

2018 ILDA Awards

The world's best laser shows, as judged by their peers



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Cover photo: "Angel" by KVANT (zoomed in to central area, for vertical cover format)
First Place, Laser Photography, 2018

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ILDA Conference



HOST OF THE 2018 ILDA CONFERENCE

Derek Garbos and Nicolas Squire

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November 8 2017 - November 11 2018

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Booklet and display printing

Brooks Palmer, FullColorLasers.com

Laser Safety Information

ILDA requires its Members to perform safe and legal laser shows. All Members submitting ILDA Award entry videos have explicitly certified that the laser effects depicted meet safety standards, as well as all applicable laser safety laws and regulations (including laws for audience scanning) in the location where the show was performed.

- Entries filmed in a studio, with no audience, can use any power and can scan anywhere, even if the original show was intended for an audience.
- However, if the video depicts an audience watching the laser show, or has lasers near performers, then the show must be safe for the audience and performers, and must comply with all applicable laws and regulations.

ILDA Awards safety review

In addition to Award entrant statements, ILDA reviews every entry for any potential safety issues. **ILDA** has the right to remove or disqualify an entry if, in our opinion, the show violates or appears to violate safety standards, laws and/or regulations.

Note that despite ILDA's review process, ILDA cannot absolutely certify that an Awards entry is safe and legal. This is ultimately the responsibility of the entrant.

If you have a laser or a laser projector, do NOT attempt to perform the type of audience-scanning effects seen in ILDA Award-winning videos 1) without qualified expert safety planning and supervision and 2) without prior written permission from appropriate authorities.

These authorities may include federal, state and local laser safety regulators, venue operators, and insurance companies.

Judging and Voting

Artistic Awards

Judging was done in June 2018 via online viewing and voting. Judges were Olga Eser, Christine Jenkin, Shane Martz, Nisha Ramnath and Adam Raugh. Judging coordinator was Richard Gonsalves. Together they reviewed 181 entries from 48 ILDA Member companies.

Note that for each of the 13 artistic award entry categories, there were three judges. However, these were not always the same three people. A person was not allowed to judge any category in which they had an entry, which is why there were five persons serving as judges.

Laser Photography and Career Achievement Award Judged by ILDA Members voting online, May 29 - June 12, 2018.

Fenning Technical Awards (standard and IDN)

Technical entries were judged via online discussion of a three-member panel that concluded July 5, 2018. Judges Derek Garbos, Richard Gonsalves and James Stewart evaluated 5 entries from 4 ILDA Members.

Laser Jockey

Judged by attendees watching the LJ performances live during the Lase-Off at the ILDA Conference in Montréal, November 11, 2018.



Corporate Show

Third Place, Corporate Show

Penguins Stanley Cup Finals Lightwave International



Programming: Mike Dunn; Laser Technicians: George Dodworth, Neal Nance, Matt Maltman, Mitch Hancher, Cliff Laschon, Tim Dunkle & Dave Reid

Music: Saliva, "Ladies and Gentlemen"

Opening for the Penguins NHL hockey team during the Stanley Cup finals. The goal was to get the crowd revved up to cheer on the team to victory. They ended up winning the Stanley Cup - again!

Second Place, Corporate Show

Peugeot 5008 Merlin Schaadt



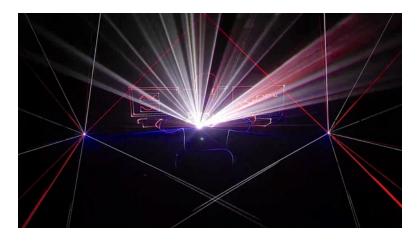
Concept & Programming: Merlin Schaadt Music: Overwerk, "Canon"; Kenji Kawai, "Utai IV: Reawakening"

Here we had to manage creating something special in a very difficult location: The location was an old fortress with a wide and high vault as you see in the opening shot, so we had to map two cars, one right side and one left side. In the video you only see one car of one side. In addition we had three screens in each part of the vault for graphics.

The aim of this car presentation was to get the car alive. So I played with the screen and mapping to create an interaction between the virtual screen car and the live mapped car.

First Place, Corporate Show

Alchemy of Light Dream Laser



Alisa Biryukova, Evgeny Kudryavtsev, Vyacheslav Konovalov, Alexey Kozin, Sergey Zabosin, Alexandr Istomin, Denis Chuchko, Andrey Tuboltsev

Music: Khrychev Maxim, "Alchemy of Light"

This show was created for the RUSAL company and broadcast in parallel in five cities of Russia. Used four lasers for one city.

Live TV Show

Third Place, Live TV Show

Alan Walker Norwegian Grammy Awards 2018 Laserimage AB



Programming: Love Karlsson; Laser Tech: Johan Lindell Music: Alan Walker, "Legends Never Die, All Falls Down"

Alan Walker wanted to have a timecoded lasershow for his performance on the Norwegian Grammy Awards. He wanted to have a massive look with a lot of synced beams to music. It was also very important for the show to look good on camera since it was on national TV.

Second Place, Live TV Show

Lamix Live at P3Guld 2018 Laserimage AB



Programming: Love Karlsson; Laser Tech: Johan Lindell

Music: Lamix, "Hey Baby"

Timecoded TV show; the main goal was to give lasers much time on TV and we had pretty much free hands to create a cool show that reflects that its a party on stage. Burst effects were used to create a massive look when the TV producer chose closeup camera angles of the artist, measurements were done before rehearsals to make sure that it was below Maximum Permissible Exposure limits.

