

# Guide for one-button Ignis Pixel devices<sup>1</sup>

## Contents:

- 1 General information**
  - Charging
  - Battery Maintenance
  - Water Protection
  - Temperature Guidelines
  - Cold Weather Performances
- 2 Controls**
  - Turning on
  - Entering to menu
  - Battery level
  - Brightness adjustment
  - Turning off
  - Automatically Turning off
- 3 Modes for devices**
  - Presets Modes
  - User timelines
- 4 Single images mode**
- 5 Ignis Pixel App and Bluetooth connection**
- 6 Ignis Pixel Utility and PC connection**
- 7 Customizing Image Sequences**
- 8 Shooting videos with your props**
- 9 Warranty**

1. The guide is relevant for the following devices with firmware version 3.0.27:

- Juggling Ball
- Ignis BubblePoi 16
- Ignis Pixel Knobs 5
- JellyPoi 16 (Ignis Rope Dart 16), JellyPoi 24 (Ignis Rope Dart 24)
- Ignis Stick 20
- LED Juggling Club 48 SD, Juggling Club 72 HD
- LED Flying Pixel Disc 8, LED Flying Pixel Disc 20, Double-LED Flying Pixel Disc
- Ignis Diabolo Sticks 24
- Ignis Drumsticks 48
- LED Pixel Cube 72, LED Pixel Octa 72, LED Pixel Tetra 72
- Rhythmic Gymnastics Ball (all models)
- Rhythmic Gymnastics Club (all models)

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## **Dear customer,**

Thank you for purchasing Ignis pixel production. To make its lifetime as long as possible, as well as to keep the warranty valid, please read this guide entirely and follow our advice.

These LED props are part of one-button devices designed to transform physical movements into captivating visual displays. While they come in different form factors, each shares a core functionality — generating dynamic light patterns through manipulation.

This is a generic instruction manual applicable to all devices featuring a one-button control system.



## 1 General information

Our devices are designed to be impact-resistant, providing reliable performance under regular use and accidental impacts. However, it's important to exercise care and avoid excessive or deliberate force, as such actions may compromise the device's functionality. Embracing a mindful approach to handling ensures the longevity and optimal functioning of these resilient pixel props.

### ● Charging

To charge the device, plug it into a USB charger or computer — you will see a red light. You can see the level of charge by the position of the red light. The level of charge corresponds to its position. If it's in the middle, the device is 50% charged, if on top — it refers to full charge, etc. When the device is on charge, the red light slowly moves towards the top position. When it is completely charged, the light finally turns green. Recommend to keep the device on charge after the green light for approximately 20-30 minutes.

### ● Battery Maintenance

Lithium batteries don't have a memory effect, which is why we recommend charging the props every time after using them; don't wait till they are fully discharged. If you charge the props every time, it makes the lifetime of the battery longer.

Avoid deep discharge of your props! Otherwise, it may result in a loss of battery capacity and a reduction of working time. Keeping the battery level above 70% is considered optimal.

### ● Water Protection

Avoid water exposure, as any intrusion can damage the props. In case of rain or other wet conditions, use sticky tape to cover USB ports, buttons, and potential entry points for water. It's crucial to note that water damage is not covered by the warranty. Contact us if issues arise.

### ● Temperature Guidelines

The recommended operating temperature for pixel equipment is between -20 °C to 50 °C (-4 °F to 122 °F). Cold temperatures may reduce battery capacity temporarily, affecting working time.

### ● Cold Weather Performances

If performing in cold environments, keep the devices warm until the performance. This prevents the batteries from cooling and ensures consistent working time.

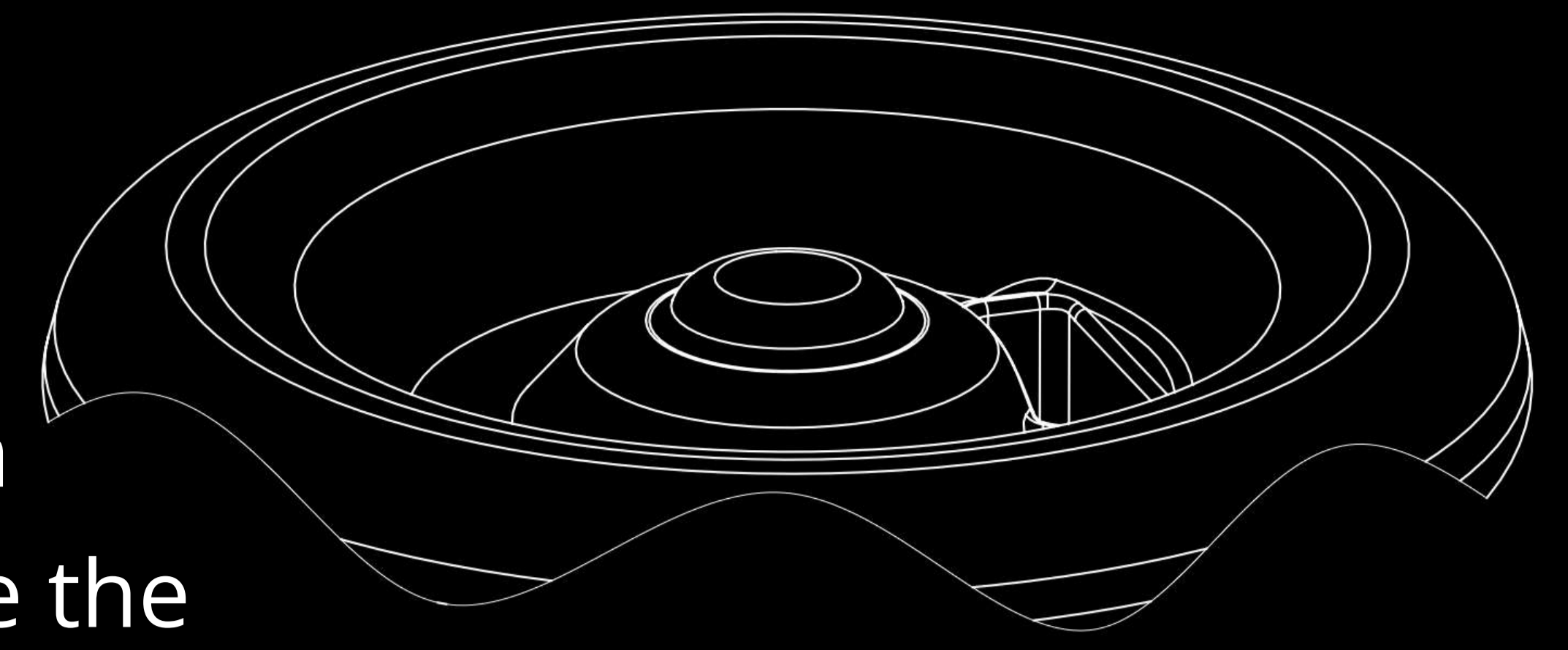
These recommendations aim to offer clarity on maintaining and protecting your pixel props for prolonged and effective use.



## 2 Controls

All one-button devices feature one button to control the primary functions of the device.

To manage functions and activate various modes, the device uses a color-flashing cursor<sup>2</sup>. This cursor can be moved and used to activate the necessary functions.



### ● Turning on

To turn the device on, press the button and hold it down until the red-to-green gradient is full. By default, the device starts playing loaded images one after another upon first activation.

### ● Entering to menu

From playback mode, you can enter the menu by pressing and holding the button a bit longer than a normal press. Release the button when the menu image appears.

The device contains a menu system with two sections:

#### Section 1:

**Preset Modes:** Features preconfigured operational modes ready for immediate use.

**User Timelines:** Allows users to create and customize sequences of images. Each timeline permits the user to set the display time and sequence for individual images.

