# **User Guide**



**FSB MK II Fluid Head** 

FSB MKII Fluid Head



FSB 6 MKII FSB 8 MKII FSB 10 MKII

Part No. S2065-0001 S2069-0001 S2073-0001



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### Original Instructions: English

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Videndum Production Solutions Ltd

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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



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



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



**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 FSB II fluid head range 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

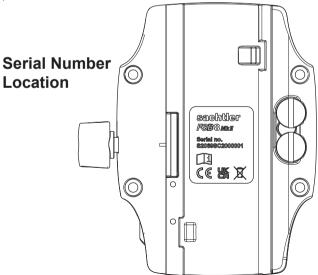
This product is covered by a one year warranty.

The warranty will be invalidated if:

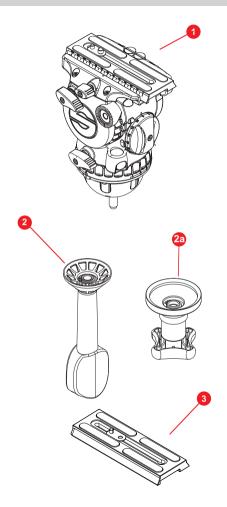
- The head is improperly installed or used in a manner contrary to this user guide.
- The head housing is opened by unauthorised personnel.

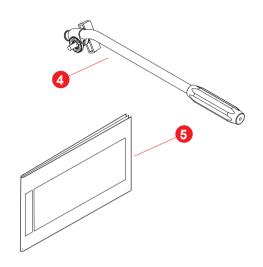
## **Extended Warranty**

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



# **Box Contents**

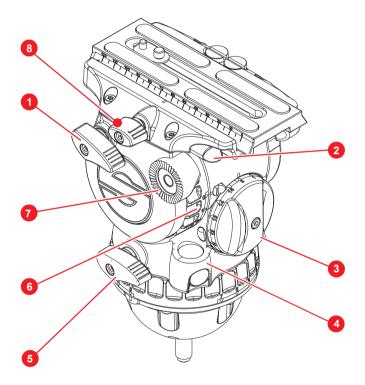




Item	Description	Part No
1	FSB 6 II fluid head (Sideload)	S2065-0001
	FSB 8 II fluid head (Sideload)	S2069-0001
	FSB 10 II fluid head (Sideload)	S2073-0001
2	Tie down 75mm	0075
2a	Tie down 100mm	S2052-1100
3	Sideload camera plate S	0164
4	Pan bar	0992SP
5	User guide	S2065-4980

# **Operating Elements**

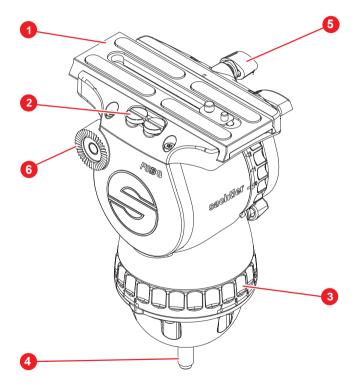
## **Left View**



1	Vertical brake
2	Sideload system safety lock
3	Counterbalance adjustment knob
4	Illuminated Prism bubble
5	Horizontal brake
6	Vertical drag control
7	Rosette for left pan bar
8	Balance plate clamp knob

# **Operating Elements**

## **Right View**



1	S Sideload camera plate S
2	Spare camera screws
3	Horizontal drag control
4	Tie down mounting
5	Balance plate clamp knob
6	Rosette for right pan bar

### **PrismBubble**

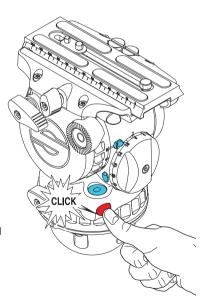
The fluid head is fitted with an illuminating bubble level which allows easy levelling in poor lighting conditions. It also illuminates the drag controls.

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 Prism Bubble 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 (drag) LED's for 20s ± 2s.
- Pressing the window again when any of the illuminations are on, will turn every LED off.

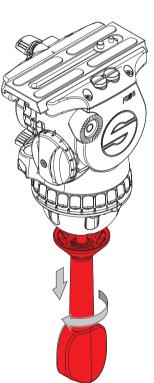


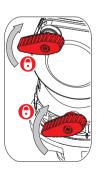
## Mounting the Fluid Head

The fluid head is designed to be installed onto Sachtler 75 mm tripod (FSB 6, FSB 8) or 100 mm tripod (FSB 10) using the tie down.

