

CLARK MASTS™

ST Series



Telescopic and Sectional Mast Systems





Clark Masts Systems has been designing and manufacturing telescopic and sectional mast systems for more than 50 years and has built up an extensive range of products that are used by civil and military authorities all around the world.

Design, development and testing are fundamental to the success of our organisation. This leaflet details our ST Series aluminium, telescopic masts that are produced to our exacting standards of quality.

The standard range is available from 4 metres to 12 metres. Customised solutions offering variations in retracted and extended heights are available at no extra cost. Clark Masts are used by all of the world's largest system integrators.



- ST Series Masts are made from 6082T6 aircraft grade seamless drawn aluminium tube.
- The base tube diameter is 3" and can have a maximum of 5 sections.
- A full length machined keyway prevents relative rotation of the mast sections which allows the whole mast to be turned easily at the base if required.
- Rotating and nonrotating versions are available using optional bases.
- The ST mast can be vehicle or shelter mounted either externally or internally.
- Bearing surfaces are fitted with nylon and PTFE for smooth and effortless extension.
- Natural rubber seals are fitted for reliable operation in the most demanding of climatic conditions.
- All ST masts are qualified to MIL STD 810F.
- Heavy duty locking collar clamps for long term unattended deployment.
- Various top fittings to suit your requirement.
- Can be extended by using handpump or electric compressor.
- The plain collared version provides the lowest collar stack height available.



1. Powerful low-friction antenna clamp.
(Flange mount optional)
2. Rotating Guy Collar.
3. Large handles for easy section locking.
4. Easily replaced frangible key protecting mast keyway.
5. Totally enclosed telescopic section locking system.
6. Collet Ring.
(Locks section on full extension)
7. Adjustable bearing screws.
8. Optional water drain hole.
9. Machined keyway aligning telescoping sections.
10. High tensile corrosion resistant aluminium alloy tube anodised finish.
11. Double Supertork notched locking sections on torsion when the mast is fully extended.
12. Exclusive natural rubber low leak seals.
13. Teflon bearing rings on each piston.
14. Location of optional mast extension warning switch.
(Factory fitted only)
15. Combined pressure relieved and condensate drain valve.
16. Air inlet.



Alternative Collars and Bases available for varied application and Field or Vehicle Installation.



Plain Collars



Locking Collars



Fixed Base



Rotatable Base



Field Base

Range Table

ST Series

Plain Collar - Non Turnable

Catalogue Number	Model Number	Extended Height	Retracted Height	Maximum Headload
STX 3 Section Model Range				
40114	STX25-3-NP	2.51 m	1.35 m	30.00 kg
40115	STX35-3-NP	3.51 m	1.45 m	30.00 kg
40116	STX45-3-NP	4.51 m	1.85 m	25.00 kg
40117	STX55-3-NP	5.51 m	2.30 m	25.00 kg
40118	STX65-3-NP	6.51 m	2.70 m	25.00 kg
40119	STX75-3-NP	7.51 m	3.00 m	20.00 kg
40120	STX85-3-NP	9.01 m	3.65 m	20.00 kg

ST 4 Section Model Range				
40102	ST45-4-NP	4.51 m	1.50 m	20.00 kg
40103	ST55-4-NP	5.50 m	1.75 m	20.00 kg
40104	ST65-4-NP	6.50 m	2.02 m	15.00 kg
40105	ST75-4-NP	7.50 m	2.30 m	15.00 kg
40106	ST85-4-NP	9.00 m	2.71 m	15.00 kg

ST 5 Section Model Range				
40170	ST1-5-NP	7.63 m	2.01 m	9.00 kg
40171	ST2-5-NP	9.15 m	2.34 m	7.00 kg
40172	ST3-5-NP	6.11 m	1.68 m	9.00 kg
40173	ST4-5-NP	4.88 m	1.40 m	9.00 kg

Locking Collar - Non Turnable

Catalogue Number	Model Number	Extended Height	Retracted Height	Maximum Headload
STX 3 Section Model Range				
40142	STX25-3-NC	2.51 m	1.41 m	30.00 kg
40143	STX35-3-NC	3.51 m	1.51 m	30.00 kg
40144	STX45-3-NC	4.51 m	1.91 m	25.00 kg
40145	STX55-3-NC	5.51 m	2.36 m	25.00 kg
40146	STX65-3-NC	6.51 m	2.76 m	25.00 kg
40147	STX75-3-NC	7.51 m	3.06 m	20.00 kg
40148	STX85-3-NC	9.01 m	3.66 m	20.00 kg

ST 4 Section Model Range				
40130	ST45-4-NC	4.51 m	1.56 m	20.00 kg
40131	ST55-4-NC	5.50 m	1.81 m	20.00 kg
40132	ST65-4-NC	6.50 m	2.08 m	15.00 kg
40133	ST75-4-NC	7.50 m	2.36 m	15.00 kg
40134	ST85-4-NC	9.00 m	2.77 m	15.00 kg

