

MAINTENANCE AND USER'S MANUAL



P70 PLUS PEDESTAL

CARTONIE
PROFESSIONAL CAMERA SUPPORT

Rev. 1 – 05/2016

Thank you for choosing the P70 PLUS Pedestal manufactured by *Cartoni S.p.A.*

The P50 was designed and built using state-of-the-art technologies and procedures in order to guarantee the maximum reliability over time, as well as total safety for its users.



In order to use the P70 PLUS Pedestal properly and safely it is essential to read this manual very carefully and follow the instructions to the letter.

All back-up material, and this manual in particular, should be stored in a safe place for future reference.



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1. INTRODUCTION

The present manual relates to the camera support *P70 PLUS Pedestal*.

The tripod can only operate properly and safely if it is used exactly as prescribed in the present manual and the other documentation that accompanies the P70 PLUS Pedestal.

It is therefore essential to read all the said documentation very carefully and to keep it in a safe place.

Always make sure that anyone required to operate the pedestal has fully understood all instructions and regulations governing its use as well as all the symbols and controls on the machine.

Although the equipment features safety devices, not all the risks inherent its improper use can be avoided. *Cartoni S.p.A* therefore accepts no responsibility for damage to persons or property deriving from improper use of the equipment.



WARNING! Do not remove or deface any labels, indications or warnings affixed to the machine.



WARNING! Any modifications to the pedestal and/or its accessories require prior authorisation by *Cartoni S.p.A*.

1.1. ANNEXES

The following form an integral part of the present document:

- ✓ Blow-up diagrams of the equipment.

1.2. WARRANTY

The P70 PLUS Pedestal is covered by a warranty against manufacturing defects for 5 years from the date of shipment.

The warranty covers replacements of any defective parts and the labour required for the purpose; it is the client's responsibility to bring any product requiring repair to the *Car-*

toni S.p.A. office in Rome or to *Cartoni* or to *Cartoni* authorized service centre.

If it is merely a question of replacing individual components, these will be supplied free of charge from the *Cartoni S.p.A.* factory. Transport costs will be charged to the client. The present warranty is only valid if the pedestal has been properly used in accordance with the manufacturer's instructions and has not been mishandled. *Cartoni S.p.A* immediately invalidates the warranty if modifications and/or repairs are carried out by persons not authorised to do so.

Components subject to wear and tear are not covered by the warranty.

The warranty is also invalidated by one of the following:

- ✓ failure to comply with payment conditions;
- ✓ failure to carry out appropriate maintenance;
- ✓ removal or mistreatment of plates and/or labels containing data and technical specifications.

The warranty absolves *Cartoni S.p.A.* of all responsibility for any direct or indirect damage deriving from its equipment and/or any time they have to be taken out of service.

Cartoni S.p.A. accepts no responsibility for damage to the pedestal caused by improper use or the malfunction of other equipment connected to the camera support.

The warranty only covers machine damage and/or malfunction and does not entitle the Purchaser to claim any damages for loss of production time due to assumed or proven damage powered by and/or connected to the pedestal itself.

The present warranty forms an integral part of the sales contract and is built into the selling price of the machine.

1.3. AUTHORISED PERSONNEL

Extraordinary maintenance and repairs to the pedestal can only be carried out by competent persons who are either employed or authorised by *Cartoni S.p.A.*

Information regarding repair/maintenance staff to be contacted in case of need can be obtained from *Cartoni S.p.A.*

1.4. REGULATIONS AND RELEVANT DOCUMENTATION

The design and construction of the machine comply with the regulations listed below:

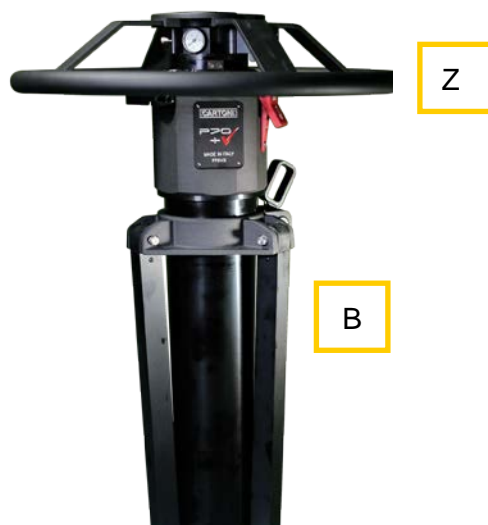
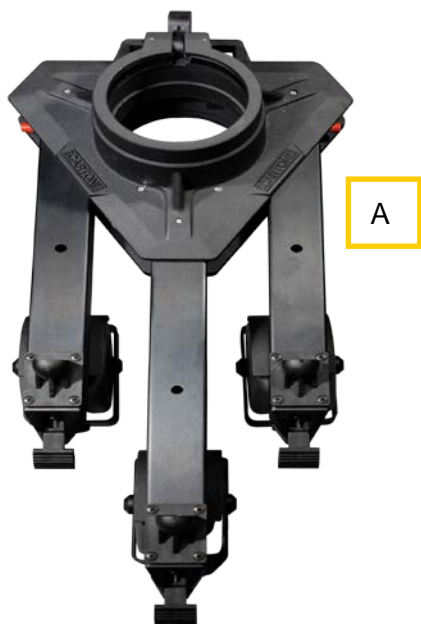
- ☐ EU Directive 2006/42/CE covering the harmonisation of member States' laws on machinery (*Machine Directive*)

- ☐ Presidential Decree 17/2010 of 27/01/2010: regulation implementing EU Directive 2006/42/CE and subsequent amendments (Italian implementation of the *Machine Directive*)
- ☐ UNI EN ISO 12100:2010 - Safety of machinery – General principles for design – Risk assessment and risk reduction
- ☐ UNI EN ISO 13857:2008 - Safety of machinery – Safety distances to prevent hazard zones being reached by upper and lower limbs

2. 2.1. TRANSPORTATION AND HANDLING

The pedestal is dismantled into the following component parts for shipment:

Component	Weight [kg /lbs.]
3-castered base	14,2 / 31.2
Column	13,5 / 29.7



These lightweight components are easily handled manually.



Figure 2 — Lever G to secure the stabilizing arms and D for skid arms releasing

The following items are also supplied with the pedestal:

- ✓ a pump for the manual pressurisation of the pedestal;
- ✓ a hose that connects the pedestal to a compressed air canister.

Purchasers are advised to check the packaging for damage on arrival and also make sure that none of the components show signs of impact. If any such damage be noted *Cartoni S.p.A.* should be informed immediately.

If the product is to be forwarded elsewhere, it should be carefully packed and the greatest care should be taken not to damage any of the components.

2.2. STORAGE

The pedestal presents no particular storage requirements as long as it is kept in an enclosed and dry environment, as indeed it should be whenever it is transported.


2.3. FLOORING

Flooring should be solid and strong enough to bear the combined weight of the pedestal and its camera.

The pedestal also needs to be positioned on flooring that is almost completely smooth and flat.



Figure 3 — Lever C to secure the column to the skid

 **WARNING!** The flooring should be such as to guarantee the stability of the pedestal, both in movement and at rest.

2.1. AMBIENT OPERATING CONDITIONS

The pedestal has been designed and built to operate in an enclosed, dry environment and should not be used in presence of fine dust or corrosive gases.

- ✓ The pedestal requires the following ambient operating conditions:
- ✓ temperature: 5 ÷ 40 °C;


- ✓ humidity: 30 ÷ 95% without condensation.

Cartoni S.p.A. also makes an open-air, rubber-tired version of the pedestal, which should not, however, be exposed to climatic extremes such as direct hot sunlight or heavy rain, etc.

2.5. ASSEMBLY

The column is mounted onto the skid as follows:

- ✓ lift the red levers (D) (see Figure 2) to open the skid arms;
- ✓ insert column base (B) into the skid aperture (A) (see Figure 1);
- ✓ adjust the height of the column, making sure that the lower end of the column does not extend beyond the castored base of the skid;
- ✓ lower lever C (see Figure 3) to secure the column to the skid;
- ✓ raise the stabilizing arms and insert one end (F) of each arm into the seats on the skid arms (E) (see Figure 4);
- ✓ lower lever G (Figure 2) to secure the stabilizing arms;
- ✓ raise and lower lever C (Figure 3) to complete stabilisation.

 **WARNING!** When inserting the column into the castored base be careful not to put a foot under the aperture on the skid, otherwise your foot might be crushed if you lower the column too far and fast.

