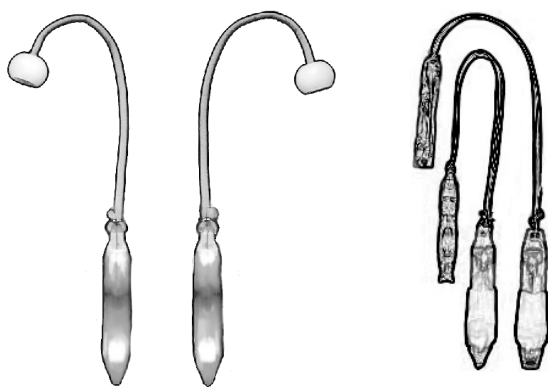




Crystal System Guide

features
operating instructions
troubleshooting
inspiration

**components + imagination =
endless possibilities for flow**



LIFETIME WARRANTY

Flowtoys are designed to last you a lifetime, but nothing is indestructible, so we provide this warranty to enable you to freely find your flow*.

If you manage to break a flowtoys product, we have a policy of free replacement on damaged non-electronic parts and defective electronics, and 50% off replacement on broken electronics. If the tips in this guide do not keep your flowtoys working for years to come, please contact us!

** Flowtoys reserves the right to refuse coverage to anyone abusing this warranty.
Please contact us before sending in your product, or it may be returned to sender.*

Flowtoys Crystal System

Combining the versatile flowlight® full spectrum LED lighsticks + protective crystal case + engineered-for-spinning flowcord and knob handle system + custom-designed flowmass for extra weight, your crystal poi or dart is a terrific stick-style flow prop, great for beginners and experienced spinners alike.

QUICK START GUIDE :: THINGS TO KNOW BEFORE YOU FLOW

1. Optimize and manage your batteries!

Use rechargeable batteries. The flowlight was designed for rechargeables. Flowlights are bright and draw a lot of power—cheapo disposable batteries can't keep up and don't last as long.

Have 2 batteries for each flowlight. This way you always have a charged set ready to glow! We offer great rechargeable NiMHs for \$1 each.

If you use NiMHs, charge shortly before use! Typical NiMHs hold a good charge for 1-2 weeks. After that they may have less than 50% of their charge left, so we recommend charging them within a week of important uses like performances, parties or festivals.

Separate charged and discharged batteries. We recommend having 2 resealable bags or other containers to keep track of your charged and discharged batteries.

2. Finish your leash! Your leashes are designed to be adjusted to the ideal length for you. Check out page 7 of this guide for instructions on finishing your leash—it's quick and easy and makes your spinning experience better!

3. Save your fingers. Crystal cases come with soft elastomer o-rings to attach to the base of your flowlight. This makes getting lights out of crystal cases much easier.

4. Cleaning your flowtoys. If your crystal cases or flowmass get dirty after hours of practice in the park, flowing in the forest or rockin' it on a dancefloor, you can clean them with soap and warm water, or put them in the wash with your laundry: air-dry, no heat!

SAFEGUARDS AND PRECAUTIONS

This guide outlines basic safeguards in using your flowtoys. The precautions and instructions presented cannot cover all possible circumstances and situations that may occur. In using any flowtoy, the user understands that common sense and caution cannot be built into the product, and must be provided by him/herself. Please read all instructions before use.

1. Flowtoys are intended for practice, play, performance and meditation. Do not use for any other purpose.
2. Do not use products under the influence of alcohol or drugs. Consult prescription labels to determine if a particular drug would impair your judgment or reflexes. If so, do not use this product.
3. Stay alert and use common sense. Do not use this product when tired or distracted. Be aware when in the presence of fragile or breakable objects.

BEFORE USE: Check for damaged parts before using any product. Ensure caps, connectors and battery doors are fully secured. Most flowtoys are made of individual pieces that can separate during use if not properly assembled.

GENERAL CARE: Repair or replace damaged or worn parts before use. Do not use damaged products.

