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# ***HI-POD***

## **X7-Product Line**

## **Manual**



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## Congratulations!

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

**X7** – The newest HI-POD is packed with new features. Not only is it taller (31 feet), but lighter as well- base only 30 lbs.

It is also faster to set-up and safer to use. Each of the tube collars has stainless steel inserts to prevent stripping. These collars lock and unlock with our newly designed cam-locks for easy tightening. Each of the 3 legs has a dual locking system to insure rock-solid stability.

## 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 three cases for the HI-POD; one for the base, one for the accessories, and one for the tubes.



## Parts Of The HI-POD: Inventory Checklist



**HEAD**



**MONITOR BRACKET**



**30 FT VIDEO CABLE**



**LAPTOP PLATE**



**BASE**



**TUBES**



**LCD MONITOR**



**HANDLE**



**BASE PLATE**



**LCD BATTERY**



**LCD SUN VISOR**



**SANDBAGS**



**ALLEN KEY**



**RAINGEAR**



**Quick Release**



**LANC, D-CABLE, REMOTE**



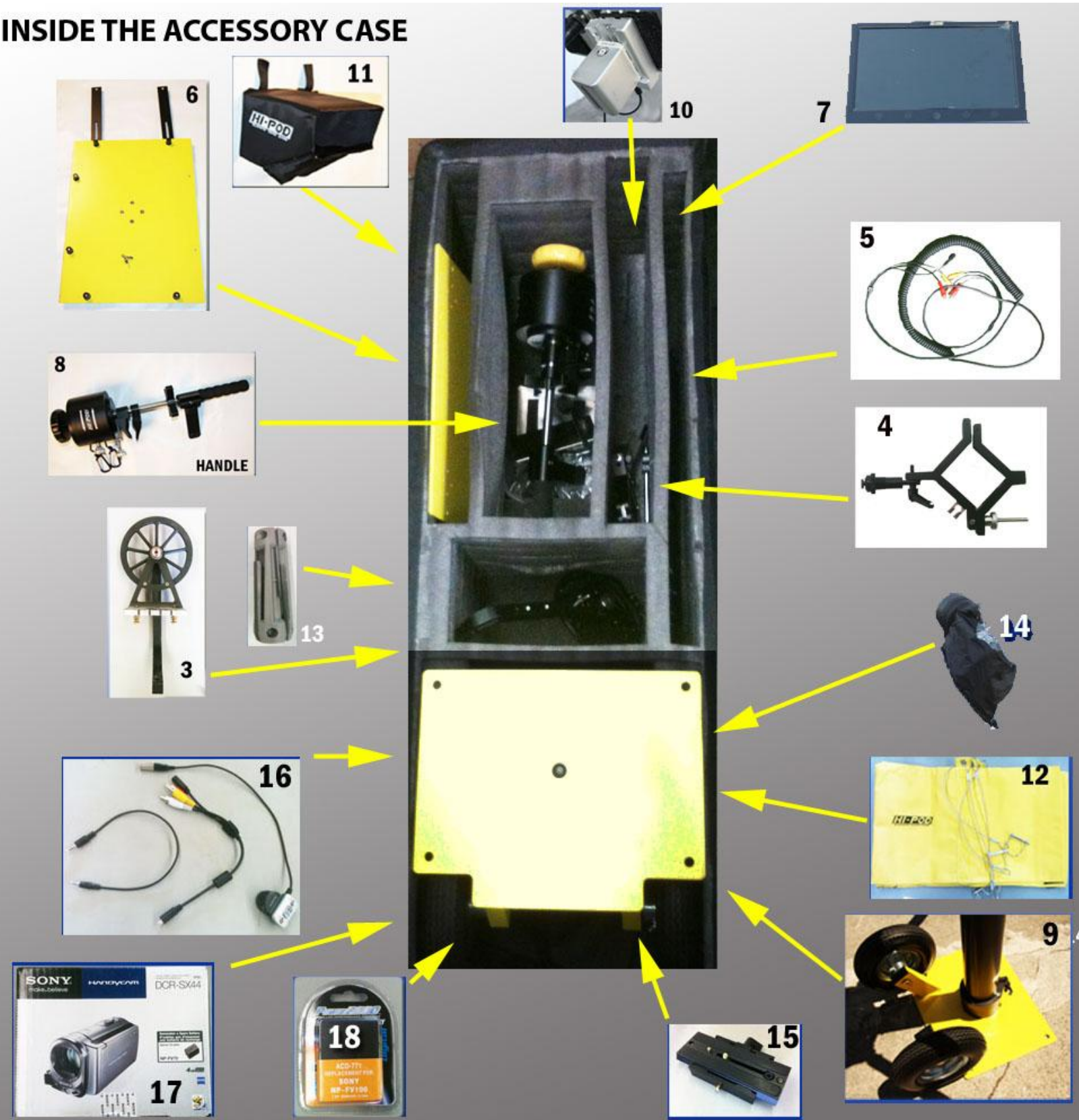
**CAMERA**



**CAMERA BATTERY**



# INSIDE THE ACCESSORY CASE



## LCD & Bracket



HI-POD now includes a 10" 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 X7 has a 10" 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 X7 unit, we have completely reconfigured the battery. The monitor now uses a 7.2v lithium-ion battery that easily snaps onto the back of the unit. While smaller, the new battery can power the monitor for up to 10 hrs without needing to be charged – a 2 hour increase.

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





