

# HI-POD *Super-Lite* Setup Manual





## **Manual Index:**

- Page 6 - Take Tower Out Of Bag
- Page 7 - Set Legs and Weight Bags
- Page 11 - Hi-Pod Head
- Page 13 - LCD Mounting Rod
- Page 14 - Attach LCD
- Page 15 - Sony Remote
- Page 16 - Hi-Pod Handle
- Page 19 - Cable Setup
- Page 31 - Camera Battery
- Page 38 - Finish LCD Setup
- Page 41 - Finish Remote Setup
- Page 45 - Text (REC) On Screen (Optional)
- Page 51 - Raingear
- Page 56 - Elevating Tubes
- Page 58 - Complete Handle Setup
- Page 59 - Lowering Tubes
- Page 59 - Velcro Cables to Tubes
- Page 60 - Putting The Tower Away



## Congratulations on Your New Hi-Pod!

*Now you can begin to elevate your game.*

~

**LX** - The HI-POD Super-Lite gives the operator maximum ease of use and transportation. It's a 25 lbs tower that will fit into the trunk of an economy car . Once you are familiar with the setup procedures it should take 10-15 mins to fully configure a unit.

\*Note: Within 2 weeks of delivery, product must be checked and confirmed by the client to have arrived in good order and in its entirety. After that time, clients will be responsible for any and all lost parts (which are not covered under the warranty).

\*Confirm your inventory with the sheet on the following page.



## Super-Lite CHECKLIST

- Handle
- Head
- Monitor Bracket
- 3 Piece Raingear
- 3 Sandbags
- LCD
- LCD Visor
- LCD Battery / 5-9 Volt Adapter Cable
- HDMI Cable
- Linc Cable
- Gold Screw for Power Bank
- Camera Remote
- Camera
- Camera Power Bank
- 16GB SD Card
- Cable Stress Relief Plate / Quick Release Plate
- Hi-Pod Quick Notes Insert

**3 IMPORTANT THINGS:**



- **ALWAYS** use the **Strain Relief Plate** for your cables

- **ALWAYS** use your sandbags



- **Take note of the 'Text on Screen'** instructions to display record status

*...and other camera settings - (page 47)*

## Take Tower Out Of Bag



Take the tower out of your case, and place it on the ground. There are two black twist knobs on the base of the tower, and you will need to unlock these to allow for the tower legs to expand.

## Set Legs and Weight Bags

You will want to setup the base of the tower with the black slats between the yellow legs as even/level with the ground as possible. This will give you maximum stability during operation.



Once the black slats are level, turn the two knobs (shown in the above picture with red arrows) to lock the legs in place.

The included weight-bags are **NOT** optional. **You must apply them every time you use the tower.** This is intended to provide your safety weight. With a tower of 25 lbs, and an approximate extra 35 lbs in the bags, this gets you to ~ 60 lbs in total. This approach works in the vast majority of situations. Also, it's better not to actually fill the bags with sand (it can be a mess). Rocks, gravel, bricks, weights from the gym, or something else is preferred.



**You are welcome to go beyond the three bags should you want.** Add cables through the legs which then connect to stakes (if not on a turf field), add more weight bags, whatever you like. The three bags we include are sufficient, but there is no harm in going beyond them if you prefer, and also if you are dealing with extreme conditions.



**USE  
YOUR  
WEIGHT BAGS!**

# NEVER WALK AWAY FROM AN ELEVATED TOWER. NEVER.

When a tower is elevated you must manage it at all times. Anything can happen at any time - unexpected winds can pop up, rain can surprise you, someone could mess with your setup, or there could be lightning - who knows?!

- If you ever need to walk away from the unit, bring it completely down so the tubes are fully compressed. Then you can take a break.

## Hi-Pod Head

Find the Hi-Pod Head in the case, and attach it to the opening at the top of the tubes. You'll see a threaded hole on the top tube which the head will connect to.



Before we mount the Handle and LCD mount to the unit, note the function of the black collar which has a ratchet attached to it.



The ratchet (pointed to by the red arrow to the above) serves to lock the tubes so they can't rotate, or to release the tubes so they can spin 360 degrees.

You can turn the ratchet in a complete circle to tighten, but the ratchet itself is adjustable (pull out, reposition, release, continue the motion).

It's best to tighten the ratchet when putting the tower away so it won't rotate awkwardly. During filming you'll want to open this ratchet so you can spin the tower as needed for operation.

## LCD Mounting Rod

The LCD Mount allows for the screen to attach to the unit.



You will find a metal item shown in the image to the left.

Simply screw this part into the threaded hole on the silver clamp on the middle of the tower to tighten.



## Attach LCD

You'll find the LCD in the electronics bag. Note the metal part mounted beneath with an open hole (red arrow).



Slide onto the silver rod and tighten with the black knob below to hold the desired position.



## Sony Remote

See a picture of the Sony remote with mounting arm below.

To install, line up the groove in the back of the remote to the arm, and snap into place.



When ready to remove the remote, press the button on the left / top of the remote, and it will slide off.



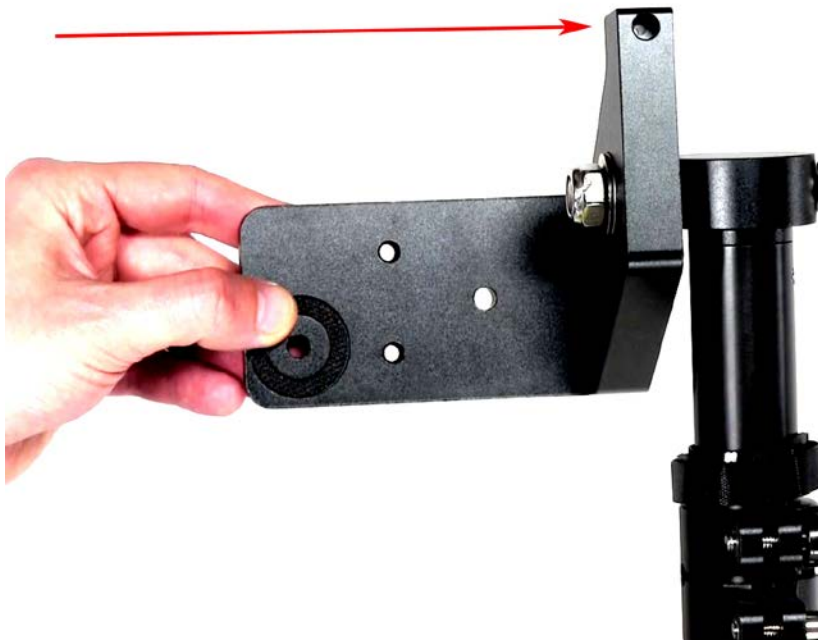
## Hi-Pod Handle

The basic handle is included in the list price and it pivots up and down. It has a black knob on the side which will either lock the arm in place if closed, or if open will allow the handle to move freely.