REGULAR MAINTENANCE: Maintain all Flowtoys products with care. Store in a clean, dry environment. Avoid over-exposure to sunlight: UV rays compromise the integrity of plastics.

UNAUTHORIZED COMPATIBLE PRODUCTS: Our products should not be combined with products or parts from other manufacturers, unless specifically authorized by us and such other manufacturers. Any unauthorized product combination may void the warranty of our products and other manufacturers' products.

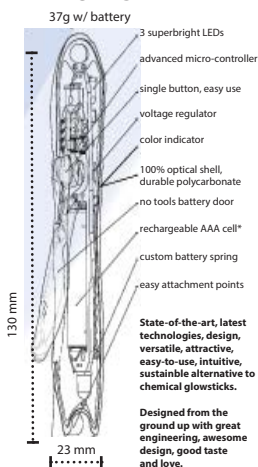
Warning: This product is not intended for use by children age 14 and under.

FLOWLIGHT - FULL SPECTRUM :: LED LIGHTSTICK

The flowlight-FS serves as a versatile, interchangeable pixel of light in the Flowtoys Modular System of poi, staffs, juggling and martial flow props.

Clip a flowlight to your person, backpack or bicycle. Use it as a flashlight or for ambient lighting, while you are at a festival, camping, or at home. With a huge range of modes and color schemes, the possibilities are limited only by your imagination.

FEATURES



Bright: 3 regulated ultrabright RGB LEDs (9 LEDs total) provide maximum brightness for entire battery life.

Long lasting: 7-24 hour run-time in most modes!

Durable: time-tested high impact polycarbonate shell, rugged circuit board, and replaceable battery provide a lifetime of service.

Easy to use: intuitive one-button operation. Easy battery access, convenient attachment points.

Sustainable: replaces chemical glowsticks, runs on 1 AAA battery, rechargeable, repairable, built to last.

Low battery mode: blinks and goes into low-power mode to continue providing useable light for hours.

Battery charge indicator: hold button while off to see the charge level of your battery.

Favorite mode recall: save you 10 favorite patterns in page 4, you can even adjust them and rearrange them!

State-of-the-art: Advanced micro-controller is super-efficient and powerful for complex functionality and patterns.

Beautiful design: carefully designed to optimize light distribution, durability, functionality, look and feel.

OPTIMIZING YOUR GLOW – UNDERSTANDING YOUR BATTERIES

The flowlight runs on a single AAA battery. It amplifies and regulates the voltage – this means you can use common rechargeable batteries and your flowlights will run at full brightness for the entire life of the battery, and not dim over the course of the night. Using higher-voltage disposable alkaline batteries will not increase the brightness, or runtime.

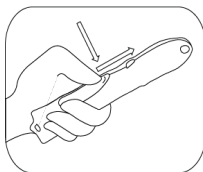
How long does a battery last? This depends a lot on the mode you are in. With freshly charged NiMH rechargeables, flowlights normally last for 7-24 hours in most modes, 2-4 hours in page 3 “performance” modes, and 1-2 hours in “bolder” and “bold” (all white modes).

Runtimes with disposable alkaline batteries are typically lower, and cheapo disposable batteries may last less than 30 minutes, as they cannot handle the amperage required.

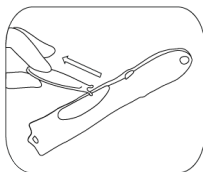
How long will a rechargeable battery hold its charge? Typical NiMH rechargeables hold a good charge for a few weeks. After that they may have less than 50% of their charge left, so we recommend **charging your batteries within a week of any important uses**, like festivals, parties or performances.

New feature - charge-level indicator: Hold the button while the light is off to see the charge-level indicator. Green is at least 80% charged, red is at least 80% dead, orange and other in-between shades are approximate and indicate about 50%. This is intended for NiMH batteries only - a “green” reading for alkaline disposable batteries may actually mean 50% or less, due to the voltage difference of the chemistry.

