

4" NEWTONIAN REFLECTING ASTRONOMICAL TELESCOPE

In this high quality Newtonian reflector, the mirror cell and mounting is of the ventilated type to allow air movement through the tube. The mirror is precision-mounted to prevent stress and adjustment is positive by means of a key to prevent the accidental movement of the adjusting mechanism which often occurs when wing nuts are used.

The secondary mirror or flat is mounted in a special 3-point suspension unit fitted to a combined telescope tube end ring and single bar "spider". This end ring also carries the bracket for mounting the eyepiece focussing mount. This is a precision, spiral focussing assembly which accepts 1.25" diameter push-fit eyepieces and, by means of an adaptor, 24.5 mm, diameter push-fit eyepieces. A 12 mm, focal length eyepiece giving a magnification of approximately 67X is supplied with the telescope.

The spherical mirror has an over-all diameter of 4.125" giving a 4" clear aperture and a focal length of 32" with resultant focal ratio of f/8. It is surface aluminised and has a silicon monoxide protective coating.

Alongside the main eyepiece is the eyepiece of the built-in starfinder. Outside an aperture on the opposite side of the tube is a mirror which turns the line of vision at right angles through a 30 mm, diameter achromatic object glass. Only a slight movement of the head is necessary, therefore, to change from the starfinder eyepiece to the main eyepiece and the telescope tube can be rotated in it's cradle so that the eyepieces are always in a convenient viewing position. The telescope is fitted to the same equatorial mount and tripod as the 4" Catadioptric Telescope.

Nett Weight-13.5 kg

Gross Weight Packed—20 kg

Dimensions of Transit Carton—112 cm × 69 cm × 23 cm

6" NEWTONIAN REFLECTING ASTRONOMICAL TELESCOPE

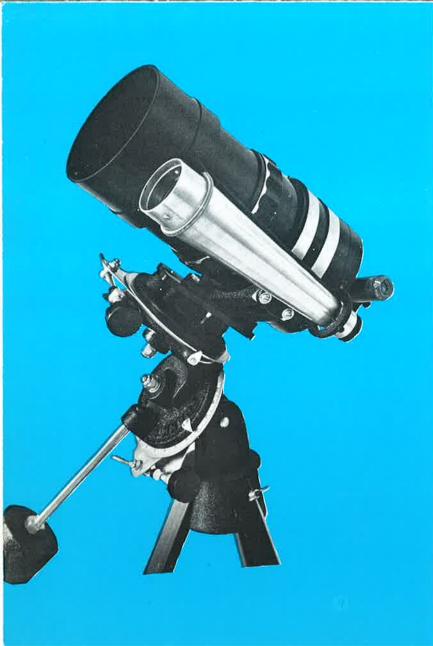
Using the same tripod and equatorial mount, geared drives and setting circles as the 4" Newtonian described above, this telescope employs a 6" clear aperture mirror with a focal length of 48" with resultant focal ratio of f/8.

THREE CHARLES FRANK PUBLICATIONS

FRANK'S BOOK OF THE TELESCOPE We can recommend this book to all those interested in Astronomy. It contains chapters on Reflectors, Refractors; Catadioptric systems etc. To quote from "Sky,& Telescope"—"the amount of information is truly amazing". Well illustrated.

FRANK'S BOOK OF OPTICAL INSTRUMENTS Many of the questions we are often asked on the theoretical or practical application of optical instruments are answered in this book, It contains chapters on Mirrors, Lenses and Prisms, Optical Aberrations, Microscopes, Telescopes, Binoculars, Sextants, Rangefinders, etc.

THE STARS ABOVE US This book by a former Astronomer Royal, Sir Harold Spencer-Jones, deals in a most interesting manner with the wonders of the Universe. Explanations are given in simple everyday language on the influences which fix the stars in their courses.



THE CHARLES FRANK 4" CATADIOPTRIC ASTRONOMICAL TELESCOPE

This newly developed telescope is a variation of the Maksutov–Cassegrain principle. The 5-element optical system is completely sealed and with a clear aperture of 104mm, and a focal length of 1100mm, has a focal ratio of f/10,5. With an over-all length of 290mm, a diameter of 135mm, and a weight of 3.8 kg, this is a remarkably light and compact instrument. A sliding lens hood is fitted and a lens cap and three filters (ultra-violet, yellow/green and orange) are supplied. A starfinder with a 50mm, diameter object glass and a magnification of approximately 4X is fitted.

