

**METIS** **DRS 2A0 Map**



*by Metis*

**Ultra speed and extreme quality  
for your large formats !!!**

**METIS**

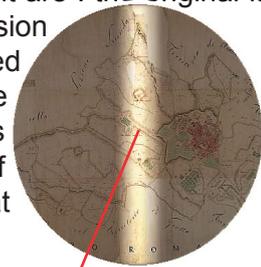
# METIS

# DRS 2A0 Map

## SynchroLight Lighting

The SynchroLight system, ideated, designed and manufactured by Metis, allows incomparable performances respect to any traditional lighting system. Since the first application by Metis in the 1998, the SynchroLight technology have been further improved by the add of state of the art lamps and electronic which allows incomparable color stability and time durability.

The SynchroLight consists of two "light blades" that run over the original in perfect synchronization with the CCD inside the DRC camera. Main benefits of the SynchroLight are : the original is exposed to a very limited amount of light; there is a very low light dispersion in the ambient; the power consumption is very low (about 1/10 compared to the traditional lighting); the uniformity of light is superior; scanning time is dramatically reduced; the space requirements for the lighting system is very limited; Color Rendering Index is >90 with an ideal color temperature of 5400°K; furthermore the light emission is completely free from IR/UV or Heat that may potentially damage the originals.

