

istruzioni per l'uso
operating instructions
Bedienungsanleitung
instrucciones de
manejo
mode d'emploi
gebruiksaanwijzing

01207170

Astro 250 plus 3200K

01207180

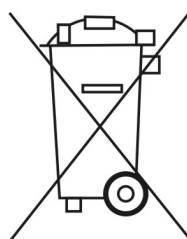
Astro 250 plus 5600K

01207370

Astro 250 plus HP 3200K

01207380

Astro 250 plus HP 5600K
100/260V DMX512+RDM



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ENGLISH

Thank you for choosing a quality product from Luci della Ribalta srl. We trust our products and services meet your requirements, but if not please contact us directly using the attached feedback form to help us improve the quality of our service.

This product has been manufactured with great care and left our factory in perfect conditions, but if it has been damaged in transport please contact your dealer in the first instance. A feedback form is appended. Our warranty covers all manufacturing and component defects for 2 years from the date you purchased the product.

Our products are designed for the use of professional technicians and operators only, and the instructions provided here ensure a safe and correct operation of this product. Luci della Ribalta srl will not accept any responsibility where damage has been caused to the product or persons through improper use of the product and/or non-compliance with the regulations described herein.

IMPORTANT: Read these user instructions before using this lighting unit

The instructions given here ensure a safe and correct usage of this product. A user's failure to comply with the installation, operating, maintenance and safety procedures mentioned in this manual, as well as those generally applicable to this lighting equipment, may cause the unit not to perform as expected.

Luci della Ribalta Srl accepts no liability for direct, indirect, incidental, special, or consequential damages resulting from the customer's failure to follow the installation, operating, maintenance and safety procedures in this manual or those generally applicable to lighting equipment.

The limitation extends to damages for personal injury, property damage, loss of operations, loss of profits, loss of product or loss of time, whether incurred in by the customer, the customer's employees or a third party.

Apart from the instructions given on this manual, all relevant safety and health standards of the appropriate Directives of the country where the unit will be installed must be complied with.

1. IMPORTANT SAFETY NORMS

- This product is a professional lighting fixture, namely a followspot, fitted with a LED light source, which can only be operated by professional staff.
- Warning, high voltage ignition. Disconnect the unit from power before servicing
- Continuous mains power is required for this spotlight as an internal dimmer controls the intensity via DMX or local rotary knob. An accessory clamp-on digital dimmer is furthermore available for positioning on the side grab handles of the followspot
- Use of a phase control dimmed mains supply may damage the internal electronics
- This product features fan-assisted ventilation. Make sure you do not cover the fans or obstruct the air flow at any time
- Make sure all fans are working correctly at any one time. Should you detect even the slightest malfunction, switch the luminaire off and carry out the necessary servicing. Replace the fans if necessary.
- This product is rated IP 20 and is therefore designed for interior use only. For details on maximum ambient temperature and tilt angle please refer to what indicated on the product label or screen-printing on the side of the lens-tube or the rear of the LED-house

- Repairing and replacement of any component of this product must be carried out exclusively by professional personnel in conformity with the relevant safety and health standards and only with original Luci della Ribalta srl components.
- Replacement of any part of the wiring system must be carried out exclusively by professional personnel in compliance with the original wiring diagram and with components identical to or compatible with those originally fitted.
- Installation of this product must be exclusively carried out by professional personnel in compliance with the safety norms in force in the country where the product is used.



**WARNING: DANGER OF ELECTRICAL SHOCK
DO NOT OPERATE ON LIVE EQUIPMENT**

- Disconnect power before opening this fixture to access its light source or electronics.
- The replacement of the LED source or any of its electronic components can be carried out exclusively by professional personnel upon LDR's written authorization and only with original Luci della Ribalta srl components. Failure to obtain the manufacturer's authorization to carry out the replacement/repair, will immediately invalidate the product's warranty



WARNING: EYE DAMAGE HAZARD

Make sure this fixture is installed so as to avoid prolonged direct staring at its operating light source (LED) from a distance of less than 7m / 23ft.



WARNING: FIRE HAZARD

- Never locate this fixture on any flammable surface.
- Minimum distance of any part of the body of the luminaire from any flammable surface or object: 0,5m / 20in
- Minimum distance from lit surface, please refer to the product's label or screen-printing on the side of the lens-tube or the rear of the LED-house
- Make sure the mains power supply the fixture will be connected to is protected by a suitable thermal magnetic circuit breaker

2. **WARNING ON COB-SOURCE LUMINAIRES: CORRECT HANDLING, INSTALLATION AND MAINTENANCE**

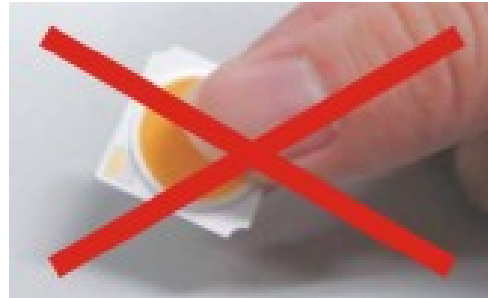
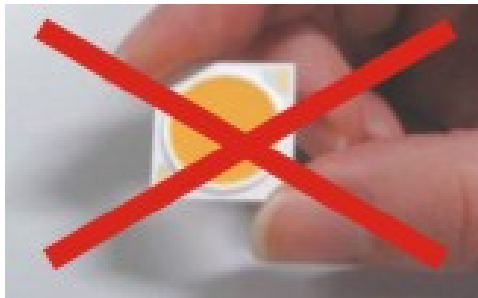
LED-source luminaires need special care when choosing where to install them as the COB is a very sophisticated piece of electronics, which is very sensitive to natural or chemical air pollutants or dust of any origin. When the installation of the Astro 250 in venues where fog or haze machines are also being used or wherever air pollution of any sort cannot be avoided please be aware that the COB might suffer fatal damages which might dramatically shorten its life or reduce its performance.

Contact a certified LDR distributor in case of residuals or other objects located on the surface of the LED source or whenever a COB becomes damaged for any reason.

CAUTION: DO NOT ATTEMPT TO CLEAN IT IN ANY WAY

As general rules please consider the following:

- do not touch the surface of the LED source
- do not rub it
- do not put mechanical stress on the COB especially on the resin area. It may cause LED light to stop functioning
- do not expose the COB to direct compressed-air flux
- ensure that no objects attach or put pressure on the resin area



- do not use sharp objects like tweezers to pick up or hold LED packages. The wire inside the resin area may disconnect, thus causing the light to stop functioning



The resin area includes both the light emitting area and the white dam area.

- avoid anything sharp to press, put stress on, rub, attach or make contact with the resin as this might negatively affect the function, performance and reliability of this product.



The COB contains silicone to protect the LED dies and the silicone is gas permeable. Some VOCs (Volatile Organic Compound) and chemicals will cause discoloration, surface damage, cracking or erosion. Here below the list of harmful materials which will damage the silicone. Please do not use them together with the LED package. If it is necessary to use them together, please test them before use.

