

# AXIS C1610-VE Network Sound Projector

Sleek, robust speaker for clear speech

This network sound projector features a clean and minimalistic design suited to both outdoor and indoor environments. Digital signal processing (DSP) ensures clear sound, and embedded audio management software lets users remotely coordinate security, safety, and operational messages alongside background music. Built-in memory supports prerecorded messages, and live speak lets personnel address events in real time. Built on open standards, this speaker supports integration with network video, access control, analytics, and VoIP (supporting SIP). This standalone unit connects directly to your standard network for a flexible, scalable, cost-effective audio solution. Furthermore, its IK10 vandal-resistant rating allows for placement almost anywhere.

- > **Sleek, vandal-resistant design**
- > **All-in-one, outdoor-ready speaker system**
- > **Connects to standard network**
- > **Simple installation with PoE**
- > **Remote health testing**



# AXIS C1610-VE Network Sound Projector

## Audio hardware

### Enclosure

One-way enclosure with 4-inch broadband dynamic cone speaker

### Max sound pressure level

106 dB

### Frequency response

200 Hz – 16 kHz

### Coverage pattern

130° (at 2 kHz)

### Audio input/output

Built-in microphone (can be disabled mechanically)

### Built-in microphone specification

50 Hz – 15 kHz

### Amplifier description

Built-in 7 W Class D amplifier

### Digital signal processing

Built-in and pre-configured

## Audio management

### AXIS Audio Manager Edge

Built in:

- Zone management allowing you to divide up to 200 speakers into 20 zones.
- Content management for music and live/pre-recorded announcements.
- Scheduling to decide when and where to play content.
- Content prioritization to ensure urgent messages interrupt the schedule.
- Health monitoring for remote discovery of system errors.
- User management to control who has access to what features.

For more details, see the datasheet on [axis.com/products/axis-audio-manager-edge/support](https://axis.com/products/axis-audio-manager-edge/support)

### AXIS Audio Manager Pro

For larger and more advanced systems. Sold separately. For specifications, see the datasheet on [axis.com/products/axis-audio-manager-pro/support](https://axis.com/products/axis-audio-manager-pro/support)

### AXIS Audio Manager Center

AXIS Audio Manager Center is a cloud service for remote access and management of multi-site systems. For specifications, see the datasheet on [axis.com/products/axis-audio-manager-center/support](https://axis.com/products/axis-audio-manager-center/support)

## Audio software

### Audio streaming

One-way/two-way with optional half-duplex echo cancellation. Mono.

### Audio encoding

AAC LC 8/16/32/48 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz, Axis  $\mu$ -law 16 kHz, WAV, Opus 8/16/48 kHz  
MP3 in mono/stereo from 64 kbps to 320 kbps.  
Constant and variable bit rate.  
Sampling rate from 8 kHz up to 48 kHz.

## System integration

### Application Programming Interface

Open API for software integration, including VAPIX® and AXIS Camera Application Platform (ACAP).  
One-click cloud connection

### Video management systems

Compatible with AXIS Camera Station Edge, AXIS Camera Station Pro, AXIS Camera Station 5, and video management software from Axis' partners available at [axis.com/vms](https://axis.com/vms).

### Mass notification

Singlewire InformaCast®, Intrado Revolution, Lynx, Alertus

### Unified communication

Verified compatibility:

**SIP clients:** 2N, Yealink, Cisco, Linphone, Grandstream  
**PBX/SIP servers:** Cisco Call Manager, Cisco BroadWorks, Avaya, Asterix, Grandstream  
**Cloud service providers:** Webex, Zoom

### SIP

**Supported SIP features:** Secondary SIP server, IPv6, SRTP, SIPS, SIP TLS, DTMF (RFC2976 and RFC2833), NAT (ICE, STUN, TURN)  
**RFC 3261:** INVITE, CANCEL, BYE, REGISTER, OPTIONS, INFO  
**DTMF (RFC 4733/RFC 2833)**

## Event conditions

Audio: audio clip playing, speaker test result  
Call: state, state change  
Device status: IP address blocked/removed, new IP address, network lost, system ready, live stream active  
Edge storage: recording ongoing, storage disruption, storage health issues detected  
I/O: digital input, manual trigger, virtual input  
MQTT: stateless  
Scheduled and recurring: schedule

## Event actions

Audio: run automatic speaker test  
Audio clips: play, stop  
I/O: toggle I/O once, toggle I/O while the rule is active  
LEDs: flash status LED, flash status LED while the rule is active  
Light and siren: run light profile, run light profile while the rule is active, stop activities  
MQTT: publish  
Notification: HTTP, HTTPS, TCP and email  
Recordings: record audio, record audio while the rule is active  
Security: erase configuration  
SNMP traps: send, send while the rule is active

## Built-in installation aids

Test tone verification and identification

## Functional monitoring

Auto Speaker Test (verification via built-in microphone)

