## **User Guide**



Fluid Head aktiv12T, 14T

# aktiv12T, aktiv14T Fluid Head





S2074T S2076T

aktiv12T aktiv14T

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#### Original Instructions: English

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## **Safety**

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 word 'WARNING'.



#### CAUTION!

Where there is a risk of damage to the product, associated equipment, process or surroundings, comments appear supported by the word 'CAUTION'.



Refer to the product instruction manual.



#### WARNING!

Pinch point, injury to fingers or hands, exercise 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 and Installation



Risk of finger entrapment. When removing the head from the tripod, take care the SpeedLevel Lever does not snap closed on fingers.



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



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



**WARNING!** Avoid unintentionally lifting the SpeedLevel Lever above the detent as the head will be released suddenly from the tripod.



**CAUTION!** Always lock the horizontal and vertical 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! Do not attach heavy items to the pan bar.



**CAUTION!** Always remove the camera before transporting.

#### **Maintenance**



**WARNING!** The fitting of non-approved parts and or accessories or servicing by non-approved personnel could effect the safety of the product. It may also invalidate the terms and conditions of the product warranty.



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

## **About this Guide**

#### **Intended Use**

The Sachtler aktiv fluid head has been developed to enable smooth pan and tilt movement giving the operator total image control through a wide range of angles.

#### **About this User Guide**

This user guide has been produced to instruct the user on the correct set-up, operation and maintenance of the fluid head.

## Warranty

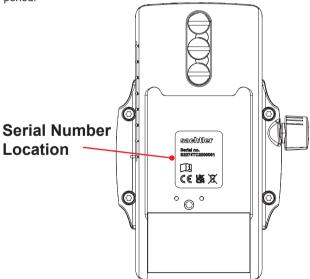
This product is covered by a one year warranty.

The warranty will be invalidated if:

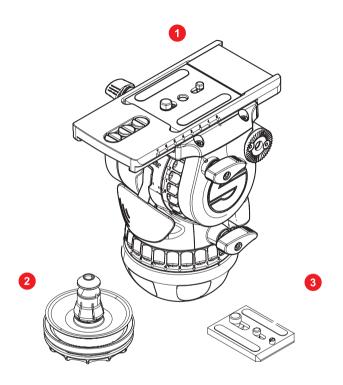
- The head is improperly installed or used in a manner contrary to this user guide.
- The head housing is opened by unauthorised personnel.

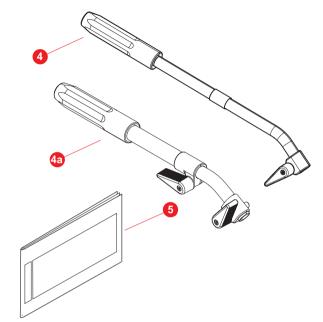
## **Extended Warranty**

Please register at **www.sachtler.com** for an extended warranty period.



## **Box Contents**

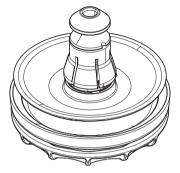




| Item | Description                       | Part No    |
|------|-----------------------------------|------------|
| 1    | aktiv12T fluid head               | S2074T     |
|      | aktiv14T fluid head               | S2076T     |
| 2    | aktiv100 bowl connector           | S2080-0013 |
| 3    | Touch & Go camera plate 16        | 1064       |
| 4    | Pan bar DV100 (aktiv12)           | 1075       |
| 4a   | Pan bar DV (telescopic) (aktiv14) | 3470       |
| 5    | User guide                        | S2074-4980 |