## LCD Bracket

This LCD bracket is much easier to use. 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.)

There is also a new LCD Bracket 'quick release' on the X7, allowing you to easily get the piece on and off of the Hi-Pod Tubes. With the new system, you can pop the long metal screw out to the side without having to entirely screw the bolt in and out of the piece. This is a nice improvement that can save a couple minutes when setting up or breaking down.

## Laptop Plate

Now, the Laptop Plate is much faster to setup. No tools are required to assemble the Laptop Plate Kit. The plate is an accessory designed to allow a laptop, DVD burner, or similar piece of equipment to rest in a convenient location.



# 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:

1. The handle
2. The camera (cam, battery, cables)
3. The battery
4. The battery charger
5. The LCD
6. The LCD bracket
7. The laptop plate (1 piece & 2 rods)
8. Camera-Head- Plate mechanism (Yoke/Pulley wheel/Tilt Plate)
9. Camera controller
10. Cables (external cable, pigtail, video cable, LCD/battery cable)
11. Rain gear for (camera, battery, LCD, controller)
12. Sun Visor
13. Sandbags
14. The base plate + wheels





With these 3 cases (two pictured left), 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.

Significant changes to the cases can be found between X6 and X7. 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!





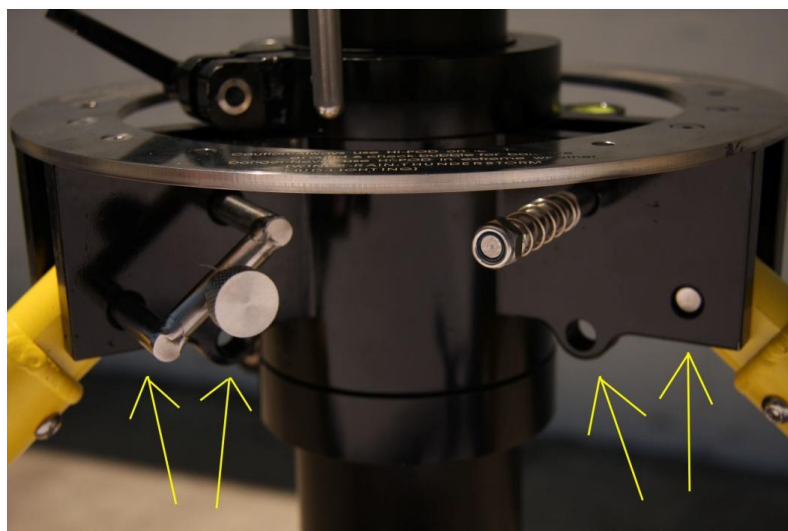
## Step 2: Base Setup



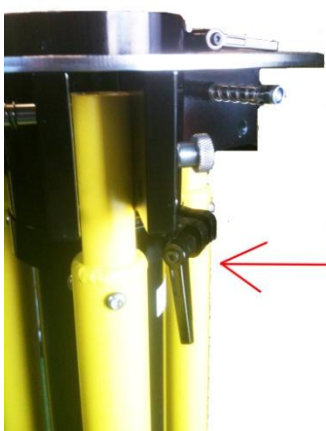
The base has 3 legs with redundant leg locks for added safety. Please examine the location of the pin. There are two holes that the safety pin can occupy. The first pin hole locks the leg closed. This is important when traveling, as it keeps the legs from falling out of place.