The standard eyepiece adaptor accepts Swift or other 24.5mm, diameter push-fit eyepieces and, in this form, gives an inverted image. This adaptor will also accept Interflex (T) camera mount adaptors to enable eyepiece projection photography to be carried out with single lens reflex cameras. The camera may also be mounted directly to the lens system for focal plane photography. The right angled eyepiece adaptor or star diagonal also accepts 24.5mm, diameter pushfit eyepieces and gives an image which is upright but laterally reversed.

When used visually with the full range of Swift eyepieces, magnifications of 27.5X–275X are available. When used for focal plane photography, the system becomes a straightforward 1100mm, telephoto lens, giving a magnification of 22X over the standard 50mm, lens. When used for eyepiece projection photography, focal lengths of 5000mm, or more can be achieved, depending on the eyepieces and extension tubes used. One 12mm, focal length eyepiece is supplied, giving a magnification of approximately 91 X.

The mount, although based on the German equatorial principle, possesses many advantages over the standard German design. As an equatorial mount, it is adjustable to suit any latitude but it is immediately convertible for use as an altazimuth mount when required.

In the past, to obtain maximum rigidity in a standard German mount, it has been necessary to use axes of substantial dimensions, fitted to close tolerances, to give smooth rotation without perceptible side play. In this new mount, a different approach has been made. The two bearing surfaces of each axis consist of two 4.75" diameter discs—one fixed and one rotating. These are held together under tension to remove all trace of side movement. Between the two discs, a variable tension slipping clutch is mounted, coupled to a screw-thread slow motion drive on each axis. The telescope can be rotated by hand via the slipping clutch for quick alignment and the final adjustment made by the slow motion drives.

Precision, 5.5" diameter setting circles are fitted. The declination circle is graduated 0–90–0–90 in single degrees. The hour circle is graduated 0–24 hrs Graduations are black anodised on a satin silver background.

The tripod is of very rigid but simple construction and the legs are removable for transit.

Nett Weight -15 kg. Gross Weight-21 kg. Dimensions Packed-112 cm × 69 cm × 23 cm

THE CHARLES FRANK 2.4" CATADIOPTRIC TELESCOPE

A smaller version of the 4" model, 4-element optical system. Clear aperture 61.5 mm. Focal length 500 mm. Focal ratio f/8. Overall length 190 mm. Diameter 95 mm. Weight 1.3 kg. Open sights are fitted in lieu of a starfinder. The telescope is fitted to the same equatorial mount and tripod as the 4" model.

Nett Weight-12 kg, Gross Weight-19 kg, Dimensions Packed -112 cm x 69 cm x 23 cm

THE CHARLES FRANK ALTAZIMUTH-MOUNTED 2.4" CATADIOPTRIC TELESCOPE

An extremely versatile outfit in which the 2,4" Catadioptric telescope is fitted to a standard photographic sliding leg tripod with pan and tilt head. With the right angled eyepiece adaptor fitted the telescope gives an upright but laterally reversed image. This reversal is, however, seldom an inconvenience in Terrestrial work such as Bird Watching etc. The entire range of Swift 24,5 mm. diameter push-fit eyepieces can be used with this telescope giving magnifications of 12,5X–125X, A 12 mm, focal length eyepiece giving a magnification of approximately 41X is supplied with the telescope.

With the standard eyepiece adaptor fitted, an inverted image is given for Astronomical work or a single lens reflex camera can be fitted to the adaptor and eyepiece for eyepiece projection photography. The camera can also be fitted directly to the optical system when it becomes a straightforward 500mm, telephoto lens. The adaptor provided enables single lens reflex cameras with Pentax type thread to be used and adaptors for most other single lens reflex cameras are available.

