

# FUJI NON-METALLIC PIPE LOCATOR

## *NPL-100*

Patent No.855951

The new NPL-100 non-metallic pipe locator is a further developed version of the PL-130 well-reputed in the water supply industry and has the automatic adjustment function for tuning in a resonance frequency of each pipe.

Because of the unique principle, the NPL-100 can locate not only the non-metallic pipes but also the metallic pipes including the metallic pipes with insulating joints.



Instruments for the location of underground utilities and water leaks.

**FUJI TECOM INC.**



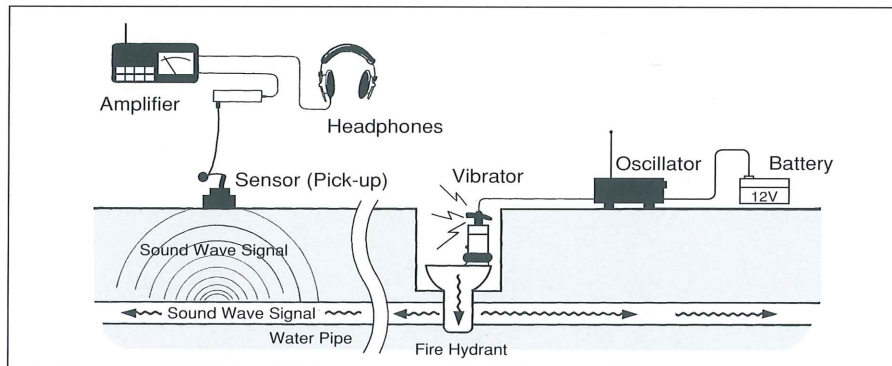
# FUJI NON-METALLIC PIPE LOCATOR

## NPL-100

### PRINCIPLE

As shown by the following figure, the sound wave signal is transmitted into the pressured water inside of the buried pipe from the firehydrant by the vibrator of NPL-100 locator and radially reaches the ground surface.

The sensor of NPL-100 locator catches the sound wave signal on the ground surface and the receiver amplifies for operating the large indicator meter and headphones.



### STRUCTURE

#### ● Transmitter consisting of :

|                        |   |
|------------------------|---|
| Oscillator .....       | 1 |
| Vibrator .....         | 1 |
| Antenna .....          | 1 |
| Connecting cable ..... | 2 |
| Meter adaptor .....    | 1 |

#### ● Receiver consisting of :

|                        |   |
|------------------------|---|
| Amplifier .....        | 1 |
| Sensor (Pick-up) ..... | 1 |
| Headphones .....       | 1 |

#### ● Aluminum carrying case .....



### SPECIFICATIONS

#### ● Oscillator

|                             |                                 |
|-----------------------------|---------------------------------|
| Power Source                | : 12V DC                        |
| Power Consumption           | : 20W                           |
| Frequency                   | : 50~500Hz                      |
| Operating Temperature Range | : -10°C~+55°C                   |
| Size                        | : 170 (W) x210 (L) x 120 (D) mm |
| Weight                      | : 1.0kg                         |

#### ● Amplifier

|                             |                                   |
|-----------------------------|-----------------------------------|
| Power Source                | : LR6 Battery 1.5Vx 6pcs. (9V DC) |
| Current Consumption         | : 100mA                           |
| Amplification               | : 80dB                            |
| Frequency                   | : 80~500Hz                        |
| Operating Temperature Range | : -10°C~+55°C                     |
| Headphone Output            | : 8Ω (Stereophonic Type)          |
| Level Indication            | : Meter Needle                    |
| Size                        | : 170 (W) x75 (L) x 140 (D) mm    |
| Weight                      | : 1.0kg                           |



#### ● Sensor (Pick-up)

|             |                                     |
|-------------|-------------------------------------|
| Type        | : Piezoelectric Acceleration Sensor |
| Sensitivity | : 0.7V/g (at 400Hz)                 |
| Size        | : φ 80x50mm                         |
| Weight      | : 0.5kg                             |

### FEATURES

|  |   |
|--|---|
|  | <b>1</b> The location, direction and bending of all kind of water pipes can be detected with the NPL-100 locator for the preliminary survey for preventing the damage of pipe and for mapping the correct drawings. |
|  | <b>2</b> The sound wave signal of NPL-100 locator is not affected by the magnetic field and the filter built in its receiver intercepts the external noises such as the traffic and footstep noises.                |
|  | <b>3</b> The operator can tune the frequency of sound wave in the resonant point of each pipe by the remote control of radio wave at the side of the receiver unit.   |
|  | <b>4</b> The NPL-100 locator can locate the non-metallic pipes such as the asbestos and P.V.C. as well as the metallic pipes including the iron pipes jointed with the insulated material.                          |

We reserve the right to change specifications without prior notice.



Instruments for the location of underground utilities and water leaks.

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