

HI-POD LX15-25 Setup Manual





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Congratulations on Your New Hi-Pod LX!

Now you can begin to elevate your game.

~

LX - The HI-POD LX series combines the professional control features of the Hi-Pod PRO series, with the ease of use and transport of a 35 lb tower. 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.



LX CHECKLIST

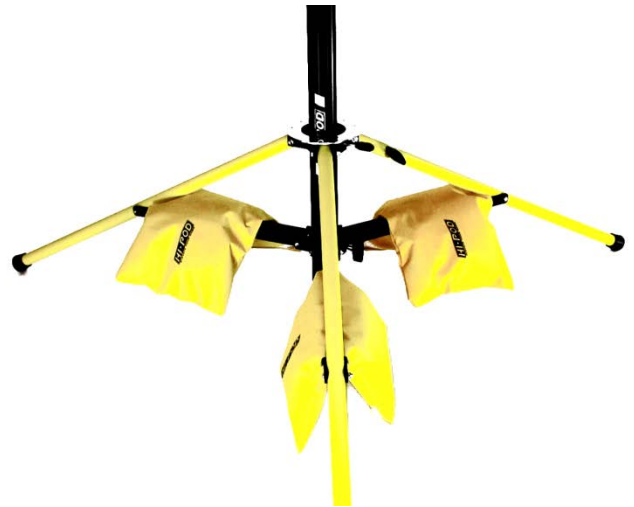
- Handle
- Head with Quick Release Spud
- Monitor Bracket
- 3 Piece Raingear
- 3 Sandbags
- LCD
- LCD Visor
- LCD Battery / 5-9 Volt Adapter Cable
- HDMI Cable
- Linc Cable
- Gold Screw for Power Bank
- Camera Remote
- Camera
- Camera Power Bank
- 16GB SD Card
- Cable Stress Relief Plate / Quick Release 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 40)

Take Tower Out Of Case

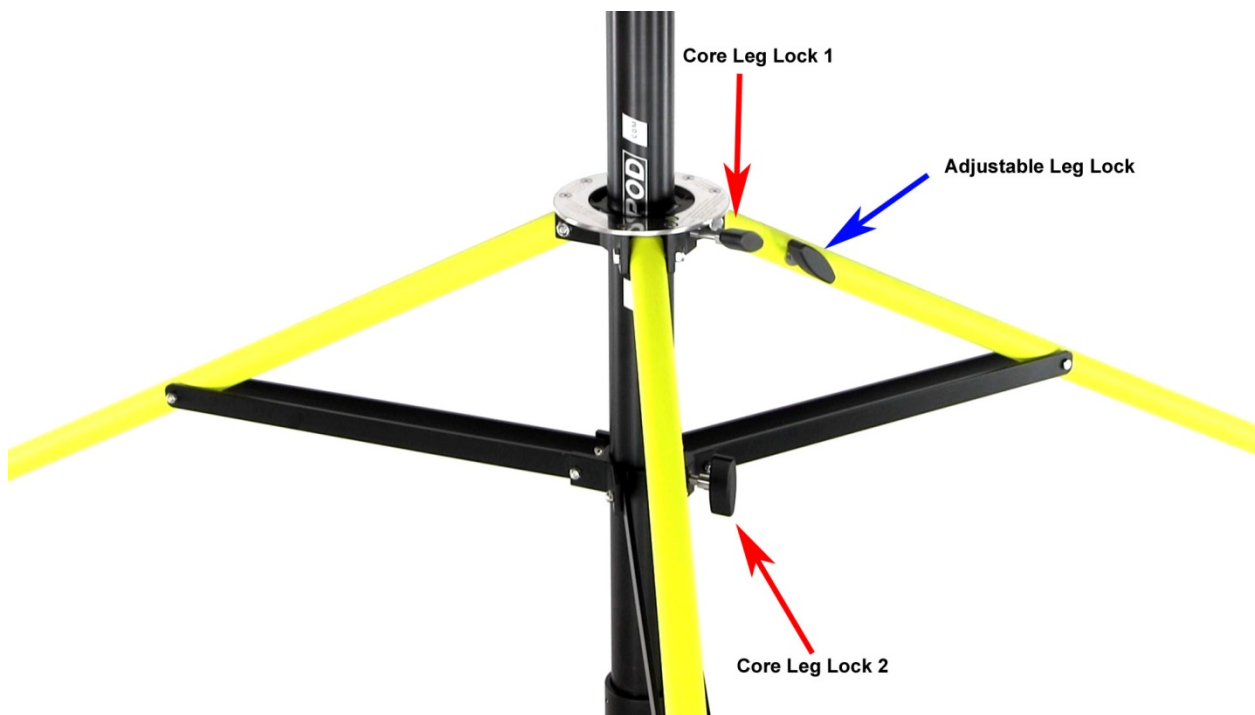


Take the tower out of your case, and place it on the ground. There are two black twist knobs on the base of the tower, and you will need to unlock these to allow for the tower legs to expand.

The base and tubes of the Hi-Pod Lite have been completely redesigned. If you used an earlier version of the Hi-Pod Lite (2015-2017) you will want to review changes to the base, tubes, and tube rotation (as well as strain relief and electronics changes from prior years).

Set Legs and Sandbags

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 the 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.

We also want to bring your attention to the function of the knob that is directly on the yellow leg itself (pointed to with the blue arrow). This is an adjustable leg which you can use when on uneven ground.

The included sandbags 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 35 lbs, and an approximate extra 35 lbs in the sandbags, this gets you to ~ 70 lbs in total. This is the approach which 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 or something else is preferred.



You are welcome to go beyond the three bags should you want to.

Add cables through the legs which then connect to stakes (if not on a turf field), add more sandbags, 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
SANDBAGS!**

NEVER WALK AWAY FROM AN ELEVATED TOWER.

NEVER EVER!

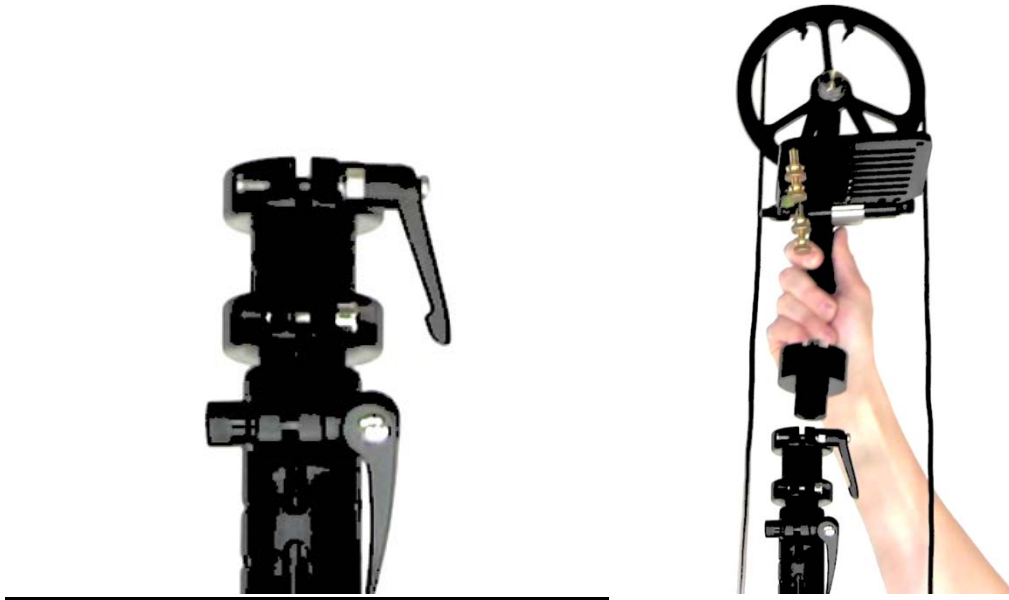
Don't do it - seriously!

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 with the mounting pedestal found at the bottom of the 'L' shape of the head.



Once in place, use the ratchet at the top of the tubes to tighten and secure.



White Line

Note the white line above a black collar with a ratchet near the middle of the tower, and directly below the tube collars with camlocks. It has text which says "Mount Above This Line" printed on it.



The parts that this text is referring to are the LCD Bracket and Hi-Pod Handle. You'll utilize the gap of tubing between the white line and tube collars to mount these parts. We'll address this piece by piece in the following sections.

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

The ratchet (pointed to by the red arrow to the right) 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 on you awkwardly. During filming you'll want to open this ratchet so you can spin the tower as needed for operation.

