



AXIS 282/282A

Bare Board Video Server

Installation Guide

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This installation guide is applicable for the following Axis Video Servers:

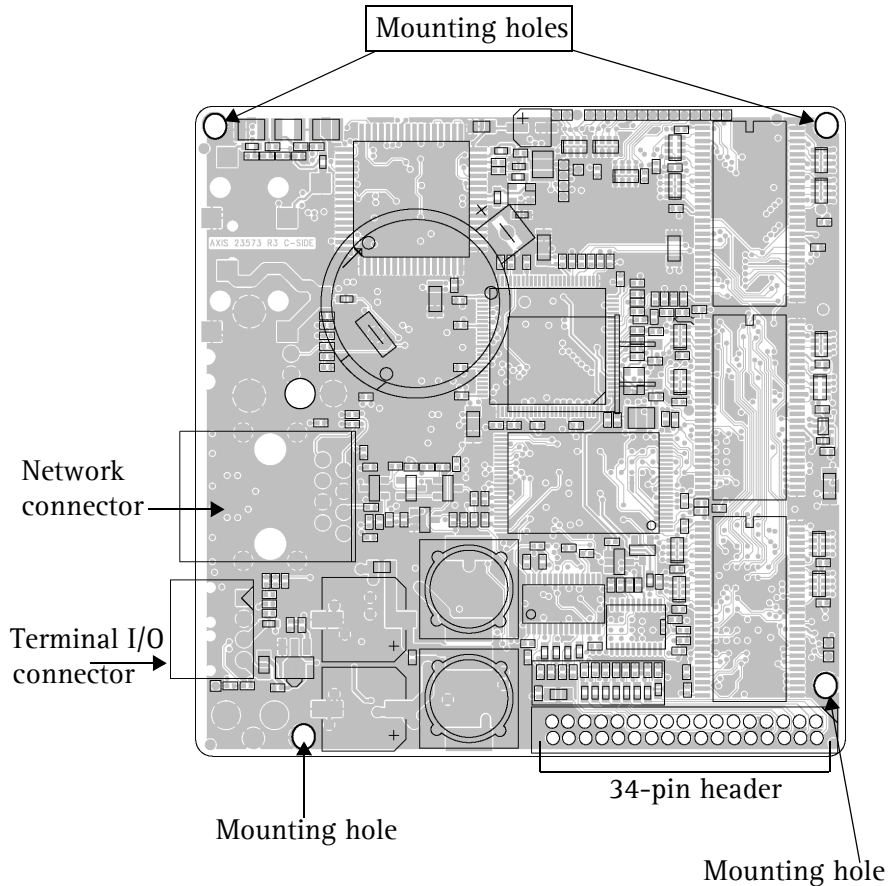
- AXIS 282: 1-port bare board video server
- AXIS 282A: 1-port bare board video server including 2-way audio

For a complete description, get the **AXIS 282/282A Bare Board Video Server User's Manual** online from Axis Web site, www.axis.com

The AXIS 282/282A is a small form factor video server board designed to be built into domes, fixed view cameras, PTZs, analog devices, etc., and is fully featured for security surveillance and remote monitoring needs. The AXIS 282 is based on the AXIS ETRAX 100LX network optimized system-on-a-chip (SOC), and the AXIS ARTPEC-2 compression chip.

The AXIS 282/282A is equipped with RS-232 or RS-485 ports for connecting third party PTZ systems. It also has 1 alarm input and 1 alarm output, which can be used to connect various third party devices, for example door sensors and alarm bells.

The AXIS 282A has a Line/Mic In (mono), via the internal connector I/O pins, for connecting an external microphone or other source producing a line level signal. An active speaker with a built-in amplifier can be connected to Line Out (mono) to enable two-way communication. Audio communication can be bi-directional (full-duplex), push to talk (half-duplex) or in one direction only (simplex).

