# IntelliTone<sup>™</sup> Pro 200 LAN Toner and Probe KIT

## MT-8200-60-KIT

Digital network cable toner and probe traces and locates cables on active network. MT-8200-60-KIT includes: IntelliTone 200 LAN Toner and 200 Probe, coax F connector adapter, (2) RJ11 and (2) RJ45 patch cables, test leads with alligator clips, (2) lanyards, quick start guide, and (2) 9-volt batteries

IntelliTone digital toning technology:

- Ends cable location confusion, decisively rejects noise and false signals
- Locates cables on active networks, even when terminated at a switch
- Isolates cable and wiring within a bundle, despite cable bleed
- Confirms cable location, verifies continuity, and detects faults (opens, shorts, and reversed pairs) in one step

SmartTone® analog toning technology:

- Isolates individual wire pairs precisely by changing tone when shorted
- Effectively traces and locates voice, audio, and video cabling

## **Overview**

Get advanced vision for locating network cables more effectively at patch panels, switches, termination blocks, or hidden within bundles. Our new IntelliTone Pro 200 LAN Toner and Probe Kits finds the cables others can't.

The IntelliTone<sup>™</sup> Pro 200 LAN Toner and Probe Series from Fluke Networks is the first network cable toner and probe to offer digital and analog signaling all in one network toner and probe. That means it's equipped with the most powerful cable location technologies for any work environment. Use digital mode to trace and locate data cabling safely and effectively on active networks. Use analog mode to isolate individual wire pairs, and trace voice, audio, and video cabling.

The IntelliTone<sup>™</sup> Pro 200 LAN Toner and Probe Series from Fluke Networks gives you superior vision for locating cables hidden in floors, ceilings, walls, and in bundles. This network cable toner and probe's breakthrough digital technology makes it the first tool to tone and trace safely and effectively on active networks.

## **Features**

#### **Digital vs Analog**

Only IntelliTone<sup>™</sup> Pro Toners and Probes offer the powerful combination of digital and analog technologies to resolve common infrastructure problems that arise during installing, maintaining, and changing of your network.

#### Digital and analog toning in one tool.

Today's media networks are more diverse than ever. Most buildings have a combination of telephone, twisted-pair data, coax, and security/alarm wiring. Verifying proper routing and termination of this diverse set of cabling types requires tools optimized for different frequencies, connector types, and work environments. Until now, no single tool has combined the right technologies to operate across all copper media types, and in all environments. IntelliTone Pro changes that by combining cutting-edge digital and analog signaling to locate and verify virtually any copper cable, regardless of application or environment.

#### When to use digital

IntelliTone Pro's digital encoded signal should primarily be used on high-grade data cabling (Cat 5e/6/6a), and in active network environments. It operates at a high-frequency to match the higher frequency data the cable plant is designed to carry. This allows the tone to overcome competing data signals and aggressive low-frequency terminations of Ethernet switches. That means LAN cabling technicians can quickly zero in on the right cable during installations or troubleshooting.

Digital toning is especially helpful once the cable has been located as it displays cable wiremap and checks for shorts, opens and miswires. The IntelliTone Pro 200 probe has an RJ45 input port and CableMap feature, allowing it to be plugged directly into a patch panel or wall port. The benefit of this wiremap test is two-fold. It eliminates the need for both a toner to a wiremapper, and provides 100% confirmation that the right cable has been located.

#### When to use analog

IntelliTone Pro's SmartTone analog toning can be used on voice-grade cabling (Cat 3 and below), as well as coax, security/alarm, and speaker wiring. These cables are optimized for lower frequency transmissions, and therefore are more easily isolated with a low-frequency tone. It should also be used in areas with relatively low interference from electronic devices. In high-interference environments, digital may still be a better choice.

SmartTone analog toning eliminates frustrating guesswork locating individual wire pairs during installations. The SmartTone analog signal will change 'songs' each time the pair under test is shorted together. This provides telecom technicians a decisive way to identify individual wire pairs before punching them down on a jack or a block, or when diagnosing voice transmission problems.

#### Locate and Isolate Cabling

#### Isolate Terminated Cables

The IntelliTone<sup>™</sup> Pro Toner uses the unique properties of twisted pair cabling to create a balanced signal that minimizes the effect of signal bleed. The smart digital signal processing in the IntelliTone<sup>™</sup> Pro Probe clearly identifies this signal with audio and LED visual indicators, allowing you to rapidly isolate the correct cable from a bundle or on a patch panel. IntelliTone<sup>™</sup> eliminates hours of cable confusion—and you can count on getting it right the first time.

