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





# 01207190

# Astro 250 Wi-fi RGBW DMX512+RDM LED



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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 our service quality.

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 one year from the date you purchased the product.

Our products are designed for the use of professional technicians, and the instructions provided here ensure 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 the 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 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 EU Directives must be complied with.

## **1. IMPORTANT SAFETY NORMS**

- 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 moving manual dimmer is furthermore available for positioning on the side grab handles.
- 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 one time.
- Make sure the fans are working correctly. 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, minimum distance from flammable objects and tilt angle, please refer to what indicated on the product label.
- 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.

## 2. CHECK PACKING CONTENT

A. Standard followspot Astro Wi-Fi in box Separate mains power cable with PowerCon Ø28mm spigot for followspot Iris diaphragm Clamp-on digital dimmer A20702071 Universal mobile device holder A20702073 B. Kit followspot
Astro Wi-Fi in flight case
Separate mains power cable with PowerCon
Ø28mm spigot for followspot
Iris diaphragm
Clamp-on digital dimmer A20702071
Universal mobile device holder A20702073

#### **3. MOUNTING THE SPIGOT**

A spigot is supplied in standard delivery for you to tripod-mount your followspot.

Make sure the tripod you are going to use can withstand the product load as indicated on the product's label

Make sure the tripod you are going to use features a top aperture over 28mm 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.

#### 4. MOUNTING THE IRIS DIAPHRAGM - supplied

The iris diaphragm supplied with the followspot has 20 leaves to size the beam from a maximum aperture of 68mm to a minimum of 5mm. A black-out iris diaphragm is available to special order.

Using a Phillips screw-driver remove the two cross-head screws from the sides of the iris plate. Slide the diaphragm in the gate area.

Fix the iris in position by tightening the previously removed screws

Important notice: do not leave the iris 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'S WARRANTY

#### 5. BLACK SHUTTER BLADES (accessory, part nr. R80208019 x 4)

Black 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, 4 are required.

#### 6. 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). However, should you need to adjust the balancing, please follow the procedure below:

- The followspot must be mounted on the tripod stand with all relevant accessories attached.
- Using a Phillips screw driver, loosen the 2 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 4 M5 screws

# 7. 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 proper 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 - Hot: 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  $\stackrel{\perp}{=}$  or coloured in green or in green-yellow

The blue wire must be connected to the connection point marked with the letter N or with the

symbol  $\pm$  or coloured in black

The brown wire must be connected to the connection point marked with the letter L or with the

symbol  $\pm$  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.

#### 8. VOLTAGE

Before operating this unit please refer to the product label mounted at the back of the luminaire to check you are operating with the correct voltage.

The Astro 250 LED can be operated between 100V and 260 VAC.

#### 9. 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

#### **10. MENU**

There are twenty-one different menus to control the settings of ASTRO RGBW 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.

#### 10.1 Wi-Fi, DMX OR MANUAL (Mode)

Colour control of the Astro is achieved through a totally innovative technology. The Astro Wi-Fi generates a proprietary Wi-Fi access which will recognize one device only and whose range reaches 15m approximately in obstacle-.free environments. Access to the Wi-Fi access is protected by password. A universal mobile phone holder (3.5/6.5in), rotatable over 360°, supplied with the Astro and clamped on one of the side bars, allows the installation of a mobile device, either IOS or Android to take control of the followspot.

If the Astro was purchased complete with the LDR controller A20702074 (available as an optional accessory) Smartphone Honor 75 Black, pre-loaded with the Android Art-Net Controller app, relevant settings and libraries, it is ready to be operated.

In case you are using your own mobile device, please refer to chapter 12 and 13 of this manual for all the necessary steps needed to set up the control system.

Select the LED control mode between Wi-Fi (factory setting – if you want to control the colour mixing through a mobile device), DMX and manual. To change the control mode press once the rotary selector 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.

In order to work properly with an external mobile device the Astro must be set in Wi-Fi mode at the default settings. If default settings have been changed, please refer to chapter 10.23-B to reset the product to factory settings.



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



#### 10.2 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.



#### 10.3 DIMMER RESOLUTION (8/16b) :

The dimming resolution can be controlled at 8 bits from one DMX channel to 16 bits with 2 DMX channels.

Factory setting is 8 Bit.



