

**APPENDIX— Next Generation (MAX) Computer Part Numbers and Information Requirements  
Listed by Telescope Manufacturer, Model and Mount**

<b>Manufacturer</b>	<b>Model</b>	<b>Telescope</b>	<b>Mount</b>	<b>Required Info.*</b>	<b>Part No.†</b>
Astro-Physics	Super Polaris DX	Refractor	German Eq.		SPV
AstroSystems	TeleKit	Dobsonian	Dobsonian	Size?	COMBO <sup>1</sup>
Bausch & Lomb	4000	Schmidt-Cassegrain	Fork		4000
Bausch & Lomb	8000, 8001	Schmidt-Cassegrain	Fork		8000
Cave Astrola	Standard, Deluxe mount		German Eq.	Shaft & setting circle O.D.?	CAVE <sup>2</sup>
Celestron	C4-R	Refractor	German Eq.	CG-4 mount	CG4
Celestron	C4.5	Refractor	German Eq.	Polaris mount	PV
Celestron	C5	Schmidt-Cassegrain	Fork	Two fork arms	C8
Celestron	C5 ,C5+	Schmidt-Cassegrain	Single Fork	Only one fork arm	C5
Celestron	C5-S	Schmidt-Cassegrain	German Eq.	CG-5 mount	CG5
Celestron	C6	Newtonian	German Eq.	Polaris mount	PV
Celestron	C6-N	Newtonian	German Eq.	CG-4 mount	CG4
Celestron	C6-R	Refractor	German Eq.	CG-5 mount	CG5
Celestron	C8 Variations <sup>3</sup>	Schmidt-Cassegrain	Fork	Manufacture date? <sup>10</sup>	C8
Celestron	C8 Variations <sup>3</sup>	Schmidt-Cassegrain	Fork	Non-tapered fork	C8+
Celestron	C8 Variations <sup>3</sup>	Schmidt-Cassegrain	German Eq.	Polaris mount	PV
Celestron	C8 Variations <sup>3</sup>	Schmidt-Cassegrain	German Eq.	Super Polaris mount	SPV
Celestron	C8 Variations <sup>3</sup>	Schmidt-Cassegrain	German Eq.	Great Polaris mount	GPV
Celestron	C8-N	Newtonian	German Eq.	CG-5 mount	CG5
Celestron	C8-S	Schmidt-Cassegrain	German Eq.	CG-5 mount	CG5
Celestron	C9¼-S	Schmidt-Cassegrain	German Eq.	CG-5 mount	CG5
Celestron	C10-N	Newtonian	German Eq.	CG-5 mount	CG5
Celestron	C11	Schmidt-Cassegrain	Fork		C11
Celestron	C14	Schmidt-Cassegrain	Fork		C14
Celestron	C80-HD	Refractor	German Eq.	CG-4 mount	CG4
Celestron	C102	Refractor	German Eq.	Great Polaris mount	GPV
Celestron	C102-HD	Refractor	German Eq.	CG-4 mount	CG4
Celestron	C114-HD	Newtonian	German Eq.	CG-4 mount	CG4
Celestron	Celestar 8	Schmidt-Cassegrain	Fork	Non-tapered fork	C8+
Celestron	Celestar 8 Deluxe	Schmidt-Cassegrain	Fork	Non-tapered fork	C8+D
Celestron	CG-4 mount		German Eq.		CG4
Celestron	CG-5 mount		German Eq.		CG5
Celestron	CG-9¼	Schmidt-Cassegrain	German Eq.	Losmandy GM-8 mount	G11
Celestron	CG-11	Schmidt-Cassegrain	German Eq.	Losmandy G-11 mount	G11
Celestron	CG-14	Schmidt-Cassegrain	German Eq.	Losmandy G-11 mount	G11
Celestron	CI-700 mount		German Eq.		CI700
Celestron	CM-1100	Schmidt-Cassegrain	German Eq.	Celestron CI-700 mount	CI700
Celestron	CM-1400	Schmidt-Cassegrain	German Eq.	Celestron CI-700 mount	CI700
Celestron	CR-150-HD	Newtonian	German Eq.	CG-5 mount	CG5
Celestron	Fastar 8	Schmidt-Cassegrain	Fork	Non-tapered fork, 5" Dec hub	C8+
Celestron	Fastar 8	Schmidt-Cassegrain	Fork	Tapered fork, 3" Dec hub	ULTB
Celestron	G-8	Schmidt-Cassegrain	German Eq.	C8 OTA on a CG-5 mount	CG5
Celestron	G8-N	Newtonian	German Eq.		CG5
Celestron	G-9¼	Schmidt-Cassegrain	German Eq.	9¼ SCT on a CG-5 mount	CG5
Celestron	Great Polaris mount		German Eq.		GPV
Celestron	Polaris mount		German Eq.	Polaris mount	PV
Celestron	SP6	Newtonian	German Eq.	Super Polaris mount	SPV
Celestron	Star Hopper 6/8	Dobsonian	Dobsonian	Size?	STARHOP
Celestron	Super Polaris mount		German Eq.		SPV
Celestron	Ultima 8	Schmidt-Cassegrain	Fork		ULT
Celestron	Ultima 9¼	Schmidt-Cassegrain	Fork		ULTB
Celestron	Ultima 11	Schmidt-Cassegrain	Fork	Older large 5" Dec hub	ULT
Celestron	Ultima 11	Schmidt-Cassegrain	Fork	Newer small 3" Dec hub	ULTB
Coulter	Odyssey	Dobsonian	Dobsonian	Blue or Red? <sup>5</sup> , Size?	ODY
Criterion	Dynamax 8	Schmidt-Cassegrain	Fork		8000
Dark Star Telescopes		Dobsonian	Dobsonian		ODY
Discovery	EQ mount		German Eq.		DEQ
Explore Scientific	Twilight II mount		Alt/Azimuth		EST2
ICS		Dobsonian	Dobsonian		ICS
JMI	NGT-6	Newtonian	Eq. Split Ring		NGT6
JMI	RB-66	Newtonian Binocular	Alt/Azimuth		RB66

