Buyer's Guide: Audible and Video Intercom Systems (2025)

1. Introduction

Intercom systems are essential for secure communication and controlled access across sites such as schools, offices, residential blocks, and industrial facilities.

A modern audible and video intercom system enables two-way communication between visitors and staff — providing visual verification before granting entry, improving safety, and streamlining operations.

This guide outlines the benefits, limitations, key considerations, and questions to ask before purchasing or upgrading an intercom system.

2. What Is an Audible and Video Intercom System?

An intercom system allows individuals at an entrance or remote location to communicate with building occupants via audio (and often video).

There are two main types:

Audible (Audio-Only) Intercoms

- Enable voice communication between entry points and internal stations.
- Typically used in lower-risk or cost-sensitive environments.

Video Intercoms

- Combine audio with live visual identification via camera and display screen.
- Provide greater security and visitor management capability.

Modern systems often connect via IP networks and integrate with:

- Access control systems (door release, card readers, etc.)
- CCTV and security management platforms
- Smartphones, tablets, or PC-based applications

3. Benefits of Installing an Intercom System

Benefit	Description
Improved Security	Enables verification of visitors before access is granted.
Controlled Access	Integrates with electric door locks, gates, or barriers.
Communication Efficiency	Allows instant two-way communication between entrances and key areas.
Safety and Compliance	Enhances safeguarding, especially in schools or healthcare environments.
Flexibility	IP systems allow calls to multiple stations or even mobile devices.
Record Keeping	Some systems record video or log visitor data for auditing or security reviews.
Scalability	Expandable from a single entrance to multi-building networks.

4. Negatives / Drawbacks

Aspect	Potential Drawbacks
Cost	Video systems and IP integrations can be more expensive than analogue setups.
Complexity	Requires network configuration and sometimes IT support.
Maintenance	Cameras, displays, and firmware updates may need periodic servicing.
Cabling Requirements	Retrofitting can be challenging in older buildings without structured cabling.
Power Requirements	Systems may need local power or PoE (Power over Ethernet) switches.
Privacy	Video recording and storage must comply with GDPR and safeguarding regulations.

5. Key Questions to Ask Suppliers

System Functionality

1. Does the system support both audio and video communication?
2. Can it integrate with our door access control or gate automation?
3. Does it support multiple entry points or multi-user environments?
4. Can users answer calls on mobile devices or desktop apps?
5. Is the system network (IP-based) or hardwired analogue?

Integration and Compatibility

6. Will it integrate with our existing CCTV, PA, or security systems?
7. Is the system ONVIF-compatible (for CCTV integration)?
8. Can it connect to existing door release mechanisms, or will these need upgrading?
9. Does it offer cloud connectivity or remote management features?

Cost, Support, and Maintenance

10. What are the installation and commissioning costs?
11. Are there software licences or subscription fees?
12. What is the warranty period, and is extended support available?
13. Do you provide training for staff or site managers?
14. What ongoing maintenance is recommended?

Hardware and Performance

15. What is the resolution and low-light capability of the video camera?
16. How durable are the outdoor units (IP65, IK ratings for weather/vandal resistance)?
17. Are internal monitors touchscreen, wall-mounted, or desktop units?
18. Can the system store or record video for evidence or review?

Futureproofing

19. Is the system expandable to include more entrances or users?

20. Can it be integrated with future technologies (smart locks, AI recognition, etc.)?

6. Cabling and Installation Considerations

1. System Type Determines Cable Requirements

System Type	Typical Cabling	Notes
Analogue Audio	2-core screened cable (e.g. Belden 8723 or similar)	Suitable for small, standalone systems.
Analogue Video	Coaxial (RG59) + power cable	Older setups, less common in new installs.
Digital / IP Systems	Cat5e or Cat6 network cable	Supports audio, video, and power via PoE (Power over Ethernet).
Hybrid Systems	Mix of 2-core and Cat5e/6	Used when upgrading existing infrastructure.

2. Power Considerations

- PoE (Power over Ethernet) simplifies installations by powering devices through the network cable.
- Alternatively, local power supplies or 24V adapters may be required for outdoor units or door releases.

3. Cable Routing and Infrastructure

- Plan routes to minimise visible cabling and protect from tampering.
- For retrofits, assess feasibility of using existing conduits or trunking.
- In multi-storey or listed buildings, wireless or IP systems can reduce disruption.

4. Network and IT Involvement

- For IP-based systems, coordinate with IT to allocate dedicated VLANs or QoS settings to prioritise video traffic.
- Ensure sufficient bandwidth for high-quality video streams.

5. Integration with Door Release Mechanisms

- Electric strikes or maglocks require dedicated low-voltage cable and power isolation where needed.
- Confirm compatibility of voltage and signal type between intercom and lock system.

7. Best Practices Before Purchase

1. Conduct a Site Survey
   Identify entry points, cable routes, and network access points.
2. Define User Requirements
   Decide who will use the system — reception staff, security, or multiple departments.
3. Consider Accessibility
   Choose models with hearing loops, visual indicators, or DDA-compliant controls for inclusivity.
4. Plan for Integration
   Choose systems that can link to access control, CCTV, or lockdown procedures.
5. Ensure Data Security
   Confirm compliance with GDPR and local safeguarding requirements.
6. Ask for Demonstrations
   Request a live demo or sample installation to test user experience.

7. Request Full Documentation
   Include as-built drawings, cabling diagrams, and user manuals post-installation.

8. Typical Costs (UK 2025 Estimates)

System Type	Approx. Cost (Excl. VAT)	Description
Audio-only (1–2 stations)	£300 – £800	Basic entry-level system
Video intercom (1 entrance, 1 monitor)	£800 – £1,500	HD camera, touchscreen display
Multi-door IP system	£1,500 – £5,000+	Scalable with network integration
Retrofit using existing cabling	£500 – £1,200	Reuse analogue wiring with adapter units

Always request a full site-specific quotation including installation, programming, and training.

9. Summary

A well-designed audible and video intercom system enhances both security and communication efficiency, allowing controlled access and clear visitor verification.

When deciding between audio-only, video, or IP-based solutions, consider:

- Your existing cabling and IT infrastructure
- The number of entry points and users
- Integration with other systems (access control, CCTV, fire alarms)
- Ease of use and long-term maintenance

Key Takeaways

- IP-based systems offer greater flexibility, scalability, and integration options.
- Always assess existing cabling — reusing it can reduce costs but may limit performance.
- Ask detailed questions about compatibility, maintenance, and power requirements.
- Choose a reputable supplier experienced in education or commercial installations.