



# *the Laserist*

Advancing the Art and Technology  
of Laser Displays

March 2006 • Volume 17, No. 1

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Meet the President

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New PR Campaign for Laser Displays

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72 Watts of Laser Light for 340 Horsepower

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Rimini Conference Edition

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THE OFFICIAL MAGAZINE OF THE  
INTERNATIONAL LASER DISPLAY ASSOCIATION  
*A publication of ILDA*

# Multi Color Showlaser Systems

- Full 16.7 Million colors
- Very compact and solid
- Low noise air cooling
- DMX control optional
- Dust sealed optic section
- Very low power consumption
- Maintenance free operation

Low noise  
air cooling

Dust sealed optics section



With the "Mystique" projector series, for the first time, MediaLas presents a full featured color laser system with tremendous characteristics. A low noise airflow guarantees first astonishing look after switching the unit on. As soon as first laser beams enlighten the ambient, it get's clear - Mystique is much more than "just a laser". Excellent beam properties and color impressions like never before, just mystical!

The "Mystique" multicolor laser projector series is a new developed line of high end laser projectors for show and multimedia application. By using latest and most reliable laser technology, all projectors are now run by a single power outlet without any additional cooling. No water required, no 3-phase necessary. Low weight and compact dimensions makes these projectors even suitable for full colored laser shows with a minimum of setup time. Just plug and play! It wasn't easier ever.

1<sup>st</sup>

Brilliant image quality, full 16.7 million color shades

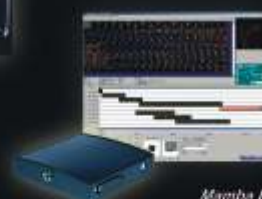


## A perfect laser system for mobile use

In combination with Mamba software or Avatar Console, the Mystique is the most versatile mobile laser system available. Set up in less than 30 minutes, the laser show starts out of your car's trunk.



Avatar Laser Console  
for live and mobile operation



Mamba Black  
Laser Software

MediaLas Laserproducts GmbH  
Hoelzlestr. 13  
72336 Balingen / Germany  
Ph. +49 7433 90799-0  
Fax +49 7433 90799-22  
www.medialas.com

**MediaLas**  
Lasers Made in Germany



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Front Cover: Courtesy Laser Visuals Limited



[www.laserist.org](http://www.laserist.org)

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### ILDA Board of Directors 2006 - 2007

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## Dear ILDA members, laserists & friends

ILDA faces new frontiers, new events and new challenges, as we all do in fast and modern business times.

As the new ILDA president, I would like to say a sincere thanks to all ILDA members and affiliates, which makes ILDA strong and a big player in the industry. Our standards are accepted worldwide, and the ILDA logo stands for high compatibility and quality. But more and more we have to recognise, that non ILDA members use our Logo to promote their products, even if they are not ILDA compatible. This is a procedure, that ILDA will not allow and will address it, to protect our members, to protect our standard and to protect the worldwide competition.



ILDA President Dirk Baur

You are ILDA, we all are ILDA, and each member increases strength and power of our organisation. I would like to encourage every laserist, show producer or affiliate to join ILDA, and participate in the upcoming success of our organisation. Take your time and fill out the online membership form to get listed as an official ILDA member and to officially be able to use the ILDA logo for your advertising and promotion.

As you might know, Executive Director David Lytle has resigned from his position, to face new challenges at another non-for-profit organisation. We all wish him the best luck for the future. A new ILDA Executive Director is in discussion, and I can tell you, there will be many surprises coming up!

I hope to see you on our conference in Rimini!

Yours sincerely

Dirk Baur, ILDA President

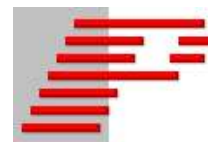
## It's Conference Time!

It's that time again when the world's laserists descend to a chosen part of the globe to enjoy a feast of photonic delights, meet with fellow friends, old and new, and discover all the latest artistic and technical developments in our industry. This time the destination is Rimini in Italy, where some of the world's finest food and wine can be enjoyed alongside a busy & exciting conference schedule.

This year's ILDA conference is running in conjunction with the SIB trade fair where many laser companies have chosen to also show their wares amongst the rest of the professional lighting industry.

A special thank you has to be said to the two main conference sponsors: Cambridge Technology Inc, & Pangolin Laser Systems Inc, whose generous donations help to make sure the conference can happen.

We hope that those of you that make it along to the conference enjoy the experience, and return home with some good memories and contacts for future endeavours.



## ILDA Logo Usage

The official logo of ILDA, the International Laser Display Association, is restricted for use only by the international organisation itself, in its official function by the board of directors, the executive director, and the president of the ILDA organisation.

Members in good standing are welcome to use the officially released ILDA logo to state their professional membership of our organisation. Other usage of any ILDA logos is strictly prohibited without particular permission in written form, or by official ILDA licence contract.

Any use of the official ILDA logo by any third parties that are not valid members in good standing of our organisation is strictly prohibited.

ILDA reserve the right to take legal action to enforce the terms of our policy for use.

# MELLES GRIOT

Position

create control

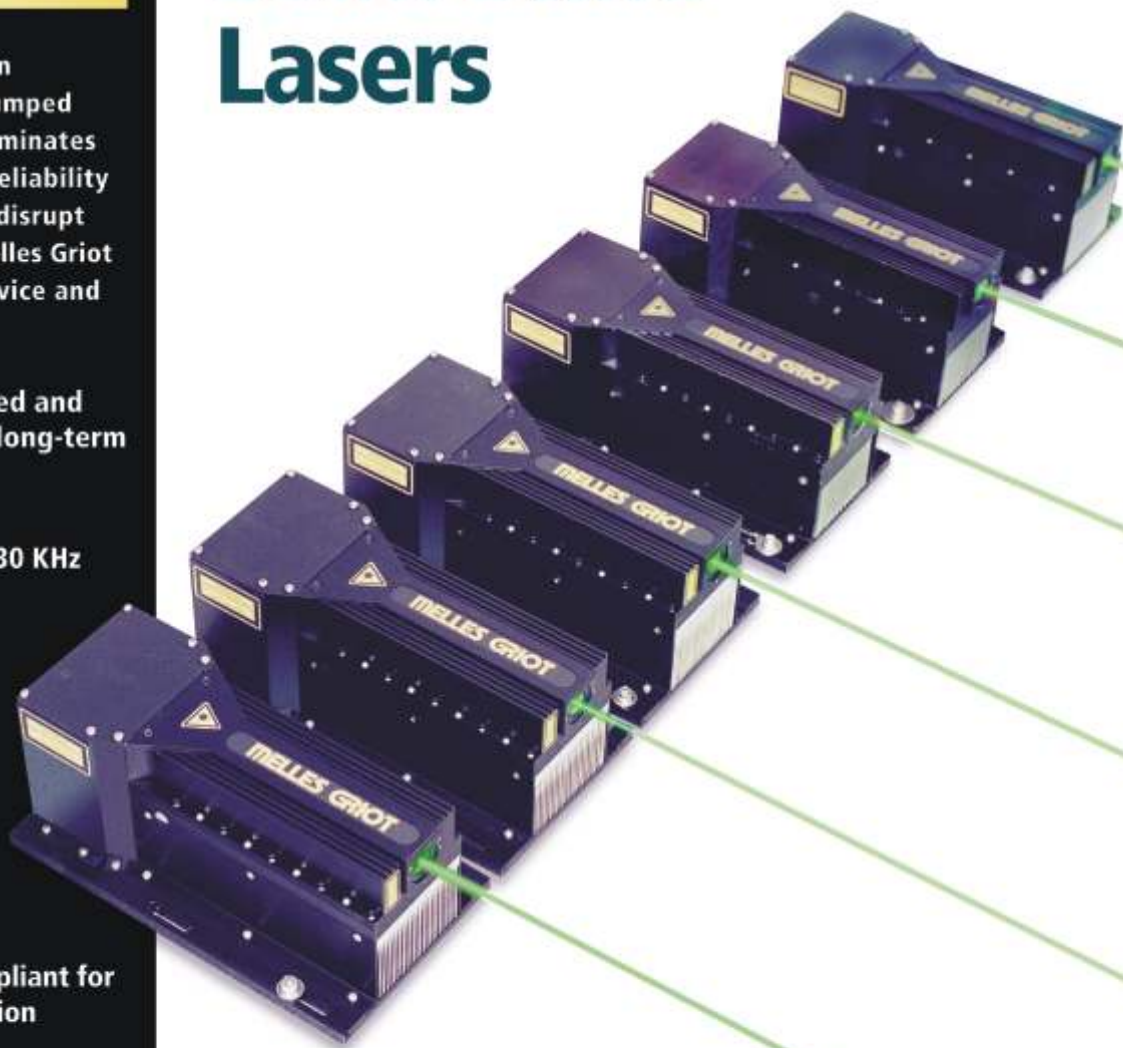
The Practical Application of Light



Our next-generation 3-W green diode-pumped solid-state laser eliminates the flickering and reliability problems than can disrupt your key events. Melles Griot provides global service and competitive prices.

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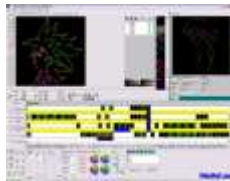
## New Products

### Medialas Introduce New Scanners and Laser Show Software Update

A new fast low cost scanner system capable of speeds up to 45K is now available from German based Medialas Laserproducts. Medialas President, Dirk Baur, says the new TeraScan is based on moving magnet galvanometer technology, and uses a small dual channel closed loop driver to achieve good projection quality capable of displaying text and graphics. The TeraScan is ideally suited for projection units where cost is an important consideration.



**TeraScan**



**Mamba Black**

The Mamba Black laser show software has just received a new update with the addition of many valuable new features and several new shows. Mamba is not restricted to any one hardware platform and can be used on a wide range of output hardware, including Medialas own USB Box. Which means the software can run from a notebook PC with a USB port. Mamba Black has the provision for unlimited number of tracks and what it calls Virtual Projectors (ViPro) enabling the software to reformat multiple display parameters for a new location within seconds. Existing users may download the Mamba Black update from the Medialas website.

Medialas Laserproducts  
(+49) 7433-90799-0  
[www.medialas.com](http://www.medialas.com)

### Pangolin Releases Version 4 of its Flagship Laser Software

Pangolin Laser Systems has announced that the Version 4 of its Lasershow Designer 2000 Software will be demonstrated at the SIB tradeshow held in Rimini, and will be made available to customers shortly thereafter.

Pangolin's LD2000 and Showtime software packages have been updated with enhancements including DMX-Input for Live! and LivePRO, more colourising options, enhanced usability for projector controls, and enhanced support for video and other forms of synchronised media. In fact, all members of the LD2000 family have been improved and updated, including Lasershow Converter MAX, Lasershow Converter FLASH, Lasershow Converter 4D, and even ancillary products like TraceIT and SMS2LASER.

Release 4.0 is a major update to the LD2000 platform, if for no other reason, because of the large number of new laser shows and frames. Version 4.0 includes a total of 15 new shows from some of the industry's best artists including Audio Visual Imagineering, Johannes Coppes and DTL. In addition to the shows, well over 50,000 high quality laser frames are included from Lightspeed Design Group.

Pangolin has also taken time to add new functions to all software levels - INTRO, BASIC and PRO. INTRO users will enjoy the addition of European-style vector frames, more than double the number of timeline tracks, and an additional colorizing feature. BASIC users will enjoy the benefits of Lasershow Converter 4D - Pangolin's plugin for the Cinema 4D animation package from MAXON. And PRO users will enjoy a free copy of Lasershow Converter FLASH - Pangolin's program for converting Macromedia FLASH web animations directly into laser.

The software-only update can be downloaded from Pangolin's website. For those wanting to have a complete package with all of the music, frames and shows, a new Installation CD/DVD combination can be purchased for \$75.

Pangolin Laser Systems:  
(+1) 407-299-2088  
[www.pangolin.com](http://www.pangolin.com)

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F +49 (30) 780 963 25  
E [info@laseranimation.com](mailto:info@laseranimation.com)  
[www.laseranimation.com](http://www.laseranimation.com)

# BLITZ News

**Accurate BLITZ RGB Cosmo**

Compact laser show projector with the smallest white light laser worldwide!





**FOR PROFESSIONALS ONLY**

**Accurate BLITZ Stage**

Exceptional DMX controlled laser show system, designed for use on stage!

- ✓ 5Watt green (532nm) high-power DPSS laser
- ✓ excellent motorized moving yoke
- ✓ high-value grating module
- ✓ high-speed scanner system



### New OEM DMX Interface Board

The new DMX1200D from ConQuip, (formerly Logic Systems), provides 12 DMX controllable relay outputs, each rated for 5A continuous. Designed with the OEM in mind, the interface uses thumbwheel switches that can be panel mounted, rather than the traditional circuit board dip switches. For added convenience outputs can also be tested without a DMX signal being present using the thumbwheel switches. The new interface is available now from ConQuip or any of their distributors.

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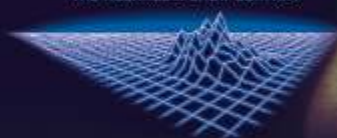
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## Two New Blitz Projectors

LaserAnimation Sollinger Germany, have added two new projectors to their Accurate Blitz range. The Accurate Blitz Stage combines a high visibility 5W green DPSS laser with high quality servo based moving yoke technology to provide smooth 370° pan and 270° tilt. Motorised optical gratings are employed, through which the laser output is projected to turn the laser graphics into tens or hundreds of changing patterns. The user has precise control over the combination of gratings, rotation direction and speed. The projector is completely DMX controlled needing only a lighting console to access all of its features. The projected objects can be exchanged in seconds using the included GoboWizard software.



The second new projector is called the Accurate Blitz RGB, which is a very compact 0.5W white-light system complete with CT 6800 scanners housed in an environmentally sealed enclosure, to avoid the optics becoming contaminated in the harsh environments laser projectors are regularly subjected to.

LaserAnimation Sollinger  
+49 (30) 780 963 00 [www.laseranimation.com](http://www.laseranimation.com)

## ColourMaster & Scan Fail Modules

UK based Laser Visuals introduces two new products at the ILDA Conference, Rimini. Scanguard Monitor is the world's first scan-fail monitoring system designed to be configured from a USB interface. The module actively monitors the health of several key parameters in the scanning system, providing a fast termination of laser output when necessary.

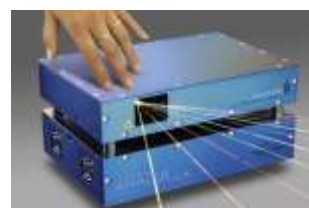
ColourMaster is an interface designed to work with any ILDA compatible control system and solid-state RGB laser projectors. The interface allows the user to synchronise colour modulation signals to reduce the effect of artefacts and colour distortions that often appear in RGB based graphics and beam effects. ColourMaster has a function that extends the number of colours many laser projectors are able to project. The interface is configured by USB and can be controlled via a DMX input to provide a range of other colour modulation functions.

A new version of the Scanguard Analyser laser safety software will be released, expanding on the range of features debuted at ILDA Conference Las Vegas 2004.

Laser Visuals Limited  
(+44) 1622 662025 [www.laservisuals.com](http://www.laservisuals.com)

## Amazer Laser Projectors

LaserLand and Arctos, two German based companies have combined expertise to develop a range of white-light solid-state laser projectors that have to be some of the most compact designs the industry has seen. The Amazer 1600 outputs 1.6W



of balanced white-light from an incredibly small enclosure, not much larger than a shoebox, and weighing in at an impressive 7Kg. Various other outputs configurations are available through to the top of the range Amazer 10,000, which can output 7W of balanced white-light from a 50Kg enclosure. Laserland's CEO, Ralph Douw, believes that the technology breakthrough Amazer offers will enable lasers to be used a wider range of applications and completely new markets.

Laserland (+49) 8055-1551 [www.laserland.de](http://www.laserland.de)



# scanguard

### Scan Fail Monitor

Brand new high speed scan fail detector module. No "pot twiddling" or oscilloscope required for set up; instead it uses easy to use software connected via USB. Compatible with closed loop scanner systems. The device has multiple active monitoring and redundancy to increase safety during your laser display.

### Laser Show Analysis

Take the guesswork and headache out of laser safety, by using the most advanced laser effects analysis tool available. Winner of two 1st place ILDA awards - Scanguard is more than just a calculation tool. With its easy to use wizards, Scanguard shows you how you can design laser effects that are safe and friendly for your audience to view.

### ColourMaster

The world's first high resolution colour synchroniser, for RGB laser projectors - removes annoying colour distortions and overlaps from laser graphics and aerial beams. Increases visible colour range on most DPSS & Diode laser systems.

### Safety Training

Professional laser safety training for operators, installers and manufacturers of laser products; day long course includes: course notes and certificate of completion.



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 Tel: +44 (0) 1622 662025 Email: [info@laservisuals.com](mailto:info@laservisuals.com)  
 Laser Visuals Limited, United Kingdom

## Pangolin Acquires Entire Lightspeed Laser Animation

Pangolin Laser Systems has recently licensed the entire Lightspeed laser animation library, consisting of over 50,000 frames of high quality animations and still images. The good news for all registered LD2000 users is that the entire library will be made available to them free of charge. William Benner, President of Pangolin, told *The Laserist* that, "It's just another way in which we are continually adding value for our customers".

Artwork categories users can expect to find in the library include Abstracts, American themes, Beam effects, Cartoon characters, Environment, Fireworks, Objects & Architecture, Realistic people, Raster frames, Space, Sports, Transportation, Zoology & Dinosaurs and more. Lightspeed have long been recognised as leaders in laser artwork production and have won numerous awards for their work. The library was formerly contained on two separate CDs, and sold for over \$2,000. It will be re-packaged into Pangolin's Installation CD/DVD pair, and will be available to all LD2000 users, even those with INTRO systems.

Pangolin Laser Systems:  
(+1) 407-299-2088 [www.pangolin.com](http://www.pangolin.com)



## Industry News

### Pangolin to Sponsor Major PR Campaign for Laser Displays

Pangolin Laser Systems has announced that it will sponsor a major Public Relations campaign aimed at improving and reinforcing the positive worldwide impression of laser displays.

