FLOWTOYS COMPOSITE SYSTEM - COMPONENTS



FLOWLIGHT-FS: World's most revolutionary LED glowstick. Beautifully sculpted polycarbonate shell refracts full spectrum LEDs. 40 adjustable modes with many bright and beautiful color and pattern options, kinetic awareness, accelerometer response, battery and charge level indicators and more. 1 rechargeable AAA provides 3-27 hours runtime. Connect as many as you like to fill your tubes with lights.



CAPSULE 2: Amazing capsule light with over 60 adjustable modes, up to 60 programmable modes, wireless connectivity, USB rechargeable, custom high-temp super bright LEDs, adjustable brightness, accelerometer, motion responsive modes, USB firmware updateable with more features to come.



1" CLEAR TUBES: Highest quality polycarbonate extrusion, transparent yet virtually bulletproof, connects to caps and connectors via snap-button holes. Available in a variety of interchangeable lengths for instant reconfiguration.



CARBON FIBER SHAFT: Custom woven carbon fiber composite with smooth, glossy finish, 12mm and 15mm diameters. Thin and light-weight yet super-strong and rigid, enabling effortless flow.



ELASTOMER GRIP: 1mm thick tubing of a proprietary elastomer blend (our supplier won't even tell us the formula!). Incredibly grippy and durable, yet translucent. Encases carbon fiber shafts for seamless grip.



TUBE-SHAFT CONNECTORS: Custom 3D-printed parts that screw into the carbon fiber and create a firm connection between the polycarbonate tube and carbon fiber shaft. Tube can be twisted off for travel.



FLOWCAP: Thick, soft, durable silicone body. Inner polycarbonate snapcap buttons snap securely onto tubes and release with a firm twist. Built-in button compatible with capsule lights; connects to flowlights with adaptor.



FLOWLIGHT ADAPTOR: Allows you to connect flowlights to flowcaps. Pops on and off easily, but will not release flowlight when inside a tube.



POD SHELL: Beautiful, thick, super-soft and durable silicone, built-in button compatible with capsule lights, strategic internal petal-ribs provide structure and focus mass at the bottom for great rotational inertia. **Pod shells attach to tubes with a friction fit - please read instructions and use caution.**



FLOWMASS: These translucent crystalline-looking weights add more inertia to your flow and optimize the balance of your staff. Add two or more if you like your tools heavy!



CAPSULE LINK: Tiny but tough, this link fits inside leash-ports of 2 capsules to link them securely inside tubes. Leaves both buttons accessible.

More modular system components, details and info available on www.flowtoys.com/PARTS

flowtoys

Composite System Guide

features
operating instructions
troubleshooting
inspiration

high performance modular system endless possibilites for flow



Com-pos-ite: (adjective) made up of various parts or elements.

Composite material: (noun) a combination of two or more distinct materials, each of which retains its own distinctive properties, to create a new material with properties that cannot be achieved by any of the components alone.

The **Flowtoys Composite System** is an extension of our Modular System and combines high-performance materials typically used in the aerospace and racing industries to provide incredible equipment for flow. Thin and lightweight, yet super-strong and rigid carbon fiber shafts for optimum comfort and performance. Transparent yet impact-resistant polycarbonate end-tubes. Soft and clear, yet incredibly durable silicone end caps for maximum glow and protection. Versatile modular components to enable the perfect combination of style, length and weight for you!

Made with the same high-tech materials that took humanity to space, your Composite Flowtoys will help take your flow practice to new dimensions. The world just became a little more awesome for all of us.

EFORE YOU FLOW

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- **1. Do not use glowsticks or WD-40 with tubing**. While polycarbonate is very strong, it breaks down in the presence of certain esters, including those produced by chemical glowsticks, mineral spirits and WD-40. Do NOT put chemical glowsticks into the tubes, otherwise they can become brittle and shatter. If you need to, we recommend lubricating tube parts with vaseline/petroleum jelly.
- **2. Modularity.** Check your components! Most composite system parts are modular and interchangeable, but not all sizes or all parts go together. A 12mm shaft needs a 12mm connector. Flowlights require an adaptor for the cap and will not fit in a 1-capsule tube (for example). Pod shells require C-rings on capsules. Find more tips for your rig in this guide!
- **3. Make sure all caps are fully secured before use!** Check that the buttons in your caps are fully clicked into tubing holes.

4. Clean your grip!

Grip can wear out with use and is affected by oils from our skin. To prolong the life of your grip, clean it after heavy use and before long periods of storage. Use rubbing alcohol and a cloth, OR a cloth with warm soapy water to remove oils from the grip. Wipe away any soap residue with clean water. If your flowcaps get dirty, you can clean them with soap and warm water, or put them in the wash with your laundry: air-dry, no heat!

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FLOWTOYS MODULAR SYSTEM - INSTRUCTIONS

INSTRUCTIONS FOR LIGHTS

Modular system props are compatible with both flowlights and capsule lights - instructions for your lights are included in a separate manual with your prop. 0......

