



4 IN 1 Fiber Optic Power Multi-Meter
MT-7602 USER'S GUIDE
用戶手冊

EnglIns

繁體中文



USER'S GUIDE

4 IN 1 Fiber Optic Power Multi-Meter

EnglIns

WARNING

You are cautioned that changes or modifications not expressly approved in this document could void your authority to operate this equipment. To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.



Precautions for Use

Use batteries

At the same time, can not use different style or different capacitance batteries. And only charge the rechargeable batteries.

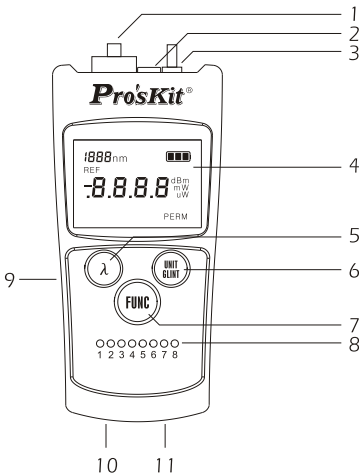
Avoiding condensation problems

As much as possible, avoid sudden temperature changes. Do not attempt to use the drive immediately after moving it from a cold to a warm location, to raising the room temperature suddenly, as condensation may form within the drive. If the temperature changes suddenly while using the drive, stop using it and take out batteries for at least an hour.

Storage

When long time no use, must take out the batteries to avoid destroying the device.

Description



1-InGaAs detector(FC/UPP)

2-LED

3-VFL optic adapter

4-LCD

5-Wavelength Select Button

6-Glint@VFL and Unit@VFL Function Button

7-Switch/Function Select Button

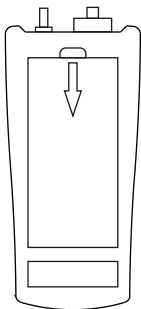
8-Network cable LED

9-MiniUSB Charging Socket

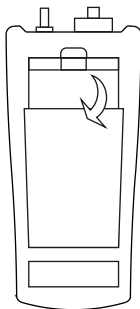
10-RJ45 Testing Socket

11-RJ11 Testing Socket

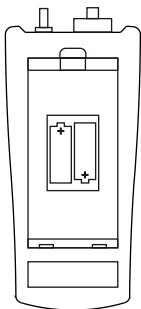
Installing the battery



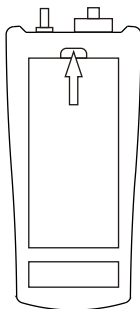
1. Pull the battery cover lock



2. Raise the battery cover

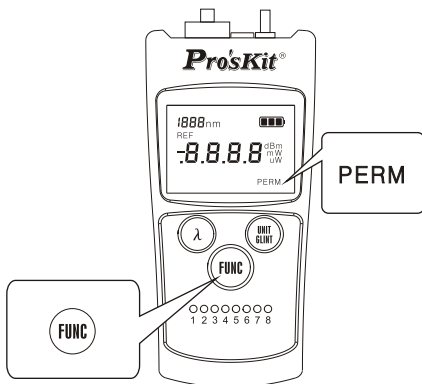


3. Installing the battery correctly



4. Push the battery cover and lock

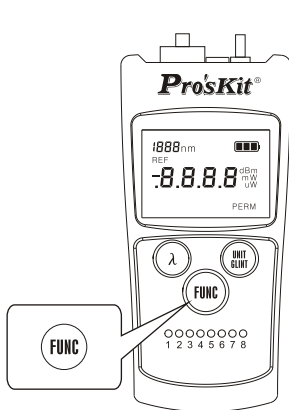
On/Off and Permanent On



Press “ **FUNC** ” button will turn on the meter . Press button again for two seconds or more will turn off the meter.

This meter has a power-saving function, normal boot and ten minutes without any operation, the device will automatically shut down. If you need to shield this function and enable the meter keeps on working, only need to press the “ **FUNC** ” button and hold when you boot the instrument. After two seconds, the meter display will show "PERM" which means permanent power on.