These features make this telescope the ideal choice for the Bird Watcher, Naturalist etc., for both visual and photographic work

Nett Weight with Impod approx -- 3 75 kg

THE CHARLES FRANK ALTAZIMUTH-MOUNTED 4" CATADIOPTRIC TELESCOPE

The larger 4" Catadioptric telescope (without starfinder) fitted to a standard photographic sliding leg tripod with pan and tilt head.

Nett Weight with tripod approx -- 7.75 kg

POSTAL AND CARRIAGE CHARGES

These charges are normally extra at cost and the following charges which include insurance may be taken as a rough guide:

U.K. Post Parcels 1 kg (2.2 lb) £0.90

U.K. Post Parcels 5 kg (11.0 lb) £1.50

U.K. Post Parcels 10 kg (22.0 lb) £2.00

Consignments of over 10 kg (22.0 lb) are normally despatched by Carrier and a carriage charge of ... £8.00 is made for any one telescope for delivery within the U.K.



CELESTRON SCHMIDT-CASSEGRAIN TELESCOPES

We are the sole U.K. Distributors for the Celestron range of telescopes—recognised throughout the world as being amongst the finest of their type. Not only are they unsurpassed for Astronomical observations, but unlike the Newtonian telescope, they can be used Terrestrially, providing high magnification with image brilliance. When fitted to the Fork Mount and Base, the instrument can be used as a table-top Terrestrial telescope, the altazimuth mount allowing complete 360° rotation on both axis. When fitted to the tripod and wedge, the instrument becomes equatorially mounted. The tripod and mount which are supplied are extremely rigid and the movements of the mount beautifully smooth. A synchronous motor drive system is built into the base and setting circles are fitted. Three sizes of telescope are offered—b", 8" and 14". Brief specifications are as follows:

Celestron	5	8	14
Clear aperture	5"	8"	14"
Cassegrain focal length	50"	80"	154"
Useful magnification	30-300X	50-500X	50-850X
Photographic speed	f/10	f/10	f/11
Near focus	15ft.	25ft	500ft.
Secondary obstruction	2"	2.75"	4.5"
Finderscope	5×24	6×30	10×40
Eyepieces	25 mm - 50X	40 mm50X	40 mm -100X
	12 mm100X	25 mm80X	25 mm -170X
			12 mm -340X
			6 mm -710X
Star diagonal	0.96"	1.25"	2"
Setting circle—RA	6.25"	8"	9.5"
Diameter—DEC	4"	4"	6"
Drive gear diam-			
eter	4.5"	6"	6.75"
Slow motions	Manual	Manual	Electric
Synchronous motor	220V 50 Hz.	220V 50 Hz	220V 50 Hz

Many accessories are offered for these telescopes and Schmidt Cameras are also available.



Accessori

TELESCOPE ACCESSORIES

SWIFT 24.5 mm. (0.96") DIAMETER PUSH-FIT EYEPIECES

40 mm. Achro, Huvhenian

26 mm. Kellner

20 mm; Kellner

12 mm. Kellner

4 mm, Orthoscopic

Moon Filter for use with Swift eyepieces

Sun Filter for use with Swift evenieces

(NOTE: For direct viewing of the Sun, a Sun Filter must be used in conjunction with a special Sun Diagonal, Direct viewing of the Sun without the protection of these two items used together could cause permanent blindness, due to the intensity of the focussed rays of the Sun.)

Swift Achromatic Barlow Lens

THE CHARLES FRANK STANDARD EYEPIECE ADAPTOR. This is the eyepiece adaptor used in our Catadioptric Astronomical Telescope, and can be fitted to any telephoto camera lens having an Interflex (T) mount. The adaptor accepts 24.5 mm diameter push-fit eyepieces and in this form gives an inverted image, The lens, adaptor and eyepiece can then be used as an Astronomical telescope or attached to the camera for eyepiece projection photography.

THE CHARLES FRANK RIGHT ANGLE EYEPIECE ADAPTOR.

This adaptor can also be fitted to any telephoto lens having an Interflex mount, and accepts 24.5 mm, diameter push-fit eyepieces. It gives an image which is upright but laterally reversed. This reversal would, however, be of no great disadvantage if you wished to use such a telescope for Terrestrial work. The adaptor is, of course, a star diagonal for high angle Astronomical viewing.

