

**Derungs**   
MEDICAL LIGHTING

**Waldmann**   
ENGINEER OF LIGHT.

NORTH AMERICA

D<sup>med</sup>® **Triango** LED UNIVERSAL PROCEDURE LIGHT

  
LED



## PRODUCT INFORMATION

### D<sup>med</sup>® **Triango**

#### D<sup>med</sup>® **Triango 30 C**

LED technology has revolutionized the art of equipment design for the medical sector.

The D<sup>med</sup>® **Triango** brings this innovative technology to the procedure & exam area. With its advanced thermal management system, integrated dimming controls, brilliant light output, and compact housing, the Triango meets the stringent requirements of both hospital designers and practitioners.





**Long lamp life**  
Swiss engineering  
and LED technology

**Ergonomically friendly**  
For ease of use

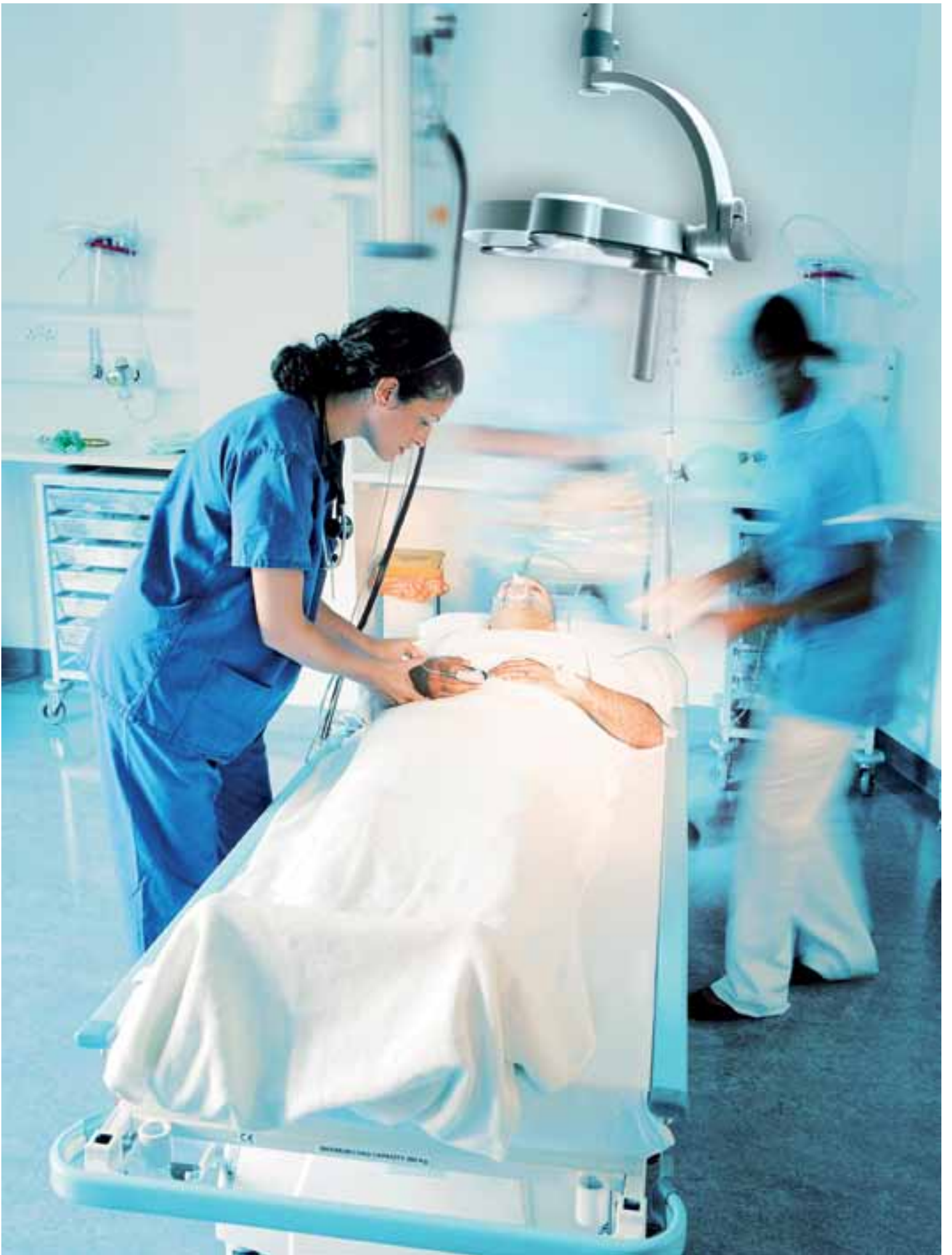
**One-hand height adjustment**

**Heat directed away from  
physician and patient**

**More than 50% energy-saving**  
Thanks to efficient LEDs

**Dimming**  
Rotary switch easily accessible

**Maintenance-free**  
No light source replacement  
for service life



# PRODUCT ADVANTAGES

D<sup>med</sup>® **Triango**



## MOBILITY AND FUNCTION

LED technology gives high performance lighting for the procedure area. Triango's intricate design and robust materials also allow for a broad range of movement and easy positioning of the fixture.

D<sup>med</sup>® **Triango** is available in two versions.

### Ceiling Mount:

The ceiling mount can be a space saver, especially in rooms where maximum freedom of movement is required.

### Floor stand:

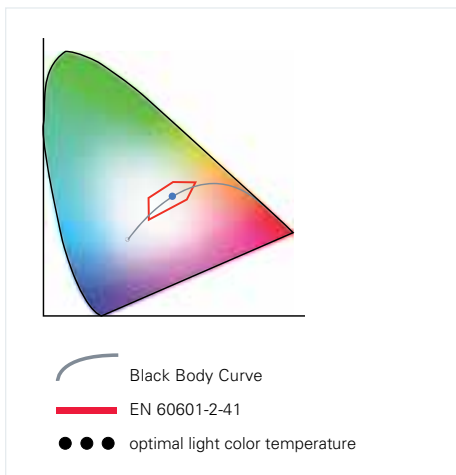
Taking the Triango mobile with the rolling floor stand offers flexibility for various areas of the floor or even for sharing among several areas.

Wall Mount: The option of a wall mounted version is also available - please consult factory.



