FLUKE networks

IntelliTone™ Toner and Probe Series

Every day, cabling installers and network technicians deal with the shortcomings of cable location tools based on 40-year-old analog technology. Even though analog tools mis-identify cable and fail to pick up signals in of the most common workplace situations, they've been the only option out there. ***Until now.***

The ***IntelliTone™ Toner and Probe Series*** *from Fluke Networks gives you digital signal locating technology that's as advanced as the systems you work with. IntelliTone is a breakthrough solution – and the only solution – that locates and isolates the most elusive, hidden or bundled voice, data and video cables quickly and reliably – even on active networks. It succeeds where analog technology fails – such as locating cable in a bundle due to signal bleed, finding a cable even when plugged into active network equipment and differentiating the tone from noise or a false signal. With gains in speed, precision and productivity that make analog tools obsolete.*

IntelliTone breakthrough digital signaling

Only IntelliTone Toners and Probes bring the performance breakthrough of digital signal technology to common problems that come up in installing, maintaining, changing and troubleshooting your network.

- Eliminates confusion over cable location; decisively rejects noise and false signals
- Locates cable quickly from a distance, even on an active network
- Isolates cable and wiring precisely from a bundle, despite cable bleed
- Validates twisted-pair installation with visual end-to-end cablemap (opens, shorts and reversed pairs)
- Identifies, diagnoses and troubleshoots telecom/datacom services
- Simplifies signal interpretation in noisy environments with smart audio and LED signal indicators
- Safely and effectively tones active networks
- Tests phone lines with powerful Talk Battery
- Extended battery life with auto-power Off
- Compatible with analog toner and probes
- One-year warranty

Locate cables quickly and easily

Fluke Networks engineering has applied decades of cable testing expertise to the science of locating copper cables. The result is what we call IntelliTone technology – a smart digital signal-toning and signal-interpreting process that rapidly and precisely zeroes in on even the most elusive cables.

Simply attach the IntelliTone Toner to a cable and set the sensing mode on the IntelliTone Probe. IntelliTone technology energizes cable conductors with a smart, sychronized digital signal. Multiple tone types occur in the signal that help you to:

- LOCATE a cable from a distance using maximum radiation.
- ISOLATE a cable from a bundle using a signal with minimum radiation.
- VALIDATE cable conductor continuity with an automated signal that steps through each conductor.

The IntelliTone Probe's signal selection thumbwheel lets you choose which tone type to use. Controlled LED signal indicators and audio tones simplify signal interpretation and take the guesswork out of cable location, reducing even the toughest locating problems into a few minutes' work.

Locate hidden cables from a distance

One of the toughest, most time-consuming parts of locating a cable has been in tracing its path through walls, ceilings or wiring closets. The IntelliTone smart digital signal features a LOCATE tone that provides maximum radiation, allowing you to quickly locate hidden and hard-to-find cabling from a distance.

Isolate the right cable – fast

Cabling installations have become increasingly complex, which has made cabling increasingly difficult to locate with analog technology. Cables from individual wall jacks or devices are often brought together and run in bundles to a central area or panel. When cables are run together for even short lengths, a signal from one can bleed over to another. One cable might carry the original signal; other cables might carry the signal as a result of bleed. Isolating cables with analog tools requires guesswork, training, time for repeated testing – and even the best efforts often result in mistakes.

The IntelliTone Toner uses the unique properties of twisted pair cabling to create a signal that minimizes the effect of bleed. The smart digital signal processing in the IntelliTone 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 eliminates hours of cable confusion – so you can get it right the first time.

Overcome noise – and save hours of time

Fluorescent lights, machinery, computer monitors and electrical wiring all produce noise that slows down cable location or makes it simply impossible with standard analog audio toners and probes. Together, the IntelliTone Toner's synchronized digital signal and the IntelliTone Probe's microprocessor controlled signal identification technology reject noise and false signals to clearly identify cable location. This advanced capability alone can save you hours every week on cable location projects.

Tone on live networks quickly and safely

Modern network devices use common mode termination 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. 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 Toner automates toning individual cable conductors, making it quick, efficient and safe to locate cables on active networks.

Validate conductor continuity with cablemap

Eliminate callbacks during cabling moves, adds and changes with the powerful diagnostic capabilities of IntelliTone™. The IntelliTone 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.

Identify and troubleshoot cable services

Continuity – Once you've located a cable, the next step is to validate cable conductor continuity. IntelliTone 100 and 200 Series Toners make it easy – eliminating the need for a separate diagnostic tool.

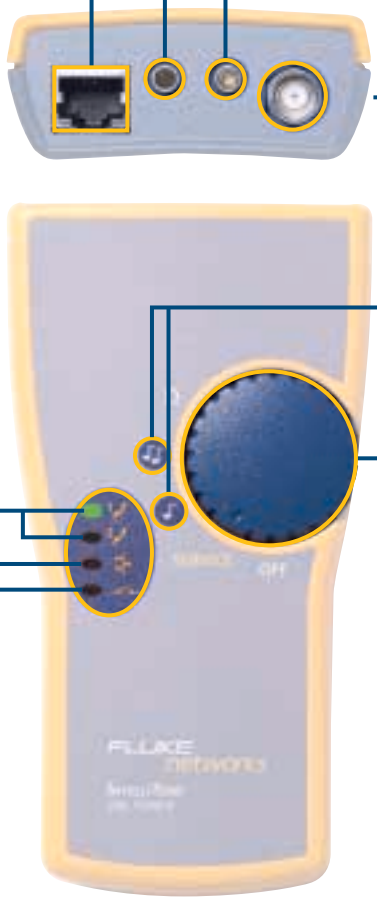
Service – Is the RJ45 jack a datacom jack, a phone jack – or a dead jack? IntelliTone 200 Toners take the guesswork out of hunting for an active jack, or a jack with the right service. LEDs clearly identify common services found on today's networks, including telecom and datacom services and 10/100/1Gb Ethernet links.