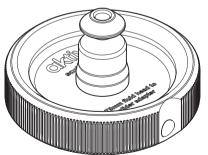
## **Optional SpeedSwap Accessories**

S2080-0013



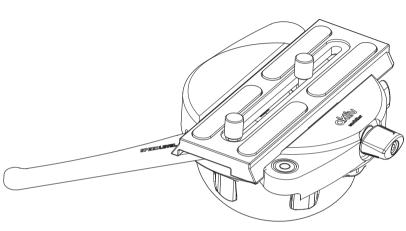
aktiv bowl connector 100 mm

S2080-0004



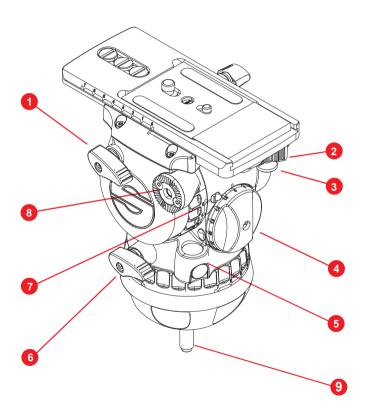
Adaptor aktiv head / slider 100 mm

S2080-0006



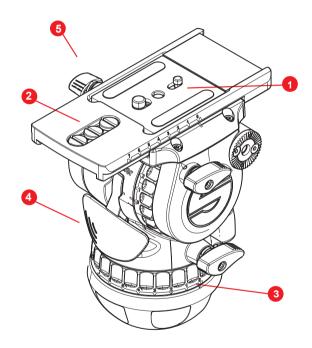
Adaptor aktiv slider / tripod 100 mm

# **Operating Elements**



| 1 | Vertical brake                                |
|---|---|
| 2 | Touch & Go system lock lever                  |
| 3 | Touch & Go system safety lock                 |
| 4 | Counterbalance adjustment knob                |
| 5 | Illuminated touch bubble                      |
| 6 | Horizontal brake                              |
| 7 | Vertical drag control                         |
| 8 | Rosette for pan bar (replaceable see page 27) |
| 9 | Tie down mounting                             |

# **Operating Elements**



| 1 | Touch & Go camera plate     |
|---|-----------------------------|
| 2 | Spare camera screws         |
| 3 | Horizontal drag control     |
| 4 | Speed level ever            |
| 5 | Balance platform clamp knob |

## **Operating Elements**

#### **PrismBubble**

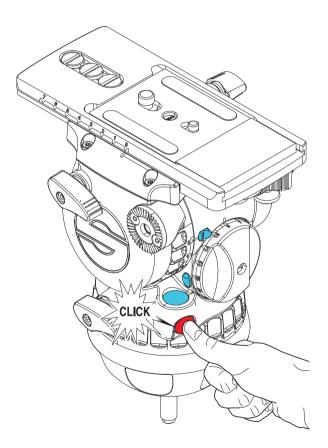
The fluid head is fitted with an illuminating bubble level which allows easy levelling in poor lighting conditions.

The head also features a prism to view the bubble when the head is too high to view from above. This Prism also incorporates the On / Off switch.

In addition the PrismBubble may be lit on its own or with the control LED's to enable setup up in low light conditions.

The illumination will be activated by pushing the bubble prism window.

- Pressing the window briefly will turn on the level bubble LED for approx.10s ± 1s.
- Pressing and holding the window for >1s will turn on the level bubble LED and all control LED's for 20s ± 2s.
- Pressing the window again when any of the illuminations are on, will turn every LED off.



## 1st Time Installation

To aid with fitting of the Bowl Connector for the first time, it is highly recommended to view the installation video. This will help ensure correct installation.



Scan the QR Code to see installation video or type into browser: <a href="mailto:sachtler.com/aktiv-head-installation">sachtler.com/aktiv-head-installation</a>

#### Fitting 100 mm Bowl Connector For The 1st Time

Note! Fitting and adjusting the Bowl Connector to the tripod is a one time effort, once set, it is left on the tripod and remains ready without further adjustment required.





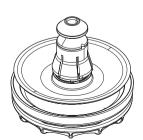
**Adjustment Knob** 

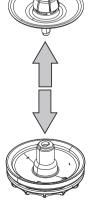
**Connector Stud** 

#### **Prepare the Bowl Connector**

The Bowl Connector comprises two parts, the connector stud and adjustment knob.