#### 10.4 LOST DMX SIGNAL (DMXMem) :

In case of signal failure this function allows to store in memory the last DMX value. This function is forced ON in Wi-Fi mode. Factory setting is ON.

Three options are available :



#### 10.5 STROBE (Strobe) :

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



## **10.6 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 .



## 10.7 DIMMING CURVE (Curves) :

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



#### 10.8 CUT OFF DIMMING RESPONSE (CutOff) :

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



#### 10.9 DIMMING BEHAVIOUR (Smooth) :

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



#### 10.10 FAN SETTING (Fan) :

This function allows to set the fan's response. A choice of three modes is available: Automatic, Silent or Steady. When fan is in Auto mode, the speed is controlled by the LED temperature. In Silent mode the fan runs slowly to reduce noise. In Steady mode the fan runs at constant speed, halfway between the minimum and maximum speed. In all cases, if the LED temperature exceeds the maximum admitted value, the LED is protected by a de-rating security system. Factory setting is AUTO.



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#### 10.11 LCD SCREEN ILLUMINATION (BackL) :

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



# 10.12 RED COLOUR INTENSITY (Red) :

This function allows to set the intensity of the red color for the manual mode. By selecting the manual mode, 100% is automatically set.



# 10.13 GREEN COLOUR INTENSITY (Green) :

This function allows to set the intensity of the green color for the manual mode. By selecting the manual mode, 100% is automatically set.



## 10.14 BLUE COLOR INTENSITY (Blue) :

This function allows to set the intensity of the blue color for the manual mode. By selecting the manual mode, 100% is automatically set.



# 10.15 WHITE COLOR INTENSITY (White) :

This function allows to set the intensity of white color for the manual mode. By selecting the manual mode, 100% is automatically set.



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#### 10.16 TEMPERATURE CONTROL (Tled) :

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



#### 10.17 SOFTWARE VERSION (SwVer) :

This function allows to visualize the software version.

#### 10.18 NET (Net) :

The apps used in Wi-Fi mode work with Art-Net 3 protocol. The Port-Address is composed of three separate fields: NET, SUB-NET and UNIVERSE. This function allows to set the NET field, in a range between 0 and 128. Factory setting is 000.



## 10.19 SUB-NET (SubNet) :

This function allows to set the SUB-NET field of Art-Net 3 Port-Address, in a range between 0 and 15. Factory setting is 00.



#### 10.20 UNIVERSE (Univ) :

This function allows to set the UNIVERSE field of Art-Net 3 Port-Address, in a range between 0 an 15. Factory setting is 00.



#### 10.21 MANUAL DIMMER TYPE (Manu) :

This function allows to select the manual dimmer type, when Astro is set in Manual mode (see chapter 10.1). When in Wi-Fi mode this setting is disregarded, as dimming on the Astro will be achieved through the manually operated Digital Clamp-on Dimmer A20702071, supplied, or through the dimming function on the App loaded on the controlling mobile device.

For full details on the Digital Clamp-on Dimmer please refer to chapter 12 of this manual

Factory setting is ENCODER.



#### **HIDDEN MENUS**

There are furthermore nine different hidden menus which allow to select the advanced settings of the ASTRO WI-FI RGBW. To activate this function turn OFF and then ON again the Astro while keeping the rotary switch pressed.

#### 10.22-A 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 available functions

BASIC, to limit the access to functions 10.1 Wi-Fi, DMX or MANUAL MODE, 10.2 DMX ADDRESS, 10.12 - 10.13 - 10.14 - 10.15 RGBW Colour intensity in manual mode, 10.16 Temperature Control, 10.17 Software version and 10.18 - 10.19 - 10.20 Net, Sub-Net and Universe for Art-Net Port-Address.

Factory setting is PRO.



#### 10.23-B FACTORY SETTINGS (Reset) :

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



#### 10.24-C ID REMOTO (ID Rem) :

It allows to select the ID number to connect the Wi-Fi Astro to the REMOTO gateway to upload and download firmware. To change the initial ID press the rotary switch until an arrow appears, then turn again to change to the desired ID number. Press to confirm your selection. It is possible to select an ID number's value between 0 an 250. If the ID number=0, remote control is not active. Factory setting is 000.



#### 10.25-D CALIBRATION (Set Min):

It allows to calibrate the minimum output level of each colour. NOTICE: Reset doesn't restore the default settings of minimum levels.



