

ECARTONIE

PROFESSIONAL CAMERA SUPPORT

LAMBDA 50 ✓

USER'S MANUAL & Maintenance





CERTIFICATO N. 19714/09/S
CERTIFICATE No.

SI CERTIFICA CHE IL SISTEMA DI GESTIONE PER LA QUALITÀ DI
IT IS HEREBY CERTIFIED THAT THE QUALITY MANAGEMENT SYSTEM OF

CARTONI S.P.A.

VIA DI PORTONACCIO, 33/B 00159 ROMA (RM) ITALIA

NELLE SEGUENTI UNITÀ OPERATIVE / *IN THE FOLLOWING OPERATIONAL UNITS*

VIA DI PORTONACCIO, 33/B 00159 ROMA (RM) ITALIA

È CONFORME ALLA NORMA / *IS IN COMPLIANCE WITH THE STANDARD*
ISO 9001:2015

PER I SEGUENTI CAMPI DI ATTIVITÀ / *FOR THE FOLLOWING FIELD(S) OF ACTIVITIES*

IAF:17
IAF:29

PROGETTAZIONE, FABBRICAZIONE ED ASSISTENZA POST-VENDITA DI PRODOTTI PER LA CINEMATOGRAFIA E LA TELEVISIONE PROFESSIONALE. COMMERCIALIZZAZIONE DI PRODOTTI ED ACCESSORI IN CONCESSIONE PER LA CINEMATOGRAFIA E LA TELEVISIONE PROFESSIONALE

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La validità del presente certificato è subordinata a sorveglianza periodica annuale / semestrale ed al riesame completo del sistema di gestione con periodicità triennale
The validity of this certificate is dependent on an annual / six monthly audit and on a complete review, every three years, of the management system
L'uso e la validità del presente certificato sono soggetti al rispetto del documento RINA: Regolamento per la Certificazione di Sistemi di Gestione per la Qualità
The use and validity of this certificate are subject to compliance with the RINA document: Rules for the certification of Quality Management Systems

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1. INTRODUCTION

The Award winning **CARTONI LAMBDA 50** Nodal Fluid Head is the only support that allows to set the nodal position with any Camera and pivoting 360° pan, tilt and roll, on the focal plan of any Camera.

The settings are achieved by graduated slides both horizontally and vertically with micrometric cranks for extreme precision. A smart system of orientable counterweight rods can be used when the slide run is not sufficient.

The **LAMBDA 50** can be mounted on any classic support as tripods or dollies or used in underslung position from cranes and Jib arms.

