

IKA

designed for scientists

Hula dancer basic
Hula dancer digital

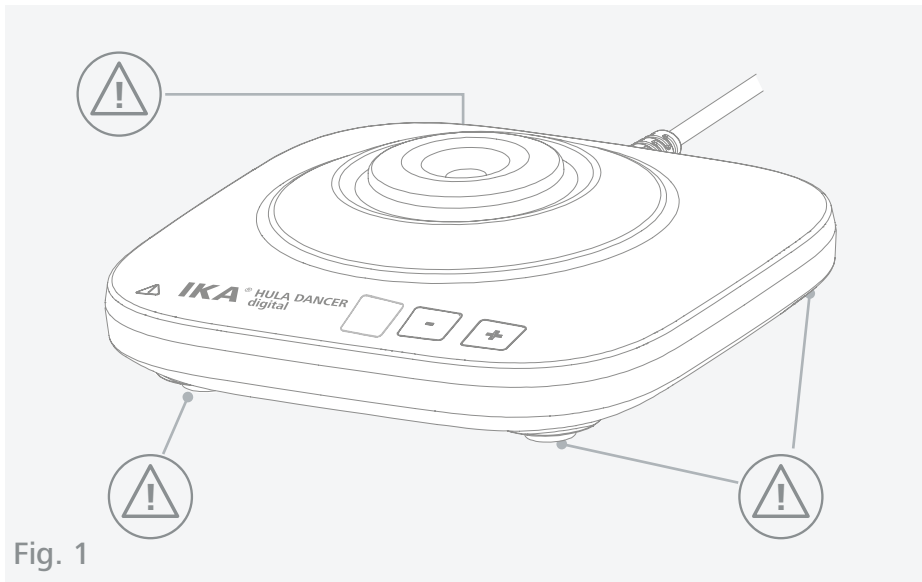










Fig. 1

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Source language: German

EU Declaration of conformity

We declare under our sole responsibility that this product corresponds to the directives 2014/35/EU, 2006/42/EC, 2014/30/EU and 2011/65/EU and conforms with the following standards or other normative documents: EN 61010-1, EN 61010-2-051, EN 61326-1, EN 60529 and EN ISO 12100.

A copy of the complete EU Declaration of Conformity can be requested.



Explication of warning symbols

Warning symbols



Danger! Indicates an (extremely) hazardous situation, which, if not avoided, will result in death, serious injury.



Warning! Indicates a hazardous situation, which, if not avoided, can result in death, serious injury.



Caution! Indicates a potentially hazardous situation, which, if not avoided, can result in injury.



Notice! Indicates practices which, if not avoided, can result in equipment damage.

General Symbols

A — Position number



Correct/Result
Shows the correct execution or the result of an action step.



Wrong
Shows the incorrect execution of an action step.



Note
Displays action steps that require particular attention to detail.

Safety instructions



General information

- › **Read the operating instructions in its entirety before using the device and follow the safety instructions.**
- › Keep the operating instructions in a place where it can be accessed by everyone.
- › Ensure that only trained staff work with the device.
- › Follow the safety instructions, guidelines, occupational health and safety and accident prevention regulations.

Device design

Danger!

- › Please pay attention to the dangerous parts of the equipment in Fig. 1.
- › Do not use the device in explosive atmospheres, it is not EX-protected.
- › With substances capable of forming an explosive mixture, appropriate safety measures must be applied, e.g. working under a fume hood.
- › To avoid body injury and property damage, observe the relevant safety and accident prevention measures when processing hazardous materials.

Caution!

- › Set up the device in a spacious area on an even, stable, clean, non-slip, dry and fireproof surface.
- › The feet of the device must be clean and undamaged.
- › Overfilling with liquid may cause the medium to splash out. For this reason, only closed test tubes should be used.
- › Check the device and accessories for damage before each use. Do not use damaged components.

Work with the device

- › The device must only be used in a technically perfect condition.

Danger!