Function Selection



Optical Power Meter



Visual Fault Locator



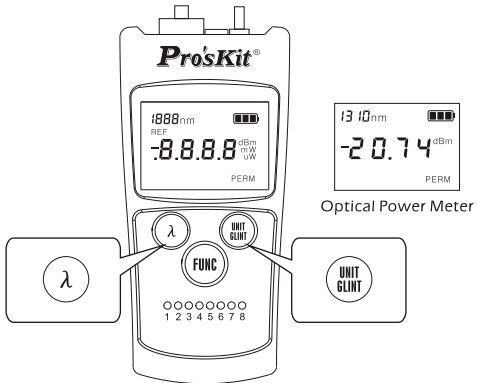
Flashlight



Network cable/
Telephone wire Testing

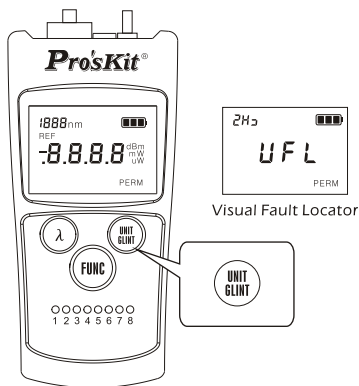
After booting, the default function is the optical power meter. Press “**FUNC**” button, you can cycle through switch to Optical Power Meter, VFL, Flashlight, Network cable/Telephone wire Tester.

Optical Power Meter



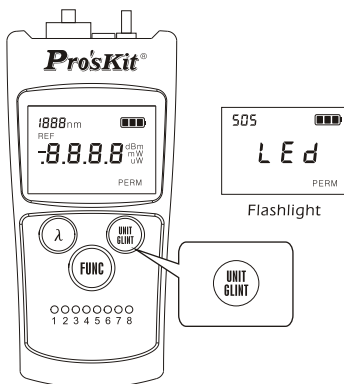
As optical power meter, press “ λ ” button can select different wavelengths to measure. This meter's standardized wavelengths are 850nm, 1300nm, 1490nm, 1550nm, 1625nm. The unit displayed is uW value and dBm value, which can switch through pressing “ UNIT GLINT ” button.

Visual Fault Locator



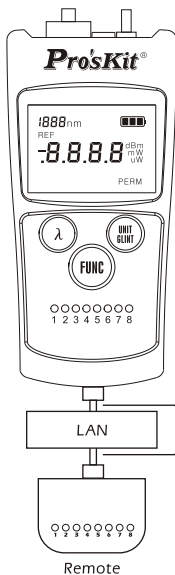
As a visual fault locator, press “” button, you can choose the laser remains on or flashing. The flashing frequency is 2Hz.

LED Flashlight



As a LED flashlight, press “**UNIT GLINT**” button, you can choose the LED light remains on or flashing in SOS encoding mode.

Network cable/Telephone wire Tester

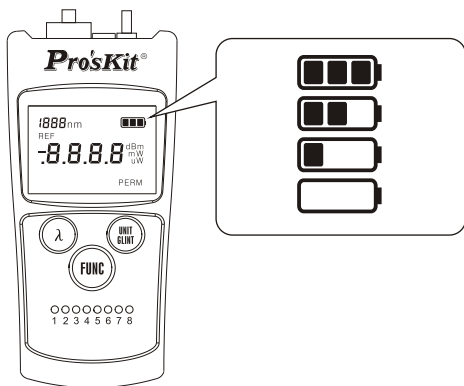


Network cable/
Telephone wire Testing

Network cable/
Telephone wire

Network cable/Telephone wire testing function is used to cabling network, connecting and disconnecting network cable, verifying the line sequence. It starts testing when this function chosen. Eight indicators are used to displaying the sequence of lines.

Power Indicator



Four levels indication of power detection



Represents the remaining 80%---100% electricity



Represents the remaining 40%---80% electricity



Represents the remaining 20%---40% electricity



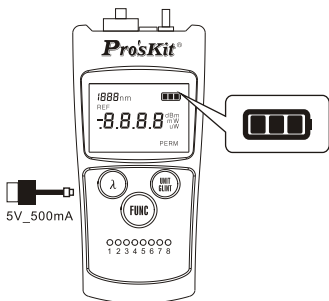
Represents the remaining electricity less than 20%

Charge

The instrument has a charging function. When use rechargeable batteries and a low battery indication shows on the instrument, you should promptly shut down it and recharge. Long time undervoltage will shorten the lifetime of the rechargeable battery.

Connect the AC adapter to the device correctly, it can charge Automatically. Besides, computer USB port can also be used for charging. The battery remaining indicator keeps flashing during charging. It will stop when the charging is finished. The battery has finished the fast recharge and can be used directly. If you do not stop recharging at this time, the instrument will continue the trickle charge state, using small current to supply natural discharge. But this process is not more than 48 hours.