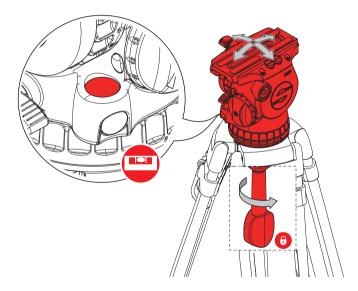
### Mounting to a Tripod

- Apply the horizontal and vertical brakes and hold the head firmly with one hand.
- 2. Remove the tie down and place the fluid head on the tripod refitting the tie down loosely.





Move the head so that the level bubble is central. Tighten the tie down, release the horizontal brake and check the level bubble remains central.



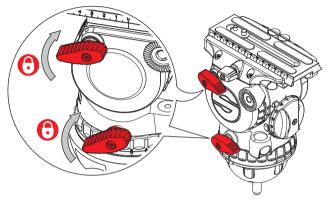
### **Converting the Head Into a Flat Base**

1. Unscrew the centre tie down stud (retain for future use) to make a flat base for a Pedestal or Slider.

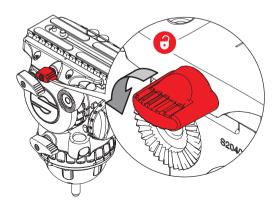


## Mounting and Dismounting the Camera (Sideload)

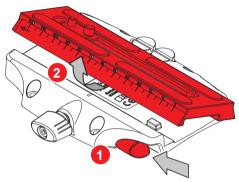
**1.** Apply the horizontal and vertical brakes.



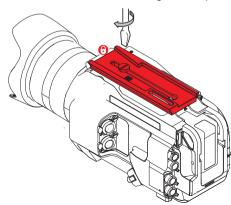
**2.** Release the clamp knob.



3. Push the safety lock (1) and release the plate (2).

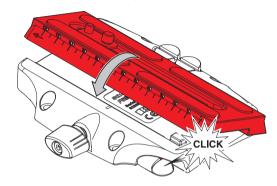


4. Attach the camera plate to the camera around its centre of gravity, observe the arrow on the plate indicating the direction of the arrow. Additional screws are stored in the sliding balance plate assembly.

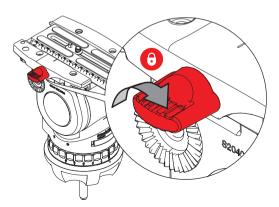


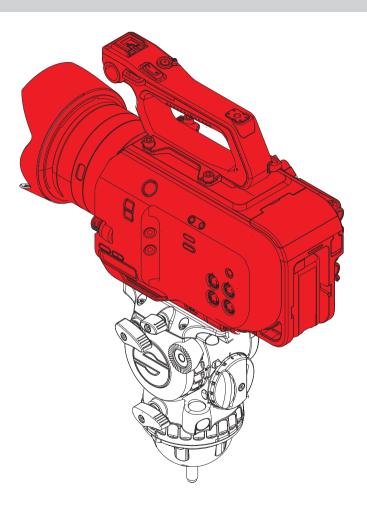
**5.** Place the camera plate into the dovetail and lower into place. It will lock automatically and the lock lever will click audibly back into its initial position.

Note! Camera removed for clarity



**6.** Firmly lock the plate in position after the balance procedure using the clamp knob.





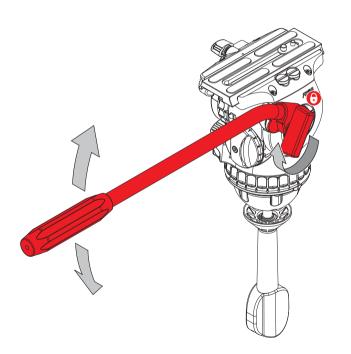
## Fitting the Pan Bar

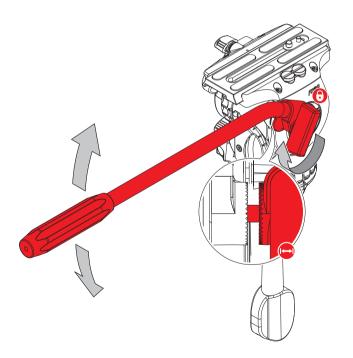
Fit and adjust the pan bar to the desired position, tighten the clamping screw ensuring the rosette teeth mesh fully.