- › Wear your personal protective equipment in accordance with the hazard category of the media to be processed. There may be a risk from:
 - splashing and evaporation of liquids,
 - release of toxic or combustible gases,
 - body parts, hair, clothing and jewelry getting caught.
- › Reduce the speed if:
 - the device is not running smoothly (only IKA Hula dancer digital)
- › The device may heat up when in use.
- › Only process media that will not react dangerously to the extra energy produced through processing. This also applies to any extra energy produced in other ways, e.g. through light irradiation.

Warning!

- › Beware of the risk of:
 - glass breakage as a result of mechanical shaking power.



⚠ Notice!

- › Sharp edged vessels cause wear debris on the attachments.
- › Keep hand/arm vibration to a minimum (Directive 2002/44/EC) when operated manually:
 - Keep the sample container as vertical as possible.
 - Only exert the minimum pressure necessary for the mixing process.
 - Use attachments for multiple samples when there are a large number of samples.

/// Power supply / Switching off the device

⚠ Notice!

- › The device can only be disconnected from the mains supply by pulling out the mains plug or the connector plug.
- › The power supply unit must be operated with the country-typical adapter.
- › The outlet for the mains plug must be easily accessible.
- › The device is maintenance-free and must not be opened.

/// Disposal instructions

- › The device, packaging and accessories must be disposed of in accordance with national regulations.



Intended use

/// Use

- › The **Hula dancer** is designed for shaking test tubes. The shaking motion is started by lightly pressing the test tube into the soft-elastic attachment. Shaking stops as soon as you lift out the test tube.

/// Area of use

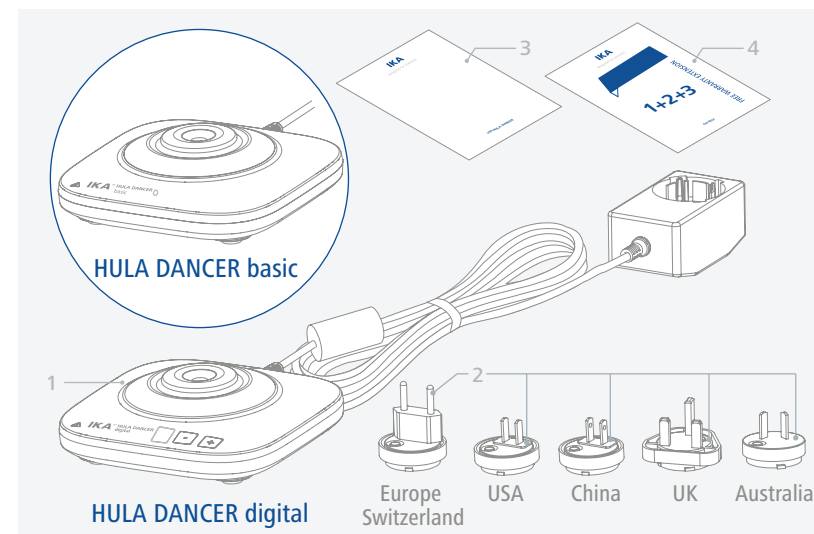
Indoor environments similar to that a laboratory of research, teaching, trade or industry.

The safety of the user cannot be guaranteed:

- › if the device is operated improperly or contrary to the manufacture's specifications.
- › if the device or the printed circuit board are modified by third parties.

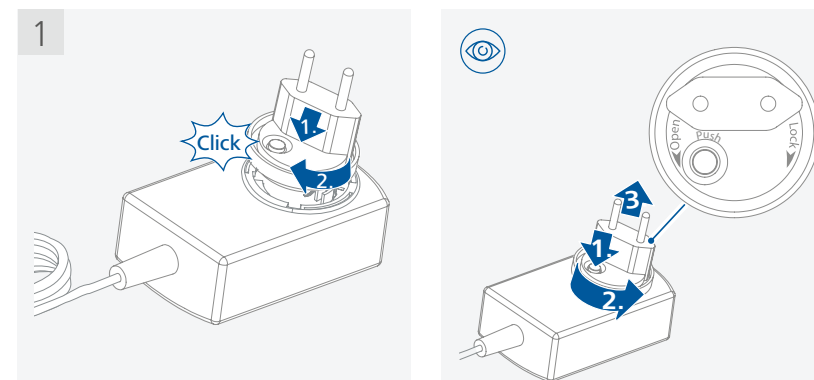
Unpacking

- › Please unpack the device carefully.
- › Any damage should be notified immediately to the shipping agent (post office, railway network or logistics company).

