

2560

Fluid Pan & Tilt Head



Part No. C1260-0001
C1260-0002

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Original Instructions: English

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Important information on the safe installation and operation of this product. Read this information before operating the product. For your personal safety, read these instructions. Do not operate the product if you do not understand how to use it safely. Save these instructions for future reference.

Warning Symbols Used in These Instructions

Safety cautions are included in these instructions. These safety instructions must be followed to avoid possible personal injury and avoid possible damage to the product.



WARNING!

Where there is a risk of personal injury or injury to others, comments appear supported by the warning triangle symbol. Where there is a risk of damage to the product, associated equipment, process or surroundings, comments appear supported by the word '**CAUTION**'.

Health and Safety



WARNING! Risk of personal injury or injury to others. All personnel must be fully trained and adhere to correct manual handling techniques and Health & Safety regulations. It is the responsibility of the local organisation to enforce safe working practices at all times.

Mounting, Installation and Operation



WARNING! Risk of finger entrapment. Do not place fingers between the platform and body of the fluid head.



WARNING! Avoid trapping fingers when collapsing and extending tripod legs.



WARNING! DO NOT fit the head to a tripod that cannot support the combined mass of the head and its full payload.



WARNING! Toppling hazard. Do not leave unattended. Keep out of reach of children.



WARNING! The product must always be secured.



CAUTION! Always lock the vertical and horizontal brakes when the camera is mounted but not in use or when levelling the fluid head on the tripod.



CAUTION! Hold the camera securely when mounting or dismounting from the fluid head and when making adjustments to the tripod height or footprint.



CAUTION! Always hold the pan bar when making adjustments to the counterbalance or camera position. Do not use the pan bar to lift or move the tripod and fluid head.



CAUTION! Only attach camera accessories to the pan bar. Do not attach heavy items to the pan bar.



CAUTION! Always remove the camera before transporting.



WARNING! Before fitting or adjusting the camera or payload the tilt lock pin must be engaged. See "Installation" on page 9.

Maintenance



WARNING! The fitting of non-approved parts and or accessories, the carrying out of non-approved alterations or servicing can be dangerous and could affect the safety of the product. It may also invalidate the terms and conditions of the product warranty.



CAUTION! When replacing the battery, use only the same or an equivalent type of battery recommended for use with the product.

About this User Guide

This guide describes the installation, configuration and operation of the OConnor 2560 fluid head.

The 2560 features OConnor's step-less counterbalance system as well as ultra-smooth pan and tilt fluid drag designed for cine style shooting.

A collapsible counterbalance crank handle and numerical readout make counterbalancing the payload easy. The platform and brake arrangements mean that all of the controls are on the camera operator's side of the head (left side) for an improved operation experience.

Additionally the platform has a marking scale and four rosette handle mountings. The platform release lever has a one touch finger and thumb actuated safety release catch, while still requiring conscious effort for safety.

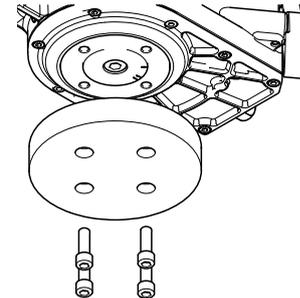
OConnor's fluid drag system allows an extremely quick pan movement from one position to another, recovering instantly without any spring back.

Variants

Two variants of the 2560 are available.

Basic Kit C1260 - 0002:

Supplied as a basic head with no accessories.



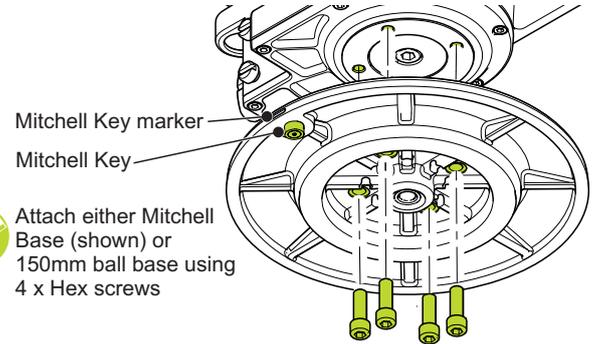
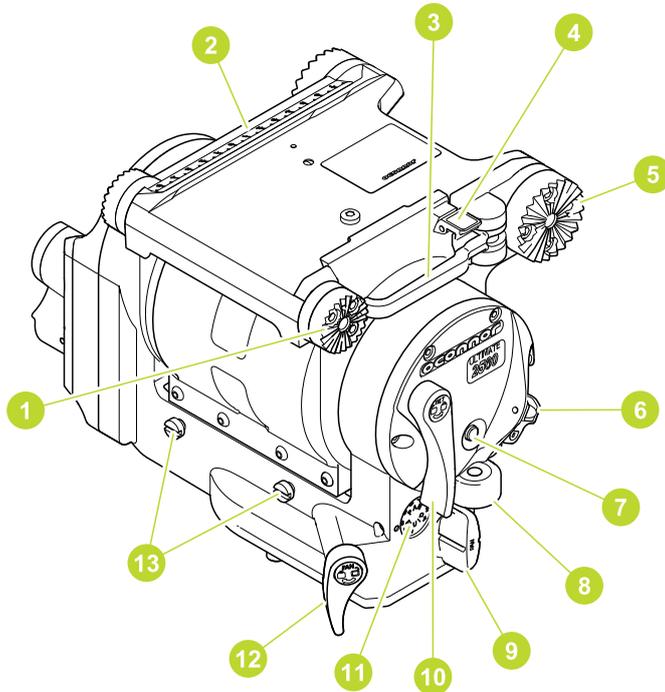
The C1260-0002 is supplied with a protective plastic base, secured with 4 x Allen bolts, which must be removed and swapped for a 150mm spherical and tie down or Mitchell and tie down before use.

Full Kit C1260 - 0001:

Supplied as a full kit, see **Box Contents C1260 - 0001** on page 6.

