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REFERENCES
2024

www.novelty.fr

YOUR TECHNICAL PARTNER
Expert & Specialist at your service

NOVELTY | 50 years of experience
Network | Video | Lighting | Power | Truss |
Backline | Pipes & Drapes | Technical Space Management

NOVELTY in figures:
- 50 years of experience
- Turnover of €109M (2022-2023)
- 10 000 events per year
- 450 employees
- More than 500 temporary staff per month
- 40 000 m² de stocks, d'ateliers et de bureaux

NOVELTY is a brand of the Novelty-Magnum-Dushow Group, the European leader in event technology.
Eager to export its know-how and «French touch» internationally, the Group accompanies its clients all over the world.
We tailor our offering to the realities of your context, driven by solid practical values to always strive for operational excellence. At all stages in the process, our teams are service-minded and keep their sights set on success in both touch technical and human terms.

Thanks to the synergies activated between our brands and teams, we provide our clients with:

- The largest equipment fleet in Europe
- A cross-functional design office
- A full-time QSE prevention specialist
- A fleet of over 200 eco-friendly vehicles
- Nearly 50 years of experience
- 25 locations in France and abroad,
- International quality references.

A fleet of state-of-the-art equipment, teams of experienced professionals; this is where we make the difference!

The Novelty-Magnum-Dushow Group is present in France and around the world:

- BORDEAUX
- CAEN
- CANNES
- LYON
- MARSEILLE
- NANTES
- NICE
- PARIS
- STRASBOURG
- TOULOUSE

- BARCELONA
- BRUSSELS
- DAMMAM
- DOHA
- DUBAI
- LISBON
- LONDON
- MADRID
- MARRAKECH
- MILAN
- MONACO
- RIYAD

Our brands:

ALABAMA • BBS BACKLINE • BEST AUDIO & LIGHTING • C17 • DE PREFERENCE • DUSHOW
DUSHOW TV • MAGNUM • NOMAD • NOVELTY • ON STAGE • PLATEAU VIRTUEL • POTAR • TEAMAGINE

NETWORK

VIDEO

LIGHTING

SOUND SYSTEMS

ENERGY

STRUCTURE

PIPES & DRAPES

TECHNICAL GUIDE

MISCELLANEOUS

S E R V I C E S

DELIVERIES
Our prices are net, ex-stock. Nevertheless, we can deliver and collect the equipment.
Our delivery prices are calculated according to volume and distance.

SHIPMENTS
Our Longjumeau depot is located near major logistics stations in the Ile-de-France region, and so we can ensure rapid dispatch and tracking of your equipment throughout France and Europe. Our proximity to the Freight area at Orly allows us to deliver the equipment anywhere in the world.

ADVICE
You can contact us at any time. We will advise you on the best choice of equipment for your operation. We are also able to carry out any required technical study.

HOTLINE
During busy periods, Novelty provides a telephone hotline in case of a sudden breakdown, a problem to be solved or a fixed installation requiring urgent repair. Do not hesitate to ask for this telephone hotline number from your preferred contact.

TECHNICAL SERVICES
If you wish to be provided aid in the installation and technical operation of the equipment, in the creation of computer graphics or the establishment of technical safety files for your operation or event, Novelty will advise you on the best technical service providers.

STORE AND CONSUMABLES
When you come for a pick-up or a return, you will find in the Store a wide and varied choice of consumables necessary for your service: gelatins, lamps, gaffer, barnier, video supports.

NOVELTY is proud to present its new catalogue.
Discover our new products on the following pages.

Novelty | Tailor-made technology for your events!

NOVELTY is proud to present its new list of products.
We let you discover in these pages our new products.

NOVELTY | All customized technique for your events!

SALE AND INTEGRATION

Novelty's Sales & Integration unit is dedicated to turning customer requirements into technical solutions.
With 20 years of experience, the unit has several missions:
- Supporting customers in the study and feasibility of technical projects
- Advising on the choice of the most suitable equipment
- Manufacturing or integrating appropriate systems, even the most specific ones that require "tailor-made" solutions
- Selling equipment and ensuring its installation, integration and maintenance through privileged contacts with the manufacturers

The solution for your equipment... The equipment for your solutions.

SECOND-HAND PRODUCTS

Novelty offers a wide range of second-hand products for the entertainment industry for professionals (sound, lighting, structure, video, etc.).
All products are systematically checked in our premises by our team of qualified technicians before being shipped.
Our teams, which are constantly being trained by the leading manufacturers, will guarantee you a quality service.
A single dedicated platform: **www.nomad-online.com**
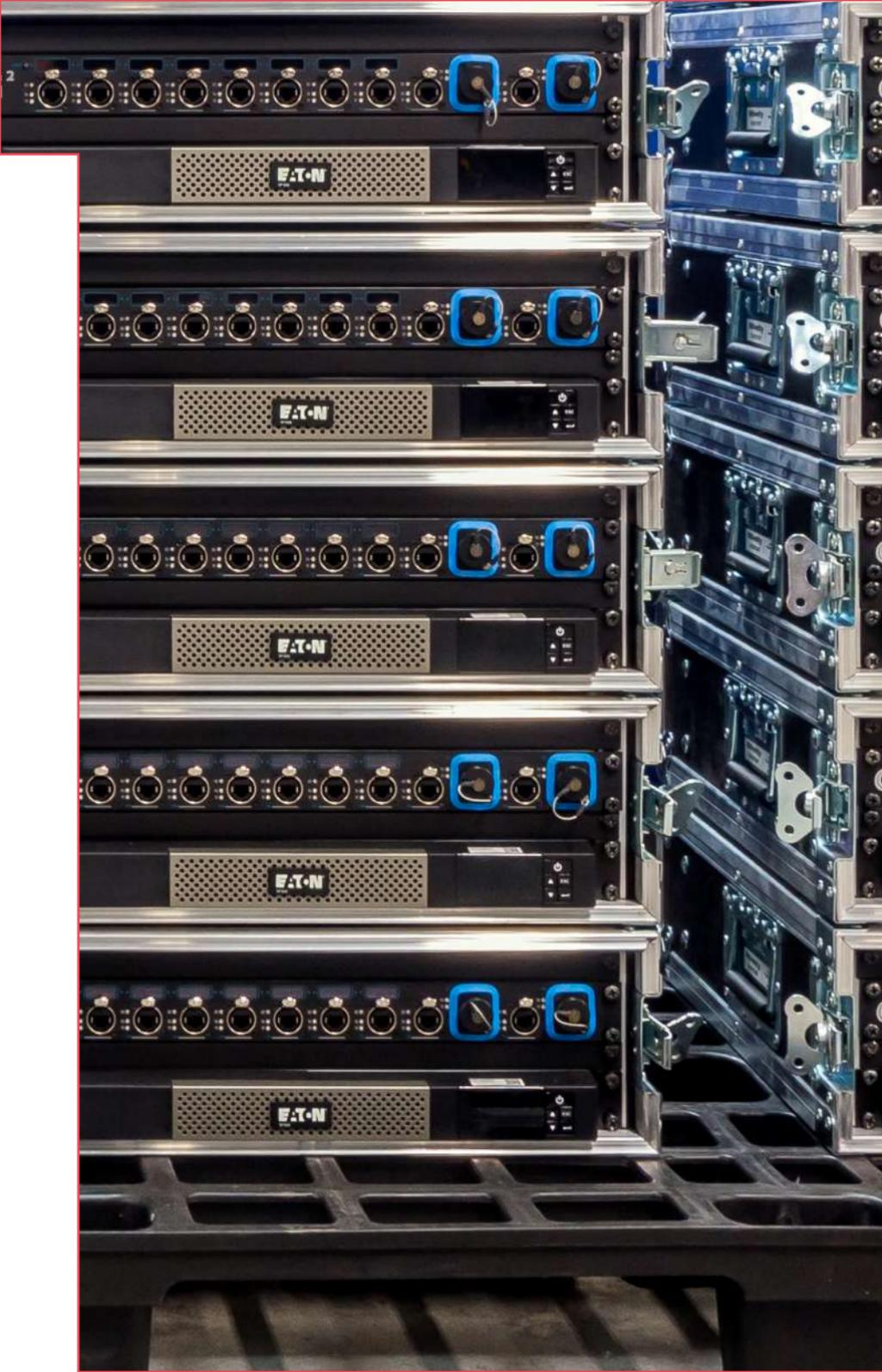
NETWORK

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NETWORKS AT NOVELTY

Network technologies have greatly evolved over the years and many of the equipment used in our services have network-compatible interfaces.
The development of equipment and habits in this area are at the heart of the development focus within the Novelty eco-system: Lighting, Sound, Video, Energy.

The term network is by definition made quite generic in use. It is therefore necessary to structure the meaning of this type of interface as well as the associated uses for the different business lines within Novelty (Lighting, Sound, Video, Energy, etc.).

By primary definition, a computer network is a set of devices linked together to exchange information.

Let us lay the foundations of two fundamental aspects in our approach to a network with these two definitions:

Control/Supervision [C/S]

The equipment can be controlled and supervised remotely, its own functionalities are used in remote mode, the control and supervision of the equipment is carried out via a computer interface (windows, menus, physical interfaces, touch interfaces, etc.).

Control data is transported via various protocol sets for the control and administration of amplifiers, mixing consoles, wireless transmission systems, lighting systems, video systems, etc.

Transport [T]

The equipment can receive and/or send signal data (digital audio, digital video, etc.) through the created network. This device will then convert the signal(s) and make them compatible to send them into the network.

Signal data is transported via various protocol subsets for the control and administration of amplifiers, mixing consoles, wireless transmission systems, lighting systems, video systems, etc.

Tel.: 01 76 91 90 00

N E T W O R K S   A T   N O V E L T Y

Normative protocol sets

In the end, all these protocol sets are based on a standardised system enabling data packets to be transported in a standardised network: **Ethernet** (ISO/IEC/IEEE 8802-3:2014).
The products are therefore interconnected within the Novelty network eco-system through different physical interfaces.

Communication protocols define, in a formal and interoperable way, how information is exchanged between network devices.

A piece of equipment can have both types of interfaces and can be controlled/supervised as well as have a transport interface.

Copper wiring interfaces

- Cat5e, Cat6 cables, RJ45 connectors
- Hubs/switches

Fibre optic cable interfaces

- Fibre optics SC, LC, ST, Neutrik Opticalcon, Fibercast, Fiberco etc., conversion and adaptation jumpers, etc.
- Hubs/switches

NETWORK DEPLOYMENT TYPOLOGY

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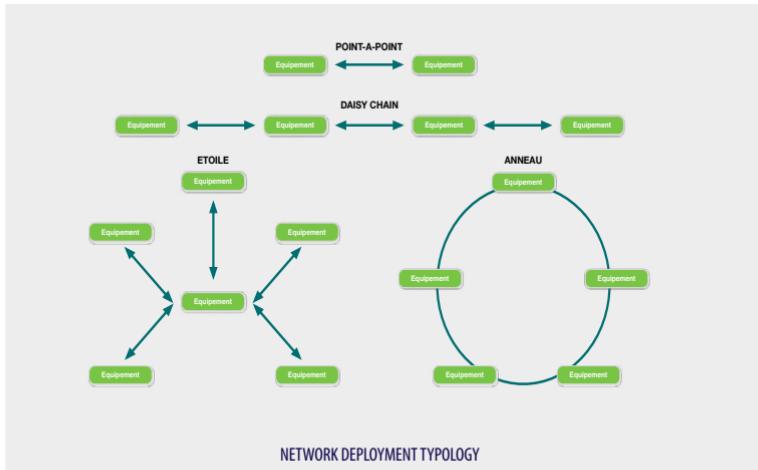
SOUND SYSTEMS NETWORKS

I/O INTERFACES & LINKS

YAMAHA RIO 3224
DANTE audio network protocol input/output patch,
32 IN, 16 OUT, + 4 OUT AES/EBU
Compatible with Yamaha consoles with DANTE protocol
RJ45 Link
Set of 2 RJ45 Cat5e 100 m reels included

YAMAHA RIO 1608
Set of 2 RJ45 Cat5e reels included

AGORA Ghost MK2
14-port Gigabit stage switchboard + 4 fibre ports 1/10 Gbits
AGORA H1
Hybrid Audio Network Bridge compatible with Auvitran A x C cards
(A x C card optional)

LUMINEX Gigacore 14R   10-port Gigabit stage switchboard + 2 fibre ports

CISCO SG300-10P   10-port Gigabit fibre switch + POE
CISCO SG300-20   20-port Gigabit fibre optic switch
ATTERO TECH Undio 2x2   Dante interface 2 x analogue IN 2 x analogue OUT

N E T W O R K

AGORA H1

AGORA GHOST MK2

LUMINEX Gigacore 14R

CISCO SG300-20

CISCO SG300-10P
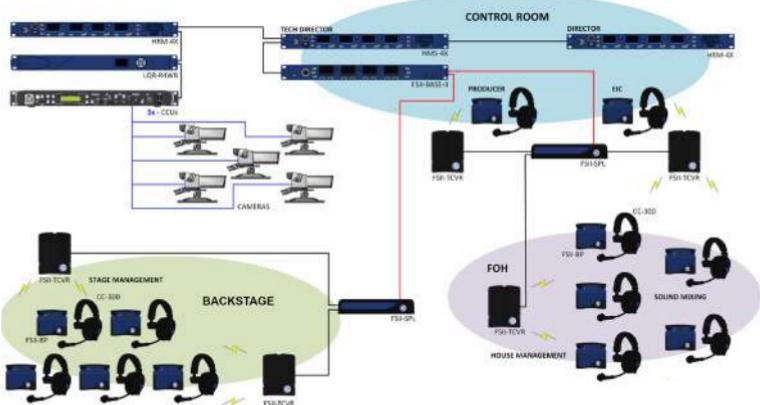
EXAMPLE OF A NETWORK CONFIGURATION FOR AN INTERCOM SYSTEM

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LIGHTING NETWORKS

I/O INTERFACES & LINKS

AGORA Ghost MK2	14-port Gigabit stage switchboard + 4 fibre ports 1/10 Gbits
LUMINEX Gigacore 14R	10-port Gigabit stage switchboard + 2 fibre ports
NETGEAR GS724T	24-port Ethernet switch
LUMINEX Node 12	Ethernet, DMX converter (12 x XLR5 pins)
MA LIGHTING NPU	Network processing unit for GrandMa console. 8 DMX universes, 4096 circuits, ethernet, delivered with keyboard
MA LIGHTING GPU M	Network processing unit for GrandMa consol 16 DMX universes, 1684 channels, ethernet, includes keyboard
MA LIGHTING GPU XL	**Network processing unit for GrandMa console 32 DMX universes, 4096 channels, ethernet, includes keyboard**
SWISSON XES8G	8 ports 10/100/1000 optimised for sound/light

"Network" compatible EQUIPMENT

(find this equipment in the LIGHTING chapter)

MA LIGHTING MA on PC Command Wing	Command system	p.89
MA LIGHTING Dot2 XL-F	Control panel for slaves	p.89
MA LIGHTING Grand MA 2 Ultra Light	Control panel for slaves	p.89
MA LIGHTING Grand MA2 Light	Control panel for slaves	p.89
MA LIGHTING Grand MA2 FullSIZE	Control panel for slaves	p.89
MA LIGHTING Grand MA3 Compact XT	Control panel for slaves	p.89
MA LIGHTING Grand MA3 Light	Control panel for slaves	p.89
MA LIGHTING Grand MA3 FullSIZE	Control panel for slaves	p.89

N E T W O R K

LUMINEX Gigacore 14R

LUMINEX Node 12

MA LIGHTING
NPU + inverter + switch

SWISSON XES8G

Régie

Câble RJ45
Câble Fibre OPTIQUE
Câble DMX

Système de redondance
de transmission de signaux
type "GrandMA NET"
à travers un média
Fibre Optique ou RJ45

Jardin

Cour

NETGEAR GS108

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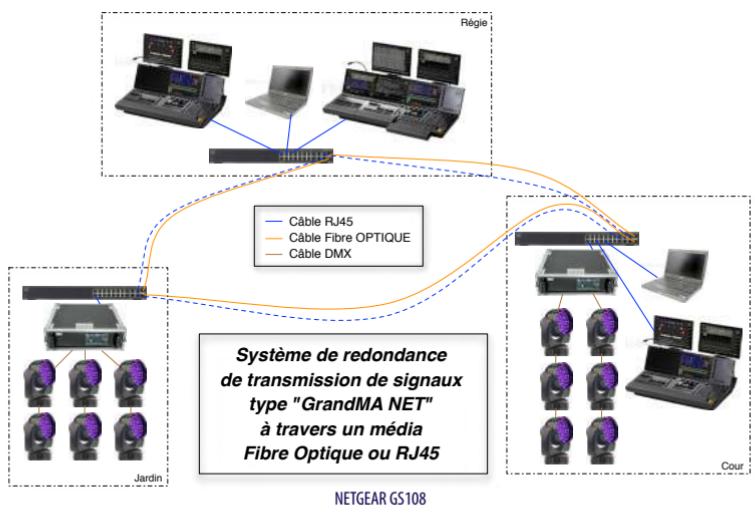
VIDEO NETWORKS

I/O INTERFACES & LINKS

OPTICAL FIBRE

LANSEE 12G + LAN　　　　Connection to Neutrik® DUO / 12G-SDI connectors
　　　　　　　　　　　　　　200m kit

LIGHTWARE MODEX-OPTS　Connection to Neutrik® DUO / DVI-HDMI connectors
　　　　　　　　　　　　　　200m kit

RJ45

MA LIGHTING VPU　　　　　Image management unit, outputs: 2 x DVI + 1 VGA
NEWTEK Sparkplus IO 4K　4K bi-directional HDMI to NDI video encoder

"Network" compatible EQUIPMENT

(find this equipment in the VIDEO chapter)

MODULO ∏ Player	4-stream and 6-stream broadcast station	p. 58
PANASONIC AW-UE150	PTZ camera	p. 61
PANASONIC AW-HE130	PTZ camera	p. 61
PANASONIC AW-HE42	PTZ camera	p.61
VIDEODEVICES PIX270i	DANTE video and sound recorder	p.64
BARCO/CHRISTIE/PANASONIC	Video projectors	p. 29 to p. 32
BARCO E2	EventMaster mixer	p.56
ANALOG WAY Ascender 16 / 32	Seamless liveCore mixer	p. 56
Mad Mapper	Video mastering software	p. 77
ARKAOS Media Master v5	Media Server software	p. 77
BRIGHTSIGN HD224	4K media player	p.64
APPLE AppleTV 4K	4K media player	p.76

BARCO E2

NETWORK

PANASONIC AW-RP60

PANASONIC AW-RP150

PANASONIC AV-HS6000

CYANVIEW CPR


NEWTEK Sparkplus IO 4K

LIGHTWARE Modex-OPTS
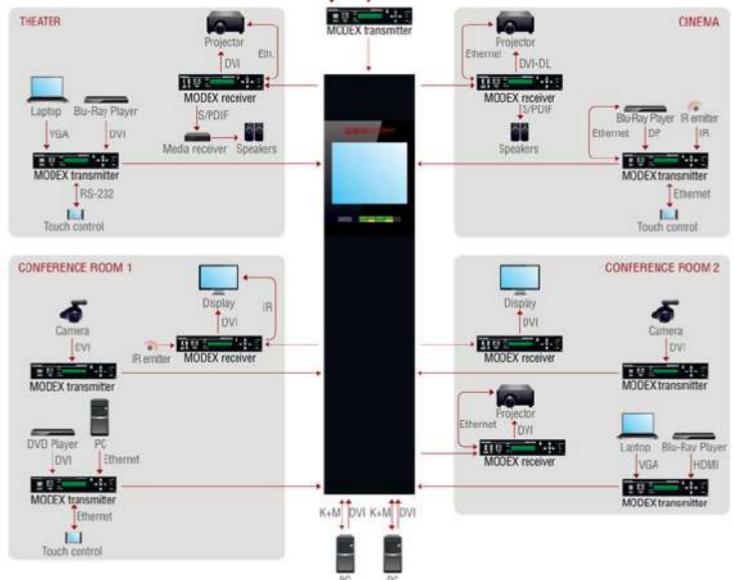
Example of integration of LIGHTWARE Modex-OPTS

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COMPUTER NETWORKS

NON-MANAGEABLE SWITCHES

SWISSON XES8G	8 Ports 10/100/1000 optimised for sound/light
D-LINK DGS1016D	16 Ports 10/100/1000 half or full duplex
D-LINK DGS1024D	24 Ports 10/100/1000 half or full duplex
NETGEAR GS516UP	16 Ports Gigabit: 8 PoE++ ports and 8 PoE+ ports
NETGEAR GS108	8 Ports 10/100/1000 half or full duplex
TENDA TEG1016G	16 Ports 10/100/1000

MANAGEABLE SWITCHES

CISCO SG300-10P	8 Gigabit POE ports + 2 fibre ports
CISCO SG300-20	18 Gigabit ports + 2 fibre ports
AGORA Ghost MK2	14-port Gigabit stage switchboard + 4 fibre ports 1/10 Gbits
LUMINEX Gigacore 10	8-port Gigabit stage switchboard + 2 fibre ports
LUMINEX Gigacore 14R	10-port Gigabit stage switchboard + 2 fibre ports
TP-LINK T1500G	8 Gigabit POE+ ports + 2 GBIC ports

WIFI ROUTERS

TP LINK WR1043ND	4 Gigabit-Wifi N300 ports
NETGEAR RG6220	4 Gigabit-Wifi AC1200 ports

"Network" compatible EQUIPMENT

(find this equipment in the VIDEO & SOUND SYSTEMS chapters)

APPLE Mac Pro 2018	8 cores 3 GHz, 32 GB, 1 TB PCle, 2 x FirePro D700 6GB	p. 76
APPLE MacBook Pro 16" 2020	16'' laptop, Intel Core i7, 2.6Ghz, 512GB, SSD, 16GB RAM	p. 76
APPLE MacBook Pro 15" RETINA	15" laptop, Intel Core i7 quad-core processor	p. 76
APPLE iPad v6 2018	9.7" touchscreen tablet, A10 chip	p.76
APPLE iPad Air 2	9.7" touchscreen tablet, A8x chip	p.76
APPLE/SONNET xMacMini	Digital audio sequencer station	p.76
APPLE AppleTV 4K	4K multimedia player	p.76
DELL G5	Core i7 1TB NVMe 16GB RAM	p.76
DELL 3560	Core i7 512GB NVMe 32GB RAM	p.76
DELL E5570	15" laptop, Intel Core i7	p.76
DELL M3510	15" laptop, Intel Core i7	p.76
DELL E580	Core i5-8250U, 1.6 GHz, 8 GB RAM, 256GB SSD	p.76
LENOVO E570	15.6'' laptop, Intel Core i5 processor	p.76
LENOVO E15	Core i5-10210U, 1.6 GHz, 8GB RAM, 256GB SSD	p.76
HP 255-G8	AMD 3500U 2.3, 256GB SSD, 8GB RAM	p.76
ACER Veriton X680G	Desktop, Intel Core i7	p.76

NETWORK

CISCO SG300-10P
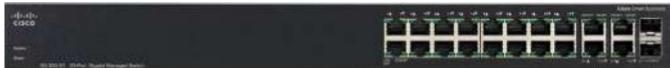
CISCO SG300-20

NETGEAR GS108

SWISSON XES8G

TENDA TEG1016G

AGORA GHOST MK2

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NETWORK WIRING

OPTICAL FIBRE

Single-mode OS2 / 9-125µ

NEUTRIK	OpticalCON MTP24, 200 m on reel
NOVELTY BO24SMBOX	Pelicase BreakOut MTP24 to 12 OpticalCON DUO
NOVELTY BO24SMRACK	BreakOut MTP24 Rack to 12 x OpticalCON DUO
NOVELTY BO24SMTRUSS	Bridge housing BreakOut MTP24 to 12 x OpticalCON DUO
NOVELTY BOSMQUADTO2DUO	BreakOut SM OpticalCON Quad > 2 OpticalCON DUO
NEUTRIK	OpticalCON DUO, 50 m in a case
NEUTRIK	OpticalCON DUO, 150 m on reel
NEUTRIK	OpticalCON DUO, 200 m on reel
NEUTRIK	OpticalCON QUAD X-TREM, 200 m on reel
NEUTRIK	OpticalCON Lite DUO 1 m
NEUTRIK	OpticalCON Lite DUO 3 m
NEUTRIK	OpticalCON Lite DUO 5 m
NEUTRIL	OpticalCON Lite DUO 10 m
NEUTRIK	OpticalCON Lite DUO 25 m
NOVELTY	LC / LC DUO jumper, 1 m
NOVELTY	LC / SC DUO jumper, 1 m
NOVELTY	SC / SC DUO jumper, 1 m
NEUTRIK	OpticalCON duo coupler
NEUTRIK	Coupleur OpticalCON MTP24

Multimode OM3 / 50-125µm

NEUTRIK	OpticalCON DUO, 2m multimode DUO
NEUTRIK	OpticalCON DUO, 150 m on reel
NEUTRIK	OpticalCON DUO, 200 m on reel
NEUTRIK	OpticalCON QUAD X-TREM, 200 m on reel
NOVELTY	LC / LC DUO jumper, 1 m
NOVELTY	LC / SC DUO jumper, 1 m
NOVELTY	SC / SC DUO jumper, 1 m

N E T W O R K   W I R I N G

RJ 45 NETWORK CABLES

Cable category 5e FTP	5 m
Cable category 5e FTP	10 m
Cable category 5e FTP	20 m
Cable category 5e GigaAudio Ethercon	50 m on reel
Cable category 5e GigaAudio Ethercon	100 m on reel
Cable category 5e Audiolan24 Ethercon	50 m on reel
Cable category 5e Audiolan24 Ethercon	100 m on reel
Multi 5 cables category 5e Ethercon	25 m
Multi 5 cables category 5e Ethercon	50 m
NEUTRIK RJ45 coupler category 6a	
Cable category 6a Audiolan6a Ethercon	5 m
Cable category 6a Audiolan6a Ethercon	10 m
Cable category 6a Audiolan6a Ethercon	20 m
Cable category 6a Audiolan6a Ethercon	50 m on reel
Cable category 6a Audiolan6a Ethercon	100 m on reel
Cable category 7 FFTP	20 m, AWG-26
Cable category 7 FFTP	40 m, AWG-26
Cable category 7 FFTP	60 m on reel, AWG-26
Cable category 7 FFTP	80 m on reel, AWG-23
Cable category 7 Kramer link	150 m on reel, AWG-23

NOVELTY
RJ45 reel

NEUTRIK
Fibre coupler

NEUTRIK
QUAD Fibre reel

VIDEO

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INNOVATION IN VIDEO

NOVELTY IN 4K

ANALOG WAY ZENITH 200 | see p.56

ANALOGWAY Pulse 4K | see p.66

LANSEE Muxlan 8+8 12GSDI | see p.71

AJA Ki Pro Ultra 12G | see p.64

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NOVELTY IN 4K

BLACKMAGIC DESIGN VIDEO ASSIST 7'' 4K HDR |

BLACKMAGIC ATEM STUDIO PRO 4K
|

PANASONIC AW-RP150
|

Camcorder CANON XF605
|

PANASONIC AW-UE100
|

PANASONIC AW-UE150
|

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INNOVATION IN VIDEO

NOVELTY IN 4K

THEATRIXX xPressCue | see p.64

DECIMATOR DD-12G CROSS | see p.69

PANASONIC TH-43/55/65/75EQ2W
+ 12G CARD | see p.38

EIZO EV2740X-BK | see p.40

CYANVIEW RIO LIVE | see p.62

FUSION TOOLS HDMI 2.0 Fiber Link
| see p.71

CYANVIEW RCP | see p.62

NOVELTY IN 4K

NOVASTAR VX1000 | see p.54

ROLAND V-160HD | see p.68

LUMANTEK EZ-PRO VS10
| see p.68

LANSEE TIDY 3GSDI-LAN
| see p.71

BLACKMAGIC DESIGN WEB PRESENTER HD
| see p.69

LILLIPUT PVM220S | see p.40

SWIT FLOW 500 | see p.62

EPSON EB-PU2220B | see p.29

XVISION THEATRIXX DA4 SDI
| see p.70

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INNOVATION IN VIDEO

ROSS ULTRIX FR2

Modular Ross Chassis delivered with a 16x16 BNC card and 4 redundant power supplies. Unified multi-user management, fully configurable. Video and audio routing, embedded or via auxiliary MADI SFPs.

Numerous options available upon request: additional 16x16 card, MADI coaxial SFP IN/OUT, 4K 12GSDI license, multiviewer license, MADI SRC license, and audio delay...

ROSS ULTRIX FR2 |

Tel.: 01 76 91 90 00

VIDEO

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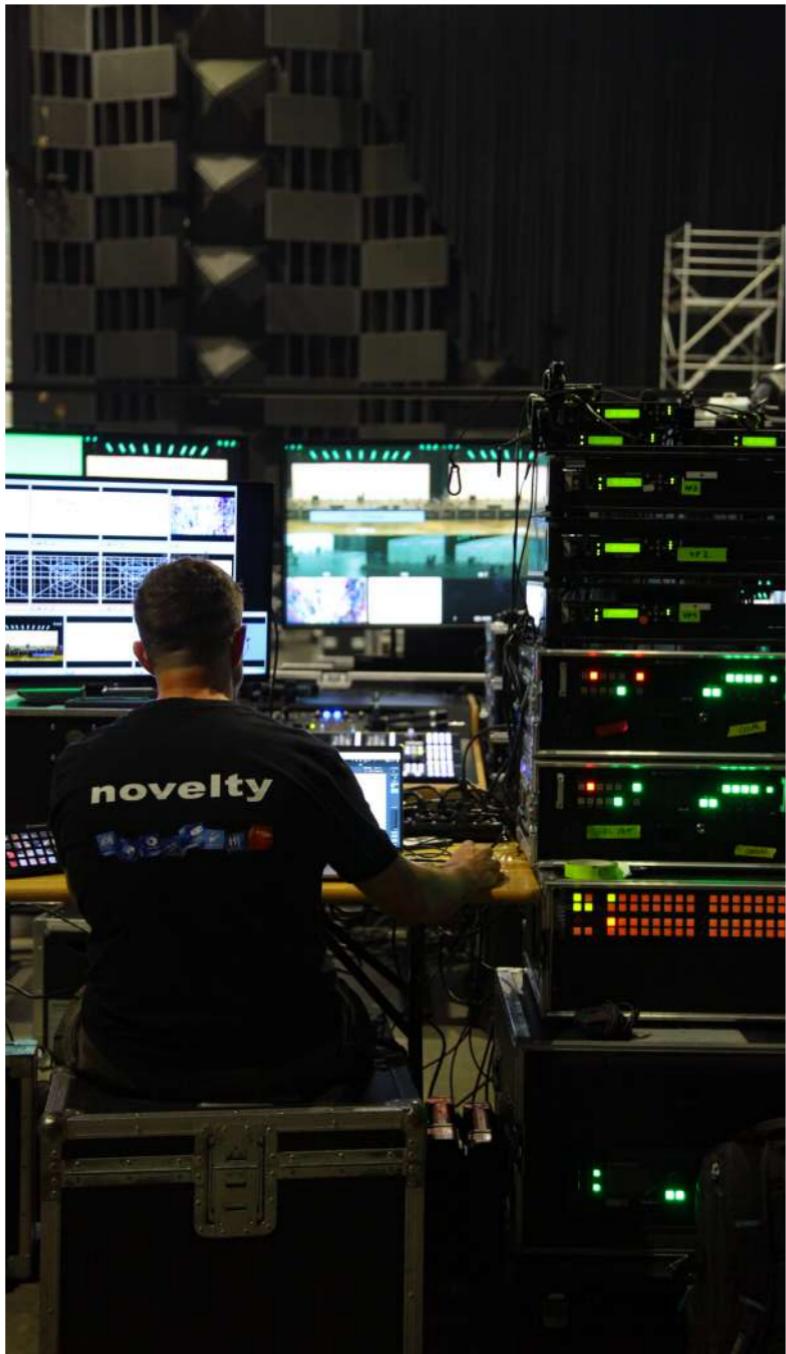
VIDEO PROJECTORS 16/9

BARCO · UDM 4K30

27.000 lumens ISO, laser source
Resolution: 3840 x 2400 pixels (16/10)
Weight: 75 Kg (with frame and motorization kit)
Consumption: 2,200 W
Input: HDBaseT simple / HDMI 2.0 (HDCP 2.2, HDR1
DP 1.2 (HDCP1.3)/ Quad 3G/12G SDI/BarcoLink ULT

BARCO · HDF-W30

30,000 lumens ANSI, 1920 x 1200, Full HD
Flex brightness (20,000 to 30,000 lumens in 2,000 lumen increments)
Dimensions: L 707 mm x H 548 mm x D 1,025 mm
Weight: 99 Kg | Consumption: 4,550 W
Inputs: DVI-I
(HDCP, including analogue RGB YUV)
SDI/HDSDI/dual HDSDI/3G/BarcoLink

BARCO · HDX-W20

20,000 lumens ANSI, 1920 x 1200, Full HD
Flex brightness (10,000 to 20,000 lumens in 2,000 lumen increments)
Dimensions: L 475 mm x H 725 mm x D 382 mm
Weight: 50 Kg | Consumption: 2,850 W
Inputs: DVI-I
(HDCP, including analogue RGB YUV)
SDI/HDSDI/dual HDSDI/3G/BarcoLink

VIDEO PROJECTORS 16/9

EPSON · EB-PU2220B

20, 000 lumens, Resolution : 1920 x 1200
Dimensions: 586 x 492 x 218 mm
Weight: 24,4 kg | Consumption: 1,300 W
Inputs : DVI, VGA, HDMI, HDBaseT, 3GSDI

CHRISTIE · HD 20K-J

18,000 lumens, Resolution: 1920 x 1080
Dimensions: 815 x 621 x 419 mm
Weight: 95 Kg | Consumption: 4,000 W
Inputs: DVI, VGA, 3GSDI, RVBHV,
Composite, S-Video

CHRISTIE · HD 14K-M

12,000 lumens, Resolution: 1920 x 1080
Dimensions: 561 x 500 x 259 mm
Weight: 25 kg | Consumption: 1,500 W
Inputs: Dual Link DVI, Dual 3G
SD, HD-SDI, HDMI, RVBHV

CHRISTIE · HD 10K-M

10,000 lumens, Resolution: 1920 x 1080
Dimensions: 561 x 500 x 259 mm
Weight: 25 kg | Consumption: 1,320 W
Inputs: DVI, VGA, HD-SDI, RVBHV,
Composite, S-Video

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VIDEO PROJECTORS 16/9

PANASONIC · PT-RZ120BE

12,000 lumens, WUXGA, 1920 x 1200, laser source
Dimensions: L 498 mm x H 200 mm x D 581 mm
Weight: 22.8 kg | Consumption: 1100 W
1 DLP chip
Inputs: 3GSDI, DVI, RVBHV, HDMI, VGA, HDBaseT

PANASONIC · PT-DZ 12,000 HD

12,000 lumens ANSI, (Resolution: 1920 x 1200 Native)
Dimensions: L 578 mm x H 320 mm x D 643 mm
Weight: 40 kg | Consumption: 1,500 W
Inputs: Composite, HD SDI, DVI D, RGB-HD and YUV

PANASONIC · PT-DZ110XE

10,600 lumens ANSI, (Resolution: 1920 x 1200 Native)
Dimensions: L 530 mm x H 200 mm x D 548.5 mm
Weight: 24 kg | Consumption: 920 W
Inputs: SDI, HDMI, DVI-D, RGB, Composite,
S-Video,D-Sub, RJ45

PANASONIC · PT-DZ10KE

10,600 lumens ANSI, (Resolution: 1920 x 1200 Native)
Dimensions: L 500 mm x H 200 mm x D 548 mm
Weight: 24 kg | Consumption: 900 W
Inputs: SDI, HDMI, DVI-D, RGB, Composite,
S-Video,D-Sub, RJ45

VIDEO PROJECTORS 16/9

PANASONIC · PT-RZ970BE

10,000 lumens, WUXGA, 1920 x 1200, laser source
Dimensions: L 498 mm x H 200 mm x D 581 mm
Weight: 23.2 kg | Consumption: 1050 W
1 DLP chip
Inputs: 3GSDI, DVI, RVBHV, HDMI, VGA, HDBaseT

PANASONIC · PT-DZ780LB

7,000 lumens ANSI, WUXGA (Resolution: 1920 x 1200)
Dimensions: L 498 mm x H 175 mm x D 521 mm
Weight: 17.6 kg | Consumption: 790 W
1 DLP chip
Inputs: 3G-SDI, HD-SDI, SD-SDI, HDMI, DVI-D, RVBHV, VGA, HDBaseT

PANASONIC · PT-RZ670

6,500 lumens ANSI, (Resolution: 1920 x 1200), laser source
Dimensions: L 498 mm x H 200 mm x D 581 mm
Weight: 23 kg | Consumption: 720 W
1 DLP chip
Inputs: 3G-SDI, HD-SDI, HDMI, DVI-D, RVBHV, VGA, HDBaseT

PANASONIC · PT-RZ660WE

6,000 lumens, WUXGA, 1920 x 1200, laser source
Dimensions: L 498 mm x H 200 mm x D 581 mm
Weight: 22.4 kg | Consumption: 825 W
1 DLP chip
Inputs: 3GSDI, DVI, RVBHV, HDMI, VGA, HDBaseT

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VIDEO PROJECTORS 16/9

VIVITEK • DK10000Z-BK

10,000 lumens, 4K, 3840 x 2160, laser source
Dimensions: L 500 mm x H 580 mm x D 205 mm
Weight: 30.6 kg | Consumption: 1350 W
1 DLP chip
Inputs: 3GSDI, HDMI, DP, HDBaseT

VIVITEK • DK8500Z-BK

10,000 lumens, 4K, 3840 x 2160, laser source
Dimensions: L 500 mm x H 580 mm x D 205 mm
Weight: 28 kg | Consumption: 845 W
1 DLP chip

Inputs: 3GSDI, HDMI, DP, HDBaseT

VIVITEK • DU7098Z

7,000 lumens, 1920 x 1200, laser source
Dimensions: L 470 mm x H 517 mm x D 202 mm
Weight: 23 kg | Consumption: 630 W
1 DPL Chip
Inputs: HDMI, DVI, VGA, RVBHV, HDBaseT

Black or white

BENQ • MH684

3,500 lumens ANSI, (Resolution: 1920 x 1080)
Dimensions: L 314 mm x H 116 mm x D 216 mm
Weight: 3.3 kg | Consumption: 310 W
Inputs: Computer in (D-sub 15pin),
Composite, Video, S-Video, HDMI

VIDEO PROJECTOR ACCESSORIES

BARCO OPTICS HDQ-XLM series

Fixed optic	1.0 (16/9) XLD HB
Zoom	1.45- 1.8 (16/9) XLD HB
Zoom	1.8 -2.4 (16/9) XLD HB
Zoom	2.2-3.0 (16/9) XLD HB
Zoom	2.8-5.5 (16/9) XLD HB
Zoom	5.5-8.5 (16/9) XLD HB

BARCO OPTICS UDX-HDF-HDX-FLM-SLM series

Fixed optic	0.38 UST 90° (16/9)
Zoom	0.67 - 1 (16/9)
Zoom	0.68 - 0.87 UST 90° (16/9)
Zoom	0.85-1.24 (16/9)
Zoom	1.16-1.49 (16/9)
Zoom	1.35-1.85 (16/9)
Zoom	1.85-2.59 (16/9)
Zoom	2.59-4.16 (16/9)
Zoom	4.16-6.93 (16/9)
Zoom	6.93-10.30 (16/9)

EPSON OPTICS EB-PU serie

ELPLX02S	10 to 20k : 0.35:1	
ELPLU03S	10 to 20k : 0.48 - 0.57:1	7 to 9.5k : 0.65 - 0.78:1
ELPU04	10 to 20k : 0.64 - 0.77:1	7 to 9.5k : 0.87 - 1.06:1
ELPLW08	10 to 20k : 0.86 - 1.21:1	
ELPLW06	10 to 20k : 1.19 - 1.62:1	
ELPLM15	10 to 20k : 1.57 - 2.56:1	7 to 9.5k : 2.16 - 3.48:1
ELPLM10	10 to 20k : 2.42 - 3.71:1	7 to 9.5k : 3.31 - 5.07:1
ELPLM11	10 to 20k : 3.54 - 5.4:1	7 to 9.5k : 4.84 - 7.39:1
ELPLL08	10 to 20k : 5.27 - 7.41:1	7 to 9.5k : 7.2 - 10.12:1

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VIDEO PROJECTOR ACCESSORIES

PANASONIC OPTICS

Zoom ET-DLE020	0.29 - 0.31 (4/3) | 0.28 - 0.3 (16/9)
Fixed optic ET-DLE030	0.39 (4/3) | 0.38 (16/9)
Fixed optic ET-DLE050	0.8
Fixed optic ET-DLE055	0.8
Zoom ET-DLE060	0.62 - 0.83 (4/3) | 0.6 - 0.8 (16/9)
Zoom ET-DLE080	0.82 - 1.03 (4/3) | 0.79 - 0.98 (16/9)
Zoom ET-DLE085	0.81 - 1.01 (4/3) | 0.78 - 0.97 (16/9)
Zoom ET-DLE100	1.3 - 2.0 (4/3) | 1.3 - 1.9 (16/9)
Zoom ET-DLE150	1.3 - 2.0 (4/3) | 1.3 - 1.9 (16/9)
Zoom ET-DLEST	1.8 - 2.4 (4/3) | 1.8 - 2.4 (16/9)
Zoom ET-DLE200	2.6 - 4.3 (4/3) | 2.4 - 4.0 (16/9)
Zoom ET-DLE250	2.6 - 4.0 (4/3) | 2.3 - 3.6 (16/9)
Zoom ET-DLE310	3.6 - 4.7 (4/3) | 3.4 - 4.5 (16/9)
Zoom ET-DLE350	3.8 - 5.7 (4/3) | 3.6 - 5.4 (16/9)
Zoom ET-DLE410	4.9 - 9.0 (4/3) | 4.5 - 8.4 (16/9)
Zoom ET-DLE450	6.0 - 9.6 (4/3) | 5.5 - 8.9 (16/9)
Zoom ET-D75LE5	0.8 - 1.0 (4/3) | 0.7 - 1.0 (16/9)
Zoom ET-D75LE50	0.8 - 1.0 (4/3) | 0.7 - 1.0 (16/9)
Zoom ET-D75LE6	1.0 - 1.2 (4/3) | 0.9 - 1.1 (16/9)
Zoom ET-D75LE10	1.4 - 1.8 (4/3) | 1.3 - 1.7 (16/9)
Zoom ET-D75LE1	1.5 - 2.0 (4/3) | 1.4 - 1.8 (16/9)
Zoom ET-D75LE20	1.8 - 2.6 (4/3) | 1.7 - 2.4 (16/9)
Zoom ET-D75LE2	2.0 - 3.0 (4/3) | 1.8 - 2.8 (16/9)
Zoom ET-D75LE30	2.6 - 5.1 (4/3) | 2.4 - 4.7 (16/9)
Zoom ET-D75LE3	3.0 - 5.0 (4/3) | 2.8 - 4.6 (16/9)
Zoom ET-D75LE4	5.0 - 8.0 (4/3) | 4.6 - 7.4 (16/9)

CHRISTIE OPTICS ILS serie

Optique fixe	0.67 (4/3) | 0.73 (16/9)
Optique fixe	1.1 (4/3) | 1.2 (16/9)
Zoom	1.4-1.8 (4/3) | 1.5-2.0 (16/9)
Zoom	1.8-2.6 (4/3) | 2.0-2.8 (16/9)
Zoom	2.6-4.1 (4/3) | 2.8-4.5 (16/9)
Zoom	4.1-6.9 (4/3) | 4.5-7.5 (16/9)

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V I D E O

PANASONIC ET-DLE055

PANASONIC ET-DLE250

PANASONIC ET-DLE450

PANASONIC ET-DLE030

PANASONIC ET-D75LE20

PANASONIC ET-D75LE30

VIVITEK OPTICS

Optic VL911G/LNS-5WZ2   0.77-1.10
Optic D88-ST001   1.70-1.90
Optic D88-WZ01   1.85-2.50
Optic D88-UWZ01   1.98-2.30

VP BRACKETS AND SUPPORTS

SmartMetals ball joint   For VP on frame
Panasonic rotating bracket   for 10,000 series
VP-Fix Panasonic   for 5000/6000 series
VP-Fix PM   Universal support for Small models
**Rolling stand for small VP**   Height adjustable, 0.40 to 1.90m