ST 5 Section Model Range				
40178	ST1-5-NC	7.63 m	2.09 m	9.00 kg
40179	ST2-5-NC	9.15 m	2.42 m	7.00 kg
40180	ST3-5-NC	6.11 m	1.76 m	9.00 kg
40181	ST4-5-NC	4.88 m	1.48 m	9.00 kg

Plain Collar - Turnable

Catalogue Number	Model Number	Extended Height	Retracted Height	Maximum Headload
STX 3 Section Model Range				
40121	STX25-3-TP	2.56 m	1.41 m	30.00 kg
40122	STX35-3-TP	3.56 m	1.51 m	30.00 kg
40123	STX45-3-TP	4.56 m	1.91 m	25.00 kg
40124	STX55-3-TP	5.56 m	2.36 m	25.00 kg
40125	STX65-3-TP	6.56 m	2.76 m	25.00 kg
40126	STX75-3-TP	7.56 m	3.06 m	20.00 kg
40127	STX90-3-TP	9.06 m	3.66 m	20.00 kg

ST 4 Section Model Range				
40109	ST45-4-TP	4.56 m	1.55 m	20.00 kg
40110	ST55-4-TP	5.56 m	1.80 m	20.00 kg
40111	ST65-4-TP	6.56 m	2.08 m	15.00 kg
40112	ST75-4-TP	7.56 m	2.35 m	15.00 kg
40113	ST90-4-TP	9.06 m	2.76 m	15.00 kg

ST 5 Section Model Range				
40174	ST1-5-TP	7.68 m	2.06 m	9.00 kg
40175	ST2-5-TP	9.20 m	2.39 m	7.00 kg
40176	ST3-5-TP	6.16 m	1.73 m	9.00 kg
40177	ST4-5-TP	4.93 m	1.45 m	9.00 kg

Locking Collar - Turnable

Catalogue Number	Model Number	Extended Height	Retracted Height	Maximum Headload
STX 3 Section Model Range				
40149	STX25-3-TC	2.56 m	1.47 m	30.00 kg
40150	STX35-3-TC	3.56 m	1.57 m	30.00 kg
40151	STX45-3-TC	4.56 m	1.96 m	25.00 kg
40152	STX55-3-TC	5.56 m	2.41 m	25.00 kg
40153	STX65-3-TC	6.56 m	2.82 m	25.00 kg
40154	STX75-3-TC	7.56 m	3.12 m	20.00 kg
40155	STX90-3-TC	9.06 m	3.72 m	20.00 kg

ST 4 Section Model Range				
40137	ST45-4-TC	4.56 m	1.61 m	20.00 kg
40138	ST55-4-TC	5.56 m	1.86 m	20.00 kg
40139	ST65-4-TC	6.56 m	2.14 m	15.00 kg
40140	ST75-4-TC	7.56 m	2.41 m	15.00 kg
40141	ST90-4-TC	9.06 m	2.82 m	15.00 kg

ST 5 Section Model Range				
40182	ST1-5-TC	7.68 m	2.14 m	9.00 kg
40183	ST2-5-TC	9.20 m	2.47 m	7.00 kg
40184	ST3-5-TC	6.16 m	1.81 m	9.00 kg
40185	ST4-5-TC	4.93 m	1.53 m	9.00 kg



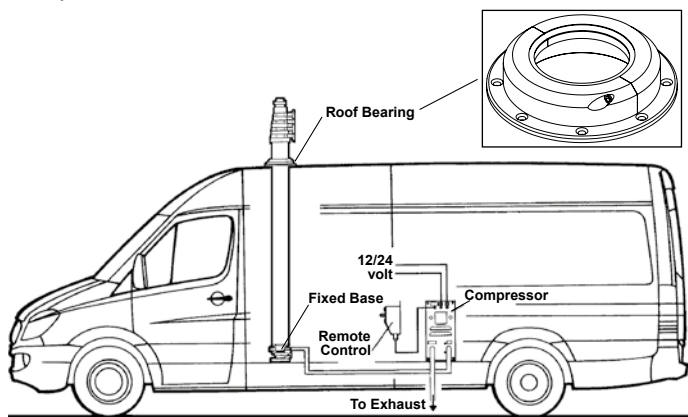
Configurations and Mountings

ST Series

Internally Mounted Mast

This is normally the most popular way of mounting a Clark Mast on a vehicle, the internally mounted mast uses the weatherproof roof bearing to adapt the vehicle roof and allows the mast to be rotated through 360 degrees when fitted with the rotatable base.