The instrument can still be used while charging. But do not plug in the AC adapter when it is not rechargeable battery inside, or it will cause a high temperature and combustion, even explosion.



Meter Maintenance and Calibration

General maintenance

Optical fiber connect the adapter should avoid contacting with hard objects and keep clean.

Should be stored in a dry and ventilated place to avoid moisture.

When un use for long time, should remove the batteries before storage.

Fault and solution

Failure name	Failure Cause	Solution
Cannot boot	Check the battery has power or not	Check the batteries are installed correctly
Immediately shutdown after booting	Check the battery has power or not	Replace or recharge the batteries
Can display, but all operations are valid	The instrument program is disordered	Reboot
Cannot charge	Using non-rechargeable battery.	Reinstall the rechargeable batteries
Garbled	Incorrect reset	Reboot

Detail Parameters

	MT-7062
Measurement Range	-70~+6dBm
Wavelength cal.	850nm,1300nm,1310nm,1490nm,1550nm,1625nm
Resolution	+6~-60dBm(0.01dB)/-60~-70dBm(0.1dB)
Accuracy	(1550nm,1310nm)±0.2dB/(1490nm,1625nm)±0.3dB /(850nm,1300nm)±0.4dB
Linearity	±0.1dB
Detector type	InGaAs
Optic adapter	FC/UPP
Response range	700~1700nm
Auto off	yes
Battery Type	AA/LR6 1.5Vx2 pcs
Battery lifetime	>160H(Only OPM)
VFL	635~650nm,>1mW,2.5mm Universal
Network cable/ Telephone wire	UTP LAN cable(8P8C),Telecom cable(6P2C/6P4C/6P6C)
Operate temp.	-10℃~+60℃
Storage temp.	-20℃~+70℃
Relative humidity	<90% no dew
Size	105mm*52mm*34mm
Weight	90g(W/O battery)

Pro'sKit®

操作手冊

4合1光纖功率計

繁體中文

警告

進行任何本手冊未明確允許的改變或改裝將使您喪失操作本設備的權利。要減少火災或電擊的危險,切勿將此設備暴露在雨中或潮濕的環境中。為防止觸電,請不要打開外殼,必須由有資格的人員進行維修。

注意

由于本機的激光束對眼睛有害,不要試圖拆卸外殼,或直視激光輸出口。



使用注意事項

使用電池

本設備可以使用一次性鹼性電池或可充電電池,不能混用不同型號或不同容量的電池。祇可對可充電電池進行充電。

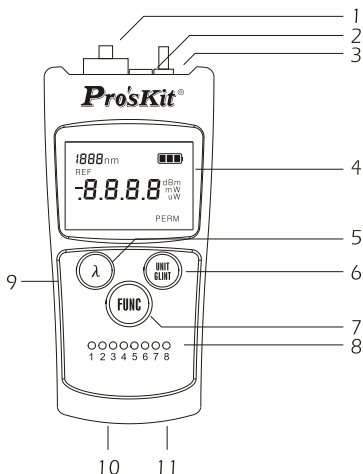
避免結露

應盡可能避免溫度的突然變化。將設備從冷的地方搬移到熱的地方後,或房間內突然升溫後,不要立即使用,因為設備內可能結露。使用設備時如果溫度突然變化,立即停止使用,並取出電池,待至少一小時後才可接通電源。

存放

當設備長期存放而不使用時,應將電池取出存放,避免電池漏液造成設備損壞。

描述



1-光纖連接器(標配FC)

2-LED-手電筒

3-VFL-可視故障探測儀光接口(2.5mm UPP)

4-液晶顯示屏

5-測量波長選擇按鍵(僅在光功率計功能時)

6-閃爍啓停按鍵(在VFL和LED功能時)

