

Manual for LED digital Ignis Buugeng 80, Fans 36, Hula-Hoops

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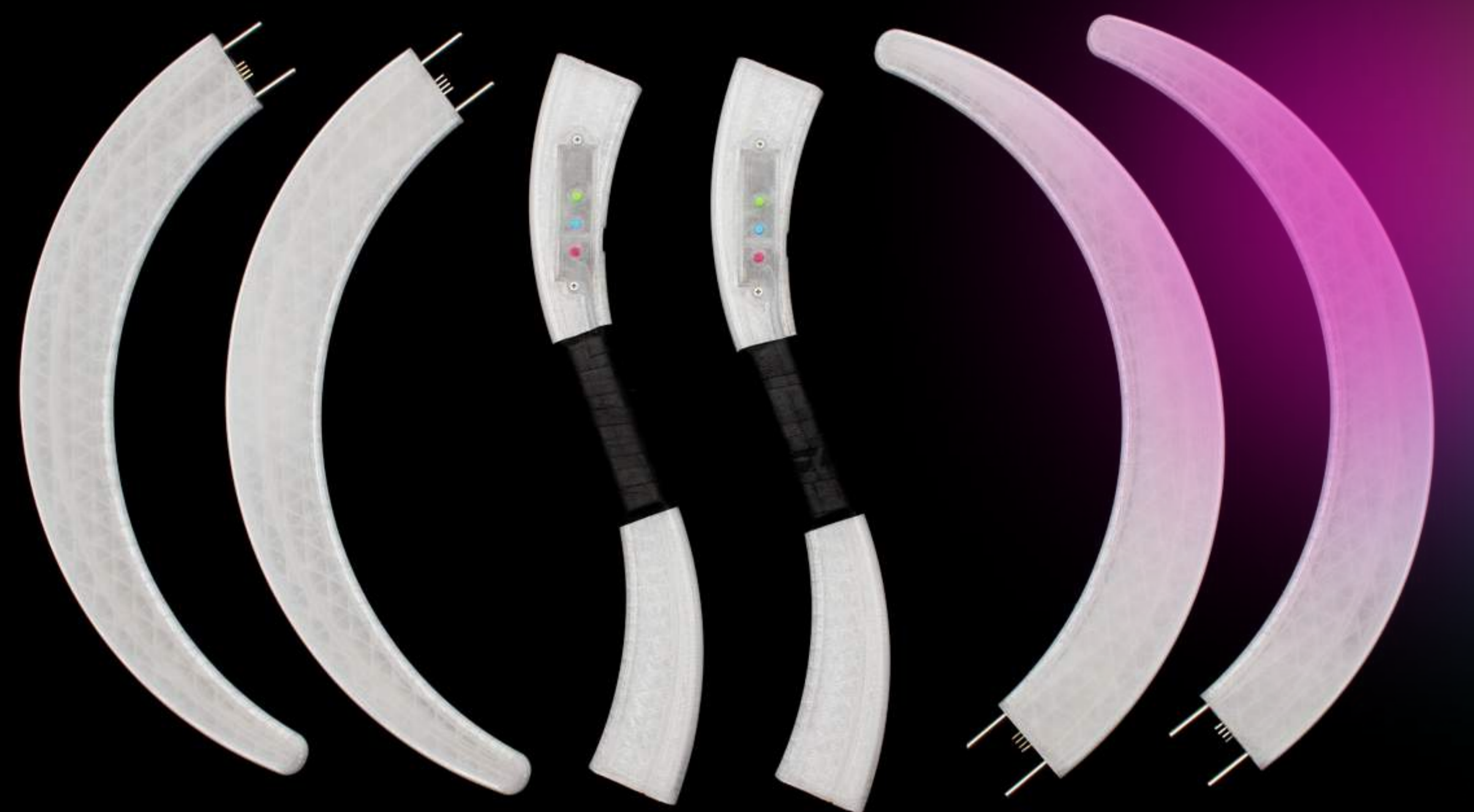
Dear customer,

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 the instruction entirely and follow our advice.

—● **Assembling**

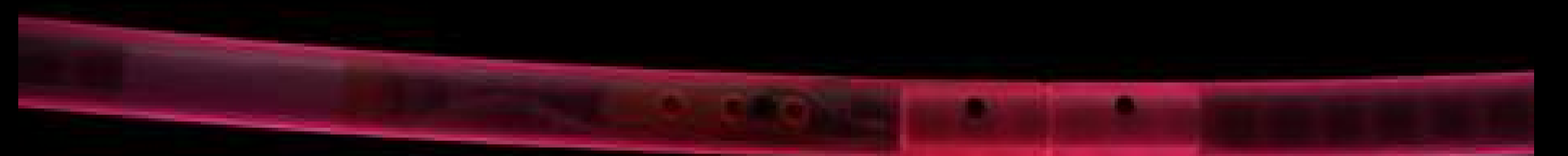
Buugengs

Ignis Buugengs are delivered disassembled. Assemble them before using. Before connecting one part to the other, remove colored protecting caps.



Hula Hoops

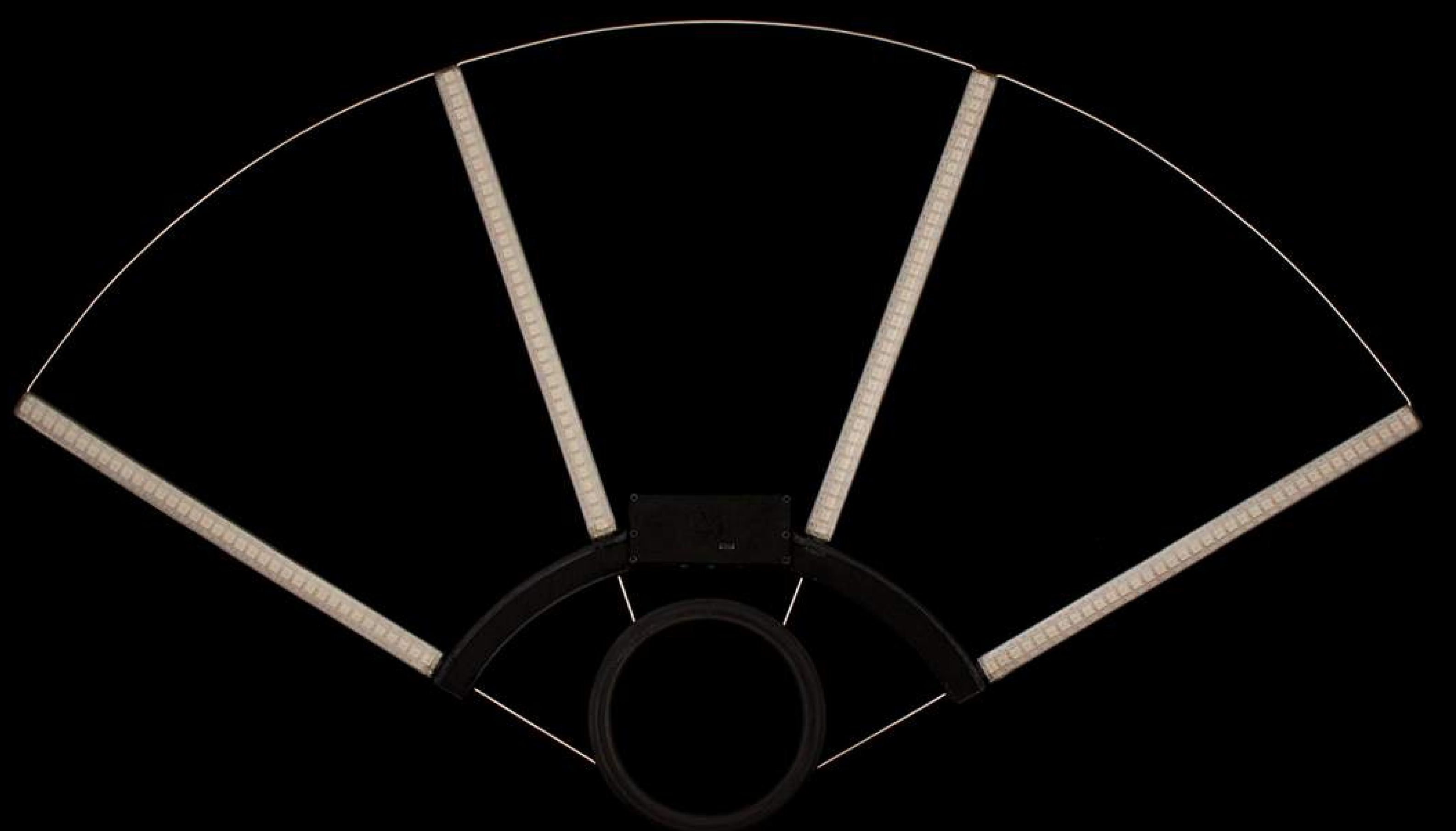
Ignis Hula hoop doesn't need assembling. However, its tube has a junction. Just insert one end of the tube into the other, and the hoop is ready for using. Detach the ends and fold the tube making it twice smaller to carry it.



Fans

Ignis Fans are delivered disassembled. Watch a step-by-step manual video how to assemble the fans:

<https://youtu.be/vPQ7rgJlxGg>



● Controls

Ignis pixel **Buugengs** have three control buttons placed near the handle.

Ignis pixel **Hula Hoop** has three control buttons placed on the frame.

Ignis pixel **Fans** have three control buttons placed between the handle-ring and inner arch.

