

JMI Encoder Setup Specifications

How To Use This Chart

- 1) Find your telescope or mount in the list below.
- 2) Set your MAX computer Mount Type to one of the two values shown (see the *MAX Computer Operator's Guide* for information on Mount Type under SETUP).
- 3) Select the encoder series based on the original purchase date or encoder resolutions (see Encoder Series information below).
- 4) Set your computer's Right Ascension and Declination or Azimuth and Altitude encoder values based on the chart.

Encoder Information Listed in the Chart (by Line Number)

- 1) Directional Sign (+ or -) and Final Output Resolution (in tics-per-revolution of the telescope axis) for MAX computers. The final output resolution is the Effective Resolution obtained by the encoders in combination with gears, pulleys, wheels or direct drive.
- 2) Axis Number (R.A. or Azimuth = 1, Declination or Altitude = 2), Directional Sign (+ or -) and Final Output Ratio for older computers and upgrade chips manufactured before 1994.
- 3) Encoder Size and Resolution (sm = small body, lg = large body, resolution is in tics-per-revolution of the encoder shaft).
- 4) Shaft Speed Ratio. For example, an axis that includes a 116-tooth gear and a 58-tooth gear has a two-to-one (2:1) gear ratio. For every complete 360° turn of the axis shaft (R.A., Dec, Az or Alt), the encoder shaft makes two complete turns. This makes the Output (or Effective) Resolution twice the Encoder Resolution.

Encoder Series (Encoder Resolutions and Sizes with Dates When They Were Sold)

- A Series Encoders, 2048 (small body S1) and 4000 (large body S2) tics-per-revolution, sold as a standard item by JMI until 09/01/1993
- B Series Encoders, 2160 (small body S1) and 4000 (large body S2) tics-per-revolution, sold as a standard item from 09/01/1993 to 11/01/1999
- C Series Encoders, 4096 (small body S1) and 8192 (large body S2) tics-per-revolution, sold as a standard item from 11/01/1999 to 07/01/2005
(available for high-speed BBOX in 10/1998 and high-speed NGC-microMAX and NGC-MAX in 08/1999)
- D Series Encoders, 5000 (small body S1) and 10000 (large body S2) tics-per-revolution, sold as a standard item from 07/01/2005 to present

The following mathematical equations are always true:

- 1) Final Output Resolution (line 1) times Final Output Ratio (line 2) always equals 2048.
- 2) Encoder Resolution (line 3) times the first number of the Shaft Speed Ratio (line 4) equals Final Output Resolution (line 1)

| <u>Telescope/Mount Info</u> | <u>Mount</u> | <u>A Series Encoders</u> | | <u>B Series Encoders</u> | | <u>C Series Encoders</u> | | <u>D Series Encoders</u> | |
|-------------------------------------|--------------|--------------------------|------------------|--------------------------|------------------|--------------------------|------------------|--------------------------|------------------|
| | | <u>R. A./Az.</u> | <u>Dec./Alt.</u> | <u>R. A./Az.</u> | <u>Dec./Alt.</u> | <u>R. A./Az.</u> | <u>Dec./Alt.</u> | <u>R. A./Az.</u> | <u>Dec./Alt.</u> |
| Antares/Synta/Sky-Watcher EQ-6/HEQ5 | GQ or GP | +04096 | +04096 | +04320 | +04320 | +08192 | +08192 | +10000 | +10000 |
| | | 1+0.5000 | 2+0.5000 | 1+0.4741 | 2+0.4741 | 1+0.2500 | 2+0.2500 | 1+0.2048 | 2+0.2048 |
| | | sm-2048 | sm-2048 | sm-2160 | sm-2160 | sm-4096 | sm-4096 | sm-5000 | sm-5000 |
| | | 2:1 | 2:1 | 2:1 | 2:1 | 2:1 | 2:1 | 2:1 | 2:1 |
| APM Giro-2 | AV or AZ | n/a | n/a | n/a | n/a | +08192 | +08192 | +10000 | +10000 |
| | | | | | | 1+0.2500 | 2+0.2500 | 1+0.2048 | 2+0.2048 |
| | | | | | | sm-4096 | sm-4096 | sm-5000 | sm-5000 |
| | | | | | | 2:1 | 2:1 | 2:1 | 2:1 |
| Astrophysics DX | GQ or GP | +04000 | +04096 | +04000 | +04320 | +08192 | +08192 | +10000 | +10000 |
| | | 1+0.5120 | 2+0.5000 | 1+0.5120 | 2+0.4741 | 1+0.2500 | 2+0.2500 | 1+0.2048 | 2+0.2048 |
| | | lg-4000 | sm-2048 | lg-4000 | sm-2160 | lg-8192 | sm-4096 | lg-10000 | sm-5000 |
| | | 1:1 | 2:1 | 1:1 | 2:1 | 1:1 | 2:1 | 1:1 | 2:1 |

| | | | | | | | | | |
|---------------------------------------|----------|---|---|---|--|---|--|---|--|
| Bausch & Lomb 4000/8000 | EQ or EP | +04096 1+0.5000 sm-2048 2:1 | +04000 2+0.5120 lg-4000 1:1 | +04320 1+0.4741 sm-2160 2:1 | +04000 2+0.5120 lg-4000 1:1 | +08192 1+0.2500 sm-4096 2:1 | +08192 2+0.2500 lg-8192 1:1 | +10000 1+0.2048 sm-5000 2:1 | +10000 2+0.2048 lg-10000 1:1 |
| Celestron C5/C8/C11 | EQ or EP | +04096 1+0.5000 sm-2048 2:1 | +04000 2+0.5120 lg-4000 1:1 | +04320 1+0.4741 sm-2160 2:1 | +04000 2+0.5120 lg-4000 1:1 | +08192 1+0.2500 sm-4096 2:1 | +08192 2+0.2500 lg-8192 1:1 | +10000 1+0.2048 sm-5000 2:1 | +10000 2+0.2048 lg-10000 1:1 |
| Celestron C8 Powerstar PEC | ET or EQ | +08192 1+0.2500 sm-2048 4:1 | +04000 2+0.5120 lg-4000 1:1 | +08640 1+0.2370 sm-2160 4:1 | +04000 2+0.5120 lg-4000 1:1 | +08640 1+0.2370 sm-2160 ² 4:1 | +08192 2+0.2500 lg-8192 1:1 | +08640 1+0.2370 sm-2160 ⁴ 4:1 | +10000 2+0.2048 lg-10000 1:1 |
| Celestron C14 | EQ or EP | +05658 1+0.3620 sm-2048 2.7627:1 | +04000 2+0.5120 lg-4000 1:1 | +05967 1+0.3432 sm-2160 2.7627:1 | +04000 2+0.5120 lg-4000 1:1 | +11316 1+0.1810 sm-4096 2.7627:1 | +08192 2+0.2500 lg-8192 1:1 | +13813 1+0.1483 sm-5000 2.7627:1 | +10000 2+0.2048 lg-10000 1:1 |
| Celestron CG-4 | GQ or GP | n/a | n/a | +04096 1+0.5000 sm-4096 ¹ 1:1 | +04830 2+0.4240 sm-4096 ¹ 1.1792:1 | +08192 1+0.2500 lg-8192 1:1 | +04830 2+0.4240 sm-4096 ³ 1.1792:1 | +10000 1+0.2048 lg-10000 1:1 | +05896 2+0.2048 sm-5000 ³ 1.1792:1 |