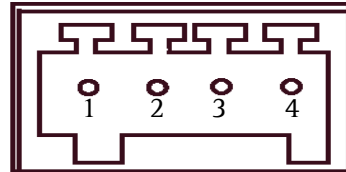
AXIS 282/282A Top**Not included:**

- 4 M2 screws - needed for mounting AXIS 282/282A
- 34 pin IDC female connector (2mm)

The Terminal I/O Connector

The AXIS 282/282A provides one 4-pin terminal I/O connector.

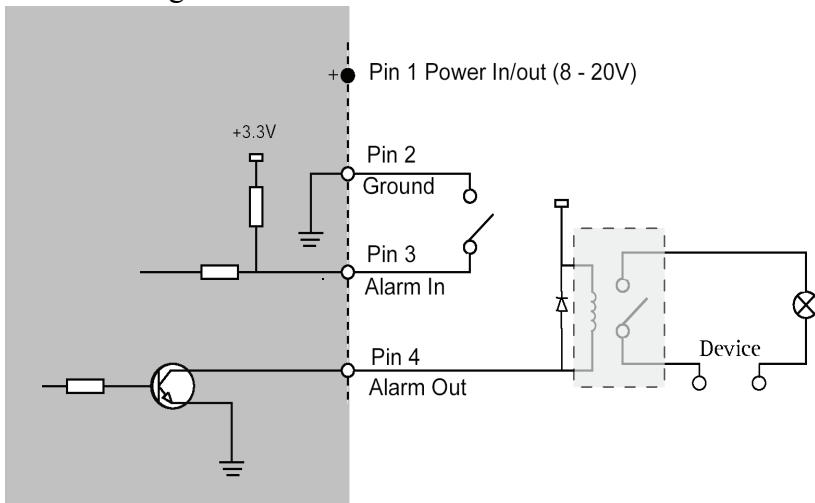
Pin	Function
1	Power in/out (8 - 20V)
2	GND
3	Alarm In
4	Alarm Out



Note: Pins 3 and 4 in the Terminal I/O Connector are the same Alarm In and Alarm Out as pins 8 and 9 in the 34-Pin Header.

If the AXIS 282/282A has been configured to have power going in through the 34 I/O pins, power can be configured to go out through pin 1 of the Terminal I/O Connector.

Schematic Diagram - Terminal I/O Connector



Network connector

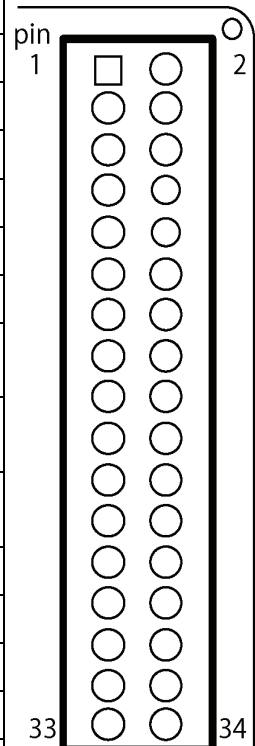
The AXIS 282/282A connects to the network via a standard STP network cable, and automatically detects the speed of the local network segment (Ethernet 10BaseT/100BaseTX, RJ-45).