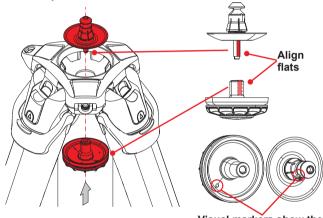
The assembly is supplied unscrewed but loosely assembled, pull the Connector Stud from the Adjustment Knob as shown.





#### **Install Bowl Connector to Tripod**

- 1. Offer the Connector Stud to the tripod from above.
- Offer the Adjustment Knob through the underside of the tripod bowl.
- Align the flats on the thread of the Connector Stud with the flat on the Adjustment Knob. See diagram below for the visual flat markers on the Adjustment Knob and Connector Stud.



Visual markers show the location of the flats

- 4. Push up the adjustment knob and keep pushing while turning clockwise.
- Keep winding clockwise gently until the two half's gently clamp the bowl.

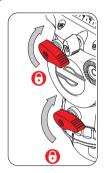
**Note!** The goal here is not to fully clamp the tripod as would be done with a traditional tie down, but to leave a small amount of spring free-play felt when the stud is pushed from above. If too tight the head will not latch properly.

6. Final adjustments will be made in the following section.

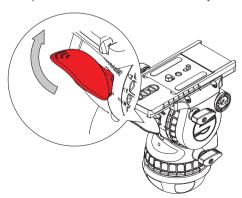
## 1st Time Installation

# Mounting the Head and Setting Connector Tension

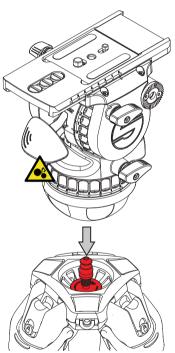
 Apply the horizontal and vertical brakes and hold the head firmly with one hand.



2. Lift the SpeedLevel Lever as shown all the way to the top.



Lower the head onto the Bowl Connector and release the SpeedLevel Lever.

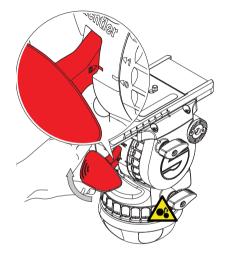




**CAUTION!** Try to lift the head from the tripod to ensure it has latched onto the connector. If the head lifts free of the connector the clamp has been tightened too much and will require loosening. With the head removed turn the Adjustment Knob anticlockwise until the head will latch onto the connector by repeating steps 2 and 3.

## 1st Time Installation

- To set the connector tension, raise the tripod so the head is at eye level.
- Lift the SpeedLevel Lever on the head and hold with "S mark" aligned to the Setting mark on the body.



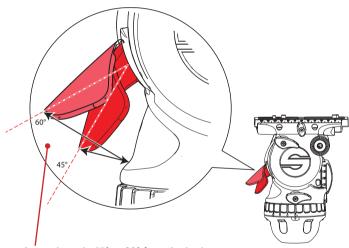
Gently, finger tighten the Bowl Connector by pressing up the outer ring and turning clockwise to remove the clearance.

**CAUTION!** DO NOT over-tighten, the objective is to eliminate a gap rather than attempting to tighten in the same manner as a tie down.



7. The tension is correct when the SpeedLevel Lever is released and sits between approximately 60° and 45° (30 mm to 50 mm (1" - 2")) from the body of the head as shown in the diagram below.

If the lever sits back against the body the Bowl Connector is too loose, repeat steps 5 and 6.



Approximately 45° to 60° from the body (30 mm to 50 mm (1 in to 2 in)) from the body.



CAUTION! Push the SpeedLevel Lever fully closed against the head body before use.



CAUTION! Try and lift the head to ensure the head is fully secured to the tripod.

