

HI-POD *Super*-Lite Setup Manual





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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)

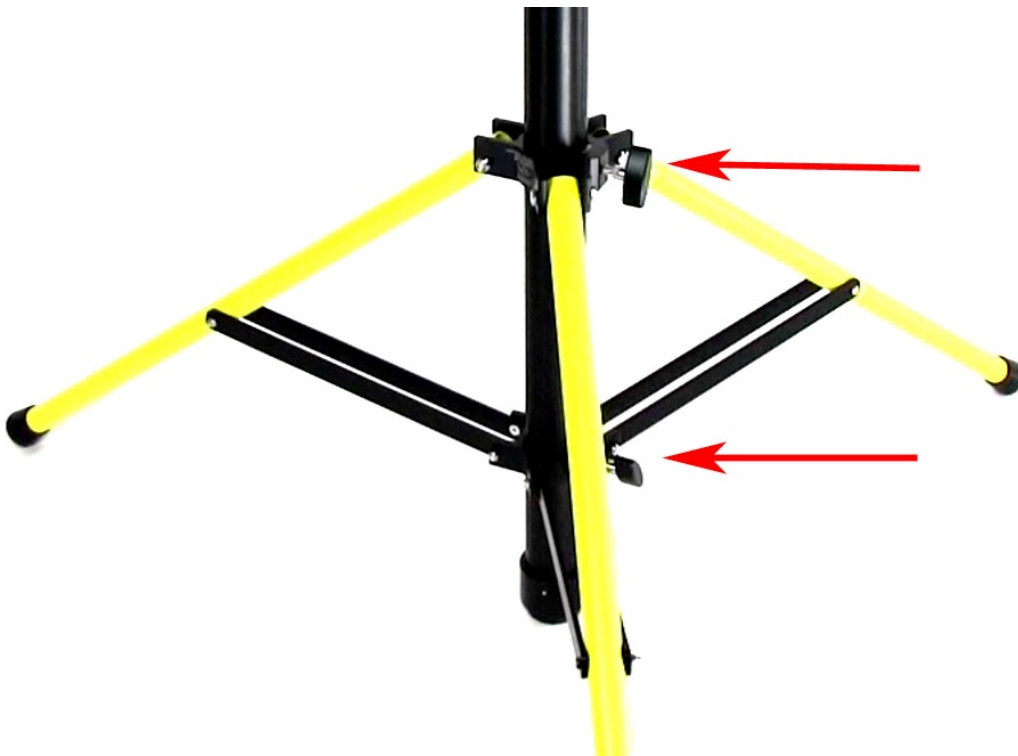
Take Tower Out Of Bag



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!**

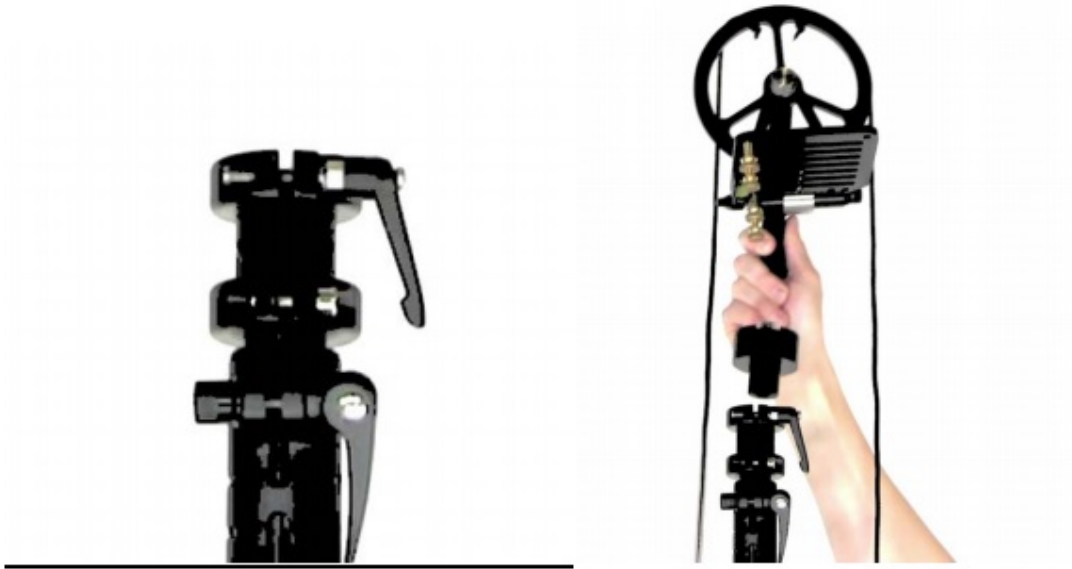
NEVER WALK AWAY FROM AN ELEVATED TOWER. NEVER.

