

# PDD 10

## Ultrasound Partial Discharge Detector Heterodyne Tester



The PDD 10A is a hand held non destructive inspection system which utilizes ultrasonic technology for predictive maintenance.

The PDD 10A, Receiver, is the primary component in the system, detects and converts ultrasound into easily recognizable sounds within the human range of hearing and supplies output to a stereo mini plug and data logger. Due to its excellent directivity by laser light, it is possible to easily detect the discharge points. Prime application would be on partial discharge in the electrical power Distribution segment & Industries.

**Electrical Arcing & Corona Partial Discharge :** When electricity escapes in high voltage lines or when it jumps across a gap in an electrical connection, it disturbs the air molecules around it and generates ultrasound. Often this sound will be perceived as a crackling or frying sound. The PDD 10A has proved to be very effective for diagnosing corona/arcing during day-time in Power Distribution Networks.

### Description

The PDD 10A continues TAURUS's history of taking the lead in pushing state of art technologies to new levels. This PDD 10A helps you to maintain safe distances from test areas and detect ultrasound from safe distance. The parabolic design enhances the capabilities of the PDD 10A ultrasound sensor by increasing the effective detection distance to more than 10 mtr.

**This instrument is a hand held device that captures ultrasonic waves generated by the discharge phenomenon and detects these discharge points from a isolation distance by targeting with laser light. It cannot be used to detect air leaks.**

Enhanced ultrasound detection is provided to the PDD 10A by combining the features of the already proven Ultra sound sensing technology with extended range and sensing capabilities. A handheld type design having better grip & laser pointer sights make the PDD 10A more precise to easily pinpoint the source of ultrasound..



### Advantages of Ultra Sound Testing

**Improved safety when testing with ultrasound :** The PDD 10A is designed to test high voltage insulators, switchgear and transformers for internal & external arcing and corona partial discharge safely. The PDD 10A can also be used to test critical equipment from a safe area. You can improve your safety practices as well as locate potential points quickly.



**Find arcing and corona partial discharge :** You can indicate and locate the ultrasound produced by arcing and corona discharge easily using the PDD 10A. In many cases, ultrasound is produced before heat. Therefore, you can implement an early cost effective routine monitoring program.

**Performs better :** The PDD 10A has been tested on numerous occasions alongside competitive technologies. The PDD 10A detects with ultrasound technology with better accuracy from greater distances than other devices.

**Improves power transmission testing :** You can increase the amount of electricity that reaches your customers and decrease power grid failure by using the PDD 10A to routinely monitor power distribution lines, Switchgear and transformers.

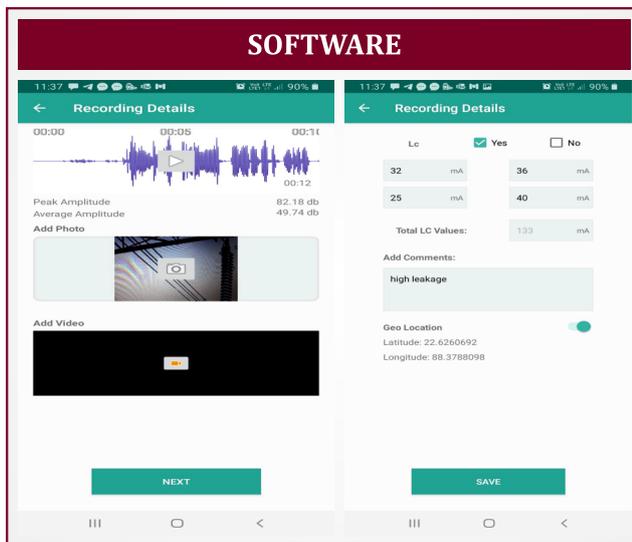
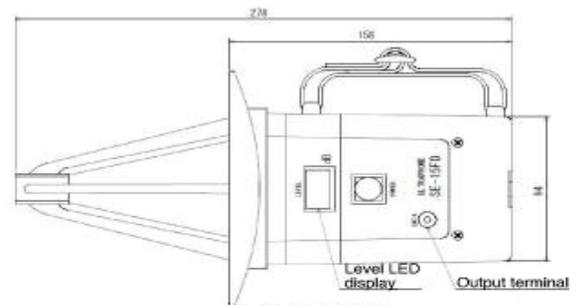
Mfd & Mkd by.

## THE SPECIFICATION OF DISCHARGE DETECTOR

Reception frequency	40kHz±1kHz
Reception sensitivity	30dB~70dB (When the distance between the detection point of failure and the instrument is 2.0m)
Display resolution	1dB
Data output	30mV~70mV
Measurable distance	10m (Distance between the detection point of failure and the instrument)
Reception level display	7-Segment LED display
Power supply	AA batteries x 4ea
Range of operating temperature	10°C ~40°C, less than RH85% (w/o condensation)
Range of storage temperature	10°C ~50°C, less than RH85% (w/o condensation)
Size	215x66mm
Weight Approx.	700g (excluding the battery and carry case)
Output	Provision to connect it to a data logger equipped with a stereo mini plug and available to import the data to your computer.
Accessories	Carrying case, Instruction manual, AA batteries & stereo mini plug

### Optional Sound Software 2.0

Sound Software 2.0 allows user to quickly test and receive real-time feedback from ultrasound discharge points like Insulator, cable joints, switchgear panel, motors. Testing take seconds and results are instant. This software is the only handheld ultrasound data capture device that instantly provides an ultrasonic wave form of the component under test.



### Get instant feedback

- View ultrasound waveform from plant floor
- Calculates root mean square
- Provides event indication
- Audio/visual playback



## TAURUS POWERTRONICS PVT LIMITED

Corp. Off.: No. 26, "Mahadimane", 12th Main, 1st Block, Rajajinagar, Bengaluru - 560 010. INDIA  
Sales & Service Off.: No. 648/54, KLE College Road, 2nd Block, Rajajinagar, Bengaluru - 560 010  
Tel: +91 7349644344, Email : info@tauruspowertronics.com, enquiry@tauruspowertronics.com  
www.tauruspowertronics.com

BENGALURU  
DELHI  
KOLKATA  
MUMBAI