KURTH ELECTRONIC
GMC-INSTRUMENTS GROUP

Cable Tester and Line Detector Sets: the Ideal Basic Equipment

KE7701 / KE7801

Made in Germany

Figure shows KE7701

At a Glance

Convenient combination of cable tester and line detector

Cable Tester Set (KE7000):

- Checks LAN, telecommunications and patch cables in the fields of IT and telecommunications, as well as coaxial cables with adapter
- Testing for continuity, interruption, reversal, short-circuit, shield continuity, multiple faults
- Double device combination displays errors at both ends
- Unequivocal cable status display

Line Detector Kit (KE701 or KE801):

- For locating all types of electrical cables, wires, cores and wire pairs
- Finds cables even behind plaster walls
- Six search frequencies, high output power
- Signal injection to active telephone and data lines (max. 90 V)
- Network port test and port finder function
- Visual fault locator (VFL) (KE7801 only)
- Flashlight function

KE7701 and **KE7801** cable tester and line detector kits are perfect basic equipment for all technicians who need to locate cables and faults in telephone and data networks. Reliable, robust and cost-effective!

The **KE7701** consists of 2 **KE7000** cable testers and 1 **KE701** telecommunications line detector kit – an all-around set for IT, TC and general applications.

The **KE7801** consists of 2 **KE7000** cable testers and 1 **KE801** fiber-optic/copper line detector kit – a unique set for fiber optic cables.

KE7000 cable testers are rugged, easy-to-use test instruments for LAN, telecommunications and patch cables in the fields of IT and telecommunications for cable lengths of up to approximately 150 meters.

Unshielded or shielded cables with twisted pairs and RJ-11 or RJ-45 connectors (UTP, STP, FTP, 568A, 568B, USOC) can be tested. These are commonly found in installed networks or as patch cables. One instrument is automatically configured as the primary device, and one as the secondary.

The included RJ-45 to coax adapter can also be used to test coaxial cables with BNC and F sockets for continuity.

Any faults such as interruptions, reversals, short-circuits and shield continuity are shown at the instruments' displays. There's no need for manual note-taking regarding flashing and illuminated LEDs or the like. The two **KE7000s** immediately read out unequivocal status information at the displays on both ends.

With a battery life of up to 100 hours, measuring operations rarely need to be interrupted.

If interference voltage is present in the cables under test, the user is warned and pin polarity is displayed. The instruments are protected against accidental contact with interference voltage of up to 60 V_{DC}, for example against telephone supply voltage or PoE.

KE701 and **KE801** line detector kits make it possible for any technician to quickly find all types of electrical cables, conductors, cores and wire pairs in a contactless manner without time-consuming stripping. Errors such as reversals, overshooting, interruptions and other faults are detected.

They consist of an **ET720** (**KE7701**) or **ET800** (**KE7801**) signal injector and a **P410** signal receiver.

The **ET720** indicates voltages present in wires, detects polarity and can be used as a continuity tester. The instrument can generate search signals with six different frequencies, each of which can be injected into live telecommunication lines (max. 90 V). The test cables with banana plugs, including plug-on alligator clips, offer lots of flexibility for connection to sockets or cores. The instrument is also capable of performing network port tests and detecting associated ports.

The search signal is received in a contactless manner at distances of up to 60 cm with the **P410** signal receiver. The integrated white-light flashlight makes it possible to identify wires and colors in dark distribution cabinets.

The **ET800** has the same range of functions as the **ET720**, and also includes a built-in laser light source with 650 nm visible light. This makes it possible to test single and multimode fiber optic cables and other fiber optic components for breaks and faults, and to determine correct pairings within an optic fiber bundle.

The **ET720** as well as the **ET800** are protected against interference voltage up to 120 V_{AC}.