7-開關及功能選擇按鍵

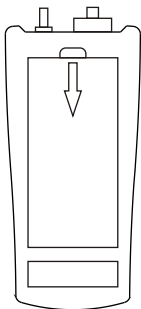
8-網綫綫序測試指示燈

9-MiniUSB充電插座

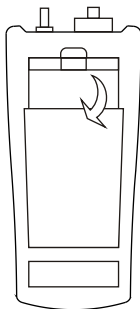
10-RJ45網綫測試插座

11-RJ11電話綫測試插座

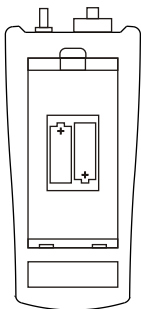
安裝電池



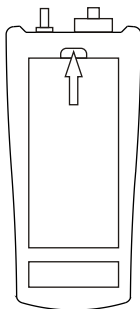
1.向下滑出電池蓋鎖扣



2.掀起電池蓋

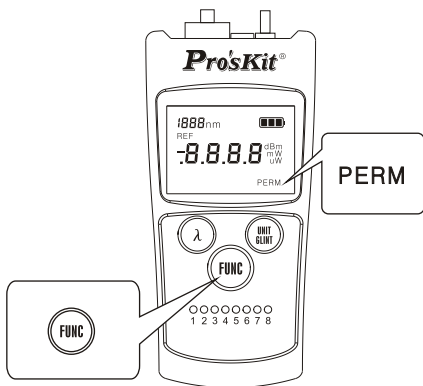


3.按要求正確放置電池



4.蓋上電池蓋并向上鎖緊電池蓋鎖扣

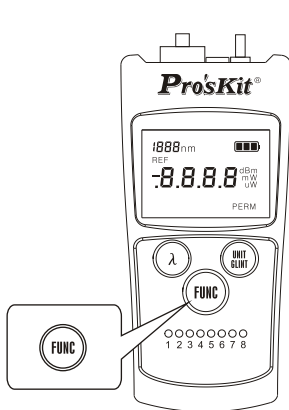
開機及省電功能的設置



按下“**FUNC**”鍵後儀表將開啓。再次按下此鍵兩秒以上儀表關閉。

儀表具有省電功能，正常開機後沒有任何操作十分鐘左右，設備將自動關閉。如果需要屏蔽此功能使儀表一直保持在工作狀態，祇需要在開機時按住“**FUNC**”鍵不放，兩秒後儀表顯示屏右下方會顯示“PERM”表示取消省電功能。

儀表功能選擇



光功率計功能



可視故障探測儀功能



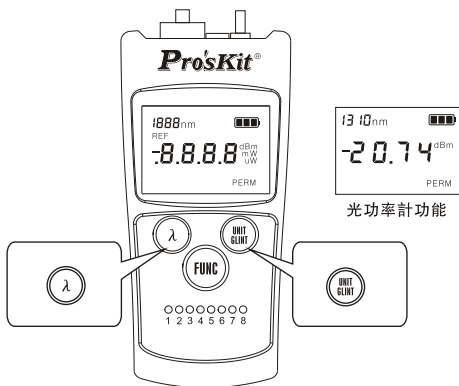
手電筒功能



網綫/電話綫測試功能

開機後默認是在光功率計功能下，按下“**FUNC**”鍵後儀表將會在“光功率計”，“可視故障探測儀”，“手電筒”，“網綫/電話綫測試儀”四個功能循環切換。

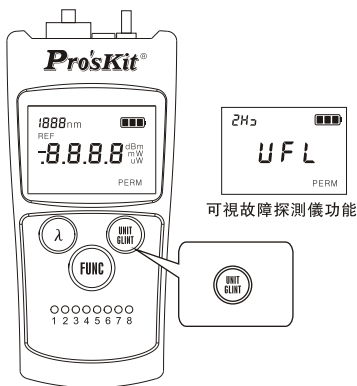
光功率計功能



光功率計功能

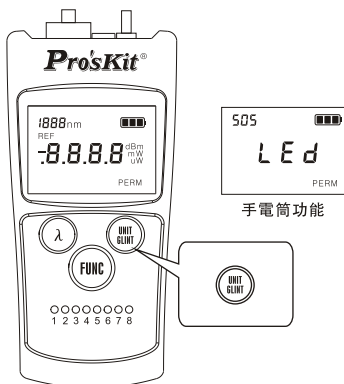
在光功率計功能下，“ λ ”按鍵可以切换測量光的波長。本儀表標定的波長為“850,1300,1310,1490,1550,1625nm”。數值顯示的單位有uW值和dBm值，可通過“UNIT GLINT”按鍵切换。

