

# Introducing CableIQ

## Qualification Tester

- **The first cabling bandwidth tester for network technicians**
  - **Troubleshoots connectivity problems caused by insufficient bandwidth**
  - **Qualifies existing cabling for 10/100BASE-T, VoIP, and Gig**



# Physical Highlights

Large graphical display gives crystal clear results

Navigation buttons make learning easy

Powerful backlight

Dial interface means always knowing selected mode

Wiremap adapter doubles as protective end-cap

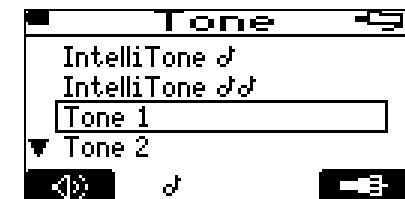
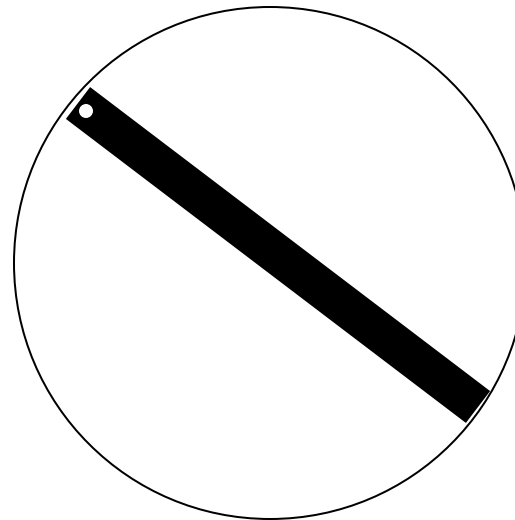
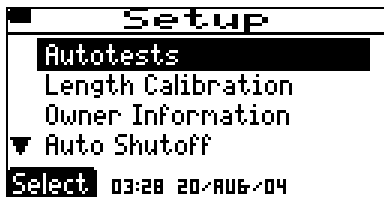
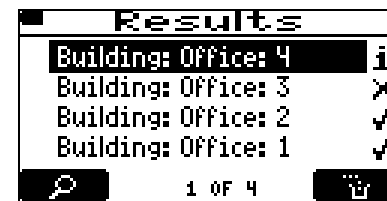
Protective boot makes it durable and attractive

Test button provides cabling bandwidth in four seconds

USB port for uploading qualification tests

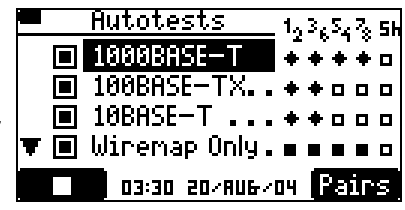
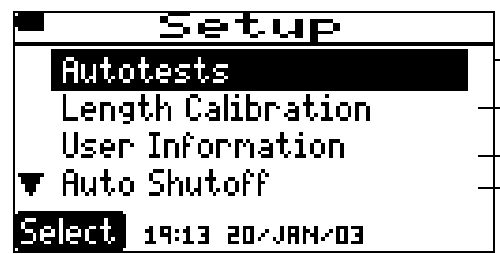


# CableIQ Major Modes

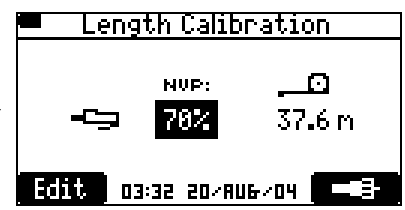


# Setup Functions

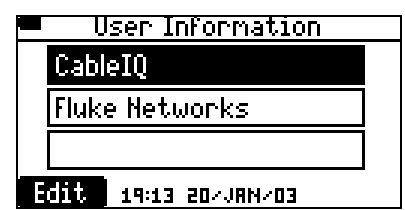
## Basic Instrument Settings



Enable/Disable Autotest and Pairs to test  
 1000BASE-T, 100BASE-TX  
 10BASE-T, VoIP, TELCO  
 Wiremap Only (Verify), Coax



