



Benchmarking for optimised acoustic performance

Passengers need clear information to guide them through their journey and help when things aren't going to plan. Public Address (PA) systems play a key role in the provision of information and their clarity, consistency and effectiveness depend largely on the quality of system design, roll-out and integration.

A PA benchmarking survey measures the acoustic performance of a PA system and can form a precursor to a new installation or allow you to evaluate the effectiveness of existing facilities.

During a survey we measure acoustic and audio parameters that are key to the clarity of your public broadcasts. Our surveys test sound pressure levels, audio frequency response, speech transmission index (STI) and system distortions.

In addition to identifying weaknesses in the system, the survey results are extremely useful as a reference when performing maintenance tasks.

Conducting a survey

The survey is carried out by fully-trained, qualified engineers who follow a test procedure that has been validated by experts. The procedure takes into account specific customer requirements and encapsulates all regulatory standards applicable to the particular category of PA system being tested.

During the test a set of test signals are broadcast through the PA system whilst measurements are taken on a fine grid across the whole test area specified by the customer. We also conduct subjective speech tests to back-up measurements.

To avoid service disruption the survey is normally conducted at night during site closure but we can also run the test during operational hours with minimal distraction to customers.

Acoustic benchmarking in practice

As part of the London Underground's station modernisation project, we've carried out benchmarking providing our customer with a comprehensive understanding of PA system performance in all areas of both sub-surface and surface stations including ticket hall, platforms, concourses and passageways. Our considerable experience and acoustic expertise have helped enhance the performance of over 30 station PA systems.

Unique test methodology

In association with test equipment suppliers we have developed rapid, accurate test methodologies. Validated by recognised experts, our test methodologies offer:

- Reduced testing time
- High accuracy of measurement results
- Low level testing for minimal nuisance to nearby residents

Our service

We provide the following services as part of our portfolio of specialised station management solutions:

- Full acoustic benchmarking of PA systems in all areas
- Written PA performance report
- Optimisation of acoustic performance if required
- Consultancy on measurement results analysis

Having developed a strong acoustic benchmarking track record in public transport station environments, we can apply our matured processes to refine the performance of PA systems in any public facility or building.



t0012_MT_D_03-2009

Point 3, Haywood Road
Warwick CV34 5AH
United Kingdom
Telephone: +44 (0)800 783 7761

www.telent.com

© telent Limited 2009. All rights reserved. telent and the telent logo are trademarks of telent Limited.