

LC-5000 Water Leak Correlator / Logger



KEY FEATURES

- 1 Main Display Control Unit
- 2 Pre amplifiers (2 or 4 units)
- 3 External Sensors / 10ft cord
- 4 Aviation Headphones
- 5 Antenna Extensions
- 6 Hard Case /Accessories

OVERVIEW

The advance LC-5000 equipment employs sophisticated algorithms and acoustic technology to analyze and compare the sound signatures of water leaks in pipelines. By precisely correlating the acoustic signals captured at different pre-amplifier points along the pipe network the correlator pinpoints the exact location of the leak with remarkable accuracy.

REALTIME FUNCTIONS

- # Correlation with graded results.
- # Acoustic listening function to all preamp sensors
- # 6 path simultaneous correlation function: allows you to evaluate a larger area and crosscheck correlations.
- # All sound files can be saved: allowing you to re-correlated from the main unit. If there are pipe data corrections you can correlate again without having to deploy the preamps a second time.

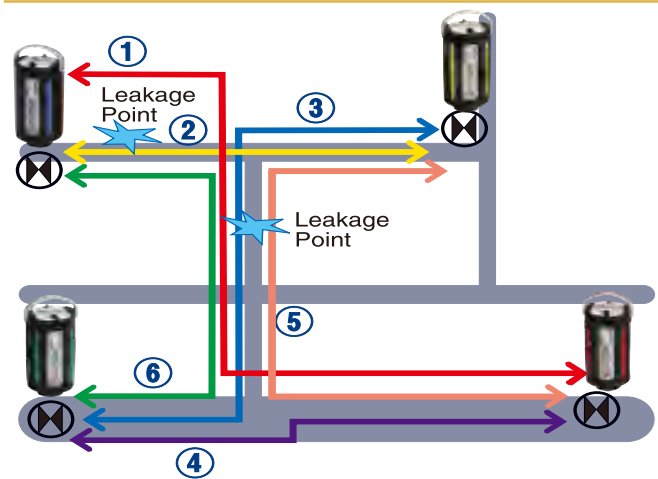
PREAMP FUNCTIONS

- # Long distance wireless communication to preamps.
- # Preamps can be used 3 different ways: Preamp , repeaters , or preamp / repeater.
- # 10ft cord on external sensors for connecting to valves or pipes in deeper handholds/chambers/vaults.
- # Strong magnets on both Preamp and external sensors
- # IP 68 waterproof rating.

LOGGER APPLICATION

- # Timer Logging function (timer or overnight) - Acquire data after hours when traffic and water consumption is less. Loggers can be used if interrupted radio communications between main unit and preamps.

COVERAGE

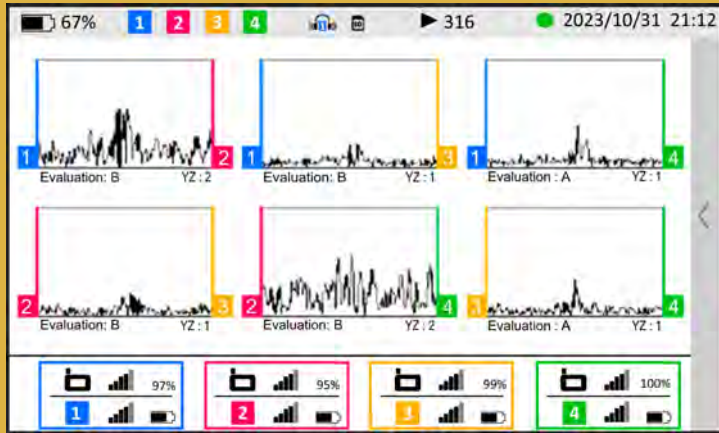


4 Pre-amps can cover a larger area and results in 6 Correlation paths. Cross correlation provides additional confirmation of results.