The color of the buttons may be different from those in this instruction, but the idea stays the same: UP - PLAY/STOP - DOWN

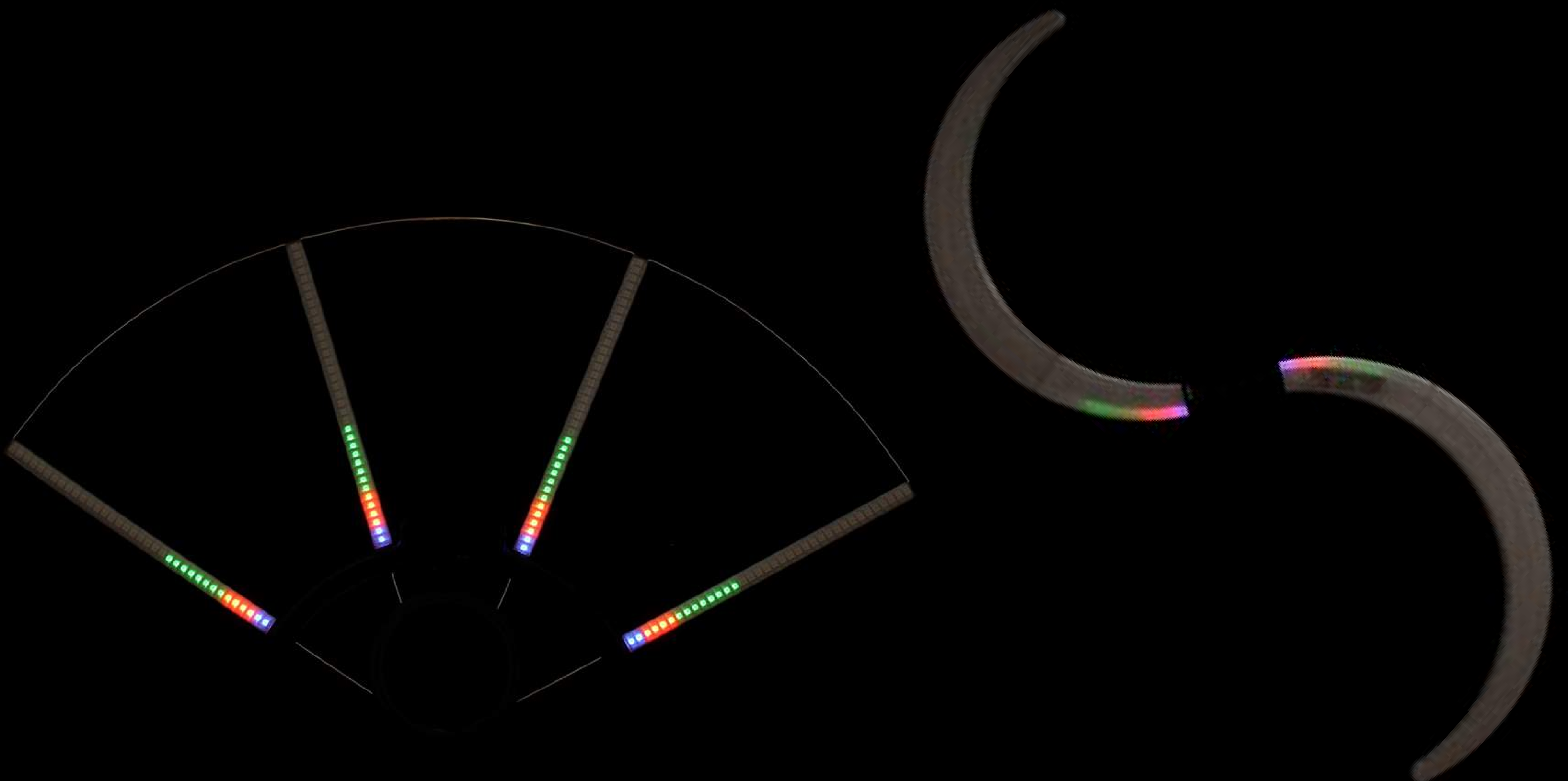
Blue button – TURN ON/OFF, PLAY/STOP

Red button – DOWN

Green button – UP



To turn on the device, hold the button pushed at least 1 second. You will see ascending **red-to-green** gradient. Wait until the gradient is full. The device is on, you are in Menu mode. You see Basic menu with 6 orange and 8 green lights, a **blue** blinking cursor lights up.



This menu consists of 3 preset timelines of **orange** color, and 4 custom timelines of **green** color:

PRESET TIMELINE 1. Successive displaying of all loaded pictures for 4 seconds each (see Note 1)

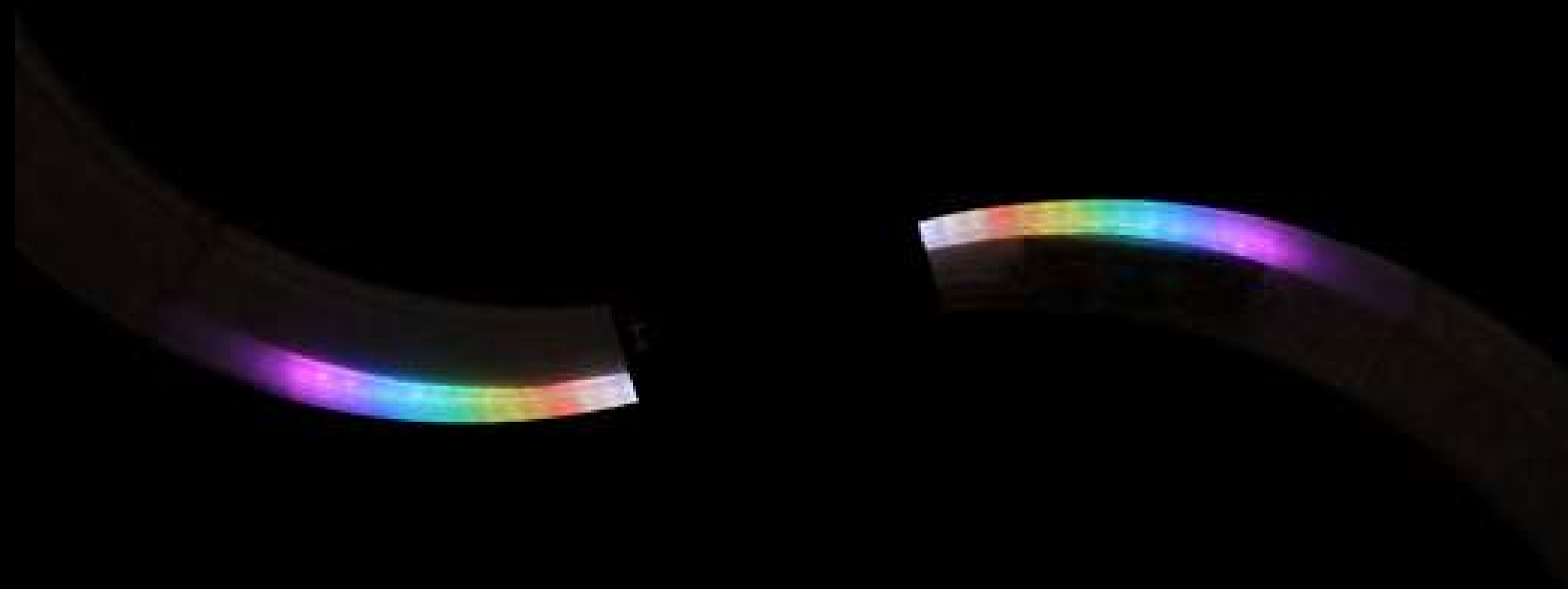
PRESET TIMELINE 2. Random displaying of all loaded pictures for 4 seconds each (see Note 2)

PRESET TIMELINE 3. Solid color mode (see Note 3)

Note 1: *The images in PRESET TIMELINES 1 and 2 change are displayed for 4 seconds on default. You can set the duration from the application or in System menu of the device (look **System menu, Submenu 6** section below) in the range from 1 to 8 seconds.*

Note 2: *If you run random playback from the app on several devices at the same time, it will pseudo-random playback. It means that pictures go randomly, but all the props will show the same. If you run preset timeline 2 on different props from the button at different time, they all will display different images — it's actually random. In both cases, random sequence goes cyclically and doesn't change.*

Note 3: *When you go into this mode, you see a rainbow-like scale of colors. Selected color blinks. To choose a certain color, navigate with **UP** and **DOWN** buttons, then click **PLAY/STOP** button — you will see the device glows with a solid color. Another click on **PLAY/STOP** button returns it to Menu mode, the cursor is on Timeline 3 again. The following is for devices equipped with Stabilization option: when the device is launched on a certain color and if the device is untouched, one of the LEDs on the scale shines dimmer than the others. Its position shows the current battery level. If the dim LED is on top, it means 100% battery charge. Lower position of the dim LED means lower battery charge. When you use the device as a lamp in this mode, for example in camping, in a tent or elsewhere, you can visually evaluate the remained battery level. It can be useful if, for example, for the next several hours you need to use it as a lantern, and you can decrease the brightness so the device shines longer. Anyway, when you start spinning the device with enough speed, all LEDs become the same bright.*