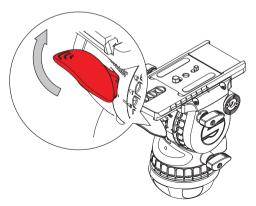
# Attaching, Levelling and Dismounting the Fluid Head From the Tripod

#### **Attach Head to Tripod**

1. Apply the horizontal and vertical brakes and hold the head firmly with one hand.



**2.** Lift the SpeedLevel Lever as shown all the way to the top.



Lower the head onto the Bowl Connector and release the SpeedLevel lever.

CAUTION! Push the SpeedLevel Lever fully closed against the head body before use.

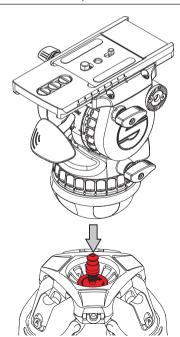


#### WARNING!

Pinch point, injury to fingers or hands, exercise caution.

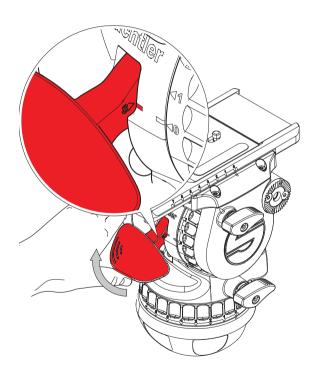


**CAUTION!** Try and lift the head to ensure the head is fully secured to the tripod.



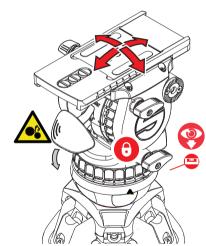
#### Levelling the Fluid Head

1. To level the head lift the SpeedLevel lever until the head is loose to enable levelling. Do not lift above the detent position, this will ensure the head remains latched to the bowl connector.



- View the bubble from above, or through the horizontal prism window (in poor light conditions operate the illumination for a better view).
- When level, lower the SpeedLevel Lever. Check level and re-adjust if required.

CAUTION! Push the SpeedLevel Lever fully closed against the head body before use.



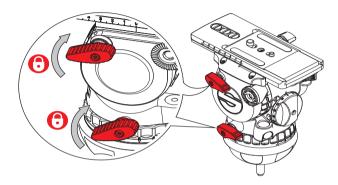
#### Dismounting the Fluid Head

To release the head from the tripod, lift the SpeedLevel Lever to the top and lift the head away from the tripod.

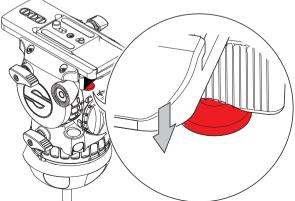
With the head removed carefully lower the SpeedLevel Lever.

## **Mounting and Dismounting the Camera (Touch and Go)**

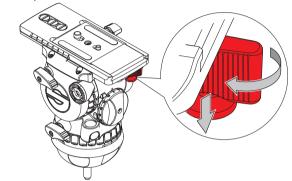
1. Apply the horizontal and vertical brakes.



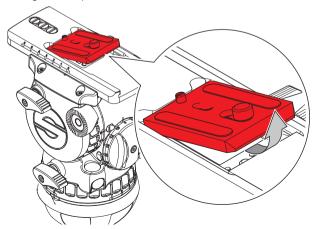
2. Hold the camera plate or camera with one hand. Grasp the locking lever with your thumb and index finger and pull down the safety button.



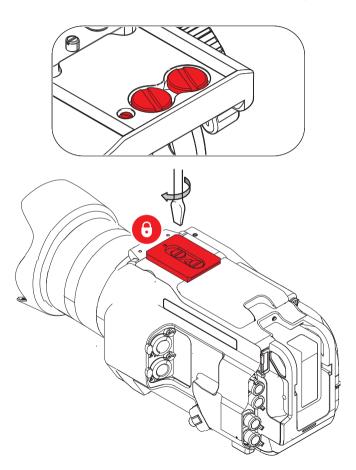
**3.** With the safety button held down, move the locking lever as far as possible to the left.