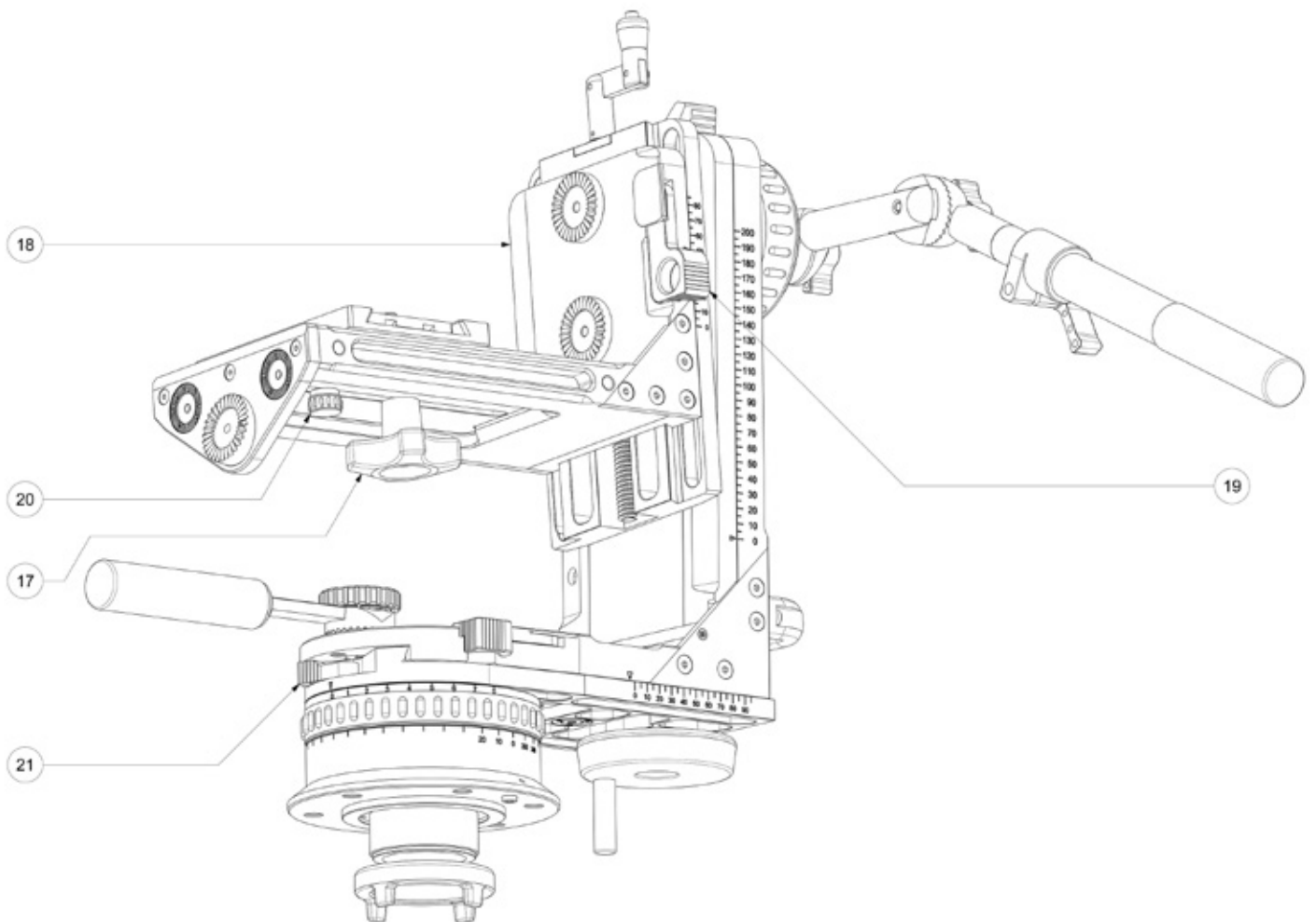
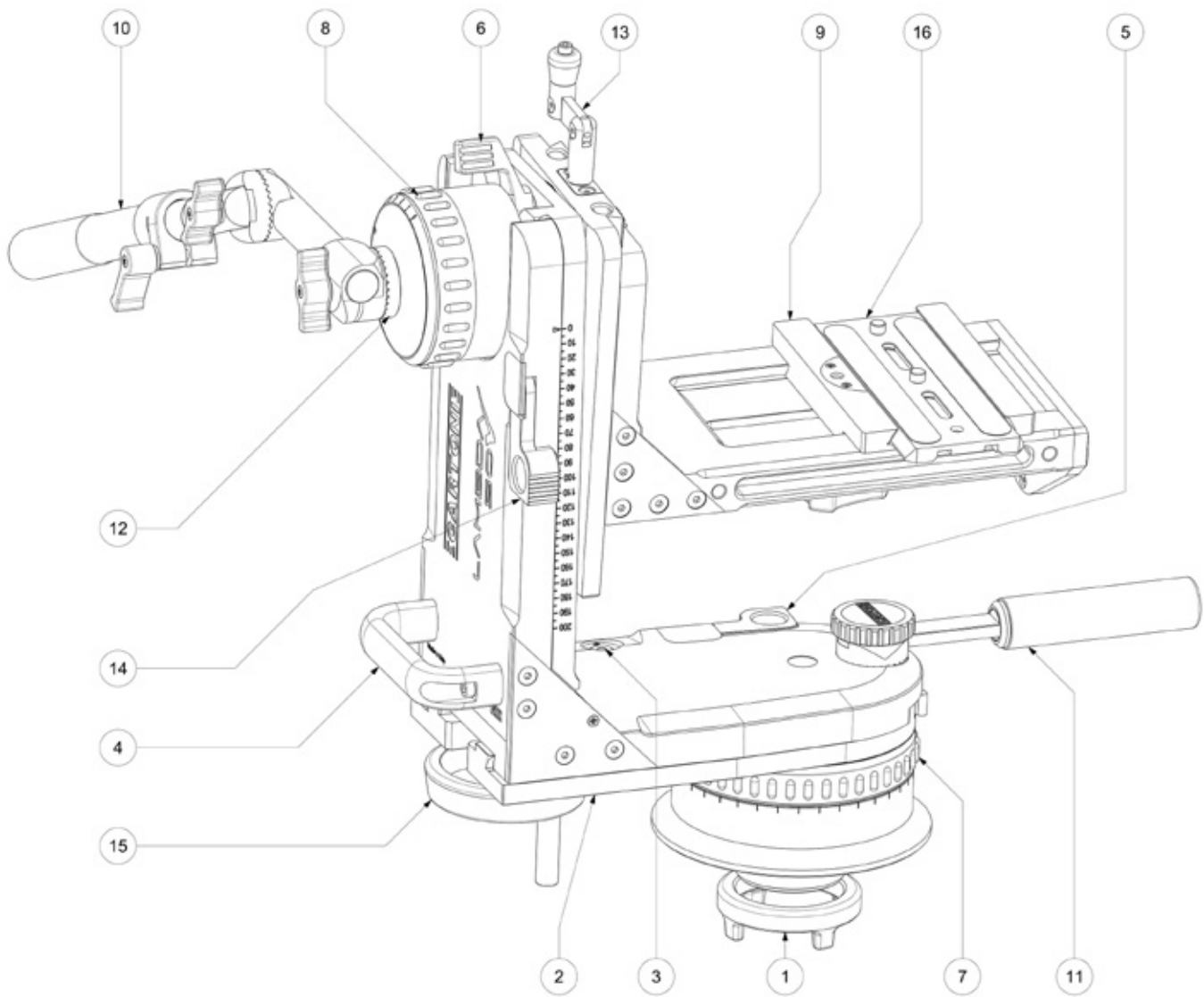
Optional accessories as the **3rd AXIS**, the orientable pan bar, steering wheel, eyepiece holder and the counterweight rods complete the most versatile of Camera supports.

