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HI-POD

X-Line Product Line

Manual



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Congratulations!

**You have just purchased a HI-POD!
Now you can begin to elevate your
game.**

X-Line – The newest HI-POD is packed with new features. Not only is it taller (31 feet), but lighter as well- base only 30 lbs.

Introduction: *About Your HI-POD*

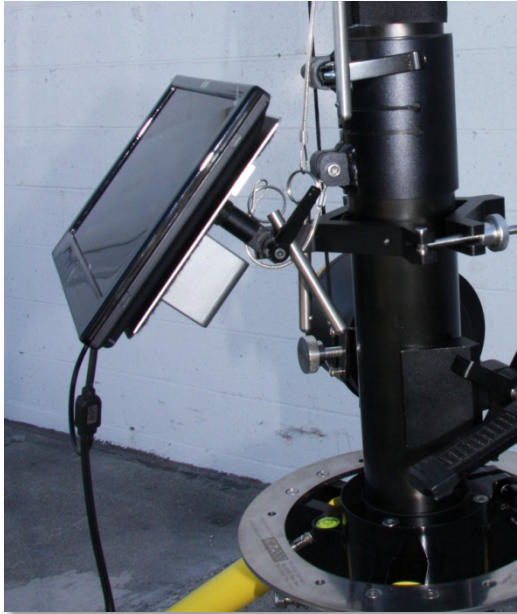
Travel Case & Packing

The new case design makes it very convenient to use and very easy to pack and keep organized.

Now there are two cases for the HI-POD; one for the base/tubes, and another for your accessories.



LCD & Bracket



HI-POD now includes a 10" HD LCD. We have created a new bracket to accommodate this new 10" LCD, as well as many different monitors. Not only is the bracket able to easily pivot up and down, but it's versatile enough to be moved up to another stage of tube. This allows very tall users to have more LCD placement flexibility.

Transporting Your HI-POD

The base has been streamlined in complexity and weight, making it a snap to unpack and go. Each of the 3 legs has a closed lock position and an open locked position. There is also a spring loaded pin to lock them into position. This ensures that the legs stay when it is in use or being transported.

The new wheels are solid and larger, ensuring that they maintain their shape and make transportation even easier.

This new base has been designed to accommodate older X-models, making it possible for users of older models to replace their older and heavier base systems.



Leg Test



The 3 legs have been beefed up in size and now include a double locking system. In addition to the twist lock, there is also a safety split lock collar on every leg, ensuring extra security.

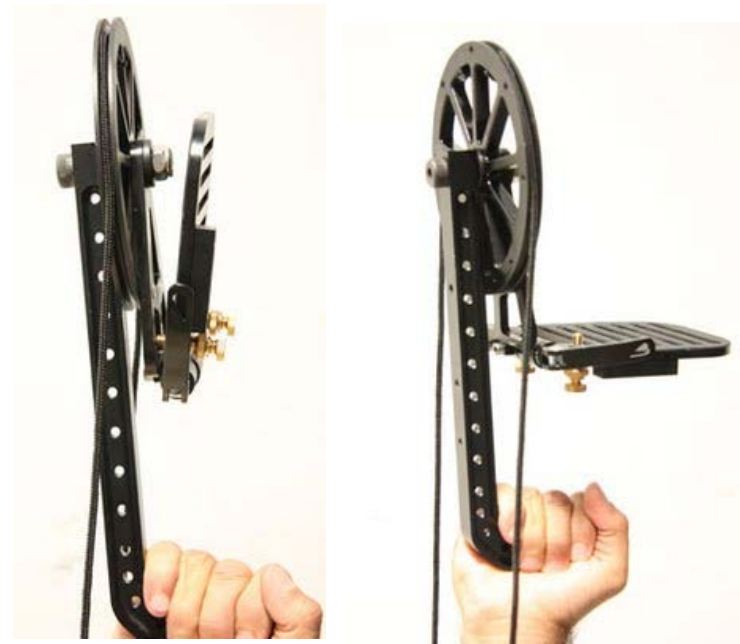
...Notable Upgrades

Foldable Camera Plate

The camera plate mechanism now has the ability to fold. This new feature serves many purposes. Firstly it conserves space. It allows the HI-POD to easily fit into the tube travel case without the user having to remove the head.

At the same time the camera plate can be much longer. This is useful because it will allow the user to attach larger cameras or even attaching 2 camcorders (one wide and the other tight).

Thirdly, this new feature allows for more precise control of the camera position and balance. On the bottom side of the folding plate there is a separate balancing level. This level is separate from the level on the base, allowing for each to set independently of each other.





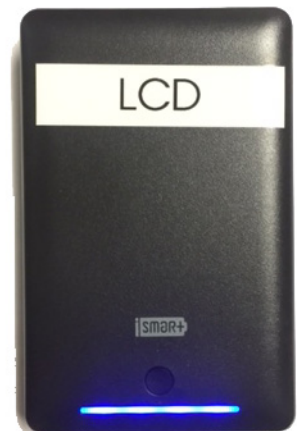
10" LCD

The X-Line has a 10" HD LCD included. This monitor provides an improved video display with a brighter screen that can be seen clearly while filming in direct daylight. Add the Hi-Pod Sun Visor for enhanced viewing.

Battery

With the X-Line unit, we have completely reconfigured the battery. The monitor now uses a USB Power pack that easily attaches onto the back of the unit. While smaller, the new battery can power the monitor for up to 6hrs. There is also no longer a need for an external charger (just a USB power cable now). Simple and effective.

The simplicity of the new battery makes set-up far easier than before.



Let's Get Started!

Step 1: Opening The Box

Every HI-POD arrives in a set of three boxes; a tube case, a base case, and an accessory case.



Tube Case (not pictured) – The tube case contains the tubes.

Base Case – (left) The base case holds the base. It has cutouts to store other items, but no items come packaged with the base. .

The **Accessories Case** contains the following:

- The handle
- The camera (cam, battery, cables)
- The battery
- The battery charger
- The LCD
- The LCD bracket
- Camera-Head- Plate mechanism (Yoke/Pulley wheel/Tilt Plate)
- Camera controller
- Cables (Lanc and HDMI)
- Rain gear for (camera, battery, LCD, controller).
- Sun Visor
- The base plate + wheels





With these 2 cases you have an excellent way to protect your product for a very long time. By making all pieces fit into the accessories case, you have the flexibility of going “case-less” for the tubes and base.

All cases seal with a high-grade zipper that easily keeps the pieces contained inside. Soft-grip handles allow you to roll the cases on their wheels without having to lift the item across a field.

Probably the biggest change to the cases is the ability to travel with two cases instead of three. To accomplish this, you can break down the base by detaching the legs and packing them in the tube case. The rest of the base can fit into the accessory case, allowing you to travel with just the tube and accessory cases...a great benefit when traveling by plane, bus, or any condition with limited space available!



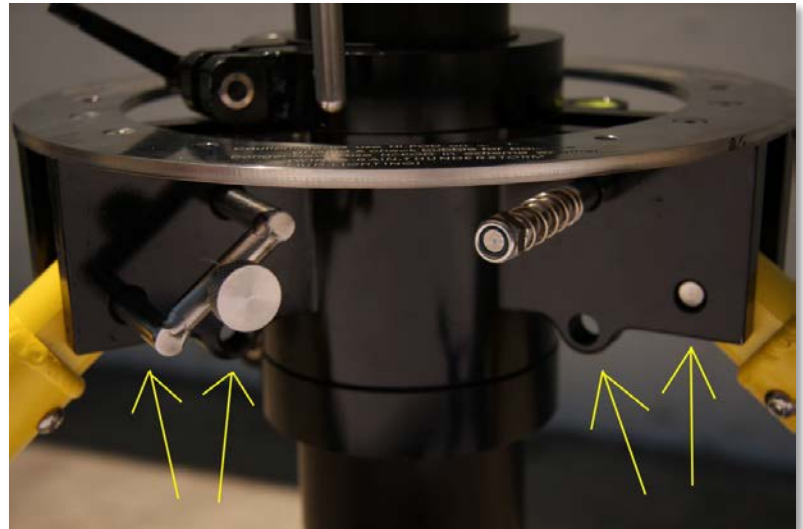
Step 2: Base Setup



The base has 3 legs with redundant leg locks for added safety. Please examine the location of the pin. There are two holes that the safety pin can occupy. The first pin hole locks the leg closed. This is important when traveling, as it keeps the legs from falling out of place.