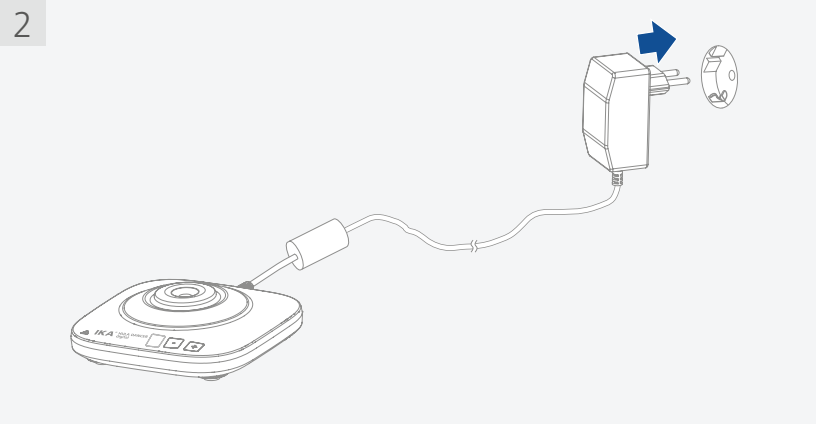


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2	Exchangeable adapters for the power supply	4	Warranty card

Installation

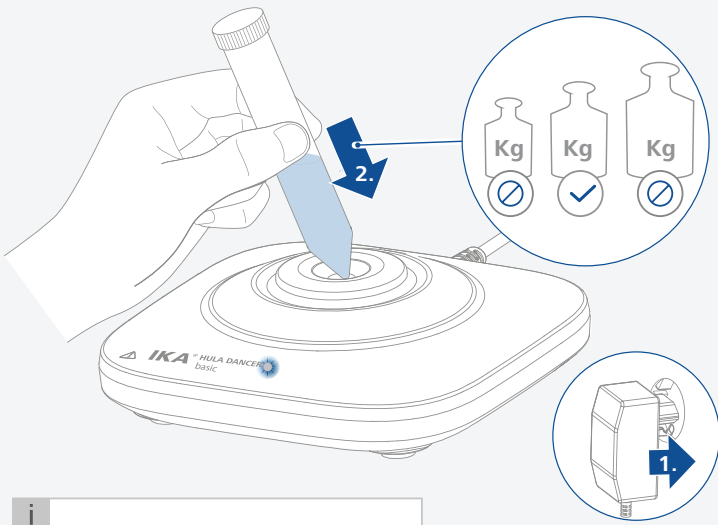


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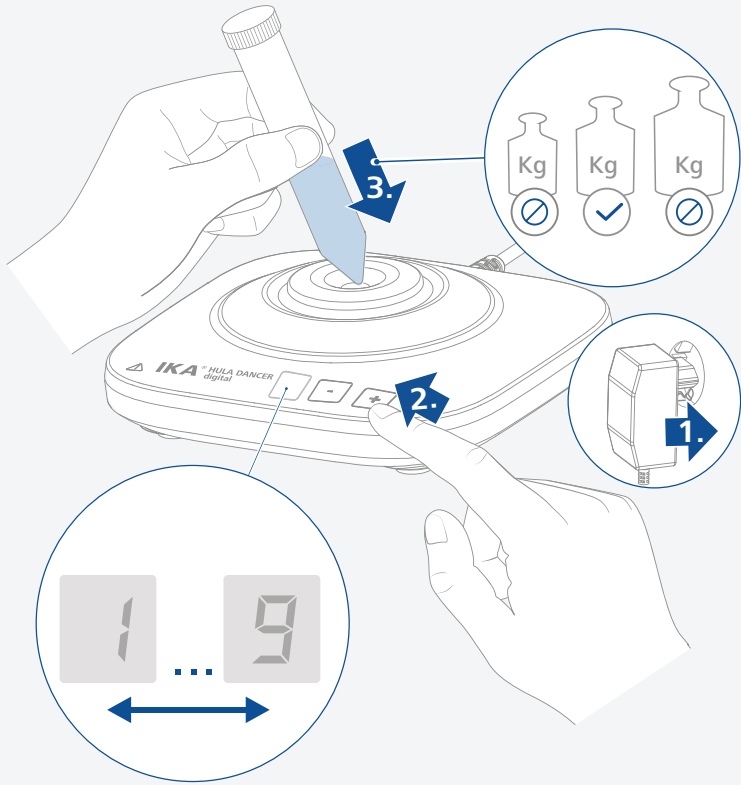
Operation

HULA DANCER basic



i Fix: 2800 rpm

HULA DANCER digital



↑	-	1 : 1200 rpm	↓	6 : 2200 rpm
		2 : 1400 rpm		7 : 2400 rpm
		3 : 1600 rpm		8 : 2600 rpm
		4 : 1800 rpm		+ 9 : 2800 rpm
		5 : 2000 rpm		

Maintenance and cleaning

The device is maintenance-free. It is only subject to the natural wear and tear of components and their statistical failure rate.

/// Cleaning

For cleaning disconnect the mains plug!

Use only cleaning agents which have been approved by IKA to clean the devices:

Water containing surfactant / isopropyl alcohol.

- › Wear protective gloves during cleaning the devices.
- › Electrical devices may not be placed in the cleaning agent for the purpose of cleaning.
- › Do not allow moisture to get into the device when cleaning.
- › Before using another than the recommended method for cleaning or decontamination, the user must ascertain with that this method does not destroy the device.

/// Ordering spare parts:

When ordering spare parts, please indicate:

- › device type.
- › serial number, see type plate
- › item and designation of the spare part, spare parts diagram and spare parts list.

/// Repairs:

Please send in device for repair only after it has been cleaned and is free from any materials which may constitute a health hazard.