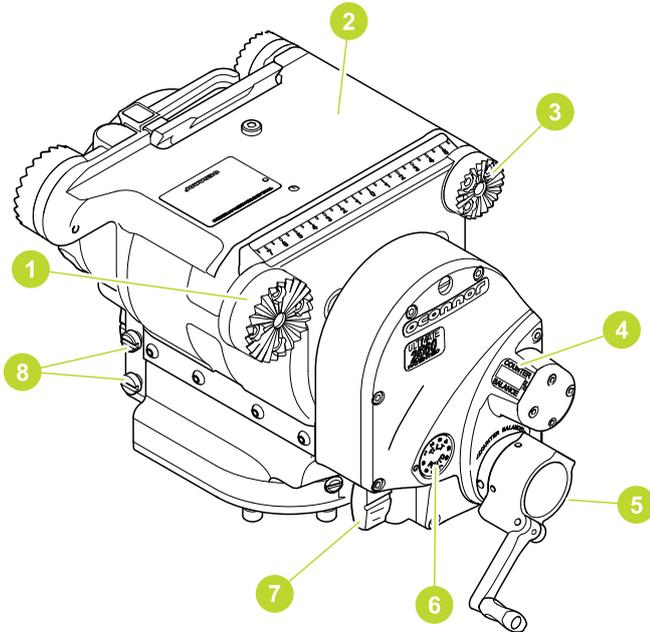
Components

Front View

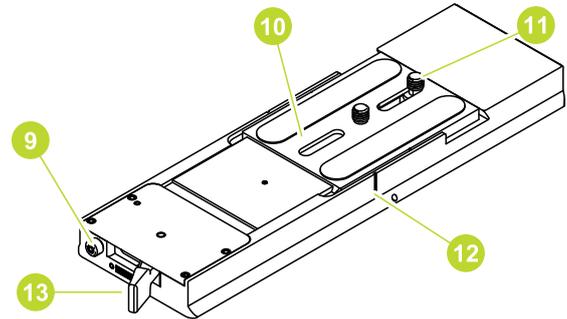


1	Front end handle / accessory mounting rosette
2	Slide plate scale
3	Platform release lever
4	Platform release lever safety catch
5	Rear large pan handle / accessory mounting rosette
6	Tilt centre lock
7	Bubble illumination button
8	Bubble level
9	Pan fluid drag adjustment knob
10	Tilt lock lever
11	Pan fluid drag display
12	Pan lock lever
13	Front box mounting screws

Rear View



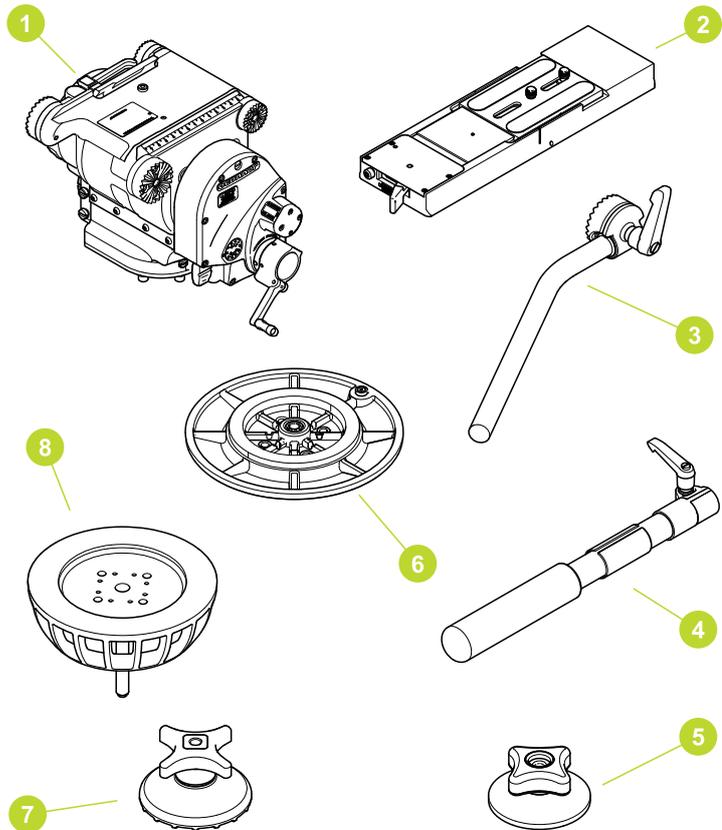
Euro Style Quick Release Plate



1	Rear large pan handle / accessory mounting rosette
2	Platform
3	Front small pan handle / accessory mounting rosette
4	Counterbalance numerical display
5	Folding counter balance adjustment crank
6	Tilt fluid drag display
7	Tilt fluid drag adjustment knob
8	Eyepiece leveller mounting screws
9	Camera plate clamp release lever
10	Camera mounting plate
11	Camera fixing screws
12	Slide plate marker
13	Camera plate clamp lever

Components

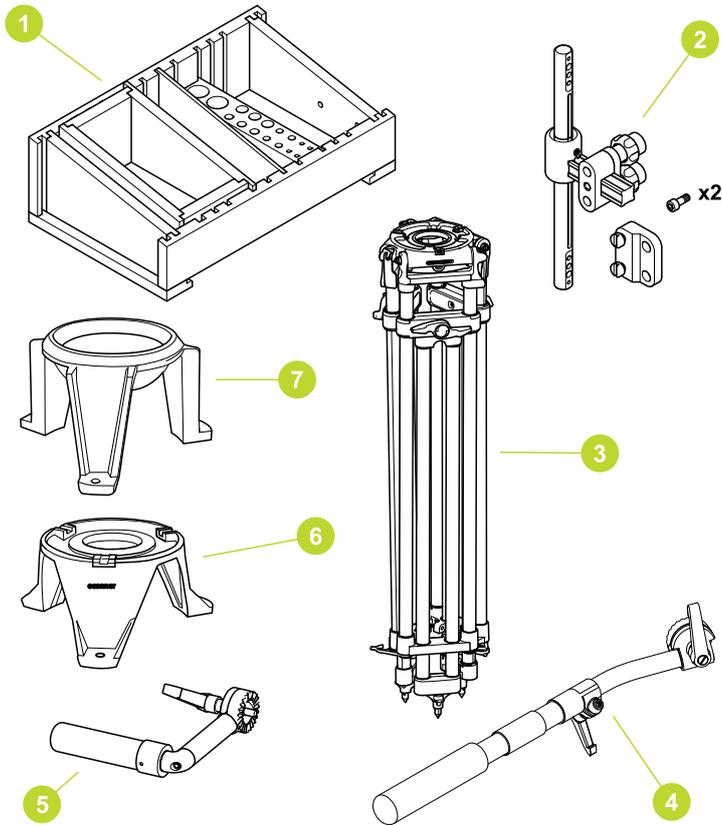
Box Contents C1260 - 0001



Item	Description
1	2560 head
2	Euro style quick release plate
3	Pan handle
4	Pan extension handle
5	Mitchell tie down
6	Mitchell base assembly
7	150mm tie down
8	150mm base assembly

*Variant C1260-0002 consists of head only.