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 in the open position, it is time to lock the lower part of the leg. Unlock the twist lock by turning in the direction that is desired.



Release the lock, by unlocking. This allows the inner leg to move freely. After extending the leg, twist the collar to lock. Now it is time to use the redundant safety lock. Loosen the cam on the safety lock, making it easy to move. Push the safety lock up so it makes contact with the twist lock. Once you have done this tighten the safety lock. 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 twist collar fails, this lock will serve as a backup.



## Step 3: Sandbag Support

As an added safety backup, we have included a sandbag for each of the three legs. A simple cotter pin is used to hook each bag to each leg.

Each sandbag has a Velcro opening, allowing the user to fill the bags on location. This makes the bags much lighter for transporting, setting up and storage.

The sandbags can be an important asset in unexpected weather conditions. In moderate amounts of wind, the weight of the sandbags can allow you to continue filming at full elevation, and/or to continue shooting from below the full 31ft height.

Keep these in your accessory case!





## Step 4: 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. (See Step 5)

The HI-POD Core X7 consists of 6 Telescoping tubes. They each are approximately 5 feet long- thus providing 31 feet of height. (Actually they are longer so each of the collars can securely grip each telescoping tube).





## 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 5: Attaching Head to Tubes



Remove the L-shaped yoke/camera plate from the case. This is the only HI-POD piece that will require a tool. (We have included an allen key set)

Now look at the top of the HI-POD. There is a slot cut out of the top spud. This slot is made to accommodate the L-shape of the camera/yoke/plate. Slide the L-shaped yoke/plate into this slot. Notice the opening.

This will accept that large 6mm allen screw. Make sure the L-shape is to the left (as in the picture below). Insert the bolt(that you removed from the top of the tube spud) and tighten. You should use an allen key (metric #6 to be exact) to tighten the yoke to the tubes.

Notice there are holes to accommodate the accessory items to the head.







