

BlueHex



Dual Blue/White LED

Transilluminator

Instruction

Description

The AT0100 is an advanced transilluminator equipped with dual light sources, making it suitable for a wide range of Life Sciences research purposes. It enables researchers to observe and analyze nucleic acids and proteins effectively.

The user-friendly design ensures ease in post-observation tasks like gel cutting, data imaging, and filing, providing researchers with a comfortable, convenient, and safe experience throughout their work.

Blue Light Mode

The AT0100 utilizes a 470nm LED light wavelength as its excitation light source. This transilluminator offers a Blue Light mode, which is ideal for both qualitative and quantitative observations of nucleic acid or protein experiments using fluorescent staining reagents.

In addition to being compatible with our safe reagents, such as Novel Juice, Novel Green, Novel Green Plus, OnePCR series, Nimble Juice, and Nimble Juice R-TYPE,

the AT0100 also works effectively with a wide range of fluorescent staining products available in the market. These include SYBR Gold, SYBR Green I & II, SYPRO Ruby, SSYPRO Orange, Coomassie Fluor Orange, GelStar, and GelGreen stains.

To achieve the best imaging quality, the transilluminator allows users to adjust the light intensity at three different levels, depending on the sample concentration. Moreover, the magnetic amber filter features a hinges-free design, providing a simple, safe, and convenient experience when opening and closing the filter.

White Light Mode

The White Light mode utilizes a whole-wavelength white LED light as the excitation source, offering softness and uniformity. It is suitable for observing or imaging SDS-PAGE gels stained with Coomassie Blue or Silver Stain. Additionally, it serves as a straightforward film-viewing transilluminator, useful for inspecting X-Ray films in research or clinical settings. With its light intensity adjustment feature, users can contrast the light intensity at three levels based on observational needs, ensuring the best imaging quality is achieved.

Features

Dual Light Source

The transilluminator comes with LED White Light and Blue Light modes. Extensive Applicability and Compatibility: Suitable for a wide range of research areas in basic science and medical diagnosis.

Magnet Filter

Featuring a hinges-free design, the magnetic filter provides users with ease, security, and user-friendliness, without causing any harm to the filter near the hinges. Observations and gel-cutting can be performed comfortably, all without the requirement of protective eyewear

Bottom-up LED illumination

This illumination method effectively eliminates interference from reflective lights caused by side illumination, significantly enhancing observational and imaging quality. The use of durable and safe LED lights ensures that neither the eyes and skin nor the experiment sample are at risk of damage, as often observed with UV illumination.

Three Levels of Adjustable Light Intensity

By customizing the light intensity and contrast according to the sample quantity or observational needs, you can attain the highest quality in observation and imaging.

5-Minute Automatic Power-Off

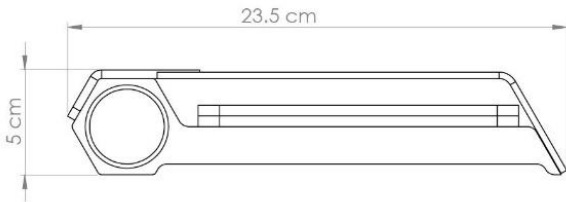
To ensure user safety and prevent overheating of LEDs, this feature automatically powers off the transilluminator after five minutes of inactivity, protecting it from potential risks caused by operational oversight.

Ordering Information

Cat. No.	Description
AT0100	Blue/White LED Transilluminator
00000	Amber Filter
00000	Blue Filter
00000	White Filter
00000	Adaptor
00000	Dark room

Specifications

Device Dimension	23.5 × 22 × 5 (cm)
Viewing Area Dimension	12 × 8 (cm)
Input Voltage	100 – 240 V AC
Input Current	2 A
Filter	Amber filter (580 nm)
Light Source	LED – Blue & White (Dual mode)
Storage	RT
Emission Maxima	470 nm
LED Package Lifetime	>30,000 hrs.



Trouble Shooting

Trouble

Low Resolution

The sample remains unobserved while under the Blue Light Mode

Cause

The fluorescent staining reagents used should not exhibit wavelengths within the 400nm - 450nm range.

Insufficient sample concentration can be a concern during the experiment.

The light mode chosen is incorrect.

Solution

Replace the fluorescent staining reagent.

Adjust the light intensity and check for improvement. If no improvement is observed, increase the sample concentration.

Ensure the light mode chosen is the Blue Light Mode.

Operation Instruction

Blue Light Mode

1

Position the AT0100 Dual LED Blue/ White Light Transilluminator on a flat, stable bench, leaving enough space for proper air circulation and preventing overheating.

2

Connect the power cord securely to the power socket.

3

To power ON or OFF, touch and hold the [Power ON/OFF] button for 3 seconds. After turning it ON, you can change the light intensity by touching the key and adjust the contrast in 3 levels.

4

Carefully place the blue filter, including the scratch-proof glass, in its designated position.

6

Once the gel sample is placed on the transparent glass area of the blue filter, you can immediately proceed with the gel-observing and cutting experiment.



To disable the automatic power-off feature at 5 minutes, press the power switch again to activate the indicator light once it turns off. Adjust the light intensity according to the sample condition using the dedicated button.

7

After completing your tasks, remember to turn off the transilluminator.

8

For cleaning, use a clean and damp cotton cloth to wipe the surfaces of the transilluminator and filter

Cleaning and Maintenance

Cleaning

After each use, make sure to gently wipe the transilluminator using a soft cotton cloth. Avoid excessive wetness in the cloth and refrain from using harsh cleaning detergents or solvents. To maintain the frame and filter glass, we recommend wiping them with a damp cloth. Avoid using overly abrasive or corrosive detergents that could harm the filter glass. Instead, opt for mild detergents like alcohol, glass cleaners, or similar alternatives. When you clean areas that might have been exposed to carcinogenic or toxic reagents, ensure to wear appropriate gloves for your safety. For the protection shield, which is made of tempered glass, use a damp cloth for cleaning purposes.

Changing the Blade

To replace the blade with a new one, carefully unscrew the silver handling part of the knife counterclockwise from the head part. Gently push out the blade-holding section located in the head part to remove the old blade. Take the "SPARE BLADE" container and extract the new replacement blade from it. Insert the new blade into the X-shaped blade insertion hole. Once done, reposition the silver connector back

to its original place and securely tighten the head part with the silver handling part in a clockwise direction.

Reminder: The blade is very sharp, so be careful to prevent any accidental cuts.

Repair

The device is covered by a 2-year warranty, and during this period, Acco company will handle any necessary repairs. Please note that all repair and servicing procedures must be conducted solely by Acco company or its authorized agents.

