



# LED F160

Operating Instructions

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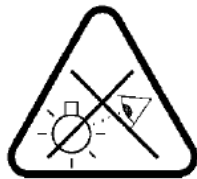
## Before use

We are delighted that you have chosen the broncolor LED F160, which is high-quality in every respect. If handled properly, it will serve you well for many years. Please read all of the information in these operating instructions carefully. It will give you important information on the use, safety and maintenance of the device. Keep these instructions for use in a safe place and pass them on to subsequent users, if necessary.

## 1. SAFETY INSTRUCTIONS

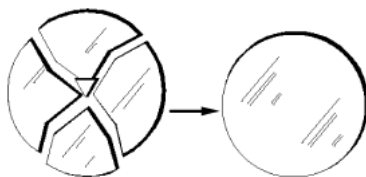


Do not look into the light source during operation!  
Risk of injury to eyes!



A minimum distance of 20 cm must be maintained between the LED F160 lamp and inflammable respectively ignitable materials.

In case the diffusion attachment is damaged, the LED F160 lamp must not be operated.



The LED F160 lamp may only be operated by qualified staff, who had read and understood this operating manual completely.

The LED F160 lamp is designed for use in dry conditions and in an ambient temperature between -20 °C and +45 °C. It is suited for indoor use.

**Observe the safety instructions supplied and the safety instructions that apply to accessories.**  
Alternatively, you can also download the safety instructions for the broncolor LED F160 lamp from <https://broncolor.swiss/safety>

### NOTICE FOR UK CUSTOMERS (wireless LAN and defined Support Period)

Notice for UK customers:  
This device can be configured to connect to a wireless LAN network.  
Please configure this product to connect to secured infrastructure.  
Do not use the configuration mode for normal operation.

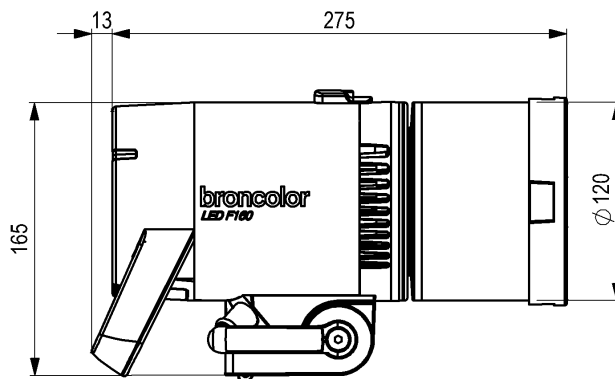
Reports about Security Vulnerabilities: [support@broncolor.swiss](mailto:support@broncolor.swiss)  
Reaction time: 30 days

UK Defined Support Period: 2 years after date of sale, only applicable to products sold in the UK (except Northern Ireland) on or after April 29<sup>th</sup>, 2024  
Manufacturer's name: Bron Elektronik AG  
Manufacturer's address: Hagmattstrasse 7, 4123 Allschwil, Switzerland

## 2. PRODUCT ADVANTAGES

- Compact dimensions
- Stepless power adjustment
- Colour temperature setting in increments of 50 Kelvin
- Manual focusing
- Absolutely flicker-free – even at high image refresh rates
- Li-Ion battery optionally available
- Excellent colour rendering index
- Constant light intensity over the entire colour temperature range and from lamp to lamp
- New freehand bayonet locking system
- Intuitive control menu
- Display very easy to read, even in bright ambient light
- Automatic display orientation
- Compatible with extensive broncolor light shaper range
- Broad radiation angle of the LEDs ensures an optimal illumination of the reflector

