

zero<sup>®</sup>88



09

From Lighting Design to Lighting Innovation

## Product Guide

English 18.0

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## From Lighting Design to Lighting Innovation

Providing professional quality products at affordable prices is an ethic that has driven Zero 88 for over 35 years. From the ground breaking Lightmaster 601 launched in 1972 to the latest consoles available today, Zero 88's products offer outstanding value for money.

### Research & Development

A combination of experience and innovation ensure our products make the best use of latest technology and materials. Up to the minute 3D modelling techniques, surface mount technology and innovative software design are used to drive down costs and make even complicated products affordable.

### Manufacture

Our small batch, short lead time policy coupled with our commitment at all levels of the business to continually improve the manufacturing process, has resulted in Zero 88 being able to respond rapidly to demand for all mainstream product lines.

A key success factor in the small batch strategy has been the development of strategic partnerships with a number of key suppliers. Zero 88's policy is to outsource the primary manufacturing processes such as metalwork, printed circuit boards, coils and transformers. By actively developing partner relationships with our suppliers, Zero 88 has been able to benefit from their years of experience in their specialities.

These benefits help us deliver the highest quality manufactured product for the best price possible.

### Global Distribution

Zero 88's warehouse facility provides distribution support for our agents around the world.

Our streamlined logistics system enables us to process and dispatch most orders from our Welsh base with great efficiency. This has been critical in allowing us to service our extensive distributor network. Our export experience together with our global dealer network ensures we are able to service your needs anywhere in the world.

Please visit our website regularly to ensure you have the latest technical information, for news on product releases, to find your nearest dealer, to download the latest software, to get technical support or simply to let us know what you think of our products.

Please refer to Page 19 for more information.



## Lighting basics

In choosing the right product for your lighting application, you often have to overcome a lot of technical jargon. To try and help, we have put together a rough guide to some of the terms that are commonly used.

### Dimming

A dimmer is the part of the lighting system that connects to the mains supply and controls the amount of electricity going to each of the lights. Normally, each dimmer channel will have its own circuit breaker to offer protection against overload or electric shock.

As you look through the Zero 88 dimmer range, you will see different models with different specifications. Taking the Rack 6 as an example, we would describe it as a 6 x 10A dimmer. This means that it has 6 channels, and each can handle up to 10 Amps of load.

An Amp is a unit of electrical current which can be calculated quite simply from Watts and Volts.

As an example, if we have a theatre light which has a 650 Watt lamp, the equation for working out Amps is;  $\text{Amperage} = \text{Wattage} \div \text{Voltage}$ .

The Voltage is simply the mains supply voltage in your country (e.g. in the UK it is 230 Volts), the Wattage we know is 650 Watts. So, the Amperage is:  $650 \div 230 = 2.8 \text{ Amps}$ .

A dimmer channel with a rating of 10 Amps could easily control this light. In fact, it could control three of these lights together.

Working it out the other way around, we can see that a 10 Amp dimmer could control  $10 \text{ Amps} \times 230 \text{ Volts} = 2300 \text{ Watts}$ .

Zero 88 make a range of dimmers from 10 Amps to 25 Amps.

In terms of the physical connections to the dimmers, there are many different choices available. There are versions with 'hard-wired' terminals, with an individual socket for each dimmer channel, and also there are 'multipole' connectors, which can carry many dimmer channels. The exact choice will depend on your application.

For control, the dimmers will have connections for Analogue, DMX and often for both; again the choice will depend on your application. Most new systems will use DMX to connect the dimmers and control desk as this offers a flexible, reliable solution.

### Control Desks

Control Desks, Boards, Consoles, Tables..... They get called many things but they all essentially carry out the same job.

Broadly speaking, control desks fall into two main categories: Manual Control and Memory Control.

A manual control desk utilises a single slider or 'fader' to control each of the dimmer channels in the system. As the operator pushes the fader up, the corresponding light will increase in brightness.

Manual desks are often referred to as 'Single Preset' or 'Two Preset' desks. A Single Preset desk allows the operator to set-up a combination of lighting levels for a number of channels in the system and fade them all up together in a complete lighting 'scene'. A 'Two Preset' desk allows an additional scene to be 'pre-set' in the background ready for a smooth transition on stage. Using a Two Preset desk and a written list of the lighting changes required, a simple show can be run quite easily.

Memory control desks are basically specialist computers, which can store and replay all of the information about a lighting show. The features available vary considerably depending on the model you have, but all types allow you to pre-program lighting scenes containing all of the channels in your system and replay them very simply.

Basic memory lighting controllers such as the Jester (page 8) allow very quick and easy recording of the different lighting scenes and let you replay them very simply. It is possible to add things such as times so that the lights fade smoothly.

Advanced memory control, like the Leap Frog (page 5), allows very complex lighting sequences to be recorded and larger lighting systems to be controlled.

The actual control of the desk will vary with size. Many small memory desks still use a 'fader' system to control the dimming channels, whereas a larger desk may use a keypad or screen for its control.



## Key Features ORB

- 2048 Control Channels, fully patchable to 4 DMX Universes. Output via 5 Pin XLR and Ethernet
- 600 (30 x 20 Pages) Submasters via DMX In
- 1000 Cue Stacks
- 1000 Cues per Stack
- 2 Playback Master faders
- Go Button playback
- Fully customisable effects engine
- 1000 each of Colour, Beamshape, Position and Effect Palettes
- Integrated colour picker
- 1000 Fixture groups
- Auto palettes, groups and fixture macros
- 1000 User Definable Macros
- 4 Onboard USB ports for software updates, show backups and connection of accessories
- 2 x XGA monitor outputs
- Onboard fixture library
- Move on Dark
- Familiar Command Line interface
- Integrated Trackball for precise moving light control



Designed as a 21st Century lighting controller, the ORB is a fully integrated console, providing control over conventional, LED and intelligent fixtures. Its design has incorporated user feedback from across the globe, and pays particular focus to the requirements of the theatrical user.

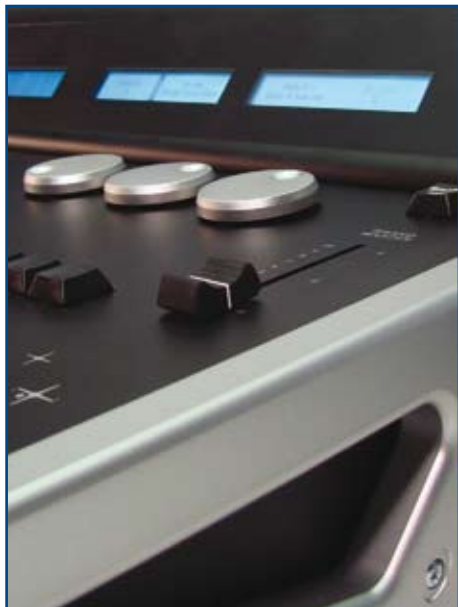
The ORB uses the powerful ZerOS operating software, which has been developed over the last four years and builds on the knowledge gained from our successful Leap Frog live performance consoles. The ORB provides a combination of traditional theatrical control philosophy and an adaptable hardware platform, offering feature rich, sophisticated control over moving lights and LED fixtures.