## EVEN ILLUMINATION OF THE AREA

The unique optic developed by Derungs ensures an optimum light field. The illuminated area meets the highest technical lighting requirements for treatment lights. The reflection-, shadow- and glare-free lighting generates an ideal field of vision specific to close work.



## COLOR RENDERING

Triango offers the optimum in color rendering with Ra > 95 and R9 > 90. This allows for clear recognition of any issues involved within the tissue.







### MAINTENANCE-FREE

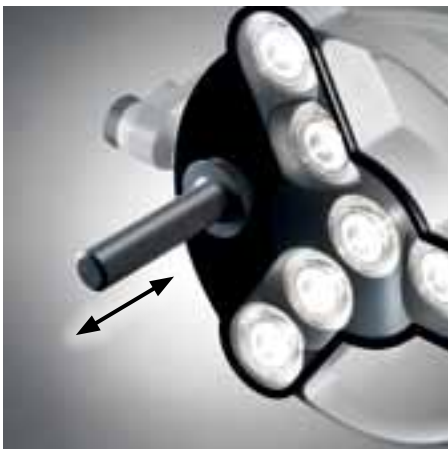
LED technology allows for long periods of maintenance-free usage. No service for bulb replacement necessary for the life of the fixture.

- Long lamp life of 30,000 hours

### CLEANING AND STERILIZATION

Its closed construction and smooth surface allows for quick, thorough cleaning. In addition, any penetration of dust, dirt or liquids is prevented. The removable handle is easy to sterilize.

- Removable and sterilizable handle



### HIGH-QUALITY COMPONENTS

High quality components guarantee a strong, user-friendly luminaire. Derungs uses only top of the line materials to garner maximum benefits from its product.

Luminaire body:

Polycarbonate & acrylonitrile-butadiene-styrene copolymer (PC & ABS)

Lens Cover:

Polymethyl methacrylate (PMMA)

An ABR-GL abrasion-proof coating makes the lens cover scratch proof.

### EASY SET UP

Setting up the floor stand requires one person, installation of the ceiling-mounted version requires two people.

### SERVICE

In case of defect, the complete luminaire head is sent back to the factory and replaced in a timely manner.



### ILLUMINATION / LIGHT INTENSITY REGULATION

Easy operation: One control switches the light on/off and dims with five light levels, providing the practitioner with the quick, convenient control necessary when many different procedures are being done during the course of the day.

### GLARE-FREE

The light beam is focused and thus glare-free, whatever the angle of sight. This avoids all bothersome reflections on the surface.