The second pin hole locks the leg open. This is necessary to stabilize the base and provide support for the extended HI-

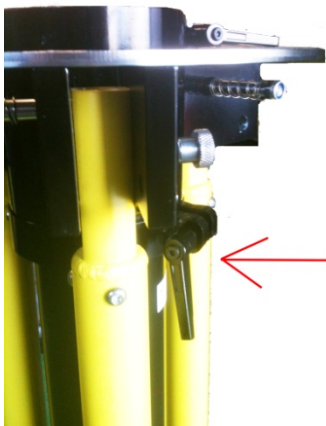
POD. Repeat this for all 3 legs. (Make sure when you insert the pin that you insert through the leg hole. It is possible to insert the pin, without securing the leg. Please make note of this.)



With this version of the HI-POD, you can break the base down into three pieces. This gives you more options when traveling, as you can pack the parts differently.

IMPORTANT: If you decide to split the base into three parts, when you put it back together you must make sure that the middle cylinder is locked to both the base plate (right), and to the leg bracket (left) – each secured by a twist lock.

The lock itself will twist, then pull out, reposition, and repeat the motion until tight.



Lower Leg Lock

Now that you have locked the upper part of the leg, it is time to lock the lower part of the leg. Unlock the lock by turning in the ratchet in the appropriate direction.



Once unlocked this allows the inner leg to extend and move freely. After extending the leg, turn the ratchet to lock. Now it is time to use the redundant safety lock. Loosen the ratchet on the safety lock, making it easy to slide. Push the safety lock up so it makes contact with the top ratchet lock. Once you have done this, secure both locks tightly. Repeat this on all legs. Examine the balance bubble. You may have to adjust the legs to achieve perfect balance. (See Below)

Pictured right, you will see an example of a set-up redundant safety lock. In the unlikely event that the priority lock fails, this lock will serve as a backup.





Step 3: HI-POD Tubes & Tube Case

The HI-POD Tubes arrive in a black travel case. Simply unzip the case to find the tubes within. After removing the tubes you will attach the head.

The HI-POD X31 consists of 6 telescoping tubes, the X23 is 4 tubes, and the X17 is 3 tubes. They each are approximately 5 feet long- thus providing 31 feet of height.



Tubes Into Base

Now that you have removed the tubes from the case, you can directly insert them into the top of the HI-POD Base. Once the tubes have been installed, you can adjust the tension on the collar at the top of the base to regulate the amount of ‘drag’ you want when panning from left to right. Adjust to preference.



Step 4: Attaching Head to Tubes

Find the wheeled head with L-shaped extension, connected to a mounting pedestal.

Insert the bottom of the pedestal into the top of the Hi-Pod Tubes. Turn the ratchet found at the top of the tubes to lock the head into place.





Step 5: Raising, Locking & Lowering HI-POD Tubes

To open the collar and allow a tube to move freely, first hold the tube above the collar so it does not move.

Next pull out the cam-lock so it is straight (horizontal). Now you can manually push up the tube to the desired height.

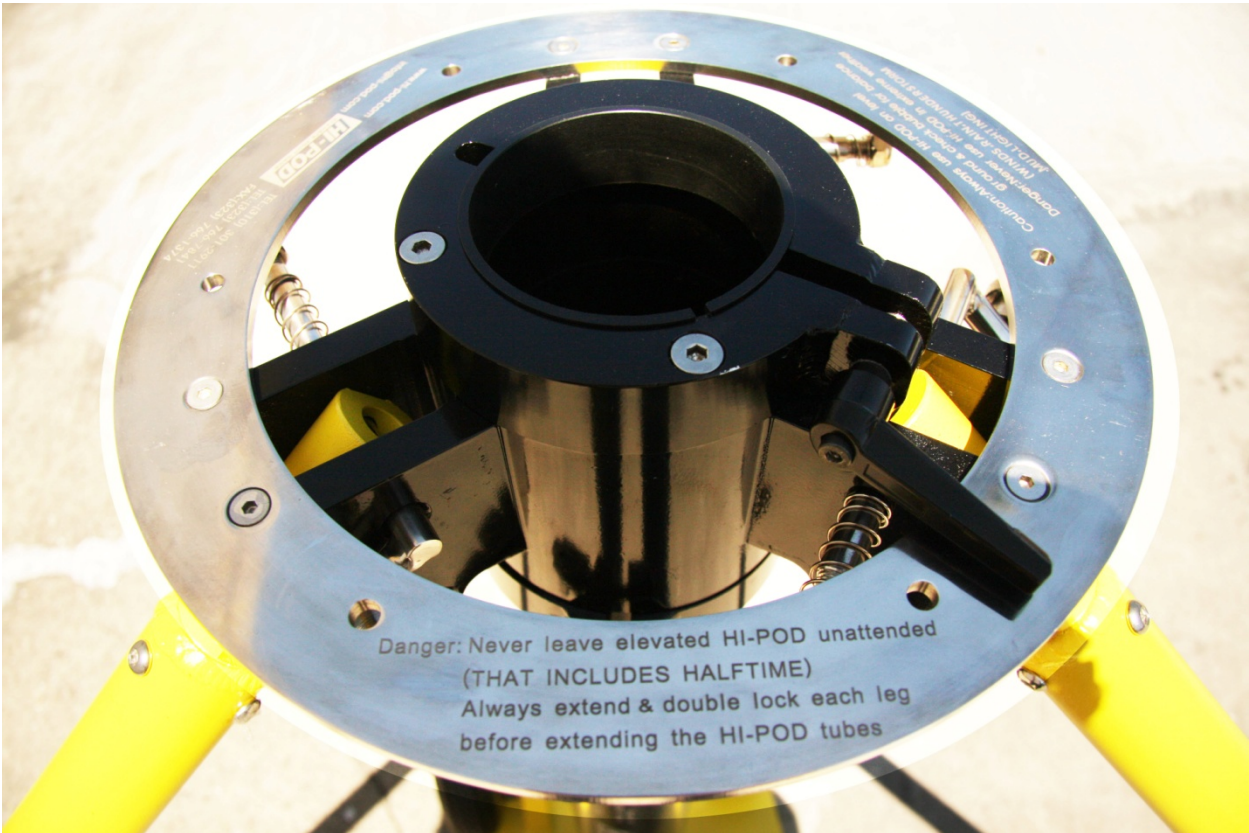
When you reach that height, hold the tube with one hand and close the camlock with the other hand. (Close is the down position). To release the camlock, simply unscrew in the opposite direction.



There are 5 collars for the 6 HI-POD tubes, each collar squeezing the upper tube. When you reach the recommended height you will see a white line. This white line tells you to stop elevating and lock the collar. It is not possible to push the innermost tube so high that it comes out. There is a built in safety catch that prevents the tube from coming out.

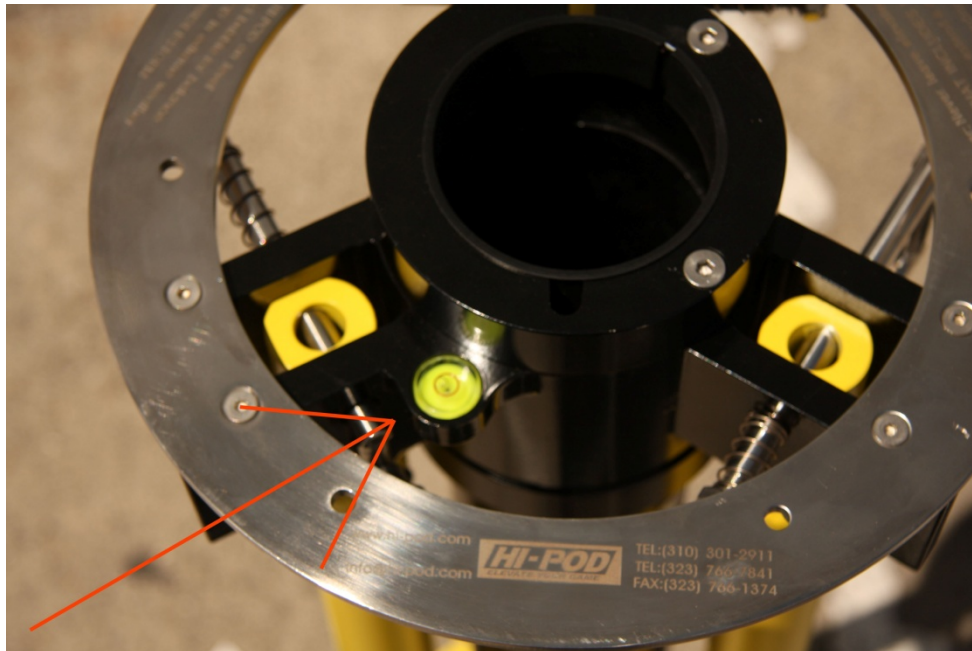


Safety Warnings



We can't stress enough that safety must be taken into consideration when using the HI-POD. Please follow the directions on the top of the HI-POD base.