ORB offers 2048 control channels as standard plus support of up to 1000 cue stacks and 600 submasters. 1000 assignable playback faders can be used to playback cue stacks or submasters. Submasters can also be triggered by an external fader bank using DMX in. Utilizing a numeric keypad, integrated track ball, automatic palettes and syntax keys, programming on ORB is familiar to both beginners and experienced professionals.

Further software features include on screen colour pickers, gobo image display and a sleek, clear user interface which brings the latest in lighting technology to your fingertips.

With such a powerful software base behind it, ORB lets you make dynamic 'on the fly' adjustments, provides advanced tracking updates and enables creation of powerful effects from the fully customizable effects engine. There are 1000 palettes for each attribute as well as macros and groups, 1000 cue stacks of 1000 cues and 2 playback masters adding conventional A/B cross fading to a powerful and sophisticated moving light controller.





A familiar programming interface gives ORB users the flexibility of customising displays and default settings, truly making the desk their own. Show files can be cross-loaded between the Leap Frog 48 & 96 and Frog 2 and imported from the original Frog range and ASCII show files. Fixture swap out to any of the internal fixture library of 1900 fixtures makes the desk ideal for touring shows, whilst external touchscreen support\* and an ergonomic design mean the console will be equally at home in a venue for every day use. No matter your show format, ORB gives you the tools achieve your lighting goals.

Industry standard Ethernet protocols and 5 pin XLR connectors gives flexibility in output options, whilst Ethernet support for visualiser and free Windows Mobile software provide interconnectivity options to suit your system. By adding a suitable Wireless Access Point and Windows Mobile device, the desk can support a wireless remote control for channel and syntax control. A free Off Line Editor is also available from the Zero 88 website.

(\* via USB – please check with Zero 88 for a list of supported screens).

## Specifications

### ORB

201 (H) x 1000 (W) x 462mm (D)

Weight : 20Kg / 44lb

# Frog 2



Following the phenomenal success of the Frog range Zero 88 developed the Frog 2 - a new console which takes the Frog philosophy of ease of use and value for money to a whole new level.

## Key Features

### Frog 2

- 2048 Control Channels
- 200 Playback stacks
- 1000 User Definable Faders
- 2000 User Definable Buttons
- Colour Touchscreen
- Parameter level programming
- Comprehensive effects engine
- Auto Palettes
- Macros
- 2 x SVGA Monitor outputs
- 3 x USB ports
- CD Writer
- 2 opto isolated 5 Pin XLR's per universe
- Ethernet

## Specifications

### Frog 2

206 (H) x 651 (W) x 590mm (D)  
Weight : 15Kg / 33lb

Frog 2 adds a new dimension to the Frog range of consoles. Designed to be used in the most demanding lighting control environments the Frog 2 will appeal to users looking for ease of programming, comprehensive playback choices, live busking or stand alone control of architectural type events.

The Frog 2 can control up to 2048 channels of DMX. DMX connection is either through traditional 5 Pin XLR connectors or via Ethernet. All the facilities needed for future RDM and ACN compatibility are included in the hardware.

To allow for effective control the Frog 2 offers multiple cue stack playback, comprehensive palette selections and effects libraries. The use of macros allows for the automatic programming and playback of shows.

For busking in live environments there are 2000 user definable buttons and 1000 faders that can be assigned to control anything from a single channel to a group of fixtures or a complete memory.

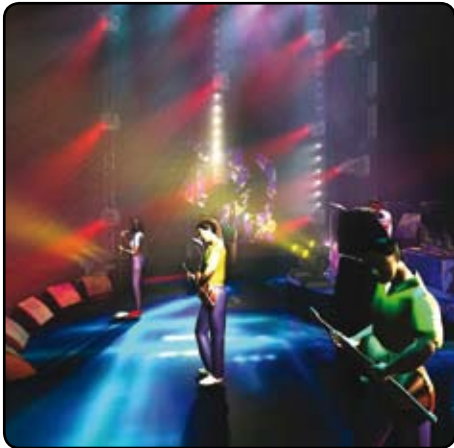
Using macros these controls can be loaded from a memory or from a cue stack as part of the running of a show.

Comprehensive feedback is provided via two monitors and an onboard touch screen. It is possible to display up to nine different sets of information simultaneously. It is possible to define specific user views to allow each user to have an operational environment best suited to their needs.

Storing shows is possible on either a USB memory stick or using the built in CD writer. There are 3 USB ports on the Frog 2 making it possible to use a variety of USB accessories including touch screen monitors.

The mechanical design of the Frog 2 has ensured that it has the smallest footprint possible while ensuring all the controls are ergonomically accessible. It is also possible to operate the console while it is in its flight-case base without damaging any connectors.

# Light Converse



Zero 88 has partnered with Light Converse to produce an easy to use lighting visualisation package.

It is possible to pre program your lighting looks cutting down on programming time in the actual venue. Light Converse is based on gaming software and offers the best 3D visualisation option currently available. Smoke, shadows and colour mixing are all extremely realistic in this package.

The built in bidirectional features of Zero 88 Light Converse mean that the program can be used as a tablet when programming with any of the new generation of Frog Consoles. A patch in Light Converse will automatically be entered into the console. It is possible to set positions for moving lights by simply clicking on a point on stage.

With CMY fittings the Light Converse Colour chart makes finding the right colour simple. All this will greatly speed up programming.

If you own any other DMX console (such as the Jester ML24) it is still possible to use Light Converse to pre program. A simple DMX to Ethernet box enables the data from the console to be transmitted to Light Converse.

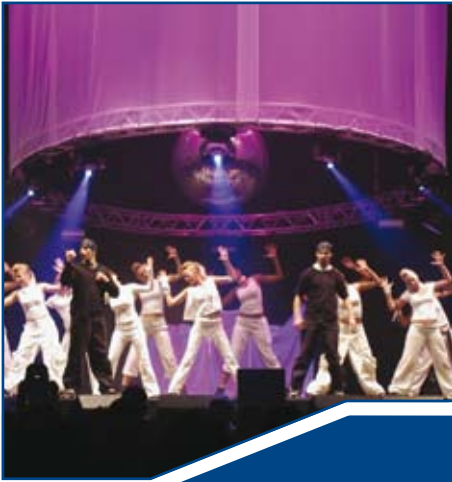
Light Converse has a comprehensive fixture library and also contains all the elements need to construct a stage, truss, scenery or add actors. Simple click and drag of objects means setting up the venue and set are simple.