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. Use the mounting spud on the bottom of the rounded head to insert and connect.



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



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 handle has a 'wheel' with nylon rope coming out of it from a pre-loaded spring mechanism. This allows for more accurate control and also the ability to add custom amounts of drag by applying the black knob (lock) fully, partially, or not at all.

The remote for this handle is installed in the same way. See below.



This handle has the black knob on the left. It can be completely locked / open, or partially set to add custom drag to the motion.



You'll also find a brass screw on top. If tightened this screw prevents the rope that's attached to a carabineer from pulling out of the black cylinder. If unlocked you can pull the rope out. This rope is what you'll use to connect the handle to the head at the top of the tower.



When using the handle you'll see another rope coming down from the head, which you'll link together.



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).

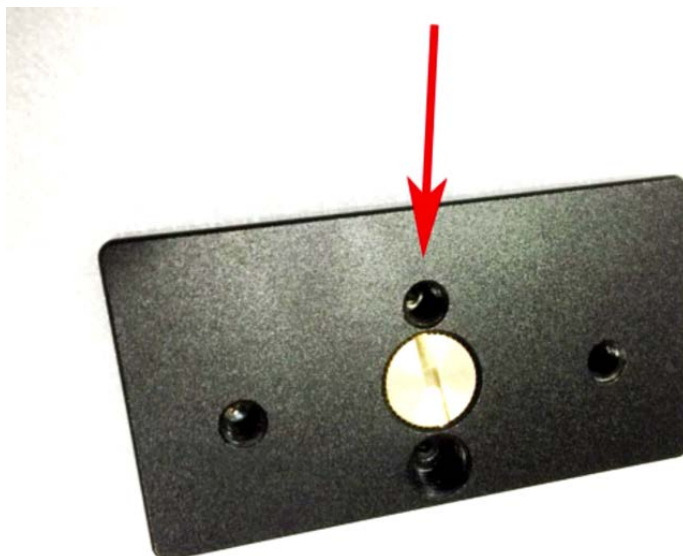


- **Strain Relief Plate w/ Quick Release**



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.

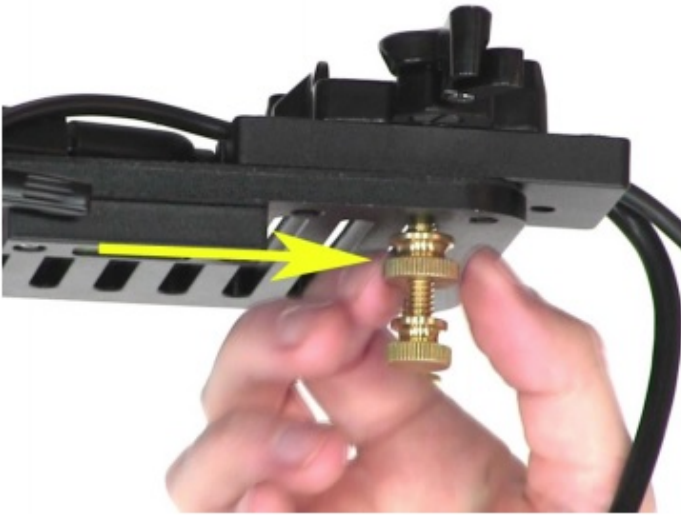




See one of the brass screws inserted to the left.

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.





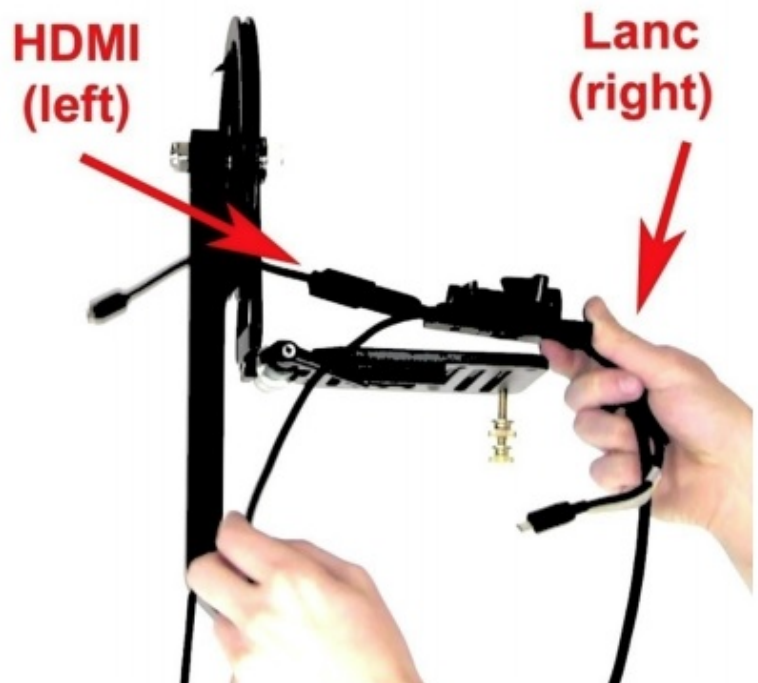
Then there is a secondary screw (see left) which comes up after the main screw is inserted which tightens this mechanism in place. Be aware that there are two parts of these screws, and both must be in place to hold tightly.