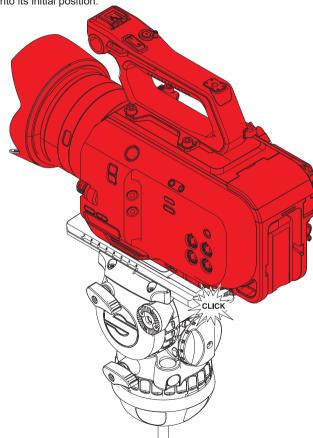
**4.** The camera plate or camera will be released from the sliding balance plate.



**5.** Attach the camera plate to the camera around its centre of gravity.

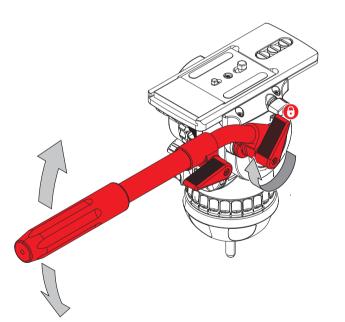


**6.** Mount the camera plate and camera onto the sliding balance plate. It will lock automatically and the lock lever will click audibly back into its initial position.



## Fitting the Pan Bar

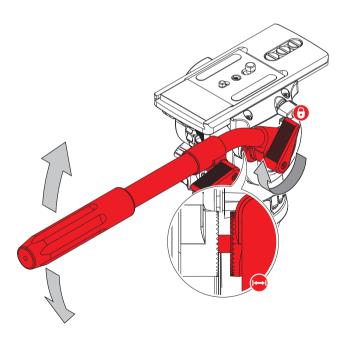
Fit and adjust the pan bar to the desired position, tighten the clamping screw ensuring the rosette teeth mesh fully.



## Adjusting the Pan Bar

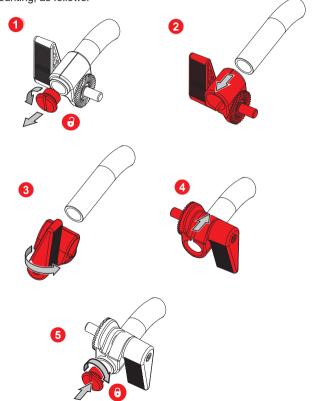
To adjust the position of the pan bar, loosen the clamping screw sufficiently to allow the rosettes to rotate without fowling.

Tighten the clamp when the pan bar is in the required position.



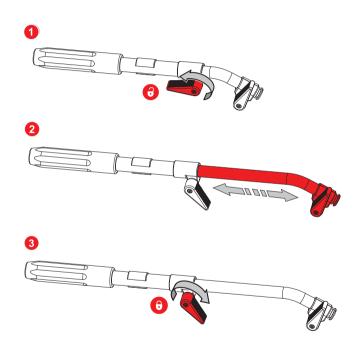
## **Configuring the Pan Bar**

As standard, the pan bar is configured to mount on the right hand side of the fluid head. The pan bar can be configured for left hand mounting, as follows:



## aktiv14T pan bar only

The pan bar may be extended, as follows:



## **Balancing the Payload**

Before operating the fluid head, the payload (camera, lens and any other fitted accessories) must be correctly balanced to ensure safe and reliable operation.

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



**CAUTION!** Always hold the pan bar when making adjustments to the counterbalance or camera position.

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

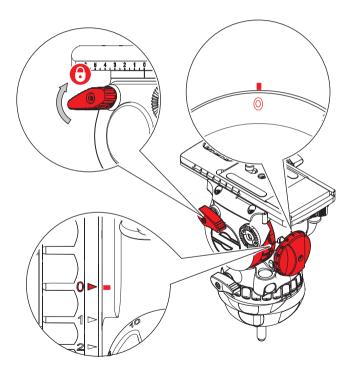
## Adjusting the Centre of Gravity (C of G)

Before adjusting the counterbalance, the centre of gravity (C of G) of the payload must be centred precisely over the axis of the fluid head.