## Step 6: 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.

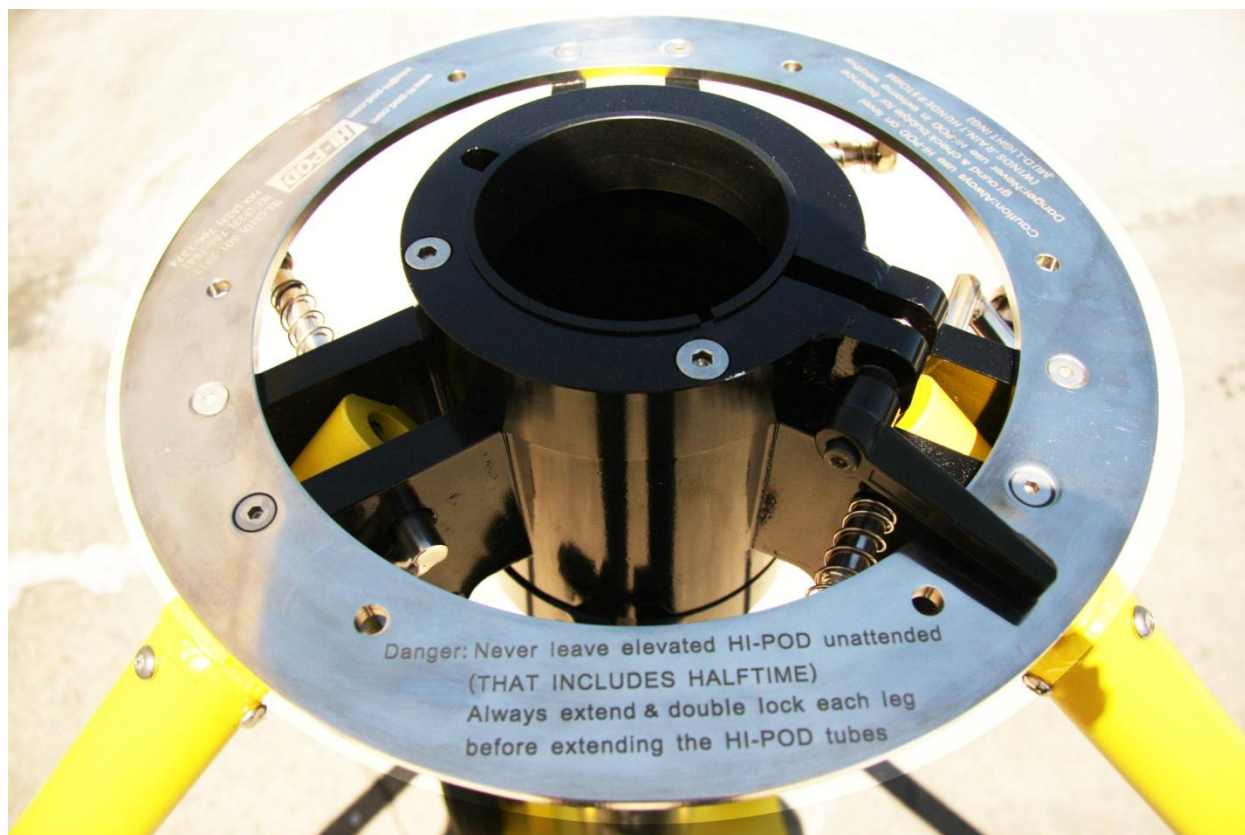
When you reach that height, hold the tube with one hand and close the camlock with the other hand. (Close is the down position) If the tube is still slipping you may have to tighten the camlock. You do this by spinning the camlock. It moves like a screw. On the other side of the collar is a stainless steel insert that grips the camlock shaft. As you keep twisting the camlock squeezes the collar shut, creating a very strong positive-lock. 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.

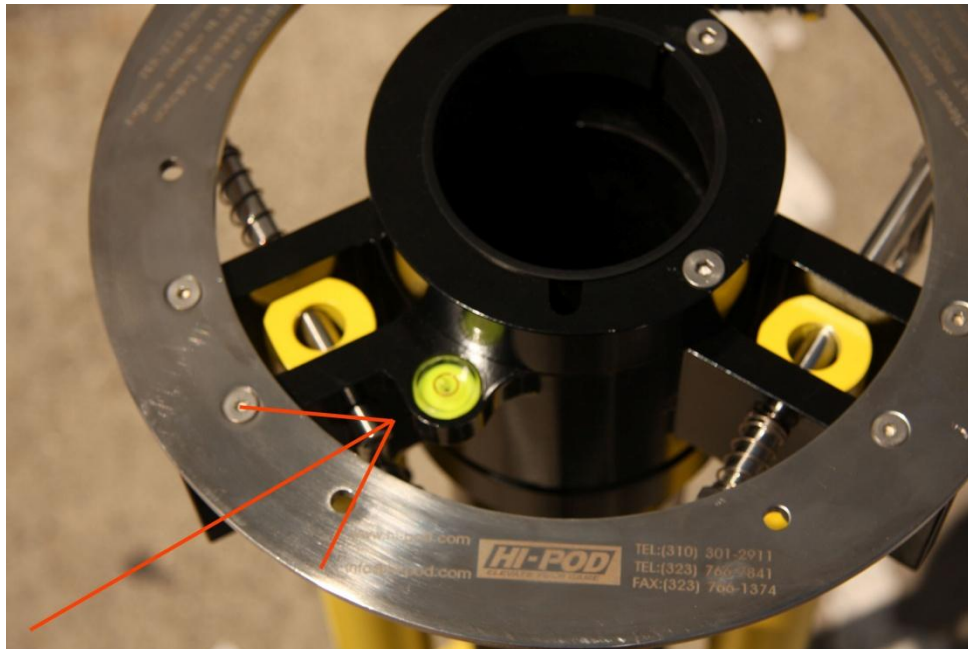


## Safety Warnings



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 it, please 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 lightening, 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.