## Key Features Light Converse

- Affordable, easy to use visualisation package
- Comprehensive fixture library
- Comprehensive truss and scenic library
- Laser and Pyro effects
- Bidirectional when used with Leap Frog 48/96 or Frog 2
- Easy to connect to any DMX desk
- Realistic visualisation in 3D
- Optional DMX interface



# Leap Frog 48 & 96



## Key Features Leap Frog

- Fully Tracking console
- 248 devices (Leap Frog 48)
- 296 devices (Leap Frog 96)
- USB support for show files storage and touchscreens
- 4 universe optically isolated DMX outputs, with a further two available over Artnet
- New Colour Picker
- 8 LCDs on the front panel (48) / 12 LCDs on (96)
- Multi function keys speed up programming
- RDM ready hardware
- XGA monitor output for clear user definable displays
- Optional hardware upgrade enables SMPTE/MIDI/ChilliNet
- Submaster playback faders now with directly recordable chases
- Submaster faders can also be used as playback faders if required, giving separated cue stacks
- Power Switch
- Full context sensitive online help



Developed using feed back from operators of our original Frog consoles the Leap Frog range maintains our philosophy of feature packed products using latest technology all at an attractive price.

Current Frog users will find a familiar ergonomic hardware platform but that is where the similarity ends. The hardware set has been expanded considerably. The desks now feature four DMX universes as standard, USB storage, external touch screen support, multiple onboard LCD displays and multifunctional keys.

The key change however is in the software platform. Consistency of operation with the existing desks is maintained but the new software allows users to achieve more.



The Leap Frog 48 allows control of up to 248 devices, whilst the Leap Frog 96 offers control of up to 296 devices. These can be allocated to up to 400 groups, 400 colour, beam and position palettes can also be recorded to provide the user with quick access when programming or operating live.

The Leap Frogs' effects engine can now be used for all attributes. Fly Ins, Can Cans, Rainbows and Iris Pulses can all be programmed simply using the onboard effects engine. Offsets and rotation settings allow for complex and versatile unique effects to be created and stored as effect palettes. The new colour picker allows for precise colour selection with a mouse or optional external touch screen.



# Leap Frog 48 & 96



The Leap Frog software allows for advanced programming and complex shows with parameter level programming, full tracking and split times.



Control of attributes is done by using the ergonomically positioned control wheels. It is now possible to set the sensitivity of these wheels.

A programming window means it is possible to try cues, park fixtures, release fixtures and override playbacks greatly enhancing the operation of the Leap Frogs.

Shows recorded on the Leap Frogs can be transferred to Frog 2 and vice versa. With the option of SMPTE/MIDI/ ChilliNet the Leap Frogs can be used to control architectural or multimedia environments. The Leap Frogs make use of the ArtNet Ethernet protocol meaning it is possible to use a PDA together with WiFi to control the desks remotely.

An offline editor is available allowing users to pre-patch shows, edit cues, palettes and submasters or simply check timings.

Finally the Zero 88 fixture library of over 1900 different moving lights is standard on the Leap Frogs. Regular updates, which can be downloaded from the Zero 88 website, ensure that users will always have the correct fixture profiles. Fixture profiles can be edited on the desks allowing users to set home values, top sets or switch pan and tilt attributes at a venue.

After sales support is extensive with regular training, a dedicated user support forum and regular software updates all ensuring users have the best possible tools to achieve their objectives.

## Specifications

### Leap Frog 48

115 (H) x 765 (W) x 575mm (D)  
Weight : 16Kg / 35lb

### Leap Frog 96

115 (H) x 1205 (W) x 575mm (D)  
Weight : 26Kg / 57lb

# LightFactory



## Key Features

### LightFactory

- 10,000 shortcuts providing instant access to any effect, palette or cue
- Playback unlimited effects at the same time
- Music, MIDI and Timecode triggers
- 5 different effects engines
- Large scale LED/Matrix wall effects
- Multi touch screen ready for real on-the-fly control
- User level access to prevent show and setup tampering
- Multiple theatrical cue stacks
- Simple and affordable upgrade paths to more universes
- Interface Builder tool to create and deploy customised user interfaces for installations

## Minimum System Requirements

- Processor : Pentium 4 or greater
- RAM : 512Mb
- Hard Drive: >200Mb
- Resolution : 1024 x 768
- Operating system: Windows 2000, XP or Vista
- USB : 1 free port for licence/output dongle



LightFactory is a unique, PC based lighting control system. It has been designed to allow any lighting engineer, operator or designer to purchase an affordable, extremely reliable lighting controller which they can become completely familiar with and that works in every situation.

Its portability and familiar user interface make it perfect for use on a laptop PC. The system is fully expandable, giving an upgrade path from a single DMX universe up to 64 universes as your system grows. Support for LED fixtures, moving heads and generic dimmers is built in and fixtures can be combined to create matrices which can be mapped to video, still images or motion paths.

LightFactory controllers have been used in an extensive range of lighting applications, from running major stadium spectaculars to local theatre pantomimes and lighting in night clubs.

LightFactory is ideally suited to education. The software may be run on multiple PCs at once and its intuitive PC style makes it easy to use and teach. Screens such as the stage layout view provide simple point and click use, enabling users to create sophisticated shows using familiar Windows® philosophy.

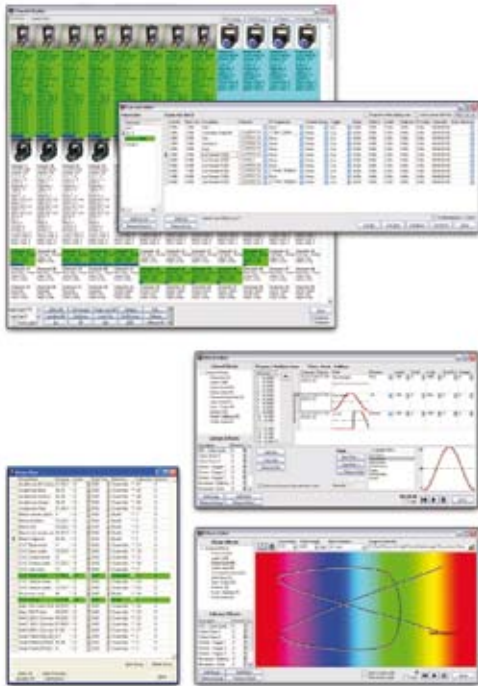
LightFactory consists of software and small licence dongles, making them easy to lock away and maintain.

Venues can also utilise existing PC hardware as LightFactory can be run on any modern computer.