Ensure that the fluid head is level before adjusting the centre of gravity. See page 14.

 Apply the vertical brake and adjust the vertical setting of the fluid drag to "0". Set the counterbalance adjustment knob to "0".



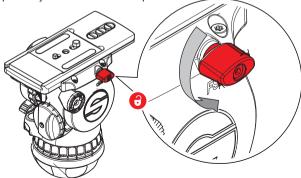
#### **Counterbalance Adjustment**

2. If the platform stops in a horizontal position (camera pointing directly forward) or falls away evenly in either direction, the balance is correct. Hold the pan bar firmly, disengage the vertical brake. Observe how the payload moves and where it stops.

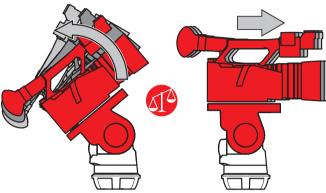


3. If the payload falls away in either direction:

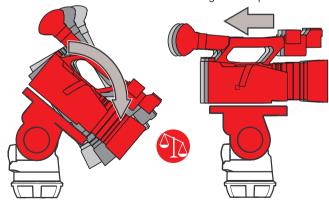
(a) Unlock the sliding balance plate by unscrewing the balance plate adjuster on the balance plate.



**(b)** If the payload tilts backwards (points up), slide it towards the front of the fluid head. Re-lock the sliding balance plate.



(c) If the payload tilts forwards (points down), slide it towards the rear of the fluid head. Re-lock the sliding balance plate.

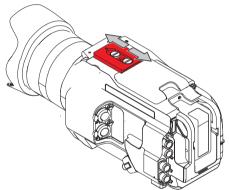


(d) Re-check the movement of the payload. If further adjustments are required, repeat steps 1 to 3.

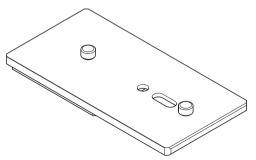
## Additional C of G Adjustments

If it is not possible to correctly set the payload C of G using the standard method:

 Move the camera plate to offset the payload further in the required direction.



2. Use the C.O.G plate (# 1063) which is available as an accessory for the Touch & Go models.



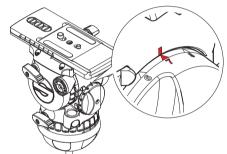
## **Adjusting the Counterbalance**

The fluid head is equipped with a 15 + 0 step counterbalance adjuster to accurately balance the payload.

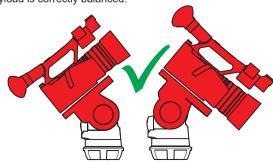


Moving the counterbalance from one setting to another requires the head to pass the horizontal position to take affect.

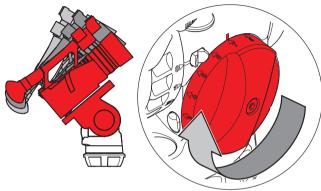
1. Set the counterbalance adjustment knob to the mid-range setting.



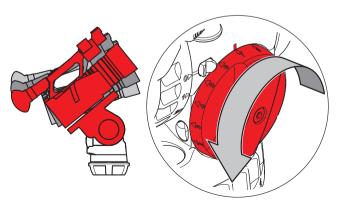
2. Tilt the payload approximately 30° in both directions and release it. If the payload stays in the same position when released, the payload is correctly balanced.



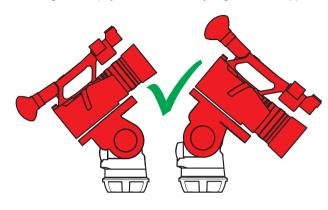
If the payload continues to move upwards when released, the balance is set too high. Lower the balance adjuster setting by one increment and retest.



