YieldPoint
Sensing the future

dMICRO User Manual

YieldPoint Inc.

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Warranty and Service Policy

Product Warranty

YieldPoint Inc., warrants the instruments described in this manual to be free from defects in materials and factory workmanship to the original buyer. This warranty is contingent upon proper use of the equipment, and does not cover equipment that has been modified or has been subjected to abusive physical or electrical stresses. YieldPoint Inc., agrees to repair or replace, at its sole discretion, any instrument that fails to perform as specified within 6 months after date of the original shipment from the factory, or 3 months after the date of installation, whichever date comes first.

Yieldpoint Inc., reserves the right to make substitutions and modifications in the specifications of equipment that do not materially or adversely affect the performance of the equipment.

New equipment may be returned within 30 days of shipment with prior approval. New items which are less than thirty days old after shipment may be returned for credit, less a minimum restocking and testing charge of twenty percent of the list price upon factory approval only, provided the customer pays all shipping and handling charges. Specially ordered, or modified goods, or goods which have been used or have been unpacked, or goods which have been shipped more than thirty days prior are not returnable.

The information contained in this manual is subject to change without notice. YieldPoint Inc. makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Further, YieldPoint Inc., assumes no responsibility for any errors that may appear in this manual and makes no commitment to update, or keep current, the information contained in this manual.

Service Policy

Units within the warranty period returned for repair, test, and recalibration are serviced at no charge in accordance with the terms of the warranty policy. The Customer pays all transportation and other charges to the factory.

Units out of warranty returned for repair, test, and/or recalibration are handled on a time and material basis. If requested, or if costs exceed 50% of current list price, YieldPoint Inc., advises the customer prior to making the repairs. Such repairs are performed at the customer's expense. Typical test, recalibration, and repairs are 25% of the instrument's current list price. Transportation charges both ways are at the customer's expense.

Please be sure all returns are shipped with the following information included:

1. Your company Name with Billing and Shipping Addresses.

2. A complete description of your problem, or re-calibration data.

3. The contact person at your company, with their telephone and facsimile numbers.

4. Non-Warranty returns additionally need your Purchase Order Number.

Please pack your returned instruments in their original shipping cartons, or in equivalent strong protective shipping cartons.

General Statement

The fully integrated digital crackmeter is extremely straightforward to install. This manual outlines a standard procedure.

The instrument is made of 2 telescoping tubular halves that will move relative to one another as the crack opens or closes. Each extremity is affixed to a bolt or anchor driven or grouted into the rock/concrete on either side of the crack.
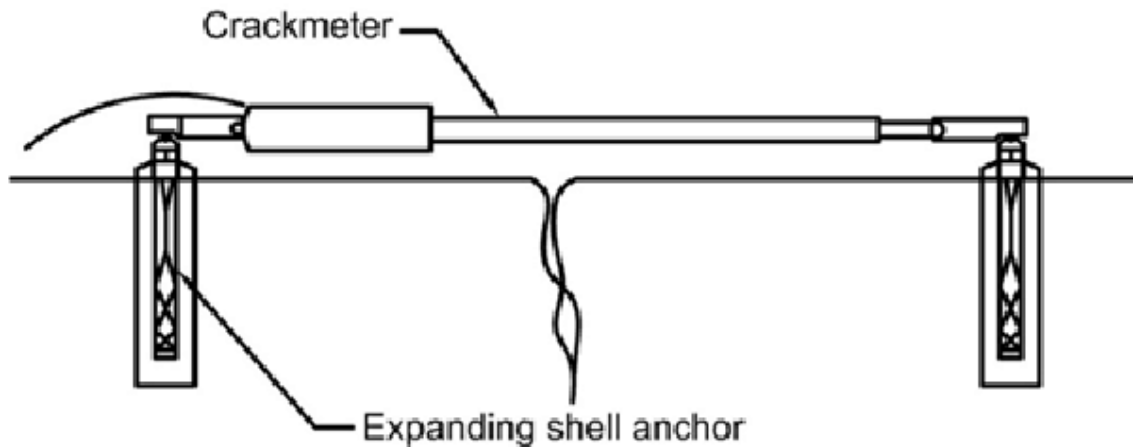
There are 2 models of YieldPoint crackmeter:

- dMICRO with a 10mm stroke and a 1 micron resolution

- dCONV with a 200mm stroke and a 10 micron resolution

A microcomputer is embedded in every instrument so creating truly SMART geotechnical and structural instruments.

The microcomputer delivers advantages such as:

- Improved Accuracy: Linearity, Temperature Compensation with built-in temperature sensor.
- Improved Reliability: non-contact technology, water immunity, low noise.
- Outputs directly in Real World Units.
- Output signals include Unique Sensor ID + SensorType.
- Many channels multiplexed on a single lead wire pair.
- Simplified Low-cost Peripherals: BLE5, WiFi, 4G-CAT-M1, 900MHz, dataloggers, Ethernet gateways.
- Safe and simple Data Transmission and Management.
- Very limited need for configuration.
- Delivered calibrated and ready to use.

Testing the Crackmeter.

1. dREADER verification: plug the dMICRO into the *d*-READER.
   Take a reading of the instrument.
   The instrument will show its ID number, dMICRO name, and a reading of temperature in degree Celsius and the reading of its current position in millimeters.

2. BluLink verification: plug the dMICRO into the BluLink.
   Open the BluPoint app on your Android device and take a reading of the instrument. The instrument will show its ID number, dMICRO name, and a reading of temperature in degree Celsius and the reading of its current position in millimeters. There are 2 BluLinks: BluLink S (sealed) and BluLnk-R (Replaceable batteries).

Install the dMICRO.

3. Identify the crack and spray paint it to make it and its orientation clearly visible.

4. Make a mark across the crack with a marker. If the cracks moves in a shearing parallel direction the 2 sides of the mark will move apart from one another and provide valuable information to add to the perpendicular movement recorded by the crackmeter.
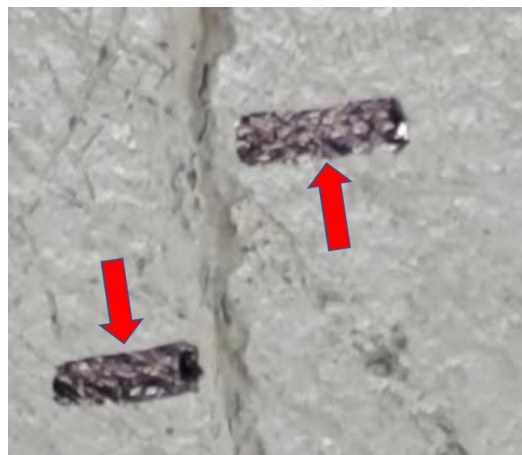
5. Measure the distance between the 2 brackets when the crackmeter is compressed.
6. Mark 2 points across the crack at that distance apart, drill and install the 2 anchors.
7. Install the crackmeter on the anchors, run the lead wire to the desired location of the data logger or telemetry module and connect.

8. Data will be delivered in .txt files such as the following: