Son et Lumière interprets a new concept in light design and draws from French tradition to propose great innovative solutions.

* Design for events: great light scenography, video projections and artistic installations of urban decor.

* Projects on evaluation of historic locations with multimedia set ups and “sons et lumières”.

We avail of a team of highly qualified designers, international light designers and technicians specialized in the study of new digital techniques and in particular the use of Led illumination to combine the maximum of creative freedom with energy efficiency.

Among the significant projects accomplished in Italy we would like to mention:

Led Rgb and domotic illumination Projects.
Commercial sales point showrooms in Turin, Ivrea and Milan accomplished by our associate Ribes Evolution.
Shows and events: Video projections, great light scenography.

We draw from the French culture of light that in the annual Fête de Lumière of Lione (France) the greatest expression, a fusion of art and technology, in a return to sound, lights, architectural illumination and multimedia set ups for events.
Short Portfolio

“Son et Lumière at Pompei”. Gala dinner. 
Illuminating technical set up at Castel S. Angelo, Rome. Gala Dinner and multimedia set up. 
Shows for the “Notte Bianca di Como” . Light and sound show 
Big visual set up dedicated to “Giacomo Puccini,” Festival of the Ville Lucchesi. 
Concert for the 2008 edition of Lu.Be.C, Church of San Romano, in collaboration with the 
Magadis International Music Agency.

Cultural Heritage permanent set up
“Son et Lumière at Galleria Borghese”.
“Le Pietre Parlanti” (The Talking Stones) Rocca of Brisighella (RA) ,
“Racconti di Luce (Stories of Lights) at Palazzo Ducale di Lucca”, Lucca. 
Sanctuary of the temple of Giove Anxur, Terracina (RM).

The team

Project Manager: Ms. Serena Ferrari
Partner for domotic projects: Lamberto Marchesin, Ribes Evolution. Turin
Graphic Designers: Mr. Paolo Areni, Mr. Marco Foschiani
Scan Laser images for 3D video projection: Enea, Dept. of ArtVisLab Mr. Massimiliano Guarneri
3D animation production and post production: Computer Graphic. Chico Univ.CSU CA USA
Graphic Animation and director: Luca Fornaciari
Light designers:
Ms. Jale Safir Nafas, Serena Ferrari, Amerigo Antonelli
Collaboration with I.C.O.N. studio (Paris) Lisa Akari Ishii
Multimedia experts: Alessandro Tondello, Mirco De Mori

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Son et Lumière is a member of a prestigious International network LUCI Association, Light Urban Community International based in Lyon, France. www.luciassociation.org

The association reunites over 60 members, in 54 cities in four continents, associations in the category, professionals, light designers, illuminating technical companies and artists.

The objective of the Network is:
- Promote the utilization of lights as instruments for the harmonious development of the city.
- Revaluation of the urban identity through the artistic use of new technology.
- Promote research on environmental sustainability and energy efficiency.

The association besides calling meetings in different international cities, meets annually for the Fête de Lumières the 8th of December at Lione (France).
Architectural illumination, energy efficiency and the maximum creative freedom.

We need light in our city; to reduce those dark areas that together degrade our urban areas, to feel safer and prevent crime, to embellish and help us feel proud of the historical monuments we own. Public lighting is not merely a succession of lighting points. It is a major constituent of urban policy, nowadays public lighting is a complex and many facetted domain.

*We mustn’t illuminate more, but better.*

Design light, integrate new digital technology, find solutions capable of facing the new challenges of energy efficiency, intervene in supporting public and private administrations to find new solutions, unite the attention given to energy efficiency with maximum creativity and potential that Led Rgb light allows, this is the objective of Son et Lumière.

In each of its projects, we exploits the remarkable potential of urban lighting projects to provide economic. Son et Lumière preserves and creates the use and image of the City. It marks the identity of the projects. We offer new urban furniture and new lighting systems.
Led illumination & domotic software system

* to work with the maximum freedom on creative aspects for the best rendering of the scenography.
* the reduction of the temperature of the environment.
* the scalability and compatibility with other technologies, audio and video digital signals, console luci e media server.
* thanks to the characteristics of “cold” light that doesn’t interfere or endanger the nocturnal process of chlorophyll in plants and one can use it freely in the illumination of green areas or in sensitive environments such as museums, art and antique shows.
* the functioning at a low voltage and so a higher safety level.
* the possibility to manage and check systems from remote station.