LC-5000 Correlator for water leak location

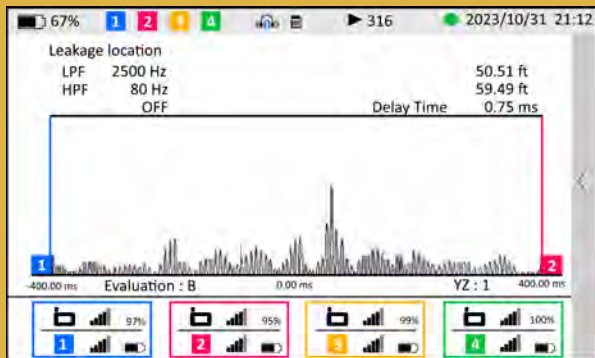
MAIN CORRELATION SCREEN



KEY COMPONENTS

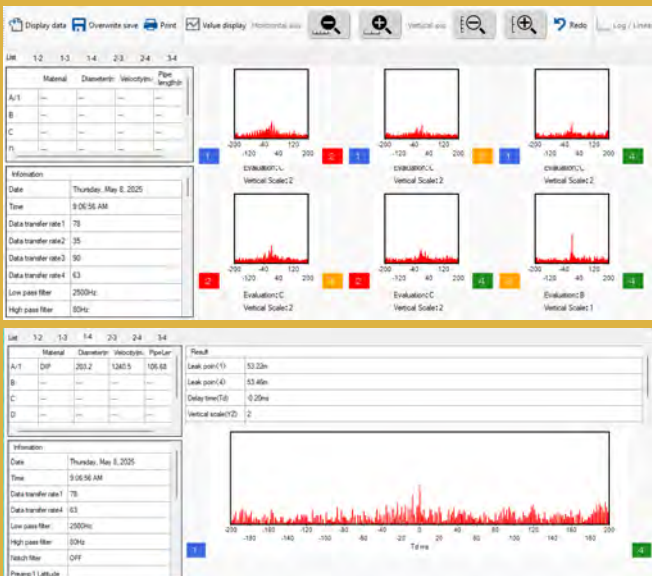
- 1 6 Correlation on one screen
- 2 Preamp signal strength and battery
- 3 Watch progress of real time correlation
- 4 Taping correlation will expand single screen
- 5 Record sound file
- 6 Evaluation grade

SINGLE SCREEN CORRELATION



The real time correlation process evaluates and displays the leak location with precise distances. Shows the filter information, battery status and preamp signal strength.

COMPUTER PRINTOUT RESULTS



SPECIFICATIONS

MAIN DISPLAY CONTROL UNIT

Protection grade	IP52
External dimensions:	273 mm (W) × 176 mm (H) × 82 mm (D)
Weight:	Approx. 2.2 kg (including battery)
Battery:	Lithium ion battery
Continuous operation time:	8 hours or more (20°C)
Display:	7-inch TFT LCD with touch panel
Controls:	Membrane buttons, touch panel
Interface and terminals:	Antenna terminal, Headphone output SD card, Power switch 2 x RS-232C cable connector
Average processing iterations:	999
High-pass filter:	Through, 80 Hz, 180 Hz, 380 Hz, 800 Hz
Low-pass filter:	630 Hz, 1250 Hz, 2500 Hz, 5000 Hz
Notch Filter:	Power 50 Hz, 60 Hz
Correlation function:	WAV data correlation
Recalculation function:	Recalculation of stored data
Leakage detection evaluation	Grade A, B, or C
Data:	16 bit / 40 kHz

PRE AMPLIFIERS

Applicable standards:	IP68 equivalent
External dimensions:	80 mm diameter x 183 mm (H) * Excluding antenna and handle
Weight:	Approx. 1 kg
Battery:	Lithium ion battery
Continuous operation time:	10 hours or more (20°C) standard mode 24 hours or more (20°C) in logger mode
Sensor:	Preamp - internal additional external sensor w/10ft cord
Operation modes:	Correlation/Relay/Logger/Relay+Correlation
Recording:	Audio signal recording (300 seconds, logger mode only)
GPS function:	Yes
External interfaces:	Power switch, gain switch, antenna terminal, external sensor connector, charge connector cable output connector, monitor terminal
Display:	Four LED lamp codes Power supply, operation mode, GPS, sensor
Communication channels:	7
Transmission output:	500 mW