KE7000 Specifications

Cable types	UTP (up to 4 pairs), STP, FTP, 568A, 568B, USOC, coaxial* * Only with adapter (included with KE7701 and KE7801)
Error displays	Continuity, interruption, reversal, short-circuit, multiple faults, shield continuity
Cable length	Max. 150 m
Power supply	9 V battery; approx. 100 hours operating time (depending on battery type and condition)
Dimensions	160 × 95 × 35 mm
Weight	160 g (without battery)
Housing	Impact-resistant ABS with fall protector
Operating conditions	0 to 50 °C, no condensation
Interference voltage protection	60 V_{DC}

KE701 / KE801 Specifications

	ET720 / ET800	**P410**
Housing	Durable, impact-resistant ABS housing with silicone operating keys	
Test cables	Two 25 cm banana-plug test cables made of flexible PVC with plug-on alligator clips, one test cable with modular RJ-11 plug, one test cable with RJ-45 plug	
Additional connections (ET800 only)	Fiber optic red-light source (VFL), 2.5 mm universal ferrule, adapter to 1.25 mm, SMA and POF optionally available	
Search frequencies	6 selectable frequencies, accuracy: < ±1% (quartz) SOLID: 1000, 2600, 577.5 Hz ALT: 1000/800, 2600/1900, 577.5 Hz intermittent	
Additional connections	Fiber optic red-light source (VFL), 2.5 mm universal ferrule, adapter to 1.25 mm, SMA and POF optionally available	
Interference voltage protection	Up to 120 V_{AC} in all operating modes	
Features	■ Continuity test with LED ■ Resistance test via frequency change ■ Network port test with port finder function ■ Low battery indication via flashing LED ■ Automatic shutdown after 45 minutes ■ Deactivation of automatic shutdown including indication via flashing LED ■ Instrument on-test via LED ■ ALTernating frequency display via flashing LED ■ SOLID frequency display via continuously illuminated LED ■ Test cable strain relief ■ Separate battery compartment	■ Filter signal LED ■ Flashlight function ■ Test probe made of carbon fiber reinforced plastic ■ ⅛" headphone socket ■ Separate battery compartment ■ Filter signal LED
Range	Maximum cable length up to 15 km (without load)	Search distance of up to 60 cm from the cable
Transmitting power	High transmitting power with 9 V battery 9.0 V PP without load 10 dBm at 600 Ω 9 dBm at 100 Ω 7.5 dBm at 50 Ω Tone over shorted pair up to 250 m	
Power supply	9 V battery, approx. 100 hours operating time (depending on battery type and condition)	9 V battery; approx. 100 hours operating time (depending on battery type and condition)
Size / weight	68 × 96 × 25 mm / 150 g without battery	220 × 40/34 × 25 mm / 80 g without battery

KE7701 / KE7801 Product Comparison

	KE7701	**KE7801**
Instruments		
KE7000 cable tester (2 ea.)	■	■
KE701 line detector kit	■	
KE801 line detector kit		■
Connections		
Banana plugs / alligator clips	■	■
RJ-11	■	■
RJ-45	■	■
Integrated red light source (VFL)		■
Functions		
Continuity test with LED	■	■
Resistance test with acoustic signal	■	■
Network port test with port finder function	■	■
Interference voltage protection	60 V_{DC} (KE7000) / 120 V_{AC} (ET700)	60 V_{DC} (KE7000) / 120 V_{AC} (ET800)

Order Information

Designation	Description	Article Number
KE7701	Cable Tester Set and Line Detector Kit in Case Includes 2 ea. KE7000, 1 ea. KE701 (ET720 with banana plugs and plug-on crocodile clips as well as RJ-45 and RJ-11 connection, 410 probe), 1 ea. RJ-45 to coax adapter (2 ea. RJ-45 to BNC plug adapters and 2 ea. BNC to F female plug adapters)	D707A
KE7801	Cable Tester Set and Line Detector Kit in Case Includes 2 ea. KE7000, 1 ea. KE801 fiber-optic/copper line detector kit (ET800 with banana plugs and plug-on crocodile clips as well as RJ-45 and RJ-11 connection, P410), 1 ea. RJ-45 to coax adapter (2 ea. RJ-45 to BNC plug adapters and 2 ea. BNC to F female plug adapters)	D708A

Figure shows KE7801

Figure shows KE801 (ET800 + P410)

Figure shows KE7000 set

Figure shows KE701 (ET720 + P410)

Figure shows RJ-45 to coax adapter

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