- Continuously dimmable from 100% - 10%
- 55,000 lux/39.5in (1m)
- Illuminated area 6.5in (160mm)
- CRI > 95
- Glare-free
- Shadow and reflection-free



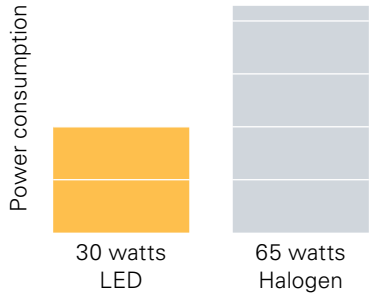
### COMFORTABLE OPERATION

The triango is ergonomically designed for comfort and ease of operation. The rotary switch is conveniently located on the luminaire head. The handle is shaped to lie comfortably in the operator's hand. The compact construction allows for freedom of movement in a crowded room.









### OPERATING COSTS REDUCED TO A MINIMUM

No maintenance required: no light source replacement, no wearing of parts, reducing operating costs significantly. Universal converter 100-240 volts: can be used in all countries.

### IMPROVED ENERGY EFFICIENCY

Notable energy savings is gained thanks to the most up-to-date LED technology: high illumination using only 30 watts of power. if lower light levels are necessary, power consumption will be even less.

*efficient light*



### NO RADIATION OF HEAT

An ideal working environment for physicians – the light emitted by LEDs contains almost no infrared or UV radiation. Thus no heat emanates from the light to the elevating the level of comfort for patient and practitioner. This prevents tissue from drying out or being affected by the heat, greatly facilitating specific procedures. Any heat generated by the light is directed to the rear of the fixture head, allowing for any necessary adjustments to be made to the fixture without worry.



### GOOD WORKING CONDITIONS

Out of necessity, a procedure light is often positioned in close proximity to patient and staff. Glare and heat can easily exacerbate headaches and fatigue. Optics are used to provide a work space free of shadows, reflections and glare. The heat generated by the LEDs is directed to the rear of the luminaire head. No cooling fan is necessary: Effectively reducing distractions by lowering the level of ambient noise in the working environment.



### SAFETY / STANDARDS

D<sup>med</sup>® **Triango** meets or exceeds the following certified requirements:

- EN 60601-1  
Medical electrical equipment. General requirements for basic safety and essential performance.
- EN 60601-1-2  
Electromagnetic compatibility (EMC)
- EN 60601-1-6  
Usability
- EN 60601-2-41  
Medical electrical equipment Particular requirements for the safety of surgical luminaires and luminaires for diagnosis.

# PRODUCT OVERVIEW / TECHNICAL DATA

## D<sup>med</sup>® Triango 30 C

### TECHNICAL DATA

LAMPING	1 x LED
LUMINOUS POWER	55,000 lux / 39.5 in (1 m)
LUMINATED FIELD	Ø 6.5 in (16 cm)
COLOR TEMPERATURE	Approx. 4500K
OPERATING DEVICE	Electronic converter
POWER SUPPLY	Direct power supply
LUMINAIRE BODY	Polycarbonate & acrylonitrile butadiene styrene copolymer (PC &ABS)
WEIGHT (NET)	Approx. 29 lbs (13.0 kg)
POWER CONSUMPTION	Approx. 30W
BALANCE OF ARTICULATION JOINTS	Spring (weight compensation)
CLASS OF PROTECTION	I
ACCESSORIES	Sterilizable handle, adapter for suspended ceiling mounting
IEC STANDARDS MET	EN 60601-1, EN 60601-2-41
SPECIAL FEATURES	Sterilizable handle, continuously dimmable, maintenance free
MOUNTING	Ceiling mount, when mounting ceiling tube could be cut to length 30-120 cm, intermediate ceiling adapter (on request)
PROTECTION RATING	IP43
ORDER NUMBER	Please Note: Order number assigned time of order/ quote according to ceiling height requirements