First Place, Live TV Show

Dancing On Ice Final ER Productions



Laser Design, Andrew Turner; Laser Programmer, Tom Vallis Music: Take That. "Giants"

Lasers were positioned low and high to gain maximum coverage from the camera angles. The lower set of systems terminated onto the ice rink edge for the skaters to perform through. When the ice was cut, the lasers sparkled and created some great shots for the skaters.

Edited Film/TV/Video

Third Place, Edited Film/TV/Video

Imagine Dragons on "Ellen" Lightwave International



Laser Technicians: George Dodworth & Neal Nance; Lighting Designer:

Mitch Schellenger

Music: Imagine Dragons, "Believer"

 Imagine Dragons wished to recreate the cover of their Grammy-nominated album "Evolve" in laser for their performance on the "Ellen DeGeneres Show." New technology was used to create moving sheets of laser light that don't emit from a single point.

Second Place, Edited Film/TV/Video

New Balance Fresh Foam Lazr LaserTech Canada

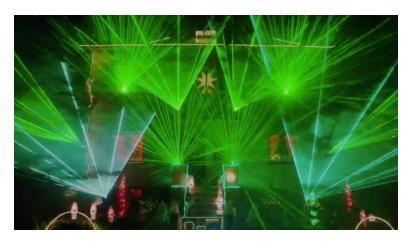


Rigging & control: Derek Garbos Music: Custom effect soundtrack

A single high-power red beam was a clean and simple concept for this commercial. All shots were done in two nights back and forth between two cities. The pace was frantic. It was nice of New Balance to name the shoe "Lazr"!

First Place, Edited Film/TV/Video

Eon Christmas Commercial 2017 Laserimage AB



Programming: Love Karlsson; Laser Tech: Kristofer Abrante Music: Avicii, "For A Better Day"

The main goal for this work was to create sort of a futuristic Christmas decoration programing with lights and laser. The power company EON wanted to market the possibility of using solar panels to create power, All of the footage was created by motorized cameras and cranes so that we could go close to the lasers without putting a cameraman or any other person in the hazard zone of the lasers.

Laser Show with Added Effects/Multimedia

Third Place, Laser Show with Added Effects/Multimedia

The Novatec Company Orion-Art Multimedia

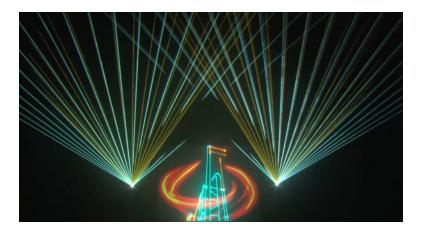


Art Director, Alexey Panin; Laser Designer, Kirill Nikitochkin Music: 2 Steps From Hell, "Dragon Rider"

Show for the polar gas producing company.

Second Place, Laser Show with Added Effects/Multimedia

The Metal CorporationOrion-Art Multimedia

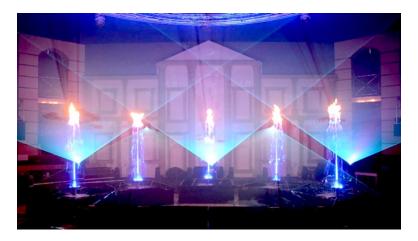


Art Director, Alexey Panin; Laser Designer, Serge Maltsev Music: Nick Phoenix & Thomas Bergerson, "Flameheart"

Show for the metal holding company. The task was to represent all the technological steps of metal producing.

First Place, Laser Show with Added Effects/Multimedia

DragonsVisual Sensation Laser Shows & Technologies



Laser Designers: Maciej Lukaszewski, Jakub Michal Walus

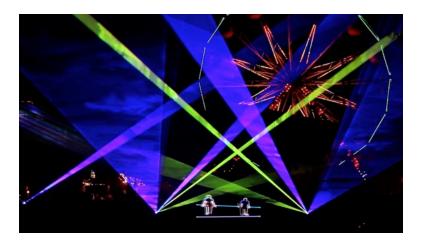
Music: Dan Graham, "Mechanoids"

[No description submitted]

Nightclub/Disco/Music Festival Show

Third Place, Nightclub/Disco/Music Festival Show

Maine Lobster Festival Pinnacle Laser Productions



Programmed by Gabe Letourneau and Mike Dunn. Production Manager: Andrew Dranetz

Music: Various -- Neil Diamond, "Coming To America"; James Brown, "Living in America"; Led Zeppelin, "Rock n Roll"

Challenging outdoor coastal show right on the water with strong winds, and a promoter that demanded the laser show finale start within one minute of a band finishing on stage, so lots of planning.

Second Place, Nightclub/Disco/Music Festival Show

Raving Holiday Lightwave International



Programming: Mike Dunn; Laser Technicians: George Dodworth, Neal Nance, Matt Maltman, Mitch Hancher

Music: Trans-Siberian Orchestra, "Wizards in Winter." EDMxChristmas, "The First Noel."

Lasers deliver the Christmas spirit! This show was donated to a local area community church in an effort to raise money directly for individuals and families in need over the holiday season, with 100% of proceeds going directly to them.

