

Mini Deuterium Halogen Light Source

DT-Mini-2-GS



Installation and Operation Manual

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WARNING

Protective Eye Wear Must Be Worn
When Using This Instrument -
Intense Ultraviolet Radiation Present
See Important Safety Notices inside.



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Important Safety Notices

1. Do not remove or modify any installed safety device on this equipment. Doing so will void your warranty and create an unsafe operating environment.
2. Dangerous voltages are present in this device. There are NO user serviceable parts inside.
3. Only allow qualified personnel to service this unit.
4. Do not use the unit if it is damaged in any way. Contact your dealer for repair or replacement information.
5. Always screw in the fiber optic cables before starting the instrument.



Protective eyewear must be worn when using this equipment - Intense ultraviolet radiation present.
Never look directly into the light beam, as this can cause eye damage.

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About This Manual

Document Purpose and Intended Audience

This document provides you with an installation section to get your system up and running.

What's New in this Document

This version of the *Mini Deuterium Halogen Light Source DT-Mini-2-GS Installation and Operation Manual* adds our partnership agreement.

Document Summary

Chapter	Description
Chapter 1: Setup	Contains a list of package contents and unpacking instructions.
Chapter 2: DT-Mini-2-GS Specifications	Contains operating environment specifications, as well as other physical details of the product.
Appendix A: Bulb Replacement	Provides instructions for changing the bulb.

Product-Related Documentation

You can access documentation for Ocean Optics products by visiting our website at <http://www.oceanoptics.com>. Select *Technical* → *Operating Instructions*, then choose the appropriate document from the available drop-down lists. Or, use the **Search by Model Number** field at the bottom of the web page.

You can also access operating instructions for Ocean Optics products on the *Software and Technical Resources* CD included with the system.

Engineering-level documentation is located on our website at *Technical* → *Engineering Docs*.

Upgrades

Occasionally, you may find that you need Ocean Optics to make a change or an upgrade to your system. To facilitate these changes, you must first contact Customer Support and obtain a Return Merchandise

About This Manual

Authorization (RMA) number. Please contact an Ocean Optics Application Scientist for specific instructions when returning a product.

Chapter 1

Setup

Overview

The following sections provide instructions on unpacking and setting up your Mini Deuterium Halogen Light Source (DT-Mini-2-GS).

Before using the DT-Mini-2-GS for the first time, check for transport damage. Be sure to adhere to all warnings on the unit and in this manual.



Unpacking the DT-Mini-2-GS

► **Procedure**

1. Unpack your lamp assembly carefully. Although the lamp is rigidly mounted, dropping this instrument can cause permanent damage.
2. Inspect the outside of the instrument and make sure that there is no damage. Do not use the instrument if damage is present.
3. Use this instrument in a clean laboratory environment.

Contents

Your DT-Mini-2-GS package should contain the following:

- ❑ DT-Mini-2-GS Mini Deuterium Halogen Light Source
- ❑ One IC-DB15-2 interface cable for shutter operation

DT-Mini-2-GS Specifications

This section provides information on the operating environment and physical controls of the DT-Mini-2-GS.

Operating Environment

The following table provides information on optimizing the operating environment of your DT-MINI-2-GS.

Operating Environment	The DT-Mini-2-GS Unit . . .
Moisture	Is designed for operation in dry rooms only.
Ventilation	Should be situated so that its location or position does not interfere with proper ventilation.
Heat	Should be situated away from any device that emits excessive heat.
Object and Liquid Entry	Should be positioned so that objects do not fall on top of the unit. Additionally, ensure that no liquids are spilled into the enclosure through openings.
Power Sources	Should be connected to a power supply only of the type described in the operating instructions or as marked on the unit.

DT-Mini-2-GS Components

The following sections describe the components located on the front and rear of the DT-Mini-2-GS.