## **IMPORTANT NOTICE**

If the Astro is used in Wi-Fi mode, DO NOT CHANGE the default output levels because the colours generated by the controlling App depend on these.

## 10.26-E IP ADDRESS (IP Addr) :

It allows to view the Astro IP address when operating in Wi-Fi mode. The IP address cannot be changed and is required to correctly connect the external mobile controller to the ASTRO



## 10.27-F SUBNET MASK (Net Mask) :

It allows to view the Astro Subnet Mask when operating in Wi-Fi mode. The Subnet Mask cannot be changed.



#### 10.28-G SERVICE SET IDENTIFIER (SSID) :

It allows to set the name of the network generated by the Astro.

Default SSID is "Astro###", where "###" is a value between "000" and "254". Because the SSID is assigned randomly, you might experience the unlikely case of receiving different fixtures with identical SSID. In order to avoid conflicts, we strongly recommend you change the SSID name of

your Astro should you have purchased more than one unit. You will be allowed to create an 8 digit SSID of your choice.

#### NOTICE: Reset (see chapter 10.23-B) doesn't restore the default settings of the SSID.



#### 10.29-H PASSWORD (PassWord) :

It allows to set the password to connect the controller to the network generated by Astro.

# Default password is "AstroNet"

We strongly recommend you change the password of your Astro should you have purchased more than one unit. You will be allowed to create an 8 digit password of your choice.

#### NOTICE: Reset (see chapter 10.23-B) doesn't restore the default settings of the password.



#### 10.30-I EXIT HIDDEN MENU (Exit) :

It allows to exit from hidden menus.

## 11. APP SETTINGS AND OPERATION FROM LDR MOBILE CONTROLLER SMARTPHONE HONOR 7S BLACK – # A20702074 – optional accessory

If the Astro was purchased complete with the LDR controller A20702074 Smartphone Honor 75 Black , (available as an optional accessory), pre-loaded with the Android Art-Net Controller app, relevant settings and libraries, it is ready to be operated.

In case you are using your own mobile device, please refer to chapter 12 and 13 of this manual for all the necessary steps needed to set up the control system under either Android or IOS.

- Set the Operation Mode of the ASTRO to WI-FI (refer to chapter 10.1)
- Make sure the controller is connected to the network generated by Astro. From the home screen, tap Settings → Wi-Fi and check that the controller is connected to the Wi-Fi network "Astroxxx".
- Make sure the clamp-on digital dimmer is connected and its fader above zero. Please see relevant instruction manual supplied with the item.



Click on the Art-Net Controller icon: from the home screen, tap Pb 0v, which will bring you to the existing library of colours, which also includes 3 whites (2700K, 3200K and 5600K) and a black-out option. Click on the chosen colour to have it on.







Luci della Ribalta srl, Via Berna 14, 46042 Castel Goffredo (MN) Italy Tel. +39 0376 771 777 – fax +39 0376 772 140 – email <u>info@ldr.it</u> – web www.ldr.it In order to change colour simply click on the following one. Please refer to chapter 12.2 of this manual for detailed operating instructions

Should you need to create and store more cues, please refer to chapter 12.3 of this manual.

#### 12. APP SETTINGS AND OPERATION FROM USER'S ANDROID MOBILE CONTROLLER

If you are planning to use an ANDROID mobile device of your own to control the ASTRO WI-FI, please carefully follow the here-below described steps to ensure a correct configuration of your mobile device.

#### 12.1 SETTINGS

From the Play Store, download and install Art-Net Controller and Art-Net Controller Libraries Apps.



Art-Net Controller



Art-Net Controller Libraries litux

On the App's screen, tap Settings  $\rightarrow$  Flight mode. Drag the Flight mode switch to the right. Select Settings  $\rightarrow$  Wi-Fi. Drag the Wi-Fi mode switch to the right, select "Astroxxx" from the list of









Enter the password (default AstroNet) and press CONNECT. When the device is connected to the network, exit from the Wi-Fi settings and tap on the Art-Net Controller Libraries icon.

Please refer to chapter 10.28G and 10.29H to reset your SSID code and password, if desired (not complusory)

Tap Create/Update Fixtures Library and wait until loading is completed.