Over the last year, the talents of top New York based public relations firm, Roher PR, have been employed by Pangolin, gaining success in promoting its SMS products. As a result, more than twenty articles have appeared in leading publications such as PC Magazine and the Wall Street Journal. Pangolin's President, William Benner told *The Laserist* that he would like to see the laser show industry as a genre benefit from the work of a good PR firm. He then announced, "Since Roher has done such a good job for us, and since we have them factored into our annual budget, I have decided to dedicate Roher's remaining time this year to promote only laser displays."

To help in this promotional effort, Pangolin is seeking news, pictures, and success stories from laser show companies around the world. These will be fed directly to Roher PR, who will then publicise them in a variety of worldwide publications. The laser displays as well as those who are performing them will obviously benefit tremendously and directly from this PR effort. But as an indirect result, it is hoped that the entire laser display industry itself could benefit by having the great work we all do, shone in the most positive light, to an audience who is largely unaware of who we are and what we do.

Benner added "One thing is for sure. The laser industry certainly receives enough negative PR... Any time some fool shines a laser into the cockpit of a flying aircraft, or into the eyes of a football goalie, it lights up the media with all of the negative PR and how all lasers must be stopped... I would like to see some positive PR out there so that people will associate true tangible "benefits" with lasers, not only the drawbacks and hazards they repeatedly hear about in the media..."

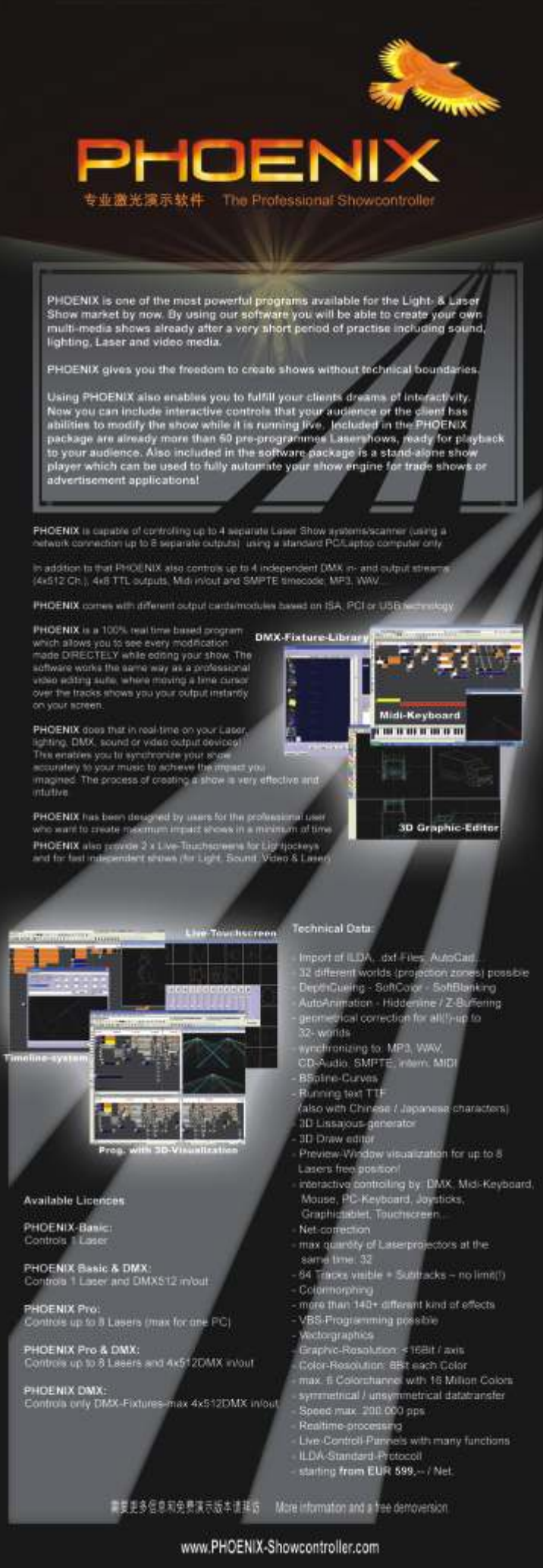
To learn more and participate in this PR campaign, contact Pangolin by email at [contact@pangolin.com](mailto:contact@pangolin.com) or by voice at (+1) 407-299-2088.



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PHOENIX is one of the most powerful programs available for the Light- & Laser Show market by now. By using our software you will be able to create your own multi-media shows already after a very short period of practise including sound, lighting, Laser and video media.

PHOENIX gives you the freedom to create shows without technical boundaries.

Using PHOENIX also enables you to fulfill your clients dreams of interactivity. Now you can include interactive controls that your audience or the client has abilities to modify the show while it is running live. Included in the PHOENIX package are already more than 60 pre-programmed Lasershows, ready for playback to your audience. Also included in the software package is a stand-alone show player which can be used to fully automate your show engine for trade shows or advertisement applications!

PHOENIX is capable of controlling up to 4 separate Laser Show systems/scanner (using a network connection up to 8 separate outputs) using a standard PC/Laptop computer only.

In addition to that PHOENIX also controls up to 4 independent DMX in- and output streams (4x512 Ch.), 4x8 TTL outputs, Midi in/out and SMPTE timecode, MP3, WAV.

PHOENIX comes with different output cards/modules based on ISA, PCI or USB technology.

PHOENIX is a 100% real time based program which allows you to see every modification made DIRECTLY while editing your show. The software works the same way as a professional video editing suite, where moving a time cursor over the tracks shows you your output instantly on your screen.

PHOENIX does that in real-time on your Laser, lighting, DMX, sound or video output device! This enables you to synchronize your show accurately to your music to achieve the impact you imagined. The process of creating a show is very effective and intuitive.

PHOENIX has been designed by users for the professional user who want to create multimultimedia impact shows in a minimum of time. PHOENIX also provide 2 x Live-Touchscreens for Light jockeys and for fast independent shows (for Light, Sound, Video & Laser).