**APPENDIX (Continued)**

<b>Manufacturer</b>	<b>Model</b>	<b>Telescope</b>	<b>Mount</b>	<b>Required Info.*</b>	<b>Part No.<sup>†</sup></b>
JMI	RB-10	Newtonian Binocular	Alt/Azimuth		RB10
JMI	RB-16	Newtonian Binocular	Alt/Azimuth		RB16
Losmandy	G-11 mount (pre-2002)		German Eq.	with flat on RA & Dec shafts <sup>9</sup>	G11
Losmandy	GM-8 mount (pre-2002)		German Eq.	with flat on RA & Dec shafts <sup>9</sup>	G11
Meade	440/GEM	Refractor	German Eq.		GEM
Meade	628, 645, 826, 856	Newtonian	German Eq.		STAR
Meade	880, 1060, 1266	Newtonian	German Eq.		DS16
Meade	2040	Schmidt-Cassegrain	Fork		2040
Meade	2045	Schmidt-Cassegrain	Fork		2045
Meade	2045D	Schmidt-Cassegrain	Fork		2045D
Meade	2080, 2120 (GEM)	Schmidt-Cassegrain	German Eq.	German mount (GEM)	GEM
Meade	2080, 2120, LX <sup>6</sup> (Fork)	Schmidt-Cassegrain	Fork	Fork mount	LX
Meade	DS-10	Newtonian	German Eq.		STAR
Meade	DS-16	Newtonian	German Eq.		DS16
Meade	GEM mount		German Eq.		GEM
Meade	Lightbridge	Dobsonian	Dobsonian	Size?, Standard or Deluxe?	LB
Meade	LX, LX3, LX5, LX6, LX10	Schmidt-Cassegrain	Fork	Fork mount	LX
Meade	LX50	Maksutov-Cassegrain	Fork	7"	LX100
Meade	LX50, LX100	Schmidt-Cassegrain	Fork	8" or 10"	LX100
Meade	MTS	SC or SN <sup>7</sup>	Fork	SC or SN <sup>7</sup>	MTS
Meade	Premier	Newtonian	German Eq.	(Specify Premier)	DS16
Meade	Starfinder 6/8	Dobsonian	Dobsonian	Dobsonian	STAROSE
Meade	Starfinder 10/12.5/16	Dobsonian	Dobsonian	Dobsonian	STARDOB
Meade	Starfinder 6/8/10	Newtonian	German Eq.	AC powered RA drive	STAR
Meade	Starfinder 6/8/10	Newtonian	German Eq.	DC powered RA drive	STARDC
Meade	Starfinder 16	Newtonian	German Eq.	Equatorial mount	DS16
Obsession	15/18/20/25/30/36	Dobsonian	Dobsonian	Size?	OBS
Orion	Atlas 8/10 EQ	Newtonian	German Eq.		EQ6
Orion	Argonaut 150mm	Maksutov-Cassegrain	German Eq.	SkyView Deluxe EQ mount	SVD
Orion	Argonaut 6" GP-DX	Maksutov-Newtonian	German Eq.	Great Polaris Deluxe mount	GPV
Orion	Deep Space Explorer	Dobsonian	Dobsonian	Premium	DSEP
Orion	Deep Space Explorer	Dobsonian	Dobsonian	Standard	STAROSE
Orion	EQ-3 mount		German Eq.		CG4
Orion	EQ-4 mount		German Eq.		CG5
Orion	R200SS GP	Newtonian	German Eq.	Great Polaris mount	GPV
Orion	ShortTube 80/90	Refractor	German Eq.	SkyView Deluxe EQ mount	SVD
Orion	SkyQuest XT	Dobsonian	Dobsonian	6", 8" or 10"	SQXT
Orion	SkyView Deluxe EQ mnt		German Eq.		SVD
Orion	SkyView Pro EQ mnt		German Eq.	Polar scope is required	SVP
Orion	Skywatcher 120	Refractor	German Eq.	EQ-3 mount	CG4
Orion	StarMax 127	Maksutov-Cassegrain	German Eq.	EQ-3 mount	CG4
Orion	VX102(-ED/-FL) GP	Refractor	German Eq.	Great Polaris mount	GPV
Orion	VX120 GP	Refractor	German Eq.	Great Polaris mount	GPV
Parks	Astrolight	Newtonian	German Eq.	Super Polaris mount	SPV
Parks	Superior mount		German Eq.		DS16
Questar	3.5	Maksutov-Cassegrain	Fork		Q35
Sky-Watcher	12"	Dobsonian	Dobsonian		SWCD
Starsplitter	II	Dobsonian	Dobsonian	Size?	OBS
Starsplitter	Compact, Compact II	Dobsonian	Dobsonian	Size?	COMBO <sup>1</sup>
Starsplitter	GEM	Newtonian	German Eq.		SVD
Starsplitter	Tube 8/10	Dobsonian	Dobsonian		SSTUBE
Stellarvue	M1 mount		Alt/Azimuth		M1
Stellarvue	M2 mount		Alt/Azimuth	Dual hub both axes	SVM2
Stellarvue	M2C mount (still labeled "M2")		Alt/Azimuth	Single hub both axes	SVM2C
Stellarvue	M4 mount		German Eq.		SVD
Stellarvue	M6 Stableglide mount		Alt/Azimuth		M6
Stellarvue	MG2 mount		Alt/Azimuth		MG2
Sunrise Telescopes		Dobsonian	Dobsonian	Size?	OBS
Synta	Sky-Watcher EQ3 mount		German Eq.		CG4
Synta	Sky-Watcher EQ4 mount		German Eq.	(A few were aka EQ5)	CG5
Synta	Sky-Watcher EQ6 mount		German Eq.		EQ6
Synta	Sky-Watcher HEQ5 mnt		German Eq.		HEQ5