1. Never leave an elevated HI-POD unattended. If you must leave, bring the unit down.
2. Always secure the legs before elevating. We have reduced the weight of the HI-POD base considerably over the years, but that means more of the stability job has been assumed by the legs. For safe operation make sure all the legs are locked and double locked.
3. Be careful in extreme weather conditions. The unit can get wet. We have raingear for all the electronics. But use caution as the winds increase. This is also a judgment call. As the winds increase, reduce the height until you feel comfortable.
4. In the event of lightning, take the unit down immediately. (It's a 31ft aluminum pole going straight up in the air!)
5. Use the leveling bubble to balance your HI-POD. If your unit is unbalanced it may be unstable.



Always check the leveling bubble when setting up the HI-POD. The bubble must be level and the legs must be locked and solid.

Safety Pins for the Bottom Three Telescoping Tubes

We have added an additional safety mechanism. Each locking collar for the tubes has the ability to receive a locking safety pin.

As you raise each tube you will see the warning white line. It tells you to stop. If you try to go further there are stoppers that prevent the tube from coming out all the way. But once you elevate the tube to the white line and lock the camlock, you will see a hole visible. On the bottom three tubes we have included a safety pin for each of these tubes. When you insert the pin, the tube is secured. It cannot slip as long as the pin is inserted.

Attaching Handle to Tubes, & Pulley Head



Attaching your HI-POD handle to the main unit is done in three easy steps.

(1) Retrieve the handle mechanism from the base case. Make sure that the round cylinder is on the left hand side of the HI-POD before securing.

Note: *The cylinder should line up directly below the tilt plate and pulley wheel, which will be attached to the top of the HI-POD.* (See Photo)

If you are in front of the HI-POD, then the handle will attach from the back. To attach the handle unit to the tube, loosen the handle mechanism clamp by spinning the large X screw so that it fits comfortably around the tube. Then, with the X screw simply tighten the handle mechanism clamp. As you spin the X screw you are squeezing the clamps against the tube. Reverse this to loosen the handle later on.



As you spin the X screw you are squeezing the clamps against the tube. Reverse this to loosen the handle later on.



(2) Now that the handle is secure, notice the left hand side. It is a cylinder with a gripping wheel for your hand to grab & control the unit. Two ropes should exit the cylinder at the bottom, from either side of a large screw.

Next we will connect the carabiner clamps with the ropes coming down from the HI-POD pulley head. *Notice how the ropes go straight up to the pulley.*



Connecting: As you face the HI-POD Handle, make sure the large silver screw & ropes are pointed towards the ground. Now, grab the rope that is closest to the tube. Pull that rope towards you. It will extend from the cylinder. Pull approximately 1 foot of rope, making sure that the large screw is still pointing down. With your other hand grab the other rope. Make sure this second rope is extending from the opposite side of the cylinder. Pull out the same amount of

rope as the first. At this point, you should have the large screw pointing toward the ground, and 1 foot of rope extending above the cylinder on either side.

(Please examine the photo)

Pull on the ropes and extend them towards the pulley wheel. Look up, and notice the ropes already dangling from the pulley.



Connect the ropes via the carabineer clamp. The carabineer connectors make it very easy to attach and detach the handle from the tubes.



This clamp extends from the ropes that are tied to the pulley at the top of the HI-POD Tubes. You will notice these ropes fall from either side of the pulley wheel. *Remember: the ropes should come from opposite sides of the pulley wheel (just like the cylinder below).*

(3) Screw Knob: Notice the big screw knob that sits in-between the rope holes underneath the cylinder. If this screw is loose, the spools behave freely, retracting the pulley ropes if there is slack, or giving out rope if the HI-POD is extended. If the big screw

is tightened or locked, the spools can neither extend nor retract the pulley ropes. **You unlock the spools to extend or bring down the HI-POD. You lock the spools to control and tilt the camera plate/camera.** By pointing the lock mechanism on the bottom of the cylinder, the user will have 180 degrees of rotation. If it is not at the bottom, the range of motion is very limited and choppy.

Note: *(For the most part this screw is not used. It becomes useful when you are using a heavier and larger camera. This screw is used when the weight of the camera overpowers the strength of the springs inside of the cylinder. You will need this screw when you try to tilt the camera and*

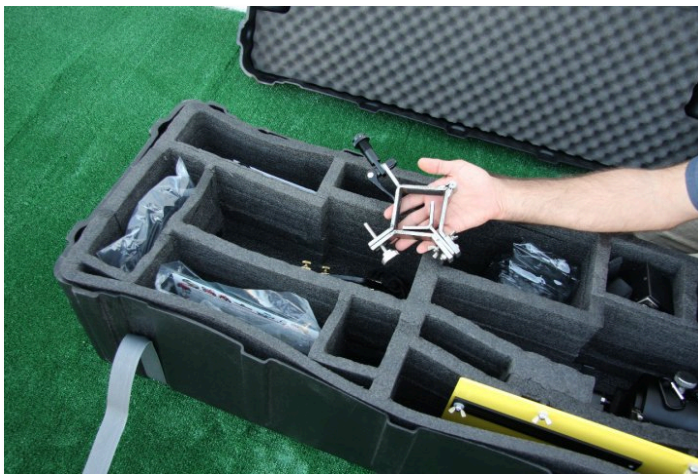
the camera slips out of position. Typically this screw is not needed when the cameras are small and light.



Handle (Position Lock Spool Retraction Lock)

Notice a knob beneath the cylinder of the left side of the handle. If you loosen the knob, the cylinder will retract the ropes. (This is a blessing as you are manually contracting the HI-POD poles, the ropes automatically self-retract.) If you tighten the knob, the ropes will stay in that position, without retracting. This knob can be loosened and tighten, according to the desired effect. (For example, if the camera tilt is not responding immediately to your hand movements, or if the camera is slipping out of tilt position)

Now let's say you are taping a drill that is in one place for long time and you do not want to hold the handle in that position. You want to free up your hands to grab something (water or food). Use the position lock (#1 below). Tighten and loosen the position lock for the desired effect. In the below photo **1 is the position lock** and **2 is the spool retraction lock**.



LCD & Bracket

The LCD bracket is designed to work with the big 31foot HI-POD and the smaller 17foot Mobile HI-POD. As you remove it from the case you will notice a Y inside of the bracket that is held in place by a wingnut screw. Loosen the screw and flip the Y so it is out of the original position. Now that the Y is out, the bracket will fit the largest diameter HI-POD Tube.

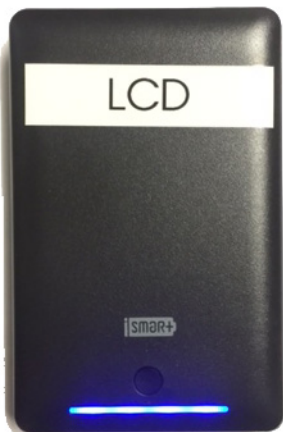
Loosen the large bolt to open the LCD bracket. Now tighten the bolt so that the bracket squeezes the tube. Adjust so you are comfortable with the height.



This LCD bracket is much easier to use than the previous one. Simply slide the hook into the back of the LCD monitor. Once you slide the hook into the slot, position it where you want it, then tighten down on it with the threaded screw. Now to position the LCD so it best for your viewing, loosen the camlock. Reposition and then lock again with the camlock.

(CAUTION: To reposition the LCD, loosen the camlock and reposition. Do not twist the LCD to reposition. Overtime this will damage the back of the slot, bend the metal slot and ultimately strip the screws that hold the slot to the back of the LCD.