| Celestron CG-5 | GQ or GP | n/a | n/a | +04320 1+0.4741 sm-2160 2:1 | +04320 2+0.4741 sm-2160 2:1 | +08192 1+0.2500 sm-4096 2:1 | +08192 2+0.2500 sm-4096 2:1 | +10000 1+0.2048 sm-5000 2:1 | +10000 2+0.2048 sm-5000 2:1 |
| Celestron CI-700 | GQ or GP | +04096 1+0.5000 sm-2048 2:1 | +04096 2+0.5000 sm-2048 2:1 | +04320 1+0.4741 sm-2160 2:1 | +04320 2+0.4741 sm-2160 2:1 | +08192 1+0.2500 sm-4096 2:1 | +08192 2+0.2500 sm-4096 2:1 | +10000 1+0.2048 sm-5000 2:1 | +10000 2+0.2048 sm-5000 2:1 |
| Celestron Polaris | GQ or GP | +04096 1+0.5000 sm-2048 2:1 | +02415 2+0.8480 sm-2048 1.1792:1 | +04320 1+0.4741 sm-2160 2:1 | +04830 2+0.4240 sm-4096 ¹ 1.1792:1 | +08192 1+0.2500 sm-4096 2:1 | +04830 2+0.4240 sm-4096 ³ 1.1792:1 | +10000 1+0.2048 sm-5000 2:1 | +05896 2+0.3474 sm-5000 ³ 1.1792:1 |
| Celestron Starhopper | AV or AZ | +04096 1+0.5000 sm-2048 2:1 | +04000 2+0.5120 lg-4000 1:1 | +04320 1+0.4741 sm-2160 2:1 | +04000 2+0.5120 lg-4000 1:1 | +08192 1+0.2500 sm-4096 2:1 | +08192 2+0.2500 lg-8192 1:1 | +10000 1+0.2048 sm-5000 2:1 | +10000 2+0.2048 lg-10000 1:1 |
| Celestron Super Polaris/Great Polaris | GQ or GP | +04000 1+0.5120 lg-4000 1:1 | +04096 2+0.5000 sm-2048 2:1 | +04000 1+0.5120 lg-4000 1:1 | +04320 2+0.4741 sm-2160 2:1 | +08192 1+0.2500 lg-8192 1:1 | +08192 2+0.2500 sm-4096 2:1 | +10000 1+0.2048 lg-10000 1:1 | +10000 2+0.2048 sm-5000 2:1 |
| Coulter Odyssey | AV or AZ | +04000 1+0.5120 lg-4000 1:1 | +04000 2+0.5120 lg-4000 1:1 | +04000 1+0.5120 lg-4000 1:1 | +04000 2+0.5120 lg-4000 1:1 | +08192 1+0.2500 lg-8192 1:1 | +08192 2+0.2500 lg-8192 1:1 | +10000 1+0.2048 lg-10000 1:1 | +10000 2+0.2048 lg-10000 1:1 |

