case study

Precise Leak Pinpointing with Portsmouth Water

DXmic Pro's noise filtering function quickly pinpoints difficult to find leaks, resulting in cost-savings from excavation and repair, ultimately, avoiding traffic chaos at busy intersections.

Water Leak Location Services Ltd, as a provider of specialist leak detection surveys for utility companies all over the world, worked on a large-scale project with Portsmouth Water. In a single year, they supported the utility to reduce leakage in their network by **6 million** litres per day.

During the project, one of the newly installed **PermaNET+** units detected the presence of a leak in a section of 300mm ductile iron pipe underneath a busy stretch of road in Waterlooville. This particular leak was a concern as the pipe was located at a junction and digging up the road to fix the leak would require traffic management, causing disruption to the road users. Traffic management is often an unavoidable consequence of leak repair, but in this instance, Portsmouth Water and Water Leak Location Services aimed to keep any disruption to a minimum.

Pinpointing the exact location of the leak to ensure the repair takes as little time as possible was critical, but in this case, the high volume of traffic at this junction was causing a problem. Although PermaNET+ could indicate the presence of a leak, traditional listening methods were ineffective as traffic noise was too loud and was masking the leak noise.

To pinpoint the exact location of the leak, Water Leak Location Services used the **DXmic Pro** Ground Microphone from HWM Global. Delivering the highest quality sound recordings, DXmic Pro includes a noise filtering function which helped enormously in this instance.

"The straightforward filtering functions enabled us to concentrate on the leak noise rather than the noise created by the traffic. Once the optimal frequency band had been set, we could listen above the pipe using the bar graph feature, pinpointing the precise location of the leak".
Andrew Mackenzie - Water Leak Location Services

Utilising the advanced noise filtering function of DXmic Pro, the team was able quickly to filter out traffic noise and accurately locate the leak. Achieving this swiftly had multiple benefits for Portsmouth Water, especially cost savings from keeping both excavations and time on site to a minimum. For Water Leak Location Services, a key benefit is the enhancement to their reputation as a partner to utility companies:

"DXmic Pro has assisted us to confidently confirm the precise location of leaks, meaning repairs are carried out with minimum disruption and cost to the water utility. These results grow our reputation as a specialist leak detection service provider".