In theatrical environments LightFactory really comes into its own. Arguably the only true theatre console on a PC, LightFactory responds to standard theatrical syntax (1 thru 5 @ 50), features familiar channel views and has a proper theatrical cue list with fade times, dwell times, follow on, etc. Tracking backup is also possible with a second PC and LightFactory also offers timecode support.

For live events LightFactory's incredibly powerful effects engine enables users to quickly generate complex moving light effects and run an unlimited number of effects at the same time.

Built in pixel mapping and matrices for programming LED fittings can be combined with media playback for audio and visual files providing an integrated sound, light and video solution. You can add any DMX desk as a fader wing, providing direct control of up to 1000 submasters.



LightFactory also caters for architectural applications with features such as scheduled tasks for triggering events, customisable button pages for simple playback and an interface builder which allows remote control over any ethernet system. LightFactory can be installed alongside remote desktop applications for complete external control and commissioning.

User level access control including password protection is included to prevent tampering and tailor the software to meet specific user needs.

LightFactory ships with all you need; a CD with software, a USB Dongle to allow DMX transmission and a licence. Set up is simple, turning any modern PC into a powerful lighting console.

LightFactory is compatible with WYSIWYG, Capture Sweden and Light Converse visualisation packages, and also supports ethernet DMX transmission via Artnet and Zero Wire DMX. Palmtop remote software is also available as a free download, enabling remote full command line control.

## LF Playback and Program Wings

The LF Playback and Program Wings are Ethernet based allowing you to connect as many devices as you want to the software. The wings are the perfect add on to the LightFactory software for those wanting hands-on control.

The LF Playback Wing provides either submasters or playbacks, with customisable behaviour. Submaster pages can be changed and real-time feedback is provided in LightFactory. Many Playback Wings can be connected to the same LightFactory system for a truly scaleable system. The behaviour of the wing can be customised as required, using friendly PC tools.

The LF Program wing gives a truly familiar interface to LightFactory. Featuring control wheels and syntax keys, the wing can be connected and customised using friendly PC tools. Encoders allow live manipulation of data, whilst familiar syntax keys give intuitive control which will be familiar to any lighting desk user - making LightFactory into much more than a PC application.

## Key Features

### LF Playback Wing

- Ethernet Interface
- 40 Customisable Keys
- 10 Playback Faders
- 2 Digit 7 Segment LED display
- PAGE UP & PAGE DOWN Keys
- Large GO & BACK Keys
- Upgradeable firmware
- External power supply

### LF Program Wing

- Ethernet Interface
- 62 Syntax Keys
- Large LCD display
- PAGE UP & PAGE DOWN Keys
- 3 Encoder wheels
- Upgradeable firmware
- External power supply

## Specifications

### LF Playback/Program Wing

50 (H) x 340 (W) x 241mm (D)  
Weight : 2.5Kg / 5.5lb

# The Jester Range



The Jester range is a series of compact lighting consoles from Zero 88. With standard, moving light and theatrical style versions, the Jester range provides users with a powerful set of programming and playback tools in easy to use and economical formats.

## Generic Features All Jester Consoles

- Playback stack
- Patching to 512 DMX channels
- DMX In allowing snap shots of all 512 DMX channels
- VGA Monitor Port
- USB storage
- MIDI Notes
- Lock Function
- LCD display for stand-alone use

## Standard Jester Consoles

Generic Features plus;

- 12/24 or 24/48 channels of control
- 24 or 48 Submasters
- 12 or 24 Auxiliary Buttons
- 19" rack mount option

## The Jester Range

All consoles are based on a comprehensive set of core features, with additional functionality tailored to meet the needs of different applications.

All Jester consoles feature a monitor port as standard. Channel, cuestack and submaster data can all be viewed using the monitor. An onboard LCD screen also provides the user with all information needed to operate the console allowing it to be used without a monitor if required.

A USB port allows users to back-up shows that have been recorded on the Jesters consoles.

A DMX In option allows any Jester to be used as an economical back-up console for other desks. It is possible to snap shot a full 512 channels of DMX into submasters or the memory stack.

The Jester range has three operating modes, allowing it to function as simple two scene preset desk through to a fully functional memory console.

In playback mode the user retains full access to all the channels on the console. This allows live changes to be made to specials instantly.

MIDI Notes can be used to trigger channels or submasters. A sound to light jack allows for chases to be sequenced to music. Chases can be recorded into the memory stack or directly into submasters.

## Jester 12/24 & 24/48

Our standard Jester consoles offers direct control of up to 48 channels of DMX via submasters or a traditional theatre playback stack. These are ideal for dimmer only installations which do not require moving light functionality.

The Jester 12/24 & 24/48 also feature 12/24 auxiliary buttons which can be used to trigger simple DMX devices such as scrollers, smoke machines or strobes.

A 19" rackmount version of the Jester 12/24 is also available.



# The Jester Range

Console	Dimmer Channels	Submasters	Auxiliary Buttons	Moving Lights	Palettes	Groups/Macros	Dimensions (mm)	Weight
Jester 12/24	✓ 24 (faders)	12 x 2 pages	✓	✗	✗	✗	90 x 452 x 278	4.5kg / 10lb
Jester 12/24 (19" rackmount)	✓ 24 (faders)	12 x 2 pages	✓	✗	✗	✗	90 x 483 x 278	4.5kg / 10lb
Jester 24/48	✓ 48 (faders)	24 x 2 pages	✓	✗	✗	✗	90 x 710 x 278	6.5kg / 14.5lb
Jester ML	✗	Only Via DMX In	✗	✓ 30	✓	✗	90 x 452 x 278	4.5kg / 10lb
Jester ML24	✓ 24 (faders)	12 x 20 pages	✗	✓ 30	✓	✗	90 x 710 x 278	6.5kg / 14.5lb
Jester ML48	✓ 48 (faders)	24 x 20 pages	✗	✓ 30	✓	✗	90 x 970 x 278	12kg / 26.5lb
Jester TL	✓ 200 (syntax)	Only Via DMX In	✗	✓ 30	✓	✓ 30	90 x 452 x 278	4.5kg / 10lb
Jester TLXtra	✓ 200 (syntax)	10 x 20 pages	✗	✓ 30	✓	✓ 30	90 x 710 x 278	6.5kg / 14.5lb



## Jester ML & Jester ML24/ML48

The Jester ML lighting consoles offer users a cost effective solution for control of up to 30 moving lights. All Jester ML consoles have effects engines, the ability to store palettes or preset focuses and use the comprehensive Zero 88 fixture library.

The Jester ML offers playback via a traditional cue stack and can also be used together with traditional Jester consoles allowing an upgrade path users who wish to add moving lights to their rigs.