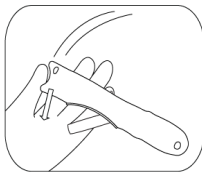
OPENING YOUR BATTERY DOOR



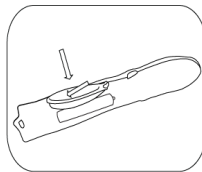
Push the front lip of the door **down and forwards** towards the button firmly. The back of the door should pop out. It may help to use a small object like a battery or the end of another flowlight.



Pull the door out to access the battery compartment. The antenna are very strong and durable. You can pull hard to remove the door. This is normal.



To remove the battery, pull on the clear battery pull tab, or tap the tail of the flowlight firmly against a firm surface. Battery may be snug, this is normal.



Insert battery “+” end first towards the pointy head of the light. Ensure clear tab is placed correctly. Push battery “-” end down. Insert antennae of battery door. Push door down and back to secure it. Power up & enjoy!

There is a **slight lip at the tip of the door**—push the lip **DOWN** towards the belly of the light and **FORWARDS** towards the head of the light. There is a tiny “latch” inside near the button that needs to be released before you can push the door forwards.

Use your thumb or another hard object (the tail end of another flowlight works really well) to push down and forwards on the tip of the door. Don’t push on the main part of the door itself—this will not release the internal latch. Once you have released the battery door, pull firmly on the door to separate the door from the light and access the battery compartment.

Inserting and removing the battery

There is a transparent battery pull tab—make sure you insert the battery with the tab across the bottom of the compartment. Insert the positive end of the battery (pointy end) in the direction of the head of the flowlight (pointy end). Pull the tab to release battery. A firm tap on a table or other semi-hard object will also pop the battery out of the compartment.

NAVIGATING THE FLOWLIGHT-FS MODES

Your flowlight-FS has many modes and features enabling infinite patterns, and effects. We’ve organized them into 4 pages of modes - easy to navigate with a few types of **button presses**.

BUTTON PRESSES

Click - 0.3 seconds or less: A quick click, like a computer-mouse click. Multiple clicks, like a double-click on a computer mouse, will access different pages - 2 clicks for page 2, 3 clicks for page 3, and so on. You may discover this by accident by trying to cycle through the modes too quickly, and find a mode you’ve never seen!

Press - 0.3-0.75 seconds: The classic button-press, this is what feels “normal” to most people.

Long-press - 0.75-1.5 seconds: An indicator flash lets you know you can let go. This puts you into the “adjust” state to adjust the mode you are in.

Hold - 1.5 seconds or more: If the light is on, it will turn off, it will also remember your mode and any adjustments you might have made to it. When you press the button again, it returns to where you were. If it is off, it will display its battery’s life estimate, then turn back off.

Save - 3.5 seconds: If you continue holding past “off”, the pattern will be saved to the Favorites page and the light will turn back on.

ADJUSTING MODES

Every mode has 1 parameter that can be adjusted. In most cases it’s the color/hue, in others it’s the speed/density of the pattern, or the brightness. To put a mode into its adjust state, do a long-press (hold for more than 0.75 sec., let go when the indicator flashes). The mode will then cycle slowly through its adjustment. When you see what you like, a button press will stop the adjust cycle, selecting that adjustment.

Page 1: classics

1 click or press of the button from “off” brings you to page 1 mode 1 (p1m1). “Rainbow” the first of the “classic modes like bold, fire, water and other elemental modes. The last mode on this page (p1m10) is a new instant-classic: pulse, which responds to your moves, like stalls, bumps and wraps.

Modes: *Rainbow • Rainbow drops • Bold • Lantern • Fire • Water • Earth • Air • Spirit • Pulse*

Page 2: party

Click the button quickly 2x - you'll see the indicator flash 2x to let you know you're now on page 2. Subsequent presses take you through the 10 modes in that page, and each mode is adjustable. This page celebrates all that is fun and festive - it's where you'll find much-loved modes like candy, petals, and microdots, and cult-favorites like watermelon, freedom, and solar-flare.