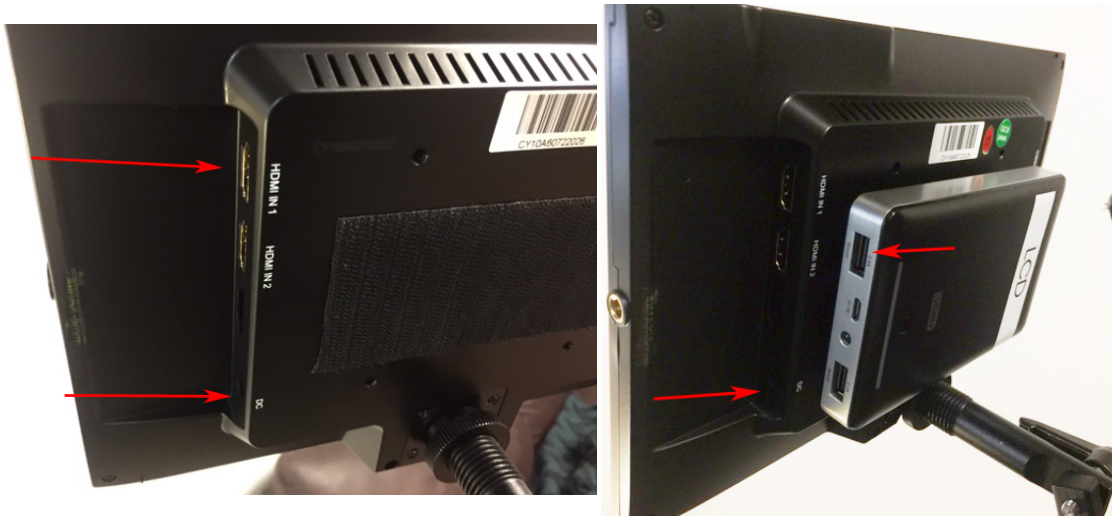
LCD Setup:



< - - see 2017 LCD battery on left

There are two LCD battery styles that have shipped. The current 2017 model LCD and battery will be described first.

On the back of the screen take note of the velcro strap, and two ports: **'HDMI IN 1'** for video and **'DC'** for power. Attach the LCD battery as shown.



<- - Use the adapter on the left to plug into the USB end of the battery, and then connect the DC tip into the LCD.



LCDs Pre-2017: Clients before 2017 will have a different battery system

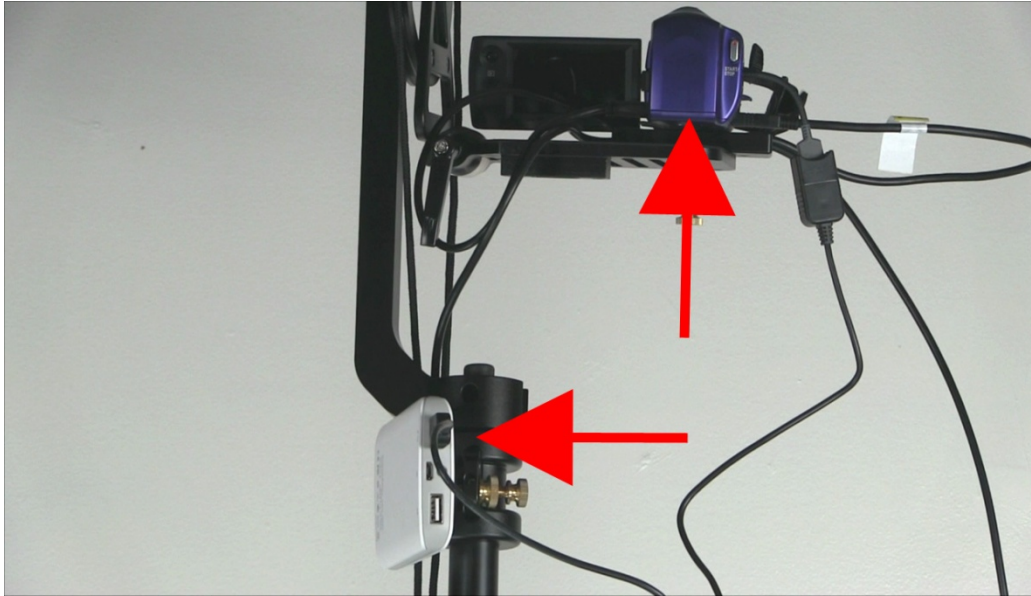
Connect the battery by lining up the metal pins on the LCD battery plate, and sliding them into the holes on the battery. Be careful not to misalign and bend the pins.



Cameras / Cables / Remotes

There are also two categories of cameras, which have different setups:

(1) - Cameras with a fixed shell w/USB external battery *(2016 forward)*



(2) - Cameras with a battery that connects in the back *(ended 2015)*

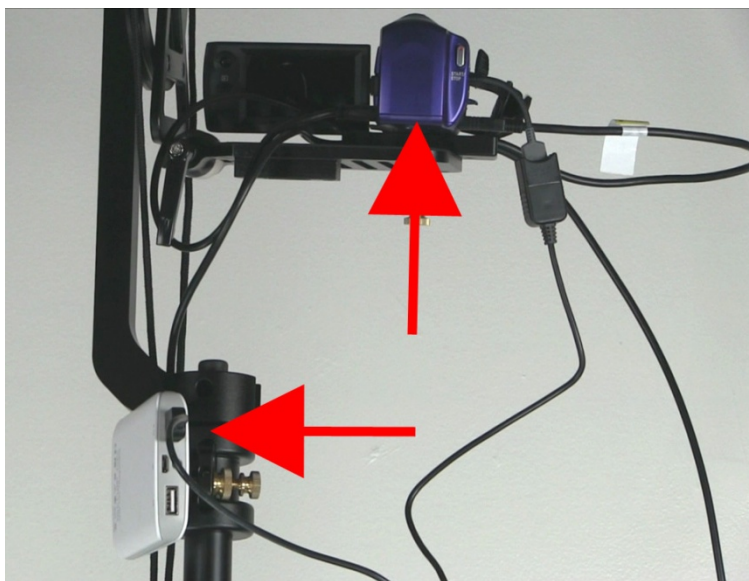


• Cameras w/USB Power Pack (2016 forward)•

Sample Cameras: Sony CX240, CX405, etc...

The newest Hi-Pods ship with cameras that use an external USB power pack. We have shipped white and grey batteries (they setup the same).

Find the USB power pack (exact style may vary), and attach to the tower where there is a hook at the top of the tubes. Use the brass screw (shown in the image) to sandwich the battery to the tower.



Connect the battery pack to the camera with a USB extension cable (included in your case). Note the shorter USB cable in the hand-strap of the camera, and use the longer extension to connect the camera/battery.