Mount LCD Bracket



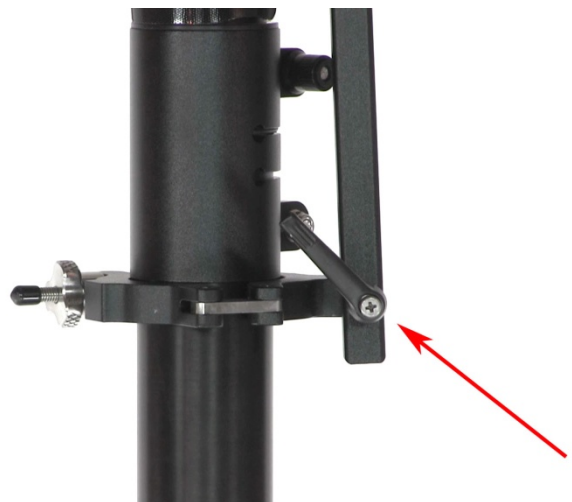
The LCD Mounting Bracket holds the screen on the tubes.

You will find a metal item with a black tip on one end (for the LCD), and a black clamp with silver connecting screw on the other (connects to tubes).

Open the collar at the base of the bracket, size to the tube, and close the silver screw to lock on.



You can adjust the angle at which the long extension portion of the bracket sits by adjusting the ratchet pointed to by the red arrow on the right. There is another ratchet you can adjust directly behind where the screen will sit.



Hi-Pod Handle

Note in the image to the right how the ropes coming down from the Hi-Pod Head mounted earlier are on the left side of the tower. See how they appear next to the LCD bracket, and note the tube collars with camlocks are facing forward.

This is important to be aware of, as you want the cables between the handle and head to be on the same side. This way nothing will catch or tangle.



**Mount
Handle
Here**

Notice the gap of open tubing between where the LCD bracket is mounted, and the white line below.

This is where you will mount the handle mechanism.

This allows for enough space for all components to rotate when finished.

Find the Hi-Pod Handle in your case. Notice the two clamps that can open and tighten by turning the large black 'X' shaped piece on the item. Use this to attach the handle to the main pole completely above the white line.



The reason you need to mount both the handle and LCD bracket above the white line can be seen in the image below. When you rotate the handle there needs to be enough clearance between the handle and the collar with ratchet (below the white line). Otherwise, if not setup with appropriate spacing the parts will bump into each other when you're filming.



Sony 1-Hand Remote (for 2019 users only)

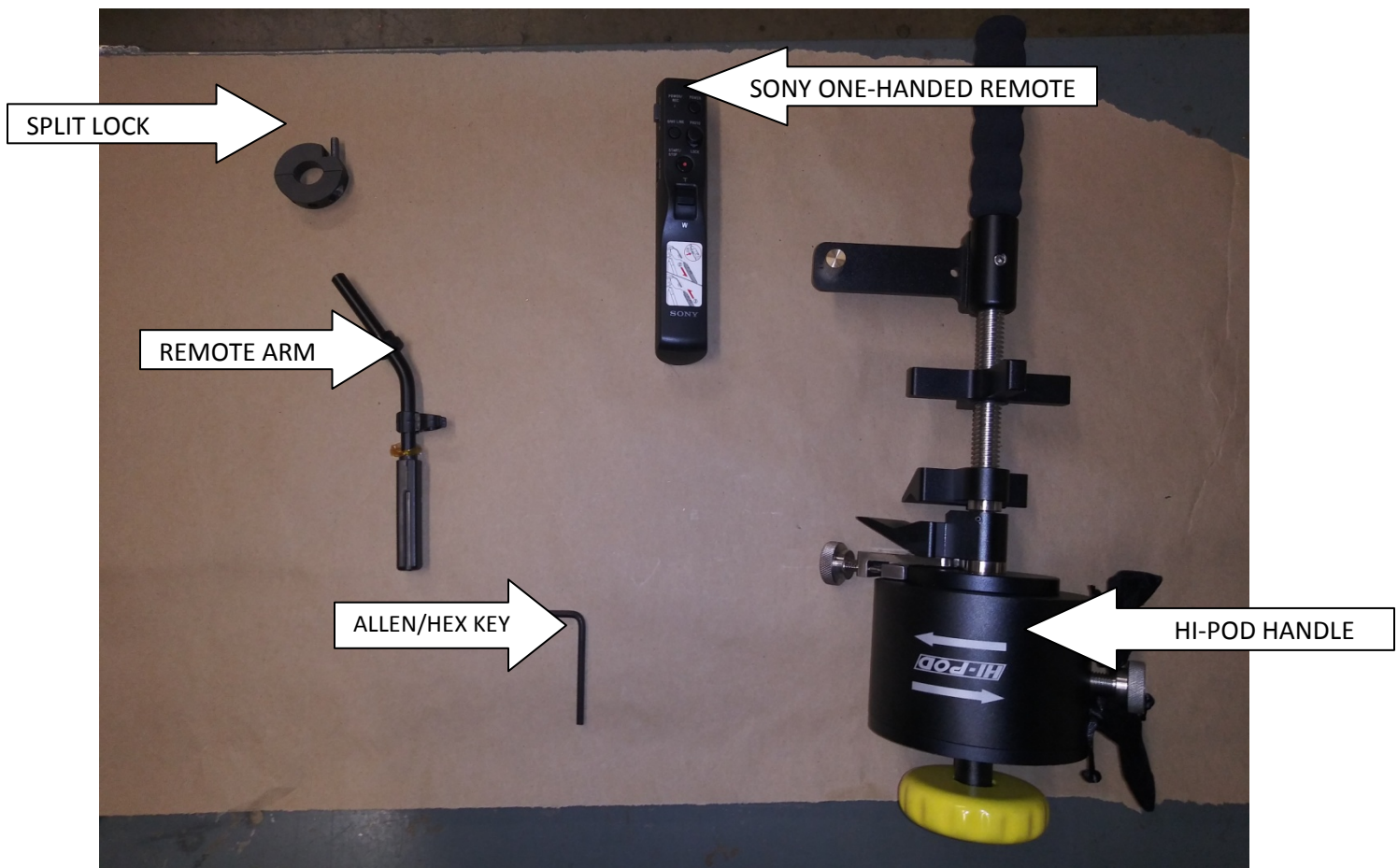
Sony One-Handed Remote Installation

Included items:

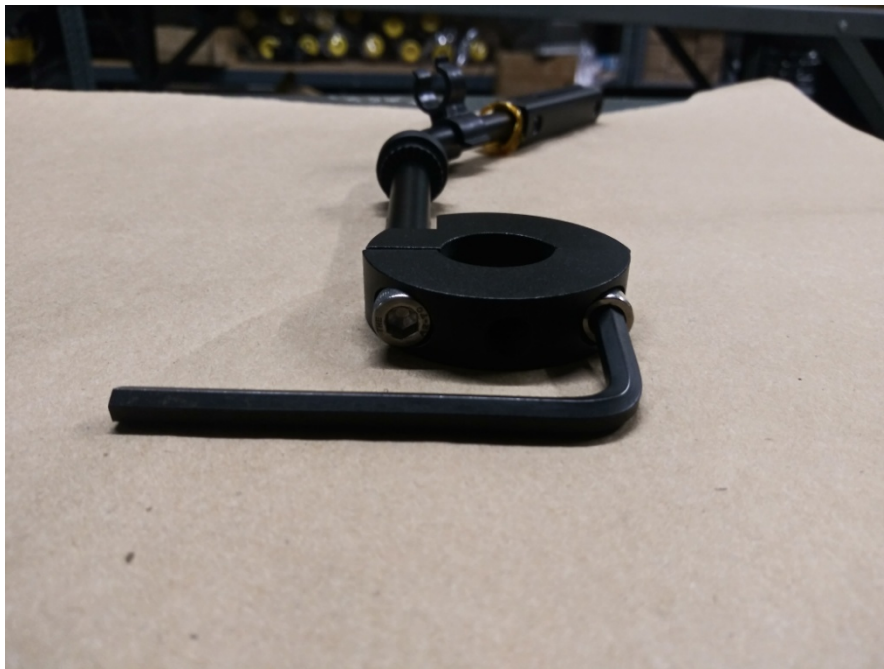
- SONY One-Handed Remote
- Remote arm
- Split Lock with 2 Internal Hex Screws
- Metric 5 Allen/Hex Key

Instructions:

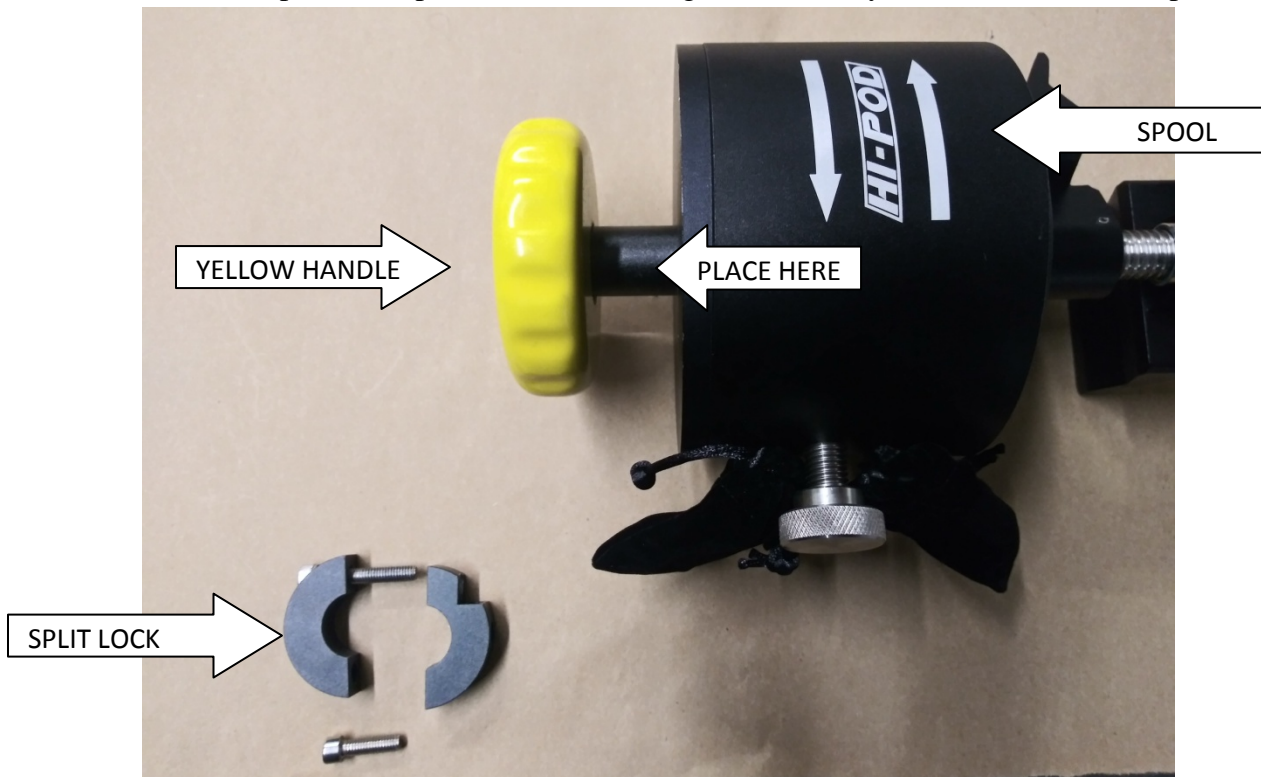
The following is what you will need for upgrading to the Sony one-handed remote.



Using the Allen/Hex Key, loosen both internal hex screws. This will allow you to separate the split lock form the remote arm.



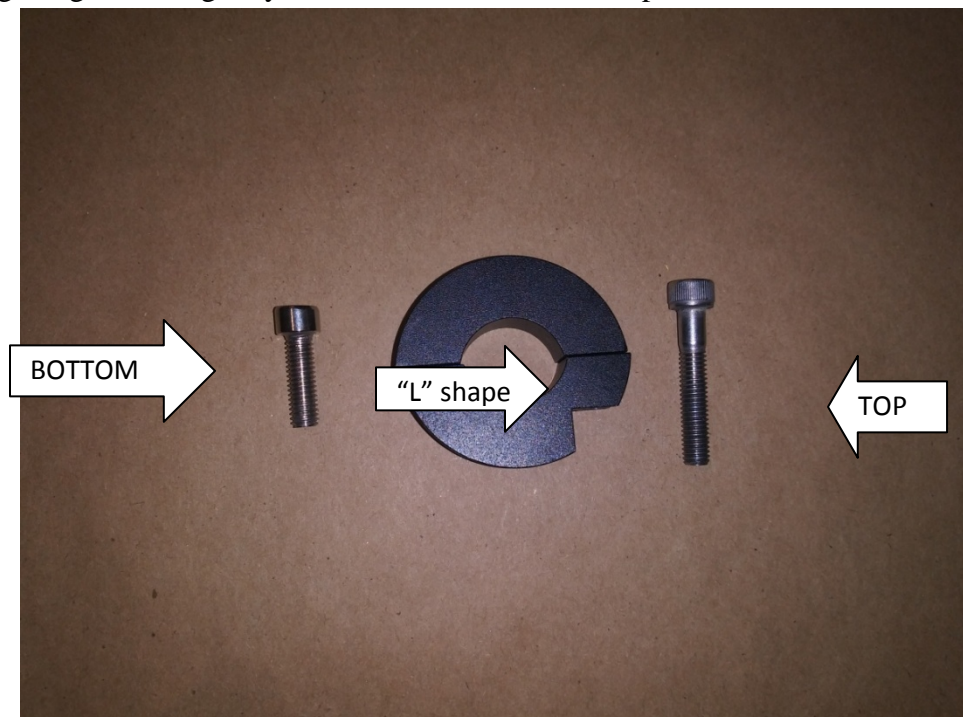
Once removed, place the split lock on the tubing between the yellow handle and the spool.



Have the “L” shaped notch facing towards you. Place longer hex screw through the access point. When placing split lock, start with the longer top screw. Screw in the remote by hand, this will allow you have more control for screwing the arm to the split lock.



Following image should give you a better idea of how the split lock and screws must be placed.





Tighten to the point where there is some mobility in the arm. Screw in bottom screw, and adjust placement of arm.

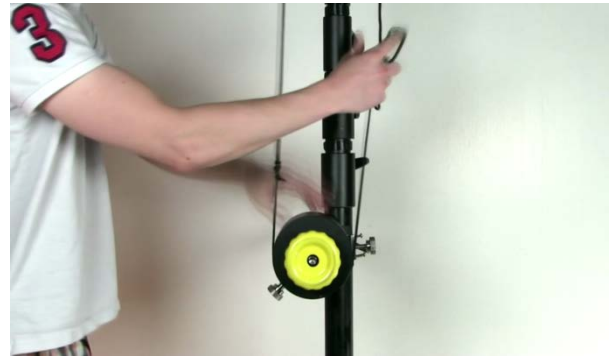
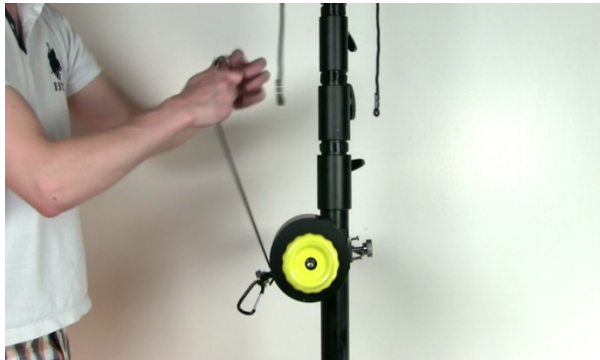
Once comfortable position is found, tighten both screws to lock in place.



The rope locking screw must be pointing straight down.



Connect Head & Handle



Notice the two black ropes coming out of the bottom of the Hi-Pod handle, with a silver pin between them.

Each of these ropes must go around the bottom of the rounded handle in opposite directions. If they come out of the top of the handle, or if they go in the same direction, they will not create the 'pulley' motion which controls the pan/tilt of your camera.

You can see in the image below that we have two arrows on the handle, indicating this for setup.



Connect the ropes coming out of the handle to the matching shorter cords coming down from the Hi-Pod Head. This engages the system. Connect with the attached carabineers.



(Handle) What The Silver Screws Do



Focusing back on the handle, there are two large silver screws. Each has an important function you need to be aware of.

The first is the Spool Locking Screw.



This is the screw found between the two black ropes coming out of the handle. If you lock this screw, the ropes will not pull out of the handle, nor will they retract. They will be fixed at whatever length you set them at. This is important at two points during setup.

First, make sure the screw is open when you are elevating the tubes, as the ropes will need to extend to the full height of the tower.

