

# RT-200

## HI-TEST ROPE TESTER

### Operating & Instruction Manual



**HD ELECTRIC COMPANY**

1475 LAKESIDE DRIVE • WAUKEGAN, ILLINOIS 60085 U.S.A.  
PHONE 847.473.4980 • FAX 847.473.4981 • website: [www.HDElectricCompany.com](http://www.HDElectricCompany.com)



## WELCOME TO THE...

### HD ELECTRIC COMPANY FAMILY OF ELECTRICAL PRODUCTS

Hi-Test Detection Instruments is now a part of the HD Electric Company group of Electrical Test and Measurement equipment.

HD Electric Company, located in Waukegan, Illinois, USA is a manufacturer and provider of a wide range of electrical equipment. We have been in business for over 65 years by providing proven products and reliable service. Our product offerings include Electrical Test and Measurement, Control Instrumentation & System Measurement, Lighting Products and Specialty Products. If you are already an HD Electric Company customer, we thank you for your valued business. If you are a new customer, we appreciate your business and look forward to meeting all of your needs.

At HD Electric Company, it is our goal to provide you with the tools and equipment you need to perform your job in the safest and most efficient way possible. It is our intention to provide you with the continuing service and support your need for all your Hi-Test equipment. You should feel free to contact us regarding any aspect of the application or operation of this test equipment. We can be reached at:

#### HD ELECTRIC COMPANY

1475 Lakeside Drive  
Waukegan, IL 60085 USA  
Tel: 847-473-4980 • Fax: 847-473-4981  
[www.HDElectricCompany.com](http://www.HDElectricCompany.com)

At HD Electric Company, we understand the special training and requirements for work on electrical power distribution systems. Please take a few moments to read this manual in its entirety before using your new equipment. Pay special attention to the warnings and cautions both in this manual and on the equipment itself.

**NOTICE** - This product is designed for use by professionals trained in its use and application in and around high voltage electrical equipment. If you are not trained in the work methods required for safe operation, do not proceed until you obtain training.

**CAUTION** - This product was tested before leaving the factory but it must be tested prior to and after each use for proper working operation. Be aware that dirt, moisture, mechanical fatigue and other factors reduce the dielectric strength of this product. If any defect of condition is noted, do not use this product. Remove from service and arrange for repair.

**WARNINGS** - Rigorous hot stick work precautions and OSHA and company work practices must be followed. Always wear approved cover-up and safety equipment. Read and understand instructions prior to use. Misuse or abuse of this product can lead to severe injury or death.

Unit Serial No.: \_\_\_\_\_

Manufacture Date: \_\_\_\_\_

## OPERATING INSTRUCTIONS

1. Insert one end of the rope to be tested in the clamps on the tester by lifting clamps and inserting the rope.
2. Push the ON button; the ON/CHARGE LED indicator will light green.
3. Hold the tester with one hand and pull the rope continuously through the clamps in one direction at any speed up to 30 centimeters or 1 foot per second. As long as the rope is non-conductive (i.e. good), the green ON/CHARGE LED indicator will remain lit. If the rope (or any section of it) is conductive (i.e. bad), the red BAD LED indicator will light and a Buzzer will sound.

**NOTE:** a) the rope can be pulled through the test clamps in either direction;

b) ropes of a diameter larger than 3.5 centimeters or 1.25" should be rotated or "spun" as they are pulled through the test clamps. One rotation per 30 to 60 centimeters or 1 to 2 feet will increase the surface contact between the rope and the clamps when the rope is of a larger diameter.

4. After pulling the entire length of rope to be tested through the test clamps, turn the tester OFF by pushing the ON button again. The green ON/CHARGE LED indicator will go out. This will preserve the charge in the battery.

**WE RECOMMEND THAT ROPES BE TESTED AS CLOSE TO THE TIME OF USE AS POSSIBLE.**

Variations in humidity over time make it possible for the same rope to test good at one time and bad at another time.