Optional Accessories



Item	Description	Part No.
1	Assistants box	CSE-MFB100
2	Eye piece leveller	C1504-1000
3	Tripods	
	Cine HD Mitchell	C1221-0001
	Cine HD 150mm ball base	C1221-0003
	Cine HD Baby Mitchell	C1221-0002
	Cine HD Baby 150mm ball base	C1221-0004
4	Pan handle	08409
5	Front handle	C1260-1010
6	High hat Mitchell	C1250-0001
7	High hat 150mm	C1250-0002
	OConner plate (Not shown)	08283
	Arri plate dovetail (Not shown)	2575 - 210
	Arri platform plate (Not shown)	C2575 - 0240
	Large pan handle (Not shown)	2575 - 107

Installation

Mounting the head

The 2560 is installed onto standard tripods using either the Mitchell base and tie down or the 150mm ball base and tie down as required.



WARNING! Do Not fit a head to a tripod that cannot support the combined mass of the head and its full payload.



WARNING! If required use a mid-level or floor spreader to ensure that the tripod legs are spread sufficiently; this ensures that the C of G remains within the footprint of the tripod.



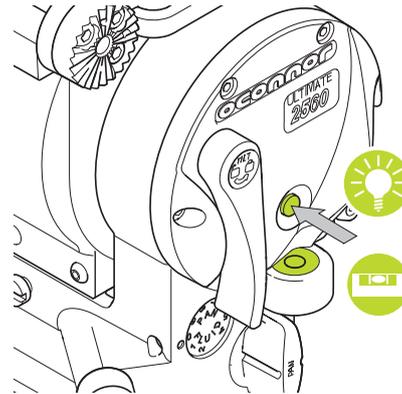
Refer to the tripod instructions supplied with the tripod for correct fitting procedure.

Levelling the Head

After securely mounting the head on to the tripod, center the bubble level to set the level.

If necessary, in poor light conditions:

1. Press the button illumination bubble (the light will remain on for 20 seconds).
2. Press the button again within 20 seconds to turn the light off.



Ball Base

Loosen the bowl clamp. Move the fluid head to center the level bubble. Tighten the bowl clamp and re-check the level.

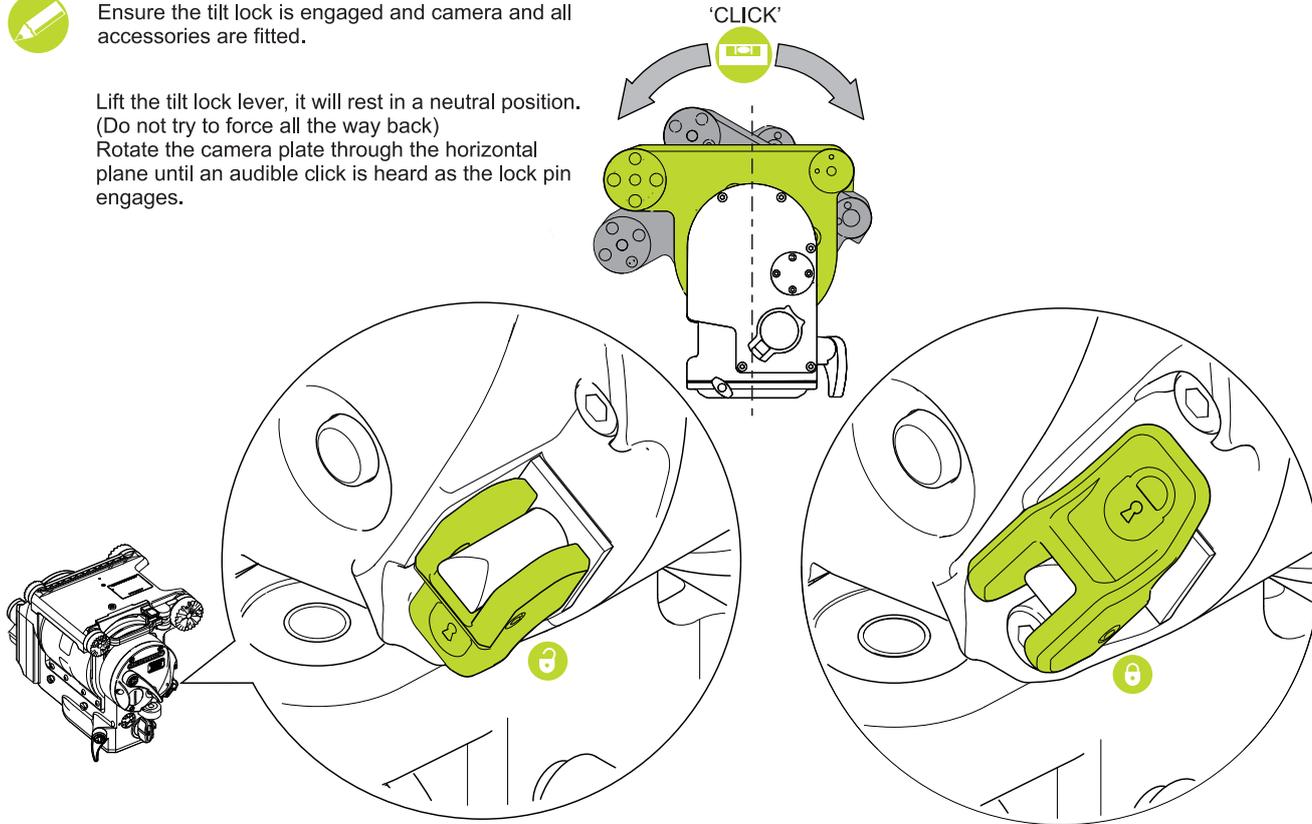
Mitchell Base

Levelling is achieved by adjusting the legs on the tripod until the level bubble is centred.



Ensure the tilt lock is engaged and camera and all accessories are fitted.

Lift the tilt lock lever, it will rest in a neutral position.
(Do not try to force all the way back)
Rotate the camera plate through the horizontal plane until an audible click is heard as the lock pin engages.