### 3. TECHNICAL DATA



All of the dimensions above in millimetres

| broncolor LED F160                     |   |
|--|---|
| Luminous flux                          | Typically 13800 lumens  |
| Colour temperature                     | 2800 to 6800 K (increments of 50)   |
| Colour rendering index                 | Typically CRI 97+   |
| Green/magenta correction (colour cast) | Control range -25 to +25<br>(limitation below 4000 K and above 5000 K)  |
| Dimmability                            | 100 to 6% or f-stop 10 to 6.0   |
| Update option                          | Via WiFi  |
| Display                                | OLED 1.69 inch  |
| Focusing                               | Manual, stepless  |
| Use<br>(suited for indoor use)         | - on stand<br>- floor installation<br>- ceiling suspension (separately available safety cable mandatory, 33.173.00)                       |
| Weight LED F160 lamp                   | 1765 g (3.89 lbs)<br>(Lamp incl. glass diffusion attachment and integrated pigtail)   |
| Dimensions LED F160 lamp               | Length*: 28.8 cm (11.3 in)<br>Height: 16.5 cm (6.5 in)<br>Diameter: 12.0 cm (4.7 in)<br>(* incl. umbrella reflector and protective cover) |
| Temperature range of use               | -20 °C to +45 °C  |
| Cooling                                | Active (temperature-controlled fan)   |
| Cognition light                        | 2 x top left/right<br>5 colours (blue, green, violet, yellow, turquoise)  |
| Compatibility                          | Compatible with broncolor bayonet   |
| Menu language                          | English   |
| Power supply unit                      | 80 to 264 VAC   |
| Power consumption                      | Max. 160 watts  |
| Length pigtail                         | 1.5 m   |
| Warranty period                        | Manufacturer's warranty of 2 years from date of purchase<br>(for the first owner)   |
| Item number                            | 61.010.00   |

## 4. ACCESSORIES AVAILABLE

Original broncolor accessories allow you to use your LED F160 lamp in an even more convenient and versatile way while further increasing the product benefits.

### Available lighting accessories

| broncolor LED F160                               |                  |             |
|--|------------------|-------------|
| Item   |                  | Item number |
| Safety cable for LED F160                        |                  | 33.173.00   |
| Umbrella reflector Ø 120 mm                      |                  | 33.170.00   |
| Protective cover for umbrella reflector Ø 120 mm |                  | 33.171.00   |
| Diffusion attachment for LED F160 (glass)        |                  | 33.174.00   |
| Power supply unit for LED F160                   |                  | 42252.00    |
| Power cable for LED F160                         | Australia        | 41859.00    |
|  | Denmark          | 41914.00    |
|  | Europe           | 41854.00    |
|  | GB and Hong Kong | 41857.00    |
|  | India            | 41858.00    |
|  | Japan            | 41856.00    |
|  | Neutral          | 39087.00    |
|  | South Africa     | 41915.00    |
|  | Switzerland      | 39084.00    |
|  | USA              | 41855.00    |
| Li-Ion battery 36 V XLR *                        |                  | 64.011.00   |
| Charger for Li-Ion battery 36 V XLR              |                  | 64.012.00   |
| V-Mount stand clamp for Li-Ion battery 36 V XLR  |                  | 64.014.00   |
| Li-Ion battery 36 V XLR kit *                    |                  | 61.020.00   |

**\* Please note:**

After max. 5 months, Li-Ion batteries have to be recharged again. If the batteries are not charged they may fall into the status of low discharge and in most cases, they cannot be charged again.

### Recommended compatible broncolor accessories and light shapers

| broncolor LED F160                               |  |             |
|--|--|-------------|
| Item   |  | Item number |
| Octabox 75 (cm (2.5 ft))                         |  | 33.600.00   |
| L40 standard reflector                           |  | 33.115.00   |
| Honeycomb grids for L40                          |  | 33.194.00   |
| Umbrella silver/black Ø 105 cm (41.3")           |  | 33.570.00   |
| Umbrella silver/black Ø 85 cm (33.5")            |  | 33.574.00   |
| Softbox 35 x 60 (cm (1.1 x 2 ft))                |  | 33.560.00   |
| Focus 110 umbrella silver/black Ø 110 cm (43.3") |  | 33.576.00   |
| Octabox 150 (cm (4.9 ft))                        |  | 33.601.00   |
| Beauty Dish reflector with textile diffuser      |  | 33.111.00   |
| broncolor Flooter                                |  | 32.431.00   |
| Safety cable for LED F160                        |  | 33.173.00   |
| broncolor Speed Ring for Softbox / Octabox       |  | 33.401.00   |
| as well as all broncolor softboxes and umbrellas |  |             |

**Please note:**

The LED F160 is designed for use with light shapers. As a result, operation without a light shaper ("bare bulb") is not recommended.

