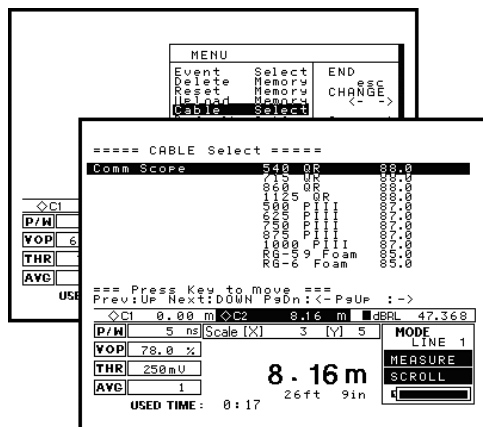
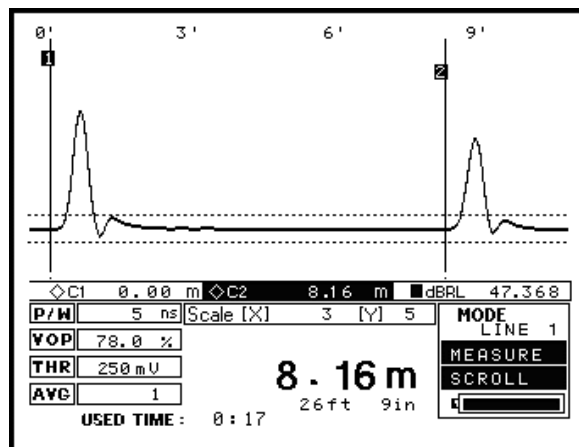


BS36

Waveform TDR (Time Domain Reflectometry) Cable Fault Locator

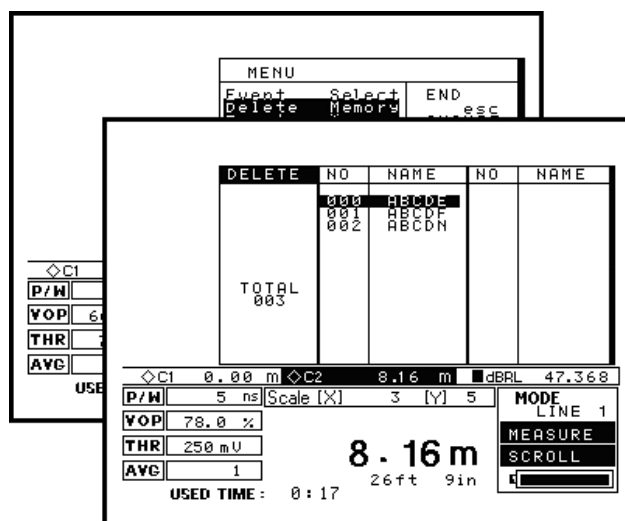


BS36 Waveform Cable Fault Locator is highly accurate portable measuring instrument based on TDR (Time Domain Reflectometry) technology that analyzes the physical characteristics of cables consisting of at least two metallic conductors. It can analyze or test a variety of cable conditions and faults from a remote distance such as **complete open & short, partial open & short, loading coils, loose connection, broken lines and faulty impedance** etc.



BS36 can effectively be utilized in a variety of the cable environments including **telephone lines, high-speed communication lines, CATV lines, power distribution lines, UTP cables (CAT 3, 4, 5, 5e & 6)** etc. The instrument displays the measurement/test results in graphic and tabular forms through a large-sized graphic LCD screen with 320x240 pixel resolution.

By providing separate keys for some frequently used functions and incorporating intuitive easy-to-use menu for other functions, users can handle it without much difficulty. With large internal memory and a serial communication port, users can **store up to 100 waveforms** in the instrument and **download them to computers** for analyzing with the specially developed PC software. With high accuracy as well as user-friendly features, BS36 is an excellent instrument for cable installation, maintenance & repair crew.



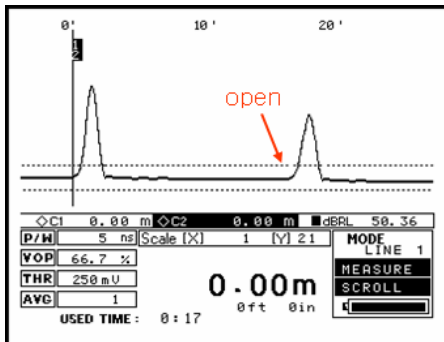


BS36 has been using in many industrial sites such as Telephone company, ISP, CATV company, HFC network maintenance company, LAN installer or maintenance company, Power plant company, Chemical company, Ship-builder, Military communication unit, Large-sized factory and Subway station wherever any kinds of metallic cables are installed and need to be maintained.

