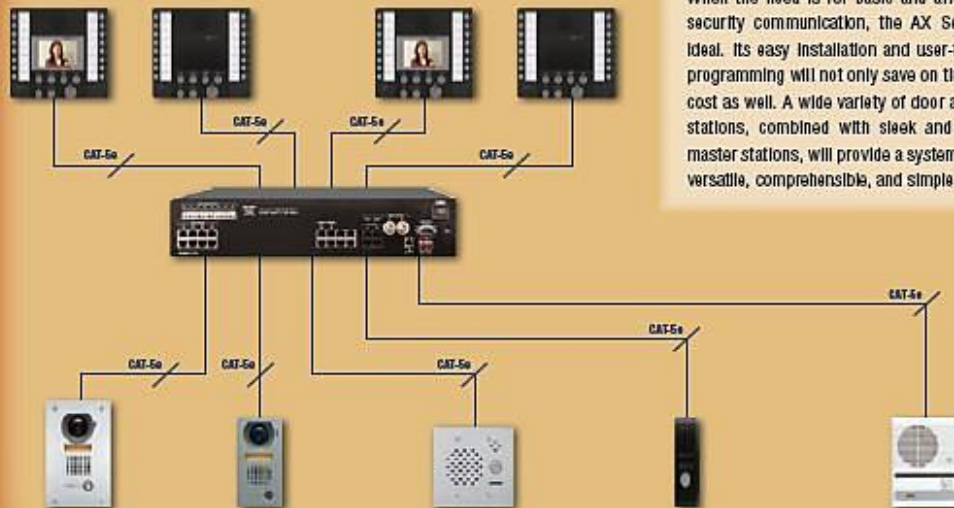
AXW-AVT





System Hardware Example

Basic Installation



When the need is for basic and affordable security communication, the AX Series is ideal. Its easy installation and user-friendly programming will not only save on time, but cost as well. A wide variety of door and sub stations, combined with sleek and sturdy master stations, will provide a system that is versatile, comprehensible, and simple to use.

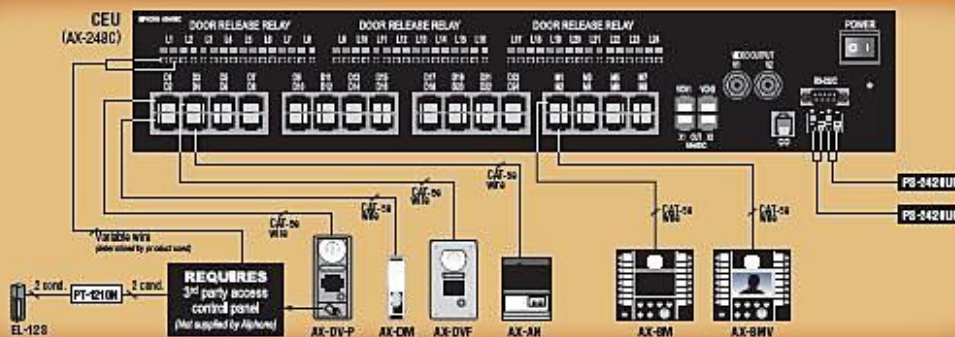
NOTE: Power supplies not shown. For a fully integrated installation, see the system software example on the next page.