## POSSIBLE SHOCK HAZARD FROM THE ROPE TESTER

1. The operator should avoid getting in series with the two test clamps on the tester. There is a current of 35 - 40 microamps at approximately 7 KVDC between the test clamps when the tester is turned ON.
2. The operator should avoid getting in series between either of the test clamps and the contact pins in the battery recharging receptacle on the side of the tester. There is a current of 35 - 40 microamps at approximately 7 KVDC between these points when the tester is turned ON.

## BATTERY RECHARGING

1. When the LOW BAT. LED indicator lights red, the battery should be recharged using the adapter supplied with the tester. A full charge will require 12 hours of recharging.
2. When the adapter is connected to the tester, the ON/CHARGE LED indicator will light red to indicate the battery is charging.

If the ON/CHARGE LED indicator is amber in color, it means the tester is turned on while you are attempting to recharge the battery. The battery will not recharge under this condition.

If the ON/CHARGE LED indicator does not light at all, it means the battery is not being recharged. Check to ensure that both ends of the adapter are properly connected; check to ensure that there is power at the wall outlet you are using to recharge the battery.

3. We recommend that the battery be recharged nightly rather than waiting for the LOW BAT. LED indicator to come on. The battery used in this tester is an 8-volt, 1 amp. hr. sealed lead acid battery. It will not suffer from the "discharge memory" problem which NiCad batteries are susceptible to when recharged from a partially discharged condition. Lead acid batteries should not be drained and then left in a discharged state. If the battery is left discharged for extended periods of time, this will permanently damage the battery and shorten its life. They should always be charged before storing them for any length of time. It is also important to ensure that the battery is fully recharged at least once every three months when the tester is not being used regularly. This will protect the battery against early failure.

## WARRANTY

The Hi-Test Rope Tester (Model RT-200) is warranted against defects in manufacture for a period of one year from the date of purchase. The only exclusions to this warranty are:

- 1) the rechargeable battery;
- 2) evidence that the tester has been subjected to unusual physical damage (including cracks, breaks, or dents in the plastic case and/or components consistent with the tester having been dropped, crushed, or otherwise mishandled); and
- 3) if the tester is returned in a condition that indicates it has been modified or tampered with.

This product is built to the highest quality standards. An extensive program of laboratory development and field testing preceded its commercial introduction to ensure that it will withstand the rigors of field use. However, it is an electronic instrument and is subject to breakage if it is handled in an excessively rough manner.

If the tester requires repair, it must be returned to HD Electric Company, or their agents; freight prepaid and properly packaged to protect it against damage in shipping. HD Electric Company and its agents will assume no liability for damaged instruments not properly packaged.

If you have any problems, questions, or comments about the tester, phone HD Electric Company in Waukegan, Illinois, USA at 847-473-4980 or fax us at 847-473-1981.





## LIMITED WARRANTY AND LIMITATION OF LIABILITY

This warranty applies to all products sold by HD Electric Company (the "Products"); provided, however, that the term Products does not include any third party products purchased through HD Electric Company, for which no warranties are made (the "Third Party Products"). Third Party Products may be subject to a separate manufacturer's warranty; [should you have any question regarding whether a separate warranty applies, please contact HD Electric Company].

NOTICE: READ THIS LIMITATION OF WARRANTY AND LIABILITY BEFORE BUYING OR USING THE PRODUCTS CONTAINED HEREIN.

It is impossible to eliminate all risks associated with the use of the Products. Risks of serious injury or death, including risks associated with electrocution, arcing and thermal burns, are inherent in work in and around energized electrical systems. Such risks arise from the wide variety of electrical systems and equipment to which Products may be applied, the manner of use or application, weather and environmental conditions or other unknown factors, all of which are beyond the control of HD Electric Company.

HD Electric Company does not agree to be an insurer of these risks.

WHEN YOU BUY OR USE THESE PRODUCTS, YOU AGREE TO ACCEPT THESE RISKS.