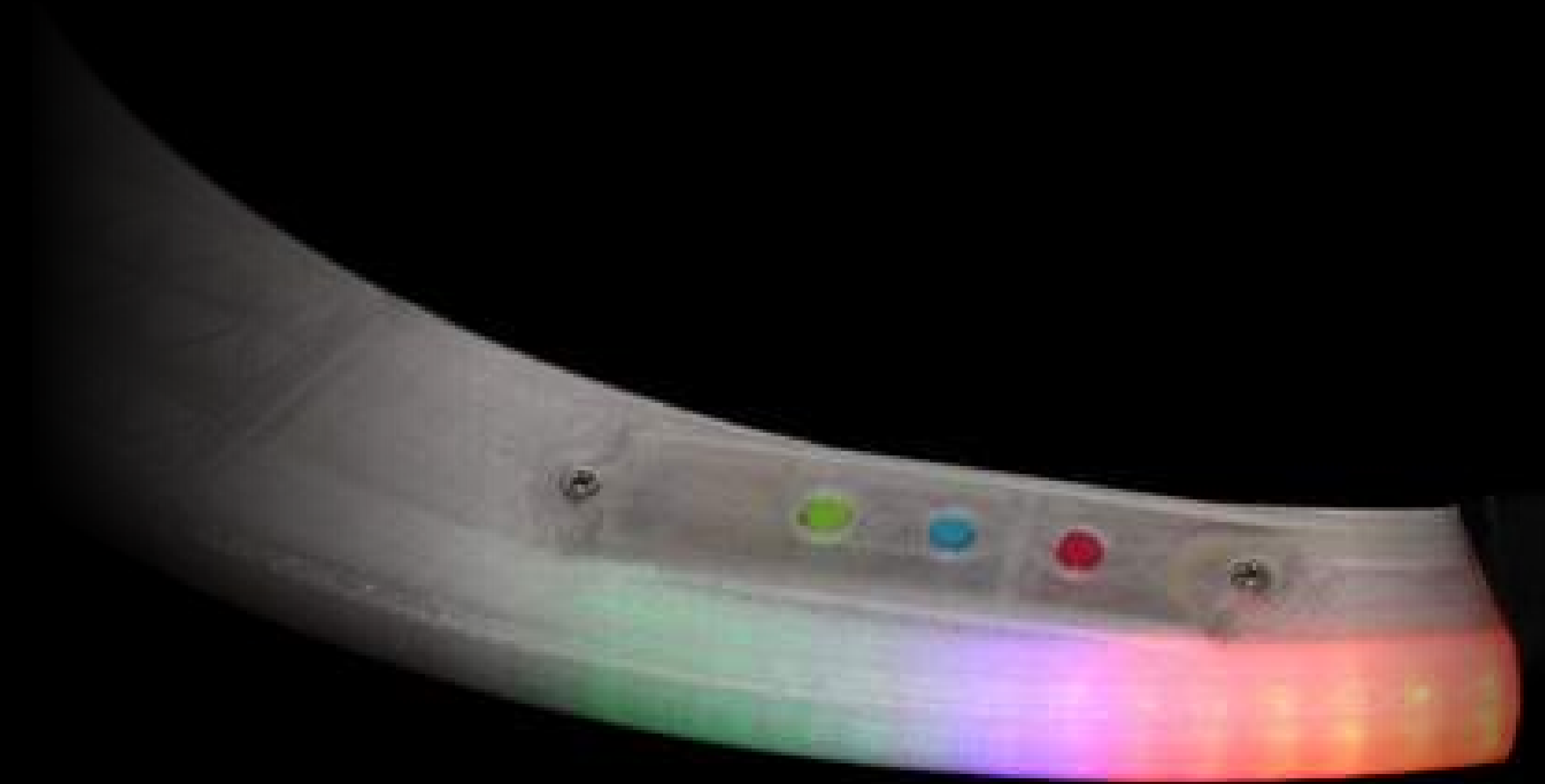


Solid color mode: selecting a color



Solid color mode in use

CUSTOM TIMELINE 1-4. Beyond **PRESET TIMELINE 3** you see a green scale with the same blue cursor. These are Timelines 1, 2, 3, 4 — custom timelines, where you can put pictures in any order. If there are no pictures in a custom timeline, it glows dim blue after you run the device. If you fill a timeline with pictures, you will see them running in the same order as you put them.



*Custom Timeline mode, the cursor is on the position of **TIMELINE 1***

SINGLE IMAGES. Go beyond **CUSTOM TIMELINE 4**, and you get into green scale, but the cursor turns **red**. You are in Single Image mode. When you run the device from this mode, a selected image doesn't change, it will be displayed permanently until you stop the device or change the picture for another one. To change a picture just click **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. A number of slots for single pictures depends on a type of the device:

Buugengs — 60 pics, **Fans** — 120 pics, **Hula-Hoops** — 60 pics.

Brightness adjustment

There is a scale to adjust the brightness from the button. To get to the scale, run any timeline or single picture, and from this position click and keep holding **PLAY/STOP** button for 2 seconds until the **rose** cursor on the white scale appears.

UP and **DOWN** buttons move the cursor through 6 levels of brightness. While you are moving the rose cursor, you see how the brightness of the white scale changes. Higher position of the cursor causes higher brightness. Confirm required brightness by clicking **PLAY/STOP** button. The device goes into running mode, so you can see the current brightness right away.

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

Principal operation points of the device:

- **Turn on:** push **PLAY/STOP** button for at least 1 second. You will see ascending gradient, then the device gets to Standby mode with blinking cursor.
- **Turn off:** push **PLAY/STOP** button for at least 1 second and hold until all lights die out.
- **Run/stop the device** from selected timeline/image: click **PLAY/STOP** button.
- **Shift the cursor** to the next or previous position or change a picture in Play mode: click **UP** or **DOWN** button.
- **Set required brightness:** run the device and press **PLAY/STOP** button for at least 2 seconds until the **rose** cursor on the white scale appears. Choose required brightness.
- **Check the current battery level:** get the device to Standby mode (with blinking blue cursor), then push **PLAY/STOP** button for 1 second. Red-to-green gradient will show the level of charge.



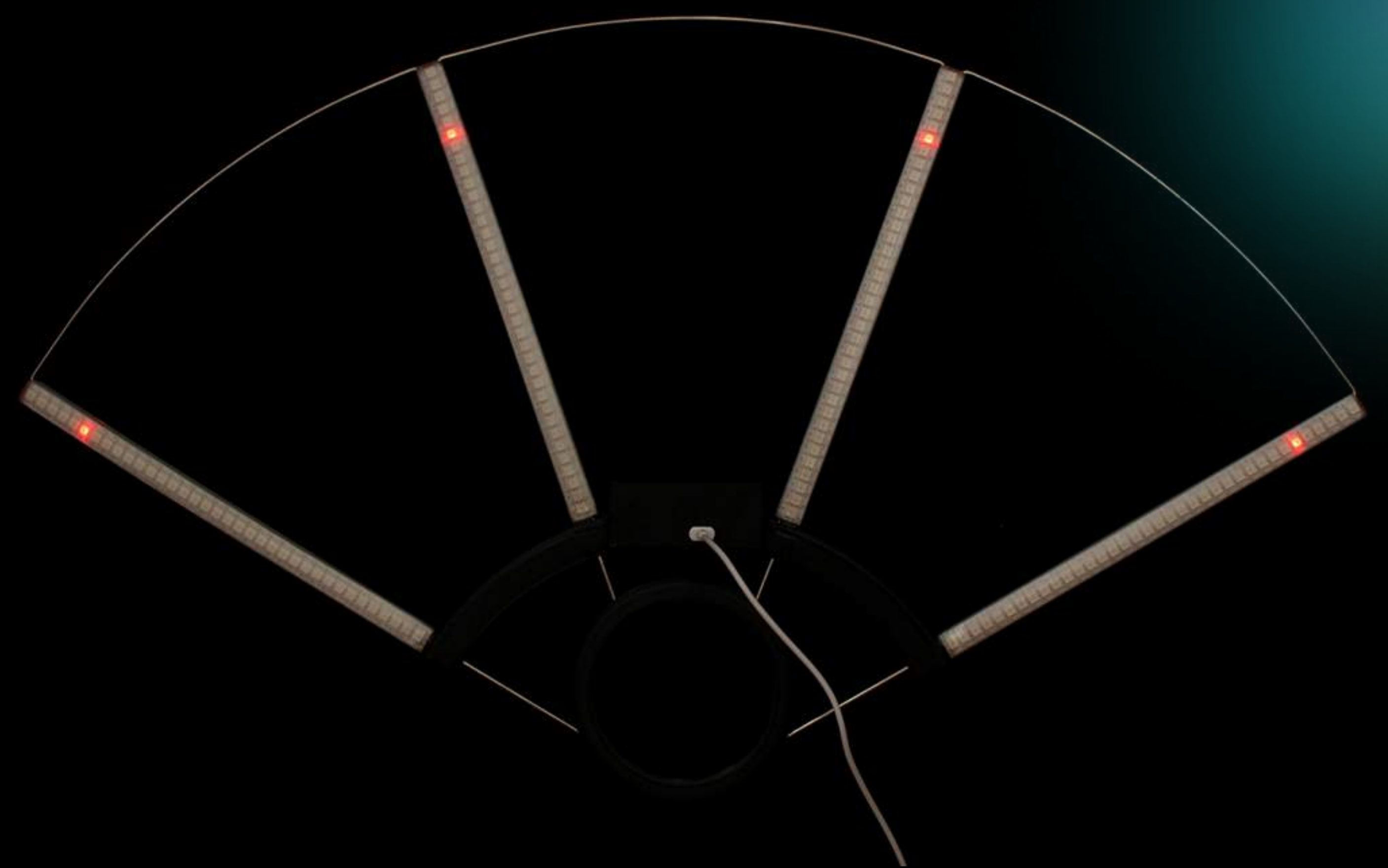
The device is charged 80 %

After 20 minutes of inaction in Menu mode, the device automatically turns itself off. In timeline/picture/solid color mode the device works until the battery is discharged.

When the battery is low, the LEDs blink red for 10 seconds. To maintain the lifetime of the battery it's highly recommended charging Ignis device the same day you use it.

—● **Charging**

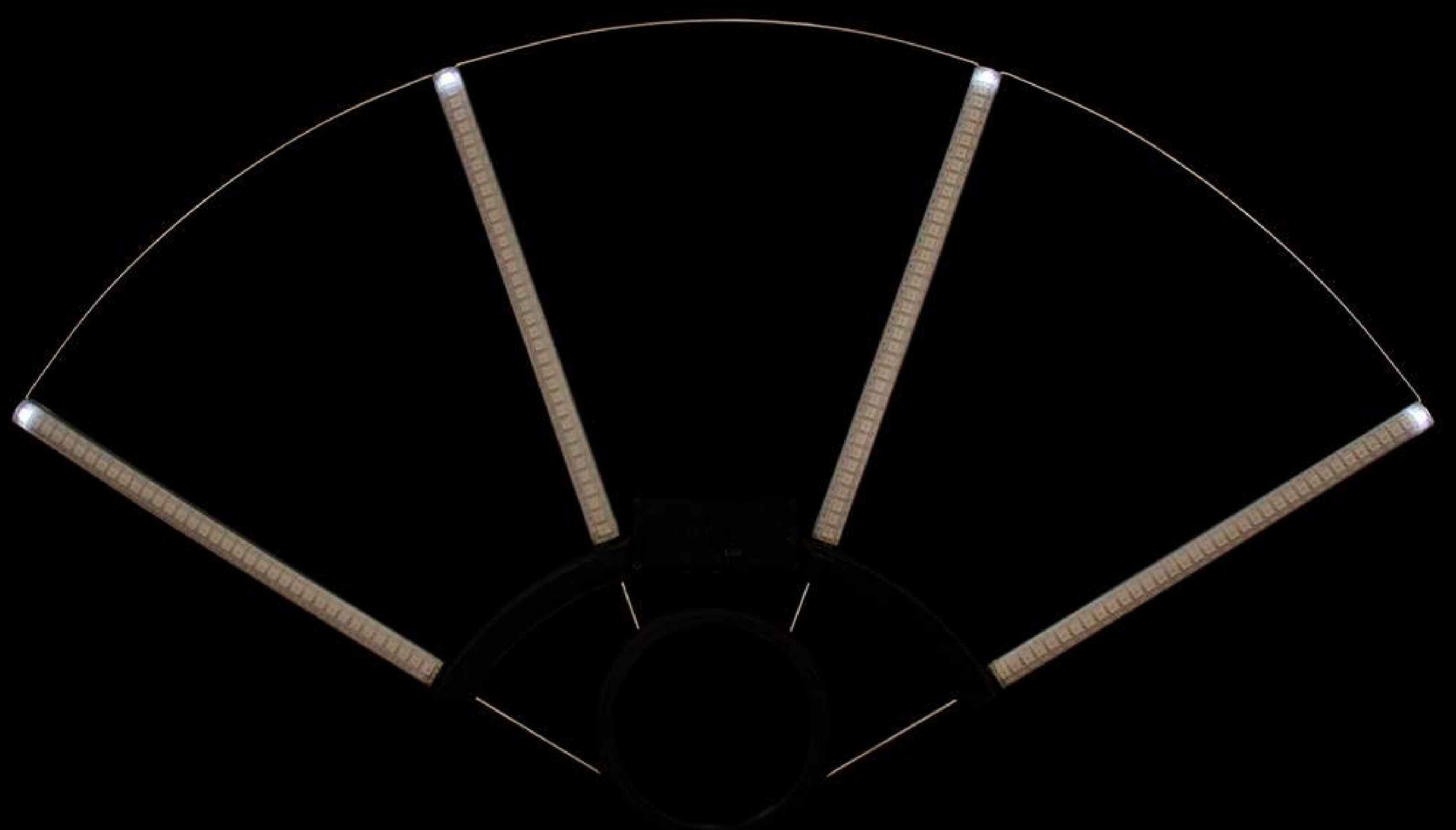
- To charge the device, plug it to a USB-charger or computer — you will see a red light. You can see the level of charge by position of the red light. The level of charge corresponds to its position. If it's in the middle, the device is 50% charged, if on top — it refers to full charge, etc. When the device is on charge, the red light slowly moves towards the top position. When it is completely charged, the light finally turns green.
- Lithium batteries don't have a memory effect, that is why we recommend charging the props every time after using them; don't wait till they are totally 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 loss of battery capacity and reduction of working time.