- acetic acid
- ammonia
- benzene
- castor oil
- dichloromethane
- gasoline
- halogenated hydrocarbons (containing F, Cl, Br elements)
- hydrochloric acid / hypochlorous acid
- lard
- linseed oil
- MEK (Methyl Ethyl Ketone)
- MIBK (Methyl Isobutyl Ketone)
- mineral spirits
- nitric acid
- petroleum
- potassium hydroxide / potassium hypohydrite
- rosin flux
- silicone oil
- sodium hydroxide / sodium hypohydrite
- sulfuric acid
- tetrachloromethane
- toluene
- xylene

3. BOX CONTENT

A. Standard followspot

Astro followspot in the chosen model
Separate mains power cable with PowerCon
Ø28mm/1.12in spigot for followspot
Fitted Iris diaphragm

B. Kit followspot

Astro f.spot in the chosen model in flight case
Separate mains power cable with PowerCon
Ø28mm/1.12in spigot for followspot
Fitted Iris diaphragm
Fitted 5-colour colour changer unit

Black follow-spot tripod
Clamp-on mobile digital dimmer

4. WEIGHT AND DIMENSIONS

A. Standard followspot

net weight: 20,3 kg
gross weight: 25,4 kg
packing dimensions: 102x45x43h cm

B. Kit followspot

net weight: 28,7kg
gross weight: 62,7
packing dimensions: 60x120x71h cm

5. MOUNTING THE SPIGOT

This product is a followspot meant for tripod- or pole-mounting only and is therefore not fitted with any secondary fixing point. Do not hang it.

A $\varnothing$ 28mm/1.12in spigot is supplied in standard delivery for you to tripod-mount your followspot.

- Make sure the tripod you are going to use features a top aperture over $\varnothing$ 28mm/1.12in dia.
- Remove the M12 nut and the washer from the spigot.
- Insert the spigot in the central hole of the yoke of the followspot from beneath the yoke.
- Add the plain screw and the M12 self- locking nut and tighten the nut with a suitable tool.
- Mount the followspot on the tripod. Make sure the structure you are fixing the product to can withstand the product load (see above list and product label).

6. MOUNTING THE COLOUR CHANGER (accessory, part nr. 20105106)

This section only applies in case you bought the followspot and the colour changer separately. In case you bought a kit model the colour changer will be already fitted.

- Mount the colour filters on the colour changer units. See relevant instructions supplied with the colour changer.
- At the front of the followspot, slacken the 3 cross-head black M4 screws (two at the top angles, one at the bottom, left-hand side angle) so that they remain inserted approximately half-way through.
- Position the colour changer unit on the front plate of the followspot, making sure that the colour levers are positioned on the left-hand side of the follow spot when viewed from the front and hang it to the previously positioned screws.
- Release the colour filters of the colour changer by pressing the black, flat lever in order to have access to the screws
- Insert a Phillips screws driver at least 12cm/4.8in long in each one of the holes provided at the front of the colour changer and tighten each screw
- Ensure the colour changer unit is secure, and all three screws are tight.

7. MOUNTING / REPLACING THE IRIS DIAPHRAGM – supplied

The iris diaphragm supplied with the followspot has 20 leaves to size the beam from a maximum aperture of 68mm/2.67in to a minimum of 5mm/0.19in. The iris comes already fitted, so you will only have to refer to this section in case you need to remove or replace the iris.

- Using a Phillips screw-driver (M4) remove the two cross-head screws from the sides of the iris plate
- By pulling (to remove) or pushing (to insert) from the lever handle, slide the iris diaphragm out of/ in to the gate area
- Fix the iris in position by tightening the previously removed screws

Important notice: do not leave the iris totally closed for over 5 minutes while the LED is on

FAILURE TO COMPLY WITH THE ABOVE NOTICE MAY CAUSE THE IRIS AND THE FOLLOWSPOT TO SUFFER MAJOR HEAT DAMAGES AND WILL INVALIDATE THE PRODUCT WARRANTY

8. MOUNTING / REPLACING THE GOBO-HOLDER – not supplied

Astro followspots can be fitted with a gobo holder – not supplied in standard delivery but obtainable as a separate accessory, for the projection of:

- | | |
|---------------------------|--------------------|
| • A-or B-size metal gobos | part # A20100807 |
| • A-size glass gobo | part # A20100807/A |
| • B-size glass gobo | part # A20100807/B |

The gobo holder must be inserted in the gate area instead of the iris diaphragm. Usage of both accessories at the same time is not possible.

In order to fit or replace a gobo holder, please:

- Remove the iris diaphragm if fitted (see above)
- Slide the gobo-holder in the gate area – bent metal wings must look to the LED-house
- Make sure it is correctly positioned and apply pressure to the plastic holder if needed

CAUTION: the metal surface of the gobo holder reaches very high temperatures during operation. Make sure the unit is totally cold before attempting to remove it, protect your hands with gloves and avoid skin direct contact with its metal surface

9. SHUTTER BLADES (accessory, part nr. R80208019 x 4)

Shutter blades are not supplied with the unit but are available as separate accessory. They are sold as single items and relevant part number is R80208019, 4x are required.

10. ADJUSTING THE YOKE

This followspot is provided with a yoke balancing adjustment. The balancing point is factory set for the standard product configuration supplied (without colour changer for standard units, with colour changer for the kit version). However, should you need to adjust the balancing, please follow the procedure here below:

- the followspot must be mounted on the tripod stand with all relevant accessories attached.
- using a Phillips screw driver, loosen the 2x M5 screws on each side of the yoke.
- gently slide the followspot backwards or forwards to the required position.
- make sure the yoke is correctly aligned horizontally.
- tighten the 4x M5 screws

11. IMPORTANT NOTICE BEFORE THE INSTALLATION / INSTALLATION

This fixture is meant for tripod-mount installation only. No hanging is allowed
Before installing this fixture check its weight on the product label and the weight of each accessory you are adding and make sure the structure you are installing it to withstands the total weight.
The mounting stirrup is designed to allow the spotlight to be fitted to a suitable tripod or pole.

CAUTION

DO NOT TURN THE LUMINAIRE UPSIDE-DOWN AND MAKE SURE THE STIRRUP ALWAYS SITS DOWNWARDS

Note: the fixture's location must provide suitable ventilation for the LED module.

12. WIRING

Before being connected to the mains power, this unit may need to be wired with a suitable plug if not already installed. Make sure the plug you are using is rated for the product's power load.

This fixture must be grounded

Ensure the plug conforms to the relevant EU/UL or local electrical standards

To perform a correct wiring, please note that the cores in this mains lead are colour-coded as follows:

Ground: green+yellow – Neutral: blue - Phase: brown

In case the colours of the wires do not correspond to the colour of the connection points on your plug, please proceed as follows:

- The green or green and yellow wire must be connected to the connection point marked with the letter E or with the symbol  or coloured in green or in green-yellow
- The blue wire must be connected to the connection point marked with the letter N or coloured in black
- The brown wire must be connected to the connection point marked with the letter L or coloured in red

Before you finally position this product for use, temporarily connect it to a properly fused power supply to check the unit works correctly.