- Before using the **LAMBDA 50**, please make sure to read this maintenance & user's manual;
- Before installing the **LAMBDA 50** on a tripod, crane, or any other support, check the support stability;
- Check that the Camera payload (including lenses & accessories) is lower than the maximum capacity of the **LAMBDA 50**;
- Before installing the Camera make sure the **LAMBDA 50** is in good conditions and bares no evident damages.

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2. LAMBDA 50 - OPERATING ELEMENTS

- | | |
|----------------------------------|--|
| 1 Fixing nut | 12 Tilt module rosette |
| 2 Horizontal slide | 13 Inner slide crank |
| 3 Bubble level | 14 Vertical lock safety lever |
| 4 Transport handle | 15 Outer slide crank |
| 5 Horizontal slide locking lever | 16 Camera plate |
| 6 Tilt lock lever | 17 Sliding camera support locking knob |
| 7 Pan drag selector | 18 Inner slide |
| 8 Tilt drag selector | 19 Safety lever |
| 9 Sliding base | 20 Safety knob |
| 10 Main pan bar | 21 Pan lock lever |
| 11 Short handle | |



3. GETTING STARTED

- Install the **LAMBDA 50** on the support (tripod, crane, dolly) and lock all the safety knobs.
- Place the **LAMBDA 50** on the Mitchel base and rotate until it matches the steel notch; tighten the Fluid Head firmly by screwing in the fixing nut (1) underneath the flat base. **WARNING:** in under-slung position secure the **LAMBDA 50** with the 2 ¼ inch nut. Check the bubble level (3) for horizontal position.
- Insert pan lock (21) and tilt lock (6) and turn both tilt drag selector (7) and pan drag selector (8) to position "0".
- To release the Camera plate (16) pull down safety knob (20), unlock knob and disengage the Camera plate.
- Attach the Camera plate under the Camera assembly and firmly secure it with both screws. Try to place the Camera plate centered under the Camera system, keeping in mind the position of the center of gravity (CG).
- Slide the Camera in place on the sliding base (9) and center it by moving the base (9) left to right until you get a centered position. Release tilt lock (6) while holding the camera to prevent accidents and find a first Camera balance adjusting the sliding base (9) position releasing and locking it with the knob (17) under the sliding base. Lock the knob (17) when in place.
- Unlock horizontal slide locking lever (5) and set slide (2) in position, lock horizontal slide locking lever (5). The Camera assembly center of gravity (CG) should be aligned with the pan unit Axis in order to avoid unnecessary offsets and optimise the Fluid Head performance.
- Unlock safety lever (19) and set the main vertical slide length to fit the Camera dimensions by cranking up slide (18) with inner slide crank (13), lock safety lever (19) when in position.
- Unlock vertical lock safety lever (14) unfold crank (15) and crank it up or down until you find the Camera center of gravity (CG); at this point the Camera has to spin freely 360° degrees around the tilt position with the adjustable main pan bar (10). Lock vertical lock safety lever (14) and fold crank into housing position.
- Adjust pan (7) and tilt (8) selectors to the desired drag position and unlock pan lock (21).
- In case the shape and weight of the Camera system makes balance hard to obtain you can compensate offset components as long telephoto lens or viewfinder extensions with the appropriate counterweights and rods to be fixed on the rosette (18).
- Counterweights and rods are essential to achieve the nodal setting.