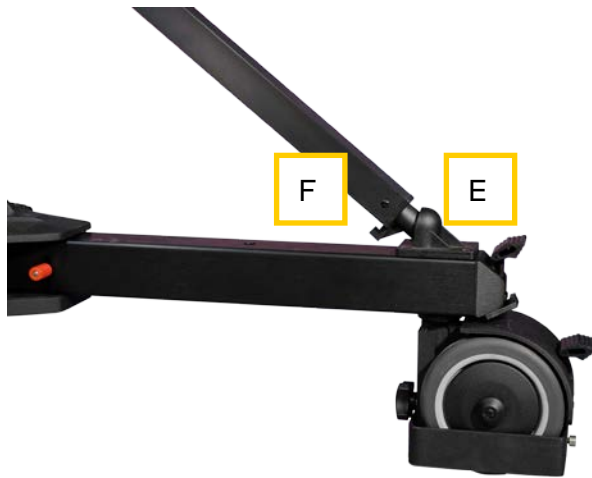


Figure 4 — Stabilizing arm with the seat

2.6. DISMANTLING

To remove the column from the skid proceed as follows:

- ✓ bleed the compressed air out of the column
- ✓ raise lever G (Figure 2) to release the stabilizing arms, then lift and fold them;
- ✓ raise lever C (Figure 3) to release the column from the skid and lift out;
- ✓ lift the red levers D (Figure 2) to release the skid arms, then fold them.

3. TECHNICAL SPECIFICATIONS

3.1. TECHNICAL SPECIFICATIONS

Max pressure P70 PLUS	9.0 atm (132 psi)
Max capacity P70 PLUS	70 kg (154 lbs)
Min height	75 cm (30 in)
Max height	140 cm (55 in)
“On-shot” stroke	50 cm (19,7 in)
Doorway tracking width	100 cm (39,4 in)
Dolly leg radius	50 cm (19,7 in)
Steering wheel diameter	45 cm (17,7 in)
Wheel diameter	125 mm (5 in)
Wheels	3 × 2 coupled
Total weight	28 Kg (62 lbs)

3.2. SPECIFICATIONS OF P70 PLUS FITMENTS

Equipment used with the P70 PLUS Pedestal should comply with the following specifications:

- ✓ optimum weight (camera + accessories + fluid head): P70 PLUS: 55 kg / 121 lbs
- ✓ maximum weight (camera + accessories + fluid head): P70 PLUS: 70 kg / 154 lbs
- ✓ these weights should be distributed in such a way that the centre of gravity of

the elements mounted on the pedestal remains well inside the rim of the wheel-base.

The fluid head adapter is compatible with almost all types of camera support heads on the market.



WARNING! The pedestal should only be used to carry cameras within the weight limits outlined above. *Cartoni S.p.A.* accepts no responsibility for malfunctions or damage to persons or property that result from using the pedestal for purposes other than those indicated in this manual.



WARNING! It is strongly recommended not to stand on the pedestal.

3.3. MACHINE NOISE

The A weighted equivalent acoustic pressure emitted by the machine is under 70 dB (A).

3.4. IDENTIFICATION PLATE

The identification plate of the machine carries the following information:

- ✓ manufacturer's name;
- ✓ type;
- ✓ serial number;
- ✓ year of construction;
- ✓ max. air feed pressure for column pressurisation.

4. DESCRIPTION OF THE MACHINE

The *P70 PLUS Pedestal* is a compact portable system for STUDIO and OB use.

It consists of a column with an air powered lift mechanism and a collapsible base.

It is ideally combined for a camera, fluid head and accessories with a total weight of around 55 kg/121 lbs for P70 PLUS.

The central column is innovatively designed to provide maximum stability and perfect control, eliminating the risk of rebounds

and ensuring exceptionally smooth wheeling combined with accurate movement.

Air can be introduced into the column using a pump or a compressor attached to the filler valve.

The column can be fully extended while the camera remains perfectly balanced simply by activating the bleeder valve to release the excess air.

The *P70 PLUS Pedestal* is available in two (indoor and outdoor) versions, each with its own wheel design.



Figure 5 — P70PLUS Pedestal

5. UTILISATION INSTRUCTIONS



 **WARNING!** The pedestal should only be used as prescribed in section 3. *Cartoni S.p.A.* accepts no responsibility for malfunctions or damage to persons or property deriving from using the product in ways other than those indicated.