The 34-Pin Header

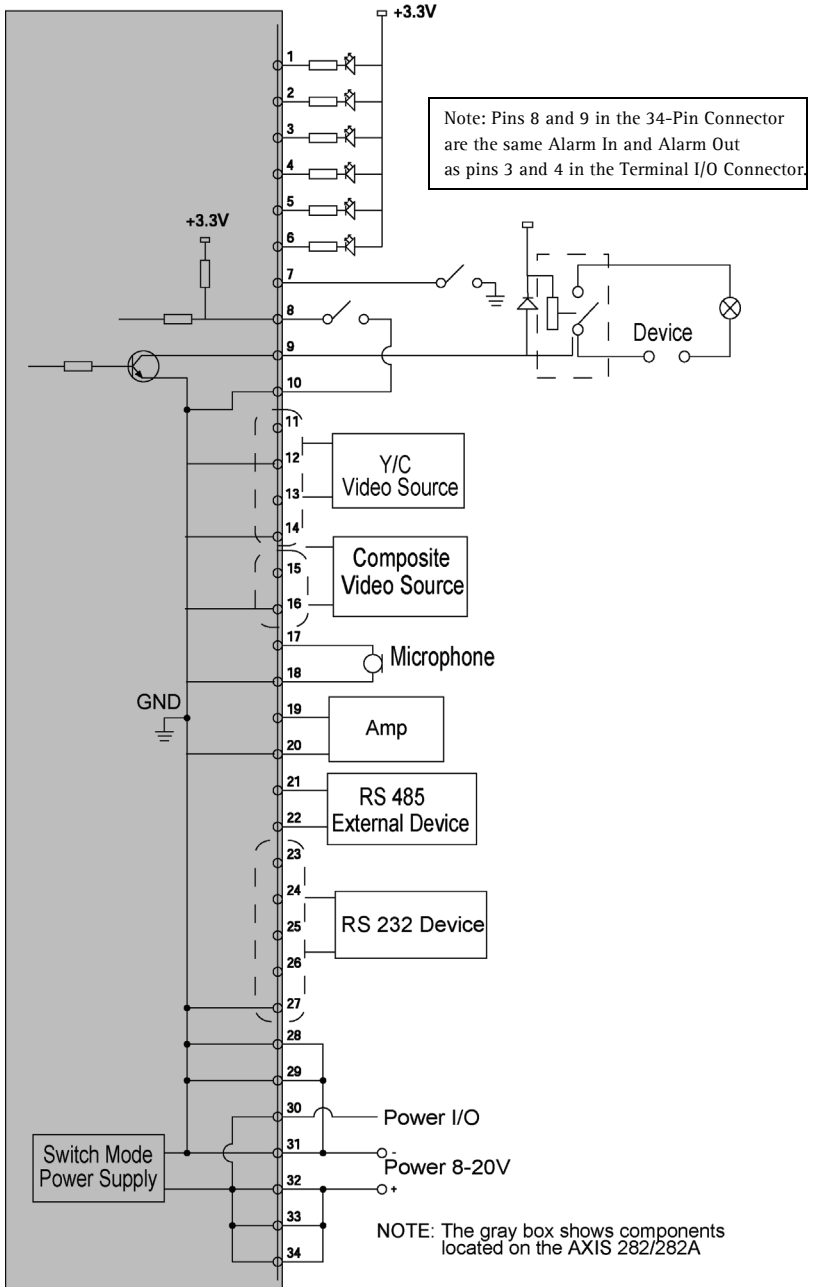
The AXIS 282/282A has a 34-Pin Header to be used with a 2mm IDC connector. Connections include:

- Serial port, configurable as RS-232 or RS-485, which is typically used for connecting Pan/Tilt/Zoom devices.
- Video in and out connections
- Audio in and out connections
- LED outputs
- DC power auxiliary connection point

