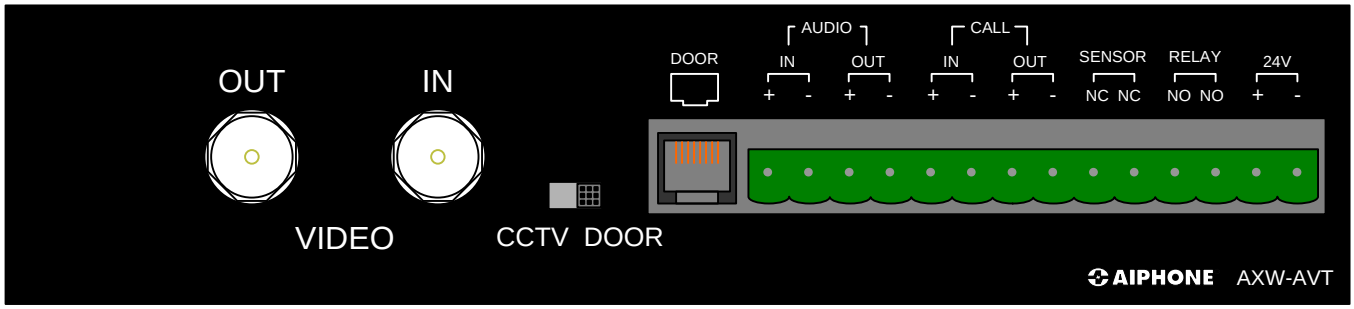
AXW-AVT

AX Series Audio-Video Adaptor for 3rd Party Transmission Equipment

- INSTRUCTIONS -

The AXW-AVT is designed to allow connection of a standard AX-series audio video door station (or audio-only IE-series door station) via the AXW-AVT, conditioning the signal for use with 3rd party transmission equipment (Ethernet). External video input is provided at adaptor to allow 3rd party camera input, output to recording devices, etc. A motion detector or other activation device can be connected to the Sensor input to trigger door / camera activation. The units also feature a relay output to trigger an external device, such as a DVR or video switcher local to the AXW-AVT whenever the audio and/or video is active. Alternatively, the AXW-AVT can be used to adapt an AX-series audio video door station to a standalone third party device (video server, network DVR, etc).

