

	Meeting (No)	Market & Town Hall Committee (1)
	Date	23 June 2026
	Document	Ref No
	Town Hall Sound System	MTH1/10b

Background

The Town Hall Sound System was originally purchased several years ago to be used for Full Council meetings; it was found to be both difficult and time consuming to set up, due to the lack of Bluetooth, and extensive wires linking all the desk microphones together, so is no longer used. However, the four PROEL wall-mounted loudspeakers remain on the wall of the main hall and are in good working order.

Update

Our Community Engagement Officer, who has a background in technical theatre, has checked the Town Hall sound system and striped it back to the components that can still be used.

The system connects to the speakers using a PROEL AMP120XL mixer amplifier, using a speakon input in the wall, below one of the speakers. The amp has 5 XLR input channels, and other aux inputs which can be used for a variety of things. As well as the cabled desk microphones which are now deemed unsuitable, the system does currently come with one UHF wireless system, consisting of a receiver box and a wireless, handheld microphone which will be useful.

Recommendations

The Officer consulted with our IT consultant, who also has experience with sound systems, and together they have come up with a proposal giving some options for working with the current system and budget, until such time that the council is in a position to move forward with a system designed for wider performance usage.

Objective

To retain as much of the existing infrastructure as possible while introducing a flexible event/meeting system and a simple room-hire music playback solution, as detailed below:

- Retain existing PROEL AMP120XL amplifier.
- Reduce speaker tap settings from 30W to 15W per speaker to gain more headroom for audio.
- Provide four wireless microphones with individual control.
- Provide Bluetooth audio playback for events.
- Provide inputs for laptops, wired microphones and physical media players (CD for example).
- Provide a separate fixed Bluetooth music system for general room hires.
- Protect speaker connection points using a lockable wall enclosure.

Recommended System Architecture

Two independent operating modes are proposed:

System A – Mobile Event Rack (using existing flight case)

For conferences, meetings, presentations and performances.

System B – Fixed Bluetooth System

For classes such as yoga and dance sessions and simple room hire applications.

Proposal

- Using the existing amplifier, purchase a 4-channel wireless desk microphone system for use in meetings/conferences. The four mics can easily be directed at different speakers or passed between them.
- Use the existing wireless microphone as a roving mic and purchase a telescopic boom pole and mic clip to accompany it, for use for public/audience questions etc.
- Purchase a small mixer to allow easy control of mics and any other devices inputted into the mixer such as a CD player.
- Purchase a Bluetooth amp that would be permanently fixed to the wall, enclosed in a cabinet with access for hirers to be able to use the speaker system for playing music, without the need for bringing out the main system.

Component	Recommendation	Approx Cost
Wireless microphones	IMG Stageline TXS-646 4 channel wireless desk mic system	£685
Mixer	Behringer Flow 8	£145
Fixed Bluetooth amp	Adastra UM60 (Bluetooth built-in)	£150
Cabinets / accessories	Rack, leads, lockable cover	£100
Telescopic boom pole	Telescopic Microphone Boom Pole by Gear4music, 3.5m	£35
Estimated Total for equipment		£1,115 (inc. VAT)

Notes:

- Prices are inclusive of VAT and approximate.
- Assistance from our IT consultant would be needed for set up.
- The IMG Stageline TXS-646 4 channel wireless desk mic system comes with 4 mics but other mics can be used within the 672.000-696.975MHz spectrum.
- A license is needed annually at around £112 from Ofcom.
- Additional wireless, handheld microphones can be purchased if required
- The Adastra Amp Bluetooth can be put into pairing mode but this is inconvenient as it requires a staff member to assist the hirer with connecting to the Bluetooth. If left open then anyone could connect to it which again poses an issue. There is a possible solution to this which would require the user to enter a pin onto a touchscreen to connect to the Bluetooth but this will need further

investigation. Cost for the solution would be around £50 to £80 Inc. VAT if it can be created.

- In an ideal world, a shotgun style microphone would be used with the telescopic boom arm for the audience, which will be an extra cost.
- The overall cost can be reduced by not providing a separate Bluetooth system for playing music. This would reduce the cost by approx. £250 and could be added at a later date.
- The mixing desk @ £145 is not completely essential, but would make the system more user friendly and provides inputs for laptops, wired mics etc. Again, this could be added at a later date but is recommended.

Hearing Loop

Our IT consultant has investigated the requirements for a hearing loop in the main hall. He states that the loop itself could easily be fitted in house.

The hall is approximately 10m x 12m rectangle, so will need 2.5mm cable to produce a induce a large enough field to be utilised throughout. In combination with the audio proposal above we would need two additional items.

- An amplifier to create the loop and the wiring for the loop itself.
Approximate cost £172 +VAT
- Induction Loop Cable 2.5mm Tri Rated
Approximate cost £75 +VAT

The Adastra is a rack mount so would fit into the 3U rack proposed to go next to the sockets in the main hall. If the rackmount was being considered for a later date, then it would live in the rolling case with the rest of the audio kit.

In the event that the rackmount is in place the wires would be terminated to the adastra in the loackable case and ready for use on demand.

If the Adastra is rolled out for the event then the wires will need connecting each time and I'd propose to install a new speakon socket connected correctly to the loop wiring and then a separate speakon cable to the Adastra in the rolling case. This will make connecting much easier and also prevent damage to cables / ports on the loop system.

Something like this would be surface mounted on the wall and connect to the wire loop system – Approximate cost £28.

Therefore, to fit a hearing loop in the main hall
the total cost for equipment would be approximately **£275 +VAT**

Nicky McMahon
Market & Town Hall Manager