

*The Driver*



OLIVERKESSLER

# **INSTRUCTION MANUAL**

**DRIV SA & DRIV DEST**



OLIVERKESSLER

**THE SOLITAIRE PUNKAH**  
*Icon of Luxury and Taste*

# THE SOLITAIRE PUNKAH

*Icon of Luxury and Taste*

## Drivers Product Family:

DRIV SA	Stand alone Driver
DRIV DEST	Driver for Desert & Tropics kit
DEST	Desert & Tropics Kit
SYNC	SynchTool (optional)
REMO	Remote Control (optional)

# TABLE OF CONTENTS

<b>1</b>	<b>IMPORTANT SAFETY INSTRUCTIONS</b>	<b>4</b>
<hr/>		
<b>2</b>	<b>INSTALLATION AND INITIAL START-UP</b>	
<hr/>		
<b>2.1</b>	<b>General Installation Instructions</b>	<b>11</b>
<b>2.2</b>	<b>Unpacking Instructions &amp; Packlist</b>	<b>12</b>
<b>2.3</b>	<b>Basic Installation Instructions</b>	<b>13</b>
<b>2.4</b>	<b>Installation Instructions (DRIV SA)</b>	<b>14</b>
<b>2.5</b>	<b>Installation Instructions (DRIV DEST)</b>	<b>17</b>
<b>2.6</b>	<b>Initial Start Up</b>	<b>20</b>
<hr/>		
<b>3</b>	<b>TROUBLESHOOTING</b>	<b>21</b>
<hr/>		
<b>4</b>	<b>SERVICING</b>	<b>22</b>
<hr/>		
<b>5</b>	<b>TECHNICAL SPECIFICATIONS</b>	<b>23</b>
<hr/>		

# 1 IMPORTANT SAFETY INSTRUCTIONS

**Always read through and comply with the following safety instructions!**






We make every effort to keep the safety standards of our products up to date and to offer our customers the highest possible degree of safety. Our products are designed, built and tested in accordance with the safety standards that apply in each case. Compliance with these standards is continuously monitored by our quality assurance system. The product described here has been designed, built and tested in accordance with the attached EC Certificate of Conformity and has left the manufacturer's plant in a condition fully complying with safety standards. To maintain this condition and to ensure safe operation, you must observe all instructions and warnings provided in this manual. If you have any questions regarding these safety instructions, your local agent or Oliver Kessler Design will be happy to answer them.

Furthermore, it is your responsibility to use the product in an appropriate manner. This product must not be used in any way that may cause personal injury or property damage. You are responsible if the product is used for any intention other than its designated purpose or in disregard of the manufacturer's instructions. The manufacturer shall assume no responsibility for such use of the product.

The product is used for its designated purpose if it is used in accordance with its product documentation and within its performance limits (see data sheet, documentation, the following safety instructions). Installing the product requires technical skills and a basic knowledge of English. It is therefore essential that only skilled and specialized staff or thoroughly trained personnel with the required skills be allowed to install the product. Keep the basic safety instructions and the product documentation in a safe place and pass them on to the subsequent users.

Observing the safety instructions will help prevent personal injury or damage of any kind caused by dangerous situations. Therefore, carefully read through and adhere to the following safety instructions before and when using the product. It is also absolutely essential to observe the additional safety instructions on personal safety, for example, that appear in relevant parts of the product documentation. In these safety instructions, the word „product“ refers to all merchandise sold and distributed by Oliver Kessler Design GmbH, including all accessories.





## Symbols and safety labels

					
Notice, general danger location Observe product documentation	Danger of electric shock	PE terminal	Ground	Choking hazard, small parts could be swallowed by infants	

# 1 IMPORTANT SAFETY INSTRUCTIONS

## Tags and their meaning

The following signal words are used in the product documentation in order to warn the reader about risks and dangers.

	indicates a hazardous situation which, if not avoided, will result in death or serious injury.
	indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
	indicates the possibility of incorrect operation which can result in damage to the product. In the product documentation, the word ATTENTION is used synonymously.

These tags are in accordance with the standard definition for civil applications in the European Economic Area. Definitions that deviate from the standard definition may also exist in other economic areas or military applications. It is therefore essential to make sure that the tags described here are always used only in connection with the related product documentation and the related product. The use of tags in connection with unrelated products or documentation can result in misinterpretation and in personal injury or material damage.

## Operating states and operating positions

The product may be operated only under the operating conditions and in the positions specified by the manufacturer. If the manufacturer's specifications are not observed, this can result in electric shock, fire and/or serious personal injury or death. Applicable local or national safety regulations and rules for the prevention of accidents must be observed in all work performed.

1. Unless otherwise specified, the following requirements apply to Oliver Kessler Design products: predefined operating position is always with the housing floor facing down, IP protection, pollution severity 2, overvoltage category 2, use only indoors,
2. Do not install the product to surfaces that for reasons of weight or stability are unsuitable for this purpose. Always follow the manufacturer's installation instructions when installing the product and fastening it to objects or structures (e.g. walls and shelves). An installation that is not carried out as described in the product documentation could result in personal injury or death.

# 1 IMPORTANT SAFETY INSTRUCTIONS

3. Do not place the product on heat-generating devices such as radiators or fan heaters. The ambient temperature must not exceed the maximum temperature specified in the product documentation or in the data sheet. Product overheating can cause electric shock, fire and/or serious personal injury or death.

## Electrical safety

If the information on electrical safety is not observed either at all to the extent necessary, electric shock, fire and/or serious personal injury or death may occur.