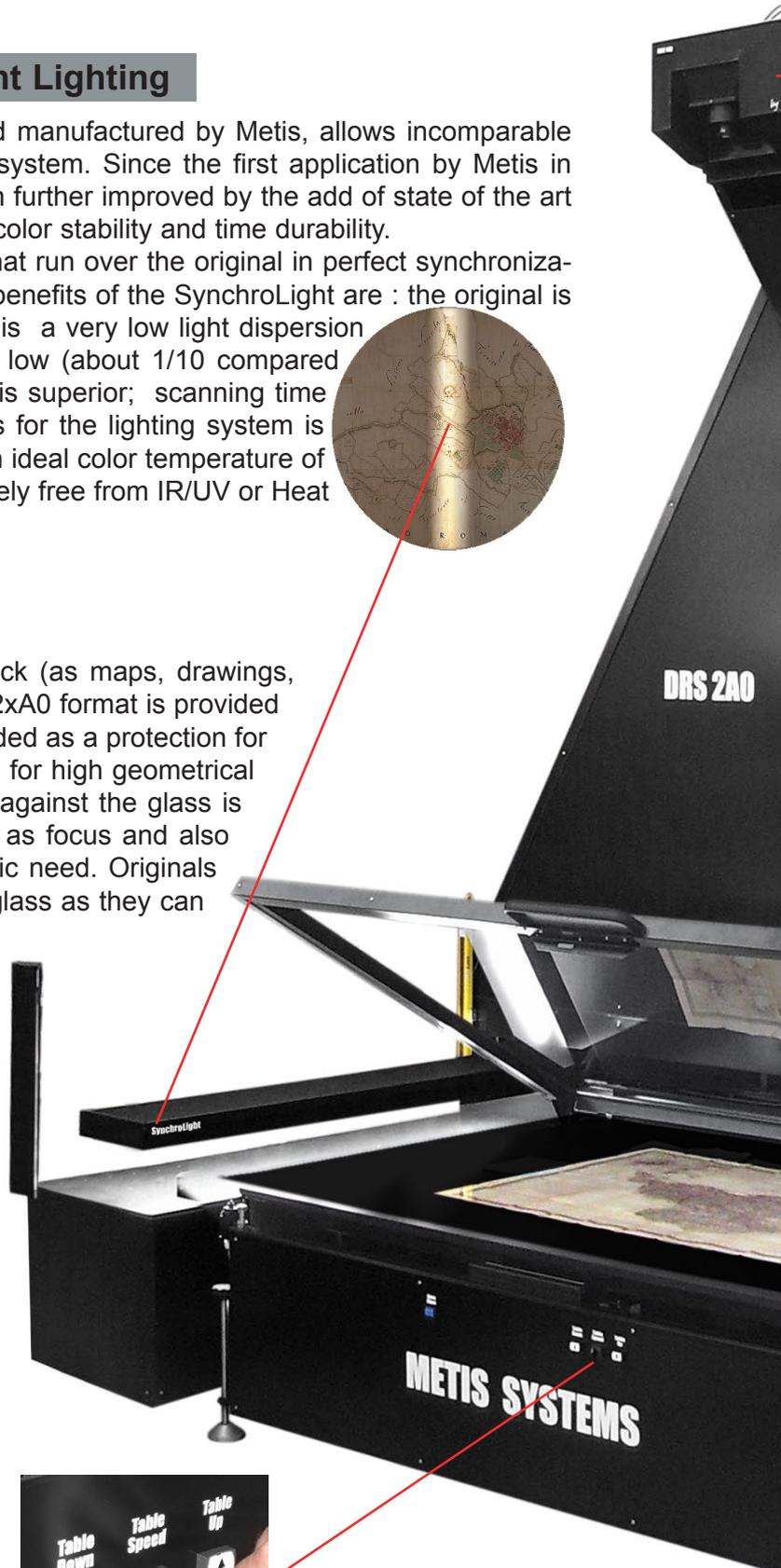


## 2A0 Table

A reproduction table for originals up to 15cm thick (as maps, drawings, parchments, paintings, books, etc.) and over the 2xA0 format is provided with the DRS 2A0 system. A special glass is included as a protection for the originals and in order to provide a flat surface for high geometrical accuracy. Working without pressing the originals against the glass is also possible by user selection at Software level as focus and also table height can be easily adjusted to any specific need. Originals larger than the table can also be hold under the glass as they can be easily shifted on the table sides.



The distance between the glass and the table surface can be easily adjusted between 0 to 15cm in order to accept originals up to 15cm thick or work without any contact with the glass (focus will be done under the glass).



# The complete reproduction system



## DRC Digital Repo Camera

This is the heart of the DRS system. The DRC includes the most sophisticated optical, mechanical and electronic elements of the entire DRS 2A0 system: a high quality CCD sensor integrated with a special electronic (completely designed by Metis) allows very high performances in terms of image quality and productivity; a high precision and reliable mechanic, optics and motor controls allows extremely high geometric accuracy ( $\sim 1/1000$ th) and repeatability; an optimized optical design allows to achieve incomparable levels of sharpness and real optical resolution with the smaller details always perfectly resolved; the DRC is provided with a motorized, accurate and software controlled focusing system; furthermore the DRC is perfectly integrated with the DRS Body, table and SynchroLight and continuously interact with them in order to fasten and optimize the scanning process and the production workflow.

## Motorized DRC holding system

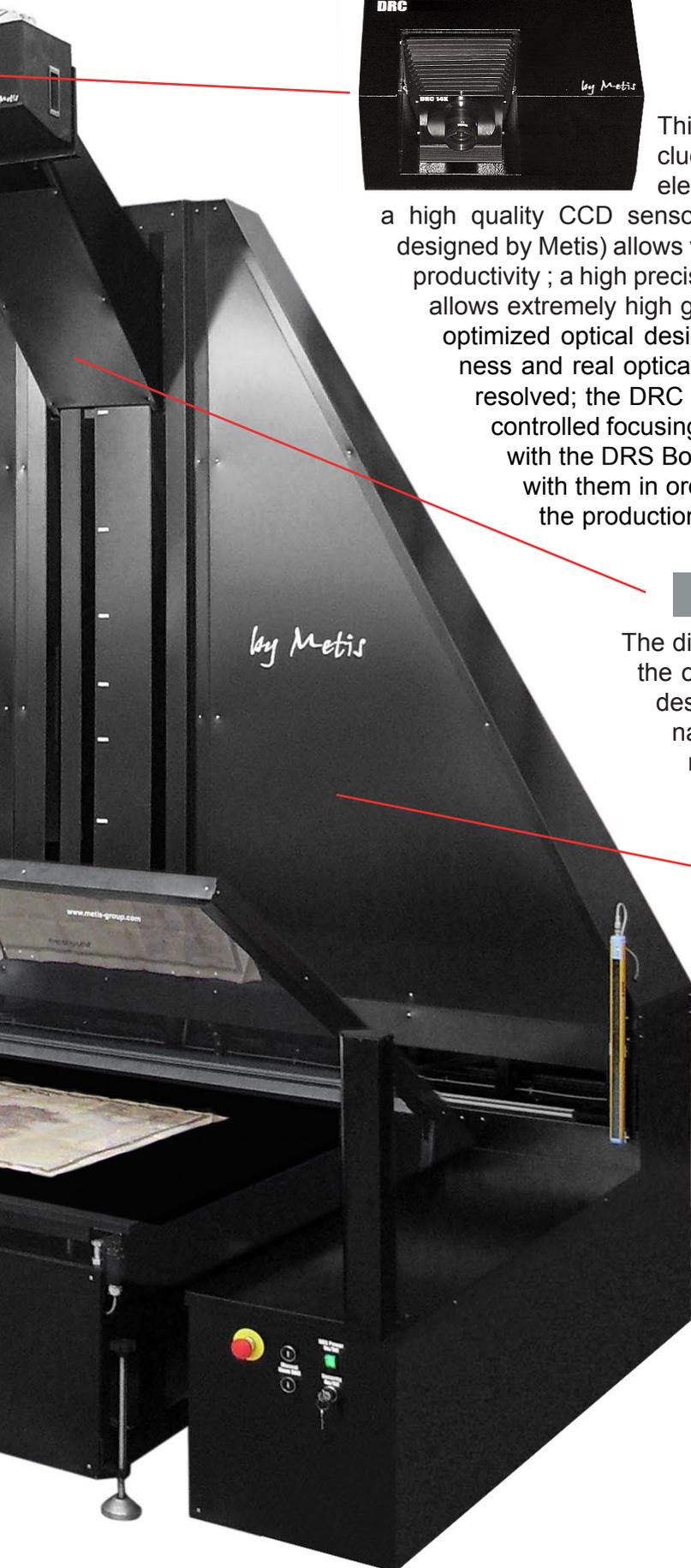
The distance between the DRC Digital Repo Camera and the original can be easily adjusted in order to match the desired magnification and optical resolution of the original to be reproduced (between 300 and 600PPI). Magnification level is software controlled and also focus is automatically adjusted according with selected DRC position.