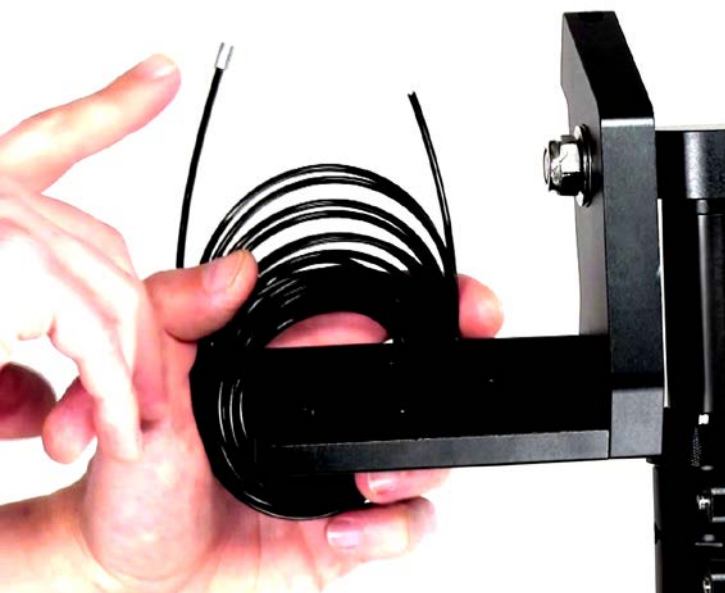




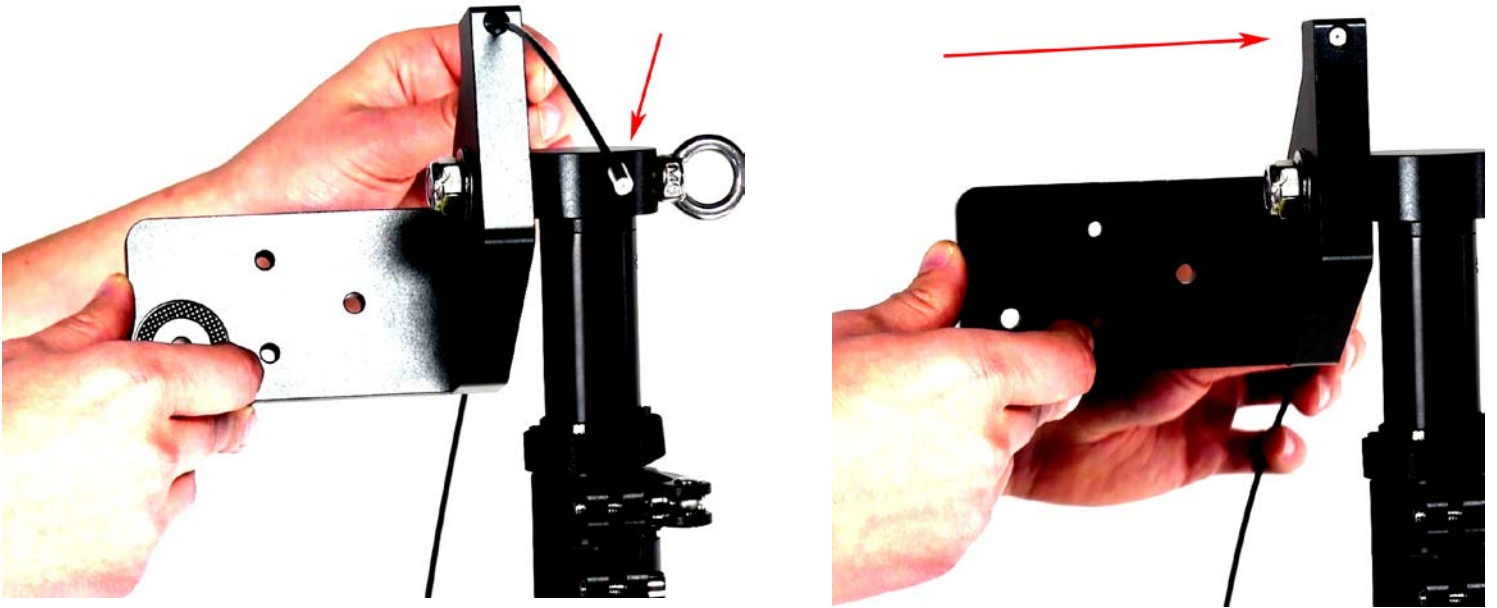
For the handle there is a cord which you'll find in a small plastic bag (see image right). This is what you use to connect the handle to the head.



On the head you'll see a small hole cut out where you'll thread the cable.



On the end of one side of the line you'll find a metal stopper. Take the opposite end without the stopper and insert it through the hold noted on the head. Pull it through all the way until the stopper falls in place.



At this point in the setup that's as much as you'll do. The final connection from the head to the basic handle is done at the very end up setup, after the tubes have been elevated (unlike the advanced handle which you can connect immediately).

When it is time to complete the head / handle connection, see the area you'll install and connect the cable to with a brass screw in the image below (but this will occur later).



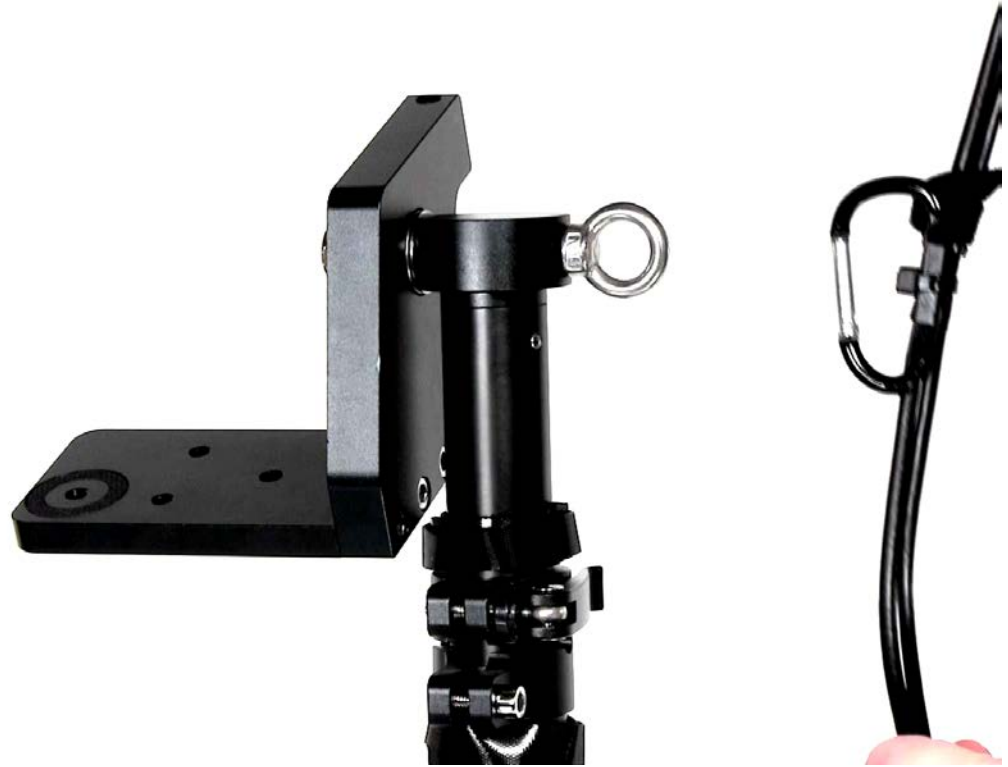
## Cable Setup

See an image of the cable bundle for your system below. There are two cables (HDMI for video and 'Lanc' for remote control) that are installed in two metal plates (Strain Relief and Quick Release plates). There is also a carabineer hook attached to help better position the cabling.

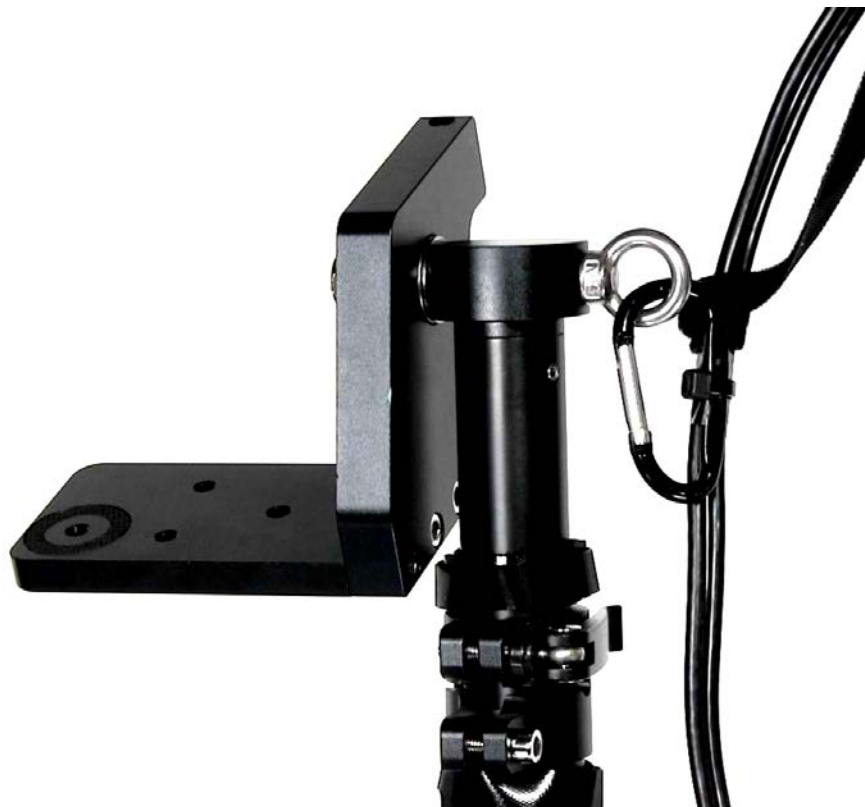


First, take the carabineer and attach it to the metal 'eye-hook' connected to the very top of the Hi-Pod tubes.