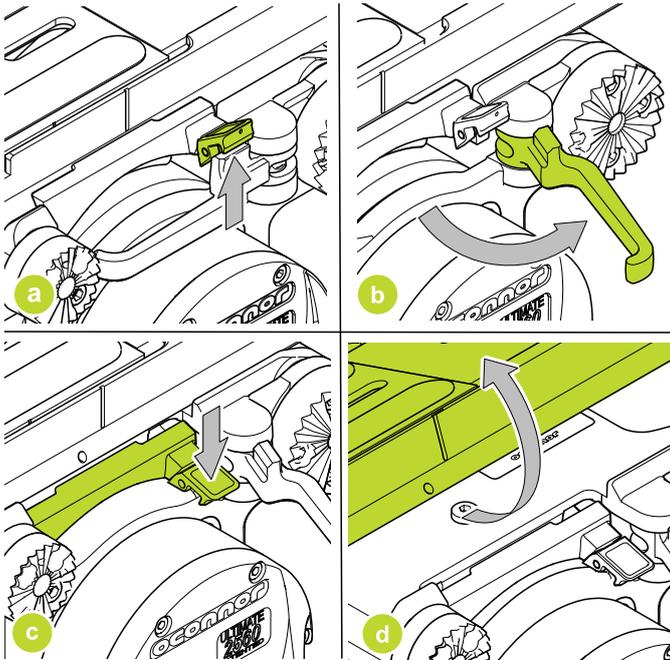
Mounting the Camera

The camera is attached to the head by means of a side loading platform mechanism.

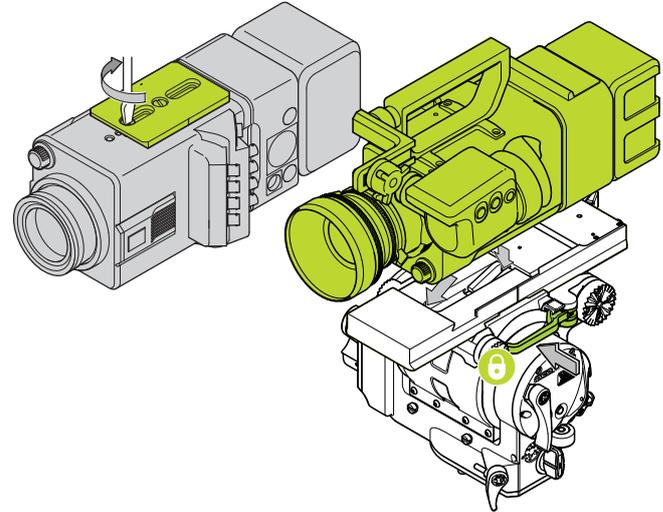


WARNING! Before fitting or adjusting the camera or payload the tilt lock pin must be engaged. See "Installation" on page 9.

1. Release side loading platform if fitted.



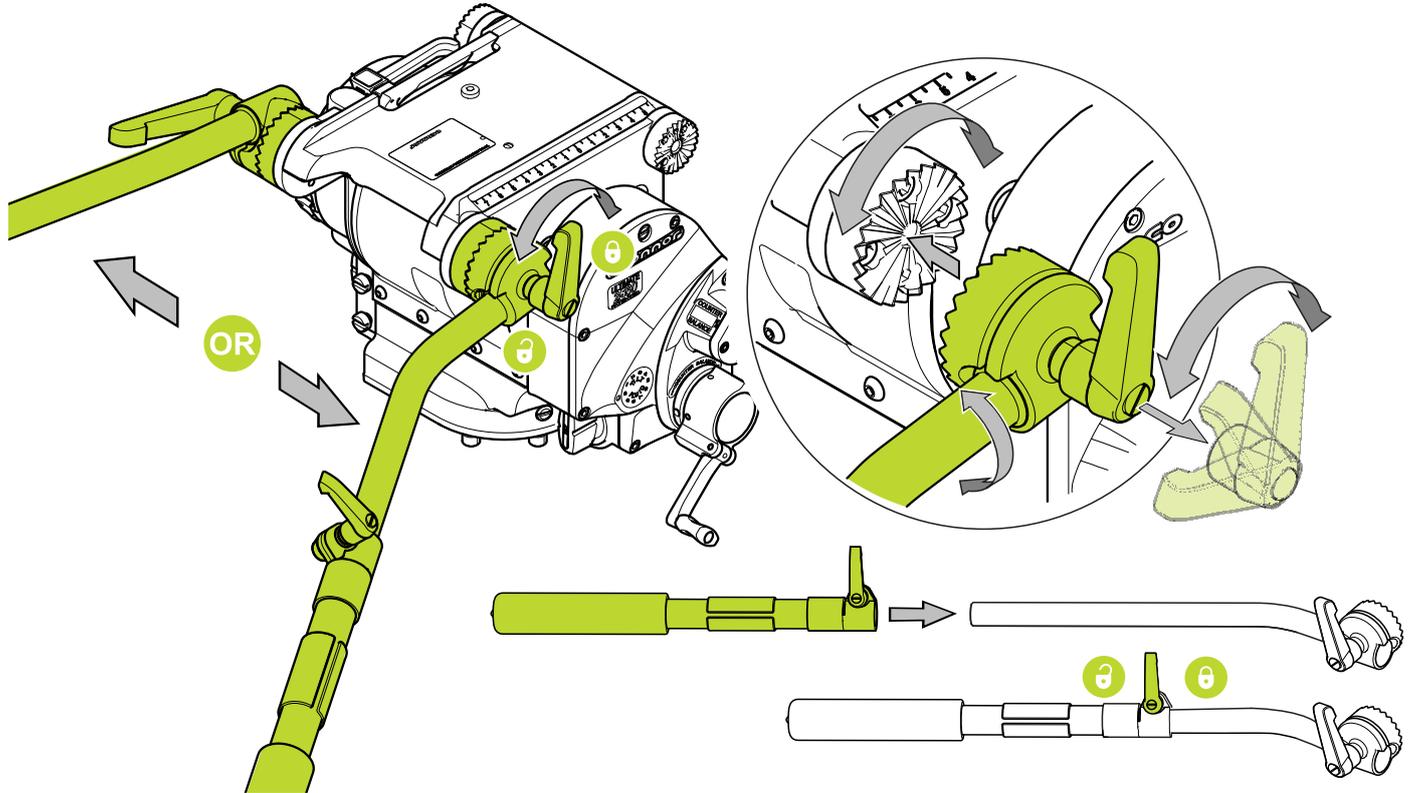
2. Attach the mounting plate securely to the bottom of the camera in the desired position.