Set or Learn NVP



User or Site info to be included in report

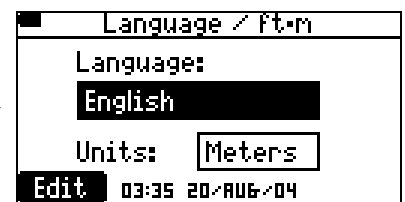


Enable / Disable Auto Shutoff

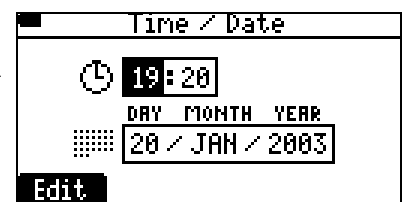
# Setup Functions (Cont)



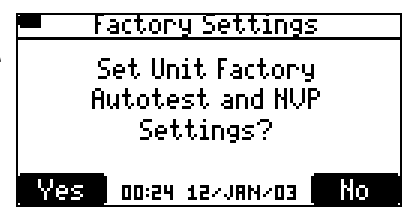
Enable / Disable Unit Sounds



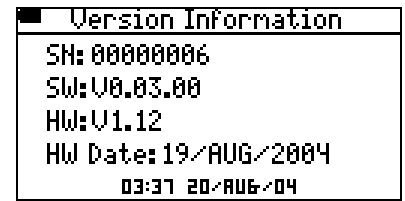
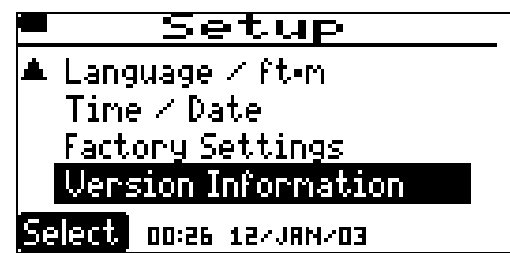
Select Language:  
English, French, German, Ital.  
Spanish, Port, Japanese  
Units: meter / feet



Set time and date  
24 hr time



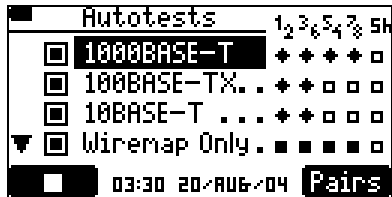
Return Autotest and NVPs Settings to factory default



Unit Version information

# Autotest with Far End Adapter Allows Full Qualification

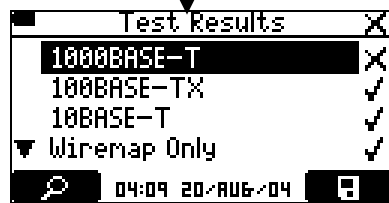
Quick Link to change Autotest Setup



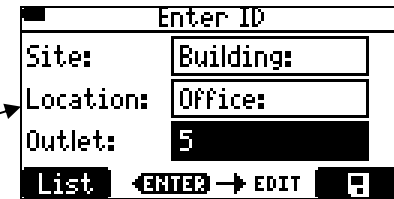
Top Autotest Screen

List of enabled test

Overall Results



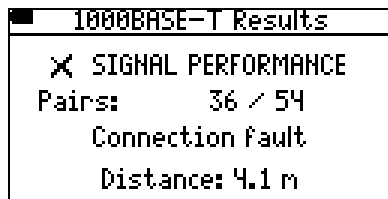
CID Enter



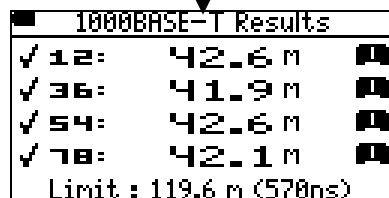
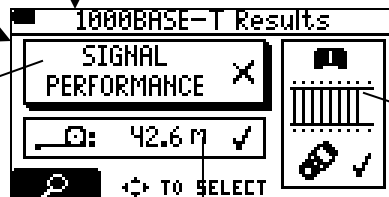
Failed or most important result hi-lighted