#### Section 2:

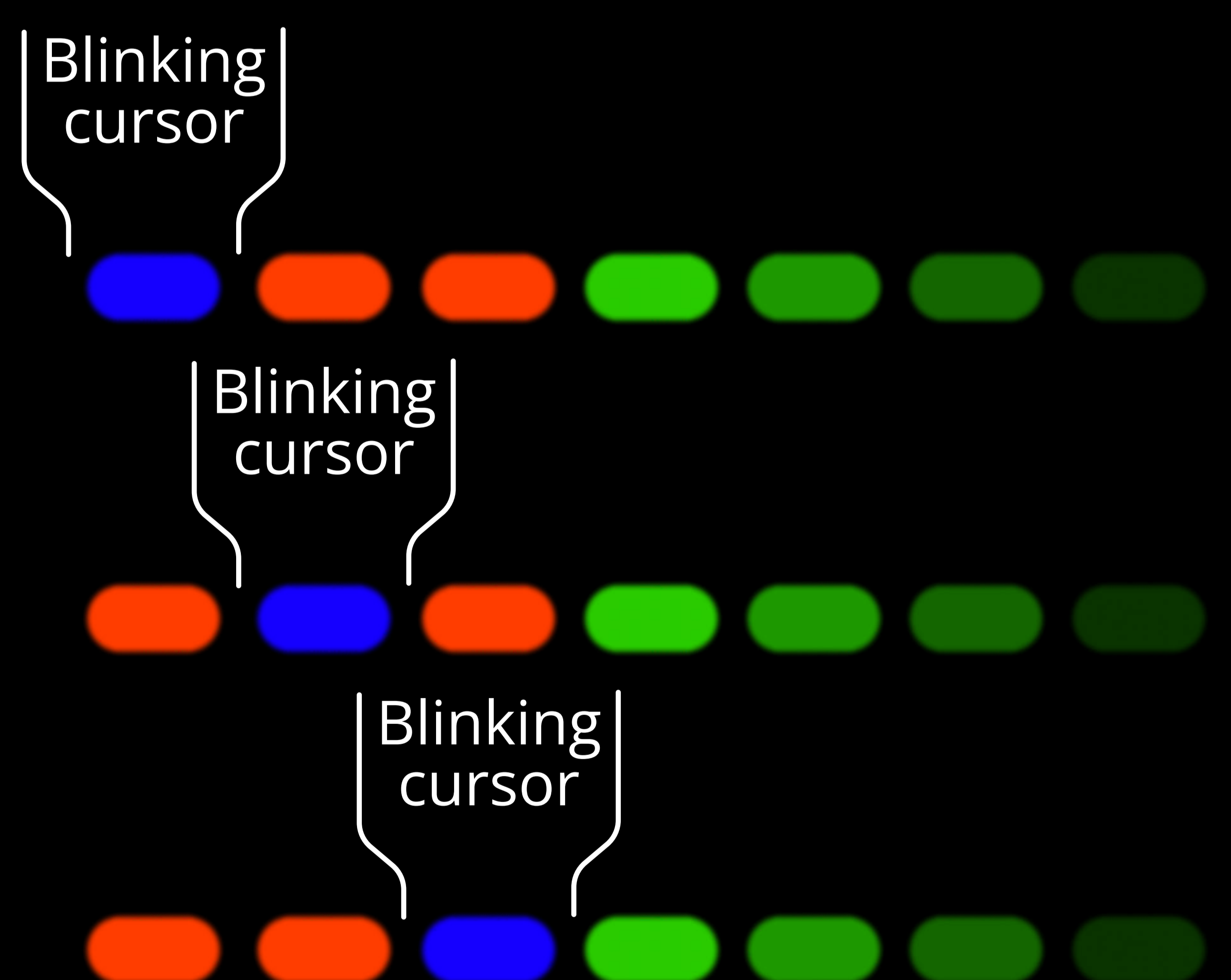
**Loaded images scale:** Displays a visual scale represented by lighting LEDs and a blinking cursor.

While in the menu, you can move the cursor up and down using the button. To move the cursor up, press the button and release it as soon as the cursor moves. To move the cursor down, press the button and hold it until the battery level bar appears, then make a short press on the button to return to the menu; the cursor moves down at the moment of entering the battery level display mode.

If you need to move the cursor down more than one position, perform a long press while the battery level bar is displayed, and you will see the cursor move down. Once the cursor is in the desired position, make a short press to return to the menu.

After selecting the desired mode, activate it by making a short press on the button. For more information about the available modes, refer to the 'Functions and Modes' section.

#### Moving the cursor



2. The blinking cursor may vary in appearance, including color, depending on the device and menu, ranging from one or more pixels.



### ● **Battery level:**

Get the device to menu mode (with a flashing blue or red cursor), then press the button and hold it for at least 1 second until a red-to-green gradient appears. The gradient will show the level of charge.

100% battery level



75%



50%



25%



### ● **Brightness adjustment.**

To adjust the brightness, run any timeline or a single image, from playback press and hold the button for slightly more than 2 seconds until the pink cursor on the white scale appears.

Use short presses of the button to move the cursor across the scale of 6 brightness levels. The brightness scale is looped, so after reaching the maximum brightness level, the next press will take you back to the lowest level. While you are moving the pink cursor, you see how the brightness of the white scale changes. The higher position of the cursor causes higher brightness. Confirm the desired brightness with one long press of the button. The device goes into running mode, so you can see the current brightness right away. If a timeline was started, it will begin playing again from the first picture.

6% Brightness



12%



25%



50%



100%



200%



Another way to adjust the brightness is through the Ignis Pixel app on your phone.

Low brightness levels help extend battery life.

### ● **Turning off**

Push the button and hold on to the button pushed until all LEDs switch off.

### ● **Automatically Turning off**

After 10 minutes of inaction in Menu mode the device automatically turns itself off. The device turns off from Timeline or Single image mode only when the battery is low.

When the battery is low, the LEDs blink red for 10 seconds after that the device turns itself off.



## 3 Modes

### ● Preset Modes

**1. Sequential Playback:** Images cycle through, each displayed for 4 seconds by default. Duration can be adjusted from 1 to 8 seconds via the application or the device's System menu.

**2. Random Playback:** Images randomly cycle for 4 seconds each by default. Duration is customizable within the range of 1 to 8 seconds through the application or the device's System menu.