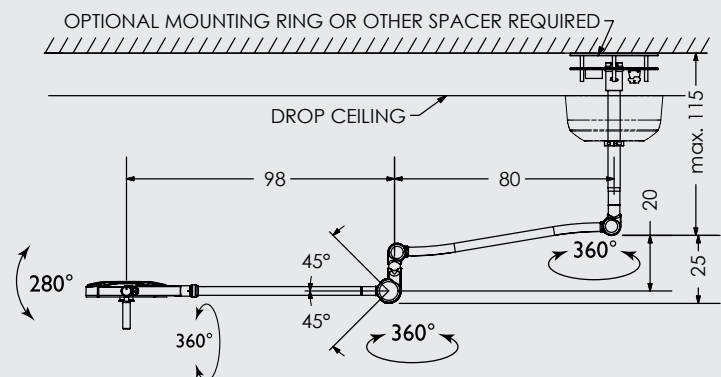
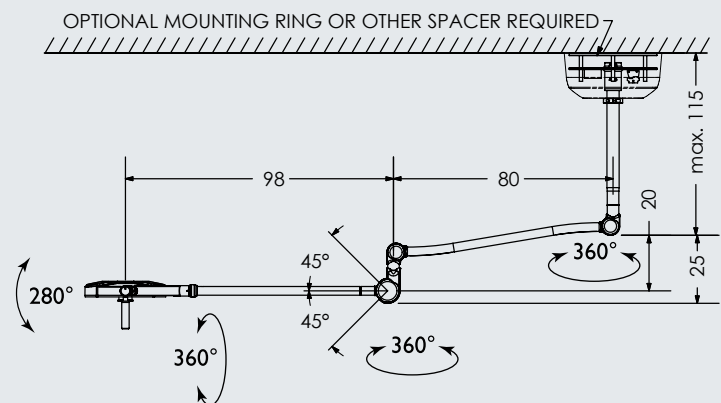
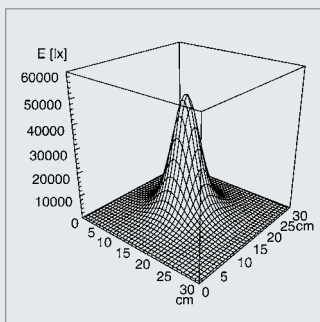
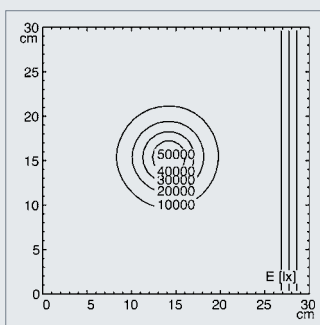


Wall mount version also available – please consult factory

### LIGHT DISTRIBUTION

### TECHNICAL DRAWING

mm



# PRODUCT OVERVIEW / TECHNICAL DATA

## D<sup>med</sup>® Triango 30 F

### TECHNICAL DATA

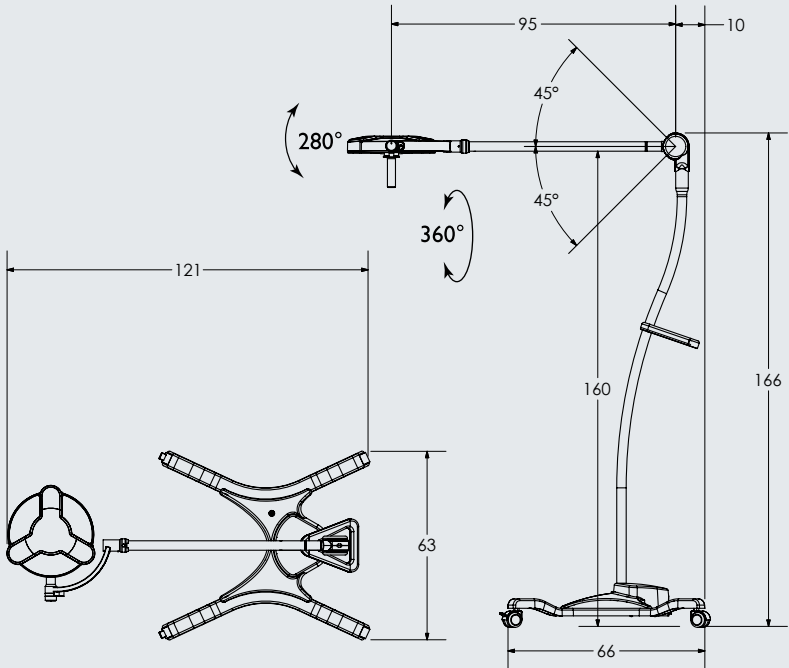
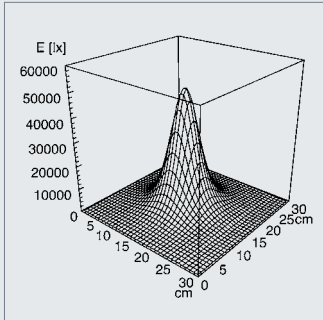
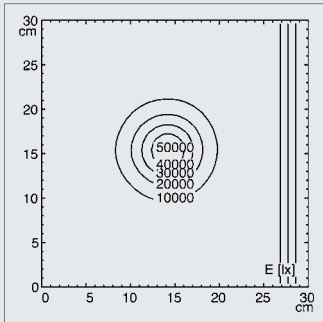
LAMPING	1 x LED
LUMINOUS POWER	55,000 lux / 39.5 in (1 m)
LUMINATED FIELD	Ø 6.5 in (16 cm)
COLOR TEMPERATURE	Approx. 4500K
OPERATING DEVICE	Electronic converter
POWER SUPPLY	Approx. 10 ft (3 m)
LUMINAIRE BODY	Polycarbonate & acrylonitrile butadiene styrene copolymer (PC &ABS)
WEIGHT (NET)	Approx. 20.0 kg
POWER CONSUMPTION	Approx. 30W
BALANCE OF ARTICULATION JOINTS	Spring (weight compensation)
CLASS OF PROTECTION	I
IEC STANDARDS MET	EN 60601-1, EN 60601-2-41
SPECIAL FEATURES	Sterilizable handle, continuously dimmable, maintenance free
MOUNTING	Floor stand
SYSTEM OF PROTECTION	IP43
ORDER NUMBER	D15.174.100

