

KHz/Country / Programme / kW /next city near transmitter / Programme type and remarks

Medium Wave Survey for Central Europe

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531 Alg	Jil FM	600	Ain El Beida, ne	5.3/9.3 NB arab, n: 300 kW
	Far Kringvarp Foroeya	25	Akraberg	4.5 NB
	Spa RNE Radio 1	6	4 tx	7.5- NB, daytime : RNE5 with 2x25 +2x20 kW
540 Hng	Kossuth Radio	2000	Solt, c	6.4/4.1 NB
	Spa Onda Cero Catalonia	50	Barcelona	Com
549 Ger	Deutschlandfunk	200	Bayreuth, s / Essen, w	4.5 NB info/cul
	Rus RadiostantsyaMayak	650	St.Petersburg/Kaliningrad	NB, other tx in remote Russia
	Svn Radio Koper	15	Beli Kriz	PB Italian
	Alg Jil FM	300	Sidi Hamadouche, nw	NB
558 Sui	Stimme Russlands	300	Mte Ceneri, s	FS, evening
	Rom Radio Craiova	400	Craiova, wc	PB Loc, + R.Rom.Cultural (NB)
	Spa RNE R.1	50	San Sebastian, n	9.5
	Svn Muravideki Magyar R.	10	Maribor, e	5.5 PB min
	Irn IRIB R.Farhan	1000	Gheslag, nw	NB, 558.045 KHz
	&Gbr Spectrum R. Int.	0.8	London, se	Com Asian
567 Ita	RAI Uno	80	Sicily,s / Bologna, n	NB
	*Spa RNE R.1/R.5 TN	55	Murcia, Marbella	NB
576 Spa	RNE R.1/R.5 TN	100	Barcelona, e	NB, echo by parallel wtx on Canary Isl.
585 Spa	RNE Radio 1	600	Madrid, c	9.0 NB info
	&Sau Riyadh / Makkah	1200	Riyadh,c	NB
	&Gbr BBC Radio Scotland	2	Dumfries, nwSco	PB, also R.Solway (Loc)
594 Por	R.Sim	100	Muge	NB
603 Fra	France Info	300	Lyon ,e	NB/Loc
	Rom R.Rom.Actualitati	100	4 tx	NB info, echo (not simulcasting), also mn German
	&Gbr BBC Radio 4 (LW)	2	Newcastle, neEng	NB aff
	&Gbr Capital Gold	0.1	Maidstone, se	Loc Com
612 Bos	R.Bosnie i Herceg.1	100	Sarajevo, c	NB, nominal 600 kW but probably reduced power
	Ltu R.Baltic Waves	100	Vilnius, c	relays of R.Svoboda(RFE), R.Polonia, R.Racja, European R. for Belarus
	&Mrc RTM Arabic	300	Rabat, n	NB arab
	&Rus Radio Mayak	50	Petrozadovsk, n	NB
621 Bel	RTBF 1	300	Bruxelles, c	5.0 NB for Valony (French language)
	Mda Voice of Russia	1000	Maiac	FS in Greek a.o.
	Spa RNE Radio 1	70	Palma + 2 tx	NB
	Egy Voice of the Arabs	500	Alexandria, ne	NB arab
630 Tun	RTT Arabic	300	Tunis, n	NB arab
	Rom R.Timisoara / mn	400	Timisoara, w	NB, also "Maghiar German" Hungarian and German
	Ger Stimme Russlands (VoR)	80?	Braunschweig, c	FS Voice of Russia
639 Cze	Cesky R.2/R.6	100	Praha, c / Ostrava, e	NB cul, nominally Praha 1500 kW, 2 x 50 kW is a guess
	Spa RNE Radio 1	300	La Coruna, nw + 5 tx	9.5 NB info

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648 Svn	Muravidek Magyar R.	10	Murska Sobota	PB in Hungarian, also Slowenja 1, stronger pwr?
657 Ita	RAI Radio Uno	195	Turin/Naples/Bozano	8.0 NB
Spa	RNE 5 Madrid	20	Madrid, c	9.5 PB
666 Spa	SER	50	Barcelona, e	Com
Gbr	BBC R.North Yorkshire	0.5	Fulford, e	Loc
Irn	Radio Iran	50	Shusta	NB
675 Ned	Radio Maria (NL)	120	Utrecht, c	6.4 relig
Nor	NRK P1	20	Röst, n	7.5
Lby	Sawt u.Lib.al-Hurra	100	Benghazi, ne	NB
Ukr	R.Promin (UR1)	50	Uzhgorod, w	NB
684 Spa	RNE Radio 1	500	Sevilla, s	NB info
Scg	R.Beograd 1	200	Belgrade	NB, reduced power?