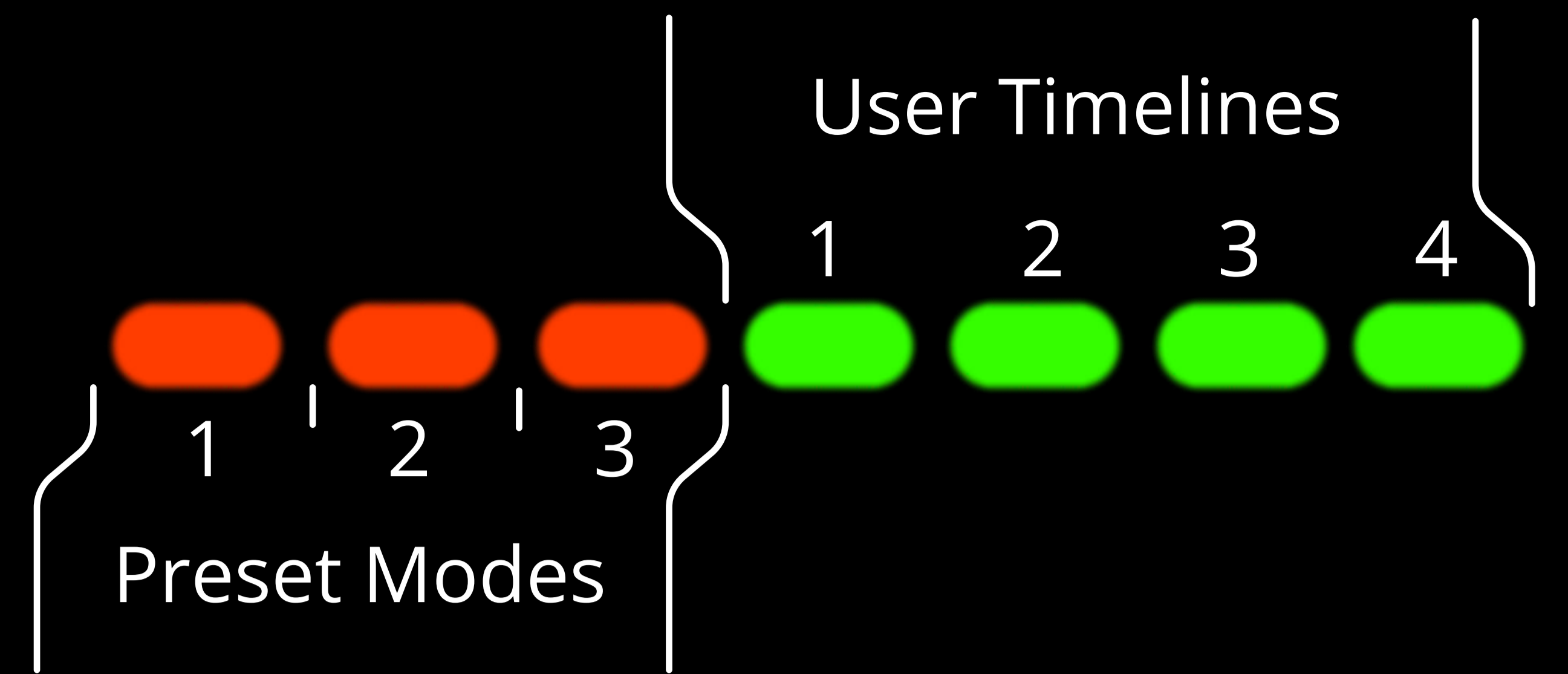
**3. Solid Color Mode:** In this mode, a spectrum of 16 colors is presented. You can select the desired color by moving the cursor. To move the cursor up, press the button and release it as soon as the cursor moves. The scale is looped, so you can move the cursor around in a circle, selecting colors. Make a short press to activate the selected color. The device will glow with the chosen color. A long press of the button returns to the Menu mode.

### ● User timelines.

Beyond the Solid Color Mode can see a green scale with the blue cursor. These are four user timelines, where you can put pictures in any sequence and duration. If there are no pictures in a user timeline, after you run it, it glows dim blue. If you fill a timeline with pictures, you will see them running in the same sequence as you put them. The creation and uploading of user timelines to the device are achievable through both the mobile application and the utility. For more detailed instructions, please refer to the "Customizing Image Sequences" section.

If the Stabilization Sensor is available and turned on:

When launched in the Solid Color Mode, the device, if untouched, indicates battery level by dimming one LED on the color scale. The position of the dim LED corresponds to the current battery level. The top position signifies 100% charge, and the lower positions indicate lower battery levels. This feature is valuable when using the device as a lamp, allowing you to gauge the remaining battery life visually. If the device is moved, the LED will normalize brightness.



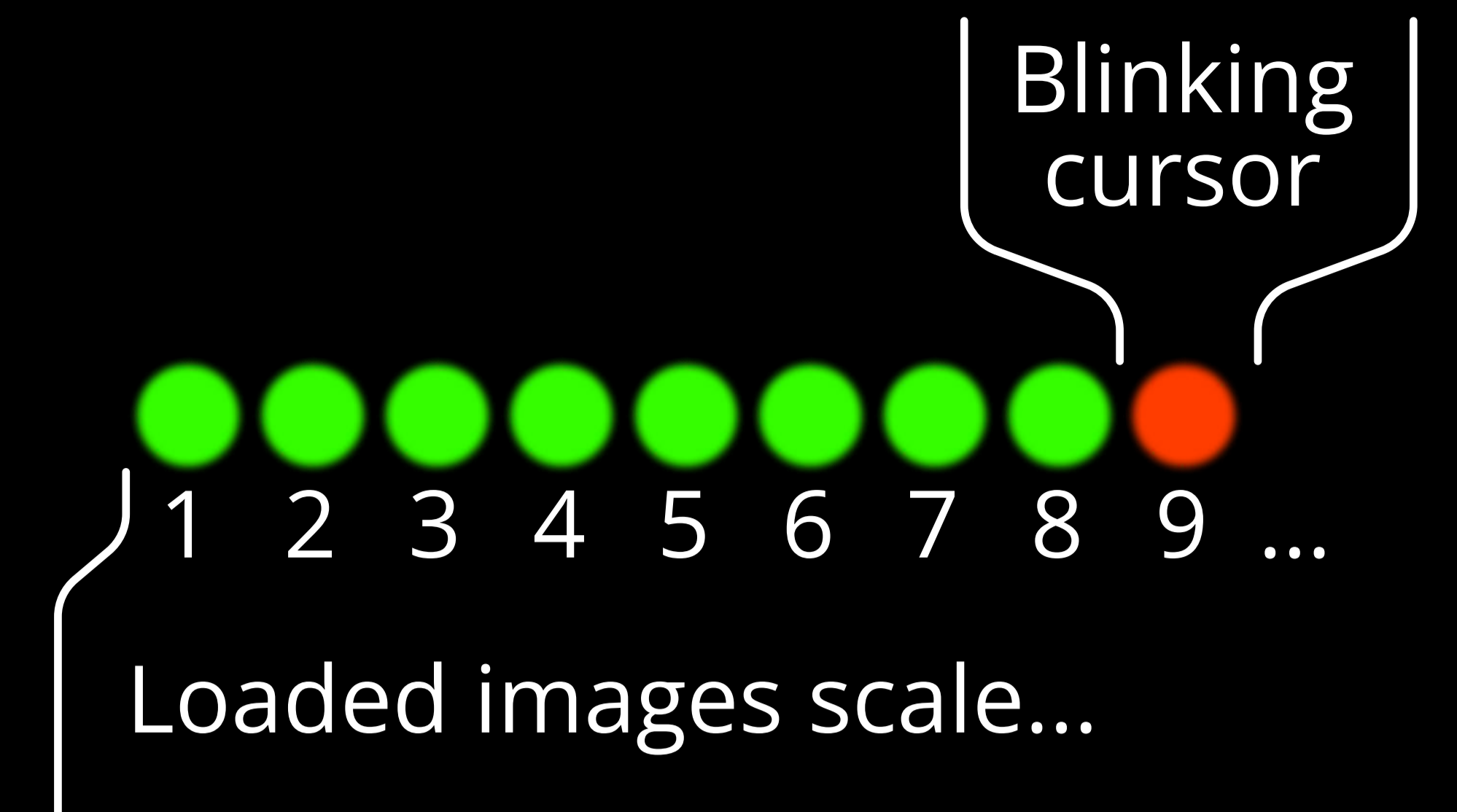
### List colors of the **Solid Color Mode**

- cold white
- warm white 1
- warm white 2
- warm white 3
- red
- orange
- yellow
- yellow green
- green
- auqa
- cyan
- light blue
- blue
- violet
- purple
- pink



## 4 Single images mode.

Go beyond the User Timelines and Preset Modes, get into the green scale, and the red blinking cursor. You are in Single Image mode. When you run this mode, a selected image doesn't change, it will be displayed permanently until you stop displaying or change the picture for another one. To change a picture just click the "Up" or "Down" button. Single image mode can be useful, for example, on photo sessions, or when you don't want a picture to change. The number of slots for single pictures depends on the type of device<sup>3</sup>.