## DRS 2A0 Body

The body of the DRS 2A0 system has been designed in order to maximize the integration between all DRS elements and in the mean time to constitute a solid support (vibration free) for the high precision mechanic and DRC RepoCamera. This allows the system to reach the extremely high optical and mechanical accuracy required to capture high quality images.

The DRS body is mechanically independent from the SynchroLight lighting and also from the DRS Table in order to avoid mutual interferences during the scanning process.

Furthermore the full DRS system is surrounded by an invisible security grid which prevent the operator from interfering with the different system elements during the scanning process.



The DRS 2A0 is a complete system for the digital reproduction of originals over the 2xA0 format.

The DRS 2A0 system is the best integration between different technologies developed by Metis specially for large formats and extreme quality.

The DRS 2A0 includes: the DRC (Digital Repro Camera), the SynchroLight lighting system, a motorized system in order to support the DRC camera and a double A0 reproduction table; all integrated in a solid and compact body.

The optimal synergy between the various components allows the DRS system to provide very high performances in terms of resolution, image quality and productivity.

The user-friendly software interface, the high scan speed, the reproduction quality and the extreme rationality of all the adopted solutions makes the DRS 2A0 the most advanced and valuable reproduction system today available in the market.

Main applications of the DRS 2A0 is the reproduction of : maps, paintings, drawings, parchments, posters, textures, architectural drawings, blue prints, textile, etc.

The Digital Repro Camera integrated into the DRS 2A0 system is equipped with a 14400 pixels CCD, in order to provide an optical native resolution up to 300PPI over the full 2A0 format or up to 600PPI over the A1 format.

## DRS General Features

- Maximum effective Scan Format: >2xA0 (178x121cm)
- Geometric Accuracy ~ 1/1000th
- Very Large Depth of Field (user selectable from a few to several centimeters).
- Acquisition method: proprietary micro-scanning allows for extremely high resolving power (high MTF)
- Image Sensor: Tri-linear CCD 14400 pixels
- Color Depth: 3x12bit = 36bit
- Magnification/optical resolution: motorized and computer controlled between 300 and 600PPI.
- Resolution adjustable between 100 and 900PPI
- Maximum scan file size : ~ 900MB at 24bit
- Automatic and motorized Focus with software controls
- User selectable Focus positions allows working with extreme flexibility as scanning without direct contact between the originals and the glass
- SynchroLight system : light blades perfectly synchronized with CCD movements; low light emission on the originals - completely IR/UV free - cold light (5400° K) flicker free - no temperature dependent - active only during scan - no warm-up time - always perfect colors more then 5000 hours lifetime
- Motorized table : distance between glass and table may be adjusted between 0 and 15cm in order to adapt for different type of originals - originals larger then the table width can also be hold by shifting under the glass - optical ultraclear glass - tilting glass with security lock
- High grade precision and reliable mechanic
- System size (cm): Height 335, Length 285, Width 200

## Main software features

- User Profiles for workflow optimization and system settings retrieving
- Quick magnification, focus, resolution setup and possibility to save and retrieve several settings for immediate use and performance optimization.
- Fast Preview for real-time crop and color adjustment
- Manual/automatic crop with up to 8 originals
- Lighting calibration and Gray Balance tools
- Color/density tools: exposure, contrast, highlight, shadows, gamma, automatic adjustment, black and white points, histograms and point analysis, ICC color profiles
- Unsharp masking, despeckle, deskew and other filters

## Computer requirements

- Intel Pentium IV 3Ghz or greater
- 4 GigaBytes RAM
- Microsoft Windows XP Professional (32bit only)

## DRS 2A0 Performances

A3 - 300 PPI (3550x4960 pixels - 50MB)	~15 - 30 sec.
A1 - 300 PPI (7085x9920 pixels - 200MB)	~30 - 50 sec.
A0 - 300 PPI (9920x14040 pixels - 400MB)	~40 - 70 sec.
2A0 - 300 PPI (19840x14040 pixels - 800MB)	~1,5 - 3 min.

\* Scan and Save Time in TIFF format - Performance may vary depending on system settings and PC performances

Product specification or appearance may change without prior notice. - V.10/01a-ENG

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