Modes: *Candy • Petals • Love • Watermelon • Freedom • Microdots • Unicorn • Blue blazer • Solar flare • Strobe*

Page 3: perform

3 quick clicks takes you to page 3. The indicator flashes 3 times and you're now ready to perform. These modes are superbright, and battery life is the last thing on your mind. This page contains all the modes, with their full power unleashed. Just press the button to cyle through them, but be warned: the brightest ones may drain your battery in under an hour!

Modes: *Flamebow • Alicorn • Liquid sugar • Rainbow dash • Fireball • Froth • Jammin • Bolder • Sunset • Daybreak*

Page 4: favorites

4 quick clicks takes you to page 4 “favorites”. Here you'll see your most recently saved pattern. You can select from your last 10 saved patterns by pressing the button to cycle through them. You can save any mode and adjustments you make to it by holding down the button until the light turns off and turns back on. This will also save a copy of any mode/pattern in Favorites to slot 1 (p4m4). You can use this to re-order your favorite modes without adjusting them!

Take me home!

To get back to page 1 from any other page, press the button to cycle through the modes until the light turns off. A single click or press will bring you back to the beginning: page 1 mode 1.

Note: If you press too quickly (less than 0.3 sec. each) it might register as a “click” and change what page you are in. if this is happening just go slightly slower :)

Tip: 5 quick clicks or more will take you to page 1 mode 1 instantly.



FLOWLIGHT TROUBLESHOOTING

Most apparently “faulty” flowlight behavior is easily remedied. A truly defective flowlight can always be sent back for free repair or replacement, but generally they just require a good charged battery, or a little care!

- 1. Use only rechargeables or good alkalines.** The circuitry is optimized for rechargeables. The voltage amplifier draws a lot of power, so cheapo batteries don't last long.
- 2. Your battery is low.** Dim orange light? Flashes and turns off? Won't respond to the button? Try a battery that you are sure is good; switch your batteries around with other lights to check.
- 3. There is something obstructing battery contact!** Check that the clear battery pull-tab is blocking the battery contact. Check that your batteries are clear of physical debris. Sometimes the wrap-per on the battery itself tears away and blocks the contact.
- 4. There is oxidation on your contacts.** Do the battery or spring contacts have black marks or debris on them? This may be oxidized metal dust from the battery and/or battery contacts caused by friction/vibration. Clean the battery and battery springs with your fingers, a clean cloth or eraser, and apply a tiny bit of petroleum jelly (vaseline) to the springs. This works wonders to prevent future oxidation and promote electrical conductivity.

FLOWTOYS CRYSTAL SYSTEM - COMPONENTS



FLOWLIGHT - FULL SPECTRUM: The heart of the system—these interchangeable high-tech durable LED lightsticks have many beautiful modes, colors and adjustments, and run on 1 rechargeable AAA.



CRYSTAL CASE: This soft yet crystalline-looking cover provides padding for body wraps and protects the flowlight during hard impacts, while diffusing the light, making it appear brighter. They also add a bit of weight and momentum to your flow. Features on the crystal case line up with the button of the flowlight in any orientation to enable you to find the button by feel.



FLOWMASS: These translucent crystalline-looking weights add more inertia to your flow and optimize the balance of your flowtoy. They can be added to crystal cases and flow tubing. Add two or more if you like your tools heavy.



KNOB-LEASH: Adjustable integrated leash and knob handle system with minimal hardware. Made with flowcord—the first cord designed for poi spinning. Highest quality for durability, comfort and endless flow!

FLOWLIGHTS IN CRYSTAL CASES

Crystal cases are designed with facets that line up with the button of the flowlight no matter which way your flowlight is oriented, so you can feel and turn on your lights in the dark. We prefer inserting flowlights with the head facing downwards as there are two LEDs at the head and this orientation makes for more dramatic light patterns.

