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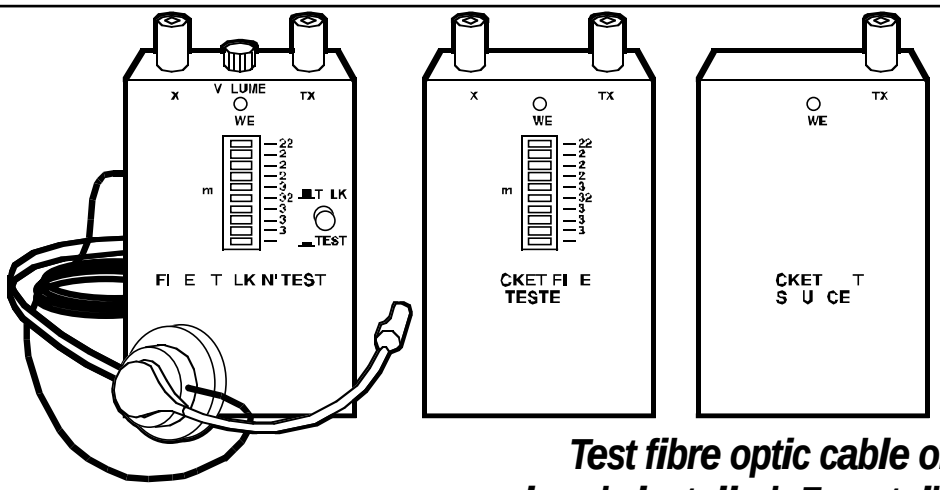
# FIBRE TALK'N TEST, POCKET FIBRE TESTER, POCKET OPTO SOURCE




***Test fibre optic cable on the spool or already installed. Even talk to a test partner!***

## Key Features

- ***Compact test devices that are powered by a standard 9-V battery.***
- ***Use to determine dB loss.***
- ***For fibre optic cable with ST connectors.***
- ***Use Talk'n Test to communicate with a partner during testing. Headset is included.***
- ***Pocket Opto Source provides a light source for a tester.***
- ***Pocket Fibre Tester also tests for continuity.***
- ***Test measurements shown on easy-to-read LED bar scale.***

For simple and affordable testing of multimode fibre optic cable, order one of these battery-powered testing devices from Black Box:

The Pocket Fibre Tester is a simple, convenient, general-purpose tool that enables you to check the integrity of your fibre optic interconnections. It's the perfect tool when all you want is a quick measure of a fibre cable's dB loss and continuity.

The Pocket Fibre Tester has a simple test format that gives you a rough idea of the quality of a particular fibre cable, whether it's installed or still on the spool.

Test measurements are displayed on an LED scale, which can be easily read in even dimly lit environments. This scale is calibrated in dBms, which is a standard unit for fibre optic power measurements, and marked in increments of 2 dBm.

The Pocket Fibre Tester works with the following types of ST-terminated fibre cables: multimode (50-, 62.5-, or 100-micron) single, duplex, or bundled. Its transmitter has a current-controlled capability to launch -20 dBm of continuous 850-nm light into a properly prepared terminus of a 100-micron fibre cable. The launch power into 62.5-micron cable is -23 dBm, and into 50-micron cable, it's -28 dBm.

Small enough to fit into a shirt pocket, this compact tester also features a power-on indicator, which reminds you to switch the unit off after use.

The Fibre Talk'n Test functions like the Pocket Fibre Tester but also enables you to talk to a test partner at the cable's other end via amplitude modulation (AM). Shipped with a folding headset with a boom microphone, the Fibre Talk'n Test has a "press to test" pushbutton switch and a volume control so you can optimise communications with your test partner.

The Fibre Talk'n Test must be used in pairs.

The Pocket Opto Source, which can be used with the Pocket Fibre Tester, injects a continuous, nonpulsed signal at a known power level into a terminated multimode fibre optic cable link. In simple terms, you use it to send a beam of light to someone with a tester at the end of the fibre cable.

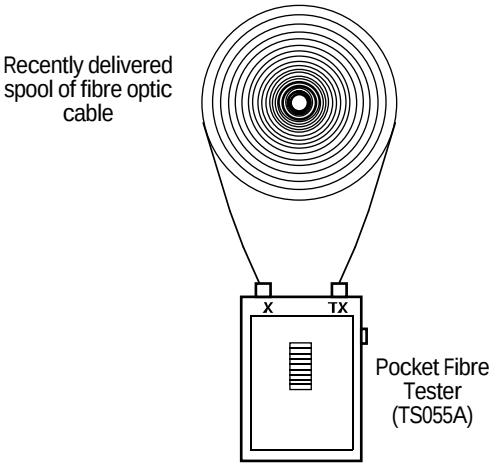
When used with the Pocket Fibre Tester, the Pocket Opto Source is ideal for measuring an installed cable's continuity or attenuation in situations where the cable's ends are too far apart to be connected.