—● **“Performance” mode**

This mode blocks all buttons to prevent them from casual clicks during the performance. If you need to lock all the buttons and make the device running with the music, do the following:

- 1 Run a required timeline.
- 2 Press and hold **DOWN** ● button for 2 seconds. For Buugengs and Fans the uppermost led shines blue. For Hula-hoops the first LED gets blue.

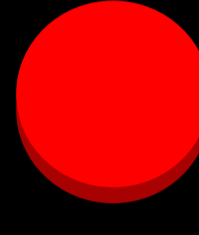

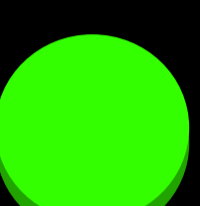


- 3 Now your device is in a “trigger” state. It means that clicking any button will run the timeline you selected before. To be exact, the device starts running at releasing any button. So, you need to press any button, and release it right with the start of the music.

Note: If no button is pressed within 1 hour, the device automatically shuts itself down.

- 4 After the device is launched, all the buttons are locked from accidental clicks.

There are three ways to go out of this mode:

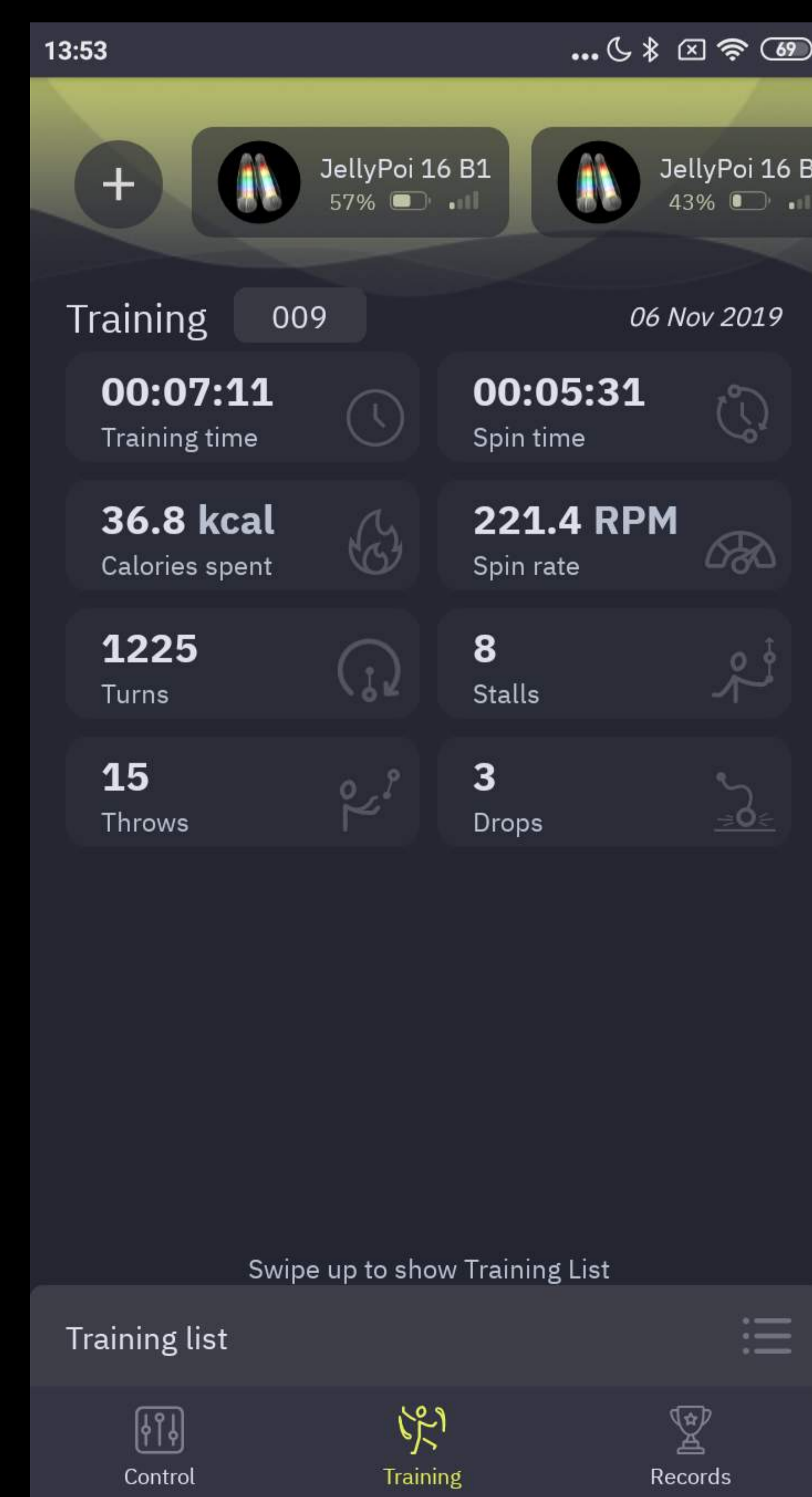
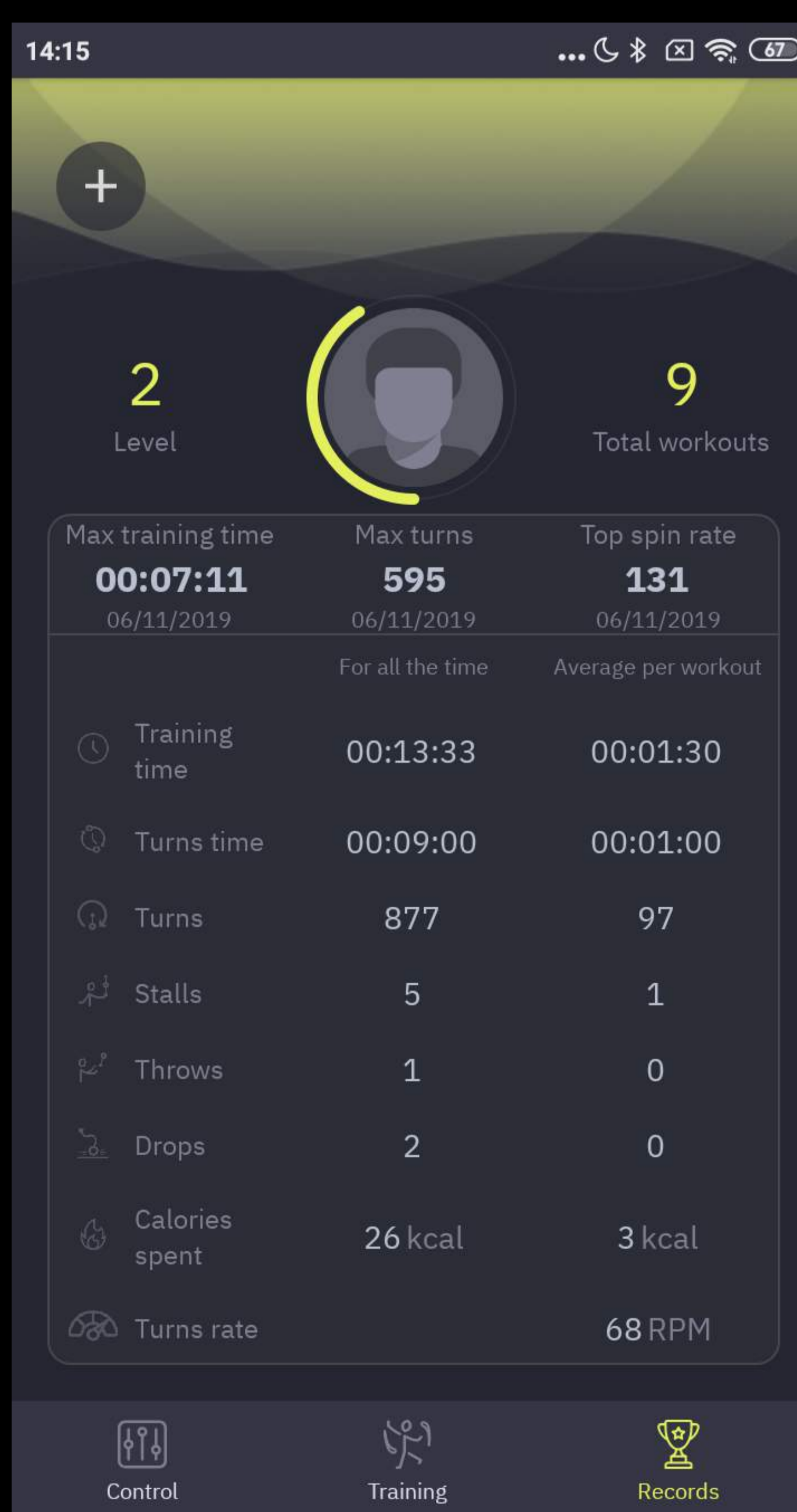
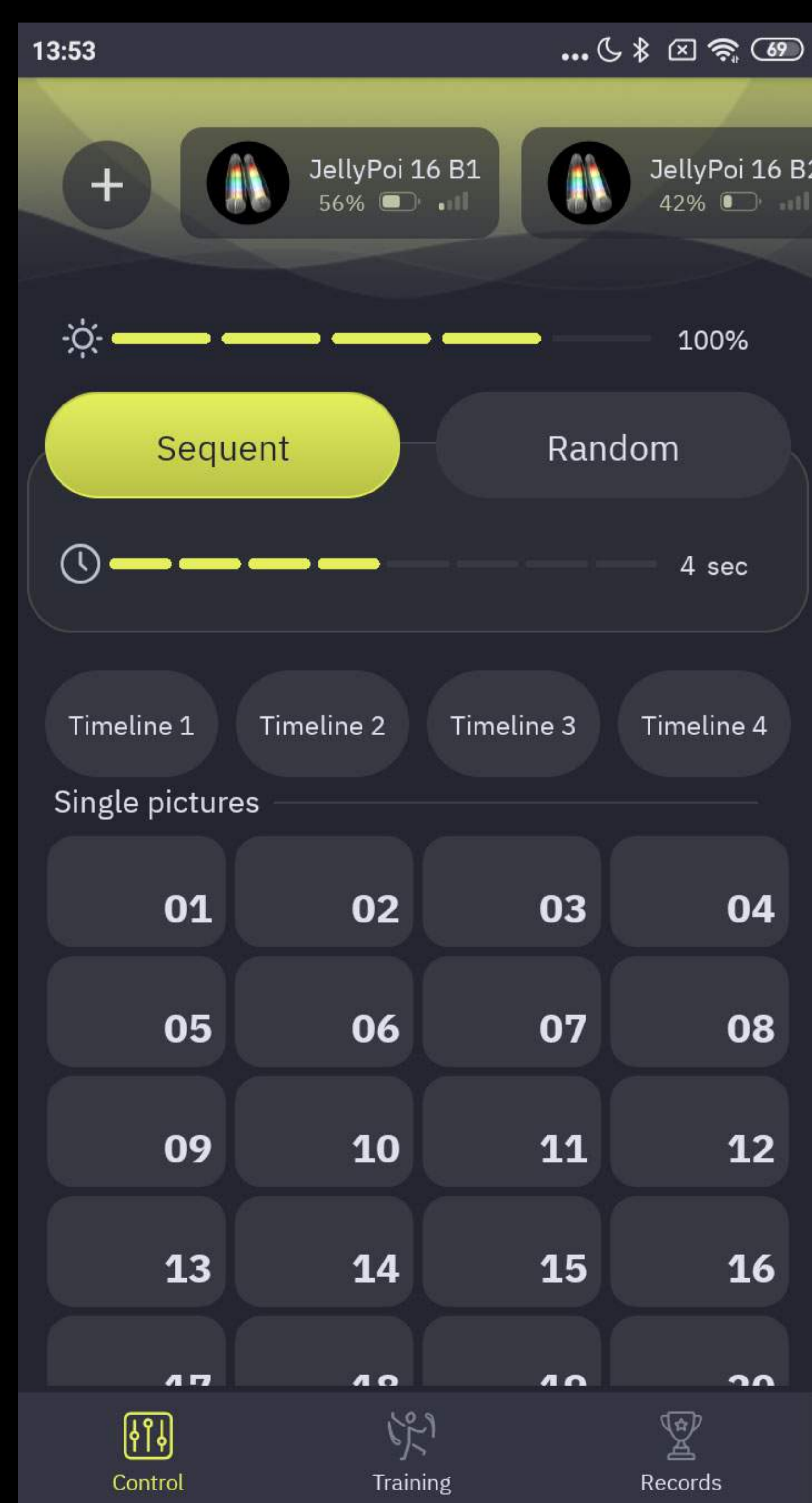
- holding **DOWN**  button gets the props back into “Performance preparation” mode.
- holding **PLAY/STOP**  button turns off the device.
- holding **UP**  button gets the props back to Standby mode.

