

HYPERSPECTRAL IMAGING FOR CULTURAL HERITAGE

Ideal for Conservation Science

*Identification of pigments,
Characterization of colours,
Dating & authentication*

Stationary Operation Mode

No additional moving system required

Remote, Non-destructive

High Spatial & Spectral Resolution

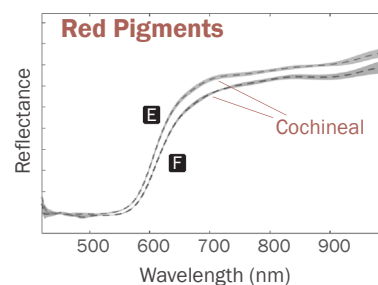
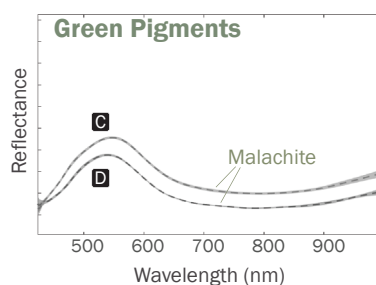
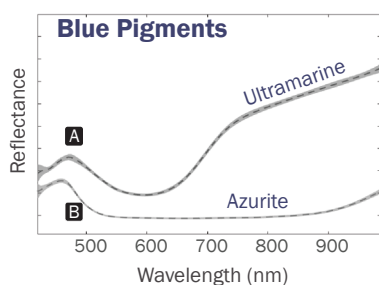
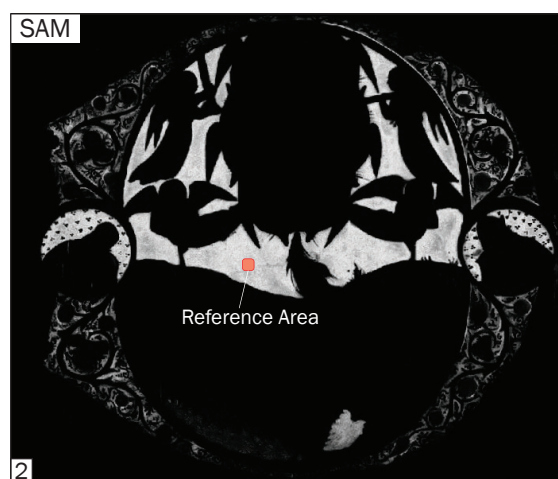


HERA Hyperspectral Camera

HERA is a high-performance camera enabling a novel approach to spectral imaging. With its unique and patented technology, HERA provides exceptional **spatial & spectral resolution** and superior **sensitivity** in **low-light illumination conditions**, allowing for lower-intensity illumination on the artworks.

Benefits

Easy to Use: Point & Shoot Camera | User Friendly Software for Data Analysis | Visualisation of Spectra for Pigment Identification | Export images in standard formats



1) **RGB reconstruction** obtained from the hyperspectral image of a medieval miniature (from "Musei Civici di Pavia", Italy). The reflectance spectra of the areas identified by the letters A-F are reported in the three panels below. **The spectral features enable the identification of the pigments** employed by the artist.

2) **Spectral Angle Mapper (SAM)** algorithm highlighting all the similar pixels (in white) with respect to a selected reference area (represented by the red square in the image). The SAM enables one to **map the spatial distribution** of a given pigment (azurite in this example).

VIS-NIR

400-1000 nm
1280 x 1024 px



SWIR

900-1700 nm
640 x 512 px