3. Different devices support varying numbers of possible uploaded images, as listed below:

126 images for:

- Juggling Ball
- Ignis BubblePoi 16
- Ignis Pixel Knobs 5
- JellyPoi 16 (Ignis Rope Dart 16)
- JellyPoi 24 (Ignis Rope Dart 24)
- Ignis Stick 20
- LED Flying Pixel Disc 8
- LED Flying Pixel Disc 20
- Double-LED Flying Pixel Disc
- Ignis Diabolo Sticks 24
- Ignis Drumsticks 48
- Rhythmic Gymnastics Ball (all models)

50 images for:

- LED Juggling Club 48 SD
- Rhythmic Gymnastics Club (all models)

24 images for:

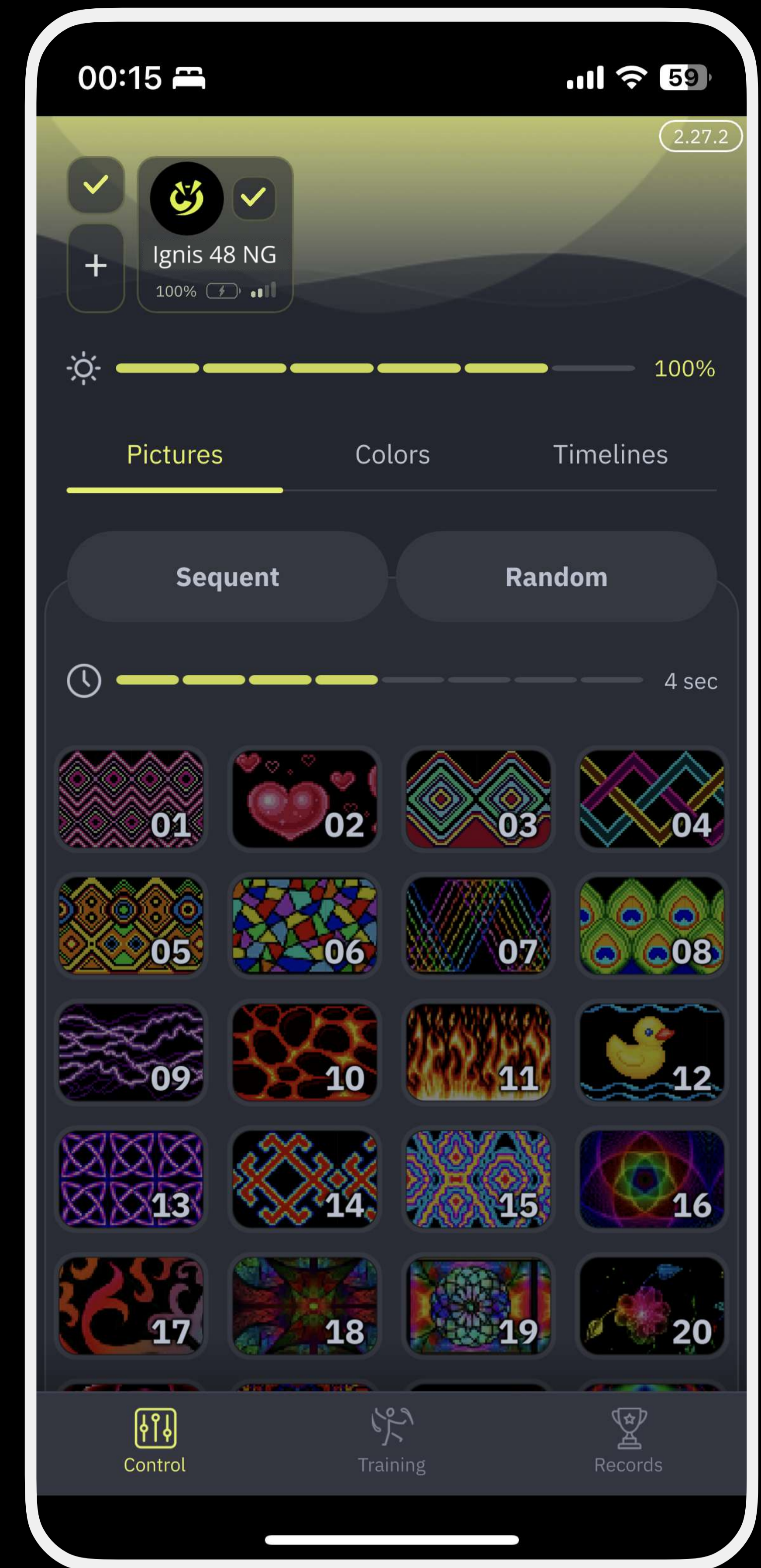
- Juggling Club 72 HD
- LED Pixel Cube 72
- LED Pixel Octa 72
- LED Pixel Tetra 72



## 5 Ignis Pixel App and Bluetooth connection

To unlock the full potential of your Ignis product, install the Ignis Pixel App on your smartphone. Make sure to enable Bluetooth on your smartphone for device connectivity. The Ignis mobile app empowers you to control your device through your cell phone, allowing you to upload images, create timelines, start and stop the device, adjust image brightness and duration, and view detailed statistics if your device is equipped with Image Stabilization. You can even synchronize and control multiple devices simultaneously. The app is compatible with both Android and iPhone platforms.

To install the mobile application, simply scan the QR code and download it to your smartphone from the App Store or Play Market.