## 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.

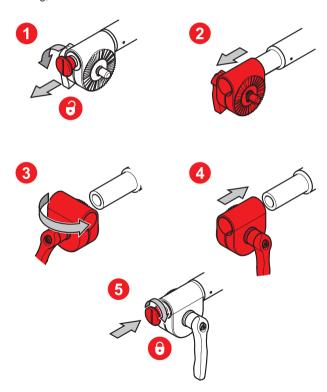
Tighten the clamp when the pan bar is in the required position.





## **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:



## **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.

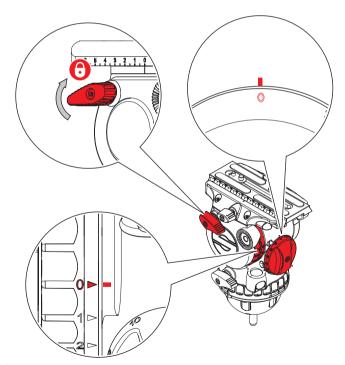


Ensure that the fluid head is level before adjusting the centre of gravity. See "Mounting the Fluid Head" on page 8.

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



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

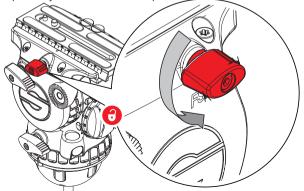


### **Counterbalance Adjustment**

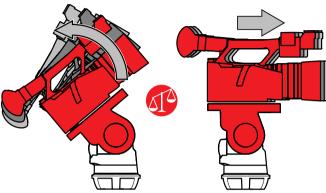
2. If the platform stops in a horizontal position (camera pointing directly forward) or falls away evenly in either direction, the balance is correct. Hold the pan bar firmly, disengage the vertical brake. Observe how the payload moves and where it stops.



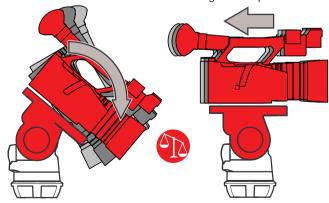
- 3. If the payload falls away in either direction:
  - (a) Unlock the sliding balance plate by unscrewing the balance plate adjuster on the balance plate.



**(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.

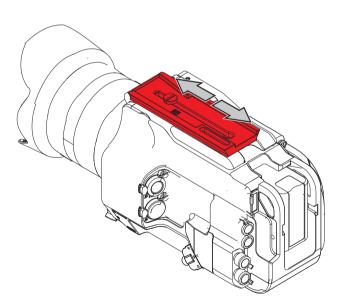


(d) Re-check the movement of the payload. If further adjustments are required, repeat steps 1 to 3.

## **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.

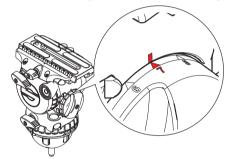


## **Adjusting the Counterbalance**

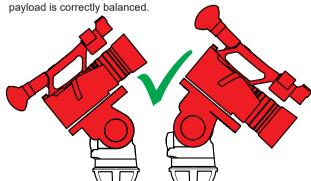
The fluid head is equipped with a 15 step counterbalance adjuster to accurately balance the payload.

**Note**, moving the counterbalance from one setting to another requires the head to pass the horizontal position to take affect.

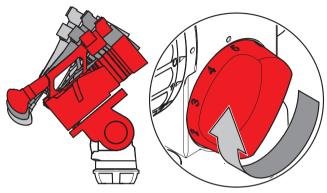
1. Set the counterbalance adjustment knob to a mid-range setting.



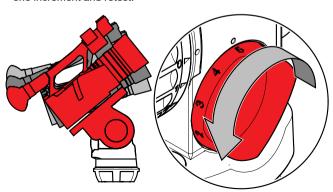
2. Tilt the payload approximately 30° in both directions and release it. If the payload stays in the same position when released, the



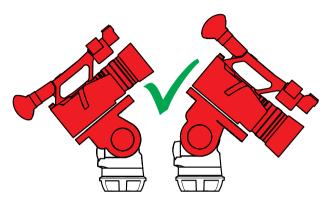
**3.** If the payload continues to move upwards when released, the balance is set too high. Lower the counterbalance adjuster setting by one increment and retest.