Figure 6 — Air intake and locking lever

 **WARNING!** Personnel instructed in its proper use should only use the pedestal.

5.1. PRESSURISING THE PEDESTAL

In order for the pedestal to function, the column must be filled with pressurised air to counter-balance the weight of the camera.



Figure 7 — Manual pump

The pedestal can be pressurised by connecting either the manual pump (Figure 7) or the compressed air circuit to the air intake (position H on Figure 6).



WARNING! Before pressurising the pedestal make sure that it is locked into position by lever L



Figure 8 – Pressure gauge



Figure 9 – Serial Number, column lock and drag control

The air pressure inside the pedestal must be adjusted to match the weight of the accessories mounted on it.

The air pressure can be monitored on pressure gauge (Figure 8).

When using the manual pump pressurisation levels can be monitored on the gauge positioned on the pump base (Figure 7).

If using a compressed air circuit, check that the air introduced is both clean and dry and that the pressure inside the circuit does not rise above 8.5 atm / 125 psi for the P70 PLUS Pedestal.



Figure 10 – Potential risk of fingers being trapped

Excess pressure can be released from the pedestal simply by pressing bleed valve S (Figure 6).



WARNING! There is a potential risk of fingers being trapped between the upper and lower sections of the pedestal (see Figure 10) when the column is being lowered and particularly when pressurised air is released; do not insert fingers into this area at such times.

5.2. MOUNTING THE CAMERA SUPPORT HEAD

Remove the fluid head support from the column.

Fix the fluid head to the support as per instructions supplied with the fluid head (methods vary from model to model).

Then reinsert the fluid head support on the column and place the camera on the camera support.

5.3 CAMERA HEIGHT ADJUSTMENT

To adjust camera height:

- ✓ release lever L (Figure 6) to unlock the column;

- ✓ adjust column rising/lowering speed

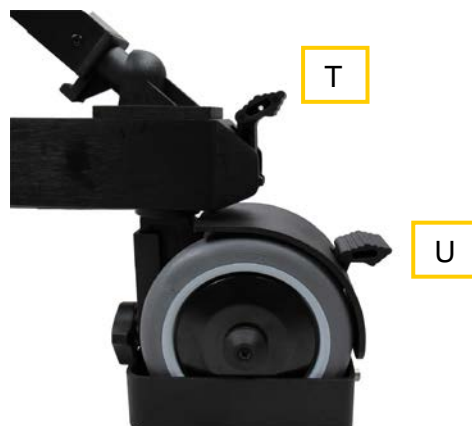


Figure 11 – Wheels locking

by rotating knob N; to lock column at selected height lock lever R (Figure 9).

5.4. MOVING THE PEDESTAL

To wheel pedestal into position, simply grasp steering wheel Z (Figure 1) and push.



WARNING! Be careful to avoid hitting set personnel when moving the pedestal or the camera. Also take care that the wheels do not crash into obstacles (e.g. steps) which might be detrimental to the stability of the pedestal.

5.5. LOCKING THE WHEELS

The casters rotate freely when lever T (Figure 11) is raised. By lowering lever T the casters can be locked into 6 different positions at 60° intervals. The wheels can be locked individually or all together in the same position if the pedestal needs to track in a straight line.

To block all wheels and hence pedestal movement, lower lever U (Figure 11).

N.B.: Figure 11 shows the wheels on the studio version of the pedestal. The OB version adopts rubber-tired wheels that are locked in exactly the same way

6. SAFETY SYSTEMS

The pedestal is equipped with safety systems designed to eliminate the risk of injury to its operators or other people in its vicinity.



WARNING! The presence of safety systems does not exonerate pedestal operators from taking the utmost care to avoid any action that might endanger themselves or their machine.



WARNING! It is absolutely forbidden to tamper with, modify or attempt to remove any of the pedestal safety systems.

6.1. WHEEL GUARDS

The wheels are provided with cable and foot guards (see Figure 11) built to UNI EN ISO 13857:2008 specifications which prevent the wheels interfering with cables or other obstacles when the pedestal is being moved around.



WARNING! The OB version is not fitted with wheel guards since they would prevent the pedestal's use in an outdoor location. Great

care must therefore be taken not to stay too close to the wheels.

6.2. PRESSURE VALVE

The column is fitted with a maximum pressure valve, which prevents air pressure rising above that level in order to protect the machine from malfunctions or breakdowns.

