SeCorrPhon AC 06
Combined correlator and electro-acoustic water leak detector

The principle

When pressurised pipelines leak, water gushes out of the crack into the ground.

The consequences:

- The pipe material vibrates at the leakage point. These vibrations are transmitted by the pipe and can even be measured at distant contact points, e.g. fittings.
- The water jet and the pipe in the vicinity of the leak also cause the ground to vibrate. These vibrations are transmitted through the ground to the surface where they manifest themselves as ground noise.

Location methods
Leak detection by correlation involves locating the leak with the help of a calculator. The noise emitted by a leak reaches two measuring points at different times. This time difference is used to state the leak position as an exact distance from measuring point 1 or 2.

Electro-acoustic water leak detection involves identifying the general area of the leak with the test rod as a preliminary step and then locating its exact position with the ground microphone. The human ear still plays an important part in analysing the noise as it can compare and analyse the volume and sound.

SEWERIN's SeCorrPhon AC 06 makes use of both methods.

SeCorrPhon AC 06 as a correlator

- FFT analysis (e.g. coherence analysis for optimal filter setting)
- Assistant for everyday situations
- Maximum accuracy and very quick measurements
- Automatic result optimisation
- Noiseless radio reception thanks to powerful 500 mW radio transmitter
- PC communication software for printing out and documentation of measurements

SeCorrPhon AC 06 as an electro-acoustic water leak detector

- Excellent sound thanks to powerful digital signal processor
- Listening with on-screen support: minimum sound level display, memory function
- Hearing protection function
- Variable filter setting
- Automatic microphone recognition (ground microphones, test rod or small, light microphone for applications inside buildings)

Pinpointing with ground microphone

Using the ground microphone at regular intervals enables the leak to be located with
sufficient accuracy for confident excavation. The SeCorrPhon AC 06 displays a precise optical comparison of the noise intensities.

Is the noise getting louder or quieter, what is the trend? The noise gets louder as you get closer to the leak and the measured value increases. The optical display is particularly helpful for beginners or those who do not use the system regularly.

Carrying case

The robust rolling plastic case can hold the SeCorrPhon AC 06 receiver, the RT 06 radio transmitters and the required accessories. The equipment can be charged in the closed case so that it is always ready for use.

1. SeCorrPhon AC 06
2. Radio transmitter RT 06
3. Test rod T-4
4. Ground microphone BO-4 with carrying rod
5. Ground microphone 3P-4
6. Piezo microphone EM 30
7. Headphones stereo
8. Docking station HS

Technical data
SeCorrPhon AC 06 receiver

- Small handy device for ergonomic carrying
- Convenient operation thanks to jog dial (menu) and waterproof membrane keypad with hotkeys
- 320 x 240 pixel display and LED backlight
- Connection for PC communication (COM, optional USB)
- Socket for direct microphone input
- BNC antenna connector with 90° rod antenna (rotating)
- Integrated NiMH battery
- Can be operated using vehicle's 12 V power supply

- Operating / storage temperature: -10 °C ... +40 °C / -20 °C ... +60 °C
- Type of protection: IP54
- Weight: approx. 1.3 kg
- Dimensions (W x H x D): approx. 12.5 x 18 x 6.5 cm
- Operating time: approx. 8 hours

Radio transmitter RT 06

- Automatic microphone recognition when plugged in
- Automatic activation via microphone contact
- Special frequency filter for plastic pipe material
- Automatic signal modulation
- High performance transmission path (500 mW) with optimal selectivity

- Operating / storage temperature: -10 °C ... +40 °C / -20 °C ... +60 °C
- Type of protection: IP67
- Weight: approx. 1.3 kg
- Dimensions (W x H x D): approx. 12.5 x 19 x 7.3 cm
- Operating time: approx. 10 hours