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



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**

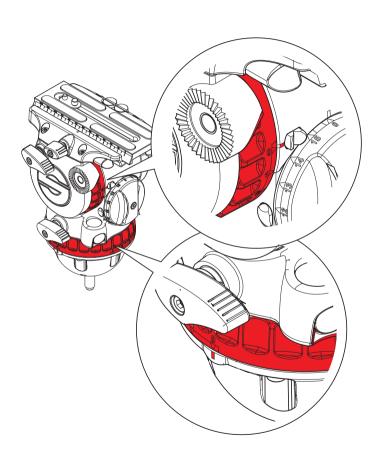
The fluid head is equipped with horizontal and vertical step drag controls. The drags help to eliminate jerks and vibrations when moving the fluid head during filming. The drags can also be fully disengaged.

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 (0 lowest, 7 highest drag resistance, **note!** FSB 6 II highest drag is 3) by aligning the arrow with the dot marker. Turn the brakes off and engage the drag by slowly panning and tilting the camera.
- 2. Turn the drag controls to the 0 position to switch off the drag completely.



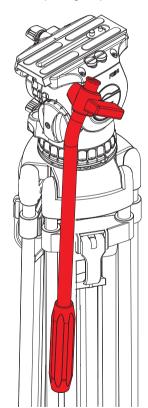
## **Transportation Head Settings**

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**

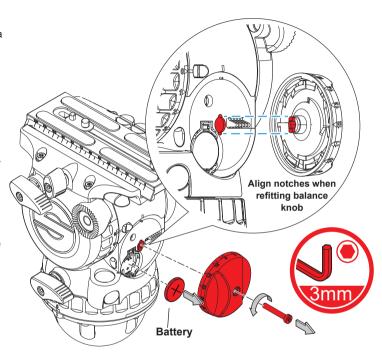
Clean the fluid head regularly using a soft cloth. For heavier dirt use a soft brush and a mild detergent.

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 2.5mm, remove the Hex bolt (turn anticlockwise) from the counter balance knob.
- Remove the counter balance knob assembly to expose the battery.
- 3. 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.

## **Technical Specification**



### Weight

FSB 6 II 2.5 kg (5.5 lb) FSB 8 II 2.6 kg (5.7 lb) FSB 10 II 2.7 kg (6.0 lb



### Max. Payload

FSB 6 II 8 kg (17.6 lb) FSB 8 II 12 kg (26.5 lb) FSB 10 II 12 kg (26.5 lb)



### Height

FSB 6 II 186 mm (7.3 in) FSB 8 II 186 mm (7.3 in) FSB 10 II 188 mm (7.4 in)



### Drags (horizontal and vertical)

FSB 6 II 3 settings plus 0 FSB 8 II 7 settings plus 0 FSB 10 II 7 settings plus 0



### Counterbalance steps

**FSB 6 II** 15 settings plus 0 **FSB 8 II** 15 settings plus 0 **FSB 10 II** 15 settings plus 0



### Tilt range

+90° to -70°



### Camera plate sliding range

120 mm (4.7 in)



### Temperature range

-40°C (-40°F) to +60°C (+140°F)



### Camera fitting

Sideload camera plate (# 0164)



### Pan bar type

Single pan bar (# 0992SP)
Diameter 16 / 28 mm (0.63 in / 1. in)
Length 430 mm (16.9 in)



### **Battery**

CR 2032, 3 V



### **Bowl size**

 FSB 6 II
 75 mm

 FSB 8 II
 75 mm

 FSB 10 II
 100 mm

## **Declaration of Conformity**



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

Videndum Production Solutions Ltd., as the responsible party for regulatory compliance, declares under our sole responsibility that as delivered the described product has been assessed and determined compliant with the following:

Electromagnetic Compatibility (EMC) Directive 2014/30/EU

By application of the following harmonised standard(s):

EN55032:2015 Class A

EN55015:2013 + A1:2015

EN61547:2009

EN55035:2017

Machinery Directive 2006/42/EC

RoHS 2011/65/EU

A copy of the Declaration of Conformity is available upon request.

### **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 22 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.



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