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.



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.

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 the 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).



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.

HDMI (left side)



MULTI (right side)



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'.



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.

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.

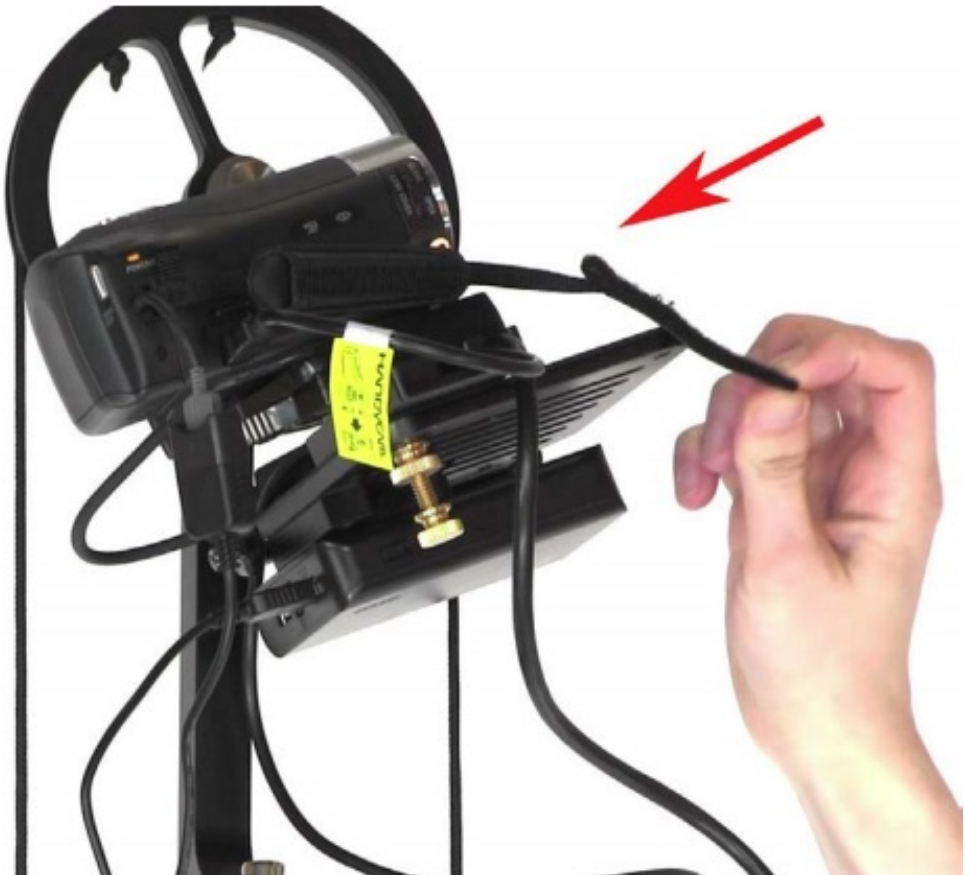
Connect the female end of the adapter to the USB cable coming out of the camera.





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.