Wall mount version also available – please consult factory



### LIGHT DISTRIBUTION TECHNICAL DRAWING

mm



**USA**

Waldmann Lighting Company  
9, W. Century Drive  
Wheeling, Illinois 60090, USA  
Phone +1 847 520-1060  
Fax +1 847 520-1730  
Toll Free +1 800 634 0007  
www.waldmannlighting.com  
waldmann@waldmannlighting.com

**FRANCE**

Waldmann Eclairage S.A.S.  
Z.I. Rue de l'Embranchement  
F-67116 REICHSSTETT  
Adresse postale :  
BP 23431 Reichstett  
F-67455 MUNDOLSHEIM Cedex  
Phone +33 (0) 388209588  
Fax +33 (0) 388209568  
www.waldmann.com  
info-fr@waldmann.com

**ITALY**

Waldmann Illuminotecnica S.r.l.  
Via della Pace, 18 A  
IT-20098 San Giuliano Milanese (MI)  
Phone +39 02 98 24 90 24  
Fax +39 02 98 24 63 78  
www.waldmann.com  
info-it@waldmann.com

**NETHERLANDS**

Waldmann Lichttechnik BV  
Lingewei 19  
NL-4004 LK Tiel  
Phone +31 (0) 344 - 631019  
Fax +31 (0) 344 - 627856  
www.waldmann.com  
info-nl@waldmann.com

**AUSTRIA**

Waldmann Lichttechnik Ges.m.b.H.  
Gewerbepark Wagram 7  
AT-4061 Pasching/Linz  
Phone +43 (0)722967400  
Fax +43 (0)722967444  
www.waldmann.com  
info-at@waldmann.com

**SWITZERLAND**

Waldmann Lichttechnik GmbH  
Benkenstasse 57  
CH-5024 Küttigen  
Phone +41 (0)62 839 1212  
Fax +41 (0)62 839 1299  
www.waldmann.com  
info-ch@waldmann.com

**UK**

Waldmann Lighting Ltd.  
Holme Well Road  
Middleton  
GB-Leeds LS 10 4TQ  
West Yorkshire  
Phone +44 1132775662  
Fax +44 1132775775  
www.waldmann.com  
enquiries@waldmannlighting.co.uk

**CHINA**

Waldmann Lighting (Shanghai) Co. Ltd.  
Part A, No. Five Normative Workshop  
199 Changjian Road, Baoshan  
CN-Shanghai, P.R.C. 200949  
Phone +86 21 5169-1799  
Fax +86 21 3385-0032  
www.waldmann.com  
s.lo@waldmann.com.cn

**GERMANY**

Herbert Waldmann GmbH & Co. KG  
Postfach 50 62  
D-78057 Villingen-Schwenningen  
Phone +49 7720 601-100  
Fax +49 7720 601-290  
www.waldmann.com  
info@waldmann.com

**SINGAPORE**

Waldmann Lighting Singapore Pte. Ltd.  
Blk 168, Jalan Bukit Merah,  
#04-09B, Connection One, Tower 3,  
Singapore 150168  
Phone +65 62758300  
Fax +65 62758377  
www.waldmann.com  
sales@waldmann.com.sg

**SWEDEN**

Waldmann Ljusteknik AB  
Skebokvarnsvägen 370  
SE-124 50 Bandhagen  
Phone +46 8 990 350  
Fax +46 8 991 609  
www.waldmann.se  
hk@idecenter.se