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LED SCREENS

PANASONIC TH-75EQ2W	75" LED screen with SDM slot, ultra-thin edge (14.9 mm)
	Native resolution: 3840 x 2160, 4K UHD, Format: 16/9
PANASONIC TH-65EQ2W	65" LED screen with SDM slot, ultra-thin edge (14.9 mm)
	Native resolution: 3840 x 2160, 4K UHD, Format : 16/9
PANASONIC TH-55EQ2W	55" LED screen with SDM slot, ultra-thin edge (14.9 mm)
	Native resolution: 3840 x 2160, 4K UHD, Format : 16/9
PANASONIC TH-43EQ2W	43" LED screen with SDM slot, ultra-thin edge (14.9 mm)
	Native resolution: 3840 x 2160, 4K UHD, Format : 16/9
PANASONIC TY-SB01QS	SDM slot card, 12GSDI
LG 98UH5E	98" LED screen, ultra-thin edge (14.9 mm)
	Native resolution: 3840 x 2160, 4K UHD, Format: 16/9
LG 75UM3E	75" LED screen
	Native resolution: 3840 x 2160, 4K UHD, Format: 16/9
LG 55SM5KE	55" LED screen
	Native resolution: 1920 x 1080, Full HD
LG 43SM5KE	43" LED screen
	Native resolution: 1920 x 1080, Full HD
LG 32SM5J	32" LED screen
	Native resolution: 1920 x 1080, Full HD, Format: 16/9
LG 75UH5F-H	75" LED screen | Matte finish
	Native resolution: 3840 x 2160, 4K UHD, Format: 16/9
LG 75UM3DG-H	75" LED screen | Matte finish
	Native resolution: 3840 x 2160, 4K UHD, Format: 16/9
LG 55UH5F-H	55" LED screen | Matte finish
	Native resolution: 3840 x 2160, 4K UHD, Format: 16/9
LG 43UH5F-H	43" LED screen | Matte finish
	Native resolution: 3840 x 2160, 4K UHD, Format: 16/9
SAMSUNG QM98F	98" LED screen
	Native resolution: 3840 x 2160, 4K UHD, Format: 16/9
SAMSUNG ME95	95" LED screen, Ultra-thin edge (12.3 mm)
	Native resolution: 1920 x 1080, Full HD, Format: 16/9
SAMSUNG QB75H	75" LED screen
	Native resolution: 3840 x 2160, 4K UHD, Format: 16/9
SAMSUNG ME75	75" LED screen, Ultra-thin edge (14 mm)
	Native resolution: 1920 x 1080, Full HD, Format: 16/9
SAMSUNG DM75	75" LED screen
	Native resolution: 1920 x 1080, Full HD, Format: 16/9

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VIDEO

LED SCREENS

SAMSUNG ED75E	75" LED screen
	Native resolution: 1920 x 1080, Full HD, Format: 16/9
SAMSUNG UE55	55" LED screen, Ultra-thin edge (5.2 mm)
	Native resolution: 1920 x 1080, Full HD, Format: 16/9
SAMSUNG DB55	55" LED screen
	Native resolution: 1920 x 1080, Full HD, Format: 16/9
SAMSUNG DB48	48" LED screen
	Native resolution: 1920 x 1080, Full HD, Format: 16/9
SAMSUNG UE46	46" LED screen, Ultra-thin edge (5.2 mm)
	Native resolution: 1920 x 1080, Full HD, Format: 16/9
SAMSUNG DB40	40" LED screen
	Native resolution: 1920 x 1080, Full HD, Format: 16/9
SAMSUNG DB32	32" LED screen
	Native resolution: 1920 x 1080, Full HD, Format: 16/9
SAMSUNG DM32	32" LED screen
	Native resolution: 1920 x 1080, Full HD, Format: 16/9
SAMSUNG ME32	32" LED screen
	Native resolution: 1920 x 1080, Full HD, Format: 16/9
SAMSUNG DB22	22" LED screen
	Native resolution: 1920 x 1080, Full HD, Format: 16/9
SAMSUNG DB10	10" LED screen
	Native resolution: 1280 x 800, Full HD, Format: 16/9

Main features common to all or most of our professional monitors:

- Monitors designed for 24/7 operation
- Advanced media player with playlist management and internal memory for media storage
- Easy integration of media directly via the USB port
- Internal image cut-out for easy set-up of multi-screen video wall
- Wireless screen mirroring from a computer or tablet
- Remote control via wired or wireless network

LG MONITORS
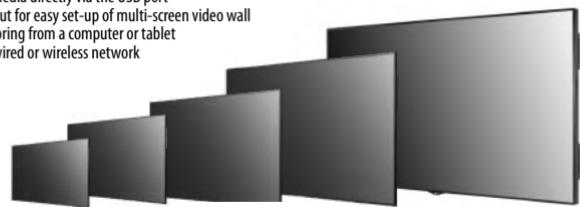
| LG 32SM5J | LG 43SM5KE | LG 55SM5KE | LG 75UM3E | LG 98UH5E |

PANASONIC MONITORS + 12G CARD

| TH-43EQ2W | TH-55EQ2W | TH-65EQ2W | TH-75EQ2W |

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LCD SCREENS

EIZO EV2740X-BK
27" monitor, 4K, 3840 x 2160, inputs: HDMI 2.0 (MHL), DP 1.2, USB-C, calibrated

SAMSUNG U28E850R
28" LCD screen, 4K, 3840 x 2160, inputs: HDMI 2.0 (MHL), DP 1.2

IYAMA XB2481 HS-B1 WITH ASG Blower 15-45°
24" LCD, 16/9, Full HD 1920 x 1080 with multi-angled active stage monitor support

NEC 2690 · 26"
26" LCD screen, 16/10, Full HD 1920 x 1200 with HP

DELL U2415 · 24"
24" LCD SCREEN, 16/10, Full HD 1920 x 1200

IIYAMA B2280HS · 22"
22" LCD screen, 16/9, Full HD 1920 x 1080

TV MONITORS

SAMSUNG UE48J5000 · 48"
48" LED TV, 16/9, Full HD 1920 x 1080

SAMSUNG UE40N · 40"
40" LED TV, 16/9, 4K, 3840 x 2160

VIDEO MONITORS

NEOVO HX24
24" LCD monitor, 16/9, Full HD 1920 x 1080, input 3GSDI, DVI, HDMI, VGA, Composite

LILLIPUT PVM220S
21.5" LCD monitor, 16/9, Full HD 1920 x 1080, input 3GSDI, HDMI, USBC

SONY LMD-A170
17" LCD monitor, 16/9, Full HD 1920 x 1080, 3GSDI, HDMI, Composite

PANASONIC BT-LH80W
7.9" Camera or control room video monitor, 16/9, 800 x 450, HD-SDI

VIDEO MONITORS

Price in € excl. tax

BLACKMAGICDESIGN VIDEO ASSIST 7"
7" monitor, 12GSDI and HDMI 2.0 with vectorscope and recording on UHS-II or USB-C

SWIT M-1071H
Banner of 2 7" monitors 3GSDI, HDMI 2.0

SWIT M-1073H
Banner of 2 7" monitors 6GSDI, HDMI 2.0 4K

EIZO EV2740X-BK

IIYAMA B2280HS

SWIT M-1073H

NEOVO HX24

DELL U2415

U28E850R

SONY LMD-A170

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SCREEN ACCESSORIES

Novelty tubular stand	For 32 to 55" screens
Shelf support for tubular stand	For computer/DVD player/tablet
Active stage monitor kit for tubular stand	For 32-55"
Wheels kit for tubular stand	For 32-55"
Wooden stage backdrop	For 32-49"
Mobile base 60 x 80	Mobile base for beam of series 300 square/tri and tube Ø50 (pole and screen support)
Horizontal/Vertical bridge bracket	Small model
Horizontal/Vertical bridge bracket	Large model

VIDEO

NOVELTY
Bridge bracket / tube Ø50
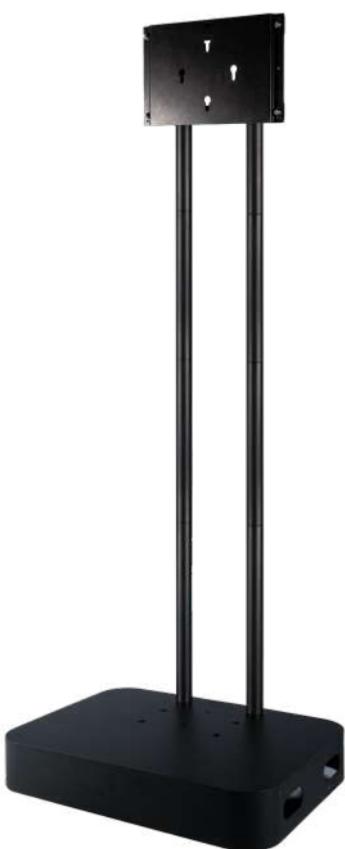
Mobile base 60 x 80

NOVELTY stand for 32 to 55"
screens

Large model bridge attachment

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INDOOR VIDEO WALLS

ABSEN MLed PL2.5
Resolution (pitch) of 2.5 mm | Indoor, 200 x 200 px
Dimensions: L 500 x H 500 x D 87 mm | Weight: 7.65 Kg |
Consumption: 135 W
Features automatic locking system and an
inner and outer curve locking system for easy installation.

PL2.5Pro Bumper x1   Hanging bumper for 1 x PL2.5 Pro panel
PL2.5Pro Bumper x2   Hanging bumper for 2 x PL2.5Pro panels

PL2.5Pro Base x1   Floor base for 1 x PL2.5Pro panel
PL2.5Pro Stand x2   Floor base for 2 x PL2.5Pro panels

PL2.5Pro Rear Hook   Rear hook arm for PL2.5Pro panels

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MLed PL2.5

MLed PL2.5

PL2.5 Bumper x1

PL2.5 Bumper x2

PL2.5 Base x1

PL2.5 Base x2

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INDOOR VIDEO WALLS

INFILED X3.9
Resolution (pitch) of 3.9 mm | 128 x 128 px
Dimensions: L 500 x H 500 x D 84 mm | Weight: 8.9 Kg | Consumption: 200 W
Tiltable in five steps to an angle of 20°.
An exceptional diameter of 2.86 m to make a complete circle.
Patented single-action locking mechanism with positioning pins for easy panel alignment.
It also has individual flexibility of the LED modules.

X3.9 Flat   LED panel, pitch 3.9 mm, "flat" model, 128 x 128 px
X3.9 Curve   LED panel, pitch 3.9 mm, "curved" model
                           angle 0°,10°,20°, 128 x 128
X3.9 Edge L&R   LED panel, pitch 3.9 mm, "edge" model
                           angle 90°, 128 x 128 px

X3.9 Bumper solo   Single hanging bumper for 1 x 3.9 panel

X3.9 Base solo   Single floor base for 1 x 3.9 panel

X3.9 Rear Hook   Rear hook arm for 3.9 panel

X3.9 Docking Plate   Corner docking plate for 4 x 3.9 panels

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X3.9

INFILED 3.9

3.9 Rear Hook

3.9 Bumper solo

3.9 Docking Plate

INDOOR VIDEO WALLS

INFILED DB2.6 | Temporary stock
Resolution (pitch) of 2.6 mm | 192 x 192 px
Dimensions: L500 mm x H 500 mm x D 75.5 mm | Weight: 8.8kg
Maximum consumption: 450 W / Panel
Brightness 1000-1200 nits, Angle of view: 160° / 160°
Tilting +/- 5° max

INFILED DB2.6

VIDEO

OUTDOOR VIDEO WALLS

Prix € HT

ABSEN POLARIS PRO V2 PL3.9
Resolution (pitch) of 3.9 mm, brightness > 4500 nits, refresh rate > 3840 Hz and a wide viewing angle of 160/160.
With high brightness, high contrast, and excellent color uniformity thanks to advanced calibration and image processing technologies from Absen, the PL3.9 delivers high-impact, large-scale image performance.

PL3.9 50 x 100	LED wall panel, L 50 x H 100 x D 78, 128 x 256 px	240
	Weight: 13 Kg, consumption: 400 W	
PL3.9 50 x 50	LED wall panel LED, L 50 x H 50 x D 78, 128 x 128 px	120
	Weight: 7.8 Kg, consommation : 200 W	
PL3.9Pro Bumper x1	Floor base for 1 x PL3.9Pro panels	21
PL3.9Pro Bumper x2	Floor base for 2 x PL3.9Pro panels	42
PL3.9Pro Base solo x1	Single floor base for 1 x PL3.9Pro panels	
PL3.9Pro Base solo x2	Single floor base for 2 x PL3.9Pro panels	42
		84

VIDEO

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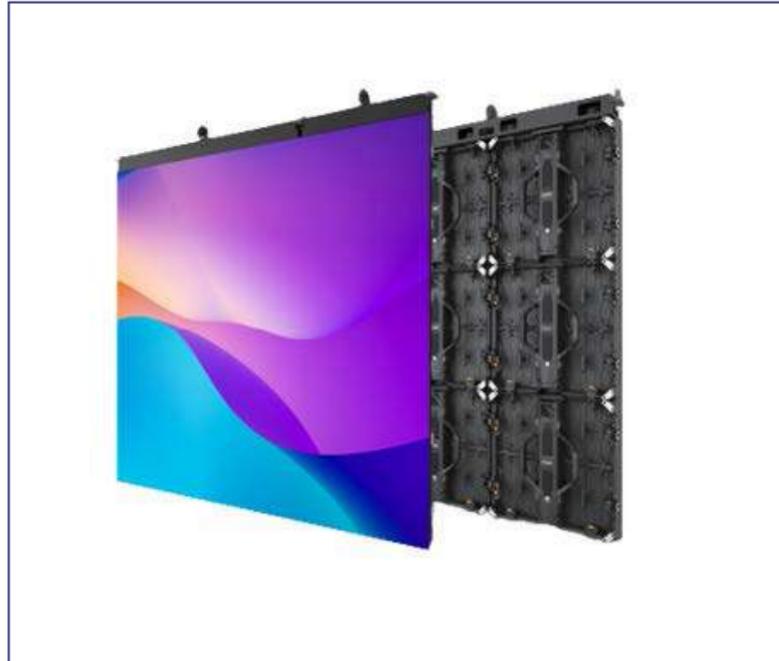
OUTDOOR VIDEO WALLS

DAYLIGHT SCREENS

MLED M6
Resolution (pitch) of 6.25 mm | 144 x 128 px
Dimensions: L 800 mm x H 900 mm x D 65 mm | Weight: 18 Kg | Consumption: 450 W
A pitch of 6.25 mm, brightness > 6000 nits, refresh rate > 2000 Hz and a
wide viewing angle, make this video wall the perfect product for your
large-scale events!

MLED BUMP1	Hanging bumper for 1 column of panels
MLED BUMP2	Hanging bumper for 2 columns of panels
MLED BASE2	Stacking base for 2 panels + 1 stabiliser + 1 ladder
MLED BASE3	Stacking base for 3 panels + 2 stabilisers + 2 ladders
MLED ECH	Additional rear support ladder

MLed M6

Bumper for 2 panels

Bumper for 1 panel

Flight-case for 4 panels

Rear support ladder

Stabiliser for base

Base for 2 panels

Base for 3 panels

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LED WALL PROCESSORS

NOVA PRO UHD Jr	LED screen processor, Input 3840 x 2160 +rotation + scaler + PIP
NOVASTAR MCTRL4K	LED screen processor, Input 3840 x 2160
NOVASTAR MCTRLR5	LED screen processor, Input 3840 x 1080 + rotation
NOVASTAR MCTRL660	LED screen processor, Input 1920 x 1080
NOVASTAR VX1000	LED screen processor, Input 3840 x 2160 + scaler
NOVASTAR VX4S	LED screen processor, Input 1920 x 1080 + scaler
NOVASTAR VX6S	LED screen processor, Input 1920 x 1080 + scaler
NOVASTAR CVT4K	Remote Nova processor, 16 EtherCON outputs
NOVASTAR CVT10 PRO-S	Remote Nova processor, 10 EtherCON outputs
NOVASTAR MX40 PRO	LED screen processor, Input 3840x2160 + scaler + PIP
NOVASTAR MX30	LED screen processor, Input 3840x2160 + scaler +PIP

NOVASTAR VX1000

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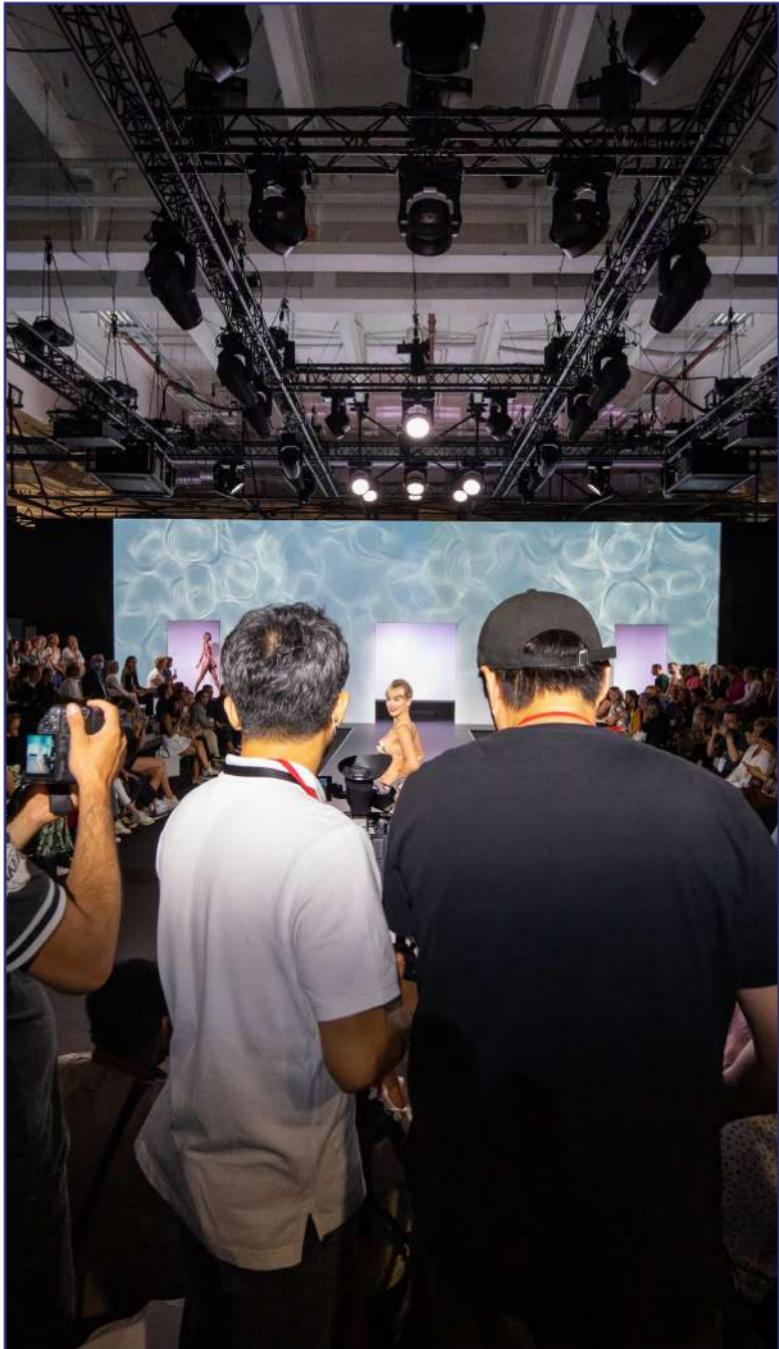
DYNAMIC & PANORAMIC
IMAGE MANAGEMENT

BARCO E2
4K screen management system.
Generation 1, generation 2 and tri-combo input and output boards available.

BARCO EC50
Compact event controller
For E2, S3, EX

ANALOG WAY Zenith 200 LivePremier

The Zenith 200 features 16 inputs, including 14 4K60 inputs (8 x HDMI 2.0, 4 x DP1.2, and 2 x 12GSDI), along with 2 1080p inputs with selectable HDMI and 3GSDI connectors.
It also provides 6 independent 4K60 outputs, each with paired HDMI and SDI connectors.
Additionally, it is equipped with a dedicated Multiviewer output.
Like all LivePremier range products, it utilizes a powerful 5th-generation scaling engine, delivering real-time 10-bit 4:4:4 native 4K60 image processing, exceptional video quality, and HDCP 2.2 compatibility.
The Zenith 200 incorporates the latest innovations, such as advanced color correction with importable external 3D LUTs, real-time SDR/HDR conversion, and high-frequency image processing up to 144 Hz.

ANALOG WAY Ascender 32 ASC3204 Livecore

Powerful Seamless Mixer for multiple screens.
Based on the Analog Way LiveCore™ platform, offering state-of-the-art
real-time processing, Soft-Edge and 4K applications
for quality presentations.
Delivered with SB-80 remote control + inverter.

ANALOG WAY Ascender 16 ASC1602 Livecore

Powerful Seamless Mixer for multiple screens.
Based on the Analog Way LiveCore™ platform, offering state-of-the-art
real-time processing, Soft-Edge and 4K applications
for quality presentations.
Delivered with SB-80 remote control + inverter.

VIDEO

ANALOG WAY ZENITH 200

ANALOG WAY Ascender 16

ANALOG WAY Ascender 32

BARCO EC50

BARCO E2

STUDIO PARIS GRENELLE

A TURNKEY STUDIO
FOR YOUR DIGITAL EVENTS

We can organize **your turnkey program**
in our TV studio for any **100% digital event.**

A MULTI-EQUIPPED VENUE

4 SHOOTING LOCATIONS
ALLOCATED OVER
83 m² OF SET

2 LOUNGE

1 ROUND TABLE

STAND UP BOTTOM 4

SOFA CORNER

3
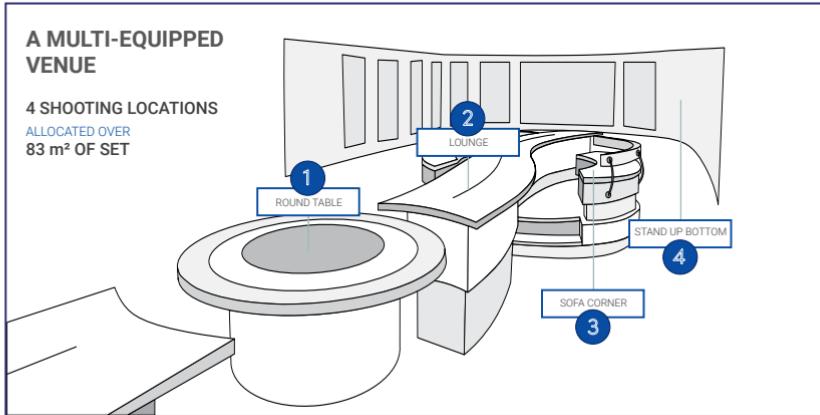
Animate and consolidate links with your network
Boost your communication strategy
Dare to be innovative and creative
Expand your scope of action

A FULLY EQUIPPED STUDIO

- 7 HD CAMERAS (2 TRACKING CAMERAS, 1 MOTORIZED)
- 28 HD SCREENS
- 8 HF TIE PIN MICROPHONES
- 2 HF HANDHELD MICROPHONES
- BROADCAST PLATFORM
- MONITORING
- 6 EAR MONITORS HF
- HD FIBER CONNECTION
- BROADCAST 2.0
- SMODE SOFTWARE TO STYLE YOUR TV SHOWS

FIXED PRICE, SIMPLIFIED KIT

STUDIO

- Full-day shoot - fully equipped studio - excluding staff: €8,000 excl. tax.
- 1/2 day shoot - fully equipped studio - excluding staff: €5,000 excl. tax.
- Preparation day (the day before: €5,000 excl. tax.
- Streaming on dedicated fiber: €200 excl. tax.

TEAMS

- Stage manager - director: €950 excl. tax/day
- Sound engineer: €550 excl. tax./day and €400 excl. tax. 1/2 day
- Camera operator: €550 excl. tax./day and €400 excl. tax. 1/2 day
- Make-up artist: €500 excl. tax/day and €300 excl. tax 1/2 day

Studio Paris Grenelle
10 boulevard de Grenelle, 75015 Paris

Sales Contact :
Guillaume CANNARD | g.cannard@novelty.fr | +33 (0)6 14 61 88 62

Technical Contact :
Norberto TOMAZ | n.tomaz@novelty.fr | +33 (0)6 60 66 93 93

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DYNAMIC & PANORAMIC IMAGE MANAGEMENT

SMODE SERVER

Smode Designer 24 IO 24 in / 24 out Full-HD videos, unlimited DMX universe video export, includes all modules XR/ VFX modules

Smode Designer 4 IO 4 in / 4 out Full-HD videos, 128 DMX universe video export, XR previsualisation

Smode Designer Dongle

MODULO ∏ Player

Modulo Player broadcast station

Modulo Player Pro 6 streams in 2560x1600 or 4 streams in 4K

Modulo Player Pro 6 streams in 2560 x 1600

Modulo Player Pro 4 streams in 2560x1600 or 2 streams in 4K

Modulo Player Pro 4 streams in 2560x1600

Optional SDI, HDMI, Timecode cards on request

RACK ARKAOS

Media Master v5 + Blackmagic UltraStudio 4K + 4K dual-display Thunderbolt 3 laptop dock

CATALYST

Media Server and video mastering software

RESOLUME ARENA 7

Media Server and video mastering software

MILLUMIN V3

Multi-screen player, soft-edge, video-mapping

RACK ARKAOS

MODULO ∏ Player

RECORDING – CAMERA CONTROL

HD DIGITAL VIDEO CONTROL

Comes with 3 digital cameras

Extra camera option
Includes

- 1 FOUGEROLLE CDD-S4AS 4 balanced audio Embedder + (HD)SDI to (HD)SDI
- 1 WOHLER AMP1A audio monitor - 1 SONY OLED 25" real monitor
- 1 CLEARCOM MS702 2-channel intercom system
- 3 AUXLAWOLBP17 Control bars
- 1 PANASONIC AVHS410 HD / SD / Multi-format Digital Video Mixer
- 1 16-port RJ45 Loudspeaker Switch
- 1 FOUGEROLLE Quadruple distributor D3G-4444/19 3G, HD-SDI, SD-SDI ASI - 1 to 4
- 1 Power supply + SAMSON Powerbrite Pro PB10 rack lighting
- 1 FOUGEROLLE TGS 6008 Synchronisation generator
- 1 LGZ H.264 SDI/HD-SDI USB recorder, requires an embedder + additional. USB
- 1 SONY OLED 17" Vision monitor
- 1 HARRIS HD-SDI 1 Oscilloscope - 1 CLEARCOM RM-702 2-channel intercom station
- 3 SONY camera remote controls (Joystick)
- 1 SDI 1x8 KRAMER SD 7108 distributor
- 1 TENDA TEG1016G 10/100/1000 MBits 16-way switch
- 1 Rack of 2 7" Swit screens
- 1 ROSENDAHL MIF4 Time Code Generator
- 1 CLEARCOM IF4W4 Quadruple 2-wire / 4-wire interface
- 1 RJ45 8-port switch PoE+ 180W HP JG350A
- 1 320Gb hard drive Passport essential black USB 3.0
- 1 Power supply + SAMSON Powerbrite Pro PB10 rack lighting
- 3 HXC-100 SONY Camera control channels
- 3 SONY HXC-100 HD Cameras
- 3 17X FUJINON ZA17X7 Standard lenses, full-motorised with extender
- 3 Fujinon lens covers + 3 Fujinon lens sun visors
- 3 FUJINON EPD21A full-servo focus demands + 3 FUJINON ERD20A zoom demands
- 3 SONY HDVF-C550W viewfinders + 3 SONY HDVF-200 eyepiece-type small viewfinders
- 3 VINTEN Vision 250 black camera stands + 3 VINTEN Vision 250 stand heads
- 2 Dolly wheeled bases for V250

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CAMCORDERS

CANON XF605 CAMCORDER

4K, HDR XF-AVC handheld camcorder
1 CMOS 1" sensor
Mains power supply
Battery charger

SONY PMW-350 2/3" CAMCORDER

XDCAM EX Full HD Camcorder (plus SD option)
3 CMOS Exmor 2/3" sensors
Mains power supply
Battery charger

SONY PXW-X160 CAMCORDER

3 CMOS Full HD 1/3-inch sensors
Full HD recording, XAVC at
112 Mbits/s or MPEG HD422 at 50 Mbits/s
Accessories: Mains power supply,
Battery charger, Zoom demand,
SXS to SDXC adapters

Tel.: 01 76 91 90 00

R O B O T I C   C A M E R A S

PANASONIC AW-UE150

4K robotic PTZ camera with 12G-SDI
video output and IP streaming with accessories

PANASONIC AW-UE100

4K robotic PTZ camera with 12G-SDI
video output and IP streaming (NDI, NDIHX, SRT)
with accessories

PANASONIC AW-HE130

Full HD robotic PTZ camera with 3G-SDI
video output and IP streaming with accessories

PANASONIC AW-HE42

Full HD robotic PTZ camera with 3G-SDI
video output and IP streaming with accessories

ACCESSORIES FOR PANASONIC PTZ CAMERA

AW-RP150
Control panel for up to 10 PTZ cameras with direct access, up to 100 IP cameras, with touch screen
AW-RP120
Control panel for up to 10 PTZ cameras with direct access, up to 100 IP cameras
AW-RP60
Control panel for 5 PTZ cameras with direct access, up to 100 IP cameras, with touch screen
AW-RP50
Control panel for 5 PTZ cameras with direct access, up to 100 IP cameras
AK-HRP200
Remote control for colour and iris settings...

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CAMERAS AND ACCESSORIES

ENEO MPC52
1/3" palm camera
Output: 3GSDI
Comes with wide-angle lens

GOPRO HERO 6
Mini in-car camera, video resolution from WVGA to 4K
Bluetooth, waterproof, Micro HDMI output
micro-USB and WIFI connections

HD CAMERA LENSES
CANON HJ40X IAS D   40 x 10-400 mm, comes with full-servo demands
FUJINON HA22X7.8 BERD   22 x 7.8 BERD, comes with full-servo demands
CANON HJ11X4.7 IAS E   11 x 4.7-52 mm, comes with full-servo demands

CAMERA ACCESSORIES
CYANVIEW RCP - Universal remote control for IP camera, unlimited license
CYANVIEW RIO Live - Multi-protocol Interface RS/IP/USB
SWIT Flow 500 - Wireless multicast system 150m 3GSDI or HDMI
LedPro x6 - On-camera light, 8W, 3200°K-5600°K
Camcorder stand
SACHTLER camera stand
Heavy stand for long lenses
Dolly wheel basey
Video mixers

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VIDEO RECORDING & SOURCES

DIGITAL RECORDERS

AJA Ki Pro Ultra 12G
> 4 stream HD or 1 stream 4K recorder
> Supplied with 2 x 1TB PAK cards and a card reader

VIDEO Devices Pix270i
> SD/HD player/recorder on disc
> Delivered with 1 x 3TB LaCie drive + 2 x 480Gb   Pix-caddy drive

BLACKMAGICDESIGN HyperDeck Studio HD Plus
> UHS-II SD card or USB-C drive player/recorder
> USB-C output for Webcam emulation
> Comes with Teranex Mini embedder

AJA KiPro Rack SD/HD player/recorder on disc
> Delivered with 1 x 3TB LaCie drive + 2 x 500GB KiStore drives

DUPLICATOR 4K SD/HD-SDI recorder on SD card

LGZ USB SD/HD-SDI recorder to external memory via USB

DIGITAL PLAYERS

THEATRIXX xPressCue 4k Media player

BRIGHTSIGN HD224 Programmable and synchronizable
4k player | With GPIO inputs and
outputs, on micro SD card

HDX 1000 Full HD player on SD or USB card
and integrated hard drive

AJA KiPro Ultra 12G

VIDEO Devices Pix270i

THEATRIXX xPressCue

DUPLICATOR
Black Magic

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COMPUTERS & VIDEO MIXERS

BARCO E2
4K screen management system

BARCO EC50
Compact event controller for E2, S3, EX

ANALOG WAY ZENITH 200
4K60 mixer with 16 inputs, 6 PGM outputs, 1 MV output, 4 mixer layers

ANALOG WAY Ascender 32 ASC3204 Livecore
Powerful Seamless Mixer for multiple screens
LiveCore™, offering state-of-the-art real-time processing,
Soft-Edge and 4K applications for quality presentations
Delivered with SB-80 remote control + inverter

ANALOG WAY Ascender 16 ASC1602 Livecore
Powerful Seamless Mixer for multiple screens
LiveCore™, offering state-of-the-art real-time processing,
Soft-Edge and 4K applications for quality presentations
Delivered with SB-80 remote control + inverter

ANALOG WAY Pulse 4K
Mixer 4k60 10 inputs, 2 PGM outputs, 1 MV output, 4 PIP maximum.

ANALOG WAY Pulse2-3G PLS350-3G
Seamless multilayer mixer with 8 inputs and Native Matrix mode

ANALOG WAY Opus OPS300
High-resolution multi-layer mixer
Clean-switching switcher with 3 scalers + 1 configurable video output

ANALOG WAY Opus OPS200
High-resolution multi-layer mixer
Clean-switching switcher with 3 scalers

ANALOG WAY Pulse PLS300
High-resolution mixer, clean-switching switcher with double scaler

C O M P U T E R S   &   V I D E O   M I X E R S

ANALOG WAY Axion 2 ARC200
Control console, up to 6 screen configurations
single or multiple + sequence mode and offline programming

ANALOG WAY Smart Matrix SMX200
Scaled 12 x 2 matrix with native output. High resolution with 4 scalers

ANALOG WAY Eikos EKS500
High-resolution multi-layer mixer
Clean-switching switcher with 4 scalers
Dedicated to high-end audiovisual presentations

ANALOG WAY
Ascender 3204 Livecore

ANALOG WAY Pulse 4K

ANALOG WAY Pulse2-3G

Barco E2

Barco EC50

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DIGITAL VIDEO MIXERS

PANASONIC AV-HS6000
2Me mixer
32 inputs, 16 outputs in 1080i, 16 inputs, 8 outputs in 1080P, 8 inputs, 4 outputs in 4K, 4 multi-viewer
ROSS CARBONITE BLACK SOLO
3GSDI mixer
6 SDI, 3 HDMI in, 5 SDI, 1 HDMI out
BLACKMAGIC DESIGN ATEM TV STUDIO PRO 4K
12GSDI mixer with 8 inputs
LUMANTEK EZ-PRO VS10
12GSDI mixer
8 SDI, 2 HDMI in, 5 SDI, 2 HDMI out
ROLAND V-160HD
3GSDI mixer
8 SDI, 8 HDMI in, 3 SDI, 3 HDMI and one USB-C out
BLACKMAGIC DESIGN ATEM TV STUDIO HD
3GSDI mixer, comes with a HD Web Presenter
4 HDMI, 4 HDMI in, 2 SDI, 1 HDMI(MV) out
PANASONIC AV-HS410
HD / SD / Multi-format digital video mixer
AVMATRIX PVS 0615
Mixer with 6 inputs 3GSDI, 2 HDMI, 2 DVI-I, 2 USB
Integrated 15.6'' Preview
BLACKMAGIC DESIGN ATEM MINI PRO
Mixer HDMI 4 inputs and 1 output, +1 USB-C output and 1 Ethernet output for streaming

LUMANTEK EZ-PRO VS10

ROSS CARBONITE BLACK SOLO

BLACKMAGICDESIGN ATEM STUDIO PRO 4K

ROLAND V-160HD

PANASONIC AV-HS6000

PANASONIC AV-HS410

CONVERTERS

ANALOG WAY VIO4K
Multi-format video converter, supplied with 2 HDMI 2.0 IN/OUT cards and DP 1.2 and one XLR audio card

NOVASTAR V1
4K video resolution converter

FOLSOM IMAGE PRO-II
Video resolution converter, scan converter and switcher-mixer

FOLSOM IMAGE PRO-HD
Transcoder, scaler, down converter, seamless switcher,
TBC in the following formats: HD SDI, VGA, DVI, Composite, Component

DECIMATOR DD-12G-CROSS
4K multi-format digital converter

DECIMATOR MD-HX
Multi-format digital converter

DECIMATOR DD-4S
Multi viewer quad 3G SDI converter

XVISION XVVSDI2HDMI
3G SDI to HDMI converter (with integrated audio)

BLACKMAGIC DESIGN MicroConverter bidirectionnel
HDMI to 3G SDI converter and 3G SDI to HDMI

BLACKMAGIC DESIGN MicroConverter 12G SDI to HDMI 4K
12G SDI to HDMI 4K micro converter (with integrated audio)

DIGITAL FORECAST BridgeM-HH
HDMI to SDI + HDMI converter with built-in scaler

NEWTEK Spark Plus IO
4K two-way HDMI to NDI video encoder

BLACKMAGIC DESIGN Web Presenter HD
Streaming solution, delivered with an Atem TV Studio HD

NEWTEK Spark Plus IO

BLACKMAGIC DESIGN Web Presenter HD

DECIMATOR DD-12G-CROSS

XVISION XVVSDI2HDMI

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PERIPHERALS

DISTRIBUTORS

HDSDI
BLACKMAGIC DESIGN TERANEX MINI	12GSDI 4K 1 < 8
LANSEE	12GSDI 4K 2 x 1 < 4
XVISION	3GSDI 2 x 1 < 4

DVI
KRAMER VM4HDCPXL	1 x 4 with EDID management

HDMI
XVISION	1 x 4 HDMI 2.0
EXTRON DA4HDMI / 4K/4K+	1 x 4

DISPLAY PORT
ATEN VS194	1 x 4 DP 1.2a MST or SST mode

EMBEDDER / DE-EMBEDDER

AJA 3G-AMA	XLR - 3G SDI audio embedder/ de-embedder
AJA HD 10 AMA	XLR - HDSDI audio embedder/ de-embedder
NEOTECK HDMIAC	HDMI de-embedder to 2 Cinch + HDMI loop

GRID

SDI
ROSS ULTRIX FR2	Modular 2U chassis
BLACKMAGICDESIGN Smart videohub Cleanswitch	
	12 x 12 6GSDI with synchronizers
FOLSOM Matrix Pro	8 x 8 HDSDI

DVI
FOLSOM Matrix Pro	8 x 8 DVI

HDMI SELECTORS
ANFI VS31A-IR	3 x 1 4K with remote control IR
KRAMER VS-311H	3 x 1
KRAMER VS-41-H	4 x 1

P E R I P H E R A L S

EXTENDERS *OPTICAL FIBRE*

LANSEE Muxlan8+8 12GSDI Multiplexer 8x12GSDI IN + 8x12GSDI OUT With dual Gigabit Ethernet connection on EtherCON connector

LANSEE EXTENDEUR 12GSDI-LAN Connection to Neutrik® DUO / 12G-SDI connectors With Gigabit Ethernet connection on EtherCON connector12 volts output on XLR4 for camera 200m kit

LANSEE TIDY 3GSDI-LAN Connection to Neutrik® DUO / 3G-SDI connectors Avec liaison Éthernet Gigabit, Kit 200 m

LANSEE TIDY RACK Docking station for 8 tidies with power supply

FOUGEROLLE MiniFlex - LAN Connection to Neutrik® DUO / 3G-SDI connectors With Gigabit Ethernet connection 200 m kit

FOUGEROLLE MiniFlex Connection to Neutrik® DUO / 3G-SDI connectors | 200m kit

XVISION SDIFIBER Connection to Neutrik® DUO / 3G-SDI connectors | 200 m kit

FUSION TOOLS HDMI2.0 FIBER LINK 4K 60Hz HDMI 2.0 extender with network and KVM on Neutrik® connectors | 200 m kit

LIGHTWARE MODEX-OPTS Connection to Neutrik® DUO / DVI-HDMI 1.4, Gigabit link, 200 m kit

LIGHTWARE TX-RX100 HDMI 1.3 extender with Neutrik® Duo adapters, 200 m kit

LANSEE Muxlan 8+8 12GSDI

LANSEE Tidy 3GSDI-LAN

FUSION TOOLS HDMI2.0 FIBER LINK

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PROJECTION SCREENS

FRAMES WITH WHITE EDGES 16/9

STUMPFL	Canvas screen, 6.30 x 3.63 m image
STUMPFL	Canvas screen, 5.08 x 2.94 m image
STUMPFL	Canvas screen, 4.47 x 2.60 m image
STUMPFL	Canvas screen, 4.25 x 2.49 m image
STUMPFL	Canvas screen, 3.45 x 2.07 m image
STUMPFL	Canvas screen, 2.86 x 1.70 m image

FRAMES WITH WHITE OR BLACK EDGES 4/3

STUMPFL	Canvas screen, 6.30 x 4.77 m frame
STUMPFL	Canvas screen, 5.08 x 3.86 m frame
STUMPFL	Canvas screen, 4.47 x 3.40 m frame
STUMPFL	Canvas screen, 3.25 x 2.49 m frame
STUMPFL	Canvas screen, 2.64 x 2.03 m frame

RETRO FRAMES WITH BLACK EDGES 16/9

STUMPFL	Canvas screen, 6.10 x 3.43 m image / 6.30 x 3.63 m frame
STUMPFL	Canvas screen, 4.88 x 2.74 m image /5.08 x 2.94 m frame
STUMPFL	Canvas screen, 4.05 x 2.29 m image / 4.25 x 2.49 m frame
STUMPFL	Canvas screen, 3.25 x 1.83 m image / 3.45 x 2.03 m frame
STUMPFL	Canvas screen, 2.66 x 1.50 m image / 2.86 x 1.70 m frame

RETRO FRAMES WITH BLACK EDGES 4/3

STUMPFL	Canvas screen, 6.10 x 4.57m image / 6.30 x 4.77 m frame
STUMPFL	Canvas screen, 4.88 x 3.66 m image / 5.08 x 3.86 m frame
STUMPFL	Canvas screen, 4.27 x 3.20 m image / 4.47 x 3.60 m frame
STUMPFL	Canvas screen, 3.05 x 2.29 m image / 3.25 x 2.49 m frame
STUMPFL	Canvas screen, 2.44 x 1.83 m image / 2.64 x 2.03 m frame

ROLLS

ORAY Screen duo	147 x 196 cm (4/3) – 110 x 196 cm (16/9)

"Custom canvas available - Please contact us for dimensions"

MISCELLANEOUS ACCESSORIES

D'SAN Perfect Cue Mini	HF remote control, can control 2 PCs
D'SAN PC-AS4-Grn	Remote control HF remote control + high-powered green laser pointer
D'SAN PRO2000 Limitimer	Bluetooth talk time timer

D'SAN Display unit 10cm	Bluetooth for PRO2000
INTERSPACE Micro Cue V3	HF remote control, can control 3 PC
INTERSPACE Micro Cue	HF remote control, can control 1 PC
ELAGATO Streamdeck	USB control interface, 6 to 32 buttons fully customisable
AVERMEDIA CP150	Media viewer, composite + VGA
Green laser pointer	Pen format

SPLITTERS/MULTIVIEWERS

MIRANDA X16D	16 3G-SDI inputs, 2 HDMI outputs, 2 3G SDI router outputs, delivered with control PC and accessories
DECIMATOR DD-4S	Multi viewer quad converter, 3G SDI
DATAPATH FX4-H	1 Displayport input, 2 HDMI inputs, 4 HDMI outputs
DATAPATH FX4-SDI	1 SDI input, 1 Displayport input, 1 HDMI input, 4 SDI outputs
DATAPATH X4	1 DVI input, 4 DVI outputs

D'SAN PERFECT CUE MINI

D'SAN PC-AS4-GRN

ELAGATO STREAMDECK

DSAN LIMITIMER PRO2000

AVERMEDIA CP150

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WIRING

HDSDI CABLES

1 metre
2 metres
5 metres
10 metres
20 metres
30 metres
50 metres on reel
100 metres on reel

HDMI CABLES

1.8 metres
5 metres
10 metres
20 metres active
40 metres active

DVI CABLES

2 metres
5 metres
10 metres
D3C 10 m active cable
D3C 20 m active cable
D3C 40 m active cable

4K CABLES

HDMI / HDMI, DVI / HDMI or DVI / DVI
2 metres
5 metres
10 metres

Fiber Optic HDMI
20 metres
40 metres

DisplayPort
2 metres
3 metres
5 metres
10 metres
15 metres

OPTICAL FIBRE / RJ45
see "Network" chapter
p. 20-21

COMPUTERS

COMPUTERS & TABLETS

APPLE Mac Pro 2018
8 cores 3GHz, 32GB, 1TB PCIe, 2 x FirePro D700 6GB

APPLE MacBook Pro 16" 2018 - 2020
Core i7, 2.6 Ghz, 512GB SSD, 16GB RAM

APPLE MacBook Pro 15" RETINA
15" laptop, Intel Core i7 quad-core processor

APPLE-SONNET xMac Mini Server
Digital audio station with Logic Pro X/Nuendo sequencers (+ info p.138)

APPLE AppleTV 4K
4K multimedia player

DELL G5
Core i7 1TB NVMe, 16 GB RAM

DELL 3560 Precision
Core i7 512 GB NVMe, 32 GB RAM

DELL e5570 Lattitude
15" laptop, Intel Core i7 processor

DELL M3510
15" laptop, Intel Core i7 processor

DELL M 4700
15" laptop, Intel Core i7 processor

LENOVO E15
Core i5-10210U, 1.6Ghz, 8GB RAM, 256GB SSD

LENOVO E580
Core i5-8250U, 1.6 GHz, 8GB RAM, 256GB SSD

LENOVO E570
15.6" laptop, Intel Core i5 processor

HP 245-G8
AMD 3500U, 8GB RAM, 256 GB SSD

APPLE iPad v6 2018 Wifi 32GB
Touchscreen tablet, 9.7", A10 chip

APPLE iPad Air 2 16Go
Touchscreen tablet, 9.7", A8x chip

COMPUTERS

SOFTWARE *(leased only installed on one of our leased computers)*

TELEPROMPT+	Teleprompter software for Mac
MILLUMIN	Multi-screen player, soft-edge, video-mapping
DT VIDEOLABS Playback Pro	HD video management software + sound card
ARKAOS Media Master v5	Media Server and video mastering software
RACK ARKAOS	Media Master v5 + Blackmagic UltraStudio 4K + 4K60, thunderbolt 3 I/O interfaces
APPLE Logic Pro X	Digital audio editing software
Catalyst	Media Server and video mastering software
Mad Mapper	Video mastering management software
RESOLUME ARENA 7	Media Server and video mastering software

Switch - Routers - Wiring
see "Network" chapter | p.18 to 21

Laptop
DELL E5570

Laptop
APPLE MAC BOOK PRO 16 2020

DELL G5

APPLE Mac Pro 2018

Tablet
APPLE iPad v6 Wifi

ACER PC
VERITON X680G

APPLE Logic Pro X

RACK ARKAOS

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LIGHTING

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INNOVATION IN LIGHTING

CHAUVET OVATION RÊVE E3 | see p.102

PORTMAN S-TRIBE | see p.100

MARTIN Mac Aura PXL | see p.88

ROBE Forte | see p.86

ROBE Esprite | see p.86

MARTIN Mac Aura XIP | see p.88

ROBE Spikie | see p.86

ROBE Spiider | see p.86

ELATION Proteus Maximus | see p.86

ASTERA AX2
| see p.94

ASTERA AX3
| see p.94

ASTERA PIXELBRICK
| see p.94

ASTERA AX5
| see p.94

ASTERA AX9
| see p.94

ASTERA TITAN
| see p.94

ASTERA HYPERION
| see p.94

GLP JDC Line 1000
| see p.92

GLP JDC1
| see p.86

CHAUVET Colorstrike
| see p.86

GLP JDC Line 500
| see p.92

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INNOVATION IN LIGHTING
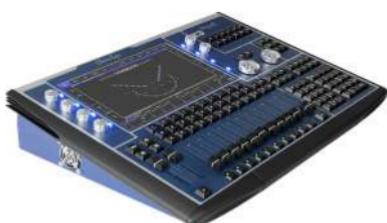
CHAMSYS MQ80 | see p.89

CHAMSYS Quick20 | see p.89

MA LIGHTING Grand MA3 Light | see p.89

MA LIGHTING Grand MA3 FullSIZE | see p.89

MA LIGHTING GrandMA 3 Compact XT | see p.89

MA LIGHTING GPU XL | see p.89

Tel.: 01 76 91 90 00

INNOVATIONS

ROBE BMFL FollowSpot LT
| see p.85

SGM i2 | see p.96

SGM Q8 | see p.96

PHILIPS Arena LED
| see p.96

MDG ME1 | see p.92

MDG ME2 | see p.92

FORTE™

T3™

ESPRITE™

T3™

ROBE.