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|--------------------------------------|----------|---|--------------------------------------|---|---|--|---|--|---|
| Discovery EQ | GQ or GP | n/a | n/a | +04320 1+0.4741 sm-2160 2:1 | +04096 2+0.5000 sm-4096 ¹ 1:1 | +08192 1+0.2500 sm-4096 2:1 | +04096 2+0.5000 sm-4096 ³ 1:1 | +10000 1+0.2048 sm-5000 2:1 | +05000 2+0.4096 sm-5000 ³ 1:1 |
| Dynamax 8 | EQ or EP | +04096 1+0.5000 sm-2048 2:1 | +04000 2+0.5120 lg-4000 1:1 | +04320 1+0.4741 sm-2160 2:1 | +04000 2+0.5120 lg-4000 1:1 | +08192 1+0.2500 sm-4096 2:1 | +08192 2+0.2500 lg-8192 1:1 | +10000 1+0.2048 sm-5000 2:1 | +10000 2+0.2048 lg-10000 1:1 |
| Intes MK-63 | EQ or EP | +06780 1+0.3021 sm-2048 3.3105:1 | +04000 2+0.5120 lg-4000 1:1 | +07151 1+0.2864 sm-2160 3.3105:1 | +04000 2+0.5120 lg-4000 1:1 | +07151 1+0.2864 sm-2160 ² 3.3105:1 | +08192 2+0.2500 lg-8192 1:1 | +07151 1+0.2864 sm-2160 ⁴ 3.3105:1 | +10000 2+0.2048 lg-10000 1:1 |
| JMI NGT-6 | GQ or GP | n/a | n/a | n/a | n/a | +04096 1+0.5000 sm-4096 ³ 1:1 | +04096 2+0.5000 sm-4096 ³ 1:1 | n/a | n/a |
| JMI NGT-18/NGT-12.5 | GQ or GP | +04000 1+0.5120 lg-4000 1:1 | +04000 2+0.5120 lg-4000 1:1 | +04000 1+0.5120 lg-4000 1:1 | +04000 2+0.5120 lg-4000 1:1 | +08192 1+0.2500 lg-8192 1:1 | +08192 2+0.2500 lg-8192 1:1 | +10000 1+0.2048 lg-10000 1:1 | +10000 2+0.2048 lg-10000 1:1 |
| JMI RB-66 | AV or AZ | n/a | n/a | n/a | n/a | +04096 1+0.5000 sm-4096 ³ 1:1 | +04096 2+0.5000 sm-4096 ³ 1:1 | +05000 1+0.4096 sm-5000 ³ 1:1 | +05000 2+0.4096 sm-5000 ³ 1:1 |
| JMI RB-10/RB-16 | AV or AZ | n/a | n/a | n/a | n/a | n/a | n/a | +10000 1+0.2048 sm-5000 2:1 | +10000 2+0.2048 lg-10000 1:1 |
| Losmandy GM-8/G-11 | GQ or GP | +04096 1+0.5000 sm-2048 2:1 | +04096 2+0.5000 sm-2048 2:1 | +04320 1+0.4741 sm-2160 2:1 | +04320 2+0.4741 sm-2160 2:1 | +08192 1+0.2500 sm-4096 2:1 | +08192 2+0.2500 sm-4096 2:1 | +10000 1+0.2048 sm-5000 2:1 | +10000 2+0.2048 sm-5000 2:1 |
| Meade 440/2080/2120 GEM | GQ or GP | +04096 1+0.5000 sm-2048 2:1 | +04096 2+0.5000 sm-2048 2:1 | +04320 1+0.4741 sm-2160 2:1 | +04320 2+0.4741 sm-2160 2:1 | +08192 1+0.2500 sm-4096 2:1 | +08192 2+0.2500 sm-4096 2:1 | +10000 1+0.2048 sm-5000 2:1 | +10000 2+0.2048 sm-5000 2:1 |
| Meade 2040/2045/2080/2120 fork mount | EQ or EP | +04096 1+0.5000 sm-2048 2:1 | +04000 2+0.5120 lg-4000 1:1 | +04320 1+0.4741 sm-2160 2:1 | +04000 2+0.5120 lg-4000 1:1 | +08192 1+0.2500 sm-4096 2:1 | +08192 2+0.2500 lg-8192 1:1 | +10000 1+0.2048 sm-5000 2:1 | +10000 2+0.2048 lg-10000 1:1 |
| Meade DS-10/628/645/826/856 | GQ or GP | +04000 1+0.5120 lg-4000 1:1 | +04096 2+0.5000 sm-2048 2:1 | +04000 1+0.5120 lg-4000 1:1 | +04320 2+0.4741 sm-2160 2:1 | +08192 1+0.2500 lg-8192 1:1 | +08192 2+0.2500 sm-4096 2:1 | +10000 1+0.2048 lg-10000 1:1 | +10000 2+0.2048 sm-5000 2:1 |