First Place, Nightclub/Disco/Music Festival Show

TranceformationsVisual Sensation Laser Shows & Technologies



Laser Designer/Live Laser Jockey: Maciej Lukaszewski, Live Laser Jockey: Jaroslaw Nadolny

Music: N/A

[No description submitted]

Live Stage Show

Third Place, Live Stage Show

World's Largest Laser Display FR Productions



Laser Design: Andrew Turner and Lawrence Wright, Laser Programmer: Andrew Turner, Lawrence Wright and Van Bridges Music: Muse, "Unsustainable"; Metallica, "Moth Into A Flame"; Fatboy Slim, "Eat,Sleep,Rave,Repeat"; Rydeck, "Cockroach!"

Over 12 tonnes of equipment valued at approximately USD \$3.5 million – including 11km of cable – was used during the show, which was held at the Las Vegas Convention Center. Due to its proximity to the McCarran International Airport, a 100m x 15m termination wall was erected to ensure that no lasers affected aircraft using the airport. During the final and crucial seven-minute closing sequence, an enormous 1,377 watts of laser power lit up the Nevada skyline. The laser show took weeks to design and 72 hours to set up for the world-record attempt. The show was controlled centrally from front-of-house using three Road Hog 4 consoles and Beyond laser software.

Second Place, Live Stage Show

Faith Hill & Tim McGraw "Soul 2 Soul World Tour" ER Productions



Laser Design: Andrew Turner, Laser Programmer: Andrew Turner and Alex Oita

Music: Various Faith Hill and Tim McGraw tracks including "Devil," "Freedom," "One Of Those Nights," "Break," and "Breathe"

This show was an interesting opportunity for the creative team giving us the freedom to throw our creative hats into the ring for the laser moments, which is always a dream.

16 Laserblades, thirty-two BB3 units and eight of ER's new Excellent 25 fixtures, spanned the length of the stage. To integrate the lasers into the slick set, custom frames were fabricated for the BB3 and Laserblade units, which also simplified the load-in process for the technical two Excellent 25 units were floor mounted out wide, while another four were rigged onto two, 5-metre long steel poles, which were operated using automation software. The pole-rigged lasers were flown in to trim during laser numbers, creating a unique effect that could be pulled back to avoid a 24-metre video wall being interrupted throughout the entire show.

First Place, Live Stage Show

Prolight Sound 2017 KVANT Ltd.



Manager: Michal Šimkovič; Choreographer: Milan Keres; Programmer: Martin Gabco, Václav Kolenčík, Tomáš Krže; Technicians: Maroš

Starosta, Boris Bello

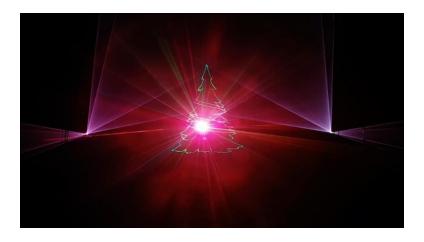
Music: Bassnectar, "Lights (Bassnectar Remix)"; Lido, "Angel"; Diskord, "Freak"

Video footage from the Prolight + Sound 2017 trade show in Frankfurt. Young and beautiful performers and KVANT lasers! The contrast between the state-of-art technology and human element delivers an unforgettable experience.

Multi-Effect Laser Show

Third Place, Multi-Effect Laser Show

New Year Show 2018 Dream Laser



Alisa Biryukova, Daria Istomina, Olga Saveleva, Evgeny Kudryavtsev, Vyacheslav, Natalya Lobanova Music: Various Christmas potpourri

This show was created using our vision of the topic of Christmas.

Second Place, Multi-Effect Laser Show

Showroom KVANT Ltd.



Programmer: Martin Gabco, Vlado Štefánek
Music: Hans Zimmer & Bnami Wallfisch, "Blade Runner 2049
Soundtrack"; Trailer Music, "Blade Runner 2049 (Theme song 2017)";
Woodkid, "Run Boy Run (Instrumental by Jakerz upcoming Hecq"; Hans
Zimmer, "Interstellar Main Theme (Lelectrolab Remix)"; Zardonic &
Voicans, "Bring Back The Glory"

Demonstration of multimedia show in showroom by client request. Show step-by-step presenting possibilities of each equipment.

First Place, Multi-Effect Laser Show

Trains And BrainsDavid Kumpula



Credit: David Kumpula

Music: Shpongle, "Are We There Yet"

This show was created with the intent to represent an immersive, psychedelic trip. No psychotropic substances required!

Graphics Show

Third Place, Graphics Show

Business Dream Laser



Alisa Biryukova, Daria Istomina, Olga Saveleva, Evgeny Kudryavtsev, Vyacheslav Konovalov, Natalya Lobanova Music: Fatboy Slim, "Right here right now (edit UB)"

This show was created using our vision of the topic of business.

Second Place, Graphics Show

XmasVisual Sensation Laser Shows & Technologies



Laser Designers: Maciej Lukaszewski, Jakub Michal Walus Music: Swing Shift, "Sleigh Ride"; Swing Shift, "Jingle Bell Rock"

[No description submitted]

First Place, Graphics Show

The Cartoon Detective Orion-Art Multimedia



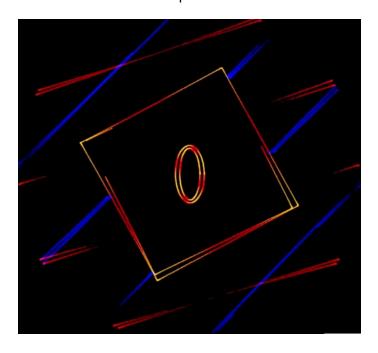
Art Director: Alexey Panin, Laser Designer: Kirill Nikitochkin Music: The Cartoon Detective original soundtrack

The show was made as a part of the New Year performance for children. According to the plot of the performance, there was a tornado accident at the cartoon factory and all the animated series characters were thrown away to the real world. The Wolf and the Rabbit, the cartoon characters from the 70's, have to solve the problem with a help of the magic star.