T3™
TRANSFERABLE ENGINE

SERVO-CONTROLLED FLOODLIGHTS

LUMINAIRE YOKES

Spot

ELATION Proteus Hybrid — Servo-controlled floodlight, "Spot" yoke type IP65, 470W, 8,000°K

ROBE BMFL Blade — Servo-controlled floodlight, "Spot" yoke type, 1700W HTI, zoom 5 to 55° aperture, gobos, colour wheel, 6000°K

ROBE Mega Pointe — Servo-controlled floodlight, "Spot & Beam" yoke type, 470W, zoom 3 to 42° aperture, 7,500°K

ROBE Pointe — Servo-controlled floodlight, "Spot & Beam" yoke type, 280W, zoom 2.5 to 20° aperture

MARTIN MAC AXIOM HYBRID — Servo-controlled floodlight, "Hybrid" Wash & Beam yoke type, 600W, zoom 2 to 44°, gobos

MARTIN MAC Viper Perfo. — 1000W HTi, 10 to 44° blades

MARTIN MAC Viper Profile — 1000W HTi, 10 to 44°

MARTIN RUSH MH3 Beam — 390W, 1 to 3.8°

CLAY PAKY SHARPY — Servo-controlled yoke floodlight, Spot type, 190W, 17 gobos

ROBE Robospot — Automatic tracking system

ROBE BMFL FollowSpot LT — Servo-controlled floodlight, dedicated to tracking system, long range, 2° to 8° zoom, 1700W HTI

Wash

ROBE BMFL WashBeam — Servo-controlled floodlight, "Wash" yoke type, 1700W HTI, zoom 5 to 45° aperture, 6000°K

MARTIN MAC Viper Wash DX — Servo-controlled floodlight, "Wash" yoke type 1000W HTi 13.5 to 59°

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SERVO-CONTROLLED FLOODLIGHTS

LED yokes

Spot

ELATION Proteus Maximus	Servo-controlled floodlight, "Spot" yoke type IP65, 950W, 8,000°K
ELATION Picasso	Servo-controlled LED floodlight, 7 to 55°, 620 W
ROBE Forte	Servo-controlled LED floodlight, 5.5 to 50°, 1250 W
ROBE Esprite	Servo-controlled LED floodlight, 5.5 to 50°, 650 W
ROBE MiniMe	Servo-controlled floodlight, lyre type LED RGB "Spot" and video (2500 Lumens)
AYRTON Ghibli	Servo-controlled LED floodlight, bladed yoke type travelling, 7° to 56°, 25,000 lumens, 900W
MARTIN MAC Quantum Profile	LED 750W, zoom 12 to 36°
MARTIN RUSH MH10 FX	60 W, 4.5°, 24 LED ring
MARTIN RUSH MH5 Profile	LED Spot yoke 75W
MARTIN RUSH MH1 Profile Plus	Profile type servo-controlled yoke floodlight, 180W, strobe effect, iris, 2 colour wheels and 2 gobo wheels
SGM G-Spot	850W, zoom 9-45°, waterproof

Effect

GLP JDC1	Hybrid LED stroboscope on a servo-mounted yoke
CHAUVET ColorStrike	Hybrid LED stroboscope on a servo-mounted yoke, IP65
GLP X4bar 10	Linear LED floodlight, 10x15 W RGBW 2,500-10,000K, zoom 7°-50°
GLP X4bar 20	Linear LED floodlight, 20x15 W RGBW 2,500-10,000K, zoom 7°-50°
AYRTON Magic Blade R	7-LED light strip, 15W RGBW, beam angle 4.5°

Wash

ROBE Tarrantula	Servo-controlled floodlight, "Was1 LED 60W RGBW + 36 x LEDs 40W RGBW, fast zoom from 5.5° to 55°
ROBE Spiider	Servo-controlled floodlight, "Wash" yoke type 1 LED 60W RGBW + 18 x LEDs 40W RGBW, fast zoom from 4° to 50°
ROBE Spikie	Servo-controlled floodlight, "Wash Beam" yoke type 1 LED 60W RGBW, fast zoom from 4° to 28°

Martin

DÉCOUVREZ LE
MAC Aura X**IP**

LE PROJECTEUR WASH PERFORMANT ET POLYVALENT
SANS COMPROMIS

Le MAC Aura XIP est un projecteur Wash robotisé haut de gamme qui intègre un nouvel effet Aura en filaments.

Dernier-né de la famille MAC Aura, le XIP est le premier projecteur de sa catégorie qui conviendra à une multitude d'applications, en extérieur comme en intérieur, sans compromis en termes de poids, de taille, d'esthétique et de nuisances sonores.

Il place la barre encore plus haute grâce à un moteur LED amélioré et une optique permettant des faisceaux aériens de haute intensité, une lumière parasite parfaitement maîtrisée et une projection Wash à bords doux.

www.martin.com

ALGAM ENTREPRISES

algam-entreprises.com - Contact : 01 53 27 64 94

SERVO-CONTROLLED FLOODLIGHTS

Wash

ROBE LedBeam 150	Servo-controlled, "Wash" yoke type 7x40W, RGBW - 3.8°
AYRTON MagicDot SX	60WLED servo-controlled floodlight, "beam" type 4.5°, zoom 5° to 40°, 1,700 lumens
AYRTON MagicDot R	60W LED servo-controlled floodlight, "beam" type 4.5°, 1,700 lumens
CLAY PAKY K15	Servo-controlled floodlight, "Wash" yoke type, 19 LED 60W, RGBW, zoom 4° to 60°
CLAY PAKY K25	Servo-controlled floodlight, "Wash" yoke type, 19 LED 60W, RGBW, zoom 4° to 60°
MARTIN MAC Aura XIP	LED 7x60W RGB, zoom 6.3 to 50.4°
MARTIN MAC Aura PXL	LED 19x40W, zoom 7 to 55°
MARTIN MAC Quantum Wash	LED 50x15W, zoom 11 to 59°
MARTIN MAC Aura	LED-Zoom 11 to 58°
MARTIN RUSH MH6	LED-Zoom 10 to 60°, 150W
MARTIN MAC101	36 x LED RGB, 12.5°, white or black

MARTIN Mac Aura XIP

MARTIN Mac Aura PXL

CONSOLES FOR SERVO-CONTROL

MA LIGHTING Grand MA3 FullSIZE	16 DMX universes
MA LIGHTING Grand MA3 Light	8 DMX universes
MA LIGHTING Grand MA3 Compact XT	8 DMX universes
MA LIGHTING Grand MA2 FullSIZE	16 DMX universes
MA LIGHTING Grand MA2 Light	8 DMX universes
MA LIGHTING Grand MA2 Ultra Light	8 DMX universes
MA LIGHTING Dot2 XL-F	2 DMX universes
MA LIGHTING MA2on PC Command Wing	
	Control unit, supplied with computer
MA LIGHTING NPU	Network processing units
	8 DMX universes, 4096 circuits
MA LIGHTING GPU M	Network processing units
	16 DMX universes, 16384 circuits, Ethernet
MA LIGHTING GPU XL	Network processing units
	32 DMX universes, 4096 circuits, Ethernet
MA LIGHTING VPU Basic MK2	Image Management Unit,
	outputs: 2 x DVI + 1 VGA
CHAMSYS MQ500 Stadium	Lighting console, 200 universes
CHAMSYS MQ500	Lighting console, 24 universes, 12,288 channels
CHAMSYS Quick20	Lighting console, up to 1024 floodlights
	2 universes, wifi
LUMINEX Node 12	12 IN 12 OUT, DMX
ELC Node 8	8 IN 8 OUT, DMX
LUMINEX Node 4	4 IN 4 OUT, DMX
LUMINEX Node 4 Truss	4 IN 4 OUT, DMX, 4 Ethernet PoE ports
LUMINEX Node 2	2 IN 2 OUT, DMX
LUMINEX Node 2 Truss	2 IN 2 OUT, DMX, 2 ports Ethernet PoE
OXO Solano2	DMX playback unit

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ACCESSORIES FOR SERVO-CONTROL

OXO BBox6	DMX/RDM signal Splitter-Booster
DYNATEC Booster 6S	DMX signal Splitter-Booster
SWISSON XSR-R5-5R	DMX/RDM signal Splitter-Booster,
	2 universes, 5 outputs per universe
SWISSON XPD-28	DMX/RDM signal Splitter-Booster
	2 universes, 4 outputs per universe
W-DMX Black Box FLEX-1 G4	HF DMX Transmitter Receiver
W-DMX Black Box FLEX-2 G5	HF DMX Transmitter Receiver
W-DMX Black Box FLEX-1 G6	HF DMX Transmitter Receiver
W-DMX Black Box Micro F1 G5	HF DMX Transmitter Receiver, battery-operated
OXO TW512	Wifi DMX Transmitter Receiver (for ColorBatt)
LUMEN RADIO INRFX1	CRMX NOVA DMX/RDM/ETH Transmitter Receiver
LUMEN RADIO STARDUST	CRMX NOVA DMX/RDM/ETH Transmitter Receiver
ROBE RDM Communicator	Multi-function DMX interface
GOBOS	For servo-control
NOVELTY Pole head	Pole head for MARTIN servos and
	VARI-LITE (black and alu)
	Pole head for CLAY PAKY servos and
	ROBE (black and alu)
	Pole head for universal servos
	X30-H30 (black and alu)
NOVELTY RainCov/L	Rain cover for servos, to be hooked / Ø 50cm
NOVELTY RainCov/S	Rain protection for servos, to be hooked / Ø 36cm
NOVELTY RS32	Electrical distribution cabinet
	Adjustable differential protection
	P17 32A tri > 6 x PC16A + Socapex 419
NOVELTY RS63 V2	Electrical distribution cabinet
	Adjustable differential protection
	P17 63A tri > 12 x PC16A + 2 x Socapex 419
NOVELTY RS63 V3	Electrical distribution cabinet
	Adjustable differential protection
	P17 63A tri > 24 x PC16A
	+ 4 x Socapex 419
NOVELTY RS125	Electrical distribution cabinet
	Adjustable differential protection
	P17 125A tri > 24 x PC16A + 4 x Socapex

Tel.: 01 76 91 90 00

LIGHTING

ACCESSORIES FOR SERVO-CONTROL

NOVELTY RS125 V2	Electrical distribution cabinet
	Adjustable differential protection
	P17 125A tri > 24 x PC16A
	+ 4 x Socapex 419
NOVELTY RS125 V3	Electrical distribution cabinet
	Adjustable differential protection
	P17 125A tri > 12 x PC16A
	+ 8 x Socapex 419
PARASOL SYSTEMS STAR600	Motorised double ring Ø108/183 cm
	Speed of 5.5 to 10.9 rpm

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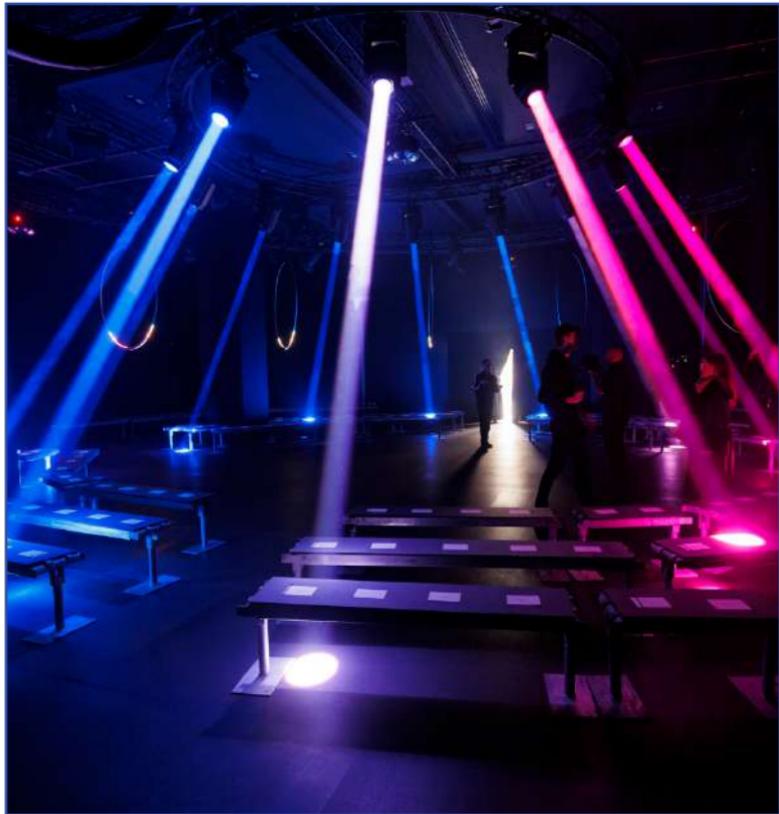
SPECIAL EFFECTS

SMOKE/FOG MACHINES

MARTIN Jem Glaciator Dynamic	High density smoke machine
LOOK VIPER NT	DMX smoke machine
MDG ME1	DMX fog machine, 1 output + fan
MDG ME2	DMX fog machine, 2 outputs + fan
MDG Atmosphère ATMe	Fog machine, CO2
REEL FX DF50	DMX fog machine
CHAUVET VESUVIO II	Fog machine
	+ LED floodlight RBA + UV
LOOK SOLUTION Unique 2.1	Fog machine MDG Atmosphère ATMe Fog machine, CO2
SHOWTECH HURRICANE	DMX-controlled fan
MARTIN Air Force One	DMX-controlled fan
Industrial fan	Large household fan
MARTIN OIL	Normal or slow dispersion, 5-litre can
MDG Neutral	4-litre can
LOOK Unique	For Unique2, 2-litre can
CO2	for MDG machines, 10 kg cylinder

EFFECTS & MISCELLANEOUS

GLP JDC Line 1000	RGBW 1600W Hybrid LED Stroboscope
GLP JDC Line 500	RGBW 700W Hybrid LED Stroboscope
GLP JDC1	Hybrid LED Stroboscope on a servo-controlled yoke
CHAUVET ColorStrike	Hybrid LED Stroboscope on a servo-controlled yoke, IP65
MARTIN Atomic 3000	3000 W DMX stroboscope + remote control
OXO UV BEAM	LED black light flood light, 90 W, IP65
CAMEO Thunder Wash 600UV	LED black light flood light, 160 W
CAMEO UV Bar 200 IR	LED black light bar, 12 x 3W, 65°, DMX3B
MACMAH BLACKGUN	Narrow-beam, long-range black light, 400 W, hexagonal
BRITEQ LED ROTOR	LED-effect fan, 70x70cm
CHAUVET Swarm 4	Disco-effect LED floodlight, "beam" type
CHAUVET Double Derby	Disco effect LED floodlight, "derby" type
CHAUVET DJ Bank	Disco effect LED floodlight, "light-chaser" type

L I G H T I N G

SPECIAL EFFECTS

GHOST MovingBar	LED Moving Bar RGBW 85W
Half Ball 40	Faceted half ball Ø 40 cm, with motor
Half Ball 50	Faceted ball Ø 50 cm, with motor Ball 30-40 Faceted ball Ø 30 or 40 cm, with motor
Ball 50	Faceted ball Ø 50 cm, with motor
Ball 100	Faceted ball Ø 100 cm, with motor
GHOST GYRO36R	Pro rotating beacon, blue, orange, red, 2 x PAR36
DESON LD194	LED ball Ø35 cm with DMX winch
WAHLBERG	DMX telescopic column
WAHLBERG	DMX rotary motor

CHAUVET ColorStrike

MDG ME2 + Flight case

CAMEO Thunder Wash 600UV

GLP JDC1

SHOWTECH Hurricane

CAMEO UV Bar 200 IR

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STAND-ALONE LIGHTING ASTERA RANGE

LIGHTING

ASTERA HYPERION	Battery powered LED decorative tube, LED 144W RGBWW, 180° angle, set of 4
ASTERA TITAN TUBE	Battery powered LED decorative tube, LED 72W RGBWW,180° angle, set of 8
ASTERA AX1	Battery powered LED decorative tube, LED 28W RGBW, 180° angle, set of 8
ASTERA AX2	Battery powered LED bar, 1m, LED 160W, RGBW, angle 21°, set of 4
ASTERA AX3	Battery powered LED spotlight, LED 15W, RGBW, 16° angle set of 8, white
ASTERA AX5	Battery powered LED spotlight, LED 45W RGBW, 13° angle set of 8
ASTERA AX9	Battery powered LED spotlight, LED 105W, RGBW, 13° angle set of 8
ASTERA PixelBrick	Battery powered LED spotlight, LED 15W RGBW, 13° angle set of 8
ASTERA Accessories	Accessories for ASTERA spotlights on request

ASTERA AX9   ASTERA AX5   ASTERA PixelBrick   ASTERA AX3

ASTERA AX1

ASTERA TITAN TUBE

ASTERA AX2

LED FLOODLIGHTS

LED BARS, DMX OR VIDEO SOURCE
MARTIN VDO SCEPTRON 10 1000MM / WITHOUT DIFFUSER
Flat, round, square and tube diffusers
MARTIN VDO SCEPTRON 10 320MM / WITHOUT DIFFUSER
Flat, round, square and tube diffusers
MARTIN P3 POWERPORT 1500
Power supply and DMX / Video switch
MARTIN P3-050
Video System Controller
MARTIN MAXEDIA COMPACT RACKMOUNT
Control panel for media composition and playback, user-friendly touch interface
MARTIN BBD-BDD POWER DATA + CABLE
1 / 5 / 10 / 25 m

LED BARS
OXO PIXYLINE
LED linear floodlight, 14x10W, RGBW, 20x50°C, IP65
AYRTON ARCALINE2 3G
10-LED strip, Full Colour RGBW, Angle 40°, 1020mm
ROBE RDM Communicator
Multi-function DMX interface for AYRTON ARCALINE

SOFT LIGHT
ARRI SKYPANEL S360-C
Full RGB+W LED floodlight, Cinema-TV-Photo type, aperture 105°,
2,800 to 10,000°K, 1500W
ARRI SKYPANEL S60-C
Full RGB+W LED floodlight, Cinema-TV-Photo type, aperture 115°,
2,800 to 10,000°K, 450W
ARRI SKYPANEL S30-C
Full RGB+W LED floodlight, Cinema-TV-Photo type, aperture 115°
2,800 to 10,000°K, 220W

ELATION KL PANEL XL
Full RGB+W LED floodlight, Cinema-TV-Photo type, aperture 110°
2,000 to 10,000° K, 544W
ELATION KL PANEL
Full RGB+W LED floodlight, Cinema-TV-Photo type, aperture 110°, 2,000 to 10,000° K, 295W
ELATION TVL2000 II
LED floodlight (450 cool white & 450 warm white), 4 shutters, aperture 30°, 3,200 to 6,500° K

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LED FLOODLIGHTS

ARCHITECTURAL

SGM P10 WASH	48 RGBW LED of 24W, angle of aperture 10°/19°/45°, IP66
SGM P6 WASH	24 RGBW LED of 24W, angle of aperture 10°/18°/47°, IP66
SGM P5 WASH	44 RGBW LED of 10W, angle of aperture 43°, IP66
SGM P2 WASH	18 RGBW LED of 10W angle of aperture 15°/21°/43°, IP66
SGM I2 WASH	69 RGBW LED, angle of aperture 8.5°, IP65

SGM Q10
Flood blind strobe 2048 RGB LED + 2048 White LED, angle of aperture 110°, IP65
SGM Q8
Flood blind strobe1812 LED RGBW, angle of aperture 110°, IP65
SGM Q7
Flood blind strobe 2000 LED RGBW, angle of aperture 110°, IP65

HUALI QUARTZ LED 480W
Quartz Led 480W, 5,100°K, 40°, Black, DMX
PHILIPS ARENA LED
ArenaVision LED Gen3, 1578 W, 5700°K, lens 12x12°
OXO SUNFLOOD 500
24 x 20W White LED floodlight 6000K, aperture 12°, with shutters and
lenses (10°x40°, 16°, 40°)
NOVELTY AF237 HORIZIODE QLED 200W
Asymmetric horizon, LED 200W, 4200°K, IP66, 15 to 75°, 21000 lm, PC16A recovery
NOVELTY HORIZIODE QLED 63W BLACK
Asymmetric horizon, LED 63W, 4000°K, IP65, 6500 lm

ARRI SKYPANEL S60-C

ARRI SKYPANEL S30-C

ARRI SKYPANEL S360-C

ELATION KL Panel

HUALI QUARTZ LED 480W

LED FLOODLIGHTS

LED PAR
CHAUVET Colorado Quad 2 Zoom IP
14 x RGBW LED of 15W, angle of aperture 6.3°
CHAUVET SlimPAR Pro H USB
LED PAR 12x10 W RGBAW + UV, angle of aperture 24°
CHAUVET ColourDash Accent Quad
LED PAR 10W RGBA, angle of aperture 15°-29°
LICIALED
Waterproof floodlight 21 W RGB (7 LED 3W), DMX
Tube 33 cm
Tube 50cm
Tube 85 cm
Tube 100 cm
Tube 167 cm
White or black skin

BATTERY-POWERED LED PAR

CHAUVET Well Fit
LED floodlight, 4 x RGBA of 10W, aperture 11-18°, battery-operated, battery life
of 8 to 20 hrs, controllable via DMX, HF, tilting stand, black, white or chrome-plated, set of 6

CHAUVET Well fit

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HPL LAMP FLOODLIGHTS 3200°K

LIGHTING

PROFILES

ETC Source 4	Body + fixed lens 5/10/14°
ETC Source 4	Body + fixed lens 19/26/36/50°/70°
ETC Source 4 Zoom	Body + zoom lens 15/30°
ETC Source 4 Zoom	Body + zoom lens 25/50°

These profiles can be installed at 575 W or 750 W.

PAR

ETC Source 4 PARNEL	Fresnel lens, 575 W
ETC Source 4 PAR	Diffusing lenses, 575 W

Different beams: VNSP/NSP/MFL/WFL. Supplied with shutters, filter holder, hook, safety sling, set of lenses.

ACCESSORIES

ETC	Iris for Source 4 profiles
ETC	Gobo-holder for Source 4 profiles, size A or B
ETC	Glass gobo holder, size B
ETC	"Donut" for Source 4 profiles, 5 to 50°
ETC	"Top Hat" for Source 4 PAR 19/26/36/50°
ETC	"Egg crate louver" for Source 4 PAR
ETC	Concentric cone for Source 4 PAR

ETC Shutters

ETC "donut"

ETC "egg crate louver"

ETC "Iris"

ETC "Top Hat"

ETC Gobo holder

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Tel.: 01 76 91 90 00

ETC Source4
5 °

ETC Source4
PAR

ETC Source4
10 °

ETC Source4
Zoom 15/30°

ETC Source4
14/19/26/36/50/70 °

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TRADITIONAL FLOODLIGHTS

OUTDOOR ENVIRONMENTS

CARIBONI	Waterproof HPIT, asymmetrical 150W, black
GEWISS	Waterproof HPIT, symmetrical 150W, grey
GEWISS	Waterproof HPIT, asymmetrical 150W, grey
GEWISS	Waterproof HPIT, symmetrical 400W, grey
MAZDA Cormoran 300 W	Horizon 300W, waterproof
MAZDA Cormoran 1000 W	Horizon 1000W, waterproof

STAGE ENVIRONMENTS

ROBE PATT 2013	"Softlight" type floodlight, set of 2
	750W HPL, 3,050°K, retro look ideal for decorative lighting
ROBE PICKLE PATT	"Softlight" type floodlight, set of 2
	575W HPL, 3,050°K, retro look ideal for decorative lighting
ROBE ONEPATT	"Softlight" type floodlight, set of 7
	LED 30W, RGBW, 3,050°K, retro look
STAR WAY Orion	Decorative ambient floodlight, 7 x 300W halogen
PORTMAN S-TRIBE	Decorative ambient floodlight, 5 x 40W, 10 LED RGW
PORTMAN P3 Pix 3L	Decorative ambient floodlight, 3 x 230W, gold finish
PORTMAN P2 Hexaline	Decorative ambient floodlight, 6 x 250W gold or silver finish
PORTMAN P1 Retro	Decorative ambient floodlight, 7 x 230W, silver finish
ADMIRAL Aradred 41	Decorative ambient floodlight, 60W, 38cm, set of 4
ADMIRAL Aradred 56	Decorative ambient floodlight, 60W, 53cm, set of 2
PANAVISION Skypan 2k/5k	Halogen 2000 or 5000 W
ADB ACP1001	Asymmetrical CYC, 1000-1250 W
KEYLITE Chinese Ball	Halogen 1000 W
BRITEQ BT NonaBeam	Svoboda LED, 9 x 60 W, BQ1
OXO Funstrip	Strip of 10 LV dichro, 75W, 240V, DMX

LOW VOLTAGE / BLINDERS

ELATION DTW 350IP	DTW Blinder 350 IP, 1 800-3 200°K, adjustable PAN
ELATION DTW 700IP	DTW Blinder 700 IP, 1,800-3,200°K, adjustable PAN
TS FL1300	2 x PAR36 650 W = 1300 W/220 V
DTS FL2600	4 x PAR36 650 W = 2600 W/220 V
DTS MOLEFAY	8 x PAR36 650 W = 5200 W/220 V
SCENILUX BT250	250 W/220 V, integrated transfo.
SCENILUX BT500	500 W/220 V, integrated transfo.
SCENILUX BT1000	1000 W/220 V, integrated transfo.

T R A D I T I O N A L   F L O O D L I G H T S

PROFILES (*Halogen Profiles*)

JULIAT 613SX	Short profile 1000 W/220V, 58°
JULIAT 614SX	Profile 1000 W/220 V, zoom 16/35°
JULIAT 710SX	Profile 2 kW/220 V zoom 10/25°
JULIAT 713SX	Profile 2 kW/220 V zoom 29/50°
JULIAT 714SX2	Profile 2 or 2.5kW/220 V zoom 15/40°
JULIAT Iris	Iris for 613S/614SX/714SX
JULIAT PG	Gobo-holder size A for 614SX/714SX

ROBE ONEPATT

ROBE PICKLE PATT

PORTMAN P1 Retro

PORTMAN P2 Hexaline

PORTMAN P3 Pix 3L

ROBE PATT 2013

STAR WAY Orion

PORTMAN S-TRIBE

ADMIRAL Aradred 56

ADMIRAL Aradred 41

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TRADITIONAL FLOODLIGHTS

HMI Profiles

ETC/BRON COLOR Kobold DW400 Source Four profile with lens unit
"Kobold" DW400, 400W daylight
JULIAT 930 SNX MSR 2500 W, offset ballast, 9 to 26°
JULIAT 933 SNX MSR 2500 W, offset ballast, 30 to 53°
JULIAT 934 SNX MSR 2500 W, offset ballast, 18 to 36°

LED Mini-Proflies / Profiles

CHAUVET OVATION RÊVE E3 Profile 367W, 2800 > 8000 °K, RGBW,
zoom 15-30° or 25-50°, black
ETC Source Four LED Lustr2 Profile 246W, 5600°K, RGBW, zoom,
black
ETC Source Four LED Lustr+ Profile 170W, 5600°K, RGBW, zoom 15-30°
or 25-50°, black
ETC Source Four LED Zoom Profile 170W, 5600°K, zoom 15-30°
or 25-50°, white
ETC Source Four LED Profile 170W, 5600°K
Focus 5°/10°/14°/19°/26°/36°/50°/70°
ETC Source Four mini LED 36° LED mini-profile, 12W, black, 4000°K,
blades, rotary gobo-holder, aperture 36°
ETC Source Four mini LED 50° LED mini-profile, 12W, black, 4000°K,
blades, rotary gobo-holder, aperture 50°
floodlight Profiled50 50 W, 20/40°, cold white 5700K

FRESNELS *(all fresnels are delivered with 4-sided shutters)*

Halogen Fresnels

DESISTI Magis 500 W 500 W/220 V, 3200°K
DESISTI Leonardo 1 kW 1000 W/220 V, 3200°K
DESISTI Leonardo 2 kW 2000 W/220 V, 3200°K
DESISTI Leonardo 5 kW 5000 W/220 V, 3200°K

HMI Fresnels

ARRI Studio T12 Fresnel 12 KW, HMI, 12 kg
ARRI Compact SE4000 HMI 4000 W, DMX self-ballast
ARRI Compact SE2500 HMI 2500 W, DMX self-ballast
ARRI Compact SE2500 HMI 2500 W, DMX electronic ballast
COMPULIGHT CoronaM DMX Shutter for SE2500
BRON COLOR Kobold DW800 800W, waterproof, "daylight", 47°
BRON COLOR Kobold DW400 400W, waterproof, "daylight", 15 to 45°

T R A D I T I O N A L   F L O O D L I G H T S

LED Fresnels
ARRI L5-C
LED Fresnel 115 W, 4-sided shutter, 2,800 to 10,000°K
ARRI L7-C
LED Fresnel 160 W, 4-sided shutter, 2,800 to 10,000°K
ARRI L10-C
LED Fresnel 400 W, 4-sided shutter, 2,800 to 10,000°K
ELATION KL6-CW
LED Fresnel 150 W 5600°K
LTM LT300N-LED-RAIL
LED floodlight 1x40W, Fresnel lens, "MIZAR" type, 4000°K, 12W console, 4-sided shutter
(equivalent to 400W halogen), black or white, equipped with PC16 and LITA power strip
DESISTI Piccoletto
LED Fresnel 30W / 4000°K / white or black

Full kit BRON COLOR DW400

ARRI L10-C

ARRI L7-C

LTM LT300N-LED-STRIP

DESISTI PICCOLETTO

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TRADITIONAL FLOODLIGHTS

CONVEX PLANES
JULIAT 310H	PC lens, 1000 W/220 V
JULIAT 329H	PC lens, 2000 W/220 V

PAR & ACL
PAR36	LV, integrated transfo., 30 W/220 V, hexagonal
PAR38 "BN"	Hexagonal, 120 W/220 V, mains outlet
PAR56	Black, hexagonal, 300 W/220 V, mains outlet
PAR64	Chrome-plated or black alu, 1000 W/110 or 220 V
PAR64BARRE	Bar of 6 PAR64 black alu, 6000 W/110 V
ACL600	Hexagonal, single unit, transfo., 600 W/220 V
SERIE ACL250	2 bars of 4xACL250, 2000 W/220 V, alu or black

FOLLOWSPOTS
ROBE Robospot	Automated tracking system
JULIAT Arthur	800W LED with Gitzo stand, 5,5/15°
JULIAT Victor 1800MSD	2500HMI with Gitzo stand, 7/14.5°
JULIAT Cyrano 2500HMI	2500HMI with Gitzo stand, 3/8°
JULIAT Aramis 2500HMI	2500HMI with Gitzo stand, 4.5/8°
JULIAT Ivanhoe 2500HMI	2500HMI with Gitzo stand, 9/21°
JULIAT Héloïse 2500HMI	2500HMI with Gitzo stand,15/29°
Bridge seat	For suspended tracker

Tel.: 01 76 91 90 00

LIGHTING

JULIAT 310H

JULIAT Arthur

JULIAT Héloïse
2500HMI

JULIAT Victor
1800HMI

LED TUBE, FLUO & GARLAND LIGHTING

KINOFLOW 60	Proj. TV/Photo, 4 60cm fluorescent tubes
KINOFLOW 120	Proj. TV/Photo, 4 120cm fluorescent tubes
KEYLITE Chinese Ball	Halogen 1000 W
LUMILA TUBELED1500	Rotating magnetic LED tube, IP65 5000 °K, 1.5 m
NOVELTY Colorwhite033	LED bars RGBW 6000°K 3.4 x 2.5 - 33 cm
NOVELTY Colorwhite100	LED bars RGBW 6000°K 3.4 x 2.5 - 100 cm
NOVELTY Colorwhite150	LED bars RGBW 6000°K 3.4 x 2.5 - 150 cm
NOVELTY Colorwhite200	LED bars RGBW 6000°K 3.4 x 2.5 - 200 cm
HALOLITE FLUO 52	Fluorescent strip T5 in 4000 / 6500°
HALOLITE FLUO 117	Fluorescent strip T5 in 4000 / 6500°
NOVELTY FLUO 120	Strip of 1 fluo, 1.20 m, starter, 36W
NOVELTY FLUO IP44 120	Strip of 1 fluo, waterproof, 1.20 m, starter, 36W
NOVELTY FLUO IP44 120	Strip of 1 waterproof LED fluo, 1.20 m
NOVELTY FLUO 120DMX	Strip of 1 fluo, 1.20 m, DMX, 36W, with dimmer (Dali)
GARLAND	Black, 10m, 3 LED bulbs per m
GUIRLANDE	Black, 20/25m, 3 LED bulbs per m
GARLAND	Black, 50 m, 3 LED bulbs per m

NOVELTY Colorwhite

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LED POLES

INNLED T4X black	Battery-powered black or white LED light pole, set of2T°-controlled power, at Full 4300°K, battery life>10 Hrs
INNLED T4X white	Battery-powered black or white LED light pole, set of 2T°-controlled power, at Full 4300°K, battery life>10 Hrs

INNLED T4X

STRIP/EXHIB./DECO LIGHTING

THREE-PHASE STRIP (BLACK OR WHITE)

LITA	Three-phase strip 16 A, 3-starter strip
LITA	Strip connectors/strip power supply/various adapters
PICCOLO	Strip with two conductors 27 x 15 mm, 150W max

FLOODLIGHTS FOR EXHIB./DECO

PROCEDES HALLIER Fenyx	LED mini-profile 16 to 40°, black or white, lita strip, 20/25W
PROLIGHTS Eclipse Zoom	LED mini-strip 19 to 36°, black, PC16, 35W
PROLIGHTS Gallery Eclipse	LED mini-profile 19 to 36°, black, strip, 35W, 4000k
PROLIGHTS Mini Eclipse Zoom	LED mini-profile, 19/26/36/50°, black, PC16,28W
CLS Jade Zoom	LED floodlight, black, zoom 9 to 58°, 3000K
LOUPI SpotC	Spot C, black or white, 2.1W, 4000°K, 10/40° or elliptical
NOVELTY AR111	LED floodlight AR111, 18.5W, 36°, black or white,lita strip
SOKA.D ETA GZ10N	LED floodlight 50W, black, 4000° K, lita strip
PROCEDES HALLIER Luneo	Set of 24 LED spotlights 5W, 4000°K, 25°, lita strip
AMBIANCE LUMIÈRE Piko	Set of 8 LED spotlights 1.25W, 28 cm rod, 18°, 4000°K

Tel.: 01 76 91 90 00

S T R I P / E X H I B . / D E C O   L I G H T I N G

MOLE RICHARDSON EXPOLED	LED on 30 cm curved tilting rod, 50W/220V, black
NOVELTY PELLED	LED floodlight 60W, "pie server" type, 25W, 4000°K, black or white
NOVELTY PELLED DALI	LED floodlight 60W, "pie server" type, 25W, 4000°K, black or white, DALI / DMX
Floodlight Profiled50	Mini-profile 50 W, 20/40°, Cold white 5700K
MOLE RICHARDSON VM70	Mini-profile 70 W, dichroic, white or black
MOLE RICHARDSON Mickey	Dichroic LV, with shutters, 50 W, white or black
CHAUVET EZBAR	Set of 4 strips of 3 LED spotlights 5W, 4000°K, battery-powered

L E D   /   I N T E G R A T I O N

|	
NOVELTY DALI	DMX -> Dali 6-channel converter
NOVELTY RUBLEDRGBW	LED strip 30W-96 LED/m RGBW 3000 and 6000°K
NOVELTY LED strip RGB-72	LED strip RGB 17.5W-72 Led/m, 5 m
NOVELTY RUBLED19,2W	LED strip 19.2W-240 LED/m 2200 / 2700 / 3000/ 3500 / 4000 / 5700°K, 5m
	Profile for LED strip integration
NOVELTY Planche-King	Controller 4 x 680 RGB pixels, 5 or 12V
ENTTEC E-STREAMER MK2	48 DMX-universe recorder
ENTTEC Pixelator	LED controller, 8160 RGB pixels via 48 Artnet universes, 24 Plink Ethernet ports
ENTTEC PLINK	Controller 340 matrixed pixels
NOVELTY DriveLED 410	LED power supply and dimmer, DMX512 (XLR and RJ45 in-out), 4 x 10A, 4 x 240W, 24V
NOVELTY DriveLED 323	LED power supply and dimmer, DMX512 (XLR and RJ45 in-out), 32 x 3A, 32 x 72W, 24V specific cables SAC 5/10/20 m
NOVELTY DriveLED 306	LED power supply and dimmer, DMX512 (XLR and RJ45 in-out), 3 x 6A, 3 x 144W, 24V
NOVELTY DriveBattV3	LED power supply, battery-powered, 24V, 12A
ACCLAIM LIGHT DriveLED 8RGBx2	
	LED power supply and dimmer, DMX512 (XLR and RJ45 in-out), 8xRGBW, 144W Max

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PIXELATOR and LED strips

NOVELTY Planche King

NOVELTY DriveBattV3

NOVELTY DriveLED 306

NOVELTY DriveLED 410

NOVELTY DriveLED 323

NOVELTY PELLED

PROCEDES HALLIER Luneo set x24

LOUPI SpotC

L I G H T I N G

CHAUVET EZ BAR

NOVELTY
LED-AR111-Rail

CLS Jade Zoom

PROLIGHTS Eclipse Zoom

PROLIGHTS Mini Eclipse Zoom
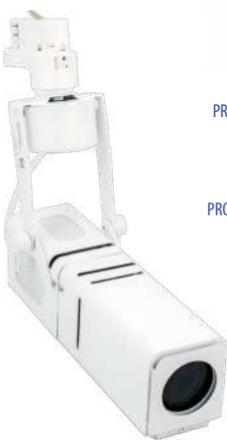
PROCEDES Hallier
Fenix 20W

AMBIANCE LUMIERE
Piko

novelty
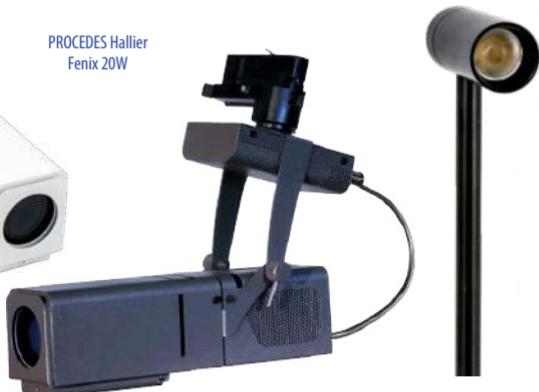
CENTREPIECE/ CHANDELIER / LAMP

CentreTabLED Tabletop lighting,
Battery-powered LED, 20 hrs battery life
with dimmer, customisable lampshade
DHX-HF controls
Lampshade Ø140 /200 mm, stand Ø200 mm
height 320 mm, weight 1.160 kg

OBELIE Tabletop lighting, set of 15
Battery-powered LED, 7 hrs battery life
with dimmer, customisable lampshade
DHX-HF controls
Lampshade Ø120 /100 mm, stand Ø140 mm
height 320 mm, weight 1.345 kg
Lamp bottom illuminates in warm white (2800°K)
Full colour lampshade

PARA NOCTA Battery-powered LED lamp, 3000°K, IP6, set of 2

Castries Lamp Parisian style, 1 head with 6 glass sides
cast aluminium, black and gold body,
E27 low-energy lamp

PROLIGHT SmartTorch LED torch RGBW IP54, battery-powered, set of 6
LUMINARA LED torches Ivory LED torches, 10/13/17/23 cm, battery-powered

CHAUVET Festoon 2 Garland 20 RGB bulbs 15m
CHAUVET Festoon 2 Controller for Festoon 2 RGB

PROLIGHT SmartTorch

CentreTabLED

OBELIE

PARA NOCTA   Festoon 2   LUMINARA LED torches

Tel.: 01 76 91 90 00

BULBEE
100 x 98 x 90 mm
Poids : 430 g
Vis 1/4"
Ergot
Dissipateur en aluminium anodisé

LANTERNE
370 x 150 mm
Poids : 300 g
Haute résistance aux chocs
Nettoyage facile

MÂT
3 tubes à connecter
Aluminium thermolaqué sablé mat poudrage spécial anti-UV haute résistance

PARA NOCTA
LA LUMIERE IDEALE

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DMX ORGAN SETS

ADB MIKADO	12/24 circuits
MA LIGHTING Lightcommander II	12/24 circuits
ZERO 88 JESTER	24/48 circuits
MA LIGHTING Lightcommander II	24/48 circuits
MA LIGHTING Lightcommander II	48/96 circuits
MA LIGHTING Grand MA3 FullSIZE	16 DMX universes
MA LIGHTING Grand MA3 Light	8 DMX universes
MA LIGHTING Grand MA3 Compact XT	8 DMX universes
MA LIGHTING Grand MA2 FullSIZE	16 DMX universes
MA LIGHTING Grand MA2 Light	8 DMX universes
MA LIGHTING Grand MA2 Ultra Light	8 DMX universes
MA LIGHTING Dot2 XL-F	2 DMX universes
MA LIGHTING MA2 on PC Command Wing	Control unit

DIMMER PACKS

OXO Simoun2	DMX, input PC16A/output PC16A
RVE Stager 6x2.3	DMX, input P17 32tri/outputs PC16A
CRYSTAL EQT 6x12	DMX, input P17 125tri/outputs 6x63 Mono P17
RVE LIVE 12x3	DMX, input P17 63tri/outputs PC16A
AVOLITE Powercube 12x3 / 18x2	DMX, input P17 63tri/outputs PC16A/Soca
RVE 24x3 HDL	DMX, input P17 125tri/outputs PC16A
RVE 36x2	DMX, input P17 125tri/outputs PC16A
AVOLITE Powercube 48x2	DMX, Powerlock input/Soca outputs

DMX ACCESSORIES

JULIAT	HERMES Interface
OXO Solano2	DMX playback unit
ROBE RDM Communicator	Multi-function DMX interface
ASTERA ART7 Bluebox	Bluetooth / CRMX / W-DMX Interface
CHAUVET Festoon driver	"Data over power" Festoon bulb driver
OXO BBox6	DMX/RDM signal Splitter-Booster
DYNATEC Booster 6S	DMX signal Splitter-Booster
SWISSON XSR-R5-5R	DMX/RDM signal Splitter-Booster,
	2 universes, 5 outputs per universe
SWISSON XPD-28	DMX/RDM signal Splitter-Booster
	2 universes, 4 outputs per universe

LIGHTING

L I G H T I N G

D M X   A C C E S S O R I E S

W-DMX Black Box FLEX-1 G4	HF DMX Transmitter Receiver
W-DMX Black Box FLEX-2 G5	HF DMX Transmitter Receiver
W-DMX Black Box FLEX-1 G6	HF DMX Transmitter Receiver
W-DMX Black Box Micro F1 G5	HF DMX Transmitter Receiver, battery-operated
OXO TW512	Wifi DMX Transmitter Receiver (for ColorBatt)
LUMEN RADIO STARDUST	CRMX NOVA DMX/RDM/ETH Transmitter Receiver
LUMEN RADIO INRFX1	CRMX NOVA DMX/RDM/ETH Transmitter Receiver
ROBE RDM Communicator	Multi-function DMX interface

ZERO 88 JESTER

ADB MIKADO

LUMEN RADIO INRFX1

LUCENTI Festoon

SWISSON XSR-R5-5R

ASTERA ART7 Bluebox

SWISSON XPD-28

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MULTIPAIR WIRING

SOCAPEX	Multipair 6 circuits 3 x 2.5 mm^2
SOCAPEX	Whip or bridge box 6 circuits 3 x 2.5 mm^2
SOCAPEX	Variable-length whip 3 x 2.5 mm^2

DMX WIRING

DMX 3-pin	Length: 3/5/10/20/50/100
DMX 5-pin	Length: 3/5/10/20/50/100
DMX 3-pin KIT	24 x 3 m / 24 x 5 m / 24 x 10 m / 12 x 20 m
DMX 5-pin KIT	24 x 3 m / 24 x 5 m / 24 x 10 m / 12 x 20 m
1/2 DMX 5-pin KIT	12 x 3 m / 12 x 5 m / 12 x 10 m / 6 x 20 m
NOVELTY BDX4U	4 DMX universe box on RJ45 category 5

