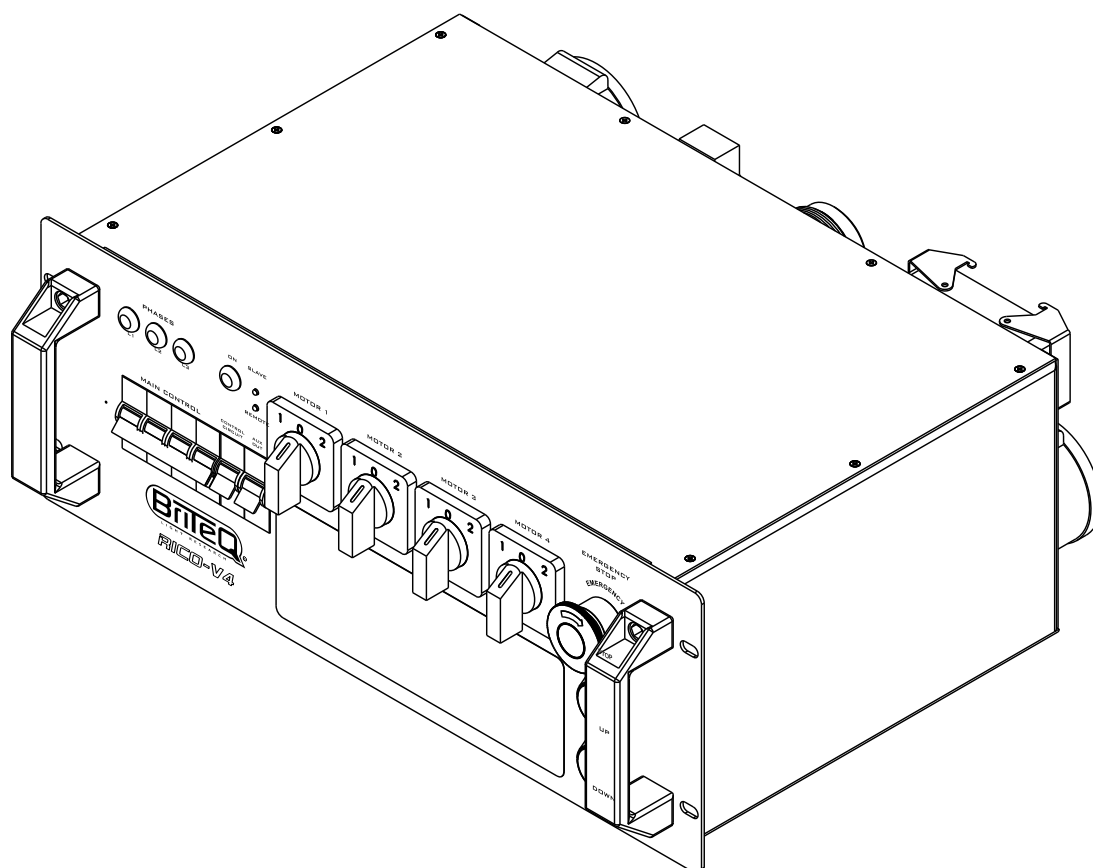


RICO-V4

CHAIN HOIST MOTOR CONTROLLER



ENGLISH

Operation Manual

Other languages can be downloaded from:
WWW.BRITEQ-LIGHTING.COM



Version: 1.0





EN - DISPOSAL OF THE DEVICE

Dispose of the unit and used batteries in an environment friendly manner according to your country regulations.

FR - DÉCLASSER L'APPAREIL

Débarrassez-vous de l'appareil et des piles usagées de manière écologique conformément aux dispositions légales de votre pays.

NL - VERWIJDEREN VAN HET APPARAAT

Verwijder het toestel en de gebruikte batterijen op een milieuvriendelijke manier conform de in uw land geldende voorschriften.

DU - ENTSORGUNG DES GERÄTS

Entsorgen Sie das Gerät und die Batterien auf umweltfreundliche Art und Weise gemäß den Vorschriften Ihres Landes.

ES - DESHACERSE DEL APARATO

Reciclar el aparato y pilas usadas de forma ecologica conforme a las disposiciones legales de su país.

PT - COMO DESFAZER-SE DA UNIDADE

Tente reciclar a unidade e as pilhas usadas respeitando o ambiente e em conformidade com as normas vigentes no seu país.