(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*

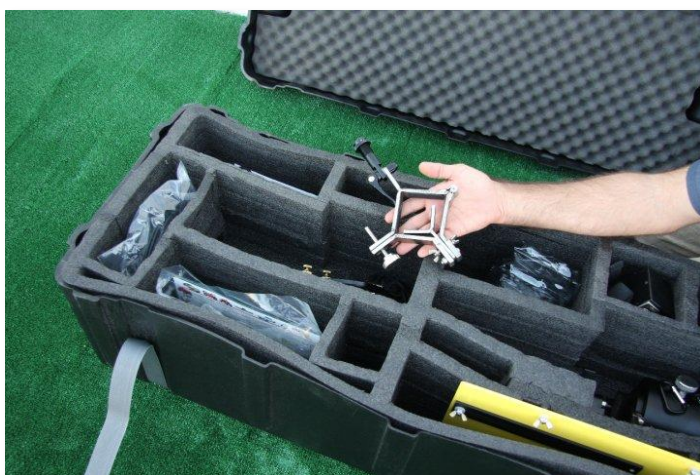
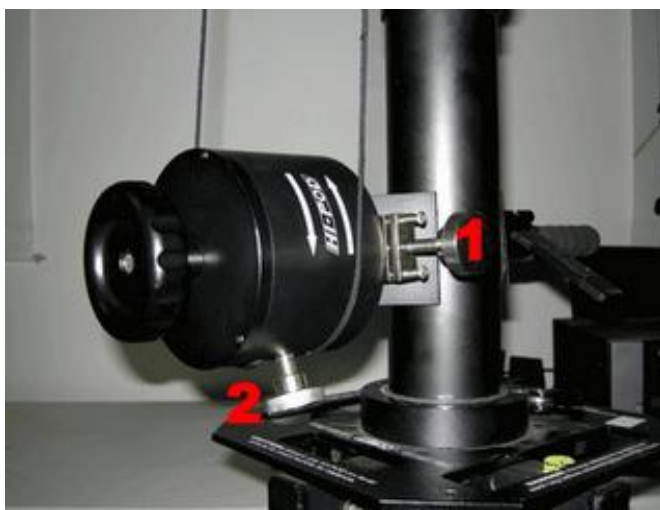
*the camera slips out of position. Typically this screw is not needed when the cameras are small and light.*



## 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)

(HANDS FREE!) 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.

## HI-POD & Controllable Cameras



The HI-POD comes packaged with a Sony hard drive or flashdrive camera; the DCR SX44. (Standard Definition) It may also come with the XR150 for High-Definition.

Sony has simplified the process of controlling these cameras. Instead of a jack for video and a jack lens control, now it is combined into one jack. When you look at the camera the plastic cover for this jack will say "AV/R." If it has this it is very easy to control. The connector looks like the letter "D" –





We include 2 cables : A cable that breaks out into the typical red, yellow, white composite (male) but it also has a black female jack. The second cable is a small male-male black pigtail cable.

Attaching to these cables to rest of HI-POD CABLING:

The top of the long HI-POD cable is female. Connect these to the yellow and red males coming out of the camera. Notice the female black 2.5 stereo jack, and the 3.5 female stereo jack. Use the short male to male pigtail to connect these two females. This is the lens control cabling.



Yellow is video signal 1, Red is video signal 2. The white cable is left unconnected. This is the flow of the signal from the TOP OF THE HI-POD.

## Camera & Camera Plate

- (1) Position the camera on any of the slots; whatever you are comfortable with. Generally position the camera so that the weight is centered. This way the camera will always be level.
- (2) Find the screw to attach the camera to the camera plate. Mount camera on top of plate and position the screw to be inserted from underneath. This will be inserted into the camera screw opening. Once tightened, this process will sandwich the mechanism together.
- (3) Now push the screw from the bottom up through one of the openings in the plate into the camera screw opening. Once you have tightened the screw as far as it will go, then use the secondary thumbscrew knob to press up against the bottom of the camera plate. This action will secure the camera to the plate very tightly. *Notice that camera plate has a rubber surface to prevent the camera from slipping out of position.*

Note: Try and position the camera so it is easy to remove the battery without having to remove the entire unit. This is great when all you want to do replace a dying battery; a great time saver.