We offer strong o-rings that you can attach to the tail of your flowlight to enable you to remove your flowlight from its crystal case more easily. You can attach the o-ring using a lark's head knot/looping it through itself.



INSTALLING FLOWMASS: Flowmass is slightly tapered with more material on one end—make sure the heavier end is installed at the **far end of your prop, where it counts.**

Adding mass to a crystal case: Thread the leash through the mass. Hold leash with one hand and pull the mass along the length of the case with your other hand until the mass is in place. If this is difficult, try hooking your leash onto a doorknob or other secure object. **Do not lubricate mass, as this can cause it to slip off.**

Positioning the mass on a crystal case: A small flowtoys super F logo on the mass should align with the button facet on the crystal case, which also aligns with the flowlight button. This allows you to feel for the button from the outside, and creates the most aesthetically perfect positioning of the mass with respect to the crystal case.

FLOWCORD AND KNOB-LEASH

Your knob-leash comes with a pair of poi knob handles, washer and adjustable flowcord leash. Crystal darts include a 10'+ leash, also made of flowcord.

ADJUSTING THE LENGTH OF YOUR KNOB-LEASH

Adjusting your leash to fit your body and style is an easy and important step to optimizing your poi experience.

Loosen the knot on the end with the extra cord, and move the position of the knot to lengthen or shorten your leash. Test the length and adjust as needed - a popular length for poi is from hand to shoulder. Tighten the knot and finish your leash (see instructions below). The result is a high performance leash with minimal hardware or knots.

ATTACHING FLOWLEASH TO CRYSTAL CASES

Your crystal poi should come with your leash assembled to the crystal case.

If you need to re-assemble your leash, thread flowcord through the provided metal o-ring and then through the crystal case. O-ring should be on the handle side of the leash.



- Thread the non-handle end of flowcord through the ring as shown.
- Adjust leash length as needed.
- Tie a simple overhand knot on the non-handle end to secure the leash.



Finishing the leash end:

- Tighten the knot. Cut excess cord off with scissors.
- Melt the end of the knot with a lighter. While the end is still soft/melted, use the edge of the lighter to flatten and shape the end of the knot onto the rest of the knot. This ensures the knot will not come undone.



Tip: If the melted plastic sticks to the lighter, it's too hot. Wait a second before shaping it.



DURABILITY

Flowlights were designed for a high-impact lifestyle. However nothing is indestructible! Flowlights are electronic instruments - we recommend using one of our protective housings or avoiding very hard collisions and drops if they are unprotected.

Please note: Chemical glowsticks release gaseous esters that break down polycarbonate and make it brittle. This can occur even if an uncracked glowstick is placed near polycarbonate, and is not only a result of broken or leaking glow-sticks. Avoid exposure!

**Don't ask yourself what the world needs.
Ask yourself what makes you come alive, and then go and do that.
Because what the world needs is people who have come alive.**

- Howard Thurman

To the illuminated mind the whole world sparkles with light. - Ralph Waldo Emerson

You never change things by fighting the existing reality.

To change something, build a new model that makes the existing model obsolete.

- Buckminster Fuller

Thank your parents.

That which matters the most should never give way to that which matters the least.

Drink lots of water. Stretch. Breathe.

A ship in harbor is safe, but that is not what ships are built for.

I'm trying to free your mind. But I can only show you the door.

You're the one who has to walk through it. - Morpheus

Do you ever get the feeling that the whole world is conspiring in your favor?

We're all (sp)in this together.

TAKE-BACK PROGRAM

If you have a flowtoy that is no longer in use or is unusable for any reason, please don't throw it away. Send it back to us and we'll put it towards an art project, recycle or refurbish and donate it. Several of our friends are involved in traveling circuses that bring the movement arts to underprivileged children in different parts of the world and are always looking for such donations.

DO GOOD. BE AWESOME. MAY THE FLOW BE WITH YOU!

Visit flowtoys.com for more information, inspiration, videos, instructions and tips.