693 Gbr	BBC 5 Live	291	11 tx	6.4 NB talk
Ger	VoRussia	250	Berlin	FS
&Ita	RAI Radio Uno	20	Potenza, c	NB
702 Ger	NDR Info/Funkhaus Eu.	7.5	Flensburg, n	4.2 PB info/mn/pop/Sp/Sh/BBC/France Info as on 972
Mco	CRI - China R. Int.	400	Monaco	FS in Italian, Chinese and French
711 Fra	France Info	300	Rennes, nw	4.7 NB + Loc France Bleu Armorique
Rum	Rom. Actualitati	50	Sighet, ne	NB
720 Ger	WDR 2 / Vera	85	Essen, w	4.7 PB pop/nonstop traffic announcements (daytime)
&Gbr	BBC Radio 4 (LW)	11	3 tx	NB aff
&Rom	R.Rom.Actualitati	35	3 tx	NB mix
&Por	RDP Antena 1	150	Porto, nw + 5 tx	NB mix
729 Spa	RNE Radio 1	195	6 tx	5.0 NB info
&Grc	ERA 1	150	Athens, c	NB
&Ger	BR Plus	5	Würzburg, c	PB sen
738 Spa	RNE Radio 1	600	Barcelona, ne	9.5 NB info
Rus	World Radio Network	5	Moscow	9.5 various FS
747 Ned	747 AM/Colourful R.	300	Flevoland, c	5.3 NB
&Bul	R.Bulgaria Internat.	300	Petric, w	FS
Irn	Radio Iran	150	Gonbad	NB
756 Ger	Deutschlandfunk	300	Braunschweig,c/Ravensbg.s	NB info/cul
Rom	R.Rom.Actualitati	400	Sibiu, s	NB
765 Rus	R.Rossii/R.Karelii	150	Petrozadovsk, nw	NB/PB
Gbr	BBC Essex	0.5	Chelmsford, se	Loc
774 Spa	RNE Radio 1	265	7 tx	NB info
Cro	Hrvatski Radio 1	50	Hvar, w	NB mix
Egy	Middle East Comm.	500	Abis	NB
Ger	WDR 2	5	Bonn, w	4.7 PB in wGer
&Gbr	BBC R.Kent/5live	0.7	Littlebourne, se	Loc / NB
&Gbr	BBC R.Leeds/Asian Net	0.5	Farnley, cEng	Loc / PB
&Gbr	BBC Radio 4	2	2 tx	NB
783 Ger	MDR Info / ARD Info	100	Leipzig, ce	4.8 PB in eGer
&Spa	Rock y Gol	50	Barcelona, ne	Com
&Syr	As-Suriyyah 1	600	Tartus, w	6.5NB 1st arab

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792 Fra	France Info	300	Limoges, c	NB
Grc	Voice of America	500	Kavalla, n	FS in Greek a.o.
Ger	NDR Info/Funkhaus Eu.	5	Lingen, nw	PB info/mn/pop/Sp/Sh/BBC/France Info as on 972
Spa	SER Radio Sevilla	20	Sevilla, s	Com info
&Gbr	BBC R.Ulster / BBCWS	1	Londonderry, NIrl	PB/FS, daytime: BBC Radio Foyle
801 Ger	BR Plus	100	Munich / Nurnberg, s	6.3 PB Schlager/Oldies
810 Gbr	BBC Radio Scotland	205	3 tx	6.5 PB mix Scotland
Mac	Radio Skopje	300	Skopje, c	4.3 NB, tests, also minority programmes and Deutsche Welle relay
819 Egy	"Jumhuriya" (1st)	1000	Alexandria, n	NB arab
Ita	RAI Radio 1	20	Trieste, n	NB
Spa	Radio Euskadi	10	San Sebastian, n	Com in Euskera (Basque) and Spanish language
828 Ned	Radio 10 Gold	20	Rotterdam, w	5.5 Com pop/oldies
Spa	Onda Cero Radio	50	Barcelona, ne	Com Nat info
Ger	NDR Info/Funkhaus Eu.	20	Hannover, n	PB info/mn/pop/Sp/Sh/BBC/France Info as on 972
837 Fra	France Info	300	Nancy, e	6.3 NB
&Spa	COPE	23	Burgos / Sevilla + 2 tx	Loc, different px
846:Rus	Radio Podmoskovya	150	Moscow	4.1 PB / Loc, only a few hours
amp;Irl	Radio North	1	Donegal, n	Com not licenced, Country music and religious programmes
855 Rom	R.Rom.Actualitati	1500	Bucarest	7.2 NB mix
Spa	RNE Radio 1	440	Murcia + 9tx	NB info "Radio Nacional de Espana"
&Gbr	BBC R.Norfolk	1.5	Norwich, e	Loc
#Ger	Deutschlandfunk	20	Berlin	NB
864 Fra	France Bleu 107.1	300	Paris	5.0 NB + Loc "City Radio de Paris"
&Egy	Al-Qahira	500	Santah	NB arab Koran program
&Bul	R.Blagoevgrad	10	Blagoevgrad, w	NB m: Turkish pr.