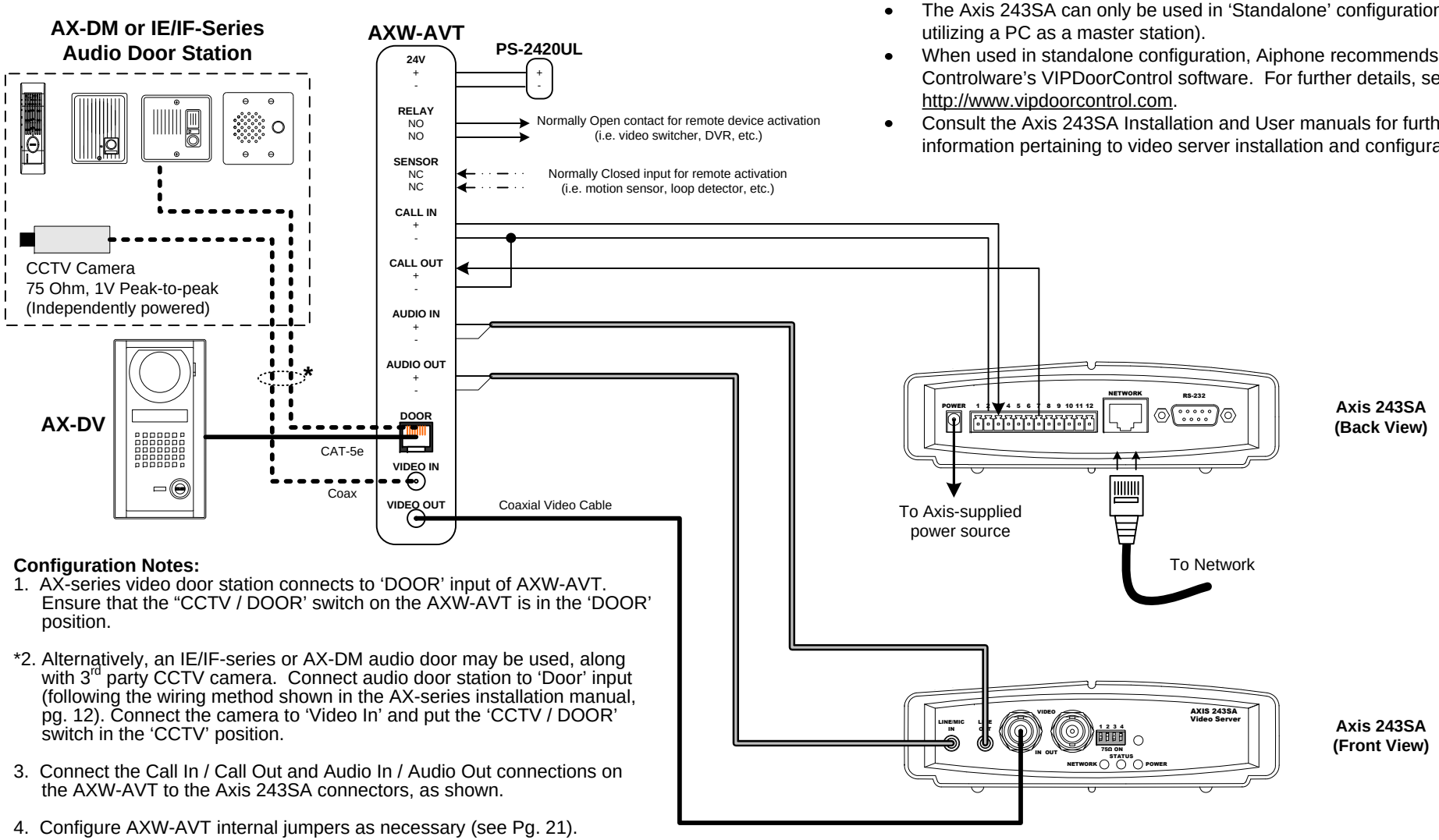
AXW-AVT



AXW-AVT TERMINAL DEFINITIONS:

DOOR (RJ-45 Jack):	RJ-45 connection from AX-series audio video door, or spliced audio only door (IE/IF-series).
AUDIO IN/OUT:	Input / Output connections for audio transmission (line level, polarity indicated by '+' and '-').
CALL IN/OUT:	Transistor-switched input / output to be connected to relay input / output on transmission equipment. 'Call In' indicates call placed by door station, 'Call Out' indicates master-initiated activity (polarity indicated by '+' and '-').
SENSOR NC, NC:	Normally Closed contact input, activates 'Call In' function when tripped by external motion detector or other device with N/C contacts.
RELAY NO, NO:	Normally Open relay contact, activated whenever communication is active.
VIDEO IN:	Composite input signal from CCTV camera, if used in place of AX-series audio video door station.
VIDEO OUT:	Composite output to external transmission equipment. Source dependent upon CCTV / DOOR switch.
CCTV / DOOR SWITCH:	Determines whether AX-series audio/video door station video ('DOOR' setting) or external CCTV video ('CCTV' setting) will be present on 'VIDEO OUT' for connection to external transmission equipment.
24V +, -	24V DC input (use Aiphone PS-2420UL).

CONFIGURATION DIAGRAM:
AXW-AVT with Axis 243SA Video Server (*Standalone Only*)



Axis 243SA Application Considerations:

- The Axis 243SA can only be used in 'Standalone' configuration (i.e., utilizing a PC as a master station).
- When used in standalone configuration, Aiphone recommends Controlware's VIPDoorControl software. For further details, see http://www.vipdoorcontrol.com.
- Consult the Axis 243SA Installation and User manuals for further information pertaining to video server installation and configuration.