Second, once the tower is fully extended, pull back down on the ropes slightly to remove any slack, then lock the screw to hold in place. This will keep the ropes tight, and will stop them from slipping out the handle. This gives you very accurate control over pan/tilt during operation. Unlock again at breakdown to allow the ropes to retract back into the handle.



The second is the Position Lock Screw. This is the screw that is seen facing you directly in the above picture, half way up the handle, next to one of the black clamps. If you turn

this screw, it will hold whatever position you have the camera pointed in place. When this screw is unlocked, the camera will naturally swing flat/even - back to the horizon line. Re-locking will hold the camera in any direction. This is useful if you just want to hold a shot in an area for an extended time, say when you don't need to follow action as it moves for drills, etc.

Attach LCD & Battery



The LCD will attach to the black tip on the end of the LCD Mounting Bracket. This tip will slide into the groove on the back of the LCD.

*Note: The size of the tips/LCD tracks has varied over the years. If you ever upgrade/change your LCD, check with us so we can confirm everything will fit.

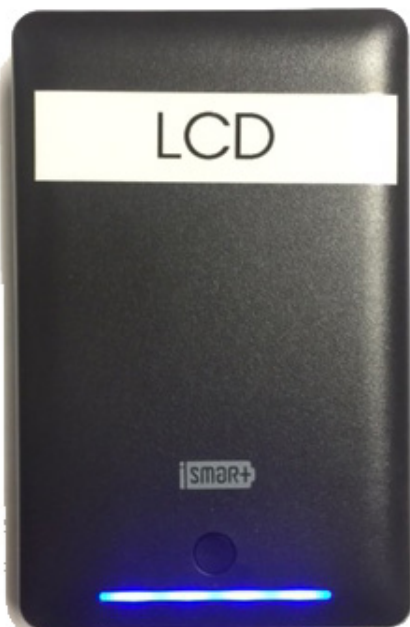


Once attached, tighten the round screw on the mounting tip behind the LCD to hold the screen in place.

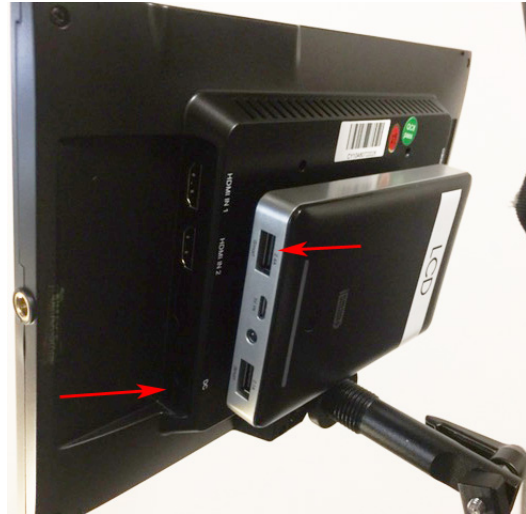
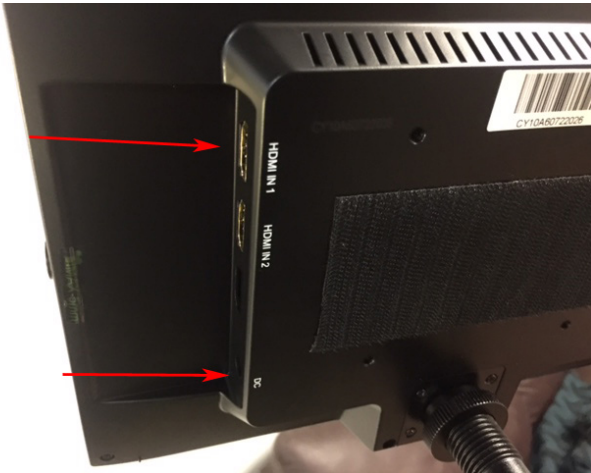
< - - see LCD battery on left

The battery for the LCD can be seen in the image to the left. These are now USB power packs which will power the screen for 6 hrs.

These batteries are greatly simplified, and allow you just check their charge status by clicking the button, showing the blue charge light.



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.



Camera / Cables / Remote

Inside of your case you'll find a bundle of cables with a remote and strain reliefs already attached. We've gone to great lengths to both simplify your setup and also to protect the cables from damage while in use. There are three main parts of this cable bundle we want to bring to your attention:



• Strain Relief Plate w/ Quick Release

• Carabineer

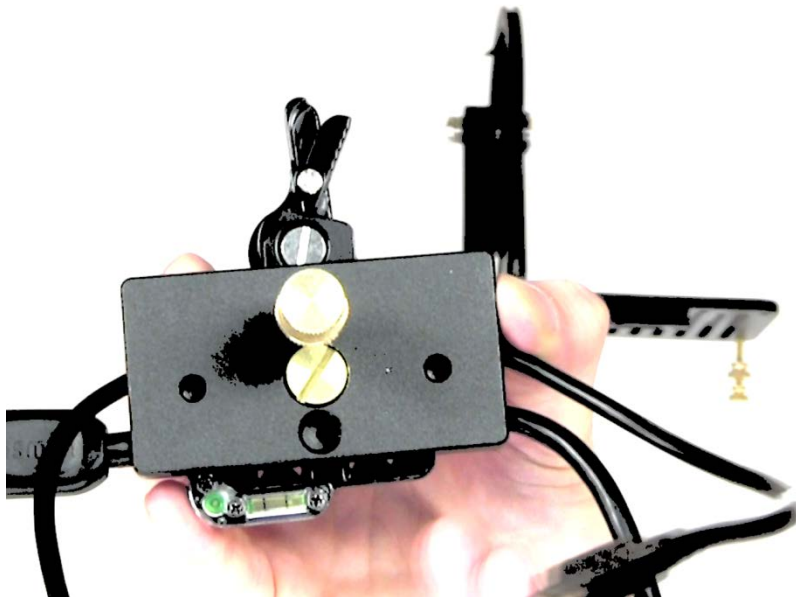
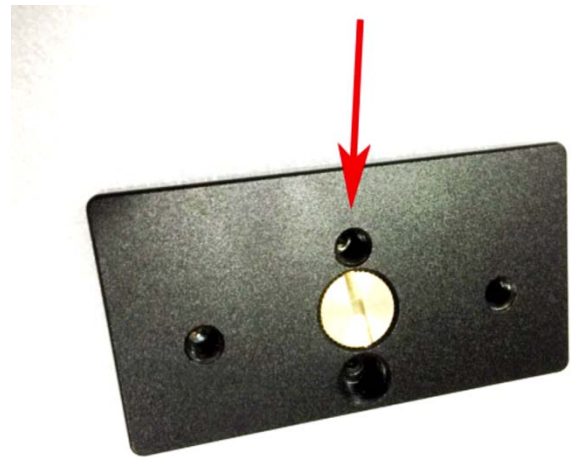


• Remotes: 2019 & 2018



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.

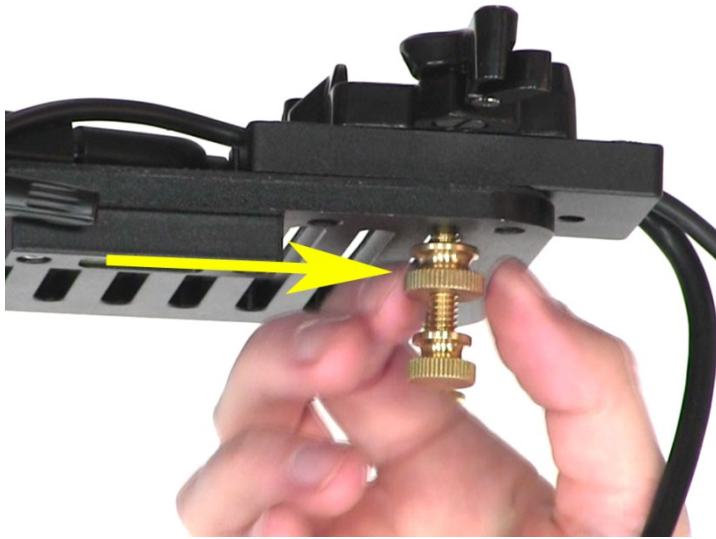
See the hole noted with the red arrow to the right.



See one of the brass screws inserted to the left.

Mount this assembly by inserting the brass screw through the slot on the very outside of the Hi-Pod head. Tighten the main screw into the threaded hole as far as possible.