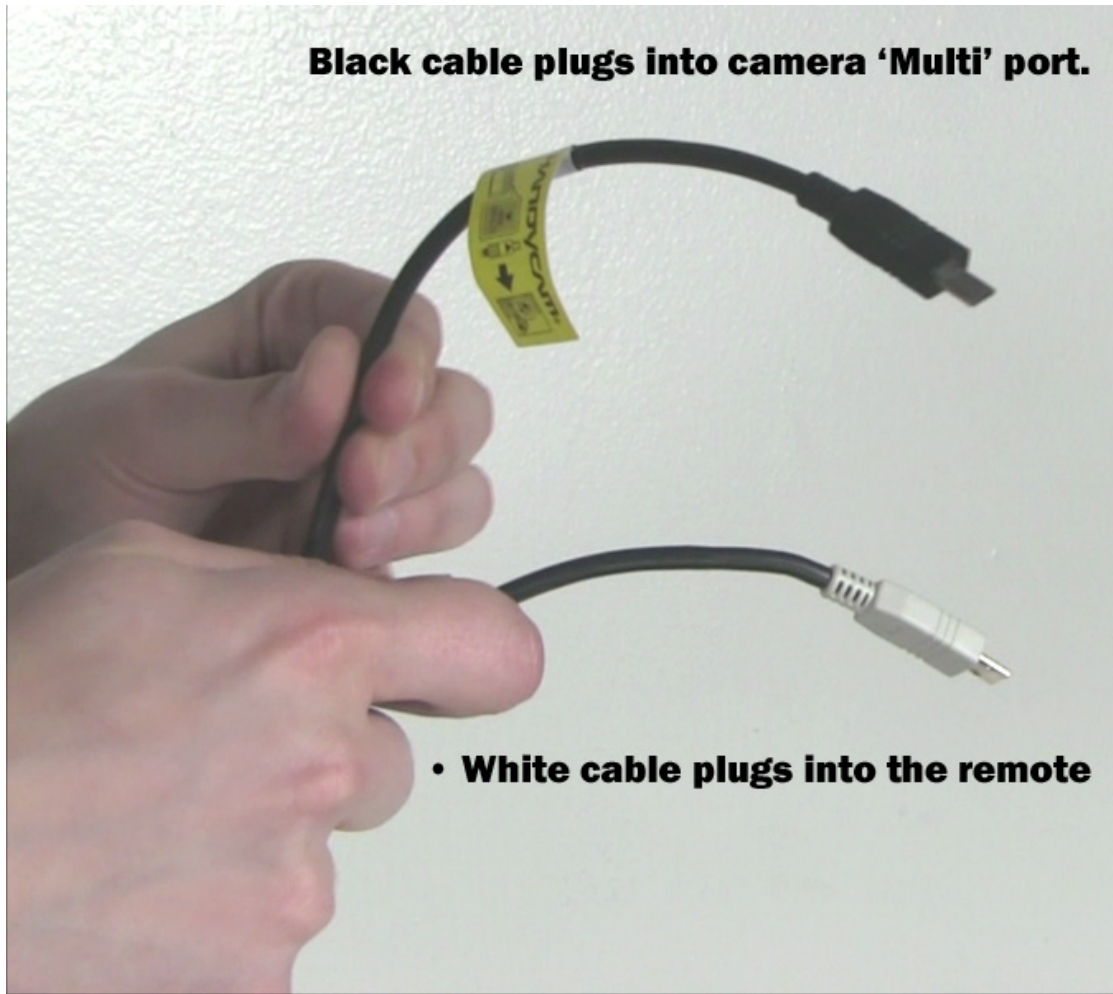


Some versions of the battery will have more than one power port. The higher of the voltage options is what you'll plug into. On the current grey battery (not pictured) the plug is **2.4A**

Now it's time to connect the camera to the remote which controls zoom and record functions. The cable/remote are pictured below:



***NOTE IMAGE BELOW: If reversed, the system will not function.**



- Find the plastic clip/cradle, insert remote, and attach to the handle



****NOTE the white end of the cable plugs into the remote.**



****NOTE the black end of the cable plugs into the camera 'Multi' port.**



• Cameras w/battery in the back (ended 2015) •



For cameras that have a battery which connects in the back of the unit, there are a few more steps. We'll work from the top down in this setup.

*Note the 'Multi' port under the hand strap on the camera.

4 Cables In Total

- (1) Find the 'Multi-Adapter cable (pictured right), and plug it into the 'Multi' port.

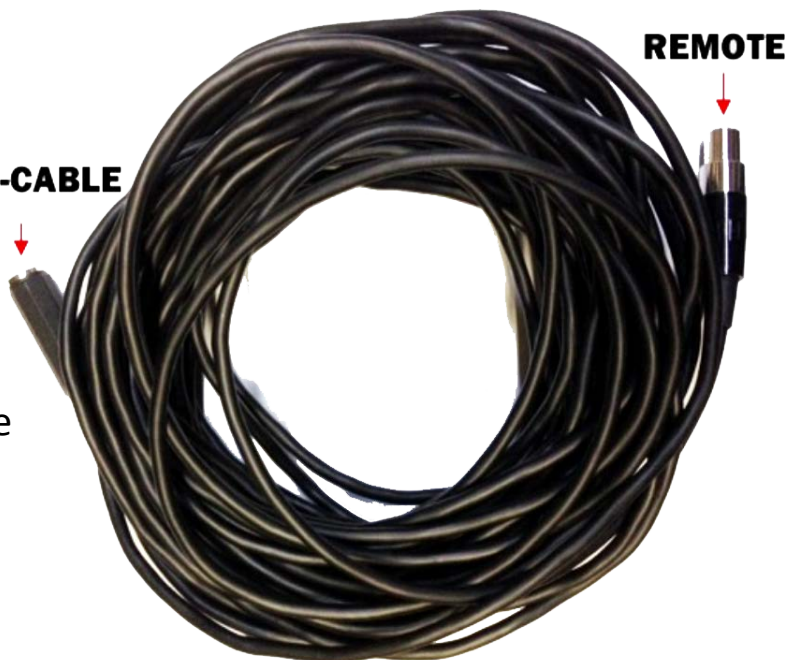




- (2) The 'Sony D-Cable' will plug into the D-shaped port on the 'Multi-Cable'. In the vast majority of cases, the only cable involved is the black cable with the stereo tip. The RCA cables are only involved if not using HDMI. Just ignore them.

(3) You'll find a really long skinny 'Lanc Cable' (pictured right), which links the 'D-Cable' down to the remote. This cable runs the length of the entire unit (top to bottom).

D-CABLE



REMOTE

(4) Over the years, three different remotes have shipped with this lanc system. See images below (*left to right: Silver Sony, Vivitar, VariZoom*):



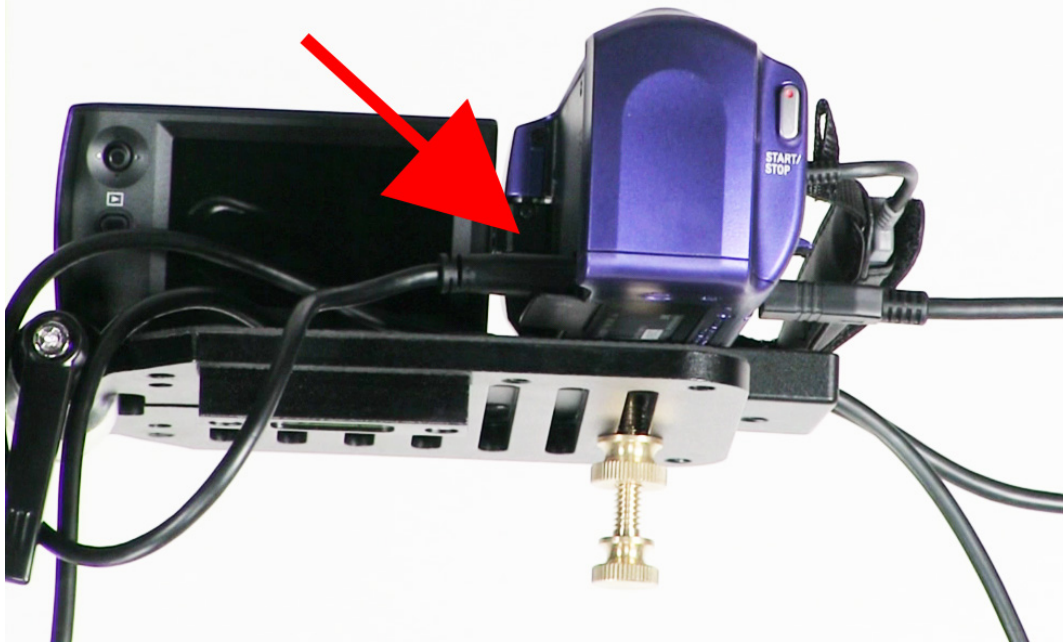
All of these remotes have a 4-6" cable which ends in a silver connector with three pins. This will connect to the long 'lanc' cable on the end which has ports to receive these three pins. Just connect the ends, and they will snap into place. You can release by pressing the small black button when disassembling.



Connecting HDMI:

For all HD cameras (regardless of what battery system you have) you will plug the long HDMI cable into the mini/micro port on your camera (found under the camera's LCD window), and run it down to the standard HDMI port in the large LCD at the base.

HDMI Port Is Found Here



(Camera)

(Back of LCD)



...and here.

Strain Relief Plate

**This is one of the most important steps during setup for any camera. Failure to use this plate can void your electronics warranty. See the cable Strain Relief Plate below:*

IMPORTANT FOR WARRANTY



The Strain Relief Plate locks the video and linc cables firmly under the camera. When the unit is fully elevated, it prevents gravity from pulling down on the delicate cable tips/camera ports, which can cause the tips to break or ports to widen. If damage occurs your control/video signal will drop - so **USE THIS ITEM EVERY TIME.** **Damage to the system can occur as quickly as a single use if not applied.*



You use this plate by threading your video and linc cables through it (in opposite directions to come out on the appropriate sides of the camera).

Attach your camera with the brass screw in the middle of the plate.





The brass screw is flushed against the bottom of the black plate, so you'll need to use a coin (or whatever is available) to securely connect.