## 5. APPLICATION RANGE FOR THE BRONCOLOR LED F160

The broncolor LED F160 is a very high-quality, compact and durable LED lamp for professional users. Its strengths particularly come to the fore in product and portrait photography. It is an ideal match for the extensive broncolor light shaper range – this enables creative and versatile work. The LED F160 lamp is also suitable for video and film applications. It is suited for indoor use.

## 6. INITIAL OPERATION

**The safety instructions provided must be observed!**

Remove all protective transport materials and the black protective cover from the umbrella reflector before switching on the lamp.

### 6.1 REMOVING AND ATTACHING LIGHT SHAPERS

The LED F160 lamp is equipped with an innovative locking slider. By fixing it in the rearmost position, you now have both hands free to remove or replace the light shaper safely and in a controlled manner.



To remove the light shaper, rotate it as far as it will go in one direction. Pull the locking slider back as far as it will go with one finger and push the small locking pin down in the rearmost position. The slide will now remain in this position. Turn the reflector further in the same direction until it is unlocked. You can now remove it carefully. Please take care not to damage or scratch the diffusion attachment.

Attachment is also very simple:

Move the light shaper towards the LED F160 lamp from the front, align it with the bayonet recesses (small to small and large to large), push it back as far as it will go and then release the locking mechanism by turning it slightly to the left or right. You will hear a click. The light shaper is now securely attached.

### 6.2 MOUNTING AN UMBRELLA



If desired, insert the umbrella rod into the umbrella holder, which is located on the stand holder underneath the lamp.

### 6.3 SWITCHING THE LAMP ON AND OFF

Firstly, connect the pigtail of the LED F160 lamp to the cable permanently attached to the power supply unit.  
Now connect the supplied power cable to the power supply unit.  
Then plug the mains plug into a suitable socket.  
The display illumination is now activated and the LED F160 lamp is ready for use.

With a short press on the on/off button (⏻), the LED lights up and can be switched off in the same way ("standby").

Unplug the mains plug from the socket to switch off the device. The display only goes out completely once the power supply is interrupted.  
The mains plug is used as a disconnect device, the disconnect device shall remain readily operable.

### 6.4 USE WITH A STAND

If desired, mount the LED F lamp on a suitable stand. The stand mount is located on the underside of the device.



### 6.5 CEILING INSTALLATION

#### WARNING!

For ceiling installation, please observe the **mounting instructions** supplied with the accessory "33.173.00 - Safety cable for LED F160 lamp", which is **available separately**.

The LED F160 lamp must **NOT** be mounted on the ceiling without the safety cable mentioned above!



The display of the LED F160 lamp has an automatic orientation. In overhead operation, the display automatically rotates by 180°.



## 7. USER CONTROLS

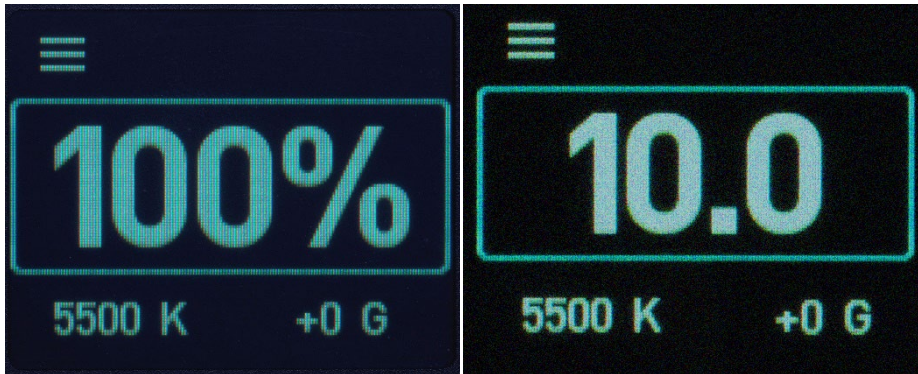
The following illustration shows the user controls for the LED F160 lamp