3. Engage the tilt lock pin.
4. Release the safety catch and pull out the platform release lever.
5. Slide the camera mounting plate on to the platform towards the right side of the head until an audible "click" is heard. When the platform hook engages the camera mounting plate, the plate is captive, but not locked.
6. Engage the base plate with the mounting plate. Slide the camera and plate to the required position and lock by closing the platform release lever.

Fitting the Pan Handle

Pan Handle / accessory mounting rosettes are located at the front and rear of the head, on both the left and right sides.



Fore/Aft Balance

Ensure that the head is level before balancing. The camera and payload should be fitted on the head, so that the load is balanced. This can be achieved by moving the camera forwards (Fore) or backwards (Aft) on the cradle.



WARNING! When balancing the payload, it is important to be aware of the potential danger that an unbalanced payload will fall away suddenly. Maintain a firm hold on the payload until the balance is set correctly.



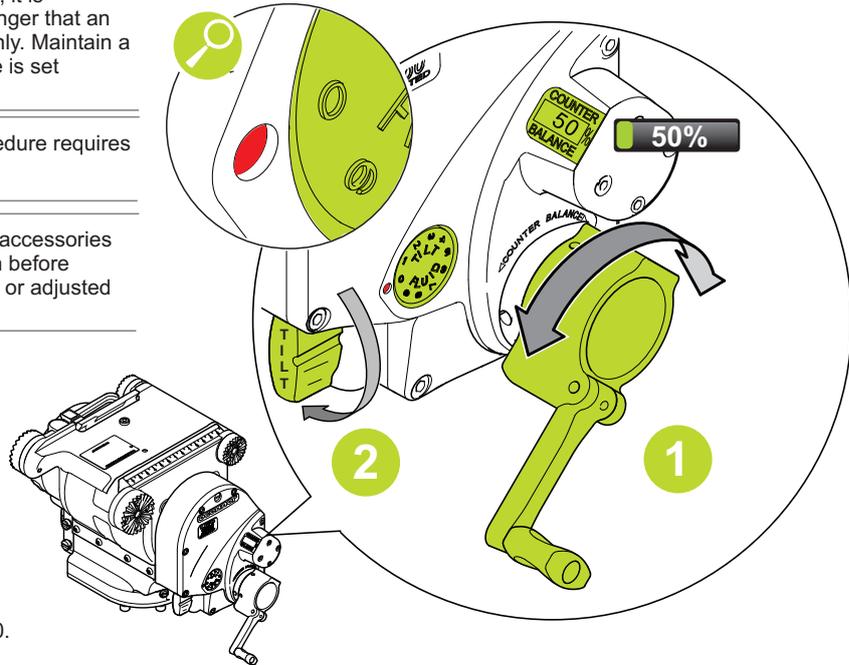
WARNING! The payload balancing procedure requires the assistance of another person.



CAUTION! The camera, handles and all accessories must be fitted in their operational position before balancing the head. Any equipment fitted or adjusted later can unbalance the head.



Depending on the payload weight, it may be necessary to increase or decrease this setting to enable the payload to be correctly balanced fore and aft.

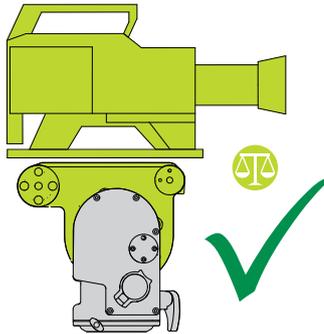


1 Turn the counterbalance crank to set the counterbalance to 50%.

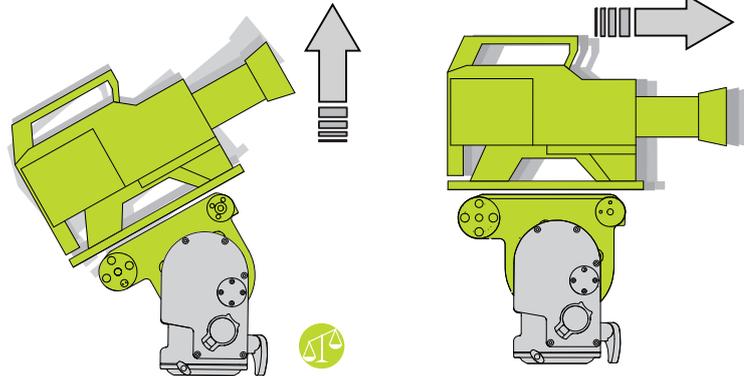
2 Set the tilt fluid drag adjustment knob to 0.

3

Hold and steady the camera, then disengage the tilt lock and observe how it moves and where it stops.



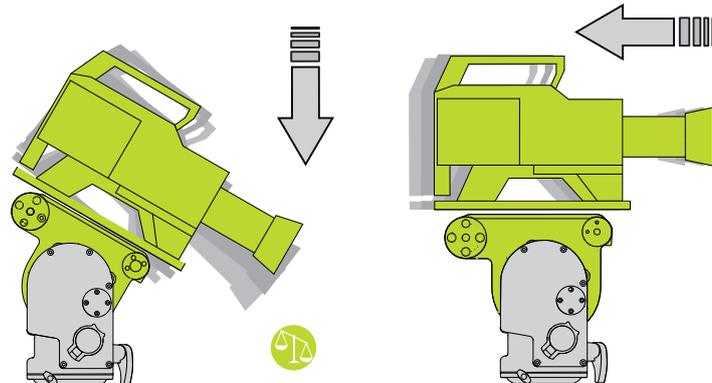
If the camera cradle stops in a horizontal position (camera pointing directly forward), the balance is correct.



If the camera tilts backwards (points upward), then the camera must be moved towards the front of the head (fore).

4

Reposition the camera as required on the head and secure in position. The horizontal balance is correct when the camera cradle comes to rest in a horizontal position.



If the camera tilts forward (points downwards), then the camera must be moved towards the rear of the head (aft).



If there is insufficient movement in the sliding plate to achieve balance, remove camera and plate from the head, reattach the mounting plate to the camera in the required position, remount the camera and plate, repeat the balancing procedure.