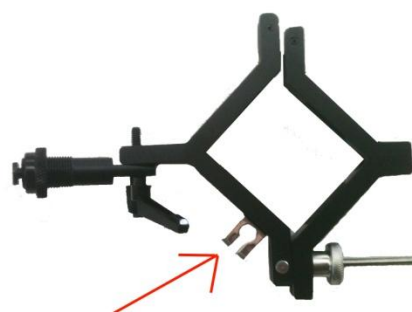
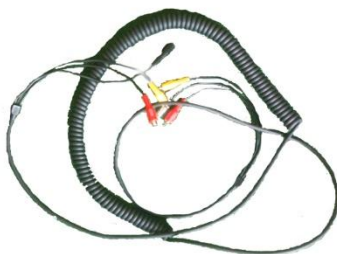
## Alternative Cameras – IR Sensors



If your camera does not have the built in Sony LANC or AV/R jack, you still might be able to control your camera. If your camera has a wireless remote it can be wired into the HI-POD. We can Velcro an IR sensor to the IR receiver of your camera. This is how the camera would receive commands for zooming and recording. Only these “pigtail” cables change, making the HI-POD extremely versatile.

## Securing the HI-POD Cabling

It is important to minimize the strain on the connectors for the camera. There are hooks on both the HI-POD Camera Plate (pictured bottom left) and the HI-POD Monitor Bracket (pictured bottom right) for the 31ft coiled video cable (bottom center) to safely attach itself. This keeps the cord from tugging on the connectors for the camera and also the monitor, ensuring your equipment will last longer.



An additional way to ensure extra security is to attach with the Velcro strips as well as securing to the camera head. **By tying a simple knot around the yoke/head, all the pulling and tugging will be on the knot and not on the camera connections.** Make sure there is plenty of slack after the knot so the camera can move freely without any cable tension. Notice that each of the 6 tubes also has a strip of Velcro. This is to secure the 32 foot cable to the tube. Tie a knot with the cabling around the handle at the HI-POD Base as well.

This also minimizes the cable movement due to wind.



## Camera Lens Control

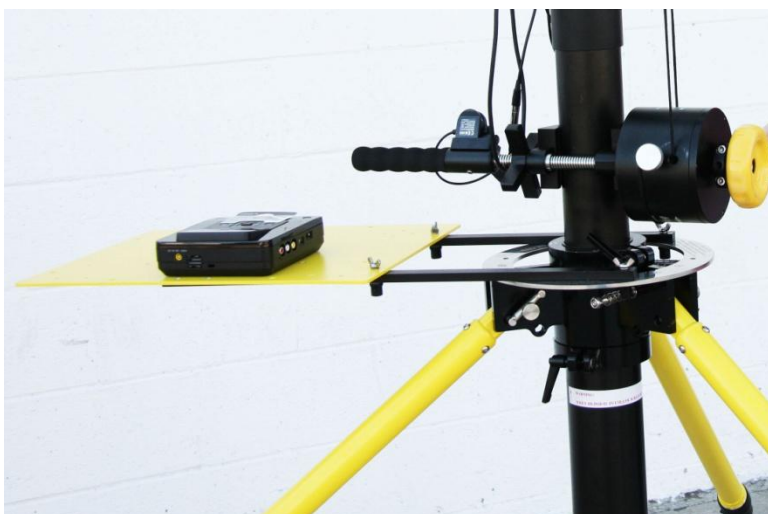


Regardless of which method you use to control your camera, you still must attach your controller to the handle.

- If you use the Sony controller you clip it onto the small metal bridge on the right side of your handle mechanism. If you use a “wired” wireless remote , you Velcro it to the T-bar on the right side of your handle mechanism.

## HI-POD Laptop Plate

The Laptop Plate has been further simplified in the X7 release. There is no longer a bracket under the plate, but instead a set of two reinforced rods that stretch across the top of the Hi-Pod Base Plate. These act as the stabilizer.