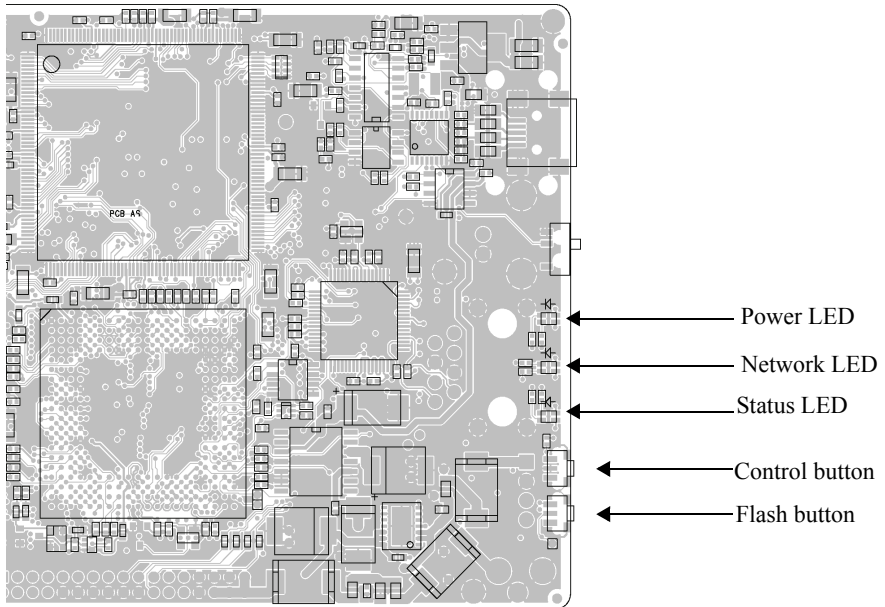
Pin	Function	Pin	Function
1	Network LED green	2	Network LED red
3	Status LED green	4	Status LED red
5	Flash LED	6	Power LED
7	Control button	8	Alarm In
9	Alarm Out	10	Ground
11	Y/C Video in (Y)	12	Y/C GND
13	Y/C Video in (C)	14	Y/C GND
15	Composite Video In	16	Composite Video Source GND
17	<ul style="list-style-type: none"> •AXIS 282: Not used •AXIS 282A MIC/Line in 	18	Mic/Line in GND
19	<ul style="list-style-type: none"> •AXIS 282: Not used •AXIS 282A Audio/Line out 	20	Line Out GND
21	RS-485 B	22	RS-485 A
23	Serial port RTS (RS-232)	24	Serial port CTS (RS-232)
25	Serial port TXD (RS-232)	26	Serial port RXD (RS-232)
27	Serial port GND	28	Power GND
29	Power GND	30	Power I/O
31	Power GND	32	Power IN
33	Power IN	34	Power IN



Schematic Diagram - 34 I/O Pins



AXIS 282/282A Bottom



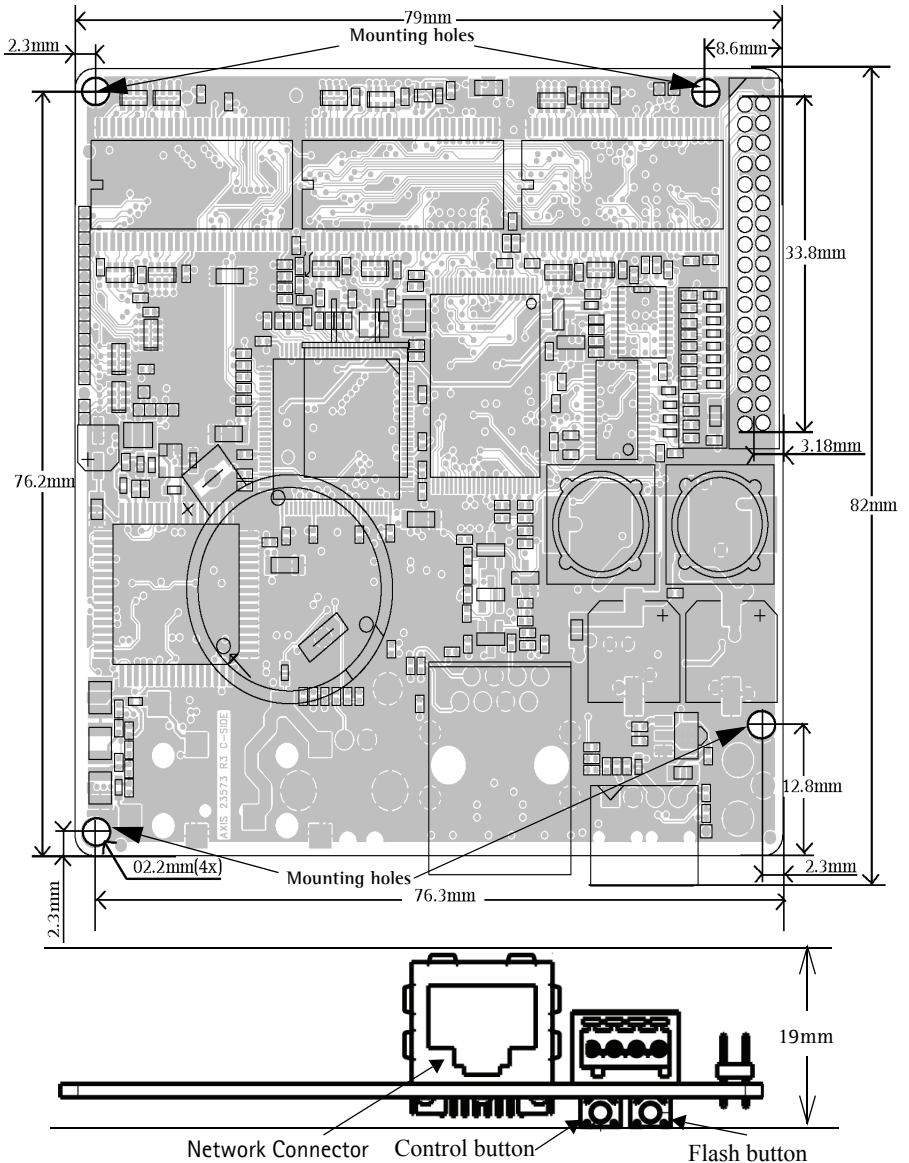
LED indicators - See AXIS 282/282A User's Manual for a complete listing of the status of the colored Status, Network, and Power indicators.