The roof bearing consists of a whole outer ring that is bolted to the vehicle roof skin and bearing halves that are clamped around the base tube and then positioned over the fixed ring so any rain or condensation will run off. This roof bearing is fitted with PTFE rings and a weatherproof sealing ring. Roof bearings are supplied in a painted finish in the same colour as the mast.



Externally Mounted Mast

ST masts can be mounted on a vertical surface of a van or shelter using upper and lower mounting brackets.

The mast can be rotated through 360 degrees and locked in position by clamping the rotatable base when required.



Field Mounted Mast

ST Series masts can also be field mounted on a folded tripod stand or as a DAF ST using adjustable field legs that permanently attach to the mast.



Tripod Mounted

Shown on the left, the ST mast is mounted on a MK6 stainless steel folding tripod stand, which is easily transported when folded (pictured below).



DAF ST Series

When fitted with integral, adjustable, steel telescopic field legs, as shown on the right, the mast is known as the DAF ST Series.


Please see our separate leaflet for further information.





Accessories

ST Series

				
<p>UPPER MOUNTING BRACKET</p> <p>Used to mount the ST mast externally on a vehicle, wall or shelter. Allows the mast to rotate 360° and is fitted with PTFE bearing pads.</p> <p>Cat. No. 14586 Weight: 1.29 kg</p>	<p>LOWER MOUNTING BRACKET</p> <p>Used for externally mounting a ST Mast on a vertical surface of a vehicle.</p> <p>Cat. No. 16686 Weight: 0.98 kg</p>	<p>ROOF BEARING</p> <p>Used when fitting a ST Mast through the roof of a vehicle. Allows 360° rotation and is fitted with PTFE bearings and a weatherproof ring.</p> <p>Cat. No. 1976 Weight: 0.56 kg</p>	<p>3" SADDLE CLAMP</p> <p>Normally used in pairs the saddle clamps provide a mounting for installations where frequent mast removal is required.</p> <p>Cat. No. 2433 Weight: 0.75 kg</p>	<p>SIDE HANDLE</p> <p>This solid aluminium handle is fitted to the base tube of the ST Mast when rotation is required.</p> <p>????????????????????????????????</p> <p>Cat. No. 1977 Weight: 0.32 kg</p>

			<p>MK6 TRIPOD</p> <p>This tripod is a portable mast base which folds into a compact unit. Each leg is adjustable for levelling.</p> <p>A Tripod Adaptor* is required to attach the mast to the tripod.</p> <p>*Cat. No. 41428</p> <p>Masts up to 4 metres Cat. No. 36585 Weight: 11.40 kg</p> <p>Masts up to 6 metres Cat. No. 36586 Weight: 12.70 kg</p> <p>Masts up to 8 metres Cat. No. 36587 Weight: 14.00 kg</p> <p>Masts up to 10 metres Cat. No. 36588 Weight: 15.40 kg</p>
<p>3.5" WALL MOUNTING BRACKET</p> <p>Generally for use where masts are to be externally vehicle mounted, shelter mounted or wall mounted.</p> <p>Cat. No. 9920 Weight: 0.30 kg</p>	<p>TOP GUY KIT</p> <p>When operating in windy conditions this kit will allow you to stabilise the ST by securing it to the rotatable guy collar located on top of the mast.</p> <p>Masts up to 6 Metres: Cat. No. 40158</p> <p>Masts over 6 metres: Cat. No. 40159</p>		

 <p>ST HANDPUMP</p> <p>This self-contained, lightweight aluminium handpump will extend any ST Mast quickly without any auxiliary power.</p> <p>Supplied with 3 metres of hose and bayonet connector.</p> <p>Cat. No. 40161 Weight: 2.00 kg</p>	 <p>MODEL 40 COMPRESSOR RANGE</p> <p>With NC Valve Cat. No. 33646 - 12v 33648 - 24v</p> <p>With 'Deadman' Cat. No. 33647 - 12v 33649 - 24v</p> <p>Weight: 9.00 kg</p>	 <p>REMOTE CONTROL HANDSET</p> <p>For use with the Model 40 Compressors. Available in standard and 'deadman' switching versions. NC valve compatible.</p> <p>12v Cat. No. 25471 Weight: 0.50 kg</p> <p>24v/110v/230v Cat. No. 25472 Weight: 0.53 kg</p>	 <p>CANVAS COVER</p> <p>The weather resistant material used to make this canvas provides protection when the mast is retracted and not in use.</p> <p>Available in green and black.</p> <p>Cat. No. 6411 Weight: 0.30 kg</p>
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**CLARK
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All details given in this publication are approximate and may be subject to change without notice.

Distributor:

Clark Masts is a division of Clark Masts Systems Ltd.

Doc. Ref. **NTSL-E-CMS-16.8.2018**

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