Summary Result for selected test

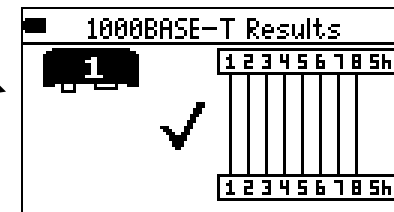
List of pre-defined names



Reason for Signal Performance failure



Detail Pairs length and pair termination



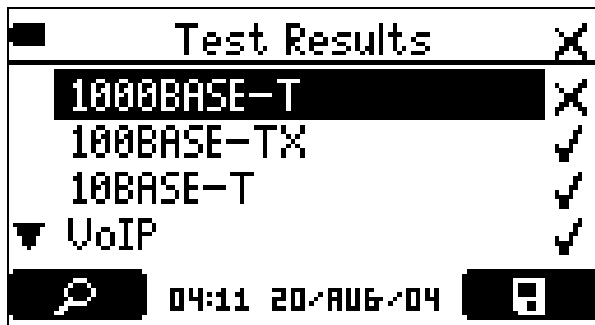
Detail Wiremap results

# Bandwidth Qualification



## Setup Qualification Test

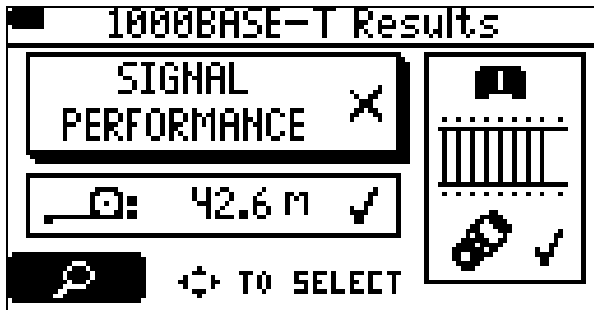
Select speeds and technologies to be included in qualification test



## View results

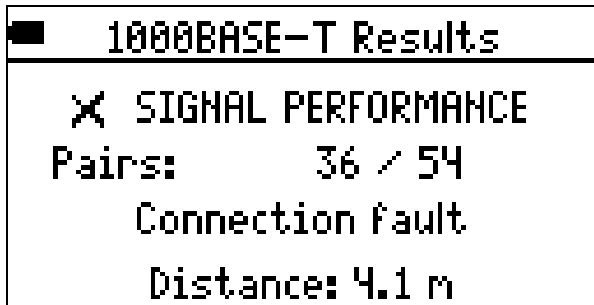
Check marks indicate which speeds and technologies the tested link qualifies to run