873 Ger	AFN	150	Frankfurt, c	12.0 (!) American Forces Network, pop
Rus	Radio Rossii	3400	Moscow/Samara/Kaliningr+3tx	10.3 NB
&Hng	Calypso 873 /mn	22	Budapest, c	Loc, mn "Nemzetisegi Adasok"
&Hng	Pecsi Reg.Studio/mn	20	Pecs, sw	Loc, mn "Nemzetisegi Adasok"
882 Gbr	BBC Radio Wales	100	Cardiff, sWal	6.5 PB mix for Wales
Mgo	Radio Crne Gore	200	Montenegro, w	PB
&Spa	COM Radio	10	Barcelona, ne	Com "Catalunya Ona Municipal"
891 Ned	Radio 538	20	Maastricht, s	6.0 Com pop
Alg	RTA 1 "Djazair"	500	Alger, n	NB arab, n: 250 kW, exact freq: 890.96 khz
Rus	Radio Yunost	50	Petrozadovsk (Karelia), nw	NB
900 Ita	RAI Radio Uno	600	Milano, n	9.0/4.9 NB mix "Radiouno"
&Sau	Al-Saudiyyah 1	1000	Qurayyat	NB, also "Call Of Islam" 17-19 h
909 Gbr	BBC 5 Live	466	11 tx	4.7 NB talk
Rom	Radio Cluj	200	Jucu, c	7.0/4.7 PB
918 Svn	Radio Slowenija 1	10	Ljubljana, c	9.8/4.6 NB mix, reduced power? nominal 600 kW
&Syr	As-Suriyyah 1	600	Al Hasakah, ne	NB arab
936 Ita	RAI Radio 1	40	3 tx	9.5 NB / Loc Venice
Ukr	Persha Prog (UR1)	1000	Lvov, w	8.5 NB
Gbr	Fresh Radio	1	West Yorkshire, c	6.5
945 Fra	France Info	300	Toulouse, sw	6.0 NB
*Gbr	Capital Gold	0.7	Brighton, s	Com, seems stronger

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954 Cze	Cesky R.2/R.6	273	Brno + 3 tx	6.5 NB cul, short delays
*Spa	Radio Espana	20	Madrid	Com Loc
&Qua	Qatar Al Doha	1500	Al Arish	NB arab main progr.
963 Fin	CRI- China R. Int.	600	Pori	4.8 FS
Tun	R.Tunis Int.	100	Jedeida, n	7.0 FS
Gbr	Buzz Asia	1	2 tx London, se	Com
Bul	Radio Horizont	5	Tarnovo, c	NB + Min (Turkish)
972 Ger	NDR Info/Funkh.Eu.	100	Hamburg, n	4.1 PB info(day)/mn Funkhaus Europa / pop (night) +Sp +Sh, relays of BBC
(18 CET)/	France Info (1830 CET)/		Funkhaus Europa (16 CET)	
Ukr	R.Promin	500	Nikolayev	NB
&Gbr	Buzz Asia	1	London	Com Loc
981 Alg	RTA 2 "Thakafiyah"	600	Alger, c	5.0 NB in Berber, n: 300 kW
Ita	RAI Radio Uno/Trst	10	Trieste, n	NB / Loc in Slovenian
990 Ger	Deutschlandr.Kultur	100	Berlin, e	4.8 NB mix Deutschlandradio Berlin
&Spa	SER Radio Bilbao	15	Bilbao, n / Radio Cadiz,s	Com info
&Gbr	BBC Radio 5 live	1	Tywyn	NB talk
&Gbr	BBC R.Devon/5live	1	Exeter,sw	Loc / NB
&Gbr	Great Yorkshire Gold	0.2	Doncaster, e	Com old
999 Ita	RAI Radio 1	42	Perugia/Rimini/Cap.Vaticano	9.0 NB
Spa	COPE R.Pop.Madrid	50	Madrid, c	Com info "Radio Popular de Madrid"
Mda	Voice of Russia	300	Grigoriopol, e	5.7 FS, also BBC and Deutsche Welle and Radio Pridnistroya
&Gbr	Gem AM	0.2	Nottingham, nEng	Com Loc pop
&Gbr	BBC Solent/5live/WS	1	Southampton, s	Loc / NB
1008 Ned	Grootnieuws Radio	200	Flevoland, c	6.5 Com rlg
&Spa	SER	15	Girona/Extremadura/Alicante	Com Loc
1017 Spa	RNE Radio 5	20	Granada / Burgos	NB
Gbr	Gold	0.6	Shrewsbury, wEng	Com
1026 Gbr	Downtown Radio	1.7	Belfast	8.0 Com Loc
Gbr	BBC Loc /BBC5 live	2	Jersey, s / Cambridge, se	Loc / NB
Spa	SER Radio Reus a.o.	24	Reus + 5 tx	Com Loc
1035 Est	Pereradio	100	Tartu, c	7.5 Com Rel in Russian
&Ita	RAI Radio 1	10	Pescara	NB
&Gbr	North Sound 2 + other	0.8	Aberdeen, Sco	Com, also West Sound Ayr, RTL Country London, BBC R.Sheffield