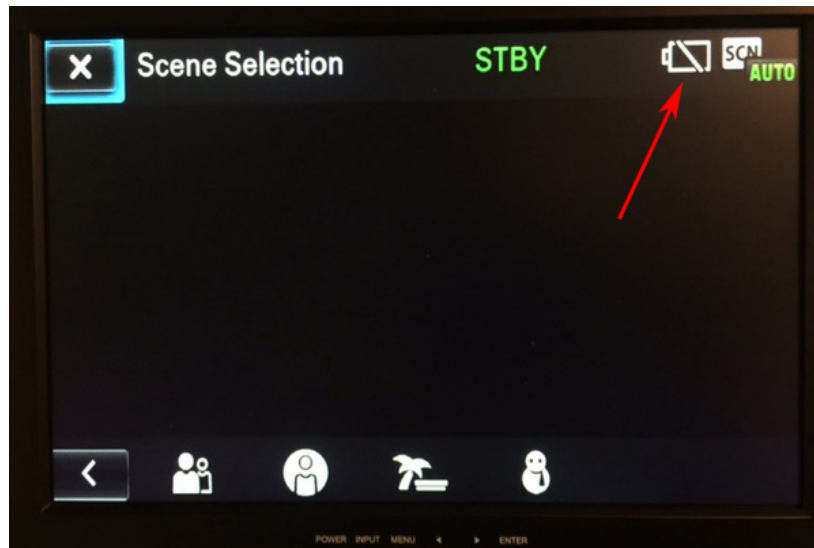




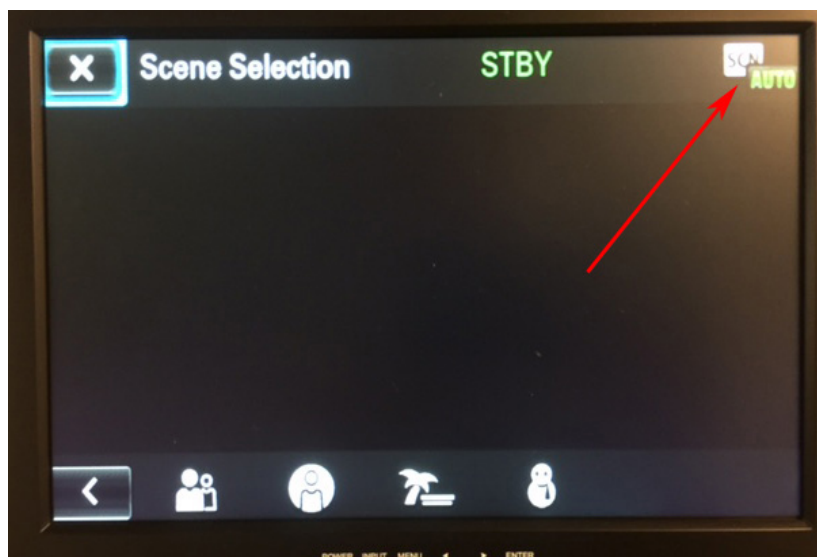
Then bind of the excess cable length of the USB adapter, and bind it inside of the camera hand-strap. This keep the cable clean and out of the way so it won't catch on anything during operation.

***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.

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 adapter cable in your camera bag. It is a USB to USB power adapter which connect the battery to the LCD.



In the first image you'll see the USB side of the cable connected to the battery. In the second image you'll see how it connects (on right side) to the LCD's DC port. See red arrow pointing to DC port.



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.

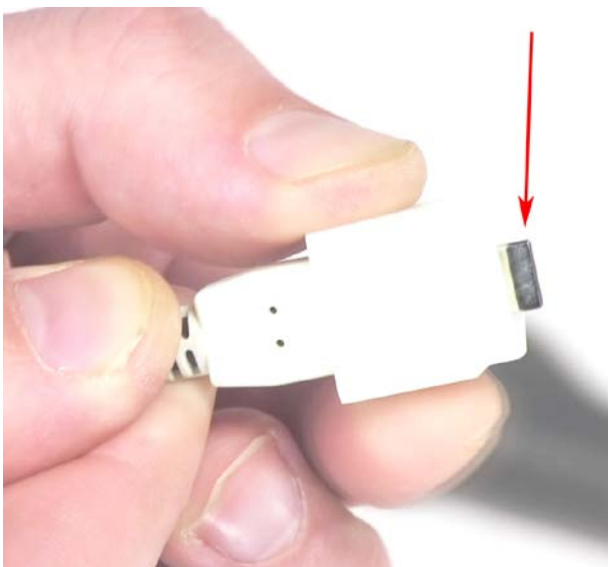


IMPORTANT: The white strain relief is **NOT** permanently attached to the cable head. It can shift backwards or forwards when the system is put away or when it sits in the case. If the white strain relief shifts forward on the cable head, the cable itself will not make a physical connection to the remote,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

