

Shielded lamps and connection cables

A step towards healthier living and working

■ Why shielding against electric and magnetic fields?

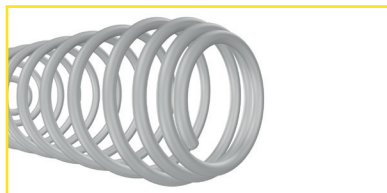
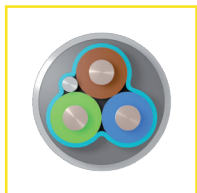
Electric and magnetic fields occur everywhere. Their causes are both natural and artificial. Artificially generated fields in particular are becoming increasingly important.

The use of electrical and electronic devices in the living and working environment is constantly increasing.

The influence of artificially generated fields on the human organism has not yet been conclusively researched, but there is increasing note that people react sensitively to exposure to electric and/or magnetic fields.

Electric fields are basically caused by every electric line, even if a connected device is not switched on. This field can be almost completely eliminated by using shielded components, without having to sacrifice comfort.

Magnetic fields only occur when a device / lamp is also switched on and thus a current flows. Magnetic fields can also be significantly reduced by the appropriate design of a lamp.



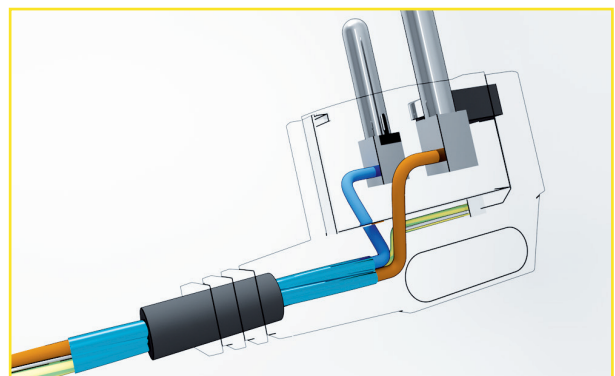
■ Practical construction of shielded lamps

Our shielded lamps basically consist of a three-pole connecting cable, a metal lamp housing of protection class I and a shielding basket for the light source.

While conventional mains cables are usually designed with two poles and a Euro plug, our cables have three poles (with protective conductor, increased safety) and are equipped with a metallic sheathing of the cores as a shield.

Our lamps have a metallic housing (or inner housing in the case of lamps made of wood) which, unlike other materials such as plastic or wood, also shields against the alternating electric field.

Lamp socket and light source (according to building biology recommendations) were integrated into the shielded system by means of a shielding basket, as considerable alternating electric fields can be measured here as well without shielding.



Shielding effect in comparison

An unshielded lamp (protection class 2) with an unshielded connecting cable produces an alternating electric field of 100.0 to 160.0 V/m (building biology recommended guide value 10.0 V/m). The shielded lamp (protection class 1) with a corresponding construction only produces an alternating electric field of a minimum of 0.4 to 0.6 V/m.

The screening is checked according to the specifications, frequency bands and measuring distances of the recognised screen standards (for low-radiation screens / monitors): TCO'99, Band I (MPR II) and DIN EN 50279 (measuring distance 30 cm)..

What else can be done?

- Only use shielded connection cables and socket strips for your other devices!
- Never leave appliances switched on or in stand-by mode for longer than necessary; always unplug the appropriate mains plug or switch off two-pole.
- Avoid electrical appliances in your bedrooms or living rooms or place them as far away from you as possible.

Generally useful notes on the subject of „electrosmog“ can be found on the Internet at:

www.verband-baubiologie.de

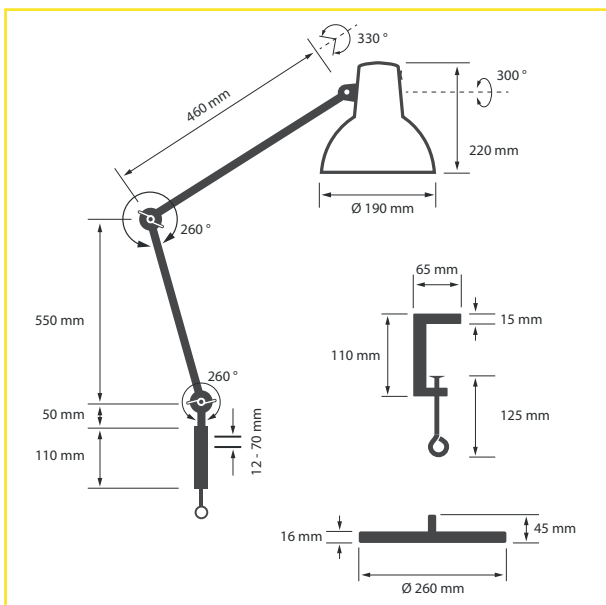
www.baubiologie.net

www.baubiologie.de

All product information on shielded cables, connecting cables, socket strips and lamp systems can be found under:
www.biologadanell.com.