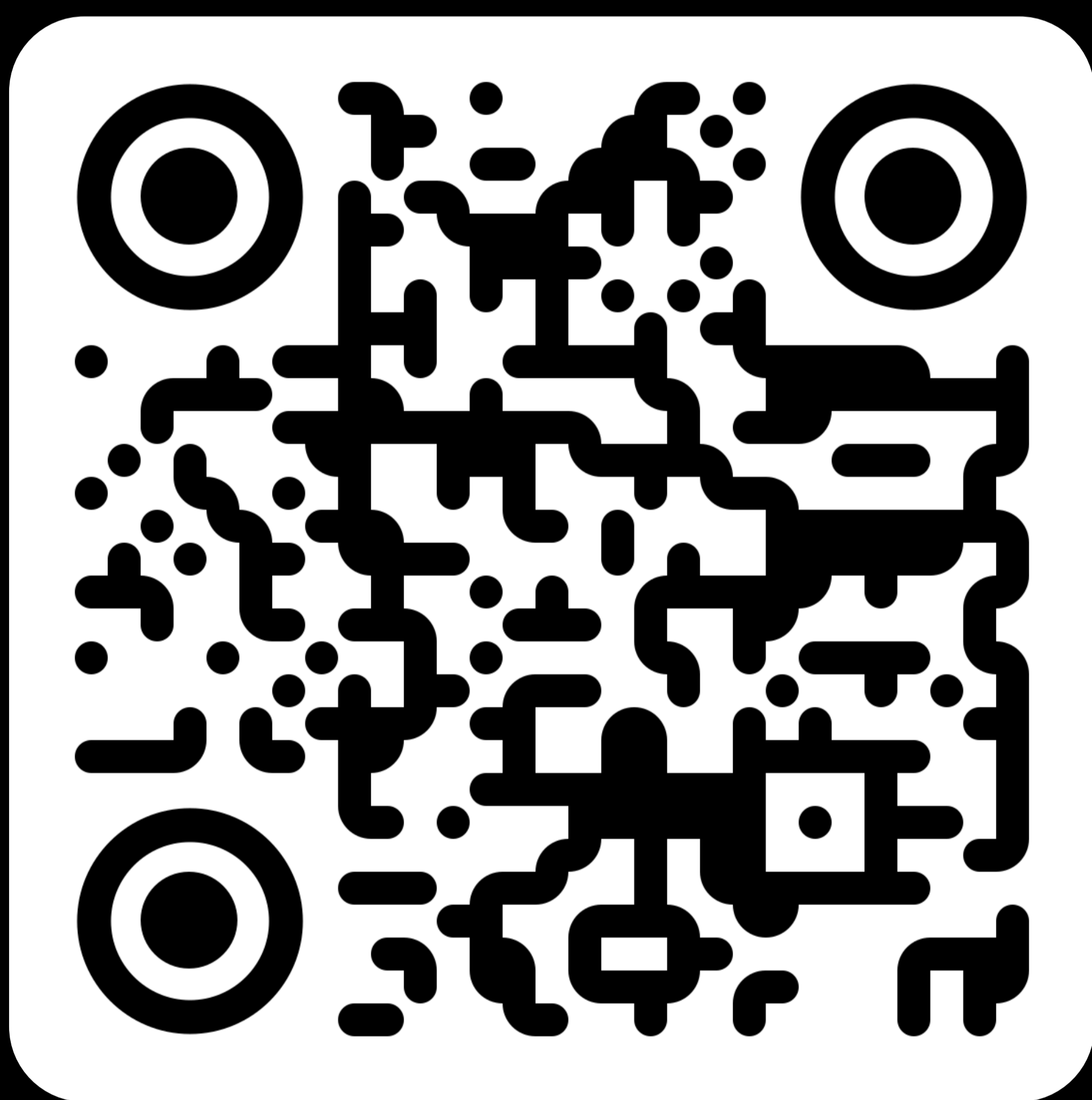
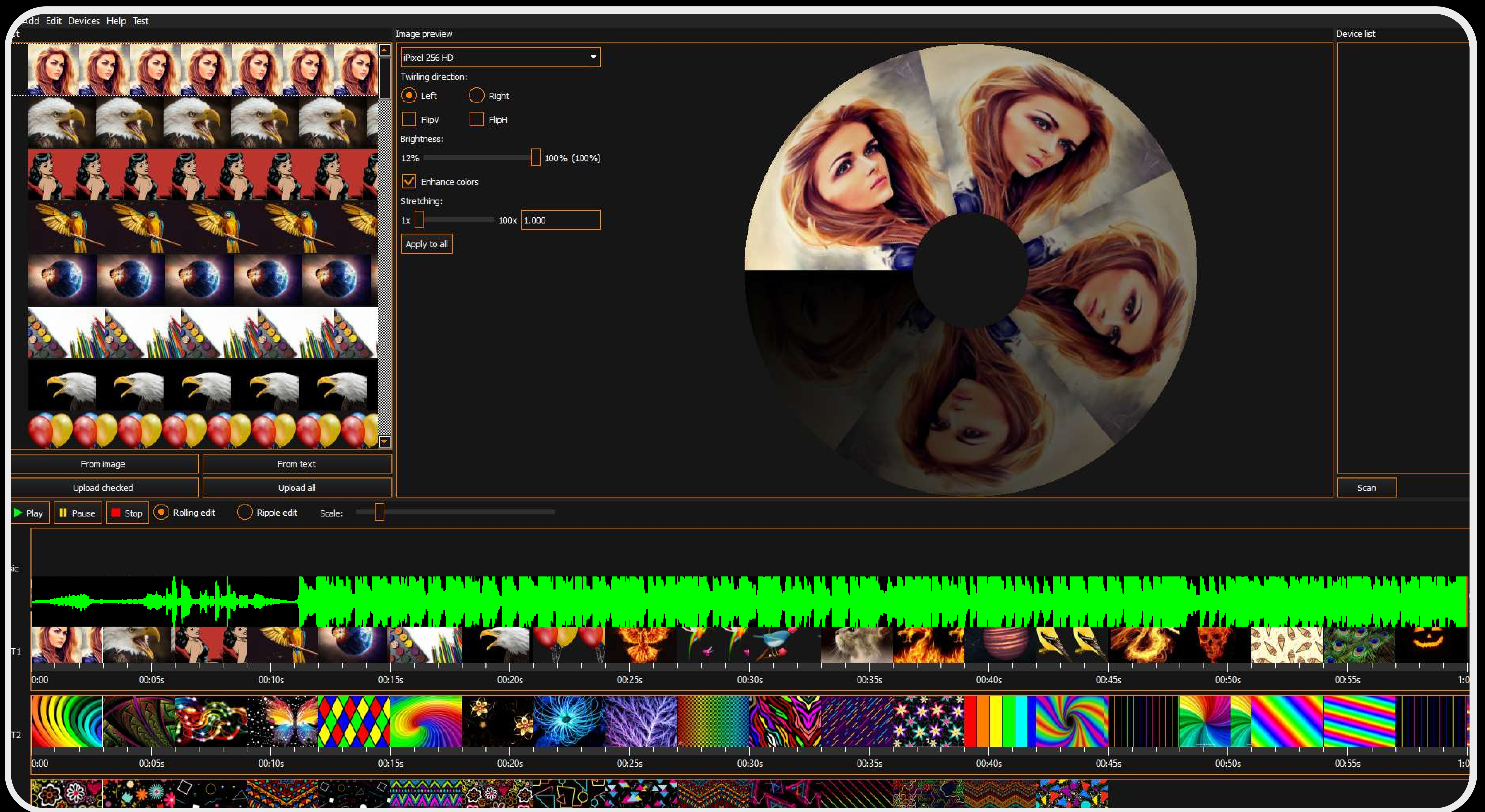




## 6 Ignis Pixel Utility and PC connection

We also provide a utility for both Windows and macOS platforms, offering more flexibility and convenience for configuring timelines and uploading new images to your device. Additionally, you can save your projects in this utility for later import into the mobile application.

To access the utility, scan the QR code or follow the link below and download it to your PC.



<https://ignispixel.com/downloads>



## 7 Creating and customizing user timelines

You have the option to set the duration of each uploaded image and arrange them in a specific order, creating a timeline synchronized with music. In the Ignis Pixel mobile app, you will find four customizable timelines labeled T1, T2, T3, and T4. It's important to note that the Ignis Pixel Utility software displays a total of 10 custom timelines, as its interface is designed to accommodate all Ignis Pixel props. However, one-button devices are only compatible with the first four timelines, and the remaining ones will not be active for these devices.

To set up a timeline, follow these steps:

1. Launch the Ignis Pixel Utility software.
2. In the upper-left section of the Ignis Pixel Utility, you'll find the Image list. You can add individual images to this list via the 'Add' menu option, selecting 'Image,' or by simply dragging and dropping image files into the list.
3. Select the images from the Image list and drag them to the desired timeline (T1-T4) located in the lower section of the Ignis Pixel Utility.
4. You will now see a sequence of pictures on your chosen timeline. To adjust their order and duration, you can drag the images or their borders, much like in video editing software. Use the Ctrl (Cmd for macOS) button to temporarily switch between the Ripple edit and Rolling edit modes. In "Ripple" mode, you push all images located to the right of the selected one, keeping their duration. However, the total duration of the timeline changes as a result. In "Rolling" mode, you adjust the duration of only the bordering images, keeping the total duration of the timeline unchanged.
5. To synchronize your timeline with music, add your music file using the "Add" menu option, selecting 'Music,' or by dragging and dropping an audio file into the Music slot of the Ignis Pixel Utility, which is located in the lower section, just above the Timelines.
6. Connect your device to the computer using a USB cable and click the "Scan" button in the Device list on the right section of the Ignis Pixel Utility.
7. Click the 'Upload All' button. The duration of this process may vary depending on your device model, the number of pictures, and the aspect ratios of the images.
8. If you only made changes to the duration or order of pictures in a specific timeline and want to save time, check the box for the relevant timeline and click 'Upload Checked.' This process will only take a few seconds.

For a more in-depth guide on how to use Ignis Pixel Utility, including uploading pictures and creating projects, please refer to this instructional video:

<https://youtu.be/FUdYDPsoVnQ>

With Ignis Pixel Utility, you can save your project and transfer it to another computer or mobile device via email, cloud storage, or using a USB flash drive. There's no need to send the original images used in the project, as they are already contained in the project file.