1.25"/**24.5** mm. EYEPIECE ADAPTOR. To enable 24.5 mm. diameter push-fit eyepieces to be used in a telescope designed to accept 1.25" diameter push-fit eyepieces.

RAS/24.5 mm. EYEPIECE ADAPTOR. To enable 24.5 mm. diameter push-fit eyepieces to be used in a telescope designed to accept RAS threaded eyepieces.

EQUATORIAL MOUNT. As fitted to our 4" Newtonian and Catadioptric telescopes. Complete with setting circles and geared slow motion hand drives.

Without setting circles and geared drives, Setting circles—per pair, Geared slow motion hand drives—per pair,

TRIPOD. Standard height 39". Available in other lengths at extra cost.

SWIFT STARFINDER. A high grade, fully achromatic focussing starfinder with a magnification of 10X and a 40 mm, diameter object glass; Supplied complete with 3" diameter tube clamp.

MIRRORS, MIRROR BLANKS ETC.

6" PRE-GENERATED MIRROR KIT. In this kit, the mirror blank has already been pre-generated to the correct curvature and requires only smoothing and parabolising with the tool, smoothing agents, pitch etc., which are supplied. Complete with instructions.

MIRROR BLANKS

6" diameter low expansion glass blank, approx 26 mm, thick

8.5" diameter low expansion glass blank approx 40 mm thick

ALUMINISED MIRRORS

4" diameter plate glass mirror of spherical form; focal length 32"

Secondary mirror (elliptical flat) for above

6"diameter low expansion glass parabolic mirror; focal length 48"

Secondary mirror for above.

 $8.5^{\prime\prime}$ diameter low expansion glass parabolic mirror; focal length $51^{\prime\prime}$ or $64^{\prime\prime}$.

Secondary mirror for above.

NOTE. The over-all diameters of mirrors and blanks are sometimes slightly greater than the nominal sizes quoted above.

SWIFT ACCESSORIES

Although we are no longer able to offer the Swift 3" refractor, we can still supply the following accessories:

SUN DIAGONAL PRISM. This employs a special wedge-shape prism known as a Herschel wedge to divert a very large percentage of the Sun's light and heat rays away from the eyepiece. To be used in conjunction with a Sun Filter on the eyepiece.

STAR DIAGONAL PRISM. This enables overhead objects to be viewed from a comfortable and more natural position.

QUADRUPLE EYEPIECE REVOLVING TURRET. Enables rapid interchanging of any four selected eyepieces when viewing,

CAMERA ADAPTOR. For attaching single lens reflex cameras with Pentax type thread to the Swift telescope for focal plane photography.



MODEL 101: A good quality 2-draw pocket telescope with a magnification of 30X and 30 mm diameter achromatic object glass, A favourite with the young plane spotter, naturalist etc. Length closed 175 mm. Weight 200 gms.



MODEL 5/30: A light and compact 3-draw pocket telescope. This 25X magnification telescope has a colour-corrected achromatic object glass of 30 mm. diameter. Length closed 135 mm. Weight 175 gms. Complete with case.



MODEL 5/32: This 2-draw pocket telescope is 175 mm long when closed and weighs 375 gms complete with the detachable table tripod. The magnification is 30X and the achiromatic object glass has a diameter of 30 mm. It comes complete with a carrying case which accommodates both the telescope and tripod.



8×30 RUSSIAN PRISMATIC MONOCULAR: Much brighter and easier to use than the conventional pocket telescope. Length 120 mm. Weight 275 gms. Strongly recommended



MODEL ZZT-20: Russian optical instruments have, for many years, enjoyed a high reputation for quality and value for money and their newly introduced telescopes are no exception. This model is a single draw telescope with focussing eyepiece. The magnification is 20X and the object glass is of 50 mm. diameter. Length closed 385 mm. Weight 560 gms.

MODEL ZZT-10: This smaller version of the above telescope has a magnification of 10X and an object glass diameter of 30 mm.



MODEL ZRT-457: This Russian prismatic telescope provides magnifications of 30X and 60X and it's 70 mm diameter object glass ensures a bright image even at the higher magnification. It is provided with a tripod which extends from a height of 34 cms to 93 cms. The length of the telescope complete with it's ray shade is 560 mm, and it weighs 1-3 kgs. The telescope and tripod are contained in a fitted metal carrying case measuring approximately 47 cms. ×21 cms. ×11 cms. The total weight is 3.6 kgs.