4. If the payload continues to move backwards when released, the balance is set too low. Raise the balance adjuster setting by one increment and retest.



**5.** Tilt the payload through positive and negative angles of travel, checking that the payload remains at any angle of tilt unsupported.





If the payload angle falls away, repeat the balancing procedure (step 3 or 4) until balance is achieved.

## **Adjusting the Drags**

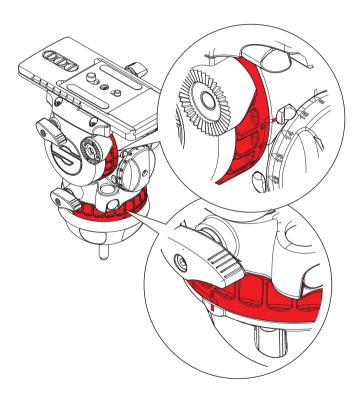
The fluid head is equipped with horizontal and vertical drag controls. The drags help to eliminate jerks and vibrations when moving the fluid head during filming. The drags can also be fully disengaged.

CAUTION! Always set the drag adjusters to the index positions. Setting the drag adjusters between index positions can cause serious damage to the fluid head.



Applying the same drag setting to the horizontal and vertical controls enables precise and even diagonal movement.

- **1.** Turn the horizontal and vertical drag controls to the required index position by aligning the arrow with the dot marker. Turn the brakes off and engage the drag by slowly panning or tilting the camera.
- Turn the drag controls to the 0 position to switch off the drag completely.



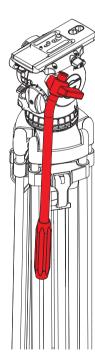
## **Transportation Head Settings**

To ensure smooth and reliable operation over the long life of the fluid head, the following settings should be applied to the controls during transportation or periods of storage:

| Brakes         | Open (OFF) |
|----------------|------------|
| Counterbalance | Maximum    |
| Drags          | Maximum    |

## **Transporting with the Pan Bar**

To transport the fluid head with the pan bar attached, stow in the vertical position with the tripod legs to prevent damage.



## **Maintenance**

## **Cleaning and Inspection**

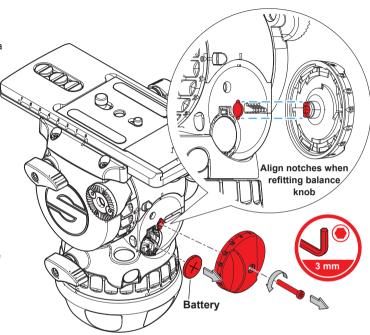
Clean the fluid head regularly using a soft cloth. For heavier dirt use a soft brush and a mild detergent.

Regular inspections are not required.

## **Changing the Battery**

The illuminated bubble level is powered by one standard type button cell (CR2032, 3 V).

- Using a suitable Hex key 3 mm, remove the Hex bolt (turn anticlockwise) from the counter balance knob.
- Remove the counter balance knob assembly to expose the battery.
- Prise the battery from its location using a finger nail or suitable flat blunt instrument. For battery disposal see "Disposal of waste batteries" on page 32
- Replace the new battery observing the correct polarity (positive face up). Press the bubble prism to check the light is working.
- Reassemble the counter balance knob. Note, the knob centrepiece must align with the notches on the head at the 12 o'clock and 6 o'clock positions.
- Replace the Hex bolt and tighten. Check the operation of the counter balance knob to confirm correct operation.



#### **Routine Maintenance**

Periodically operate the horizontal and vertical drags through their full range of indexing to ensure the engaging pins in fluid head stay lubricated.

The battery should last for approximately 2000 illumination cycles.

## **Rosettes**

Spare Part No.