**(1)**



**(2)**



- Strain Relief Plate w/ Quick Release

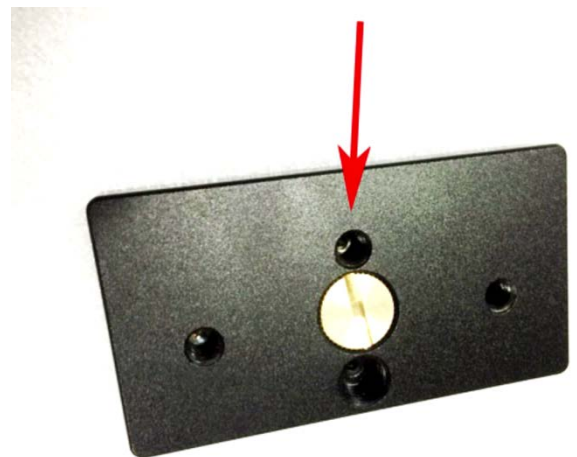


- Carabineer

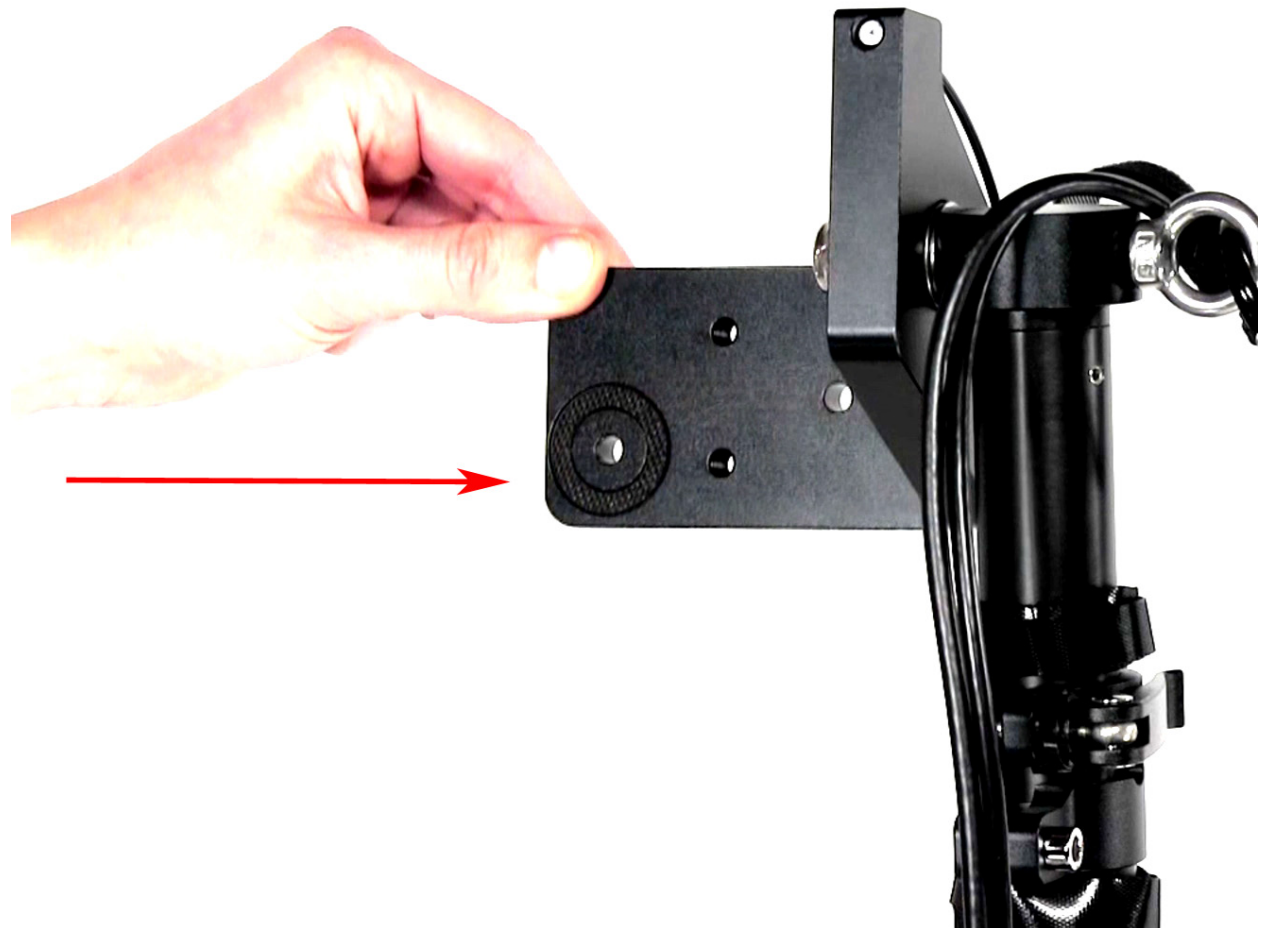


To mount the strain relief plate with quick release attached, use the smaller of the two middle holes on the bottom of the strain relief portion of the plate.

See the hole noted with the red arrow to the right.

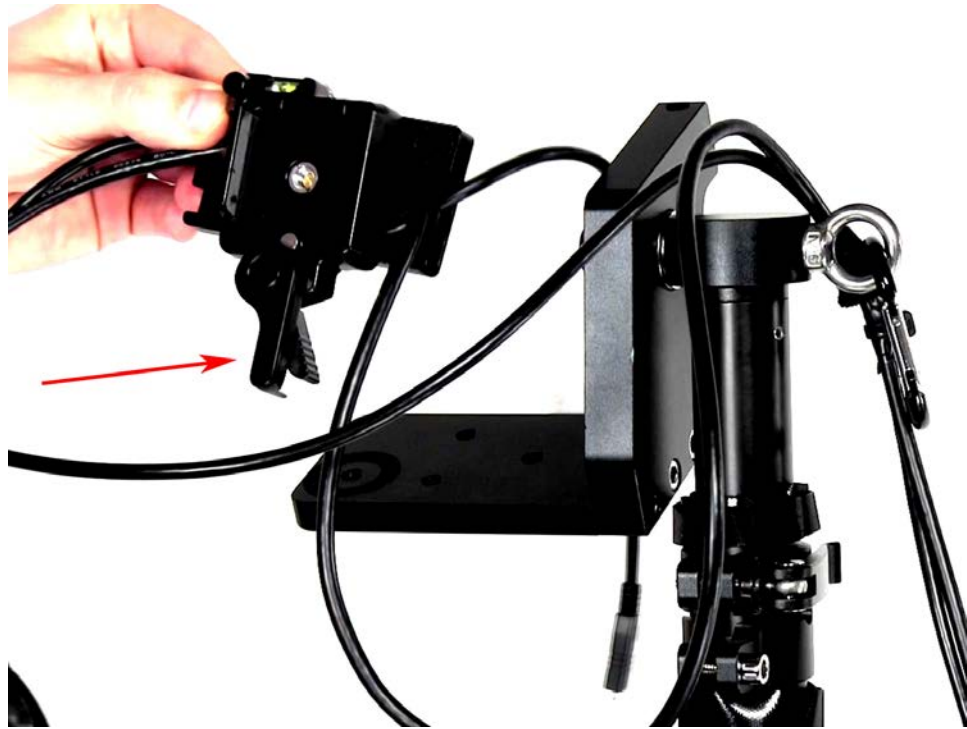


Note the hole which has the circular rubber 'grip' installed around it. This is the hole you will use to connect the strain relief plate to the Hi-Pod head.



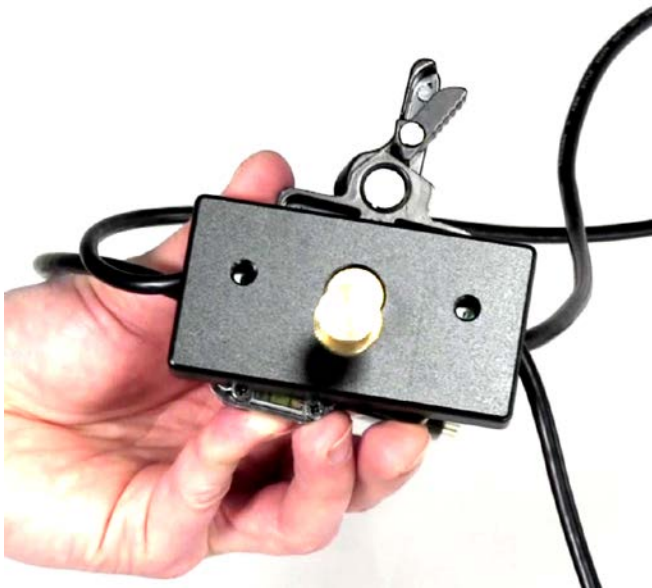
As mentioned earlier, the metal plates pre-attached to the cables are the Strain Relief (on the bottom) and Quick Release (on the top).

