

# CHAPMAN UK

CHAPMAN/LEONARD STUDIO EQUIPMENT LTD.

Dollies • Cranes • Remote Camera Systems

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## Chapman/ Leonard 43' HYDRASCOPE RISK ASSESSMENT

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## ***IMPORTANT!***

**If mounting the 43' Hydrascope Crane onto a vehicle that is not being provided by Chapman UK, you must ensure that appropriate dispensation has been applied for from the relevant local authority in advance of shooting.**

**If filming in London, please contact the Metropolitan Police and follow the link below to access the Metropolitan Police Filming on The Move Guidelines.**

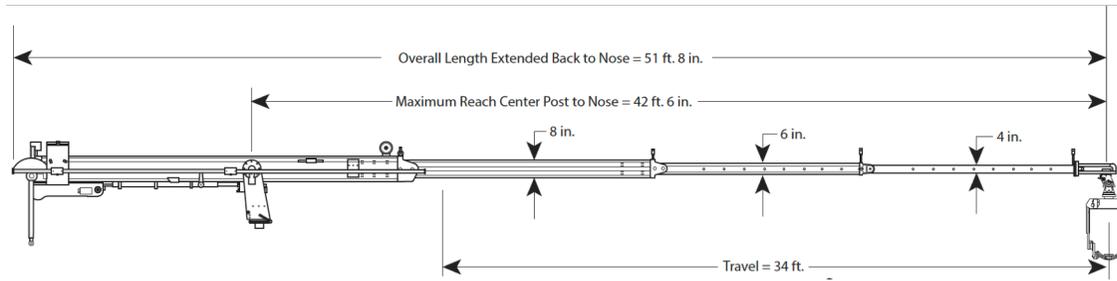


**[Click Here](#)**

## *Chapman 43' HYDRASCOPE Crane Specifications*

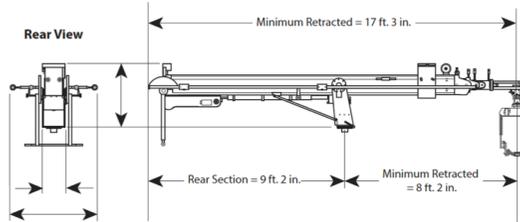
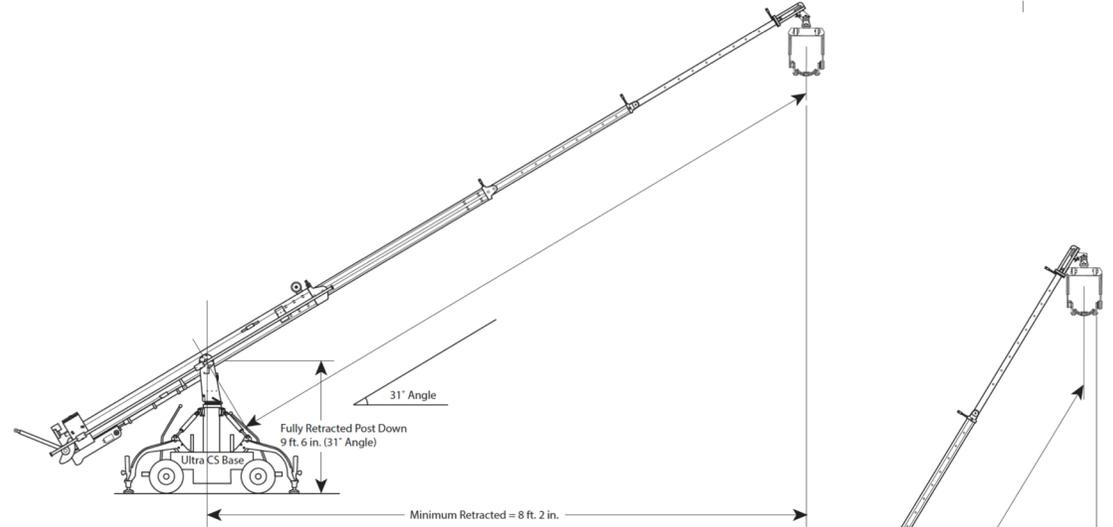
The 43' Hydrascope is perfect for studio work, large sets (inside and out) and wet weather filming. This crane enables the camera to get into positions that would otherwise be time consuming by other methods. This telescopic crane gives you increased length and height without compromising the core principles of the Hydrascope's fantastic design, it is extremely smooth, quiet and well balanced. The 43' could well be called the 50', as it easily achieves this height with the camera over slung (which can be changed from underslung in seconds).