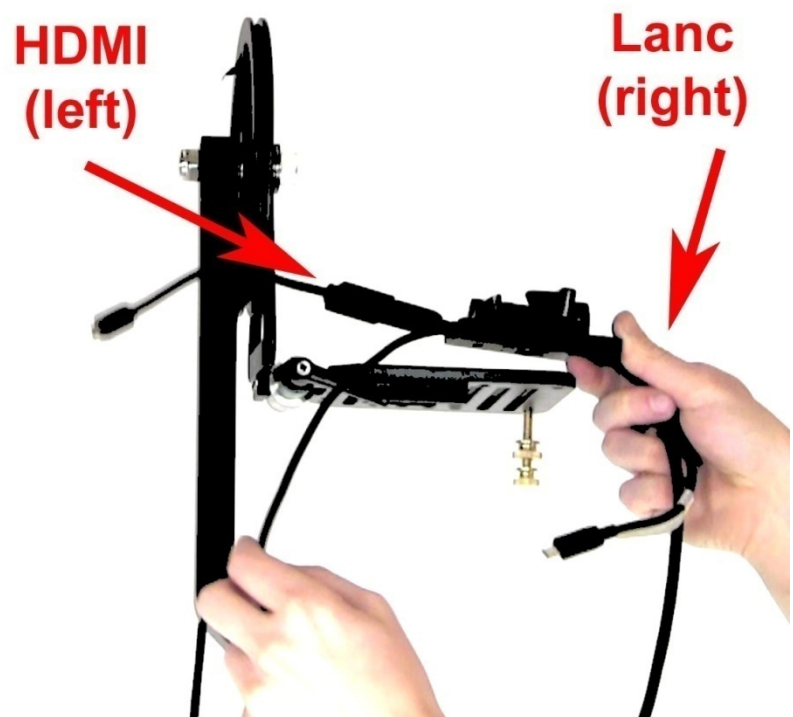
Then there is a secondary screw (see left) which comes up after the main screw is inserted which tightens this mechanism in place. Be aware that there are two parts of these screws, and both must be in place to hold tightly.

Now, you need to mount the strain relief and quick lease plate in the correct way so that the cables are available on the correct sides to plug into the camera.

The HDMI cable will need to come out on the **left** side of the plate/head structure.

The lanc cable (with the yellow tag) will need to come out of the **right** side of the plate/structure.

This places the cables on the correct sides of the assembly where they will plug into the camera ports in a following step.



2019 Remote:

The new remote for 2019 is an upgraded 1-Hand Sony controller. This mounts to the remote mounting bracket attached to the Hi-Pod handle in the image above (see to the right of yellow grip).

Use the remote mounting bracket as shown below, and snap into place.



You can remove the remote (when packing up) by pressing the button on the side which says "Press to Release". The remote will come off and you can store it safely. Leave the remote mounting bracket arm attached to the handle.



If you ever want/need to change the physical position of the remote, as it attached to the handle, you'll need to find an allen key (metric), open the screws, adjust the angle to your preference, and tighten again.



2018 Remote: At the base of the unit you will take the strain relief plate with the remote inside, and this will connect to the mounting plate which comes out of the handle.



See the handle with the mounting area in the image below.



Note on the back of the remote strain relief that there is a small silver pin at the top, and a brass screw coming out of a threaded hole lower down. These are the two



connection points which match to the two holes on the plate directly on the handle.



Once you have the top pin connected and the bottom hole lined up, take the brass screw and lock the remote into place.

The connection should be firm. Just be careful not to lose the brass screw as it will come out of the assembly to allow it to mount or disassemble.

Once the remote is connected to the camera it has a light on it that will switch from red to green during operation. This is a really nice feature that removes the need to apply text/record data directly on the LCD. However, we will show those steps later in this method if you still want the info on the screen.



To mount the camera, find the quick release plate and make sure that the lever is pulled back into the open position.



Notice how the camera already has a connection adapter attached to it. This is what you'll use to snap the camera to the quick release plate.





This image shows the camera snapped into the quick release plate. Pull back on the two levers on the quick release plate when it's time to pack up.

Open the LCD window on the camera.

You'll find the HDMI port under a little door where the LCD opened.

There is also a small door near the camera hand-strap called 'multi'.





See the **HDMI** connection on the right side of the camera.

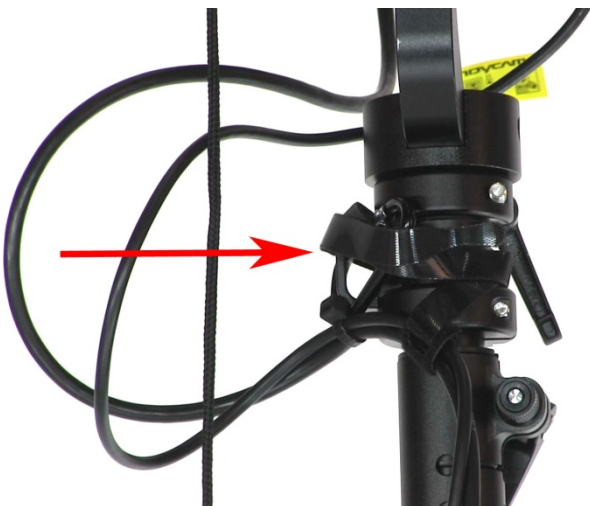
See the **LANC** connection for the remote on the right side of the camera.





For that last step in the core cable setup, find the carabineer that is attached to the cables.

Take the carabineer and connect it to the hook coming out of the top of the Hi-Pod tubes.



Then take the extra velcro and attach it around the tubes several times to keep it out of the way. This finishes mounting the cables, remote, and camera to the physical structure - with strain reliefs at each point.

Connect HDMI to LCD

Now we're going to connect the HDMI cable coming down from the camera to the LCD.

There are two types of LCDs. The one shown is the upgraded option which includes HDMI Loop-Thru (in and out). This gives you two HDMI-ins, and one back out.

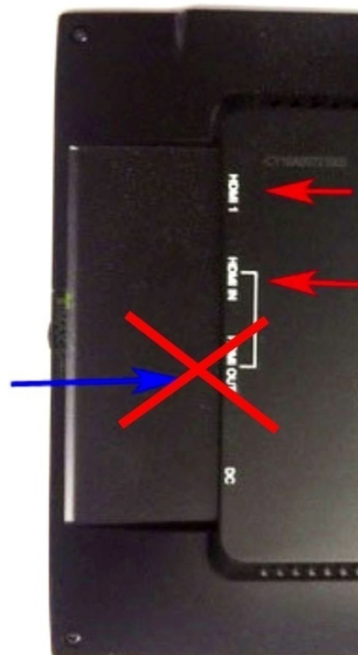
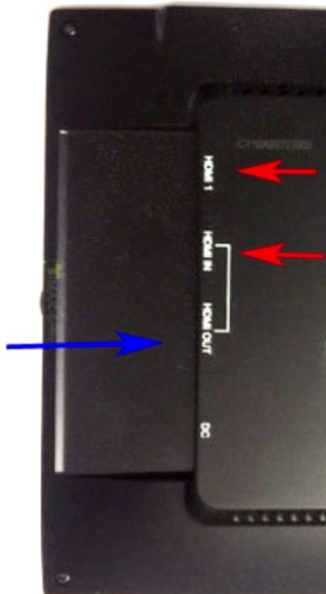
If you have the default screen, it will have two HDMI-in ports only (nothing back out).



See the back of the two different LCDs below.

- LCD with HDMI Loop-Thru *(Upgrade)
2 ports HDMI-in (red). 1 HDMI-out (blue)

- Default LCD
2 ports HDMI-in only (red)



Take your standard sized HDMI cable and connect it to the top port (HDMI1) for video signal. Make sure the LCD is on the correct channel (HDMI 1, HDMI 2, etc) to display the video signal.



Camera Battery

There is an external USB power pack battery that you will need to mount to the tower and connect to the camera. This is what allows you to film for 5-6 hours. If you do not mount this battery you'll be drawing power from the small battery inside of the camera. That battery will die within 30-45 mins max, so you need to connect the external option to film for an extended time.



There are two options for how to mount the battery.

(Option 1) Mount Battery Under Camera Plate



For this method you will take one of the brass screws as you did with the strain relief plate, and mount the camera battery with the reverse approach: battery will hang down under the camera plate, and the brass screw will connect from the top.

Mount with the USB ports facing back towards you to connect.

Find the female to male USB adapter cable (see right). This runs power from the battery into the camera.





Now locate the small USB cable that is inside of the hand-strap for the camera. This is where you will connect the adapter cable.

Connect the female end of the adapter to the USB cable coming out of the camera.