System Software



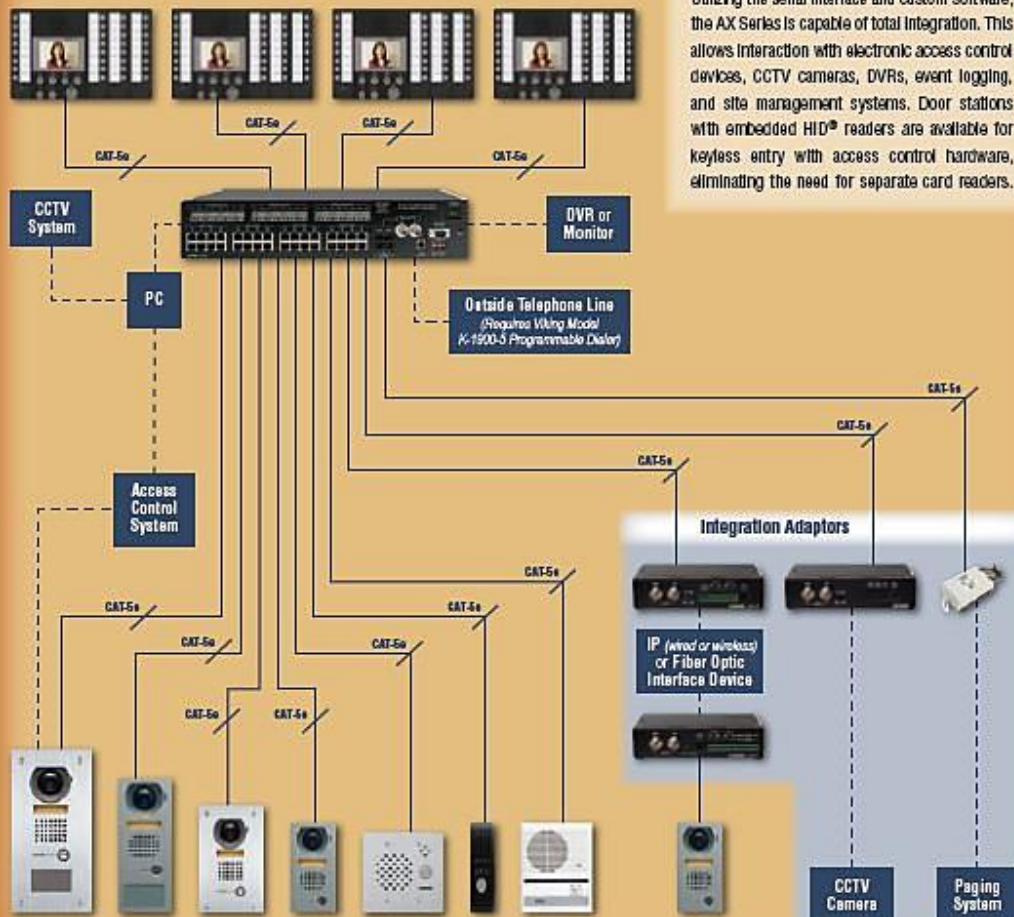
Features and functions are programmed using the custom software, included with the CEU. It is intuitive to use and allows you to set individual door stations' call-in length (10 seconds to 10 minutes, or infinite), call-in priority levels, scan monitoring inclusion, and door release relay activation and timing. In addition, the software features an easy to use interface for gathering log data, setting the communication method at the master (VOX or PTT), and data up/down loading.

System Wiring Diagram



System Integration Example

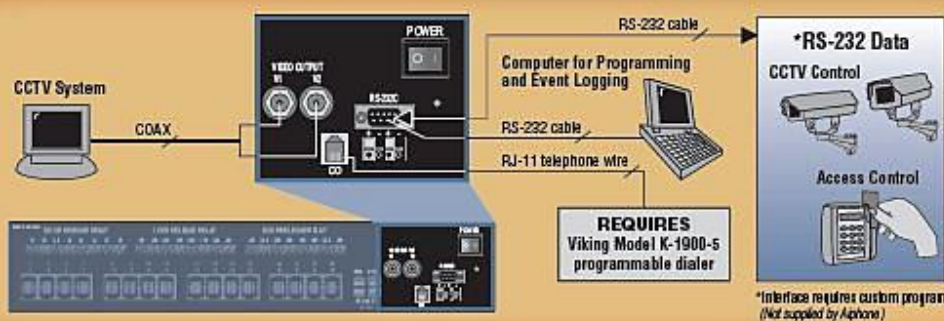
Fully Integrated Installation



Utilizing the serial interface and custom software, the AX Series is capable of total integration. This allows interaction with electronic access control devices, CCTV cameras, DVRs, event logging, and site management systems. Door stations with embedded HID® readers are available for keyless entry with access control hardware, eliminating the need for separate card readers.

NOTE: Power supplies not shown.

Integrated Wiring Diagram



Central Exchange Unit



AX-084C (Shown)
Central Exchange
Unit for 8 doors
and 4 masters

AX-248C
Central Exchange
Unit for 24 doors
and 8 masters

AX-320C
Add-on Exchange
Unit for 32 doors

- RJ-45 connectors for master and door stations
- Composite video output (BNC)
- RS-232 serial output
- Selective door release (Programmable to N/O or N/C)
- CCTV and access integration
- PC programmed
- Rack mountable (2U)

Master Stations



AX-8MV
Color Video
Master Station,
wall or desk
mount



AX-8MV-W
WHITE Color Video
Master Station,
wall or desk mount
(Up to max. of 8 door stations
and 8 master stations)