# Cable Troubleshooting



**Why didn't it qualify**

**Drill down on qualification test components to find reason for failure**

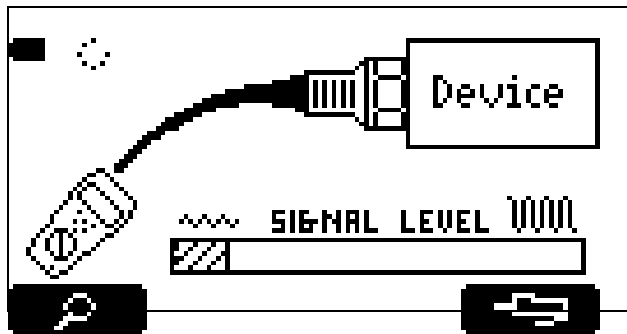


**Find performance fault**

**Drill down further to see distance to performance fault**

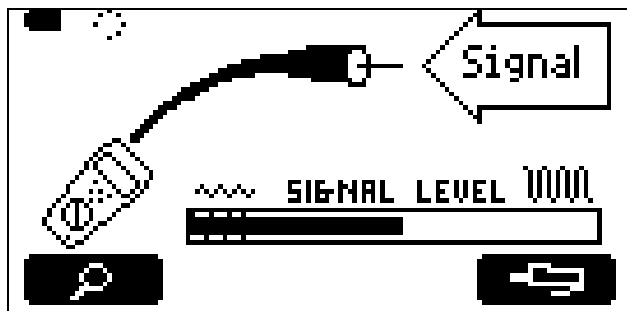


# Coax Video Testing



## Detect a coax device

Plug into any coax outlet and verify a device at the far end



## Verify signal

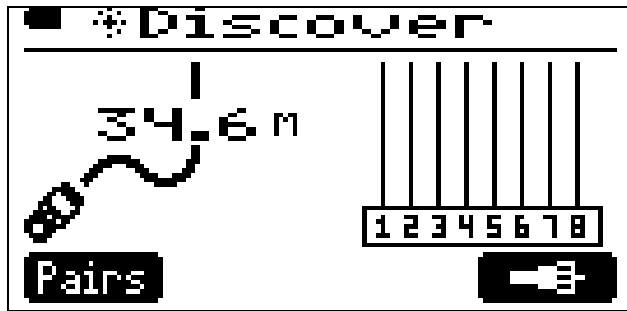
A bar graph display shows whether signal level is low, medium, or high

Mid approx. 10dBmV (normal)

Low approx. 1 dBmV

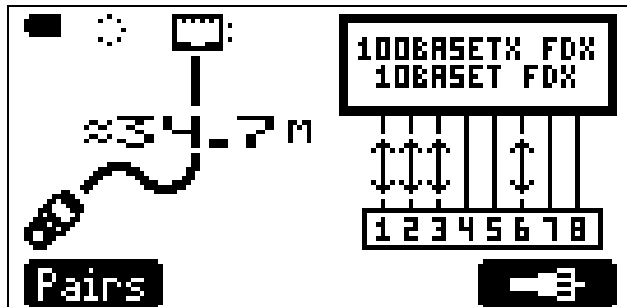


# Infrastructure Discovery



## Open link

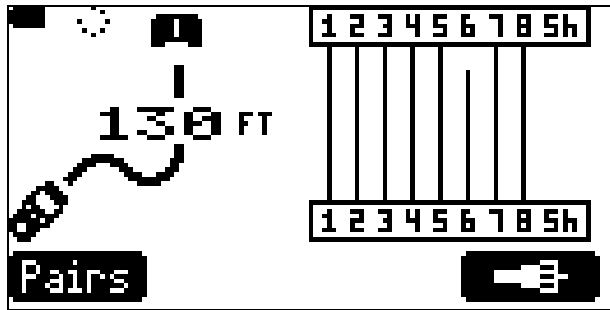
Plug into any cable, wall jack, or patch panel to see where cable leads



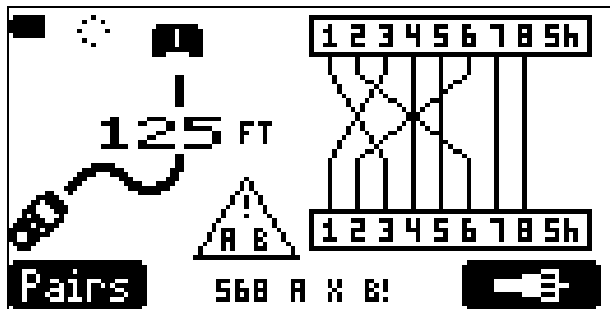
## Far end device

Detect connected devices and see speed/duplex settings

# Intelligent Wiremapping



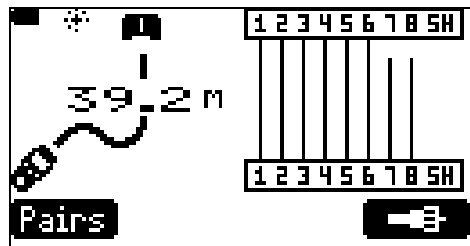
**Open pin at far end**  
Proportionally-correct pin lengths indicate location of breaks