## 8 Shooting videos with your props

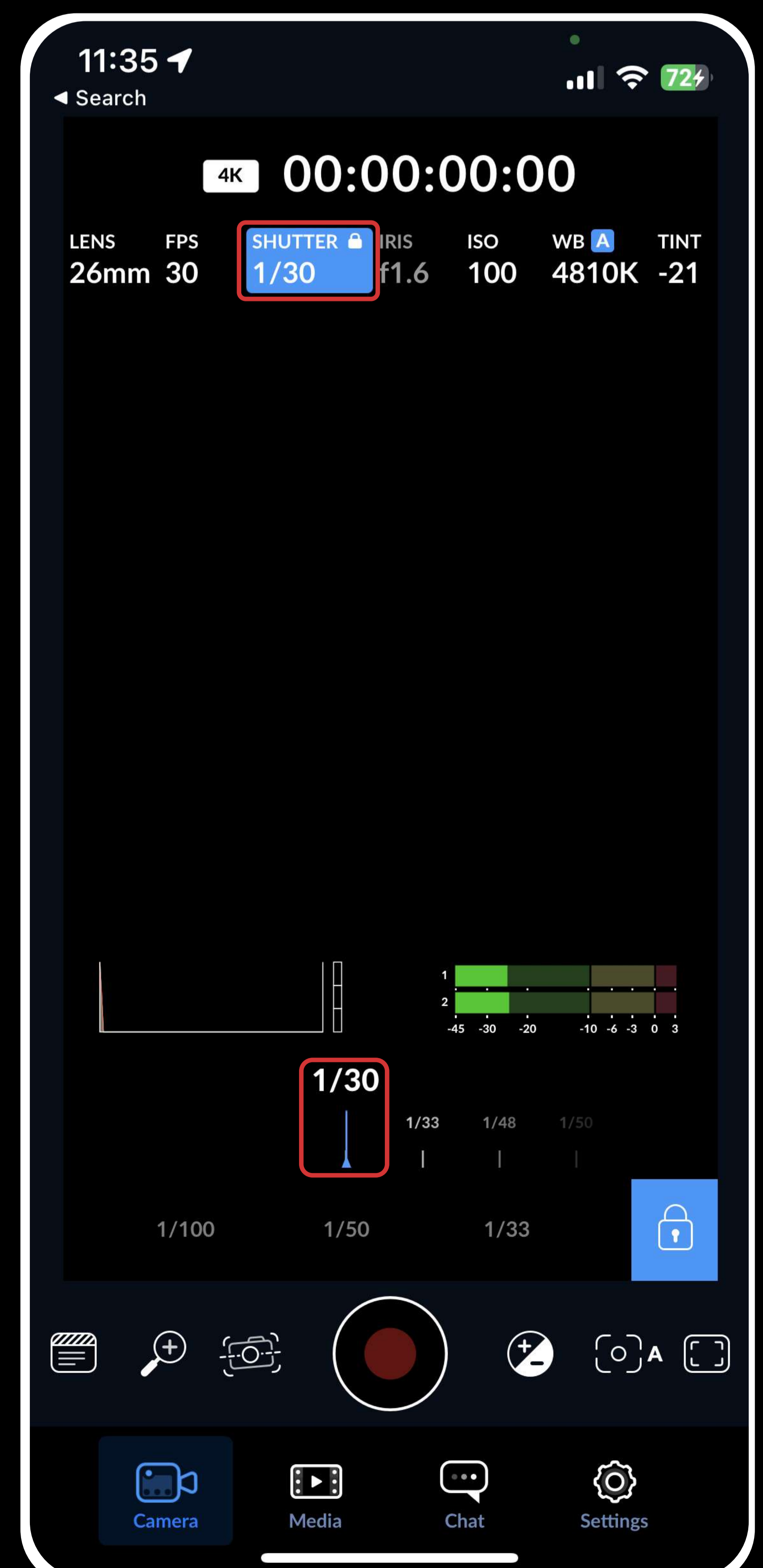
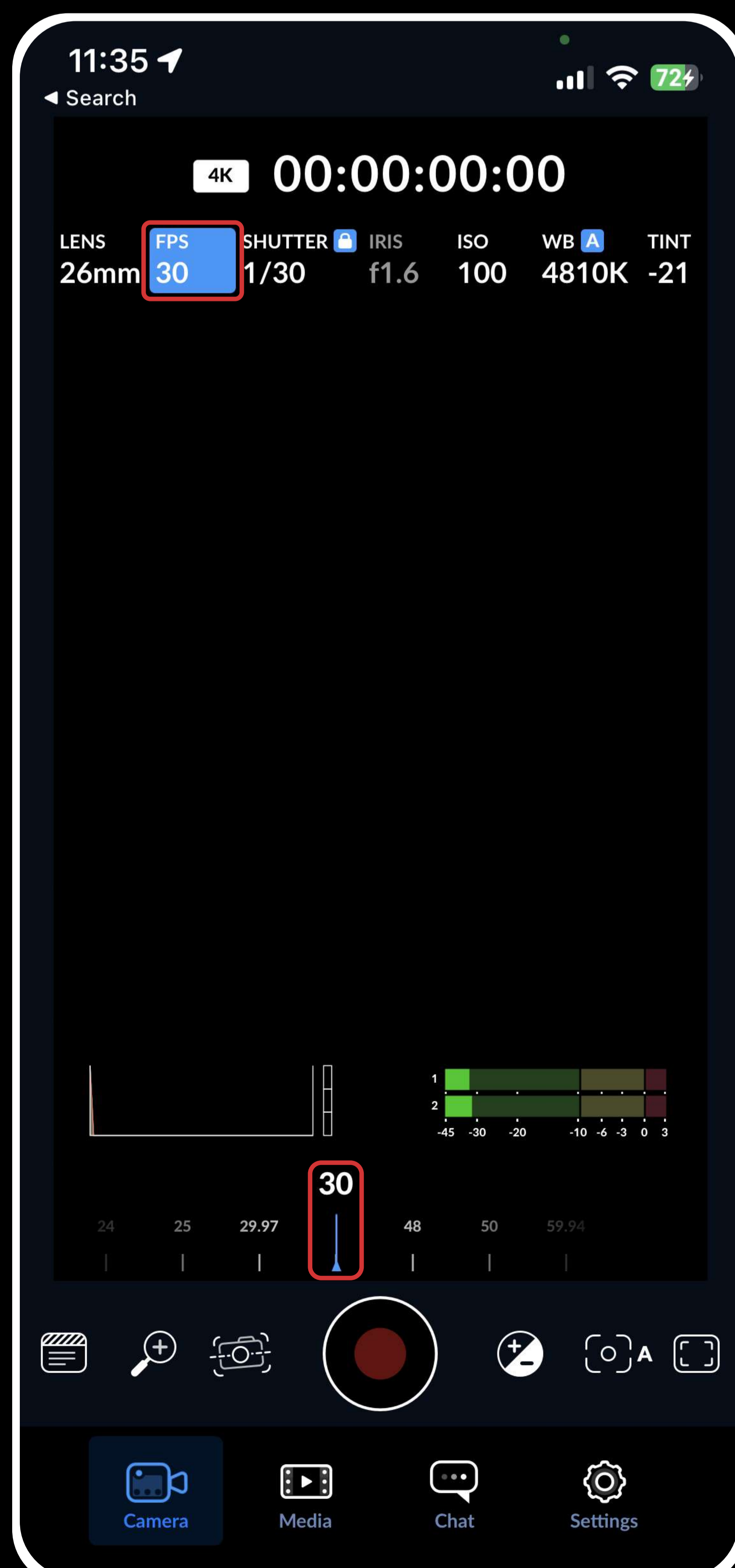
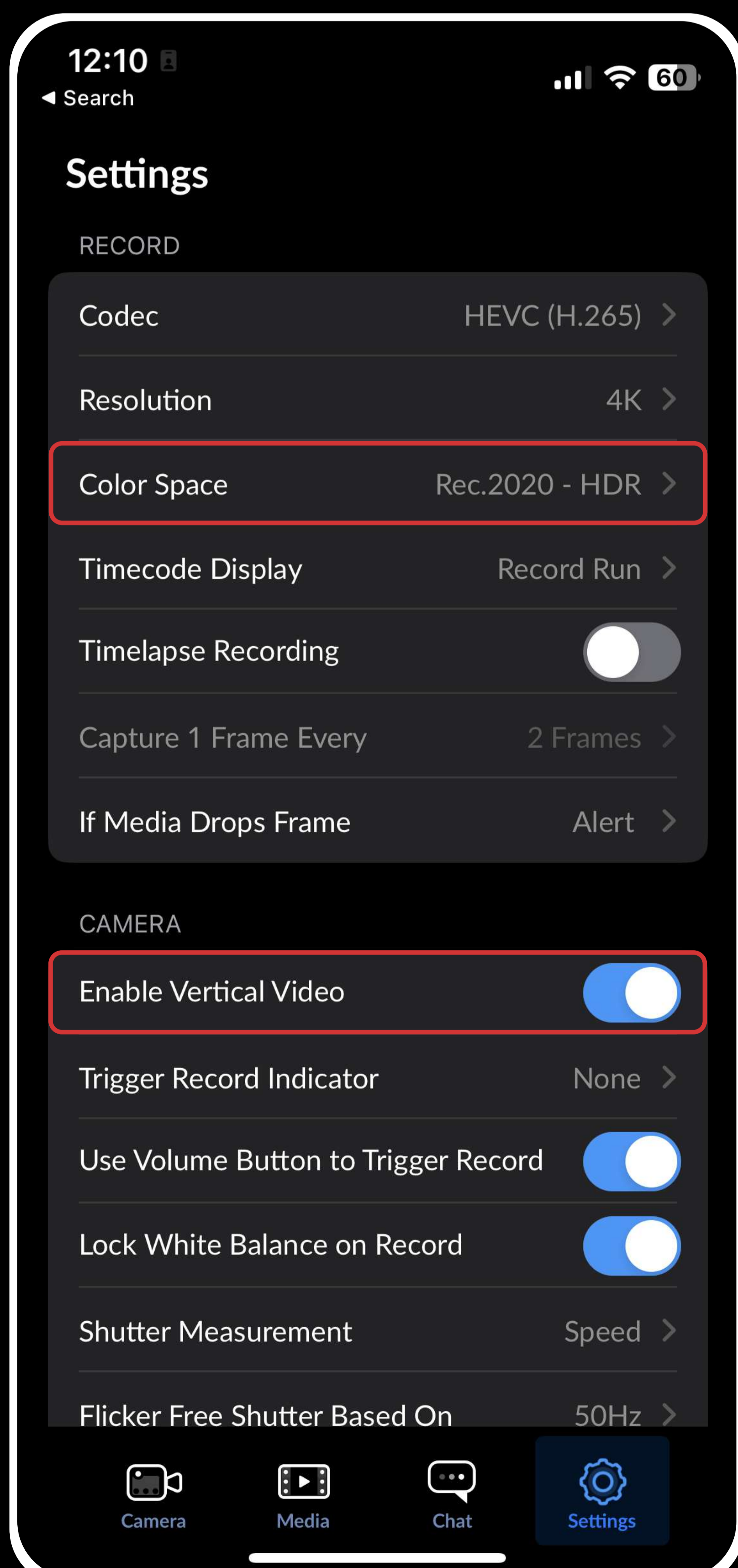
### Preparation.

