

# Wire Mapper Pro™ LAN & Cable Tester Model CA7028

**Direct & simple  
push button  
operation!**

**The only wiremap  
tester in its class  
with graphical,  
fault and distance  
display.**



The Wire Mapper Pro™ Model CA7028 is a hand-held structured cable mapping and troubleshooting tester designed for use on UTP, STP, FTP and SSTP cabling equipped with RJ-45 connectors and wired to either TIA 568A/B (ISO 11801 and EN 50137), USOC or ISDN specifications. It detects open circuit pairs, shorts, crossed wires, crossed pairs, reversed pairs, split pairs and shield faults.

In the event of opens and shorts, the Model CA7028 uses TDR technology to indicate if the fault is at the near end or the remote end of the cable,

or if it is somewhere in between. It will then indicate the distance to the fault.

The Model CA7028 has the ability to measure and indicate the length of the cable under test, using a Vp (Velocity of Propagation) set by the user, from a built-in library or manually. It will measure and report the length of all four pairs of wires in the cable under test. It also generates an audible tone that is transmitted into all four pairs on the cable under test. This can be used for cable tracing and identification in conjunction with a tone generator.

The Model CA7028 also has the ability to identify telephone and data lines. If the main unit is plugged into an operational RJ-45 socket, it will give a continuous warning tone and display if a telephone voltage is present on any of the pins. If the Service Detect key is pressed, it will check and display telephone, 10BaseT, 100Mbit+ and token ring active service.

## Features

- Hand-held LAN Cable Mapping and Troubleshooting Tester
- Indicates all common wiring faults including split pairs, shorts, opens, reversed pairs and crossed wires
- Unique graphical and digital display of fault information and length
- Indicates distances to opens and shorts and identifies location
- Display fault location up to 500 ft (150m) in feet or meters
- Built-in tone generator for tracing and locating cables
- Built-in service check function to detect telephone, 10BaseT, 100Mbit+ and token ring
- Visual and audible warning of live telephone network voltages
- Works with all category cables
- Rugged design weighs less than 12 oz (350g)
- Large high-visibility blue electroluminescent backlit display
- Complete with remote unit and mini patch leads
- Active remote identifiers indicates Pass/Fail at remote end using Green/Red LED
- Up to 16 unique remote identifiers available
- Works with TIA 568A/B, USOC and ISDN wiring schemes

## Applications

- Identify LAN wiring faults
- Find distances (feet or meters) to opens and shorts
- Test patch cords
- Test for active service
- Trace cable locations
- Measure cable length
- Map network layout



Model CA7028 used to locate and test a cable from the patch panel to an office a few hundred feet away.



Model CA7028 includes meter, soft carrying case, remote ID (#1), two patch cords, four x 1.5V AA batteries and user manual

## Functional Displays

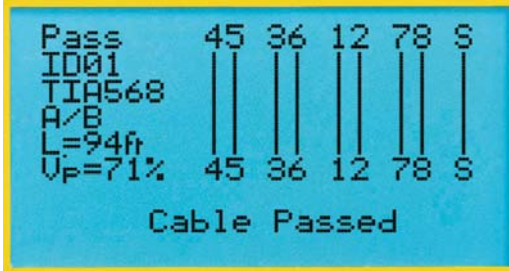
In addition to displaying the cable wire map, the Model CA7028 also displays a pass/fail indication, the ID number of the remote module, the cable type (if from the built-in library), cable length and the Velocity of Propagation all on one screen.

The mapping of each pair is graphically displayed providing a quick indication of the termination at both ends of the cable. Opens or shorts along the cable are identified by wire and distance to the fault. The Model CA7028 also detects and displays opens or shorts at each end of the cable thus notifying the operator which end needs to be corrected.



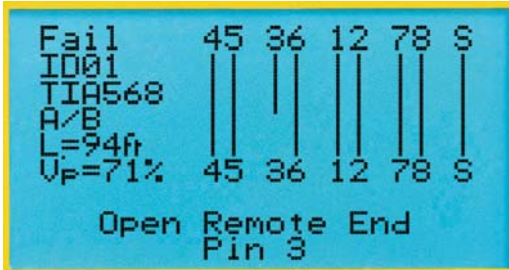
Model CA7028 at patch panel verifying cable runs.

### Cable Passed



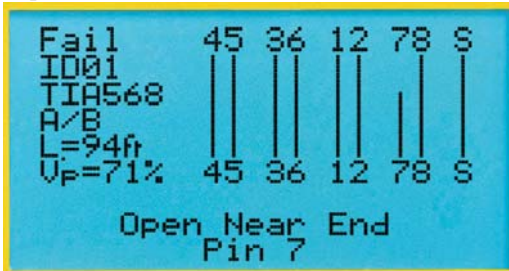
Good cable, all connections are correct.