**DMX-Fixture-Library**

**Midi-Keyboard**

**3D Graphic-Editor**

**Live Touchscreen**

**Timeline-system**

**Prog. with 3D-Visualization**

**Technical Data:**

- Import of ILDA, .dxt Files, AutoCAD...
- 32 different worlds (projection zones) possible
- DepthQueuing - SoftColor - SoftBlending
- AutoAnimation - Hiddenline / Z-Buffering
- geometrical correction for all(!)-up to 32- worlds
- synchronizing to: MP3, WAV, CD-Audio, SMPTE, intern, MIDI
- B-Spline-Curves
- Running text TTF (also with Chinese / Japanese characters)
- 3D Lissajous-generator
- 3D Draw editor
- Preview-Window visualization for up to 8 Lasers free position!
- interactive controlling by: DMX, Midi-Keyboard, Mouse, PC-Keyboard, Joysticks, Graphictablet, Touchscreen...
- Net-correction
- max. quantity of Laserprojectors at the same time: 32
- 64 Tracks visible + Subtracks - no limit(!)
- Colormorphing
- more than 140+ different kind of effects
- VBS-Programming possible
- Vectorgraphics
- Graphic-Resolution: ±16Bit / axis
- Color-Resolution: 8Bit each Color
- max. 6 Colorchannel with 16 Million Colors
- symmetrical / unsymmetrical databtransfer
- Speed max. 200.000 pps
- Realtime-processing
- Live-Control-Panels with many functions
- ILDA-Standard-Protocol
- starting from EUR 599,- / Net.

**Available Licences**

**PHOENIX-Basic:**  
Controls 1 Laser

**PHOENIX Basic & DMX:**  
Controls 1 Laser and DMX512 in/out

**PHOENIX Pro:**  
Controls up to 8 Lasers (max for one PC)

**PHOENIX Pro & DMX:**  
Controls up to 8 Lasers and 4x512DMX in/out

**PHOENIX DMX:**  
Controls only DMX-Fixtures-max 4x512DMX in/out

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[www.PHOENIX-Showcontroller.com](http://www.PHOENIX-Showcontroller.com)



## Outdoor Lasers and Aircraft Safety

A meeting of the SAE G-10T Laser Safety Hazards Subcommittee took place at the University of Central Florida, Orlando between the 7<sup>th</sup> and 10<sup>th</sup> of February 2006. The SAE G10T Subcommittee was created at the request of the FAA following repeated laser interactions with aircraft in the Las Vegas area in the mid nineties. The committee has representatives from all aspects of lasers in airspace, whether they military, research, or for entertainment use.

One of the topics covered during the meeting was the increase in people shining laser pointers at aircraft, and the consequences that follow such actions. So far it has been accepted that such incidences are not related to light shows.

ILDA members in attendance consulted with Van B. Nakagawara, O.D., FAA-Civil Aerospace Medical Institute about the possibility of conducting a research program on the effects of laser exposure with regards to a pilot's ability to fly aircraft. Van B. Nakagawara recommended a collaborative effort involving both ILDA and FAA in order to ensure that the study would not be considered biased and to share costs involved. William Benner, President of Pangolin, volunteered to help sponsor this research. Patrick Murphy, Greg Makhov, William Benner, and Roberta Mc-Hatton will put together a first draft of a proposal that will be submitted to ILDA for comments. Upon ILDA approval, a final draft will then be submitted to the FAA. The proposed study would provide real examples of exposure and maybe used as a tool to educate pilots as to what to expect and how to react appropriately when/if they are ever exposed to laser or high intensity light.

A full copy of the SAE-G10T meeting report will be posted on the members area of ILDA website.

## Laser Safety Standards News

ILDA has been working with one of the IEC committees responsible for creating and maintaining the international Laser Safety Standards. *IEC 60825-3 Guidance for Laser Displays and Shows* is currently being updated. Dr John O'Hagan, of the UK's Health Protection Agency is responsible for creating the update, and wanted to have input from the laser display industry to help create a useful document.

In recent months interested members of ILDA have been taking an active role in helping to provide opinion and comment on the content for the new revision. In February the first Committee Draft was published and is subject to further comment.

Members contributing to the new revision have welcomed the opportunity to become involved in helping with a document that could ultimately have significant importance to the laser display industry. The latest IEC 60825-3 draft opens with a reference acknowledging the input of ILDA in helping to produce the Technical Report.

Later in the year it is expected that IEC 60825-1 which covers such things as manufacturing requirements will be published and adopted as the new general laser products safety standard.

## Certified ILDA Operator

Keeping on a safety theme, one of the sessions at the ILDA Conference, due to be presented by Greg Makhov of LSDI, Orlando, will discuss the idea of setting a training program in place for ILDA members to become certified laser operators.

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## 72 Watts of Laser Light for 340 Horsepower

© LOBO Laser and Multimedia Systems, Aalen/Germany



German based LOBO provided Mercedes-Benz with a spectacular presentation for the world premier unveiling of the GL Class SUV, at the North American International Auto Show, in Detroit. The presentation of the car started with a video sequence shot in California by Jaques Steyn which then smoothly merged into the laser projection. Three-dimensional laser projections symbolised the way from the vision to the realisation of the new GL Class. After a rapid interplay between the 3D car projections and atmospheric beam effects, a green laser beam ignited a pyro effect where suddenly the new Mercedes hovered downwards.

Lobo used four X15 multicolour lasers to deliver 60 Watts of

pure white laser light which generated crystal clear projections using dual-field projection technique onto a semi-translucent screen. Four additional 3W monochrome lasers were integrated into the backdrop and used to create atmospheric beam effects. LOBO's LACON series of controllers was used to create the show, operated wirelessly from a laptop computer. In order to guarantee the utmost reliability, an entirely equivalent backup system replicating all the components was installed alongside the main system and configured ready to switch over instantly in the unlikely event of a malfunction of the main system.

LOBO electronic • [www.lobo.de](http://www.lobo.de)



© LOBO Laser and Multimedia Systems, Aalen/Germany



© DMX Laser, The Netherlands

## DMX Laser Symphonic Rockin' Lasers

DMX Laser, based in the Netherlands recently worked with Dutch symphonic rock band Roslynn, providing a slow moving laser ceiling of light for one of their concerts. The project used one of the company's Excellence 2000 green DPSS lasers.