The Jester ML24 & ML48 also offer direct control of 24 or 48 dimmer channels. Playback is either via the submasters or through a traditional theatrical cue stack.

## Jester TL & TLXtra

The Jester TL consoles are the newest members of the Jester range. They offer control of 200 dimmer channels from a numeric keypad using industry standard command syntax. Up to 30 fixtures can be controlled using fixture select buttons and three control wheels. Playback is by a traditional theatre playback stack, or submaster control using multi-function-buttons (an external DMX desk can be connected as a fader bank).

Channel selection groups and fixture palettes allow quick selection of common channel sets and fixture looks. Macros allow frequently used sequences of key presses to be recorded and replayed. A built-in effects engine allows quick generation of movement effects for fixtures.

Up to 24 submasters can be controlled using multi-function-buttons, or by using a DMX desk connected to the DMX Input as a 'wing'.

The Jester TLXtra also offers 200 submasters (20 pages of 10) which negates the need for an external 'wing' and provide a totally integrated control solution.

## Jester ML Consoles

Generic Features plus;

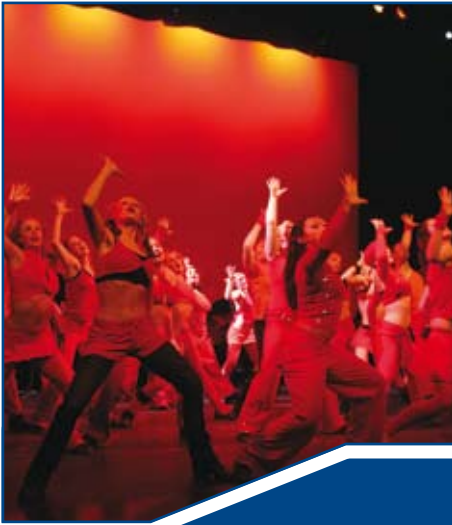
- 30 Moving Lights
- 12/24 or 24/48 channels of control (Jester ML24 & ML48 only)
- 20 x 24 / 20 x 48 Submasters (Jester ML24 & ML48 only)
- 30 each of Colour, Beamshape & Position Palettes

## Jester TL Consoles

Generic Features plus;

- 200 dimmer channels
- 30 fixtures
- Playback stack with programmable times
- 480 Submasters (20 pages of 24) controlled from Multi-Function-Buttons or DMX Input
- 200 Submasters (20 pages of 10) on local faders. (Jester TLXtra only)
- 30 Groups and Macro's
- 30 each of Colour, Beamshape & Position Palettes

# Juggler & Level 6



## Key Features Juggler

- Two Preset Operation
- 12/24 Channels
- Flash Buttons
- 12 Sequences of 99 Steps
- Multiple Channels per Step
- Sequence Master
- Speed Control
- True Dipless Crossfade
- Grand Master
- Wide Mode

## Specifications

### Juggler

88 (H) x 483 (W) x 279mm (D)  
Weight : 4.5Kg / 10lb

### Level 6

53 (H) x 222 (W) x 110mm (D)  
Weight : 0.9Kg / 2.0lb



The Juggler provides manual lighting control for the smaller stage, offering the perfect solution to uncomplicated lighting plots.

The Juggler is a two preset, 12 channel desk with a wide mode feature that allows 24 channel operation. Channel faders are set in a conventional two preset layout for easy crossfading. Each preset has its own fade time control allowing smooth fades to be achieved over periods as long as 5 minutes. All crossfades are true dipless. This ability to hold constant lighting levels and varying fade times allows sophisticated lighting plots to be replayed simply and accurately.

The Juggler has channel flash buttons enabling the creation of lively lighting effects. These can be disabled by the flash on/off switch to prevent accidental use.

The Juggler also offers a sequence feature allowing users to program chases or play-back stacks. Up to 12 sequences of 99 steps can be recorded on the desk. (Only 1 of the 12 sequences may be output at any given time).

Sequences can be played back using the auto function with the ability to set the chase time using the speed pot. Sequences can also be stepped through manually. In manual mode the time pot used for the A/B faders can be used to set the fade time between steps. To allow seamless integration of a chase into a look there is a sequence master. Sequence steps can contain single or multiple channels.

## Level 6

The Level 6 is an excellent value manual lighting control desk and is perfect where minimal control is all that is required.

The Level 6 is a six channel single preset lighting controller with a master fader and "power on" LED. It is available in Analogue and DMX versions for simple, straight-forward control.



**SHoW DMX**



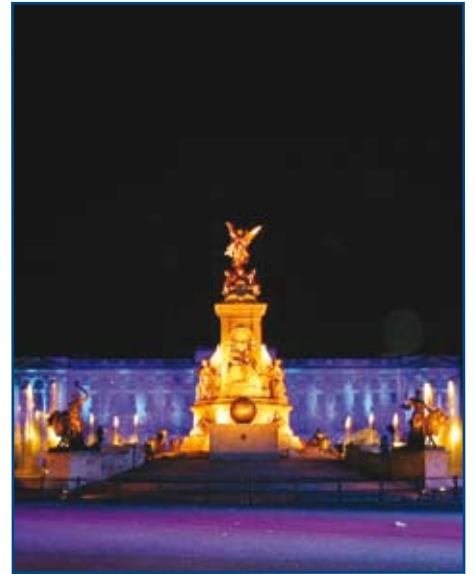
**Demux 24**



**Cable Test**



**Ethernet Box**



## SHoW DMX

City Theatrical's double award winning SHoW DMX utilizes a patent pending radio that synchronizes the radio's hopping pattern with the incoming DMX packet to ensure the highest levels of data fidelity ever seen in wireless DMX.

The SHoW DMX Transmitter has been designed specifically to broadcast DMX and its frequency hopping pattern is timed to coincide with each arriving DMX packet. Only complete DMX packets are broadcast, assuring the highest data fidelity levels attainable.

Three user-selectable methods are available : Limited Output Power (from 5-125mW FCC), Limited Bandwidth (select full bandwidth or any one of three sub bands), and Limited Burst (output any number of channels up to 512 in groups of 32).

## 1 Universe Ethernet Box

The 1 Universe Ethernet Box is a stand alone Ethernet to DMX converter, which can function as an Input or Output node to any Ethernet DMX installation. The 1 Universe Ethernet Box supports the Artnet protocol and allows for remote configuration via the Node Management Utility. This box can be used to add an additional DMX universe (over Ethernet) to our Leap Frog and Frog 2 consoles.

## Demux 24

The Demux 24 is a 24 channel, 1U high, rack mounted DMX to Analogue converter. Manufactured to the highest professional standards, the Demux 24 offers users the ability to use older analogue equipment with more modern DMX512 controllers. It is possible to select individual analogue outputs as either negative or positive. The Demux 24 also allows for the storage of 12 memories that can be manually played back.