Abstract Show

Third Place, Abstract Show

Boom BoomChristopher Short



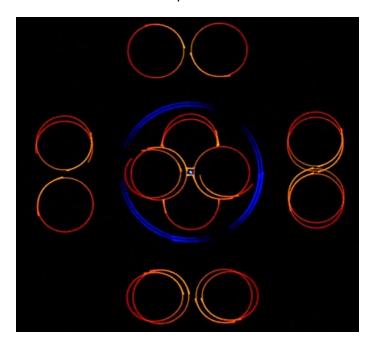
Credit: Christopher Short

Music: Imelda May, "Johnny's Got a Boom Boom"

Who isn't a sucker for a good bass line? Lissajous effects, and some 3D on this one. I wanted something that felt like the music in style and color, but still had swooping expression and a little text as a counterpoint. Lots of layer effects and masking to provide depth and motion.

Second Place, Abstract Show

Hot Damn Christopher Short

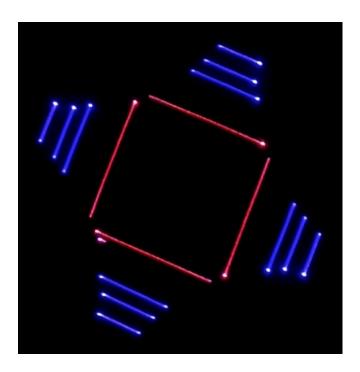


Credit: Christopher Short Music: Ivy Levan, "Hot Damn"

This was just a piece for fun. I found the music while deep diving YouTube and it caught my attention. Ivy describes her music as "Swamp-Hop" so I focused on animating individual components within each scene to create a dance circling the protagonist.

First Place, Abstract Show

Feel It Still - Portugal The Man Jason Salt



Laser Artist: Jason Salt

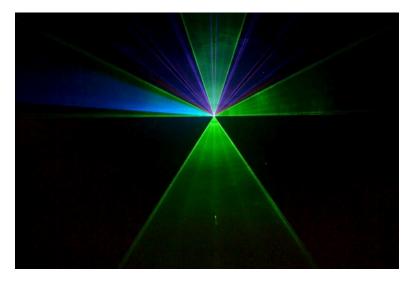
Music: Portugal The Man, "Feel It Still"

In this piece I used many different masking effects to create layers. You will notice hidden shapes in black that are brought out by the pulsing squares and lines. I also used masking to make some patterns look like they explode out from inside other patterns.

Beams/Atmospherics Show for a Single X-Y Scanner Pair

Third Place, Beam Show for Single X-Y Scanner Pair

One Thing LOBO

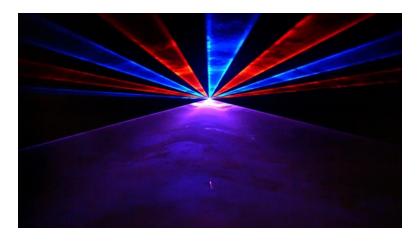


Show Designer: Phillip Wendt, Creative Director: Udo Gauss Music: Calvin Harris, "My Way"

Phillip's typical fingerprints once again. An extremely filigree sense for timing and melodic mood. Hearing and seeing, these senses melt into unity. Maybe sometime he should look into programming the matching scents into his creations. Then we won't only hear what we see, no, we will also see what we hear and smell. Perception in unity.

Second Place, Beam Show for Single X-Y Scanner Pair

Calm Night LOBO

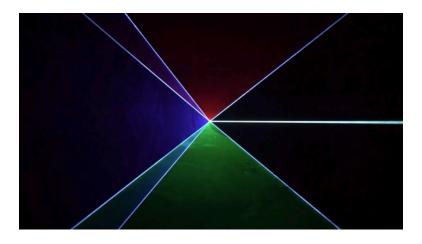


Show Designer: Phillip Wendt, Creative Director: Udo Gauss Music: Elsiene, "Mend"

Again Phillip worked with the timing of a Swiss clockwork masterpiece. Phillip is very versed in transforming even subtle musical cues into laser light without overloading the whole show. The dreamy song appears to melt together with this laser light composition.

First Place, Beam Show for Single X-Y Scanner Pair

IgniteTheo Petrides



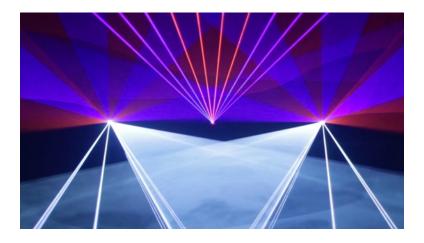
TLaser Operator/Programmer/Videographer: Theo Petrides Music: City 17, "Ignite It"

This laser show is composed of very precise movements to the music. It utilizes creative use of fog to make an immersive experience that highlight beautiful colors, intense liquid sky, and tunnel effects. The transitions between effects are key for the artist's programming and story telling.

