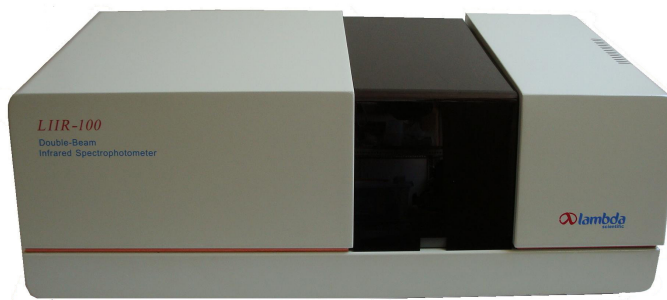


# LIIR-100 Double-beam Infrared Spectrophotometer



- $4000 - 400 \text{ cm}^{-1}$
- *Double-beam*
- *Direct-proportioned Recording*
- *Easy Operation*
- *Low Stray Light*
- *High Accuracy*
- *Cost Effective*

Infrared spectroscopy is one of the most powerful techniques for identifying organic substances available to organic and analytical chemists. Infrared analysis is applicable to both qualitative and quantitative analyses. It is an indispensable tool in almost every analytical laboratories.

LIIR-1 Double-beam Infrared Spectrophotometer can be used to record IR absorption and reflecting spectra within the range of  $4000 \sim 400 \text{ cm}^{-1}$ . It is a powerful tool to analyze the sample structure in the fields such as petroleum, chemical engineering, pharmacy, public health and environmental protection.

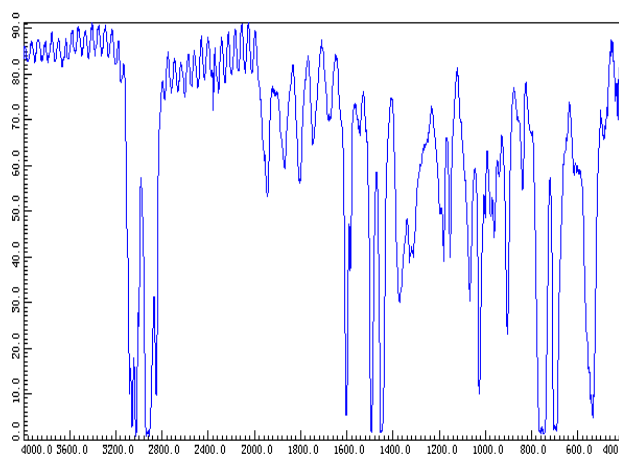
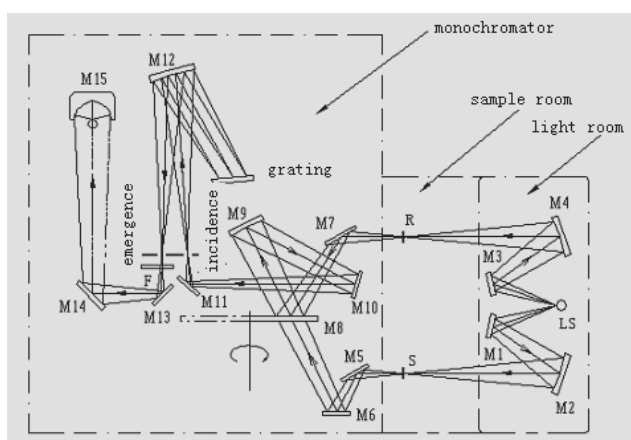
## Software Functions

The Windows application software provides a user-friendly interface for the control of spectrophotometer, data acquisition and spectral analysis .

- Spectral background baseline memory
- Spectral background baseline correction
- Spectral data smoothing operation
- Spectral baseline slope correction
- Spectral data differential operation
- Spectral data arithmetic operation
- Spectral data accumulating operation
- Conversion of %T and ABS
- Spectrum file management
- Spectral peak search
- Spectrum scale extension
- Spectral absorption expansion

## Optical System

## Polystyrene Spectrum



## Specifications

Optical System	Double-beam
Wave-number Range.	4000 ~ 400 cm <sup>-1</sup>
Wave-number Accuracy	±4 cm <sup>-1</sup> (4000 ~ 2000 cm <sup>-1</sup> ) ±2 cm <sup>-1</sup> (2000 ~ 400 cm <sup>-1</sup> )
Wavelength Resolution	1.5 cm <sup>-1</sup> (near to 1000 cm <sup>-1</sup> )
Transmittance Accuracy	±0.2%T (noise level not included)
Io Line Flatness and Straightness	±2%T
Stray Light	≤0.5%T (4000 ~ 650 cm <sup>-1</sup> ) ≤1%T (650 ~ 400 cm <sup>-1</sup> )
Abscissa Extension	×0.5, ×1, ×2, ×5 and ×10
Ordinate Extension	×0.25 to ×50
Test Mode	Transmittance, absorbance and single beam
Scanning Speed	5 stops (very fast, fast, medium, slow and very slow)
Slit Width	5 stops (very wide, wide, medium, narrow and very narrow)
Response	5 stops (very fast, fast, medium, slow and very slow)
Operation Mode	3 kinds (continuous scan, repeat scan and fixed wavelength scan)
Power	220 ~ 240VAC/50Hz or 110VAC/60Hz
Dimensions	740 (L) x 600 (W) x 260 (H) mm
Weight	60 kg