Front Panel



Front View

SMA Connector

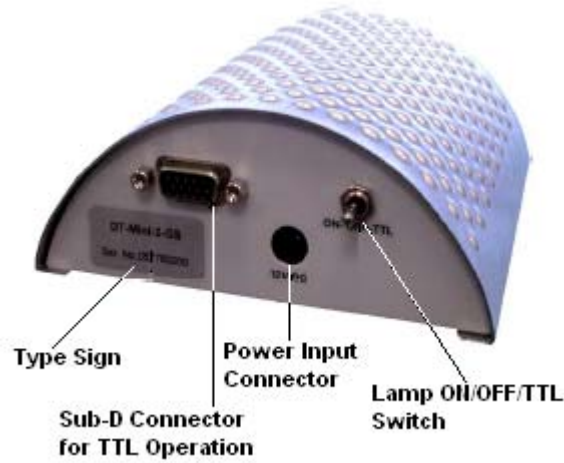
The SMA connector has a protection cap in place to prevent users from unintentionally looking directly into the light source. To avoid this occurrence, connect the fiber optic cable to the SMA connector before starting the DT-Mini-2-GS lamp. Use caution when handling other end of the fiber optic cable to ensure that light radiation does not come into contact with skin and/or eyes.

WARNING

Protective eyewear must be worn when using this equipment – Intense ultraviolet radiation present.

Never look directly into the light beam, as this can cause eye damage.

Rear Panel



Rear View

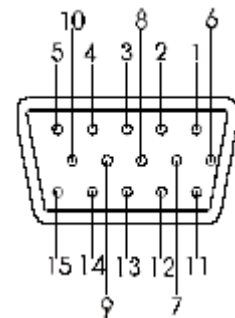
Power Input Connector

When a 12VDC connection is supplied to the DT-Mini-2-GS, the lamp automatically switches to the basic operating mode. The LED indicator on the front panel will light to reflect this condition.

Lamp ON/OFF/TTL Switch

When this switch is turned ON (when the lamp has power), you can operate the lamp by using the switches on the front panel.

Switch Position	Function
ON	The deuterium and halogen bulbs are illuminated.
OFF	The deuterium and halogen bulbs are not illuminated.
TTL	The lamp is powered up and can be controlled by the SUB-D connector: <ul style="list-style-type: none"> • Pin 1 = Deuterium ON/OFF • Pin 5 = Halogen ON/OFF • Pin 10 = Ground • Pin 13 = Shutter Open/Close



2: DT-Mini-2-GS Specifications

Appendix A

Bulb Replacement

To order replacement bulbs for the DT-MINI-2-GS, order item number: DT-Mini-2-B.

Replacing the Bulb

Use the following procedure to replace the bulb.

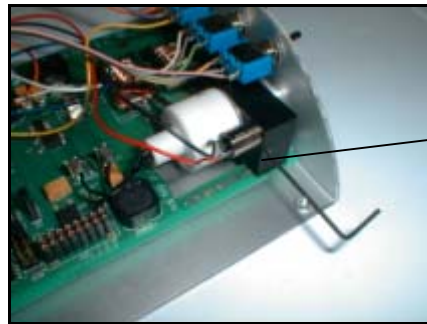
► **Procedure**

1. Remove the four screws on the bottom of the housing of the DT-Mini-2-GS and remove the cover.
2. Disconnect the four cables attached to the deuterium and halogen bulb.



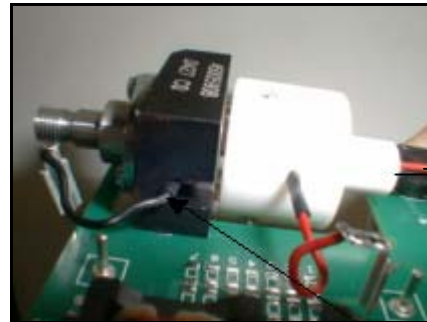
A: Bulb Replacement

3. Loosen the screw located on the bulb housing.



Bulb Housing
Screw

4. Remove the bulb from the DT-Mini-2-GS by gently pulling the bulb backwards out of the internal bulb socket.



Pull
Gently

Caution

Do not turn or wiggle the bulb during removal, as this can damage the bulb socket.

5. Reverse the steps above to insert the new Mini-D2-B into the bulb housing.

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