LIGHTING ACCESSORIES

IFF Pantograph	Cross-bar suspension, 6 m max, 40 kg max
	Boom control
AVENGER C825	Telescopic rod 117 cm / 30 kg to 220 cm / 7 kg
MANFROTTO Baby 30	Chrome-plated stand for floodlight, 1,30 to 3 m, 10 kg max
MANFROTTO 126CSU	Chrome-plated stand for floodlight
ASD AL250	Steel stand of 1.30 to 2.50 m, 70 kg max
ASD ALT300	Steel stand of 1.30 to 2.50 m, 70 kg max
MANFROTTO WIND-UP	Rack-and-pinion stand 3.7 m, 30 kg max, black
MANFROTTO WIND-UP-ROUL	Rack-and-pinion stand 3.7 m, 30 kg max, black on castors
MANFROTTO EXTENSION	Extension cord for Wind-Up, black
NOVELTY	Coupling bar for 2 to 4 floodlights
NOVELTY	Floor cross for 1 floodlight

LIGHTING

NOVELTY BDX4U

MANFROTTO Baby 30

AVENGER C825

ASD stand AL300

Flood cross

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SOUND SYSTEMS

SOUND SYSTEMS

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INNOVATIONS IN SOUND SYSTEMS

L-ACOUSTICS LA-RAK III-AVB | see p.131

L-ACOUSTICS LA-RACK II - AVB | see p.131

M1 HOLLYLAND | see p.152

Tel.: 01 76 91 90 00

INNOVATIONS

L-ACOUSTICS P1 | see p.140

L-ACOUSTICS SB10i | see p.130

L-ACOUSTICS SOKA | see p.129

YAMAHA DM7-EXT | see p.136

L-ACOUSTICS SYVA BLANC | see p.129

YAMAHA DM3 | see p.136

L-ACOUSTICS L SERIES

SOUND SYSTEMS

L-ACOUSTICS L2 | see p.128

L-ACOUSTICS L2D | see p.128

L-ACOUSTICS L-Bump | see p.128

Tel.: 01 76 91 90 00

L-ACOUSTICS K SERIES

L-ACOUSTICS K3 | see p.128

L-ACOUSTICS K3-Bump | see p.128

L-ACOUSTICS K3-Tilt | see p.128

SOUND SYSTEMS

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INNOVATIONS IN SOUND SYSTEMS

Translation booth
| see p.152

TAIDEN HCS-4800MA | see p.156

TAIDEN HCS-4838NCSD-D/80
| see p.158

BOSCH DCNM-WDE | see p.158

Tel.: 01 76 91 90 00

INNOVATIONS

TAIDEN HCS5100MA08M + HCS5100PA
| see p.157

SENNHEISER HDE 2020-D-II
| see p.159

SENNHEISER EK 2020-D-II
| see p.159

NOVELTY Headset
Handsfree Kit
| see p.157

BEYERDYNAMIC
BD-UNIT-TP
| see p.159

TAIDEN HCS8685
| see p.157

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NEXO SOUND SYSTEMS

BROADCASTING SYSTEM

PS15 R2	Speaker, delivered with yoke 2 active/passive channels - 100° x 55° - 1 x 15"/1 x 2"
PS10 R2	Speaker, delivered with yoke 2 passive channels - 100° x 55° - 1 x 10"/1 x 1"
PS8 R2	Speaker, delivered with yoke 2 passive channels - 100° x 55° - 1 x 8"/1 x 1"
RS18	Subwoofer - 2 x 18"
LS18	Subwoofer - 1 x 18"
ID24	Compact full-range speaker, set of 4 500W/16Ω, 120°x40°, black and white, set of 4
IDS110	Subwoofer, 1x10", 650W/4Ω, 43-130Hz, black

WEDGE

NEXO 45N12	106 dB, 50Hz-20kHz, 30° H-22.5° Diag, 60°

AMPLIFIERS

NXAMP 4X1C	Amplifier + processor - 4x1000W / 4Ω
NXAMP 4X4C	Amplifier + processor - 4x4000W / 4Ω
DTDamp 4x1.3	Amplifier 4x1200W/4Ω

IDS110

ID24

DTDAMP

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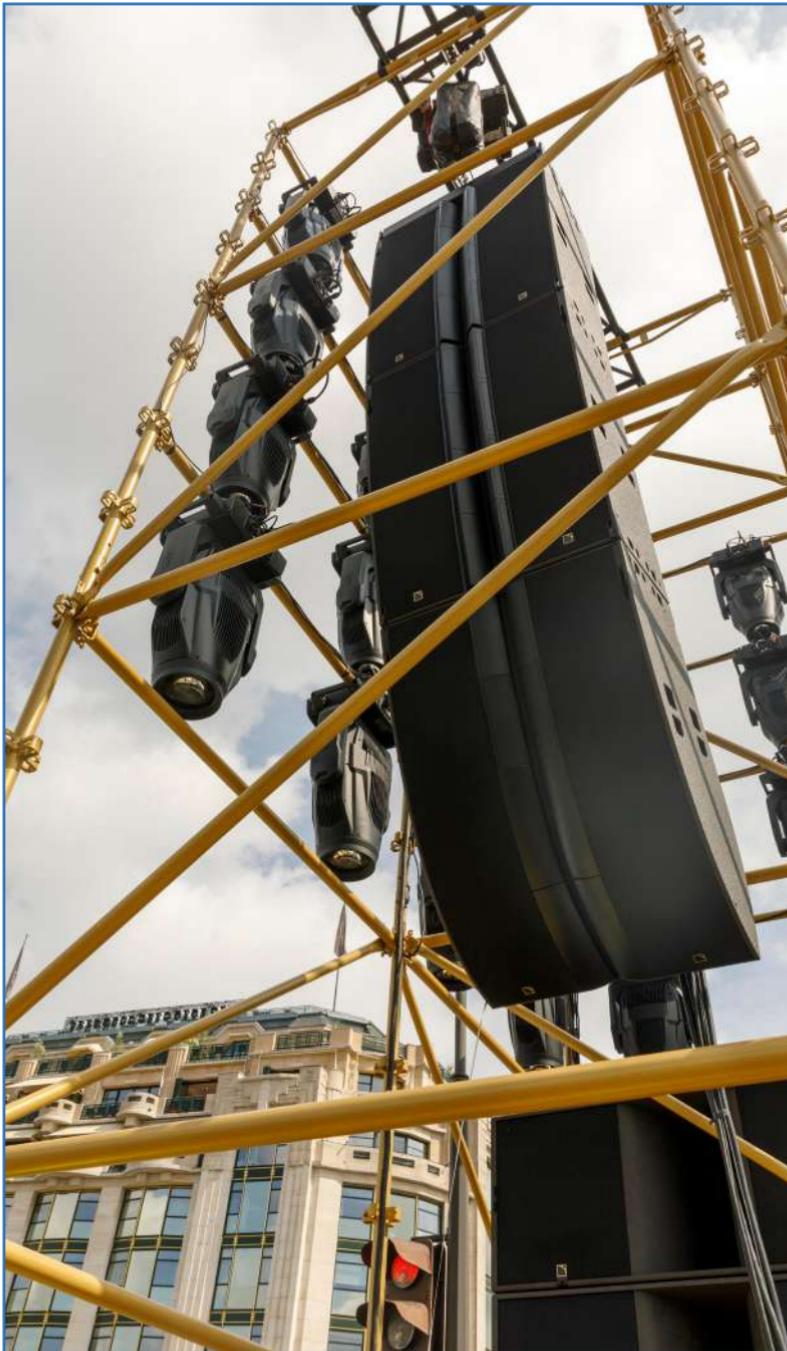
L-ACOUSTICS SOUND SYSTEMS

L SERIES

L2	Active Speaker, 16 channels, WST Progressive Curve 10°
L2-D	Active Speaker, 16 channels, WST Progressive Curve 60°
L2-Bump	Hanging bumper for L2 speakers

SÉRIE K

K3	3-channel speaker - 2 x 12" 4 x 6,5" 2 x 3"
K3-Bump	Hanging bumper for K3 speakers
K3-Tilt	Rigging element for stacking K3 on KS28
K2	3-channel speaker - 2 x 12" 4 x 6.5" 2 x 3"
K1-Sub	Subwoofer - 2 x 15"
K2-Bump	Hanging bumper for K2 speakers
KARA-DOWN-K2	Fixing device for KARA under K2
KUDO	3-channel speaker - 2 x 12" 4 x 5" 2 x 1.75"
K-Bump	Hanging bumper for Kudo speakers
K-Jack x2	Adjustment system for K-Bump in ground position
K-Lift	Horizontal hanging bumper for Kudo speakers
KARAII	Speaker, 2 active channels, 139dB, 55 Hz/20 kHz, set of 3
M-Bump	Hanging bumper for Kara speakers
M-Barre	Extension bar for M-Bump
Minibu	Compact lifting or laying bumper for 6 KARA
Pullback	Plate for rear attachment of KARA in shower configuration
KIVAII	"Line-array" speaker 16 Ohms, 2 channels, 138dB SPL, aperture 100°
KIBUII	Hanging bumper for lifting "KIVA" speakers
KIETII	Stirrup for hanging of 3 Kiva / Kiva II max in "under-balcony" or on stands
Kibu-SB	Lifting or laying bumper for Kiva and SB15M
Pullback	Rear lifting accessory for KIVA II and KIVA systems

Tel.: 01 76 91 90 00

L-ACOUSTICS SOUND SYSTEMS

S SERIES

SOKA	Speaker, 2 passive channels, LF = 9x3.5",HF=3x1", horizontal cover 140°
SYVA	Speaker, 2 passive channels, MF = 6x5",HF=3x1.75", horizontal cover 140°, vertical cover +5/-21°, 137 db SPL, 8 Ω + Bar, Pole, Wall, Clamp250 accessories
SYVA LOW	Subwoofer for "Syva" system, 4Ω, 137 dB SPL, 2 x 12" + Base
SYVA SUB	Subwoofer for "Syva" system, 8Ω, 128 dB SPL, 1 x 12"
SYVA BLANC	Speaker, 2 passive channels, MF = 6x5",HF=3x1.75", horizontal cover 140°, vertical cover +5/-21°, 137 db SPL, 8 Ω
SYVA LOW BLANC	Subwoofer for "Syva" system, 4Ω, 137 dB SPL, 2 x 12"

A SERIES

ARCS II	"WST source line" speaker with constant curve 50Hz to 20kHz, 60° asymmetrical x 22.5°
Bump3	Lifting bumper in vertical position
LiftBar	Lifting bar for 2 x ArcBump
ArcBump	Lifting bumper in horizontal position
A10 Wide / Focus	"WST source line" speaker with constant curve
A15 Wide / Focus	"WSR source line" speaker with constant curve
A10 Bump	Bumper for A10
A15 Bump	Bumper for A15
A-TILT	Bracket for KS21 and A10/A15

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L-ACOUSTICS SOUND SYSTEMS

SÉRIE X / XT "COAXIAL"

X15 HiQ	2 active channels - 50° x 50° - 1 x 15"/ 1 x 1.4"
115XT	2 active channels - 80° x 80° - 1 x 15"/ 1 x 1.4"
115XT HiQ	2 active channels - 50° x 50° - 1 x 15"/ 1 x 1.4"
15" Yoke	Yoke for 15" series
X12	2 active/passive channels (switch) - 90° x 90° - 1 x 12"/ 1 x 3"
12XT	2 actives/passive channels (switch) - 90° x 90° - 1 x 12"/ 1 x 3"
12" Yoke	Yoke for 12" series
X8	2 passive channels - 100° x 100° - 1 x 8"/ 1 x 1.5"
8XT	2 passive channels - 100° x 100° - 1 x 8"/ 1 x 1.5"
8" Yoke	Yoke for 8" series
5XT	2 passive channels - 110° x 110° - 1 x 5"/ 1 x 1"
	brown (5XT) or white (5XT-W)
5XT Yoke	Yoke for 5XT

P SERIES "AMPLIFIER"

112P	Amplifier, 2 active channels - 90° x 90° - 1 x 12"/ 1 x 3"
112 Yoke	Yoke for 112 series
108P	Amplifier, 2 passive channels - 100° x 100° - 1 x 8"/ 1x 1"
108 Yoke	Yoke for 108 series
SB15P	Amplified subwoofer 1 x 15"

SUBWOOFER

KS28	Subwoofer for large format systems
	K1-K2, 4Ω, 143 dB SPL, 2x18"
KS28 Bump	Bumper 16 x KS28
KS21	Subwoofer for medium format systems
SB28	High-power subwoofer1225 W 2 x 18"
SB18	High-power subwoofer 700 W 1 x 18"
SB118	High-power subwoofer 700 W 1 x 18"
SB15M	Compact high-power subwoofer 600 W 1 x 15"
SB10i	Subwoofer 1x10"

L-ACOUSTICS SOUND SYSTEMS

AMPLIFIER CONTROLLERS

L-ACOUSTICS LARAK-III-AVB	Rack of 3 LA7.16 with LS10 AVB switch
L-ACOUSTICS LARAK-II-AVB	Rack of 3 LA12X, with LS10 AVB switch
L-ACOUSTICS LARAK-AES	Rack of 3 x LA8-AES - 12 x 1800 W
L-ACOUSTICS LA12X	Amplifier controller based on an architecture of 4 inputs/4 outputs, amplification module 12,000 W (4 x 3,300 W)
L-ACOUSTICS LA8 AES	Amplifier processor - 4 x 1800 W
L-ACOUSTICS LA4X	Amplifier processor - 4 x 1000 W

L-ACOUSTICS LA12X

L-ACOUSTICS KS28   L-ACOUSTICS X8   L-ACOUSTICS X12   L-ACOUSTICS X15 HiQ

L-ACOUSTICS 108P

L-ACOUSTICS 112P

L-ACOUSTICS SB15M   L-ACOUSTICS SB10i   L-ACOUSTICS LARAK-II-AVB

SOUND SYSTEMS

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BOSE SOUND SYSTEMS

SHOWMATCH SMAFT KIT

DeltaQ SM5	Speaker 8Ohms, 2 channels, 128 dB SPL, aperture 70° Hx5°V
DeltaQ SMS118	Subwoofer for DeltaQ SM5 system
SMAFT	Hanging bumper for ShowMatch DeltaQ Array system
DeltaQ-X8TOUR	Bose Showmatch X8 Tour Rack Ampli amplifier rack
SMAFMP	Bracket hanging system for increasing hanging points on bumpers from 7 to 45

SOUND SYSTEMS

YAMAHA VXS8	Wall speaker 180 W, black
YAMAHA VXS5	Set of 2 wall speakers 150 W, black or white
YAMAHA VXS3F	Set of 2 wall speakers 40 W, black or white
YAMAHA VXS10S	Passive subwoofer 2 x 200W, black
APG DX5W	Compact speaker, 1 x 13 cm + 1 x tweeter, white
BOSE S1	Amplifier speaker, mixing table 3 integrated channels with reverb and Bluetooth streaming, XLR input and 3.5 mm Jack, set of 2 + stands
BOSE L1	Compact Line-Array Speaker, black Amplifier, vertical position 3 different installation heights
BOSE L1	Compact Line-Array Speaker, white Amplifier, vertical position 3 different installation heights
BOSE 802 Série III	240 W / 8 Ω, 1 passive channel
BOSE Freespace DS40F	Passive speaker 40W / 8 Ω or 70V / 100V, white
FISHERAMPS BassPump III	Bass pump system "Shaker" type, amplifier, ideal for drummers
GENELEC 8030	Pair of monitor speakers (80W bi-amp)
GENELEC 8020	Pair of monitor speakers (40W bi-amp)
YAMAHA MSP5	Pair of monitor speakers (40+27W bi-amp)
YAMAHA SW10	"Subwoofer" amplifier speaker 160W

BATTERY-POWERED SOUND SYSTEMS

FOHHN FP22 RX	Battery-powered amplifier speaker, CD player, 1 Sennheiser EW HF receiver
FOHHN FP22 RXTX	Battery-powered amplifier speaker, CD player, 1 transmitter + 1 HF receiver Sennheiser EW

AMM108

AMM112

AMS115

Enceintes multi-usages AMM

Une multitude d'usages.
Un son unique.

Les enceintes multi-usages AMM, qui reposent sur une conception coaxiale deux voies, sont extrêmement polyvalentes. Vous pouvez les déployer en tant qu'enceintes principales, de retour, ou de rappel.

Dotées d'un guide d'ondes à alignement de dispersion, une technologie exclusive Bose, les enceintes AMM délivrent la qualité sonore caractéristique de Bose, avec une réponse en fréquences, une clarté et une diffusion homogènes sur l'ensemble de la zone de couverture, pour une expérience audio d'une puissance remarquable, pour les artistes comme pour leur public. La gamme AMM se compose de deux enceintes large bande et d'un caisson de basses complémentaire, qui bénéficient de performances et d'une protection optimales grâce aux pré-réglages inclus dans les processeurs audio Bose.

Inclinaison de 35°

Guide d'ondes
Beamwidth Matching

6 inserts
filetés M10

AMM112

Poignée encastrée
avec embase intégrée
pour mât de 35 mm

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100V SOUND SYSTEMS

JET SON PDS	20 W / 100 V, + hook yoke
TOA F150/F160	20 W / 100 V, + hook
TOA PA031 Rack X2	2 x amplifiers 120 W / 100 V
NOVELTY hanging cross	For 4 PDS
NOVELTY hanging bar	For 2 PDS
NOVELTY line reel	100 m

AMPLIFIERS

QSC PLX1802	Amplifier 2 x 325 W / 8Ω
YAMAHA XMV8140D	Amplifier 8 x 140 W / DANTE
YAMAHA XMV8280D	Amplifier 8 x 280 W / DANTE
YAMAHA PC412-DI	Amplifier 4 x 1200 W / DANTE / 100V
L-ACOUSTICS DX5 AMPLI	Amplifier rack LA48A + DP224
BEHRINGER HA8000	Headphone amplifier, 8 stereo channels

PUBLIC ADDRESS SYSTEMS

BOSCH Rack Sécu V2	Message broadcasting system *security EN-54 LBB1965+Inverter* *with remote switch*

SPEAKER STANDS

K&M	Rack-and-pinion speaker stand
K&M	Coupling bar for speakers
K&M Stand Diff3 and 4	Black or white speaker stand with base – 1.10 m to 1.81 m
ASD ST780	With dolly + hoist max=7.83 m/500 kg

K&M STANDS DIFF3 and 4

YAMAHA VXS8

FOHHN FP22 RX

YAMAHA VXS3F

YAMAHA VXS5

BOSE L1 Compact

Tel.: 01 76 91 90 00

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DIGITAL CONSOLES

DIGICO SD10	Digital mixing console, 96 inputs, 48 bus, output matrix 16x23
DIGICO SD10	Flight, accessories, screen, fibre 150 m
WAVES	Soundgrid extreme server V2
WAVES	Mercury Bundle pack
WAVES Digigrid	SG/MADI BNC
ALLEN & HEATH SQ5	16 Faders, 48 channels
YAMAHA DM7-EXT	30 Faders, 120 channels, 60 bus
YAMAHA DM3	9 Faders, 16 channels, 8 bus
YAMAHA CL5	32 Faders, 72 channels, 32+2 bus
YAMAHA CL1	16 Faders, 48 channels, 32+2 bus
YAMAHA QL5	32 Faders, 72 channels, 32+2 bus
YAMAHA QL1	16+2 faders, 32+8 channels, 16 mix, 8 matrix
YAMAHA TF1	16+1 faders, 32 mono channels
YAMAHA 01V96i	16 Faders, 32 channels, 8+1bus
QSC TouchMix16	20 inputs (12 mono + 4 stereo), 6+2 aux

REMOTE DIGITAL RACK

MIDAS DL251	Stage rack 58 in / 16 out

YAMAHA RIO 3224 / RIO 3224D2
Input/Output rack under DANTE network protocol, 32 IN, 16 OUT, + 4 OUT AES/EBU
Compatible with YAMAHA consoles with DANTE protocol
RJ45 or Optical Fibre connection, manageable ethernet switch
Supplied with a set of 2 RJ45 Cat5e 100m reels

YAMAHA RIO 1608 / RIO 1608D2
Input/Output rack under DANTE network protocol, 16 IN, 8 OUT, + 4 OUT AES/EBU
Compatible with YAMAHA consoles with DANTE protocol
RJ45 or Optical Fibre connection, manageable ethernet switch
Supplied with a set of 2 RJ45 Cat5e 100m reels

DIGICO SD Rack
Input/Output rack under OPTOCORE network protocol
56 IN / 40 OUT 16 AES out

SOUND SYSTEMS

ANALOGUE CONSOLES

MIDAS Venice160	8+4st Analog IN, 6 Aux, 4 GRP, 1 St Analog OUT
MIDAS Venice240	16+4st Analog IN, 6 Aux, 4 GRP, 1 St Analog OUT
MIDAS Venice320	24+4st Analog IN, 6 Aux, 4 GRP, 1 St Analog OUT
YAMAHA MG12XU	Mixing console, 12 channels – 6 micro inputs, 12 line inputs (4 mono + 4 stereo),
YAMAHA MG06X	Mixing console, 6 channels – 2 micro inputs, 6 line inputs (2 mono + 2 stereo), 1 stereo bus, 1 multi-effect SPX
YAMAHA EMX312SC	Amplifier analogue console, 2 x 300W

PRESS BOX / SPLITTER

BEHRINGER MX882 (setx2)	1 stereo input / 8 outputs
LA AUDIO DA82 (setx2)	1 stereo input / 8 outputs
T RACKS DS2418 (setx2)	1 mono input / 8 outputs or 2 inputs / 4 outputs
XTA DS800	8 stereo inputs / 32 outputs

Digico SD10

YAMAHA DM7-EXT

ALLEN & HEATH SQ5

YAMAHA DM3

YAMAHA CL5

SOUND SYSTEMS

VIDEO

SON

ECLAIRAGE

ENERGIE

STRUCTURE

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PERIPHERALS

PREAMPS

AVALON VT737SP	Mic/line preamp + equalizer + comp.
FOCUSRITE Octopre Platinum	8-mic preamp, ADAT card
SPL Channel One	mic preamp with lamp

COMPRESSORS

BSS DPR402	Stereo, XLR I/O
BSS DPR404	Stereo, XLR I/O
BSS DPR901	Stereo or mono 4 bands, XLR
DRAWNER DL241	Stereo, XLR I/O
EMPIRICAL LABS Distressor EL-8X	Stereo, XLR I/O

NOISE-GATE

BSS DPR504	4 channels, XLR I/O
DRAWMER DS201	Stereo, XLR I/O

EQUALIZERS & SIGNAL PROCESSING

UNIVERSAL AUDIO APOLLO 16	Thunderbolt 2 audio interface 16 x 16
PORTICO5045	Analogue feedback eliminator processor
BSS FCS966	2 x 31 bands, graphic
KLARK TECHNIC DN360	2 x 31 bands, graphic
SPL StereoVitalizer MK2-T	Dynamics processor with lamp

DIGITAL PROCESSORS

BSS Soundweb 9088ii	8 inputs/8 outputs
	(computer and technician on quotation)
LAKE LM44	4 inputs/4 outputs
L-ACOUSTICS P1	Digital audio processor

Tel.: 01 76 91 90 00

PERIPHERALS

DIGITAL DELAYS

TC ELECTRONIC 2290   Mono, XLR I/O
TC ELECTRONIC D-TWO   Stereo, 6.35 Jack I/O

DIGITAL REVERBS

LEXICON PCM70   Stereo, 6.35 Jack I/O
LEXICON PCM90/91   Stereo, memory card

DIGITAL MULTI-EFFECTS

TC ELECTRONIC TC6000   Stereo Version Mastering
TC ELECTRONIC M2000   Double stereo, memory card
LEXICON PCM80   Stereo, memory card
LEXICON PCM96   Surround, memory card
YAMAHA SPX900/1000   Stereo
YAMAHA SPX990   Stereo, memory card
YAMAHA SPX2000   Stereo

HARMONIZER

EVENTIDE H3000   Stereo, XLR I/O

DIGITAL CLOCKS

ROSENDAHL NANOSYNC HD   Multi-standard sync interface
ROSENDAHL NANOCLOCK   Digital clock with 12 outputs

SOUND PRESSURE LIMITERS

DATEQ SPL5   Sound pressure limiter,
                              controllable via internet
MRC AUDIO EQlimit-kit   Sound pressure limiter,
                              global or 1/3 octave, with memory

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AUDIO DATA PROCESSING

INTERFACES

FOHHN A-1 Live	Audio output interface USB to 2 x XLR
SCARLETTT2 i2	Sound card XLR JACK 2 inputs, 2 outputs
SCARLETT2 i4	Sound card XLR JACK 2 inputs, 4 outputs
MOTU 828Mk3	FireWire Interface, 24 bit, 192 kHz
MOTU 828Mk3 Hybrid	FireWire/USB Interface, 24 bit, 192 kHz
RME MADI Router	12 ports and format converter
RME MADIface XT	USB3/MADI interface with 394 channels (196 IN + 198 OUT) 192 kHz
ROLAND UA-1610	USB 2.0 interface, 24 bit, 192 kHz
WAVES Soundgrid Extreme Server	
	Audio processing server
DIGICO Digigrid MGB	Audio processing server

COMPUTERS & SOFTWARE

APPLE-SONNET xMac Mini Server
Station with sequencer software Logic Pro X/Nuendo
RME HDSP AES-32 Audio card and Dante virtual card

NOVELTY Rack Mesure Smaart V8
Acoustic measurement station
Smaart v8Di software

10EAZY Class 1	Class 1-compliant SPL measurement control system
AFF25 TOURING	Triple pressure level display compliant with decree 2017-1244

APPLE Logic Pro X	Delivered as an additional feature on a computer only
AVID Pro Tools	Delivered as an additional feature on a computer only
FIGURE 53 QLab Pro	Delivered as an additional feature on a computer only
STEINBERG Nuendo	Delivered as an additional feature on a computer only
WAVES GoldNative+MultiRack	
	Delivered as an additional feature on a computer only
WAVES Mercury Bunddle	
	Delivered as an additional feature on a computer only
WAVES MultiRack	Delivered as an additional feature on a computer only
WAVES SoundGrid Studio	Delivered as an additional feature on a computer only

Tel.: 01 76 91 90 00

WAVES Mercury Bunddle + WAVES Multi-Rack + Soundgrid Extreme Server + DIGICO Digigrid MGB

SCARLETT2 i4

APPLE-SONNET Mac Mini Server + Logic Pro X

AFF25 TOURING

FIGURE53 Qlab Pro

STEINBERG Nuendo

WAVES Gold Native + MultiRack

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MOBILE CONTROL UNITS

NOVELTY Rack Conference V2 – BX
AX-BX-GX frequency plan conference rack, equipped with 2 HF microphones
(hand and headband), 2 "swan neck" desk microphones, 1 CD/MP3 player,
1 digital console with recording function, accessories

SOURCES

TASCAM CD-200	CD / MP3 / WAV player
TASCAM SS-CDR200	CD/SD/CF/USB player/recorder

TELEPHONE INSERT

AEQ TH-02	Telephone insert + handset

DJING

PIONEER DJM-V10	6 line + 2 phono inputs for Serato / Rekordbox
PIONEER DJM2000 Nexus	6 line + 2 phono + 4 digital inputs
PIONEER DJM900 Nexus 2	"DJ" Console, 4 audio channels, 2 Mic channels, 4 digital, 6 line, 2 phono inputs
PIONEER DJM A9	"DJ" Console, 4 audio channels, 2 Mic channels, 4 digital, 6 line, 2 phono inputs
ALLEN & HEATH Xone92	6 line + 4 phono inputs
ALLEN & HEATH Xone22	2 line / phono inputs
ALLEN & HEATH XoneDB4	4 line / phono inputs + effects
PLAYDIFFERENTLY Model1	6 line / phono inputs
RANE TTM57SL	Console with Serato Live, vinyl and Timecode CD
PIONEER CDJ3000	USB/SD player with touchscreen
PIONEER CDJ2000 Nexus 2	USB/CD/SD player with pitch
PIONEER CDJ2000 Nexus	USB/CD/SD player with pitch
RANE SL4 Serato	Supplied with vinyl and timecode CD
TECHNICS SL1210Mk2	Vinyl turntable
TECHNICS SL1210Mk7	Vinyl turntable +16 / - 16
PIONEER PLX1000	Vinyl turntable
LUKE ASB1	Absorber for SL1200
PIONEER RMX1000	DJ remixing station
KORG KAOSS PAD	DJ effects controller
ADAM HALL LAPTOP Stand	SLT005 DJ LAPTOP Stand

RANE Serato SL4

NOVELTY Rack Conference V2 – BX

PIONEER CDJ3000

PIONEER CDJ2000 2

PIONEER DJM-V10

PIONEER DJM-S9

PIONEER DJM900 Nexus 2

ALLEN & HEATH Xone92

ALLEN & HEATH Xone22

ALLEN & HEATH XoneDB4

TECHNICS SL1210Mk7

TECHNICS SL1210Mk2

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HF MICROPHONES (WIRELESS)

HF HANDHELD SYSTEM

SENNHEISER EW335
Single UHF system *1 transmitter + single receiver Plan AX / BX / GX*

SHURE Axient Digital double G56 handheld system
2 AD2 transmitters (choice of capsule) + AD4D receiver
SHURE Axient Digital quad G56 system
4 AD2 transmitters (choice of capsule) + AD4Q receiver
SHURE single UHF handheld system
1 UR2 transmitter (choice of capsule) + receiver
SHURE double UHF handheld system
2 UR2 transmitters (choice of capsule) + receiver
available options with the SHURE UHF handheld systems: SM58 head (black or grey), Beta58 (black or grey), Beta87, Neumann KSM9 black and Neumann KSM8 black

HF TIE/HEADBAND/POCKET SYSTEMS

SENNHEISER EW335 G3 / G4 - BX / GX / AX
UHF system, *pocket SKM300, 1 x EM300 G3 receiver*
SHURE Axient Digital double G56 system
2 AD1 receivers (choice of capsule) + AD4D receiver
SHURE Axient Digital quad G56 system
4 AD1 transmitters (choice of capsule) + AD4Q receiver
SHURE single UHF system
UR4D+ receiver, 1 x UR1 or UR1M transmitter, one capsule
SHURE double UHF system
UR4D+ receiver, 2 x UR1 or UR1M transmitters, two capsules +

DPA 4488-DC-F	Cardioid headband microphone, flesh-coloured
DPA 4088F	Cardioid headband, flesh-coloured
DPA D:fine 4088F	SCardioid headband, flesh-coloured or black
DPA D:fine 4466-0C-F	Cardioid headband, flesh-coloured
DPA D:fine 4066F	Omnidirectional headband, flesh-coloured
DPA D:screet 4060F	Omnidirectional headband, flesh-coloured or black
SENNHEISER ME3-EW	Cardioid headband, for SK100/300/500, black

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HF MICROPHONES (WIRELESS)

HF MICROPHONES

SENNHEISER MKE40	Cardioid tie pin, black colour
SHURE WL183	Omni tie pin, black colour
SHURE WL184	Super-cardioid tie pin, black colour
SHURE WL185	Cardioid tie pin, black colour

HANDHELD/TIE PIN/HEADSET HF RACK

SHURE Axient Digital system, 12 transmitters, handheld or tie pin
3 x AD4Q receivers, 12 x AD2 or AD1 transmitters, antenna coupler

ACCESSORIES

SHURE UR3-J5E	Plug-On UHF-R UR3 transmitter (plan J5E 578-638 MHz)
SHURE AD3	Plug-On AD G56 series transmitter
SHURE ADX1M	AD1 LEMO3 micro transmitter
SHURE AXT600	UHF Spectrum Manager, provides broadband exploration of the UHF spectrum, spectrum analysis and coordination of compatible frequencies
SHURE AD600	Real-Time UHF Spectrum Manager
SHURE AD610	ShowLink Access Point
SHURE UA864-L0	Amplifier wall antenna Frequency band A (470 to 636 MHz)
SHURE UA860SWB	Passive omni-directional antenna UHF broadband (470 to 1100MHz)
SHURE UA874E	Broadband amplifier directional antenna (470 to 698MHz). Antenna gain 7.5dBi. Amplifier gain -6dB / 0dB / +6dB / +12dB switchable
SHURE PA805SWB	Directional antenna 7 dB
SHURE UA845	Antenna splitter
SENNHEISER ASA3000	Antenna splitter
SENNHEISER AD1031	Omnidirectional antenna
MANFROTTO 1005BAC	Antenna stand

All our HF frequency plans are compatible with the regulation (freeing of the 700Mhz band).

Tel.: 01 76 91 90 00

SHURE UR4D+

SENNHEISER ASA3000

SHURE AD600

SHURE Axient Digital

SHURE UA864-LO

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MICROPHONES

DYNAMIC MICROPHONES

SHURE WH20 XLR	Wired dynamic headband
AUDIX D2/D4/D6	Hypercardioid dynamic
AUDIX D6	Cardioid dynamics
AUDIX OM7	Hypercardioid dynamic
AUDIX I5	Cardioid dynamic
AUDIO TECHNICA MB3K	Unidirectional dynamic, with switch
BEYERDYNAMIC M88	Hypercardioid dynamic
ELECTROVOICE RE20	Cardioid dynamic
SHURE SM57/SM58	Cardioid dynamic
SHURE SM55 SH	Cardioid dynamic
SHURE BETA57A/BETA58A	Supercardioid dynamic
SHURE BETA52	Cardioid dynamic
SHURE SM58 / SE	Cardioid dynamic, with switch
SENNHEISER e606, e609	Supercardioid dynamic
SENNHEISER e825-S/e835-S	Cardioid dynamic, with switch
SENNHEISER e845-S	Supercardioid dynamic, with switch
SENNHEISER e835/e840,e935	Cardioid dynamic
SENNHEISER e845/e855	Supercardioid dynamic
SENNHEISER e904	Cardioid dynamic
SENNHEISER e906	Supercardioid dynamic
SENNHEISER MD421/MD441	Supercardioid dynamic
TELEFUNKEN M80	Cardioid dynamic

MICROPHONE ACCESSORIES

AVALON U5	Direct/preamp box with lamp
BSS AR133	Active direct box
RADIAL ENGINEERING J48	Active direct box
RADIAL ENGINEERING JDI	Passive direct box
RADIAL ENGINEERING PRO D2	Stereo active direct box
RADIAL ENGINEERING PRO AV1	Multimedia direct box
SAMSON S-Direct Plus	Stereo direct box for multimedia
RADIAL ENGINEERING	Transfo 600/600 "twin Iso"
LA AUDIO DBT+/Set	Set of 2 insulation boxes 600/600 Ω
SCV	48 V power supply for 4 static mics
K&M	Coupling bar for 2/4 mics
K&M	Micro, small, large boom stand, with base
K&M	Studio microphone giraffe stand
NEERING HotShot DM-1	Switcher pedal for dynamic mics

MICROPHONES

STATIC MICROPHONES

AKG C411	Miniature cardioid mic
AKG C3000B	Cardioid static + suspension
AKG C414 XLS	Multi-directional static + suspension
AKG C535	Cardioid static
AUDIO TECHNICA AT4033ASM	Cardioid static mic
AUDIO TECHNICA AT831B	Cardioid tie pin mic
AUDIO TECHNICA AT8035	"Gun" type static
AUDIX SCX1	Cardioid static
DPA 4011	Cardioid static
DPA d:screet 4060F	Miniature, omni-directional flesh-coloured or black
DPA d:vote 4099	Miniature, static, supercardioid Multiple attachments (extra)
NEUMAN KM184	Cardioid static + suspension
NEUMAN KM185	Cardioid static + suspension
NEUMAN TLM103	Cardioid static
NEUMAN KMS105Bk	Hypercardioid static
SHURE KSM9-CG	Cardioid and Supercardioid static mic
SHURE BETA87A	Supercardioid static
SHURE BETA98HC	Cardioid static + clamp
SHURE SM81	Cardioid static
SHURE SM91/BETA91	Semi-cardioid PZM static
SENNHEISER MKH406	Cardioid static
SENNHEISER MKH416	Shotgun mic
SCHOEPS CMC6+MK4	Cardioid static + suspension
SCHOEPS CMC6+MK21	Infra-cardioid static + suspension
SCHOEPS CMC6+MK41	Infra-cardioid static + suspension
CROWN PCC160	Supercardioid surface mic

DESK MICROPHONES

SHURE MX412 (set x2)	Static swan neck + base
SHURE MX418 (set x2)	Static swan neck + base
SCHOEPS CMC6+MK4+SKC300	Static swan neck + suspension

RADIAL ENGINEERING HOTSHOT DM-1   DPA 4011   AUDIX D2   AUDIX D4   AUDIX D6   AUDIX SCX1   KSM9-CG

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INTERCOM

Digital HF Intercom Set	10 HF stations
	1 CLEARCOM Freespeak 2 station
	1 CLEARCOM antenna splitter
	3 CLEARCOM actives antennas
Wired HF Intercom + Set	4 HF stations, 8 wired stations
	HOLLYLAND Solidcom M1 station
	1 CLEARCOM MS702 station
	4 TELEX HF stations, 8 CLEARCOM wired stations
	2 directional antennas
Digital Wired Intercom Set	
	15 wired stations
	1 CLEARCOM Helixnet station
	1 CLEARCOM Helixnet digital interface
	1 table station + 1 mic
Wired Intercom Set	8 wired stations
	CS-702 CLEARCOM
BEYER/CLEARCOM BodyPack	Intercom station (RS501/601/602/701)
	+ headset (DT108/109/CC40/CC95)
CLEARCOM TR-825	Dual-earphone HF Beltpack, A2 frequency
CLEARCOM AC10K	4 matrix directions CLEARCOM AC10K Interface module
CLEARCOM IF4W4	2 wires / 4 wires interface
CLEARCOM FL7	Illuminated terminal
GREENGO BPX	32-channel wired beltpack
GREENGO MCX	32-channel wired rackmount station
GREENGO MCXD	32-channel wired desktop station
GREENGO WBPX	32-channel wireless beltpack
GREENGO WAA	Active antenna for wireless box
GREENGO DANTE INTERFACE X	DANTE AES67 interface
GREENGO INTERFACE X	2-wire - 4-wire interface
GREENGO RDX	Interface for walkie-talkies

NEW A2 AND B4 FREQUENCY PLANS AVAILABLE

WALKIE-TALKIES

MOTOROLA DP1400/SET	Set of 6 walkie-talkies + remote mic + earpieces

LONG-RANGE DIGITAL HF LINK

DIWEL Melody Caster	Wireless connection kit, 5Ghz band
	1 stereo transmitter, 2 stereo receivers,
	omni and directional antennas +23dBi
	2 AES or analogue channels, range of up to 4km

Tel.: 01 76 91 90 00

EAR-MONITOR

EAR-MONITOR SYSTEMS

SHURE P9HW   Wired connection, without earpiece
SHURE PSM1000   UHF connection, transmitter + receiver,
                             without earpiece
SHURE PSM1000 RACK   Rack of 4 UHF connections, without earpiece
                             + helical antennas + directional antennas (+7dB)
                             + 4-input antenna combiner
PHONAK Roger   Digital earpiece, 2.4GHz + repeater

EAR-MONITOR ACCESSORIES

SHURE SE112   In-ear earphones
SHURE SE315-CL   1-channel stereo earphones, transparent
SHURE SE425-CL   2-channel stereo earphones, transparent
SHURE SE535CL   3-channel stereo earphones
SHURE PA821   8-input antenna combiner, for
                             wireless Ear-Monitor systems of the PSM range
SHURE PA805SWB   Directional antenna 7 dB
SHURE HA8089   Helical antenna

GREENGO MCX

GREENGO INTERFACE X

GREENGO DANTE INTERFACE X

GREENGO MCXD

GREENGO WAA

GREENGO WBPX

GREENGO RDX

GREENGO BPX

SOUND SYSTEMS

WIRING

MODULATION WIRING

NOVELTY	XLR module cable M/F 1/3/5 m
NOVELTY	XLR module cable M/F 10 m
NOVELTY	XLR module cable M/F 20 m
NOVELTY	XLR module cable M/F 50 m
NOVELTY	XLR module cable M/F AES 100 m
NOVELTY	Various adapters, Jack 6.35/XLR/RCA/Insert cables...
Module Kit	12x1m + 12x3m + 12x5m + 12x10m + 12x20m

CÂBLAGES HP

L-ACOUSTICS	CACOM cap, without M/F ring
L-ACOUSTICS	DO HP cable, 0.70/7 m
L-ACOUSTICS	DO HP cable, 10 m/ DO 10 P
L-ACOUSTICS	DO HP cable, 25 m/ DO 25 P
L-ACOUSTICS	DO HP cable, 50 m/ DO 50 P
L-ACOUSTICS	DO HP cable, Fill / Sub / 3 WFILL
NOVELTY	Speakon 4-point loudspeaker cable, 1/5/10/20 m
NOVELTY	Speakon 4-point loudspeaker cable, 5/10/20 m, white
NOVELTY	Speakon 8-point loudspeaker cable, 1/5/10/20 m
NOVELTY Kit Speakon	6x5m + 6x10m + 6x20m + 12 male/male NL4MM
KLOTZ LSV2864	Distribution housing Spk8-Spk4

W I R I N G

MULTIPAIR WIRING

NOVELTY MULTI 4 PAIRS AES Length: 5 m
Length: 20 m
NOVELTY MULTI 8 PAIRS AES Length: 5 m
Length: 20 m
NOVELTY PA-COM Length: 50 m
Length: 100 m
Length: 200 m
Male/female whip
NOVELTY Harting 20p Length: 5 m
Length: 10 m
Length: 25 m
Length: 50 m
Length: 100 m
Stage box MLP1/3
Male or female whip
NOVELTY VEAM 16P Length: 6 m
Length: 10 m
Length: 30 m
Length: 50 m
Stage box 16p AES
16p XLR female AES whip
16p XLR male AES whip
Splitter, large model 32p
Stage interface 32p AES (for Rlo and ML32…)

NOVELTY VEAM 16P

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SIMULTANEOUS INTERPRETATION

HCS5100 : Une centrale multifonctions
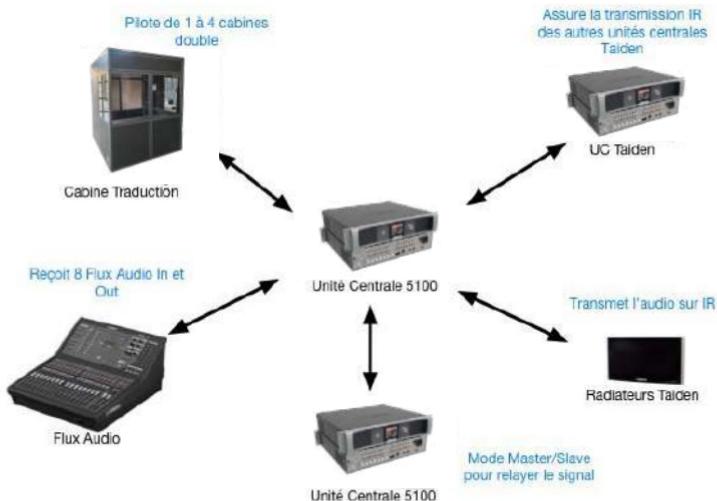
TRANSLATION BOOTHS

Translation booth	For 2 interpreters, 1.70 x 1.70 x 2.05 m
TAIDEN HCS8685	Interpreter's desk + headset
TAIDEN HS8385HDMI	Video selector for interpreters, 64 channels, 2 HDMI out and 1 HDSDI input
IIYAMA B2280HS	LED monitor, 22"

TRANSLATION UNITS

TAIDEN HCS-5100MA16BD	16-channel digital infrared transmitter
TAIDEN HCS-4800MA	Central unit, translation, voting, conference, 64 channels
TAIDEN HCS-8600MIO/16AD	16-channel input and output interface
TAIDEN TMX0808SDI	HDSDI switchbox for interpreters, 8 channels

Tel.: 01 76 91 90 00

SIMULTANEOUS INTERPRETATION

INFRARED

TAIDEN HSC5100T35B   Infrared radiator, 35 W

INFRARED RECEPTION

TAIDEN HCS5100R32   32-channel battery-operated infrared receiver
TAIDEN HCS5100PA   Headphones
NOVELTY Disposable headphones | COVID standard
                    Sale of disposable headphones
NOVELTY Customisable disposable headphones | COVID standard
                    Sale of disposable headphones, customisable
                    with your logo, silk-screen printing in max. 2 colours

NOVELTY Headphones
Handsfree kit

TAIDEN HCS5100MA08M

Translation booth

TAIDEN HCS4800MA

TAIDEN HCS8685

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SIMULTANEOUS INTERPRETATION

WIRED CONFERENCE MIC

TAIDEN HCS-4800MA   Central discussion unit
TAIDEN HCS-8600MEA   Extension unit
TAIDEN HCS-4838CS/80   Chairman unit, listening only
TAIDEN HCS-4838DS/80   Delegate unit, listening only

TAIDEN HCS-4800MA

TAIDEN HCS-8600MEA

TAIDEN HCS-4838CS/80

TAIDEN HCS-4838DS/80

WIFI CONFERENCE MIC

BOSCH DCNM-WAP   Wireless access terminal and central unit
BOSCH DCNM-WDE   Wireless chairman/delegate unit

BOSCH DCNM-WDE

BOSCH DCNM-WAP

Tel.: 01 76 91 90 00

SIMULTANEOUS INTERPRETATION

GUIDED TOUR

SENNHEISER SR 2020-D   Guided tour fixed transmitter - 863/865 Mz
SENNHEISER SKM 2020-D   Guided tour handheld transmitter - 863/865 Mz
SENNHEISER EK 2020-D-II   Guided tour pocket receiver - 863/865 Mz
SENNHEISER HDE 2020-D-II   Guided tour stethoscope receiver - 863/865 Mz

SENNHEISER
EK 2020-D-II

SENNHEISER
SKM 2020-D

SENNHEISER SR 2020-D

SENNHEISER HDE 2020-D-II

GUIDED TOUR + DECT BROADCAST

BEYERDYNAMIC BD-UNIT-TH   DECT handheld transmitter
BEYERDYNAMIC BD-TG-H56C-TG   DECT headset with mic
BEYERDYNAMIC BD-UNIT-TP   DECT pocket transmitter
BEYERDYNAMIC BD-UNIT-AP4   DECT 4-channel transmitter
BEYERDYNAMIC BD-UNIT-RP   DECT pocket receiver

BEYERDYNAMIC
BD-TG-H56C-TG

BEYERDYNAMIC
BD-UNIT-RP

BEYERDYNAMIC
BD-UNIT-AP4

BEYERDYNAMIC
BD-UNIT-TH

BEYERDYNAMIC
BD-UNIT-TP

SOUND SYSTEMS

SIMULTANEOUS INTERPRETATION

REMOTE INTERPRETING STUDIO

Since May 2021, at the Novelty-Magnum-Dushow Group's headquarters, we have provided a remote interpreting studio equipped to accommodate 10 interpreters and work in 6 languages.