1044 Ger	MDR Info / ARD Info	20	Dresden, se	4.7 PB info in eGer, inactive?
Spa	SER	15	San Sebastian,n / Valladolid.	Com Loc
Rus	R.Svoboda	20	Moscow (Kurkino), c	7.1 FS (Radio Liberty)
1053 Gbr	Talk Sport	135	12 tx	8.2 Com talk
Rom	R.Iasi/Rom.Actual.	1000	Iasi	PB, also R.Moldava (20-21)
1062 Ita	RAI Radio 1	51	6 tx	9.3/6.8 NB, delays
Cze	Country Radio	10	Praha	4.7 Com Country, night 1 kW
1071 SvK	R.Regina Kosice/Svk1	40	Kosice, e	PB / Loc Kosice / NB "Slovensko 1"
&Gbr	Talk Sport	2.5	Newcastle + 2 tx	Com talk
1080 Spa	SER	20	5 tx	Loc: Granada, Palma, La Coruna, Huesca
Isr	Reshet Dalet	100	Tel Aviv, w	NB in Arabic
Spa	Onda Cero R.Toledo	5	Toledo, c	Loc
Rus	R.Rossii	100	Kovylkino, seEu	NB
Irn	IRIB Arabic R.	750	Abadan, sw	FS, //sat 13E 12437H A87 left channel

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1089 Gbr	Talk Sport	314	7 tx	8.2 NB talk, echoes
1098 Svk	R.Devin	10	Bratislava?	NB, power guessed
*Spa	RNE 5	30	5 tx	NB/Loc
1107 Ger	AFN Power Network	10	Kaiserslt,sw	9.5 (!) Mil American Forces Network, seems like 50 KW
Ger	AFN The Eagle	10	Amberg, se	9.0 Mil
Yug	R.Beograd 1	150	Novi Sad, n	NB
Spa	RNE Radio 5	95	5 tx	NB / Loc
Ita	RAI Radio 1	100	Rome	9.3/6.8 NB
&Gbr	Moray Firth R.	1.5	Inverness, nSco	6.5 Com Loc
1116 Hng	Kossuth R./Misk./mn	15	Miskolc, ne	4.8 NB, Loc "Miskolci Regionalis Studio", mn "Nemzetisegi Adasok"
Hng	Györi Reg.Studio/mn	5	Mosonmagyarovar, nw	4.8 NB, Loc, mn "Nemzetisegi Adasok"
Ita	RAI Radio 1	247	5 tx	9.3 NB
Rus	Radio Yantar	30	Kaliningrad, w	Loc 05-07/15-1520, other times: Radiostanzja Yunost/Mayak
amp;Spa	SER		5 3 tx	Com R.Albacete / R.Pontevedra / R.Tarrasa
&Gbr	BBC R.Derby / 5live	1.2	Derby, w	Loc / NB
1125 Bel	VivaCité (RTBF)	20	Charleroi, sc	4.7 NB pop
Cro	Hrvatski Radio 1	100	Deanovec	NB mix
Rus	Radio Orfey	150	St.Petersburg, nw	11.2 NB cul
Spa	RNE R.5	52	5 tx	7.3
1134 Cro	Hrvatski Radio 1	600	Zadar, w	11.2 NB mix 15-2030 UTC
1143 Ger	AFN Power Netw./Loc	15	Stuttgart, s + 7 tx	4.8 Mil American Forces Network, echoes, Loc from Würzburg
Rus	Mayak/VoR/RMR	300	Kaliningrad,w / Samara	NB / FS, Russkoye Meshdunarodnoye R.
