

## Wizmount CU2pack User Manual



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## System components

- 1 Backpack
- 2 Light weight ergonomic support plate (base plate)
- **2a** Base plate stabilizing straps
- 3
- 3a #1 boom pole (base pole, mounted to support plate)
- **3b** #2 boom pole (short 90 deg bend)
- **3c** #3 boom pole (long 90 deg bend)
- 3d #4 boom pole (45 deg bend)
- 4 Three Safety Torque Adjustable Clamps (STAC)
- 5 Poles storage sleeve
- 6 3-axis camera mount assembly



## **Backpack components**

#### **Outer components**

- **1a** Top compartment zipper
- **1b** Velcro left & right ports for poles
- 1c Main compartment zipper
- 1d Water tube ports
- **1e** Storage compartment
- 1f Holding straps for poles storage sleeve
- 1g Base plate stabilizing straps buckle
- 1h Webbing loop for harness kit
- 1j Zipper pull Velcro



#### **Poles storage sleeve**

5a	Sleeve	cord	lock
34	JICCVC	coru	IUUK

- **5b** Sleeve hook
- 5c Sleeve Velcro

#### **Inner components**

- **1k** Plate Inner harness vertical straps
- **1I** Plate inner harness horizontal straps
- (lower strap is hidden in this view)
- 1m Webbing to hold water bladder



## System assembly

- 1. Open backpack top compartment zipper **1a** (notice that this is the second zipper from top)
- Place STAC 4 on #1 boom pole 3a left or right side, according to your preferences, make sure STAC 4 locking handle is in its open position.
- 3. Open Velcro port **1b** on your preferable side, left or right.
- Slide narrow (male) end of boom pole 3b through the Velcro port into pole 3a
- 5. Make sure that the reduced diameter section of pole **3b** is fully inserted to pole **3a**
- 6. Push and lock **STAC** handle until it touches the clamp body
- Follow "Adjusting the STAC" instruction chapter as how to adjust clamping force on page 7





**Note 1:** One side of **STAC 4** has a reduced diameter (see next page) and should be mounted on the boom pole from its wider diameter side. Therefore, when moving the STAC from left to right side (and vice versa) on #1 boom pole, STAC should be flipped to its other side

**Note2:** Tighten STAC only when they are clamping two matching boom poles (Do not clamp a high level of pressure to STACs when they are clamped to a single pole )



Warning: Failing to insert the assembled poles <u>completely</u>, can result in system damage due to insufficient overlap between the two poles



**Correct assembly** 

Wrong assembly

#### Adjusting the STAC - "Safety Torque Adjustable Clamp"

#### **STAC 4** structure:

- 4a Quick release handle
- 4b Clamp insert side
- **4c** Clamp limiter
- 4d Clamping force adjustment nut



- Make initial adjustment of the **STAC** clamping force by rotating the **STAC** nut **4d** clockwise (to increase clamping force) or counter clockwise (to decrease clamping force)
- Insert clamp, through 4b side, to the pole wider diameter side, until it reaches its limiter 4c
- Hold **STAC** with one hand (to keep it from rotating around the pole) while closing its quick release handle with your other hand.
- If you feel that you need to apply too much force to close the handle, fully open the handle, slightly rotate (counter clockwise) the clamp nut **4d** and try again to close it again.
- If you feel that you need to apply very light force to close the handle, fully open the handle, slightly rotate (clockwise) the clamp nut **4d** and try again to close it.
- Clamp nut **4d** controls the clamping force of the STAC. Higher clamping force is required for aggressive maneuvers and will require higher force to close the quick release handle
- After closing the quick release handle, try to rotate the connected poles one relative to the other. If they move by applying relatively light force with your hands, it indicates that clamping force is not strong enough and should be adjusted as explained above.

Note: When locking the STAC onto one pole (without

the second matching pole), be sure to adjust the clamp nut for a light clamping force. Use a larger amount of clamping force only when clamping 2 poles together.

## System assembly (Cont.)

- Insert second STAC 4 on part 3b, make sure the quick release handle 4a is open. Insert the smaller end of boom pole 3c into pole 3b <u>completely</u>, then follow "adjusting the STAC" instructions.
- See page 7 for correct STAC adjustment



Warning: Failing to insert the pole **3c** completely into pole **3b**, can result in damage to the system or opening of the connection between the two poles

 Insert the third STAC 4 on pole 3c, make sure quick release handle is open. Insert pole 3d into pole 3c, adjusting it to the required length and orientation.

Warning: Assembled poles 3c and
3d must overlap at least 40mm
(1.6") which is indicated by pole 3d
completely fills the slit in pole 3c.

3d

4

Failing to do so, can result in damage to the system or opening of the connection between the two poles

# Connecting and adjusting your camera

The three way camera assembly provides 3 motion axis to adjust your camera angles:

- 6c Pan control with special Wizmount thumb knob
- **6b** Roll axis control with stainless steel bolt
- **6a** Tilt axis control with stainless steel bolts
- Leash outlet to secure your camera (leash kit is optional)

Special Wizmount pan adjustment thumb knob **6c** has two functions :

- 1. Securing the camera assembly mounts to pole 3d
- 2. Locking the pan axis at the desired angle



**Note:** The thumb knob **6c** has a special safety mechanism that ensures it cannot be fully unscrewed and removed. Do not try to remove it by applying strong force as you will break the safety mechanism

#### Mounting of GoPro Hero 1,2 and 3

- 1. Unscrew bolt 6a and take it out
- 2. Insert GoPro Camera.
- 3. Replace bolt **6a** and tighten it for the desired camera angle.

#### Notes:

- 1. As Wizmount mount assembly is made from Aluminum Alloy and is more rigid then plastic, it requires slightly more force to enter the camera house to the tilt control mount compared to GoPro mounts
- Bolts 6a and 6b are fully compatible with GoPro Knobs. Nevertheless, to achieve strong and stable camera mounting, we recommend using Philips screwdriver even if you are using the GoPro knob.



#### Mounting other cameras

To mount other cameras that accept a standard 1/4" 20 tpi (threads per inch), use the optional universal camera mount adapter **11**.

- Open bolt 6a, insert adapter 11, and screw back the bolt.
- Insert camera female thread ¼" to the adapter bolt and rotate the camera until locked





## Adjusting your camera position & angles

- 1. Assemble the whole system with your camera as explained in previous sections
- 2. Adjust camera position using the 3 joints. Start with the first joint (connects **3a-3b**) that is located inside the pack. Then adjust the second joint (connects **3b-3c**) and finally adjust the third joint **(3c-3d)** that controls system length as well as orientation.
- 3. Wear the backpack and fasten the waist strap. Look at the system and camera and roughly check if you achieved the desired POV (Point Of View). If not, remove the backpack, re-adjust the joints and repeat this step.

**Note:** Take your time in the first few times that you use the system to practice different camera positioning by changing the orientations between the poles. Take into consideration, that the first joint setting, is affecting the motion of the second joint, and therefore you may find it a bit tricky in the first usage. Once you practice, it will become easier to use.

- 4. Once the camera seems to be in the right position, adjust camera angles using 6a, 6b and 6c bolts
- 5. Operate the camera and watch its image by smart phone or other means supplied by the camera maker. If such means are not available, we suggest that in the first times, you operate your camera and watch the recorded result.
- 6. Once you are satisfied with the POV, make sure that all clamps are fastened enough and that camera assembly bolts are fasten with a screwdriver.

**Note:** When you check the camera image, make sure to position your body as if you are doing your sport (for example, if your are biking, seat on the bike in a riding position, and check the image)

### **Optional components**

#### **300mm Extension Pole (optional)**

Expand your reach by using the 300mm boom pole **3e** (supplied with one STAC). Especially useful for shooting in front angles (biking, ski, etc.). In most cases, when shooting from non-front sides, there is no need for the extension pole.

In most cases, extension pole should be inserted between pole **3c** and **3d**, however it can be inserted between any other poles pair (e.g. **3a-3b** or **3b - 3c**)



**Extension pole used for front shooting** 

#### Waist Harness kit (Optional)

Designed to be used in sports where a waist harness is used (kitesurfing, windsurfing, snowkiting, etc.). Keeps the CU2pack from riding up on your back while surfing. The waist harness kit clips on the bottom of your waist harness to stabilize and keep the CU2pack in place.

The kit includes:

12a 2 special buckles

**12b** 2 40cm straps

12c 2 stainless steel clips



#### Assembly instructions

Open the top part of the special buckles **12a** and slide them through the backpack webbing loops **1h**. Close the buckle to lock it to the webbing.

After wearing and adjusting your harness, wear the backpack, and clip the stainless steel clips **12c** to the bottom of your harness. Fasten straps **12b** so the backpack is pulled towards harness bottom

Note: Clips **12c** have some flexibility. If your harness is thicker than their opening, you can increase the gap of their opening by holding both sides of the clip and slightly pulling apart.



#### Camera securing leash kit (optional)

Built from 2 separate cords to enable easy dismantling and assembly of the system, the leash kit is designed to secure your camera as well as all CU2pack components. The leash runs through the inside of all boom poles and attaches your camera (via a dedicated leash outlet) to the backpack support plate. **We highly recommend using the leash at all times, especially during water sports.** 

#### Assembly instructions

#### Short cord section

- Insert the short cord loop 13b through one of the pole 3a sides and pull it out through the pole center hole
- 2. Slide the loop around pole opposite side to get a secure connection of the cord to the first pole



Leash short cord assembly

#### Long cord section

- Slide the long cord loop 13c along pole 3d until you reach the leash outlet 7
- Insert the other side of the long cord into the leash outlet and pass it through Pole 3d and 3c (with clamp attached)
- 3. Tie the cord end to the metal ring **13d**



Leash long cord assembly

#### Connecting the two leash sections

- Insert the hook 13a through the first pole 3a STAC 4 (not shown in the picture), pole 3b and another STAC 4.
- 2. Connect the hook **13a** to the metal ring **13d**
- 3. Insert pole **3c** to pole **3b** (metal ring should be pushed to pole **3b**)
- 4. Lock STAC 4



## Disassembly

When the CU2pack is not in use, you can disassemble the system and store all components within the backpack or inside the supplied poles storage sleeve

Poles disassembly instructions using the external sleeve:

- 1. Disconnect your camera by opening bolt 6a
- 2. Open STAC 4 between poles 3c-3d and 3b-3c
- 3. Disconnect poles 3c and 3d and insert them into sleeve 5. Fasten it's cord lock 5a and its Velcro 5c
- 4. Disconnect pole **3b** and insert it and STACs to one of the backpack compartments
- 5. Attach the sleeve to the backpack by using **1f** sleeve holding straps and secure it by attaching the sleeve hook **5b** to the top hanging webbing of the backpack



Poles disassembly instructions without a sleeve:

- 1. Disconnect your camera by opening bolt 6a
- 2. Fully retract pole **3d** into pole **3c**
- 3. Open pole **3c-3b** STAC **4** and disconnect the pair **3c-3d** from **3b** pole
- 4. Insert poles **3c-3d** to backpack main compartment as seen in the picture
- 5. Insert the STACs to one of the backpack compartments
- 6. Secure the backpack main zipper by opening **1j** Velcro and inserting it to the second zipper pull tab (see zoomed picture)

## Using your CU2pack as Hydration backpack

#### With plate & poles

You can add a water bladder (approx. 1 liter) to the backpack, while using the system for camera shooting. Use CU2pack water bag webbing **1m** to hang water bladder inside the backpack. Take bladder tube out through left or right water tubes outlets **1d**.

#### Without plate & poles

For storing larger amount of water and/or additional items, you may disassemble the base plate from the backpack and use it as a standard high quality hydration backpack. Follow the instruction in the next section "Disassembly & Reassembly of the base plate".

## **Disassembly & Reassembly of the base plate**

#### Disassembly

- 1. Release all poles from backpack
- 2. Release and remove the base plate holding straps **2a** from buckle **1g**
- 3. Completely open main zipper 1c
- 4. Completely open vertical plate straps 1k
- 5. Completely open horizontal plate straps 11
- 6. Take the plate out





#### Assembly

- 1. Open main zipper **1c** completely down
- 2. Move the inner harness straps (1k, 1l) to the sides and insert the plate
- 3. Insert your hand to the bottom of the base plate and pull base plate stabilizing straps **2a** through right and left backpack waist straps outlets.
- 4. Run the base plate stabilizing straps 2a through 1g buckles and make initial fastening
- 5. Close inner harness vertical straps **1k**. Make sure base plate is in correct position and tighten the **1k** straps
- 6. Close inner harness horizontal straps **1**. Make sure base plate is in correct position and tighten the **1** straps
- 7. Make final fastening of all straps: 1k, 1l and 2a. Make sure that plat seats tightly inside the backpack.
- 8. Close the main zipper 1c

## Maintenance

- Rinse the system with fresh water after every use in seawater. Store it after drying it completely.
- Avoid disassembly of the system in sand. If sand gets inside the overlapping area between the poles, make sure to disassemble the poles, clean the sand, and reassemble the clean poles
- When storing the system for a long period of time it is recommended to disassemble the poles
- Periodically check and tight, if needed, the inner harness base plate straps **1k** and **1l** and base plate holding straps **2a.** Loose straps may lead to unstable system.