

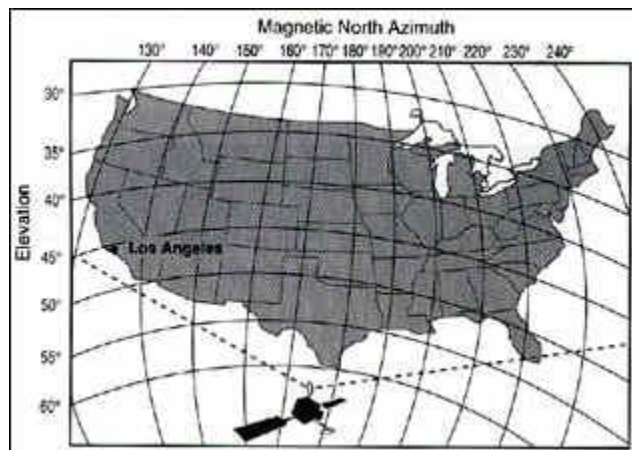
Satellite Dish Aiming: Azimuth and Elevation of Satellites

Notes: Echo Star = Dish Network

Directions are to primary satellite only

Dish Network is harder to get in the east due to satellite location.

Lower elevations due to satellite location means signal has more obstructions from trees etc.



Hold compass so the needle lines up with N and S. Satellite is in the direction of azimuth number. Elevation is angle from horizontal.

Western United States

EchoStar Azimuth (Degrees)	EchoStar Elevation (Degrees)	DIRECTV Azimuth (Degrees)	DIRECTV Elevation (Degrees)	State	City
98	40			HI	Honolulu
118	15			AK	Anchorage
156	35	133	31	WA	Seattle
156	38	133	34	OR	Portland
159	46	132	41	CA	San Francisco
163	44	135	39	NV	Reno
167	50	138	46	CA	Los Angeles
167	39	142	37	ID	Boise
172	47	141	44	NV	Las Vegas
174	35	150	34	MT	Great Falls
178	42	151	41	UT	Salt Lake City
180	50	148	49	AZ	Phoenix
180	50	148	49	MO	Jefferson City
186	39	159	40	WY	Casper
190	47	158	48	NM	Albuquerque
190	42	162	43	CO	Denver

Central United States

EchoStar Azimuth (Degrees)	EchoStar Elevation (Degrees)	DIRECTV Azimuth (Degrees)	DIRECTV Elevation (Degrees)	State	City
194	33	170	36	ND	Bismarck
197	36	172	39	SD	Pierre
200	45	170	49	TX	Amarillo
201	38	175	42	NE	Grand Island
206	41	177	45	KS	Wichita
207	43	178	49	OK	Oklahoma City
208	31	185	35	MN	Brainerd
211	35	186	41	IA	Des Moines
216	47	185	54	TX	Houston
219	40	192	48	AR	Little Rock
221	31	198	37	WI	Oshkosh
222	35	198	42	IL	Springfield
223	43	195	52	LA	Baton Rouge
224	41	198	50	MS	Jackson
224	28	202	35	MI	Iron Mountain
227	33	204	41	IN	Indianapolis
229	38	204	47	AL	Birmingham
230	30	206	37	MI	Lansing
231	36	208	45	TN	Chattanooga
232	33	209	42	KY	Lexington

Eastern United States

EchoStar Azimuth (Degrees)	EchoStar Elevation (Degrees)	DIRECTV Azimuth (Degrees)	DIRECTV Elevation (Degrees)	State	City
233	36	210	46	GA	Atlanta
233	31	211	40	OH	Columbus
237	31	216	41	WV	Charleston
240	33	218	45	SC	Columbia
242	37	220	49	FL	Orlando
242	31	221	42	NC	Raleigh
243	27	222	37	PA	State College
245	29	224	39	VA	Richmond
245	28	225	38	DC	Washington
246	27	225	38	MD	Annapolis
247	24	228	33	NY	Utica
248	27	228	37	DE	Dover
249	25	229	36	NJ	Trenton
251	23	232	33	CT	Hartford
252	21	232	32	VT	Montpelier
253	22	234	33	MA	Worcester
254	21	234	31	NH	Concord
254	22	235	32	RI	Providence
259	19	239	29	ME	Bangor