13. VOLTAGE

Before operating this unit please refer to the screen-printing on the right-hand side panel of the lens-tube – where the zoom control knobs are located - to check you are operating with the correct voltage. The Astro 250 LED can be operated between 100V and 260 VAC.

14. FREQUENCY

Frequency on this product is automatically selected by the electronic PSU (50/60Hz)

15. CONNECT TO THE POWER SUPPLY

- Connect the unit to a continuous mains power source
- Make sure the power supply is protected by a suitable thermal magnetic circuit breaker
- This fixture must be grounded

16. MECHANICAL OPERATION

Focus control: this fixture features a variable beam angle from 7° to 12° which can be controlled through the two control knobs on the right-hand side of the lens-tube.

The variable beam is modified by adjusting the front and rear zoom lenses in relation to each other. The front lens defines the beam spread, the rear lens defines the focus degree of 'softness' or 'hardness' of the beam edge or shutters.

Gently turn the knobs anti-clockwise until you have reached the desired size/focus of the beam in relation to the distance you are projecting at.

Turn the knobs clockwise and tightly close them so that the lenses are held in position at any tilt angle

Beam-sizing: the size of the beam is controlled using the supplied iris diaphragm

Beam-dimming and black-out: this followspot can be dimmed by:

- Local manual control, rotary switch on the backplate of the unit
- Local, via clamp-on digital dimmer, supplied in the kit version only, accessory in standard delivery – see relevant instructions
- Remote, by DMX512 signal

CAUTION: Make sure you always use one of the above options to black-out the light and never the sizing iris diaphragm, as keeping the latter closed may cause overheating, damage and even fire inside the LED-house.

Pan & Tilt control: this unit is fitted with 2 soft, comfortable side bars covering the full length of the followspot for an easy and safe control of the pan and tilt angle by the followspot's operator from any position.

The stirrup is factory-balanced and fitted with a positive friction clamp controlled by a user-friendly, effective lever-knob. Turn the knob anticlockwise to release it, position the followspot at the desired tilt angle and turn the lever clockwise to hold the desired position.

Press the button at the top of the lever and keep it pressed while turning the lever if you need to change its position.

Make sure the lever is softly tightened at any time during operation

A smooth pan-movement is guaranteed by the provided spigot. For extra stability and smoothness a spigot with fluid head, pictured here below, is available as extra accessory under part # A20102100



17. LOCAL CONTROL PANEL AND OPERATION

OPERATION: LCD display for DMX address, system setup and status details.

POWER: power LED status indicator, red colour. ON= power

DMX: DMX LED status indicator, green colour. LED OFF = DMX OFF and manual control activated, LED ON = DMX MODE activated with no DMX signal, FLASHING LED = receiving DMX

MENU: rotary switch selector to select and modify the operational modes. Turn left or right to navigate through the menu and press to select or to confirm

DMX IN: input DMX signal (pin1=0, pin2= DATA-, pin3=DATA+).

DMX OUT: Loop through DMX signal output

POWER IN: Mains power input

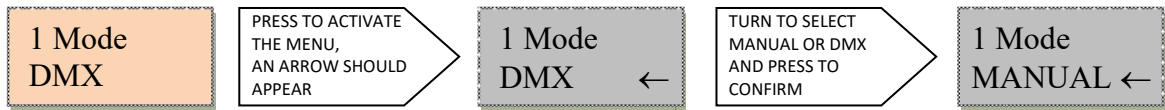
POWER OUT: Mains power output

18. MENU

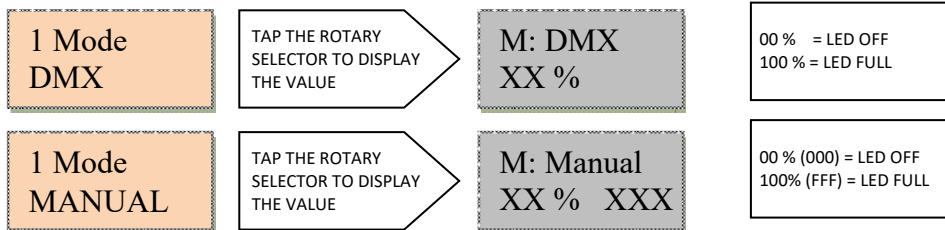
There are fourteen different menus to control the settings of the ASTRO LED. The rotary selector is used to adjust the settings and to navigate through the menu. Turn left or right to select the menu and push to access or to confirm the selected data or functions. To exit the selected menus without saving the data, press the rotary selector for at least 1 second.

18.1 DMX OR MANUAL (Mode)

Select the LED control mode between DMX (factory setting) and manual. To change the control mode press the rotary selector once until an arrow (←) appears on the menu. Turn the selector to the right or the left to select the desired mode of operation and press to confirm your selection.



Tap the rotary selector and the LCD screen will display the mode status and the current value:



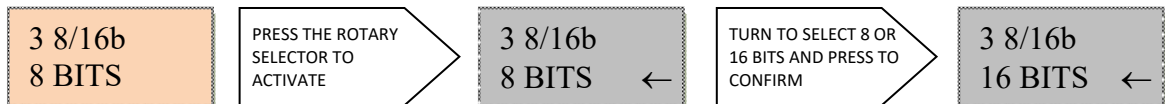
18.2 DMX ADDRESS (Addr)

It allows to select the initial DMX starting address to remotely control the LED functions. To change the initial DMX address press the rotary switch until an arrow appears, then turn to change to the desired DMX starting address. Press to confirm your selection. Factory setting is 001.



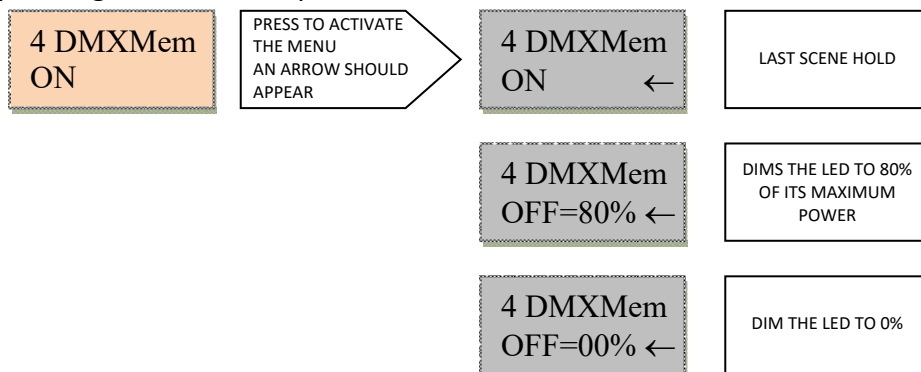
18.3 DIMMER RESOLUTION (8/16b)

The dimming resolution can be controlled at 8 bits from one DMX channel or 16 bits with 2 DMX channels. Factory setting is 8 Bit.