Beams/Atmospherics Show for Multiple-Scanner Projectors

Third Place, Beam Show for Multiple Scanners

This Is What You Came For Nice Lasers



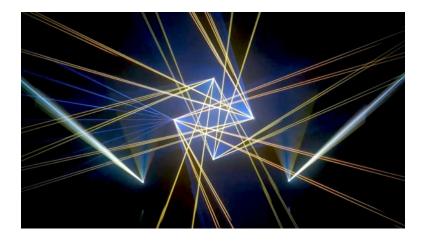
Laser Designer: Anthony Garcia

Music: Calvin Harris, "This Is What You Came For"

Created as a product demo for X-Laser

Second Place, Beam Show for Multiple Scanners

Unleashed VisuTek e.U.



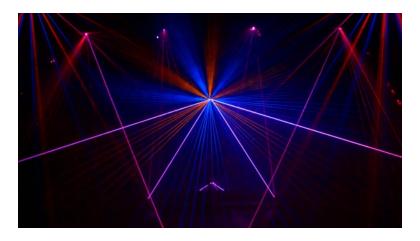
Programmer: Markus Voggenberger, Setup and Laser Operator: Helmut Gruber

Music: Two Steps From Hell, "Unleashed"

According to the new album from Two Steps from Hell "Unleashed", we programmed a really impressive beamshow with immersive presence effects. In this symmetric arrangement we used seven pure diode laser systems.

First Place, Beam Show for Multiple Scanners

The Hunt LOBO



Show Designer: Roman Schütz, Creative Director: Udo Gauss Music: League of Legends, "Welcome to Planet Urf"

This show bases on an extremely clear and experimental electronic sound. Core of the creative concept behind this show, The Hunt, are very clear arrangements giving profound statements of dramaturgy and beat. The mere show has statistics with a respectable number of programmed cues -- a clear sign for dedication to detail.

Innovative and Fine Art Laser Applications

Third Place, Innovative and Fine Art

GlowingDavid Kumpula



Credit: David Kumpula

Music: Toto, "Africa"; Bob Marley, "Is This Love"; Rimsky-Korsakov, "Flight of the Bumblebee"; Thomas Bergensen, "A Place In Heaven"

Laser projector-drawn glow-in-the-dark artwork have been fairly basic renderings ... until now. New, dedicated laser projectors designed to draw on luminescent materials are expanding the artform to included fill effects, soft fades and even the appearance of translucent materials and slightly out-of-focus scene elements.

Second Place, Innovative and Fine Art

Lightning Catchers Seb Lee-Delisle



Artist, programmer, designer, sound design: Seb Lee-Delisle Music: N/A

Lightning Catchers is a prototype game that gives you the chance to catch bolts of lightning with a custom built lightning rod.

Rods are tracked using an infra-red camera, when they connect with the lightning, they buzz loudly, light up and create sparks.

The electricity effects are generated algorithmically and projected with a single laser. The lightning rods are hand-built, and have 576 super-bright LEDs inside.

First Place, Innovative and Fine Art

Lightning Strikes Seb Lee-Delisle



Artist, programmer, designer, sound design: Seb Lee-Delisle;

Technician/Operators: Alice Black, Ian McCormack

Music: Sound design by Seb Lee-Delisle

Projected on to Saltwell Towers, this was the centrepiece of Enchanted Parks, inspired by the experiments of a 19th century scientist.

It simulates electrical effects like sparks, Jacob's ladders and lightning. It is designed to look like a recreation rather than a graphical projection.

The brightness of the lasers, and the powerful sound system produce an intense and awe-inspiring experience for the audience.

All effects are generated algorithmically in real-time and can be performed live. Each effect has an element of randomness so every spark and bolt is completely unique.

Permanent Installation

Third Place, Permanent Installation

The Home DiscoDavid Kumpula



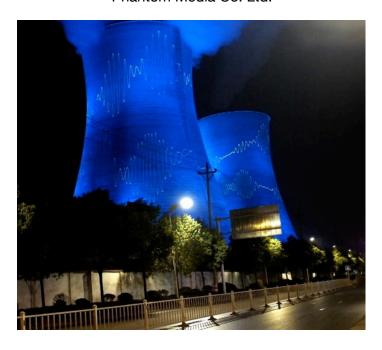
Credit: David Kumpula

Music: Various

Designed as an immersive home light and laser studio, this fun space attempts to wow remote viewers with a wide variety of capabilities.

Second Place, Permanent Installation

Da Long TowerPhantom Media Co. Ltd.



Technical Planning & Director: Sean Zhang Jifeng, Programmer: Sean

Zhang Jifeng, Leon Ren Jun

Music: N/A

This is a laser mapping on the two cooling towers (each with height 108m) of a power plant. The program also includes LED illumination done by a different company.

Each tower required two laser projectors to cover about 270 degrees of the surrounding surface. The rest of surface was ignored because there are no audience in that direction. Satellite photos were used to determine the best spot for the installations. It took quite some efforts because there are too many buildings and we need to find a good place that is permissible to use and at same time we need a clear view to the cooling tower to avoid any object in between which might block the beam path.

Four laser houses were built as the shelter of the lasers and peripherals. Inside the house there are air conditioner, de-humidifier, UPS, GPS controlled timer, LAN switch, wireless LAN bridge antenna, and a GPRS linking device which is used to monitor and control the devices. Even from the other side of the planet, we can switch the power on and off to the whole system, or adjust room temperature etc if required. But most of time the housing is running automatically.