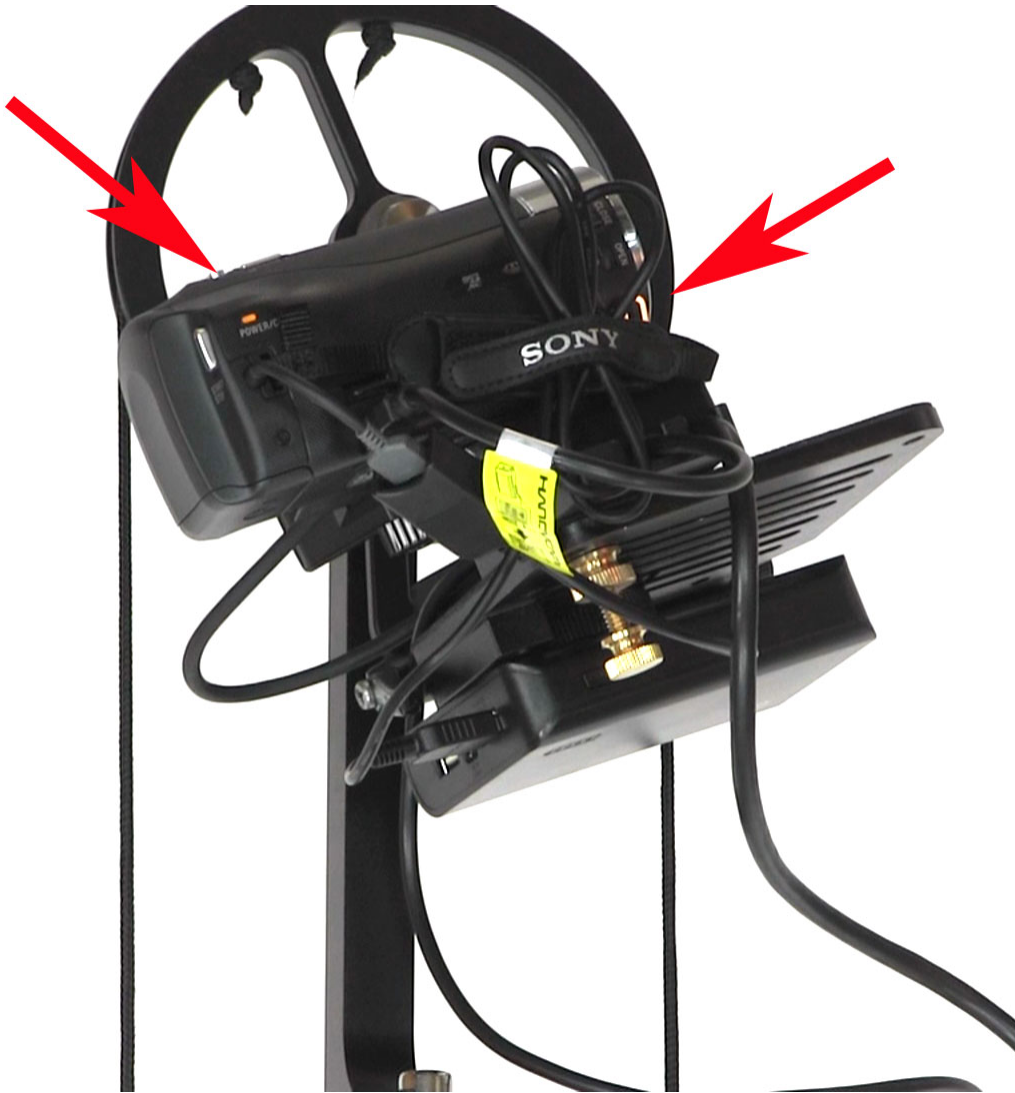




Then take the male end of the USB adapter and plug it into the USB power pack battery.

After you have the cable connected on both ends, you're going to have a lot of extra slack. Take the hand strap in the camera and open up the velcro.

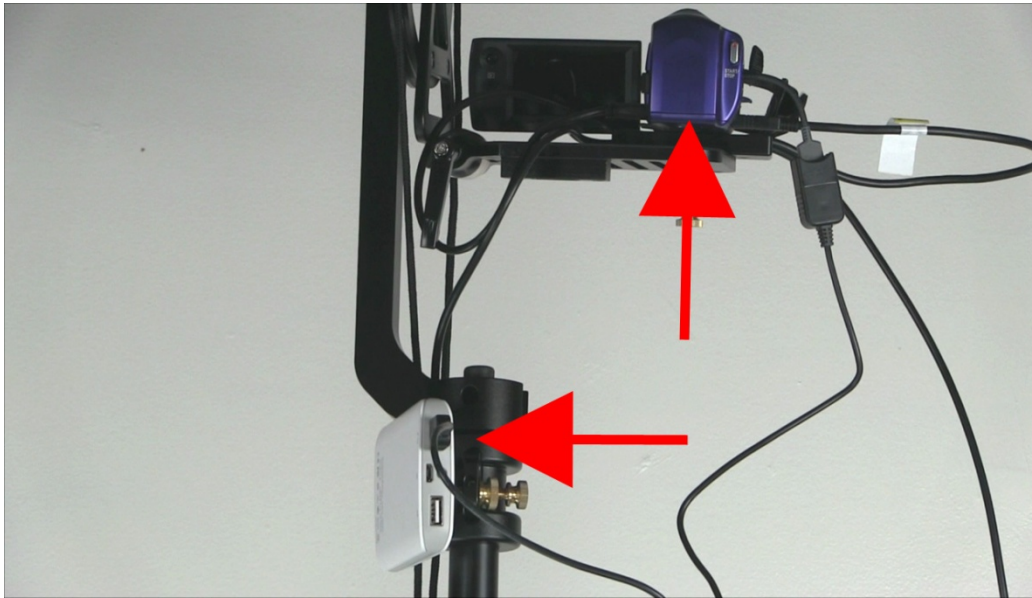




Then bind of the excess cable length of the USB adapter, and bind it inside of the camera hand-strap. This keep the cable clean and out of the way so it won't catch on anything during operation.

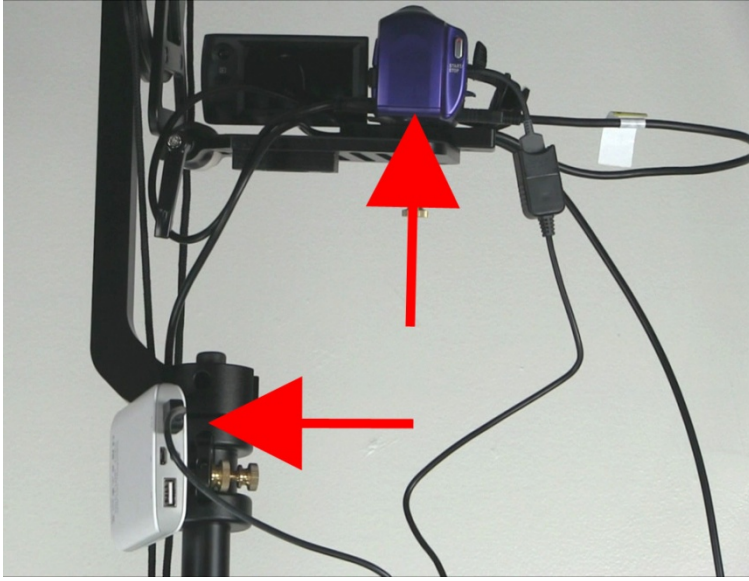
***Proper cable management is one of the most important parts of owning and operating a Hi-Pod system.** We've done a lot of work to create strain reliefs, and to make them easy to apply to the unit during setup. Use them. If you ever change cables (for any reason) you must reapply through the included strain relief plates. Otherwise you will damage your cables quickly. Be careful with how you treat the cables before, during, and after a filming session. It makes all the difference between a functional or non-functional system on game day.

