OGMALION PROJECT

SABIA



Your Digital Museum

We offer a wide array of high quality scanning services for fine art and cultural objects using the world's most advanced digital-imaging technology. Our comprehensive services include preservation and restoration of fine art and cultural heritage objects, digital archiving, and exhibitions using digital technology.

Scanning Services

Our scanning services are fully customizable to match your needs, and include oversized image scanning, ultra-high resolution scanning, scanning using infrared and visible light, and local on-site scanning.





Image Processing

We provide superior-quality image processing services such as image stitching, image extraction and color correction.

Digital Content Management

Our proprietary software for image archiving and high-speed display can be used for research, exhibition, or publication on the web. We also offer digital display systems that support 4K and Full HD.



Scanning Services





We provide scanning services for digital archiving, reprinting, reproduction, and replica creation using high-definition scanners especially designed for cultural objects.

With resolutions from 300 dpi to 1400 dpi, we offer the world's highest resolution. With a precision-calibrated scanning head and an ultra-high CRI LED light source, accurate color reproductions are achieved in primary data, which makes color correction following digitization unnecessary.

Because of our wide and versatile array of scanning choices, we provide the optimum scanner to digitize any artwork's image or any cultural object's shape.

We also offer a range of choices to match your needs: on-site scanning at your institution, vertical placement scanning, IR imaging, and oversized object scanning using adjustable tracks.

Superiority

	Digital Camera:	Scanner(KUS HOKUSAI)
lmage Quality	Severe image distortion caused by pronounced lens aberration. Multiple lighting adjustments (with stroboscopes, flashes, etc.) results in large variations in color quality.	Lens aberration is small because a CCD line sensor is used, resulting in almost no image distortion. Color quality is stable because high-quality LED lighting is used on the subject at a fixed distance.
Color Precision	+ about5~25	+ less than 1.2
Speed	Light adjustment causes long imaging times. Extremely high image processing costs (to correct distorted images due to lens aberrations).	Quick LED illumination adjustment time. Fast scanning speeds result in shorter imaging times. Distortion-free images reduce post-processing man hours and lower costs.
Portability	Leguipment is light and installation is simple.	Scanner is extremely portable, weighing around 60 kg. Extra lighting, etc., is not required.
Effects on Cultural Objects	Effects on cultural objects may be large, depending on the amount of light used (with a stroboscope, flash, etc.)	Light intensity is low with LED light sources, minimizing the effects on the object being imaged. As a non-contact scanner, there is no potential for damage to the cultural object.
Special Light Source	With IR imaging, imaging is performed multiple times, but identical images cannot be obtained. Images of metallic objects (silver, gold, etc.) cannot be captured with a camera.	Identical images can be obtained using both visible and IR light. Images of metallic objects can also be taken by adjusting spectral reflection.

Actual Digitization Results

The high-definition "Niji-H" scanner at Kyushu National Museum Kyushu, Japan

Niji-H is a full-spectrum scanner with an array of capabilities, from ultra high-definition scanning to IR and pigment analysis with a multi-band imaging technique.



National Museums Northern Ireland Belfast, Northern Ireland

Objects: Ship design images, watercolor and oil paintings, insect specimens

Project volume: 200 ship design images, other paintings and specimens

Completion time: Approximately one month



Nagoya Castle Nagoya, Japan

Objects: Stone rubbing images Project volume: Approximately 300 images Completion time: Three days



Okinawa Prefectural Archives Okinawa, Japan

Objects: Maps

Project volume: Approximately 1,000 map images

Completion time: Three weeks



Ninna-ji Temple (UNESCO World Heritage Site) Kvoto, Japan

Objects: Sliding-door paintings, paintings on wood, picture scrolls, folding screens

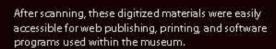
Completion Time: Three days (using two scanners)

Project volume: 180 pieces



Kyoto Prefectural Library and Archives Kyoto, Japan

Objects: Various works of art including designated National Treasures and Important Cultural Properties. Among these were large-scale drawings (greater than 3 m x 20 m) which have not been displayed in 20 years. Project volume: 700 scans of approximately 150 pieces Completion time: Halfa day





Odoi Project – Kyoto University Museum Kyoto, Japan

Digital exhibitions were created by using digital browsing systems that incorporate existing technology such as touch screens.

The digitized picture at right is the "Odoi Viewer" featuring the "Odoi Drawing."



Digitization of Josiah Conder drawings into a data base

This multi-function sanner featuring a special table was specifically developed for architectural drawings. Our proprietary system makes free and unrestricted viewing possible by creating high-capacity, high-definition images that can be quickly and easily viewed after scanning in 1200 dpi.



The World's Highest-Quality Scans



Ultra High Resolution High Color Reproducibility High Speed

Ultra High Resolution

We provide high-end scanning and digitization services with the world's highest resolution (over 1400 dpi). Our scanners produce images with unmatched image quality and color precision, and are so accurate that post-scanning adjustments are unnecessary.

High Color Reproducibility

The color precision of our scanners is less than 1.2 based on the IT8 chart. Our light sources – developed with engineers at Kyoto University – allow us to finely control spatial light distribution, resulting in flawless high-quality images.

High Speed

You might be surprised at how fast our scanners work. Large images (around 60 x 160 inches) can be scanned at 600 dpi in less than 40 minutes, which is faster than a digital camera. What's more, because our LED light sources help to create images with no distortions, image processing time is extremely fast.