Note the red arrow in the image to the right - it's pointing to a lever that's pulled back on the Quick Release plate. The plates must be set so that the lever comes out **BEHIND** them when the head is in this position. Also, the lever must be pulled back (open) to accept the camera, which will then snap into position.



The Strain Relief plate has winding grooves cut out of it which allow the HDMI and remote cables to slide into place. Then, the Quick Release plate installs on top of the Strain Relief to lock the cables down. This set of plates prevents any tension from pulling at the small connection points on the camera. Any yanking or pulling on the cables will occur below the plates, not at the delicate connection ports. You must use these plates **EVERY** time with the Hi-Pod, otherwise you will cause damage to the cables causing them to become non-functional.

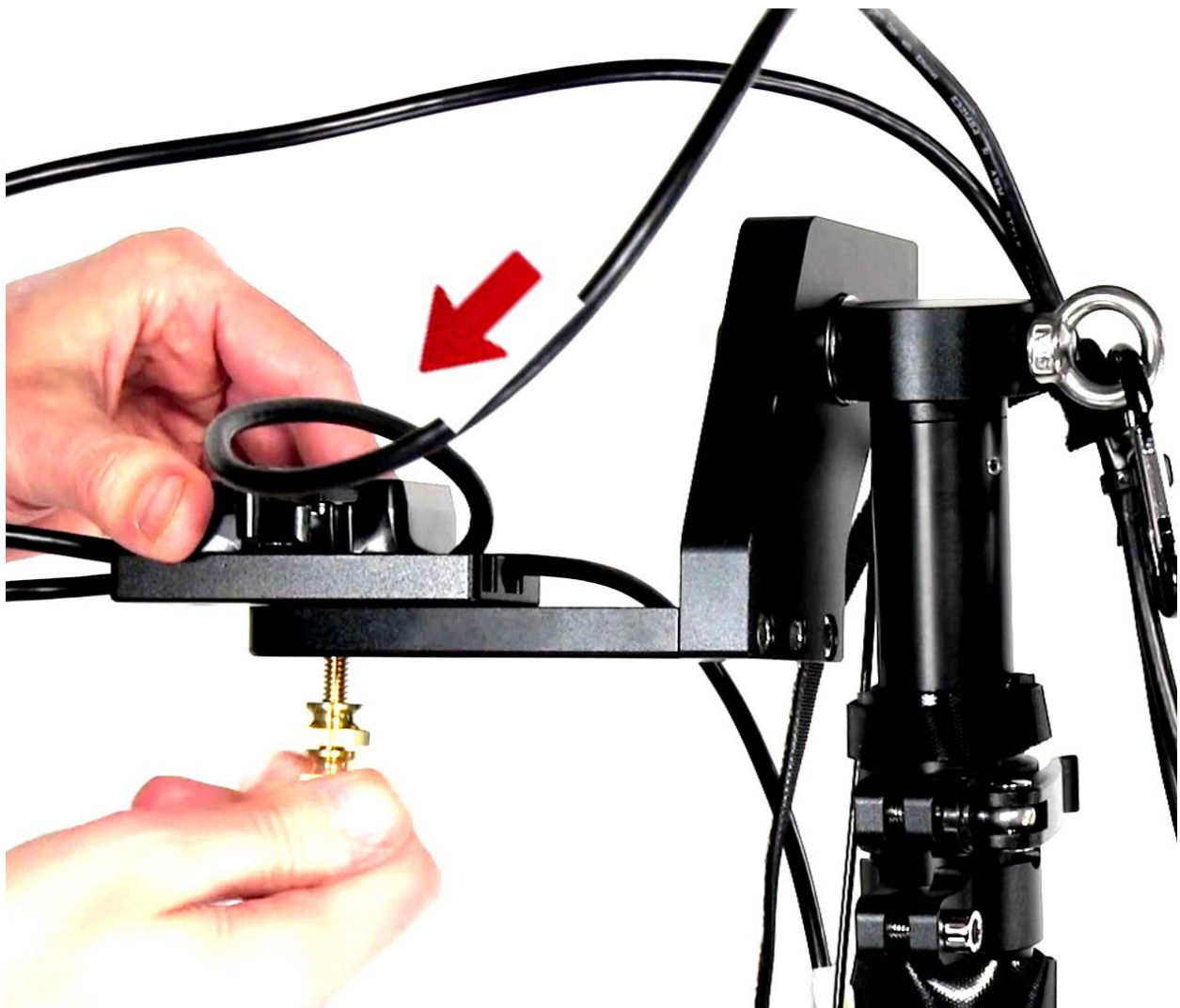
Now, find a brass screw in one of the pockets of your tower / camera bag as shown in the image to the right. This is what is used to secure the plates to the Hi-Pod head.



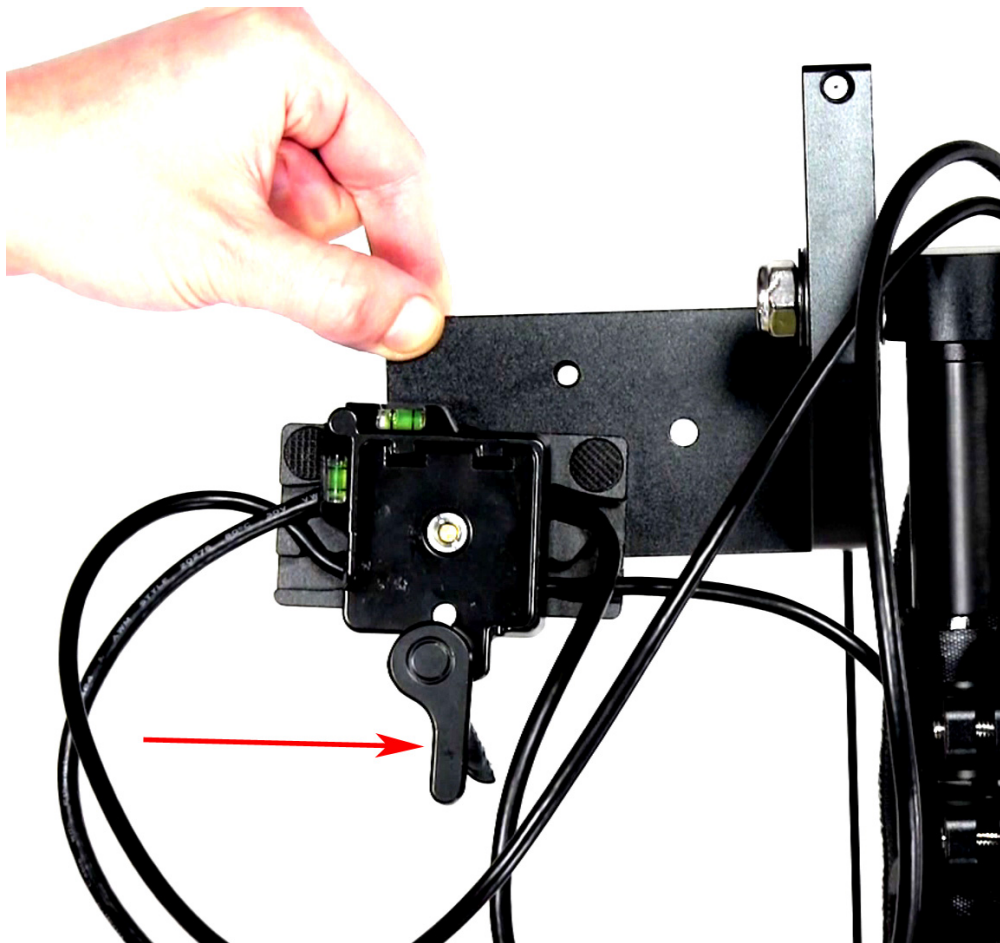
Here is a view from below of what the brass screw, lever, and strain relief plate will look like.



