Powering the Way

To A Better Tomorrow

TRADE SAFE ELECTRICAL

+27 82 958 4722

lichelle@tradesafeelectrical.co.za

P.O Box 22254
Glen Ashley | Durban | 4022

www.tradesafeelectrical.co.za

Tanbos

LB4-60A

Smart Bridge for cable fault location

Tanbos

LB4-60A Smart Bridge for cable fault location

- **No need to analyze waveform (TDR reflection based technologies)**
- **Directly show the fault distance**
- **Compact and lightweight**
- **Suited for prelocating difficult, high-resistive faults**
- **With burning function up to 60kV**
- **One knob to easy operate**

Introduction

The LB4-60A is a highly accurate high-voltage bridge designed to pre-locate cable faults. We add burning function inside with a high voltage up to 60kv which will be useful to high-resitive faults.

Why do you need an HV bridge when you have ARM based prelocation?

Because it locates faults where the otherwise perfect reflection based technologies have limits, for example on long cables as subsea cables.

- TDR reflection based technologies have very large reflections on crossbonded cables, which prevent longer ranges
- Reflection measurements are based on an impedance measurement, while the LB4-60A measures resistance. Resistance and impedance values can be completely different while having the same cause.
- The main insulation wave reflection characteristics of low-voltage cables are bad, making it difficult to obtain effective TDR reflection

Intelligent Diagnosis

Numeric Result

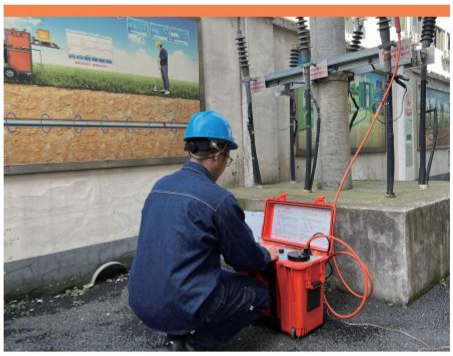
Bipolar Voltage

Burning Function

Applications

- Meet faults while TDR reflection based technologies can not work good
- Meet high-resistive faults need to burn through which will be easier to locate
- Want to see fault distance directly with no analysis waveform
- Pre-locate sheath fault of a cable





One knob to easy operate

With its single rotatory knob, all function can be selected and controlled easily.

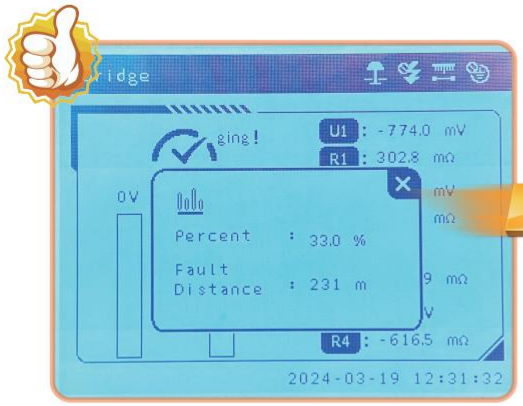
LB4-60A — Time-saver at your service for cable fault locating

- Light weight
- Rugged design

- Portable
- Trolley case design

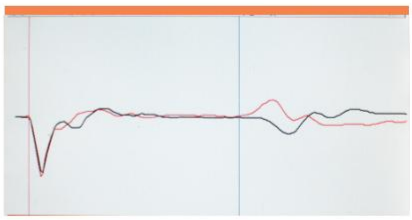
Easier measurement

No need to analyze waveform, no need to calculate, directly show distance between you and faults



New digital location mode shows fault distance directly

Traditional wave-reflect location: impulse current method



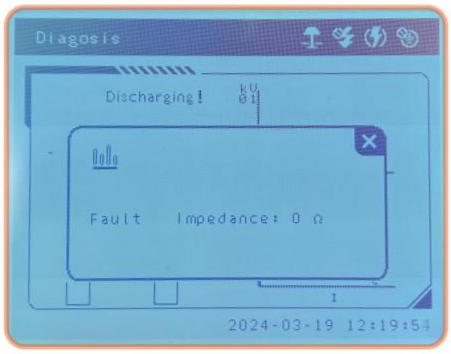
Traditional wave-reflect location: Arc Reflection Method

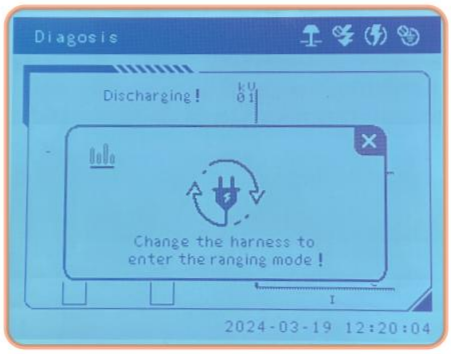
Stronger burning function

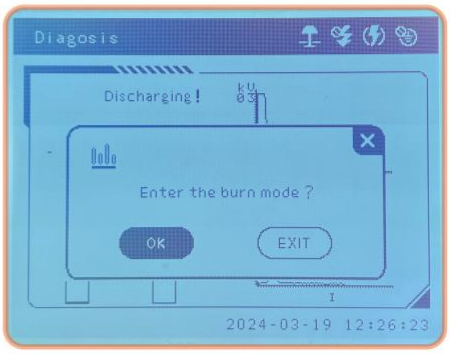
Up to 60kV output voltage which will be easier to burn high-resistive faults to low-resistive faults in a short time.

Smarter analyze

Smart function which will auto analysis the state of a cable and directly show you fault distance.







TECHNICAL DATA	
Test mode	Intelligent diagnosis mode, bridge mode, cross section mode, burn through mode
Intelligent diagnostic mode	
Function	Automatically determine the fault type, recommend the test method, guide into the burn through mode or ranging mode
Output voltage	0~60kV DC, negative polarity
Burn through mode	
Output voltage	0~60kV DC, negative polarity
Short circuit current	400mA
Burn through power	20~100%, adjustable
Burn through time	0~90min, adjustable
Bridge mode	
Output voltage	0-4kV DC, bipolarity
Output current	0-750mA
Cross section mode	
Cable cross-sectional area	1-9999mm2, adjustable
Boost operation	CNC operation, automatic boost
Test range	0.001-50km
U-t, I-t change relationship	Two-dimensional coordinate map display
Voltage and current display	Digital display, no dashboard
Positioning accuracy	± (0.1%·L+1) m (L is cable full length)
Grounding detection	Contact resistance between the test ground and the protection ground should be less than 10Ω
Safety	Temperature detection, automatic protection loop, double ground system
Screen	320*240 LCD, visible in sunlight
Data storage	Record historical data in ranging mode, max 100 pieces
Max output power	400W
Memory	32G, USB port
Operating temperature	-25°c ~50°C
Storage temperature	-30°C~60°C
Humidity	< 95% no condensation
Power supply	AC 100V~240V, 50/60Hz
IP	IP43
Weight	22.5kg (without accessories)
Size(Lx W x H)	300x460x500mm

Standard accessories

Test cable
Output line for bridge ranging function

HV output cable
Used for burn-through function

Short connection cable
Used for short-circuiting the end of cable when test distance

Special ground wire
Used for grounding the housing of equipment

Test box
Regular calibration for the fault location function for the bridge

Discharge rod
Used to discharge the cable

Power cable
Used to power the device