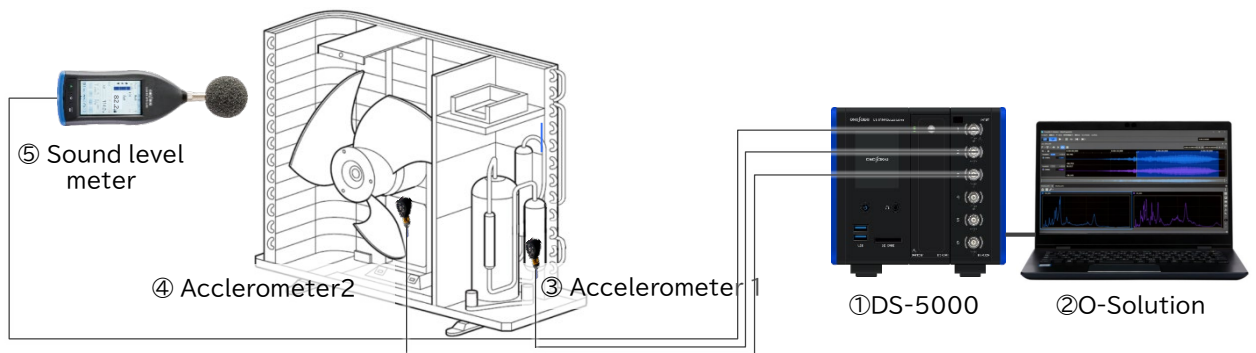


Measurement of acoustic vibration of outdoor unit

~Overview~

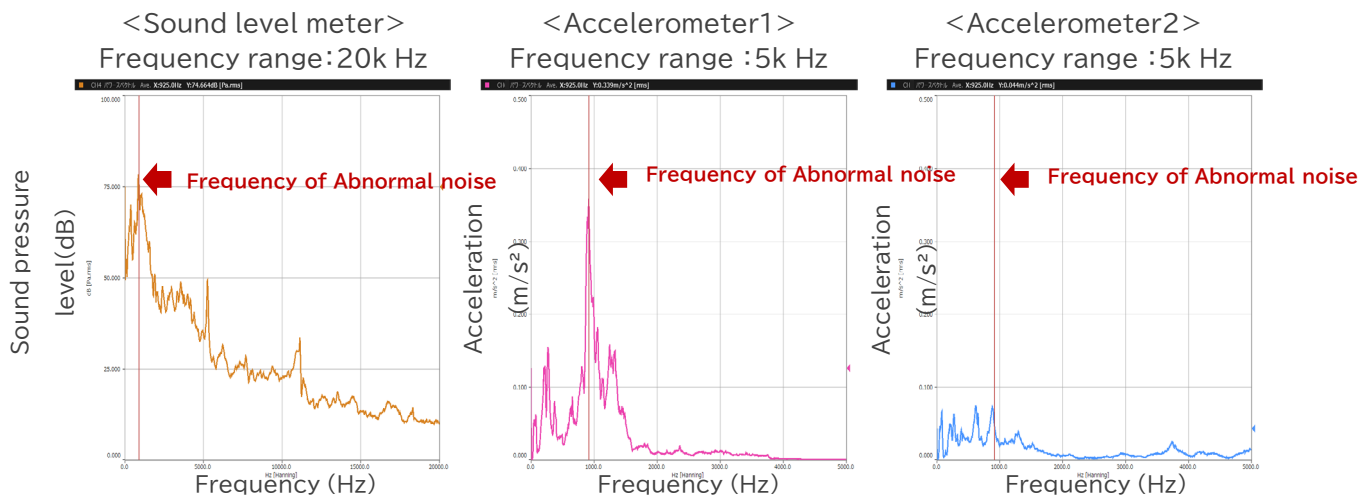
There was a complaint that an abnormal noise was generated in an outdoor unit. First, measure the noise generated from outdoor unit, and record the sound pressure level and the vibration near the operating parts. Analyze the results to identify the abnormal noise and determine the cause.

~Measurement~



~Analysis~

- Noise and vibration measurement were analyzed in appropriate frequency ranges.



~Results~

- Found that the noise level is 82 dB * Equivalent to the noise level inside the subway.
- From the frequency analysis result of the sound pressure level, there was a remarkable peak at 925 Hz.
- When this band was confirmed by the audibility, it matched the abnormal noise. Thus, found that 925 Hz was the cause of abnormal noise.
- Since the frequency of the abnormal noise matched the vibration result of the accelerometer 1, found that the cause was in the compressor.

~System configuration~

	Model	Product name
①	DS-5100	Main unit
①	DS-0526	6ch 40kHz Input unit
②	OS-5100	Platform
②	OS-0522	FFT Analysis Function
②	OS-0512	Hardware Connection Function

	Model	Product name
②	OS-0501	Battery unit
③	NP-3211	Accelerometer with built-in preamplifier
⑤	LA-7500	High performance sound level meter