Simply secure the rods to the stainless steel plate with the included winged screws, and attach the rods to the designated spots on the plate. Easy.



## Sony Camera Menu Functions



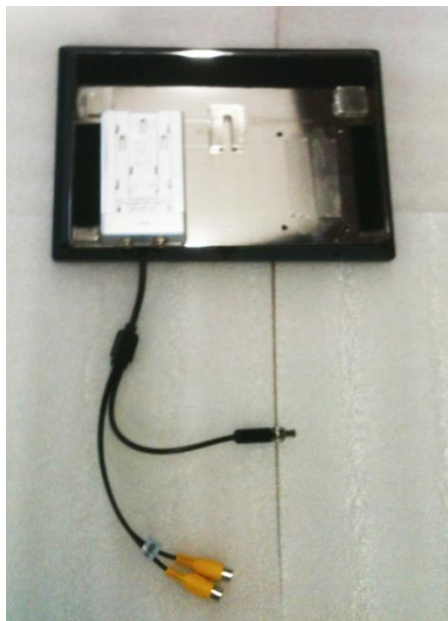
Two things that you must be aware of in the function menu of the Sony cameras. Text on Video out, and Power Save.

When you are watching the 10inch Hi-pod Screen, you also want to know if you are recording or not, how much tape you have left and how much battery you have left. The location of menu items change per camera. Search for DISPLAY. Choose text/video out.

Next is the POWER SAVE or AUTO SHUT OFF. This is in the exact same area. Make sure you set it to NEVER. If you do not, then your camera will power down every 5 minutes of inactivity.



## LCD & Video Signal Set-Up



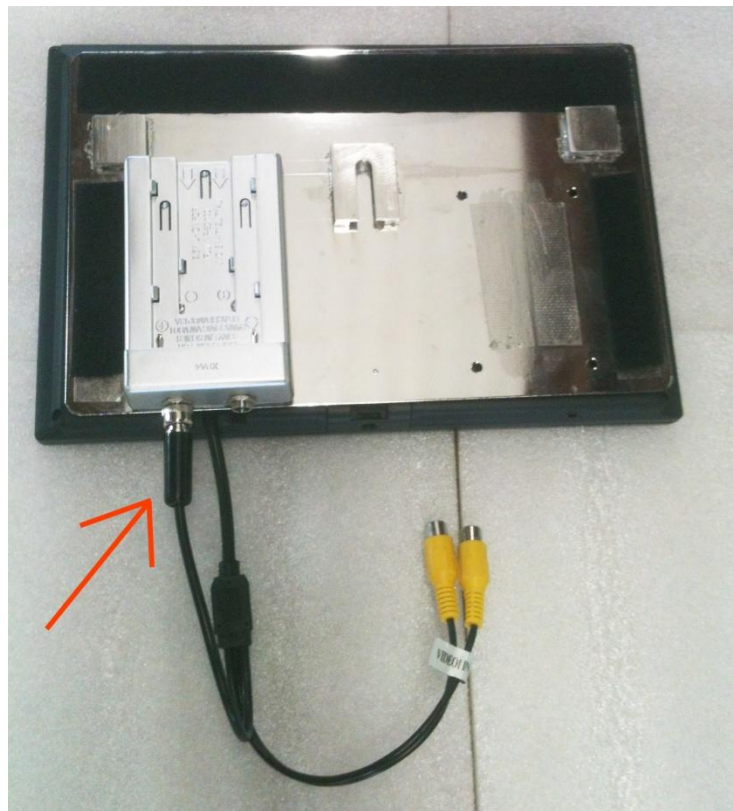
Your LCD will arrive ready for hook-up (pictured left). Notice that you have 5 different parts that are merged into this LCD kit.

