

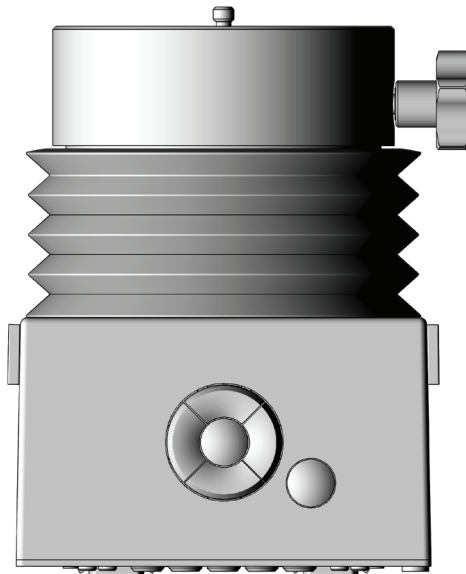


ACADALUS

## CPS-h1

### Self-Leveling Camera Head

#### Owner's Manual



**koch**  
Photography

# IMPORTANT SAFETY INSTRUCTIONS

## Save these instructions

### Warning

To reduce fire or shock hazard, do not expose the unit to rain or moisture.

### Caution

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

### DANGER:

To reduce the risk of fire or electric shock, carefully follow these instructions.

If the shape of the plug does not fit the mains power outlet, use an attachment plug adaptor of the proper configuration for the power outlet.

## Disposal of the Acadalus CPS H1 Camera Head

At the end of its useful life the Acadalus CPS H1 Camera Head and its accessories should be handed over to a recycling center for electronic equipment to be properly recycled. They do not belong into regular household trash to avoid potential negative consequences for the environment and human health. For more detailed information about recycling of this product, please contact your local government, household waste disposal service or the place you purchased the product from.



## CONTENTS

Important safety instructions.....	2
Disposal of the Acadulus CPS H1 Camera Head	
Owner's Record .....	3
Getting Started .....	4
AC Adaptor	
Cables	
$\frac{3}{8}$ " to $\frac{1}{4}$ " Reducing Bushing	
Acadulus CPS H1 Camera Head	
Operating instructions.....	6
Attaching the battery pack to the CPS H1 Camera Head	
Connecting the AC Adaptor to the CPS H1 Camera Head	
Using the CPS H1 camera head abroad .....	7
Attaching the CPS H1 Camera Head to the tripod or camera stand	
Securing a device on top of the CPS H1 Camera Head	
Initializing the rotational position	
Leveling the Camera.....	8
Extra steps for long exposures and situations that need high stability	
Manual adjustments	
Turning the CPS H1 Camera Head off .....	9
Recalibrating the camera head	
Troubleshooting.....	10

## OWNER'S RECORD

The model and serial numbers are located on the bottom. Record the serial number in the space provided below.

Serial # \_\_\_\_\_

Refer to these numbers whenever you call upon Koch Photography or a dealer regarding this product.

# GETTING STARTED

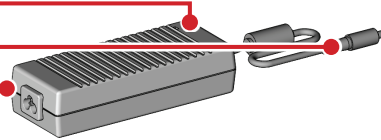
Get to know the components of your CPS-H1 system.