Control button - Used to restore the factory default settings, as described in AXIS 282/282A User's Manual.

Flash button - The AXIS 282/282A has a flash button. Used only for firmware programming in the factory and not when upgrading the firmware! See AXIS 282/282A User's Manual for more information.

Integration of the AXIS 282/282A

Mechanical integration may be done through the 4 mounting holes on the AXIS 282/282A, shown in the figure below. Electrical integration of the AXIS 282/282A is done through the connectors described here.



Technical Specifications

Item	Specification
Models	<ul style="list-style-type: none"> • AXIS AXIS 282: 1-channel bare board video server • AXIS AXIS 282A: 1-channel bare board video server with two-way audio
Audio features AXIS 282A only	<ul style="list-style-type: none"> • G.711 PCM 64kbit/s, G.726 ADPCM 32 or 24 kbit/s, full duplex, half duplex, simplex or audio off
Connectors	<ul style="list-style-type: none"> • One 34-pin I/O header <ul style="list-style-type: none"> - 1 analog composite or Y/C video input (NTSC/PAL autosensing) - RS-485 or RS-232 port - 1 alarm input, 1 alarm output - Power connection (input and output) - LED outputs - Audio input (282A): Microphone (54 mVpp) or Line in (8.0 Vpp), mono - Audio output (282A): Line out (2.6 Vpp), mono • Terminal block: <ul style="list-style-type: none"> - 1 alarm input, 1 alarm output - Alternative power connection • Ethernet 10Base/100BaseTX,RJ-45 connector
Power	<ul style="list-style-type: none"> • Via pin 3 of the Terminal Block: 8 – 20V DC, max 8W • Via pins 32 – 34 of the 34-pin header: 8 –20V DC, max 8W
Operating conditions	<ul style="list-style-type: none"> • Temperature: 5°C (41°F) to 50°C (122°F) • Humidity: 20-80% RH (non-condensing)
Installation, management and maintenance	User's manual and installation tool available at www.axis.com Web-based configuration, Configuration backup and restore Firmware upgrades over HTTP or FTP, firmware available at www.axis.com
Approvals	<ul style="list-style-type: none"> • AXIS 282/AXIS 282A is delivered as a component for the sole purpose of being integrated into a product or system. The foregoing implies an obligation on behalf of the integrator to obtain any approvals from authorities or governmental bodies that may be required for the lawful use of the finished product or system, which includes the AXIS 282/AXIS 282A as a component. Resale and use of the AXIS 282/AXIS 282A on a stand-alone basis is not allowed.
Dimensions	<ul style="list-style-type: none"> • HxWxD = 19 x 79 x 82mm (3/4" x 3 1/8" x 3 1/4") • Weight: 60g (2 1/8oz)

For a complete detailed description of technical specifications see the AXIS 282/282A Bare Board Video Server User's Manual.