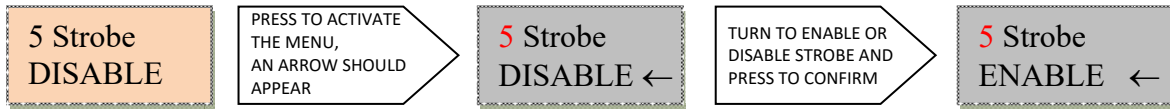
18.4 LOST DMX SIGNAL (DMXMem)

In case of signal failure this function allows to store in memory the last DMX value. Factory setting is ON. Three options are available:



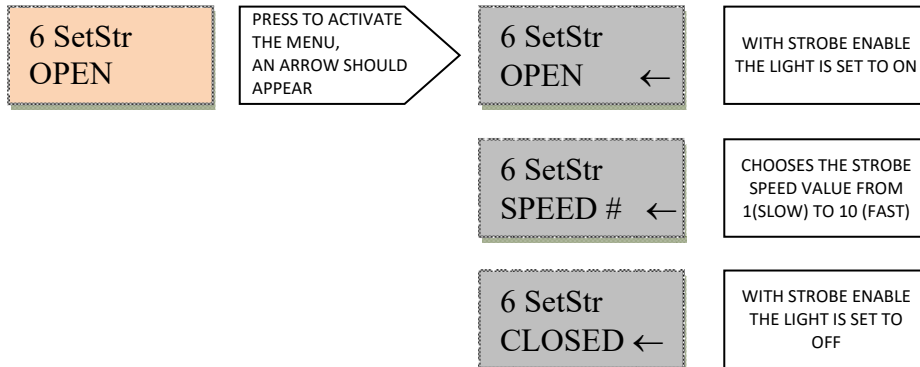
18.5 STROBE (Strobe)

This function allows to activate the strobe function. Factory setting is DISABLE.



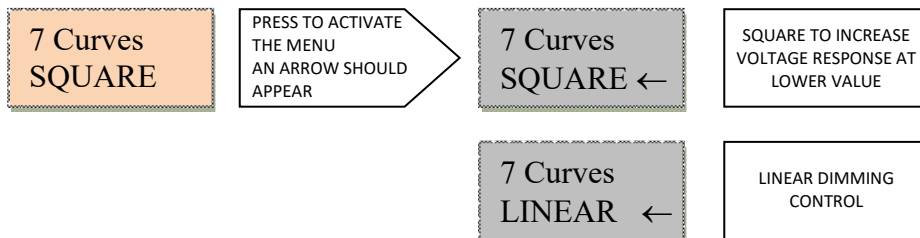
18.6 STROBE SPEED (SetStr)

It allows to set the strobe speed. This menu is not active when the strobe function is disabled or when it is remotely controlled through DMX. Factory setting is OPEN.



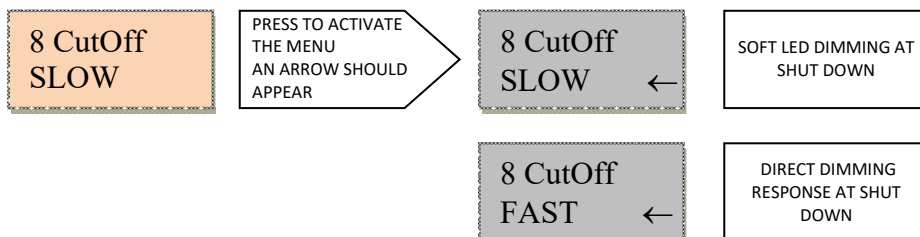
18.7 DIMMING CURVE (Curves)

This function allows to select a response curve for the Astro LED. A choice of two curves is available: Square and Linear. Factory setting is SQUARE.



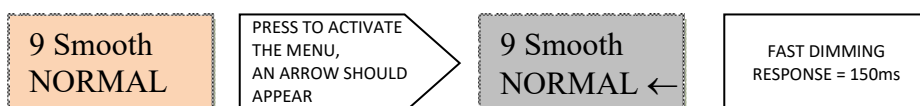
18.8 CUT OFF DIMMING RESPONSE (CutOff)

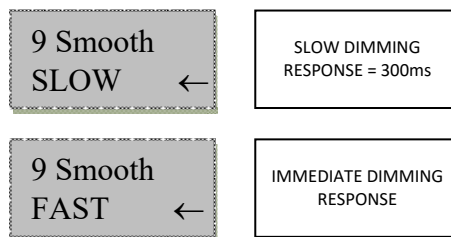
This function allows to select the LED behaviour simulating a tungsten-halogen lamp during the dimming cut off. Factory setting is SLOW.



18.9 DIMMING BEHAVIOUR (Smooth)

This function allows to set the LED dimming response. Factory setting is NORMAL.

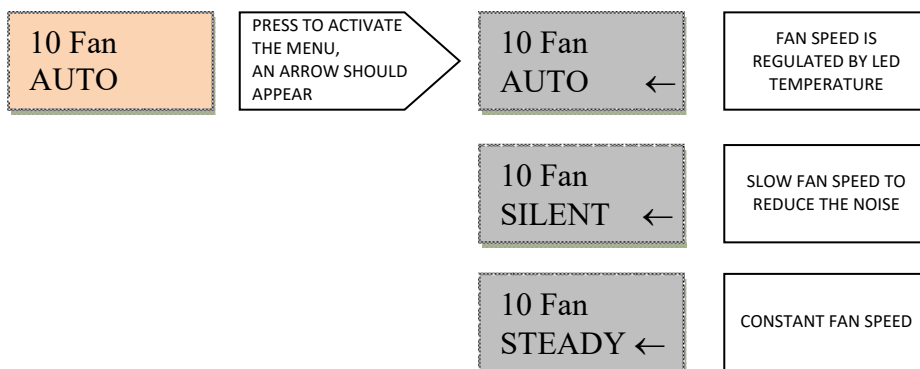




18.10 FAN SETTING (Fan)

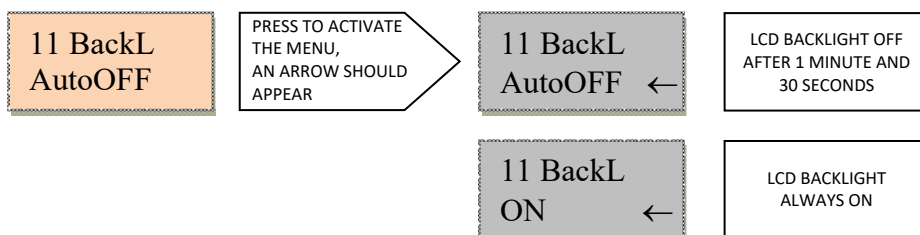
This function allows to set the fan response. A choice of three modes is available: Automatic, Silent or Steady. When the fan is in Auto mode, the speed is controlled by the LED temperature. When in Silent mode, the fan runs slowly to reduce the noise. If Steady mode is activated the fan runs at constant speed, halfway between the minimum and maximum speed. In all cases, if the temperature of the LED exceeds the maximum admitted value, the LED is protected by a de-rating security system, which lowers the light output until the temperature goes back to safe levels, when full power is then restored automatically.