- 1 – LCD Monitor
- 2 – LCD Plate (metal mounting plate)
- 3 – Battery Plate
- 4 – 2 Video Cords (yellow/female)
- 5 – LCD Power Receptacle (single black cord)

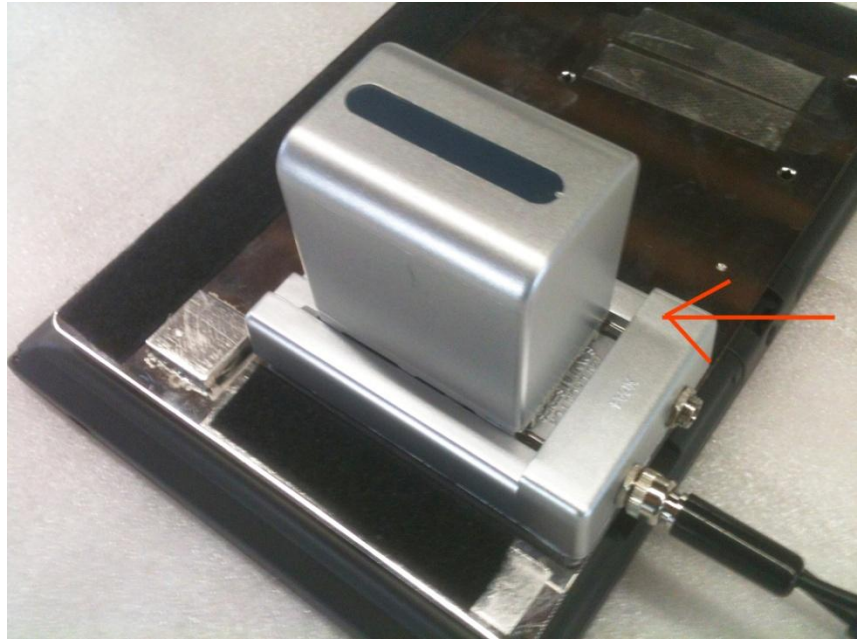
The plate is attached to the LCD either by Velcro, or it may be screwed directly into the plate.

The first thing you will need to do is screw the black power cord that is coming out of the LCD into the battery plate. You will attach the cord on the **LEFT** port that is open beneath the plate. Screw the lightener until the connection feels solid

The right port under the battery plate will not be used.



Next, take the 7.2v battery and place it in the battery plate as shown. Before clicking the battery into the plate, make sure the open end of the bottom part of the battery is lined up with the pins on the plate. If these are not lined up correctly you can bend/damage the battery plate pins making obtaining a connection difficult if not impossible.



Here is a better view of the battery plate. Notice the red arrow pointing out the left pin – there is also one on the right.



Once satisfied, secure the connection by sliding the battery down onto the pins. You should notice a tight fit which locks the battery in place.

You can power your monitor on at this point.

To finalize your monitor set-up, connect the two male cords coming down from the long 31 ft video cable to the two open females coming out of the LCD.

You will attach the red and yellow cords from the long cable to either of the yellow cords coming out of the monitor. This provides you with two video feeds.





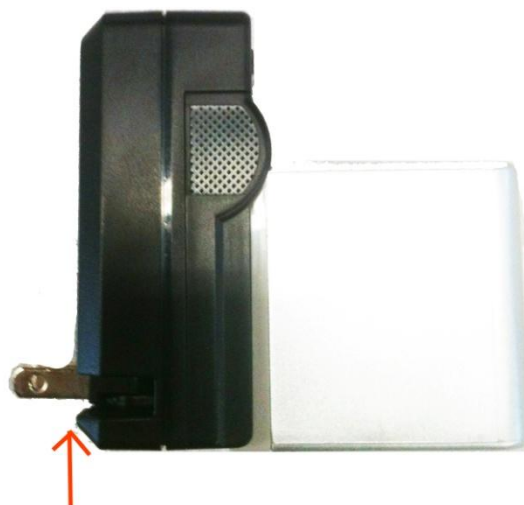
## Charging the LCD Battery



There is a new LCD Battery charger for the X7. Again, this has been further simplified.

The connection is very similar to that of the LCD Monitor. Notice there are two pins on the black charger unit. (above) Line up the battery with these pins, and slide to lock.

On the charger itself, (right) flip the two metal prongs out from within the unit so you can plug it into the wall. (International clients: Make sure you have the proper conversion accessories.)





**For more information, please contact HI-POD at:**



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