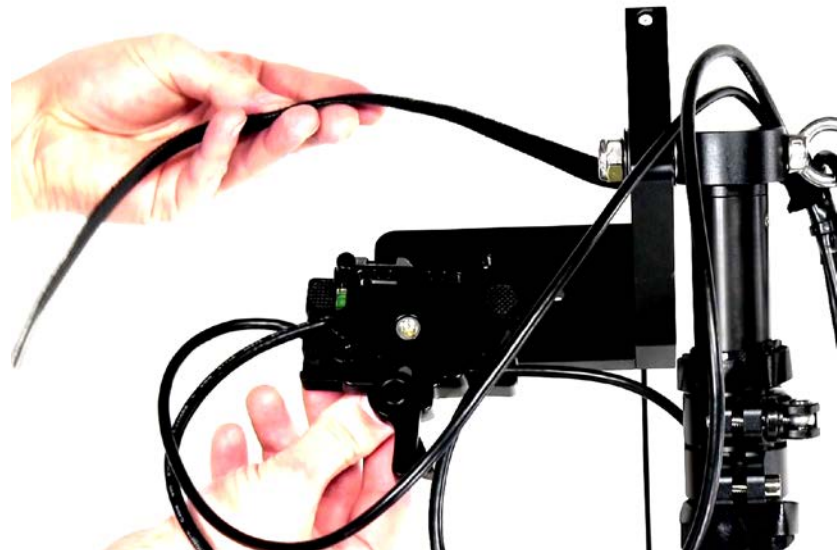
Now, from below the Hi-Pod head, take the brass screw and thread it into the strain relief plate as shown. Note the red arrow pointing out the position of the lever pointing back.



When complete your setup should look like this (view from above).  
Note the red arrow again pointing to the lever which is facing back.



There is a long strap of velcro (image right) on the cables which you can use when putting them away, but also to reinforce the cables connected to the hook. Position as needed.



## Camera and Cable Connections

Now that the cables are mounted to the tower it's time to connect your camera. If you received the Sony CX405 camera from us (included in all default purchases) we will ship the camera with a mounting adapter already attached. It is pointed to by the red arrow below. This will snap into the top Quick Release plate we just connected in the previous step - again make sure the lever is pulled back to accept the camera.



For cabling, there are two ports to be aware of on the camera: HDMI and Multi. They will each be described below.

### HDMI / SD Card

If you open the LCD window physically attached to the camera, you will see a little door that you can open by pulling down. Inside you'll find the HDMI (micro) and SD card ports.

The HDMI port sends video from the camera down to your LCD.

Regarding the SD port, once the SD card has been installed it's best to leave it in permanently as the cards are very small. Inserting / removing the card over and over again is not advisable as you could cause damage. Instead, transfer footage out of the camera via the USB cable (to be discussed on the following page) located on the opposite side of the camera.



### MULTI (Remote Cable / Port)

On the opposite side of the camera - under the hand strap - you'll find a small door. Open it and you'll reveal the 'Multi' port. This is where the cable will connect which sends signals to the camera from the remote control.



## USB Cable

Inside of the hand-strap on the camera you'll find a small USB cable. This is used to transfer data to a computer after filming, and it also charges the small internal battery included with the camera.

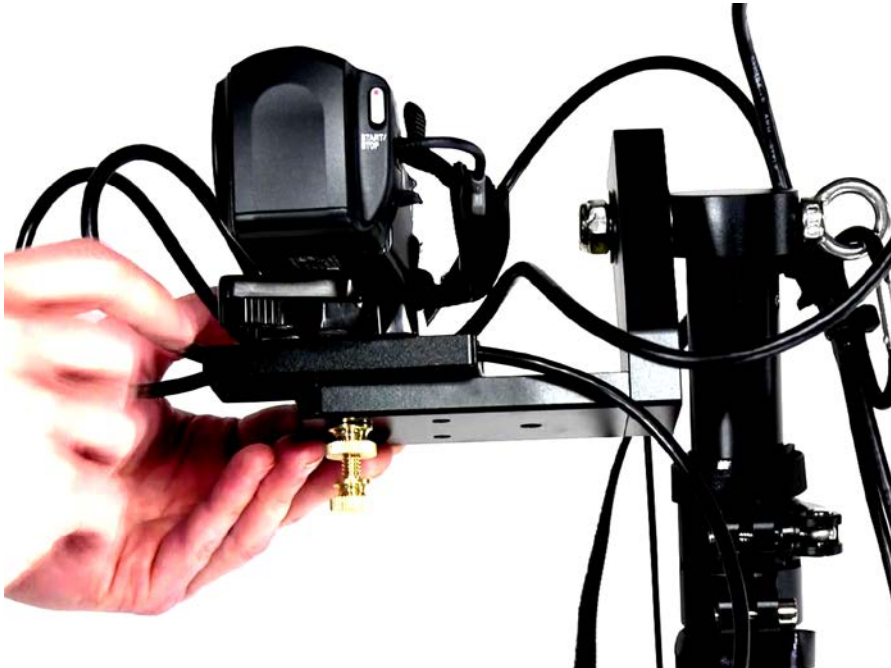


We'll discuss battery setup in more detail, but be aware that the small internal battery will need some amount of charge in it so that the camera will turn on, but you do not want the small battery to be used as the default power source because it will die in 20-30mins (more on that in a later section).

Mount the camera by pulling back the lever on the Quick Release Plate, and inserting the adapter on the bottom of the camera into the plate



assembly. Tilt the camera in forward first, then snap the back in. The lever should close behind the camera to secure it in place.



Your setup should look like this.

Now connect the HDMI and remote (Multi) cables to the camera. Note that the cable for the remote - which connects to the 'Multi' port - has a yellow tag attached. The HDMI does not have a tag on it, so this is how you can tell them apart.

**HDMI (left side)**



**MULTI (right side)**



## Camera Battery

There is an external USB style battery that you'll need to connect to the tower to act as the camera's primary power source. See a picture of it to the right (actual battery can change over time, but function remains the same).



As mentioned earlier, there is a small battery inside of the camera that lasts 20-30 mins. This is far too short to film a game, so by connecting this external battery you can film up to 5 hrs.

Find another of the brass screws in your cases and drop it into the hole shown in image below (facing down) - to the right of the camera.



See a  
reverse  
angle of  
the  
camera /  
screw  
setup.





Take the USB battery and connect it to the brass screw.



Tighten the secondary thumbail on the screw to lock in place.



Now you need to connect the external battery to the camera. Note the USB cable inside of the camera's hand strap, and the USB port on the external battery we just installed. These will be connected by an adapter cable.



See the female to male USB adapter in the image to the left. The female side connects to the USB cord from the camera, and the male end plugs into the USB battery.

Connect the male side of the USB cable to the battery.



Connect the female side of the USB cable to the camera's male USB.



Once this is complete you'll have a lot of extra cabling. You'll need to clean this up so nothing catches and unplugs the battery during use (very important).



The best option is to bind up the extra cable and secure it inside of the velcro on the hand strap.

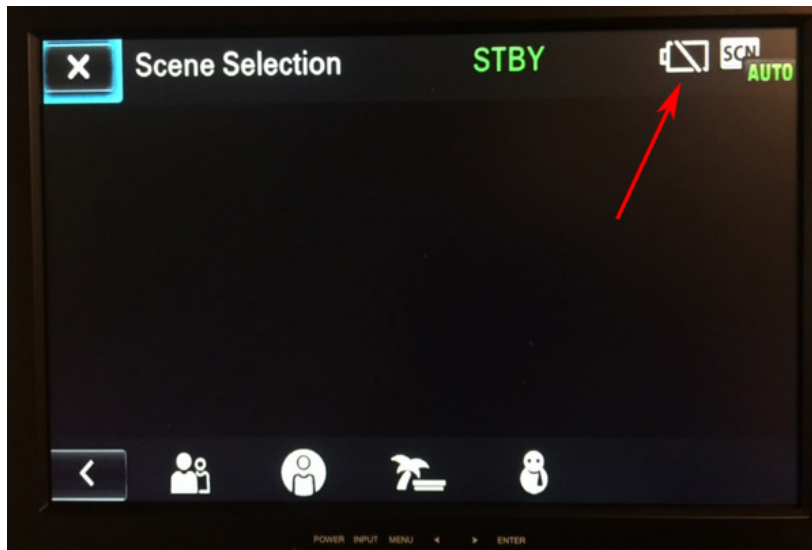
Gather the cabling, open the velcro, place cable inside, and close the velcro.

This allows everything to move together when the camera pans / tilts when filming.