Factory setting is AUTO.



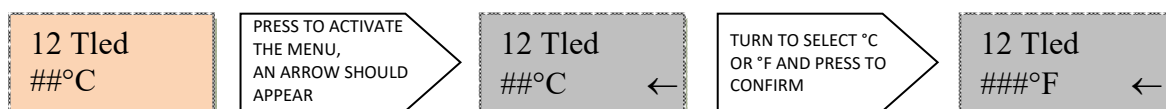
18.11 LCD SCREEN ILLUMINATION (BackL)

This function allows to turn off the LCD backlight, the LED POWER and LED DMX after 1'30" from last setting. Factory setting is AutoOFF.



18.12 TEMPERATURE CONTROL (Tled)

This function allows to visualize the LED temperature. Factory setting is °C.



18.13 SOFTWARE VERSION (SwVer)

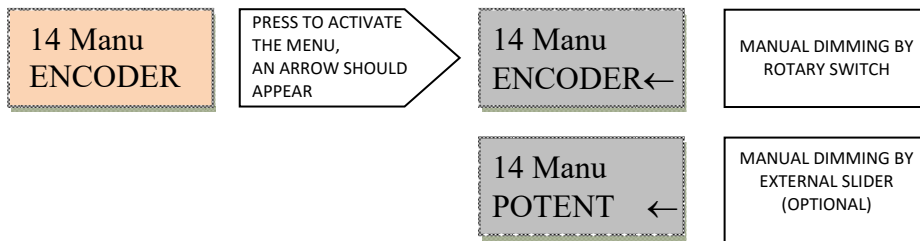
This function allows to visualize the software version.

18.14 MANUAL DIMMER TYPE (Manu)

This function allows to select the manual dimmer type. An additional digital dimmer, which can be clamped-on in any position of each of the side control bars, is available as an additional accessory as follows

A20702071 ASTRO SIDE-HANDLE CLAMP-ON MANUAL DIMMER

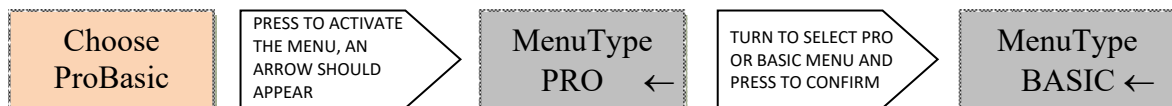
whereas it comes in standard delivery when ordering an ASTRO kit.
Factory setting is ENCODER.



There are also four different hidden menus to select the advanced settings of the ASTRO LED. To activate this function turn the Astro OFF and ON by pressing the rotary switch at power on.

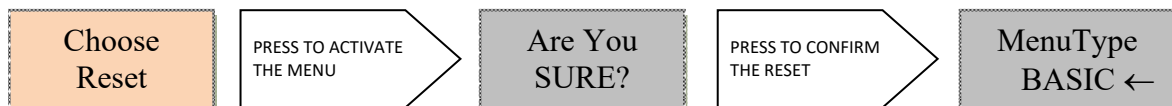
18.15 PRO or BASIC CONTROL (ProBasic)

The PRO-BASIC control is a special function which allows to limit the access to the control menu. Select ProBasic with the rotary switch and press to access the menu. Select:
PRO, to enable access to all the functions
BASIC, to limit access to functions 18.1 DMX or MANUAL MODE, 18.2 DMX ADDRESS, 18.12 Temperature Control and 18.13 Software version.
Factory setting is PRO.



18.16 FACTORY SETTINGS (Reset)

The RESET control is a special function which allows to RESET the product to factory settings.



18.17 ID for REMOTO (ID Rem)

Remoto is a control device which allows to upgrade your Astro with the latest software version or to load and download stored info. It is available as an optional accessory as follows

A20702072 REMOTO control unit

To change the initial ID press the rotary switch until an arrow appears, then turn to change to the desired ID number. Press to confirm your selection. It is possible to select an ID number from 0 to 250. If ID number=0 remote control is not active. Factory setting is 000.



18.18 CALIBRATION (Set Min)

It allows to calibrate the minimum level of the output.



18.19 EXIT HIDDEN MENU (Exit)

It allows to exit from the hidden menus.

19. CLEANING AND MAINTENANCE

To ensure maximum performance of the product, a regular maintenance service should be carried out. Please make sure the product is cold and disconnected from power supply when doing this.

General maintenance

- * Clean all reflective parts such as lenses opening the product, if necessary.
- * Check the lenses and replace any visibly damaged component.
- * Clean air ducts and fans in order to allow proper ventilation activity on the product.
- * Check internal and external wiring and replace any cable which should be damaged by heat or mechanical agents.

Cleaning of optical components

LEDhouse lenses:

- Open the lens compartment lid by removing the two M4 cross head screws at the rear of the led-house tube and slide the top lid free
- Remove the condensor lenses assembled block by removing the two M5 cross head screws.
- Clean the lenses with a soft cloth and re-position

Zoom lenses:

Slide the front zoom panels positioned at the bottom of the lens tube and clean with a soft cloth.

20. SPARE PARTS

All components are available as spare parts. We strongly recommend you always use original LDR components as spare parts. Please refer to our technical assistance should you need to order and/or replace any part of the unit.

21. WARRANTY

Our warranty covers all structural and manufacture defects for two years from the date you purchased this product. In case of complaints we strongly recommend you use the complaint form at the end of this manual or contact the local dealer who supplied the product to you. In any case please report the serial number of the product.

In case of complaints under warranty proof of purchase will have to be provided.

22. SUMMARY OF CONTROLS AND FUNCTIONS

#	Function	Description	Available Options	Factory Setting
1	Mode	MANUAL or DMX control	MANUAL (controlled from the rotary switch or clamp-on manual dimmer); DMX	DMX
2	Addr	Selects the DMX starting address; other remotely controlled functions are assigned in sequence to the 1st assigned DMX address	From 001 to 512	001
3	8/16b	8 or 16 Bits dimming resolution	8 BITS on 1 channel; 16 BITS on 2 channels	8 BITS
4	DMXMem	Sets the behaviour of the unit in case of DMX failure	ON = last DMX value; OFF=80% fade to 80% after 1,5 Sec; OFF=0%	ON
5	Strobe	Activates the Strobe function	ENABLE; DISABLE	DISABLE
6	SetStr	Selects the Strobe speed. This menu is not active when the Strobe function is disabled or when remotely controlled through DMX	OPEN = ON; SPEED = ## (select value from 01 slowest to 10 fastest); CLOSED = OFF	OPEN
7	Curves	Selects the dimming curve	SQUARE; LINEAR	SQUARE
8	CutOff	Replicates the halogen lamp dimming behaviour at cut off	FAST = NOT ACTIVE; SLOW = ACTIVE	SLOW
9	Smooth	Dimmer response	NORMAL = 150ms; SLOW = 300ms FAST = Immediate response	NORMAL
10	Fan	Fan setting	AUTO = regulated by Tled; SILENT = slow speed, low noise; SILENT = constant speed	AUTO
11	BackL	LCD screen retro-illumination	ON; AutoOFF = LCD light off after 1'30"	AutoOff
12	Tled	Visualizes the LED temperature	Select the LED Temp in °C or F°	°C
13	SwVer	Visualizes the software version		---
14	Manu	Selects the manual dimmer type	ENCODER = Rotary switch; POTENT = External slider	ENCODER