Three pairs of antenna were used to connect the four houses. The connection was not a real star layout because none of the four houses could be directly seen from the all other three houses at the same time. We had to use two of the four houses as communication hub. On the window of each house, a piece of high grade AR glass (200mm * 300mm, dual-side coated, outside surface coated with extra water proof layer, 98.5% throughput efficiency on 400nm-700nm range) was installed to prevent losing too much money/power in the house. The laser pattern was mapped with the geometric shape of towers and two laser images on the same tower are edge-blended. This is done by powerful DGC function of the laser software and result was quite promising.

The show sequence has 14 minutes. From 00:00-07:30 is the effect of LED illumination. After that the LED controller switch will send full value to a specific DMX channel, which is broadcasted by a Wireless DMX device. This is received by house #2, the main control laser house. The controller in house #2 then starts the script and the three other houses will get distributed time code along the wireless LAN. Laser part is from 07:30-14:00 during which the LEDs were switched to very dimmed blue. The show is played as infinite loops every night. Some preprogrammed lines were integrated to let the system know what date it is today so laser will project specific messages only for that day.

The project was planned in 2016, it was finished and video-recorded in middle of January 2017. It is still working everyday now. We didn't have to visit there again after installation is done. All devices are in good conditions. Benefiting from the remote monitoring and controlling devices we were able to check house conditions any time if wanted.

First Place, Permanent Installation

Shanghai KVANT Ltd.



Head of Project: Viktor Dubec, Main Technician: Martin Miček,

Supervisor: Michal Mažár Music: Audiojungle

This laser display installation visually interconnects four various floors of One Museum Place tower in Shanghai with 4th and 5th floor rooftops of adjacent building structure. Eight pieces of high-power 55W full-colour diode lasers were used to provide enough optical power for the laser beams to be clearly visible to all spectators around the building and surroundings. Four systems are positioned on the 5th floor rooftop and other four on the 4th floor rooftop of adjacent building; three out of four units installed on 4th floor rooftop are located at a publicly accessible area (terrace). Because of this, the three systems on the terrace are fitted with safety tubing to prevent public from accessing the laser emission.

Each system is encased in weatherproof air-conditioned housing and equipped with motorised beam targeting system.

Specially-developed optical retroreflectors are used to bounce and focus the beams back off the tower, which significantly increases the

visibility of the beams in the air. Each laser beam aims at one of the retroreflectors that are mounted on the sides of the tower.

Each laser system is controlled by a Master Controller which is located in the main control room.

Safety: Each laser display unit is equipped with several self-diagnostic and emergency mechanisms to minimise the safety hazards in case of failure of any part of the installation. There are two sets of four cameras enclosed in weatherproof enclosures installed on adjacent building rooftops. Each set monitors four beam positions in relation to the centres of targeted retroreflectors and sends the data back to the Master Controller for evaluation.

Due to the nature and location of this installation, the maximum safety measures were applied to every aspect of this project. List of hardware laser safety features:

- Mains power Emergency STOP located on Switch box
- 5th floor doors safety Interlocks (2) connected to Power Distribution box
- Safety key switch and START button located on Switch box
- Interlock for each individual laser display system
- · HD video camera beam position monitoring system
- Laser beam auto-alignment mechanism (see First Place Fenning Technical Achievement Award description)

Laser Photography

Third Place, Laser Photography

IMAGINE - Dubai Festival City Laservision Mega Media

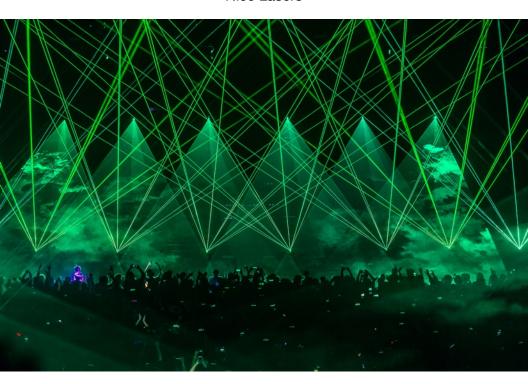


Photo: Matthew Tuey, Marketing Manager; Laser Artist: Daniel McCloskey

A long-term exposure image late into the wee hours of the morning during a video shoot of IMAGINE-Dubai Festival City. The stillness of the water and the moonlight allowed us to see the form of the water assets and captured a moment in time. The green hue from the lasers in the finale scene.

Second Place, Laser Photography

EvergreenNice Lasers

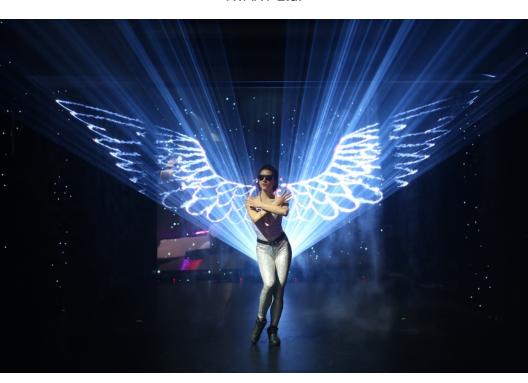


Laser Designer: Anthony Garcia, Photographer: Jesse Perez

[no description provided]

First Place, Laser Photography

Angel KVANT Ltd.