OPERATION MANUAL

Thank you for buying this Briteq® product. To take full advantage of all possibilities, please read these operating instructions very carefully.

FEATURES

- Standalone direct voltage chain hoist motor controller.
- Controls up to 4 motors in standalone operation
- Several units can be linked in master/slave using the link in/out on the back panel:
 - Easy control for a larger number of chain hoists.
 - Simultaneous hoist control using the UP/DOWN buttons on the master controller.
 - Centralized Emergency stop on the master controller.
 - “Slave” indicator led.
- Manual phase inversion switch for each output.
- Choice of different outputs for maximum flexibility (rental companies!):
 - 4x individual CEE16 4pole 16A outputs
 - 1x 16PIN multichannel industrial rectangular connector, Harting® compatible
 - 2x 19PIN multichannel industrial round connector, Socapex® compatible
 - 1x earthed 16A mains outlet: auxiliary output for all kinds of use.
- Remote control input (XLR) with led indicator to connect the [RICO-REMOTE] (optional, order code: 4650).
- Phase indicators to easily check if the 3phases are available.
- 32A 4pole circuit breaker protects ALL outputs, including the 32A output to the next unit. In case of emergency all 3 phases AND the neutral are disconnected.
- Two C16 (16A - 1P+N) 2-POLE automatic circuit breakers for control circuit + auxiliary output.
- Mains input cable (3x 32A, 5wire), equipped with CEE (3P+N+E) 32A inlet plug
- CEE (3P+N+E) outlet socket (3x 32A, 5wire) for bypass
- Extremely robust 19"/4U metal housing.
- **Designed and build in Europe to the highest international safety standards!**

BEFORE USE

Check the contents:

Check that the carton contains the following items:

- [RICO-V4] unit
- User manual

Some important instructions:

- Before you start using this unit, please check if there's no transportation damage. Should there be any, do not use the device and consult your dealer first.
- **Important:** This device left our factory in perfect condition and well packaged. It is absolutely necessary for the user to strictly follow the safety instructions and warnings in this user manual. Any damage caused by mishandling is not subject to warranty. The dealer will not accept responsibility for any resulting defects or problems caused by disregarding this user manual.
- Keep this booklet in a safe place for future consultation. If you sell the fixture, be sure to add this user manual.
- To protect the environment, please try to recycle the packing material as much as possible.

SAFETY INSTRUCTIONS:



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION: To reduce the risk of electric shock, do not remove the top cover. No user-serviceable parts inside. Refer servicing to qualified service personnel only.



The lightning flash with arrowhead symbol within the equilateral triangle is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within the equilateral triangle is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying this appliance.