## Cable Test

The Cable Test is an indispensable and easy to use DMX tool.

Made from brushed aluminium and shipped in a belt holster, the Cable Test utilises 9 diagnostic LEDS to allow a variety of test functions.

The unit can test for the presence of DMX; detect reversed polarity in cables as well as checking all wires are connected. Every technician needs a test device and this battery operated unit is priced to allow anyone to afford a good, easy to operate tester.

## Key Features SHoW DMX

- Patent pending 2.4GHz Frequency Hopping Spread Spectrum radios, optimized for broadcasting DMX
- RDM: Monitor and change your system from your laptop with our built in SHoW DMX Monitor system
- Art-Net and ACN capable
- Simple default Plug and Play mode
- Mounting/hanging bracket included

## Specifications

### SHoW DMX

60 (H) x 160 (W) x 130mm (D)  
Weight : 0.9Kg / 2.0lb

### Demux 24

44 (H) x 482 (W) x 128mm (D)  
Weight : 3Kg / 6.6lb

### Cable Test

128 (H) x 22 (W) x 22mm (D)  
Weight : 150g

### 1 Universe Ethernet Box

40 (H) x 58 (W) x 119mm (D)  
Weight : 260g

# Chilli Dimming Range



## Key Features Chilli

- 4, 6, 12, or 24 channels
- 10A, 16A or 25A per channel
- Easy wall mount installation, four screws
- 100% Duty Cycle
- 3 dimmer laws, selectable per channel
- User defined backup memory
- Channel Preheat
- Automatic frequency tracking 40 to 70Hz
- MCB per channel
- Optional incoming supply RCD protection
- Simple User Interface
- Variable level channel test
- Built in, switchable, DMX line termination
- Common Service applications need only a screwdriver
- Convection Cooling
- 12 memories
- 3 sequences
- Zoning options
- Switch pack option
- Programmable channel attributes:
  - Topset
  - DMX addressing
  - Preheat



The Chilli range offers a high density dimming solution whilst retaining ease of installation. The intuitive Chilli user interface allows operators to quickly set up and operate the dimmers.

Using intelligent design, the Chilli range offers an efficient and reliable solution to a range of dimming applications. The user interface, comprising a backlit, 16 button numeric keypad and LCD screen, ensures that even in the dark the full range of Chilli features can be accessed. DMX addressing, preheat and dimmer curves can all be set with minimum fuss.

The Chilli provides a built in programmable backup memory and a choice of responses to a DMX failure.

Installation of the Chilli dimmer is simple. The unit is located by two screws and secured by a further two. The front panel is easy to remove for installation and maintenance. The ease of installation and commissioning ensures a minimal time on site.

Two versions of Chilli Dimmer are available.

Standard Chilli dimmers feature single pole breakers whilst Chilli Pro versions are fitted with neutral disconnect breakers.

The Chilli dimmer provides exceptional control for DMX applications, but with the addition of our external control accessories, a host of new applications and system designs become available.

With applications that range from controlling the lights in a small bar to high end theatrical control, the Chilli dimmer range provides an out-of-the-box solution for many different applications.

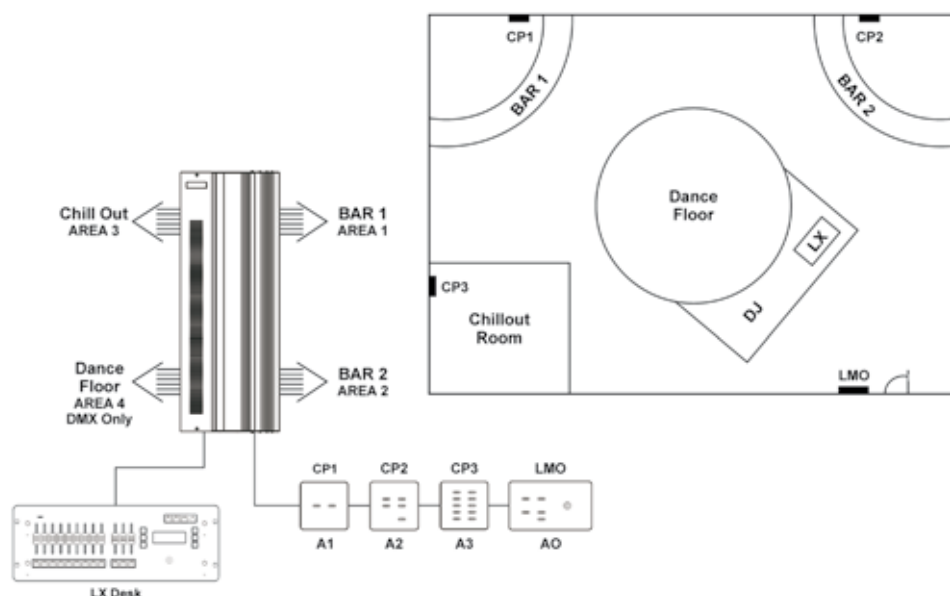
Using our custom-written ChilliNet protocol, the Chilli accessories provide simple and rapid installation tools for system monitoring, environmental lighting control and architectural systems.

Each channel of a Chilli dimmer can have an individual DMX address, preheat and a top-set level. 12 and 24 channel versions feature single pole + neutral MCB protection on each channel.

12 Memories can be stored on each dimmer and these can be used to create 3 chase sequences of up to 12 steps each.

4, 12 and 24 channel versions of the Chilli are available, along with a special 4 channel unit for controlling HF and DSI Ballasts.





Chilli has a number of features designed to meet the needs of the professional user including a variety of playback options, network capability through ChilliNet and comprehensive configuration options through the backlit onboard interface.

The ChilliNet system uses standard CAT 5 cabling to interconnect the units in the system. Units are daisy chained together up to the maximum network limits. CAN Bus provides a stable network protocol for ChilliNet to run over.

Zoning software allows users to assign any dimmer channel to any one of 10 zones or areas. This enables one dimmer in an architectural system to be used to control multiple areas within a room or environment.

Take a nightclub, which has 6 areas, each requiring 4 channels of dimming and localised control as an example. The zoning software enables one 24 channel dimmer to be split into 6 areas, each area having 4 channels and each area with its own control panel.

This allows for shorter installation time and costs as only one mains supply is needed and only one dimmer installed.

The zoning software provides

- 10 Area's/Zones
- 1 Master Area/Zone
- 12 Memories Per Area/Zone
- 3 Assignable Sequences Per Dimmer
- Alarm Input
- User Selectable DMX interface relationship – DMX on/off, DMX takes precedence, LTP or HTP.