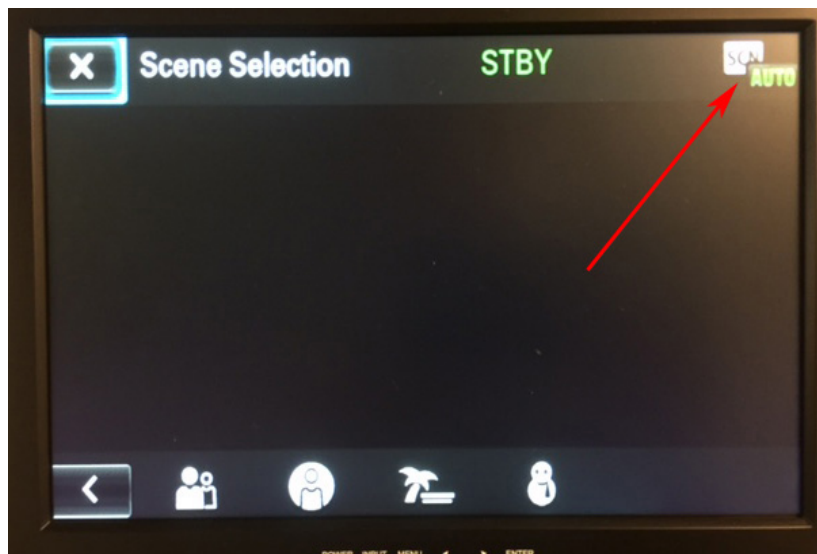
Nothing will catch and unplug.

Make sure to confirm the correct battery (external USB) is set as the default power source for the camera. See how to do this below.

You'll need to check the LCD window attached to the camera. If you see an icon that shows a battery - fully charged, half charged, or about to die (like in the image below) you are drawing power from the small battery inside of the camera. **This is NOT what you want.**



If your external battery is already connected (per instructions above) you need to 'click' the battery on to activate the power transfer. Sometimes the batteries don't automatically turn on (often they do - but not always). When the big USB battery takes over, the battery icon on the camera LCD will disappear. **This is what you want.**



## Finish LCD Setup

See the open HDMI port on the LCD in the image to the right.



Connect the standard sized HDMI cable at the bottom of the cable bundle to the port.

On the back for your LCD you'll see a long strip of velcro.



Find the larger LCD battery (with velcro pre-attached) and stick it onto the back of the screen.



Now you need to find this USB cable in your camera bag. It will provide power from the battery directly into the LCD.



In the first image below you'll see a red arrow pointing to the USB port on the LCD. With the LCD reversed you'll find it on the right side near the DC port. Simply plug the USB cable into the available port, and connect it to the battery.





## Finish Remote Setup

In the image below you'll see a red arrow pointing to a port on the remote control. This is where you will plug in the cable on the bundle (top end of this cable has the yellow tag which plugged into camera).



The cable head looks like this (right).

Pay special attention to the white piece added to the cable head. This is a strain relief that we have made with a 3D printer. It fits into the gap around the cable port that's inside the remote and prevents the tip of the cable from wiggling or breaking inside when filming.

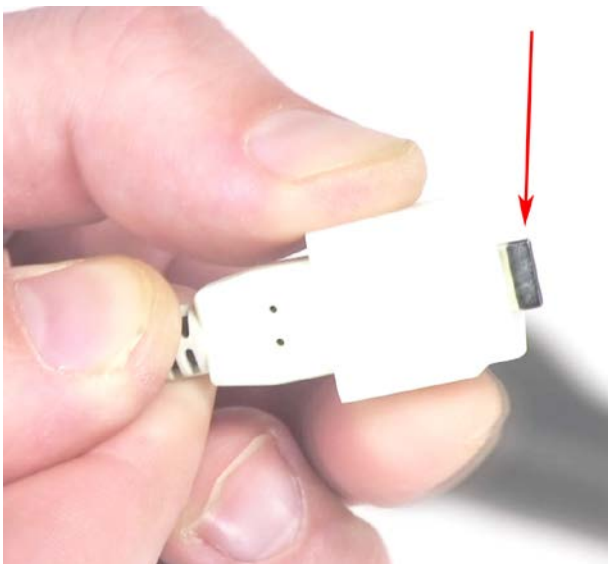


**IMPORTANT:** The white strain relief is **NOT** permanently attached to the cable head. It can shift backwards or forwards when the system is put away or when it sits in the case. If the white strain relief shifts forward on the cable head, the cable itself will not make a physical connection to the remote, and therefore will not function properly.

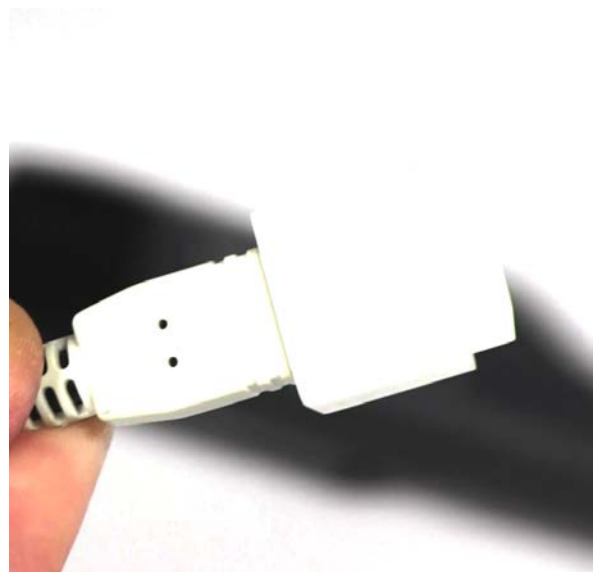
Below in the first image you'll see the silver tip of the remote cable extending past the white strain relief. This is what you want as the strain relief is present, but the metal tip passes it to connect to the remote.

In the second image you'll see a scenario where the white stain relief has shifted forward. This will offer no connection to the remote, and you'll need to push the piece back onto the cable head to make the connection.

**Correct**

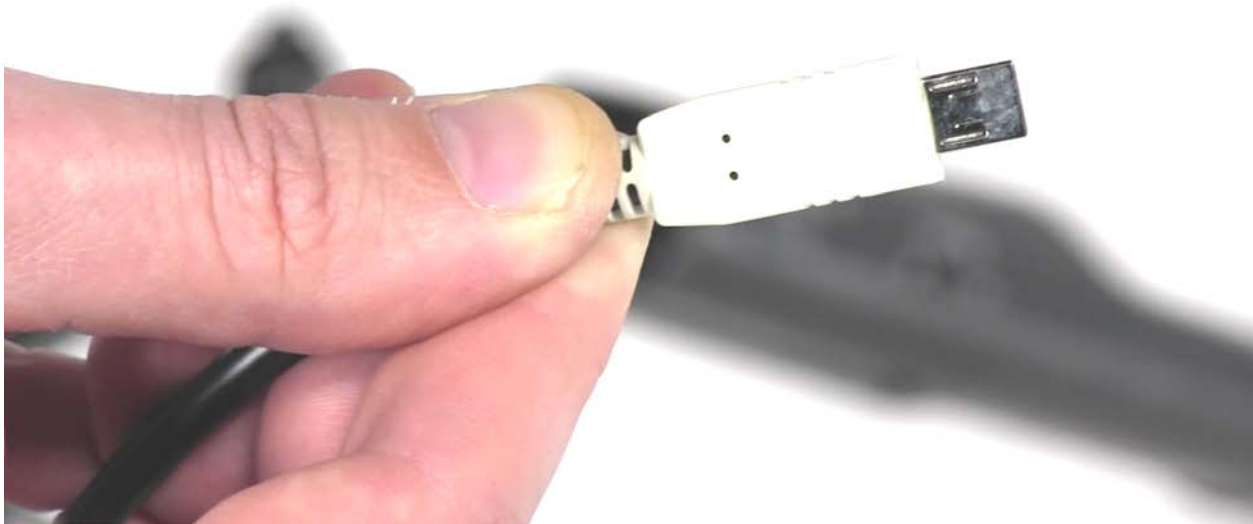


**Incorrect**



## Troubleshooting

See an image below of the cable with the strain relief removed. You can do this for testing, but please replace the strain relief after confirming any variables to protect the cable.



### **Common Issue**

Something that tends to happen is that a client will have the white piece shifted forward slightly, but they won't notice it. This happens when the white strain relief is shifted back on the cable head enough for the metal tip to connect to the remote, but not completely - so the cable is only half inserted into the remote. When this happens you see the green power



button light up on the remote - so the client believes everything is connected correctly - but then they have no control over zoom and record functions. This means you only have a half-connection of the cable into remote - enough to receive power, but not enough to communicate signals back and forth. Correct this by adjusting the placement of the white strain relief back onto the cable head, and make sure it is fully connected. Then everything will start working.

