

Astra 2d satellite dish alignment throughout Europe

	true bearing	magnetic declination *	altitude above horizon	skew angle **
London	146	1½ W	26	14
Aberdeen	145		20	11
Aberystwyth	142		24	16
Barnstaple	141		24	16
Belfast	141		20	14
Birmingham	145		26	15
Bristol	142		25	16
Caernarfon	142		23	15
Canterbury	147		26	13
Cardiff	142		25	16
Edinburgh	144		20	12
Fort William	142		19	13
Glasgow	143		20	13
Inverness	143		19	12
King's Lynn	146		24	13
Londonderry	139		20	15
Manchester	144		23	14
Newcastle-upon-Tyne	145		22	12
Penzance	139		24	18
Plymouth	141		25	17
Swansea	142		24	16
Ullapool	143		18	12
Austria		3 E		
Vienna	164		34	4
Graz	162		34	4
Innsbruck	157		33	8
Salzburg	160		33	8
Belgium		0		
Brussels	150		27	11
Antwerp	150		27	11
Bruges	149		27	12
Czech Republic		1 E		
Prague	162		31	4
Denmark		1½ E		
Copenhagen	161		25	3
Aarhus	159		24	5
Esbjerg	156		27	6
Skive	158		23	5
France		1 E		
Paris	147		29	14
Bourg-en-Bresse	149		32	13
Brest	140		26	18
Caen	144		27	15
Calais	148		27	13
Chartres	146		29	15
Châteauroux	145		30	16
Clermont-Ferrand	147		32	15
Dijon	150		31	13
La Rochelle	142		30	18
Le Mans	144		29	16
Lyon	149		32	14
Marseilles	148		35	15
Nice	151		35	13
Orleans	147		29	15
Perpignan	146		34	17
Rouen	146		28	15
St Malo	143		27	17
Strasbourg	154		31	10
Tours	145		30	16
Germany		1 E		
Berlin	161		28	4
Dortmund	154		27	9
Dresden	162		30	4
Dusseldorf	154		28	9
Frankfurt	156		30	8
Göttingen	158		28	7
Hamburg	158		25	5
Hannover	158		28	7
Leipzig	160		30	6
Mannheim	154		31	10
Munich	159		33	7
Greece				
Athens	174		46	-2
Salonica	172		42	-1

Holland				
Amsterdam	152	0	27	10
Eindhoven	152		28	10
Groningen	154		26	8
Hungary				
Budapest	168		34	1
Pécs	166		36	3
Ireland				
Dublin	140	5 W	22	16
Cork	137		22	18
Galway	137		21	17
Limerick	137		21	17
Tralee	135		21	19
Waterford	138		22	17
Italy				
Rome	157		39	10
Florence	156		36	10
Genoa	156		36	12
Milan	154	2 E	35	11
Naples	159		40	9
Rimini	159		37	8
Turin	153		34	12
Venice	158		36	9
Luxembourg				
Luxembourg City	152	0	29	11
Norway				
Oslo	160		20	-1
Stavanger	154		20	0
Tromsø	170		11	-4
Trondheim	160		17	-1
Poland				
Warsaw	171		30	-1
Krakow	170		32	0
Portugal				
Lisbon	129	3 W	31	30
Faro	130		33	31
Oporto	131		30	28
Romania				
Bucharest	177		39	-5
Constanta	180		39	-7
Slovakia				
Bratislava	165		34	3
Slovenia				
Ljubljana	161	3 E	35	6
Spain				
Madrid	136		33	23
Alicante	139		37	24
Almería	136		37	27
Badajoz	133		33	28
Barcelona	143		36	20
La Coruña	133	3 W	29	25
Malaga	134		36	28
San Sebastian	140	1 W	32	21
Seville	132		34	32
Valencia	140		36	23
Valladolid	136		31	24
Sweden				
Stockholm	168	3 E	22	-1
Jämtland	165		18	0
Örebro	164		22	1
Switzerland				
Bern	152	1½ E	32	12
Basel	154		32	10
Geneva	151		33	13
Lucerne	154		33	11
Wengen	154		33	11
Zurich	155		33	10

Notes

* magnetic declination is the correction to be applied to true north to give the magnetic north shown on your compass.

eg London = 146 true + 1½ West = 147½ on your compass Vienna = 164 true - 3 East = 161 on your compass

Do not assume that countries without any magnetic declination listed (eg Norway, Romania) are 0, they are just not shown because I wasn't going there. You can, however, interpolate within a country which has geographically spaced figures.

** skew angle is shown relative to the Inb being vertical, eg London = 14 degree clockwise.

Seville = 28 degrees clockwise (7 o'clock)

Athens = 2 degrees anticlockwise