Open the Art-Net Controller app: by default the app displays the Prog (Programmer) window. Tap the three dots located on the upper left corner (or lower right corner – depending on models) of the screen to open the main menu and select Patch  $\rightarrow$  Lib.





Scroll the fixtures library and select GENERIC\_RGBW.D4. Insert "1" in the following fields: Start DMX, n° Fixtures and Start ID. Tap Patch it and then exit the Patch menu.







Open the main menu and select Options  $\rightarrow$  Play 'Pb 0v' by  $\rightarrow$  Fixture.





Open the main menu and select Settings.

Enter your ASTRO's IP address in the "Art-net broadcast/unicast to:" fields.

Please refer to chapter 10.26-E of this user guide to know the IP address to be used.

Scroll the Settings window downwards, enter "99" in the PlayBacks fields and confirm (Apply).

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In order to load on your device the LDR colour libraries and settings the

"Astro RGBW-LDR revxxx.show.zip" file is needed.

The file can be obtained by email or WhatsApp directly from LDR or your dealer.

Open the main menu and select Files  $\rightarrow$  Load share  $\rightarrow$ Select download and Search for your SHOW.ZIP file (for example in the download folder if received by e-mail or downloaded by the LDR's website) and confirm (OK): the LDR settings and libraries will be loaded and saved.





Your mobile device is now ready to control the Astro Wi-Fi

## **12.2 OPERATING THE ASTRO WI-FI**

Make sure the clamp-on digital dimmer is connected and its fader above zero. Please see relevant instruction manual supplied with the item.

From the home screen (Prog), tap Pb 0v (Play-Backs) in the main app toolbar, and you will get the latest available library of saved colours. These currently also include 3 different whites (2700K, 3200K and 5700K) plus a black-out option. Tap on the desired colour to get the Astro to reproduce it, and choose the next one when needed.

A Rec function (top-right button, above the colours) is active by default. If accidentally pressed it will cause the settings of your colours (scenes) to change.

## We strongly recommend you de-activate this function as follows:

Open the main menu (3 dots top left or bottom right) and choose OPTIONS

Tap on REC to make it PLAY and then exit. The REC button is no longer active

Dimming can be performed either through the digital clamp-on dimmer (supplied, suggested option) or by sliding the yellow bar located above the colours' palette. The percentage of power out is indicated beside the yellow bar and changes according to the set level (100% full power; 0% black-out.

**WARNING**: the levels for RGBW set on the 4 virtual channels in the Prog window will always take precedence over the levels set when creating and storing a colour in the Pb 0v menu.

In order to avoid undesired changes to the stored colours and problems during their reproduction, tap Clear when in the Prog window before selecting any colour (scene) from the Pb 0v window.



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2	1#RG	BW#Green	/Dimmer			000
	1#R0	BW#Blue/[	Dimmer			000
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#### **12.3 CREATING, STORING AND DELETING COLOURS**

ART-NET Controller allows you to create any desired colour and to store up to 99 different options at one time.







If you want to create and store a new colour (or scene), select Prog in the main app toolbar to view the RGBW faders and set each colour (Red, Green, Blue, White) to the required level by sliding each fader to the right (higher level) or to the left (lower level) until you get the desired colour. Select Pb 0v, tap Rec and then the desired position in your colour palette (in the above example position n.19)

Tap and hold the PB button to access the colour's details view. Type in the name for your PB Button, choose its colour (Color  $\rightarrow$  Edit) and confirm (OK). Your new colour has been stored.



In order to delete any of the stored colours (scenes), tap Rec briefly until the button's name turns to ( $\rightarrow$  Delete) then the PB Button you want to delete.

To avoid undesired or accidental changes to the stored colours (scenes), carefully make sure the App is set to Play mode when operatin the ASTRO: open the main menu and select Options  $\rightarrow$  Mode=Play.

Use the CLEAR option to cancel any undesired or accidental modification.

#### WARNING: by default the App always starts in Rec Mode.







#### 13. APP SETTINGS AND OPERATION FROM USER'S IOS MOBILE CONTROLLER

If you are using an iOS mobile device (iPhone or iPad) to control the ASTRO, please:

From the App Store, purchase, download and install Luminair 3. The price of this app will depend on the country you are purchasing it from.

Luminair 3 - DM...