## AC Adaptor *CPS-PS-001*

Indicator LED

Charger cable

Socket for power cable



## Cables



AC Adapter power cord

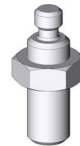
## **3/8" to 1/4"** Reducing Bushing

*CPS-RB-038-018*

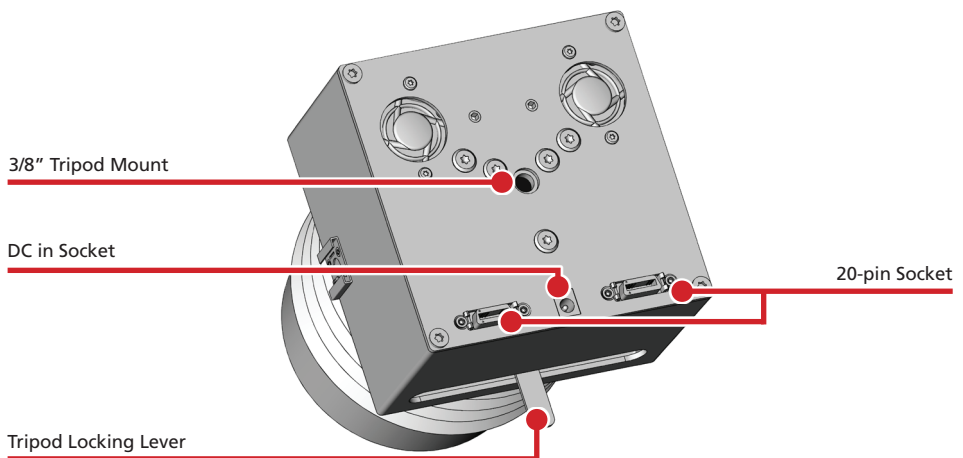
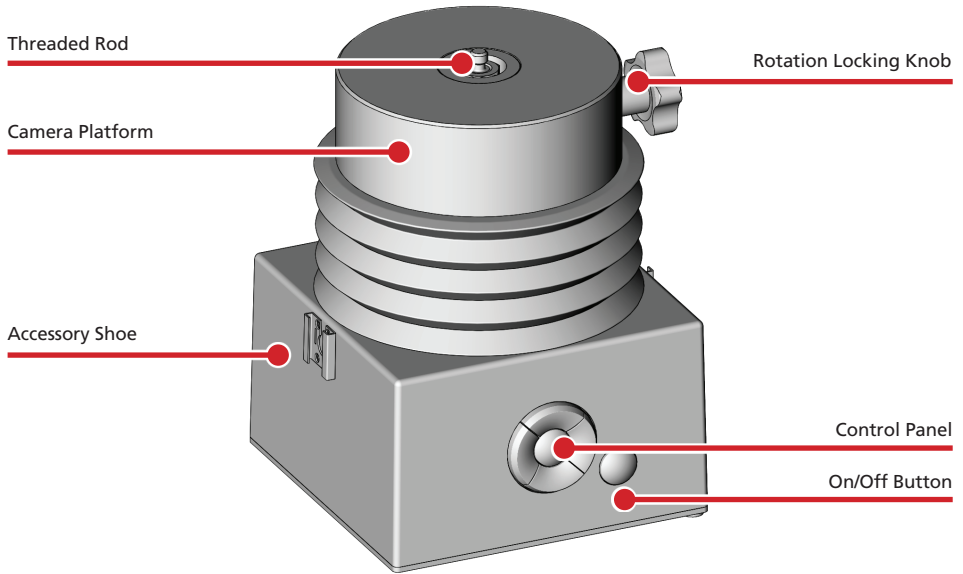


## **3/8" to 1/4"** Camera Adapter Screw

*ROD-AD-3/8-1/4*



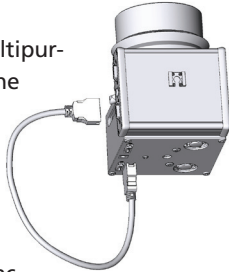
## Acadulus CPS H1 Camera Head



# OPERATING INSTRUCTIONS

## Attaching accessories to the CPS H1 Camera Head

1. Slide an accessory such as a battery pack in the left accessory shoe, or one such as the control unit into the right accessory shoe.
2. Connect the Multipurpose Cable to one of the 20-pin sockets on the accessory and connect it to either the head or a connected accessory such as a battery pack.



A second battery can be attached to the empty socket of the CPS H1 Camera Head. Additional batteries can be attached to any free sockets of the system including those of battery packs.