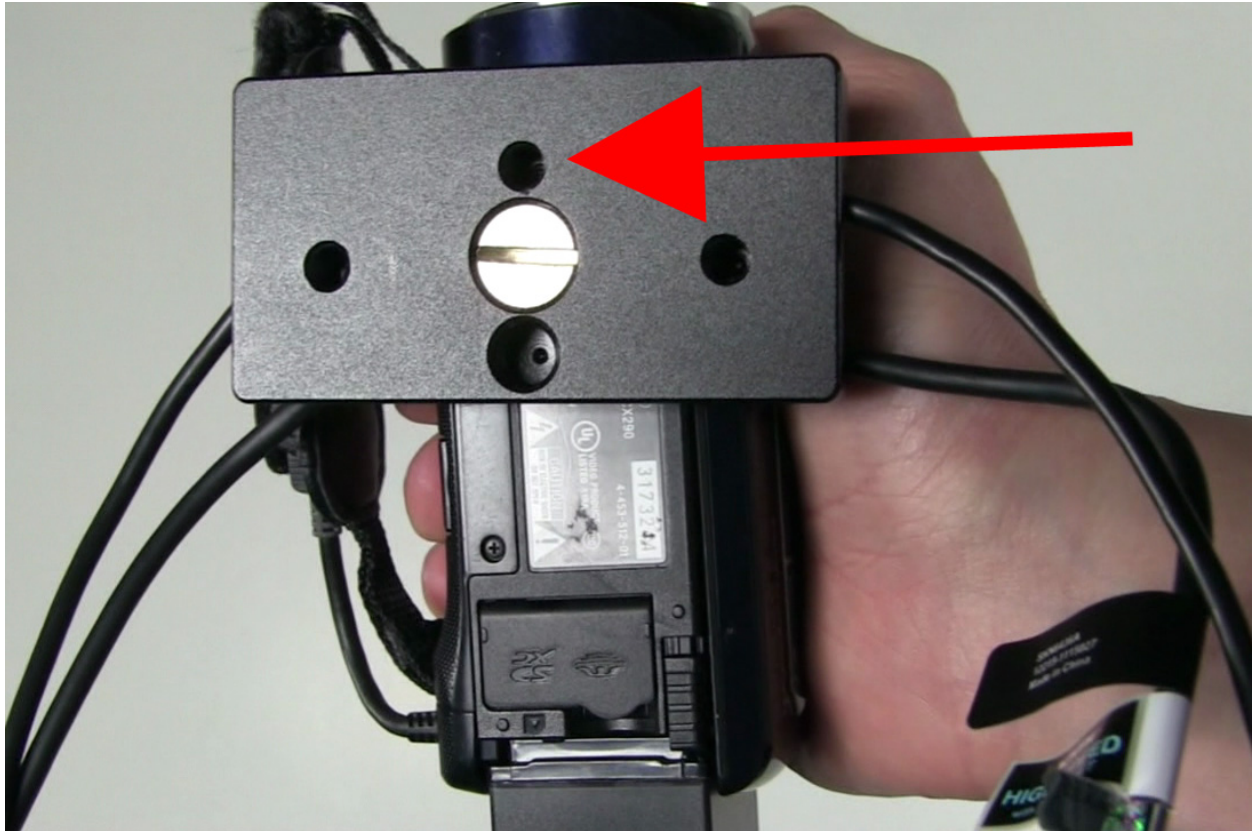


- Before mounting the camera to the wheeled plate, make a slack knot in the cables around the 'L' shape of the head, where it attaches to the tubes. This helps to cut down on cable droop, etc - just make sure to leave enough slack for the wheel/head so it can move in all directions (including straight up and down). - If you don't leave enough slack you can damage the cables when the head begins to move.



**Setup:
All Remotes**

After the Strain Relief Plate is attached, to mount to the Hi-Pod wheeled head, find the smaller of the two holes next to the bottom of the brass screw. This will connect with the camera mounting screw.



Take one of the brass camera mounting screws (attached to the plate of the head), and insert from below the plate with grooves carved out of it. You'll likely need to use one of the most exterior slots to mount.

- See (below) how this setup should look when mounted.

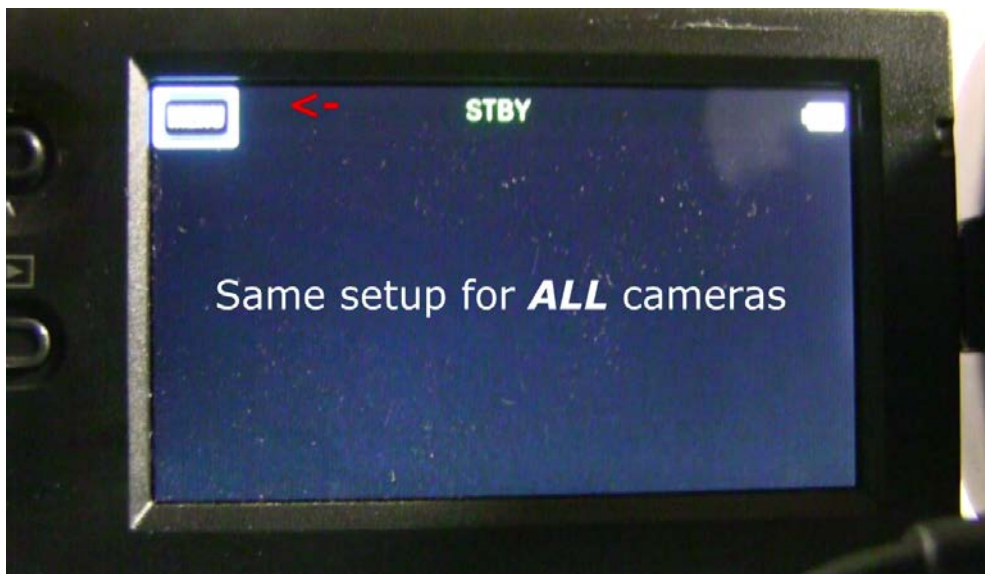


***NOTE:** Pay attention to how the cables (when threaded through the strain relief plate) do not immediately turn back around to plug into the camera. Leave some slack in the cables (extra length) so that you don't 'pinch' them by twisting back too quickly. Doing so can damage the cables or the camera port, as you would be adding tension to the tips/ports by not allowing ample cable slack. Also, notice how we've looped the HDMI cable around/under the ratchet on the bottom left of the plate. This will keep the cable out of the way during operation. The linc cable on the right can stick out as there is nothing in the way.

Text (REC) On Screen

In general, cameras under \$1,000 do not have the ability to save a setting to push out text (record/battery status) from the camera down to the LCD. There is a way to achieve this on less expensive cameras, but it's applied every time the camera is turned on. Once memorized it takes about 5 secs.

- First, click on the '**Menu**' button in the top left corner:



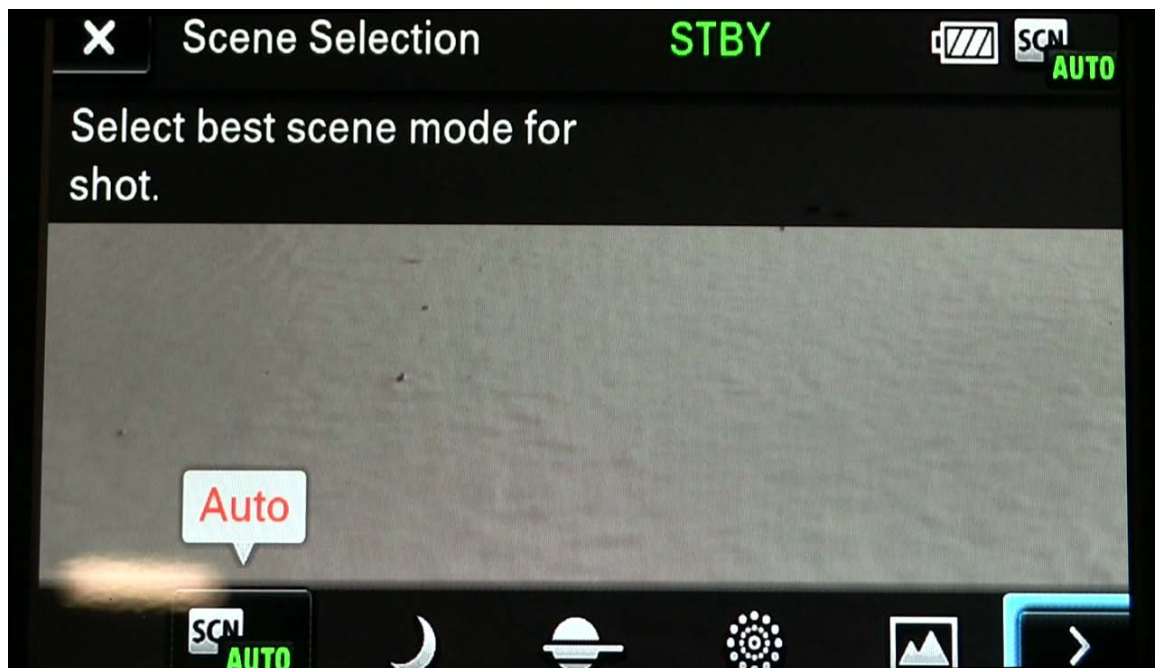
- Select '**Camera/Mic**'



- Scroll down until you find 'Scene Selection' and click on it



Your screen will change to look like this. Click on the bottom right arrow to continue.