DMX Laser's, Peter Broerse told *The Laserist* that ever since he saw his first laser show in Spain, he has been enchanted by the sheer power, the vibrant colour and the simply amazing effects that could be produced by what he describes as beams of magic.

Peter was delighted to work with Roslynn in providing laser effects to go with a rock soundtrack, proving once again that lasers are suitable with all types of music.

Peter Broerse • DMXLASER • (+31) 161-454022



## LM Production Pushes the Button



### LM Productions : Chemical Brothers Tour

United Kingdom based LM Productions provided three high visibility green DPSS lasers for the recent Chemical Brothers Push the Button tour. Each of the lasers were controlled via DMX through a lighting desk. One laser was fixed under the bands set, and the remaining two lasers were positioned either side of the stage, all creating atmospheric beam effects coordinated with the music.

In December, LM Productions used three 40W YAGs to produce bright emerald green beams at the Millennium Stadium in Cardiff, Wales, for a performance with another top band, the Foo Fighters. The lasers were positioned to project towards the audience from the stage. The laser show consisted of a range of high impact beams and atmospheric effects, with flat scan effects being used for the slower songs.

LM Productions  
(+44) 1323 890752    [www.lm-productions.com](http://www.lm-productions.com)

## 3RD Dimension Eventech : Laser Projects

3RD Dimension Eventech are pleased to have completed several recent prestigious projects in the GCC, which include the Saudi Football Team season launch, the Siemens Mobile launch and Sonata 06 Launch event.

In 1990, 3RD Dimension Eventech were the first and only laser show producer in the GCC, and since that time have worked on over 450 projects throughout the Gulf.

Abdulwahab Baghdadi says that much of his work is the all important repeat business, which he believes is a good sign that he is doing the right things to impress his clients. He also adds that clients are enjoying having laser effects feature as part of multimedia displays, incorporating moving lights, pyrotechnics, special effects and fireworks, that they also supply.

A Baghdadi • 3RD Dimension Eventech • (+966) 2-6070011



# International Laser Display Association Members



INTERNATIONAL LASER  
DISPLAY ASSOCIATION

[www.laserist.org](http://www.laserist.org)

For the most up-to-date list of ILDA members, including links to their Web Sites, use our on-line Company Finder Web tool at: [www.laserist.org](http://www.laserist.org), or contact ILDA at: (+1) 503-407-0289.

Membership in ILDA is open to laser show producers, equipment suppliers, nonprofits, individuals and students. Visit [www.laserist.org/join.htm](http://www.laserist.org/join.htm) for full details.

The five categories of membership are:

• Corporate (*producers of laser shows*) • Affiliate (*distributors, manufacturers and service providers*) • Not-for-Profit (*museums, schools, etc.*) • Student (*full-time*) • Individual (*not for commercial purposes, such as promoting services or products*).

## Corporate Members

**3RD Dimension Eventech**  
Jeddah, Saudi Arabia, (+966) 2-6070011

**AB Omagica**  
Stockholm, Sweden, (+46) 8-590 712 02

**Alex Engineering LTD**  
Hong Kong, China, (+852) 27931020

**Artistic Laser Production**  
California, USA, (+1) 760-802-2752

**Bocatec Video-und Lasertechnik GmbH**  
Hamburg, Germany, (+49) 407887623-0

**Buenos Aires Lasers S.R.L.**  
Buenos Aires, Argentina, (+54) 11-4796-9570

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**Definitive Special Projects**  
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**Fascination Laser**  
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**Fischer Media Group**  
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**Genius Laser Technology Pty Ltd**  
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**Global Laser Systeme**  
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**HB-Laser Komponenten**  
Schwaebisch Gmuend, Germany, (+49) 7171 499116

**Highlite International B.V.**  
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**Image Engineering**  
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**International Laser and Light, Inc.**  
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West Lafayette, Indiana, USA (+1) 765-463-3258

**Jenkins Displays**  
Vandalia, IL, USA (+1) 618-267-7723

**Kam Lee Hang Co., Ltd.**  
Hong Kong, China, (+852) 26879125

**Kvant**  
Bratislava, Slovakia, (+421) 2-654 11355

**Laser Action**  
Staffordshire, UK, (+44) 1782 639964

**Laser Action Ltd.**  
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**Laser Entertainment S.R.L.**  
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**Laser Kinetics**  
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**Laser Show Design**  
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**Laser Systems**  
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**Laser Visuals Limited**  
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**Laserlight Showdesign**  
Berlin, Germany, (+49) 30 49 76 09 76

**LaserSLT**  
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**Lemlight**  
s-Hertogenbosch 5235, The Netherlands, (+31) (0)73-6447491

**LFI International**  
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**Lighting Systems Design, Inc.**  
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**Lim8 sp. z o.o.**  
Lodzkie, Poland, (+48) 502344820

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**LOBO electronic GmbH**  
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**LPI**  
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**LPS-Middle East S.A.R.L.**  
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**Magical Water**  
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**Matrix-Laser GmbH**  
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**Mediam Ltd.**  
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**Mundo Odnum, S.A. de C.V.**  
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**Omicron Laserage Laserprodukte GmbH**  
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**Orion-Art Production Intl.**  
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**Royal Disco-Laserimage**  
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**SAM Laser Display Co.**  
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**Scenes**  
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**Sidram Service, Inc.**  
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**Skylaser Efeitos Especiais de Iluminacao**  
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**Stockholm Lasers - Tecnica Humana**  
Stockholm, Sweden, (+46) 70-549-1070

**TechniLaser, LDA**  
Prior Velho, Portugal, (+351) 219428560

**Theo Dari - Laser Man**  
Argenteuil, France, (+33) 1 34 11 35 30

**TTL Laser Shows**  
Paramus, New Jersey, USA, (+1) 201-587-2199

**WOW! Multimedia Ltd**  
Tyne & Wear, UK, (+44) 191 584 4306

## Affiliate Members

**Arctos Showlaser**  
Surheim, Germany, (+49) 8654 62528

**BACS Design, Inc.**  
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**BFI Optilas GmbH**  
Puchheim, Germany, (+49) 89-890135-0