The following telescopes give an intended for land observation they



EX-ADMIRALTY 7×50 PRISMATIC TELESCOPE:

This high quality telescope sight is ideally suited for setting up on a verandah etc. for long and short range viewing, planetary and satellite observations etc. The instrument is of heavy construction weighing in the region of 7 kgs, excluding tripod. The magnification of 7X coupled with an object glass diameter of 50 mm, ensures that the brightest possible image is given, even in the poorest of lighting conditions. Complete with tripod.

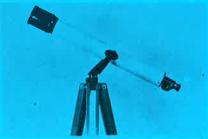
VARIABLE MAGNIFICATION TELESCOPES

Telescopes with a fixed magnification often have the disadvantage that the magnification is too high in relation to the object glass diameter, with the consequence that performance is disatically reduced in poor light. With a variable magnification telescope, however, relatively low magnification can be used when the light is poor and higher magnification, when conditions permit. At the lower magnification, not only is the image brighter but the field of view is wider—a feature which is particularly useful in bird watching etc.



MODEL V-I: This versatile instrument has a 40 mm diameter object glass and magnifications of 15X, 30X and 45X are available. Focussing is by rack and pinion and a table-top tripod is provided. Length 610 mm. Weight complete with tripod 985 gms.

upright image and, whilst they are primarily can, on occasion, be useful for Astronomy.



MODEL V-II: This very popular Terrestrial telescope can also be a most useful Astronomical instrument. Magnifications 15X, 30X, 45X and 60X. Object glass diameter 60 mm, Rack and pinion focussing. Length of tube 660 mm, 4 full length sliding leg tripod is provided. Weight complete with tripod 2.5 kgs.

ZOOM TELESCOPES.

In a variable power telescope, the magnification is selected by pulling out a draw-tube with click stops for the various magnifications available, and the telescope has to be refocussed for each change of magnification. In the zoom telescope, however, the magnification is infinitely variable throughout the range and if the telescope is initially focussed on highest magnification, it can be "zoomed" throughout the range with only a small adjustment of focus necessary.



MODEL Z-I: In this beautifully constructed telescope, magnifications of 8X-25X are selected by a recessed knob just forward of the evepiece. The easy-to-operate focussing is by a ring around the telescope body. Object glass diameter 30 mm. Length of telescope 310 mm. Weight 510 gms.

Table-top tripod extra



MODEL Z-II: Of similar construction to the Model Z-I, but with a 40 mm, diameter object glass and magnifications of 13X-40X. Length 400 mm, Weight 570 gms

Table-top tripod extra



MODEL Z-III: A superior quality instrument which can be zoomed from 20X-60X. High light transmission is obtained with the 60 mm. diameter object glass. Length 520 mm. Supplied complete with sturdy table-top tripod. Weight with tripod 1.5 kps.



HERTEL & REUSS AND NICKEL SUPRA TELESCOPES

A tremendous advance in portable telescope design has been achieved by two German telescope makers.—Hertel & Reuss of Kassel and B. Nickel of Marburg. Both instruments have variable magnification which, in the case of the Flertel & Reuss can be zoomed from 25X-60X and in the case of the Nickel Supra, from 15X-60X. The 60 mm. diameter object glass ensures high light transmission and the bodies are bushed to enable them to be used on camera tripods. There is little to choose between either instrument for quality or performance and it is generally accepted that these two telescopes are the world's best. Supplied complete with case.

Hertel & Reuss Nett Weight—990 gms Length Closed—390 mm Length Open --675 mm



Nickel Supra
Nett Weight—800 gms
Length Closed—300 mm
Length Open 560 mm

HERTEL & REUSS 20 x 35: A smaller 2-draw Hertel & Reuss telescope with a magnification of 20X and a 35 mm diameter object glass. Length closed 200 mm. Extended 460 mm. Weight 370 gms. Supplied complete with case.