This studio is the only one of its kind in Paris, located in the heart of the 7th arrondissement.

We can work from and to any platform, although we recommend ZOOM or KUDO, which allow us to meet in a single session and share video and slides, while following the meeting in the desired language.

By combining a digital mixing console with the Taiden digital interpretation system, we have the advantage of working entirely on the Dante network, which guarantees quality.

SOUND SYSTEMS
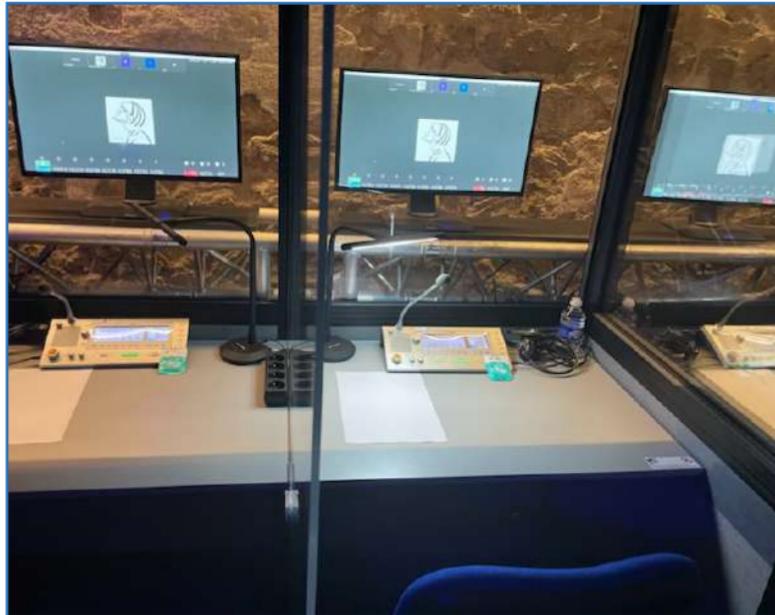
Tel.: 01 76 91 90 00

SIMULTANEOUS INTERPRETATION

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ENERGY

ENERGY

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INNOVATION IN ENERGY

INDU-ELECTRIC AD630 Powerlock
| see p. 167

INDU-ELECTRIC RC250 Indoor
| see p. 167

Protective cabinet 250A to 630A
| see p. 176

LED emergency exit lighting unit
45 lumens | see p.178

LED emergency exit lighting unit
400 lumens | see p.178

Tel.: 01 76 91 90 00

INNOVATIONS

NOVELTY RS63 V3 |

NOVELTY RS125 V3 |

WALTHER Distribution box
32 tri |

EATON 9PX3000 |

novelty

DISTRIBUTION CABINETS

THREE-PHASE 32A DISTRIBUTION

AD32T/3x32M Differential protection 30mA
P17 32A tri > 3 x P17 32mono + 6 x PC16A + repeater

RC32 Adjustable differential protection
P17 32A tri > 3 x P17 32mono + 6 x PC16A
In flight case, lighting backed up on inverter,
Power monitoring and management unit

RS32 Adjustable differential protection
P17 32A tri > 6 x PC16A + 1 x Socapex 419
In flight case, lighting backed up on inverter,
Power monitoring and management unit

THREE-PHASE 63A DISTRIBUTION

AD63T/2x32T+M Adjustable differential protection
P17 63A tri > 2 x P17 32tri + 3 x P17 32mono + 3 x PC16

AD63T/6x32M Adjustable differential protection
P17 63A tri > 6 x P17 32mono

AD63T/2x32 Differential protection 30mA
P17 63A tri > 2 x P17 32tri

RS63 V2 Differential protection 30mA
P17 63A tri > 12+3 x PC16 + 2 x Soca 419

RS63 V3 Differential protection 30mA
P17 63A tri > 24 x PC16 + 4 x Soca 419

THREE-PHASE 125A DISTRIBUTION

AD125T/4x32T Adjustable differential protection
P17 125A tri > 4 x P17 32tri + 3 x PC16A

AD125T/2x63T Adjustable differential protection
+4x32T+2xPC16 *P17 125A tri > 2 x P17 63tri + 4 x P17 32Atri*
+ 2 x PC16A

AR125T/4x32F Fuse protection
P17 125A tri > 4 x P17 32Atri + 2 x PC16A

RC125 Adjustable differential protection
P17 125A tri > 2 x P17 63A tri + 4 x P17 32A tri + 2 x PC16A
In flight case, lighting backed up on inverter,
Power monitoring and management unit

RS125 V2 Adjustable differential protection
P17 125A tri > 24+3 x PC16 + 4 x Soca 419
En flight-case,
Lighting backed up on inverter,
Power monitoring and management unit

Tel.: 01 76 91 90 00

ENERGY

DISTRIBUTION CABINETS

THREE-PHASE 125A DISTRIBUTION

RS125 V3   Adjustable differential protection
P17 125A tri > 12 x PC16 + 8 x Soca 419
En flight-case,
Lighting backed up on inverter,
Power monitoring and management unit

THREE-PHASE 250A DISTRIBUTION

AD250T   Adjustable differential protection
Outputs: 2 x P17 125tri + 2 x P17 63tri + 8 x 32tri

RC250 Indoor   Adjustable differential protection, Powerlock
Outputs: 2 x P17 125tri + 2 x P17 63tri + 3 x 32tri

THREE-PHASE 630A DISTRIBUTION

AD630T/631   Adjustable differential protection, Powerlock
Outputs: 5 x P17 125tri+4 x P17 63tri+4 x P17 32tri+3 x P17 32Mono
Adjustable differential protection on each outlet.
Downgradable to 40

AD630T/5x125T   Adjustable differential protection
Outputs: 5 x P17 125tri+2 x P17 63tri+6 x P17 32tri+3 x PC16A

RC630 Indoor   *Rack-mounted distribution cabinet. Input: 2 sets of Powerlock.*
Outputs: 5 x P17 125tri + 2 x P17 63tri + 6xP17 32tri + 3xPC16A
Adjustable differential protection on each outlet.
Downgradable to 400A, 250A. Built-in voltmeter and ammeter.

DISTRIBUTION >1000A

1200 A CABINET   Custom-made
2000 A CABINET   Custom-made

RC32 CABINET

ENTRÉE
P17 32A tri X 1

SORTIES
P17 32A mono X 3
PC 16A X 6

DIMENSIONS
54(L) x 63 (p) x 32 (h) cm

POIDS
29 kg

RS32 CABINET

ENTRÉE

P17 32A tri X 1

SORTIES

Socapex 419
6 circuits X 1 *(OR PC16)*

PC 16A X 1

DIMENSIONS

54(L) x 63 (p) x 32 (h) cm

POIDS

29 kg

RS63 V2 CABINET

ENTRÉE

P17 63A tri X 1

RECOPIE

P17 63A tri X 1

SORTIES

Socapex 419 X 2 *(OR PC16)*

PC 16A X 3

DIMENSIONS

60 (L) x 54 (l) x 67 (h) cm

POIDS

58 kg

RS63 V3 CABINET

ENTRÉE

P17 63A tri X 1

RECOPIE

P17 63A tri X 1

SORTIES

Socapex 419 X 4

PC 16A X 9

DIMENSIONS

54(L) x 76 (l) x 60 (h) cm

POIDS

57 kg

Tel.: 01 76 91 90 00

RC125 CABINET

ENTRÉE	SORTIES	DIMENSIONS
P17 125A tri X 1	P17 63A tri X 2	54(L) x 62 (p) x 82 (h) cm
	P17 32A tri X 4	POIDS
	PC 16A X 2	61 kg

RS125 V2 CABINET

ENTREE	SORTIES	DIMENSIONS
P17 125A tri X 1	Socapex 419 X 4 (OR PC16)	81.5 (L) x 55 (l) x 62 (h) cm
RECOPIE	PC 16A X 3	POIDS
P17 125A tri X 1		66 kg

RS125 V3 CABINET

ENTREE	SORTIES	DIMENSIONS
P17 125A tri X 1	Socapex 419 X 8 (including 2 also in PC16)	48.3 (L) x 25 (l) x 80 (h) cm
RECOPIE	PC 16A X 3	POIDS
P17 125A tri X 1		66 kg

RC250TRI CABINET / 3 X 125TRI + 2 X 63TRI + 4 X 32TRI + 3 X 32MONO

SORTIES

ENTRÉE

Powerlock **X 1**

P17 125A tri **X 3**

P17 63A tri **X 2**

P17 32A tri **X 4** *(including 1 adjustable differential)*

P17 32A mono **X 3**

RC630TRI CABINET / 5 X 125TRI + 2 X 63TRI + 6 X 32TRI + 3 X PC16 DOWNGRADABLE TO 400A TRI

SORTIES

P17 125A tri *(with adjustable differential)* **X 5**

P17 63A tri *(with adjustable differential)* **X 2**

P17 32A tri *(with adjustable differential)* **X 6**

PC 16A *(with adjustable differential)* **X 3**

ENERGY

32TRI CABINET / 3 X 32MONO + 6 X PC16

ENTRÉE
P17 32A tri X 1

RECOPIE
P17 32A tri X 1

SORTIES
P17 32A mono (Disjoncteur 30mA) X 3
PC 16A (Disjoncteur 30mA) X 6

DIMENSIONS
55 (L) x 30 (l) x 75 (h) cm

POIDS
26,5 kg

63TRI CABINET / 2 X 32TRI + 3 X 32MONO + 3 X PC16

ENTRÉE
X 1

RECOPIE
P17 63A tri X 1

SORTIES
P17 32A tri (Disjoncteur 30mA) X 2
P17 32A mono (Disjoncteur 30mA) X 3
PC 16A (Disjoncteur 30mA) X 3

DIMENSIONS
60 (L) x 30 (l) x 87 (h) cm

POIDS
33,5 kg

125TRI CABINET / 2 X 63TRI + 4 X 32TRI + 2 X 32MONO + 2 X PC16

ENTRÉE

P17 125A tri
(Vigi réglable)

SORTIES

P17 63A tri
(fusible) X 2

P17 32A tri
(Disjoncteur 30mA) X 4

Alimentation
Blocs de Secours X 2

PC 16A
(Disjoncteur 30mA) X 2

DIMENSIONS

75,L) x 40(l) x 110(h) cm

POIDS

69,2kg

250TRI CABINET / 2X125TRI + 2X63TRI + 8X32TRI + 2XPC15

SORTIES

P17 125A tri X 2

P17 63A tri X 2

P17 32A tri X 8

PC 16A X 2

ENTRÉE

Jeu de barres (cosses)

630TRI CABINET / 5 X 125TRI + 2 X 63TRI + 6 X 32TRI + 3 X PC16 DOWNGRADABLE TO 400A TRI

ENTRÉE

Bornier 5 x 120mm2
(Disjoncteur Vigi réglable)

SORTIES

P17 125A tri (fusible) X 5

P17 63A tri (fusible) X 2

P17 32A tri (Vigi 30mA) X 6

PC 16A (Vigi 30mA) X 3

DIMENSIONS

102(L) x 50(l) x 152(h) cm

POIDS

155 kg

630TRI V2 CABINET / 5 X 125TRI + 4 X 63TRI + 4 X 32TRI + 4 X 32MONO + 6 X PC16

SORTIES

P17 125A tri X 5

P17 63A tri X 4

P17 32A tri X 4

P17 32A mono X 4

PC 16A X 6

ENTRÉE

Powerlock X 2

Jeu de barres (cosses)

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AMPERAGE / MAINS / POWER BOARD

POWER rated	INTENSITY phase-wise	MAINS minimal	PLUG EEC
3.5 kW	16A single-phase	3 x 2.5 mm^2	PC16
3.5 kW	16A single-phase	3x 2.5 mm^2	P17
7 kW	32A single-phase	3 x 6 mm^2	P17
10.5 kW	16A three-phase	5 x 2.5 mm^2	P17
21 kW	32A three-phase	5 x 6 mm^2	P17
41.6 kW	63A three-phase	5 x 16 mm^2	P17
82.5 kW	125A three-phase	5 x 25 mm^2	P17
165 kW	250 three-phase	5 x 70 mm^2	TERMINAL BLOCK
264 kW	400 three-phase	5 x 120 mm^2	TERMINAL BLOCK
380 kW	630 three-phase	5 x 240 mm^2	TERMINAL BLOCK

Tel.: 01 76 91 90 00

D I S T R I B U T I O N   B O X E S

16/32A SINGLE-PHASE

Stand box   16A / 30 mA
32A box   Mono 4 PC 16A

Stand housing   32 A housing

32A THREE-PHASE

32A Tri box   2 x 32 Tri
32A Tri box   3 x 2 PC 16A Mono (waterproof housing)
32A Tri box   6 PC 16A Mono (waterproof housing)
32A Tri box   3 x 32A Mono + 6 x PC16A Mono (waterproof housing)

63A THREE-PHASE

63A Tri box   2 x 32A Tri
63A Tri box   2 x 32A Tri + 3 x P17 16 mono + 3 x PC16

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PROTECTIVE CABINETS

32A THREE-PHASE PROTECTION

AP32DIF   Differential protection, on terminals

63A THREE-PHASE PROTECTION

AP63DIF   Differential protection, on terminals

125A THREE-PHASE PROTECTION

AP125DIF   Differential protection, on terminals

250A TO 630A PROTECTIVE CABINET

AP600/250   Adjustable differential protection, Powerlock

METER/CLOCK/CARNIVAL CABINETS

AP63HORL   63A clock cabinet
Blue tariff   EDF 63A meter cabinet
Yellow tariff   160 to 400A meter cabinet
Green tariff   400A+ meter cabinet

Protective cabinet 250A to 630A

Tel.: 01 76 91 90 00

ELECTRICAL WIRING

16A - CROSS-SECTION 2.5 MM^2

PC16A	3 x 2.5 mm^2, H07RNF
KIT PC16A	12 x 3 m + 12 x 5 m + 12 x 10 m + 6 x 20 m + 24 sector plates
Demi KIT PC16A	6 x 3 m + 6 x 5 m + 6 x 10 m + 3 x 20 m + 12 sector plates
KIT PC16A-3M	48 x 3 m
KIT PC16A-5M	48 x 5 m
KIT PC16A-10M	24 x 10 m
KIT QUAD	48 x quadruplets PC16
P17 16A mono	3 x 2.5 mm^2, H07RNF
P17 16A tri	4 x 2.5 mm^2, H07RNF
P17 16A tri	5 x 2.5 mm^2, H07RNF

32A - CROSS-SECTION 6 MM^2

P17 32A mono	3 x 6 mm^2, H07RNF
P17 32A tri	5 x 6 mm^2, H07RNF

63A - CROSS-SECTION 16 MM^2

P17 63A tri	5 x 16 mm^2, H07RNF

125A - CROSS-SECTION 25 MM^2

P17 125A tri	5 x 25 mm^2, H07RNF

CROSS-SECTION 70 TO 240 MM^2

CS170C	Copper single-core cable 70 mm^2
CS1120C	Copper single-core cable 120 mm^2
CS1150C	Copper single-core cable 150 mm^2
CS1150CP	Copper single-core cable 150 mm^2 Powerlock
CS1240C	Copper single-core cable 240 mm^2
CS1240CP	Copper single-core cable 240 mm^2 Powerlock
CS1240A	Aluminium single-core cable 240 mm^2
GR600	Terminal block grid, 70 to 240 mm^2

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GENERATOR SETS

MISCELLANEOUS	Generator set 5.5 to 400 kVA

MISCELLANEOUS & ACCESSORIES

EATON 9PX3000	Inverter 3000VA
ADAM HALL Defender Midi 5	Cable duct, 5 x 34 mm, 0.89 m, 5t
KEYLITE	Cable duct, 4 x 50 mm, 1 m
NOVELTY PCAB 2C	Cable duct, 2 channels, 980 x 240 mm
NOVELTY PCAB 5C	Cable duct, 5 channels, 900 x 500 mm
PMR	Cable duct, 5 x 15 mm, 0.8 m
NOVELTY	Cable reel unwinder
NOVELTY	Ground stake, 1.5 m
NOVELTY	Ground braid 16/25/35 mm^2

EMERGENCY LIGHTING

BAES (self-contained emergency lighting)

LED ANTI-PANIC LIGHTING UNIT	2,000 lumens, black
ANTI-PANIC LIGHTING UNIT	1,500 lumens, black
ANTI-PANIC LIGHTING UNIT	2,000 lumens, black or cream

ANTI-PANIC LIGHTING UNIT	1,000 lumens, self-contained
ANTI-PANIC LIGHTING UNIT	360 lumens, self-contained

LED EMERGENCY EXIT LIGHTING UNIT	400 lumens, self-contained
EMERGENCY EXIT LIGHTING UNIT	400 lumens, self-contained
EMERGENCY EXIT LIGHTING UNIT	60 lumens LED, self-contained

URA BAES	Cylindrical emergency exit LED lighting unit, self-contained, stainless steel, emergency exit signage

The emergency units are mounted on a hanging plate.

LED emergency exit lighting unit
45 lumens

LED emergency exit lighting unit
400 lumens

LED anti-panic lighting unit

FORCED-AIR HEATING

Ascim Jouanin	Electric fan heater 9kW 9kW
FRICO Tiger	Electric fan heater 7.5 -> 15kW
Ascim Jouanin	Electric fan heater 18kW

FRICO Tiger

CALCULATION/HEATING RULE

Number of devices = $\dfrac{\text{Volume x Insulation factor* x (Delta Temp°)}}{\text{Heating capacity of the air heater}}$

* **Insulation factor:**	Warehouse / Hangar	3
	Cladded structure	3.5
	Structure	4
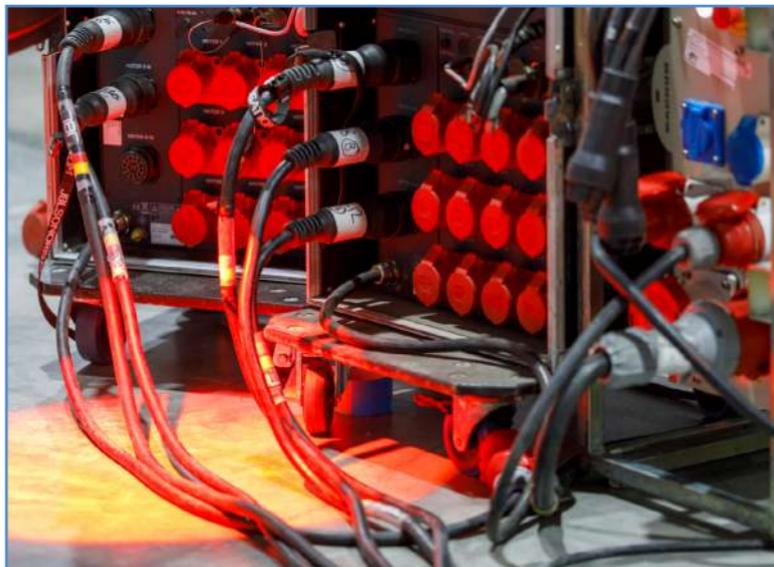
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RADIANT HEATING

VARMA TEC 400   1.5 kW, PC16A mono, black

VARMA TEC 400

NOVELTY Radiant15   Radiant chandelier 15 kW, P17 32A tetra
NOVELTY Radiant24   Radiant chandelier 24 kW, P17 63A tetra
RVE BP12x5   Dimmer unit 4 x 32A tetra for chandelier 15 kw

Prices do not include installation and wiring.

Comfort
· Immediate perception of warmth
· No displacement of air
· No stratification of air
· Silent running
· Frees up floor space

	Dimensions	
	15 kW	24 kW
Diameter	175 cm	200 cm
Height	39 cm	37 cm
Fly	180 x 180 x 40 cm	210 x 210 x 40 cm
Weight	40 kg	45 kg

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STRUCTURE

STRUCTURE

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INNOVATION IN STRUCTURE

GIS LPM250 | see p.208

GIS LPM500 | see p.208

WINCH 50 | see p.208

Remote control 12 TD | see p.210

Tel.: 01 76 91 90 00

ASD TL400
| see p. 196

ASD Bar H
| see p. 186

NOVELTY Lest
| see p. 212

STRUCTURE

ASD ALT550
| see p. 208

ASD ELP730 | see p.208

novelty

ALUMINIUM BRIDGES
Paint on request

MONOTUBE Ø50 (ALU)

ASD EX50050A	0.5 m long
ASD EX500100A	1 m long
ASD EX50200A	2 m long
ASD EX50300A	3 m long
ASD EX50 Base	Heavy base Ø40 cm
ASD EX50-Cer180A	Alu Circle Ø1 m 80
ASD EX50-Cer500A	Alu Circle Ø5 m

MONOTUBE Ø50 (BLACK)

ASD FX50N	0.29/0.50 m long
ASD FX50N	0.71 /1 m long
ASD FX50150N	1.5 m long
ASD FX50200N	2 m long
ASD FX50250N	2.5 m long
ASD FX50300N	3 m long
ASD FX50350N	3.5 m long
ASD FX50400N	4 m long
ASD FX50-45X24N	3D "T"-shaped black corner piece, base 45 cm x stand 24 cm
ASD FX50-71X24N	3D "T"-shaped black corner piece, base 71 cm x stand 24 cm
ASD FX50Embase	Heavy base Ø40 cm
ASD FX50-Cer0150N	Circle Ø1.5 m, monotube black
ASD FX50-Cer0300N	Circle Ø3 m, monotube black
ASD FX50-Cer0500N	Circle Ø5 m, monotube black
ASD EC50-Cer01200N	Circle Ø12 mn monotube black
ASD FX50-HB-N	Modular tubular ladder, Entraxe 75 cm/H. 100 cm
ASD FX50-HCA-N	Modular tubular ladder with black collar

X30L LADDER BRIDGE (ALU)

ASD X30L050A	0.50 m long
ASD X30L071A	0.71 m long
ASD X30L100A	1 m long
ASD X30L200A	2 m long
ASD X30L300A	3 m long
ASD X30LC007A	2D 90° corner piece
ASD X30LC020A	3D 90° corner piece

STRUCTURE

Tel.: 01 76 91 90 00

novelty

ALUMINIUM BRIDGES

TRIANGULAR ALU BRIDGE X30D/SX290 (ALU)

ASD SX290	0.29/0.50/0.71 m long
ASD SX290	1/2/3/4 m long
ASD SX290	2D corner piece
ASD SX290	3D/4D corner piece
ASD SX290	5D/6D corner piece
ASD SX290	Movable corner/cardan
ASD SX290	Special angles (120°, 135°, etc.)
ASD SX290	Suspension, max. load 125/500 kg
ASD SX290	Motor insert 250 kg, 0.50 m
ASD SX290	Small base, pole head
ASD SC300	Heavy base 40 x 100, 60 kg, centred/off-centred
ASD SX290	Heavy base 50 x 100, 60 kg, centred/off-centred
ASD SX290	Semelle lourde 100 x 100 cm, 120kg, centrée/décentrée
ASD SX290	Heavy base Ø80 cm, 60 kg, centred/off-centred
ASD SX290	Concrete base 80 x 120, 750 kg

TRIANGULAR ALU BRIDGE X30D/SX290 (BLACK)

ASD SX290	0.29/0.50/0.71 m long
ASD SX290	1/2/3/4 m long
ASD SX290	2D corner piece
ASD SX290	3D/4D corner piece
ASD SX290	5D corner piece
ASD SX290	Movable corner/cardan
ASD SX290	Special angles (120°, 135°, etc.)
ASD SX290	Suspension, max. load 125/500 kg
ASD SX290	Motor insert 250 kg, 0.50 m
ASD SX290	Small base, pole head
ASD SC300	Heavy base 40 x 100, 60 kg, centred/off-centred
ASD SX290	Heavy base 50 x 100, 60 kg, centred/off-centred
ASD SX290	Heavy base Ø80 cm, 60 kg, centred/off-centred
ASD SX290	Concrete base 80 x 120, 750 kg

TRIANGULAR ALU BRIDGE X30D/SX290 (WHITE)
Paint on request

ASD SX290	0.29/0.50/0.71 m long
ASD SX290	1/2/3 m long
ASD SX290	2D corner piece
ASD SX290	3D/4D corner piece
ASD SX290	Small base
ASD SX290	Heavy base

ASD SX290

novelty
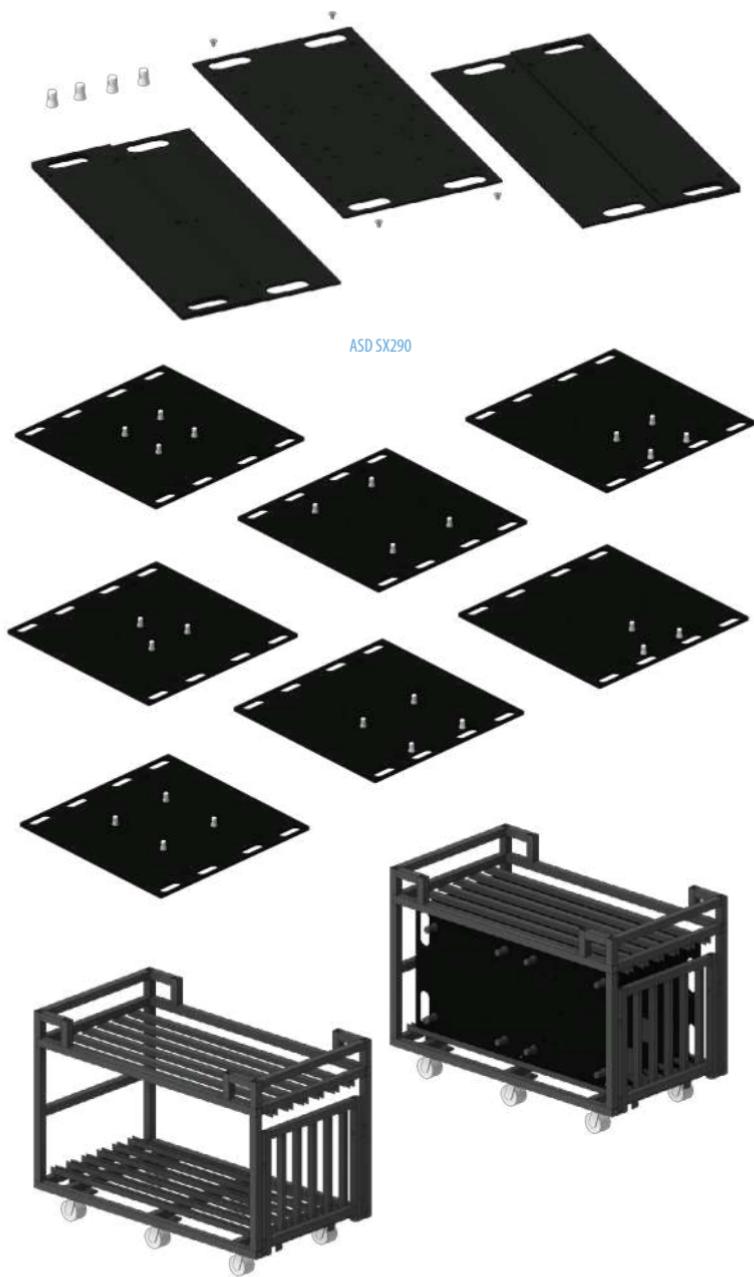
ALUMINIUM BRIDGES

SQUARE ALU BRIDGE H30V/SC300 (ALU)

ASD SC300	0.145/0.20/0.21/0.29/0.50/0.645/0.71 m long
ASD SC300	1/2/3/4 m long
ASD SC300	2D corner piece
ASD SC300	3D corner piece
ASD SC300	4D corner piece
ASD SC300	5D corner piece
ASD SC300	Magic corner piece H30V/H30V or H30V/H40V, moveable cardan
ASD SC300	Special angles (120°, 135°, etc.)
ASD SC300	Suspension, max. load 125/500 kg
ASD SC300	Small base, pole head
ASD SC300	Heavy base 40 x 100, 60 kg, centred/off-centred
ASD SC300	Heavy base 50 x 100, 60 kg, centred/off-centred
ASD SC300	Heavy base Ø80 cm, 60 kg, centred/off-centred
ASD SC300	Steel "pallet" base 80 x 120 x 17, 500 kg
ASD SC300	Concrete base 80 x 120, 750 kg

SQUARE ALU BRIDGE H30V/SC300 (BLACK)

|	
ASD SC300	0.145/0.20/0.21/0.29/0.50/0.645/0.71 m long
ASD SC300	1/2/3/4 m long
ASD SC300	2D corner piece
ASD SC300	3D corner piece
ASD SC300	4D corner piece
ASD SC300	5D corner piece
ASD SC300	Magic corner piece H30V/H30V or H30V/H40V, cardan
ASD SC300	Special angles (120°, 135°, etc.)
ASD SC300	Suspension, max. load 125/500 kg
ASD SC300	Small base, pole head
ASD SC300	Heavy base 40 x 100, 60 kg, centred/off-centred
ASD SC300	Heavy base 50 x 100, 60 kg, centred/off-centred
ASD SC300	Heavy base Ø80 cm, 60 kg, centred/off-centred
ASD SC300	Steel "pallet" base 80 x 120 x 17, 500 kg
ASD SC300	Concrete base 80 x 120, 750 kg
ASD TL290	Lifting kit 1t, 1 0m

STRUCTURE
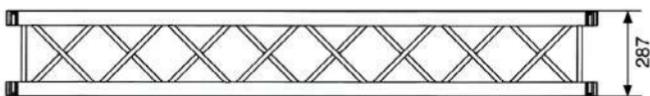
Poids (équipé de 3 manchons/goupilles/sécus) =
0,21m = 3,05kg / 0,29m = 3,55kg
0,50m = 4,85kg / 0,71m = 6,15kg
1m = 7,8kg / 2m = 13,45kg
3m = 19,40kg / 4m = 25,20kg
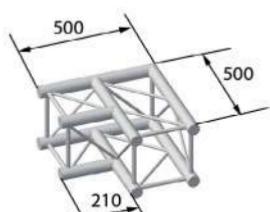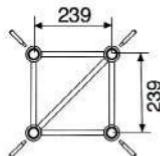
H30V - C003 (90°)
Poids (équipé) = 6,7kg
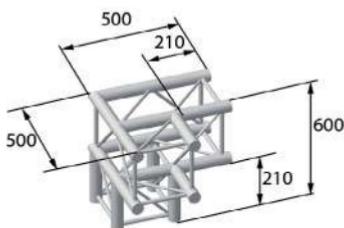
H30V - C012 (90°)
Poids (équipé) = 8,6kg
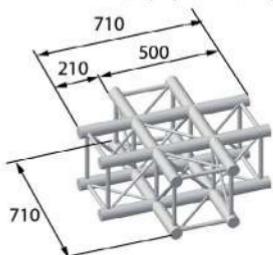
H30V - C016 (90°)
Poids (équipé) = 10,75kg
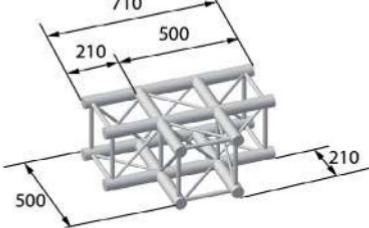
H30V - C017 (90°)
Poids (équipé) = 9,3kg
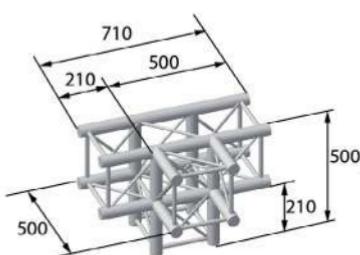
H30V - C020 (90°)
Poids (équipé) = 10,55kg
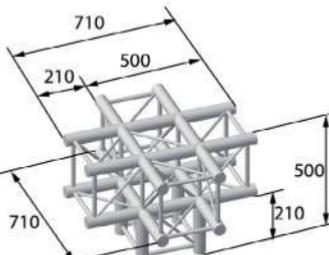
H30V - C024 (90°)
Poids (équipé) = 12,1kg

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ALUMINIUM BRIDGES

SQUARE ALU BRIDGE H40V/SC390 (ALU)

|	
ASD SC390	0.25/0.30/0.50/0.60/0.81 m long
ASD SC390	1/2/3/4 m long
ASD SC390	2D corner pieces
ASD SC390	3D corner pieces
ASD SC390	4D corner pieces
ASD SC390	5D corner pieces
ASD SC300	Magic corner H30V/H30V ou H30V/H40V, cardan
ASD SC390	Suspension, max. load 125/500 kg
ASD SC390	Small base, pole head
ASD SC390	Heavy base 50 x 100, 60 kg, centred/off-centred
ASD SC390	Heavy base Ø80 cm, 60 kg, centred/off-centred
ASD SC390	Steel "pallet" base 80 x 120 x 17, 500 kg
ASD SC390	Concrete base 80 x 120, 750 kg

SQUARE ALU BRIDGE H40V/SC390 (BLACK)

ASD SC390	0.25/0.30/0.50/0.60/0.81 m long
ASD SC390	1/2/3/4 m long
ASD SC390	2D corner pieces
ASD SC390	3D corner pieces
ASD SC390	4D corner pieces
ASD SC390	5D corner pieces
ASD SC390	Suspension, max. load 125/500 kg
ASD SC390	Small base, pole head
ASD SC390	Heavy base 50 x 100, 60 kg, centred/off-centred
ASD SC390	Heavy base Ø80 cm, 60 kg, centred/off-centred
ASD SC390	Steel "pallet" base 80 x 120 x 17, 500 kg
ASD SC390	Concrete base 80 x 120, 750 kg
ASD TL400	Tower kit, series 400 stand, series 400/500 outlet

TRUSS RODS

ASD SX290 (X30D)	Alu or black truss rod Ø3/4/5/6/8/10/12/15 m
ASD SX290 (X30D)	Alu truss rod Ø20 m
ASD SC300 (H30V)	Alu or black truss rod Ø3/4/5/6/8/10/12 m
ASD SC300 (H30V)	Black truss rod Ø15 m
ASD SC300 (H30V)	Black truss rod Ø18 m
ASD SC300 (H30V)	Black truss rod Ø20 m
ASD SC300 (H30V)	Black truss rod Ø25 m
ASD SC300 (H30V)	Black truss rod Ø34 m
ASD SC390 (H40V)	Alu or black truss rod Ø3/4/5/6/8/10/12 m
ASD SC300 (H40V)	Black truss rod Ø25 m
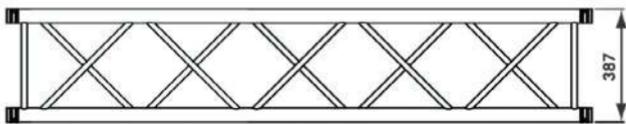
Poids (équipé de 3 manchons/goupilles/sécus) =

0,25m = 4,00kg / 0,30m = 4,20kg

0,50m = 5,90kg / 0,81m = 7,75kg

1m = 8,70kg / 2m = 14,70kg

3m = 20,60kg / 4m = 26,80kg
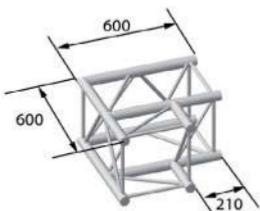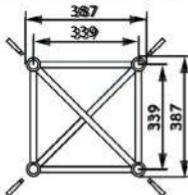
H40V - C003 (90°)
Poids (équipé) = 5,63kg
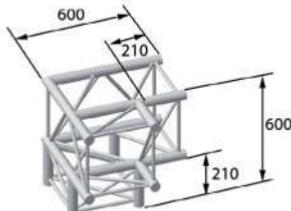
H40V - C012 (90°)
Poids (équipé) = 8,80kg
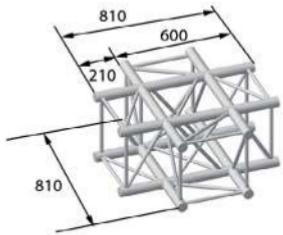
H40V - C016 (90°)
Poids (équipé) = 14,30kg
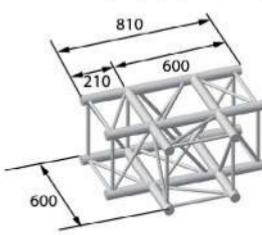
H40V - C017 (90°)
Poids (équipé) = 11,05kg
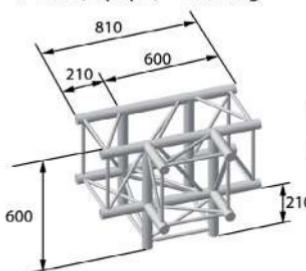
H40V - C020 (90°)
Poids (équipé) = 11,60kg
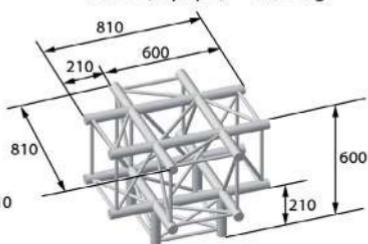
H40V - C024 (90°)
Poids (équipé) = 12,60kg

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EXAMPLES OF CORNER AND SPECIAL PIECES FOR SERIES 300 / 400

ASD Bar H
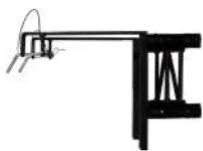
ASD magic corner piece H30V/H40V
(available in black and alu)

ASD T for H30V

ASD corner piece H40V 18°

ASD truss rod Ø70 H30V

ASD magic corner piece H30V/H30V
(available in black and alu)

ASD Base 500kg H30V/H40V

ASD T for all series

ASD truss rod Ø180 H30V

ASD heavy base 80kg
centred or off-centred
for H30V/X30D/H40V

NOVELTY Cover
for concrete base
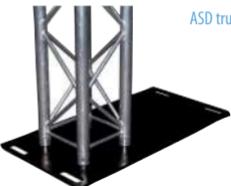
ASD concrete base 750kg
for series X30D/H30V

Tel.: 01 76 91 90 00

EXAMPLES OF CORNER AND SPECIAL PIECES FOR SERIES 300 / 400

ASD high motor support for H40V

ASD corner piece H30V 45°

ASD corner piece X30D 60° + stand

ASD corner piece H30V 135° + stand

ASD corner piece H30V 135°

ASD corner piece X30D 120° + stand

ASD corner piece 90° H30V + stand H40V

ASD corner piece H30V 120°

ASD corner piece X30D 135°

ASD corner piece H30V 90° + "rounded" stand

ASD corner piece H30V 90° "rounded"

ASD magic corner piece H30V 90°

ASD magic corner piece H40V 90°

ASD variable corner piece H40V

STRUCTURE

novelty

ALUMINIUM BRIDGES

TRIANGULAR ALU BRIDGE SERIES 500 (BLACK) ▽

PA507	0.70 m long
PA514	1.40 m long
PA528	2.80 m long
PA528 O	2.80 m long, open
PA5CRX	4D 90° horizontal cross
PA5TE	3D 90° horizontal corner piece
PA5SUSP	TSuspension triangle
PA5ESSE	Cable gland bridge S-hook

Materials: Alloy 6060 T5 / TIG welding
Members Ø50 thick. 5 mm / Lower cross-beams Ø50 thick. 5 mm / Diag. Ø30 thick. 3 mm

Weight: 0.70 = 14.0 kg / 1.40 = 19.5 kg / 2.80 m = 32.0 kg /2.80 open + arms = 33.0 kg

SQUARE ALU BRIDGE SERIES 500 SC500 (BLACK) ▱

ASD SC5280N	2.80 m long
ASD SC5140N	1.40 m long
ASD SC5070N	0.70 m long
ASD SC5035N	0.35 m long
ASD SC5005D	5D corner piece
ASD SC5005D	Offset bracket 500 kg
ASD SC5005D	Motor suspension 1t
ASD TL400	Tower Kit, stand series 400, outlet series 500

Materials: Members Ø50 thick. 5 mm / Cross-beams Ø50 thick.
5 mm / Diagonals Ø30 thick. 3 mm

Weight: 0.35 = 13.5 kg / 0.70 = 18.0 kg / 1.40 = 35.0 kg / 2.80 m = 54.0 kg

SQUARE ALU BRIDGE SERIES 500 ST52 (BLACK) ▱

THOMAS ST52N300	3.00 m long
THOMAS ST52N250	2.50 m long
THOMAS ST52N200	2.00 m long
THOMAS ST52N100	1.00 m long
THOMAS ST52N	2D / 3D / 4D corner piece

Materials: Members Ø50 thick. 5 mm / Cross-beams Ø50, 8 thick. 4 mm / Diagonals Ø24 thick. 3.2 mm

Weight: 1.00 m = 16 kg / 2.00 m = 27 kg / 2.50 m = 33 kg / 3.00 m = 36 kg

STRUCTURE

Tel.: 01 76 91 90 00

STRUCTURE

STACCO PA500

STACCO PA500
Suspension

STACCO PA500

ASD SC500
bracket 500 kg

ASD SC500
motor suspension 1t
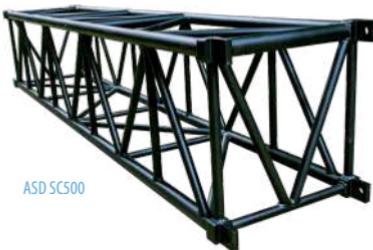
ASD SC500

ASD SC500

THOMAS ST52

THOMAS ST52

THOMAS ST52

novelty
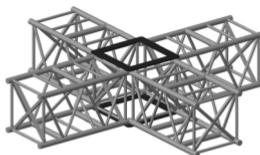
ALUMINIUM BRIDGES

ALU BRIDGE SERIES 6043 (BLACK)

ASD SR6043 RV-240	2.40 m beam, cross-section 60 x 43 1 adjustable tube in the centre for height, black (equipped with 4 sleeves + 8 pins)
ASD SR6043 RV-100	1 m beam, cross-section 60 x 43 1 adjustable tube in the centre for height, black (equipped with 4 sleeves + 8 pins)
ASD SR6043 RV-30	0.30 m beam, cross-section 60 x 43, black (equipped with 4 sleeves + 8 pins)

Tel.: 01 76 91 90 00

novelty
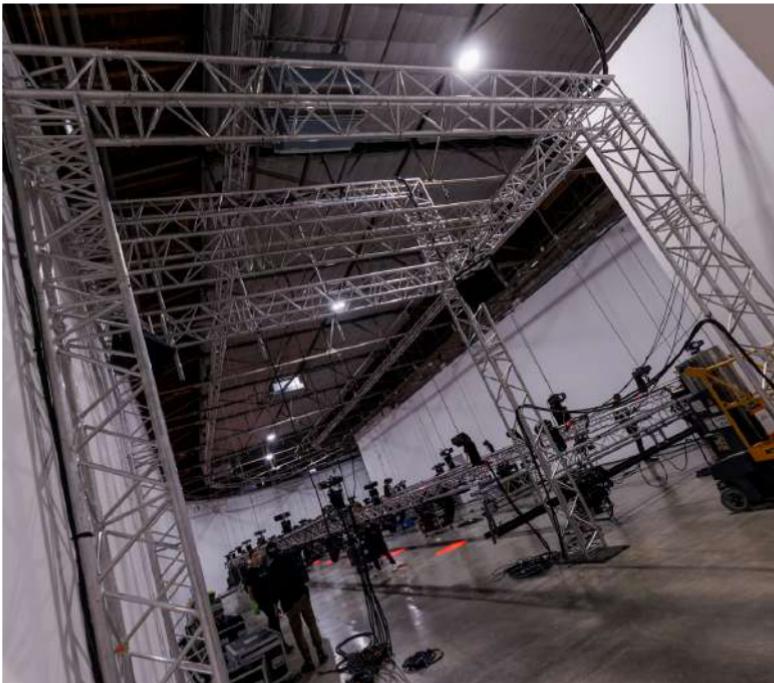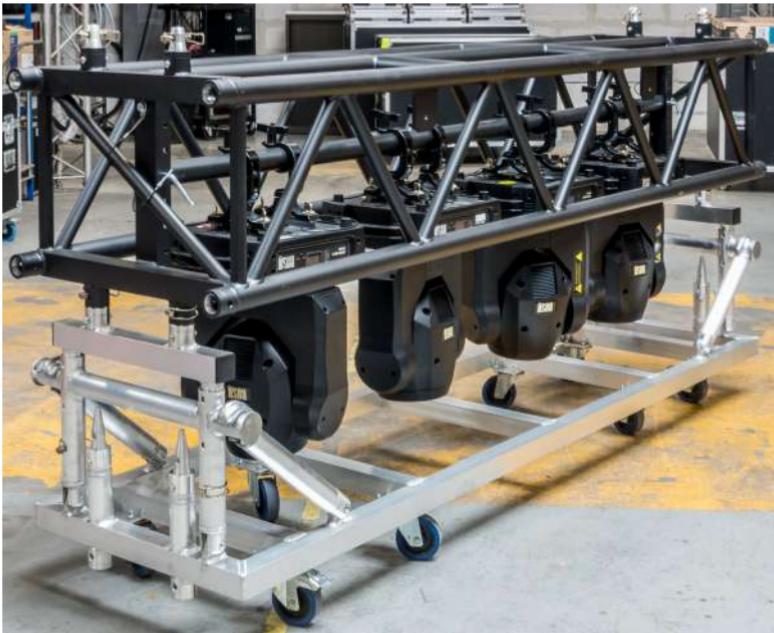
ALUMINIUM BRIDGES