At this point, your screen will clear up leaving the middle unobstructed. **DO NOT CLICK ANYTHING.** Just leave the screen here. The text displayed will push down to your LCD - notice the 'STBY' in green. This will change to a red 'REC' indicator when you're recording. This way you'll always know when you are or aren't recording.



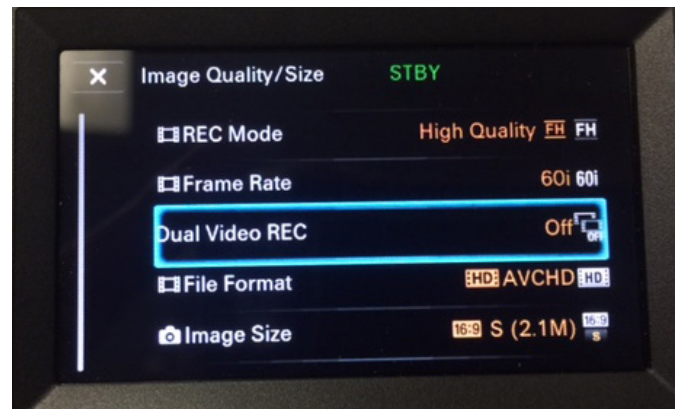
This text overlay will not be on your final video files. It is only seen by the Hi-Pod operator when they are filming.

*Note: If you have a remote which has a 'Photo' button option - **DO NOT HIT IT.** If you do it will bounce you out of this view back into the menu where you chose 'Scene Selection.' If you do this while the camera is in the air, you will have to bring it all the way down to setup on the camera again.

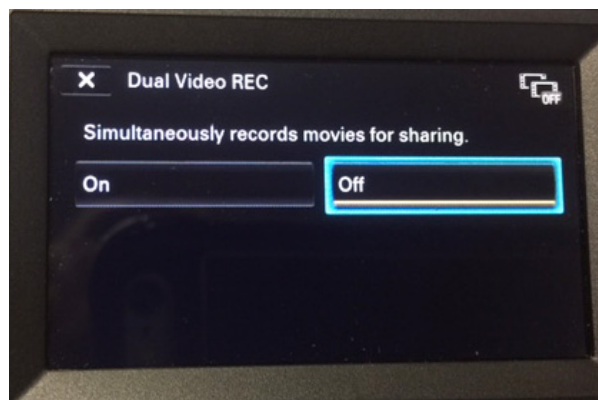
Camera Settings Continued: Dual Video REC

On new cameras for 2017 (example CX405), they appear to default ship with a setting called 'Dual Video REC' enabled in the camera settings. When this feature is active the camera saves two copies of the same clip in different quality settings (one is higher def, one is for online sharing). What this means is that the camera is taking double the storage space that it needs to. Whether you want to leave this setting on is up to the preference of the user, but if you want to turn it off..

- First go to 'Menu'
- Then 'Image Quality/Size'
- Then look for 'Dual Video REC'



- Turn this feature 'Off'



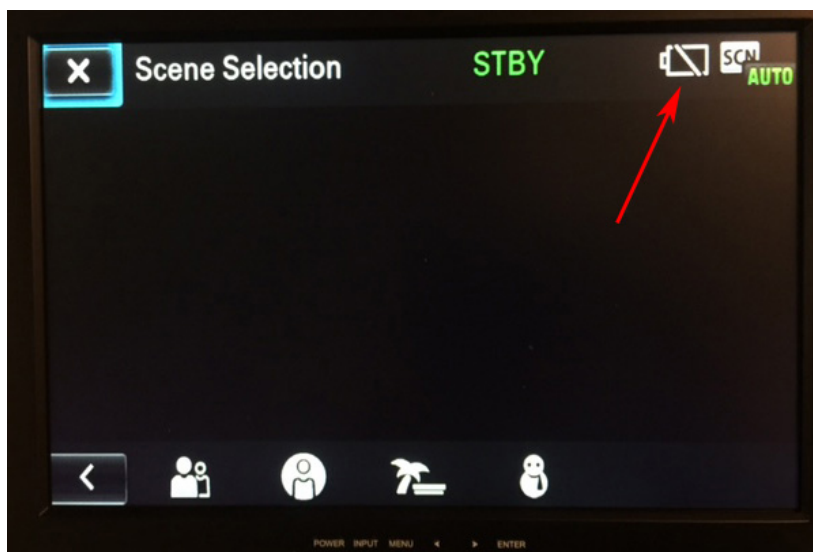
Camera Settings Continued: Confirming Camera Battery



For those clients using either the grey or white USB batteries, you need to confirm that the battery is turned on and is set as the main power source before elevating. Without doing this, it's possible to leave the small internal camera battery active which will die quickly.

If you have your camera connected to the LCD (with text on screen applied as explained earlier in this manual) you will see the battery icon in the top left. This means the small internal battery is active.

This is not what you want.

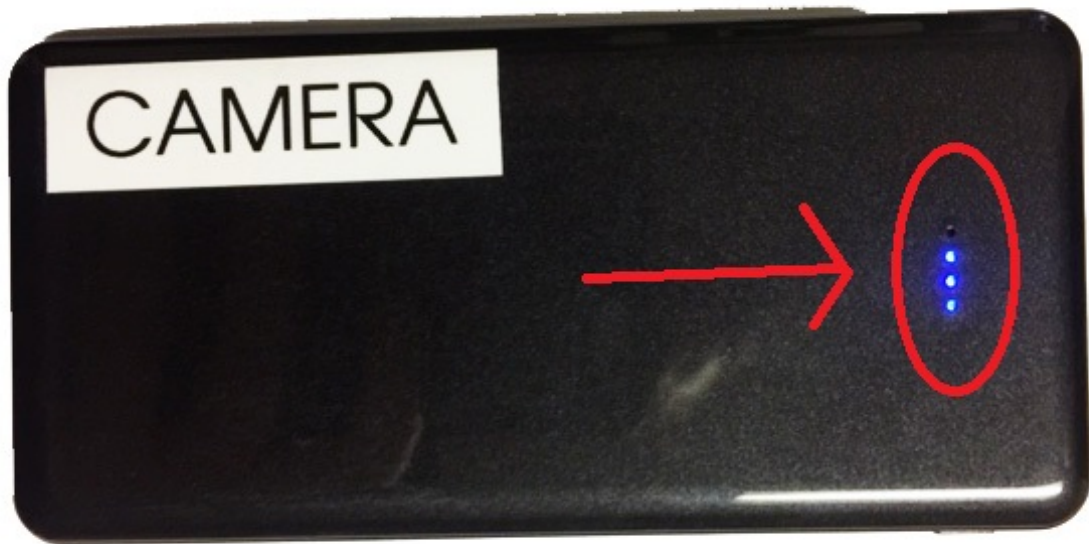


First, mount the battery to the tower (either to the top of the poles as shown or to the camera plate). Connect the battery to the camera with the female-to-male USB cable extension. The female end will connect to the USB cable found in the camera hand strap.