**Cambridge Lasers Laboratories, Inc.**  
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**Cambridge Technology, Inc.**  
Cambridge, Massachusetts, USA, (+1) 617-441-0600

**Creative Laser Production**  
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**Csoft**  
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alifornia, USA, (+1) 818-994-9577

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**LaserAnimation Sollinger GmbH**  
Berlin, Germany, (+49) 30-780-963-0

**Lumalaser**  
Simi Valley, California, USA, (+1) 805-583-0244

**Medialas Laserproducts GmbH**  
Balingen-Engstlatt, Germany, (+49) 7433 907990

**Muller Elektronik**  
Spaichingen, Germany, (+49) 7424 501643

**Neo-Neon Technologies**  
Guang Dong, China, (+86) 750-8300-941

**Neos Technologies**  
Florida, USA, (+1) 321-242-7818

**Pangolin Laser Systems**  
Orlando, Florida, USA, (+1) 407-299-2088

**Spectronika Ltd.**  
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## Not-for-profit Members

**Astronaut Memorial Planetarium & Observatory**  
Cocoa, Florida, USA, (+1) 321-433-7292

**Benedum Science Theater**  
Wheeling, West Virginia, USA,  
(+1) 304-243-4034

**Buehler Planetarium**  
Davie, Florida, USA, (+1) 954-475-6681

**ESTA/ Entertainment Services & Technology Association**  
New York, NY, USA, (+1) 212-244-1505

**Health Protection Agency (formerly NRPB)**  
Didcot, Oxon, UK, (+44) 1235-822673

**Utah Valley State College, Multimedia Communication Technology Department**  
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## ILDA Mission Statement & Membership Benefits

The International Laser Display Association (ILDA), founded in 1986, is the world's leading organisation dedicated to advancing the use of laser displays in the fields of art, entertainment and education.

ILDA promotes the use of laser displays in the international marketplace through awards programs, publications, technology standards and a code of ethics. ILDA also represents the industry on safety issues and provides forums for members to exchange ideas, forge partnerships and explore new technologies. ILDA helps members relate to each other not as competitors, but as colleagues who share common goals and problems. Working together, members have the ability to solve problems faster and more productively than working alone.

Succeeding in the field of laser displays requires an unusual mix of artistic talent, technical acumen and business savvy. ILDA's publications, awards programs, conferences and committee activities are designed to help members become more successful. But one of ILDA's greatest benefits is one that doesn't fall under any particular category: it's the ability to meet your peers and discuss issues as colleagues, rather than competitors.

ILDA's annual conference, its committees and its print and web publications open the door to countless opportunities to forge partnerships, explore new options and network with the many talented people who comprise the laser display industry.

### ILDA

+1 503 407 0289 [www.laserist.org](http://www.laserist.org)  
9501 Satellite Boulevard #109, Orlando, FL 32837 USA

## Lytle Says Farewell to ILDA

I remember when I saw laser light for the first time. It was almost 30 years ago in a student apartment. At the time it was incredible to see 2mW of laser light bouncing off a mirrored speaker cone. Little did I guess that I would someday be the editor of the Laserist magazine and ILDA's Executive Director.

But just as all things must pass, it's time for me to say farewell to these endeavours. A new opportunity to work with one of the leading nonprofit organisations in the US grabbed my attention just like a laser did so many years.

It's tough to say goodbye. ILDA, however, has made great strides recently: membership has grown to historically high levels, we held our first "no-host" conference in Las Vegas, and I was the first representative of ILDA to testify before the US Centre for Devices & Radiological Health.

There were a huge number of stories I reported on and an incredible array of visual sights I was fortunate to feast my eyes on. Best of all, however, were the laserists around the world I was lucky enough to meet. I will always keep my eyes open for the next laser display, and for laserists I have yet to meet.

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# Continual updates make Lasershow Designer

**A**round the world, the best-selling professional laser show software is Lasershow Designer 2000 from Pangolin. LD2000 makes it easy to create high-quality, audience-pleasing shows and displays. That's why more laserists around the world use Pangolin than all other professional laser display software combined.

## The most technical and artistic awards

LD2000 is not only the top-seller, it is also the industry leader in technical and artistic quality:

- Pangolin has received 15 major awards for technical innovation in the past 14 years, including numerous First Place awards for key LD2000 software and hardware features.
- LD2000 helps create the best, most award-winning shows. Laser show companies using LD2000 have won far more international awards than those using other software.

We are especially proud of our users' awards. They demonstrate how Lasershow Designer 2000 is highly capable in every aspect of laser displays, including animations, beams, abstracts and multimedia extravaganzas. And they show how easy LD2000 is to use. Winners range from one-person operations to teams of artists from the world's top laser companies.

So, no matter what type of show you're creating, and no matter how big or small your staff is, LD2000 is perfect for the job.

## Create frames and shows

Pangolin's LD2000 system is packed with all of the features you need to create sophisticated laser shows. In fact, it is so powerful that your entire show production can be done on a portable computer that fits into an airline carry-on bag. Here's a typical "on the road" scenario:



Create spectacular shows, easily and quickly, with Lasershow Designer 2000.

- Snap your client's picture with a digital camera, and turn it into a TV-like laser-projected photograph.
- Select additional artwork from over 175,000 clip art frames and animations.
- Type in text using any TrueType font — even Arabic and Chinese fonts.
- Load an audio CD or MP3 song, then drag-and-drop your frames onto Showtime's timeline, to match the music.
- Preview the show on the computer with realistic beams and graphics.

Whether you're in the office or on the road, LD2000 makes laser shows easy.

## Special products for special effects

In a world where everyone uses large-screen video, laser beams and graphics still stand out as an audience-pleasing "ooh and ahh" technology. There are many ways you can make the magic of lasers work for you and your clients. Here are

some Pangolin products for special needs and advanced users:

- Lasershow Performer (pictured above) is a 19" rack-mount console with lighted keys and a fast knob controller. It works with the Live! and LivePRO software, to control up to 1700 laser effects in time to live music.
- There are three ways to play back shows, for stand-alone installations. Choose from playback using CD discs (CD2000—shown below), SmartMedia cards (Flashback 3), or standard Windows computers (LD2000).