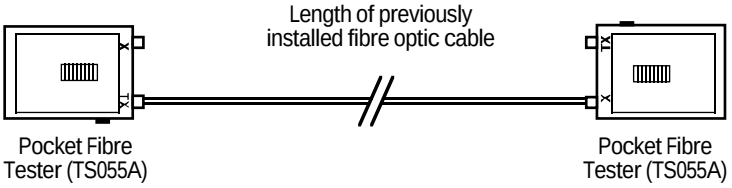
It's also small enough to fit into a shirt pocket and draws its power from a standard 9-volt battery.

**Tester components**

The Pocket Fibre Tester and Fibre Talk'n Test feature four main components: an optical source, an optical receiver, receive-level

# Test just-arrived or already installed fibre optic cable.




circuitry, and receive-level scale.

The Pocket Opto Source is a single component, a regulated optical source.

All of these test devices shoot light into the fibre optic cable at the varying intensities: 100-micron cable core: -20-dBm intensity; 62.5 micron: -23 dBm; and 50 micron: -26 dBm.

The optical receiver and receive-level circuitry of the Pocket Fibre Tester and the Fibre Talk'n Test include an optoelectronic transducer and active voltage-divider circuitry. These components convert the light received into a voltage, which is then modified by the receive-level circuitry and displayed on the testers' receive-level LED scale.

The receive-level LED scale, which is calibrated in -2-dBm steps from -22 dBm to -40 dBm, shows you the intensity of light, in dBm, received by the tester.

**Interpreting a tester reading**

You can determine the approximate measurement of received power of light in the cable by simply observing the highest bar illuminated on the tester's LED scale. For example, if all bars on the scale light up to and include the "28" segment of the bar graph, you know the measured received power is at least -28 dBm but less than -26 dBm, the next highest scale value (that is, the signal received is between -28 and -26 dBm).

You would then compare the difference between the amount of light sent and the amount received to immediately know how well your fibre cable transmits light signals and to determine its quality.

**Tester applications**

You can use the Pocket Fibre Tester or Fibre Talk'n Test in a variety of measurement modes. Use a single tester as both transmitter and receiver to test continuity in a spool of cable. Or use a single tester to detect light activity on a particular cable that you're trying to locate within a bundle of cable.

You can also use two testers in tandem to check both sides of duplex cables simultaneously. Connect one tester to terminals at the start of the cable, and connect the other tester to the cable's other end. You can then compare the measurements for each side of the duplex cable with the values you expect.

Want to examine long-distance cable runs? Well, the Pocket Fibre Tester can be used with a Pocket Opto Source to examine such lengthy runs. In this setup, the transmitter of the Pocket Opto Source sends the light signal while the optical receiver of the Pocket Fibre Tester measures the signal loss.

## Specifications

**Accessories**: TS054A: Folding headset with boom mike

**CE Approval:** Yes

**Modulation:** TS054A: AM

**Output Wavelength:** 850 nm, ±15 nm at ±3 dB

**Power Output:** -20 dBm ± 0.5 dBm into 100-µ core fibre, -23 dBm ±1 dBm into 62.5-µ core fibre, -26 dBm ± 1 dBm into 50-µ core fiber

**Readout Range:** TS054A, TS055A: -22 to -40 dBm

**Readout Resolution:** TS054A, TS055A: 2 dBm

**Controls:** TS054A: Volume, "press to test" button

**Connectors:** TS054A: (2) ST, (1) RJ-11 (headset);
TS055A: (2) ST;
TS056A: (1) ST®

**Indicators:** All models: (1) Power LED;
TS054A, TS055A:
(1) bar-graph-style LED, graduated in 2-dBm steps

**Power:** 9 volts, supplied by alkaline or nickel-cadmium transistor battery

**Size:** 4.5"H x 2.3"W x 1"D (11.4 x 5.8 x 2.5 cm)

**Weight:** 0.3 lb. (0.1 kg), including battery

## *Ordering Information*

| ITEM | CODE |
|---|---|
| Pocket Fibre Tester, ST | TS055A |
| Fibre Talk'n Test, ST | TS054A |
| Pocket Opto Source, ST | TS056A |

*NOTE: Testers are for use with glass-core fibre optic cable only. Fibre Talk'n Test must be used in pairs.*