可視故障探測儀功能



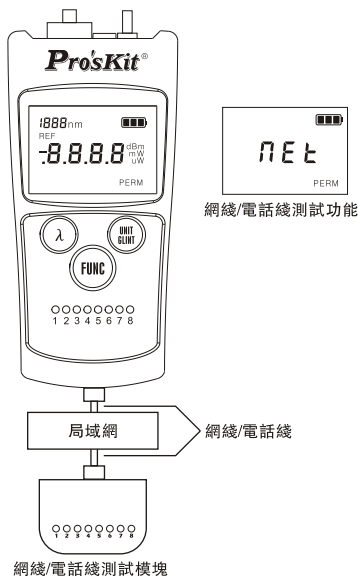
在可視故障探測儀功能下，“”按鍵可以選擇激光的常亮或閃爍，閃爍頻率約為2Hz。

LED手電筒功能



在LED手電筒功能下，“”按鍵可以選擇LED燈光的常亮或者SOS編碼方式的閃爍。

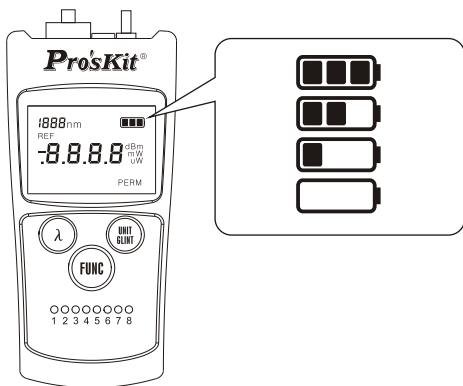
網綫/電話綫測試功能



網綫/電話綫測試功能是用於網絡綜合布綫和網綫通斷及綫序驗證的功能，當選擇到這個功能後就開始測試，8個指示燈是用於顯示綫序的。

可參考圖上的連接方法。

電量指示



電量檢測有四級指示



表示剩餘80%---100%的電量



表示剩餘40%---80%的電量



表示剩餘20%---40%的電量



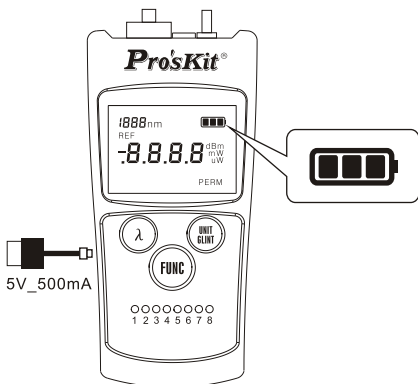
表示剩餘的電量不足20%

充電

本儀表具有充電功能, 當您使用可充電電池且儀表上指示電量不足時, 應及時關機并進行充電。長時間欠壓將會導致充電電池的壽命縮短。

充電祇要將交流適配器正確的連接到設備上就可以自動進行, 也可採用電腦USB接口進行充電。 充電時電池餘量指示會閃爍, 當充電結束後, 電池餘量指示停止閃爍。此時,電池已經結束快速充電, 可以直接使用。若此時不停止充電, 設備將繼續進入涓流充電狀態, 以小電流補充自然放電的電量。

充電時仍可使用儀表, 切勿在不使用充電電池時插入交流適配器,這將導致設備溫度升高而燃燒,甚至爆炸。



儀表維護及校準

一般維護

光纖連接適配器應避免與硬物接觸，並保持清潔。

存放時因通風乾燥，避免受潮。

長期不使用時，應取出電池後存放。

用戶可處理的故障

故障名	故障原因	處理辦法
不能開機	檢查電池是否有電	檢查電池是否安裝好
開機後馬上關機	檢查電池是否有電	更換電池或充電
有顯示，操作均無效	設備程序紊亂	重新開機
不能充電	使用非充電電池	重新安裝充電電池
顯示亂碼	復位不正確	重新開機

詳細參數

	MT-7062
測量範圍	-70~+6dBm
校準波長	850nm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm
分辨率	+6~-60dBm(0.01dB)/-60~-70dBm(0.1dB)
精確度	(1550nm, 1310nm)±0.2dB/(1490nm, 1625nm)±0.3dB /(850nm, 1300nm)±0.4dB
綫性度	±0.1dB
探測器類型	InGaAs
光纖適配器	FC連接器/2.5mm通用連接器
波長響應範圍	700~1700nm
自動關機	有
電池類型	AA/LR6 1.5Vx2 pcs
電池壽命	>160H(僅功率計功能)
VFL參數	635~650nm, >1mW, 2.5mm Universal
網綫/電話綫	UTP LAN cable(8P8C), Telecom cable(6P2C/6P4C/6P6C)
使用溫度	-10℃~+60℃
存儲溫度	-20℃~+70℃
相對濕度	<90%不結露
外觀	105mm*52mm*34mm
重量	90g(不含電池)

測試條件：-10dBm@1550nm 23±2攝氏度，40%~60%濕度，使用標準測試纖