Introduction

Handheld fiber optical light sources (FOLS) aim at the installation, engineering acceptance and maintenance of fiber optical network. FS provides four FOLS series optical light sources which feature decent appearance, compact size, friendly operation interface. The figures below display the product images of the four optical light sources.

Accessories

FOLS-101/FOLS-106

SC Adapter x1  ST Adapter x1  FC Adapter x1

FOLS-103/FOLS-108

SC Adapter x1  ST Adapter x1  FC Adapter x1  Charger x1
Installing

Inserting FC Cables

1. Remove dust cap.

2. Install FC fiber cable.
Inserting ST Cables

1. Install ST connector.

2. Install ST fiber cable.
Inserting SC Cables

1. Install SC connector.

2. Install SC fiber cable.
# Function Introductions

![Optical Light Source](image)

<table>
<thead>
<tr>
<th>Button</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON/OFF</td>
<td>ON/OFF</td>
<td>Press the key to turn on/off the unit.</td>
</tr>
<tr>
<td>WAVE</td>
<td>WAVE</td>
<td>Press the key to select the wavelength.</td>
</tr>
<tr>
<td>MODE</td>
<td>MODE</td>
<td>Press the key to select CW light output and modulated light output. When modulated light output is selected, a dot appears in LCD screen.</td>
</tr>
</tbody>
</table>

## Operation Instructions

1. Press “ON/OFF” to turn on the unit.
2. Connect FC or PC connector.
3. Press “WAVE” to select the wavelength. The default wavelength is 1310nm.
4. Press “MODE” to choose “CW”, “270Hz”, “1KHz” or “2KHz” light output frequency.
5. Press “ON/OFF” to turn off the unit.
## Troubleshooting

<table>
<thead>
<tr>
<th>Description</th>
<th>Problems</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The output light is unstable or decreases rapidly while operation</td>
<td>Battery is weak</td>
<td>Change battery</td>
</tr>
<tr>
<td>Insensitive display in LCD</td>
<td>The output port is polluted</td>
<td>Clean the output port</td>
</tr>
<tr>
<td>Output power is fluctuating when turning on the unit</td>
<td>–</td>
<td>Use it after 15 minutes warm-up</td>
</tr>
</tbody>
</table>

## FOLS-103/FOLS-108

**Function Introductions**

![FOLS-103/FOLS-108 Optical Light Source](image-url)
<table>
<thead>
<tr>
<th>Button</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON/OFF</td>
<td>Press the key to turn/off the unit.</td>
<td></td>
</tr>
<tr>
<td>( \lambda )</td>
<td>( \lambda )</td>
<td>Press the key to select the wavelength and display the wavelength on the top left corner of the screen.</td>
</tr>
<tr>
<td>( \text{CW} )</td>
<td>( \text{CW} )</td>
<td>Short press the key to shift the frequency. Long press the key to enter into or exit the wavelength auto-identify. “AU” will display on the screen.</td>
</tr>
<tr>
<td>P_\text{up}</td>
<td>UP</td>
<td>Increase the output power.</td>
</tr>
<tr>
<td>( \text{Pr} )</td>
<td>( \text{Pr} )</td>
<td>Press the key to turn on/off the back light. Long press the key to select back light control mode.</td>
</tr>
<tr>
<td>P_\text{down}</td>
<td>DOWN</td>
<td>Decrease the output power.</td>
</tr>
</tbody>
</table>

**Operation Instructions**

1. **Output Power**
(1) Press \( \text{ON/OFF} \) to turn on the unit and connect with the patch cord.
(2) Press \( \lambda \) or \( \text{CW} \) to turn on the laser on the diode.
(3) Press \( \lambda \) to select the output wavelength which displays at the top of the screen.
(4) Press \( \text{Pr}_\text{up} \) and \( \text{Pr}_\text{down} \) respectively to decrease and increase the output power, press \( \text{CW} \) to load the output frequency.
(5) Press \( \text{ON/OFF} \) for a few seconds to turn the unit off. Or press the \( \text{ON/OFF} \) to activate the auto-off function, then the unit will turn itself off automatically after 10 minutes idle time.

2. **Wavelength Automatic Identification**
(1) Connect the optical light source with its same serials matched optical power meter.
(2) In “Wave ID” operation mode
Press \( \text{CW} \) for several seconds, the optical light source will enter into “Wave ID” mode, and “AU” will be shown on the upper right of LCD screen.
Press \( \lambda \) for several seconds, the optical power meter will enter into “Wave ID” mode, and “AU” will be shown on the upper right of LCD screen.
(3) Press \( \lambda \) to change wavelength
Once the ID information is changed from optical light source, the detected information on optical power meter will be changed automatically according to the optical light source after 3 to 5 seconds.
(4) Exit “Wave ID” mode
Press \( \lambda \) and \( \text{CW} \) respectively to exit “Wave ID” mode from the optical power meter and optical light source.
3. Frequency Detection
(1) Connect the optical light source with its same serials matched optical power meter.
(2) Press $\lambda$ or $\square_{M}$ to emerge light from the unit, short press $\square_{M}$ and the optical light source will output frequencies of 270Hz, 330Hz, 1KHz, 2KHz accordingly, which will be shown on the upper right of the LCD screen.
The optical power meter will detect the corresponding frequency automatically from the optical light source.

4. Backlight Setting
After turning on the optical light source, long press $\odot$ to select backlight control mode. There are two kinds of backlight control modes:
(1) LDR intelligent backlight control mode
Long press $\odot$ and the “B/L SET” indicator is green. After 10 seconds, the indicator is off. According to the outside light, the LDR controller will automatically adjust the backlight within 15 seconds, which is to save power.
(2) Backlight button control mode
Long press $\odot$ and the “B/L SET” indicator turns to red. After 10 seconds, the indicator is off. Short press $\odot$ to turn off the backlight.

<table>
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<tr>
<th>Description</th>
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<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faint LCD display</td>
<td>1. Power is off</td>
<td>1. Press “ON/OFF” key</td>
</tr>
<tr>
<td></td>
<td>2. Battery is weak</td>
<td>2. Change battery</td>
</tr>
<tr>
<td>Output power is fluctuating</td>
<td></td>
<td>Use it after 15 minutes</td>
</tr>
<tr>
<td>when turning on the unit</td>
<td></td>
<td>warm-up</td>
</tr>
</tbody>
</table>

**Troubleshooting**

**Maintenance**

(1) Light interface is sensitive, please carefully plug in and pull out the adapters.

(2) Do not plug in the power supply when installing the battery.

(3) Take out the batteries when not in use.

(4) Keep regular cleanings on optical port of optical light source with cotton swabs.

(5) In order to avoid the electric shock, please do not disassemble the components. Disobeying the standard instruction may lead to safety issues.

(6) In order to avoid the measurement errors, please cover the dust-proof cap to ensure the optical interface is clean when the unit is not in use.

(7) Do not view the laser output directly when using the optical light source. Or else, personal injury should not be attributed to the product and FS.
Online Resources

- Download  https://www.fs.com/download.html
- Help Center  https://www.fs.com/service/help_center.html
- Contact Us  https://www.fs.com/contact_us.html

Product Warranty

FS ensures our customers that any damage or faulty items due to our workmanship, we will offer a free return within 30 Days from the day you receive your goods.

Warranty: All Optical Light Sources enjoy 1 year limited warranty against defect in materials or workmanship. For more details about warranty, please check at https://www.fs.com/policies/warranty.html

Return: If you want to return item(s), information on how to return can be found at https://www.fs.com/policies/day_return_policy.html