1. Prior to cleaning, servicing and demounting the product, disconnect it completely from the power supply (e.g. AC supply network or battery). Use a soft, non-linting cloth to clean the product. Never use chemical cleaning agents such as alcohol, acetone or diluents for cellulose lacquers.

2. Intentionally breaking the protective earth connection either in the feed line or in the product itself is not permitted. Doing so can result in the danger of an electric shock from the product. If extension cords or connector strips are implemented, they must be checked on a regular basis to ensure that they are safe to use.

3. If the product does not have a power switch for disconnection from the AC supply network, the plug of the connecting cable is regarded as the disconnecting device. In such cases, always ensure that the power plug is easily reachable and accessible at all times (corresponding to the length of connecting cable, approx. 2 m). Functional or electronic switches are not suitable for providing disconnection from the AC supply network. If products without power switches are integrated into racks or systems, a disconnecting device must be provided at the system level.

4. Never use the product if the power cable is damaged. By taking appropriate safety measures and carefully laying the power cable, you can ensure that the cable will not be damaged and that no one can be hurt by, for example, tripping over the cable or suffering an electric shock.

5. Do not insert the plug into sockets that are dusty or dirty. Insert the plug firmly and all the way into the socket. Otherwise, sparks that result in fire and/or injuries may occur.

6. Do not overload any sockets, extension cords or connector strips; doing so can cause fire or electric shocks.

# 1 IMPORTANT SAFETY INSTRUCTIONS

7. For measurements in circuits with voltages  $V_{rms} > 30 \text{ V}$ , suitable measures (e.g. appropriate measuring equipment, fusing, current limiting, electrical separation, insulation) should be taken to avoid any hazards.
8. Ensure that the connections with information technology equipment, e.g. PCs or other industrial computers, comply with the IEC60950-1/EN60950-1 or IEC61010-1/EN 61010-1 standards that apply in each case.
9. Unless expressly permitted, never remove the cover or any part of the housing while the product is in operation. Doing so will expose circuits and components and can lead to injuries, fire or damage to the product.
10. If a product is to be permanently installed, the connection between the PE terminal on site and the product's PE conductor must be made first before any other connection is made. The product may be installed and connected only by a licensed electrician.
11. For permanently installed equipment without built-in fuses, circuit breakers or similar protective devices, the supply circuit must be fused in such a way that anyone who has access to the product, as well as the product itself, is adequately protected from injury or damage.
12. Use suitable overvoltage protection to ensure that no overvoltage (such as that caused by a bolt of lightning) can reach the product. Otherwise, the product can be damaged.
13. Any object that is not designed to be placed in the openings of the housing must not be used for this purpose. Doing so can cause short circuits inside the product and/or electric shocks, fire or injuries.
14. Unless specified otherwise, products are not liquid-proof (see also section „Operating states and operating positions“, item 1. Therefore, the equipment must be protected against penetration by liquids. If the necessary precautions are not taken, the user may suffer electric shock or the product itself may be damaged, which can also lead to personal injury.
15. Never use the product under conditions in which condensation has formed or can form in or on the product, e.g. if the product has been moved from a cold to a warm environment. Penetration by water increases the risk of electric shock.
16. Operation is permitted only on sockets with an earthing contact and protective earth connection.

# 1 IMPORTANT SAFETY INSTRUCTIONS

## Operation

1. It is the responsibility of the employer/operator to select suitable personnel for operating the product.
2. Before you move or transport the product, read and observe the section titled „Transport“.
3. As with all industrially manufactured goods, the use of substances that induce an allergic reaction (allergens) such as nickel cannot be generally excluded. If you develop an allergic reaction (such as a skin rash, frequent sneezing, red eyes or respiratory difficulties) when using an Oliver Kessler Design product, consult a physician immediately to determine the cause and to prevent health problems or stress.
4. Depending on the function, certain products such as RF radio equipment can produce an elevated level of electromagnetic radiation. Considering that unborn babies require increased protection, pregnant women must be protected by appropriate measures. Persons with pacemakers may also be exposed to risks from electromagnetic radiation. The employer/operator must evaluate workplaces where there is a special risk of exposure to radiation and, if necessary, take measures to avert the potential danger.
5. Should a fire occur, the product may release hazardous substances (gases, fluids, etc.) that can cause health problems. Therefore, suitable measures must be taken, e.g. protective masks and protective clothing must be worn.

# 1 IMPORTANT SAFETY INSTRUCTIONS

## Batteries and rechargeable batteries/cells

If the information regarding batteries and rechargeable batteries/cells is not observed either at all or to the extent necessary, product users may be exposed to the risk of explosions, fire and/or serious personal injury, and, in some cases, death. Batteries and rechargeable batteries with alkaline electrolytes (e.g. lithium cells) must be handled in accordance with the EN 62133 standard.

1. Cells must not be taken apart or crushed.
2. Cells or batteries must not be exposed to heat or fire. Storage in direct sunlight must be avoided. Keep cells and batteries clean and dry. Clean soiled connectors using a dry, clean cloth.
3. Cells or batteries must not be short-circuited. Cells or batteries must not be stored in a box or in a drawer where they can short-circuit each other, or where they can be short-circuited by other conductive materials. Cells and batteries must not be removed from their original packaging until they are ready to be used.
4. Keep cells and batteries out of the hands of children. If a cell or a battery has been swallowed, seek medical aid immediately.
5. Cells and batteries must not be exposed to any mechanical shocks that are stronger than permitted.
6. If a cell develops a leak, the fluid must not be allowed to come into contact with the skin or eyes. If contact occurs, wash the affected area with plenty of water and seek medical aid.
7. Cells and batteries must be recycled and kept separate from residual waste. Rechargeable batteries and normal batteries that contain lead, mercury or cadmium are hazardous waste. Observe the national regulations regarding waste disposal and recycling.