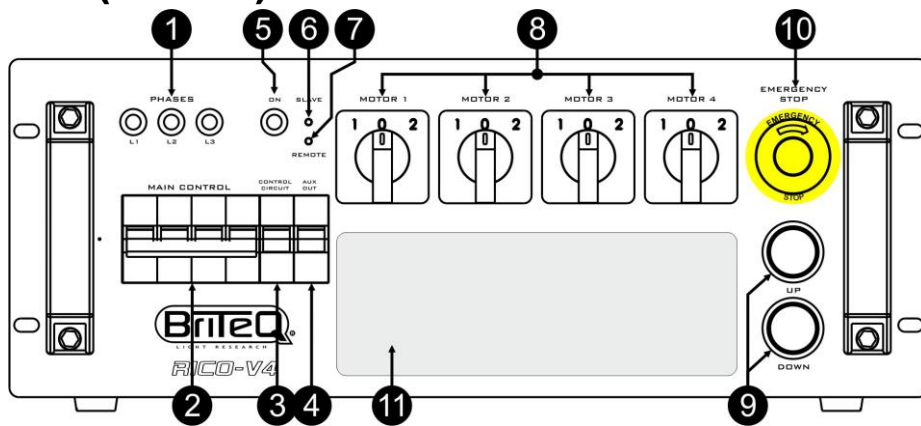
This symbol means: indoor use only



This symbol means: Read instructions

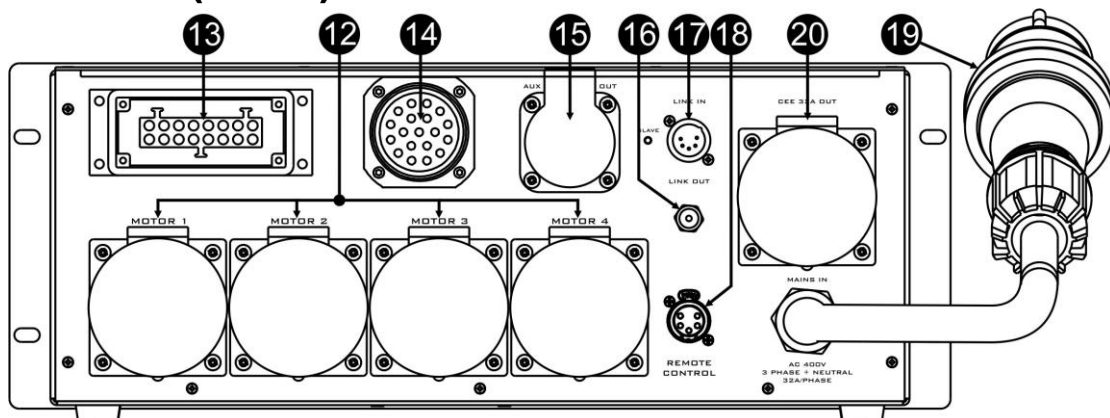
- To prevent fire or shock hazard, do not expose this appliance to rain or moisture.
- To avoid condensation to be formed inside, allow the unit to adapt to the surrounding temperatures when bringing it into a warm room after transport. Condense sometimes prevents the unit from working at full performance or may even cause damages.
- This unit is for indoor use only.
- Don't place metal objects or spill liquid inside the unit. No objects filled with liquids, such as vases, shall be placed on this appliance. Electric shock or malfunction may result. If a foreign object enters the unit, immediately disconnect the mains power.
- No naked flame sources, such as lighted candles, should be placed on the appliance.
- Don't cover any ventilation openings as this may result in overheating.
- Prevent use in dusty environments and clean the unit regularly.
- Keep the unit away from children.
- Inexperienced persons should not operate this device.
- Maximum safe ambient temperature is 40°C. Don't use this unit at higher ambient temperatures.
- Always unplug the unit when it is not used for a longer time or before you start servicing.
- The electrical installation should be carried out by qualified personal only, according to the regulations for electrical and mechanical safety in your country.
- Check that the available voltage is not higher than the one stated on the rear panel of the unit.
- The socket inlet shall remain operable for disconnection from the mains.
- The power cord should always be in perfect condition: switch the unit immediately off when the power cord is squashed or damaged. It must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard
- Never let the power-cord come into contact with other cables!
- This appliance must be earthed to in order comply with safety regulations.
- In order to prevent electric shock, do not open the cover. Apart from the mains fuse there are no user serviceable parts inside.
- **Never** repair a fuse or bypass the fuse holder. **Always** replace a damaged fuse with a fuse of the same type and electrical specifications!
- In the event of serious operating problems, stop using the appliance and contact your dealer immediately.
- Please use the original packing when the device is to be transported.
- Due to safety reasons it is prohibited to make unauthorized modifications to the unit.


FUNCTIONS (FRONT)