Before you start shooting, it's necessary to set the brightness on your device to 12%; see section 2, "Brightness Adjustment". If your device does not have a brightness adjustment feature, you need to prepare your project images in "Ignis Pixel Utility", set their brightness to 12%, and then upload them to the device. This is necessary for matching the brightness of the poi and the background brightness to get the optimal exposure.

For the best results, shoot videos under moderate lighting. The best time for outdoor shooting is at sunset, in the shade, under the canopy of trees, or within an hour after the sun has set. If you're filming indoors, dim the lights but do not turn them off completely. Alternatively, illuminate the person with a lamp or flashlight; otherwise, the person will not be visible in the video. Use a dark or muted background. If you use a bright background, the poi trails will not be visible in the video. Don't forget to clean the lens to avoid unwanted flares in your video.

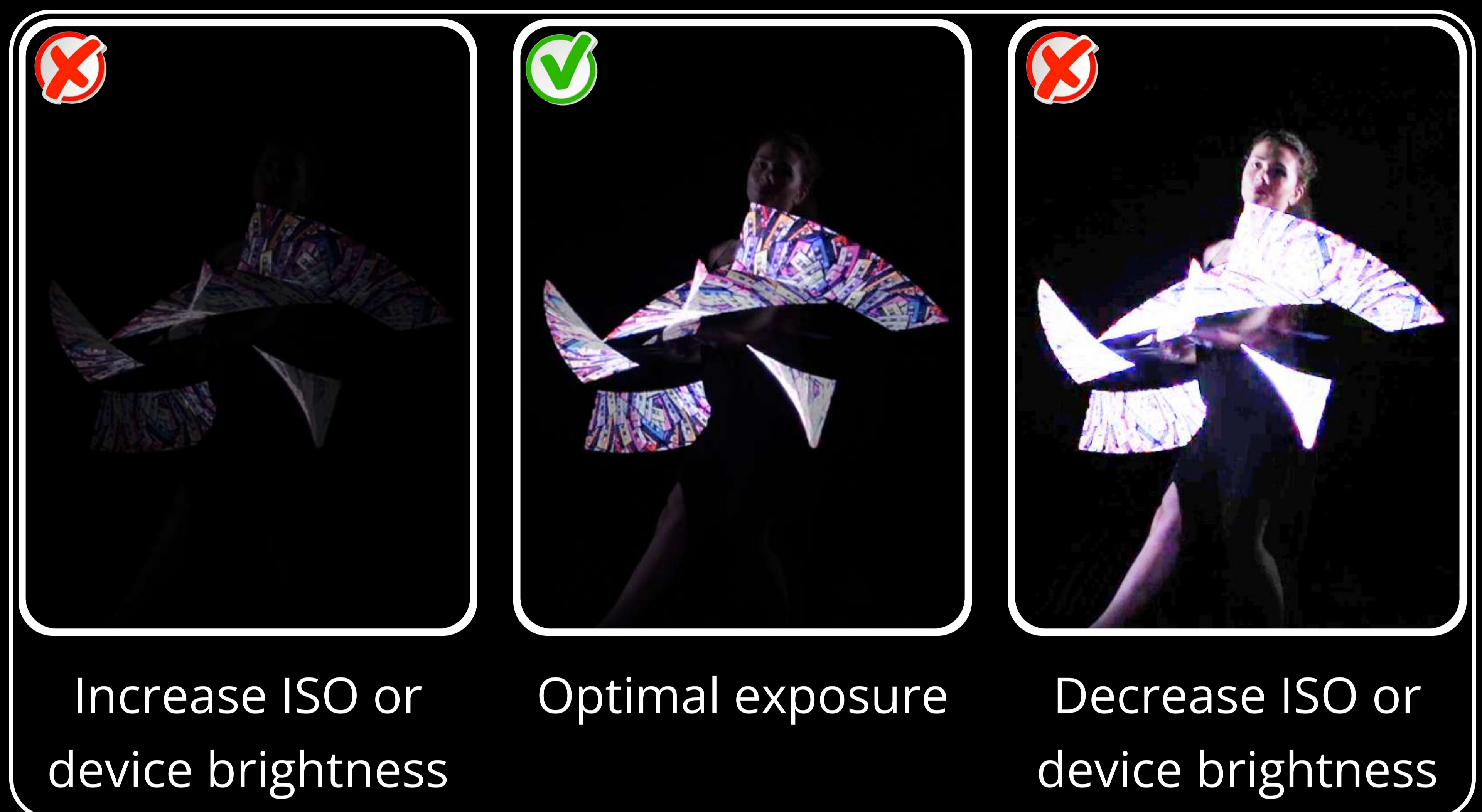
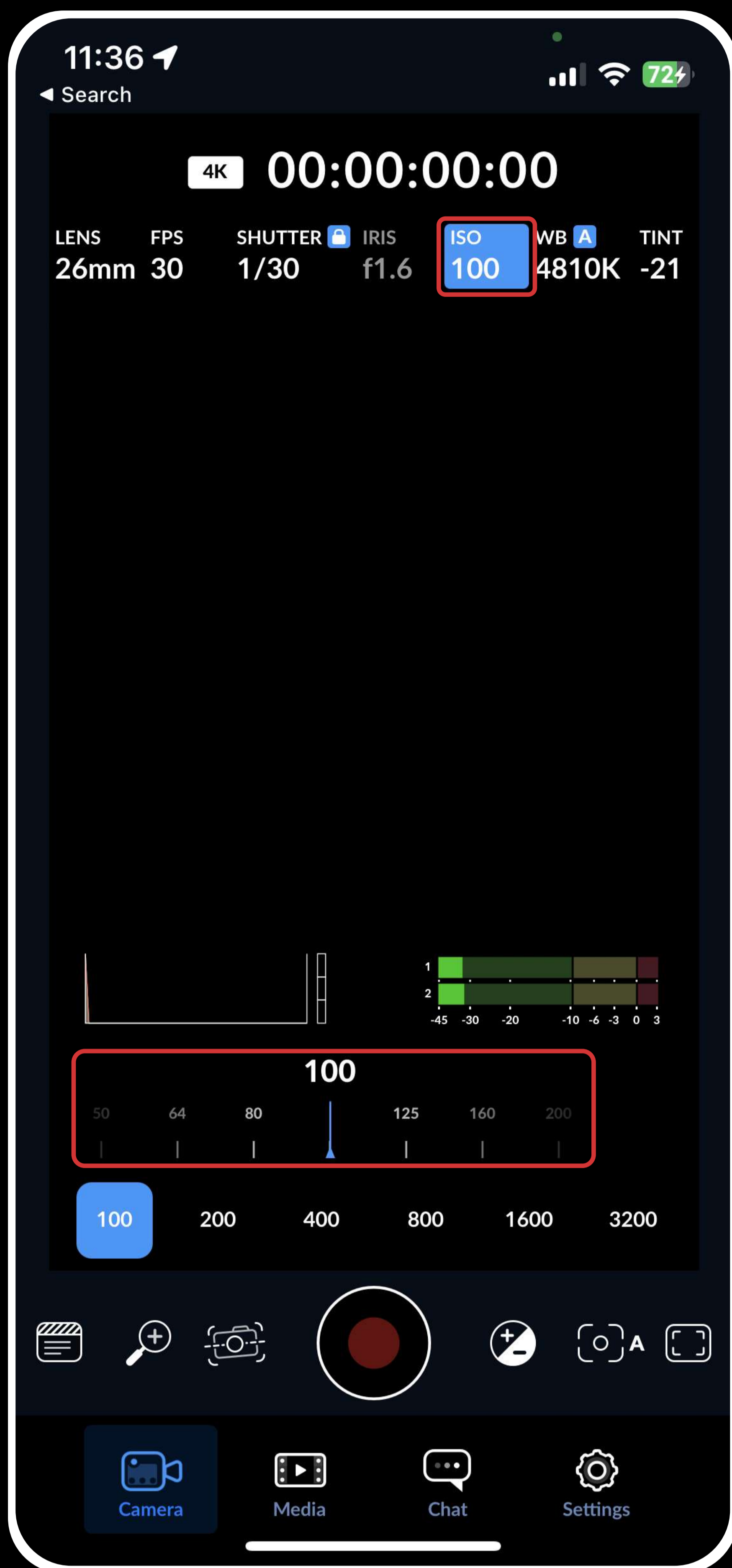
### Shooting.

1. Download the "Blackmagic Camera" app on your iPhone. It allows for manual camera settings adjustment.
2. It is recommended to select "Rec.2020 - HDR" color space if available on your mobile phone.
3. If needed, enable vertical image orientation in the app settings.
4. Set FPS to 30 frames per second to achieve the desired effect.
5. Adjust the shutter speed to 1/30 for motion blur.
6. Lock the shutter speed by tapping the lock icon to prevent it from changing automatically during shooting.





7. Adjust the ISO for dimmed lighting. Start with the lowest setting and increase until you get the desired level. If the light is still too bright at the lowest ISO, find a darker location or use an ND filter or sunglasses in front of the lens. You may need to increase the device's brightness when using a filter.



8. Shoot a test video to check the settings.

9. After reviewing the test video, adjust the ISO or device brightness so the trail is visible but not overexposed. For example, for ISO 50, a brightness of 25% is suitable, and for ISO 200, a brightness of 6%, these parameters for many mobile cameras are optimal.

These steps will help you set up video shooting with a trailing effect in the air using the "Blackmagic Camera" app.

You can also use any other app that allows manual camera settings adjustments, following the steps described above.



## 9 Warranty

We give a 1-year warranty for all our products (except Jump Rope, which is given a 6-month or 20,000 jumps warranty, whichever comes first).

If you got a defective product or a malfunction occurred within 15 days after receiving the order, or there was a mistake in the model or quantity, the Company is obliged to replace the product, covering all shipping costs and compensating your postage expenses for sending the defective or wrong item back to us. It's important to notify our support service about this within the first 15 days after receiving the product, making an inquiry to [support@ignispixel.com](mailto:support@ignispixel.com)