## Connecting the AC Adaptor to the CPS H1 Camera Head

1. Connect the Power Supply to the mains with the AC Adaptor power cord.
2. Connect the DC power plug of the charger to the DC in socket on the bottom of the CPS H1 Camera Head.

### Note:

The power supply does not recharge connected batteries. For your safety the batteries are electrically separated from the AC Adaptor which does not contain the circuitry to safely recharge Li-ion batteries.

### Caution:

Using power supplies other than those supplied by Koch Photography could lead to malfunction or destruction of the device.

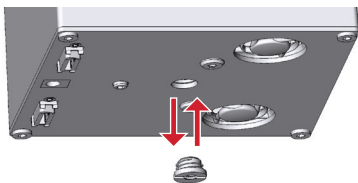
## Using the Acadalus CPS H1 camera head abroad

You can use the Acadalus CPS H1 camera head, the battery charger, and the AC Adaptor in any country or region where the power supply is within 100 V to 240 V AC, 50/60Hz.

Do not use an electronic transformer (travel converter). This may cause a malfunction.

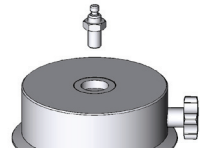
## Attaching the CPS H1 Camera Head to the tripod or camera stand

1. If necessary, attach or remove the 3/8" 1/4" reducing bushing to obtain the appropriate tripod mount.
2. Move the locking lever to the left side.
3. Use the tripod bolt to mount the head. Only tighten the tripod screw lightly.
4. Now firmly secure the head to the tripod by moving the locking lever to the right.



## Securing a device on top of the CPS H1 Camera Head

1. If necessary, re-position the 3/8" -1/4" Camera Adapter Screw by hand or using the provided 14 mm wrench to loosen the nut so the appropriate thread for the device to be mounted becomes accessible.
2. After setting the appropriate height of the stud, secure the 3/8" – 1/4" Camera Adapter Screw gently with the supplied 3/8" jam nut to the turntable.
3. Mount the camera or other accessory to the platform.



## Initializing the rotational position of the CPS H1 Camera Head

1. Point the camera lens away from the control panel and secure the platform with the rotation locking knob.
2. Turn on the head by pushing the "On" button.

After turning on the system, it will take a fraction of a second to boot and perform a self test. As soon as the keys are lit, the hardware has passed all tests and the system is ready. The CPS H1 Camera Head requires the lens to point forward at start-up to compute natural movements when the inclination of the head is manually adjusted.

## Leveling the Camera

Push the central button of the control panel once. The CPS H1 Camera Head wakes up, illuminates the control panel and levels the camera automatically.

## Using the Camera Head Upside Down

When using the Camera Head in constrained spaces such as when shooting car interiors or when mounting the head on a ceiling, the CPS h1 can be used upside-down. While adjusting the position, the head senses its position and will level accordingly.

Should the head be in an ambivalent position, it can be shown the direction of the ground by pushing the start button and the arrow key which is pointing downwards. This direction is stored until the device is turned off.

## Using the Camera Head For Panoramas

The camera platform has click stops every 15° as a reference for manual panoramas. By adjusting the rotation knob accordingly, this feature can be used to count the clicks in order to measure the amount of rotation.

### Hint:

Once the camera is leveled that way, all vertical lines, such as windows, doors or corners in a building are straight. These lines stay straight even when the camera is being rotated with the platform.

As tightening the rotation locking knob can slightly change the inclination of the camera platform, (re-)level the head after locking the knob to obtain the full accuracy.

To save power and to avoid interference with the image, the head dims the control panel after 10 seconds, leaving the on/off button at reduced illumination so the head is still visible in a dark studio.

To extend battery life, the camera head shuts off automatically after 20 minutes if it does not detect a power supply.