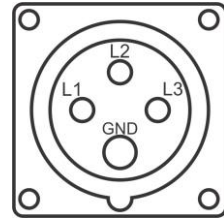
1. **PHASE INDICATORS:** used to check if all 3 phases are available.
Important note: DO NOT operate the hoists if one of the phases is not present!
2. **GENERAL CIRCUIT BREAKER:** protects ALL outputs, including the 32A output to the next unit. In case of emergency all 3 phases AND the neutral are disconnected.
3. **CONTROL CIRCUIT BREAKER:** protects the control electronics, should be switched on at all times to ensure proper operation.
4. **AUX OUTPUT CIRCUIT BREAKER:** protects the auxiliary mains output (15)
5. **ON INDICATOR:** indicates that the unit (control electronics) is switched on and ready to be operated.
6. **SLAVE INDICATOR:** is lit when the unit is used as slave unit, [LINK IN] connector (17) is used. The [UP/DOWN] controls can only be operated from the master unit. The [EMERGENCY STOP] controls are still operational on ALL connected controllers.
7. **REMOTE INDICATOR:** is lit when the [RICO-REMOTE] controller is connected to the [REMOTE CONTROL INPUT] (18). The [UP/DOWN] controls can only be operated from the remote controller. The [EMERGENCY STOP] controls are still operational on ALL connected controllers.
8. **MOTOR SWITCH:** used to select the operation mode of the connected motor:
 - POSITION 0: motor not used.
 - POSITION 1: motor connected with normal phase order (normal operation)
 - POSITION 2: motor connected with 2 phases switched (UP/DOWN inverted)*Important note: NEVER use these switches while the connected motor is running.*
9. **[UP/DOWN] BUTTONS:** as long as these buttons are pushed, the connected hoists will move in the indicated direction. These buttons are only operational on units working as master.
10. **[EMERGENCY STOP] BUTTON:** In case of an emergency you can press the [EMERGENCY STOP] button on ANY of the controllers that are connected in master/slave mode: ALL motor outputs will become inactive. The emergency button that was pressed lights up. To release (reset) it, rotate the [EMERGENCY STOP] button clockwise.
11. **SURFACE FOR NOTES:** can be used to write the exact function of the connected chain hoist motor.

FUNCTIONS (REAR)



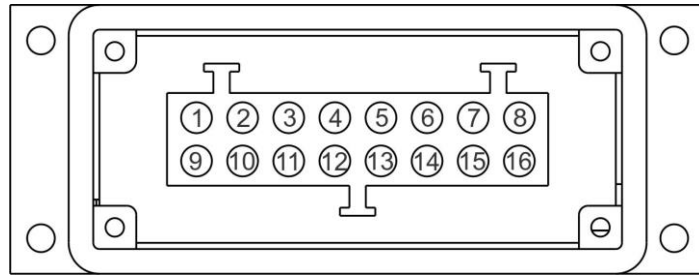
 **Important note:** never connect more than 1 hoist motor per output. Don't use the 19PIN (14) , 16PIN (13) and CEE-sockets (12) at the same time!

12. MOTOR OUTPUTS: four 3-phase CEE 4-pole 16A output connectors, used to connect the 4 chain hoist motors.



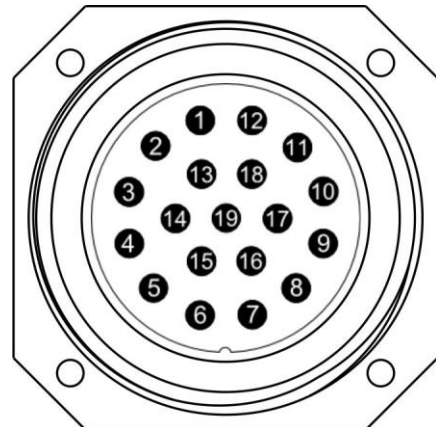
13. 16-PIN CONNECTOR: 4channel output for use with “HARTING®” multicables.

- PIN1 = L1 for motor 1
- PIN2 = L2 for motor 1
- PIN3 = L3 for motor 1
- PIN4 = L1 for motor 2
- PIN5 = L2 for motor 2
- PIN6 = L3 for motor 2
- PIN7 = L1 for motor 3
- PIN8 = L2 for motor 3
- PIN9 = L3 for motor 3
- PIN10 = L1 for motor 4
- PIN11 = L2 for motor 4
- PIN12 = L3 for motor 4
- PIN13~16 = not connected
- Chassis = earth connection



14. 19-PIN CONNECTOR: 4channel output for use with “SOCAPEX®” multicables.

- PIN1 = L1 for motor 1
- PIN2 = L2 for motor 1
- PIN3 = L3 for motor 1
- PIN4 = L1 for motor 2
- PIN5 = L2 for motor 2
- PIN6 = L3 for motor 2
- PIN7 = L1 for motor 3
- PIN8 = L2 for motor 3
- PIN9 = L3 for motor 3
- PIN10 = L1 for motor 4
- PIN11 = L2 for motor 4
- PIN12 = L3 for motor 4
- PIN13~19 = earth connection