4. LAMBDA 50 - SPECIFICATIONS

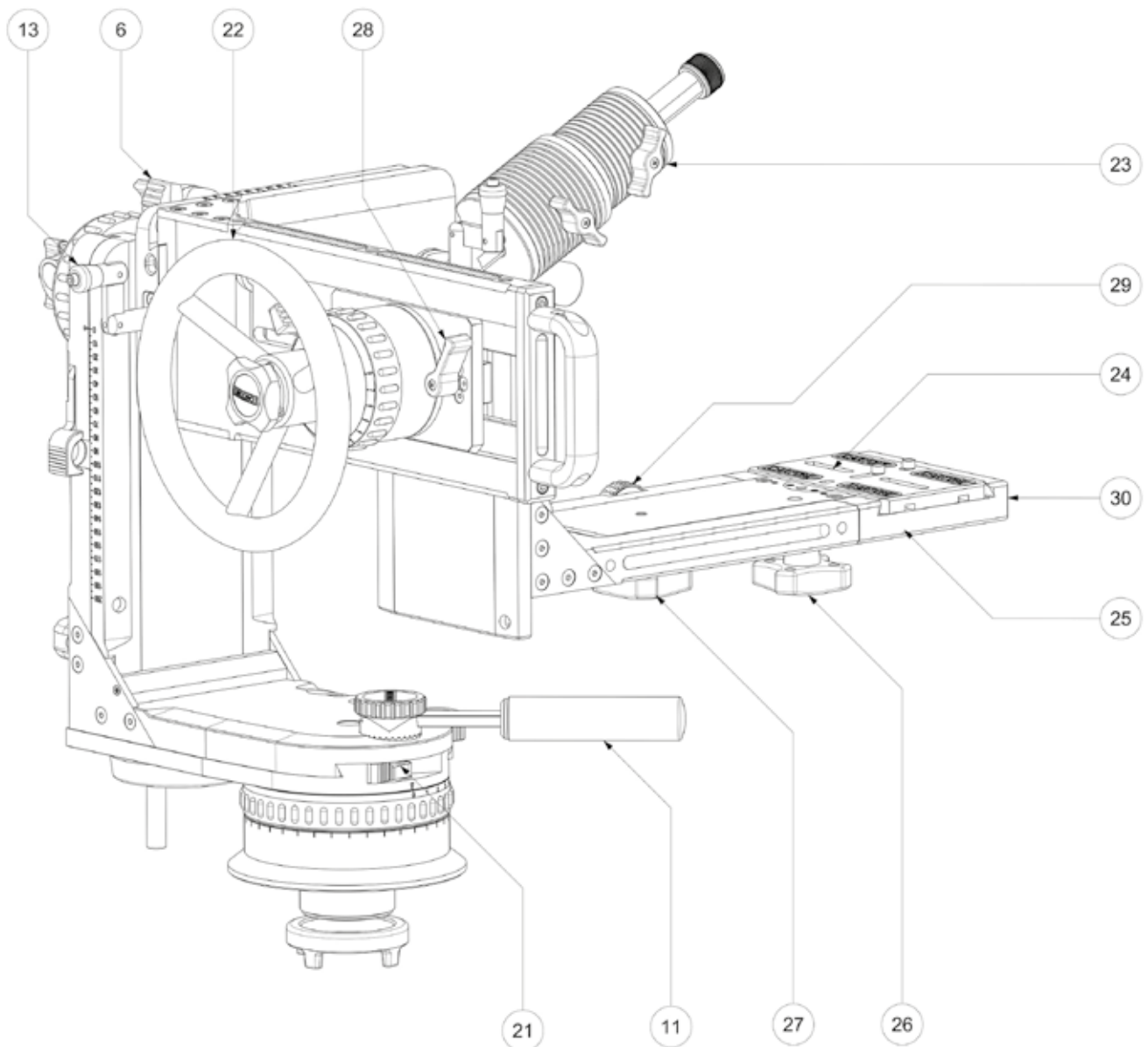


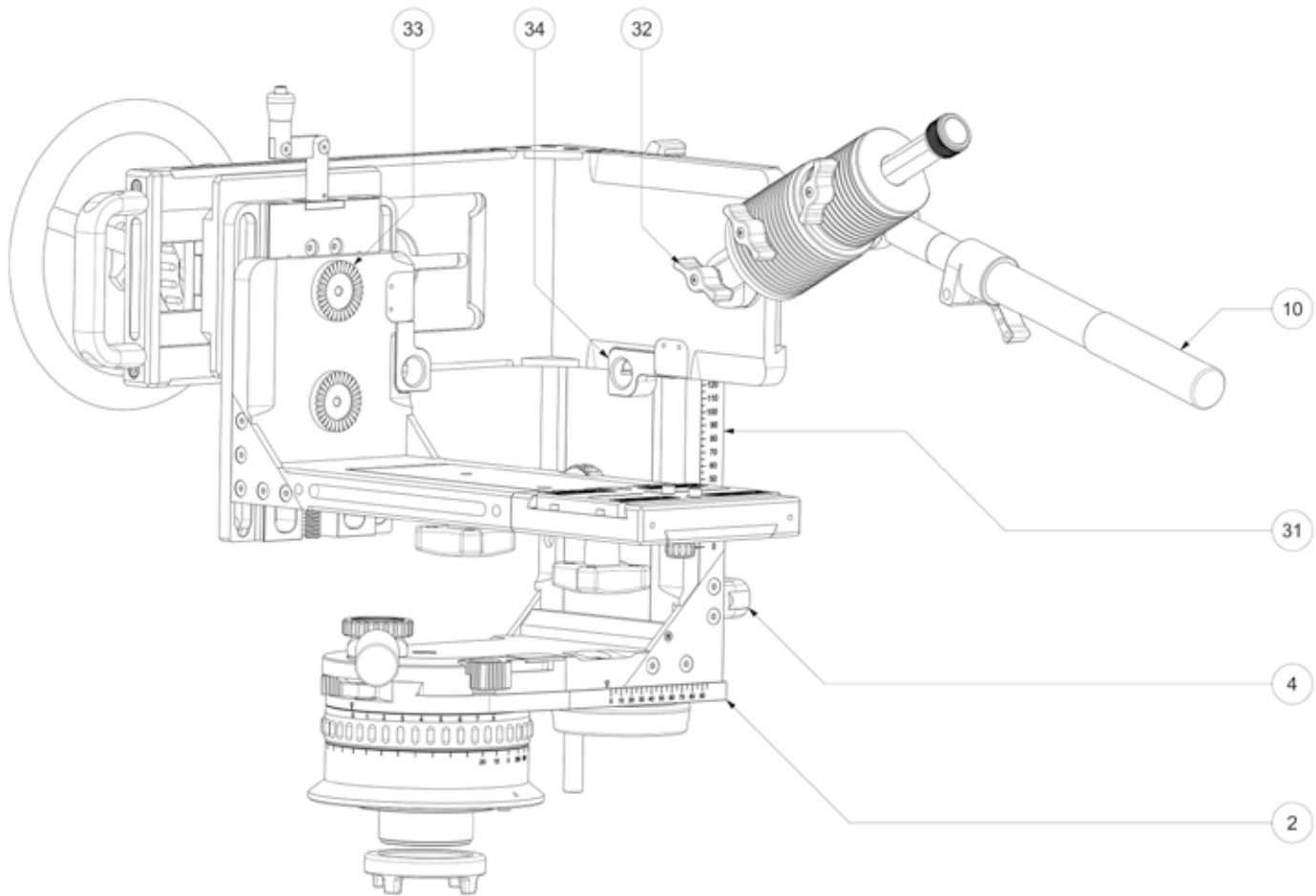
Minimum payload	0 Kg	0 lbs
Maximum payload	50 Kg	110 lbs
Weight	21,0 Kg	46.3 lbs
Bowl diameter	Flat base	
Fluid control	7 steps + 0	
Counterbalance	0	
Pan range	360°	
Tilt range	+/- 65°	
Temperature range	-40 / +60 °C	-40 / +140 °F