### Open Remote End



Open connection at remote end of cable.

### Open Near End



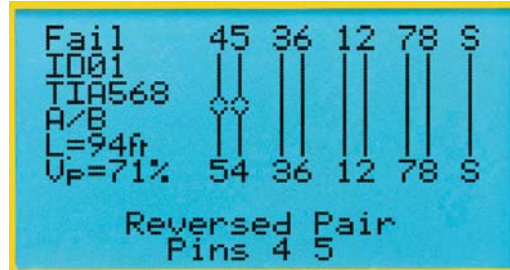
Open connection at near end of the end of the cable.

### Open



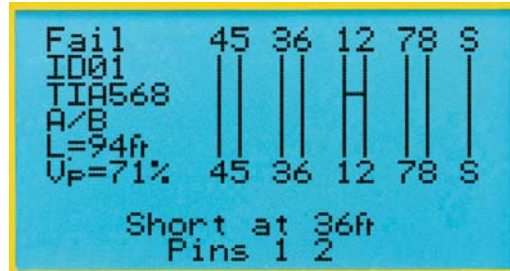
Open wire with pins and distance to the open point displayed.

### Reversed Pair



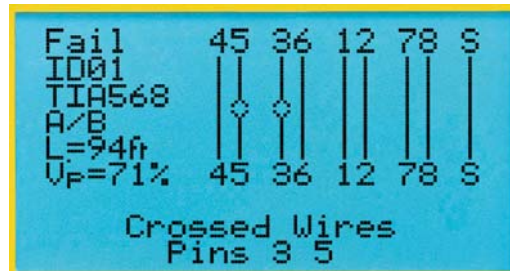
Wires within a pair are reversed from one end to the other.

### Short



Short with pins and distance to short displayed.

### Crossed Wires



Crossed wires with pins identified.

The Model CA7028 can also detect the type of service the cable is capable of. It can indicate 10BaseT, 100BaseT, token ring or telephone connections.

The built-in tone generator function is activated at the push of a button. When active, a signal between 810 and 1110Hz is injected into the cable. When used in conjunction with the Tone Receiver/ Cable Tracer Model TR02, cable tracing and locating is easily accomplished.

### Setup Screen



Quick and easy setup of cable type, Vp, feet/meter display, language and display contrast.

### Voltage Detected



Automatic detection of live telephone voltage.

### Tone Generator Enabled



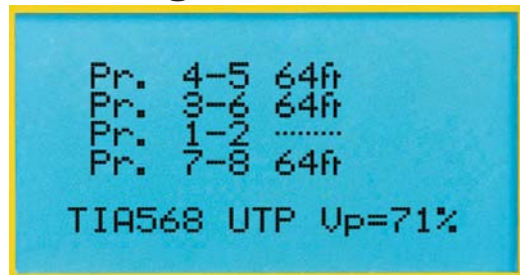
Built-in tone generator for cable tracing.

### Service Test Screen



Service test function determines speed and type of transmission.

### Cable Length Test Screen

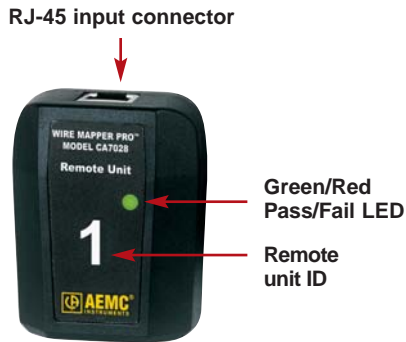
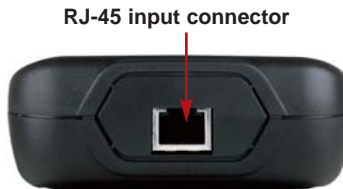
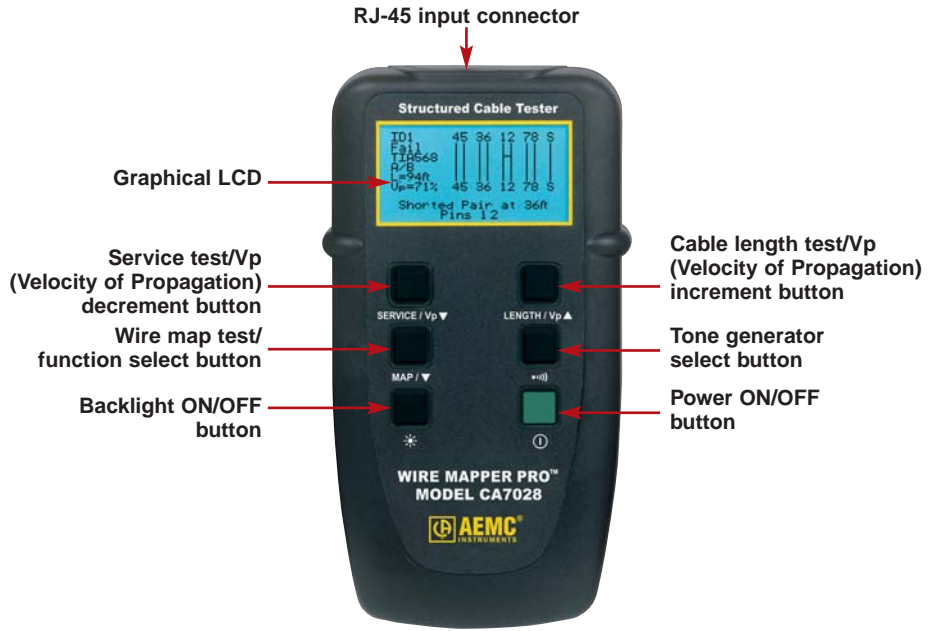