SPECIAL FUNCTIONS: to activate these functions press the rotary switch at power on				
#	Function	Description	Available Options	Factory Setting
A	ProBasic	Sets the functions available from the control menu	PRO = Enable acces to all functions; BASIC = Limit the access to: 1 Mode, 2 Addr, 12 Tled and 13 SwVer	PRO
B	RESET	Factory RESET	Return to factory settings	---
C	ID Rem	Sets the ID number to activate the Remoto control to upload and download firmware	From 000 (no remote control) to 250	000
D	Set Min	Sets the minimum level of the output	From 000 to 9999	---
E	Exit	Exits from hidden menus		---

23. DMX CHARTS

23.1 DMX chart 1 (16 bit dimmer and strobe disabled)

This DMX chart refers to the followspot set at default parameters.

DMX Channel	Function	Type of Control	Effect	Decimal		Percentage	
1	Master Dimmer	Proportional	Adjusts luminous output intensity from 0 to 100%	0	- 255	0%	- 100%
Projector: Astro White			Table name: DMX512 Functions chart 1 (default)	Edition: 1		Date: 16/05/2018	

23.2 DMX chart 2 (16 bit dimmer enable, strobe disabled)

This DMX chart refers to the followspot set at 16 bits resolution (See chapter 18.3 of this user guide).

DMX Channel	Function	Type of Control	Effect	Decimal		Percentage	
1	Master Dimmer	Proportional	Adjusts luminous output intensity from 0 to 100%	0	- 255	0%	- 100%
2	Dimmer Fine	Proportional	Fine dimmer control 16 bit	0	- 255	0%	- 100%
Projector: Astro White			Table name: DMX512 Functions chart 2 (16 bits)	Edition: 1		Date: 16/05/2018	

23.3 DMX chart 3 (Strobe function enable, 8 bit dimmer)

This DMX chart refers to the followspot set at strobe function on (See chapter 18.5 of this user guide).

DMX Channel	Function	Type of Control	Effect	Decimal		Percentage	
1	Master Dimmer	Proportional	Adjusts luminous output intensity from 0 to 100%	0	- 255	0%	- 100%
2	Spare Channel	Step	No effect	0	- 255	0%	- 100%
3	Strobe	Step	Open	0	- 20	0%	- 8%
		Step	Strobe speed 1 (minimum frequency)	21	- 40	9%	- 15%
		Step	Strobe speed 2	41	- 60	16%	- 24%
		Step	Strobe speed 3	61	- 80	25%	- 31%
		Step	Strobe speed 4	81	- 100	32%	- 39%
		Step	Strobe speed 5	101	- 120	40%	- 47%
		Step	Strobe speed 6	121	- 140	48%	- 55%
		Step	Strobe speed 7	141	- 160	56%	- 63%
		Step	Strobe speed 8	161	- 180	64%	- 71%
		Step	Strobe speed 9	181	- 200	72%	- 78%
		Step	Strobe speed 10 (maximum frequency)	201	- 220	79%	- 86%
		Step	Closed	221	- 255	87%	- 100%
Projector: Astro White			Table name: DMX512 Functions chart 3 (Strobe)	Edition: 1		Date: 16/05/2018	

23.4 DMX chart 4 (16 bits dimmer and Strobe enabled) :

This DMX chart refers to the followspot set at 16 bits resolution and strobe function on (See chapter 18.3 and 18.5 of this user guide).

DMX Channel	Function	Type of Control	Effect	Decimal		Percentage	
1	Master Dimmer	Proportional	Adjusts luminous output intensity from 0 to 100%	0	- 255	0%	- 100%
2	Dimmer Fine	Proportional	Fine dimmer control 16 bit	0	- 255	0%	- 100%
3	Strobe	Step	Open	0	- 20	0%	- 8%
		Step	Strobe speed 1 (minimum frequency)	21	- 40	9%	- 15%
		Step	Strobe speed 2	41	- 60	16%	- 24%
		Step	Strobe speed 3	61	- 80	25%	- 31%
		Step	Strobe speed 4	81	- 100	32%	- 39%
		Step	Strobe speed 5	101	- 120	40%	- 47%
		Step	Strobe speed 6	121	- 140	48%	- 55%
		Step	Strobe speed 7	141	- 160	56%	- 63%
		Step	Strobe speed 8	161	- 180	64%	- 71%
		Step	Strobe speed 9	181	- 200	72%	- 78%
		Step	Strobe speed 10 (maximum frequency)	201	- 220	79%	- 86%
		Step	Closed	221	- 255	87%	- 100%
Projector: Astro White			Table name: DMX512 Functions chart 4 (16 bits + Strobe)		Edition: 1		Date: 16/05/2018

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**CERTIFICATO DI CONFORMITA' - CERTIFICATE OF CONFORMITY
KONFORMITAETSERKLAREUNG - CERTIFICAT DE CONFORMITE'
CERTIFICADO DE CONFORMIDAD**

I Noi sottoscritti dichiariamo, sotto la nostra completa responsabilità, che i prodotti:
EN We hereby declare, under our own responsibility, that the products listed here below:
D Wir beglaubigen, daß die nachfolgend genannten Produkte:
F Nous certifions, sous notre responsabilité, que le produits mentionnés ci-dessous:
ES Los que subscriben declaran, bajo su responsabilidad, que los productos aquí listados:

ASTRO 250 plus LED LUMINAIRES
Standard models and all their variants

I sono conformi alle seguenti normative:
EN conform to the following standards:
D entsprechen den nachfolgen angeführten Normen:
F sont conformes aux normes ci-après:
ES cumplen de hecho con las siguientes normas:

EN IEC 55015:2019	LIMITS AND METHODS OF MEASUREMENTS OF RADIO DISTURBANCE CHARACTERISTICS OF ELECTRICAL LIGHTING AND SIMILAR EQUIPMENT
EN 61547: 2020	EQUIPMENT FOR GENERAL LIGHTING PURPOSES. EMC IMMUNITY REQUIREMENTS
EN 61000-3-2: 2019	ELECTROMAGNETIC COMPATIBILITY (EMC). PARTS 3-2: LIMITS -LIMITS FOR HARMONIC CURRENT EMISSIONS (EQUIPMENT INPUT CURRENT UP TO AND INCLUDING 16 A PER PHASE) CLASS C
EN 61000-3-3: 2013+A1: 2019	ELECTROMAGNETIC COMPATIBILITY (EMC) - PART 3-3: LIMITS - LIMITATION OF VOLTAGE CHANGES, VOLTAGE FLUCTUATIONS AND FLICKER IN PUBLIC LOW-VOLTAGE SUPPLY SYSTEMS, FOR EQUIPMENT WITH RATED CURRENT ≤ 16 A PER PHASE AND NOT SUBJECT TO CONDITIONAL CONNECTION
EN IEC 60598-1: 2021+A11: 2022	SPECIFIES GENERAL REQUIREMENTS FOR LUMINAIRES. INCORPORATING ELECTRIC LIGHT SOURCES FOR OPERATIONS FROM SUPPLY VOLTAGES UP TO 1 000 V.
EN IEC 60598-2-17: 2018	SPECIFIES REQUIREMENTS FOR STAGES, TELEVISION, FILM AND PHOTOGRAPHIC STUDIO LUMINAIRES (INCLUDING SPOT AND FLOODLIGHTING PROJECTORS) FOR USE OUTDOORS AND INDOORS, WITH ELECTRIC LIGHT SOURCES ON SUPPLY VOLTAGES NOT EXCEEDING 1 000 V.
EN 62493: 2015	APPLIES TO THE ASSESSMENT OF LIGHTING EQUIPMENT RELATED TO HUMAN EXPOSURE TO ELECTROMAGNETIC FIELD
EN 63000: 2018	TECHNICAL DOCUMENTATION FOR ASSESSMENT OF ELECTRICAL AND ELECTRONIC PRODUCTS WITH RESPECT TO THE RESTRICTION OF HAZARDOUS SUBSTANCES

FOLLOWING THE EU DIRECTIVE OF THE EUROPEAN PARLAMENT AND THE COUNCIL OF THE EUROPEAN UNION:

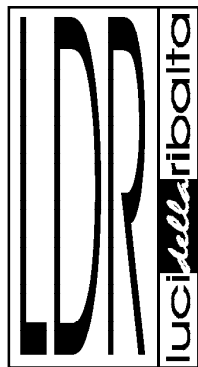
- 2014/30/EU ELECTROMAGNETIC COMPATIBILITY (EMC)
- 2014/35/EU EU LOW VOLTAGE (LVD)
- 2011/65/UE
- 2009/125/CE
- 2019/2020 + 2021/341

In faith, Lisa Papi, President

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Lisa Papi



modulo di reclamo - complaint form
Reklamationsformular - formulaire de réclamation -
hoja de reclamaciones

email: info@ldr.it

Azienda ed Indirizzo - Company's name and address - Firmenname und Adresse - Nom et adresse -
Nombre y dirección

Nome del rivenditore da cui il prodotto è stato acquistato - Name of the dealer where you have purchased
the product - Namen der Firma, die Ihnen das Produkt verkauft hat - Nom de la société qui vous a vendu ce
produit - Nombre de la compañía donde han comprado el producto:

Prodotto difettoso	☐	01207170	Astro 250 plus 3200K
Faulty product	☐	01207180	Astro 250 plus 5600K
Defekte s Produkt	☐	01207370	Astro 250 plus HP 3200K
Produit défectueux	☐	01207380	Astro 250 plus HP 5600K
Producto defectuoso	☐		100/260V DMX512+RDM
	☐		

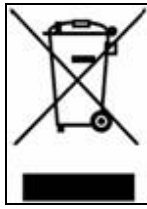
Descrizione del problema /Problem found/Beschreibung des Defekts/Description du défaut/Descripción del problema

Data d'acquisto - Date of purchase - Kaufdatum - Date de l'achat - Fecha de compra _____

Si prega di allegare prova d'acquisto - Please attach copy of purchase invoice - Bitte Kaufnachweis beilegen -
Veuillez joindre une quittance d'achat - Les rogamos incluyan l copia de la factura de compra.

Nome e qualifica - Name and position - Name und Funktion - Nom et fonction - Nombre y cargo

Data - Date - Datum - Date - Fecha _____



IT
Direttiva 2002/96/CE (Rifiuti di Apparecchiature Elettriche ed Elettroniche - RAEE):
informazioni agli utenti: ai sensi dell'art. 13 del Decreto Legislativo 25 luglio 2005, n. 151 "Attuazione delle Direttive 2002/95/CE, 2002/96/CE e 2003/108/CE, relative alla riduzione dell'uso di sostanze pericolose nelle apparecchiature elettriche ed elettroniche, nonché allo smaltimento dei rifiuti" questo prodotto è conforme.

Il simbolo del cassonetto barrato riportato sull'apparecchiatura o sulla sua confezione indica che il prodotto alla fine della propria vita utile deve essere raccolto separatamente dagli altri rifiuti. L'utente dovrà, pertanto, conferire l'Apparecchiatura giunta a fine vita agli idonei centri di raccolta differenziata dei Rifiuti Elettronici ed Elettrotecnici, oppure riconsegnarla al rivenditore al momento dell'acquisto di una nuova apparecchiatura di tipo equivalente, in ragione di uno a uno. L'adeguata raccolta differenziata per l'avvio successivo dell'apparecchiatura dismessa al riciclaggio, al trattamento ed allo smaltimento ambientalmente compatibile contribuisce ad evitare possibili effetti negativi sull'ambiente e sulla salute e favorisce il reimpiego e/o riciclo dei materiali di cui è composta l'apparecchiatura. Lo smaltimento abusivo del prodotto da parte dell'utente comporta l'applicazione delle sanzioni amministrative previste dalla normativa vigente.

ES
Directiva 2002/96/EC (Residuos de aparatos eléctricos y electrónicos - RAEE):
Información para el usuario.

Este producto es conforme con la Directiva EU 2002/96/CE. El símbolo de la papelera barrada situado sobre el aparato indica que este producto, al final de su vida útil, debe ser tratado separadamente de los residuos domésticos. El usuario es responsable de la entrega del aparato al final de su vida útil a los centros de recogida autorizados. El adecuado proceso de recogida diferenciada permite dirigir el aparato desechado al reciclaje, a su tratamiento y a su desmantelamiento de una forma compatible con el medio ambiente, contribuyendo a evitar los posibles efectos negativos sobre el ambiente y la salud, favoreciendo el reciclaje de los materiales de los que está compuesto el producto. Para información más detallada inherente a los sistemas de recogida disponibles, dirigirse al servicio local de recogida o al establecimiento donde se adquirió el producto.

FR
Directive 2002/96/CE (Déchets d'équipements électriques et électroniques - DEEE):
informations aux utilisateurs.