Installation

Payload Weight and C of G Height Adjustment



WARNING! For safe and reliable operation the head and all mounted equipment must be correctly balanced.



If the correct numerical balance setting of the payload is known, tilt the platform to the horizontal position and turn the counterbalance crank until the display shows the correct setting

Maximum and minimum payloads that can be balanced are dependent on the weight of the camera and accessories and on the centre of gravity (C of G) height. The graph below shows the range of loads and C of G heights that can be maintained in balance. The counterbalance can be adjusted all the way to zero (no counterbalance) and the head can still be tilted $\pm 90^\circ$.

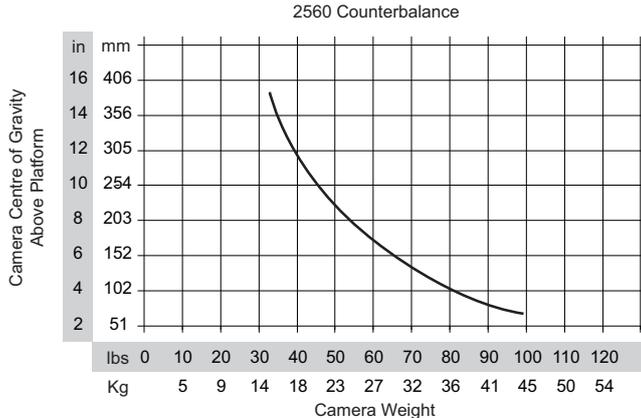
Numeric Display

The numeric display indicates the setting of the counterbalance mechanism on a scale of 0-99%. Adjust the counterbalance crank clockwise to increase the counterbalance setting and counter clockwise to reduce it.

The display has a three color coded band offering advance warning of cranking to the end limits.



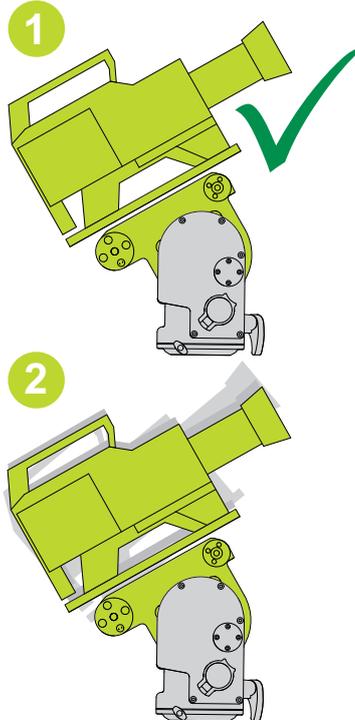
CAUTION! When cranking into the red zone be careful to stop before reaching either 0 or 99% as damage could occur.



Adjusting the Counter Balance

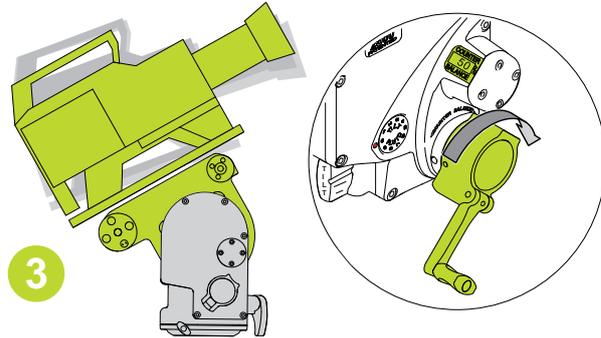
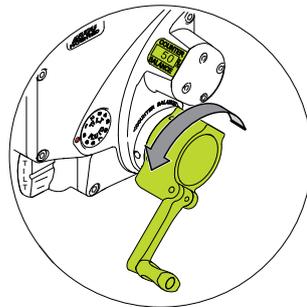


CAUTION! Risk of damage to equipment. Be prepared to prevent the camera from falling away suddenly



Tilt the camera approx. 45° upward and release it. If the camera stays in the same position when released, the camera is correctly balanced with the C of G on the tilt axis.

If the camera continues to move towards the horizontal after releasing the camera cradle, reduce the counterbalance.



If the camera keeps falling back towards the vertical position when released, increase the counterbalance.

Tilt the camera over the TDC, it should remain stationary at any angle.

If the camera angle falls or rises, repeat the alignment procedure until balance is achieved.

After adjusting the counterbalance, it may be necessary to check that the fore and aft balance remains satisfactory. Readjust the position of the camera horizontally on the camera plate as required.

After balancing, exercise the head through both axes to confirm that it operates smoothly.

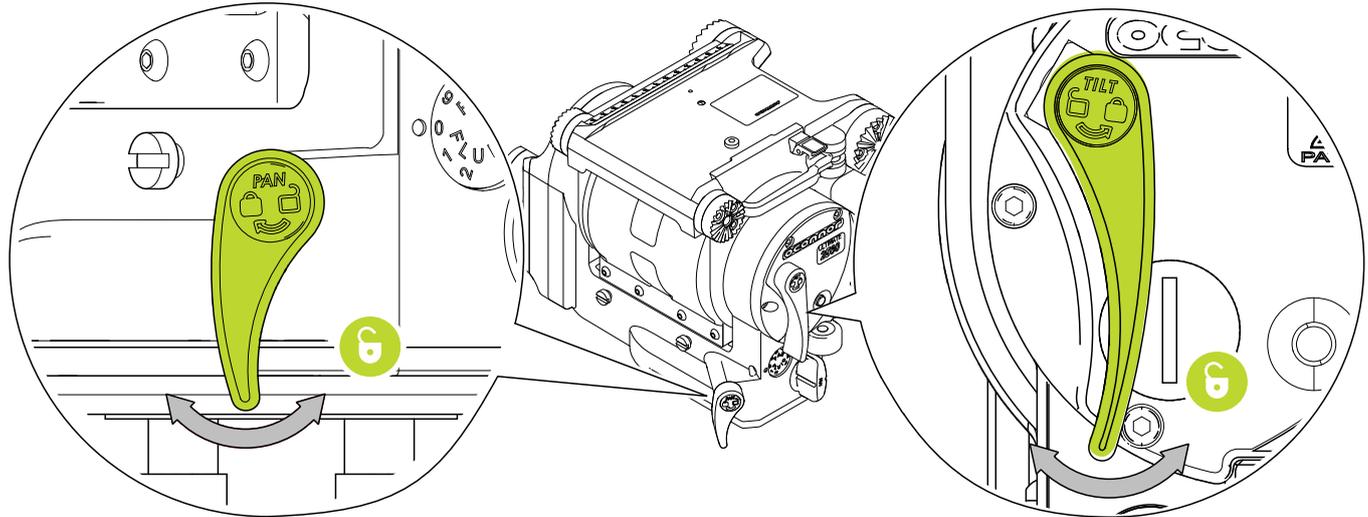


The sliding plate is marked and the platform has graduations. Make a note of the "balanced" position to simplify rebalancing this particular payload.