AX-8M
Audio Only
Master Station,
wall or desk
mount

- 3.5" color TFT LCD monitor (AX-8MV & AX-8MV-W only)
- Hands-free (VOX) or push-to-talk (PTT) communication
- All Call to master stations
- Scan monitoring
- Selective door release
- Privacy and mute functions
- Connection for headset and footswitch



AX-16SW
16-Call
Add-on
Selector

- Channels for additional door stations
- Aesthetically matches AX-8M and AX-8MV (Not recommended for the AX-8MV-W)

Component Matrix

						
Number of door stations, sub stations, or adaptors		Number of master stations	Number of add-on selectors per master	Number of central exchange units AX-084C AX-248C		Number of add-on exchange units
Up to 8		Up to 4	—	1	—	—
Up to 24		Up to 8	1	—	1	—
Up to 40		Up to 4	2	1	—	1
Up to 56		Up to 8	3	—	1	1
Up to 72		Up to 4	4	1	—	2
Up to 88		Up to 8	5	—	1	2
Up to 104		Up to 4	6	1	—	3
Up to 120		Up to 8	7	—	1	3

NOTES: Use the AX-248C for systems with more than 4 master stations (May effect the required quantity of AX-320C).
Two PS-2420UL power supplies are required per system.

Door Stations

Weather & Vandal Resistant Video Door Stations - Surface Mount



AX-DV
Fixed Color Video Door Station, aluminum die cast, surface mount



AX-DV-P
Fixed Color Video Door Station with HID® ProxPoint® Plus Card Reader, aluminum die cast, surface mount



AX-DV-XP
Fixed Color Video Door Station with embedded Stand-Alone Card Reader and host controller, aluminum die cast, surface mount

Weather & Vandal Resistant Video Door Stations - Flush Mount



AX-DVF
Fixed Color Video Door Station, stainless steel, flush mount



AX-DVF-P
Fixed Color Video Door Station with embedded HID® ProxPoint® Plus Card Reader, stainless steel, flush mount



AX-DVF-XP
Fixed Color Video Door Station with embedded Stand-Alone Card Reader and host controller, stainless steel, flush mount

Weather Resistant Audio Only Door Stations - Surface Mount



AX-DM
Audio Door Station, plastic cover, mullion surface mount



IF-DA
Audio Door Station, plastic cover, surface mount



IE-DC
Audio Door Station, plastic and aluminum cover, surface mount

Weather & Vandal Resistant Audio Door Stations - Flush Mount



IE-SS
Door Station, stainless steel, flush mount



IE-SSR
Door Station with a red mushroom call button, stainless steel, flush mount

Weather Resistant Audio Only Door Station - Flush Mount



IE-JA
Door Station, stainless steel faceplate, flush mount

Weather & Vandal Resistant CCTV Camera Audio Door Station - Flush Mount



IE-SSV
Door Station with a built-in CCTV camera, stainless steel, flush mount (Requires AXW-AZ)

Sub Stations



AX-A
Sub Station, plastic cover, surface mount

AX-AN (Shown)
Privacy Sub Station, plastic cover, surface mount

AX-B
Sub Station, plastic cover, semi-flush mount

AX-BN
Privacy Sub Station, plastic cover, semi-flush mount

Integration Adaptors

Approved Devices for AXW-AVT & AXW-AVR

Manufacturer	Model	Type
AFI (American Fiberdek)	MT/MR -1990	Fiber Optic
Infinova	N3732TA-M / N3732RA-M	Fiber Optic
Meridian Technologies	ST / SR-1W2A2C2G / 2A2C2G-X	Fiber Optic

NOTE: The list of approved devices (above) is subject to change. For an updated list, please contact Aiphone Technical Support (Mon.-Fri., 8:00am-4:30pm) at (800) 692-0200 or e-mail tech@aiphone.com.