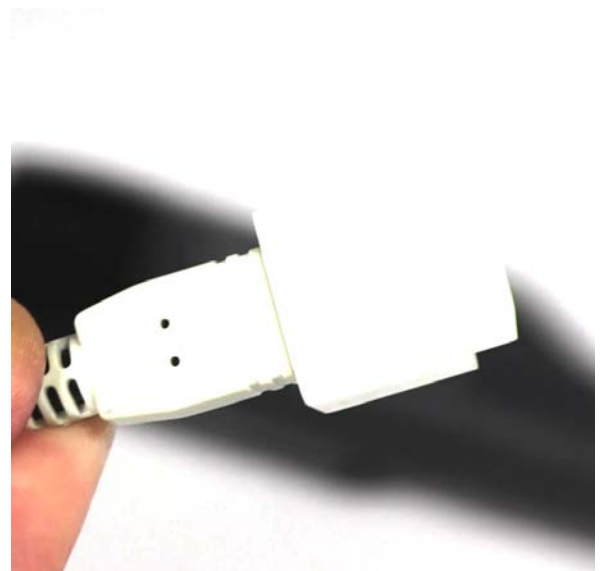
Below in the first image you'll see the silver tip of the remote cable extending past the white strain relief. This is what you want as the strain relief is present, but the metal tip passes it to connect to the remote.

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

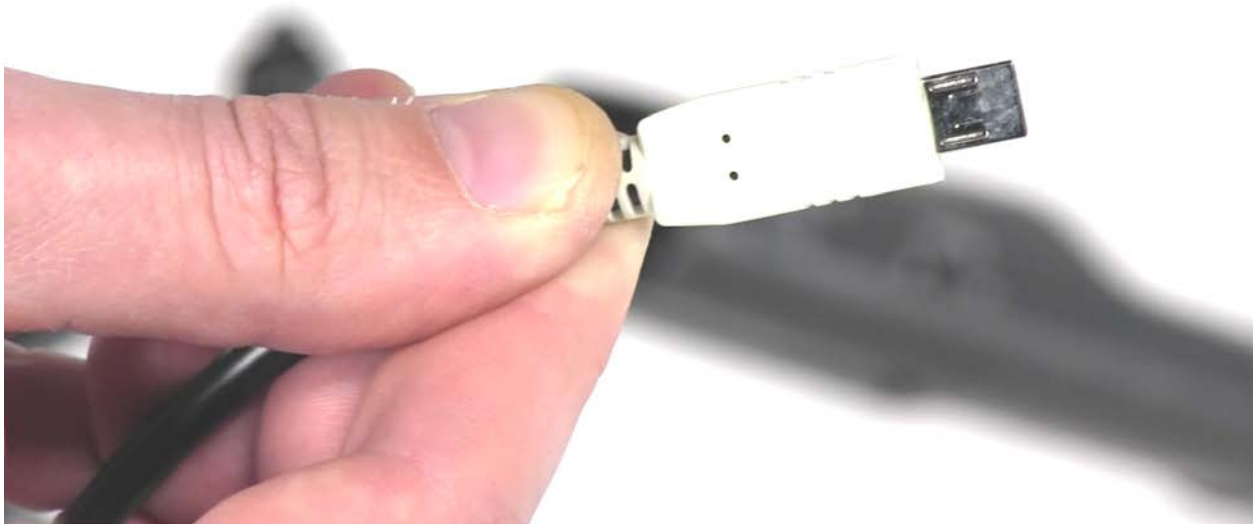


Incorrect



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:



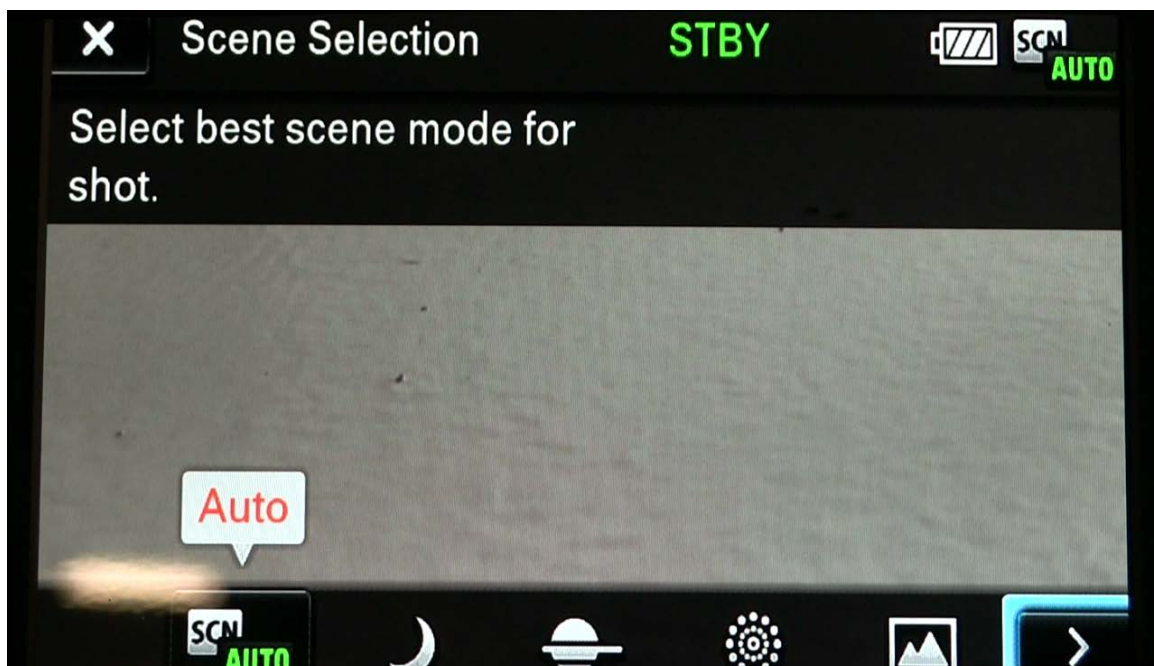
- Select '**Camera/Mic**'