From Settings set your device to Airplane Mode first, as this will avoid any interference from incoming calls, emails or messages. Drag then the Wi-Fi switch to the right and select "Astroxxx" from the list of detected Wi-Fi networks, in order to connect your device to the Astro network.



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Other		

Enter the password (default AstroNet) and press join to connect to the network. Once the device is connected, exit from the Wi-Fi settings and tap on the Luminair icon.

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Other		
Ask to Join Ne	etworks	



Luci della Ribalta srl, Via Berna 14, 46042 Castel Goffredo (MN) Italy Tel. +39 0376 771 777 – fax +39 0376 772 140 – email <u>info@ldr.it</u> – web www.ldr.it The App will start at the default factory settings, specifically with a Factory Test Project.

By default, Luminair broadcasts Art-Net over the network to Net 0, Subnet 0 and Universe 0. In this scenario, data will be delivered to all Art-Net interfaces on the local network and then no special configuration should be necessary.

To load the LDR settings which will allow you to control the Astro, please request the **"Astro RGBW - LDR revxxx.luminair"** 

file and open it with Luminair App.

Astro RGBW...300.luminair 193 KB

This file can be requested directly from LDR or your dealer and can be received by email or WhatsApp.





Once the file has been loaded, your mobile device is ready to take control of the Astro.

## 13.1 Operating the Astro WI FI

Make sure the clamp-on digital dimmer is connected and its fader above zero. Please see relevant instruction manual supplied with the item.

By default, Luminair will take you to the buttons area. Each button carries a reference number and the description of the stored colour. Tap on the desired colour to get the Astro to reproduce it, and choose the next one when needed. Use the clamp-on digital dimmer to dim the light output.

## 13. 2 Creating, storing and deleting colours

In addition to the supplied library of colours, Luminair 3 allows you to create and store any extra customized colour.

To add a new colour (scene), select Controls in the main app toolbar to view the RGBW faders and set the desired channel levels for R, G, B and W.



Tap the + button (Add Scene): after selecting the button color, the parameters are automatically saved on the scene.

**WARNING:** because Luminair3 only offers 10 colour codings, which do not correspond to the loaded colours, we have chosen GREY for all buttons. You can modify these settings if desired. Buttons can be customized by adding pictures or emoticons to them but this option risks to overload and slow-down your system.



Any change to the colour levels made when a colour (scene) is selected/active will automatically be recorded into that scene. Switching between (colours) scenes will automatically recall the levels last auto-saved into the newly selected scene. Luminair will fade between colours based upon the fade time assigned to that colour scene. Tap on the scene's name label to access the scene details view. To avoid undesired or accidental changes to the stored colours, always make sure you recall the Scenes view from the main app toolbar.

To delete a stored colour (scene), tap and hold on the scene's name label and press Delete.



To avoid undesired or accidental changes to a project, uncheck Auto-Save Projects from the Settings menu.



#### 14. UNIVERSAL, 360° ROTATING MOBILE DEVICE HOLDER, supplied

Your Astro Wi-FI will have been delivered with an universal, 360° rotating, mobile device holder. The holder is factory-mounted in a convenient position on the right-hand side control bar, in order to avoid damages in transit. You can re-position the holder anywhere on one of the two control bars, at your best convenience. In order to do so, slacken the knob at the bottom of the clamp, slide or remove the mobile holder, position where desired and re-tighten the clamp.

**CAUTION** : make sure you do not drop the holding nut and knob as you might find it diffficult to put it back to its original position

#### **15. POSITIONING YOUR MOBILE DEVICE**

Because the WI-FI signal emitted by the Astro covers a distance of approximately 15/18m (provided there are no obstacles to its diffusion), you can choose to position your mobile device on the provided mobile holder, or anywhere else within the range of transmission and actually have the colour changing of the Astro remotely controlled by a second operator.

Should your device lose connection to the Wi-Fi signal the Astro will not switch off but be left « frozen » at the last chosen settings.

In order to fit your mobile device to the supplied holder, move the red button at the rear of the holder to the OPEN position, and, while keeping it pressed, rotate the red toothed wheel until the desired opening of the 4 holding arms is reached and turn it again clockwise to close the arms and have your mobile securely held. Rotate your mobile to the desired angle and operate the followspot.

In order to remove your mobile from the holder, press the red button at the rear of the holder to release the arms open.