Task lamps - Operating instructions

LONDON silver - 41-7003 & LONDON black - 41-7161



Safety instructions

All electrical work (work on electrical equipment and installations) must be carried out and inspected by a qualified electrician or under their direction and supervision!

Use your lamp only in normally tempered, dry indoor rooms. No outdoor use!

■ Unpack

The lamp consists of four individual packages:

1. Lamp
2. Reflector
3. Table clamp foot or table stand foot
4. Accessories pack:
(with instructions, bulb adapter,
G9 light source, shade basket)

■ Reflector mounting:

Place the reflector on the luminaire mechanism as shown and screw it in until it clicks into place.



■ Clamping foot

to the tabletop (up to 70 mm thick) and insert the lamp into the opening of the clamping foot. Secure against removal with the enclosed slotted screw. Tighten the screw only slightly so that the lamp can still be turned in the holder.

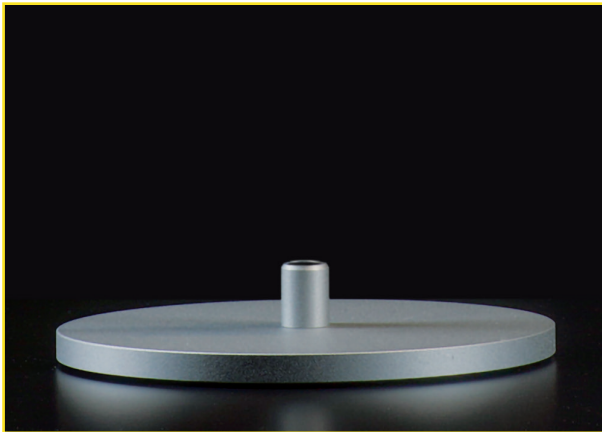


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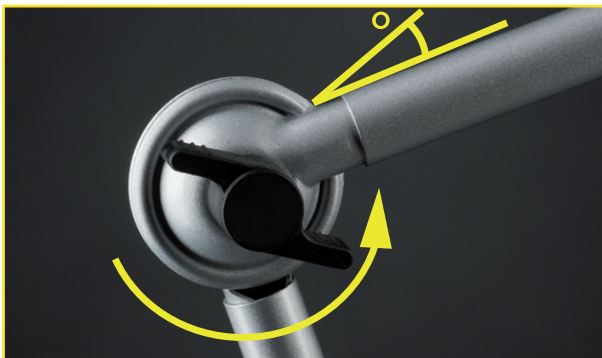
■ Table stand

Place the lamp in a suitable place and insert it into the opening of the stand. Secure against removal with the enclosed slotted screw. Tighten the screw only slightly so that the lamp can still be turned in the holder.



■ Adjusting the lamp arm

The two wing nuts on the lower and middle joint hold the lamp arm in the position once selected. To adjust, please adjust the lamp arm in the joint or loosen the wing nut slightly and tighten again in the new position.



■ Start-up

To change or insert the light source for the first time, please see the next page. Then connect the mains cable to the socket; switching on and off is done with the toggle switch on the reflector.



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■ Inserting the light source for the first time

Attention, important note:

For all work on the lamp, always disconnect the mains plug first!

1. Screw the supplied G9 base E27 into the lamp socket.
2. Insert the light source into the base from above.
3. Screw the shade basket onto the socket. The shade basket does not have to be screwed on as far as it will go.

When using a high-voltage light source of type G9, maximum power 48 W!

There is no limit for LED light sources.

■ Changing the light source

Attention, important note:

In the case of a G9 high-voltage halogen light source, allow the light source to cool down!

1. Press the screen basket down from above
2. Remove the defective light source and insert the new one. Let the lampshade basket slowly escape upwards under its own power.

When using a high-voltage light source of type G9, maximum power 48 W!

There is no limit for LED light sources.

Choice of light sources

Halogen incandescent lamps have a filament that is made to glow by the flow of current.

This creates a continuous luminous flux that produces a slightly yellowish-orange light in halogen bulbs and a somewhat stronger yellowish-orange light in incandescent bulbs (similar to the evening sunset) = high quality of light!

We also offer a more energy-efficient G9 LED (LM-LED-G9-55) in similar quality.

■ Insert light source G9



G9 illuminant with 48 Watt

This work lamp is recommended with a G9 light source with 48 watts.

What is a G9 light source: The G9 lamps have a plug-in base for 230 volts mains voltage with 9 mm contact spacing. International standard: IEC 60061-1 (7004-129)

■ Change light source G9



Energy efficiency class

All household lamps (incandescent lamps, halogen lamps, LED lamps and fluorescent lamps) are classified in EEK (energy efficiency classes). Watt, lumen and burning hours are taken into account.

W (Watt), power consumption, says something about power consumption, nothing about brightness.

lm (lumen): Describes the brightness of light sources (the luminous flux = total visible radiation). The higher the lumen value, the brighter the lamp shines.