Besides, due to the low energy consumption and the long duration energy consumption is drastically reduced. For example a red Led uses 15 watts instead of 150 watts used by a conventional lamp. Led is 10 times more efficient than an incandescent lamp and twice more than a fluorescent one.
The duration in time of the Led light is 100 thousand hours, that corresponds to 10 years of use in comparison to 1.000 hours of a incandescent lamp.

The decrease of light pollution is estimated at about 80 %, thanks to the improved optical lense applicated to the Led that allows to optimize the luminous flux only where needed.

Through a appropriate domotic software system building automation the architectural Led illumination becomes an important instrument for the control of energy consumption and an element of a really true production of the main systems.

The research on the possibility of Led illumination are in continuous evolution, soon we will see on the market solutions capable of interfacing the luminous source with photovoltaic surfaces.
Cultural Heritage becomes marketing  Innovative cultural multimedia projects

Economy, shows, new technology and Cultural heritage, elements capable of creating an induction that pours great economical benefits on the territory as long as the product promoted is valid and innovative. An example 450,000 present in only one month for the Carafa Chappell Virtual Exhibition, 4,000 visitors for “Racconti di Luce” (Light Tales) Palazzo Ducale of Lucca in 2006.

To obtain these results, it is necessary that investments are made in projects really innovative and adequate territorial marketing actions taken.

Cultural marketing is the instrument that starts from the valorisation of the product and one turns to the market. The main purpose is to reach a potential public with an offer that enhances, excites, informs and entertains.

But what are the projects that include all these components? Son et Lumière answers this question proposing multimedia projects that enhance the history and the immense artistic heritage that Italy possesses together with great attention to the environment, projects that entertain, inform, amaze, excite with the use of new technology, without neglecting the environment and reducing drastically energy consumption and the maintenance of illumination.

The technology used by Son et Lumière® allows management of the remote system using Led illumination and keeping costs down while giving almost unlimited freedom of design with an infinite number of colors and interaction between sound, light and video projected images.
Press Overview

Publications:
La cultura diventa marketing. Percorsi Son et Lumiere. (Culture becomes marketing, Son and Lumiere Journey)
Thesis for degree in majoring in various faculties of tourism management  Prof. Fabiana Sciarelli
Thesis presented by Maria Lucci  University of Studies of Naples Federico II

The following newspapers that always talked about our projects favorably:

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The "Sons et Lumières" tradition

The "Sons et Lumières" are the tradition by now consolidated that perpetuates in exceptional historic and artistic scenarios that sink its roots in the baroque period. The celebrations in the presence of young King Louis XIV organized by the Financial advisor Fouquet il August 17, 1661 to inaugurate the castle of Vaux le Vicomte, were described in detail by Jean Le Fontain. The fireworks of Torelli remained impressed in the minds of all those invited. In Italy, for a short time the custom of illuminating parks was introduced by Napoleon's court. Beauharnais organized at the Villa Reale of Monza numerous parties in which lights, fireworks and music amazed the guests. Between the end of the XIX century and the beginning of the XX century, a particular interest taken in electricity during the world and colonial expositions allowed for the production of nocturnal ephemeral landscapes. The tradition of "Sounds and lights" proceed and the first modern show was presented in France in 1954, in this way handing down to our day the influence of these extraordinary scenographies of monuments and their surroundings. The park of the Villette in Paris is the first French park with a project of permanent illumination and produced by Architect Bernard Tschumi, with the support of numerous illumination designers.

The “Fête de Lumières” show, born in 1998 under the artistic direction of Laurent Fachard, a designer from Lyon, dresses in lights the city every year during the days of the Immaculate Conception. In Egypt, for over 30 years the "Sons et Lumières" is repeated at Karnak, at the Pyramids and the temple of Philae. After sundown, a scene production makes these extraordinary sites come alive, offering to the viewing of the contemporaries a great exciting impact. In France extremely interesting experiments have been produced of valorisation and illumination of urban spaces, parks and castles mentioning the most significant ones here below: “The metamorphosis of Chambord”, journey with a nocturnal show, and the “Chromatic Garden” of the park of Gerland a Lione.
Lights and garden art

Artificial lights are strictly linked with garden art. In the XVII century, illumination during baroque parties became very important. Candles, torches small and large, posted or carried, decorated promenades and woods creating a fairy-tale atmosphere. Around the XVIII century parks of "pleasure" were born in England where with an entrance ticket one could see a show of pyrotechnical lights at a concert during which food and drink were served. But what does a landscape become when darkness falls? Does it seem the same whether is illuminated by the moon or the sun? Or is the nocturnal landscape completely different from the daytime? Is a landscape or nocturnal space? Space to live differently than you would during the day. What happens when the darkness and obscurity makes one blind? Is this the reason why there is so little sensitivity in a dark area?