# 1 IMPORTANT SAFETY INSTRUCTIONS

## Transport

1. The product may be heavy. Therefore, the product must be handled with care.
2. The user is responsible for securely fastening the products to or on the means of transport or lifting. Observe the safety regulations of the manufacturer of the means of transport or lifting. Noncompliance can result in personal injury or material damage.

## Waste disposal

1. If products or their components are mechanically and/or thermally processed in a manner that goes beyond their intended use, hazardous substances (heavy-metal dust such as lead, beryllium, nickel) may be released. For this reason, the product may only be disassembled by specially trained personnel. Improper disassembly may be hazardous to your health. National waste disposal regulations must be observed.
2. If handling the product releases hazardous substances or fuels that must be disposed of in a special way, e.g. coolants or engine oils that must be replenished regularly, the safety instructions of the manufacturer of the hazardous substances or fuels and the applicable regional waste disposal regulations must be observed. Also observe the relevant safety instructions in the product documentation. The improper disposal of hazardous substances or fuels can cause health problems and lead to environmental damage.

# 2.1 GENERAL INSTALLATION INSTRUCTIONS

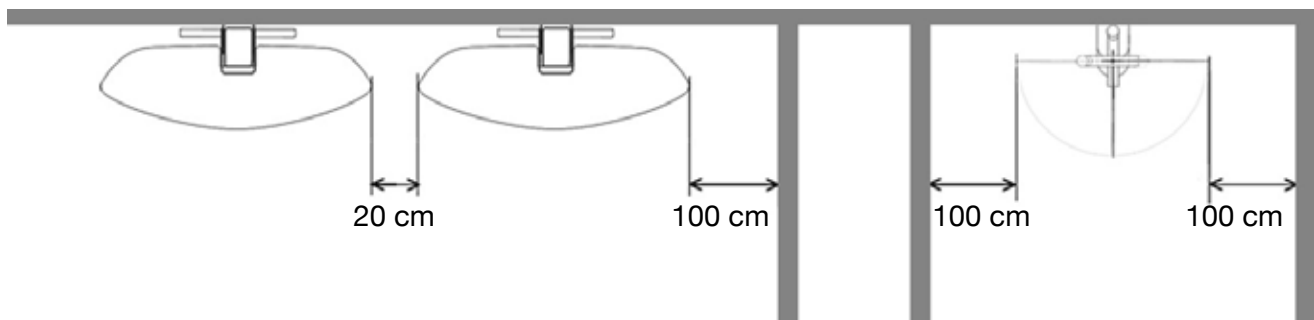
## General installation instructions

The entire ceiling fan may have a gross weight up to 35kg depending on the blade and the counterweights. Make sure it is mounted to a horizontal, solid surface by a professional! Check in advance if the surface is appropriate. Use installation material provided with the product or equivalent.

Never attach the ceiling fan directly to a suspended ceiling! Make sure to use an adapter professionally manufactured e.g. from steel tubes to attach the device through the suspension to the solid concrete ceiling.

Do install the product to a ceiling not lower than 2,70m (9 ft.) and at a location that makes sure nothing and nobody gets into the motion zone of the blade. Installation must satisfy local regulations. Note that some blades may be banned in public or semi public places due to regional fire safety laws.

Do allow enough space around the object to let it move freely 180 degrees with a minimum distance of 100 cm to walls or other objects and 20 cm to next blade to avoid collision or clamping (see image). The operational swing angle is approximately 70° to both sides.



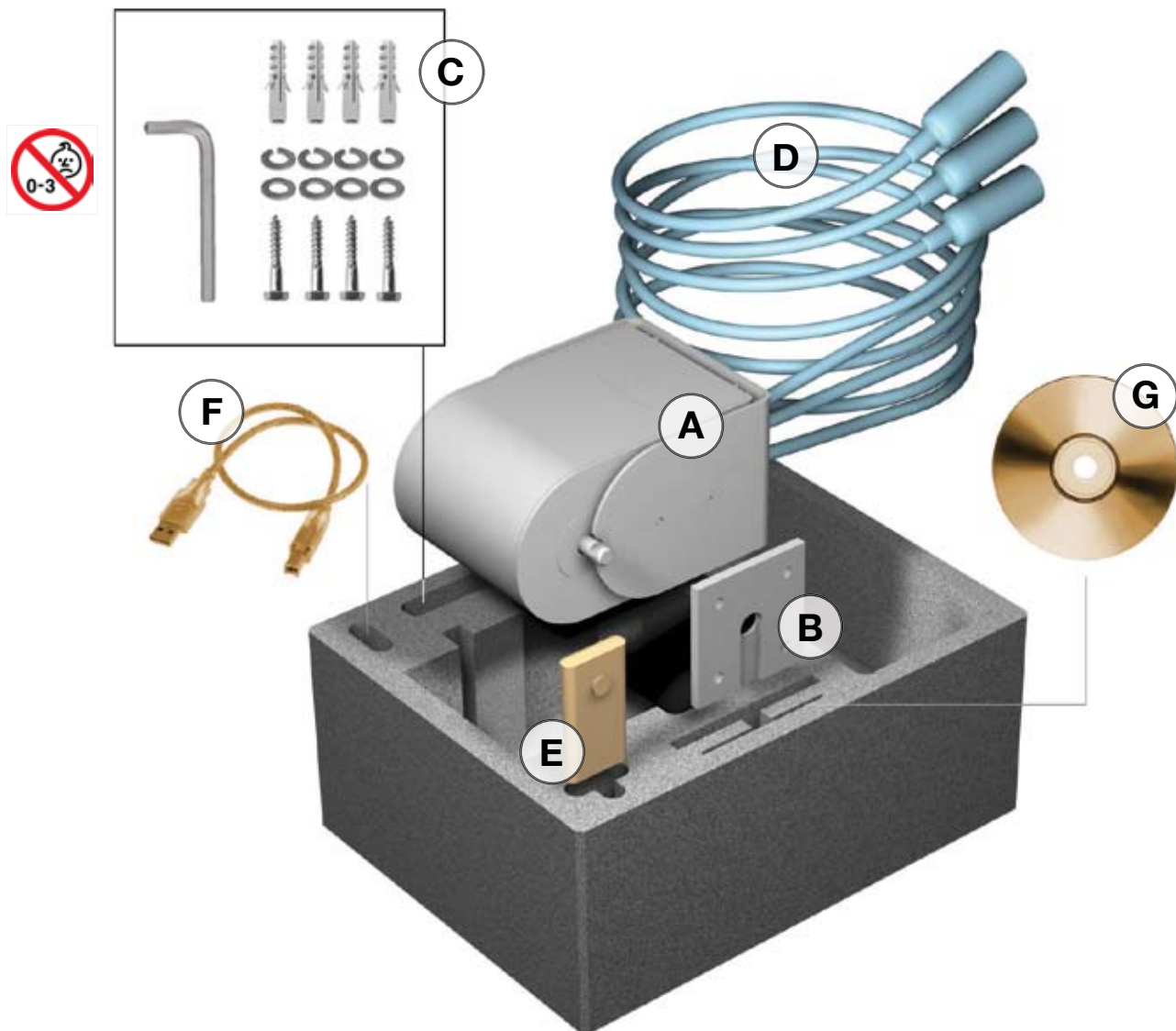
Mount the product in a sheltered and wind-free area. Avoid direct sunlight on the driver case to prevent overheating of the control. In case of wind make sure to detach first the counterweights and then the blade from the driver unit to avoid damage. Gusts of wind may influence the movement of the blade and the fan synchronization. Some blades are for indoor use only, check the instruction manual of the blade if you are unsure.

Do only mount certified blades and the corresponding weights found in our catalogue or on our webpage. If you use any other blade or weights or if you use the driver for anything else than powering certified blades the warranty is void and you possibly cause severe harm to life!

All electric assembly has to be done by a professional. Never open the case of the driver. Doing so results in loss of warranty and may cause severe injury by high voltage electric shocks. Make sure all electricity is entirely switched off during installation and servicing! Never operate the product before the installation process is entirely completed!

## 2.2 UNPACKING INSTRUCTIONS & PACKLIST

Check if you have received the following parts. Do not install if any part is damaged or missing. Substitution of parts or accessories not designated for use with this product could result in personal injury and will void the warranty! Packaging contents may include small parts. Keep out of reach of infants to avoid choking!



### Partlist:

- A) Driver with installation bracket (1)
- B) Adapter plate (1)
- C) Installation kit (1)

### Additional partlist (DRIV DEST):

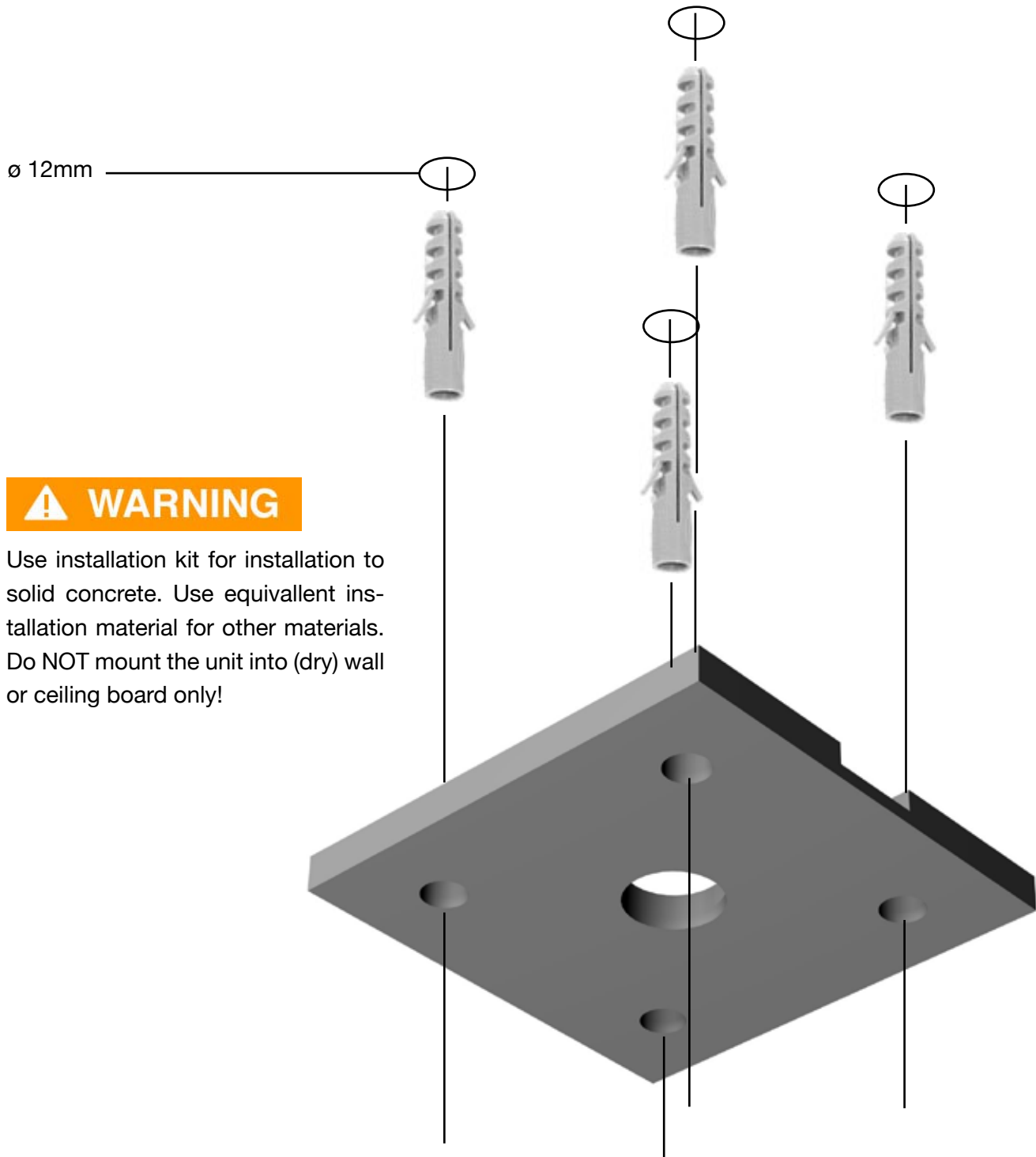
- D) Preinstalled powercords (3)

### Additional partlist (Option REMO):

- E) Remote control (1)
- F) USB recharge cable for remote control (1)
- G) CD-ROM containing USB drivers (1)

## 2.3 BASIC INSTALLATION INSTRUCTIONS

If you use the installation kit: Drill four  $\varnothing 12\text{mm}$  holes in concrete ceiling and insert dowels. Use adapter plate as template to mark the correct drilling position. Make sure to be able to feed powercords through the center hole.



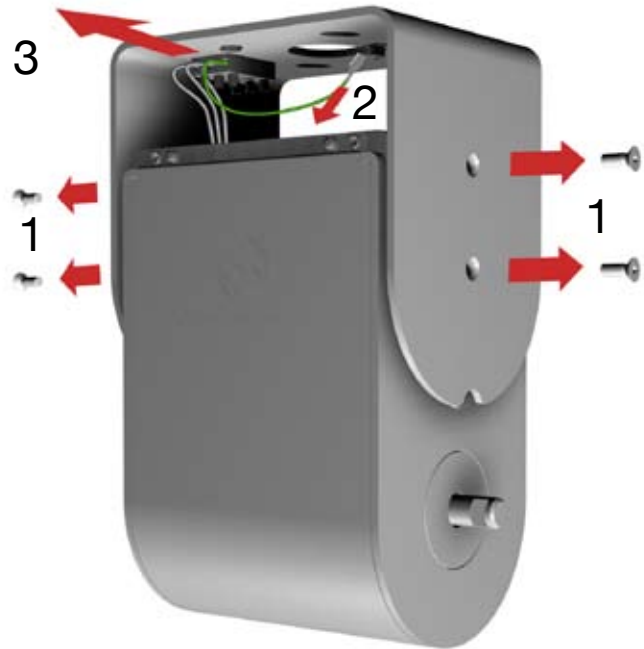
Continue on page 14 for DRIV SA, continue on page 17 for DRIV DEST

## 2.4 INSTALLATION INSTRUCTIONS (DRIV SA)

Take off the installation bracket by releasing the 4 main screws. Detach ground clamp and main power plug.

### NOTICE

Slide bracket slowly upwards to avoid damages to wiring

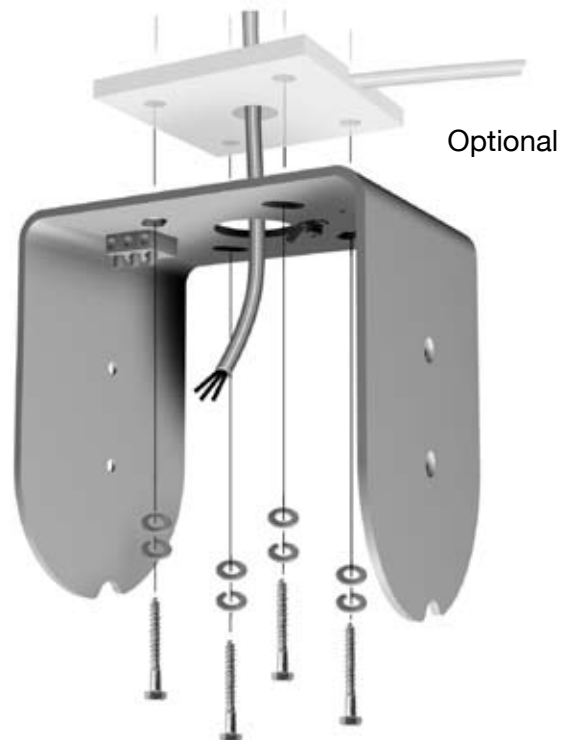


Attach installation bracket to the ceiling. Insert adapter plate if sideways wiring is necessary.



### ⚠ WARNING

Use installation kit or equivalent for installation. Do NOT mount the unit into (dry) wall or ceiling board only!

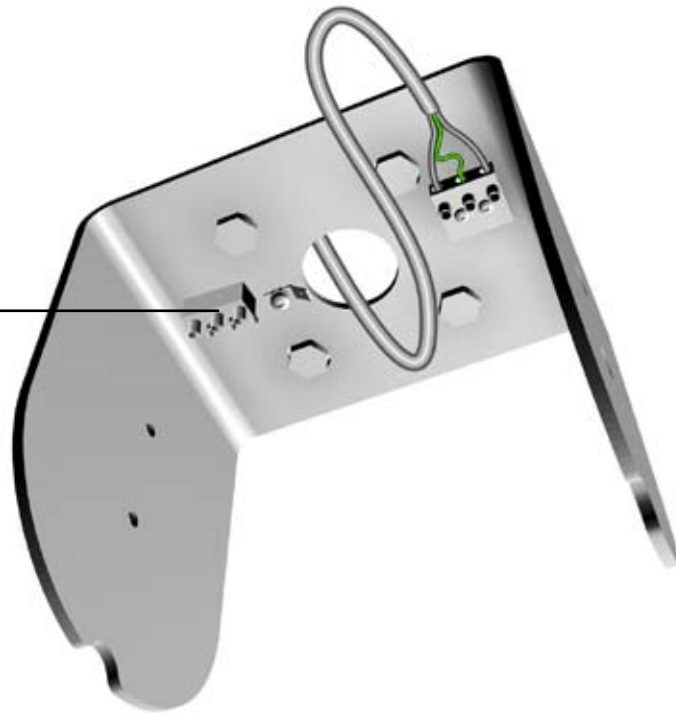


## 2.4 INSTALLATION INSTRUCTIONS (DRIV SA)

Connect 85 - 265 VAC powercord to the bracket clamp. Pay attention to the right position of the wires. Ground connection is mandatory. Make sure to attach cord to a switch (e.g. wall switch) for later operation. **Consult a qualified electrician for installation!**

### NOTICE

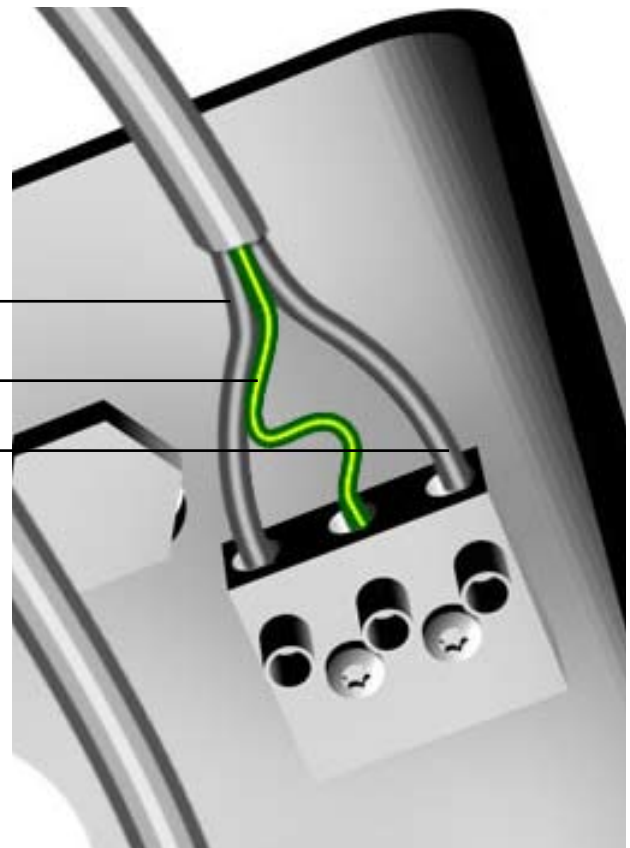
Second clamp for optional wired Synchtool only.



L1 Active

PE Ground

N Neutral



### ⚠ WARNING

Wire diameter 1 - 2.5 mm<sup>2</sup>

## 2.4 INSTALLATION INSTRUCTIONS (DRIV SA)

Slide plug onto socket, slide ground clamp on pin. If you are installing multiple synchronized drivers make sure to check that drivers are mounted facing into the same directions. Check sticker on driver top.



Slide driver all the way up and fix it with the 4 screws.

### WARNING

Make sure not to jam any wires

### NOTICE

Tightening torque 8Nm



Continue on page 20

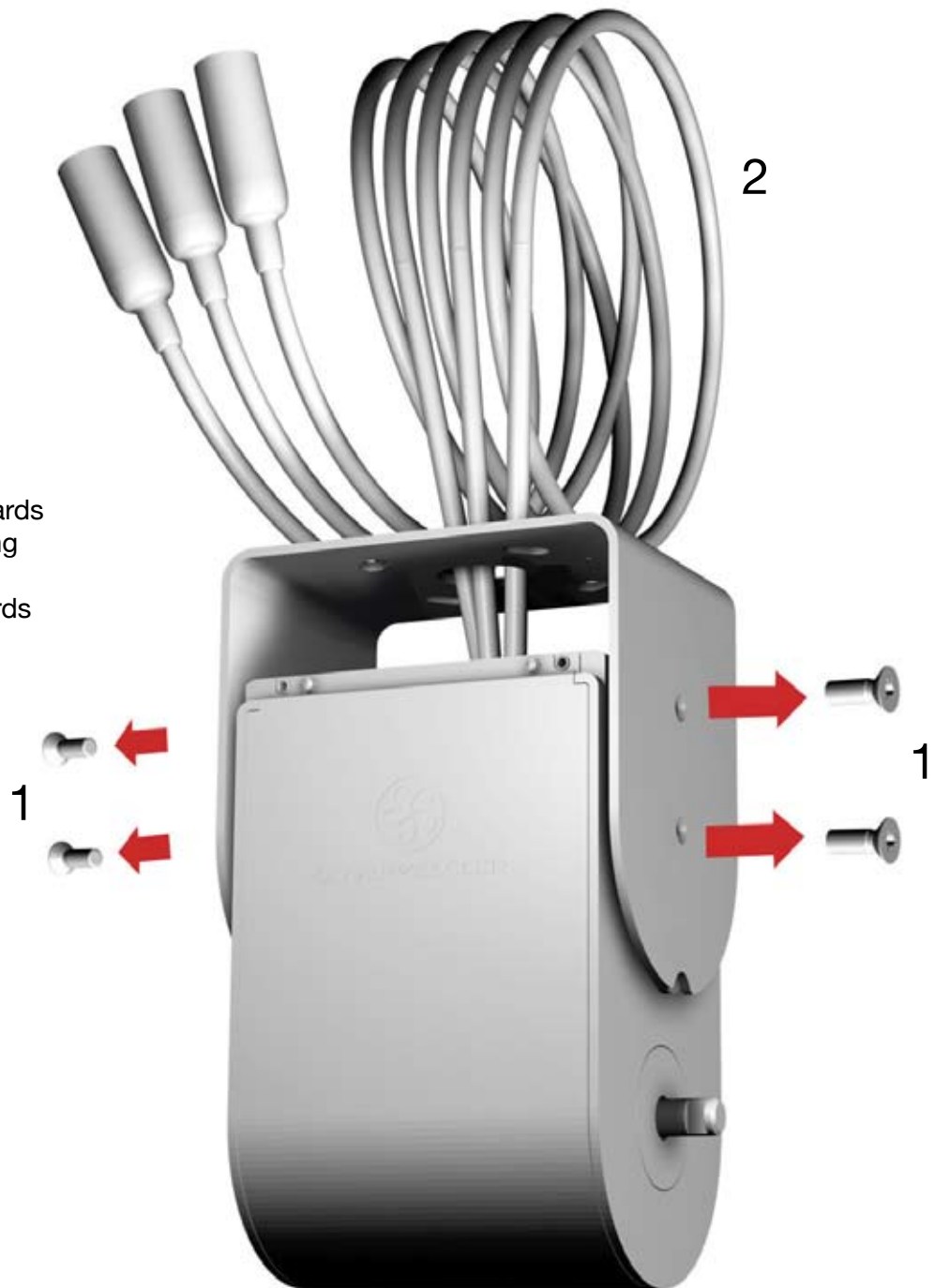
## 2.5 INSTALLATION INSTRUCTIONS (DRIV DEST)

Take off the installation bracket by releasing the 4 main screws. Feed powercords all the way out of center hole of bracket.

### NOTICE

Slide bracket slowly upwards to avoid damages to wiring

Do avoid to pull powercords

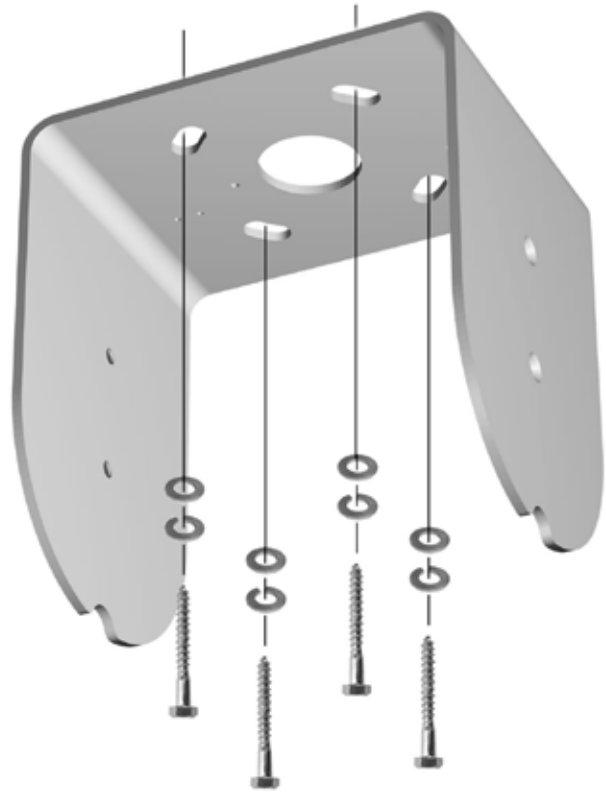


## 2.5 INSTALLATION INSTRUCTIONS (DRIV DEST)

Attach installation bracket to the ceiling.

### **⚠ WARNING**

Use installation kit or equivalent for installation. Do NOT mount the unit into (dry) wall or ceiling board only!



Feed powercords through center hole.



## 2.5 INSTALLATION INSTRUCTIONS (DRIV DEST)

Slide driver all the way up and fix it with the 4 screws.