HABICHT SPOTTINGSCOPE: A telescope of really superb quality from the world famous Austrian manufacturer. The body is rubber-armoured and there is a single draw-tube. Focussing is by helical eyepiece which is fitted with a turn-down rubber eyecup for the spectacle wearer. This construction, coupled with a magnification of 30X and an object glass diameter of 75 mm, makes this telescope the ideal choice for the rifle range, stalking etc. The body is bushed for fitting to a tripod, Rubber end caps and a carrying strap are provided. Length closed 330 mm. Extended 530 mm. Weight 1.4 kgs.

2.4" CATADIOPTRIC TERRESTRIAL TELESCOPE: This is the smaller version of the 4" model. The aperture of 61.5 mm. coupled with an initial magnification of 33X with the terrestrial eyepiece, ensures a bright image even in conditions of relatively poor light and providing a quality of definition which is quite exceptional. This is truly a portable telescope with a length (excluding eyepiece) of only 135 mm (5½") and being only 2½ lbs. in weight it can truly be described as the finest lightweight telescope ever produced. As with the larger model this instrument is ideally suited for use as a telephoto lens, and by the addition of eyepiece adaptors etc., it can be converted to a full astronomical telescope. The telescope is supplied in fitted case, with filters.

Suitable photographic tripod with pan and tilt head extra.

We offer many Astronomical publications, including the following "standard" works of reference:

NORTON'S STAR ATLAS AND REFERENCE This, quite understandably, has become recognised as the Astronomers' Bible. Packed with useful information, it also contains lists of 500 interesting objects and no fewer than 9,000 stars, clusters and nebulae

CHART OF THE STARS Tancock.—Showing stars in white and lettering in black on a blue background 46" × 37". Paper folded (pocket-size)

REVOLVING PLANISPHERE Phillips.—Showing the principal stars visible for every hour in the year and at any particular hour on any day. Only the stars visible at the time are shown, 10" diameter.

MAP OF THE MOON—Originally drawn by Elgar

lens system. As an astronomical or terrestrial telescope performance has to be seen to be believed and tests show that at magnification of 73X newsprint can be resolved at about 120 ft. As a telephoto lens it can be used with practically any 35 mm. S.L.R. camera and as it can be focused from infinity to under 6 ft. with extension tubes, it is ideal for astronomical or nature photography. Moreover, this

TERRESTRIAL TELESCOPE: The

been designed by us and built around

the Russian 1100 mm. F10.5 mirror

new multi-purpose telescope

CATADIOPTRIC

A CONTRACTOR OF THE PARTY OF TH

An extremely rigid full-length tripod with mount suitable for verandah o garden also available.

Nett weight of telescope 9 lbs. Let 230 rnm (9 ins.) excluding eyeptece. The telescope is supplied in fitted case, with filters.