LAMBDA 50 - 3rd AXIS

5. 3rd AXIS - OPERATING ELEMENTS

- | | | |
|----------------------|---------------------------------|-------------------------------------|
| 6 Tilt lock lever | 23 Counterweight | 28 Spin lock lever |
| 11 Short handle | 24 Camera plate | 29 Camera plate slide control wheel |
| 13 Inner slide crank | 25 Camera plate safety knob | 30 Slide |
| 21 Pan lock lever | 26 Camera plate lock knob | |
| 22 Control wheel | 27 Camera plate slide lock knob | |





2 Horizontal slide

4 Transport handle

10 Main pan bar

31 Vertical slide

32 Counterweight lever

33 Counterweight rosette

34 3rd **AXIS** plate lock lever

6. How To MOUNT THE 3rd AXIS

Please see the video at:

www.cartoni.com/products/fluid-heads/fluid-heads-sfx/hl5000ta-lambda50-third-axis/

- Place inner **LAMBDA 50** slide (18) horizontally and lock in place with tilt lock lever (6).
- Unlock inner slide safety lever (19) and crank out inner slide (18) with crank (13) till to access safety Allen screw.
- Remove safety M5 screw with a 4mm Allen key.
- Lock inner slide safety lever (19).
- Crank inner slide (18) all the way with crank (13) and remove it.
- Slide in the **3rd AXIS** assembly.
- Crank the **3rd AXIS** assembly with crank (13) and lock **3rd AXIS** plate with lever (34).
- Replace safety Allen screw and tighten.
- Mount control wheel (22) adjustable pan bar (10) and short handle (11).