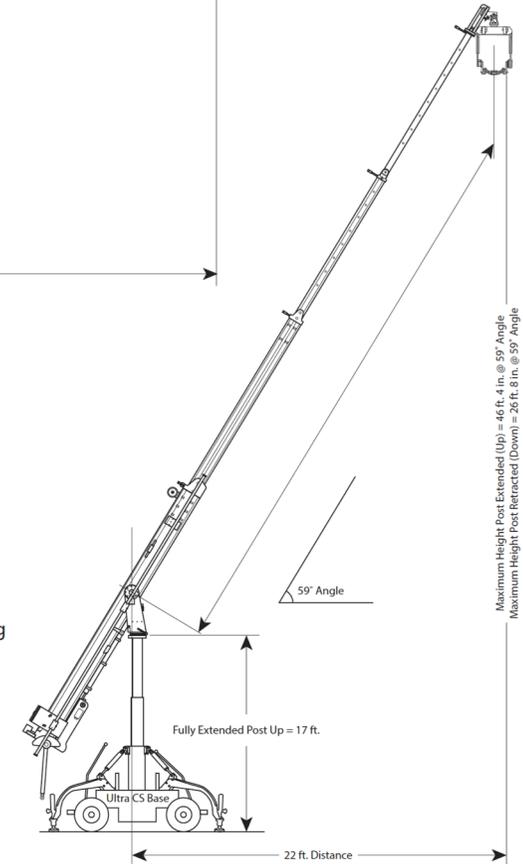
## WARNING OF POWERLINES!

Nominal Voltage	Minimal Required Clearance	
	(Feet)	(Meters)
600 up to 50,000	10	3
Over 50,000 to 75,000	11	3.4
Over 75,000 to 125,000	13	4
Over 125,000 to 175,000	15	4.6
Over 175,000 to 250,000	17	5.2
Over 250,000 to 370,000	21	6.4
over 370,000 to 550,000	27	8.2
over 550,000 to 1,000,000	42	12.8



Maximum Payload.....180 lbs / 113.3 kg  
 Minimum Crane Unit Weight.....1,592 lbs / 722.11 kg  
 Maximum Crane Unit Weight.....3,550 lbs / 1,610.25 kg  
 Weight Balance Weight Carts (total of 3).....2,085 lbs / 945.74 kg  
 Weight of Ultra HY HY Base.....1,050 lbs / 476.2 kg  
 Balance Ratio.....3:1

Voltage.....24v DC Battery /  
110v AC to 24v DC



## CHAPMAN UK CRANE RISK ASSESSMENT

RISK:	L: Low Risk	M: Medium Risk	H: High Risk
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HAZARD	RISK	POTENTIAL RISK TO CAST/CREW	PREVENTATIVE MEASURES	NEW RISK	ADDITIONAL INFORMATION / PROCEDURES
The Crane's Base is on wheels. The Crane is therefore mobile.	H	If control of the crane base is lost, there is a high risk of injury to CAST/CREW.	When the base is being moved, it must be sufficiently manned to assist starting, moving and stopping the base. When the base is not being moved (i.e. once in position) it must be jacked or chocked by the <b>CHAPMAN UK</b> crane technicians so it is secure.	M	It is ultimately the responsibility of the crane technicians to decide whether moving the base is safe, particularly on steep cambers or hills. The proposed final position must be discussed and checked before the crane is moved.
Lifting the Crane arm/and or base using machinery i.e. Fork lift, Manitou or Lifting Crane.	H	Incorrect lifting of the crane may cause the crane arm to tip and fall from a height causing a risk of injury to CAST/CREW.	When lifting the crane arm, strict procedure set by Chapman UK technicians must be followed to ensure it is done safely. Grips team to communicate shoot plans and set plans in order to assess safety of environment prior to shoot. Grip team to communicate weight of camera package in order to determine max height of Manitou lift.	M	If the crane arm is being lifted, the correct supplied lifting equipment must be used. It is ultimately up to the crane technician, at the time, to decide whether lifting the crane is safe and the final position (e.g. Rostrum or Manitou) is safe. These factors must be discussed with the technicians, grips and 1 <sup>st</sup> AD (or equivalent).
Tracking with the crane.	H	Tracking at speed will cause stress and strain to the crane arm. Therefore there is a risk of the crane falling/tipping which could cause injury to CAST/CREW.	When tracking with crane, much care must be taken and the move should be rehearsed at slower speeds before shooting. Technicians and grips must be aware of the G force and be in control of the crane arm at all times.	M	Any tracking moves with the crane must be discussed between the technicians, grips and 1 <sup>st</sup> AD (or equivalent).
Extreme weather conditions such as high winds and/or thunder and lightning.	H	Lightning strikes on the crane could cause injury to the CAST/CREW. High winds could cause loss of control of the arm or even cause the crane to tip over.	Use weather forecasting services to provide a general idea of expected weather conditions. Adverse weather conditions may mean the crane is too dangerous to operate, particularly at height. If the wind is strong, causing the arm to swing uncontrollably the crane must be racked in and lowered. Likewise, on the sign of thunder and lightning, the crane must be lowered and racked in.	M	It is ultimately the decision of the <b>CHAPMAN APPROVED</b> crane technicians to decide if the crane is safe to use in poor weather conditions.