Configuration Notes:

1. AX-series video door station connects to 'DOOR' input of AXW-AVT. Ensure that the "CCTV / DOOR' switch on the AXW-AVT is in the 'DOOR' position.

*2. Alternatively, an IE/IF-series or AX-DM audio door may be used, along with 3rd party CCTV camera. Connect audio door station to 'Door' input (following the wiring method shown in the AX-series installation manual, pg. 12). Connect the camera to 'Video In' and put the 'CCTV / DOOR' switch in the 'CCTV' position.

3. Connect the Call In / Call Out and Audio In / Audio Out connections on the AXW-AVT to the Axis 243SA connectors, as shown.

4. Configure AXW-AVT internal jumpers as necessary (see Pg. 21).

Please Note:
Only information pertaining to the connection and operation of the AXW-AVT / AXW-AVR and listed 3rd party devices interfacing with it are included here. Aiphone is not responsible for attempts to connect the AXW-AVT / AXW-AVR to untested 3rd party transmission hardware. Consult the installation manual for the 3rd party device being utilized for further information regarding physical mounting, base functionality, power requirements, etc. For the most up-to-date compatibility information, please consult http://www.aiphone.com or contact Aiphone Technical Support.

For complete AX system installation, wiring, and programming information, please consult the AX Installation Manual (included on CD with AX Central Exchange Unit, or available at http://www.aiphone.com).

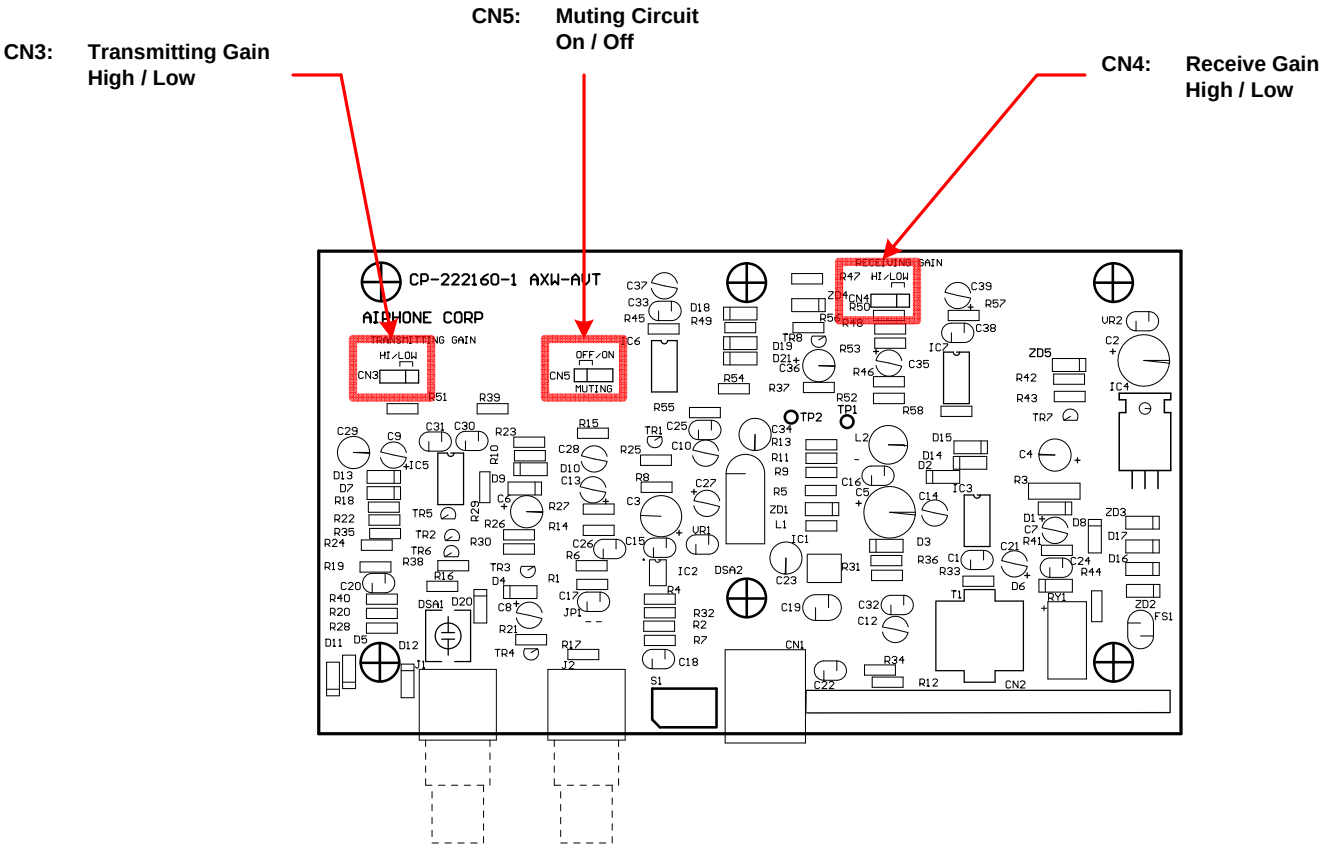
AXW-AVT Internal Jumper Settings:

The AXW-AVT has three internal jumper settings to control the functionality and conditioning of the audio circuitry. These should be adjusted as necessary, based on the selection of fiber / Ethernet equipment used. To access these jumpers, the chassis of the AXW-AVT will need to be opened. Adjusting these jumper settings will NOT invalidate the AXW-AVT's warranty.

Transmitting Gain (CN3): Controls the amount of amplification applied to the outgoing audio ('Audio Out') connection of the AXW-AVT. A 'Low' setting provides no gain, whereas a 'Hi' setting applies approximately +10db of amplification. Default position is 'Low.'

Receive Gain (CN4): Controls the amount of amplification applied to the incoming audio ('Audio In') connection of the AXW-AVT. A 'Low' setting provides no gain, whereas a 'Hi' setting applies approximately +10db of amplification. Default position is 'Low.'

Muting Circuit (CN5): The 'Muting Circuit' controls whether audio to/from the door station is completely full-duplex, or limited to one direction or the other (semi-duplex). This adjustment is required in situations where latency may be present between audio transmission and reception (i.e., Ethernet). In such situations, the muting circuit should be set to 'On' to reduce audible echoing. In situations where latency is not an issue (i.e., fiber, direct connections, etc.), this should be left in the default 'Off' position.



SPECIFICATIONS:

Power:		
	AXW-AVT	24V DC, 500mA (use Aiphone PS-2420UL)
Video Input & Output:		Composite 1V Peak-to-Peak, NTSC
Video Connectors:		BNC
Door input:		RJ-45
Relay:		Normally Open contact output; 30V DC, 1A
Sensor:		Normally Closed contact input
Wire:		CAT-5e, 24AWG UTP-4
Wiring distance:		
	AXW-AVT to Door,	Max. 980' cumulative
	AXW-AVT to 3rd party devices	As close as possible; do not exceed 16'
Dimensions:		
	AXW-AVT	1-5/8"H x 7"W x 4"D

FCC Class B Verification

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device , pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

— Reorient or locate the receiving antenna.
— Increase the separation between the equipment and receiver.
— Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
— Consult the dealer or an experienced radio/TV technician for help.

Note:
Only information pertaining to the connection and operation of the AXW-AVT and devices interfacing with it are included here. Aiphone is not responsible for attempts to connect the AXW-AVT to untested 3rd party transmission hardware. For the most up-to-date compatibility information, please consult http://www.aiphone.com or contact Aiphone Technical Support. For complete installation, wiring, and programming information regarding the AX system, please refer to the AX Installation Manual, which is included on the CD provided with the AX CEU, or available for download at http://www.aiphone.com.