ALU LADDER BRIDGE 52 CM LITEC (ALU)

LITEC FL52035	Ladder length of 35 cm (mesh 0.49 m)
LITEC FL52086	Ladder length of 86 cm (mesh 1.00 m)
LITEC FL52137	Ladder length of 137 cm (mesh 1.51 m)
LITEC FL52186	Ladder length of 186 cm (mesh 2.00 m)
LITEC FL52CS04	4-way star connector
LITEC RAH158	Diagonal for mesh 35 x 137 (49 x 151)
LITEC RAH202	Diagonal for mesh 35 x 186 (49 x 200)
LITEC RAH223	Diagonal for mesh 86 x 186 (100 x 200)
LITEC RAH213	Diagonal for mesh 137 x 137 (151 x 151)
LITEC RAH250	Diagonal for mesh 137 x 186 (151 x 200)
LITEC RAH282	Diagonal for mesh 186 x 186 (200 x 200)

ALU TOWER LITEC (ALU)

LITEC QL40050A	0.50 m long
LITEC QL40130A	139 cm long
LITEC QL40200A	200 cm long
LITEC QL40300A	300 cm long
LITEC MT40	Dolly (base + head + stabiliser)

Tel.: 01 76 91 90 00

50

520

470
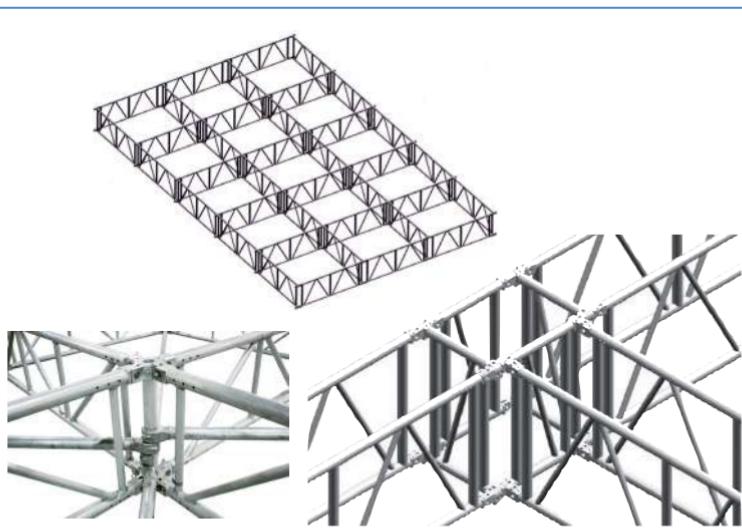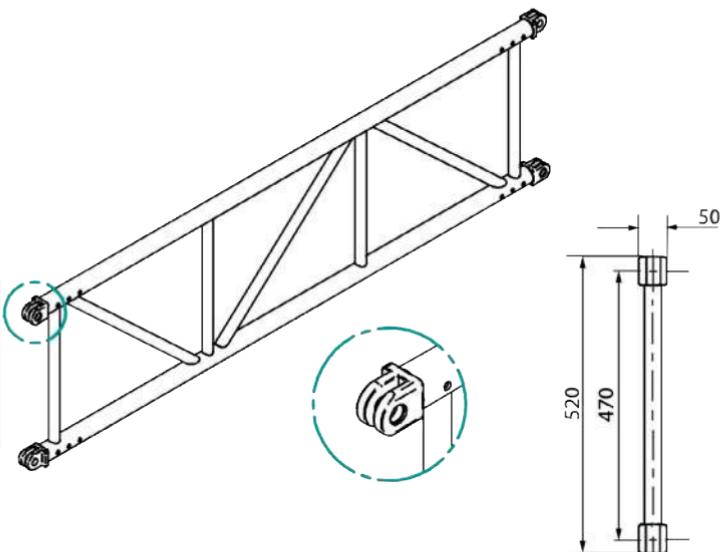
LITEC

Réf	Désignation	Poids nu	Poids equipé
FL52086V	Poutre 52 x 86 cm	5,7kg	6,2kg
FL52137V	Poutre 52 x 137cm	7,7kg	8,2kg
FL52186V	Poutre 52 x 186cm	10kg	10,5kg
FL52035V	Poutre 52 x 35cm	4,0kg	4,2kg
FL52CS04	Raccord de poutres	3,3kg	4,05kg
RAH158M6	Diag. maille 35x150	3,2kg	
RAH202M8	Diag. maille 35x200	3,9kg	
RAH223M8	Diag. maille 100x200	4,0kg	
RAH213M5	Diag. maille 150x150	4,0kg	
RAH250M6	Diag. maille 150x200	4,6kg	
RAH282M8	Diag. maille 200x200	5,1kg	

R

DIOR.COUTURE

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LITEC MAXI TOWER QL40
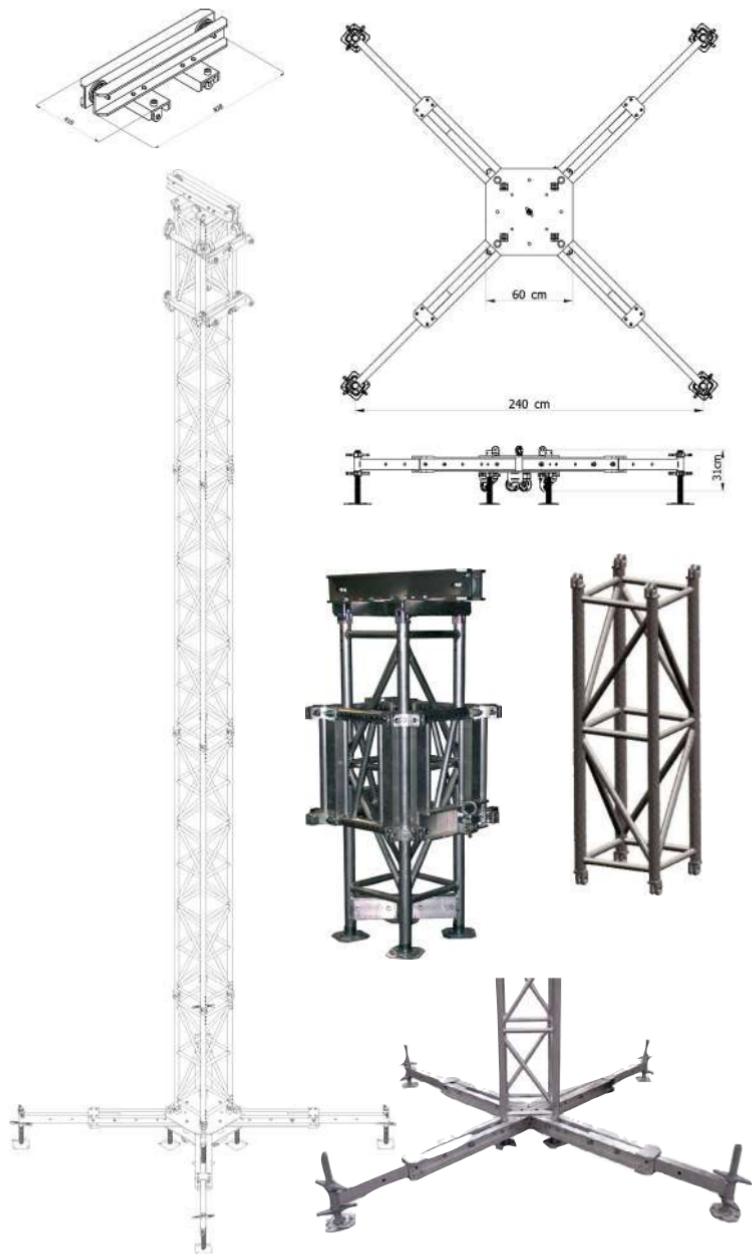
![novelty]

ASD TOWER TL290
(FOR SERIES 300 & 400, SQUARE OR TRIANGULAR)

Tel.: 01 76 91 90 00

ASD TOWER TL290
(FOR SERIES 300 & 400, SQUARE OR TRIANGULAR)

novelty
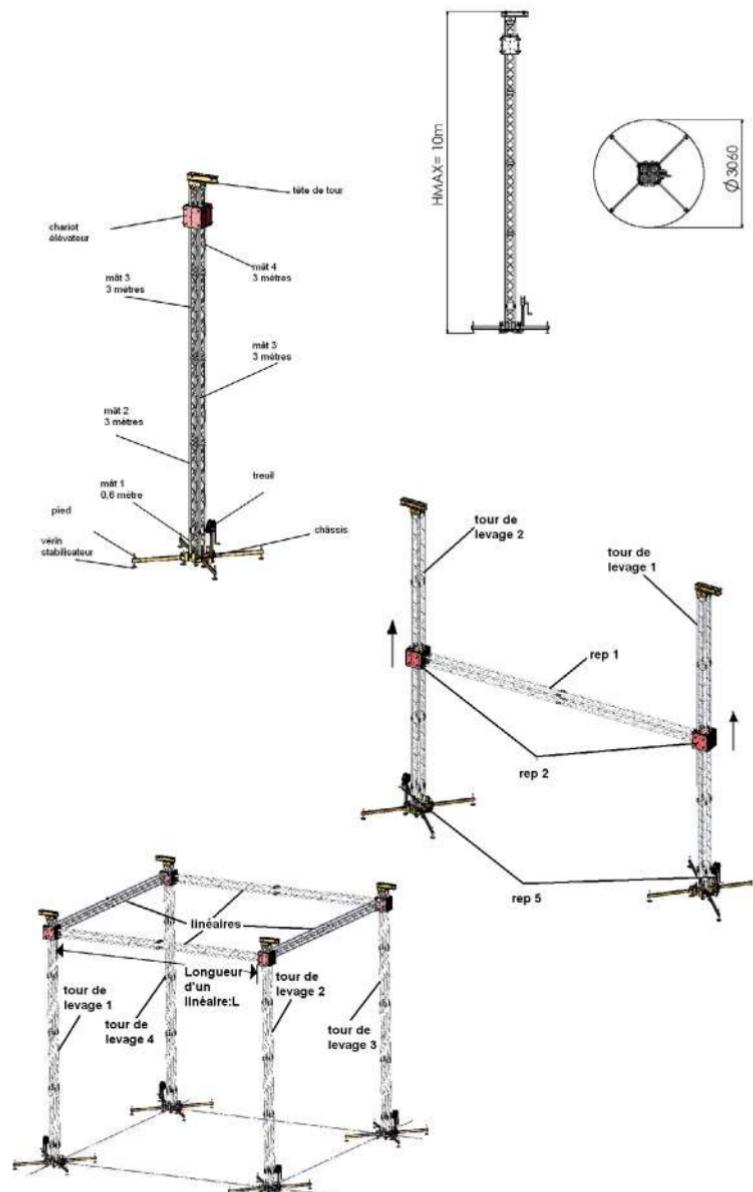
SOUND CLUSTER TOWER

ASD ST780	Sound cluster tower, max. height 7.83m
	Max. load 500 kg
ASD STM500/650	Sound cluster tower, max height 6.5m
	Charge max 300 kg

ASD ST780

Tel.: 01 76 91 90 00

ASD STM500/650

STRUCTURE

novelty

LIFTING

SERVO-CONTROLLED ELECTRIC HOIST

WINCH 50 — "Winch" cable motor, load 50 kg, max. height 12m, variable speed 9-45cm/s DMX512

ELECTRIC HOIST

GIS LPM250	Electric hoist 250 kg D8+, double-brake	
VERLINDE SR1	Electric hoist 250 kg, 4 m/mn	*20 m*
VERLINDE SR2	Electric hoist 250 kg, 4 m/mn	*20 m*
GIS LPM500	Electric hoist 500 kg D8+, double-brake	
VERLINDE SR5	Electric hoist 500 kg, 4 m/mn	*20 m*
VERLINDE SM5	Electric hoist 500 kg, 4 m/mn	*20 m*
GIS LPM1000	Electric hoist 1,000 kg D8+, double-brake	
VERLINDE SR10	Electric hoist 1,000 kg, 4 m/mn	*20 m*
SHOW DISTRIBUTION TR1000	Electric hoist 1,000 kg, 4 m/mn	*28 m*

MANUAL HOIST

ELLER	Manual Hoist 500 kg, black chain	*15 m*

STANDS

ASD AL250	Steel stand of 1.30 to 2.50 m, 70 kg max.
ASD ALT300	Steel stand of 1.60 to 3.00 m, 70 kg max.
ASD ALT550	Lifting stand 5.50 m, 225 kg, bridge head
ASD ST650	Lifting stand 6.50 m, 225 kg, bridge head
MANFROTTO WIND-UP	Rack and pinion stand 3,.7 m, 30 kg max, black
MANFROTTO WIND-UP CASTORS	Rack and pinion stand on castors 3.7 m, 30 kg max, black
MANFROTTO EXTENSION	Extension for Wind-Up, black
ALP M476	Lifting stand 4.76 m, 300 kg
GENIE SL18	Lifting stand 5.20 m, 300 kg
GENIE ST25	Lifting stand 8 m, 295 kg
ASD ELP730	Lifting stand 7.3 m, 300 kg

AERIAL WORK PLATFORM

GENIE AWP-36S	Electric work platform 11 m, 180 kg
ALP PHC1200	Electric work platform 10 m, 180 kg
GENIE AWP-30S	Electric work platform 9 m, 180 kg

VERLINDE SR1

ELLER Manual hoist 500 kg

GIS LPM1000

VERLINDE SR2

VERLINDE SR5

VERLINDE SR10

ASD ALT300

ASD AL250

MANFROTTO Ranker

SHOW DISTRIBUTION Tour Rig 1000

ALP M476

ASD ELP730

ASD ST650

novelty

LIFTING

REMOTE CONTROL

TELEC1	Remote control for 1 motor, P17 32tri
TELEC4 SRS	Remote control for 4 motors, P17 32tri
TELEC8	Remote control for 8 motors, P17 32tri
TELEC12N	Remote control for 12 motors, P17 32tri, digital
TELEC12 SRS	Remote control for 12 motors, P17 32tri, Harting, remote housing, linkable
TELEC12 TD	Remote control for 12 motors, P17 32tri, Harting, Soca remote housing, linkable
TELEC24	Remote control for 24 motors, P17 63tri
P17 16A tri	4 x 2.5 mm^2, motor extension, per m
P17 motor kit	Motor extensions: 10 x 5 m + 10 x 10 m + 10 x 20 m
Harting motor kit	Harting 4 circuits: 1 x 30 m + whips

LIFTING ACCESSORIES

SLING

NOVELTY	Floodlight secure sling, 0.6 m/200 kg
NOVELTY	Sheathed sling, 0.3 to 5 m/cmu 400 kg
NOVELTY	Sheathed sling, 0.3 to 5 m/cmu 700 kg
NOVELTY	Sheathed sling, 0.3 to 10 m/1 t
NOVELTY	Steelflex/cmu 2 t
	0.5 m
	1 m
	1.5 m
	2 m
	2.5 m
	3 m
NOVELTY	Deckchain 1.5 m/cmu 2 t
NOVELTY	Stackchain 1 m/cmu 2 t

NOVELTY Sheathed sling
0.3 to 5 m/cmu 700 kg

NOVELTY Sheathed sling
0.3 to 10 m/1 t

NOVELTY Sheathed sling
0.3 to 5 m/cmu 400 kg

Remote control 12N

Remote control 4

Remote control 12 SRS

Remote control 12 TD

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SCAFFOLDING TOWERS

ASD TOWER UP'4	Height of 4 m, 2 m x 0.90 m
ASD TOUR UP'6	Height of 6 m, 2 m x 1.60 m

Double width 2 m x 1.60 m - Complete tower with stabiliser - Delivered in a dolly of 3 m x 0.60 m x 2 m

TUBULAR STRUCTURES

TUBE Ø35MM

ARMUR TUB35	Aluminium tube, AU4G, Ø35/5 mm
ARMUR TUB35	Jack, screw jack + base plate
ARMUR TUB35 angle	Various 2D, 3D, 4D, 5D assembly corner pieces
	corner piece, variable, sleeves,...

TUBE Ø50MM

TUB50	Steel tube, Ø50 mm
Painting	Paint on steel tube, Ø50 mm
DOUGHTY	Double collar, Ø50 mm, 90° fixed or adjustable
LAYER	Double collar, Ø50 mm, 90° fixed or adjustable
ASD TUB50EMBØ40	Heavy base Ø40 cm, 40 kg, black or white
ASD TUB50EMB30x30	Candle base 30 x 50, with heavy round or rectangular base plate

MISCELLANEOUS ATTACHMENTS

DELTA PLUS STOP CHUTE	250 kg, 10 m
KRATOS fall protector	15 kN, 15 m
LADDER	3 plane, 6.85 m
LADDER	7 plane, 3.59 m
NOVELTY	Shackle 0.2 to 2 t
DOUGHTY Gravelock	Pair of couplers for attaching tubes on IPN at 90°
ESPACE CONCEPT EC1/EC2	IPN clamps and structure, 250 / 500 kg, 90 to 125 mm
HADEF 75-230	IPN clamps, 1,000 kg, 75 to 230 mm
NOVELTY	IPN clamps, 3,000 kg, 95 to 360 mm
NOVELTY	IPN clamps, 5,000 kg, 95 to 360 mm
IFF MONO 6	Pantograph 6 m/40 kg
AVENGER C825	Telescopic bar 117 cm/30 kg to 220 cm/7 kg
NOVELTY Cuve 1t	Ballasted tank 1,000 l / 1t + drain valve
NOVELTY LEST	Ballast 25 kg 50/300/400

STRUCTURE

Tel.: 01 76 91 90 00

ASD TOWER UP6 on dolly

NOVELTY Ballast

ASD Tower TL400

Vue de dessus

Ø3940

11M Maxi
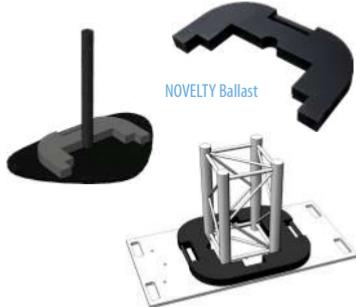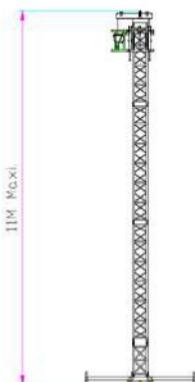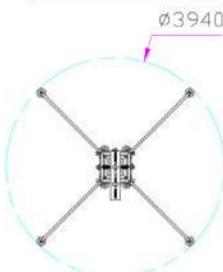
HADEF
IPN clamp 1,000 kg

NOVELTY Clamp

IPN 3,000 kg

DOUGHTY
Gravelock

NOVELTY Clamp

IPN 5,000 kg

AVENGER DC600

novelty

STAGE DESIGN

PROPS

ASD 2x1	Prop 2 m x 1 m, 750 kg / m^2
ASD 2x0.5	Prop 2 m x 0.50 m, 750 kg / m^2
ASD 1.5x1	Prop 1.5 m x 1 m, 750 kg / m^2
ASD 1x1	Prop 1 m x 1 m, 750 kg / m^2
ASD 1x0.5	Prop 1 m x 0.5 m, 750 kg / m^2
ASD DT211 D	Right-handed triangle prop 2 m x 1 m x 1 m, 750 kg / m^2
ASD DT211 G	Left-handed triangle prop 2 m x 1 m x 1 m, 750 kg / m^2
ASD Fixed stand	Set of 4 stands h=20/40/60/80/100 cm
ASD Adjustable stand	Set of 4 adjustable stands 1.20 m to 2.20 m
ASD RAC2	2-stand connector ,
ASD RAC4	4-stand connector
ASD GARD2	Railing 2 m x 1 m, noir
ASD GARD1	Railing 1 m x 1 m, noir
ASD Ladder 20-100	Modular ladder from 20 to 100 cm
ASD MC100	Handrail for ladder
ASD STR300	Prop / structure connection series 300 for self-supporting walkways or mezzanines
ASD RISER 1x2	Riser prop frame on castors 1 m x 2 m
ASD RISER 2x2	Prop frame on castors 2 m x 2 m

ASD Dolly of
4 props 1.5m x 1m

ASD STR300

ASD RAC2

ASD Prop 1.5m x 1m x 0.40m
+ railing 1m and 2m

ASD Prop 2m x 0.5m x 0.40m

ASD Prop 1m x 1m x 0.40m

ASD Prop 1 m x 0.5 0 m x 0.40 m

ASD Prop 2m x 1m x 0.40m

ASD DT211G

ASD DT211D

ASD RISER 1x2

ASD RISER 2x2

STAGE

GROUPE

novelty magnum DUSHOW

TO FIND OUT ABOUT ALL OUR STAGES, CONSULT THE CATALOGUE:

On STAGE

ON STAGE

ON STAGE consists of 4 major stage complexes, mobile stages and scaffolding, located throughout France, providing its know-how for the live and festival sectors, as well as for events and customised projects.

ON STAGE IS
- 4 sites across the country
- 1 centralised request centre (contact@onstage-live.com | +33 1 60 13 88 90)
- 1 centralised design and validation office

ON STAGE, SERVING THE SECTOR
- 7 mobile stages
- 14 covered stages from 10 to 20m
- 7 covered stages from 20 to 48m
- Scaffolding of all types
- Customised construction projects

YOUR CONTACTS

Sébastien Corneil
s.corneil@onstage-live.com

Matthieu Aubin
m.aubin@onstage-live.com

CATALOGUE AVAILABLE HERE

HTTPS://WWW.ONSTAGE-LIVE.COM/SCENES.HTML

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STAR 600

PARASOL SYSTEMS Star600

• Double motorised truss rod
• Ø108 cm and Ø183 cm, up to 18 servo-controlled yokes
• Height 29 cm between 2 truss rods
• Bare weight of 200 kg
• Mains power supply and continuous dmx
• Speed from 5.5 to 10.9 rpm

Tel.: 01 76 91 90 00

D O L L Y

NOVELTY DOLLY 100 x 100
NOVELTY DOLLY 100 x 100 SLAVE
NOVELTY DOLLY 100 x 100 MOTION SERVER

Motorised dolly for moving the stage, video wall, stage design
Maximum load of 1t per dolly, can be assembled by 300 square beam

DOLLY MASTER

DOLLY SLAVE

novelty

PIPES & DRAPES

novelty

PIPES & DRAPES

SHOWTEX EASYDRAPE
- EasyDrape Set: 24 m x H.3 m max / 6 x curtains 4 x 3 m
- Class M1
- EasyDrape Base Plate 50 x 50, 14 kg
- EasyDrape Horizontal Drape Support / length: 180 to 300 cm
- EasyDrape Black drape 4 x 3 m 300 g/m^2
- EasyDrape Telescopic Upright / length: 175 to 300 cm
- EasyDrape dolly / for 8 stands, 8 horizontals, 6 drapes

CONTROL PANEL COVER

WENTEX CONTROL PANEL COVER	Control panel cover kit, 3 to 6 m

TENTS

TENTS	Folding tent 3 x 3 m, black

DRAPES

DRAPES	H. 4 x L. 6 m / Knotted / Wool Serge M1
	H. 6 x L. 6 m / Knotted / Wool Serge M1
	H. 8 x L. 3 m / Knotted / Wool Serge M1
	H. 8 x L. 4.5 m / Knotted / Wool Serge M1
	H. 8 x L. 6 m / Knotted / Wool Serge M1
	H. 8 x L. 9 m / Knotted / Wool Serge M1
	H. 9 x L. 4 m / Knotted / Wool Serge M1
	Custom-made

FRIEZES

FRIEZES	L. 9 x H. 0.8 m / Knotted / Wool Serge M1
	L. 21 x H. 2 m / Knotted / Wool Serge M1
	L. 20 x H. 70 m / Knotted / Wool Serge M1
	L. 20 x H. 1.20 m / Knotted / Wool Serge M1
	L. 20 x H. 1.50 m / Knotted / Wool Serge M1

CURTAIN TRACKS

CURTAIN TRACKS	Unitrack curtain track, rail 2 m, 10 m
	Unitrack curtain track, rail 2 m, 12 m
	Grippontube, Snap-hook for drapes
	Max. load 20 kg

Tel.: 01 76 91 90 00

Rideau laine Serge

Rideaux en Laine Serge Noire M1 Oeillets et nouettes en tête
foureau lesté en bas,
ourlets sur les cotés
Sacs en Toile Noire avec drisse de serrage
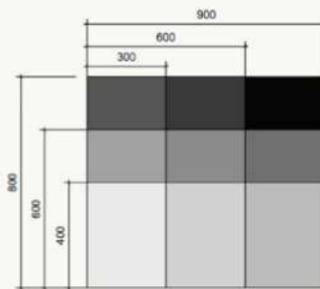
9 Tailles en stock:
. 8m Haut, Largeur 9m – 6m – 3m
. 6m Haut, Largeur 9m – 6m – 3m
. 4m Haut, Largeur 9m – 6m – 3m

SHOWTEX EASYDRAPE SET

WENTEX CONTROL PANEL COVER

novelty

TECHNICAL GUIDE

ECHNICAL GUIDE

NETWORK

TECHNOLOGY

Data transport and network technologies

1 - Topologies:

"Point to point" solution
This solution makes it possible to respond to distance-based transmission limits; it is limited in its form to a transmission/reception via an element called the transmitter and another element called the receiver. A single receiver can receive the signal from a single transmitter.

"Star" or multipoint solution
the network is centred around a central node
This solution is a true transmission network and provides great management flexibility.

2 - Ethernet:
Sound, video, control and supervision signals are fed into and retrieved from the thus created network via converters. The data is transported via protocol sub-sets such as Dante, Ethersound, Ravenna, AVB, AES67 for the sound part, and Artnet, MA-Net, etc. for the light part. Control data is transported via various protocol sets for the control and administration of amplifiers, mixing consoles, wireless transmission systems, etc.
In the end, all these protocol sets are based on a standardised system enabling data packets to be transported in a standardised network: Ethernet (ISO/IEC/IEEE 8802-3:2014)

An Ethernet-type infrastructure has many advantages:
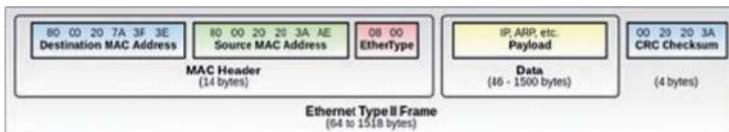
- Very flexible management compared to a point-to-point network; it is thus possible to dynamically add or remove equipment
- Full hardware compatibility (switches, copper or fibre wiring, connectors etc.) with standard computer hardware
- Standard and proven redundancy systems
- Possible and easy development
- Controlled deployment costs

3 - Type of network:

N E T W O R K

XBase-Y (e.g.: 100Base-T)
X => Speed in Mbits / sec (10, 100, 1000, 10000)
Y => Type of connection used
   T (twisted pairs with number of pairs)
   TX (full-duplex twisted pairs)
   BX (single-mode optical fibre – 10 km max)
   FX (multimode optical fibre – 2 km max)
   SX (cost-effective optical fibre – 300 m max)

4 - Quality of the connections: Media
In order to ensure the transmission of audiovisual signals in a qualitative manner, various factors must be considered.

- **Quality of connections:** traditional copper wiring, RJ45 copper wiring, optical fibre.
- **Type of connection:** point-to-point typology, ring typology, star typology.
- **Network architecture:** fast converters/switches fully compatible with Ethernet network standards (ISO/IEC/IEEE 8802-3:2014).

5 - Copper wiring:
Twisted pairs allow keeping a constant distance between the 2 wires of the pair. This distance determines the impedance of the cable, which should be about 100Ω (depending on the category).

The greater the number of twists, the lower the crosstalk. The average number of twists per metre is part of the cable specification, but each pair in a cable is twisted slightly differently to avoid crosstalk.

6 - Types of cables:
- Unshielded twisted pair (UTP or U/UTP)
- Foil twisted pair (FTP or F/UTP): an aluminium foil is used as general shielding
- Shielded twisted pair (STP or U/FTP): each pair is individually shielded
- Shielded Foil Twisted Pair (SFTP or SF/UTP): aluminium foil and a braid is used as general shielding
- Screened Shielded Twisted Pair (SSTP or S/FTP): each pair is individually shielded and the whole is shielded again.

NETWORK

7 - Optical fibre:

- **-** They conduct light signals by reflections against the "walls" of a "silica" core
- **-** Different types, different diameters, different wavelengths
- **-** Single mode: very thin silica core (OS1 or OS2)
- **-** Multimode: larger synthetic core (OM1, OM2, OM3, OM4)
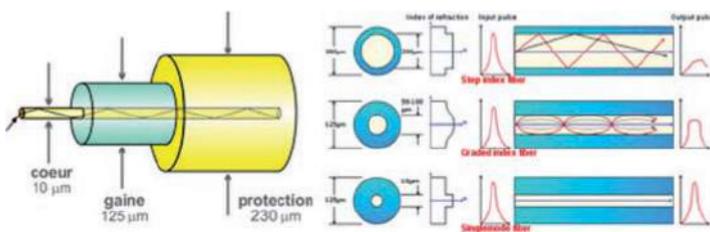
Advantages of optical fibre over copper

- **Increased distance -** You can run a fibre optic cable over several kilometres
- **Reduced attenuation -** As light signals encounter little resistance, the data can be transported further
- **Security -** Unauthorised connections are easy to detect in a fibre cable. Any unwanted connection causes light to be emitted from the cable and the whole system to fail
- **Increased bandwidth -** Fibre cables can transport more data than copper cables. Optical fibre is ideal for high-speed applications involving the transfer of large files, such as multimedia
- **Immunity -** Optical fibre is immune to interference
- **Design -** Much lighter than copper, optical fibre is easier to transport and handle

8 - Multimode or single-mode fibre?

Multimode fibre has a large core diameter and therefore offers several modes of light propagation: several light wavelengths can travel through the fibre core. It is mainly used for voice and data applications.

However, **single-mode** optical fibre has a smaller core which allows only one mode of

NETWORK

propagation. As only one wavelength passes through the core of the single-mode fibre, the light is realigned towards the centre of the core instead of bouncing off its edge as in multimode fibre.

What is the advantage? Increased distance, up to **50 times** more range in single-mode than in multimode.

For this reason, single-mode fibre is typically used in long-distance network connections covering large areas, such as cable TV and high-speed backbone cables.

The bandwidth is also higher. With a full-duplex single-mode fibre pair, you can achieve up to twice the throughput of multimode fibre. The actual range of single-mode fibre varies depending on the manufacturer of the network peripherals you use with the cable. In contrast to multimode optical fibre, there are still very few established standards for single-mode fibre.

Le connecteur ST®, avec son système de verrouillage à baïonnette, est le plus courant.

Le connecteur SC connector comprend un corps surmoulé et un système de verrouillage par pousser-tirer.

Le connecteur FDDI comporte une férule de 2,5 mm et une protection fixe pour réduire la perte de sigal lumineux.

Le connecteur MT-RJ (type RJ à faible encombrement) comprend un corps surmoulé et se monte par clivage de la fibre.

Le connecteur LC, à faible encombrement, comporte une férule en céramique et ressemble à un connecteur SC miniature.

Le connecteur FC est un connecteur à bague filetée. Il est utilisé dans les environnements à vibrations intenses.

Le connecteur MU ressemble au connecteurSC, en plus petit. Il utilises un système de verrouillage simple par pouser-tirer. A utiliser dans les applications à haute densité.

NETWORK

9 - MTP24 fibre:

MTP24 fibre is a flexible field cable consisting of 24 assembled fibre channels. Available in single or multi-mode, the MTP24 cable consists of opticalCON MTP connectors. It features a spring-loaded push-pull locking mechanism and excellent cable retention using aramid wire. The optical connection is exceptionally well protected against dirt and dust by an automatically operated sealing cover. There are three types of MTP breakout boxes that convert 1 opticalCON MTP24 to 12 opticalCON DUO:

The Rack version: intended for transmissions from the control room, this version is rackable in standard 19'' fly
The Bridge version: intended for burst signals on structural bridges
The Floor version: which is a box that is placed on the floor for signal reception at the level of stages, other rooms, etc.

VIDEO
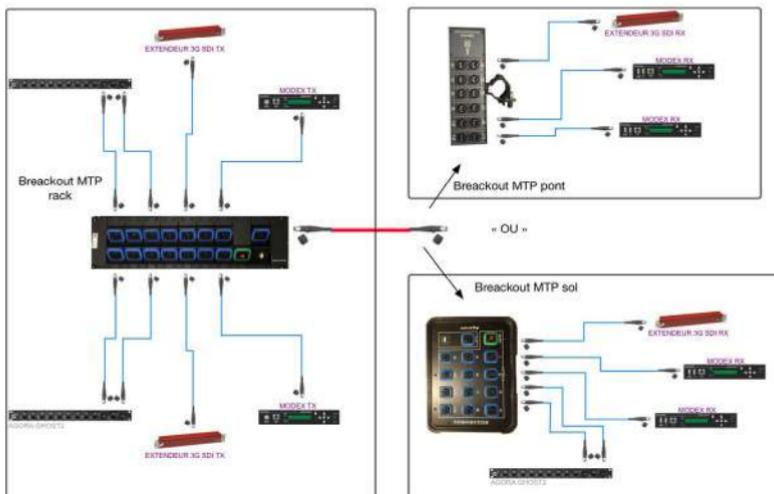
LED TECHNOLOGY

LED (Light-Emitting Diode) technology:
Conventional LCD flatscreens operate with a neon (tube) backlight system. The drawback of this technology is that the light at the back of the LCD panel is not always evenly distributed.
"LED" displays use a completely different backlight technology. The neon tubes (CCFL) are replaced by several hundred light-emitting diodes (LEDs), arranged on the back of the LCD panel.

Screens that use LED technology have several advantages:
- more uniform backlighting of the LCD panel
- higher contrast ratio
- deeper blacks
- up to 40% lower power consumption than conventional LCD displays

There are several different LED technologies:
EDGE LED technology: The LEDs are placed on the edge of the LCD panel.
This technology makes it possible to save on thickness and to obtain even thinner screens, of less than 3 centimetres.

Full LED technology: the diodes are placed over the entire surface of the LCD panel.
Both of these technologies can, on some models, also benefit from the "Local Dimming" technology.

LCD flatscreens with EDGE LED technologies:
In LCD screens with Edge LED technology, the LEDs are installed along the entire edge of the LCD panel. Light reflectors are used to spread the LED light over the entire LCD panel. In addition to the advantages of LED backlighting, this system reduces the space required at the back of the panel. On ultra-slim TVs, the screen is less than 3 cm thick.

LCD flatscreens with Full LED or Direct LED technology:
Some TV sets use a Full LED or Direct LED diode distribution. This means that the LEDs used for backlighting line the back of the LCD panel, covering the entire screen. The backlighting is even more uniform than the EDGE LED, but the screen thickness is greater. In some TV sets, the backlighting is provided by three LEDs (RGB: red, green, and blue).

VIDEO

LED TECHNOLOGY - CONTINUED

LCD screens with Full LED + Local Dimming technology:

LED technology is best used when each LED can be switched on and off intelligently, i.e. only when the brightness of the scene or scene detail requires it. This dynamic LED lighting technology is called "local dimming". The lighting of the areas is dynamic and the blacks are much deeper than on conventional LCD screens. In terms of rendering and image quality, this technology is very similar to plasma screens.

LCD screens with Edge LED + Local Dimming technology:

This type of screen combines the advantages of local dimming in terms of image quality with the thinness of the screen (LEDs on the edges of the LCD panel).

LCD TECHNOLOGY

LCD (Liquid Crystal Display) technology is based on a screen composed of two parallel transparent grooved plates, oriented at 90°, between which is wedged a thin layer of liquid containing molecules (liquid crystals) which have the property of orienting themselves when subjected to an electric current. In combination with a light source, the first grooved plate acts as a polarising filter, allowing only those light components to pass which oscillate parallel to the grooves. In the absence of electrical voltage, the light is blocked by the second plate, acting as a perpendicular polarising filter. Under the effect of a voltage, the crystals will gradually align themselves in the direction of the electric field and thus be able to cross the second plate! By locally controlling the orientation of these crystals, it is possible to form pixels. A distinction is usually made between two types of flatscreens, depending on the control system used to polarise the crystals:

"Passive matrix" screens, where the pixels are controlled by row and column. It is a technology that is being phased out of use.

"Active matrix" screens, where each pixel is individually controlled. The most commonly used technology for this type of display is TFT (Thin Film Transistor) technology, which allows each pixel to be controlled by three transistors (corresponding to the three RGB colours).

VIDEO

LED WALLS

A LED wall is an assembly of several LED panels. They are assembled and connected according to precise patterns that allow coherent images to be sent to the LED wall.

The LED panels are controlled by electronics that will read a video signal entering the wall pixel by pixel.

An LED panel is equipped with a receiver card that interprets the signal sent by the electronics. It allows assigning the position of the LED panel in a wall, synchronising its image to the other panels, ensuring the consistency of the colorimetry of the panel in the LED wall.

On a panel, all LEDs are spaced at the same distance (horizontally and vertically). This space gives the Pitch of the LED panel. The finer the pitch, the higher the LED resolution.
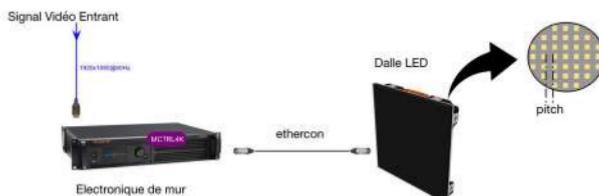
Exemple d'impact du pitch sur la résolution d'un mur

PL2.5 Pro - Absen pitch 2.5mm - 200 x 200 px
Taille du mur : 3 x 2 m
Résolution du mur : 1200 x 800 px
Nombre de dalles : 24 dalles

X3.9 - Infiled pitch 3.9mm - 128 x 128 px
Taille du mur : 3 x 2 m
Résolution du mur : 768 x 512 px
Nombre de dalles : 24 dalles

M6 - Desay pitch 6mm - 128 x 144 px
Taille du mur : 3,2 x 1,8 m
Résolution du mur : 512 x 288 px
Nombre de dalles : 6 dalles

VIDEO
VIDEO RESOLUTION

Name	Dimensions	L/H ratio
QQVGA	160x120	4:3
QVGA	320x240	4:3
HVGA	320x480	4:3
VGA	640x480	4:3
Hercules	720x348	4:3
SVGA	800x600	4:3
WSVGA	964x544	16:9
XGA	1024x768	4:3
WXGA-H	1280x720	16:9
WXGA-H+	1280x800	16:10
SXGA+	1280x1024	5:4
WSXGA	1366x768	16:9
WSXGA+	1440x900	16:10
SXGA+	1400x1050	4:3
WSXGA	1600x1024	25:16
WSXGA+	1680x1050	16:10
UXGA	1600x1200	4:3

Name	Dimensions	L/H ratio
WUXGA	1920x1080	16:9
WUXGA+	1920x1200	16:10
QXGA	2048x1536	4:3
WQXGA	2560x1600	16:10
QSXGA	2560x2048	5:4
WQSXGA	3200x2048	25:16:00
QUXGA	3200x2400	4:03
WQUXGA	3840x2400	16:10
HXGA	4096x3072	04:03
WHXGA	5120x3200	16:10
HSXGA	5120x4096	05:04
WHSXGA	6400x4096	25:16:00
HUXGA	6400x4800	04:03
UHDV	7680x4320	16:09
WHUXGA	7680x4800	16:10
QHXGA	8192x6144	04:03
H²XGA	16384x12288	04:03
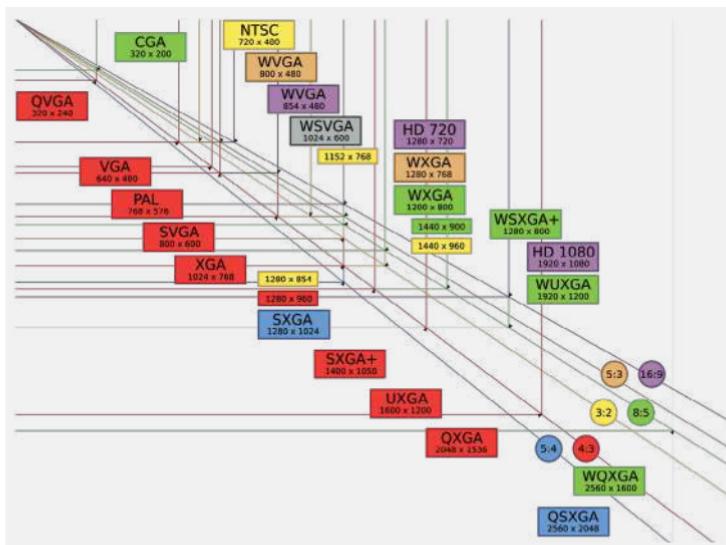
VIDEO

DIGITAL VIDEO WIRING STANDARDS

Standard	Name	Bitrates	Video format examples
SMPTE 259M	SD-SDI	270 Mbit/s 360 Mbit/s 143 Mbit/s 177 Mbit/s	480i, 576i
SMPTE 344M	ED-SDI	540 Mbit/s	480p, 576p
SMPTE 292M	HD-SDI	1.485 Gbit/s 1.485/1.001 Gbit/s	720p, 1080i
SMPTE 372M	Dual Link HD-SDI	2.970 Gbit/s 2.970/1.001 Gbit/s	1080p
SMPTE 424M	3G-SDI	2.970 Gbit/s 2.970/1.001 Gbit/s	1080p
TBA	6G UHD-SDI	6 Gbit/s	4 K
TBA	12G UHD-SDI	12 Gbit/s	4 K

PROJECTION RATIO

Projection ratio = The ratio between the projector-to-screen distance and the width of the projected image.

Projection distance (m) = Screen width (m) X lens ratio

For example: *A lens with a ratio of 5 will make a 4m base image at 20m distance (5=20/4), while a 0.7 lens will make the same image at 2.8m (0.7=2.8/4).*

In the case of a zoom lens, this ratio is variable, and two ratios are indicated. They correspond to the minimum and maximum values of this ratio.

Note, however, that some lenses can be used on different projectors, which may have different matrix sizes depending on their native resolution (4:3, 16:9 or other). The lens ratio is a function of the projector matrix on which it is mounted.

For example: *A lens with a 1.2 ratio on a 4:3 projector will have a 1.1 ratio on a 16:9 projector.*

To avoid mistakes, do not hesitate to consult the correspondence tables, or use the calculation software offered by the manufacturers.