—● **Bluetooth connection**

Install Ignis Pixel App on your cell phone to get access to get full functions of Ignis product. Turn on Bluetooth on your phone to connect the device. Ignis mobile app allows to operate the device via your cellphone (to upload pictures, make timelines, launch and stop the device, change brightness of pictures and duration). If you your buugengs have Image stabilization option, you can see detailed statistics in the app. You can operate more than one device synchronously. The app is available for both Android and iPhone versions.

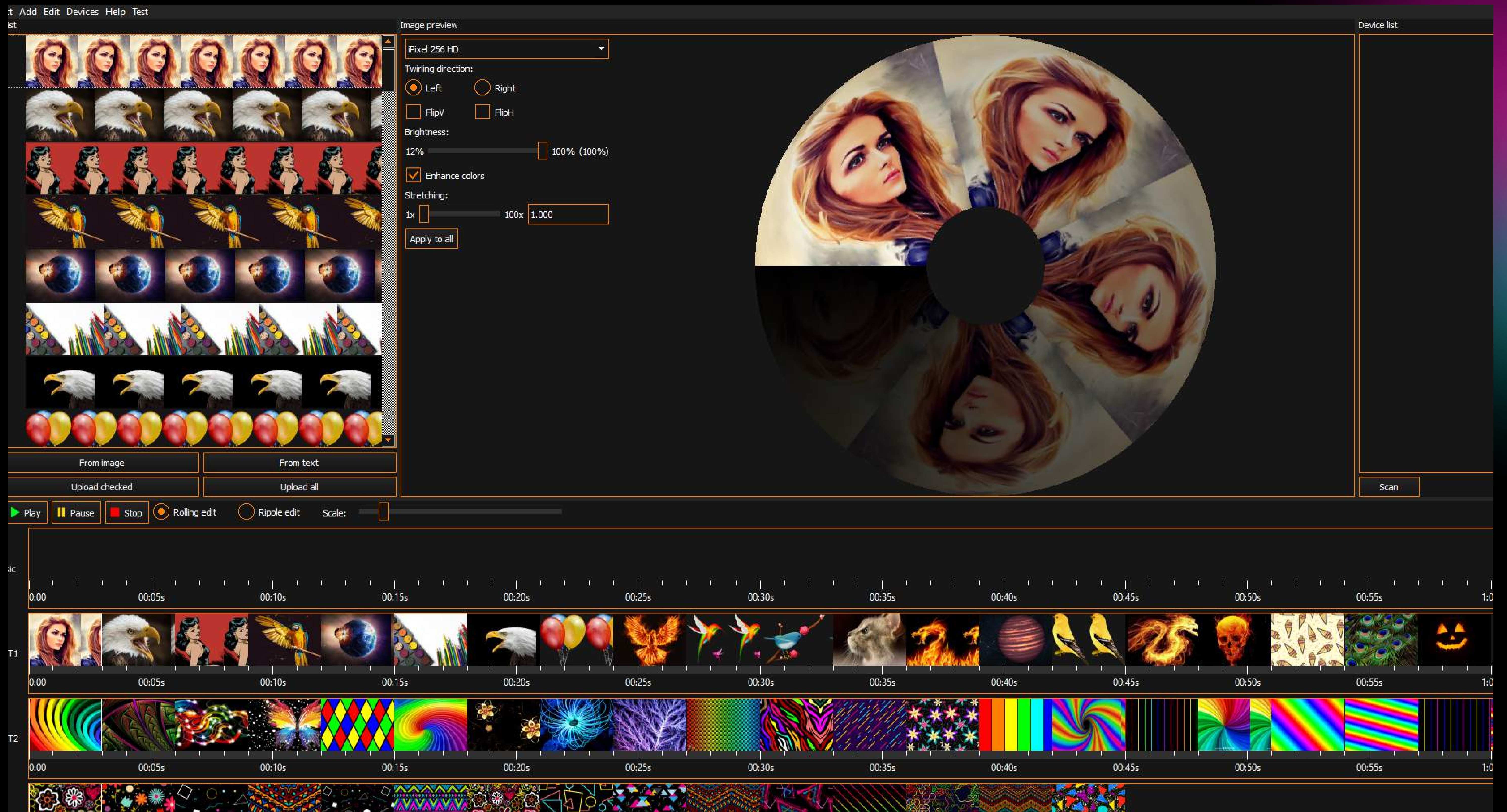
<https://play.google.com/store/apps/details?id=com.ignispixel>

<https://apps.apple.com/app/ignis-pixel/id1531377562>



—● Programming and saving

You can set the duration for each uploaded picture and put them in order, thus creating a sequence of them, synchronized with the music. For Ignis **Buugengs/Fans/Hula-Hoops** there are four timeline custom sequences marked in the software as T1, T2, T3, T4. Note that the software shows 10 timelines, as its interface is universal for all Ignis props. **Buugengs/Fans/Hula-Hoops** work only with 4 first timelines, all the other will be not active for these devices.



To configure a timeline, do the following:

- 1 Run Ignis Pixel Utility;
- 2 Open single pictures from files through menu **Add** -> **Image** or drag and drop files to the Image list into the left upper area of Ignis Pixel Utility;
- 3 Select images in Image list (upper left section), drag and drop them to a timeline (T1-T4) to the lower area of Ignis Pixel Utility;
- 4 Now you see a sequence of pictures. You can change their order and duration by dragging them or their borders, like in video editors. Use Ctrl (Cmd for macOS) button to change editing method Ripple edit/Rolling edit;
- 5 To adjust a timeline synchronously with music, add your music file through menu **Add** -> **Music** or drag and drop an MP3 file to the Music slot of Ignis Pixel Utility (lower area, just above the Timelines);

- 6 Connect your device to computer with a micro-USB cable and press **Scan** button in the Device list (right section of Ignis Pixel Utility);
- 7 Click **Upload all** button — the process can take up to several minutes depending on the device model, a number of pictures, and height-width ratios of the pictures;
- 8 When you change only a duration or an order of pictures in a timeline to save time, just tick the required timeline and click **Upload Checked** — the process will take just a few seconds.

