# **HEXLOGGER**

#### Model EPT/HEX-4000 CIPS, DCVG, and Data Logger GPS Survey Instrument



## **DESCRIPTION**:

Hexlogger Model **"EPT/HEX-4000**", is a new GPS equipped Coating pipeline survey equipment that able to perform **CIPS**(close interval pipeline survey), **DCVG** (direct current voltage gradient), and **DCVG+CIPS** combined pipeline integrity survey. It has the ability to record instant ON and OFF pipeline potential with distance, GPS coordinates and time.

By using **EP-TECH computer software** and clicking a button, the operator can Graph the survey data information and find out the critical cathodic protection level of the pipelines.

Beside its logging features, it is powerful and an accurate equipment for detecting and tracking the escaping currents of pipelines by using its bar graph display option in DCVG mode.

Hexlogger can display the results of the CIPS survey in graphical form on the LCD screen allowing the operator to view the data as the survey proceeds.

Hexlogger can record distance in feet or meters. Pipeline starting survey distance can be entered from the keyboard.

## **Technical Information and Features:**

- 1- Input voltage: 7.2 volt/ 4000MA
- 2- Large 240 x 64: LCD Display Graphics
- 3- Consumption: Current 109 MA without GPS Engine and with GPS 149 MA
- 4- Memory Capacity: 2GB Flash Memory (2000MB)
- 5- Ability to Tag information
- 6- Internal clock: separate Lithium Battery and works separately from the Processor
- 7- **Keypad :** 7 x 4 tactile Switch keypad
- 8- AC Active filter : -73db for 50/60 HZ for Power Line interferences
- 9- Input Impedance : selectable 1000/ 100 MG Ohms
- 10- Input: differential input with two separate channels for survey
- 11- Interruption Program: Cycle from 0.5 up to 10, OFF from 0.2 up to 10 seconds
- 12- Data logger : 4 local data logger channels
- 13- Logging time : from 1 second up to 64000 seconds automatic or manual
- 14- Range of measurement: +/- 5000 MV
- 15- Size of the unit: 182x 182 x 63 mm Aluminum box
- 16- **EP-Tech software:** downloading information via RS232 or USB port, Export data to Excel, and plot the graph.
- 17- Charger current: constant current 400 MA
- 18- Graph ability with EP-Tech Software
- 19- Graph Zooming ability





Model: EPT-4000

## **TYPICAL APPLICATIONS:**

It is a sophisticated electronic Milli-voltmeter with a 20000 Mega-Ohm input resistance. Analog DCVG Holiday detector is able to detect very low voltage gradients and provide easy methods of finding any coat defect in a pipeline by using analog panel meter. Not only is DCVG Holiday Detector able to show the ON and OFF voltage gradient of a pipeline, but it's also able to show the difference between ON and OFF in interruption mode. It is powerful and an accurate equipment for detecting and tracking the escaping currents of the pipelines.





- Robust and fully portable
- Waterproof box
- Highly accurate of finding Coating defect and ability to find 1 "milli volt" voltage gradient
- Ability to work as a side drain direction current detector
- Easy to use by one operator
- Easy to use in deserts, on asphalt/concrete
- Highest input resistance in the world (20000 Mega Ohm)
- Stabilized and filtrated against AC and stray currents
- Locates electrical short circuits
- Flexible pogo sticks
- High impedance Reference Electrodes (Cu/CuSO<sub>4</sub>)
- Chargeable batteries and indicators





Model: EPT/LC-200

### **TYPICAL APPLICATIONS:**

This equipment is used for cathodic protection monitoring, CP Pipeline survey, and in the field. It is protected against AC power lines or telluric stray current and suitable for potential survey DC and AC of the Pipeline Test Points.



- High input impedance selectable from 25, 50,100, 250, 1000 Mega Ohm
- DC volt 0- 20 MV, 200 MV, 0- 2 v, 0-200 V
- DC Current 0- 2A, 0- 20A
- AC Mode 600 V
- Resistance measurement 0- 2000 ohm
- Resolution for DC mode 0.01 MV, 0.10 MV, 1.00 MV, 0.1 V and current Mode is 0.001 A, 0.01A
- Resolution for AC mode 1 V
- Low Battery consumption
- NCD Battery with charger
- One year limited warranty
- External shunt 00.001 ohm/50A 1mv =1 Amp
- Battery test indicator
- CU/CU SO4 Reference Electrode
- Flexible pogo stick to extend the reference electrode
- Ac Rejection -80db or 1/10000
- 3-1/2" DLCD Liquid Crystal Meter
- Battery test indicator
- Aluminum carrying case



Model: EPT/DPM-20

## **TYPICAL APPLICATIONS:**

This equipment is suitable for measuring pipe to soil potential of buried pipelines or other metallic structures.