Complete this portion of the setup by sliding the gray plastic 'grip' on the arm of the remote mount directly behind the end of the cable head. This acts as additional strain relief.

(1)



(2)



## Text (REC) On Screen (Optional)

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. With the new remote (with light on it) this becomes an option.

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



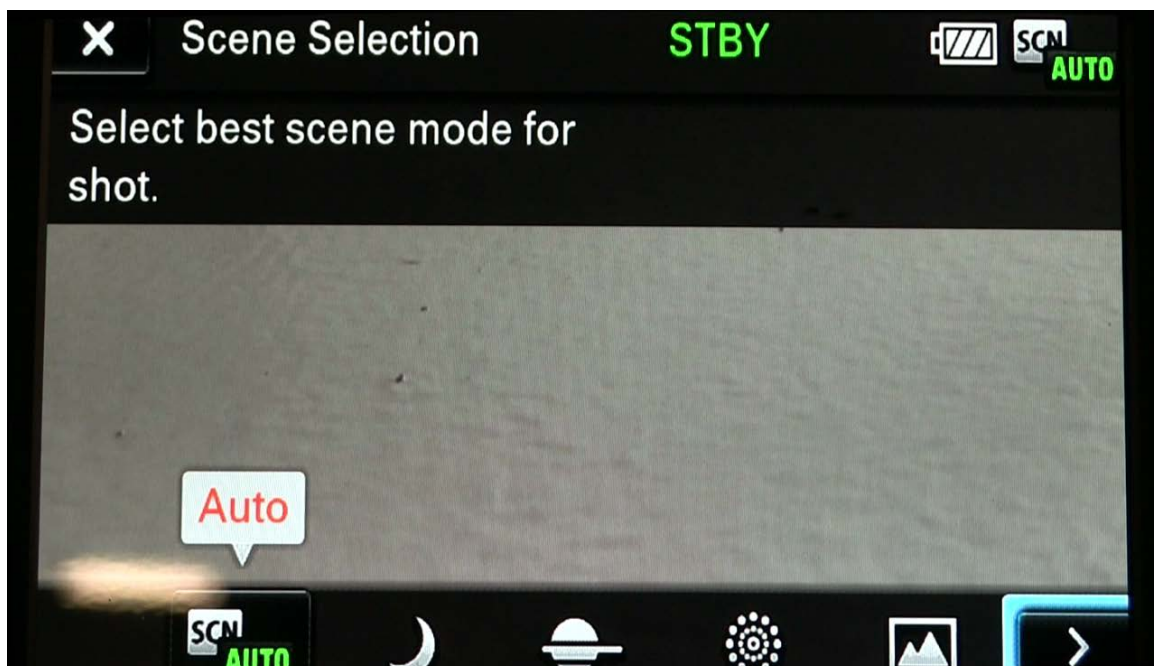
- Select '**Camera/Mic**'



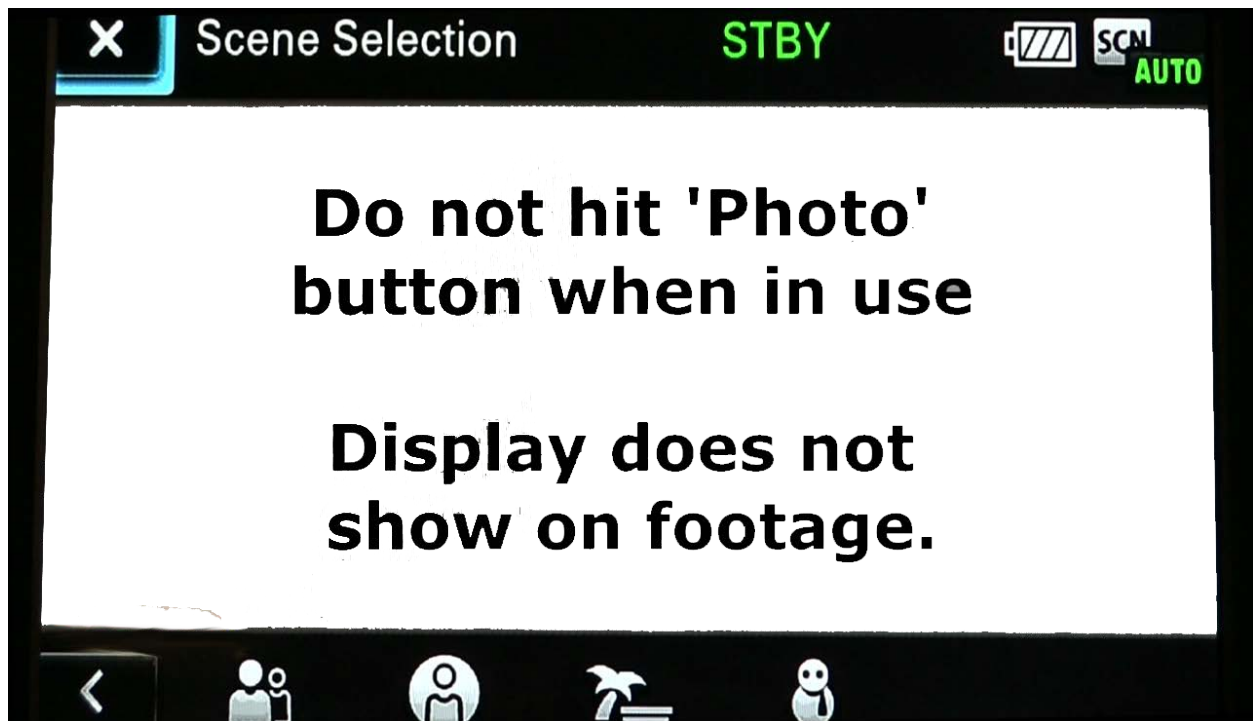
- Scroll down until you find 'Scene Selection' and click on it



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.

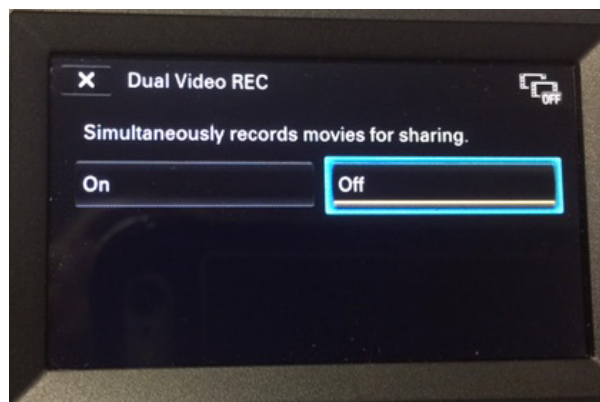
## Camera Settings Continued: Dual Video REC

On new cameras (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**'





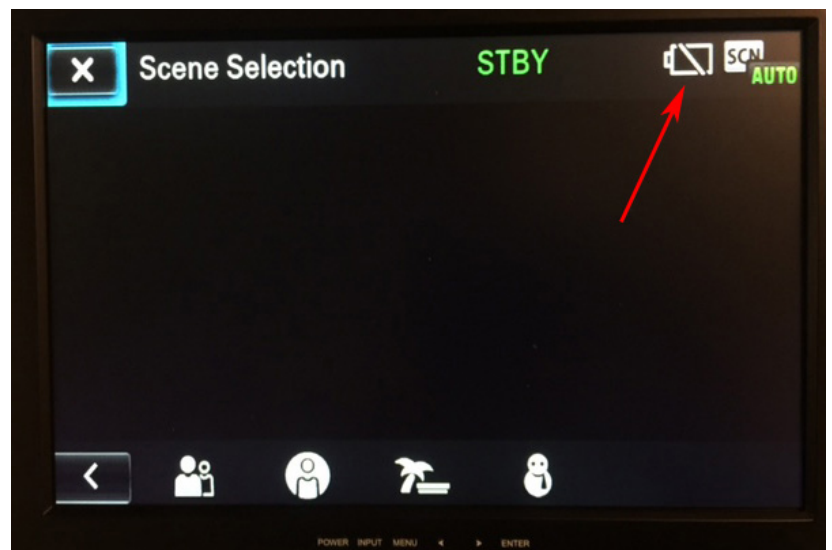
### Camera Settings Continued: Confirming Camera Battery



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.