LIAM

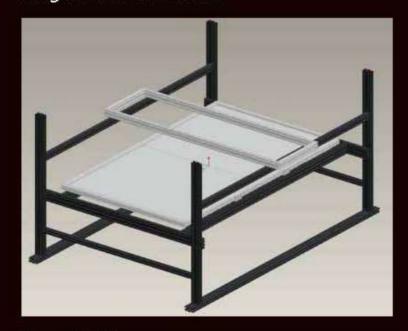
Linear Image Acquisition Machine





LIAM Feature

High Definition (High Resolution + High Color Reproducibility) Large Flatbed Scanner

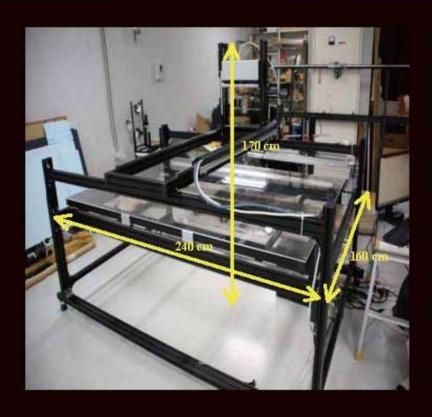


Type: LIAM

The LIAM is a 4-axis movable scanner that can be used in fully automatic mode. It features a motorized platform for automatically moving the object beneath the scanner, as well as a camera module to scan images with resolutions of up to 1200 dpi. A motorized filter holder for multi-spectral imaging is also available.



LIAM: Standard Specifications



VIII	
Up to B0 (917 mm x 1297 mm)	
Up to 5 cm thickness (*1)	
L 160 cm x W 240 cm x H 170 cm	
3 Line Color CCD (*2)	
300∼1200 dpi	
15-45 cm (*3)	
125 cm	
LED (Visible Light) (*4)	
3 Axes (*5)	
Windows 7	

^{*1)} Customizable (Limit width analogous to resolution)

^{*2)} Monochrome camera can be added

^{*3)} Shooting width analogous to resolution

^{*4)} Near Infrared light source can be added

^{*5)} Multi-filter control can be added



LIAM-S

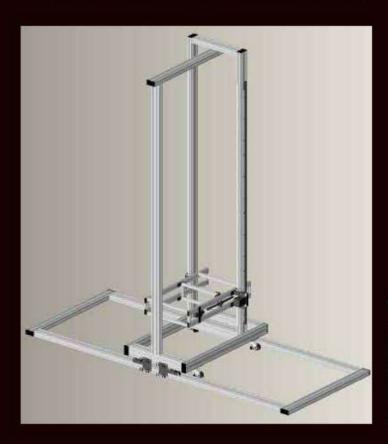
Linear Image Acquisition Machine Stand





LIAM-S Features

High-definition (high resolution + high color reproducibility) vertical scanner



Type: LIAM

The LIAM is 4-axis movable scanner that can be used in fully automatic mode. As a "vertical" scanner, it is ideal for vertical objects such as statues and wall paintings. It also features a camera module that can scan in high-resolution (up to 1200 dpi). Other options include a motorized filter holder for multi-spectral imaging.



Standard Specifications for LIAM-S



Objects	Statues, wall paintings	
Scanner Size	H 2 m×W 1 m (*1)	
Camera	3 Line Color CCD (*2)	
Resolution	300∼500 dpi	
Scanning Width (1scan)	15-45 cm (*3)	
Scanning Length (1scan)	180 cm	
Light source	LED (Visible Light) (*4)	
Number of controlled axes	2 Axes (*5)	
PC	Windows 7	

^{*1)} Customizable

^{*2)} Monochrome camera can be added

^{*3)} Shooting width analogous to resolution

^{*4)} Near Infrared light source can be added

^{*5)} Add up to 4-axis control



Standard Specifications for LIAM-Series Scanners



Camera Frame

A camera module is mounted on a motorized platform.



LED Light Source

The use of an LED light source lessens the impact on delicate cultural objects.

An LED visible light source can be added to an NIR light source.



Motorized Platform

The motorized platform allows objects to be automatically moved.

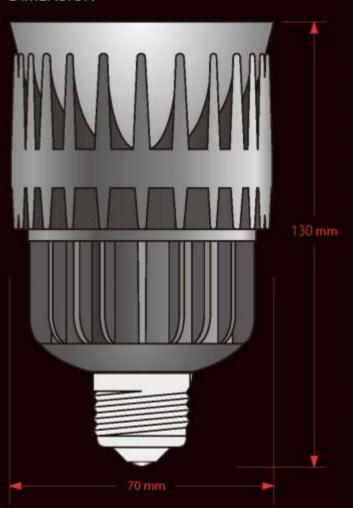


Retrofit LED Lamp

LED XICATO Artist Series / E26/27

PROTOTYPE

DIMENSION



SPECIFICATIONS

Wattage: 9W

Color Temperature: 2700K / 3000K

LED: LED XICATO Artist Series

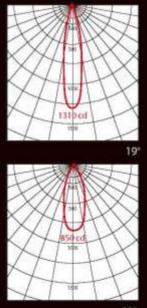
CRI: Ra≥95

Lumen: 500 lm

Beam Angle: 19°/29°

Weight: 290g

PHOTOMETRIC DATA



Next Proructs
High power model

Wierless control model

SABIA

Contact

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