Manager: Michal Šimkovič; Choreographer: Milan Keres; Programmers: Martin Gabco, Václav Kolenčík, Tomáš Krže; Technicians: Maroš Starosta, Boris Bello

This photo was taken during Prolight + Sound 2017. As you can see we used fogscreen and laserwings as well.

Live "Laser Jockey" Performance

The Laser Jockey competition for live performance was held the evening before the Awards Presentation. Eight persons performed; these are the winners:

Third Place

Sally Steranko Image Engineering

Second Place

Nick Squire LaserTech Canada

First Place

Derek Garbos LaserTech Canada

Fenning Award for Technical Achievement

[no Third Place awarded]

Second Place, Fenning Technical Achievement

Mercury X-Laser



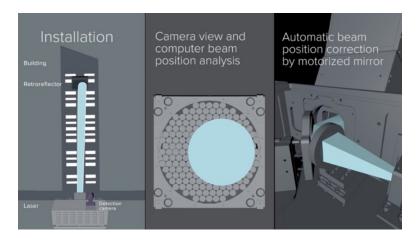
Figure 2 - Lighting Designer Daniel Maxwell Controlling Skywriter HPX M-5 lasers with an Avolites Sapphire Touch

Mercury is an entirely DMX-based integrated laser control system built from the ground up specifically for lighting designers to use not with laser control software, but with a modern lighting console such as GrandMA, Avolites, Chamsys, etc.

Featuring
DMX+RDM, ArtNet,
and in the future
Streaming ACN
(E1.31/E1.33),
Mercury can be
used from the
lighting console just
like any top-brand
moving light. It can
be discovered,
profiled, configured,
and programmed
directly from the
lighting console.

First Place, Fenning Technical Achievement

Static Laser Beam Auto-alignment Safety System KVANT I td.



During temporary or permanent outdoor installations of a high power static laser beam, a potential risk occurs if the beam deviates its original direction or the illuminated object sways with time, which may lead to a dangerous situations. We implemented a new solution to avoid such scenario and to make such installation safe.

To deal with the sway of the illuminated object (e.g. building, sculpture, target), or with the beam direction deviation that may happen due to mechanical instability or thermal expansion of the laser system or its base or mount, we developed a special self-alignment safety system to keep the beam targeted exactly where it is supposed to.

The laser beam aims at the center of some target located at far distance or mounted on the tower. At the same time the position of the beam in relation to the center of the target is monitored with the camera system and the beam position data is sent to the Master Controller (e.g. computer). If the system analyses that the laser beam isn't hitting the exact center of the target, it sends the new targeting data back to the laser display system. The laser targeting algorithm adjusts the tilt of the motorized beam reflecting mirror so the beam is aimed at the center of its target again.

This cycle happens during the start sequence each time and then continuously in real time or in certain time interval while the laser display system is in operation. If the correct alignment of the beam to its target isn't confirmed by the Master Controller within three safety check cycles, the power to corresponding laser display unit is cut off.

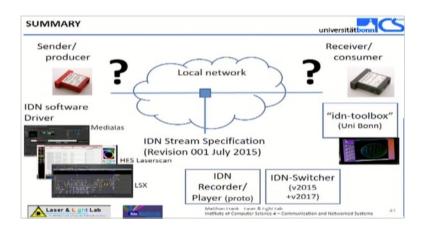
The camera system is equipped with a telescope objective to reach necessary spatial resolution. The software recognizes the shape of the target and any target shape can be programmed. In order to reduce background light a narrow bandpass optical filter can be installed in camera if necessary (although this works with 100% reliability for single color beam only).

Fenning Award for ILDA Digital Network Standards Technical Achievement

[no Third Place awarded]

Second Place, Fenning IDN Standards

ILDA Digital Network - Switcher University of Bonn, Institute of Computer Science 4 (Laser & Light Lab)



A piece of software that is able to switch, map and multiplex between different IDN-based senders and several IDN-based receivers in a local network.

The basic idea and motivation for an IDN-Switcher is based on the digital transmission of laser data over a local network. With IDN (the ILDA Digital Network) an open specification of data formats for laser projector control became available. IDN aims to provide an open standard/specification to allow for a unified way to connect laser show software with laser projecting devices. (IDN stream specification became an ILDA technical standard in October 2015).

Any IDN-enabled software may directly send laser data to IDN-enabled laser projectors or IDN-enabled receivers. An IDN-enabled switcher can

be installed in the network (on a dedicated computer like a laptop, an embedded device, or similar) to control the flow of laser data between senders and receivers, allowing to switch on/off individual sources, map sources to projectors and even map single streams to several projectors or combine several streams onto a single projector. The IDN-Switcher

- supports both the IDN continuous mode (wave mode) and IDN discrete mode (frame mode).
- works with the Dexlogic ISP StageFeed, which can be used to connect to legacy (non IDN-capable) devices via ISP DB 25 and feed IDN wave mode streams with 100 kHz sampling into the IDN local network.
- is able to map single IDN wave mode streams to one or more IDN receivers.
- is able to map several, independent IDN frame mode sources to one of the IDN receivers (using the IDN channel principle).

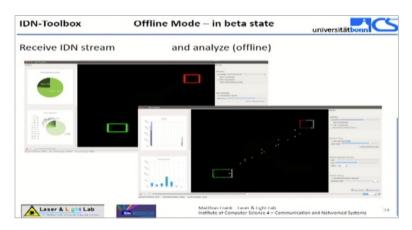
Several laser frames will be projected one after the other in an interleaved way by the IDN receiver.

