# 3 Phase Cable Identifier Operating Instructions



The 3ID 3 Phase Cable Identifier includes a SENDER and RECEIVER for identifying individual conductors in 3 phase overhead or underground cable installations.

# IMPORTANT SAFETY INFORMATION

Read and understand these instructions prior to use. These operating instructions are not a substitute for proper training in the use of this equipment.

- Cables and conductors to be tested must be deenergized and discharged on both ends before connecting the 3ID.
- Test the 3ID before each use for proper operation and a good battery and inspect all test leads for physical damage.

## **TEST BEFORE EACH USE**

Connect the SENDER leads to the RECEIVER leads: A to A, B to B, C to C and RETURN to RETURN.



Turn both units ON by pressing the ON button and verify A B C and Battery lights are all on. Replace the battery if either unit does not pass this test.

### CONNECT SENDER TO ONE CABLE END

Connect one SENDER lead to each phase conductor. Connect green RETURN lead to cable neutral. Turn the SENDER ON. Any phase conductor shorted to cable neutral will turn on the SHORT light.



# HD ELECTRIC COMPANY

1475 LAKESIDE DRIVE • WAUKEGAN, ILLINOIS 60085 U.S.A. PHONE 847.473.4980 • FAX 847.473.4981 • website: www.HDElectricCompany.com



### CONNECT RECEIVER TO OPPOSITE CABLE END

Connect one RECEIVER lead to each phase conductor. The green RETURN lead connects to cable neutral. Turn the RECEIVER ON. In phase indications will appear for each phase on both SENDER and RECEIVER. Rearrange RECEIVER leads as required until all phase indications are on.

Use the ON/OFF Verify button to turn the SENDER and RECEIVER quickly on and off as needed to signal from one cable end to another.

Turn SENDER and RECEIVER off after use. These units do not shut off automatically.

### **TESTING CABLES WITH BROKEN OR MISSING NEUTRALS**

For testing three phase conductors without a continuous neutral or ground connection from one end to the other:

- Connect the SENDER leads A and B to two of the three phase conductors. Connect the RETURN lead to the third conductor.
- Connect the RECEIVER leads A, B and RETURN as needed on the three phase conductors until the A and B lights turn on.

With the A and B lights on, the RETURN lead will be on the C conductor.

## **BATTERY REPLACEMENT**

Remove the outer rubber boot and access the battery compartment through the door on the back of the unit.



**Operating Voltage: 38VDC Maximum** 

Operating Temperature Range: -40°F to +120°F (-40° to 49°C) Battery: 9V alkaline 1604A, IEC 6LR61 or 9V lithium, ANSI-1604LC

CALIBRATION & TESTING: Regular calibration of the 3ID is not required.

There is no calibration adjustment.

**SERVICE:** Return to HD Electric Company for service.

#### LIMITATION OF WARRANTY AND LIABILITY

NOTICE: READ THIS LIMITATION OF WARRANTY AND LIABILITY BEFORE BUYING OR USING THIS PRODUCT. IF THE TERMS ARE NOT ACCEPTABLE, RETURN THE PRODUCT AT ONCE, AND THE PURCHASE PRICE WILL BE REFUNDED.

It is impossible to eliminate all risks associated with the use of this product. 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 this product may be applied, the manner of use or application, weather and environmental conditions or 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 THIS PRODUCT, YOU AGREE TO ACCEPT THESE RISKS.

HD Electric Company warrants that this product is free of defects in material and workmanship, under normal use and service, for a period of one (1) year from the date of shipment. This warranty is void in the event of misuse, alteration, faulty installation, or misapplication of the product.

HD ELECTRIC COMPANY MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. IN NO EVENT SHALL HD ELECTRIC COMPANY BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. BUYER'S OR USER'S BARGAINED-FOR EXPECTATION IS EQUIPMENT FREE OF DEFECTS IN MATERIAL AND WORKMANSHIP WHICH IS CAPABLE, WHEN PROPERLY APPLIED BY TRAINED PROFESSIONALS, OF PERFORMING IN ACCORDANCE WITH THE PRODUCT DESCRIPTION. THE EXCLUSIVE REMEDY OF THE USER OR BUYER AND THE EXCLUSIVE LIABLITY OF HD ELECTRIC COMPANY OR SELLER, THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT, OR AT THE ELECTION OF HD ELECTRIC COMPANY OR SELLER, THE REPURN OF THE PRODUCT. REPLACEMENT OF THE PRODUCT.

HD Electric Company must have prompt notice of any claim for damage or injury so that an immediate product inspection and investigation of the incident 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 or 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 2017 • Bulletin No. 3ID INSTCARD-103