Telecom troubleshooting – Detect Line 1 voltage, polarity, and ring with IntelliTone 100 and 200 Toners. The IntelliTone 200 Toner adds Line 2 troubleshooting. Confirm telecom circuits with the built-in talk battery capability.

IntelliTone provides robust toning into active network equipment while eliminating cable mis-identification due to bleed

Banana jacks allow customer selection and replacement of leads or no leads

One tool supports all VDV cable types (RJ45, RJ11, coax, and bare wire



Choose between **one-note or two-note tones**

Knob provides **simple, task oriented operation**

Identify and diagnose POTS with multi-line Telco detect, polarity and ring indication (Line 1 and Line 2)

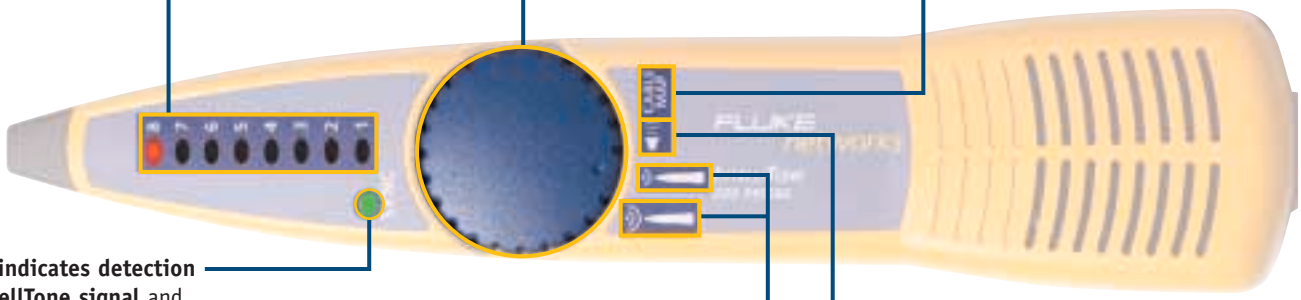
Identify and diagnose Ethernet link connectivity with NIC/hub indication

Test cable continuity, eliminating need for separate diagnostic tool

Multiple-level LEDs simplify signal interpretation in noisy environments

Time-saving thumbwheel lets you select desired toning mode on the probe rather than toner

Test cable continuity – eliminating need for separate diagnostic tool



SYNC indicates detection of IntellTone signal and shows battery status at power-up

Choose between two digital toning signals:

– lets you locate cables at a distance

– lets you isolate cables in bundles or at patch panels

IntelliTone probes sense legacy analog signals for **full backwards compatibility**

Shared features:

IntelliTone digital technology with advanced signal processing provides **high-resolution measurement**

Auto-Off feature: The toner turns off automatically after 2.5 hours of inactivity. Probe turns off after 1 hour of inactivity.

Low battery indicator: LEDs on the toner and probe light for one second at power on to indicate the battery status

Analog toner/probe compatible – IntelliTone Toners generate 1 KHz compatible legacy analog tones that analog audio probes can detect; and IntelliTone Probes sense legacy analog signals for full backwards compatibility

Specifications

General	Operating temperature*	32 °F to 104 °F (0 °C to 40 °C)
	Storage temperature	-4 °F to +140 °F (-20 °C to +60 °C)
	Operating relative humidity (% RH w/o condensation)	95 % (50 °F to 95 °F; 10 °C to 35 °C) 75 % (95 °F to 104 °F; 35 °C to 40 °C) Uncontrolled < 50 °F (< 10 °C)
	Vibration	Random, 2 g, 5 Hz-500 Hz
	Shock	1 m drop test with and without module
	Safety	EN 61010-1 1st Edition + Amendments 1, 2
	Altitude	3000 m
	EMC	EN 61326-1
	Battery type and life	9 V alkaline (NEDA 1604A or IEC 6LR61); 20 hours typical
	Applications	Copper cabling media, including shielded (STP) and UTP cable; 75 or 50 Ohm coaxial cable; two conductor control, security, generic cabling. 10 Base-T or 10/100 Base-T datacom networks. POTS telecom service
	Legacy Tone	Create and detect 1000 Hz compatible tone
Toner 	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
	Talk battery voltage	6 V into 600 W
	Output power	5 V p-p
	Voltage protection	100 V
	Auto power down	Turns off automatically after 2.5 hours of inactivity
Probe 	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, Synch LED indicator
	Audio	Microprocessor controlled audio files
	Control	Thumbwheel switch, volume control wheel
	Tone detection	Detects IntelliTone digital signal and 1 kHz signal from analog toners
	Toner interface	Main Mod8 port for cablemap on all four pairs of UTP / STP cabling
	Auto power down	Turns off automatically after one hour of inactivity

Optional Carrying Case
MT-8202-05

Optional test leads
with bed of nails
MT-8203-20

Optional test leads
with alligator clips
MT-8203-22