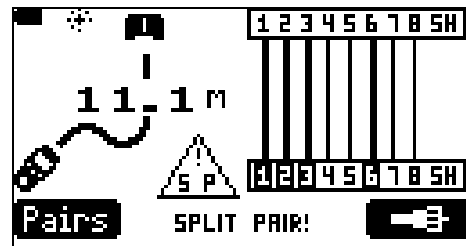
**568A/B cross**  
CableQ's intuitive interface makes detecting common wiring faults easy

# Other TWP Wiremap Functionality

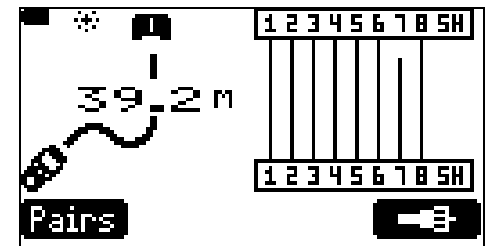
Proportional Drawing on wiremap immediately shows where the problem is



Split Pair Detection



Wire Based Mapping shows Single Wire Faults



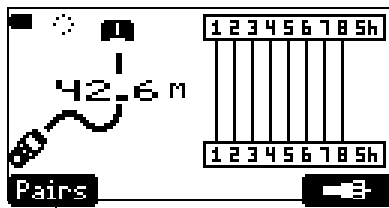
Press Pairs to see details of length and termination of each pair