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|-----------------------------------|----------|---|--------------------------------------|--|---|--|---|---|---|
| Meade DS-16/880/1060/1266 | GQ or GP | +04096 1+0.5000 sm-2048 2:1 | +04096 2+0.5000 sm-2048 2:1 | +04320 1+0.4741 sm-2160 2:1 | +04320 2+0.4741 sm-2160 2:1 | +08192 1+0.2500 sm-4096 2:1 | +08192 2+0.2500 sm-4096 2:1 | +10000 1+0.2048 sm-5000 2:1 | +10000 2+0.2048 sm-5000 2:1 |
| Meade ETX | EQ or EP | n/a | n/a | +02160 1+0.9481 sm-2160 1:1 | +02160 2+0.9481 sm-2160 1:1 | n/a | n/a | n/a | n/a |
| Meade Lightbridge 8/10/12 | AV or AZ | n/a | n/a | n/a | n/a | n/a | n/a | +10000 1+0.2048 lg-10000 1:1 | +10000 2+0.2048 lg-10000 1:1 |
| Meade LX50/LX100 | EQ or EP | +04096 1+0.5000 sm-2048 2:1 | +04096 2+0.5000 sm-2048 2:1 | +04320 1+0.4741 sm-2160 2:1 | +04320 2+0.4741 sm-2160 2:1 | +08192 1+0.2500 sm-4096 2:1 | +08192 2+0.2500 sm-4096 2:1 | +10000 1+0.2048 sm-5000 2:1 | +10000 2+0.2048 sm-5000 2:1 |
| Meade LXD500 | GQ or GP | n/a | n/a | +06690 1+0.3061 sm-4096 ¹ 1.6333:1 | +04096 2+0.5000 sm-4096 ¹ 1:1 | +06690 1+0.3061 sm-4096 ³ 1.6333:1 | +04096 2+0.5000 sm-4096 ³ 1:1 | n/a | n/a |
| Meade MTS Series | EQ or EP | +03953 1+0.5181 sm-2048 1.9302:1 | +04000 2+0.5120 lg-4000 1:1 | +04169 1+0.4912 sm-2160 1.9302:1 | +04000 2+0.5120 lg-4000 1:1 | +07906 1+0.2590 sm-4096 1.9302:1 | +08192 2+0.2500 lg-8192 1:1 | +09651 1+0.2122 sm-5000 1.9302:1 | +10000 2+0.2048 lg-10000 1:1 |
| Meade Starfinder 6/8/10 (AC & DC) | GQ or GP | +04000 1+0.5120 lg-4000 1:1 | +04096 2+0.5000 sm-2048 2:1 | +04000 1+0.5120 lg-4000 1:1 | +04320 2+0.4741 sm-2160 2:1 | +08192 1+0.2500 lg-8192 1:1 | +08192 2+0.2500 sm-4096 2:1 | +10000 1+0.2048 lg-10000 1:1 | +10000 2+0.2048 sm-5000 2:1 |
| Obsession | AV or AZ | +04000 1+0.5120 lg-4000 1:1 | +04000 2+0.5120 lg-4000 1:1 | +04000 1+0.5120 lg-4000 1:1 | +04000 2+0.5120 lg-4000 1:1 | +08192 1+0.2500 lg-8192 1:1 | +08192 2+0.2500 lg-8192 1:1 | +10000 1+0.2048 lg-10000 1:1 | +10000 2+0.2048 lg-10000 1:1 |
| Orion SkyQuest XT 8/10 | AV or AZ | +04000 1+0.5120 lg-4000 1:1 | +04000 2+0.5120 lg-4000 1:1 | +04000 1+0.5120 lg-4000 1:1 | +04000 2+0.5120 lg-4000 1:1 | +08192 1+0.2500 lg-8192 1:1 | +08192 2+0.2500 lg-8192 1:1 | +10000 1+0.2048 lg-10000 1:1 | +10000 2+0.2048 lg-10000 1:1 |
| Orion SkyView Deluxe | GQ or GP | n/a | n/a | +04320 1+0.4741 sm-2160 2:1 | +04096 2+0.5000 sm-4096 ¹ 1:1 | +08192 1+0.2500 sm-4096 2:1 | +04096 2+0.5000 sm-4096 ³ 1:1 | +10000 1+0.2048 sm-5000 2:1 | +05000 2+0.4096 sm-5000 ³ 1:1 |
| Orion SkyView Pro | GQ or GP | +04096 1+0.5000 sm-2048 2:1 | +04096 2+0.5000 sm-2048 2:1 | +04320 1+0.4741 sm-2160 2:1 | +04320 2+0.4741 sm-2160 2:1 | +08192 1+0.2500 sm-4096 2:1 | +08192 2+0.2500 sm-4096 2:1 | +10000 1+0.2048 sm-5000 2:1 | +10000 2+0.2048 sm-5000 2:1 |