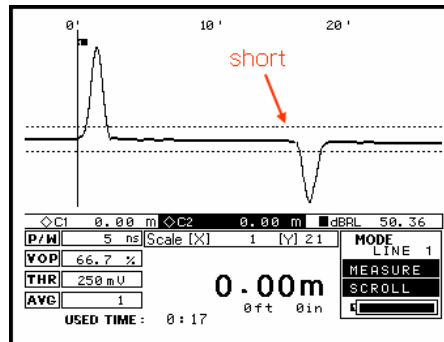
- Coaxial cables network maintenance
- CATV and CCTV network maintenance
- Electric power cable maintenance
- Telephony network maintenance
- Security cable maintenance
- LAN network maintenance

Sample Waveforms of Various Events in Cables

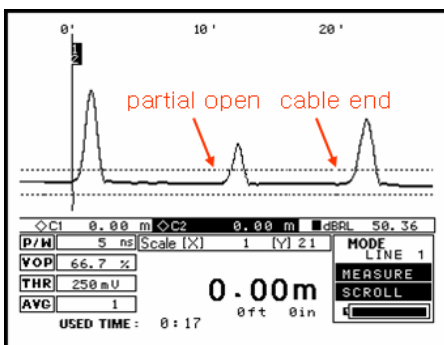
1. Complete Open



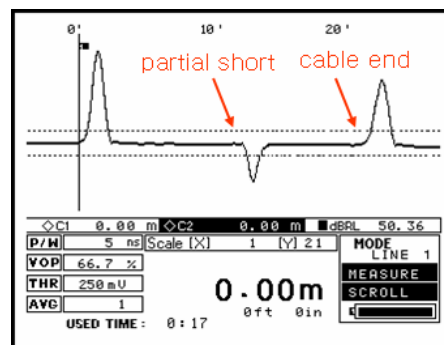
2. Complete Short



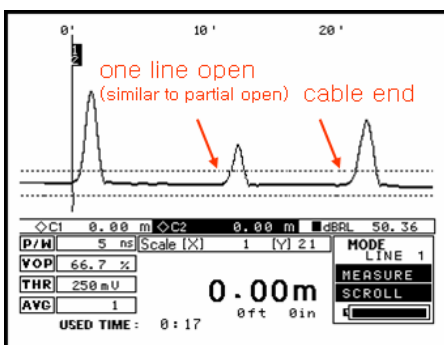
3. Partial Open



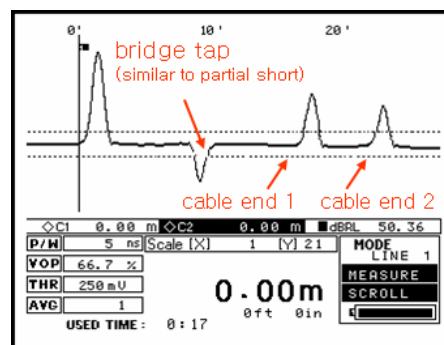
4. Partial Short



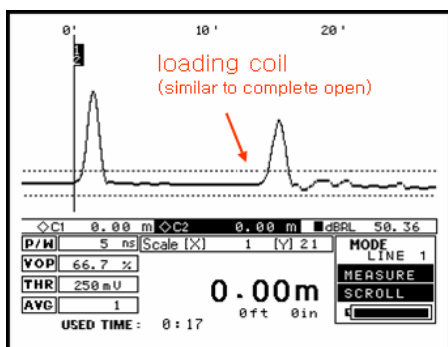
5. One Line Open



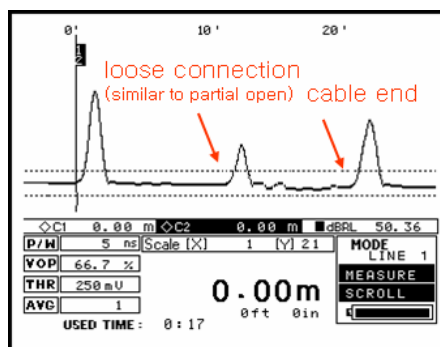
6. Bridge Tap



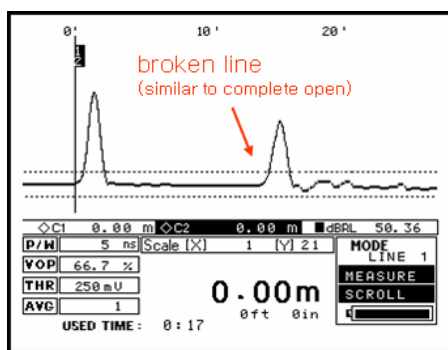
7. Loading Coil



8. Loose Connection



9. Broken Line



Features:

- Suitable for use on Coaxial, Telephone, CATV, CCTV, Power cable & UTP cable etc.
- Max. range: 3.2m~20,000m (10.4ft~65,000ft) for Coaxial
- Two active cursors with individual control
- Changeable zero point
- Ease of use: single key functions
- Non-volatile memory for storing data up to 100 waveform
- Built-in library of 77 cables for fast & easy selection of VOP
- Usable battery time display
- Waveform zoom capabilities
- Waveform trace and diagnosis
- Automatic event search
- Low power consumption
- Windows Software
- Rugged and waterproof packing
- Optional spare battery double operating time

Accessories

- 8m /75Ohm coaxial cable
- 2m long alligator clip
- RS-232C serial communication cable
- DC 12~14V / 1A adaptor
- BNC to F connector
- BNC to BNC connector
- Soft carrying bag
- Shoulder strap
- Windows Software CD
- User's manual