## Manual adjustments

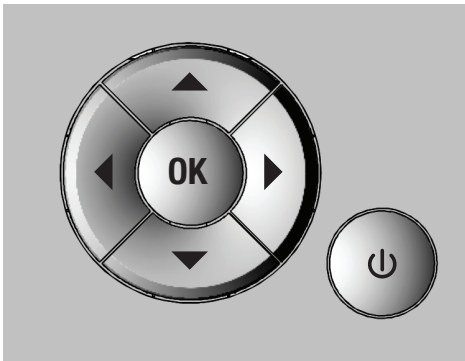
At any time the camera can be rotated by turning the platform or it can be inclined manually.

You can tilt the camera slightly by tapping the top or bottom arrow keys of the control panel. Push and hold the keys to tilt the camera continuously.

### Note:

Under certain rotation angles of the platform, especially when the lens was not pointing forward upon startup, it is possible that tilting the camera will require some re-adjustments of the horizontal inclination to regain straight vertical lines.

Tap the right or left arrow keys of the control panel, to slightly change the camera's horizontal inclination. Push and hold the keys to incline the camera continuously.



## Turning the Acadulus CPS H1 Camera Head off

Tap any button to wake the system up. The LEDs turn on. Push the On/Off button until it flashes. Upon release, the system turns off.

## Recalibrating the camera head

### Caution:

Sometimes the installed device needs to be leveled rather than the top of the camera head; for example, a camera attached to an angle bracket for reproductions. On such a setup the reference plane might be the bayonet of the camera body.

Using a precise spirit level or a digital protractor, a new reference plane can easily be programmed into the camera head.

This reference can be adjusted several thousand times without damaging the unit.

Make sure to adjust the head so the reference plane it is leveled in both the X (left/right) and the Y (front/back) direction to teach the head this new position.

1. Using a precise level such as a digital protractor, manually level the platform in both the horizontal and the vertical direction.
2. Turn the camera head off.
3. Keep the central button pressed while pushing the ON/OFF button until the lights of the arrow keys start to flash in a circular pattern.
4. As soon as the arrow keys flash three times, the current position has been stored as the new reference to which the head will level.

## TROUBLESHOOTING

### Problem:

The Control Panel is lit, however the head does not respond to any commands.

### Solution:

The system's microprocessors are not synchronized; Make sure the camera is pointed away from the control panel. Turn the system off by pushing the On/Off button until the lights go off. Turn the system back on again.

### Problem:

The head only turns on the fans and refuses to move.

### Solution:

The system has temporarily shut down to protect the electronics and the motors from overheating. After it has cooled down to a safe operating temperature, it will work properly again.

### Problem:

Upon startup the system refuses to work and one or more LEDs of the arrow keys flash.

### Solution:

One or more of the internal microprocessors controlling the head could not be detected. If the problem persists, please send the device in for service; one of the internal cables or boards has become faulty.

## Specifications

<b>Weight</b>	2200 g	4 lbs, 14 oz.
<b>Dimensions (h x w x l)</b>	170 x 125 x 125 mm	6.75" x 5" x 5"
<b>Rated Capacity</b>	3.5 kg	7.7 lbs
<b>Maximum tilt</b>	$\geq 20^\circ$	
<b>Tilting accuracy</b>	$\geq 0.25^\circ$	
<b>Time to auto-off</b>	20 min after last activity (with battery)	
<b>Connectors</b>	2 x Acadulus 20 pin multipurpose socket DC- in socket, GND outside 17 to 24 V, 6 A"	

## **REPAIRS**

Your Acadalus CPS-h1 comes with a warranty of 36 months from date of purchase.

Before returning the product to the factory or an authorized service center for repair, please contact us to obtain an RMA number and shipping instructions.

Visit <http://www.acadalus.com> and click on Support to obtain your RMA number. Also be sure to register your CPS-h1 for trouble-free support and to stay up to date on updates and notifications.

Additional information about this and  
other products from Koch Photography  
can be found on our website,  
**<http://www.acadalus.com>**

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