#### **16. RE-CHARGING YOUR MOBILE'S BATTERIES**

A USB Port is provided on the rear of the Astro. This will allow you to re-charge your device while the Astro is being operated, without risking to run flat on batteries during a show or having to rely on an external power supply unit.

#### 17. CLAMP-ON MOBILE DIGITAL DIMMER, supplied

The Astro Wi-fi is supplied with a clamp-on mobile digital dimmer, which is packed separately in a plastic bag inside the box/flight case of the Astro. Please refer to the dimmer's separate Instruction manual provided in the packing to install and use it correctly.

#### **18. FOCUSING**

This fixture features a variable beam angle from 8° to 22°. 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.

#### **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 door by removing the two M4 cross head screws on the top of the ledhouse tube and slide the top cover 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 door positioned on 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 from one year 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 you will be asked to report the serial number of the product, so make sure you have noted it down before sending any complaint.

The serial number of each unit can be found

- on the rear plate of the followspot
- on the LED engine inside the followspot

#### **22. AVAILABLE ACCESSORIES**

This is the list of the available accessories at the time this manual was printed. More items might be available or some might have become obsolete by the time you got this unit. We strongly recommend you always double-check with your dealer or LDR that you have the latest updated list

A20100707	Spare iris diaphragm
A20100807	A/B-size gobo holder – metal gobo
A20100807B	B-size gobo holder – dichroic gobo
A20102100	Fluid-head spigot for followspot tripod
A20102200	Spare spigot for tripod
A20102311	HD steel tripod with fluid head
A20102401	Black followspot tripod
A20102402	Chrome-plated followspot tripod

A20107180	Flight-case with braking wheels, stackable
A20202401	Set of 3 braking wheels for followspot tripod
A20702071	Spare side-handle clamp-on digital dimmer
A20702072	Remoto control unit for software upgrade
A20702073	Spare universal mobile phone-holder
A20702074	Smartphone HONOR 7S BLACK, with pre-loaded app, settings and libraries
V90MLRT100FR	Braking wheel (1pc) for flight case

#### 23. SUMMARY OF CONTROLS AND FUNCTIONS

#	Function	Description	Available Options	Factoring Setting
1	Mode	Wi-Fi, DMX or MANUAL control	Wi-Fi = controlled by Apps and external slider ; DMX ; MANUAL = controlled from the rotary switch or external slider	DMX
2	Addr	Select the DMX starting address other remotely controlled functions are assigned in sequence to the 1st assigned DMX addres	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	Set 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	Activate the Strobe function	ENABLE ; DISABLE	DISABLE
6	SetStr	Select the Strobe speed. This menu is inactive when the Strobe function is disabled or when is remotely controlled through DMX	OPEN = ON ; SPEED = ## (select value from 01 slowest to 10 fastest); CLOSED = OFF	OPEN
7	Curves	Select the dimming curve	SQUARE ; LINEAR	SQUARE
8	CutOff	Replicate 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
#	Function	Description	Available Options	Factoring Setting
11	BackL	LCD screen retro-illumination	ON ; AutoOFF = LCD light off after 1'30"	AutoOff
12	Red	Red intensity for manual mode	From 00% to 100%	
13	Green	Green intensity for manual mode	From 00% to 100%	
14	Blue	Blue intensity for manual mode	From 00% to 100%	
15	White	White intensity for manual mode	From 00% to 100%	
16	Tled	Visualize the LED temperature	Select the LED Temp in °C or F°	°C

17	SwVer	Visualize the software version			
18	Net	Set the Net number of Art-Net Port Address	From 000 to 127	000	
19	SubNet	Set the Sub-Net number of Art- Net Port Address	From 00 to 15	00	
20	Univ	Set the Universe number of Art- Net Port Address	From 00 to 15	00	
21	Manu	Select the manual dimmer type	ENCODER = rotary switch POTENT = external slider	ENCODER	
SPE	CIAL FUNCT	IONS : to activate these functions p	press the rotary switch at power on		
#	Function	Description	Available Options	Factoring Setting	
A	ProBasic	Set the functions available from the control menu	PRO = Enable acces to all functions ; BASIC = Limit the access to: 1 Mode, 2 Addr, 12-13- 14-15 Color Intensity, 16 Tled, 17 SwVer, 18-19-20 Art-Net Port Address	PRO	
В	RESET	Factory RESET	Return to factory settings		
С	ID Rem	Set the ID number to activate Remoto control for upload and download firmware	From 000 (no remote control) to 250	000	
	Set Min			Red: from 000 to 9999	
		Set the minimum output level of	Green: from 000 to 9999		
D		each color	Blue: from 000 to 9999		
			White: from 000 to 9999		
E	IP Addr	Visualize the IP address of Astro access point			
F	Net Mask	Visualize the subnet mask of Astro access point		255.255.255.0	
G	SSID	Set the SSID of Astro Wi-Fi network			
Н	Password	Set the password of Astro Wi-Fi network		AstroNet	
I	Exit	Exit from hidden menus			