Rosette: SKO11E2043 Screw x 2: D799104101

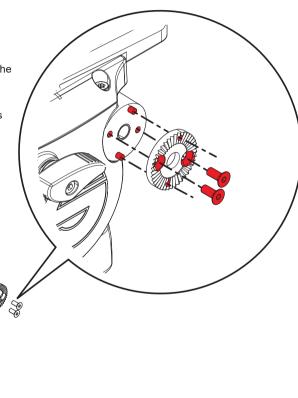
aktiv12T and aktiv14T have replaceable rosettes.

 Using a 4mm HEX key, remove the two HEX bolts securing the rosette.

2. Prise the rosette from the two locating pegs.

To fit the new rosette, slide the rosette over the retaining pins and firmly screw the HEX bolts into place.

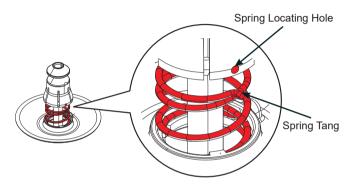
9



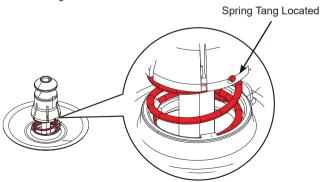
## **Bowl Connector Trouble Shooting**

# In the unlikely event that the upper cup and spring become disconnected from the Stud.

Slide the upper cup and spring back onto the stud shaft and hook the spring tang into the bronze cone locating hole from the inside.



Gently push and twist the cup until the spring latches into the lip on the inner edge of the bronze cone



## **Technical Specification**



#### Weight

**aktiv12T** 3.3 kg (7.3 lb) **aktiv14T** 3.4 kg (7.5 lb)



### Max. Payload

**aktiv12T** 14 kg (30.9 lb) **aktiv14T** 16 kg (35.3 lb)



#### Height

**aktiv12T** 188 mm (7.4 in) **aktiv14T** 188 mm (7.4 in)



#### **Drags (horizontal and vertical)**

**aktiv12T** 7 settings plus 0 aktiv14T 7 settings plus 0



## Counterbalance steps

aktiv12T15 settings plus 0aktiv14T15 settings plus 0



## Platform sliding range

Touch & Go - 70 mm / 2.8 in



#### Temperature range

-40°C (-40°F) to +60°C (+140°F)



## **Battery**

CR 2032, 3 V



#### Tilt range

**aktiv12T** +90° to -70° **aktiv14T** +90° to -70°



### **Camera fitting**

Touch & Go camera plate 16 (# 1064)



## **Tripod fitting**

100 mm bowl with SpeedSwap base



#### Pan bar type

**aktiv12T:** Pan bar DV 100 Diameter 18/-/32mm - 0.7/-/1.3 in; Length 450 mm / 17.7 in

**aktiv14T:** Pan bar DV telescopic Diameter 18/22/32 mm 0.7/0.9/1.3 in Length 350-520 mm / 13.8 - 20.5 in

We reserve the right to make changes to the product based on technical advances.

#### **General Notices**



#### **UK Declaration of Conformity**

Vitec Production Solutions Ltd. declares under our sole responsibility that the product detailed in this manual conforms with all relevant provisions of the following UK Regulations:

The Electromagnetic Compatibility Regulations 2016

The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 A copy of the declaration is available on request.

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### **EU Declaration of Conformity**



Vitec Production Solutions Ltd. declares under our sole responsibility, supported by Vitec Product Solutions GmbH - our authorized representative, that the product detailed in this manual conforms with all relevant provisions of the following EU directives:

Electromagnetic Compatibility Directive 2014/30/EU

RoHS 2011/65/EU

A copy of the declaration is available on request.

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#### **FCC Compliance Statement**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment under FCC rules.

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Vitec Production Solutions Ltd. declares that this product has been manufactured in accordance with BS EN ISO9001.

#### **Environmental considerations**

# European Union Waste of Electrical and Electronic Equipment (WEEE) Directive (2012/19/EU)



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 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 "Changing the Battery" on page 20 in this user guide 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.