And finally, a landscape, understood in this sense, has a rapport with an urban area? Its borders, park, villa and bodies of water are linked with the city? Many are the questions that come up when one starts to think about an illuminating technical intervention, permanent or ephemeral in greenery. The study of the location, its natural light, the geophysical lines, as well as its public function, all combine to inspire and produce work that respects the environment and introduces new poetry, dictated by the artistic sensitivity of the light designer. In the center is the careful study of color and its interaction with objects. The greenery, declining in its numerous variations, reacts in fact to the color of the source of light following the spectrum. In the center is man, the color in fact is perceived by the eye with a well defined physical laws. In the center of the study is the use of space, recreational space, functional only when enjoyed, nocturnal illuminating landscaping puts thus a dreamy dimension, handing itself fully to the fantasy and the creativity of the designers. The result is endless excitement and a bridge between night and day.
**Institutional collaborations**

The success of our events is also due to the collaboration and support of various members of academic and political institution and we would like to mention in particular the following:

- Ministry of Cultural Assets
- The Borghese Gallery and Museum
- Louvre Museum
- Photographic Archive of the Polo Museale Romano
- Sant’ Angel Castle
- Exhibition Of of the Palazzo Venezia Museum
- Province of Lucca – Cultural Service and Place factory
- Monza Cultural Dept.
- S.Giuliano Milanese Cultural Dept.
- Portogruaro Cultural Dept.
- Como Cultural Dept.
- Historical Palaces and Villas of Lucca
- Brisighella Cultural Dept.
- Terracina Municipality
Sound & Vision  sound and light visual shows in Historical Locations

THE VIRTUAL RESTORATION OF BORGHESE GALLERY

The area in front of the museum, immersed in the beautiful park of Villa Borghese, was the scenario where the show was held. The images of the decorations that were removed by Napoleone Buonaparte in 1807, returned miraculously where they once were, thanks to a video projection. Baroque music and light shows accompanied the projection of the masterpieces of the famous museum.

See Louvre Museum web site for 3D virtual restoration
BORGHESE GALLERY VISUAL SHOW
Son et Lumière shows use video projections studied in such a way so they can be inserted perfectly in the architectural facade of a structure.
The images projected blend with the architectural element so as to harmonize.
The video projections on the outside of a building can be created with a single video projector that can give an image of 25 meters in width. The use of more than one video projector allows larger dimensions. In this case, the projectors synchronize thanks to a software called Watchout or PANDORA’S BOX that elaborates the images dividing them on different screens.
The video projections is synchronized with a theme song, narrators, music and lights effects.
SON ET LUMIÈRE AT POMPEII, NAPLES

The main element of the event is the light design of the archeological site and the theme song composed for the occasion in English. The acoustic impact of this narration created with sound effects was undoubtedly charming. The imaginary place which the story is about was the amphitheater. Here the victorious gladiators were awarded by going to fight in Rome. Here the matrons came to pick the gladiators for the love games before the battles. Here the lava and ashes buried the people of Pompeii in 79 a.c. These are the elements of the theme song narrated with great elegance and ability with sound effects and music and emphasized by the voice of Clive Richie.

SON ET LUMIÈRE, ST. ANGEL CASTLE (ROME)

Son et Lumière substituted the castle's illumination to increase the value with unusual colors and gave a strong impact to certain areas occupied during the event.
“Light tales at Palazzo Ducale” was promoted by the province of Lucca to celebrate the completion of the lengthy work of restoration of the fifteenth century Palazzo Ducale. The event, conceived for the people of Lucca visitors is to relive the most important moments of these monuments that is identified with the history of the city itself. Life was given to paths through the various halls, recreating and historical “affresco” animated by lights, images, and voices.
Narrating Voices: Piera degli Esposti, David Riondino.