#### 24. DMX CHARTS

#### 24.1 DMX chart 1 (16 bit dimmer and strobe disabled) :

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

DMX Channel	Function	Type of Control	Effect	Decim	al		Percei	nt	age
1	Master Dimmer	Proportional	Adjust luminous output intensity from 0 to 100%	0	- 2	255	0%	-	100%
2	Spare Channel	Step	No effect	0	- 2	255	0%	-	100%
3	Red	Proportional	Proportional setting of the red color from 0 to 100%	0	- 2	255	0%	_	100%
4	Green	Proportional	Proportional setting of the green color from 0 to 100%	0	- 2	255	0%	-	100%
5	Blue	Proportional	Proportional setting of the blue color from 0 to 100%	0	- 2	255	0%	-	100%
6	White	Proportional	Proportional setting of the white color from 0 to 100%	0	- 2	255	0%	_	100%
Projector	: Astro RGBW		Table name: DMX512 Functions chart 1 (Default)	Editior	า: :	1	Date: 03/09/	2	018

#### 24.2 DMX chart 2 (16 bit dimmer enable, strobe disabled) :

This DMX chart refers to the followspot set at 16 bits resolution (See chapter 10.3 of this user guide).

DMX Channel	Function	Type of Control	Effect	Decim	al		Percen	ta	age
1	Master Dimmer	Proportional	Adjust 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	Red	Proportional	Proportional setting of the red color from 0 to 100%	0	_	255	0% -	- [	100%
4	Green	Proportional	Proportional setting of the green color from 0 to 100%	0	-	255	0% -	- [	100%
5	Blue	Proportional	Proportional setting of the blue color from 0 to 100%	0	-	255	0% -	- [	100%
6	White	Proportional	Proportional setting of the white color from 0 to 100%	0	-	255	0% -	- [	100%
Projector	r: Astro RGBW		Table name: DMX512 Functions chart 2 (16 bits)	Editior	า:	1	Date: 03/09/2	20	)18

# 24.3 DMX chart 3 (Strobe function enable, 8 bit dimmer) :

This DMX chart refers to the followspot set at strobe function active (See chapter 10.5 of this user guide).

DMX Channel	Function	Type of Control	Effect	Decimal		Percentage					
1	Master Dimmer	Proportional	Adjust luminous output intensity from 0 to 100%	0	_	255	0%	-	100%		
2	Spare Channel	Step	No effect	0	-	255	0%	-	100%		
3	Red	Proportional	Proportional setting of the red color from 0 to 100%	0	_	255	0%	-	100%		
4	Green	Proportional	Proportional setting of the green color from 0 to 100%	0	_	255	0%	-	100%		
5	Blue	Proportional	Proportional setting of the blue color from 0 to 100%	0	_	255	0%	-	100%		
6	White	Proportional	Proportional setting of the white color from 0 to 100%	0	_	255	0%	-	100%		
	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%		
7		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 RGBW			Table name: DMX512 Functions chart 3 (Strobe)		Edition: 1			Date: 03/09/2018			

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

This DMX chart refers to the followspot set at 16 bits resolution and strobe function active (See chapter 10.3 and 10.5 of this user guide).