## APPENDIX (Continued)

Manufacturer	Model	Telescope	Mount	Required Info.*	Part No.†
Takahashi	EM10 mount		German Eq.	USD Drive?	EM10
Takahashi	EM200 mount		German Eq.		T200
Takahashi	NJP mount		German Eq.		T200
Takahashi	Teegul TG-LML mount		Alt/Azimuth	"Lapides Modification", +\$50 <sup>8</sup>	TGLML
Tectron	15	Dobsonian	Dobsonian		TEC
Tele-Optic (APM)	GR-2 (Giro II) mount		Alt/Azimuth	DX or TV, +\$50 <sup>8</sup>	GR2
Tele-Optic (APM)	GR-3 (Giro III) mount		Alt/Azimuth	DX or TV, +\$50 <sup>8</sup>	GR3
Tele Vue	Gibraltar mnt (pre-2002)		Alt/Azimuth	No holes in altitude arms	MOG
Tele Vue	Gibraltar mnt (post 2002)		Alt/Azimuth	Three holes in alt arms, +\$50 <sup>8</sup>	PAN
Tele Vue	Panoramic mount		Alt/Azimuth	+\$50 <sup>8</sup>	PAN
Tele Vue	Renaissance-101	Refractor	Alt/Azimuth	Gibraltar mount	MOG
Tele Vue	Systems Mount		German Eq.		TVS
Tele Vue	Tele-Pod		Alt/Azimuth	+\$50 <sup>8</sup>	PAN
Torus Optical		Dobsonian	Dobsonian	15"	COMBO <sup>1</sup>
Vixen	(Binocular) Fork mount		Alt/Azimuth		VFM
Vixen	Great Polaris mount		German Eq.		GPV
Vixen	Great Polaris Deluxe mnt		German Eq.		GPV
Vixen	Polaris mount		German Eq.	Polaris mount	PV
Vixen	Porta mount		German Eq.		VPM
Vixen	Super Polaris mount		German Eq.		SPV
William Optics	EZTouch mount		Alt/Azimuth	Requires JMI evaluation	EZT
Z-Optical		Dobsonian	Dobsonian	Size? <sup>4</sup>	ODY
Zhumell	12"	Dobsonian	Dobsonian		Z12
Miscellaneous	(Various)		(Various)	Dimensions?, Pictures	CUSTOM
Do-it-yourself Kit	(Any)		(Any)	(Computer and 2 Encoders)	KIT

\* In the preceding chart, a question mark represents a question that needs to be asked of the customer regarding their equipment. Other information that is required or is unique to the telescope or mount is also listed. In all cases we need to know the manufacturer and model of telescope and/or mount.