If a malfunction occurred in the period from 15 days and until 1 year after receiving the product, the Company is obliged to repair the product. The repair process and components are free, you pay only for shipping both ways.

If a malfunction occurred after a 1-year of the warranty period, we will continue to service your product, but for a fee. Most repairs typically range between 30-50 USD, while more complex repairs may incur costs up to 30% of the original product's price (charged per equipment piece). If you are worried about the repair cost of the product beyond the warranty period, please discuss it with our support service before sending the product for repair. Our technician will try to evaluate estimated cost of repairs, although an accurate estimate of the repair cost can be given after inspection and diagnosis of the product by our specialists.

Our post-warranty service extends for an additional 2 years or more after the Company discontinues the product. The service period for a discontinued product depends on its technical features and the availability of components. Our support team will let you know if the product is not served anymore.

In any case, no matter what happens to your product, whether it is within the warranty period or not, immediately contact our support team by email [support@ignispixel.com](mailto:support@ignispixel.com). Describe in detail the issue you encountered and, if possible, attach a photo or video demonstrating the issue. Our support team will write back with possible solutions.

We made our props as durable as possible and designed them assuming that they will be accidentally dropped or hit during use. Ignis props withhold most of casual drops and impacts, however we suggest to be careful as it's a complex technical device.

Damages resulting from water penetration, electricity, extreme temperatures, extreme humidity, attempts at customization or disassembly, or destruction caused by abnormal usage such as being run over by a car or eaten by an animal are not to be covered by warranty.

We offer a 15-day money-back guarantee. If you are not satisfied with our props, you can return the product. It's important to make an inquiry to support email within the first 15 days after receiving them, not later. All delivery costs are the responsibility of the Buyer. Props should be in a salable condition (full set, no signs of usage, no scuffs). Refunds will be issued upon receiving the props and conducting an assessment.

For inquiries or questions about our products, please visit the contacts area on our website: <https://ignispixel.com/contacts> Email: [pixel@ignispixel.com](mailto:pixel@ignispixel.com), [support@ignispixel.com](mailto:support@ignispixel.com)

Warm regards,  
Ignis Team