The IDN-Switcher can be understood as a device (hardware + software combination) that helps to control the access from a variety of laser show software sources to a number of available receivers (laser projectors).

First Place, Fenning IDN Standards

ILDA Digital Network - Toolbox

University of Bonn, Institute of Computer Science 4 (Laser & Light Lab)



The IDN-Toolbox is software that can be used to receive IDN streams on a laptop or desktop computer. The IDN stream(s) can either come directly from software being able to generate IDN streams (like Medialas, HE Laserscan, LSX, ... - as already being demonstrated by Uni Bonn at recent ILDA meetings), or an IDN stream may be generated using an ISP-DB25 to IDN converter (like the StageFeed ISP from DexLogic).

In the latter case the IDN-Toolbox can be used together with any laser show system, attaching the converter to IDN to the ISP- DB25 output of the system (e.g. connecting to LaserGraph DSP, to JMLaser Netlase, to Pangolin FB3/FB4, or any other laser DAC with ISP-DB25 output).

The IDN-Toolbox can visualize the laser stream/frame data on a computer monitor (similar to the laser preview that many laser show systems provide). However, when the IDN-Toolbox receives data according to the IDN continuous mode (aka "wave mode"), either directly generated from software or coming from an ISP-DB25 to IDN converter, the scan speed and scanning effects (flickering, low scan speed) can be visualized with the IDN-Toolbox as well. If the graphic driver/card of the computer is sufficient, the visualization works with 60 fps (frames per second).

Furthermore, the IDN-Toolbox is able to analyze the received laser stream/frame data. Blanking points/lines will be made visible. Statistical data like point durations/point repetitions will be available (i.e. to identify possible "hot spots"). Histograms can be used to display the analyzed data, e.g. histograms of color values, histogram of distances between consecutive laser points, and others.

The initial concept of the IDN-Toolbox was presented and a very early prototype was demonstrated at the Advanced Technology Workshop at the ILDA meeting 2016 in Baltimore. At the ILDA meeting 2017 in Bratislava (ATW and IDN seminar), the stable version of the IDN-Toolbox was demonstrated and a use case of integrating the IDN driver into the Dynamics software with help of the IDN-Toolbox has been reported on.

Laser Safety Course Students

ILDA offered three laser safety courses immediately prior to the 2018 Conference.

These students who attended the courses and, for the LSO course also passed the test given at the end of the course, will receive their certificates of attendance after the Awards Presentation.

Laser Operator Course
Thomas Nugent

Laser Safety Officer Course

John H. Dickson Cameron Garbos Meganne Money Nick Squire Sally Steranko Nevin Tarnowski

2018 Career Achievement Award



Glenn Thomas



Laser shows were first popularized by Laser Images Inc. through their "Laserium®" shows in planetariums.

Laser Images' Glenn Thomas pioneered the art of live performances of abstract laser imagery with music. During his 27(!)-year career as the senior laserist for Laserium® at the Griffith Observatory in Los Angeles from 1975 to 2002, Glenn performed approximately 12,500 live

shows that both inspired and influenced those of us who followed in his footsteps.

Laser shows were presented very differently during Glenn's career. They were performed in the totally darkened environment of a planetarium theater with a single ion laser powering the innovative Laserium® projector. It had four X-Y scanner pairs and an extensive array of optical effects that even today have never been equaled. The original Laserium® shows consisted entirely of abstract laser imagery that was performed live. The laserist controlled all aspects of the image composition (such as harmonic frequencies, size, position, movement, color, optical effects, etc.) from a sophisticated console which was similar to an electronic music synthesizer — with a multitude of potentiometers, switches, and even joysticks.

Glenn played the console just like a musical instrument and elevated Laserium® shows to become synonymous with visual music.

In a very real sense, the laserist was the star of the show. A talented laserist was a lot like a rockstar guitarist who would drive audiences

wild with their virtuosity. Similarly, audiences at live planetarium laser shows would erupt into applause after an especially exciting performance by the laserist.

And Glenn was one of the most renowned and accomplished laserists of this bygone era of live laser shows. He was a master of his instrument – like Yo-Yo Ma is to a cello.

Laserium® founder Ivan Dryer, honored as the first recipient of the ILDA Career Achievement Award, remarked after one of Glenn's performances that it wasn't just entertaining but that it was a transformative experience. Pretty high praise!

It should also be noted that Glenn was sent to Laserium planetarium installations worldwide to teach other laserists how to perform. Consequently, his influence was experienced by literally millions of audience members.

Considering Glenn Thomas's lengthy career and unique artistic accomplishments, he is most deserving of ILDA's highest recognition.

ILDA has published online a book by Glenn Thomas, "Laserium® Laserist: The Greatest Job on Earth." It is at http://www.ilda.com/thomas.htm

Glenn joins these past CAA recipients:

1989	(not awarded	2010	2014
Ivan Dryer	1994-2003)	Lothar Bopp	Tim Walsh
1990	2004	2011	2015
Seiji Inatsugu	Patrick Murphy	Stephen Heminover	Dirk Baur
1991	2006	2012	2016
Floyd Rollefstad	Doug McCullough	Tom Harman	Dr. Alexander Timofeyev
1992	2007	2013	2017
Jennifer Morris	William R. Benner, Jr.	Pavol Kubošek	Alex Hennig
1993 Robert Mueller	2009 Greg Makhov		