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|--|----------|---|---|---|---|--|---|--|---|
| Questar 3.5" | EQ or EP | +05981 1+0.3424 sm-2048 2.9204:1 | +03292 2+0.6221 sm-2048 1.6074:1 | +06308 1+0.3247 sm-2160 2.9204:1 | +03472 2+0.5899 sm-2160 1.6074:1 | +06308 1+0.3247 sm-2160 ² 2.9204:1 | +06584 2+0.3111 sm-4096 1.6074:1 | +11962 1+0.1712 sm-4096 ⁵ 2.9204:1 | +08037 2+0.2548 sm-5000 1.6074:1 |
| Starsplitter | AV or AZ | +04000 1+0.5120 lg-4000 1:1 | +04000 2+0.5120 lg-4000 1:1 | +04000 1+0.5120 lg-4000 1:1 | +04000 2+0.5120 lg-4000 1:1 | +08192 1+0.2500 lg-8192 1:1 | +08192 2+0.2500 lg-8192 1:1 | +10000 1+0.2048 lg-10000 1:1 | +10000 2+0.2048 lg-10000 1:1 |
| Stellarvue M6 Stableglide | AV or AZ | n/a | n/a | n/a | n/a | +12635 1+0.1621 sm-2160 ² 5.8495:1 | +08192 2+0.2500 sm-4096 2:1 | +12635 1+0.1621 sm-2160 ⁴ 5.8495:1 | +10000 2+0.2048 sm-5000 2:1 |
| Takahashi EM-1 | GQ or GP | +04096 1+0.5000 sm-2048 2:1 | +04096 2+0.5000 sm-2048 2:1 | +04320 1+0.4741 sm-2160 2:1 | +04320 2+0.4741 sm-2160 2:1 | +08192 1+0.2500 sm-4096 2:1 | +08192 2+0.2500 sm-4096 2:1 | +10000 1+0.2048 sm-5000 2:1 | +10000 2+0.2048 sm-5000 2:1 |
| Takahashi EM-10 (non-USD) | GQ or GP | +03322 1+0.6165 sm-2048 1.6221:1 | +03322 2+0.6165 sm-2048 1.6221:1 | +03504 1+0.5845 sm-2160 1.6221:1 | +03504 2+0.5845 sm-2160 1.6221:1 | +06644 1+0.3082 sm-4096 1.6221:1 | +06644 2+0.3082 sm-4096 1.6221:1 | +08111 1+0.2525 sm-5000 1.6221:1 | +08111 2+0.2525 sm-5000 1.6221:1 |
| Takahashi EM-10 USD | GQ or GP | n/a | n/a | +03970 1+0.5159 sm-2160 1.8379:1 | +04280 2+0.4785 sm-2160 1.9814:1 | +07528 1+0.2721 sm-4096 1.8379:1 | +08116 2+0.2523 sm-4096 1.9814:1 | +09190 1+0.2229 sm-5000 1.8379:1 | +09907 2+0.2067 sm-5000 1.9814:1 |
| Takahashi EM-200, NJP (1997 and earlier) | GQ or GP | +04096 1+0.5000 sm-2048 2:1 | +05656 2+0.3621 sm-2048 2.7617:1 | +04320 1+0.4741 sm-2160 2:1 | +05965 2+0.3433 sm-2160 2.7617:1 | +08192 1+0.2500 sm-4096 2:1 | +11312 2+0.1810 sm-4096 2.7617:1 | +10000 1+0.2048 sm-5000 2:1 | +13809 2+0.1483 sm-5000 2.7617:1 |
| Takahashi NJP (1997 and later) | GQ or GP | n/a | n/a | n/a | n/a | +06599 1+0.3103 sm-4096 1.6111:1 | +11312 2+0.1810 sm-4096 2.7617:1 | +08056 1+0.2542 sm-5000 1.6111:1 | +13809 2+0.1483 sm-5000 2.7617:1 |
| Takahashi Teegull TG-LML | AV or AZ | n/a | n/a | n/a | n/a | +08192 1+0.2500 sm-4096 2:1 | +08192 2+0.2500 sm-4096 2:1 | +10000 1+0.2048 sm-5000 2:1 | +10000 2+0.2048 sm-5000 2:1 |
| Tele Vue Gibraltar/Panoramic/Tele-Pod | AV or AZ | +02048 1+1.0000 sm-2048 ³ 1:1 | +02048 2+1.0000 sm-2048 ³ 1:1 | +02160 1+0.9481 sm-2160 ³ 1:1 | +02160 2+0.9481 sm-2160 ³ 1:1 | +04096 1+0.5000 sm-4096 ³ 1:1 | +04096 2+0.5000 sm-4096 ³ 1:1 | +05000 1+0.4096 sm-5000 ³ 1:1 | +05000 2+0.4096 sm-5000 ³ 1:1 |
| Tele Vue Systems | GQ or GP | +04096 1+0.5000 sm-2048 2:1 | +04096 2+0.5000 sm-2048 2:1 | +04320 1+0.4741 sm-2160 2:1 | +04320 2+0.4741 sm-2160 2:1 | +08192 1+0.2500 sm-4096 2:1 | +08192 2+0.2500 sm-4096 2:1 | +10000 1+0.2048 sm-5000 2:1 | +10000 2+0.2048 sm-5000 2:1 |