AXW-AZ
CCTV Camera Input Module



AXW-PA1
Paging Adaptor



AXW-AVT
Door Station IP or Fiber Optic Transmission Interface Unit



AXW-AVR
Door Station IP or Fiber Optic Reception Interface Unit

AX Series - Options & Accessories

 XP Kit Includes keypad (XRP3), programming cards, and 10 blank entry cards (XC571)	 HID-SS Accessory Station with an embedded HID® ProxPoint® Plus Card Reader	 ICP-8R Brass Faceplate for IE-JA	 ICP-AB Antique Brass Faceplate for IE-JA	 SBX-2G Surface Mount Box for HID-SS, IE-JA, IE-SS, IE-SSR, or IE-SSV	 SBX-2BH Horizontal Surface Mount Box for HID-SS and IE-JA, IE-SS, IE-SSR, or IE-SSV	 SBX-2BV Vertical Surface Mount Box for HID-SS and IE-JA, IE-SS, IE-SSR, or IE-SSV
 SBX-AXDV30 30° Angle Box for AX-DV	 SBX-AXDVF Surface Mount Box for AX-DVF	 SBX-DVF-P Surface Mount Box for AX-DVF-P and AX-DVF-XP	 EL-12S Electric Door Strike, 12V AC/DC, 200mA (Requires PTF-120W)	 IER-2 Call Extension Speaker	 TAR-3 External Signaling Relay (Requires SPK-4200)	 MCW-S/A Master Station Desk Stand
					 RY-24L Form C Door Release Relay (1 per door)	

Unit Dimensions

MODEL	HEIGHT	WIDTH	DEPTH	MODEL	HEIGHT	WIDTH	DEPTH	MODEL	HEIGHT	WIDTH	DEPTH
AX-084C	3-7/16"	18-7/8"	13-3/16"	AX-DV-P	9-5/8"	3-15/16"	1"	IE-SSR	4-3/4"	4-3/4"	2"
AX-248C	3-7/16"	18-7/8"	13-3/16"	AX-DVF-P	11-5/8"	5-3/4"	1-7/8"	IE-SSV	4-3/4"	4-3/4"	2"
AX-320C	3-7/16"	18-7/8"	13-3/16"	AX-DV-XP	9-5/8"	3-15/16"	1"	AX-A	7-1/16"	5-5/8"	2-3/16"
AX-8M	6-7/8"	7-5/8"	1-7/8"	AX-DVF-XP	11-5/8"	5-3/4"	1-7/8"	AX-AN	7-1/16"	5-5/8"	2-3/16"
AX-8MV	6-7/8"	7-5/8"	1-7/8"	AX-DM	6-5/16"	1-11/16"	7/8"	AX-B	8-3/16"	6"	1-15/16"
AX-8MV-W	6-7/8"	7-5/8"	1-7/8"	IF-DA	5-1/8"	3-7/8"	1-1/8"	AX-BN	8-3/16"	6"	1-15/16"
AX-16SW	6-7/8"	3-3/8"	1-7/8"	IE-DC	5-5/16"	4"	1-11/16"	AXW-AZ	1-5/8"	7"	4"
AX-DV	7-11/16"	3-15/16"	1"	IE-JA	4-1/2"	4-9/16"	1-3/16"	AXW-AVT	1-5/8"	7"	4"
AX-DVF	9-11/16"	5-3/4"	1-7/8"	IE-SS	4-3/4"	4-3/4"	2"	AXW-AVR	1-5/8"	7"	4"

Specifications

Power source	24V DC - Use two PS-2420UL
Calling	Tremolo and LED 10-600 secs. (programmable) or Infinite
Communication	Push TALK button to reply, communication times out in 30-600 secs. (programmable)
Video Monitor	3-1/2" direct view TFT color LCD
Camera	250,000 pixels
Scanning Line	525 lines
Door Release	Programmable N/O or N/C dry contact, 24V AC/DC, 500mA max. Use RY-24L for larger contact rating
Wiring	Homerun CAT-5e wire to CEU
Distance	Door stations to CEU: 980' CEU to master stations: 980'
Wire type	CEU to master stations: CAT-5e Video Door stations to CEU: CAT-5e IE door stations to CEU: CAT-5e

System Features

- CAT-5e wiring homerun from each station
- Up to 8 masters and 120 doors/subs/adapters
- Two talk channels
- Hands-free (VOX) or push-to-talk (PTT) communication
- Selective calling between masters and from masters to door/sub stations
- Masters available with 3-1/2" color TFT LCD monitor
- Composite video output from CEU and video masters
- Normal or priority call levels
- Scan monitoring
- Data output on CEU provides custom integration capability with CCTV and access control systems*
- PC programmable with a large variety of settings
- All Call or Group Call to master stations
- Compatible with IE and IF Series door stations
- Transfer calls to an outside phone line (requires Viking Model K-1900-5 programmable dialer)
- Optional Features: Headset, footswitch, call transfer to telephone, and PC remote control*

*Interface requires custom program (not supplied by Aiphone)

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Aiphone Co. Ltd.



Aiphone Corp.



Aiphone Co. Ltd.



Aiphone Corporation

1700 130th Ave. NE

Bellevue, WA 98005

Phone: (800) 682-0200

Fax: (425) 455-0071

www.aiphone.com