#	Pairs	
12:	39.6 m	⏏
36:	39.2 m	⏏
45:	39.7 m	⏏
78:	34.6 m	⏏

# TWP Discover Finds What is at the End

## Wiremap Adapter

Length and map

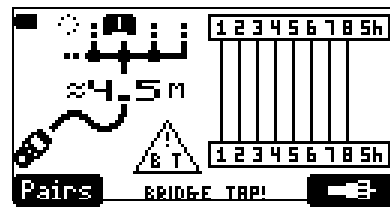


Pair	Length (m)	Map
12:	43.1 m	■
36:	42.6 m	■
54:	43.1 m	■
78:	42.7 m	■

Wiremap Adapter

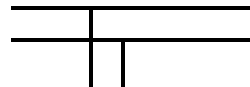
## Wiremap Adapter with Bridge Tap

Distance to BT and map



Pair	Length (m)	Map
12:	4.3 m	◆◆
36:	4.3 m	◆◆
45:	4.3 m	◆◆
78:	4.4 m	◆◆

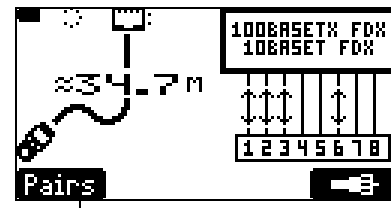
Bridge Tap Termination Condition



Bridge Tap Common in phone wiring

## Active Ethernet Port

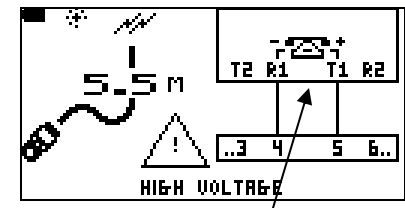
Port capability and distance to port



Pair	Length (m)	Map
12:	--- m	■
36:	--- m	■
45:	12.3 m	×
78:	12.6 m	×

Pairs 12 and 36 are terminated  
45 and 78 are shorted in Port

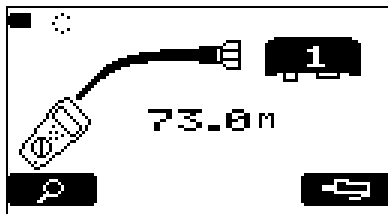
## Live Phone Line



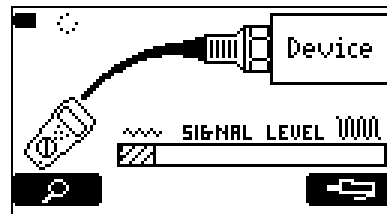
45 is detected as the Active Phone Line

# Coax Discover Finds What is at the End

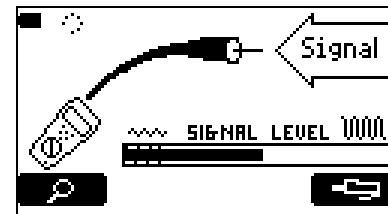
Coax attached to Wiremap Adapter



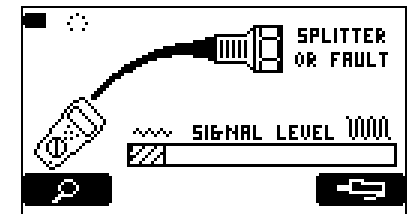
Coax attached to something:  
TV, Antenna, etc



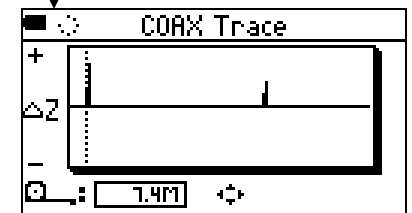
Live RF Cable  
Signal Detected



A significant fault or  
possible splitter is detected

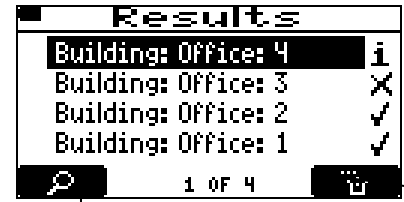


Use Coax Trace Function  
to view TDR results

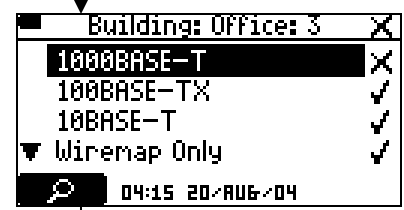


# Results Viewing

Viewing stored Results screens similar to Autotest Results



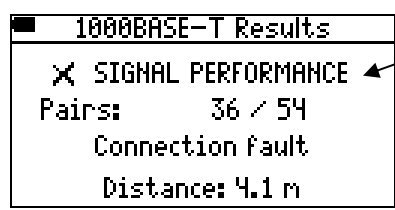
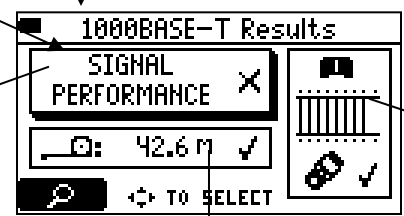
Delete Selected or All Stored Tests



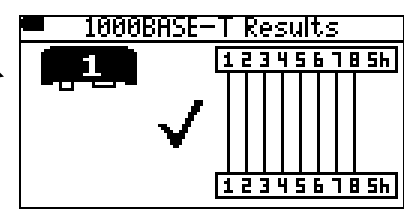
Overall Results

Failed or most important result hi-lighted

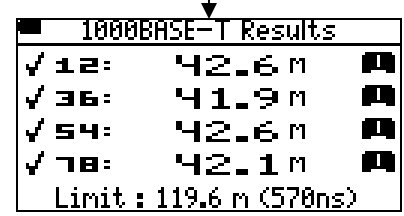
Summary Result for selected test



Reason for Signal Performance failure



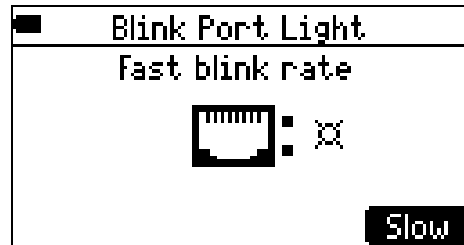
Detail Wiremap results



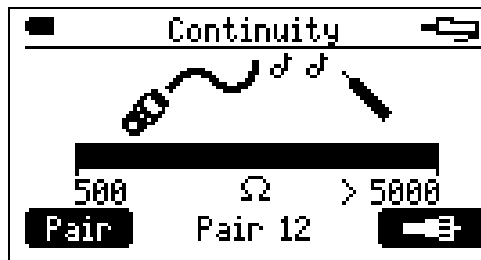
Detail Pairs length and pair termination