CAPS :: FLOWCAP

Flowcaps are compatible with all flowtoys light engines (flowlights, capsules and vision), and securely click into any flowtoys 1" polycarbonate tubes.



DETACHING/ATTACHING FLOWCAPS TO TUBES:

- To detach, twist firmly to release the buttons and pull.
- To attach, place cap over tube, push and twist until snap-buttons click into the holes.

ATTACHING/DETACHING FLOWLIGHTS TO FLOWCAPS:

- Push the narrow "head" of the flowlight into the adaptor, then insert flowlight+adaptor into the flowcap.
- Twist until the adaptor clicks into place. The sides of the light should align with the buttons in the cap.
- To remove flowlight with adaptor attached, push the center of the cap while twisting the light.
- To leave adaptor in the cap, pull light out while gripping the cap.

ATTACHING CAPSULES TO FLOWCAPS: Insert capsule into flowcap, button side in. Twist and push until it settles. The seams of the capsule must be aligned with the buttons inside the cap for it to fit in the tube.0

CAPS :: POD SHELL

Pod shells are intended for use with capsule lights only. Can be used as caps for staff ends. Pod shells provide great rotational inertia for staffs and baton ends, but are not recommended for other props like poi, rope darts, chucks and swinging clubs.

INSERTING CAPSULES INTO POD SHELLS:

Capsules MUST have their C-ring installed before inserting into pod shell. Insert capsule with C-ring into the bottom of the pod shell firmly. Check button for normal operation. If the button is difficult to press, check that the capsule is all the way inside the shell and the C-ring is properly installed on the capsule. Also check that there is not a C-ring already in the pod!

ATTACHING POD SHELL ONTO TUBE:

The pod shell attaches to the tube with a friction fit. Push the pod shell over the tube firmly, ensuring the plastic tube is between the capsule and the silicone tube inside the pod that holds the capsule in place.

Be aware - the tube must be clean and the edge of the silicone that holds the capsule must cover the holes in the tube for a secure fit. Silicone does not stretch out, warp, or relax like other plastics, and as long as it is installed correctly the pod cannot fly off during use. You have been warned. We will not replace parts that go flying due to inadequate connection!

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 leash through the mass. Hold leash with one hand and pull the mass down the length of the case with your other hand until mass is in place.

Adding mass to tubes: Apply a little bit of vaseline/petroleum jelly to the inside surface of the mass and slide the tube through it. Ensure there is enough clearance at the top for your flowcaps to click in properly and securely.

CAPSULE LINK:: CONNECT 2 CAPSULE LIGHTS

The capsule link is a little 3D-printed part that can connect 2 capsule lights together.

- Remove the o-rings from the leash-port (battery side) of two capsules.
- Pry open one shell enough to insert the capsule link then reinstall the O-ring.
- Roll the second capsule's O-ring over the first's, then connect the second capsule to the link and roll the O-ring onto it.

It is also possible to install and remove the link by prying and holding the capsule open with the O-rings in place - if you have strong fingers! Only two capsules can be connected - both buttons should face out.

CONNECTING 2 FLOWLIGHTS



If you have two or more flowlights in one tube, you will need to attach the opposite ends of the flowlight to each other for the lights to fit properly, and slide in and out of the tubes conveniently.

Be sure to click them together and apart **sideways** (laterally as shown in the picture), NOT up and down in the direction of the pivot (vertically), as this can cause splitting at the seam and loosen the connection.

CONNECTING SHAFT TO TUBE:

The connectors are screwed into the carbon fiber shaft. Depending on the length of your prop, the clear polycarbbonate tubes may or may not already be installed.

carbon fiber tube-shaft 1" polycarbonate connector shaft

If you need to assemble your rig, here's how:

To attach composite connectors to clear tubes: Line up the 1" tube holes with the connector buttons, and push tube firmly down to the connector buttons.

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Connector sizing: We have 2 shaft sizes – 12mm and 15mm, and 2 connector sizes to match. Please be sure you are using the correct connector - it should fit very firmly.

FAQs

Can I break down my staff into shorter pieces for travel?

Yes you can. You can twist and pull off the tubes to shorten your staff - the shortest it can go is the length of the carbon fiber shaft with the connectors attached. Please note that while you can break them down ocassionally for travel, it's not intended for frequent disassembly, as it causes wear-and-tear on the buttons.

My flowcap won't release from the tube.

Make sure to grip the top end of your flowcap when removing it. If you grip lower down the cap, the silicone can press against the tubing and stick, making it harder to remove. New caps can be hard to open - use a jar gripper to grip the tube with one hand, while twisting the cap off with your other hand.

FOREVER 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 offer free replacements on defective or non-working parts due to intended use, and 50% credit for products in any condition at any time. Capsule battery depletion is normal wear & tear and covered for free in first 2 years and half-price/capsule after. If you need warranty support, please contact us at support@flowtoys.com.

> * Please check flowtoys.com for full warranty details. 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.