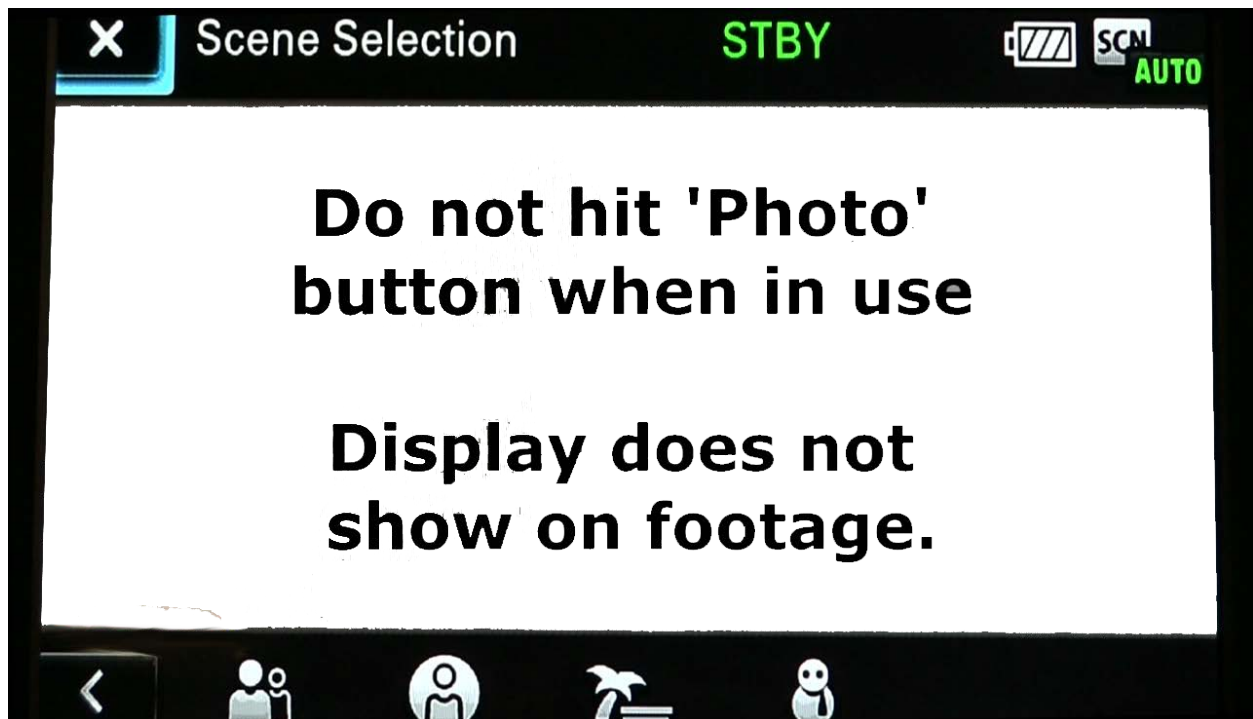
- Scroll down until you find 'Scene Selection' and click on it



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**'

