

## Azimuth Override Chart

Decimal Values	Azimuth		Diff	Decimal Values	Azimuth		Diff	Decimal Values	Azimuth		Diff	Decimal Values	Azimuth		Diff
Rise*	Set*			Rise*	Set*			Rise*	Set*			Rise*	Set*		
0	90	270	Turned Off	2	114.59	294.59	57.29	4	229.18	49.18	57.30	6	343.77	163.77	57.30
0.1	5.73	185.73	-84.27	2.1	120.32	300.32	5.73	4.1	234.91	54.91	5.73	6.1	349.50	169.50	5.73
0.2	11.46	191.46	5.73	2.2	126.05	306.05	5.73	4.2	240.64	60.64	5.73	6.2	355.23	175.23	5.73
0.3	17.19	197.19	5.73	2.3	131.78	311.78	5.73	4.3	246.37	66.37	5.73	6.21	355.81	175.81	0.58
0.4	22.92	202.92	5.73	2.4	137.51	317.51	5.73	4.4	252.10	72.10	5.73	6.22	356.38	176.38	0.57
0.5	28.65	208.65	5.73	2.5	143.24	323.24	5.73	4.5	257.83	77.83	5.73	6.23	356.95	176.95	0.57
0.6	34.38	214.38	5.73	2.6	148.97	328.97	5.73	4.6	263.56	83.56	5.73	6.24	357.53	177.53	0.58
0.7	40.11	220.11	5.73	2.7	154.70	334.70	5.73	4.7	269.29	89.29	5.73	6.25	358.10	178.10	0.57
0.8	45.84	225.84	5.73	2.8	160.43	340.43	5.73	4.8	275.02	95.02	5.73	6.26	358.67	178.67	0.57
0.9	51.57	231.57	5.73	2.9	166.16	346.16	5.73	4.9	280.75	100.75	5.73				
1	57.30	237.30	-32.70	3	171.89	351.89	57.29	5	286.48	106.47	57.29				
1.1	63.03	243.03	5.73	3.1	177.62	357.62	5.73	5.1	292.21	112.21	5.73				
1.2	68.75	248.75	5.72	3.2	183.35	363.35	5.73	5.2	297.94	117.94	5.73				
1.3	74.48	254.48	5.73	3.3	189.08	369.08	5.73	5.3	303.67	123.67	5.73				
1.4	80.21	260.21	5.73	3.4	194.81	374.81	5.73	5.4	309.40	129.40	5.73				
1.5	85.94	265.94	5.73	3.5	200.54	380.54	5.73	5.5	315.13	135.13	5.73				
1.6	91.67	271.67	5.73	3.6	206.26	386.26	5.72	5.6	320.86	140.86	5.73				
1.7	97.40	277.40	5.73	3.7	211.99	391.99	5.73	5.7	326.59	146.59	5.73				
1.8	103.13	283.13	5.73	3.8	217.72	397.72	5.73	5.8	332.32	152.32	5.73				
1.9	108.86	288.86	5.73	3.9	223.45	403.45	5.73	5.9	338.05	158.05	5.73				

1. If Azimuth Override is turned on (value other than zero); then Axis Tilt is automatically disabled. With any selected azimuth to set your own sunrise position, sunset will ALWAYS be 180° directly opposite. This condition is only possible during the March & Sept Equinoxes and would never happen near winter or summer solstice. The sun will always be straight overhead at 12 noon, having no tilt toward either the north or south horizon.

0° or 360° Azimuth as a Sunrise direction can never be fully achieved. You can only get infinitely close by dropping as close to 0 or climbing as close to 6.27 without going over.

Override Value	Rise Cardinal Direction	Set Cardinal Direction	If you wish to place the sun at a specific azimuth and elevation to emulate a specific time of day, use the charts adjacent to the left & below to set up proper sun azimuth and elevation.	
0.001	NORTH	SOUTH		
6.265				
0.785	NE	SW		
1.571	EAST	WEST		
2.356	SE	NW		
3.142	SOUTH	NORTH		
3.927	SW	NE		
4.712	WEST	EAST		
5.498	NW	SE		
Decimal Time Value	Degrees above Horiz		Virtual TOD	
AM (east)	PM (west)		AM (east)	PM (west)
0 or 1	0.5000	0°	06:00:00	18:00:00
0.0139	0.4861	5°	06:20:01	17:39:59
0.0278	0.4722	10°	06:40:02	17:19:58
0.0417	0.4583	15°	07:00:03	16:59:57
0.0556	0.4444	20°	07:20:04	16:39:56
0.0834	0.4166	30°	08:00:06	15:59:54
0.1250	0.3750	45°	09:00:00	15:00:00
0.1667	0.3333	60°	10:00:03	13:59:57
0.2083	0.2917	75°	10:59:57	13:00:03
0.2222	0.2778	80°	11:19:58	12:40:02
N/A	0.2500	90°	N/A	12:00:00

Seasonal Azimuth Override Values	Solar Standstill Azimuth Lines (mid latitudes presumed)	Seasonal Morning & Evening Equivalents	
1.048	The 60 – 240 Line	Summer Solstice AM	Winter Solstice PM
1.571	The 90 – 180 Line	Spring or Fall Equinox AM & PM	
2.094	The 120 – 300 Line	Winter Solstice AM	Summer Solstice PM