### NOTICE

Slide driver slowly upwards to avoid damages to wiring

Do avoid to pull powercords

Tightening torque 8Nm

### ⚠ WARNING

Make sure not to jam any wires



### NOTICE

Connect to DEST next, refer to instruction manual of the Desert & Tropics kit

## 2.6 INITIAL START UP

### NOTICE

**DRIV DEST: Connect to DEST first, refer to instruction manual of the Desert & Tropics kit**

#### TEST RUN THE DRIVER

DRIV SA and DRIV DEST:

Turn main power on, move switch to ON position

Axle will turn slowly up to appr. 70° and then start to turn appr. 70° to both directions

DRIV SA and DRIV DEST with SynchTool:

Turn main power on, move switch to ON position

Axle of master driver will turn slowly up to appr. 70°

Axle of slave drivers will turn slowly to appr. 70°

All axles will start to turn appr. 70° to both directions

DRIV SA and DRIV DEST with remote control:

Turn main power on, press ON/OFF button on remote control

Axle will turn slowly up to appr. 70° and then start to swing to both directions

DRIV SA and DRIV DEST with remote control and SynchTool:

Turn main power on, press ON/OFF button on remote control

Axle of master driver will turn slowly up to appr. 70°

Axle of slave drivers will turn slowly to appr. 70°

All axles will start to turn appr. 70° to both directions

### NOTICE

**Turn off main power after the successful test drive and continue with the installation of the blade**

# 3. TROUBLE SHOOTING

TROUBLE	PROBABLE CAUSE	SUGGESTED REMEDY
Driver will not start Axle does not turn Blade (if installed) does not move	Main power is off	Switch main power on
	Blade is blocked	Remove blockage
	Powercords are not connected properly	Check powercords
Drivers do not run in synchronicity (only drivers equipped with SynchTool)	Temperature too high	Check technical specification for maximum temperature
	Gust of wind affected drivers	Drivers will re-synchronize after short time as soon as wind stops (check for draft at the installation location)
Drivers do not run in twisted synchronicity (drivers equipped with SynchTool)	Electronic is overheated	Choose a cooler place for installation (see technical specifications for maximum operating temperatures)
	Affected driver is installed at a 180° twist	Turn affected driver 180°, check installation manual and direction indicator on sticker at driver top
Remote control (optional) does not work	Check LED on remote control:	
	LED is off or constantly red when pushing the button	Recharge remote control (see Servicing section of this manual)
	LED is blinking red when pushing the button	Switch main power of entire system off and after 10 sec on again to reset the system

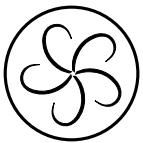
## 4. SERVICING

1. Do not open the inner case of the driver. The product may be opened only by authorized, specially trained personnel. Contact your local dealer or Oliver Kessler Design should you not be able to solve a malfunction by referring to the Troubleshooting section of this manual.
2. Any manipulation of the product not carried out by personnel authorized by Oliver Kessler Design will result in loss of warranty.
3. Recharge remote control by connecting the remote control to a USB port with the recharge cable. If necessary install the USB drivers to your computer first. Insert CD-ROM and follow the instructions in the READ ME file (MS Windows only). Regular recharging time is appr. 4 hours. During recharging the LED on the remote control illuminates constantly yellow. Do not open the case of the remote control.

# 5. TECHNICAL SPECIFICATIONS

<b>Product</b>	<b>DRIV SA *</b>	<b>DRIV DEST *</b>
<b>Mechanical data</b>		
Weight max. (kg)	10	12
Dimensions L x B x H (mm)	210x135x263	210x135x263
Protection class	IP 66 (in line with DIN EN 60529)	IP 66 (in line with DIN EN 60529)
Pivoting angle	± 70°	± 70°
<b>Electrical data</b>		
Mains voltage	85-265 VAC 50/60Hz	
Power input max.	140VA	
Average power consumption	30W (without wind / without additional options)	
Supply line cross section	1mm <sup>2</sup> to 2.5mm <sup>2</sup> (AWG14-18)	
Fuse	slow-blow, 1.25A (5x20mm)	
Radio frequency (REMO only)	2,4 GHz (FCC Part 15.247)	2,4 GHz (FCC Part 15.247)
Protection class (in line with DIN EN 61140)	I / protective grounding	III / safety extra low voltage
<b>Operating conditions</b>		
Temperature w/o direct sunlight	-10°C to +35°C	-10°C to +65°C
Humidity max.	0 to 95% rh (nc)	0 to 95% rh (nc)
Environment	only in non-corrosive environments in line with DIN EN ISO 8044 (DIN 50900)	
Wind	only in wind-protected areas / caution: do not overlook brief gusts	
<b>Storage/transport conditions</b>		
Vibration/shock max.	50g / 50ms	50g / 50ms
Transport height max. (aircraft)	14000 m	14000 m
Temperature	-40°C to +85°C	-40°C to +85°C
Humidity	0-95% rh (nc)	0-95% rh (nc)
Environment	no direct sunlight / protect from moisture	
<b>Functions/features</b>		
Safety stop	yes	yes
Mechanical end stops	yes (90°)	yes (90°)
Overtemperature protection	yes (45°C)	yes (70°C)
Different colors	opt	opt
Different speeds	opt	opt
Synchronization (SYNC)	opt	opt
Remote control (REMO)	opt	opt

\* includes REMO and SYNC options (if available for DRIV)



**OLIVERKESSLER**

Oliver Kessler Design GmbH

Turfstr.11

81929 Munich

Germany

Phone: +49 89 54 88 78 18

E-Mail: [kontakt@oliverkessler.com](mailto:kontakt@oliverkessler.com)

Internet: [www.oliverkessler.com](http://www.oliverkessler.com)

© 2011 Oliver Kessler Design, all rights reserved