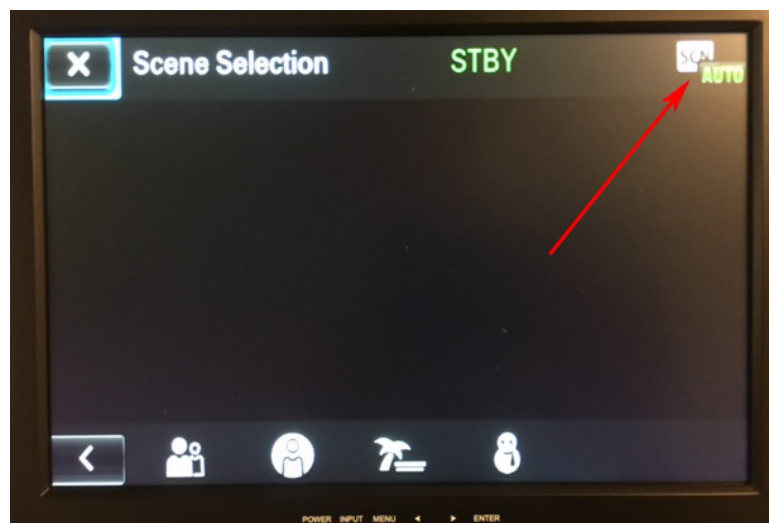


Click the button on the side of the battery to turn it on.

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.

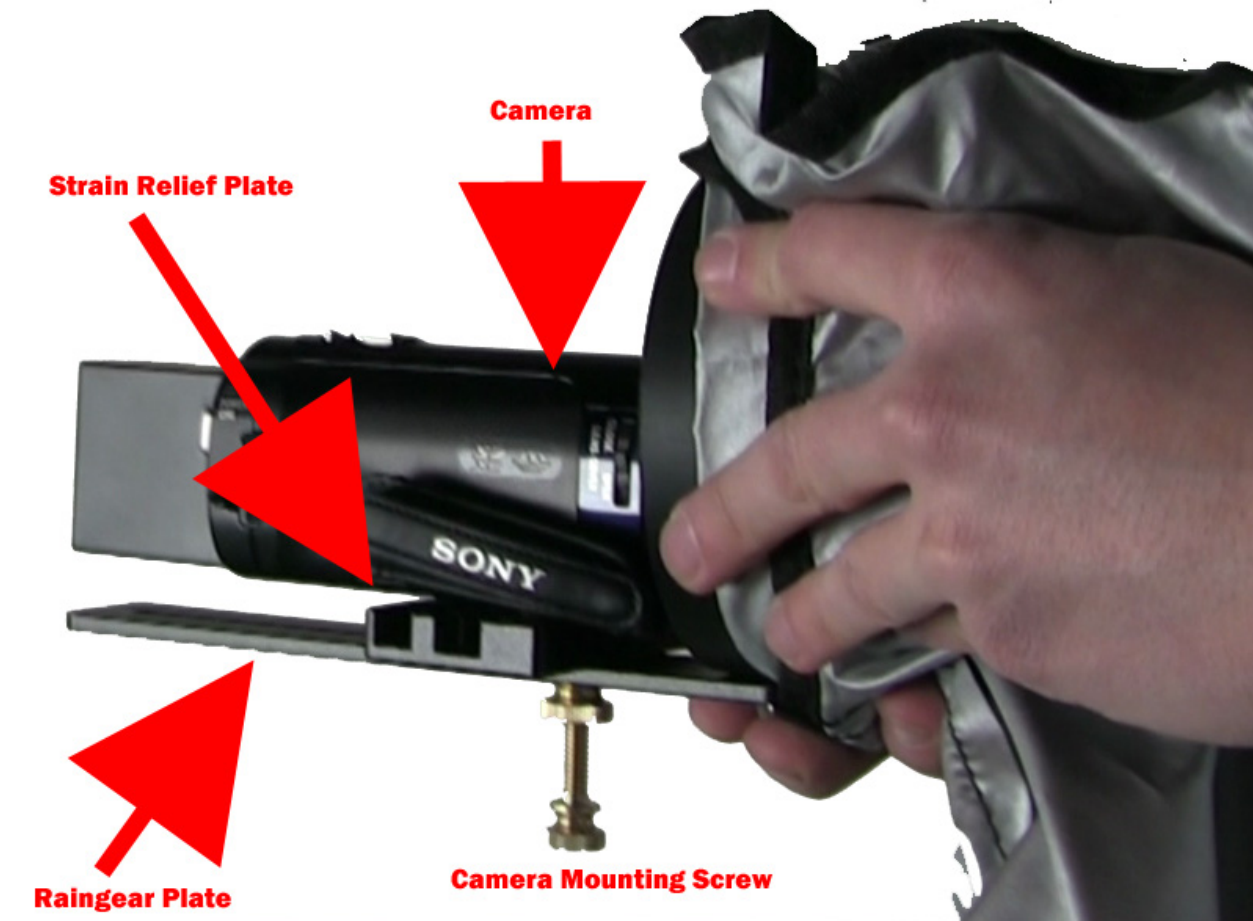


## Raingear

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

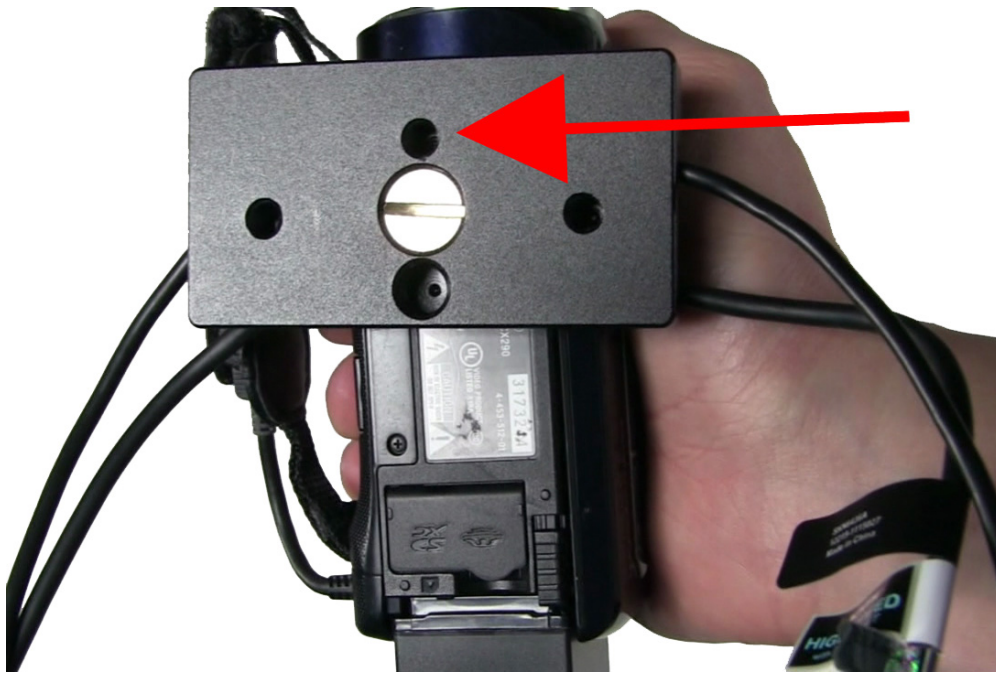
- Camera
- LCD
- Remote

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!***

## Elevating Tubes

At this point in the setup, your unit is set to elevate.

Grab a pole above a collar, unlock, raise to your desired height, and lock again.



Note the lever (camlock) which you'll use to release and lock the tube collars. Repeat this for all stages.





See the collar and camlock on the tubes after the pole has been elevated.

Close the lever (camlock) to hold the pole in place at your desired height.

Again, repeat for all tube stages.



## Complete Handle Setup

Once the tubes are in the air, it will be time to connect the head to the brass screw / gap on the handle mechanism.

See this image mentioned earlier in the manual. The gap between the brass screw and metal frame of the handle is where you'll secure the long cable attached to the Hi-Pod head.



Once the cable is in place close the brass screw behind it to secure.



### Lowering Tubes

When lowering the tubes, **always grab the pole above a collar before opening that collar.** If you do not grab the pole first, it will shoot down.



### Velcro Cables to Tubes

We include a strap of velcro above every collar. Use this to attach your video/lanc cables to the tower. This keeps your cables out of the way, and acts as an additional strain relief.



## Putting The Tower Away

When it's time for you to put away the unit, most of the setup can just be done in reverse.

Two key things to point out:

(1) When attempting to fold the tower, unlock all knobs and push your foot lightly down on the black slats between the legs, and pull up on the top. The legs will fold in.



# Setup Complete

For more information, see

<http://hipod.com>

(see *'Manuals'* tab).

For help call us at:

**818-982-2601**

*9am - 5pm Pacific, M-F*