- (1) Light on/off
- (2) OLED display
- (3) Daylight (5500 K) and tungsten (3200 K) toggle key
- (4) Control button/knob
- (5) Cognition light
- (6) Micro USB port
- (7) Manual focusing wheel
- (8) Locking slider
- (9) Umbrella holder
- (10) Pigtail to power supply cable
- (11) Stand mount
- (12) Clamping lever

## 8. OVERVIEW OF THE MAIN MENU FUNCTIONS

### Main menu view



You can always see the most important settings in the main menu view:

- The currently set **power** Control range: 10.0 to 6.0 / 100 % to 6 % \*
- The currently set **colour temperature** Control range: 2800 to 6800 Kelvin
- The currently set **green-shift** value Control range: -25 to +25

\*

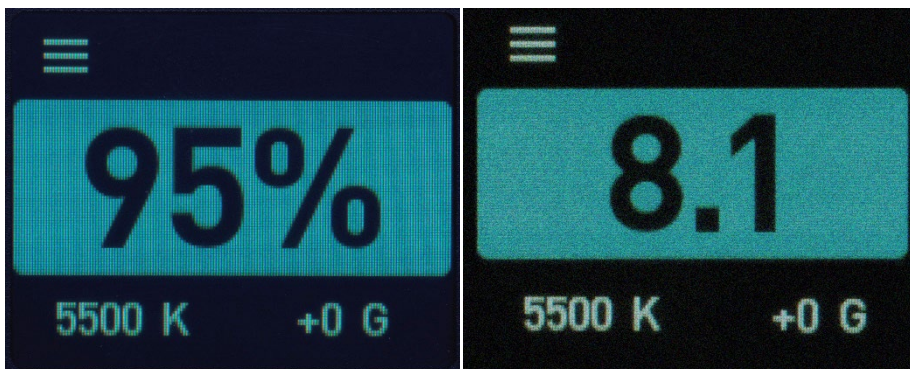
| Output range   | possible increment |
|----------------|--------------------|
| 6.8 and higher | 0.1                |
| below 6.8      | 0.2                |

You can easily switch to the **submenu** via this button:



### Power control

Position the **focus** (by turning the control button/knob) on the power indicator and briefly press it once. The following illustration shows that the power value now has a full light blue background.



The power can now be changed immediately by turning the control knob to the left (power is reduced) or to the right (power is increased). When you see the desired power value on the display, briefly click the control knob once to activate it. The focus becomes visible again and the new power value has been accepted.

### Colour temperature control

Position the focus on the colour temperature field.



Perform the same steps as in the "power example" above.

### Colour cast control (green-magenta shift)

Position the focus on the "green" field.



Perform the same steps as in the "power example" above.

### How do I edit the other available functions?

All other settings must be made in the submenu (☰).

## 9. THE SUBMENU: STRUCTURE

The submenu of the LED F160 lamp is divided into the following functions:

1. Units
2. Cognition light
3. Lamp address
4. WiFi
5. Display
6. Diffusor
7. Info

### How do I switch back from the submenu to the main menu?

Set the focus on the small triangle in the upper left-hand corner by turning the control knob. Click the control knob to return to the home screen.

## 10. THE SUBMENU: DETAILED DESCRIPTION

In this section, each available function in the submenu is explained in detail.

### 10.1 UNITS

This submenu allows you to select the preferred way of displaying the output: either in percentage ("%") or f-stops.