## Specifications

**Chilli 4-10i**  
400 (H) x 220 (W) x 155mm (D)  
Weight : 7.0Kg / 15.5lb

**Chilli 12-10i**  
850 (H) x 325 (W) x 155mm (D)  
Weight : 20.0Kg / 44lb

**Chilli 12-10i Switch**  
550 (H) x 220 (W) x 155mm (D)  
Weight : 9.0Kg / 19.8lb

**Chilli 12-16i**  
850 (H) x 325 (W) x 155mm (D)  
Weight : 26.5Kg / 58.0lb

**Chilli 24-10i**  
1000 (H) x 632 (W) x 155mm (D)  
Weight : 47.0Kg / 103lb

**Chilli 24-16i**  
1000 (H) x 632 (W) x 155mm (D)  
Weight : 49.5Kg / 109lb

**Chilli 6-25i**  
850 (H) x 325 (W) x 155mm (D)  
Weight : 21.5Kg / 47.0lb

**Chilli 12-25i**  
1000 (H) x 632 (W) x 155mm (D)  
Weight : 26.5Kg / 58.0lb

# Chilli Accessories



## Key Features

### Control Panels

- Slimline design
- Illuminated buttons
- Up to 4 panels per dimmer
- Controls multiple dimmers simultaneously
- Brushed stainless steel and brushed brass finishes
- Simple connections
- Uses standard CAT5 cable

### Master Touch Screen

- Full dimmer remote control – all functions available
- Intelligent 'System Channel Mapping'
- Full Colour Touch Screen
- Simple connections
- Controls multiple dimmers simultaneously
- Can be used as a controller for any area

## Specifications

### Control Panels

86 (H) x 86 (W) x 27.5mm (D)  
Weight : 0.12Kg

### Master Touch Screen

145 (H) x 180 (W) x 60mm (D)  
Weight : 2.0Kg

### Netlink Bridge

94 (H) x 180 (W) x 57mm (D)  
Weight : 0.25Kg

### Last Man Out

86 (H) x 146 (W) x 27.5mm (D)  
Weight : 0.25Kg



## Control Panels

The Chilli Control Panel can be employed where simple scene setting is required. Available in a variety of configurations, the control panels provide direct access to the internal memories and sequences of the dimmer. Panels can be assigned to any one of the 10 zones.

Available in 2, 5 and 10 button configurations, the panels have been designed to fit any standard UK single gang back box allowing simple installation and are available in brushed stainless steel or brushed brass with illuminated buttons. Up to 50 Chilli Control Panels can be used on a single network, providing multi-point control and modern good looks.

A "Last Man Out" panel is also available. This panel features a 5 button control panel and a keyswitch, allowing for a supervisor to turn the network on or off from a single location. When the keyswitch is thrown, after a 30 second delay, the panel sends an "all off" command to the ChilliNet dimmers. The Last Man Out panel fits a standard double gang back box.

## ChilliNet Master Touch Screen

The Touch Screen can be used with any combination of Chilli dimmers, and provides full remote control and system monitoring. It uses an intuitive menu structure to allow for easy setting up of a ChilliNet network. This includes setting all of the functions of any dimmer in the network, as well as recording and playing back memories globally or for individual zones.

Using intelligent 'network mapping' the Touch Screen can be used to access system channel numbers directly, rather than working on a dimmer by dimmer basis. This means that channels can be quickly and logically addressed in large systems. This process can be done automatically if desired.

Finally the implementation of a timeclock allows for events to be played back at specific times of the day.

## Chilli Netlink Bridge

The ChilliNet Link Bridge is an interface that allows up to six independent ChilliNet systems to be linked together, to provide an overall 'master control' zone. The unit is ideal where more than 10 zones are used but overall control of the entire system is also required. The NetLink Bridge also features a fire alarm input for connection to building emergency systems.

## RS232 Interface

The RS232 Interface allows for the connection of Chilli Pro products to a range of control systems. Most commonly AMX and Crestron. This allows for the integration of a Chilli Network to AV, Sound and other types of equipment. Using RS232 it is possible to access individual channels, memories or sequences. It allows Chilli dimmers to be used in the most complex of architectural environments.



When it comes to high-end touring reliability is not an optional extra. The control system has to work day after day, no matter what is thrown at it.

## Spice

The Spice 1210, is a tough rack mounting dimmer designed to offer a professional range of features while offering Zero 88's standard ease of use, reliability and affordability.

The Spice dimmer provides superb mains supply tolerance and protection, helping it to withstand common mains faults and continually reporting it's condition. Connection faults, and over-voltage conditions are all handled by the Spice's control software. Advanced features such as supply reporting make the Spice an extremely capable unit.

The Spice dimmer shares it's heritage with Zero 88's superb Chilli dimmer range, providing compatibility with the extensive range of ChilliNet units. As part of a ChilliNet system, the Spice will work as an architectural dimmer, and will provide remote monitoring information via the ChilliNet Master Controller. The Spice user interface is also shared with the Chilli dimmer offering a simple, reliable method of setting up and operating the dimmer in any conditions.

## Spice Racks

In addition to the individual dimmers Zero 88 offers completely configured Spice touring racks. These are supplied as complete, 'ready to go' systems and are available with 24 or 48 channels. All system components are installed into professional quality flight cases and have the choice of Harting or Socapex connectors.

Two types of system are available. Both are designed to withstand the rigours of the most demanding touring environments.

The Spice Eco Rack features a classic flight case, power distribution and CEE 63A Mains output.

The Spice Pro Racks also benefit from a full, industry standard, 1:2 patching system using 3 pole GST series connectors and professional grade Connex power distribution components.

## Key Features Spice

- 12 Channels, 10 Amps per channel
- 100% Duty Cycle
- DMX Address: Addressable per channel
- Multiple Dimmer Curves, selectable by channel
- 12 on-board memories and 3 sequences, accessible via ChilliNet
- Topset & Preheat selectable per channel
- Operates on single phase, three-phase star
- Highly resilient supply protection
- DMX and ChilliNet Control
- Socapex and Harting output options
- Single pole plus Neutral thermal magnetic circuit breaker per channel
- Low-noise temperature controlled fans
- CEEFORM supply connector with 1.2m cable fitted as standard on multipole versions

## Specifications

### Spice 12

132 (H) x 482 (W) x 420mm (D)  
Weight : 14.5Kg / 32.0lb

# Betapack 3



## Key Features

### Betapack 3

- MCB protection
- Isolated DMX input
- Patchable per channel
- Preheat, Topset and Dimmer Law selectable per channel
- 12 backup memories
- 3 x 99-step sequences with adjustable times
- Auto DMX termination when loop-through plug is removed
- Auto frequency tracking
- Lock and Reset functions
- Temperature monitoring
- Convection cooled
- DMX addressing via front panel selectors
- DMX Status indication
- 19" Rack and Wall mounting brackets included

## Specifications

### Betapack 3

177 (H) x 447 (W) x 195mm (D)

Weight : 8.0Kg / 17.5lb



Excellent value, industry standard, 6 channel dimmers for multipurpose use.