For better understanding how to use Ignis Pixel Utility, to upload pictures, and to make projects, please watch this manual video:

<https://youtu.be/FUdYDPsoVnQ>

The software allows you to save the project, and you can send your project by e-mail or USB flash to another computer. You do not need to send the original pictures of your project. They are contained inside the project file.

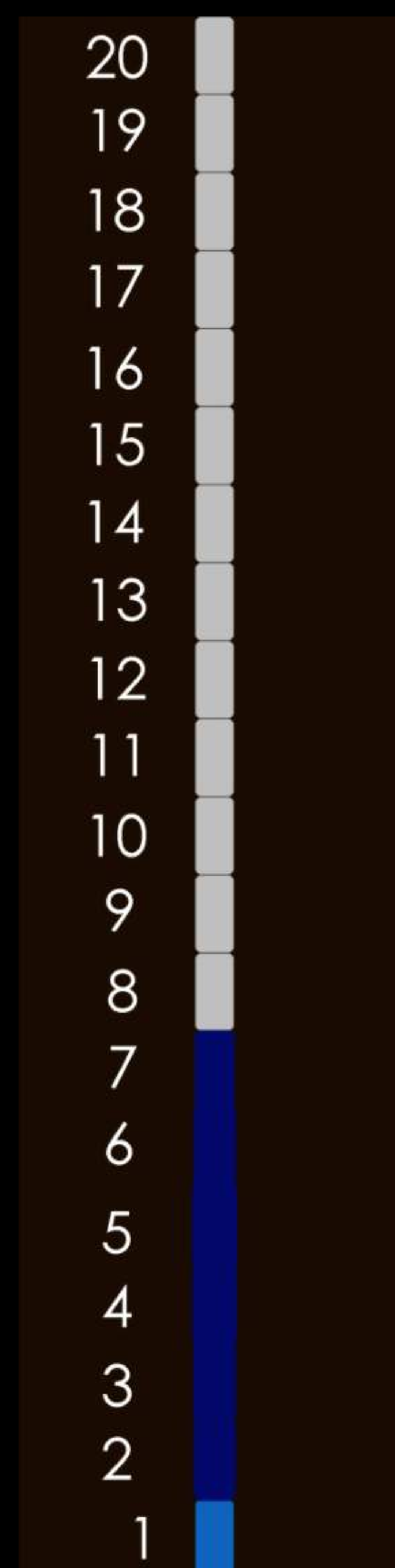
—● System menu

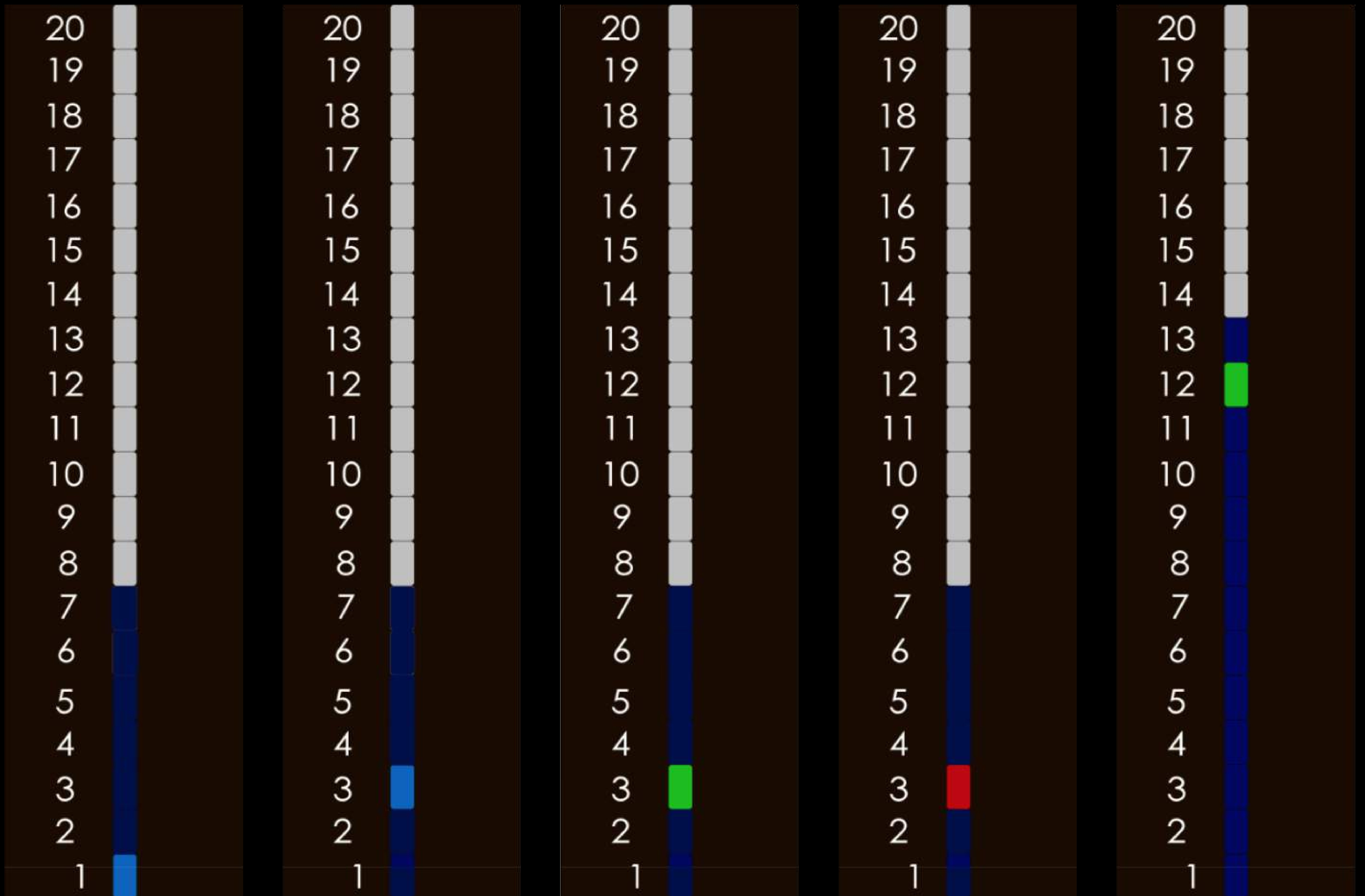
Through System menu some parameters can be adjusted, as well as the state of the device can be checked out. You can adjust parameters of the radio, choose a group the device belongs to, set the brightness of the “Performance” mode indicator, etc.

To enter into System menu, press and hold **UP** ● and **DOWN** ● buttons for 5 seconds until indication changes.

System menu is arranged into Basic menu and several Submenus. Blue background of the Basic menu and Submenu shows the total number of points in it.

In Basic menu the light-blue blinking cursor indicates the position. Submenu also consists of dark-blue LEDs, but marked by red or green indicator. If the indication is red — the parameter is not active, if green – it's active. To go from Basic menu into a required Submenu, click **PLAY/STOP** ● button. To navigate over System menu or Submenu, use **UP** ● and **DOWN** ● buttons. To go out of Submenu back to System menu, press **PLAY/STOP** ● button for one second.





Examples of the indication in System menu.

From left to right:

- *indication in the Basic menu, the cursor is on the first Submenu.*
- *indication in the Basic menu, the cursor is on the third Submenu.*
- *the first Submenu, total control mode is active.*
- *the first Submenu, total control mode is inactive.*
- *the second Submenu, 12th channel is selected.*

Blue background of the submenu shows the total number of points in it.

—● System menu description

- ① Status and settings of Wireless Sync unit
- ② Selecting a channel for Wireless Sync unit
- ③ Selecting a group for Wireless Sync unit
- ④ Brightness of the performance preparation indicator
- ⑤ System condition
- ⑥ Duration for pictures in preset timelines (T1, T2)
- ⑦ Settings for Inertial sensor

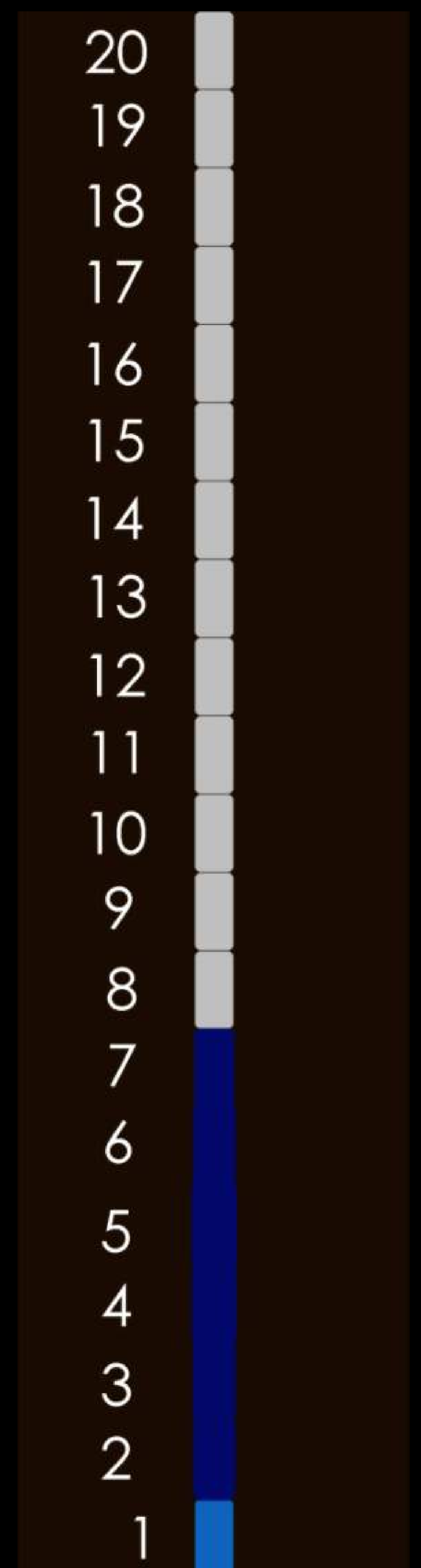
—● Submenu description

Submenu 1 — Status and settings of Wireless Sync unit

- ① Wireless Sync availability: **Available** / **Not available**
- ② Turning on/off Wireless Sync: **On** / **Off**
- ③ Full control mode: **On** / **Off**

There are several principal modes for wireless sync operation in the device:

- **Wireless Sync is On, Full control mode is Off.** In this state the device reacts only on commands to enter into “Performance preparation” mode and to be launched in “Performance” mode (look page 5). All the other commands are ignored
- **Wireless Sync is On, Full control mode is On.** In this state the device totally follows airing commands. Full control over the device is possible solely in this state. It includes:
 - navigating over the menu
 - play/stop sequences and single images
 - entrance into “Performance preparation” mode and launching in “Performance” mode
 - going out of “Performance” mode into the menu
 - battery level check-up
 - total shutdown of the devices



4 Group work: On / Off

- Wireless Sync is On, Group work mode is On. In this state devices can be split on several groups (up to 32), thereby allowing each group to work independently. The device responds only to commands aired for the group it belongs to.