(Option 2) Mount Battery To Hi-Pod Tubes



Find the USB power pack (exact style may vary but setup will remain the same), 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**

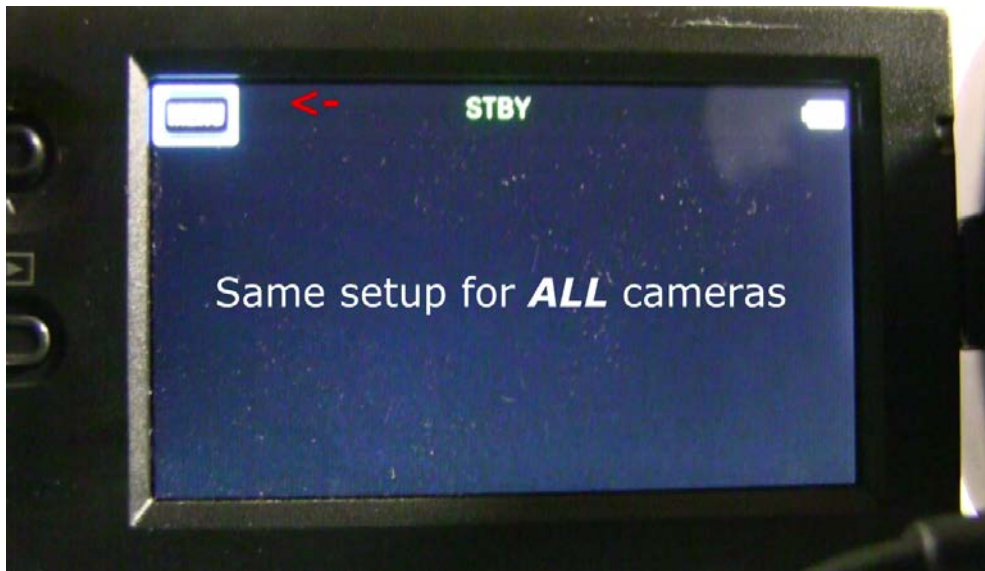


*If you mount the battery to the tubes of the Hi-Pod you will have the battery in a position where it doesn't move with the head. You'll need to be careful to organize the cables so they don't yank or tug at any point. Unlike the first method (mounting battery to the head where the battery moves with the camera), this is one more variable you'll need to be aware of to make sure the cables remain in working order.

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:



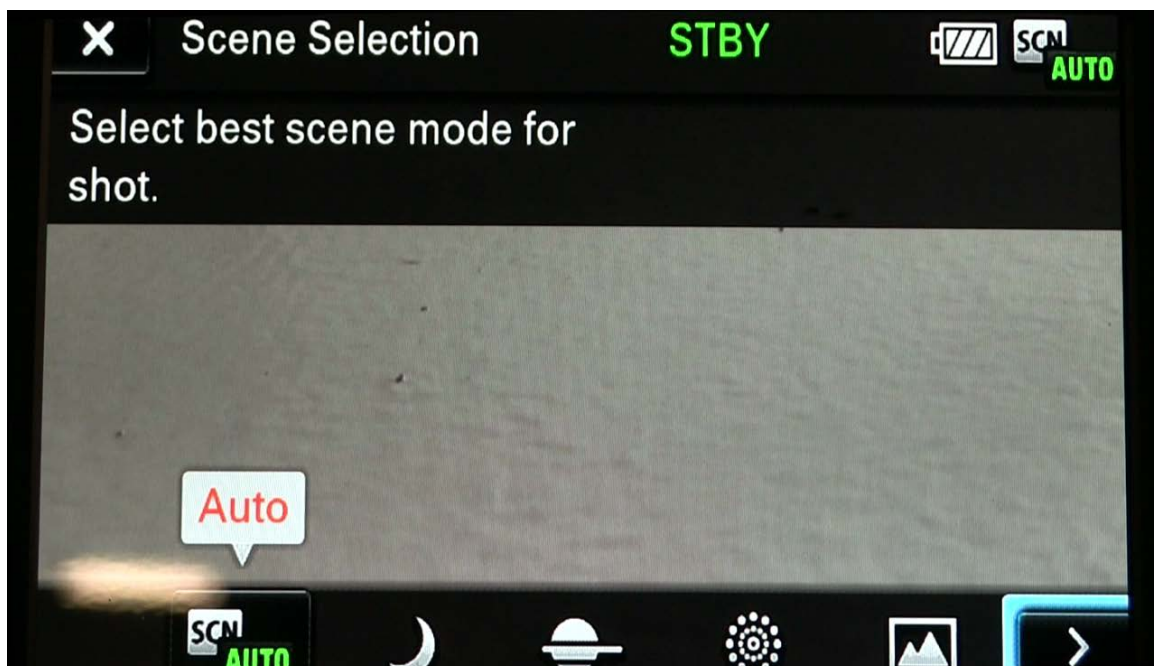
- Select '**Camera/Mic**'



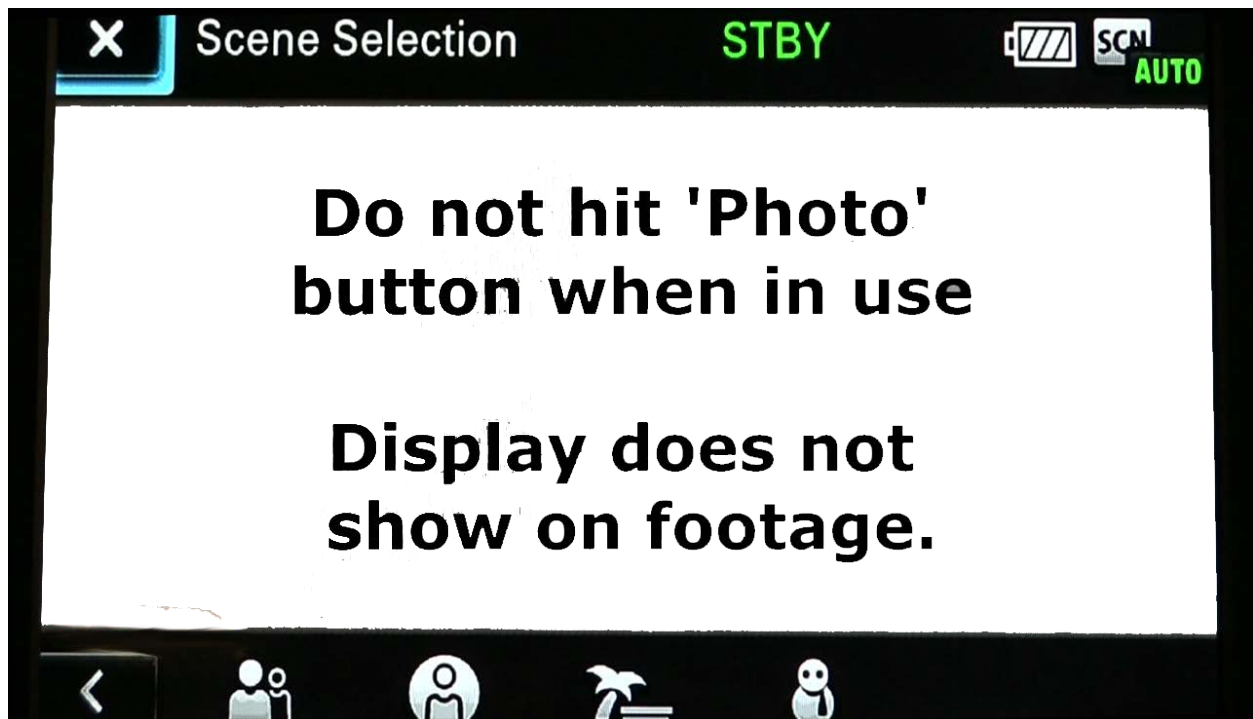
- Scroll down until you find 'Scene Selection' and click on it



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.

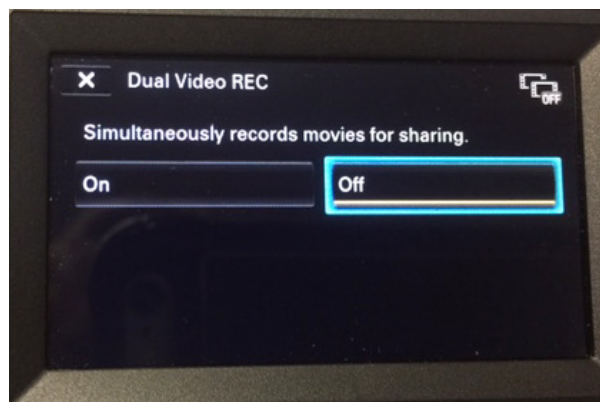
Camera Settings Continued: Dual Video REC

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**'



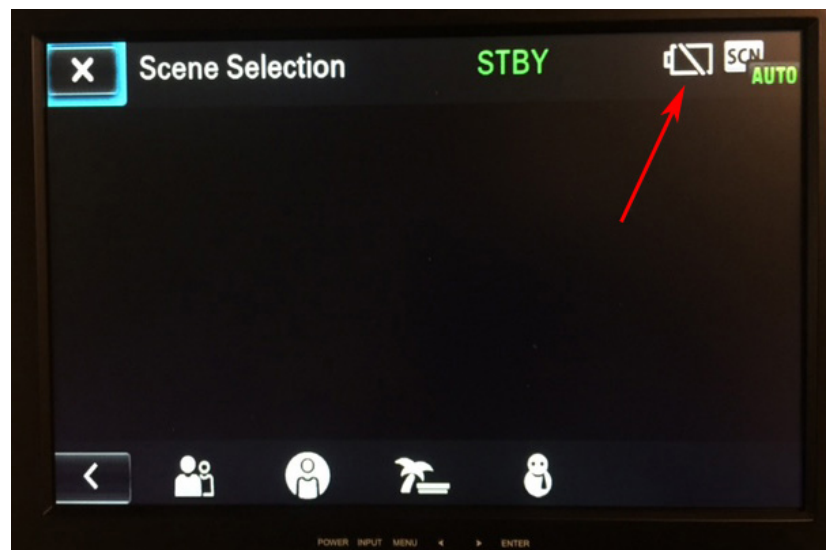
Camera Settings Continued: Confirming Camera Battery



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.