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VIDEO

LENSES

		Ratio 4/3 approx.	ratio HD-WU approx.
ILS			
118-100110-01	Lens ILS 0.73:1SX+/0.67:1HD	0.73:1	**0.67:1**
118-100117-01	Lens ILS 1.2SX+/1.1:1HD	1.2:1	**1.1:1**
118-100111-01	Lens ILS 1.25-1.6SX+/1.16-1.49HD	1.25-16.1:1	**1.16-1.49:1**
118-100112-01	Lens ILS 1.5-2.0SX+/1.4-1.8HD	1.5-2.0:1	**1.4-1.8:1**
118-100113-01	Lens ILS 2.0-2.8SX+/1.8-2.6HD	2.0-2.8:1	**1.8-2.6:1**
118-100114-01	Lens ILS 2.8-4.5SX+/2.6-4.1HD	2.8-4.5:1	**2.6-4.1:1**
118-100115-01	Lens ILS 4.5-7.3SX+/4.1-6.9HD	4.5-7.3:1	**4.1-6.9:1**
118-100116-01	Lens ILS 7.5-11.2SX+/6.9-10.4HD	7.5-11.2:1	**6.9-10.4:1**

LENSES

DLP chip	PT-DZ21K	PT-DZ12000 PT-DZ8700/ DZ110X	PT-DW10000	PT-DS20K	PT-DS8500/ DS100X PT-D12000/ D10000
ET-D75 LE1		1.4-1.8:1		1.5-2.0:1	
ET-D75 LE10		1.3-1.7:1		1.4-1.8:1	
ET-D75 LE2		1.8-2.8:1		2.0-3.0:1	
ET-D75 LE20		1.7-2.4:1		1.8 2.6:1	
ET-D75 LE3		2.8-4.6:1		3.0-5.0:1	
ET-D75 LE30		2.4-4.7:1		2.6-5.1:1	
ET-D75 LE4		4.6-7.4:1		5.0-8.0:1	
ET-D75 LE40		4.6-7.4:1		5.0-8.0:1	
ET-D75 LE5	no Shift	0.7:1	no Shift	no Shift	0.75:1
ET-D75 LE50	no Shift	0.7:1	no Shift	no Shift	0.75:1
ET-D75 LE6	H+/-15%, V+/-44%	0.9-1.1:1	H+/-15%, V+/-50%	H+/-20%, V+/-40%	1.0-1.2:1
ET-D75 LE8		7.3-13.8:1		8.0-15:1	
H-Shift		+/- 20%	+/- 20%	+/- 30%	
V-Shift		+/- 55%	+/- 60%	+/- 50%	
Aspect Ratio		16:10	16:9	4:3	
Resolution		1920x1200	1920x1080	1400x1050	
Chip size		0.96"	0.95"	0.95"	

VIDEO

CHRISTIE VIDEO PROJECTORS

		Ratio 4/3 approx.	ratio HD-WU approx.
CT			
104-110101-01	Fixed Lens 0.67:1HD (SXGA+0.73:1)	0.73:1	**0.67:1**
104-111101-01	Fixed Lens 1.1:1HD (Long Focal)	1.2:1	**1.1:1**
104-137101-01	Zoom Lens 1.16-1.49:1HD (SXGA+1.25-1.6:1)	1.25-16.1:1	**1.16-1.49:1**
104-112101-01	Zoom Lens 1.4-1.8:1HD (SXGA+1.5-2:1)	1.5-2.0:1	**1.4-1.8:1**
104-113101-01	Zoom Lens 1.8-2.6:1HD (SXGA+2-2.8:1)	2.0-2.8:1	**1.8-2.6:1**
104-114101-01	Zoom Lens 2.6-4.1:1HD (SXGA+2.08-4.5:1)	2.8-4.5:1	**2.6-4.1:1**
104-115101-01	Zoom Lens 4.1-6.9:1HD (SXGA+4.5-7.3:1)	4.5-7.3:1	**4.1-6.9:1**
104-130101-01	Zoom Lens 6.9-10.4:1HD (SXGA+7.5-11.2:1)	7.5-11.2:1	**6.9-10.4:1**

PANASONIC VIDEO PROJECTORS

DLP chip	PT-DZ770	PT-DZ6710	PT-DZ6700	PT-DW740/DW730	PT-DW6300	PT-DW5100	PT-DW5000
Standard Lens		1.8-2.4:1		1.8-2.5:1		1.8-2.4:1	
ET-DLE030	no Shift	0.4:1	no Shift	no Shift	0.4:1		no Shift
ET-DLE050	no Shift	0.8:1	no Shift	no Shift	0.82:1		no Shift
ET-DLE055	no Shift	0.8:1	no Shift	no Shift	0.84:1		no Shift
ET-DLE080	0.79-0.98:1			0.82-1.03:1			
ET-DLE100	not recommended			1.4-1.8:1			
ET-DLE150	1.3-1.9:1			1.4-2.0:1			
ET-DLE200	not recommended			2.5-4.1:1			
ET-DLE250	2.3-3.6:1			2.4-3.8:1			
ET-DLE300	not recommended			not recommended			
ET-DLE310	not recommended			3.6-4.7:1			
ET-DLE350	3.6-5.4:1			3.8-5.7:1			
ET-DLE400	not recommended			not recommended			
ET-DLE410	not recommended			4.7-8.9:1			
ET-DLE450	5.3-8.4:1			5.7-9.0:1			
H-Shift	+/- 10%			+/- 10%			
V-Shift	+ 50%			+ 60%		+ 50%	
Aspect Ratio	16:10			16:10		15:9	
Resolution	1920x1200			1280x800		1280x768	
Chip size	0.67"			0.65"			

VIDEO

EPSON EB-PU SERIES
Lenses Compatibility - High Brightness

	ELPLX02S	ELPLU03S	ELPU04	ELPLW08	ELPLW06	ELPLM15	ELPLM10	ELPLM11	ELPLL08
EB-PU1006 6 000 lm									
Ratio	x	0.65 - 0.78:1	0.87 - 1.06:1	x	x	2.16 - 3.48:1	3.31 - 5.07:1	4.84 - 7.39:1	7.2 - 10.12:1
Lens Shift V/H	x	±67% / ±30%	±67% / ±30%	x	x	±67% / ±30%	±67% / ±30%	±67% / ±30%	±67% / ±30%
Brightness max	x	5100 lm	5400 lm	x	x	5900 lm	5800 lm	5600 lm	5600 lm
EB-PU1007 7 000 lm									
Ratio	x	0.65 - 0.78:1	0.87 - 1.06:1	x	x	2.16 - 3.48:1	3.31 - 5.07:1	4.84 - 7.39:1	7.2 - 10.12:1
Lens Shift V/H	x	±67% / ±30%	±67% / ±30%	x	x	±67% / ±30%	±67% / ±30%	±67% / ±30%	±67% / ±30%
Brightness max	x	6000 lm	6300 lm	x	x	6900 lm	6800 lm	6600 lm	6600 lm
EB-PU1008 8 500 lm									
Ratio	x	0.65 - 0.78:1	0.87 - 1.06:1	x	x	2.16 - 3.48:1	3.31 - 5.07:1	4.84 - 7.39:1	7.2 - 10.12:1
Lens Shift V/H	x	±67% / ±30%	±67% / ±30%	x	x	±67% / ±30%	±67% / ±30%	±67% / ±30%	±67% / ±30%
Brightness max	x	7300 lm	7700 lm	x	x	8400 lm	8300 lm	8000 lm	8000 lm
EB-PU2010 10 000 lm									
Ratio	0.35:1	0.48 - 0.57:1	0.64 - 0.77:1	1.19 - 1.62:1	0.86 - 1.21:1	1.57 - 2.56:1	2.42 - 3.71:1	3.54 - 5.41:1	5.27 - 7.41:1
Lens Shift V/H	+25% / ± 15%	±24% / ±10%	±60% / ±18%	±60% / ±18%	±60% / ±18%	±60% / ±18%	±60% / ±18%	±60% / ±18%	±60% / ±18%
Brightness max	9000 lm	8700 lm	9500 lm	9600 lm	9700 lm	10 000 lm	9900 lm	9500 lm	9500 lm
EB-PU2113W / PU2213B 13 000 lm									
Ratio	0.35:1	0.48 - 0.57:1	0.64 - 0.77:1	1.19 - 1.62:1	0.86 - 1.21:1	1.57 - 2.56:1	2.42 - 3.71:1	3.54 - 5.41:1	5.27 - 7.41:1
Lens Shift V/H	+25% / ± 15%	±24% / ±10%	±60% / ±18%	±60% / ±18%	±60% / ±18%	±60% / ±18%	±60% / ±18%	±60% / ±18%	±60% / ±18%
Brightness max	11 765 lm	11 050 lm	12 155 lm	12 805 lm	12 675 lm	13 000 lm	12 610 lm	12 415 lm	12 415 lm
EB-PU2116W / PU2216B 16 000 lm									
Ratio	0.35:1	0.48 - 0.57:1	0.64 - 0.77:1	1.19 - 1.62:1	0.86 - 1.21:1	1.57 - 2.56:1	2.42 - 3.71:1	3.54 - 5.41:1	5.27 - 7.41:1
Lens Shift V/H	+25% / ± 15%	±24% / ±10%	±60% / ±18%	±60% / ±18%	±60% / ±18%	±60% / ±18%	±60% / ±18%	±60% / ±18%	±60% / ±18%
Brightness max	14 480 lm	13 600 lm	14 960 lm	15 760 lm	15 600 lm	16 000 lm	15 520 lm	15 280 lm	15 280 lm
EB-PU2120W / PU2220B 20 000 lm									
Ratio	0.35:1	0.48 - 0.57:1	0.64 - 0.77:1	1.19 - 1.62:1	0.86 - 1.21:1	1.57 - 2.56:1	2.42 - 3.71:1	3.54 - 5.41:1	5.27 - 7.41:1
Lens Shift V/H	+25% / ± 15%	±24% / ±10%	±60% / ±18%	±60% / ±18%	±60% / ±18%	±60% / ±18%	±60% / ±18%	±60% / ±18%	±60% / ±18%
Brightness max	18 100 lm	17 000 lm	18 700 lm	19 700 lm	19 500 lm	20 000 lm	19 400 lm	19 100 lm	19 100 lm

Tel.: 01 76 91 90 00

VIDEO

BARCO SERIES SLM

Projection distance according to lenses and desired image size [in metres].

Image \ Lens	0.8	1.6 / 2.0		2.0 / 2.8	
		Min.	Max.	Min.	Max.
1.80 x 1.35	1.44	2.86	3.59	3.55	5.03
2.40 x 1.80	1.92	3.85	4.82	4.78	6.78
3.00 x 2.25	2.40	4.83	6.06	6.02	8.53
4.20 x 3.15	3.60	6.80	8.53	8.49	12.03
6.40 x 4.88	5.20	10.41	13.06	13.02	18.46
8.00 x 6.00	6.40	13.03	16.36	16.32	23.13

Image \ Lens	2.8 / 5.05		5.0 / 8.0	
	Min.	Max.	Min.	Max.
1.80 x 1.35	5.03	9.11	9.03	14.04
2.40 x 1.80	6.76	12.26	12.09	18.84
3.00 x 2.25	8.49	15.42	15.15	23.64
4.20 x 3.15	11.95	21.73	21.27	33.24
6.40 x 4.88	18.28	33.30	32.49	50.84
8.00 x 6.00	22.89	41.72	40.65	63.64

VIDEO

PMW-150 SONY RECORDING FORMAT

	Video recording format	Audio recording format	Recording duration on 64 GB	Recording duration on 32 GB
UDF				
HD422 Mode	MPEG-2 422P@HL, 50Mbps / CBR 1920 x 1080/50i, 25p 1280 x 720/50p, 25p	LPCM 24 bits, 48 kHz, 4 channels	+/- 120 minutes	+/- 60 minutes
HD420 Mode	MPEG-2 MP@HL, 35Mbps / VBR 1440 x 1080/50i, 25p 1280 x 720/50p	LPCM 16 bits, 48 kHz, 4 channels	+/- 180 minutes	+/- 90 minutes
DVCAM Mode	720 x 576/50i, 25PsF	LPCM 16 bits, 48 kHz, 4 channels	+/- 220 minutes	+/- 110 minutes
FAT				
HQ 1920 Mode	MPEG-2 MP@HL, 35Mbps / VBR 1920 x 1080/50i, 25p	LPCM 16 bits, 48 kHz, 4 channels	+/- 200 minutes	+/- 100 minutes
HQ 1440 Mode	MPEG-2 MP@HL, 35Mbps / VBR 1440 x 1080/50i, 25p	LPCM 16 bits, 48 kHz, 4 channels	+/- 200 minutes	+/- 100 minutes
HQ 1280 Mode	MPEG-2 MP@HL, 35Mbps / VBR 1280 x 720/50p, 25p	LPCM 16 bits, 48 kHz, 4 channels	+/- 200 minutes	+/- 100 minutes
SP 1440 Mode	MPEG-2 MP@H-14, 25Mbps / CBR 1440 x 1080/50i	LPCM 16 bits, 48 kHz, 2 channels	+/- 280 minutes	+/- 140 minutes
DVCAM Mode	720 x 576/50i, 25PsF	LPCM 16 bits, 48 kHz, 2 channels	+/- 260 minutes	+/- 130 minutes

VIDEO

KIPRO RACK AJA RECORDING FORMAT

With audio set to 48kHz, 24 bits, 2 channels

CODEC	500 GB HARD DRIVE
1080p @ 24fps	
Apple ProRes 422 (HQ)	4.5 hours
Apple ProRes 422	7 hours
Apple ProRes 422 LT	10.5 hours
Apple ProRes 422 (Proxy)	22.5 hours
1080i @ 30fps or 720p @ 60fps	
Apple ProRes 422 (HQ)	4 hours
Apple ProRes 422	5.5 hours
Apple ProRes 422 LT	8.5 hours
Apple ProRes 422 (Proxy)	18 hours
1080p @ 25fps or 720p @ 50fps	
Apple ProRes 422 (HQ)	4.5 hours
Apple ProRes 422	7 hours
Apple ProRes 422 LT	10 hours
Apple ProRes 422 (Proxy)	22 hours
Pal	
Apple ProRes 422 (HQ)	16 hours
Apple ProRes 422	24 hours
Apple ProRes 422 LT	33 hours
Apple ProRes 422 (Proxy)	68 hours
NTSC	
Apple ProRes 422 (HQ)	13.5 hours
Apple ProRes 422	20 hours
Apple ProRes 422 LT	28 hours
Apple ProRes 422 (Proxy)	59 hours

For more details on recording capacities, AJA recommends you to use its dedicated tool "AJA Data Rate Calculator Application" which you can find here: http://www.aja.com/support/kona/kona-3-3x.php or its iOS equivalent on the AppStore: http://itunes.apple.com/us/app/aja-datacalc/id343454572?mt=8.

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VIDEO

STUMPFL CANVAS SCREEN - MONOBLOX 32

Screen size (cm) cm	Image size (cm) cm	Weight (kg)
Video format 4:3 (TAR – True Aspect Ratio)		
203 x 157	183 x 137	15
220 x 170	200 x 150	15
264 x 203	244 x 183	19
300 x 230	280 x 210	20
325 x 249	305 x 229	22
345 x 264	325 x 244	23
386 x 294	366 x 274	25
406 x 310	386 x 290	26
447 x 340	427 x 320	33
508 x 386	488 x 366	35
HDTV format 16:9 (TAR – True Aspect Ratio)		
238 x 143	218 x 123	15
286 x 170	266 x 150	18
345 x 203	325 x 183	20
386 x 226	366 x 206	22
392 x 230	372 x 210	23
425 x 249	405 x 229	25
447 x 260	427 x 240	28
508 x 294	488 x 274	30

VIDEO

STUMPFL CANVAS SCREEN - MONOBLOX 64

Screen size (cm) cm	Image size (cm) cm	Weight (kg)
Video format 4:3 (TAR – True Aspect Ratio)		
386 x 294	366 x 274	38
447 x 340	427 x 320	44
508 x 386	488 x 366	48
630 x 477	610 x 457	55
752 x 569	732 x 549	69
HDTV format 16:9 (TAR – True Aspect Ratio)		
386 x 226	366 x 206	35
447 x 260	427 x 240	38
508 x 294	488 x 274	42
630 x 363	610 x 343	50
752 x 431	732 x 411	61
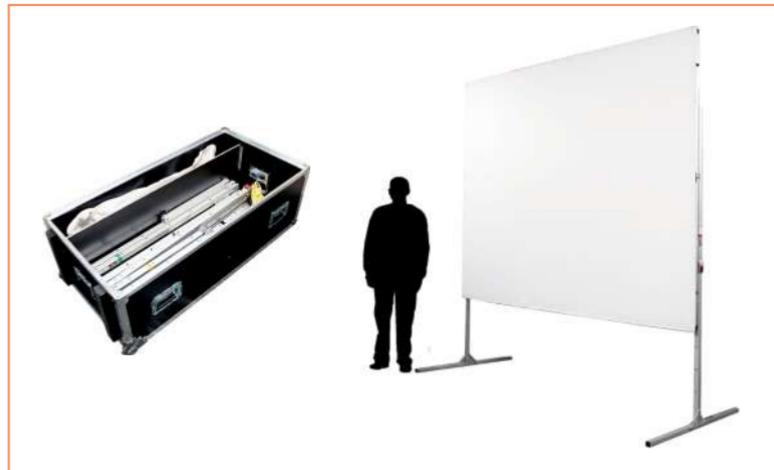
MULTIMEDIA - COMPUTERS

NETWORK CABLES

Shielding: Twisted pairs are often shielded to limit interference. As the shielding is made of metal, it is also acts as grounding. The shielding can be applied individually to the pairs or to the set formed by them. When shielding is applied to all pairs, it is called foiled.

There are several types of twisted pairs:
Unshielded twisted pair (UTP): Official designation: U/UTP. The unshielded twisted pair is not surrounded by any protective shielding.

Foiled twisted pair (FTP): Official designation: F/UTP. The twisted pair assembly has an overall shielding of aluminium foil. The screen is placed between the outer sheath and the 4 twisted pairs. The twisted pairs are not individually shielded.

Shielded twisted pair (STP): Official designation: U/FTP. Each shielded twisted pair is surrounded by an aluminium foil in a similar way to a coaxial cable.

Foiled foiled twisted pair (FFTP): Official designation: F/FTP. Each twisted pair is surrounded by a conductive aluminium shielding layer. All twisted pairs have a collective aluminium screen.

Shielded foiled twisted pair (SFTP): Official designation: SF/UTP. Cable with double shielding (metallized foil and braid) common to all pairs. Twisted pairs are not individually shielded as the term shielded foiled twisted pair might suggest.

Super shielded twisted pair (SSTP): Official designation: S/FTP. Each pair is shielded by an aluminium screen, and in addition the outer sheath is shielded by a tinned copper braid. The term SSTP does not stand for Shielded shielded twisted pair as the pairs are not individually shielded by a braid.

Network cable categories:
Category 5: Category 5 allows a bandwidth of 100 MHz and a speed of up to 100 Mbit/s. This standard allows the use of 100BASE-TX and 1000BASE-T, as well as various telephony or network applications (Token ring, ATM). It was described in the former ANSI/TIA/EIA-568-A standard. In the current standard, only categories 5e and 6 remain described.

Category 5e / class D: Category 5e (enhanced) can allow speeds of up to 1,000

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MULTIMEDIA – COMPUTERS

Mbit/s. It is a type of wiring that allows a bandwidth of 100 MHz (introduced in the TIA/EIA-568B standard). The standard is an adaptation of Category 5 (resistance < 9.38 Ω/100 m, mutual capacitance < 5.6 nF/100 m, capacitance to ground < 330 pF for a frequency between 1 kHz and 1 GHz, differential pair impedance matched to 100 ohms ±15% for a frequency between 1 MHz and 1 GHz, delay time < 5.7 ns/m at 10 MHz, shielding type and length pairing are not specified.

Category 6 / class E: Category 6 is a type of wiring that allows a bandwidth of 250 MHz and above (ANSI/TIA/EIA-568-B.2-1 and ISO/IEC 11801).
Category 6a / class Ea. Ratified on 8 February 2008, the 6a standard is an extension of Category 6 with a bandwidth of 500 MHz (ANSI/TIA/EIA-568-B.2-10 standard). This standard allows 10GBASE-T to operate over 90 metres.

Category 7 / class F: Category 7 has a bandwidth of 600 MHz4. It allows a modulated television signal to be carried in the VHF or UHF band, but not in a satellite band (which requires a bandwidth of 2,200 MHz).

Category 7a / class Fa: Category 7a has a bandwidth of 1 GHz and allows a throughput of up to 10 Gbps.

Examples of speeds and frequencies by Category:

	Category 5	Category 5e	Category 6	Category 7
Frequency	< 100 MHz	< 155 MHz	< 250 MHz	< 600 MHz

RJ45 WIRING STANDARDS

Common name	Official designation	Shielding of the entire cable	Shielding of individual pairs
UTP	U/UTP	None	None
STP	U/FTP	None	Foil
FTP	F/UTP	Foil	None
FFTP	F/FTP	Foil	Foil
SFTP	SF/UTP	Foil, Braid	None
SSTP	S/FTP	Braid	Foil

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MULTIMEDIA – COMPUTERS

COMPUTER CABLES

Cables	Peripherals	Length	Duplex	Speed
RS232 series	Miscellaneous	> 100 metres	Full	115 Kbps
Parallel	Miscellaneous	> 100 metres	Half	1 MBps
USB1	Miscellaneous	Half	Half	1.5-12 Mbps
USB2	Miscellaneous	5 metres	Half	480 Mbps
USB3	Miscellaneous	15 metres	Half	5 Gbps
Fire wire 400	Miscellaneous	3 metres	Half	400 Mbps
Fire wire 800	Miscellaneous	3 metres	Full	800 Mbps
Thunderbolt	Miscellaneous	5 metres	Full	20 Gbps
SATA	DD/CD/DV	40 cm	Half	150 MBps
ATA 133	DD/CD/DVD	40 cm	Half	133 MBps
Ps2 keyboard	Keyboard	20 metres	-	-
Ps2 mouse	Mouse	5 metres	-	-
Infrared	Miscellaneous	2 metres	Half	115 Kbps

COLOUR CODE FOR RJ45 SOCKET WIRING

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MULTIMEDIA – COMPUTERS

DATA QUANTIFICATIONS

1 Octet (French) = 1 Byte (English)
1 Byte (English) = 8 bits (French or English)
1 Terabyte = 1024 Gigabytes = 1024^2 Megabytes = 1024^3 Kilo
bytes = 1024^4 bytes = 1024^4 x 8 bits Mo = Méga Octet (French version)
MB = Megabytes (English and US version)

Hence 1Mo = 1MB

Do not get confused between Mb (Megabits) and MB (MegaBytes)
CAD: 1 Byte is made up of 8 bits

Bytes are calculated in Base 2, not in decimal base.

NETWORK MEDIA

Type	Theoretical max. speed (bits)	Theoretical max. speed (bytes)	Range	Substrate	Reliability
RTC Modem	56 Kbits	7 kBps	-	copper (tel)	medium
Bluetooth	2 Mbits	244 kBps	10-15 m	radio	low
ADSL modem	5 Mbits	610 kBps	-	copper (tel)	medium
10 Base T - rj45	10 Mbits	1.19 MBps	100-200 m	copper	high
100 Base T - rj45	100 Mbits	11.92 MBps	100-200 m	copper	high
1000 Base T - rj45	1000 Mbits	119.21 MBps	100-200 m	copper	high
1000 Base T	1000 Mbits	119.21 MBps	200-300 m	optical fibre	high
Wifi IEEE 802.11b	11 Mbits	1.31 MBps	35 m	radio 2.4Ghz	medium
Wifi IEEE 802.11g	54 Mbits	6.44 MBps	25 m	radio 2.4Ghz	medium
Wifi IEEE 802.11a	54 Mbits	6.44 MBps	25 m	radio 5Ghz	medium
Wifi IEEE 802.11n	540 Mbits	64.40 MBps	25 m	radio 2.4 and 5Ghz	medium
Wifi IEEE 802.11ac	2 Gbits	238.42 MBps	100 m	radio 5Ghz	medium

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LIGHTING

SPECIFICATIONS

Brand	Type	Gobo size	PF size (in mm)	Ø lens (in mm)
ADB	A56	x	155x155	110
ADB	ACP1001	x	430x270	x
ARRI	Compact 2500	x	Ø330	25
COLLYNS	Foudre II	x	x	x
COEMAR	Blackgun	x	x	x
DESISTI	Magis	x	130	100
DESISTI	Monet	x	185	140
DESISTI	Leonardo	x	270	240
DTS	Flash 2000L	x	x	x
DTS	Flash 4000L	x	x	x
DTS	Flash 8000L	x	x	x
ETC	Source Four 5°	A or B	355x355	310
ETC	Source Four 10°	A or B	305x305	265
ETC	19/26/36/50 °	A or B	158x158	125
ETC	Source Four Zoom	A or B	190x190	160
ETC	Source Four PAR	x	190x190	165
F.A.L.	Versatile	x	x	x
GEWISS	HPIT 400			
GEWISS	HPIT 150			
HIGH END	Cyber	see tab.	x	x
ROBERT JULIAT	613S/614S	B	180x180	140
ROBERT JULIAT	614SX	A	180x180	140
ROBERT JULIAT	714SX	A	215x215	200
LEGRAND	Fluo 2.40	x	x	x
LEGRAND	Garland 12m	x	x	x
LMT	LT300	x	Ø100	70
LTM	LT300	x	Ø100	70
MAZDA	Cormoran500	x	x	x
MAZDA	Cormoran1000	x	x	x
MAZDA	HPIT150	x	x	x

LIGHTING

OF FLOODLIGHTS

Lamp type	Cap type	Power (W)	Voltage (V)	Temp (°K)	Service life
M40	GY9.5	500	230	3000	2000
K4	R7S	1000	230	3000	200
HMI2500/SE	G38	2500	Ballast	6000	500
XOP15	x	1500	105	5600	500
H400BL	E40	400	Ballast	x	2000
CP82	GY95	500	230	3200	200
CP40	G38	1000	230	3200	200
CP73	G38	2000	230	3200	480
DWE	Leads	650W x2	120	3200	1000
DWE	Leads	650W x4	120	3200	1000
DWE	Leads	650W x8	120	3200	1000
HPL575	G9.5	575	230	3200	400
HPL575	G9.5	575	230	3200	400
HPL575	G9.5	575	230	3200	400
HPL575	G9.5	575	230	3200	400
HPL575	G9.5	575	230	3200	400
T11/T19	GX9.5	1000	230	3000	750
W/645	E40	400	125	4500	20000
W/942	RX75	150	x	4200	16000
HMI1200/SE	G38	1200	Ballast	6000	750
T11/T19	GX9.5	1000	230	3000	750
T11/T19	GX9.5	1000	230	3000	750
CP43/CP72	GY16	2000	230	3200	300
Fluo	G13	2x32	220	6200	8000
Bulb	E27	40x40	220	x	x
CP81	GY9.5	300	230	3200	150
CP82	GY9.5	500	230	3200	150
J500/K1	R7S	500	230	3000	2000
K4	R7S	1000	230	3000	2000
HPA400S	38R7S	400	Ballast	x	x

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LIGHTING

SPECIFICATIONS

Brand	Type	Gobo size	PF size (in mm)	Ø lens (in mm)
CLAY PAKY	Alpha Spot 700	25.7 mm	x	x
CLAY PAKY	Alpha Spot 300	25.7 mm	x	x
MARTIN	MAC250	22.5 mm	x	x
MARTIN	MAC700	27.9 mm	x	x
MARTIN	MAC2000	E	x	x
MARTIN	VIPER	E	x	x
MARTIN	MAC III	E	x	x
PULSAR	PAR46MK2	x	x	x
ROBERT JULIAT	310H	x	180	180
ROBERT JULIAT	329H	x	210	185
ROBERT JULIAT	710Sx	x	195	180
ROBERT JULIAT	933Sx	A	180	x
ROBERT JULIAT	ARAMIS	x	235	240
ROBERT JULIAT	IVANHOE	A	180	200
ROBERT JULIAT	HELOISE	x	175	210
ROBERT JULIAT	KORRIGAN	A	175	185
ROBERT JULIAT	PIXIE	x	x	140
SCENILUX	BT250	x	235x235	x
SCENILUX	BT500	x	355x355	x
SCENILUX	Svoboda	x	1000x370	x
SPOTLIGHT	Profiled 5ZS	x	80	64
STUDIO DUE	City Color	x	x	x
THOMAS	PAR36	x	x	x
THOMAS	PAR38	x	x	x
THOMAS	PAR56	x	x	x
THOMAS	PAR56 Rail	x	230x230	x
THOMAS	PAR64	x	255x255	x
VARILITE	VL 3000/3500	E	x	x
VARILITE	VL 2500	22.5 mm	x	x

LIGHTING

OF FLOODLIGHTS - CONTINUED

Lamp type	Cap type	Power (W)	Voltage (V)	Temp (°K)	Service life
MSR250/2	GY9.5	250	230	8100	x
MSR700/D4/60		700	230	7500	x
OSR 1200/S	Crayon	1200	230	7500	x
1000/80		1000	80	6000	x
HTI 1500/60/D5	Fast Fit	1500	230	6000	x
MSR700	Mini Fast Fit	700	230	7500	x
MSR300	Mini Fast Fit	300	230	7500	x
PAR46	Screw	30	6 + Transfo	2800	100
CP40/CP70	GY9.5/G38	1000	230	3200	200
CP92	G38	2000W	230	3200 K	400
CP72	GY9.5	2000W	230	3200 K	400
2500W/SE	G38	2500W	115	6000 K	500
HMI 2500SXS	Sfa 21	2500W	115	6000 K	500
HMI 2500W/SE	G38	2500W	115	6000 K	500
HMI 2500W/SE	G38	2500W	115	6000 K	500
HMI 1200/DXS	Sfc 15.5	1200W	100	6000 K	1000
HMI 575/DXS	Sfc 10	575W	95	6000 K	1000
Domed LV	E27	250	24 + Transfo	3000	50
Domed LV	E40	500	24 + Transfo	3000	50
Domed LV	E40	9x250	9x24	3000	50
LED Cool White	x	50	x	5700	x
MHD1800	PSFC20-6	1800	Ballast	5600	4000
PAR36	Screw	30	6 + Transfo	3200	200
PAR38	E27	120	230	3000	2000
PAR56	GX16d	300	230	3000	2000
PAR56	GX16d	300	230	3000	2000
PAR64	GX16d	1000	120	3000	4000
MSR Gold 1200	Crayon	1200	230	7500	x
MSR700 SA	GY9.5	700	230	7500	x

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LIGHTING

DIAMETER OF A LIGHT BEAM AS A FUNCTION OF

The diameter of the projection beam is

	1 m	2 m	3 m	4 m	5 m	6 m	7 m	8 m	9 m	10 m	11 m	12 m
5 °	0.09	0.17	0.26	0.35	0.44	0.52	0.61	0.70	0.79	0.87	0.96	1.05
10 °	0.17	0.35	0.52	0.70	0.87	1.05	1.22	1.40	1.57	1.74	1.92	2.09
11 °	0.19	0.38	0.58	0.77	0.96	1.15	1.34	1.54	1.73	1.92	2.11	2.30
12 °	0.21	0.42	0.63	0.84	1.05	1.26	1.47	1.67	1.88	2.09	2.30	2.51
13 °	0.23	0.45	0.68	0.91	1.13	1.36	1.59	1.81	2.04	2.27	2.49	2.72
14 °	0.24	0.49	0.73	0.98	1.22	1.47	1.71	1.95	2.20	2.44	2.69	2.93
15 °	0.26	0.52	0.79	1.05	1.31	1.57	1.83	2.09	2.36	2.62	2.88	3.14
16 °	0.28	0.56	0.84	1.12	1.40	2.67	1.95	2.23	2.51	2.79	3.07	3.35
17 °	0.30	0.59	0.89	1.19	1.48	1.78	2.08	2.37	2.67	2.97	3.26	3.56
18 °	0.31	0.63	0.94	1.26	1.57	1.88	2.20	2.51	2.83	3.14	3.45	3.77
19 °	0.33	0.66	0.99	1.33	1.66	1.99	2.32	2.65	2.98	3.31	3.65	3.98
20 °	0.35	0.70	1.05	1.40	1.74	2.09	2.44	2.79	3.14	3.49	3.84	4.19
22 °	0.38	0.77	1.15	1.54	1.92	2.30	2.69	3.07	3.45	3.84	4.22	4.61
24 °	0.42	0.84	1.26	1.67	2.09	2.51	2.93	3.35	3.77	4.19	4.61	5.02
26 °	0.45	0.91	1.36	1.81	2.27	2.72	3.17	3.63	4.08	4.54	4.99	5.44
28 °	0.49	0.98	1.47	1.95	2.44	2.93	3.42	3.91	4.40	4.88	5.37	5.86
30 °	0.52	1.05	1.57	2.09	2.62	3.14	3.66	4.19	4.71	5.23	5.76	6.28
32 °	0.56	1.12	1.67	2.23	2.79	3.35	3.91	4.47	5.02	5.58	6.14	6.70
34 °	0.59	1.19	1.78	2.37	2.97	3.56	4.15	4.47	5.34	5.93	6.52	7.12
36 °	0.63	1.26	1.88	2.51	3.14	3.77	4.40	5.02	5.65	6.28	6.91	7.54
38 °	0.66	1.33	1.99	2.65	3.31	3.98	4.64	5.30	5.97	6.63	7.29	7.95
40 °	0.70	1.40	2.09	2.79	3.49	4.19	4.88	5.58	6.28	6.98	7.68	8.37
42 °	0.73	1.47	2.20	2.93	3.66	4.40	5.13	5.86	6.59	7.33	8.06	8.79
44 °	0.77	1.54	2.30	3.07	3.84	4.61	5.37	6.14	6.91	7.68	8.44	9.21
46 °	0.80	1.60	2.41	3.21	4.01	4.81	5.62	6.42	7.22	8.02	8.83	9.63
48 °	0.84	1.67	2.51	3.35	4.19	5.02	5.86	6.70	7.54	8.37	9.21	10.05
50 °	0.87	1.74	2.62	3.49	4.36	5.23	6.11	6.98	7.85	8.72	9.59	10.47
52 °	0.91	1.81	2.72	3.63	4.54	5.44	6.35	7.26	8.16	9.07	9.98	10.89

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LIGHTING

THE ANGLE AND DISTANCE OF PROJECTION

expressed in metres (for a 75 mm diameter projection window)

	13 m	14 m	15 m	16 m	17 m	18 m	19 m	20 m	25 m	30 m	35 m	40 m
5 °	1.13	1.22	1.31	1.40	1.48	1.57	1.66	1.74	2.18	2.62	3.05	3.49
10 °	2.27	2.44	2.62	2.79	2.97	3.14	3.31	3.49	4.36	5.23	6.11	6.98
11 °	2.49	2.69	2.88	3.07	3.26	3.45	3.65	3.84	4.80	5.76	6.72	7.68
12 °	2.72	2.93	3.14	3.35	3.56	3.77	3.98	4.19	5.23	6.28	7.33	8.37
13 °	2.95	3.17	3.40	3.63	3.86	4.08	4.31	4.54	5.67	6.80	7.94	9.07
14 °	3.17	3.42	3.66	3.91	4.15	4.40	4.64	4.88	6.11	7.33	8.55	9.77
15 °	3.40	3.66	3.93	4.19	4.45	4.71	4.97	5.23	6.54	7.85	9.16	10.47
16 °	3.63	3.91	4.19	4.47	4.74	5.02	5.30	5.58	6.98	8.37	9.77	11.16
17 °	3.86	4.15	4.45	4.74	5.04	5.34	5.63	5.93	7.41	8.90	10.38	11.86
18 °	4.08	4.40	4.71	5.02	5.34	5.65	5.97	6.28	7.85	9.42	10.99	12.56
19 °	4.31	4.64	4.97	5.30	5.63	5.97	6.30	6.63	8.29	9.94	11.60	13.26
20 °	4.54	4.88	5.23	5.58	5.93	6.28	6.63	6.98	8.72	10.47	12.21	13.96
22 °	4.99	5.37	5.76	6.14	6.52	6.91	7.29	7.68	9.59	11.51	13.43	15.35
24 °	5.44	5.86	6.28	6.70	7.12	7.54	7.95	8.37	10.47	12.56	14.65	16.75
26 °	5.90	6.35	6.80	7.26	7.71	8.16	8.62	9.07	11.34	13.61	15.87	18.14
28 °	6.35	6.84	7.33	7.82	8.30	8.79	9.28	9.77	12.21	14.65	17.10	19.54
30 °	6.80	7.33	7.85	8.37	8.90	9.42	9.94	10.47	13.08	15.70	18.32	20.93
32 °	7.26	7.82	8.37	8.93	9.49	10.05	10.61	11.16	13.96	16.75	19.54	22.33
34 °	7.71	8.30	8.90	9.49	10.08	10.68	11.27	11.86	14.83	17.79	20.76	23.72
36 °	8.16	8.79	9.42	10.05	10.68	11.30	11.93	12.56	15.70	18.84	21.98	25.12
38 °	8.62	9.28	9.94	10.61	11.27	11.93	12.59	13.26	16.57	19.89	23.20	26.52
40 °	9.07	9.77	10.47	11.16	11.86	12.56	13.26	13.96	17.44	20.93	24.42	27.91
42 °	9.52	10.26	10.99	11.72	12.46	13.19	13.92	14.65	18.32	21.98	25.64	29.31
44 °	9.98	10.75	11.51	12.28	13.05	13.82	14.58	15.35	19.19	23.03	26.86	30.70
46 °	10.43	11.23	12.04	12.84	13.64	14.44	15.25	16.05	20.06	24.07	28.09	32.10
48 °	10.89	11.72	12.56	13.40	14.23	15.07	15.91	16.75	20.93	25.12	29.31	33.49
50 °	11.34	12.21	13.08	13.96	14.83	15.70	16.57	17.44	21.82	26.17	30.53	34.89
52 °	11.79	12.70	13.61	14.51	15.42	16.33	17.24	18.14	22.68	27.21	31.75	36.28

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LIGHTING
PAR GOBO SIZE /FLOODLIGHTS

Type/Size	Outer Ø of the Gobo	Useful Ø of the image
A Size	100 mm	75 mm
B Size	86 mm	64.5 mm
B Size Glass (Obsolete)*	79 mm	64.5 mm
M Size (S4 Jr.)	66 mm	49.5 mm
D Size (Steel)	53.3 mm	40 mm
E Size	37.5 mm	38 mm
Clay Paky Stage Scan, Zoom	51.8 mm	48 mm
Clay Paky VIP	31.5 mm	23 mm
Martin MAC2000 / VIPER / MAC III	37.5 mm	38 mm
Martin MAC 500, 918	27.8 mm	23 mm
Martin MAC 250	22.25 mm	17 mm
Martin 518	25 mm	14 mm
CP Mini-Scan HPE, Stagelight 300	25 mm	22-20 mm
Trackspot	25 mm	18 mm
Vari*Lite VL1	25 mm	18 mm
Vari*Lite VL2	SPEC	SPEC
Vari*Lite VL3000 / VL3500	37.5 mm	38 mm
Vari*Lite VL6	SPEC	SPEC

THE DMX PROTOCOL

The DMX 512 protocol allows transmitting information between a command (control panel, DMX player/recorder...) and multiple remote receivers (servo-controlled yokes, LED projectors, DMX I/O, etc.).

The DMX 512 protocol allows controlling 512 DMX channels, which are themselves divided into 256 values (from 0 to 255 in 8 data bits per channel). A "DMX universe" therefore has a maximum of 512 DMX channels.
The signal consists of digital pulse trains of rectangular signals transmitted cyclically at a frequency of 250,000 bps (250 kbps). The set of these pulse trains are called a "DMX frame". The entire frame is transmitted 44.3 times per second (i.e. at 44hz) (Calculation: 2,500,000 bps / 513 channels (512+1) X 11 bits (8 data bits + 3 frame start and end bits for control = 44.3 Hz). The amplitude value of the signals is set from - 7 V min. to + 12 V max. with respect to the ground.
The transmission is serial and unidirectional, no acknowledgement from the receivers to the transmitter is possible: the transmission is asynchronous.

TECHNICAL GUIDE

L I G H T I N G

The signals are transmitted via a symmetrical link. Two wires carry the signals in opposite phase and the input stage of the receiver detects the amplitude differences between these two conductors. In this way, an induced interference on both wires will be reduced to zero potential through the use of a differential amplifier.

The data is copied by each receiver, mostly passively. The theory states that 32 receivers can be connected behind one transmitter (with a maximum of 16 channels per receiver). The number of receivers in series on the line therefore depends on all the electrical characteristics of the network (quality of the cable, quality of the transmitter current, passive or active recopying, etc.) and also on the number of channels required to operate the machine. Many servo-controlled yokes now have much more than 16x channels/parameters to make them work.

The standard cable has a cable impedance of 120 ohms and consists of 2 twisted pairs wrapped in a shield.
The standard specifies the 5-pin XLR as the termination of the cable carrying DMX signals (type NC5MX and NC5FX). However, many devices, especially LEDs, have 3-pin connectors.

It is recommended to insert a "DMX 120 Ohms plug" (120 Ohms resistor soldered between pins 2 and 3 of the male XLR) at the end of the line to avoid data reflections (data coming back on the line).
It is recommended to insert a "DMX 120 Ohms plug" (120 Ohms resistor soldered between pins 2 and 3 of the male XLR) at the end of the line to avoid data reflections (data coming back on the line).

pin 1	ground
pin 2	data -
pin 3	data +
pin 4	Not connected
pin 5	Not connected

Different light panels (or controllers) now have the ability to issue several different control protocols to allow different machines to be controlled:
- The DMX 512
- The ARTnet (Encapsulation of DMX frames in Ethernet frames, theoretically allowing 32,768 universes to be carried in Art-Net 3)
- The MAnet (Encapsulation of DMX frames in a proprietary MALighting communication protocol, also allowing remote control of transmitters (Console, MPU...))
- sACN, ETCNet . . .
- ...

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SOUND SYSTEMS

NETWORKS

	SPIF	AES(3)/EBU	ADAT (Type II)		Ethersound ES-100	Giga Ethersound
No. of channels	2 channels	2 channels	8 channels	4 channels	64 channels	256 channels
Sampling frequencies	All frequencies	All frequencies	48 kHz	96 kHz	48 kHz (or multiple)	48 kHz (or multiple)
Resolution	24 bits (on two 32-bit layers)	24 bits (on two 32-bit layers)	24 bits	24 bits	24 Bits	24 Bits
Type of transmission	Point to Point	Point to Point	Point to Point	Point to Point	Daisy Chain	Star connection or ring
Connectors	Cinch/RCA TOSLINK and Mini TOSLINK	XLR 3b	TOSLINK	TOSLINK	RJ45	RJ45
Cables	Shielded Coax Plastic Optical Fibre	Shielded twisted pairs	Plastic Optical Fibre	Plastic Optical Fibre	Cat 5e (UTP)	Cat 5e (UTP)
Impedances	75 ohm	90 to 120 ohms				
Latency					104µs + 1.4µs per device passed through (in daisy chain)	
IP network speed					100 Mbit	1 GigaBit
Redundancy				Yes		

SOUND SYSTEMS

DIGITAL AUDIO (non-exhaustive list)

Cobranet	Madi (AES10)	Dante	Super MAC (AES-50)	Hyper-MAC	AVB	OPTOCORE
32 IN + 32 OUT (per link between the machines)	64 channels	512+512 (in GigaBit network)	48 Channels (24 channels)	384 Channels (192 channels)	1024 (in GigaBit network)	1 Gbps: 512 IN 2 Gbps: 1024 IN Unlimited OUT
48 kHz	48 kHz	96 kHz	48 kHz (96 kHz)	48 kHz (96 kHz)	All frequencies	48 kHz
24 bits	24 bits (on a 32-bit layer per channel)	24 bits			Unlimited	24 bits
Star connection	Point to Point	Star connection (and ring for Yamaha)	Star connection	Star connection	Star connection	Ring, Daisy Chain, Star connection
RJ45	BN.C All fibre connectors (ST/LC/PC/SC…)	RJ45	All fibre connectors (ST/LC/PC/SC…)	All fibre connectors (ST/LC/PC/SC…)	RJ45	All fibre connectors (ST/LC/PC/SC…)
Cat 5e (UTP)	Shielded Coax Optical Fibre (Single-mode or Multi-mode) Cat5e	Cat 5e (UTP) or Cat 6	Cat 5e (UTP)	Cat 5e (UTP) or Cat 6	Cat 5e or Cat 6	Optical Fibre (Single-mode or Multi-mode)
	75 ohm					
5.33 ms per machine passed through		83.3µs (in GigaBit network)	62.5 µs	41.66 µs	1 ms	41.6 µs
100 Mbit (CM1)		1 GigaBit	100 Mbit	1 GigaBit	1 GigaBit	1 & 2 GigaBit
Yes		Yes	Yes	Yes	Yes	Yes

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SOUND SYSTEMS

SOUND PRESSURE

The variation **N** (dB) of sound pressure **Rt** (dB) is obtained as a function of:

- **- Ro** = Theoretical efficiency of the speaker in dB, for a power **Po** of 1W at 1 m.
- **- Px** = Power in watts, actually delivered by the speaker.
- **- Dx** = Distance in metres from the speaker to the listening point.

$$\textbf{Rt} \text{ (dB)} = \textbf{Ro} \text{ (1W/1m)} + 10\log(\textbf{Px/Po}) - 20\log(\textbf{Dx/Do})$$

Px	N (dB)		N (dB)	Dx
1 W	0 dB		0 dB	1 m
2 W	+3 dB		-6 dB	2 m
4 W	+6 dB		-12 dB	4 m
8 W	+9 dB		-18 dB	8 m
16 W	+12 dB		-24 dB	16 m
32 W	+15 dB		-30 dB	32 m
64 W	+18 dB		-36 dB	64 m
128 W	+21 dB		-42 dB	128 m
256 W	+24 dB		-48 dB	256 m
1024 W	+27 dB		-54 dB	1024 m

Example:
Calculation of the acoustic efficiency of a speaker delivering 100dB at 1m and a power Px of 128W at a distance of 64m.
Rt = 100 + 21 - 36 = **85 dB**

Simplified free field calculation:

- Doubling the power increases the sound pressure by 3dB at the same distance.
- Doubling the distance from the listening point, causes a loss of 6dB of sound pressure at the same power.

TECHNICAL GUIDE

SOUND SYSTEMS

GAIN AND VOLTAGE

The table below shows the electrical voltage at the output of the device (console, amp, peripheral, etc.) as a function of the gain or attenuation delivered by this device.

These values are calculated with 0dB reference = 1 mW/600Ω

Voltage	Gain		Voltage	Gain
0.002 V	-50 dB		1.735 V	+7 dB
0.008 V	-40 dB		1.946 V	+8 dB
0.025 V	-30 dB		2.184 V	+9 dB
0.0775 V	-20 dB		2.452 V	+10 dB
0.245 V	-10 dB		2.75 V	+11 dB
0.275 V	-9 dB		3.086 V	+12 dB
0.3085 V	-8 dB		3.462 V	+13 dB
0.346 V	-7 dB		3.884 V	+14 dB
0.388 V	-6 dB		4.358 V	+15 dB
0.436 V	-5 dB		4.89 V	+16 dB
0.489 V	-4 dB		5.487 V	+17 dB
0.549 V	-3 dB		6.155 V	+18 dB
0.616 V	-2 dB		6.91 V	+19 dB
0.775 V	0 dB		7.75 V	+20 dB
0.87 V	+1 dB		15.47 V	+26 dB
0.976 V	+2 dB		24.507 V	+30 dB
1.095 V	+3 dB		30.855 V	+32 dB
1.228 V	+4 dB		48.9 V	+36 dB
1.378 V	+5 dB		77.5 V	+40 dB
1.547 V	+6 dB		97.57 V	+42 dB

Example:
An amplifier rated at 32dB gain with an input sensitivity of 0dB will deliver an output voltage of 30.855V.
A mixer producing a signal at +4dB will deliver an output voltage of 1.228V. In this case: 0dB Vu = +4dBm

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SOUND SYSTEMS

IMPEDANCE MATCHING OF
LOW IMPEDANCE LOUDSPEAKER LINES

The table below shows the current in the speaker line as a function of amp power and speaker impedance.

When calculating the cross-section of the loudspeaker cable, the admissible current density of the copper (Cu = 5A/mm2) or aluminium (Al = 3A/mm2) must be taken into account.