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HAZARD	RISK	POTENTIAL RISK TO CAST/CREW	PREVENTATIVE MEASURES	NEW RISK	ADDITIONAL INFORMATION / PROCEDURES
Operating crane near overhead powerlines (electricity).	<b>M</b>	Electrocution from power lines poses a high risk to crew operating the crane.	Care must be taken when operating cranes near overhead powerlines. The minimum distances for the stated voltages must be observed ( <b>table on page 3</b> ).	<b>L</b>	It is the decision of the crane technicians to decide if a crane is safe to operate near overhead power cables.
Personal injury whilst handling heavy crane components (eg. crane weights).	<b>M</b>	Risk to technicians and CREW.	Care must be taken when lifting heavy crane components. When required, multiple people to be used to lift heavier components.	<b>L</b>	Grips and crew must follow the instructions of the technicians if heavy crane equipment/components are being lifted.
Operation of column (Raising and lowering).	<b>M</b>	Raising the column increases the likelihood of the crane tipping over posing a high risk of injury to CAST/CREW.	Column only to be operated by or under the supervision of the <b>CHAPMAN APPROVED</b> crane technicians. If necessary out-riggers may have to be attached to the base to increase stability.	<b>L</b>	The column must not be raised if the crane is out of balance. Furthermore, if the crane and base are ever being moved, the column (post) must be lowered.
Extension of telescopic arm.	<b>M</b>	Risk of CAST/CREW being struck by the extending telescopic arm and causing injury.	Technicians and grips must be vigilant and ensure that while the telescopic arm is being operated there is sufficient clearance from obstacles and CAST/CREW.	<b>L</b>	The telescopic arm extends very quickly, the grips and crane technicians must ensure that there is sufficient clearance between the arm and the CAST and CREW.
Securing crane whilst unattended.	<b>L</b>	May cause crane to swing, tip or move and cause injury to CAST/CREW.	If the crane base/arm is not secure whilst unattended, it may swing, tip or move on its base. The base must be secured using jack/chock and the bars must be in place and the pan lock applied.	<b>L</b>	The crane technicians must ensure that the crane is safe to leave, particularly if being left overnight.
Colliding with obstacles whilst operating the crane.	<b>L</b>	May cause damage to crane and other equipment and injury to CAST/CREW.	The crane arm can be moved at high speed including jib, pan and racking movements.	<b>L</b>	Before the crane is operated, the Grip and crane technicians must ensure that the area is safe and clear.

Crane:

**HYDRASCOPE 43'**

## CHAPMAN UK CRANE RISK ASSESSMENT

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HAZARD	RISK	POTENTIAL RISK TO CAST/CREW	PREVENTATIVE MEASURES	NEW RISK	ADDITIONAL INFORMATION / PROCEDURES
Changing payload.	L	May cause crane to tip and cause injury to CAST/CREW.	If any changes to the pay load are carried out, i.e. film magazine and lens changes, the crane technicians must be informed so the crane can be securely locked off. Furthermore, any permanent changes to the pay load must be made known to the crane technicians so the crane can be rebalanced.	L	Imbalance caused by changing the payload may cause the crane to tip over.
Walking into crane.	L	Crane arm and base may cause injury if CAST/CREW walk into crane.	A 1 m no go zone must be enforced around the crane to ensure CAST/CREW do not walk near or under the crane particularly when being operated to prevent collisions.	L	Colliding with crane could cause serious injury to CAST/CREW therefore care must be taken and out of bound zones set by the crane technicians must be adhered to.
Securing remote head/camera package.	L	Equipment falling from a height can cause serious injury to CAST/CREW.	Remote heads must be securely fastened before the camera is placed on the crane. Camera packages must be secured using a 'safety' before the arm is raised or racked out.	L	To prevent items falling from a height, the camera must be securely fastened to the remote head or the nose of the crane.

N.B. Additional space is provided here for Technicians/Grips to add risks as appropriate. Any additional risks must be discussed with 1<sup>st</sup> AD/Equivalent and health and safety officers.