

Changing Between Lamp Types

If you changed lamp types (*i.e.*, from Deuterium to Halogen or Halogen to Deuterium), then the QuadTec Setup menu must be modified to reflect the change in lamp type.

1. Exit the BioLogic program.
2. Turn on the detector and when the screen displays the firmware version (*e.g.*, v1.5), immediately press the green arrow keys in the following sequence: Up/Down/Up. This loads the Extended Setup application.
3. After initialization and calibration are complete cursor will be blinking at ON in View screen. Select the Setup menu by pressing the right green arrow key until the cursor is blinking next to Setup on right side of LCD. Hold the arrow key for a few seconds and the Extended Setup menu will appear.
4. From the Extended Setup menu, press the Down arrow to access the desired menu items. Make the following modifications:

- a. **LAMP:** The lamp type is specified using the Up arrow to toggle between Deuterium and Halogen.

Changing the lamp type prompts a question on whether to reset the lamps' working time. Pressing any green arrow key will reset the time. The lamp number is incremented automatically and cannot be edited.

When replacing a deuterium lamp, the working time should be reset as this value is used in the GLP report. Position the cursor on the working time value and press the Up arrow. Pressing the Up arrow again resets the working time to zero and increments the lamp number.

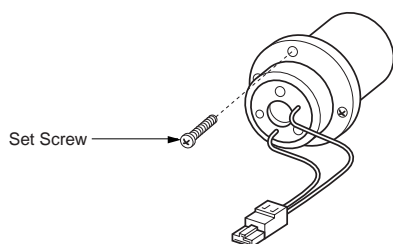
- b. **WAVELENGTH:** For a Halogen lamp, set Filter to 999 nm and set Range to 300–900 nm.

For a Deuterium lamp, set filter to 380 nm and set Range to 190–740 nm.

5. Exit the Extended Setup menu by pressing the left arrow key to return to the Main menu. Power the QuadTec off and on.

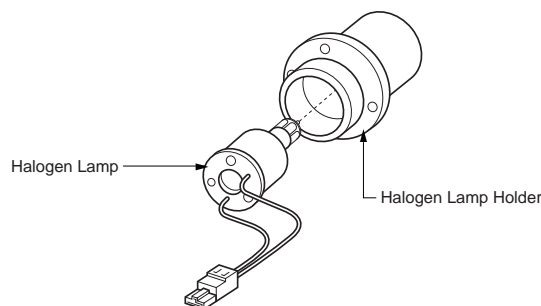
Instructions for Replacing the Halogen Lamp in the Holder

To replace a halogen lamp in the holder, open the cover of the QuadTec Detector and remove the halogen lamp. Release the set screw on the side of the holder with a 1.5 mm hex wrench, as shown below.



Removing the Set Screw

Remove the old lamp and insert the new lamp. Tighten the set screw until the lamp is held firmly in the holder, do not overtighten.



Removing the Halogen Lamp

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QuadTec

Instructions for Lamp Changes

Changing the Lamp

1. Let the lamp cool down for at least 15 minutes after switching it off.

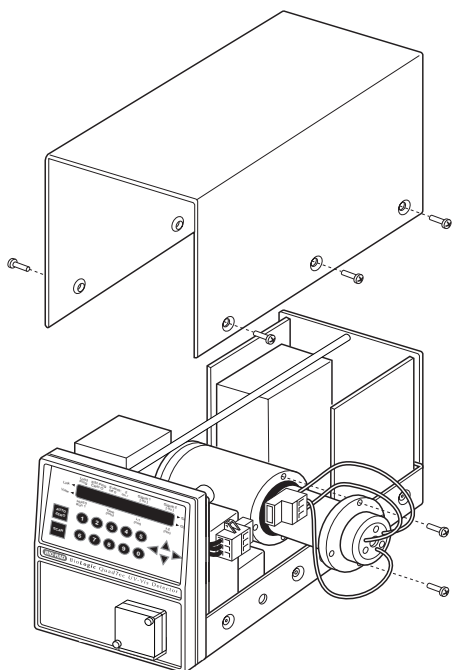
Caution: Remove the power plug before opening the QuadTec case.

2. Unscrew the 6 screws around the base of the detector housing and remove the cover.
3. The lamp is located in a black housing on the right side of the instrument. The Deuterium and Halogen lamps are shown below.
4. Pull the lamp's electrical supply cable connector from its socket.
5. Unscrew the two screws in the lamp socket and remove the lamp and connected cables. Insert the new lamp assuring that it is correctly seated in the guiding slot and screw it in securely.

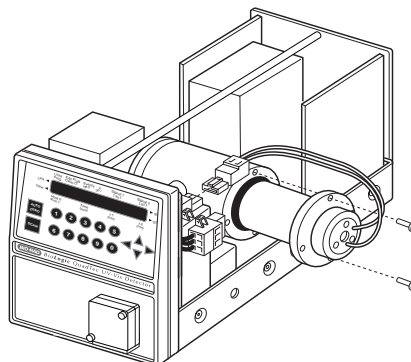
Caution: Do not touch the lamp glass. Should you touch it accidentally, clean it thoroughly with a lint free cloth and isopropyl alcohol.

6. Insert the lamp's electrical supply cable connector into the appropriate socket. The deuterium lamp has a 3-pole plug, the halogen lamp a 2-pole one. It is impossible to plug a lamp's power supply into the wrong socket.
7. Put the lid back on from the top of the instrument and fasten the screws of the cover.
8. Install the dummy cell, set the wavelength to 240 nm, and record the signal and reference values as a reference to track the lamp output and flow cell cleanliness.
9. *If you are not changing the lamp type (i.e. you replaced a Deuterium lamp with a new Deuterium lamp or a Halogen lamp with a new Halogen lamp), then the QuadTec Setup menu remains unchanged, but the lamp working hours should be reset (see the QuadTec instruction manual).*

If you changed lamp types (i.e. from Deuterium to Halogen or Halogen to Deuterium), follow the procedure on the opposite side of this sheet.



Replacing the Deuterium Lamp



Replacing a Halogen Lamp