Onsite, non-invasive and non-destructive Technical Examination for Wall paintings
Virtual tours

“Scientific examination of Cultural Heritage raises awareness in local communities”

360° Virtual Tours publishable on the web.
Raise awareness on your conservation projects.

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Virtual tours

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Panoramic Photography

High Resolution Photography

“A practical guide to Panoramic Multispectral Imaging”

High resolution documentation of large wall paintings
Photomodeling allows rapid and low-cost 3D modeling for the web
Reflectance Transformation Imaging (RTI)

“Innovative Imaging Techniques for Examination and Documentation of mural paintings and historical graffiti in the catacombs of San Giovanni, Syracuse”

RTI (Reflectance Transformation Imaging) allows a high quality documentation of historical graffiti
Ultraviolet Fluorescence (UVF)

“Practical notes on ultraviolet technical photography for art examination”

Ultraviolet photography documents inpaints and organic materials, consolidants and binders.
Infrared photography (IR)

Infrared photography makes visible underdrawing and changes (pentimenti)
Infrared False Color (IRFC)

Infrared False Color photography locates inpaints with modern pigments
A complete Technical Photography (TP) documentation allows a preliminary identification of pigments.
We designed a **Technical Photography** kit specifically for art professionals and educational institutions.

It’s the best compromise among Quality, Adaptability and Costs and it allows to realize a complete set of 7 technical photo documentation methods: VIS (visible photography), UVF (Ultraviolet Fluorescence), UVR (Reflected Ultraviolet), IR (Infrared), IRF (Infrared Fluorescence), IRFC (Infrared False Color), IRT (Infrared Transmitted)

This is a kit for art professionals: conservators, art appraisers, archaeologists, art historians.

Use it for fast and informative examination of easel paintings, wall paintings, manuscripts and historical documents.
Raking Light photography documents incisions which are indicative of the painting techniques.

"Technical Photography for mural paintings:"

Click to download
Pigments can be mapped with multispectral imaging to locate inpaints and differentiate among pigments with the same hue and tone but different chemical composition.
Antonello – Multispectral Imaging system for Art

Antonello is a simple MSI system composed of 18 bandpass filters and a full spectrum DSLR camera, covering the 400-925 nm spectral range.

Conservators and art historians need non-invasive methodologies to identify and map pigments on works of art and archaeology. These tools allow them to select appropriate conservation procedures, acquire information on the workshop practices, distinguish original sections from inpaints and to enhance visualization of faded pigments and inks.
Reflectance Spectroscopy

Pigments identification with onsite, non-invasive and non-destructive Reflectance Spectroscopy (RS).
Gorgias – Reflectance Spectrometer for Art
On-site

We provide these methods on-site with our traveling equipment

Multispectral Imaging (MSI)
Infrared Reflectography (IRR)
RTI, Reflectance Transformation Imaging
Reflectance Spectroscopy (RS)

Off-site

We take tiny samples to analyze them in our Studio

Raman Spectroscopy (RS)
Cross-section Optical microscopy (OM)

Technical Photography (TP)
Multispectral Imaging (MSI)
Infrared Reflectography (IRR)
RTI, Reflectance Transformation Imaging
Reflectance Spectroscopy (RS)

Detect inpainted, map consolidants and binders
Detect incisions, graffiti, giornate

Mapping Zinc white, Titanium white
Mapping Cadmium pigments, Egyptian blue

Preliminary Pigments Identification

Detect underdrawing

Visualize paint layers, preparation and ground

Pigments Identification

UVF (Ultraviolet Fluorescence)
IRFC (Infrared False Color)
UVR (Reflected Ultraviolet)
IRF (Infrared Fluorescence)
IR (Infrared)
IRT (Transmitted Infrared)
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Preliminary Pigments Identification

Visualize paint layers, preparation and ground

Pigments Identification
On-site

Technical Photography (TP)

Multispectral Imaging (MSI)

Infrared Reflectography (IRR)

Infrared Reflectance Transformation I. (RTI)

Off-site

Reflectance Spectroscopy (RS)

Raman Spectroscopy (RS)

Cross-section Optical microscopy (OM)

On-site with traveling equipment

UVF (Ultraviolet Fluorescence)

UVR (Reflected Ultraviolet)

IRF (Infrared Fluorescence)

IR (Infrared)

IRT (Transmitted Infrared)

Mapping Pigments

Detect Underdrawing

Detect incisions, virtual tours, high resolution

Preliminary Pigments Identification

Pigments Identification

Visualize paint layers, preparation and ground

Brush strokes

Detect inpaints

Mapping Zinc white, Titanium white

Mapping Cadmium pigments, Egyptian blue

Detect underdrawing

CHSOS – art examination methods

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Any questions?

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