- High input impedance 1000 Mega Ohm
- DC volt 200 MV, 0- 2 v, 0-20 V with high resolution
- Low Battery consumption
- 4.8-volt NCD Battery with charger
- One year limited warranty
- Heavy duty suitable Pelican case with foam for boxing and carrying
- Battery test indicator
- CU/CU SO4 Reference Electrode
- Ac Rejection -80db or 1/10000
- 3-1/2" DLCD Liquid Crystal Meter
- Battery test indicator
- Test leads with Banana Plugs Connector
- Aluminum carrying case



Models: EPT/CI-15, EPT/CI-25 EPT/CI-50, EPT/CI-100

## **TYPICAL APPLICATION:**

Current Interrupters need to turn ON and OFF the Rectifiers power for cathodic protection survey sources. Measurement of ON and OFF potential, shows a good explanation of the level of the protection of the Pipelines. We have different ranges of GPS Current Interrupters, they are "15, 25, 50, 100, 200, and 300" AMP.

All "EP-TECH" current interrupters are equipped with Global Positioning System (GPS) engines for precise interruption synchronization. The GPS engine is on at all times to ensure 200 nanosecond timing synchronization.



- 12 satellites visible and it works in all parts of the world
- Magnet mounts GPS Antenna
- GPS lock indicator
- RS 232 port to connect to PC for UTC time, date, and coordinates
- Programmable or Selectable Interruption program models
- Manual and GPS Synchronized Mode and Compatible with NACE Standard Logic
- Rechargeable long life battery
- Resynchronized every 1-minute and remains synchronized
- Waterproof and heavy-duty box
- 5 program capability
- Programmable start and stop time
- Programmable start and stop date
- Hold rectifier power ON when not interrupting
- 1 year Warranty from the date of purchase against defective component and faulty workmanship





Models: EPT/AC- 16 EPT/AC- 20 EPT/AC- 30

#### **APPLICATIONS:**

- High voltage coating inspection on oil, gas, and water pipelines
- Inspection of coating on concrete, storage, tank, water and sewage treatment facilities
- Inspection of various thickness coating on steel, chemical reactor or storages

#### **FEATURES**:

- Simple, accurate and precise
- Robust and fully portable
- Digital or analog display of output High voltage to 0.1 KV
- 16- 20- 30 KV models available
- Fully adjustable output metering
- Audio and visual alarm
- Power On alarm Indicator
- · Low battery indicator
- Rechargeable battery
- Low current consumption, long life battery
- · Adjustable sensitivity for dry or wet conditions
- Lightweight and rugged instrument

# **PEARSON HOLIDAY DETECTOR**

#### Model: EPT-1000

## **TYPICAL APPLICATIONS:**

It is a sophisticated electronic receiver with high input resistance that is able to detect low audio AC voltage gradients (ACVG) and provide easy methods of finding any coat defect in a pipeline. Audio powerful Transmitter is connected to the pipe and an operator is able to select the output so that it sends maximum energy to the pipe by using a panel meter. It is equipped with two visual and audio indicators that show the direction of the currents escaping from the defects.



- Robust and fully portable
- Waterproof box
- Highly accurate method of finding Holidays
- Dual transmitter frequency 745 HZ and 4Hz to eliminate external interference
- Easy to use by two operators
- High input resistance
- Stabilized and filtrated input
- Adjustable pogo sticks
- Ability to work with parallel pogo sticks or cleat shoes
- Chargeable Batteries
- Low consumption rate
- One year limited warranty



#### Model: EPT-1000

## **TYPICAL APPLICATIONS:**

It is a sophisticated electronic receiver that is equipped with a search coil and is able to detect coated pipeline signal for a great distance by using null method theory. Transmitter conductively connected to the pipe by a remote ground and equipped with Interruption mode to eliminate noise and stray currents. The Transmitter has different output levels to match the impedance to all soil conditions.





- Crystal Controlled Oscillator
- Equipped with Analog Meter and Audio Alarm
- Dual transmitter frequency 745 HZ and 4Hz to eliminate external interference
- Automatic Excellent Sensitivity
- Ability to measure depth of pipelines
- Simple and highly accurate
- Rechargeable Nickel Cadmium Batteries with Switching Power Supply Charger
- Stabilized and filtered
- Low consumption rate
- Temperature Frequency Stabilized



#### Model: EPT/124F

## **TYPICAL APPLICATION:**

It is a sophisticated electronic digital null meter. The Soil Test Resistance Meter is used to measure soil resistively and to determine optimum location for earth Electrodes and Anodes.



- Wide Range selection from 0.01 -1 Mega ohm with three digits
- Automatic excellent Sensitivity
- Able to work in the lab or in the field
- Highly Accurate
- Rechargeable NCD Battery
- Digital Panel Meter
- Stabilized and filtered input
- Low consumption rate
- Compatible to use with 4, 3, or 2 pins method
- Operates on 124 HZ for maximum AC rejection
- Waterproof box
- Temperature Stabilized
- Automatic shut down