# Diagnostic Functions

- Blink Port Light
- Continuity
- Find NEXT Fault
- Find Impedance Fault
- Speaker Test



Blinks the port activity light and analog tones to aid locating the port.  
Does not function with ports configured for non-negotiation (fixed rate).

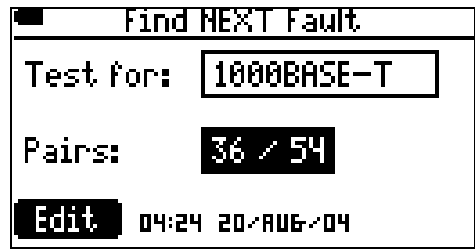


Analog Tones while measuring continuity.  
Tone frequency and rate is a function of measured resistance. Bar graph provides indication of resistance between 500 and 5000 ohms

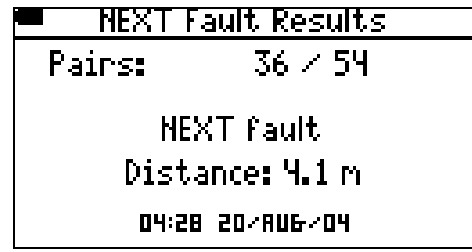


# Diagnostic Mode Cont.

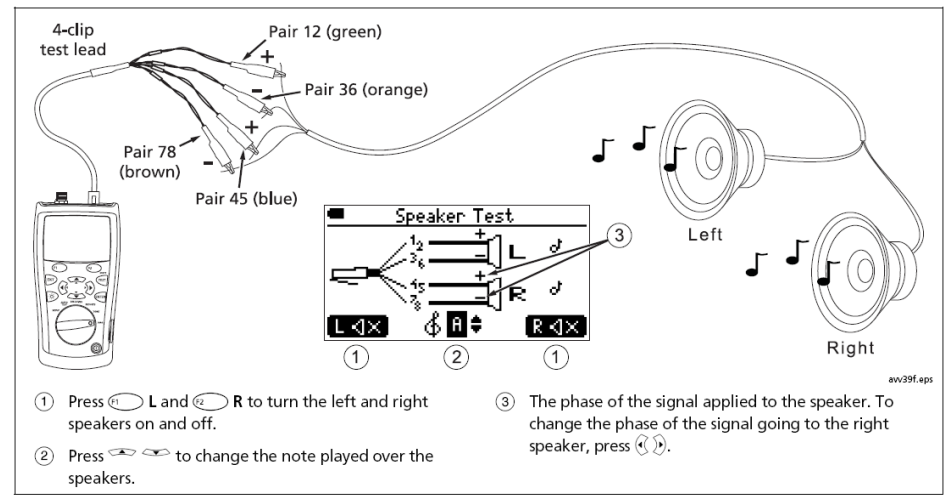
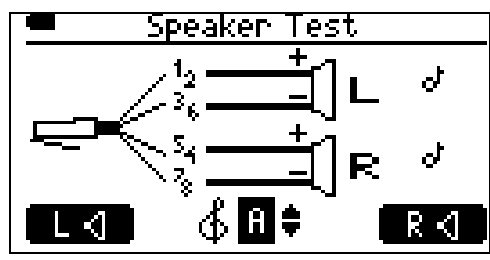
## Find NEXT and Impedance Fault



**TEST**



If the cable fails, Find NEXT and Impedance Fault identify fault type and location.  
Fault types are point (generally connectors) or distributed (generally cable)



User can check speakers with a simple audio test.  
Left / Right speaker and phasing controls allow easy checkout.  
Use speaker adapter cable between CableIQ and speaker wiring.