Operation

Operating the Pan and Tilt Locks

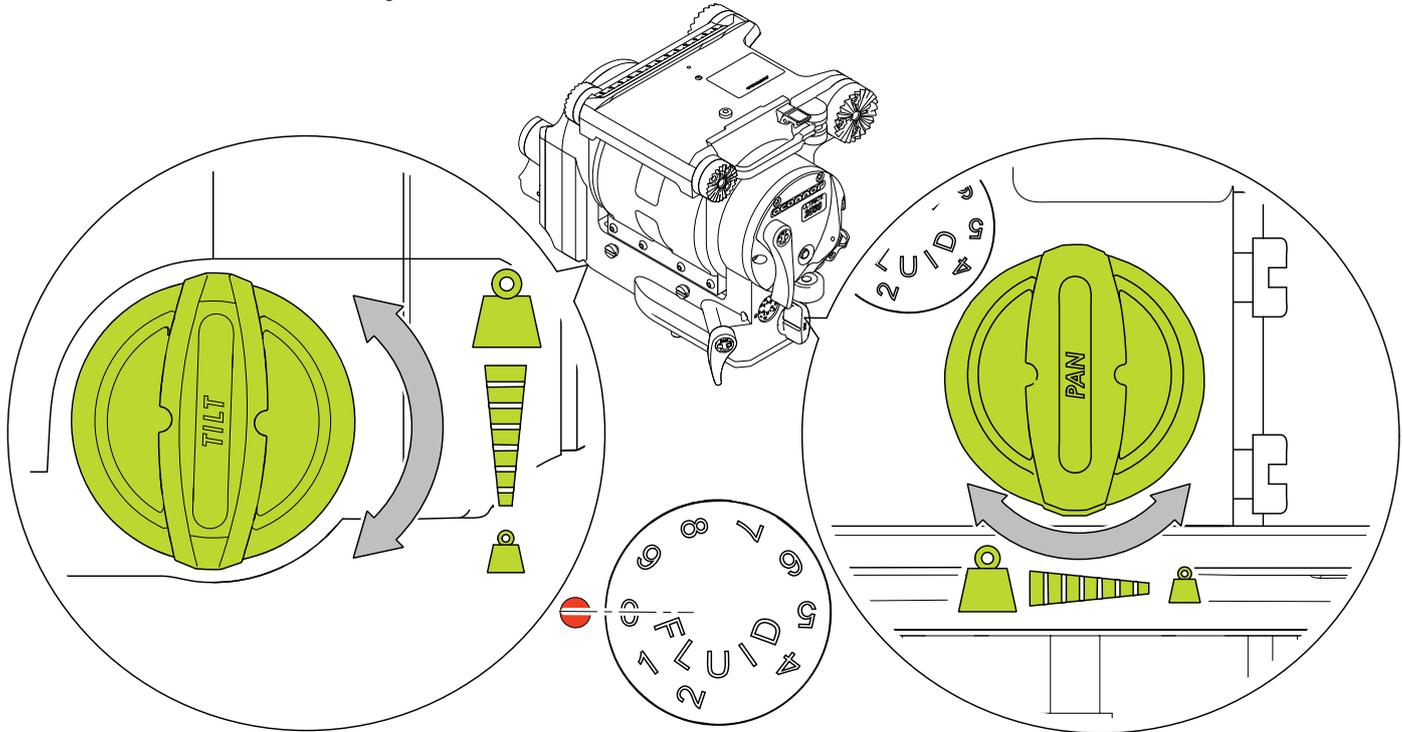
The pan and tilt friction locks are operated by levers on the left of the head. The locks should be applied whenever the camera/head is left unattended.



After prolonged use, if the lock does not fully engage at the end of the lock lever travel, refer to **Adjust Lock Levers** on page 19. The levers are designed so they can be released simultaneously with one hand.

Pan and Tilt Fluid Drag

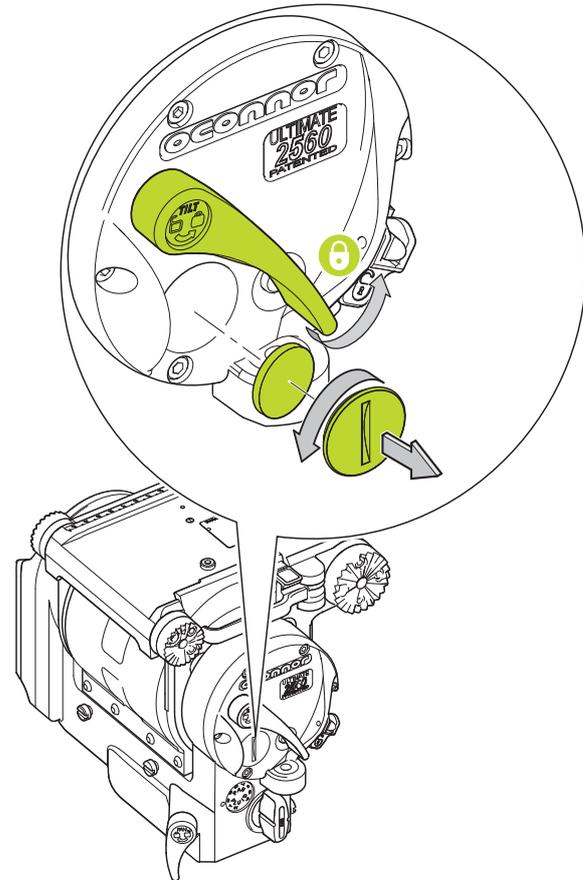
The pan drag adjustment knob is located on the lower right rear of the head, and the tilt drag adjustment knob on the lower left of the head. Both controls are continuously adjustable from 0 to 9. To increase drag, turn the knob clockwise, towards a higher setting. To decrease drag, turn the knob counter-clockwise, towards a lower setting.