DMX Channel	Function	Type of Control	Effect	Decimal		Percentage				
1	Master Dimmer	Proportional	Adjust luminous output intensity from 0 to 100%	0	- 2	255	0%	_	100%	
2	Dimmer Fine	Proportional	Fine dimmer control 16 bit	0	- 2	255	0%	-	100%	
3	Red	Proportional	Proportional setting of the red color from 0 to 100%	0	- 2	255	0%	_	100%	
4	Green	Proportional	Proportional setting of the green color from 0 to 100%	0	- 2	255	0%	_	100%	
5	Blue	Proportional	Proportional setting of the blue color from 0 to 100%	0	- 2	255	0%	_	100%	
6	White	Proportional	Proportional setting of the white color from 0 to 100%	0	- 2	255	0%	-	100%	
	Strobe	Step	Open	0	- 2	20	0%	-	8%	
		Step	Strobe speed 1 (minimum frequency)	21	- 4	10	9%	-	15%	
		Step	Strobe speed 2	41	- 6	50	16%	-	24%	
		Step	Strobe speed 3	61	- 8	30	25%	-	31%	
		Step	Strobe speed 4	81	- 1	100	32%	-	39%	
7		Step	Strobe speed 5	101	- 1	20	40%	-	47%	
/		Step	Strobe speed 6	121	- 1	40	48%	-	55%	
		Step	Strobe speed 7	141	- 1	.60	56%	-	63%	
		Step	Strobe speed 8	161	- 1	80	64%	-	71%	
		Step	Strobe speed 9	181	- 2	200	72%	-	78%	
		Step	Strobe speed 10 (maximum frequency)	201	- 2	220	79%	-	86%	
		Step	Closed	221	- 2	255	87%	-	100%	
Projector: Astro RGBW			Table name: DMX512 Functions chart 4 (16 bits + Strobe)	t Edition: 1		Date: 03/09/2018				

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certificato di conformità certificate of conformity Konformitätserklärung certificat de conformité certificado de conformidad

- I Noi sottoscritti dichiariamo, sotto la nostra completa responsabilità, che i prodotti:
- **GB** 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 responsabilitè, que les produits mentionnés ci-dessous:
- E Los que subscriben, declaran, bajo su responsabilidad, que los productos aquì listados:

# 01207190 Astro 250 Wi-fi RGBW DMX512+RDM LED

sono conformi alle seguenti norme ed ai requisiti delle seguenti direttive CEE:

**GB** conform to the following standards and to the requirements of following EEC directives:

- **D** den nachfolgend aufgeführten Normen und EEC-Vorschriften entsprechen:
- F sont conformes aux normes et prescriptions CEE ci-aprés:
- E cumplen de hecho con las siguientes normas y directivas CEE:

EN 61000-3-2, EN61000-3-3, EN 55024, EN 55022 EN 60-598-2-17 1989 including amendments 1/2 EN 60-598-1 1992 including amendment 1 CE marking directive 93/68 EEC Low voltage directive 73/23/EEC as amended by directive 93/98/EEC EMC directive 89/336/EEC as amended by directive 91/263/EEC and 92/31/EEC

Luci della Ribalta srl Lisa Papi, President



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 Addresse - Nom et adresse -Nombre y direcciòn

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 compañia donde han comprado el producto:

Prodotto difettoso Faulty product Defekte s Produkt Produit défectueux Producto defectuoso	<ul> <li>□ 01207190</li> <li>□</li> <li>□<!--</th--><th>Astro 250 Wi-fi RGBW DMX512+RDM LED</th></li></ul>	Astro 250 Wi-fi RGBW DMX512+RDM LED
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Descrizione del problema /Problem found/Beschreibung des Defekts/Description du défaut/Descripciòn 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 lcopia 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):

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 simbolo 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 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 ménagéres. 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 contribute 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. DF

#### 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 Müllsamnlung 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 begunstigt 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 getäligt 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.

# 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 milieuvriendeiijke 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 (Residuos de equipamentos eléctricos e electrónicos REEE):

informações para os utilizadores. Este produto é conforme á Directiva EU 2002/96/CE. O simbolo 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 compativel, contribui para evitar possiveis 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 disponiveis, dirija-se ao serviço local de escoamento de residuos, 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 resirkullering av dette produktet.

S

#### Symbol för avfall från elektrisk och elektronisk utrustning (WEEE). Märkning med WEEE-symbolen visar att

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 jelölö szimbòlum.

Ez a szimbólum azt jelöli, hogy a terméket nem szabad háztartási hulladékként kezelni. A hulladékká valt termék megfeleló 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 podaji místní úřady, společnost pro likvidaci komunálního odpadu nebo obchod, kde jste zboži zakoupili.

