



A RIPLEY® BRAND

# DLS 650

Dual LED Source  
User Guide



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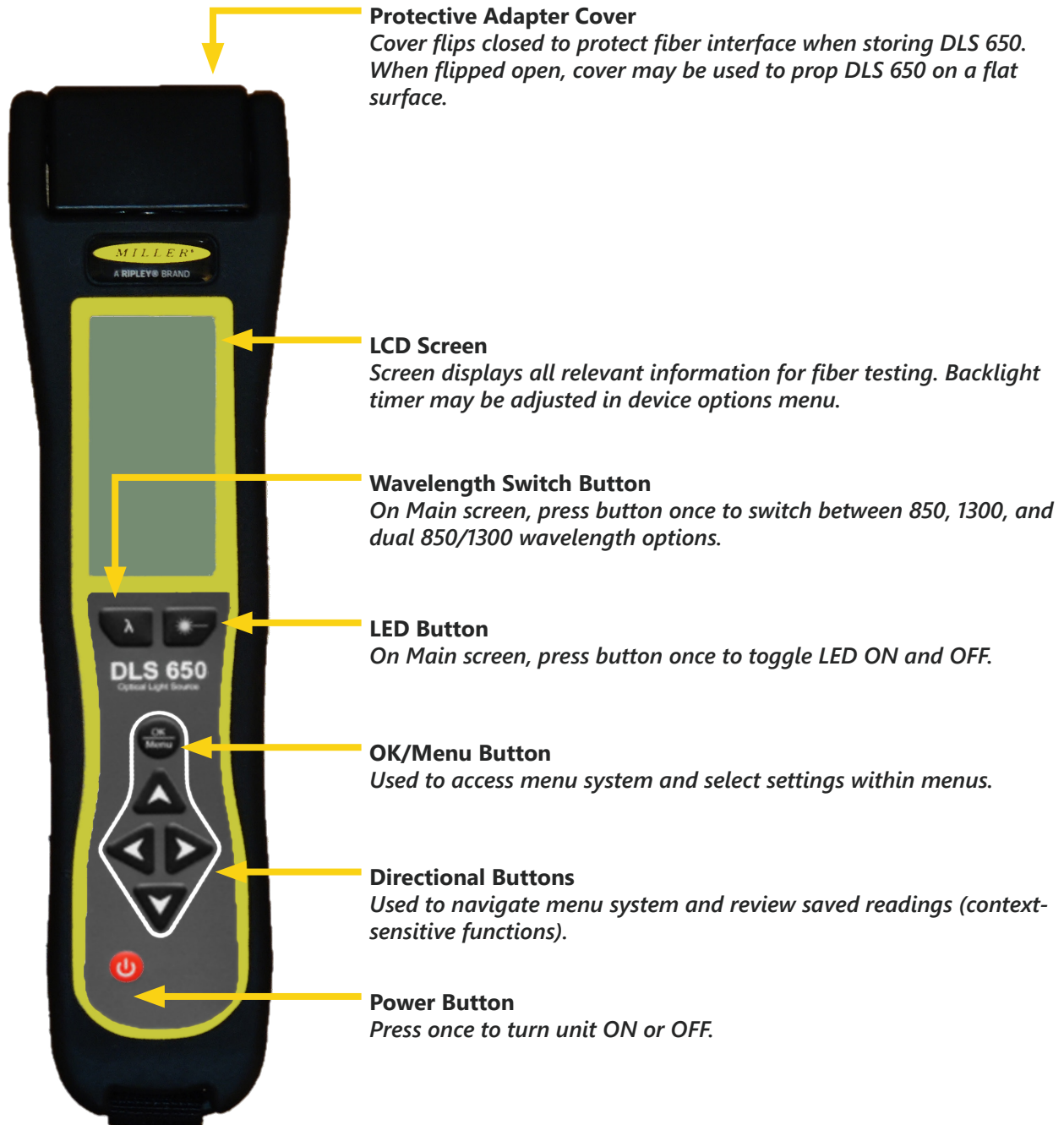
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# Introduction

The DLS 650 is an optical LED source used for verifying the proper function of fiber optic networks. This document will serve as an overview of the major functions and features of the device.

## Device Overview



# Important Safety Information



Read and understand all of the instructions and safety information in this manual before operating this tool.

## Laser Hazard



Avoid eye exposure to open fiber connectors and interfaces when working with fiber systems. They may be connected to a live laser source.

Do not look into the output port of a laser source.

Point fiber endfaces toward non-reflective surfaces to prevent reflection of laser.