## Approvals

### EMC

EN 55032 Class B, EN 50121-4, EN 61000-6-1, EN 61000-6-2, IEC 62236-4, EN 55024  
Australia/New Zealand: RCM AS/NZS CISPR 32 Class B  
Canada: ICES-3(B)/NMB-3(B)  
Japan: VCCI Class B  
Korea: KC KN32 Class B, KC KN35  
USA: FCC Part 15 Subpart B Class B  
Railway: IEC 62236-4

### Safety

IEC/EN/UL 62368-1, IEC/EN/UL 60950-22

### Environment

IEC 62262 IK11, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-14, IEC 60068-2-78, IEC/EN 60529 IP66, NEMA 250 Type 4X, MIL-STD-810G 509.5, ISO 21207 (Method B), ISO 4892-2

## Cybersecurity

ETSI EN 303 645, BSI IT Security Label

## Network

### Network protocols

IPv4/v6<sup>1</sup>, HTTP, HTTPS<sup>2</sup>, SSL/TLS<sup>2</sup>, QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, Bonjour, UPnP™, SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCP, ARP, SOCKS, SSH, NTCIP, SIP

## Cybersecurity

### Edge security

**Software:** Digest authentication and OAuth 2.0 RFC6749 Client Credential Flow/OpenID Authorization Code Flow for centralized ADFS account management, password protection

### Network security

IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2)<sup>2</sup>, IEEE 802.1AR, HTTPS/HSTS<sup>2</sup>, TLS v1.2/v1.3<sup>2</sup>, Network Time Security (NTS), X.509 Certificate PKI, host-based firewall

### Documentation

*AXIS OS Hardening Guide*  
*Axis Vulnerability Management Policy*  
*Axis Security Development Model*  
AXIS OS Software Bill of Material (SBOM)  
To download documents, go to [axis.com/support/cybersecurity/resources](https://axis.com/support/cybersecurity/resources)  
To read more about Axis cybersecurity support, go to [axis.com/cybersecurity](https://axis.com/cybersecurity)

## System on chip (SoC)

### Model

NXP i.MX 6SoloX

### Memory

512 MB RAM, 512 MB Flash

## General

### Casing

Impact-resistant aluminum, IP66-, IK11-, NEMA 4X-, and MIL-STD-810G 509.5-rated.

1. Audio synchronization with IPv4 only.

2. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. ([openssl.org](https://openssl.org)), and cryptographic software written by Eric Young ([ey@cryptsoft.com](mailto:ey@cryptsoft.com)).

## Power

Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 3 (typical 4.5 W, max 12.95 W)

---

## Connectors

RJ45 10BASE-T/100BASE-TX PoE  
I/O: 4-pin 2.5 mm terminal block for 2x supervised configurable I/Os

---

## LED indicators

Status LED, front-facing LED

---

## Storage

Support for microSD/microSDHC/microSDXC card  
Max. size 1 TB  
For SD card recommendations see [www.axis.com](http://www.axis.com)

---

## Reliability

Designed for 24/7 operation.

---

## Operating conditions

-40 °C to 55 °C (-40 °F to 131 °F)  
Humidity 10-100% RH (condensing)

---

## Storage conditions

-40 °C to 65 °C (-40 °F to 149 °F)  
Humidity 5-95% RH (condensing)

---

## Dimensions

Ø203 X 105 mm (Ø8.0 x 4.1 in)

---

## Weight

4.1 kg (9.0 lb)

---

## Box content

Speaker, installation guide, Owner Authentication Key, AXIS Connector Guard A, Cable shoe

---

## Optional accessories

AXIS T91B47 Pole Mount, AXIS T91F67 Pole Mount, Cable Gland M20x1.5, RJ45, Cable Gland A M20, AXIS Power over Ethernet Midspans, T94R01B Corner Bracket, T94P01B Corner Bracket, T94S01P Conduit Back Box  
For more accessories, see [axis.com](http://axis.com)

---

## Languages

English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Polish, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese

---

## Warranty

5-year warranty, see [axis.com/warranty](http://axis.com/warranty)  
Available at [axis.com/products/axis-c1610-ve#part-numbers](http://axis.com/products/axis-c1610-ve#part-numbers)

## Tools

## Design

AXIS Site Designer  
Available at [axis.com](http://axis.com)

---

## Installation

AXIS Device Manager, product selector, accessory selector  
Available at [axis.com](http://axis.com)

## Sustainability

### Substance control

PVC free, BFR/CFR free in accordance with JEDEC/ECA Standard JS709  
RoHS in accordance with EU RoHS Directive 2011/65/EU/ and EN 63000:2018  
REACH in accordance with (EC) No 1907/2006. For SCIP UUID, see [axis.com/partner](http://axis.com/partner).

---

### Materials

Renewable carbon-based plastic content: 26% (recycled: 0%, bio-based: 26%, carbon capture based: 0%)  
Screened for conflict minerals in accordance with OECD guidelines  
To read more about sustainability at Axis, go to [axis.com/about-axis/sustainability](http://axis.com/about-axis/sustainability)

---

### Environmental responsibility

[axis.com/environmental-responsibility](http://axis.com/environmental-responsibility)  
Axis Communications is a signatory of the UN Global Compact, read more at [unglobalcompact.org](http://unglobalcompact.org)