### 10.2 COGNITION LIGHT

The purpose of the Cognition light is to better differentiate between individual lamps when they are controlled by the "bronControl" app. The assignment to a colour is determined by the respective lamp address:

Lamp address 1 blue

Lamp address 2 green

Lamp address 3 violet

Lamp address 4 yellow

Lamp address 5 turquoise

From lamp address 6, the colours repeat in the same order (starting with blue).

You can activate ("on") the Cognition light or deactivate ("off") it.

The "bronControl" app can be downloaded free of charge and is available for computers, tablets, and smartphones.

The following link will provide you with further information: [www.broncolor.swiss](http://www.broncolor.swiss)

### 10.3 LAMP ADDRESS

Here, you can assign an address (1 to 508) to every lamp in use. Lamps with an identical address are clustered in the same group. This means you can control all lamps within this group simultaneously.

#### 10.4 WIFI

Here, you can adjust the following values:

- switch on WiFi ("on")
- switch off WiFi ("off")
- perform a reset of the WiFi module ("reset")
- set the studio address
- activate automatic firmware updates ("Auto update") or disable them ("off")

Furthermore, the respective SSID the lamp is currently connected to, is being displayed here as well.

The studio address can have a value between 1 and 99.

#### 10.5 DISPLAY

Adjusting the display orientation is the purpose of this submenu:

- "Auto": Thanks to a sensor, the display will rotate by 180 degrees as soon as the lamp is upside down
- "0°": Now, the display will no longer rotate automatically (intended for stand mount)
- "180°": Now, the display will no longer rotate automatically (intended for ceiling installation)

After 10 minutes without user action, the display switches off ("Sleep Mode"). It can be woken up again by pressing or turning the central Control button/knob.

#### 10.6 DIFFUSOR

To ensure perfect light quality, the diffusion attachment mounted on the LED F160 must always match the diffusion attachment type selected in the submenu. The original diffusion attachment (silver ring; plastic; 33.172.00) can still be used. However, the optionally available new diffusion attachment (black ring; glass; 33.174.00) brings with it an increase in brightness of typically 15%.



LED F160 lamps ordered from June 22, 2021 are already equipped with the new, black diffusion attachment as standard.

#### 10.7 INFO

Here, you can read the firmware version currently installed on the device.

### 11. ERROR MESSAGES

If a device malfunction occurs, the two cognition lights will permanently light up red. The cause of the malfunction is shown as plain text on the display.

### 12. MAINTENANCE / REPAIRS

Your broncolor LED F160 lamp is a precision instrument that will work without problems for many years with the appropriate care. If you should nevertheless experience problems, please do not try to open the device to repair it yourself. Always leave maintenance and repairs to the broncolor service centres.

### 13. NOTE ON ENVIRONMENTAL PROTECTION

This product must not be disposed of with normal household waste at the end of its life, but must instead be taken to a recycling point for electrical and electronic equipment. The materials can be recycled according to their markings. You can make an important contribution to protecting the environment by reusing the product, recycling the basic materials or reprocessing redundant equipment in other ways. Please ask your local authorities or our sales partners regarding the appropriate disposal point.

### 14. WARRANTY

We provide a manufacturer's warranty of 2 years from date of purchase (for the first owner) for the LED F160 lamp. This does not include flash tubes, halogen bulbs, safety glasses, cables, batteries, rechargeable batteries and textiles. Faults that occur due to non-observance of the safety instructions, improper handling, use of third-party accessories or unauthorised interventions/modifications are excluded from the manufacturer's warranty. We accept no liability for damage resulting from non-observance of the safety instructions, improper handling, use of third-party accessories or unauthorised interventions/modifications. In event of technical problems, please contact the nearest broncolor authorised service centre immediately. Part numbers, product designations and the scope of delivery may vary from country to country. Detailed information can be obtained from your broncolor sales partner. Subject to errors and misprints.

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