## Electric Shock Hazard



Pay attention to proper battery polarity. Do not mix battery types or manufacturers.

Do not open the unit with the exception of the battery compartment door.

Use this unit only for its intended purpose as outlined in this document.

## Damage to Item Hazard



Do not leave item in direct sunlight or near heat sources, submerge in water, or subject unit to strong impact.

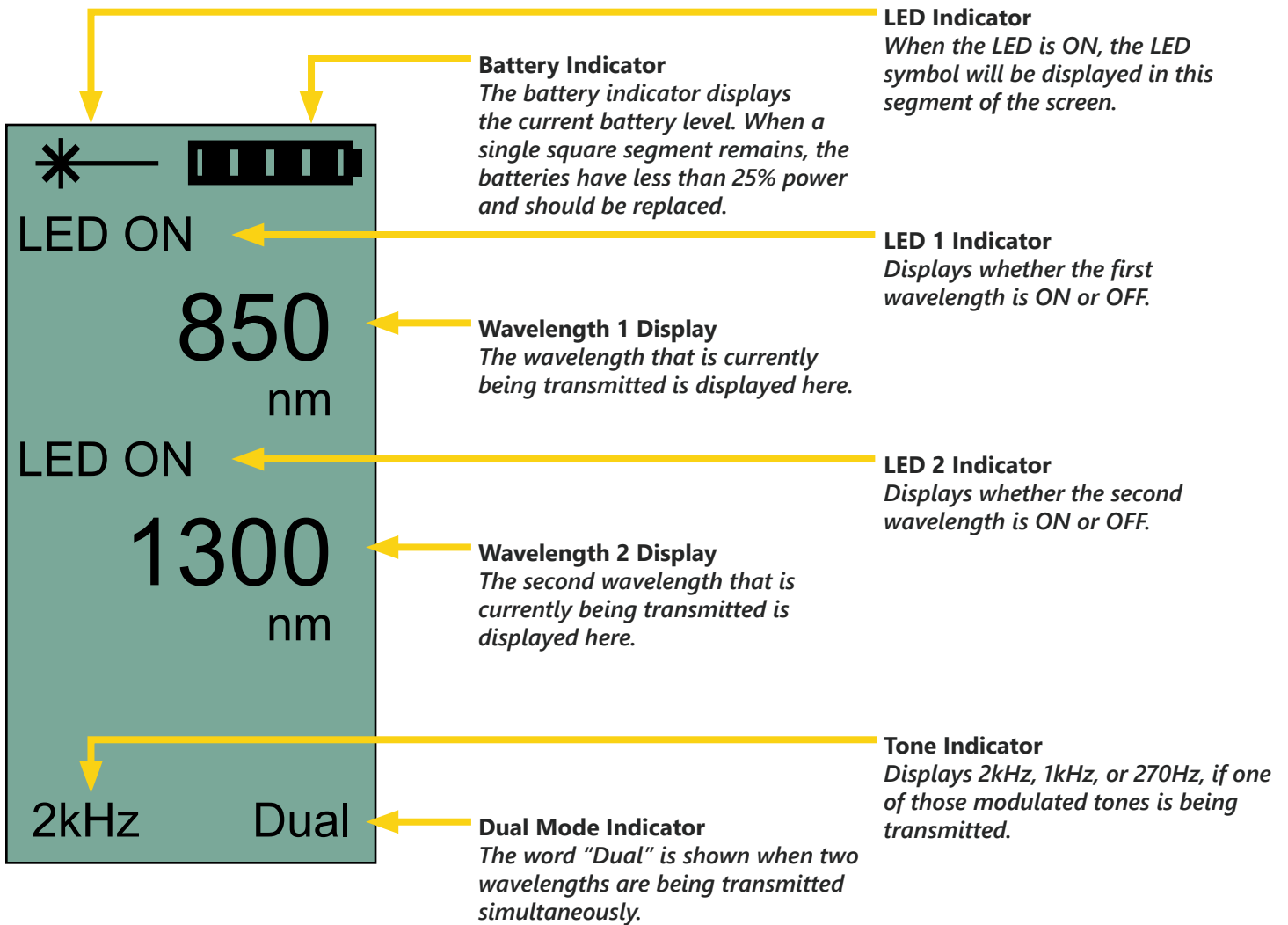
Cover the fiber interface with the flip-cap when not in use.



**Do not throw this product away.**

Contact your local recycling station to dispose of properly.