7. CAMERA SET-UP WITH 3rd AXIS

- To release the Camera plate (4) pull down safety knob (5), unlock knob (6) and disengage the Camera plate.
- Lock the spin lock lever (8) the pan lock lever (12) and the tilt lock lever (13).
- Attach the Camera plate under the Camera assembly and firmly secure it with both screws.
- Slide the Camera in place on the sliding base (10) and lock the knob (6).
- Set the **LAMBDA 50** main horizontal slide (14) and main vertical slide (15) at maximum extension in order to prevent the Camera and its accessories to interfere with the **LAMBDA 50** frame during the 360° movement. Operate the pan lock lever (12) and tilt lock lever (13) to lock and unlock.
- Set the Camera position by the turning wheel (9) and secure it with the Camera plate control knob (7). The Camera should move freely 360° on the roll Axis.
- Crank up or down the slide (10) to line up the rotation shaft of the control wheel (1) with the position of the Camera center of gravity (CG) (vertical Axis).
- Unlock the knob (6) and slide the Camera in place on the sliding base (10), to line up the rotation shaft of the control wheel (1) with the position of the Camera center of gravity (CG) (horizontal axis).
- The Camera is most probably out of balance so we have to correct the center of gravity (CG) of the entire system. Fix one or two counterbalance rods with weights to the rosette; adjust the angular position of the rod and weight position, until you fit the Camera in balance.
- This operation can require several fine tuning attempts, so please see the video at www.cartoni.com/products/fluid-heads/fluid-heads-sfx/hl5000ta-lambda50-third-axis/.
- Unlock the spin lock lever (8), the pan lock lever (12) and the tilt lock lever (13).
- The Camera has to be balanced and has to rotate 360° operating the control wheel (1) for roll rotation and the main pan bar (16) for pan and tilt rotation.

8. 3rd AXIS - SPECIFICATIONS

Minimum payload	0 Kg	0 lbs
Maximum payload	40 Kg	88 lbs
Weight	15,5 Kg	34.2 lbs
Bowl diameter	Plate	
Fluid control	7 steps + 0	
Counterbalance	0	
Pan range	360°	
Tilt range	360°	
Temperature range	- 40 / + 60 °C	- 40 / +140 °F

9. MAINTENANCE

When needed, with indoor use just clean the **LAMBDA 50** and tripod with a soft cloth. Dirt accumulated during storage may be removed using a brush or Air-spray.

CARTONI products main mechanisms are sealed as they are also built for professional outdoor use.

However, used under rough conditions they will require special care. Salt water is very corrosive and can cause extreme damages. In attempt to avoid further damage the Fluid Head should be washed off with fresh water at the earliest opportunity and perfectly dried before storage.

Sand and dirt are abrasive and should be removed using a semi-stiff brush or Air-spray.

10. WARRANTY

All **CARTONI** Fluid Heads & Pedestals have a free of charge three (3) year warranty. Register your product at www.cartoni.com within 30 days from date of first purchase/invoice to receive further two (2) year warranty for the unsurpassed free five (5) year warranty.

Tripods, spreaders, dollies and all accessories are guaranteed one (1) year from the date of first purchase/invoice.

CARTONI warrants that the product supplied will - under proper use - be free from defects in workmanship and materials and agrees that it will, at its option, either repair or replace any defective part within duration of warranty from date of first purchase with no labour charge.

This warranty does not apply to any **CARTONI** product that has been damaged in shipping or handling, abused, misused, operated contrary to instructions for use, neglected, normal wear or tear, modified or changed in design or construction or serviced by unauthorized parties.

Repairs or misuse by any unauthorized parties will void this warranty.

Warranty claims must be submitted – in writing - to the factory for verification or to an authorized distributor/dealer designated by **CARTONI**.

It is the end user's responsibility when ordering to ensure that the products ordered conform to his requirements.

All freight of product to **CARTONI** must be prepaid. All implied warranties are limited to the time period set forth herein & subject to change without notice.

No liability can be accepted for any variation.

11. ACCESSORIES & PRODUCT LINE

For the complete Accessories list & Product line please visit **CARTONI's** official website

www.cartoni.com.

Every product has an updated list of compatible items sorted by groups, with descriptions and technical data.

CARTONI
PROFESSIONAL CAMERA SUPPORT

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