For repair, please request the "Decontamination Certificate" from **IKA**, or download printout of it from the **IKA** website.

If you require servicing, return the device in its original packaging. Storage packaging is not sufficient. Please also use suitable transport packaging.

Accessories

See more accessories on www.imlab.eu.

Technical data

	Hula dancer basic	Hula dancer digital
General data		
Type of movement	orbital	
Shaking diameter	4.5 mm	
Permissible shaking weight (incl. attachment)	0.1 kg	
Motor rating input	9.5 W	
Motor rating output	5 W	
Permissible ON time	100%	
Speed	fix, 2800 rpm	adjustable, 1200...2800 rpm
Touch function	yes	
Dimensions (W x D x H)	123 x 123 x 42	
Weight	0.7 kg	
Permissible ambient temperature	+5 ... +40 °C	
Permissible relative humidity	80 %	
Protection class according to DIN EN 60529	IP 42	
Power supply		
Input	100 ... 240 VAC 0.4 A 50 / 60 Hz	
Output	12 VDC / 1.25 A 15 W.LPS (limited power source)	
Protection class	II (double insulated)	

Subject to technical changes!

Warranty

In accordance with IKA warranty conditions, the warranty period is 24 months. For claims under the warranty please contact your local dealer. You may also send the machine direct to our factory, enclosing the delivery invoice and giving reasons for the claim. You will be liable for freight costs. The warranty does not cover worn out parts, nor does it apply to faults resulting from improper use, insufficient care or maintenance not carried out in accordance with the instructions in this operating manual.