# Understanding the Main screen



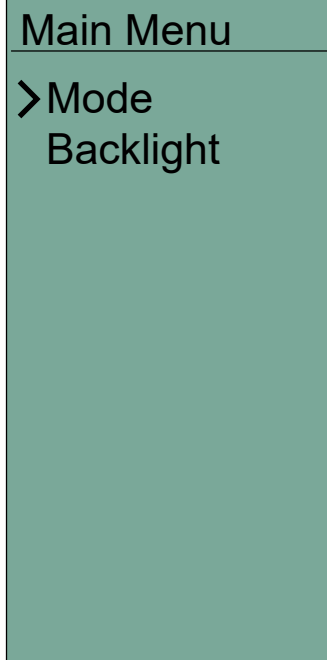
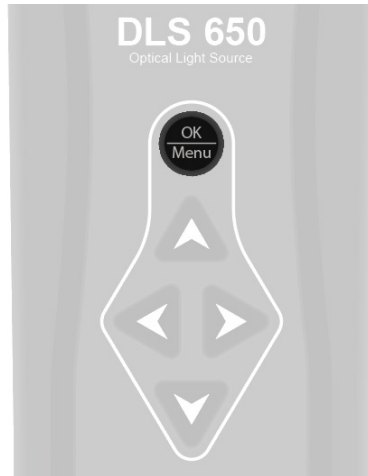
The Main screen of the DLS 650 acts as the general user interface for fiber testing.

Up to two wavelengths may be transmitted at the same time. The DLS 650 unit offers the 850nm and 1300nm multimode wavelengths.

When a single wavelength is selected for transmission, only that wavelength will be shown onscreen. Both wavelengths will be shown onscreen only when they are both selected for transmission.

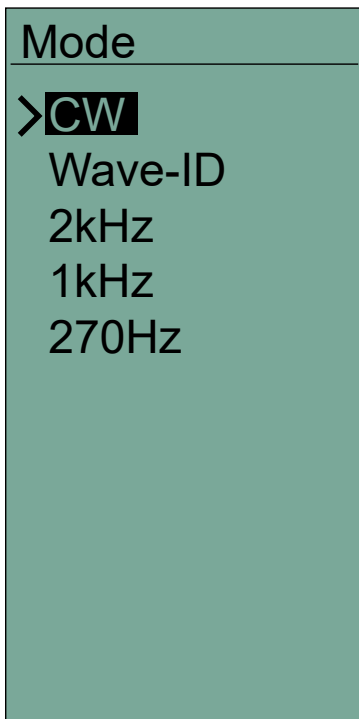
# Transmission Mode

Press the OK/Menu button to access the Main Menu



Use the Up/Down arrow buttons to move the cursor to the option you would like to explore. Press the Left arrow button to go back to the Main screen. Press the OK/Menu button or the Right arrow button to select an option.

Press the OK or Right arrow button to select the Mode menu.



The Mode menu shows all modulation modes the DLS 650 can transmit.

CW indicates the continuous wave mode. This mode contains no modulation. CW mode can be used with any optical power meter.

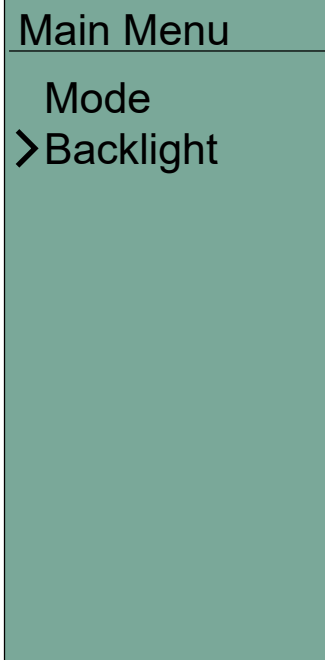
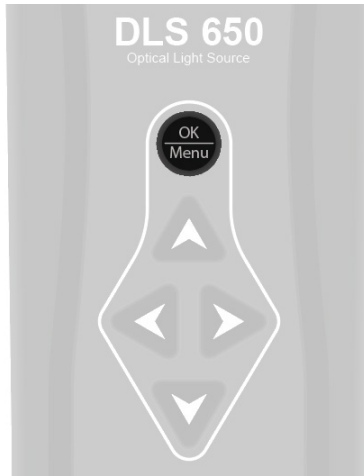
Wave-ID indicates the automated wavelength identification mode. In this mode, the DLS 650 wavelength information is transmitted and can be recognized by the RP 560-series of optical power meters. The RP 560 will automatically switch to measure the wavelength being transmitted.