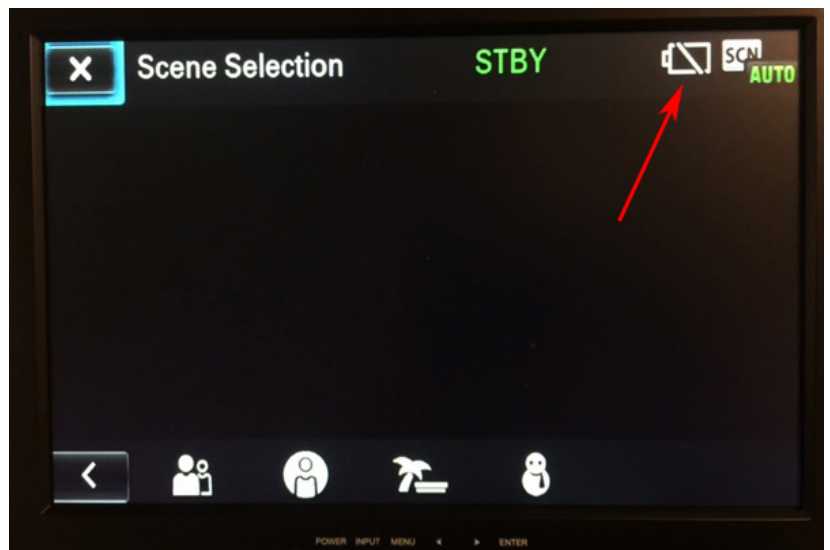


Camera Settings Continued: Confirming Camera Battery

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.

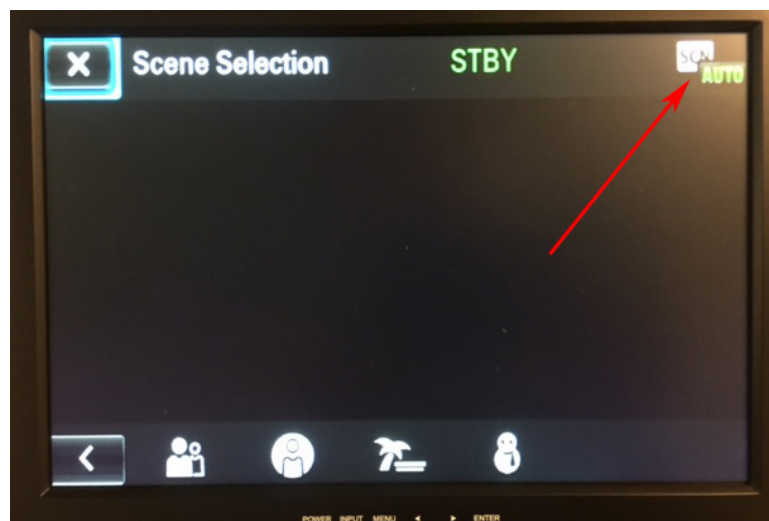


Click the button on the side of the battery to turn it on.

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.