Battery Replacement

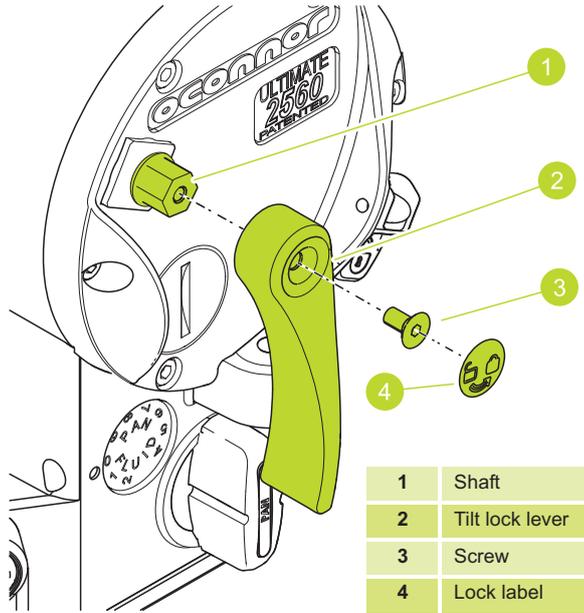
The battery illuminates the bubble level. It should be replaced whenever the illumination becomes inadequate.

1. Use a coin or flat blade screwdriver to unscrew the battery cover.
2. Carefully pull the battery out of its compartment.
3. Fit a replacement CR 2032 3v battery in the compartment, ensuring that the positive side (+) of the battery faces outermost.
4. Replace the battery cover and tighten using a coin or flat blade screwdriver.
5. Press the bubble level illumination button and verify that the bubble level is lit for approximately 20 seconds.



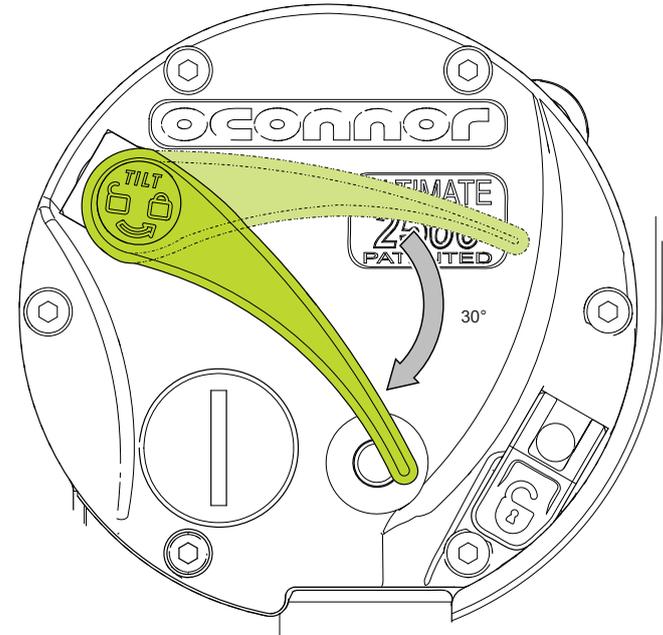
Adjust Lock Levers

If the pan and/or tilt friction locks do not fully engage at the end of the lock lever travel, adjust the lever position as follows:



1. Rotate the lock lever to the "locked" position.
2. The lock lever is attached by means of a screw. Carefully peel off the lock label to expose the screw. Using a 2.5 mm Allen key remove the screw.

3. Pull the lock lever off the hexagonal shaft, rotate it approx. 30° away from the "locked" end of travel, and reinstall it.
4. Tighten the screw. Reapply the lock label.



Maintenance

Cleaning

We encourage regular cleaning of the product. During normal use the only cleaning required should be a regular wipe over with a lint-free cloth.

Cover the head when not in use. Dirt accumulated during storage or periods of non-use may be removed with a vacuum cleaner.



CAUTION! Salt water will damage the head! If product comes into contact with salt water, immediately rinse with distilled water and dry with compressed moving air.

Storing the Head

- When shooting is finished the head should be stored in the case.
- Store in a dry area.
- You may leave the counterbalance and drag settings at the end of a shoot.
- For long term storage, we advise that the counterbalance is adjusted towards 100%.



CAUTION! Never force the counterbalance when resistance is felt near 0 or 100%.

Physical Data



Height
20.3 cm (8 in.)



Width
28.7 cm (11.3 in.)



Depth
19.1 cm (7.5 in)



Weight
7.3 kg (16.2 lb)



***Maximum payload**
40.72 kg (90 lb) See chart on page 14



Tilt
±90° throughout entire counterbalance range, zero to max.



Storage temp.
-40°C to +60°C
(-40°F to +140°F)



Operating Temp.
-40°C to +60°C
(-40°F to +140°F)



Bubble level
Illuminated



Battery
Type: 1 x CR 2032 3v

*Capacity:

For maximum payload capacity please use balance graph on **page 14**.

As a reference below are the maximum capacities if CofG distance above platform is:

@102mm (4 in) 37.7 kg (83 lb.)

@152mm (6 in) 29.5 kg (65 lb.)

@ 203mm (8 in) 24.1 kg (53 lb.)

General Notices

Declaration of Conformity



Vitec Videocom Limited declares that this product has been manufactured in accordance with BS EN ISO 9001:2008 and is in compliance with the essential requirements and other relevant provisions of the Machinery Directive 2006/42/EC. A copy of the Declaration of Conformity is available upon request.

Environmental considerations

European Union Waste of Electrical and Electronic Equipment (WEEE) Directive (2002/96/EC)



This symbol marked on the product or its packaging indicates that this product must not be disposed of with general household waste. In some countries or European Community regions separate collection systems have been set up to handle the recycling of electrical and electronic waste products. By ensuring this product is disposed of correctly, you will help prevent potentially negative consequences for the environment and human health. The recycling of materials helps conserve natural resources.

Visit our website for information on how to safely dispose of this product and its packaging.

In countries outside the EU:

Dispose of this product at a collection point for the recycling of electrical and electronic equipment according to your local government regulations.

Disposal of waste batteries

Any batteries included with this product must not be treated as household waste. By ensuring these batteries are disposed of correctly, you will help prevent potentially negative consequences for the environment and human health, and help conserve natural resources.

Read 'Battery Replacement' section in this manual for instructions on how to remove the battery from the product safely. Hand the battery over to the applicable collection point for recycling waste batteries.

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