2kHz, 1kHz, and 270Hz are all modulated signals that may be needed for continuity testing on fiber. Any Ripley power meter will identify a 2kHz tone, but the 1kHz and 270Hz options are only compatible with the RP 560-series.

The currently-selected option is highlighted.

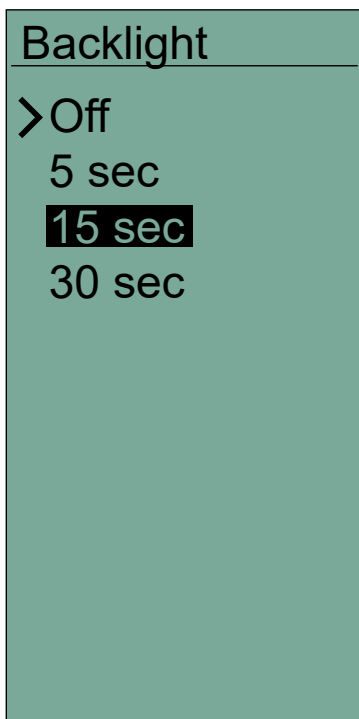
# Settings

Press the OK/Menu button to access the Main Menu



Use the Up/Down arrow buttons to move the cursor to the option you would like to explore. Press the Left arrow button to go back to the Main screen. Press the OK/Menu button or the Right arrow button to select an option.

Press the OK or Right arrow button to select the Backlight menu.



The backlight menu displays the options for the screen light timer.

Use the Up/Down arrow buttons to move the cursor to the option you would like to select.

Use the OK/Menu or Right arrow button to activate the option. The currently-selected option will be highlighted.

The backlight will turn on each time a button is pressed on the DLS 650. The timer option indicates how long it is illuminated.

# Specifications

DUAL MULTIMODE LED SOURCE	
<b>Wavelength</b>	850nm & 1300nm (single or dual modes)
<b>Output Power</b>	-22.00 dBm
<b>Output Stability</b>	±0.05dB (1 Hour) ±0.03dB Long-Term (15 min warm-up)
<b>Spectral Width</b>	40nm / 120nm
<b>Optical Interface</b>	SC/FC/ST/LC Interchangeable
<b>Tone Output</b>	2 kHz, 1kHz, 270Hz
<b>LED Class</b>	Class 1 (IEC 62471:2006)
<b>Power</b>	Push Button Toggle
<b>Battery</b>	AA - 2 Alkaline Batteries Included
<b>Operating Temperature</b>	-10° to +50° C
<b>Storage Temperature</b>	-30° to +60° C
<b>Dimensions</b>	5.8cm x 21.5cm x 3.0cm
<b>Weight</b>	6 oz

## Ordering Information - Accessories

### Light Source Adapters

PART NO.	DESCRIPTION
AC 022B	SC Adapter
AC 023B	FC Adapter
AC 024B	ST Adapter
AC 025B	LC Adapter

### Patch Cord Accessories

PART NO.	DESCRIPTION
AC 550	MM SC-LC - 1m Simplex
AC 551	MM SC-SC - 1m Simplex
AC 552	MM LC-LC - 1m Simplex
AC 600	SC-SC Simplex Bulkhead Adapter
AC 601	LC-LC Simplex Bulkhead Adapter
AC 602	LC-LC Duplex Bulkhead Adapter

### Cleaning Tools

PART NO.	DESCRIPTION
AC 089	One-Click Cleaner for 1.25mm & ODC Ferrules / Bulkheads
AC 099	One-Click Cleaner for 2.5mm Ferrules / Bulkheads
AC 090	1.25mm Swabs (100 per Pack)
AC 091	2.5mm Swabs (100 per Pack)
AC 092	SqR Pad & Fiber Wash Pen
AC 190	Cletop Cleaner - Type B - Blue Tape



# Certifications and Contact Information



This product conforms with health, safety, and environmental protection standards for products sold within the European Economic Area (EEA). This product was tested by an ISO 17025 accredited laboratory and complies with the following CE directives and standards listed below:

Directives:

Electromagnetic Compatibility (2014/30/EU)

Low-Voltage (2014/35/EU)

Standards:

EMC: EN 61326-1:2013 Industrial

Safety: EN/IEC61010-1:2010+A1:2016




This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## Contact Support

contact us with any questions pertaining to this or any other Ripley product.

 **Call Us:**  
(603) 524-8350

 **Email Us:**  
[tech.support@odm.ripley-tools.com](mailto:tech.support@odm.ripley-tools.com)

 **Visit Us Online:** [www.ripley-tools.com](http://www.ripley-tools.com)