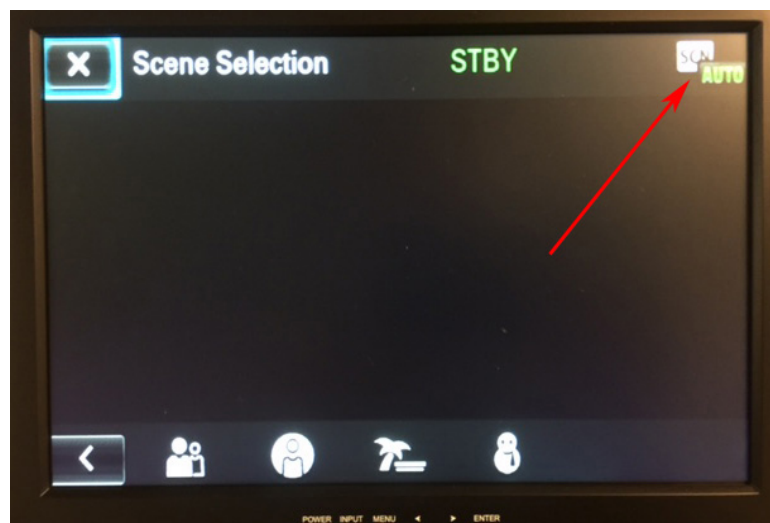


Click the button on the side of the battery to turn it on.

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.

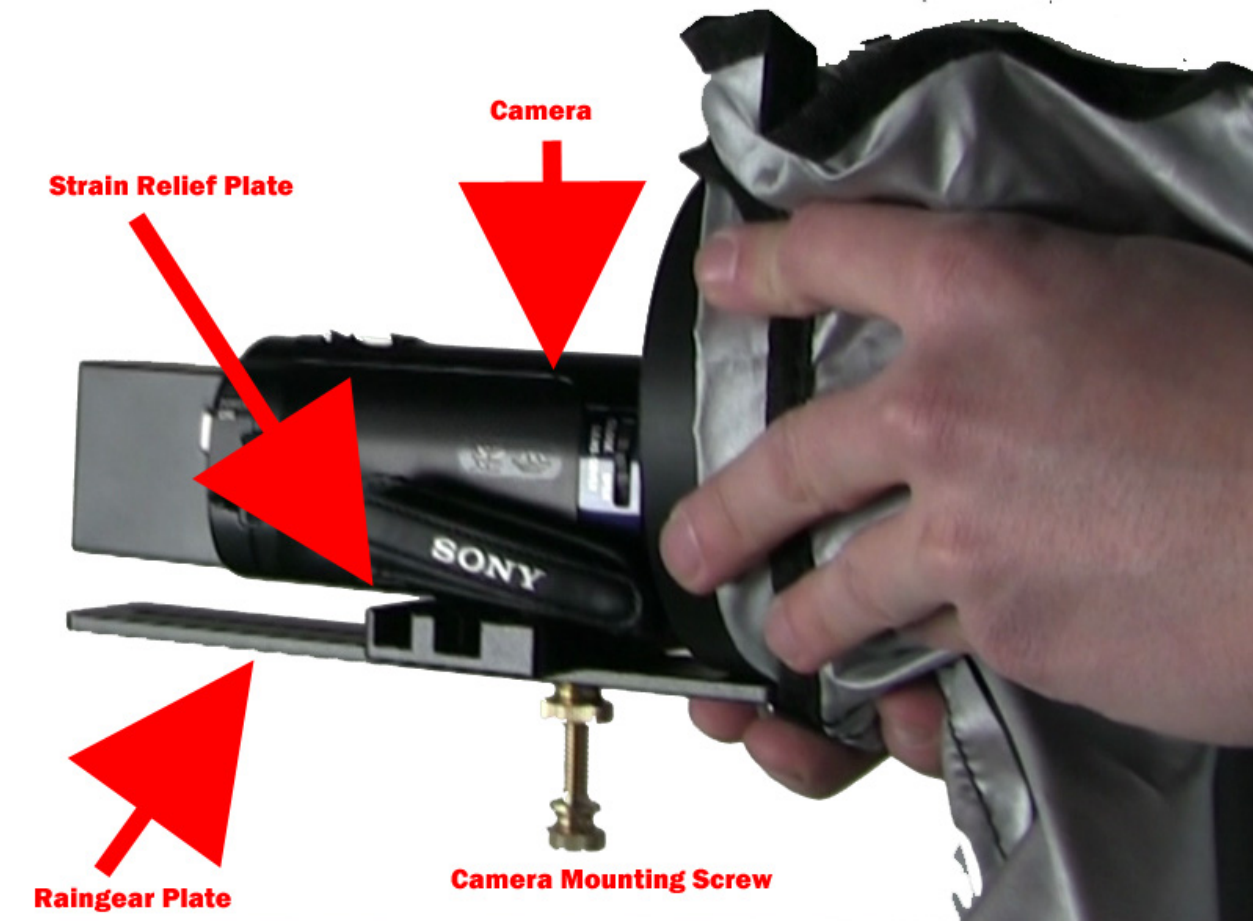


Raingear

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

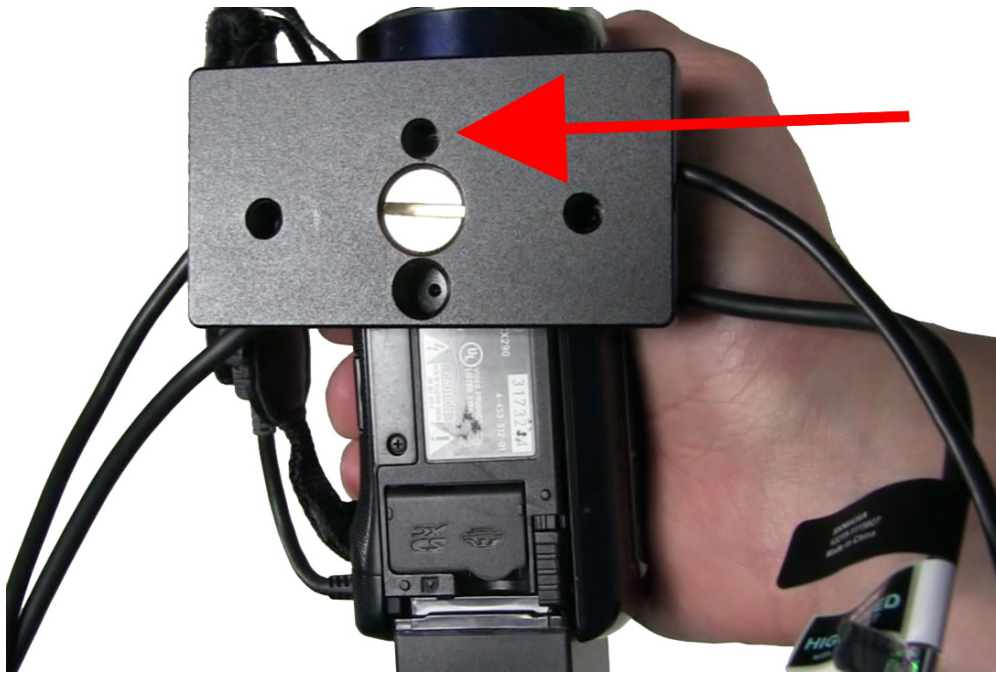
- Camera
- LCD
- Remote

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!***

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



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.



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 silver ring. The legs will fold in.



Setup Complete

For more information, watch

- [LX Series Video Manual](#)

or

<http://hipod.com>

For help call us at:

818-982-2601

9am - 5pm Pacific, M-F