- 15. [AUX] OUTPUT:** this is an auxiliary 16A mains output that can be used to all kinds of equipment. This output is secured by a 2-pole circuit breaker (4) on the front panel.
- 16. [LINK OUT]:** this fixed cable can be used to connect the controller to the [LINK IN] (17) of another controller. Several controllers can be daisy chained in master/slave mode: the 1st controller in the chain will act as the master unit, the others as slaves.
- 17. [LINK IN]:** used to connect the [LINK OUT] of the previous controller in the chain. The controller will now act as slave controller.
- 18. [REMOTE CONTROL] INPUT:** used to connect the optional [RICO-REMOTE] controller. With this controller you can operate the [UP/DOWN] + [EMERGENCY STOP] controls from a distance.
- 19. 32A INPUT:** 1,5m long mains input cable (3x 32A, 5wire), equipped with CEE (3P+N+E) inlet plug.
- 20. 32A OUTPUT:** CEE (3P+N+E) outlet socket (3x 32A, 5wire), can be used to feed-through up to 32A 3phase current.
- Important remark:** Make sure that the total input current will not be exceeded!

CONNECTIONS / USE

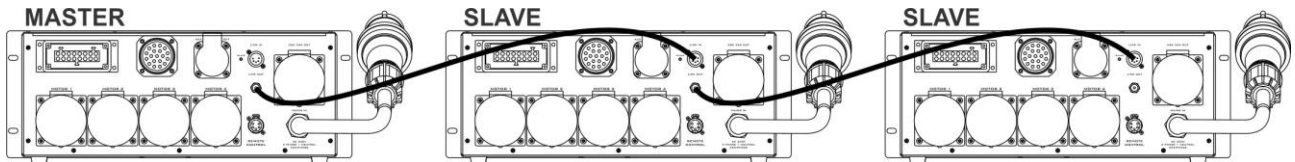
BASIC

Just connect the RICO-V4 to the chain hoist motors and control these using the controls as explained in the previous chapter. An optional [RICO-REMOTE] can be connected for remote operation.

MASTER / SLAVE

Connect several RICO-V4 to the chain hoist motors and daisy chain the [LINK IN/OUT] as shown on the drawing. Use the controls on the master as explained in the previous chapter.

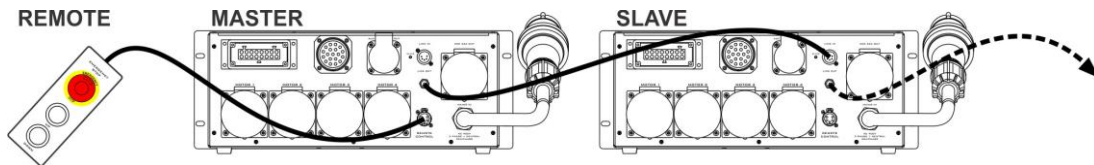
Remark: the [EMERGENCY STOP] can be used on all units, also on the slaves.



MASTER / SLAVE WITH 1 [RICO-REMOTE]

Connect several RICO-V4 to the chain hoist motors and daisy chain the [LINK IN/OUT] as shown on the drawing. Connect the optional [RICO-REMOTE] to the remote input of the master. Use the controls on the [RICO-REMOTE].

Remark: the [EMERGENCY STOP] can be used on all units, also on the slaves and remote.

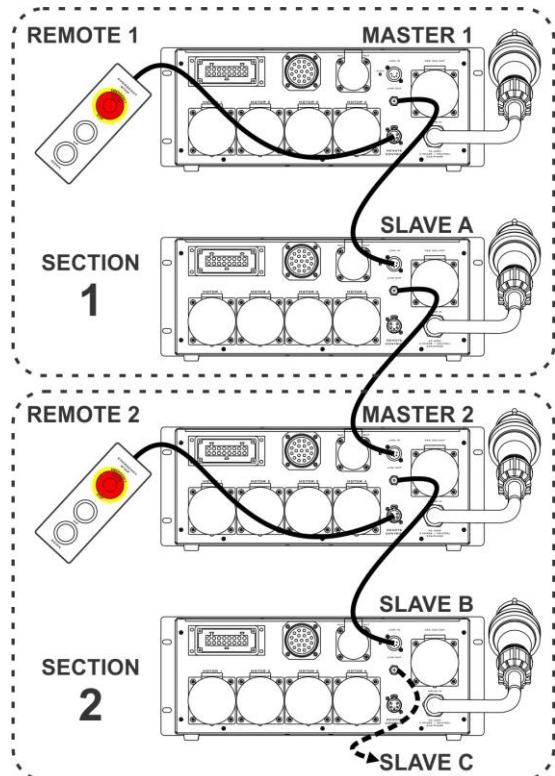


MASTER / SLAVE WITH SEVERAL [RICO-REMOTE] CONTROLLERS

Master/slave connection is identical to the normal master/slave setup. But in this setup the master/slave operation can be split up in several independent sections. Each section can be controlled by a different [RICO-REMOTE] controller, like in the example drawing:

- Four or more RICO-V4 controllers are connected in master/slave.
- Two [RICO-REMOTE] controllers are connected:
 - [REMOTE1] to the unit 1.
 - [REMOTE2] to the unit 3.
- Automatically the chain will be split up in independent 2 sections:
 - **Section 1:** [MASTER1] (unit 1) controls [SLAVE A]
 - **Section 2:** [MASTER2] (unit 3) controls [SLAVE B], [SLAVE C] and eventual further slaves...

IMPORTANT REMARK: the [EMERGENCY STOP] can be used on ALL units, also on the slaves and remotes, and will interrupt the outputs of ALL controllers in ALL sections!



MAINTENANCE



DANGER TO LIFE:

Switch the unit off and unplug the mains cable BEFORE servicing!



During inspection the following points should be checked:

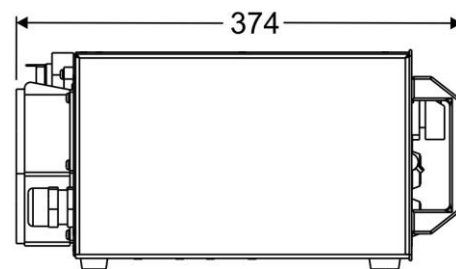
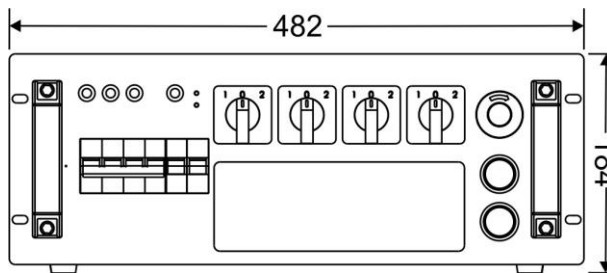
- All screws used for installing the device and any of its parts should be tightly fastened and may not be corroded.
- Housings, fixations and installations spots (ceiling, truss, suspensions) should be totally free from any deformation.
- The mains cables must be in impeccable condition and should be replaced immediately when even a small problem is detected.
- Clean with a soft cloth using normal glass cleaning products.
- Always dry the parts carefully.
- The unit and its installation conditions should be inspected and approved every 3 months by an authorized expert!

Attention: We strongly recommend internal cleaning to be carried out by qualified personnel!

SPECIFICATIONS

This unit is radio-interference suppressed. This product meets the requirements of the current European and national guidelines. Conformity has been established and the relevant statements and documents have been deposited by the manufacturer.

Power Input:	IEC60309-standard, CEE-32A industrial plug 400Vac 50/60Hz, 3phase, 5wire (3P+N+E)
Maximum overall power:	32A / phase
Output channels:	4x CEE 4pole 16A
Aux output:	240Vac / 16A
Protection class:	class I (only to be connected to class I outlets)
Automatic fuses / phase:	2x C16 (I _n =16A, instantaneous tripping current = 5x I _n)
Diameter Power cord:	5x 6mm ² (H07RN-F 5G6)
Size:	19" / 4U (482x184x374mm without connectors / buttons) see drawings
Weight:	15 kg



Every information is subject to change without prior notice

You can download the latest version of this user manual on our website: www.briteq-lighting.com



MAILING LIST

EN: Subscribe today to our mailing list for the latest product news!

FR: Inscrivez-vous à notre liste de distribution si vous souhaitez suivre l'actualité de nos produits!

NL: Abonneer je vandaag nog op onze mailinglijst en ontvang ons laatste product nieuws!

DE: Abonnieren Sie unseren Newsletter und erhalten Sie aktuelle Produktinformationen!

ES: Suscríbete hoy a nuestra lista de correo para recibir las últimas noticias!

PT: Inscreva-se hoje na nossa mailing list para estar a par das últimas notícias!

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