#### Isolate Individual Wire Pairs

With traditional analog toners and probes, isolating individual wire pairs precisely can be almost impossible because of signal bleed between pairs. As a result, wire pairs are often routed and terminated incorrectly the first time. Redoing incorrect terminations or pulling new wiring wastes tremendous amounts of time and money. IntelliTone Pro's SmartTone analog technology cuts out the guesswork and improves accuracy by providing definitive confirmation when the pair under test is located. Just short the pair under test, and the audible tone will change its cadence. The difference is dramatic.

#### Verify Cable Continuity

Eliminate callbacks during cabling moves, adds and changes with the powerful diagnostic capabilities of IntelliTone. The IntelliTone Pro 200 Probe features a CABLEMAP capability that identifies common cable miswires in twisted pair cabling. IntelliTone technology automates the testing of each conductor for end-to-end continuity; LED lights and tones clearly indicate miswires such as opens, shorts or reversed pairs.

#### **Tone Live Networks**

Modern network devices use aggressive termination schemes for cables connected to their ports. While this termination reduces noise and crosstalk in the cable, it can also absorb an analog toner signal, making the connected cable impossible to detect with an analog audio probe. The result is that locating an unlabeled network can take hours with analog technology. Unlike analog signals, the IntelliTone digital signal stays strong despite common mode termination. And the IntelliTone Pro Toner automates toning individual cable conductors, making it quick, efficient and safe to locate cables on active networks.

#### Verify Ethernet Service

Perform moves, adds and changes with powerful diagnostic capabilities of the IntelliTone Pro 200 Toner & Probe

*Toning* - IntelliTone makes it easy to quickly locate the cable in the equipment closet when performing moves, adds and changes. Unconnected cable can be quickly isolated in the presence of bleed.

*Cablemap* - The IntelliTone Pro 200 Probe features a CABLEMAP capability that identifies common cable miswires in twisted pair cabling. Complete per-pin verification of TIA568 wiring identifies the exact wire that is open, shorted or miswired. LED lights and distinctive tones clearly indicate miswires. The built-in Cablemap feature eliminates the need to carry separate tools or returning to the far-end to replace the toner with a mapper. The IntelliTone Pro 200 Kit is the all-in-one tool to locate and map Category 5 cabling even when plugged into a switch, and verify link service after moves, adds and changes.

*Verify Ethernet Service* - Is the link pulse correct, reversed due to a swap cable of uplink port, or MDIX capable? Identify active Ethernet services present at the office wallplate. LED lights clearly indicate the presence of normal, reversed or MDIX Ethernet link connectivity.

## **Specifications**

## **General Specifications**

Operating temperature	32 °F to 104 °F (0 °C to 40 °C)
	-4 °F to +140°F (-20 °C to °C)
Storage temperature	
	95 % (50 °F to 95 °F; 10 oC to 35 °C)
Operating relative humidity (% RH without	
condensation)	75 % (95 °F to 104 °F; 35 °C to 40 °C) Uncontrolled < 50 °F (< 10 °C)
	Random, 2 g, 5 Hz-500 Hz
Vibration	
	1 m drop test
Shock	
	EN 61010-1, Category: None
Safety	
	3000 m
Altitude	
	EN 61326-1, FCC Part 15 B
EMC	
	9 V alkaline (NEDA 1604A or IEC 6LR61); 20 hours typical
Battery type and life	
	Copper cabling media including; 75 or 50 Ohm Coaxial cable;
Applications	Two Conductor control, security, generic cabling. 10 Base-T or 10/100 Base-T datacom networks. UTP cable, Shielded
	Twisted Pair supported in Cablemap function of the IntelliTone 200.

## **Toner Specifications**

Dimensions	5.54 in x 2.94 in x 1.25 in (14.1 cm x 7.5 cm x 3.2 cm)
Display	LED
Control	Thumbwheel switch
Toner interface	Main Mod8 port for tone generation on all 4 pairs of UTP / STP cabling. F Connector for coaxial cabling Banana Jack Plugs (2) - two conductor wiring
Toner frequency	IntelliTone™ signal: encoded digital signal Analog SmartTone signal: 500 - 1200Hz, 4 songs
Ouptut power	5 V p-p
Auto power down	Turns off automatically after 2 1/2 hours of inactivity

Probe Specifications	
Dimensions	8.73 in x 1.88 in x 1.26 in (22.2 cm x 4.8 cm x 3.2 cm)
Display	8) LED indicators, Sync LED indicator
	IntelliTone: Microprocessor controlled audio files
Audio	
	Analog: Detected toner signal
Control	Thumbwheel switch, volume control wheel
	Detects IntelliTone™ digital signal for Locate, Isolate, and CableMap
Toner Detection	Detects analog SmartTone signal (500-1200Hz) and other analog toners.
Toner interface	Main Mod8 port for cablemap on all 4 pairs of UTP / STP cabling.
Auto power down	Turns off automatically after 1 hour of inactivity