5 Not used, reserved

6 Master / Slave

- Wireless Sync is On, Slave mode is Active. In this state the device accepts commands, but doesn't air any.

7 Not used, reserved

Submenu 2 — Selecting a channel of the Wireless Sync unit

This submenu stands for choosing a channel. Totally, there are 12 channels, and you can set the device on any of these channels. If you want both devices (of the whole group of them) to be synchronized with each other, they should belong to the same channel.

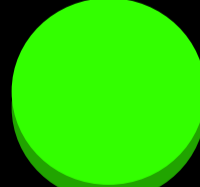
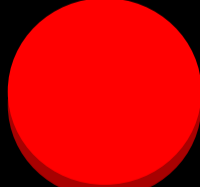
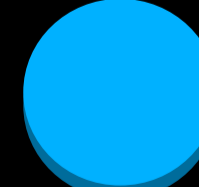

To choose a channel, just navigate the blinking cursor by clicking UP  and DOWN  buttons.

When you reach the required position, click PLAY/STOP  button. The active channel glows green.

To go out of this menu, hold PLAY/STOP  button for one second.

When you go into this menu the next time, the cursor automatically shifts itself onto the previously selected channel.

Submenu 3 — Selecting a group

This submenu stands for choosing a group. Totally, there are 32 groups, and you can set the device to any of these groups. If you want both devices (of the whole group of them) to be synchronized with each other, they should belong to the same group and the channel (look Submenu 2). Group work point should be On (look Submenu 1, point 4). To choose a group, just navigate the blinking cursor by clicking UP  and DOWN  buttons. When you reach the required position, click PLAY/STOP  button. The active group glows green. To go out of this menu, hold PLAY/STOP  button for one second.

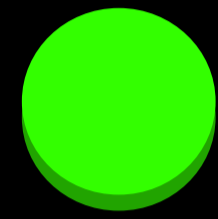
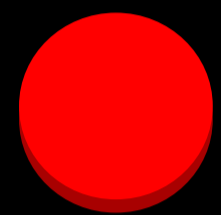
When you go into this menu the next time, the cursor automatically shifts itself onto the previously selected group.

Submenu 4 — Setting up the brightness of the Performance preparation indicator

In this submenu a brightness of the indicator is to be set (as an option, the indicator can be turned off, if the position 1 is selected). Other positions 2, 3, 4 stand for the brightness of “Performance” mode indicator. Position 4 makes the indicator the brightest.

For better obviousness a selected brightness of the indicator is displayed in the last (the top) LED.

Submenu 5 — System condition

In this menu perfection of the device is to be controlled. Navigate by clicking **UP**  and **DOWN**  buttons. All positions of the cursor must be **green**. If it is not so, apply to the support team for detailed investigation.

Submenu 6 — Duration for pictures in preset timelines (T1, T2)

Set the duration for pictures for the first two orange preset timelines. The number in this submenu (1-8) means how many seconds a picture will be displayed before changed for the next one.

1 stands for one second, 2 — two seconds, 3 — three seconds, and so on up to 8.

Submenu 7 — Settings for Inertial sensor

① Inertial sensor availability: **Available** / **Not available**

② Self-control result: **Success** / **Failure**

Red light means decreased precision or some failure.

③ Turning on/off the Sensor unit: **On** / **Off**

④ Stretching stabilization: **On** / **Off**

This function retains the angular size of the picture, no matter how slow or fast you spin the device.

⑤ Stabilization by phase: **On** / **Off**

This function displays the image in the air always at the same place, if you spin the device with constant speed.

⑥ Waving mode: **On** / **Off (experimental)**

If you wave the device in front of you, the image draws motionlessly relative to the center (for hoops it's doesn't work).

—● **Taking photos and videos with your props**

You will need a camera with manual settings mode and a flash. Find a dark place, the spinner should be in deep shadow. Set your camera: ISO 200, f6.3, shutter speed = the speed of your trick, 0,3-0,5 sec usually. Turn the flash on. If poi trail is too bright, use f8.0.

Video is a trickier thing. You have to upload images with reduced to 12-25% brightness. This is necessary to equalize poi luminosity and background brightness to gain correct exposure. You should see normally exposed hoop trails and a performer clearly on the camera screen.

Camera. We recommend using a cam with "global shutter", not a "rolling shutter". Nice result could be on new DSLR cameras like Canon 5D mark4, shutter speed 1/25 and 25 FPS framerate works pretty well. Anyway, a camera doesn't see light trails like a human eye does, so some post-processing is necessary, for example, Echo effect to make the trail longer as you can see with your eye.

Tips for smartphones. Use "Night" camera mode if you don't have manual settings. This will make the shutter speed slower and trails longer. Filming through the sunglasses is a good idea as well. The best result could be achieved with camera applications with enhanced settings, you need to adjust aperture and ISO manually.



—● **Maintenance**

- Keep the battery charged. Lithium batteries don't have a memory effect, that is why we recommend charging the props every time after using them; don't wait till they are totally discharged. If you charge them every time, it makes the lifetime of the battery longer. This advice works for your smartphone, laptop, and for any gadgets with Li-ion batteries inside. Optimal is to keep your battery above 70%.
- Water. The props will be damaged for sure if some water gets inside. If you feel you have no chance to keep them dry under the rain, for example, take sticky tape and cover USB port, buttons, and other spots where the water may go inside. Water damage is not covered by the warranty. Feel free to contact us if issues pop up.

—● **Temperature recommendations**

- Operating temperature to keep and use pixel equipment is from -20 °C to 50 °C (from -4 °F to 122 °F). On low temperature, the time of working can be diminished due to reduced battery capacity when a battery is kept on cold. When you come back to room temperature, all characteristics get back to the normal level.
- If you really need to perform in freezing cold, keep the devices in a warm place and take them right before the show. In this case the batteries don't have enough time to cool off, and the working time remains almost the same.
- Selfheating by bright modes can also be used when performing in the cold — it doesn't allow the battery to freeze during the performance.

—● **Warranty**

We give 2-year warranty for our pixel equipment. If during this time some defect or malfunction comes out, we either fix it or make a free replacement of a faulty element. All shipping charges are laid upon a customer, except cases when a device came initially defected or a failure was revealed right after using the device.

Ignis pixel equipment is strong enough to survive collisions on normal spinning speed (about 2 revs per sec). Anyway, it cannot be called indestructible. Warranty does not cover damages caused by hard collisions, drops, and water.

Estimated lifetime of Ignis Pixel equipment is 5-10 years and limited only by battery life (like in mobile phones). If the battery becomes worthless, get in touch with us to replace it with a new one, or we can tell how to change it by yourself.

If the equipment shows any failure, first and foremost reach us out by email support@ignispixel.com and tell what happened. In most cases, a failure is possible to fix on place, without sending back to us — this will save you a lot of time and money to send it to and fro.

It's really important for us to know all weak spots of our equipment, so we could make it even more reliable and durable. We would appreciate if thus you help us to evolve.

To get in touch with us and ask questions about the props, go to contacts area on our website:

<https://ignispixel.com/contacts>

Email: pixel@ignispixel.com

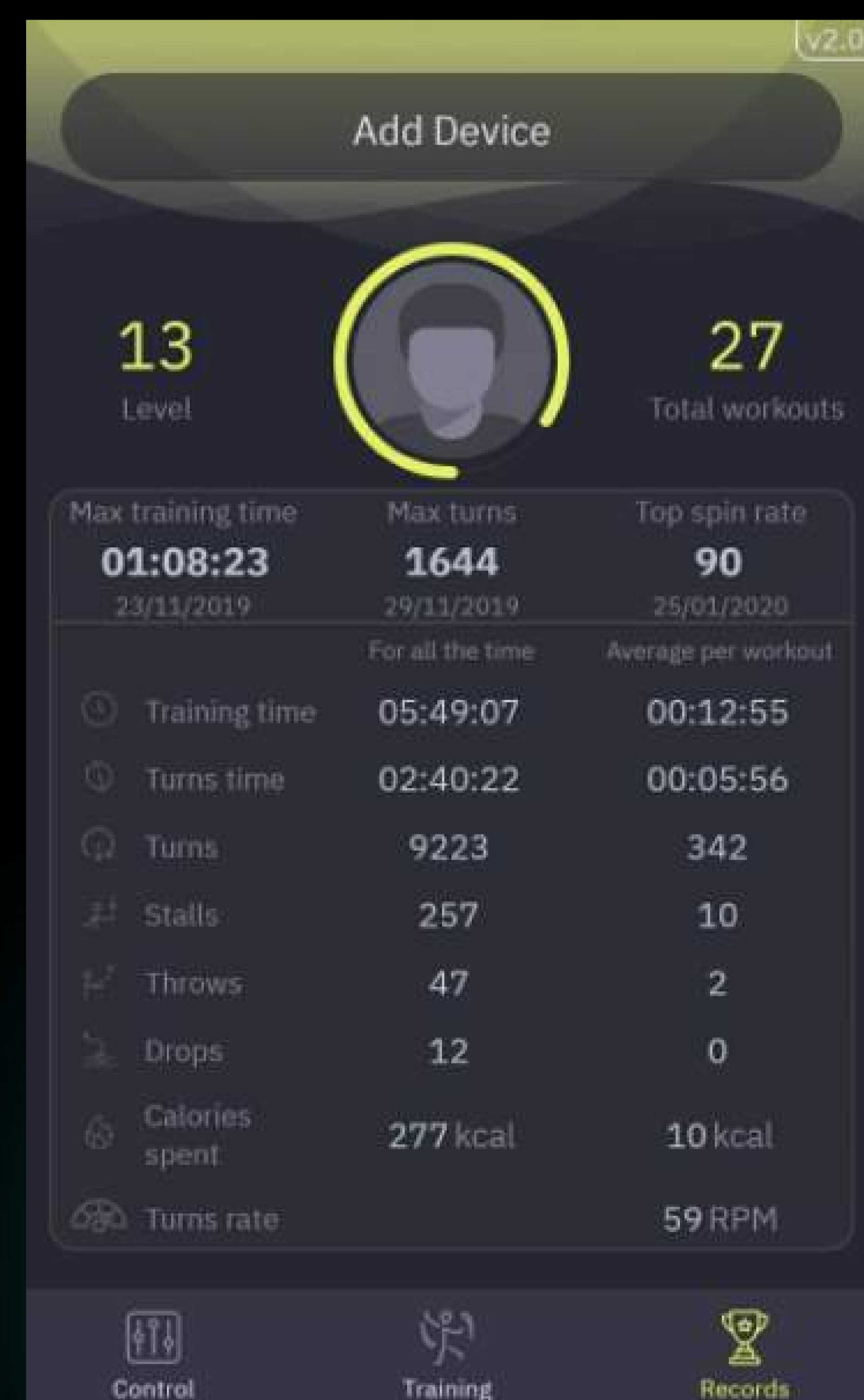
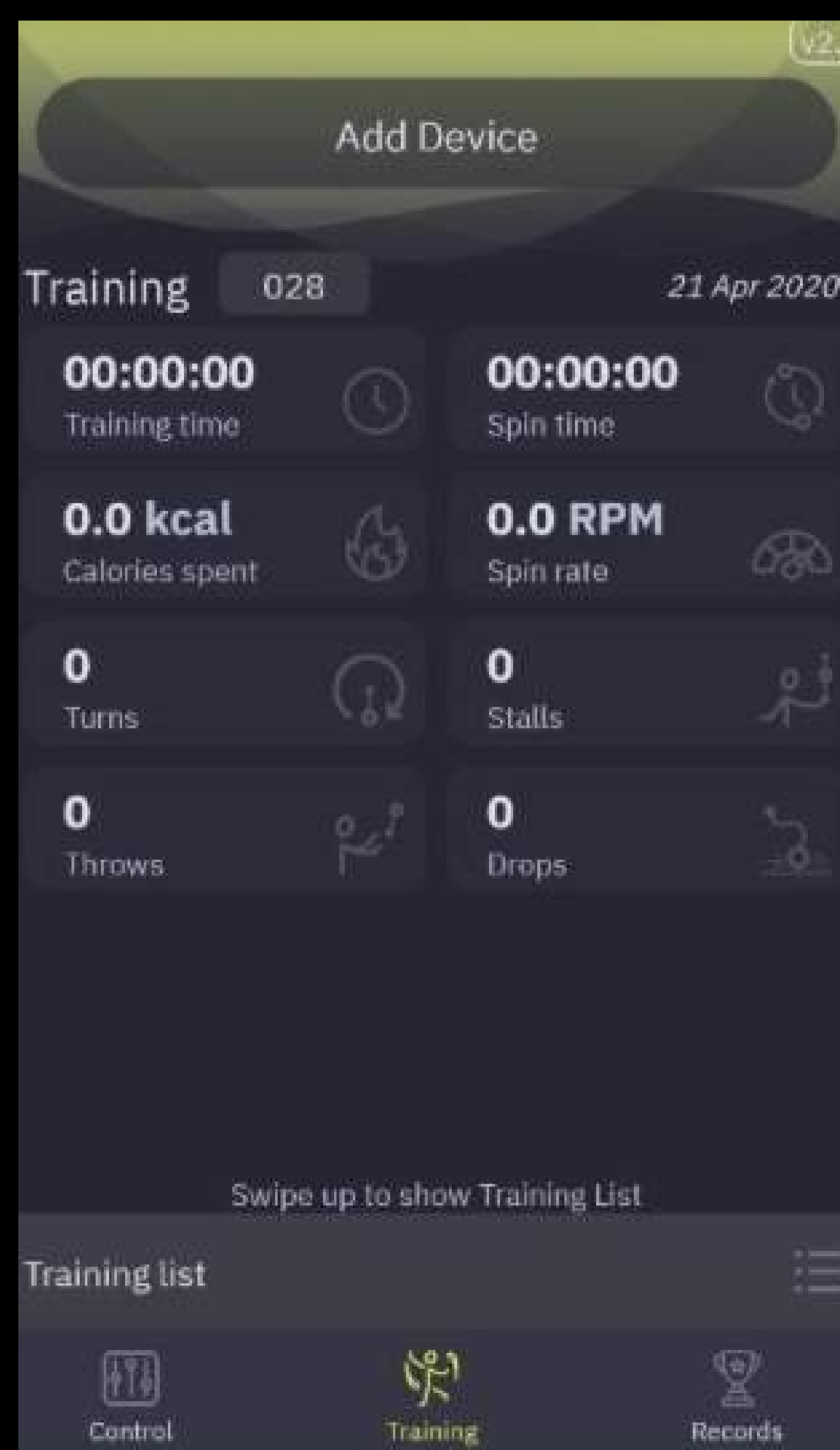
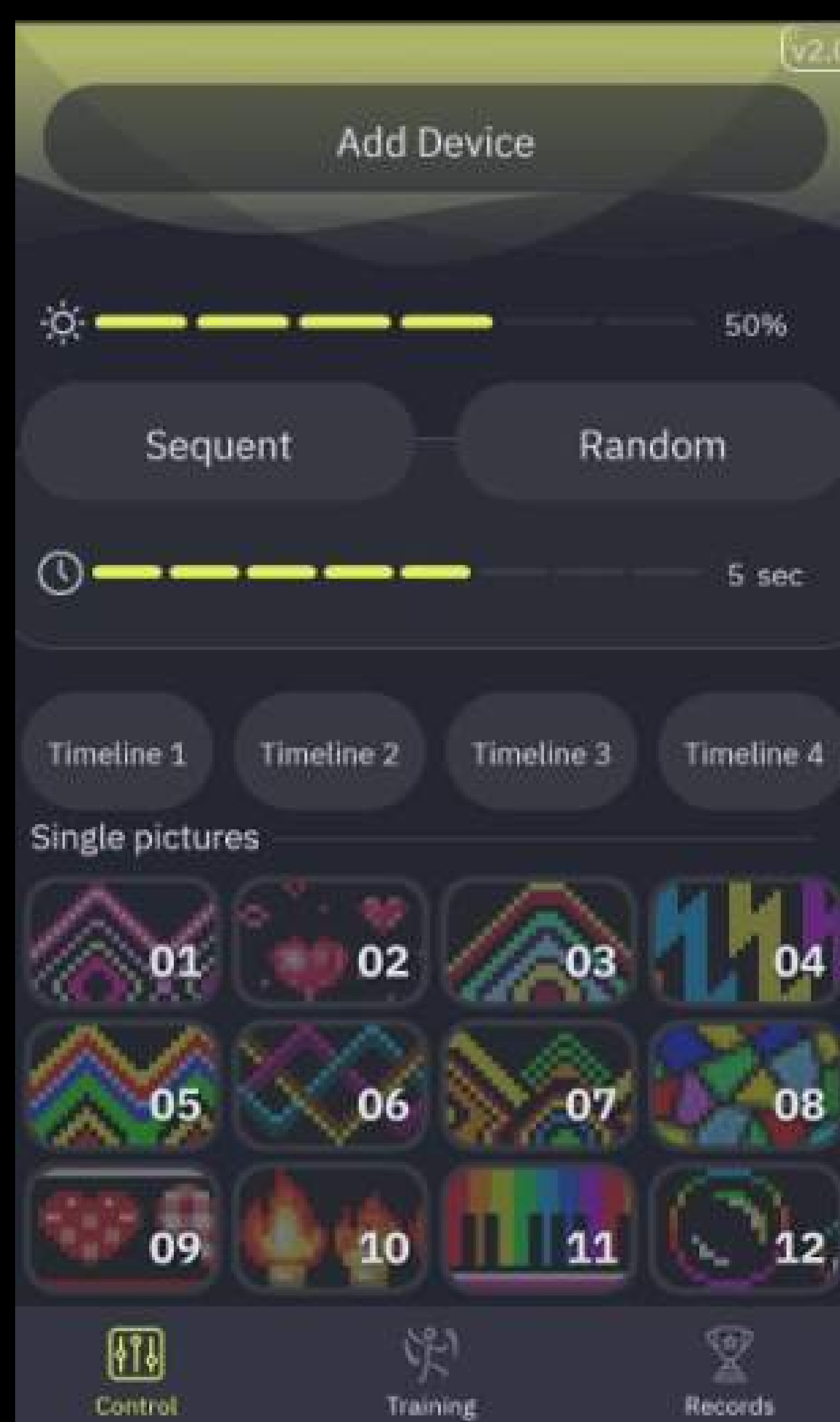
**kindest regards,
 Ignis team**



—● Ignis mobile Application

<https://play.google.com/store/apps/details?id=com.ignispixel>

<https://apps.apple.com/app/ignis-pixel/id1531377562>



Control scheme

Press PLAY/STOP button to turn on the device and get to Menu Mode

Menu mode

Blue blinking cursor is on the 1st position.

Click UP and DOWN buttons to navigate the cursor over menu

To turn off the buugeng, click and hold PLAY/STOP buttons till all LEDs die out.

To get into battery level scale
press middle button for 1 sec.

Battery level

The position of the red cursor shows
the battery level.

Green light on the top means full charge.

To return to Standby, click middle button.

To return to Menu mode,
click PLAY/STOP button.

To run the device, click
PLAY/STOP button

Running mode: Timeline or Single picture

Selected mode is launched.

To turn off the buugeng, click PLAY/STOP button to stop the device
running, then click the button again and hold it till all LEDs die out.

To return to Running mode
click PLAY/STOP button.

To get to Brightness setting
hold PLAY/STOP button for 2 sec

Brightness adjustment

Position of the cursor shows the level of current brightness.

To change the brightness, click UP and DOWN buttons.