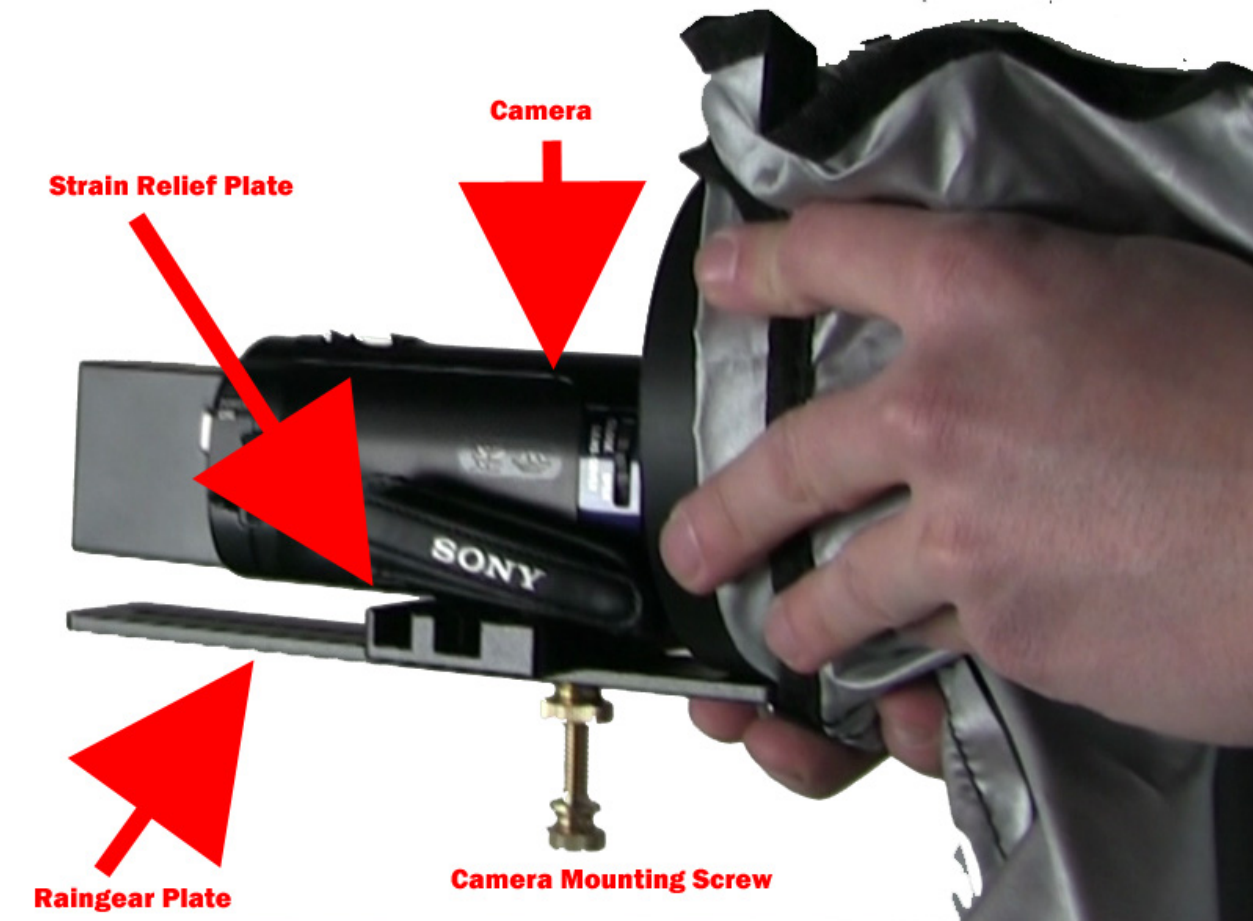


Raingear

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

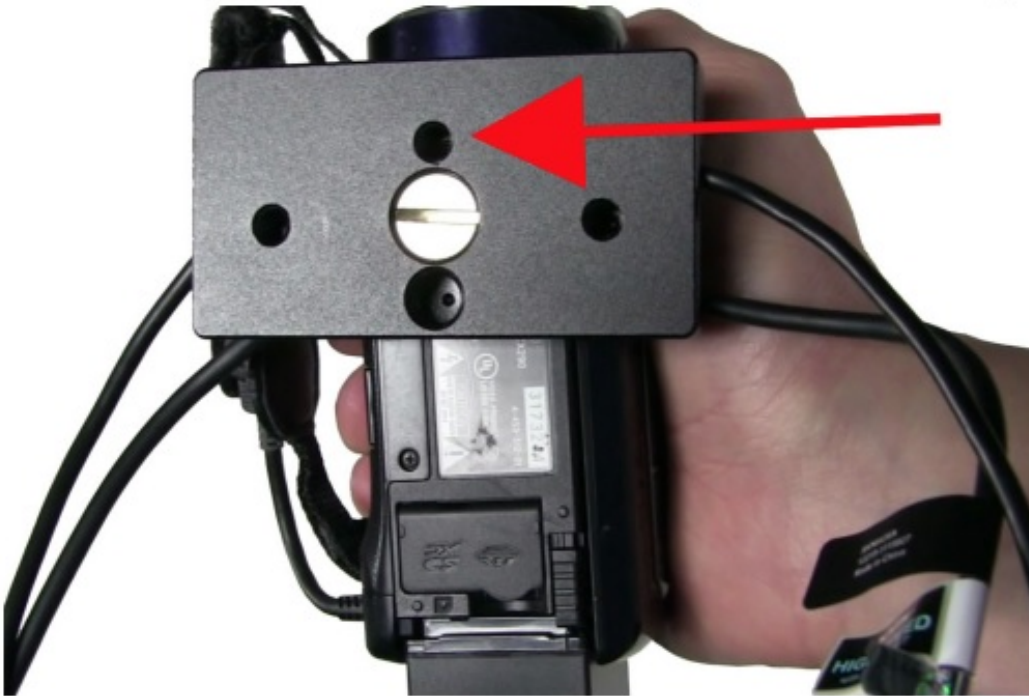
- Camera
- LCD
- Remote

See the camera raingear below:



This image is shown without the 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 top. The legs will fold in.



Setup Complete

For more information, see

<http://www.hipod.com>

(see '*Manuals*' tab).

For help call us at:

818-982-2601

9am - 5pm Pacific, M-F