



Digital Construction provides a precise, reliable foundation for sound system design by capturing venues exactly as they are built. Using state-of-the-art LiDAR scanning technology, we replace often inaccurate or costly architectural drawings with high-resolution geometric models that reflect real-world venue environments.

As-Built Accuracy: True-to-life virtual models replace unreliable or absent drawings, reducing risk and on-site surprises.

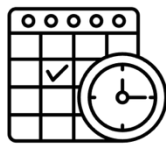
Standardized and Repeatable: LiDAR technology, smoothing processes, and quality checks ensure consistent accuracy at any scale.

Validated Deliverables: Detailed point-clouds and Soundvision-ready venue geometry ensure confident simulation and system design.

By grounding every design decision in accurate, real-world data, Digital Construction Services remove uncertainty from the design process; enabling more reliable simulation and precise algorithmic optimization, resulting in exceptional installed system performance.



**IDENTIFY
OPPORTUNITY**



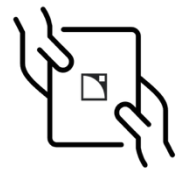
**SCHEDULE
SITE VISIT**



**ONSITE
SCAN**



**PROCESS
SCAN DATA**



**SOUNDVISION
FILE**

Frequently Asked Questions

How does Digital Construction differ from traditional Architectural drafting?

Digital Construction removes the need for manual measurements, speeds up the creation of accurate space replicas, and captures more detail.

What technology is used to perform the scan?

Digital construction services utilize cutting edge handheld Simultaneous Localization and Mapping (SLaM) technology which is ideal for capturing L-Acoustics venues. Commercial smartphone Lidar scanners have a limited distance of approximately 5m and are therefore unsuitable for the level of detail that we require. The L-Acoustics Digital Construction workflow provides the right amount of detail to capture on-site conditions and forms the basis for accurate acoustic simulations.

What conditions are necessary on-site to perform the scan?

The Applications Engineer performing the scan requires access to the entire unoccupied venue including stage areas, balconies, and any adjoining spaces between these areas. It is important that venue personnel vacate the space for the duration of the scan, as any movement of objects during the scan will interfere with the results.

How long does it take to perform the scan?

Scanning time is dependent on the size and architectural complexity of the venue. Please reach out to your L-Acoustics representative for more details.

How long does post-processing of the scanned venue take?

This is dependent on the size of the venue and its architectural complexity. Smaller venues with simple geometries require a minimum of 2-days to generate Soundvision-ready file formats. Larger, more architecturally complex venues may require 5 or more days to post-process. We encourage all clients interested in leveraging this service to work closely with their regional application engineer and the Digital Construction team to define a reasonable timeline for their projects.

What deliverables are presented at the end of the process?

Digital Construction provides customers with a detailed pointcloud file of their venue for their reference, as well as a simplified Soundvision-ready file for acoustic simulation and system design purposes.