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|------------------------------|----------|----------|----------|----------|----------|----------|----------|----------------------|----------------------|
| Ultima 8/9¼/11 | EQ or EP | +04096 | +04000 | +04320 | +04000 | +08192 | +08192 | +10000 | +10000 |
| | | 1+0.5000 | 2+0.5120 | 1+0.4741 | 2+0.5120 | 1+0.2500 | 2+0.2500 | 1+0.2048 | 1+0.2048 |
| | | sm-2048 | lg-4000 | sm-2160 | lg-4000 | sm-4096 | lg-8192 | sm-5000 | lg-10000 |
| | | 2:1 | 1:1 | 2:1 | 1:1 | 2:1 | 1:1 | 2:1 | 1:1 |
| Vixen (Binocular) Fork Mount | AV or AZ | n/a | n/a | n/a | n/a | n/a | n/a | +04320 | +05000 |
| | | | | | | | | 1+0.4741 | 2+0.4096 |
| | | | | | | | | sm-2160 ⁴ | sm-5000 ⁶ |
| Vixen Porta Mount | AV or AZ | n/a | n/a | n/a | n/a | n/a | n/a | +10000 | +10000 |
| | | | | | | | | 1+0.2048 | 2+0.2048 |
| | | | | | | | | sm-5000 | sm-5000 |
| | | | | | | | | 2:1 | 2:1 |

Notes

- ¹ Using a C series encoder for a B series installation to increase total resolution to normal standards
- ² Using a B series encoder for a C series installation to decrease total resolution to normal standards or to match the resolution of the other axis
- ³ Size restrictions on the encoder package limit final output to lower than our standard resolution
- ⁴ Using a B series encoder for a D series installation to decrease total resolution to normal standards or to match the resolution of the other axis
- ⁵ Using a C series encoder for a D series installation to decrease total resolution to normal standards or to match the resolution of the other axis
- ⁶ Using a lower resolution due to the application (e.g. large field of view)

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JMI Telescopes

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