Built-in cable length meter verifies the length of the cable.

# Specifications

<b>MODEL</b>	<b>CA7028</b>
<b>MEASUREMENTS</b>	
Range	500 ft (150m)
Accuracy	±5%
Cable Types	UTP, STP, FTP & SSTP
Faults Indicated	Short Circuit Pair, Open Circuit Wire, Short Between Pairs, Split/Cross Pairs, Pair Reversals, Shield Continuity
Fault Location	Near end, remote end or distance to fault
Wiring Schemes	TIA 568A/B, USOC & ISDN
Service Indication	Telephone, 10BaseT, 100Mbit+, Token Ring
Voltage Warning	Audible and visual warning of TNV (Telecom Network Voltage) presence
Test Inhibit	Inhibits testing in the presence of live voltages
Tone Generator	Oscillating 810 to 1110Hz
<b>GENERAL</b>	
Main Unit Display	128 x 64 pixel graphical LCD
Fault Display	All fault and setting info displayed textually and graphically
Display Backlight	Blue electroluminescent
Remote Display	Green/Red Pass/Fail LED
Auto-Off	After 3 minutes
Languages	English, French, German, Spanish, Portuguese, Italian
Battery Life	Standby mode >4000 hrs Continuous testing >7.5 hrs
Power Source	4 x 1.5V AA Alkaline batteries
Battery Indicator	0 to 100% bargraph
Storage Temperature	-4° to 158°F (0° to 70°C); 5 to 95% RH non-condensing
Operating Temperature	32° to 112°F (0° to 40°C); 5 to 95% RH non-condensing
Dimensions	Main unit: 6.5 x 3.5 x 1.5" (165 x 90 x 37mm) Remote unit: 2.5 x 2.0 x 1.0" (65 x 52 x 25mm)
Weight	Main unit: 12 oz (350g); Remote unit: 1.5 oz (40g)
<b>SAFETY</b>	
Safety Ratings	EN 61010-1, EN 61326-1, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-6
CE Mark	Yes

# Construction



## ORDERING INFORMATION

## CATALOG NO.

Wire Mapper Pro™ Model CA7028 (LAN Cable Tester).....	Cat. #2127.82
Tone Receiver/Cable Tracer Model TR02.....	Cat. #2127.75

# Tone Receiver/ Cable Tracer Model TR02



Model TR02

The Tone Receiver/Cable Tracer Model TR02 is a small, hand-held tracer that will aid in the identification of tone carrying wires without piercing their insulation. It has a self-contained amplifier and a rugged, moisture resistant mylar cone speaker. When used in conjunction with the tone transmitter function of the Models CA7024, CA7026 or CA7028, wire tracing and locating is quick and efficient.

One button turns the unit on and, while it is depressed activates the receiver. A volume control allows you to set the speaker loudness to a desirable level. An audio output jack facilitates the use of an optional, commercially available ear piece which inhibits the Model TR02's internal speaker. This provides quiet operation in office environments while allowing the operator to hear the signal clearly.

## Specifications

MODEL	TR02
<b>GENERAL</b>	
Power Source	9V Alkaline battery
Dimensions	6.5 x 3.5 x 1.5" (165 x 90 x 37mm)
Weight	12 oz (350g)

## Features

- Compatible with AEMC Models CA7024, CA7026 and CA7028
- Contains a frequency selective hi-gain, hi-impedance amplifier for clear pick-up
- Rugged, moisture resistant mylar cone speaker
- Convenient operation from a standard 9V battery
- Volume control adjustment
- Audio output jack for headphones
- Pen size, fits into your pocket

## Applications

- Locate cable runs
- Detect breaks in cables
- Find cables in panels



Model TR02 used to find cables in a panel.

## Construction

