

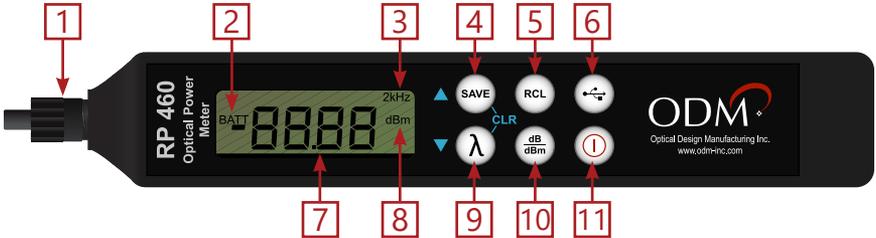


A RIPLEY® BRAND

# RP 460 Optical Power Meter

## Quick-Start Guide

### Device Overview



1. **Connector Adapter - Interchangeable**

The RP 460 comes with a 2.5mm universal adapter. Contact ODM for additional adapter options.

2. **Low Battery Indicator**

"BATT" will appear on the LCD when the CR2 3V battery needs to be replaced.

3. **2kHz Tone Indicator**

The RP 460 will beep and show "2kHz" on the LCD when a 2kHz modulated signal is recognized.

4. **Save Button**

Over 4000 readings may be saved on the RP 460. Each time the Save button is pressed, the current reading will be saved to internal storage. The display flashes the indexed location where the reading has been saved.

5. **RCL Button**

Pressing this button allows the user to toggle through the saved readings on the RP 460. The indexed location, wavelength, and reading will flash onscreen.

6. **USB Button**

When the RP 460 is connected via USB to a computer running ODM's software, pressing this button will transfer all saved data points into the software for reporting.

7. **LCD Screen**

This screen displays the measured value, currently-selected wavelength, and status indicators.

8. **Measurement Mode Indicator - dB/dBm**

dB is a loss measurement. dBm is an absolute power measurement.

9. **Wavelength Button**

Hold this button to switch the RP 460 between the 850, 1300, 1310, 1490, 1550, 1611, and 1625nm wavelengths. Press the button once to immediately display the current wavelength. The currently-selected wavelength will briefly appear onscreen every 8 seconds.

10. **dB/dBm Button**

Press this button to toggle between dB and dBm modes. Hold this button down when in dBm mode to set a reference on the RP 460.

11. **Power Button**

Press this button once to turn the RP 450 on. Press once again to turn the RP 460 off. The RP 460 is set to turn off after 5 minutes.

# Function Tips

## Audible Alerts

The RP 460 will emit an audible beep each time a major function is used. To disable most beeps, start with the unit OFF. Press and hold the Save button, then turn the unit ON while holding the Save button. Perform the same procedure to turn the audible beeps back on.

## Continuous Usage Mode

The RP 460 will turn off automatically if no buttons are pressed for 5 minutes. To bypass this feature, hold the Power button for 3 seconds when powering on. A series of beeps will indicate that the unit is now in continuous mode: it will not turn off automatically.

## Reviewing Saved Readings

While in the RCL mode, use the Save and Wavelength buttons to navigate through the saved readings on the device. Each reading has a "location" indicated by a 4-digit number. Note the blue arrows on the Save and Wavelength buttons. The data cycles at either end, so going "up" from the last data point will cycle back to the first location (0001) and vice versa.

## Deleting Saved Readings

Press and hold the Save and Wavelength buttons simultaneously to delete all saved readings in the RP 460 internal memory. The screen will flash 0000 to indicate that the memory is empty.

## Non-Volatile Memory

The RP 460 uses a non-volatile memory system. Data will not be lost if the unit is turned off while testing, if the battery is removed, or if the unit is stored for long periods of time.

# USB Download

Before transferring data from the RP 460 to the computer, download and install the OpTest software, available online at [www.odm-inc.com](http://www.odm-inc.com)

1. Plug the RP 460 into the computer using the included USB cable. If this is the first time it has been plugged in, WAIT ten seconds for drivers to install.
2. Place the OpTest software into the Dump/Sync mode by navigating to Settings>Data Mode>Dump Mode.
3. Press the USB button on the RP 460 to dump/sync all data points. The data from the RP 460 will appear in the box on the left side of the window.
4. Fill out the information on the right side of the window (Customer, User, Test Site, etc.).
5. Navigate to Settings>Report Settings to identify a minimum and maximum value for the PASS/FAIL functionality. Choose a color code scheme from this window, if appropriate.
6. Create the final report by clicking File>Export to Excel.

# Data Streaming

The RP 460 can be used in a live streaming mode with the OpTest software.

1. With the RP 460 plugged in via USB, place the OpTest software into Active mode by navigating to Settings>Data Mode>Active Mode.
2. Click the Save button onscreen to save the live reading displayed in the window. Save as many readings as needed.
3. Create the final report by clicking File>Export to Excel.

# Maintenance

## Unpacking and Inspection

The RP 450 comes supplied with a soft carry case, 2.5mm adapter (on the unit), 3.0V CR2 battery, USB cable, and instruction card. Contact ODM immediately if any part of the unit or packaging is damaged or otherwise unsatisfactory.

## Low Battery

The RP 450 will provide over 1000 operations under normal conditions. When the BATT indicator is shown on the device screen, the CR2 battery should be replaced.

## Optical Connector Interface

The RP 450 is equipped with a universal connector adapter which allows the interface of many popular style connectors. This connector adapter interface should be kept covered and protected from contamination. Care must be taken to avoid objects that could damage the glass surface of the detector mount. If scratches or breaks occur on the surface, please contact ODM for proper service.

## Warranty and Calibration

All ODM products come with a 2 year warranty. ODM recommends recalibration every two years to ensure adherence to NIST measurement standards. The first recalibration is free within the warranty period. Contact ODM for return information.

# Specifications

OPTICAL POWER METER	
<b>Detector Type</b>	<b>-02:</b> InGaAs / <b>-04:</b> Filtered InGaAs
<b>Measurement Range</b>	<b>-02:</b> +6 to -70dBm / <b>-04:</b> +23 to -45dBm
<b>Wavelength Range</b>	850nm to 1650nm
<b>Selectable Wavelengths</b>	850 / 1300 / 1310 / 1490 / 1550 / 1611 / 1625 nm
<b>Resolution</b>	0.01dB
<b>Absolute Accuracy</b>	± 0.25 dB
<b>Optical Interface</b>	Universal 2.5mm (Additional Adapters Available)
<b>Display</b>	LCD
<b>Tone ID</b>	2kHz
<b>Storage</b>	4000+ Measurements
<b>Data Transfer</b>	Mini-USB (Live Readings or Data Dump)
<b>Power</b>	Push Button Toggle / Auto OFF
<b>Battery</b>	CR2
<b>Dimensions</b>	6.1" x 0.94" x 0.75" (15.5 x 2.38 x 1.9 cm)
<b>Weight</b>	3 oz (85.4 g)

# Contact ODM

Phone: 603-524-8350

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

Web: [www.odm-inc.com](http://www.odm-inc.com)