The Betapack dimmer has served the lighting industry for over 15 years. Based on tried and tested technology, these robust, reliable, digitally controlled dimmer packs are incredibly versatile. Whether it's for schools in the UK, theatres in Malaysia or TV Studios in South Africa, these dimmers provide the core component of lighting systems globally.

Manufactured to the highest professional standards, this comprehensive range of 6 x 10 Amp packs includes variants with sockets to match most global standards. The Betapack 3 range is available with MCB's per channel giving you peace of mind and maximum protection.

The versatility of the Betapack 3 means it can be 19" rack or wall mounted using the brackets supplied or made portable by adding the optional "Easicarry" kit consisting of a handle and four feet. Its legendary reliability and durability make it the dimmer of choice for a huge variety of venues worldwide.





# Alhaphack 2 & Rack 6



## Alhaphack 2

Alhaphack 2 is a 3 channel fully portable dimmer unit, which can be safely, secured to a stand or wall with the use of a mounting bracket. One of our most popular dimmers, the Alhaphack finds uses in all areas of the lighting industry. Rental, display, education, event services and live music users have all found the Alhaphack to be a perfect solution.

This compact and rugged unit has 3 faders for local control, or can be controlled remotely as part of a larger lighting system. The Alhaphack has both Analogue and DMX control inputs providing maximum flexibility for a great price.

A unique safety system and overload protection circuit means that the Alhaphack provides a very safe and reliable solution to small dimming applications, never allowing the dimmer loads to draw more current than is available from the supply.

## Rack 6

The Rack 6 is an excellent choice for users wanting great value DMX dimming.

It offers users six 10 amp circuits of dimming control. All operator controls are available through a simple, intuitive interface. The Rack 6 is not limited in features. Offering 12 memories, a preheat per channel, three dimmer curves and Chilli-Net compatibility these dimmers offer users sophistication not usually found in a dimming product in this price range.

The Rack 6 is housed in a compact 2U 19" case with access for maintenance via the top and bottom panels.

The Rack 6 is available in a range of socket options, and comes complete with CE certification and a three year warranty.

## Key Features

### Alhaphack 2

- Three Channels
- 6.3 Amps per Channel
- Three fader Local Control
- Overload protection circuit
- "In" and "Thru" Control Connections
- Channel Selection Switch with LED
- Optional Mounting Bracket

### Rack 6

- 3 Dimmer curves
- 12 Memories
- Preheat per channel
- Socket options
- 6x10 amps
- ChilliNet compatibility

## Specifications

### Alhaphack 2

85 (H) x 240 (W) x 315mm (D)  
Weight : 3.5Kg / 8.0lb

### Rack 6

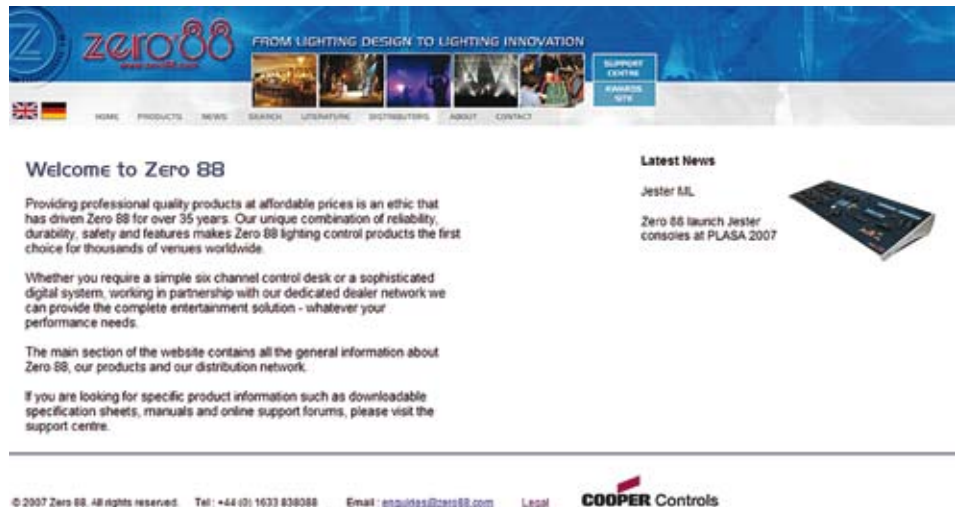
88 (H) x 483 (W) x 360mm (D)  
Weight : 8.0Kg / 17.6lb

# Zero 88 on the Web



## Pictures Courtesy of the following:

hillekamp + weber architekturstudio  
Nexos Lighting Technology  
Louise Stickland  
Mad Dogs Theatre Company  
Paul Brown  
Rose Bruford College  
Nordic Rental  
LightFactory  
Light Converse  
Ben M Rogers  
Metronom Theater Oberhausen  
Kühl-Beschallung Ritterhude



## Zero 88 on the Web

With the ever-increasing use of the Internet as a communication tool, Zero 88 has created a comprehensive website that enables all our distributors and customers to access and share information effectively.

www.zero88.com is the hub of our online resource which incorporates our Main Site, the Product Support Centre and information about our Financial Award Scheme.

### Main Site

The main site is available in English and German and continues to be our primary web source. It includes general information about our products, our distributors, latest news and contact information.

### Product Support Centre

This area provides a library of information for all our products; past and present. It includes downloadable product information including datasheets and manuals plus general information such as pricelists.

The support centre also hosts a dedicated product support forum for all our products. Visitors can keep up to date with software releases, request new features, enquire about product selection or usage and keep in touch with other users. Visitors can also report software bugs here and contribute to the development of new software.

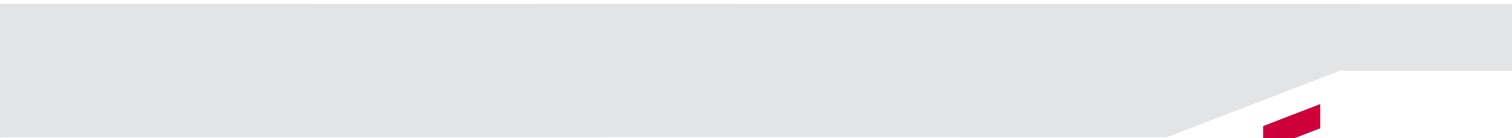
### Awards

This site has been set up to promote and report on our Financial Award Scheme. It contains information about the scheme, downloadable application forms and updates on the successful applications.

### Product Data Sheets

Each Zero 88 product has its own technical and data sheet. These can be downloaded from the support pages of our web site; **www.zero88.com**







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