- Audiences can directly control the laser, by sending SMS text messages that become scrolling laser projected words. This is very popular in discos, at concerts and for special events.



# the world's most powerful laser show software

- Control a live, talking laser character with Lasershow Puppeteer. It's a virtual reality traffic stopper at trade shows, fairs and special events.
- Five different add-on programs let you convert graphics from other formats into laser animations. Supported formats include Autodesk 3ds Max, Macromedia Flash, standard bitmaps, graphics, and video conversion.

As you can see, LD2000 is not just one or two programs, but is the heart of a complete world of laser-powered special effects.

## Free lifetime updates

There are three versions of LD2000: budget-priced Intro, mid-range Basic and the top-level Pro. Pick the version that's best for your needs.

You'll get 80 laser shows (songs) already made for you. Get started right away, by inserting your own frames or selecting from the 175,000 clip art frames included. Software updates are free, so you will always have the latest version of the program at no extra cost.

With a 90-day money-back guarantee, there's no risk. Come join the over 3500 users in 62 countries who rely on LD2000 to make the world's best laser shows.

Contact one of our worldwide dealers, visit us on the Internet at [www.pangolin.com](http://www.pangolin.com), or call us in the United States at 1-800-PANGOLIN (+1-407-299-2088 from outside the U.S.). Soon you'll be creating your own spectacular laser shows with the professionals' top choice: Lasershow Designer 2000.



**Pangolin Laser Systems Inc.**

9501 Satellite Boulevard, Suite 109  
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## Free lifetime updates to LD2000

One of the great things about LD2000 is that it is continually improved — for free! Once you purchase LD2000, you get new features as we release them. Your software is never outdated, and the updates don't cost you a cent.

### New and improved features in release 4.0: FREE!

Here is a list of recent major improvements and changes in LD2000 release 4.0. Current LD2000 owners can go to our website to download this release for FREE.

- Added DMX input capability, so the Showtime Live! and LivePRO programs can be controlled by a DMX-512 lighting console. With LivePRO, you can synthesize up to four separate virtual lighting fixtures, each with pan/tilt, zoom, gobo selection and rotation, brightness, various color effects, etc.
- Added a new colorizing feature in LD2000 Basic and Pro versions, which allows you create smooth color gradations along lines marked using two point markers. This is especially handy when creating beam shows.
- Increased the number of laser projectors you can control, from 20 to 30.
- Added the ability to create shows up to 24 hours in length.
- Added a 'Progress gauge' to help tell how far along you are when loading frame and show files.
- Changed sliders in Projector Settings dialog boxes to make them easier to use, with 'Medium Change' and 'Small Change' buttons.
- Improved Showtime's Media Player for better support of video.
- Updated and improved "Lasershow Video" (formerly known as VST2002)

### New software capabilities at every level: FREE!

In addition to these improvements, Pangolin continues to add value to the three levels of LD2000: Intro, Basic and Pro. We have been able to take features from higher levels, and bring those to users of the lower-priced versions. If you already own LD2000, simply see our website for instructions on how to get these new features for FREE:

- Formerly Lasershow Converter Flash was only available as a \$995 add-on; it is now included for free with LD2000 Pro.
- Formerly Lasershow Converter 4D was included with the Pro level of LD2000, but was a \$995 add-on for the Intro and Basic levels. It is now free with the Basic and Pro levels. With this, even LD2000 Basic now can convert frames made with third-party 3D software.
- Formerly LD2000 Intro only allowed creation of point-oriented frames, shows were restricted to three tracks, and color capabilities were limited. Now, LD2000 Intro lets you create both point- and vector-oriented frames, make shows with up to eight tracks, and use additional color capabilities previously found only in LD2000 Basic.

### 15 new shows and 50,000 new frames: FREE!

LD2000 already came with an impressive array of free artwork: 70 shows and 125,000 frames. Now, we add to this collection with 15 new shows — seven of them award-winners — and over 50,000 new animation frames, completely free to new LD2000 customers.\*

- Two new beam shows from multi-award winning laserist Johannes Coppes of Laser Presentation: *Holding Out for a Hero* (music by Bonnie Tyler) and *I See Right Through to You* (music by DJ Encore)
- Three new beam shows from the multi-award winning laserist Harry de Boer of DTL Lasertechnology
- Five new beam shows and one graphics show from the Faculty of the Arts, Thames Valley University; four of these include royalty-free music
- An updated version of our 3D masterpiece *Revelation*, with a new Space Shuttle scene and with lighting, shading and shadows used throughout
- Three new graphics shows from AVI, including shows set to the B-52's *Cosmic Thing*, Madonna's *Music* and 3 Doors Down's *Kryptonite*.
- *Rhapsody in Balloon* show from Stuart Technologies
- The entire laser animation library from industry pioneer Lightspeed Design. It contains 50,000 frames of high-quality and award-winning animations.

\*Current LD2000 customers please note: Due to the large file sizes, the new shows and frames are not available for online download. They are available by ordering the full release 4.0 software CD/DVD set which costs US\$75 for the discs and handling — still a great value.



# Speed Freaks

## ***The fastest scanners on the market...just got faster.***

Some might say we're obsessed with speed. Perhaps that explains how we can consistently deliver the industry's fastest and most accurate galvanometers and servo drivers. Like our new **H line of 62xx galvos** – pushing the technology envelope with better performance and speeds that are 25% faster than what's available in today's market.

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*Highest frequency galvo in the market  
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### ■ **62xxH Series Galvanometers**

*25% torque increase for higher speeds  
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### ■ **DC900 State-Space Digital Servo Driver**

*Self-tuning – no adjustment pots  
Up to twice as fast as analog servos*



### ■ **MicroMax 673xx Dual-Axis Analog Servo Driver**

*Half the size of 2 single-axis servos  
The most attractive combination of  
size, speed and cost*



## ***Talk is cheap. Our prices are not bad, either.***

While the rest of the industry talks about performance, we deliver it. So go ahead, put us to the test. We're making it even easier by increasing performance without increasing prices.

