

Stapleford Jubilee Pavilion

Audio Visual Project Specification

Project address: Stapleford Jubilee Pavilion, Gog Magog Way, Stapleford, CB22 5BQ

Project Overview

This specification outlines the audiovisual (AV) and associated infrastructure requirements for the Stapleford Jubilee Pavilion's main Hall, which will include AV cabling, speaker system, automated projector screen, and lighting control. The project aims to future-proof the infrastructure for the Pavilion renovations. This specification is for just the hall.

The scope includes installation of an automated rise and fall ceiling projector and recessed automatic rise and fall screen, audio system, wireless connectivity, and integration of a smart wall mounted control system. Proposals must be based on the details provided below.

Attached to this proposal, in the email, includes the 'draft' plan of the Pavilion and the specification of the ceiling which is planned to be installed at the beginning of November, for reference.

If you suggest any alternative to this specification, please feel free to let us know.

We have attached photographs showing the space.



Infrastructure Requirements

1. Wall Mounted Data Cabinet

- Install an aesthetically pleasing wall-mounted data cabinet in the main hall, to house all network and AV equipment required for the main hall. This cabinet can be used for the mixing desk, which can be pulled out and put on a table, to allow for comfortable access to the basic controls and easy access to the input sockets for temporary reconfiguring of connections.
- Please ensure all cabinets are smart and match the room's decor, i.e in white.
- The cabinet must offer proper ventilation, and provide easy access for maintenance.
- The cabinet must contain a secure lock and three keys.

2. Network Accessories

- Supply and install all necessary network switches and accessories.
- Provide ethernet cabling for any AV components (projector, input boxes, etc.), with capacity for future expansion.

3. Power Accessories

- Supply and install any power outlets to support AV equipment and network accessories.
- Ensure the power setup allows for future additions, with circuits capable of handling the expected loads.

4. Pavilion Cabling

- All cabling for audio, video, network, and power systems must be recessed and concealed.
- Ensure sufficient cable capacity to accommodate future connections.

5. Cabling & Termination Accessories

- Install high-quality AV and network cable connectors.
- All cables must be terminated and labelled clearly for future maintenance and expansion.
- All cables must be tested for performance, with a full report provided upon project completion.

Main Hall Audio Visual Equipment

1. Audio System

- **Speakers:** Install four (4) white wall-mounted speakers in each corner of the hall, ensuring even sound distribution. Note that the hall does have a sound limiter installed.
 - Speakers should be mounted at the appropriate height for optimal sound quality.
 - Speakers should have high quality audio. Please suggest your specified brand.
- **Stereo Amplifier:** Install an amplifier, connected to the speaker system and integrated with the data cabinet. It should support easy audio control.
- **Microphone System:** Supply and install three (3) wireless radio systems with two (2) hand held microphones and one (1) body worn, lapel microphone. Supply two (2) floor stands for the hand held microphones.
 - Easy to use audio desk so users can allocate which microphones can be used, audio levels etc.
 - Supply two (2), or as appropriate, permanently installed, surface mounted, boundary microphones on the ceiling for general coverage when recording/live-streaming. This eliminates the need for non-experts to position microphones for routine streamed sessions.
- **Audio Usage Requirements:**
 - The speaker system must support connection to both the microphones and any connected device.
 - Allow simultaneous connection to one device for both audio and visual or separate devices for each function.
 - The speakers will be used to amplify speakers in meetings, parties, presentations etc.
 - used, audio levels etc.
 - Separate output to a device used to stream meetings
- **Mixing desk:**
 - The mixing desk must be permanently installed in a permanent equipment cabinet at the rear of the hall. The mixing desk should be labelled for each channel.
 - The mixing desk support a minimum of the following inputs:
 - Two radio microphones
 - Two cable microphones
 - One lapel microphone
 - Two fixed mounted boundary microphones
 - One stereo input for sound from a projector video
 - One stereo input for an additional, wired in sound source.
 - One stereo input for sound from a Bluetooth or similar remote device.
 - Please suggest the simplest version where any advanced options are concealed for ease of use.
 - Please ensure all audio is clear and there is no interference/ noise/ noise in unterminated leads.

2. Automated Projector Screen + Input Boxes

- **Screen:** Supply and install a 3-meter-wide automated projector screen, controlled via a smart system, such as RAKO, equipped with a blackout layer for optimal projection quality.
 - The screen should be boxed in a white casing and mounted onto the wall.
 - The installation must allow curtain use when the screen is not in use, and also when the screen is in use so the screen comes down in front of the curtain.