For encoder and hardware (ENC) and hardware only (HDW) orders, please also ask the customer which computer they have or will be using. With this information we can provide a computer holder that will fit their computer (see the chart below). If they do not know or do not specify which computer they have, we will not include a holder.

Vendor	Small Computer	Medium Computer	Large Computer	Other
JMI	SGT-MAX, NGC-microMAX	NGC-miniMAX	NGC-MAX	NGC-superMAX
Lumicon	Sky Vector I	Sky Vector II	NGC Sky Vector	
Orion	Sky Wizard Model 1	Sky Wizard Model 2	Sky Wizard Model 3	
Celestron			Advanced Astromaster	
TeleVue			Sky Tour	
Vixen				Sky Sensor

† Part numbers have two sections, the first represents the type of equipment being purchased and the second represents the type of equipment the customer owns. The first section will be one of the following: NGC, MIN, MIC, SGT, ENC or HDW. The second portion will come from the last column in the chart above. For example, an NGC-microMAX complete system for an Obsession would have the part number MICOBS.

SUP = NGC-superMAX System                      SGT = SGT-MAX System (Software Guided Telescope)  
 NGC = NGC-MAX System                          ENC = Encoders and Hardware Only  
 MIC = NGC-microMAX System                  HDW = Hardware Only

### Numbered Notes:

- <sup>1</sup> ODY Azimuth, OBS Altitude
- <sup>2</sup> Some Cave Astrola installations are priced as Custom Installations
- <sup>3</sup> C8, Super C8, Classic 8, C8+, Powerstar 8<sup>10</sup>
- <sup>4</sup> Hardware has not been verified for some sizes.
- <sup>5</sup> Earliest models have a combination square and round optical tube and are blue in color, later models are all round and red.
- <sup>6</sup> 2080, 2120 Basic, LX, LX3, LX5, LX6, LX10

## APPENDIX (Continued)

<sup>7</sup> SC = Schmidt Cassegrain, SN = Schmidt Newtonian

<sup>8</sup> Add \$50 to the normal Retail price

<sup>9</sup> The Losmandy mount must have a flat (or a groove on some early GM8 mounts) machined into both the Right Ascension and Declination shafts. Losmandy stopped machining flats in the shafts in 2002.

<sup>10</sup> In order to supply encoder hardware for the fork mounted Celestron C8 telescope, we need to have information about the right ascension axis center screw hole. Generally we can guess at this information based on the date of manufacture. However, there were great variations and inconsistencies in the manufacturing specifications from inception through 1985. The more information you can provide us, the more likely we will be able to provide the correct main gear for the right ascension axis. Use the following as a guide, remembering that we have seen exceptions to almost every bit of information listed below.

If the C8 was manufactured after 1985:

- The optical tube will be black.
- The right ascension axis center screw hole will have a 10-32 thread.

If the C8 was manufactured between 1980 and 1985:

- The optical tube will be orange or black.
- The right ascension axis center screw hole will have a 10-32 thread in most cases but it will have an 8-32 thread in a few cases.

If the C8 was manufactured between 1975 and 1980:

- The optical tube will be orange.
- The right ascension axis center screw hole will have an 8-32 thread.

If the C8 was manufactured before 1975:

- The optical tube will be orange.
- If there is no hole in the center of the right ascension axis it will need to be drilled.
- If the center hole is not threaded it will need to be tapped (to JMI specifications).
- If the hole is threaded we will need to know the thread size. Check the declination thread size also. Some scopes have non-standard 10-24 threads on both axes.
- We also need to know the inside diameter and depth of the right ascension screw well. When measuring the depth, include any ribs that protrude up from the surface. Placing a straight edge (such as a ruler) across the top of the hole will help in making this measurement.
- We may need more specific information such as drawings and dimensions.

Please note that the fork mounted C8 is not the same as the Ultima 8, Celestar 8, Celestar 8 Deluxe, Fastar 8 or any German equatorially mounted C8 which all require different hardware.

The C8 Powerstar PEC, with the central right ascension locking knob, needs some special consideration. This telescope was built for encoders but included a flaw in the design. The clock drive movement is not registered by the encoders. This leaves two options with both having drawbacks that must be considered. The first option is to use the MAX computer's ET (equatorial table) mode since normal R. A. tracking will not be seen by the encoders. The drawback here is that the telescope must be polar aligned for the encoder system to work properly. The second option is to use EQ mode and turn off the telescopes clock drive. With this option, the scope does not need to be polar aligned. The drawback is that the telescope will not be able to track in right ascension.