

Introducing the User-Serviceable Spectrometer

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KEYWORDS

FT-IR, maintenance, user-serviceable, system diagnostics, pre-aligned components, pinned-in-place

INTRODUCTION

If you are concerned about the cost of maintaining your system and limiting your instrument's downtime, then the idea of a user-serviceable spectrometer should appeal to you. Nicolet's Magna-IR® and Impact® spectrometers deliver maximum operating time with the lowest maintenance costs.



Some user-replaceable Magna-IR parts.

During the concept phases of the Magna-IR and Impact product development cycles, we asked many of you what you wanted in a new FT-IR system and found that cost and response time for repairs are very important. To address these needs, we designed our new optical benches with precision, pre-aligned, pinned-in-place components and performed extensive testing to ensure long life. Then we added a diagnostic package to monitor these components in real-time.

The results are components that you can replace yourself if the need arises. These are components include the source, laser, detectors, power supply and PC interface board. And, you can do so in less time than it would take you to call your service representative.

Replacing a component in the Magna-IR or the Impact is extremely easy. Simply turn off the instrument, loosen the fastener nut, remove and replace the pinned-in-place component. Then refasten the nut and turn on the system – no alignment is required. Within minutes, you will be collecting spectra.

Plus, both systems feature a powerful bench diagnostics package which monitors all electronic components to ensure optimal performance. With these diagnostics, you can verify that all components are operating correctly or determine the source of any electronic malfunction on the instrument by simply clicking open the diagnostic window. If a component is not working properly, the software will guide you to the source of the problem, so that it can be resolved quickly, getting you back to work fast.

Our new diagnostics are so powerful and complete that they will even monitor the temperature status of the MCT detector in you Magna-IR*.

We are pleased to provide both highly functional and user-friendly systems. We hope you find the Magna-IR spectrometer and the Impact spectrometer a pleasure to use, and as dependable and reliable as we do.

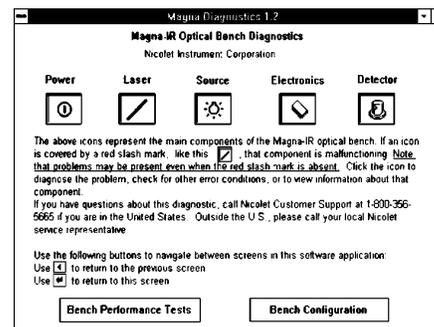


Figure 1: The opening page of the Magna-IR's diagnostic routine, indicating a failed laser.

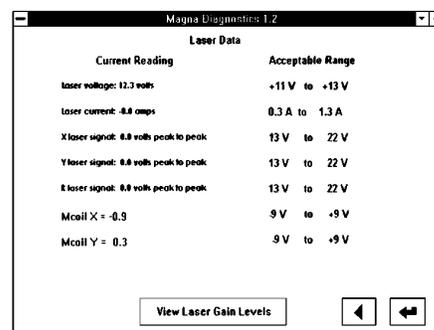


Figure 2: By double-clicking on the laser icon, you obtain a check list of the laser status with an option to monitor the real-time laser data. The data tells us that the power to the laser is functioning, but no current is being used. Trouble shooting information, replacement procedures and ordering information are available with a click of the mouse.

**Some diagnostic features are unique to the Magna-IR spectrometer.*

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