GIACOMO PUCCINI VISUAL SHOW

Sound track

**MANON LESCAUT:** Francesco Molinari, Pradelli, Orchesta e Coro dell'Accademia di Santa Cecilia di Roma
Tebaldi, Del Monaco, Boriero, Corena – 1960

**LA BOHEME:** Tebaldi, Prandelli / Erede – 1951

**TOSCA:** Tebaldi, Del Monaco, London; Orchestra dell’Accademia Nazionale di Santa Cecilia / Molinari, Pradelli - 1959

**MADAMA BUTTERFLY:** Renata Tebaldi, Alberto Erede Academy of Santa Cecilia, Roma: Alberto Erede - 1951/1993

**TURANDOT:** Borkh, Tebaldi, del Monaco, Zaccaria; Erede, Orchestra dell’Accademia di Santa Cecilia - 1955
Anxur Temple, *Terracina archeological site*

**Virtual theater, 3D video projection**

**Holography**

The holography began in the optical theater of the cinema at the beginning of the century in which the image projected on several mirrors inside a box created the illusion of a virtual theater. The illusory effect of an object suspended in mid-air is obtained projecting the movie on an holographic background. The holo screen foil is totally transparent.

**Collaboration with ENEA – Frascati (Rome) Research Centre**

The Frascati (Rome) Research Centre of ENEA is one of the major research centres – at the national and international levels – where R&D activities are focused on nuclear fusion, laser technologies and particle accelerators. The Centre’s activities also include characterisation and protection of the environment. The Centre accounts for 450 staff-employees and daily hosts 150 Italian and Foreign guests: fellows, bachelor students, visitors, and employees from various agencies, universities and other public and private institutions.

**ACTIVITIES**

The activities regarding the following sectors:

- Nuclear Fusion
- Advanced Physical Technologies
- Characterisation and Environmental Protection
A NEW APPROACH AT THE PRODUCTION OF CULTURAL HERITAGE VIRTUAL TOUR

ENEA, Dept. of ArtVisLab and Son et Lumière are working at a project with the purpose of developing a new approach at the production of cultural heritage images which can be used for catalogues, DVD, virtual tours, etc.

The approach is based on images produced by a three stimulus laser scanner, RGB-ITR, patented by ENEA, which is able to give point-by-point two information at the same time: color and distance. These data can be combined together for building:

- Very high definition 2D laser images, without shadows produced by external light sources; moreover the color of these 2D images can be corrected by distance information (i.e. this information can correct the color of two white targets at different distances);
- A complete 3D model of the scene acquired by the scanner. All raw models have also UV information, reducing post-production costs. Other features of this scanner are:
  - ability to acquire data at a distance up to 15-20 m
  - distance point-by-point (at 8m): 0.4 mm
  - lasers spot size (at 8m): 0.8 mm
  - acquisition speed: 6000 points per second
  - ability to acquire a scene without external structures
VIRTUAL & AUGMENTED REALITY

Creating a Virtual Reality "Environment" often involves budgetary considerations and various difficult technological decisions.

The choice of the visualization technology to be used will impact the realism, the functionality, and finally, the return on investment of the total system.

CRT, LCD and DLP™ projectors for active or passive stereo are used with specific optimizations, active-to-passive stereo converters and a range of peripheral equipment.

See the 3D animation in web site www.sonetlumiere.net
Interactive park

The project precedes the interactive footing on which are positioned sculptured works of art and internal illumination with Led RGB, the audio diffusors and video projectors. The domotic system manages from a distance every function including surveillance.

Ground projection

Imagine a video projection on the ground, a carpet made of leaves, waves or clouds and as you walk down the carpet, the images change, leaving space for the animated logo of the convention to welcome you. The interactive effect is guaranteed by a special software equipped with infrared sensors.
The talking stones
Brisighella Castle. Ravenna

The project allows to create non conventional information sites. The sites inserted in walls, contain a receptive sensor and touch Led illumination system which activates the illumination and audio reproduction. The audio track can be modified from the production hall and can be updated easily.

Magic Book touch screen

In the film "Minority Report" (2002 - Steven Spielberg), the leading actor John Anderson, portrayed by Tom Cruise, "navigates" through the visions of pre-cog using a glass panel and luminous futuristic gloves.

From these science fiction presumptions was born a screen made up of sensors that transmit finger movements on the surface of the screen to the mouse, allowing one to use almost all Windows© e Mac© Operative systems.