WE RESERVE THE RIGHT TO ALTER SPECIFICATIONS AND PRICES WITHOUT NOTICE

CHARLES FRANK LTD. 144 INGRAM STREET, GLASGOW G1 1EH

DESIGNERS AND MAKERS OF SCIENTIFIC INSTRUMENTS SINCE THE TURN OF THE CENTURY

041-221 6666

Cables: BINOCAM, GLASGOW

Printed in Scotland by Bell and Bain Limited, Glasgow

TELESCOPE PRICE LIST

4" Newtonian Reflecting Astronomical Telescope	Ph	266.80	
6" Newtonian Reflecting Astronomical Telescope	مع	477.08	57
Frank's Book of the Telescope DE LUXE edition	PH7	1. 50	
Frank's Book of the Telescope ECONOMY edition	مه	1.00	
Frank's Book of Optical Instruments	۳۶	1.00	
The Stars Above Us	رج	1.00	¥.
4" Catadioptric Astronomical Telescope	Dis	continued	ф
2. 4" Catadioptric Astronomical Telescope	Dis	continued	Д
Altazimuth-mounted 2.4" Catadioptric Telescope	Dis	continued	ட
Altazimuth-mounted 4" Catadioptric Telescope	Dis	continue	ď
Celestron Schmidt-Cassegrain 5" Telescope	Ph.	791.47	
Celestron Schmidt-Cassegrain 8" Telescope	Ph 0	994.54	
	£ 49	4907.89	
Swift 40mm Eyepiece	۲n	14.40	
Swift 26mm Eyepiece	۲۲	14.40	
Swift 20mm Eyepiece	۳٦	14.40	
Swift 12mm Eyepiece	۴h	14.40	
Swift 6mm Eyepiece	۳٦	16.70	
Swift 4mm Eyepiece	۳٦	26, 15	
Swift Moon Filter	۳٦	3. 20	
Swift Sun Filter	۲'n	3.20	
Swift Barlow Lens	۲۲	19.03	
Standard Eyepiece Adaptor	۳٦	10.92	
Right Angle Eyepiece Adaptor	۳٦	15.52	
1. 25" / 24.5mm Eyepiece Adaptor	۳٦	3.73	
RAS / 24.5mm Eyepiece Adaptor	ሥነ	4.31	
Equatorial Mount without circles and drives	۲Hn	82. 23	
Equatorial Mount with circles and drives	راج	108.00	
Setting Circles - per pair	۳٦	4.96	
Geared Slow Motion Hand Drives - per pair	٦	20.81	
Tripod	۳٦	27.00	
Swift Starfinder	ŀ'n	35.00	
6" Pre-generated Mirror Kit	۳	20. 25	
6" Mirror Blank	۳٦	3.63	
8.5" Mirror Blank	۳	5. 28	
4" Aluminised Mirror	۳٦	18.22	
Secondary Mirror (Elliptical Flat) for above	۳٦	4.32	
6" Aluminised Mirror	P	56.70	
Secondary Mirror for above	ê.	11.66	
8.5" Aluminised Mirror	۳٦	97. 20	
Secondary Mirror for above	۳	20.73	
Swift Sun Diagonal Prism	Ph	16.40	

	Map of the Moon	Revolving Planisphere	Chart of the Stars	Norton's Star Atlas and Reference	4" Catadioptric Terrestrial Telescope	2.4" Catadioptric Terrestrial Telescope	Habicht Spottingscope	Nickel Supra Telescope 15 - 60 x 60	Hertel & Reuss 25 - 60 x 60 Telescope	Model Z-111 Telescope	Tripod - for Z-1 or Z-11 Telescope	/ Model Z-11 Telescope	✓ Model Z-l Telescope	Model V-11 Telescope	Model V-1 Telescope	Ex. Admiralty 7x50 Prismatic Telescope	Model ZRT-457 Telescope	Model ZZT-10 Telescope	Model ZZT-20 Telescope	8 x 30 Russian Prismatic Monocular	Model 5/32 Telescope	Model 5/30 Telescope	Model 101 Telescope	Swift Camera Adaptor	Swift Quadruple Eyepiece Revolving Turret	Swift Star Diagonal Prism
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м ж ж Д Д ж ж ж ж ж ж ж ж ж ж ж ж ж ж ж	0.65	2.00	1. 25	5. 75	scontinued.	scontinued.	367.03	158.62	153, 56	50.45	5.06 *	32.06 *	24.75 *	46.12	20.47	65.00	On application	14.20	24.50	11.00	12.37	10.46	6. 58	16.04	28.65	16.40

ADDITIONAL ITEMS.

SYNCHRONOUS MOTOR DRIVE UNIT. For use with the Charles Frank Equatorial Mount, this drive unit operates on a 12V AC 50Htz. power supply obtain ed from the mains through a suitable transformer (not supplied but readily available from most electrical shops) thus eliminating high voltage outdoor cables

greater control for photographic work BATTERY OPERATED VARIABLE FREQUENCY DRIVE UNIT. This unit enables the Synchronous Motor Drive Unit to be driven from a 12V battery. The output frequency is variable from approximately 45 - 55 Htz. giving greater control for photographic work £ 23.76 an interflex (T) mount, which includes an eyepiece, CHARLES FRANK TERRESTRIAL ERECTOR. effective focal length of the erector is approximately thus converting it to a terrestrial telescope. can be fitted to any telephoto camera lens with This complete erector system 15mm, and the The

ALL PRICES INCLUDE VALUE ADDED TAX

CHARLES FRANK LTD:, 144 Ingram Street,

May 1978.

GLASGOW G1 1EH

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