The maximum pressure valve is set at 9.5 atm / 140 psi for the P70 PLUS Pedestal and all column component dimensions have been selected to tolerate an operating pressure above that level.



WARNING! It is absolutely forbidden to modify these pressure valves in any way whatsoever. Incorrect pressure valve settings could cause malfunctions or breakdowns in the pedestal components and could also seriously endanger its operators.

6.3. REBOUND CONTROL

In order to prevent column rebounds when the column lock is released, the column itself is equipped with a system that releases air in a controlled, gradual fashion.

7. IMPROPER USE

Despite the safety devices, operators must take the greatest care to avoid situations that might endanger themselves or others.

Anyone required to operate the pedestal must be appropriately trained in its proper use and must also be informed about the construction and workings of the pedestal and its safety systems.

7.1. MANIPULATION OF THE MACHINE

The column must be completely depressurised and detached from the compressed air system, if any, before any assembly, dismantling, maintenance or adjustment work is carried out.

To depressurise the column simply press valve H (Figure 6) until gauge (Figure 8) indicates zero pressure.

Competent personnel trained in the correct procedures should only carry out any such work.

7.2. OPERATOR POSITION

All operations should be carried out at floor level.

It is strictly forbidden to handle the machine from a position on any lift, hoist or crane and equally forbidden to stand on the pedestal itself.



WARNING! It is strictly forbidden to climb onto the pedestal.

7.3. PEDESTAL STABILITY

The distribution of the weight of the elements mounted on the pedestal (fluid head and camera) should be such as to maintain their centre of gravity well inside the rim of the casted base.



WARNING! Items whose centre of gravity is too close to the rim of the casted base could cause the pedestal to tip over eventually while moving the pedestal.

When positioning the pedestal, make sure that the wheels do not run into obstacles such as steps, since this could compromise the stability of the pedestal.

7.4. PROPER USE

The pedestal has been designed and built for use as prescribed in section 3 of this manual.



WARNING! It is strictly forbidden to use the pedestal in any other way than indicated here.

8. MAINTENANCE

The pedestal has been designed and built for minimum maintenance and problem-free efficiency over time.

After any maintenance operation, the pedestal must be tested to ensure that it is working properly.



WARNING! Before any maintenance operation is carried out the pedestal must be detached from any air supply line and the column completely depressurised as described in section 5.1.

8.1. STANDARD MAINTENANCE

The standard maintenance operations described here will be sufficient, if properly performed, to keep the pedestal operating efficiently.



WARNING! All standard maintenance operations should be carried out by competent personnel instructed in the correct and safe use of the pedestal.

8.1.1. CLEANING

Use a damp cloth and no harsh cleaning products to remove dust, grease or other substances from the pedestal. It is particularly important to keep the wheels clean so that they can rotate freely.

8.1.2. PERIODIC INSPECTION

At least once a month all pedestal components should be carefully inspected and any damaged parts immediately replaced to prevent failures that might compromise the safety of the pedestal.

8.2. REPAIRS

Only the *Cartoni*'s own technical servicing staff or persons authorised by *Cartoni S.p.A.* should be entrusted with any repairs to the pedestal.

Information on authorised servicing staff to contact is obtainable from *Cartoni S.p.A.*

For fast, effective problem solving purposes *Cartoni S.p.A.* should be given the following information:

- ✓ pedestal type;
- ✓ serial number (V position in Figure 9);
- ✓ the nature of the defect or its visible symptoms and when the problem arises.



WARNING! All warranty conditions are invalidated should any repair operations be attempted by anyone not authorised by *Cartoni S.p.A.*

8.3. SPARE PARTS

All spare parts should be ordered from *Cartoni S.p.A.* which will either supply them directly or indicate where they may be obtained.

Refer to the blow up in the annexes to this manual for the identification of spare parts.

Remember that repairs should only be carried out by persons employed or authorised by *Cartoni S.p.A.*



WARNING! All warranty conditions are invalidated should any spare parts different from those originally mounted on the pedestal be employed.

9. DECOMMISSIONING

If the pedestal is irreparable it should be taken out of service or at least clearly labelled as “out of order”.



Since the pedestal is largely made of steel and aluminium, most of its material can be recycled.

Once a pedestal is decommissioned, it is advisable to separate out its various materials for differentiated utilization or disposal.

Since none of the materials used on the pedestal are toxic or present any risk to the health of its operators, they can be handled without the need for any special precautions.