3. Projector

- **Commercial 4K Projector:** Provide and install a commercial-grade 4K projector, ceiling-mounted and recessed when not in use.
 - Projector must offer clear, high-resolution output for commercial events, presentations and parties.
 - Proposals must include recommended lumens output.
 - Ensure clear image quality in both bright and dark conditions.
 - Include adjustable brightness settings for various lighting conditions.
 - Ensure the projector automatically rises and falls via control from the smart system, from the ceiling, similar to the screen, to ensure no damage from hall users when it is not in use.
 - Please ensure the projector is protected at all times with some sort of visually appealing box when it is in use too.
 - Projector can be used via a laptop and also via a mobile device.

4. Input Boxes + Spare cable

- Install two input boxes:
 - **Box 1** - At the front of the hall (next to the screen). Fitted with HDMI wall socket and three (3) XLR sockets. HDMI wall socket cabled to an HDMI plug in the equipment cabinet, with provision for extracting sound channels to the mixer input. Video signal continues to the projector via an HDMI socket in the equipment cabinet. Connection should be such that it is possible to substitute a laptop HDMI lead in place of the cabling from the screen location when operating a laptop from the back of the hall. XLR sockets wired by screened leads to the mixer unit in the equipment cabinet. One socket to be wired for stereo use to the mixer (for connection to a laptop 3.5mm output). Additional, loose cabling: 10m HDMI plug-to-plug to connect laptop to HDMI screen socket. 10m XLR plug to 3.5mm, stereo jack plug to connect laptop to stereo XLR screen socket.
 - **Box 2** - at the rear of the hall inside the permanently installed equipment cabinet. Fitted with HDMI wall socket and two (2) XLR sockets. HDMI socket normally takes the screen socket input to the audio splitter and projector, but can be removed to allow laptop operation from the rear of the hall. XLR sockets: one connected to mixer as stereo, the other as a mic channel.
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5. Wireless Connectivity

- Provide wireless connectivity for users to stream audio to the speaker system.
 - The system should support audio streaming from smartphones, tablets, and laptops via standard platforms (e.g., Bluetooth, AirPlay, etc.).

6. Camera/ streaming

- Provide a movable camera system, on a tripod, which can be stored in a cupboard and used during meetings, so meetings can be broadcasted in 4K video, along with the radio microphone audio, to zoom/ teams.

7. Keypad/ screen

- Supply, install a wall mounted keypad/ screen to allow functionality of the system.
- Install an screen/ keypad at the entrance to the Main Hall, allowing control of the following functions:
 - Front lights On/Off
 - Rear lights On/Off
 - Dimming of front lights
 - Dimming of rear lights
 - Projection mode (screen comes down/ projector comes down)
 - Speakers On/Off
- Keypad/ screen must have a log in secure feature to allow changes to only be made by Parish Councillors, not by the public using it.

Lighting Control

1. Integration with the Lighting System

- Integrate all ceiling lights (installed by another company) with the smart control system.
 - Ensure the system is wired to operate via the smart control system, with two zones for lighting control (front near the screen and rear).

2. Keypad Control

- Install an engraved screen/ keypad at the entrance to the Main Hall, allowing control of the following functions:
 - Front lights On/Off
 - Rear lights On/Off
 - Dimming of front lights
 - Dimming of rear lights
 - Projection mode (screen comes down/ projector comes down)
 - Speakers On/Off

Testing and Commissioning

- Thoroughly test all AV and infrastructure components before project handover. Testing must include:
 - Speaker system sound quality and coverage (please note the hall has a sound limited installed).
 - Projector and automated screen functionality.
 - Wired and wireless connections through input boxes.
- A detailed handover document with usage instructions must be provided, along with a comprehensive report of testing results and troubleshooting guidance.
- An EICR certificate of the main hall's electrics.

Future-Proofing and Scalability

- The infrastructure must support future AV and network expansion.
- Ensure all cabling, power, and network connections can accommodate additional AV equipment in future Pavilion phases.

Damage to the walls

- The ceiling and walls must be restored to their original condition upon completion of the works. If the work involves chasing into a wall, your quotation should include the reassembly, plastering, and priming of the affected area. Please note, Stapleford Parish Council will handle repainting the hall once all works are complete.

Compatibility

- It would be a bonus if the AV/ light controls can be linked to the HIVE radiators.

Maintenance

- Please supply your ongoing maintenance plans for review.

Proposals must address the outlined specifications and provide the requested brands where necessary, or suggested brands where requested brands can't be met. Proposals should also include a full cost breakdown, installation timeline and availability and any warranties provided for the installed equipment.

- For any questions regarding the project, please contact clerk@staplefordparishcouncil.gov.uk.
- A site visit can be arranged upon request.
- All proposals must follow with an accurate quotation for the works.