At low impedance, the current in the loudspeaker line is: I (A) $= \sqrt{(P \text{ (W)} / Z \text{ (Ω)})}$. P being the amp power and Z being the impedance of the H line.

Amp power	4Ω	8Ω	16Ω
1W	0.50A	0.35A	0.25A
2W	0.71A	0.50A	0.35A
4W	1.00A	0.71A	0.50A
5W	1.12A	0.79A	0.56A
8W	1.41A	1.00A	0.71A
10W	1.58A	1.12A	0.79A
20W	2.24A	1.58A	1.12A
30W	2.74A	1.94A	1.37A
40W	3.16A	2.24A	1.58A
50W	3.54A	2.50A	1.77A
100W	5.00A	3.54A	2.50A
200W	7.07A	5.00A	3.54A
300W	8.66A	6.12A	4.33A
400W	10.00A	7.07A	5.00A
500W	11.18A	7.91A	5.59A
600W	12.25A	8.66A	6.12A
700W	13.23A	9.35A	6.61A
800W	14.14A	10.00A	7.07A
900W	15.00A	10.61A	7.50A
1000W	15.81A	11.18A	7.91A

Example:
For a 4Ω loudspeaker line and an amp delivering 400W, the line current is 10A. We therefore

Tel.: 01 76 91 90 00

SOUND SYSTEMS

IMPEDANCE MATCHING OF
70V OR 100V LOUDSPEAKER LINES

The table below shows the current in the loudspeaker line as a function of amp voltage (70V or 100V) and loudspeaker impedance.

US-standard amps deliver 70V and EEC-standard amps deliver 100V.

In a "100V" or "70V" line, the impedance of the loudspeaker line is: Z (Ω) = U^2 (V) / P (W) P being the amp power and U being the amp output voltage.

Amp power	EEC = 100V		USA = 70V	
	Z	I	Z	I
1W	10000Ω	0.01A	4900Ω	0.01A
4W	2500Ω	0.04A	1225Ω	0.057A
5W	2000Ω	0.05A	980Ω	0.071A
8W	1250Ω	0.08A	612Ω	0.11A
10W	1000Ω	0.10A	490Ω	0.14A
12W	833Ω	0.12A	408Ω	0.17A
15W	666Ω	0.15A	326Ω	0.21A
20W	500Ω	0.20A	245Ω	0.28A
30W	333Ω	0.30A	163Ω	0.42A
60W	166Ω	0.60A	81Ω	0.85A
100W	100Ω	1A	49Ω	1.42A
120W	83Ω	1.2A	41Ω	1.71A
240W	41.6Ω	2.4A	21Ω	3.42A
360W	27.7Ω	3.6A	13.6Ω	5.14A
480W	21Ω	4.8A	10Ω	6.85A

If all the speakers have the same impedance, the maximum number of speakers that can be connected in parallel is:

$n = Zt$ (total line impedance) / Zx (impedance of one speaker)

Example:
For an amp delivering 100W at 100V, the maximum number of 20Ω speakers that can be powered is 100Ω/20Ω=5.

SOUND SYSTEMS

AMPLIFICATION PRINCIPLES

1. To reduce the current in the loudspeaker lines, for long-range distributions, a step-up transformer is placed at the output of the amp. We therefore work in voltage and no longer in current. Line losses and the cross-section of the distribution cable can thus be reduced.

EEC standard = 100V / USA standard = 70V

Example: - a 100W/4Ω amp delivers a current of 5A
            - a 100W/100V amp delivers a current of 1A

2. An amplifier distributing a voltage network signal must not be connected to a loudspeaker distribution line with an equivalent impedance lower than its matching impedance.

Example: - 120W & 100V amp,
            $Z_{eq} = (100 \times 100) / 120 = 83.3Ω$
            - 20W & 100V speaker
            $Z_u = (100 \times 100) / 20 = 500Ω$
            - the maximum number of speakers on the loudspeaker line is:
            $n = Z_u / Z_{eq} = 500 / 83.3 = 6$ speakers max.

3. The sum of the power ratings of the connected loudspeakers must not exceed the power of the amp.

Example: - 120W amp & 20W speakers
            - the maximum number of speakers on the loudspeaker line is:
            $n = 120 / 20 = 6$ speakers max.

SOUND SYSTEMS

MICROPHONE SELECTION TABLE

There are two main categories of microphones: **dynamic** (only needing to be plugged into a mixer) and **static** (needing phantom power from 12 to 48V).
The choice of a microphone is based on several criteria:
- the **directionality** which is (from the widest to the tightest): omnidirectional / bidirectional / cardioid / supercardioid / hypercardioid
- the **sensitivity**, depending on the sound pressure the microphone will be subjected to

- the **response curve** of the microphone which will define its sound "colour"

The following table gives you the most suitable microphone choices for the main recordings to be made.

Source	Dynamic	Static
Song, speech	SM58/Beta58/SM57	SM87/Beta87/C535
Bass drum	RE20/Beta52/MD421/D112	Beta91/SM91
Snare drum	SM57/Beta57/M88	C35
Tom-toms	SM57/Beta57/MD421/M88/e604	Beta98
Drum cymbals		SE300/SM81/KM184/C451/C414
Guitar	SM57/Beta57/MD421/M88/e609	C35
Acoustic guitar	SM57/Beta57	SM81/SE300/C451/C414/KM184
Bass	RE20/MD421/Beta52	
Brass instruments	SM57/Beta57/SM58/MD421/M88/RE20	C535/C414
Percussion instruments	SM57/Beta57/MD421/e604/M88	C535/C414/SE300/C451
Piano		Beta91/SM91/PCC160/SM81/C414/CMC6
Choir		CMC6/C414/SE300/SM81/MKH416/KM184
Speech, conference	SM58/Beta58/SM57	C647/C747/C535

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ENERGY

ALTERNATING CURRENT POWER & INTENSITY

P in (kW) →

$$P (kW) = \frac{U (V) \times I (A) \times \cos \varphi}{1000}$$

→

$$P (kW) = \frac{U (V) \times I (A) \times \cos \varphi \times 1.732}{1000}$$

ALTERNATING   SINGLE-PHASE   THREE-PHASE

P IN (KVA) →

$$S (kW) = \frac{U (V) \times I (A)}{1000}$$

→

$$S (kW) = \frac{U (V) \times I (A) \times 1.732}{1000}$$

The cos φ depends on the machines or floodlights connected to the electrical installation. For example:

for an incandescent lamp cos φ ≈ 1
for a fluorescent lamp cos φ ≈ 0.5

With voltage U(V) = 400
cos φ = 0.93 (EDF recommendation)

Current/Phase	Total Active Power
32 A	21 kW
63 A	41 kW
125 A	81 kW
250 A	161 kW
400 A	258 kW
630 A	406 kW
1000 A	644 kW

With voltage U(V) = 400
cos φ = 0.80 (Adverse reality)

Current/Phase	Total Active Power
32 A	18 kW
63 A	35 kW
125 A	69 kW
250 A	139 kW
400 A	222 kW
630 A	349 kW
1000 A	554 kW

EDF RATES

EDF metering

Blue Tariff 3 to 36 kW

Yellow Tariff 36 to 250 kW

Green Tariff> 250 kWA

Tel.: 01 76 91 90 00

ENERGY

KW <--> KVA CONVERSION

Active power is expressed in **kW** (kiloWatt) while apparent power is expressed in **kVA** (kiloVolt-Ampere).

The conversion formula is:

$$P \text{ (kW)} = P \text{ (kVA)} \times \cos \varphi$$

The table below gives the active power delivered by a generator according to its apparent power.

USEFUL POWER DELIVERED BY A GENERATOR IN KW (Cos φ = 0.8)

P (kVA)	P (kW)	P (kVA)	P (kW)	P (kVA)	P (kW)
3	2.4	35	28	150	120
4	3.2	40	32	160	128
5	4	45	36	170	136
6	4.8	50	40	180	144
7	5.6	60	48	200	160
8	6.4	70	56	250	200
9	7.2	80	64	300	240
10	8	90	72	350	280
15	12	100	80	400	320
20	16	120	96	500	400
25	20	130	104	600	480
30	24	140	112	1000	800

Example:
To connect 200kW of floodlights, a generator of at least 250kVA is required, assuming that the powers are correctly balanced on the 3 phases, at full power (67kW / phase).

ENERGY

TECHNICAL NOTE

For 400 volts / equivalence table for 0.80 < cos φ < 0.93

Power in kW	9	18	36	72	142	240	400	680
Power in kVA	11	22	45	90	180	300	500	860
Amperage per phase	16	32	63	125	250	400	630	1200
Cable cross-section for 100 m	$5x2.5^2$	$5x6^2$	$5x16^2$	$5x25^2$	$5x120^2$	$5x185^2$	$5x240^2$	$10x240^2$

NEUTRAL SYSTEM AND GROUNDING

Standards in force:
1st letter =   **Position of the neutral point**
T means "direct connection to ground"
I means "Insulated or impedance neutral"

2nd letter =   **Grounding method**
T means "direct connection to ground"
N means "connection to source Neutral".

3rd letter =   **Neutral & Ground position**
C means "Ground & Neutral combined"
S means "Earth & Neutral separate".

Examples:
TT = Primary neutral directly to Ground - Ground separate from Neutral
TN-S = Neutral & Ground separate / **TN-C** = Neutral & Ground combined /
IT = Impedance neutral or insulated from ground

Things to remember:

Current carrying capacity of the wiring:
The following data is an approximation that can be used for lengths < 20 m and cross-sections < 16 mm^2.

Copper (Cu) = 5 A/mm^2
Aluminium (Al) = 3 A/mm^2

ENERGY

ELECTRICAL CABLE CROSS-SECTION WITH RESPECT TO ITS LENGTH

The tables below give the maximum length of cable that can be used depending on the voltage, current and power to be supplied.

SINGLE-PHASE CURRENT, 220V

P (kW)	I (A)	Cable cross-section (mm²)					
		2.5	4	6	10	16	25
0.5	2.2	165	265	395	-	-	-
1	4.3	84	135	200	335	530	-
2	8.7	43	68	100	170	265	430
3	13	29	45	66	110	180	285
4	17.5	21	34	49	84	135	210
5	21.5	-	27	39	68	105	170
6	26	-	23	32	56	90	140
7	30	-	-	28	48	76	120
8	34.5	-	-	-	42	67	105
9	39	-	-	-	38	60	94
10	43.5	-	-	-	34	54	84

Max. cable length (in m)

(For a voltage drop of 3%)

THREE-PHASE CURRENT, 380V

P (kW)	I (A)	Cable cross-section (mm²)					
		2.5	4	6	10	16	25
6	12	135	210	315	525	810	-
12	24	69	110	160	265	415	640
18	36	-	-	110	180	280	430
20	40	-	-	98	160	255	390
25	50	-	-	-	130	205	315
30	60	-	-	-	-	170	260
40	80	-	-	-	-	-	195
50	100	-	-	-	-	-	160

Max. cable length (in m)

(For a voltage drop of 3%)

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ENERGY
FREQUENCY & VOLTAGE BY COUNTRY

Country	Frequency	Voltage	Country	Frequency	Voltage
Azores	50Hz	220/380V	China	50Hz	220/380V
Afghanistan	50Hz	220/380V	Cyprus	50Hz	240/415V
South Africa	50Hz	220/380V	Colombia	60Hz	110/220V
Algeria	50Hz	220/380V	Congo	50Hz	220/380V
Germany	50Hz	220/380V	Korea	60Hz	100/200V
England	50Hz	240/415V	Costa Rica	60Hz	120/240V
Angola	50Hz	220/380V	Dahomey	50Hz	220/380V
Saudi Arabia	60Hz	127/220V	Denmark	50Hz	220/380V
Argentina	50Hz	220/380V	Dominican Republic	60 Hz	110/220V
Australia	50Hz	220/415V	Egypt	50Hz	220/380V
Austria	50Hz	220/380V	Spain	50Hz	220/380V
Bahamas	60Hz	120/240V	USA	60Hz	115/200V
Bahrain	50Hz	230/400V	Ethiopia	50Hz	220/380V
Bangladesh	50Hz	230/400V	Fiji	50Hz	200/415V
Barbados	50Hz	110/200V	Finland	50Hz	220/380V
Belgium	50Hz	220/380V	France	50Hz	220/380V
Benin	50Hz	220/380V	Ghana	50Hz	220/400V
Bermudas	60Hz	115/230V	Greece	50Hz	220/380V
Myanmar	50Hz	220/240V	Greenland	50Hz	220/380V
Bolivia	50Hz	220/380V	Guatemala	60Hz	120/240V
Botswana	50Hz	220/380V	Guinea	50Hz	220/380V
Brazil	60Hz	127/220V	Haiti	60Hz	110/220V
Bulgaria	50Hz	220/380V	Upper Volta	50Hz	220/380V
Cambodia	50Hz	120/208V	Netherlands	50Hz	220/380V
Cameroon	50Hz	220/380V	Honduras	60Hz	110/220V
Canada	60Hz	120/240V	Hong Kong	50Hz	200/346V
IEC	50Hz	127/220V	Hungary	50Hz	220/380V
Central African Republic	50 Hz	220/380V	India	50Hz	230/400V
Chile	50Hz	220/380V	Indonesia	50Hz	127/220V

ENERGY

FREQUENCY & VOLTAGE BY COUNTRY - CONTINUED

Country	Frequency	Voltage
Iraq	50Hz	220/380V
Iran	50Hz	220/380V
Ireland	50Hz	220/380V
Iceland	50Hz	220/380V
Israel	50Hz	220/400V
Italy	50Hz	220/380V
Jamaica	50Hz	110/220V
Japan	60Hz	100/200V
Kenya	50Hz	240/415V
Kuwait	50Hz	240/415V
Laos	50Hz	220/380V
Lebanon	50Hz	110/190V
Libya	50Hz	127/220V
Luxembourg	50Hz	220/380V
Malaysia	50Hz	240/415V
Malta	50Hz	240/415V
Morocco	50Hz	115/200V
Mexico	60Hz	127/220V
Mozambique	50Hz	220/380V
Nepal	50Hz	230/440V
Nicaragua	50Hz	120/240V
Niger	50Hz	220/380V
Nigeria	50Hz	230/415V
Norway	50Hz	230V
New Zealand	50Hz	230/400V
Oman	50Hz	220/440V
Uganda	50Hz	240/415V
Pakistan	50Hz	230/400V
Panama	50Hz	110/220V
Paraguay	50Hz	220V

Country	Frequency	Voltage
Peru	60Hz	110/220V
Philippines	60Hz	110/220V
Poland	50Hz	220/380V
Portugal	50Hz	220/380V
Romania	50Hz	220/380V
Salvador	60Hz	115/230V
Senegal	50Hz	110/220V
Sierra Leone	50Hz	220/440V
Somalia	50Hz	220/440V
Sudan	50Hz	240/415V
Sri Lanka	50Hz	230/400V
Sweden	50Hz	220/380V
Switzerland	50Hz	220/380V
Suriname	60Hz	115/230V
Swaziland	50Hz	230/400V
Syria	50Hz	115/200V
Tahiti	60Hz	127/220V
Taiwan	60Hz	110/220V
Tanzania	50Hz	230/400V
Czech Republic	50 Hz	220/380V
Thailand	50Hz	220/380V
Togo	50Hz	220/380V
Tunisia	50Hz	220/380V
Turkey	50Hz	220/380V
Uruguay	50Hz	220V
U.S.A.	60Hz	115/200V
Venezuela	60Hz	120/240V
Vietnam	50Hz	220/380V
Zaire	50Hz	220/380V
Zimbabwe	50Hz	220/380V

STRUCTURE

MONOTUBE STRUCTURE Ø50 ASD EX50

The table below gives the maximum load that can be attached to an **EX 50 structure**, depending on the length and load distribution.

TABLE OF ADMISSIBLE LOADS

Deflection condition (deflection span)	Max. admissible load	1 m	2 m	3 m	4 m	5 m	6 m
1/150	Centred (kg)	105	50	22	10	5	1
Maximum resistance	Distributed (kg/ml)	210	43.4	12.3	4.7	2	0.8
1/300	Centred (kg)	110	26	10	4	-	-
Operating load	Distributed (kg/ml)	176	21.3	5.7	1.9	0.6	-

MONOTUBE STRUCTURE Ø50 ASD FX50

The table below gives the maximum load that can be attached to an **FX 50 structure**, depending on the length and load distribution.

TABLE OF ADMISSIBLE LOADS

Deflection condition (deflection span)	Max. admissible load	1 m	2 m	3 m	4 m	5 m	6 m
1/150	Centred (kg)	148	72	31	15	6	1
Maximum resistance	Distributed (kg/ml)	298	61.2	17.3	6.6	2.8	1.1
1/300	Centred (kg)	153	37	14	5	-	-
Operating load	Distributed (kg/ml)	248	30	8	2.5	0.8	-

These data are not contractually binding and are given for assessment purposes only. Any hanging project must first be the subject of a specific study which must be transmitted to a control office for final acceptance.

STRUCTURE

LADDER SERIES 300 H30L STRUCTURE

	H30L - ADMISSIBLE LOADS							
	Uniformly distributed load Load per metre	De-flec-tion	A central point	Deflec-tion	Distribution on 2 points (Load per point)	Distribution on 3 points (Load per point)	Distribution on 4 points (Load per point)	
	UDL		CPL		TPL	QPL	FPL	
m	kg/m	mm	kg	mm	kg	kg	kg	Total weight
1	1718.7	1	1718.7	1	859.4	572.1	429.7	5.0
2	856.9	4	1259.2	3	856.9	569.6	428.4	10.0
3	556.9	8	835.3	6	626.5	417.7	346.7	15.0
4	311.1	14	622.1	11	466.6	311.1	258.2	20.0
5	197.3	22	493.2	18	369.9	246.6	204.7	25.0
6	135.5	32	406.4	26	304.8	203.2	168.7	30.0
7	98.2	44	343.7	35	257.8	171.9	142.6	35.0
8	74.0	57	296.1	46	222.0	148.0	122.9	40.0
9	57.4	72	258.4	58	193.8	129.2	107.3	45.0
10	45.6	89	227.8	71	170.9	113.9	94.6	50.0
11	36.8	108	202.4	86	151.8	101.2	84.0	55.0
12	30.1	128	180.7	103	135.5	90.4	75.0	60.0
13	24.9	150	162.0	120	121.5	81.0	67.2	65.0
14	20.8	174	145.6	140	109.2	72.8	60.4	70.0
15	17.5	200	131.1	160	98.3	65.5	54.4	75.0
16	14.8	228	118.0	182	88.5	59.0	49.0	80.0

These data are not contractually binding and are given for assessment purposes only. Any hanging project must first be the subject of a specific study which must be transmitted to a control office for final acceptance.

STRUCTURE

LADDER SERIES 300 X30L STRUCTURE

X30L - ADMISSIBLE LOADS (STRUCTURE ATTACHED AT THE ENDS)				
	Uniformly distributed load		Load on 1 central point	
Length	UDL	Deflection	CPL	Deflection
m	kg/m	mm	kg	mm
1	992.2	0	992.2	0
2	339.0	1	339.0	1
3	114.0	2	171.0	2
4	44.0	3	88.0	2
5	20.0	3	50.0	2
6	9.0	3	26.0	2

X30L - ADMISSIBLE LOADS (STRUCTURE ATTACHED AT EVERY METRE)				
	Uniformly distributed load		Load on 1 central point	
Length	UDL	Deflection	CPL	Deflection
m	kg/m	mm	kg	mm
4	245.8	17	523.8	13
5	166.5	26	416.3	21
6	114.7	37	344.2	30
7	83.5	51	292.2	41
8	63.2	66	252.9	53
9	49.3	84	222.0	67
10	39.0	100	196.9	83
11	27.8	110	176.2	100
12	20.7	120	158.6	119

These data are not contractually binding and are given for assessment purposes only. Any hanging project must first be the subject of a specific study which must be transmitted to a control office for final acceptance.

STRUCTURE

LADDER SERIES 300 X30L STRUCTURE - CONTINUED

X30L - ADMISSIBLE LOADS (STRUCTURE ATTACHED AT EVERY 2 METRES)				
	Uniformly distributed load		Load on 1 central point	
Length	UDL	Deflection	CPL	Deflection
m	kg/m	mm	kg	mm
4	82.5	5	165.0	4
5	51.7	8	129.3	7
6	35.0	12	105.0	10
7	24.9	16	87.2	13
8	18.4	21	73.5	17
9	13.9	27	62.5	22
10	10.7	33	53.4	27
11	8.3	40	45.7	32
12	6.5	48	39.0	38
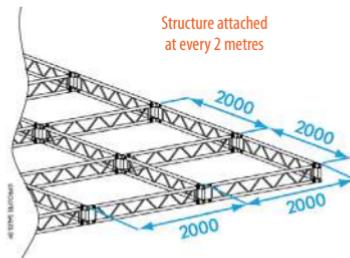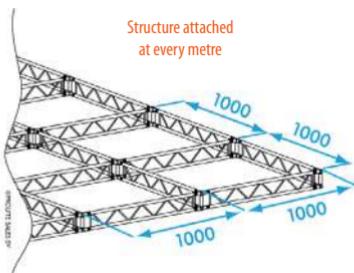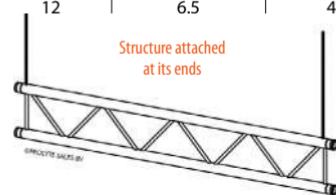
Structure attached
at its ends

Structure attached
at every 2 metres

Structure attached
at every metre

These data are not contractually binding and are given for assessment purposes only. Any hanging project must first be the subject of a specific study which must be transmitted to a control office for final acceptance.

STRUCTURE

TRIANGULAR SERIES 200 E20D STRUCTURE

E20D - ADMISSIBLE LOADS								
Uniformly distributed load Load per metre	De-flec-tion	A central point	De-flec-tion	Distribution on 2 points (Load per point)	Distribution on 3 points (Load per point)	Distribution on 4 points (Load per point)		
UDL		CPL		TPL	QPL	FPL		
m	kg/m	mm	kg	mm	kg	kg	kg	Total
1	339.8	1	339.8	1	169.9	113.0	85.0	1.6
2	169.1	3	225.4	2	169.0	112.2	84.6	3.2
3	99.3	7	148.9	5	111.7	74.5	61.8	4.8
4	55.1	12	110.3	10	82.7	55.1	45.8	6.4
5	34.7	19	86.8	15	65.1	43.4	36.0	8.0
6	23.6	27	70.9	22	53.1	35.4	29.4	9.6
7	19.9	37	59.3	29	44.4	29.6	24.6	11.2
8	12.6	48	50.3	39	37.8	25.2	20.9	12.8
9	9.6	61	43.2	49	32.4	21.6	17.9	14.4
10	7.5	75	37.4	60	28.0	18.7	25.5	16.0
11	5.9	91	32.5	73	24.4	16.2	13.5	17.6
12	4.7	108	28.2	87	21.2	14.1	11.7	19.2

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STRUCTURE

SQUARE SERIES 200 E20V STRUCTURE

	E20V - ADMISSIBLE LOADS							
	Uniformly distributed load Load per metre	Deflection	A central point	Deflection	Distribution on 2 points (Load per point)	Distribution on 3 points (Load per point)	Distribution on 4 points (Load per point)	
	UDL		CPL		TPL	QPL	FPL	
m	kg/m	mm	kg	mm	kg	kg	kg	Total weight
1	381.8	1	381.8	1	190.9	126.9	95.4	2.1
2	189.8	3	379.7	3	189.8	125.9	94.9	4.2
3	125.9	8	346.4	6	188.8	124.8	94.4	6.3
4	93.9	14	258.0	11	187.7	123.8	93.9	8.4
5	74.7	22	204.5	17	153.4	102.2	84.9	10.5
6	56.2	31	168.5	25	126.4	84.2	69.9	12.6
7	40.7	43	142.5	34	106.8	71.2	59.1	14.7
8	30.7	56	122.7	45	92.0	61.3	50.9	16.8
9	23.8	71	107.1	57	80.3	53.5	44.4	18.9
10	18.9	87	94.4	70	70.8	47.2	39.2	21.0
11	15.2	106	83.8	85	62.8	41.9	34.8	23.1
12	12.5	126	74.8	101	56.1	37.4	31.0	25.2

These data are not contractually binding and are given for assessment purposes only. Any hanging project must first be the subject of a specific study which must be transmitted to a control office for final acceptance.

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STRUCTURE
TRIANGULAR SERIES 300 ASD SX290 STRUCTURE

The table below gives the maximum load that can be attached to an **SX 290 structure**, depending on the length, load distribution and the "upper point" or "lower point" assembly (in the indicated loads, the dead weight of the structure is not included).

TABLE OF ADMISSIBLE LOADS
"upper point" ASSEMBLY

Deflection condition (deflection span)	Max. admissible load	4 m	6 m	8 m	10 m	12 m	14 m	16 m	18 m	20 m
1/100	Centred (kg)	808	522	374	281	175	102	52	14	-
Maximum resistance	Distributed (kg/ml)	406	187	101	49	26	15	8	4	2
1/300	Centred (kg)	684	283	136	63	18	-	-	-	-
Operating load	Distributed (kg/ml)	277	78	30	13	5	2	-	-	-

TABLE OF ADMISSIBLE LOADS
"lower point" ASSEMBLY

Deflection condition (deflection span)	Max. admissible load	4 m	6 m	8 m	10 m	12 m	14 m	16 m	18 m	20 m
1/100	Centred (kg)	394	246	167	116	78	48	24	2	-
Maximum resistance	Distributed (kg/ml)	202	87	47	28	18	12	8	4	2
1/300	Centred (kg)	394	246	136	63	18	-	-	-	-
Operating load	Distributed (kg/ml)	202	78	30	13	5	2	-	-	-

> Deflection calculation method at 1/300:
> Length between 2 attachment points (span) in cm ÷300.

Example for a 10 m span: 1000 cm ÷300 =3.33 cm deflection, for a load of 10 x 13 kg = 130 kg.

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STRUCTURE

SQUARE SERIES 300 ASD SC300 STRUCTURE

The table below gives the maximum load that can be attached to an **SC300 structure**, depending on the length and load distribution (in the indicated loads, the dead weight of the structure is not included).

TABLE OF ADMISSIBLE LOADS

Deflection condition (deflection span)	Max. admissible load	4 m	6 m	8 m	10 m	12 m	14 m	16 m	18 m	20 m
1/100	Centred (kg)	1169	758	546	413	320	250	195	149	109
Maximum resistance	Distributed (kg/ml)	350	231	143	89	60	42	31	23	17
1/300	Centred (kg)	1169	758	546	329	195	110	50	5	-
Operating load	Distributed (kg/ml)	350	231	117	56	30	16	9	4	1

SQUARE SERIES 400 ASD SC390 STRUCTURE

The table below gives the maximum load that can be attached to an **SC390 structure**, depending on the length and load distribution (in the indicated loads, the dead weight of the structure is not included).

TABLE OF ADMISSIBLE LOADS

Deflection condition (deflection span)	Max. admissible load	4 m	6 m	8 m	10 m	12 m	14 m	16 m	18 m	20 m
1/100	Centred (kg)	1540	1000	720	550	430	340	260	210	150
Maximum resistance	Distributed (kg/ml)	390	257	190	119	80	56	41	31	23
1/300	Centred (kg)	1540	1000	720	550	430	290	170	100	30
Operating load	Distributed (kg/ml)	390	257	190	115	65	38	22	13	7

These data are not contractually binding and are given for assessment purposes only. Any hanging project must first be the subject of a specific study which must be transmitted to a control office for final acceptance.

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STRUCTURE

SQUARE SERIES 500 ASD SC500 STRUCTURE

The table below gives the maximum load that can be attached to an **SC 500 structure**, depending on the length and load distribution.

TABLE OF ADMISSIBLE LOADS

Length of the beam between supports (M) *Corresponds to module No. 2.80 + 2 x 1/2 angle of 0.65 m*	3.45	6.25	9.05	11.85	14.65	17.45	20.25	23.05
Total mass uniformly distributed over the point P (kg)	4240	4200	3410	2520	1950	1490	930	540
Deformation at centre (cm)	3.3	1.5	3.3	5.6	8.4	11.6	13.5	15.4
3 point weights P (kg) at 1/4, 1/2 and 3/4 of the beam	3x 1430	3x 1310	3x 950	3x 700	3x 540	3x 390	3x 240	3x 140
Deformation at centre (cm)	0.4	1.7	3.5	5.8	8.8	11.6	13.5	15.4
2 point weights P (kg) at 1/3, 2/3 of the beam	2x 1910	2x 1650	2x 1260	2x 1010	2x 810	2x 550	2x 340	2x 200
Deformation at centre (cm)	0.4	1.5	3.3	5.9	9.3	11.6	13.5	15.4
1 point weight P (kg) at the centre of the beam	2860	2510	1870	1400	1080	860	580	340
Deformation at centre (cm)	0.4	1.4	3.0	5.1	7.7	11.1	13.5	15.4

Point weight P = 1500 kg* at the end of the cantilever 2.80 m max

Deformation at the tip = 1.1 cm

The maximum allowable weights take into account the limitation of the deflection of the beams at L/150 (L = length of the beam between supports)

* Provided that the user has previously checked the non-tilting stability of the beam

These data are not contractually binding and are given for assessment purposes only. Any hanging project must first be the subject of a specific study which must be transmitted to a control office for final acceptance.

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TECHNICAL GUIDE

STRUCTURE

TRIANGULAR FL PL500 STRUCTURE

Uniformly distributed load P on a beam with free supports at its ends

Span L (m)	Max. load P (kg/m) for a max. deflection of			
	F = 1/100	**F = 1/200**	F = 1/300	F = 1/400
5.60		710*	710*	660
7.00		565*	450	335
7.50		530*	365	270
8.40		390	255	190
9.00		315	205	150
10.00		225	145	115
11.20		155	100	73
12.00		125	80	57
13.00		95	60	42
14.00	150	75	45	31
15.00	120	59	35	23
16.00	100	46	27	17
16.80	85	38	22	
18.00	65	29	15	
19.00	57	23		
19.60		20		
20.00		18		

* Load limited by the permissible shear load T

The data are the result of theoretical calculations

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HEATING

LUSTRE RADIANT 18KW HEATING

Area	No. of electric heaters in Mid-season (in 18 kW on the floor)	PU (in kW)	No. of heaters in Winter (in 18 kW on the floor)	PU (in kW)
600 m²	8	144	12	216
700 m²	9	162	14	252
800 m²	10	180	16	288
900 m²	12	216	18	324
1000 m²	13	234	20	360
1100 m²	14	252	22	396
1200 m²	16	288	24	432
1300 m²	17	306	26	468
1400 m²	18	324	28	504
1500 m²	20	360	30	540
1600 m²	21	378	32	576
1700 m²	22	396	34	612
1800 m²	24	432	36	648
1900 m²	25	450	38	684
2000 m²	26	468	40	720
2100 m²	28	504	42	756
2200 m²	29	522	44	792
2300 m²	30	540	46	828
2400 m²	32	576	48	864
2500 m²	33	594	50	900
2600 m²	34	612	52	936
2700 m²	36	648	54	972
2800 m²	37	666	56	1008
2900 m²	38	684	58	1044
3000 m²	40	720	60	1080
3100 m²	41	738	62	1116
3200 m²	42	756	64	1152
3300 m²	44	792	66	1188
3400 m²	45	810	68	1224

HEATING

LUSTRE RADIANT 18KW HEATING - CONTINUED

Area	No. of electric heaters in Mid-season (in 18 kW on the floor)	PU (in kW)	No. of heaters in Winter (in 18 kW on the	PU (in kW)
3500 m²	46	828	70	1260
3600 m²	48	864	72	1296
3700 m²	49	882	74	1332
3800 m²	50	900	76	1368
3900 m²	52	936	78	1404
4000 m²	53	954	80	1440
4100 m²	54	972	82	1476
4200 m²	56	1008	84	1512
4300 m²	57	1026	86	1548
4400 m²	58	1044	88	1584
4500 m²	60	1080	90	1620
4600 m²	61	1098	92	1656
4700 m²	62	1116	94	1692
4800 m²	64	1152	96	1728
4900 m²	65	1170	98	1764
5000 m²	66	1188	100	1800
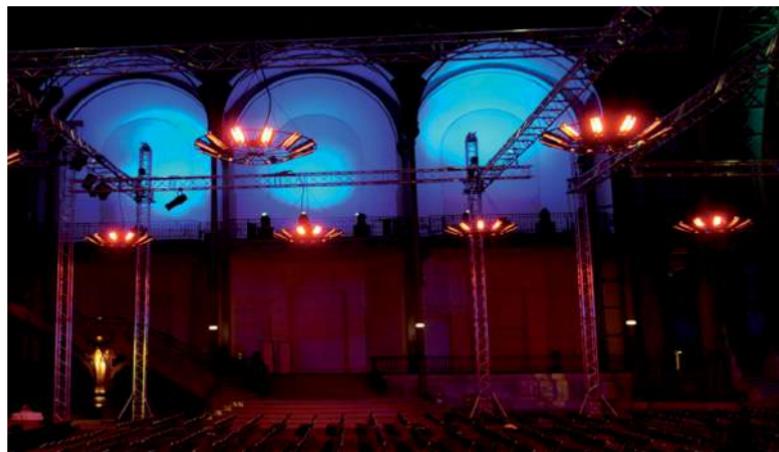
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MISCELLANEOUS

MISCELLA-
NEOUS

TRANSPORT

WORKING HOURS 8 am / 7 pm

LV truck of 2 to 6 m^3, with driver, per trip

LV truck of 8 to 12 m^3, with driver, per trip

LV truck of 18 to 20 m^3, with driver, per trip

HGV truck of 30 to 40 m^3, with driver, per trip

HGV truck of 50 to 60 m^3, with driver, per trip

Super HGV truck of 80 to 100 m^3, with driver, per trip

NON-WORKING HOURS WE & 7 pm / 8 am

LV truck of 2 to 6 m^3, with driver, per trip

LV truck of 8 to 12 m^3, with driver, per trip

LV truck of 18 to 20 m^3, with driver, per trip

HGV truck of 30 to 40 m^3, with driver, per trip

HGV truck of 50 to 60 m^3, with driver, per trip

Super HGV truck of 80 to 100 m^3, with driver, per trip

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CONSUMABLES

All these products are available in our store in Longjumeau. You can find a wide choice of consumables necessary for your service (gelatins, lamps, gaffer, barnier, video supports, etc.). Due to constant market fluctuations, please contact our sales department on 01 76 91 90 00 for information on the prices.

ADHESIVES

ADVANCE Barnier	Width 10 mm
ADVANCE Dance mat	Roll of 50 mm x 33 m
MAGTAPE Gaffeur	Black/white/grey, 50 mm x 50 m
MAGTAPE Gaffeur	Black/white/grey, 50 mm x 100 m
ALL COLOR Gaffeur	Fluo colour, 50 mm x 25 m
ADVANCE Gaffeur Alu	High t°, std alu, 50 mm x 25 m
ADVANCE Gaffeur Alu	High t°, black alu, 50 mm x 25 m
Double-sided	50 mm x 25 m
Ribbon tape	Red and white, 50 mm x 100 m

GELATIN

GAMCOLOR	A roll (5.00 x 0.61)
ROSCO E-color	A roll (7.62 x 1.22)
ROSCO Supergel	A roll (7.62 x 0.61)
ROSCO Heat Shield	A roll (60 cm x 7.62 m)
ROSCO	Supergel series, a roll (7.62 x 0.61)
ROSCO Cinefoil	A roll (61 cm x 7.62 m / 30 cm x 15.5 m)

GOBOS

Custom-made gobos   for all types of floodlights
(Servo-controlled floodlights - CLAY PAKY, MARTIN, ROBE, VARILITE / Profiles / Tracking spotlights...)

LAMPS

PHILIPS	Contact us for the model numbers
GE LIGHTING	Contact us for the model numbers
OSRAM	Contact us for the model numbers

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SMOKE MACHINE

MARTIN HUILE	Normal or slow dispersion, 5-litre can
MDG Neutral	4-litre can
REEL EFX Liquid DF50	5-litre can
LOOK Unique	For Unique2, 2-litre can
LOOK VIPER	5-litre can
CO2	for MDG machines, 10 kg cylinder
CHAUVET Geyser	5-litre can

BATTERIES

LR03	Battery 1.5V, size AAA
LR06	Battery 1.5V, size AA
LR14	Battery 1.5V, size C
LR20	Battery 1.5V, size D
6LR61	Battery 9V

For any other request, please contact us at **01 76 91 90 00**

Scale: 1/50ᵗʰ

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GENERAL TERMS AND CONDITIONS OF RENTAL OF NOVELTY

Article 1 - BOOKING THE EQUIPMENT:

1.1.: All bookings imply unconditional acceptance of our general terms and conditions of rental, regardless of the clauses contained in the customer's purchase orders.

1.2.: All telephone bookings must be confirmed by e-mail at least 24 hours before the start of the rental period.

1.3.: Bookings are only accepted while stocks last.

1.4.: All bookings must be accompanied by an advance payment of 50% of the total amount (including tax) of the order.

1.5.: If a booking is cancelled less than 48 hours before the start of the rental period, the advance payment already made shall be retained by NOVELTY as fixed compensation.

1.6.: The customer must indicate at the time of booking if the equipment is to be used outside French territory.

Article 2 - COLLECTING THE EQUIPMENT:

2.1.: The equipment is collected in exchange for a purchase order for companies having an account in our books. For individuals, proof of address will be required, as well as payment of the rental fee and a deposit.
A deposit will always be required for new customers.

2.2.: The equipment is handed over in perfect working order; it can also be checked by the customer before each rental.

2.3.: Collection takes place from Monday to Friday from 9 am to 12 noon and from 2:30 pm to 6 pm.
Collection outside these times is possible with a minimum of 2 days' notice and an additional charge of 10% of the rental value.

Article 3 - RENTAL PERIOD:

3.1.: The equipment is systematically accompanied by a rental voucher on which the dates and times of the scheduled collection and return of the equipment are indicated.

3.2.: The rental period is expressed in days and starts from the day of collection of the equipment to the day of its physical return to our premises, including Sundays and public holidays, regardless of whether the equipment is used or not.

Article 4 - RETURNING THE EQUIPMENT:

4.1.: The return of the equipment is at the customer's expense and must be made on our premises at the dates and times specified at the time of booking. A return outside the working hours of the site is possible with a minimum of 2 days notice and an

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additional charge of 10% of the rental value.

4.2.: Any extension of the rental period must be notified at least 24 hours before the initially planned return date and may only be carried out with the agreement of NOVELTY. This extension

must be validated within the same timeframe by a new purchase order which must be confirmed under the same conditions as the initial purchase order.

4.3.: Any return made before the scheduled date will be invoiced according to the terms of the original order.

4.4.: The customer shall be liable for any damage suffered by NOVELTY and its customers as a result of a delay in the return of the equipment.

4.5.: Any equipment not returned in its original packaging or dirty will be invoiced.

4.6.: Any missing or damaged equipment will be invoiced on the basis of the current NOVELTY tariff, i.e. the new public price.

4.7.: An additional period of 48 hours is allowed for the return of small items of equipment and accessories that are missing; after this period, the invoice will become final.

4.8.: Lamps for lighting and/or video projection that are returned "out of order" will be charged at 70% of their new value.

4.9.: No claim will be accepted after a rental if the customer has not tested the equipment on its return in the presence of our technicians.

Article 5 - RATES:

5.1.: The invoiced prices shall be those in force on the day of delivery. NOVELTY reserves the right to modify its prices at any time without notice. The VAT rate applied is 20% on all services offered as of 1 November 2018; this rate is subject to change according to legislation.

5.2.: Quotes are valid for a period of 30 days from the date of issue.

5.3: The photos and characteristics of the NOVELTY catalogue are not contractually binding.

Article 6 - OPENING AN ACCOUNT AND PAYMENTS:

6.1.: NOVELTY may, with the agreement of its financial department, open a customer account. This request must be accompanied by the following documents:

· K-Bis extract (company registration certificate) less than 3 months old

· Bank account details (RIB or RIP in France)

Unless special conditions are negotiated when the account is opened, invoices are payable on collection of the equipment, as well as for any order less than or equal to €750 including tax.

GENERAL TERMS AND CONDITIONS OF RENTAL OF NOVELTY

6.2.: For customers with an account, payment is made by bill of exchange at 45 days from the end of the month, in accordance with the law. Bills must be returned accepted within eight days.

Article 7 - LATE PAYMENT:

7.1.: The non-payment of a bill on its due date shall result in all sums due becoming immediately payable.

Any extension of the due date must be submitted to our financial department for approval. They will only be granted on an exceptional basis, and in all cases, be subject to the payment of a fixed indemnity of €40 to compensate for collection costs (decree of 2/10/2012), and late payment interest at a rate of 1.5% per month, each month started being considered indivisible.

Article 8 - RETENTION OF TITLE CLAUSE:

8.1.: The equipment is the property of NOVELTY. As such, it cannot be seized by third parties, and the lessee does not have the right to transfer or sublet it. It must not make any superficial or substantial changes to the equipment.

ARTICLE 9 - CITATION AND COMMUNICATION:

9.1.: NOVELTY shall be entitled to quote and use, in its internal and external information tools, as well as in any other communication medium, the service or rental that NOVELTY has provided to its customer.

9.2.: NOVELTY may also record and use visuals of the operation. If the customer requires complete confidentiality, it shall inform NOVELTY in writing before the date of the transaction.

Article 10 - LIABILITY:

10.1.: The lessee, as the custodian, assumes full responsibility for the equipment from when it is collected from our premises and until it is returned.

10.2.: The lessee shall be liable to third parties for the use of the equipment and in particular for the use of loudspeaker, audio or video transmitters, walkie-talkies, radios, telephones, etc., without recourse against NOVELTY in any respect whatsoever. It must obtain the necessary authorisations for the use of the above-mentioned equipment.

10.3.: All rentals of lifting equipment, structures, supports, towers, work platforms, ladders and floors, without NOVELTY's assistance, are under the full responsibility of the lessee, who must take out insurance in compliance with the safety conditions on its site and civil liability insurance.

10.4.: The lessee undertakes to use the equipment in accordance with its intended purpose and not to make any modifications or repairs to the equipment without prior agreement from NOVELTY.

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10.5.: In the event of damage, the equipment will be invoiced at the price of new equipment according to the current tariffs, and the costs of repairing the equipment will be charged at the current cost.

10.6.: NOVELTY shall not be held liable for the non-operation or malfunction of the rented equipment due to the addition of incompatible equipment or misuse.

Article 11 - INSURANCE:

11.1.: The rented equipment can be the subject of an optional machine breakdown insurance generating a premium of 4% of the rental amount with a fixed deductible of €5000. In no case does this insurance cover the equipment against theft.

11.2.: If the lessee does not take out the insurance offered by NOVELTY, the lessee shall insure the rented equipment for its replacement value as new. The insurance must in this case cover the risks of theft, loss or damage, whatever the cause or nature.

11.3.: The lessee shall be responsible for all risks of civil liability for any damage caused by the equipment or by any use made of it while it is in its custody.

11.4.: In the event of a claim, the lessee must send a detailed declaration on a paper with its letterhead within 48 hours, and in the event of theft, the original receipt of the report issued by the police station. This declaration is made by registered mail with acknowledgement of receipt. In the event of theft, the equipment must be reimbursed at its new replacement value.

Article 12 - GDPR:

Your personal information is processed for the purpose of executing the contract, managing our services and complying with all our legal and regulatory obligations. It may also be used in compliance with legal provisions to promote our services. We implement the necessary measures to ensure data security.

In accordance with the French Data Protection Act of 6 January 1978 as amended and articles 16 and 17 of the GDPR, you have the right to access, rectify and object to any personal data concerning you, as well as the right to data portability. These rights can be exercised by contacting the Data Protection Officer (DPO on the dedicated e-mail dpo-rgpd@novelty.fr), and this applies to any complaints as well. For more information on how we process your personal data, please refer to our privacy policy at www.novelty.fr.

Finally, you have the right to lodge a complaint with the supervisory authority, the CNIL.

Article 13 - APPLICABLE LAW AND JURISDICTION:

For any dispute relating to the interpretation and execution of this contract, the Commercial Court of EVRY (1, Rue de la Patinoire - 91000) shall have sole jurisdiction.

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NOVELTY and its Sustainable Development process

Member of **SYNPASE** *(the French National Union of Audiovisual Stage and Event Providers),* holder of the **PrestaDD** Label.

The PrestaDD Label, created by SYNPASE in June 2011, enables service provider companies to formalise their commitment to sustainable development. These companies must be able to guarantee to their partners and customers their compliance with ethical rules and good practices in environmental, economic and social terms.

PrestaDD also aims to create a common commitment to sustainable development in order to define good practices to be adopted.

At the same time, **NOVELTY has decided to invest in environmentally friendly materials:** LED technology with very low energy consumption, investment in video projectors with lamps that last three times longer than normal and consume less than the average.

At NOVELTY, paper, cardboard, metals, batteries, oils and other liquids are systematically sorted.

NOVELTY is registered in the recycling channels for lamps, tubes and batteries, allowing them to be processed by approved eco-organisations.

For batteries, "BATRIBOX" collection boxes have been distributed throughout the company.

Used lamps and tubes are collected.

This recycling is free of charge and open to all employees, who are invited to deposit used batteries, lamps and tubes resulting from their private consumption.

Novelty is investing in eco-responsible vehicles, in particular with the acquisition of hybrid PL7.5t vehicles.

Novelty is the first and only company in the sector to have a full-time Quality | Safety | Environment preventionist.

Novelty is preparing for **ISO20121 certification** in order to put sustainable development at the heart of tomorrow's events.

For further information:

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NOVELTY SAS

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Evry Companies Register B 419 822 408 | NAF Code 9002Z

EU VAT FR 30 419 822 408 -

Capital €5,000,000

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