HD Electric Company warrants to the original purchaser that the Products (excluding any third party products purchased through HD Electric Company, for which no warranties are made) will be free from defects in material and workmanship, under normal use and regular service, and preventative maintenance for a period of one (1) year from the date of shipment (the "Warranty Period"). Should any failure to conform with this warranty be found during the Warranty Period, you must notify HD Electric Company of your claim within thirty (30) days of discovery, and within the Warranty Period. Your failure to give notice of claims of breach of warranty within the Warranty Period shall be deemed an absolute and unconditional waiver of claims for such defects. HD Electric Company will have no responsibility to honor claims received after the date the applicable Warranty Period expires.

Upon notice of your claim, HD Electric Company will provide a return authorization number, and further instructions on how to return the product for service. You must follow HD Electric Company's instruction. You are responsible for all Product removal, handling, re-installation, and shipping (both to and from HD Electric Company). Products returned for repair, as well as repaired or replacement Products shall be sent postage / freight prepaid. After receipt of a product which HD Electric Company determines is defective, HD Electric will, at its option, either (1) repair (or authorize the repair of) the Product or (2) replace the Product, subject to the following: The Products are made using parts sourced from a variety of manufacturers. Due to the rapidly changing technology environment, parts may become obsolete / unavailable over time (end of life). In the event that a Product cannot be repaired or replaced due to unavailability of parts, HD Electric Company will use commercially reasonable efforts to obtain substitute parts or conduct work around design, but cannot guarantee its ability to do so.

Items not found defective will be returned at your expense, or failing receipt of instruction from you on return of such items within five (5) business days of our notice to you that the product is not defective, HD Electric may dispose of the product at its discretion and with no liability to you. HD Electric Company's determination of defects is final. Products repaired or replaced during the Warranty Period shall be covered by the foregoing warranties for the remainder of the original Warranty Period or ninety (90) days from the date of delivery of the repaired or replaced Products, whichever is longer.

### LIMITATIONS:

This warranty is void in the event of misuse, alteration, faulty installation, or misapplication of the product. This warranty does not cover failure of product or components due to any ACT OF NATURE; lightning, floods, hurricanes, tornadoes or any other such catastrophic events.

HD Electric Company does not warrant any third party products or associated hardware or their performance or suitability for use and application. Such items are provided "as-is".

All repairs must be authorized by HD Electric Company. Unauthorized repairs will not be reimbursed under any circumstances.

HD Electric Company is not required to make replacement or loaner equipment available while Products are being repaired or replaced, or to compensate you for any in/out labor charges or expenses associated with removal, handling or re-installation of the Products.

TO THE MAXIMUM EXTENT PERMITTED BY LAW, THIS WARRANTY AND THE REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED. HD ELECTRIC EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY AND NON-INFRINGEMENT.

IN NO EVENT SHALL HD ELECTRIC COMPANY BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THESE PRODUCTS. THIS SHALL INCLUDE BUT, NOT LIMITED TO, LOST PROFITS OR REVENUE, LOSS OF USE OF THE PRODUCTS, COST OF SUBSTITUTE PRODUCTS, FACILITIES OR SERVICES, OR DOWNTIME.

IN NO EVENT SHALL HD ELECTRIC COMPANY HAVE ANY LIABILITY FOR ANY THIRD PARTY PRODUCTS OR ASSOCIATED HARDWARE, OR CUSTOMER-OWNED SYSTEMS, EQUIPMENT OR SOFTWARE.

HD Electric Company must have prompt notice of any claim so that an immediate product inspection and investigation can be made. Buyer and all users shall promptly notify HD Electric Company of any claims, whether based on contract, negligence, strict liability, or other tort or otherwise be barred from any remedy.

HD Electric Company is committed to ongoing review and improvement of its product lines, and thus reserves the right to modify product design and specifications without notice.

HD Electric Company products are available through HD sales representatives worldwide.

Printed in U.S.A. © HD Electric Company 2011 • Bulletin No. RT200 IM-200a