Optional Accessories

- Optional spare battery
- Male BNC to female RJ45 adaptor
- 12V Cigarette lighter charger

Standards

Safety: IEC61010-1/EN 61010-1

EMC: EN 61326: 1997 A1: 1998

Specifications

Measurement	Range	3.2 ~ 20,000m (Maximum testable cable length will vary with cable's characteristics and types)
	Max. Horizon Resolution	10 cm
	Max. Vertical Resolution	0.01 mV
	Accuracy	$\pm 0.1 \text{ m} \pm 0.1 \%$ (for coaxial cables) (Accuracy will vary with real VOP of cable being tested)
	Velocity of Propagation	VOP(PVF) : 30.0 ~ 99.9 % (in 0.1% step) V : 90 ~ 300 m/ μ s V/2 : 45 ~ 150 m/ μ s
Output Pulse	Magnitude	2 V (into 75 Ω)
	Width	5, 15, 45, 100, 200, 500, 1000, 2000, 5000, 10000 ns
	Rising Time	1 ns
Input Signal	Input Impedance	25, 50, 75, 100, 125, 150 Ω (auto setting)
	Gain	Over 66 dB (adjustable in 34 increments)
	Analog Bandwidth	300 MHz
	Max. Safe Voltage	Below AC 50V and DC 120V
Signal Processing	Microprocessor	Intel i80386EX
	Memory	256KB
	Sampling Rate	1GS/s
	Max. Storage Capacity	Up to 100 waveforms
Interface	Display	320 \times 240pixel LCD (backlight provided)
	Output Connector Type	BNC Female
	Screen Refresh Speed	3/sec. Max.
	Communication Port	RS-232C, 38,400 baud rate (1 start bit, 8 data bits, 1 stop bit, no parity)
Power	Battery	12V, 4000mAh, Ni-MH
	Power Consumption	5.5W (with LCD backlight ON)



	Input Voltage	DC 12 ~ 14V, 1A
	Battery Operating Time	6 hours (can be extended up to 10 hours by using the optional spare battery)
	Battery Recharge Time	4 hours (takes about 8 hours when recharge both battery installed inside and optional spare battery simultaneously)
Operating Environment	Operating Temperature	-15 °C ~ +55 °C (+5°F ~131°F)
	Storage Temperature	-20 °C ~ +70 °C (-4°F ~158°F)
	Humidity	Less than 95%
Others	Measurement Category	CAT II, III, IV and V
	Pollution Degree	2
	Size	W: 247mm(9.7") × D: 127mm(5") × H: 267mm(10.5")
	Net Weight	2.7 kg (5.9 lbs)

VOP Table

MANU-FACTURER	CABLE TYPE	VOP (%)	MANU-FACTURER	CABLE TYPE	VOP (%)	
Comm Scope	QR	88	Trilogy	500 MC2	93	
	540 QR	88		650 MC2	93	
	715 QR	88		750 MC2	93	
	860 QR	88		1.00 MC2	93	
	1125 QR	88		500 Foam	87	
	Drop PII	82		625 Foam	87	
	Trunk/Dist PIII	87		750 Foam	87	
	500 PIII	87		875 Foam	87	
	625 PIII	87		1000 Foam	87	
	750 PIII	87		RG-59 Foam	82	
	875 PIII	87		RG-6 Foam	82	
	1000 PIII	87		Trunk/Dist Form	87	
	RG-59 Foam	85		Trunk/Dist MC2	93	
	RG-6 Foam	85		Drop Form	82	
Times Fiber	565 TX10	89	Scientific Atlanta	Drop 7 ser	88	
	700 TX10	89		Cable Flex	87	
	840 TX10	89		Drop	81	
	1165 TX10	89		500 GID-3	83	
	500 T10	87		625 GID-3	83	
	625 T10	87		750 GID-3	87	
	750 T10	87		875 GID-3	87	
	875 T10	87		1000 GID-3	87	
	1000 T10	87		RG-59 Series CX	81	
	RG-59 T10	82		RG-6 Series CX	81	
	RG-6 T10	82		Belden	Drop Form	78
	Trunk/Dist T4, 6,10	87			Solid	66
	Dynaform	90			RG-59	82
	Drop T4, 6,10	83			RG-6	82
PC	AWG19	69	General	RG-57 (50)	66.7	
	AWG22	68		RG-58 (75)	66.7	
	AWG24	66		MC2	93	

Due to our policy of continual product development we reserve the right to amend the specifications of all mentioned products without notice.



	AWG26	65		Drop	82
Pulp/ Paper	AWG22	69	JELLY	AWG19	68
	AWG24	68		AWG22	62
	AWG26	66		AWG24	60
Gel Filled	AWG19	68	Capscan	AWG26	58
	AWG22	65		CC	88
	AWG24	64		Drop	82
	AWG26	63			

* The VOP values will not exactly be the same even at the same cable according to its condition of place installed, different manufacturer or different time of production etc.

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