Ce produit est conforme à la Directive ED 2002/96/CE. Le symbole de la corbeille barrée reporté sur l'appareil indique que ce dernier doit être éliminé à part lorsqu'il n'est plus utilisable et non pas avec les ordures ménagères. L'utilisateur a la responsabilité de porter l'appareil hors d'usage à un centre de ramassage spécialisé. Le tri approprié des déchets permet d'acheminer l'appareil vers le recyclage, le traitement et l'élimination de façon écologiquement compatible. Il contribue à éviter les effets négatifs possibles sur l'environnement et sur la santé, tout en favorisant le recyclage des matériaux dont est constitué le produit. Pour avoir des informations plus détaillées sur les systèmes de ramassage disponibles, s'adresser au service local d'élimination des déchets ou au revendeur.

DE
Richtlinie 2002/96/EU (Elektro- und Elektronik-Altgeräte - WEEE):
Benutzerinformationen.

Dieses Produkt entspricht der EU Richtlinie 2002/96/EU. Das Symbol des auf dem Gerät dargestellten, durchgestrichenen Korbes gibt an, dass das Produkt am Ende seiner Nutzungsdauer gesondert vom Hausmüll zu behandeln ist. Am Ende der Nutzungsdauer ist der Benutzer für die Überantwortung des Geräts an geeignete Sammelstellen verantwortlich. Die angemessene, getrennte Müllsammlung zwecks umweltkompatibler Behandlung und Entsorgung für den anschließenden Recycling beginn des nicht mehr verwendeten Geräts trägt zur Vermeidung möglicher schädlicher Wirkungen auf Umwelt und Gesundheit bei und begünstigt das Recycling der Materialien, aus denen das Produkt zusammengesetzt ist. Für nähere Informationen bezüglich der zur Verfügung stehenden Sammelsysteme, wenden Sie sich bitte an den örtlichen Müllentsorgungsdienst oder an das Geschäft, in dem der Kauf getätigt worden ist.

UK
Directive 2002/96/EC (Waste Electrical and Electronic Equipment - WEEE):
information for users.

This product complies with EU Directive 2002/96/EC. The crossed-out wastebasket symbol on the appliance means that at the end of its useful lifespan, the product must be disposed of separately from ordinary household wastes. The user is responsible for delivering the appliance to an appropriate collection facility at the end of its useful lifespan. Appropriate separate collection to permit recycling, treatment and environmentally compatible disposal helps prevent negative impact on the environment and human health and promotes recycling of the materials making up the product. For more information on available collection facilities, contact your local waste collection service or the shop where you bought this appliance.

NL
Richtlijn 2002/96/EG (Afgedankte Elektrische en Elektronische Apparaten - AEEA):
informatie voor de gebruikers.

Dit product voldoet aan de richtlijn EU 2002/96/EG. Het symbool van de vuilnisbak met een streep erdoor, dat op het apparaat staat, geeft aan dat het product, wanneer het wordt afgedankt, niet met het huisvuil kan worden meegegeven. Het is de verantwoordelijkheid van de gebruiker het product, op het moment dat dit wordt afgedankt, in te leveren bij een centrum voor gescheiden afvalverwerking. Een correcte gescheiden afvalverwerking, die gericht is op de recycling van het afgedankte product en die een milieuvriendelijke behandeling en vernietiging mogelijk maakt, draagt ertoe bij mogelijk negatieve effecten op het milieu en op de gezondheid te voorkomen en bevordert het hergebruik van de materialen waaruit het product bestaat. Voor meer gedetailleerde informatie met betrekking tot de voorhanden zijnde afvalverwerkingsystemen dient u zich te wenden tot de plaatselijke vuilnisdienst of tot de winkelier waar u het product heeft gekocht.

PT
Directiva 2002/96/CE (Resíduos de equipamentos eléctricos e electrónicos REEE):
informações para os utilizadores.

Este produto é conforme à Directiva EU 2002/96/CE. O símbolo do cesto barrado marcado no aparelho indica que o produto, no fim da própria vida útil, deve ser tratado separadamente do lixo doméstico. O utilizador é responsável pela entrega do aparelho, no fim da vida do mesmo, às apropriadas estruturas de recolha. A adequada recolha diferenciada para o encaminhamento sucessivo do aparelho à reciclagem, ao tratamento e ao escoamento ambientalmente compatível, contribui para evitar possíveis efeitos negativos sobre o ambiente e a saúde e favorece a reciclagem dos materiais que compõem o produto. Para informações mais detalhadas inerentes aos sistemas de recolha disponíveis, dirija-se ao serviço

local de escoamento de resíduos, ou a loja na qual efectuou a compra.

NO
WEEE-symbolet (Waste Electrical and Electronic Equipment).

Bruken av WEEE-symbolet indikerer at dette produktet ikke kan behandles som husholdningsavfall. Du vil bidra til å beskytte miljøet ved å sørge for at dette produktet blir avhendet på en forsvarlig måte. Ta kontakt med kommunale myndigheter, renovasjonsselskapet der du bor eller forretningen hvor du kjøpte produktet for å få mer informasjon om resirkulering av dette produktet.

S
Symbol för avfall från elektrisk och elektronisk utrustning (WEEE).

Märkning med WEEE-symbolen visar att produkten inte får behandlas som hushållsavfall. Genom att slänga den här produkten på rätt sätt bidrar du till att skydda miljön. Mer information om återvinning av produkten kan du få av de lokala myndigheterna, din renhållningsservice eller i affären där du köpte produkten.

FI
WEEE-merkintä (sähkö- ja elektroniikkalaiteromu).

WEEE-merkintä osoittaa, että tätä tuotetta ei voi käsitellä kotitalousjätteen tavoin. Kun huolehdit tämän tuotteen asianmukaisesta hävittämisestä, autat suojelemaan ympäristöä. Lisätietoa tämän tuotteen kierrättämisestä saat paikallisviranomaisilta, jätehuoltoyhtiöltäsi tai myymälästä josta ostit tämän tuotteen.

DK
Symbol for affald af elektrisk og elektronisk udstyr (WEEE)

Brugen af WEEE-symbolet betyder, at dette produkt ikke må behandles som husholdningsaffald. Ved at sørge for korrekt bortskaffelse af produktet medvirker du til at beskytte miljøet. Du kan få flere oplysninger om genbrug af dette produkt hos de lokale myndigheder, dit renovationsselskab eller i forretningen, hvor du har købt produktet.

HU
Hulladék elektromos vagy elektronikus készüléket jelölő szimbólum.

Ez a szimbólum azt jelöli, hogy a terméket nem szabad háztartási hulladékként kezelni. A hulladékká vált termék megfelelő elhelyezésével hozzájárul a környezet védelméhez. A termék újrafelhasználásával kapcsolatban a helyi szerveknél háztartási hulladékokat elszállító vállalatnál vagy a terméket értékesítő üzletben tájékozódhat.

CZ
Symbol pro odpadní elektrický a elektronický materiál (WEEE).

Použití symbolu WEEE označuje, že tento produkt nelze likvidovat jako domovní odpad. Správnou likvidaci tohoto produktu přispějete k ochraně životního prostředí. Podrobnější informace o likvidaci tohoto produktu vám podají místní úřady, společnost pro likvidaci komunálního odpadu nebo obchod, kde jste zboží zakoupili.