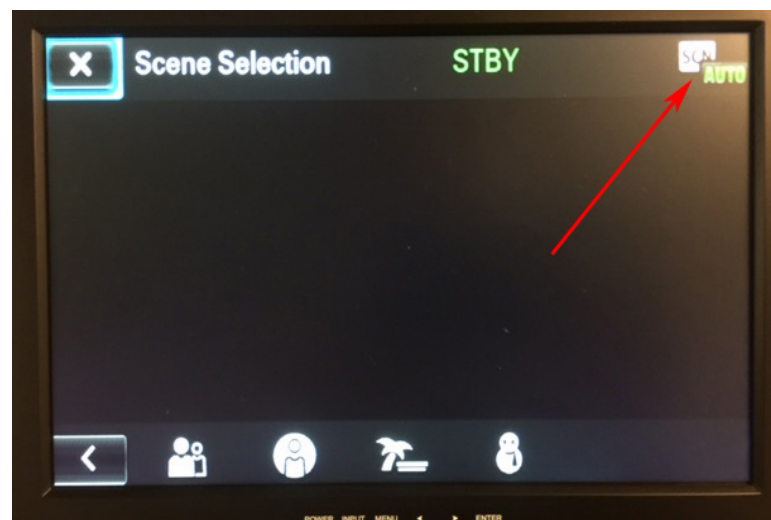


Click the button on the side of the battery to turn it on.

You will see the buttons on the battery light up blue.



When connected correctly and turned on, the battery button in the top right of the LCD will disappear. **This is what you want,** and (when charged) will allow the camera to record for at least 5 hrs.

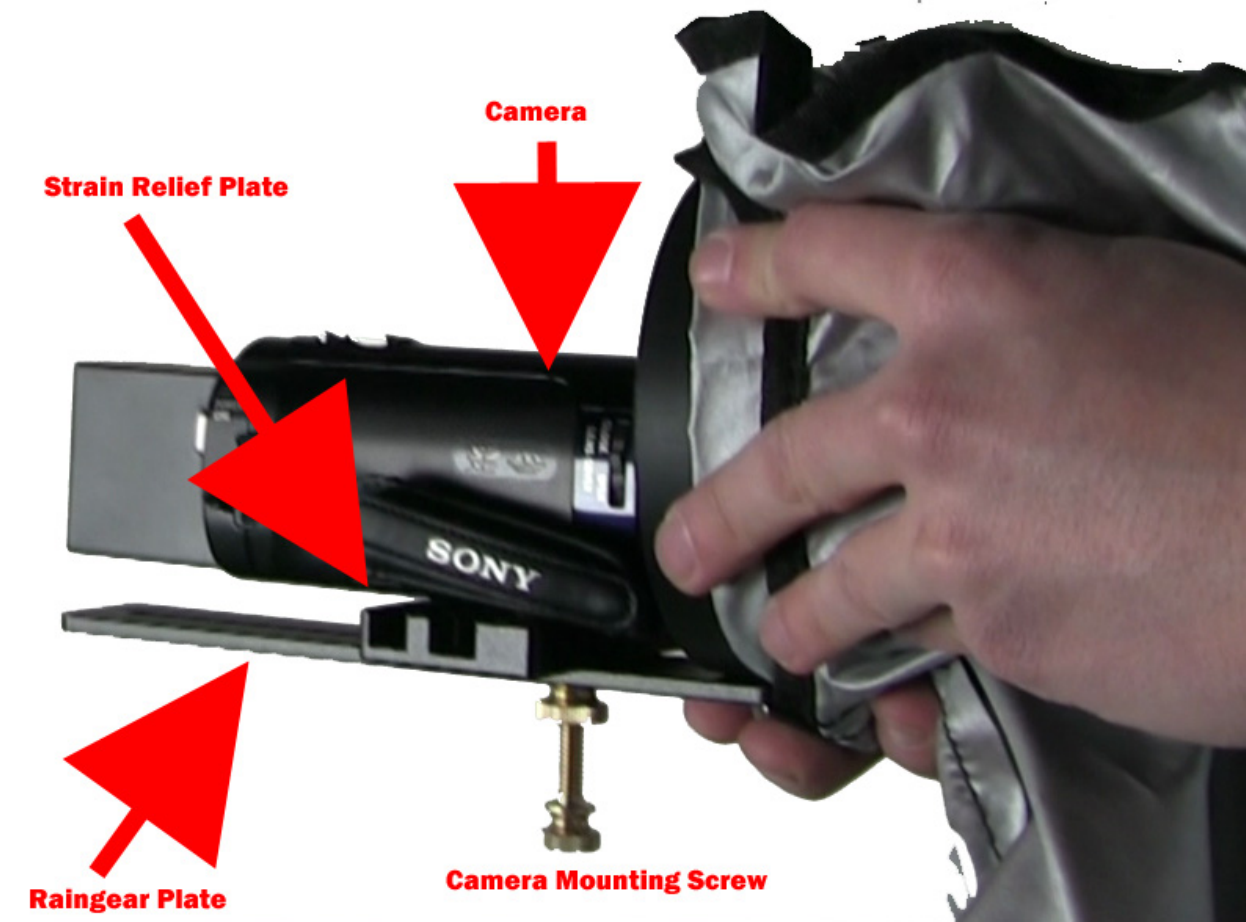


Raingear

There are three parts to the raingear for the Hi-Pod:

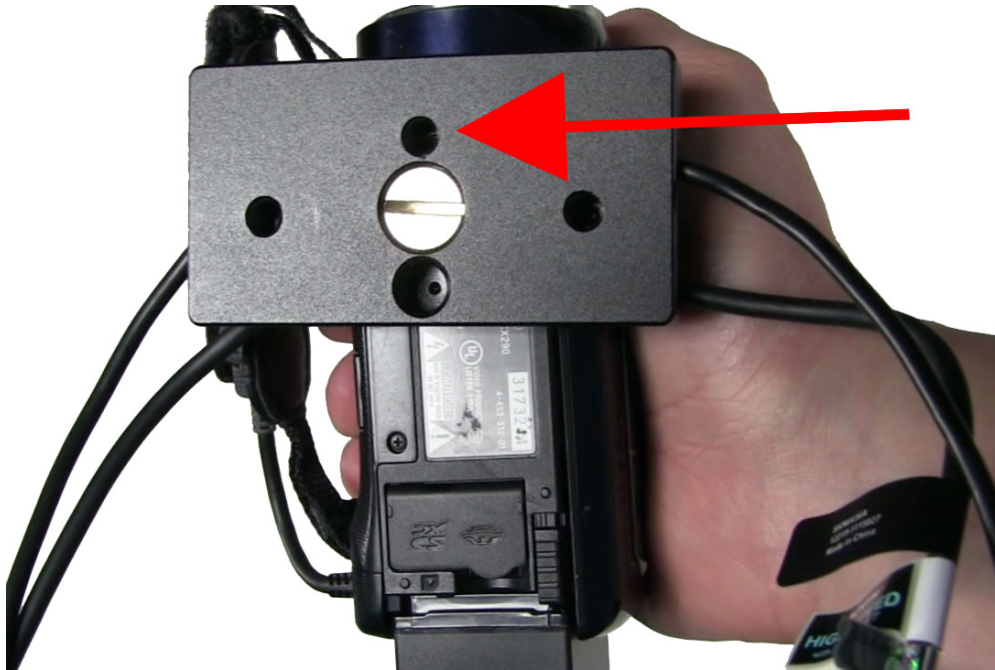
- Camera
- LCD
- Remote

See the camera raingear below:



This image is shown without the wheeled head. The brass screw will be the only part under the wheeled head - everything else will go on top.

Use the same hole on the strain relief plate to attach the brass screw as you do with the raingear. Just make sure that now, the raingear plate is below the strain relief plate, but on top of the wheeled plate.



(See attached)





There is a cinch cord which will allow you to organize your cables, arrange the bag, and then completely close so no water can get inside. There are different ways to accomplish this, but the key is to pull the cord completely shut when finished.

Note the length of cord, and general position. Pull shut.



The LCD raingear attaches by simply sliding it over the mounted screen, with battery attached in the back. Velcro to seal.



Raingear for the remote will attach as shown in the image below. Most often, you seal the bag and operate the remote from outside. However, there is a slot in the bag (to the right) with another cinch cord if you wanted your hand to be inside as well.



With the camera, lcd, and remote covered, this completes the raingear setup. If conditions vary, you can always go beyond what is included to enhance your protection.

****You will need to judge the weather conditions and adjust **BEFORE** you start shooting. If you even think there is a chance of bad weather mount the raingear in advance. *There is nothing worse than scrambling in rain during the middle of a game with expensive equipment exposed to the elements, so plan in advance!***

Horizon Line



On the Hi-Pod head, from the bottom looking up, you'll find a green leveling bubble. This helps to confirm whether your shot is level with the ground before elevating.

Attending to this before elevation can make the difference between...

this



or this





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