Ita	RAI Radio 1	10	Sassari, w	9.3 NB
1152 Rom	R.Rom.Aktualitati	950	Cluj, w / Kupavna	9.3 NB, mix
&Rus	Radio Orfey	150	Kupavna (Moscow)	NB
&Gbr	LBC	23	London	Com Loc
&Gbr	Classic Gold	1.1	Norwich, se / Plymouth, s	Com Loc
&Gbr	4 Com.Loc.stns	10	6 tx	Clyde 2, Glasgow / Piccadilly Gold, Manchester / Xtra AM, Birmingham /
GNR, Newcastle				
1161 Bul	Horizont	20	Targoviste,c / Dulovo, ne	NB + Min (Turkish)
&Gbr	5 Loc.stns	3	5 tx	Radio Tay AM, Dundee / BBC Southern Counties Radio, Bexhill / Classic
Gold, Hull / a.o.				
&Egy	Mid Delta R.	100	Tanta, n	Loc
1170 Cro	R.Capo d'Istria	100	Rijeka, w	6.0 PB mix in Italian, also R.Slowenija
:Blr	Radio Belarus	800	Sasnovy	FS, seems much weaker, also VoRussia, daytime domestic services
&Gbr	6 Com.Loc.stns	2	6 tx	Swansea Sound / GNR, Stockton / Classic Gold a.o.
1179 Rom	R.Rom.Aktualitati	207	Bacau, e / Vascau	4.8 NB mix
Ger	SWRinfo/Ant.Saar/ARD	10	Saarbrücken, sw	PB
Spa	SER	50	Valencia, e	Com
1188:Hng	MR 4 Nemzetiseg	150	Marcali	4.8 Ethnic, only daytime
Ger	MDR Info / ARD Info	3	Görnitz, c	PB info for eGer
&Rus	Deutsche Welle	10	St.Petersburg	FS Rus. 4-5, 15-21 UTC
1197 Gbr	Absolute Radio	6	9 tx	6.7 Com rock
Rom	R.Cluj/R.Neumarkt	14	Brasov	PB + German minority service
Blr	Kanal Kultura	100	4 tx	NB Cul 15-21 UTC
1206 Fra	France Info	300	Bordeaux, sw	4.0 NB

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1215	Gbr	Absolute Radio	326	13 tx	6.5 Com rock
	:Rus	Voice of Russia	600	Kaliningrad, w	FS , Russkoye Meshdunarodnoye R.
	Alb	CRI - China R. Int.	500	Fllake	4.5 FS, also R.Tirana, VoA, carrier about 1214.85 kHz
1224	Bul	R.Bulgaria Internat.	600	Vidin, nw	7.5/6.5 NB / FS, directional to SW
	Spa	COPE	40	7 tx	8.0 Com/Loc
1233	Gbr	Absolute Radio	1.6	6 tx	6.4 Com rock
1242	Fra	France Info	150	Marseille, s	4.7 NB
	Gbr	Absolute Radio	2	4 tx	6.5 Com rock
1251	Hng	Kossuth/R.Nyir./mn	25	Nyiregyhaza/Szombathely	NB, Loc "Nyiregihazi Regionalis Studio", mn "Nemzetisegi Adasok",
		echoes, 05-21 UTC			
	Ned	747 AM/Colourful R.	10	Maastricht, s	5.5 NB aff
	Lyb	Idha at L. al-Hurra	500	El Beida, n	5.4 FS
	&Gbr	Classic Gold	0.8	Bury St.Edmunds, se	Com (night: Classic Gold network)
1260	&Spa	SER	10	Murcia / Algeciras, s	Loc and Nat Com
	&Rus	BBC Russian	20	Moscow (Kurkino), c	FS
	&Gbr	Absolute Radio	0.5	Guildford, se	Com
	&Gbr	Classic Gold Brunel	1.6	Brunel	Loc Com (night: Classic Gold network)
	&Gbr	Sabras Radio	0.3	Leicester, nwEng	Loc Com Asian
	&Cva	R.Vatican	5	Vatican City	6.3 NB
1269	Ger	Deutschlandfunk	300	Neumuenster, n	5.1 info/cul +Sh
1278	Fra	France Bleu	300	Strasbourg, e	5.0 NB pop / Loc "France Bleu Alsace" in Alsace dialect
1287	Spa	SER Local	14	R.Lerida / R.Lugo /R.Burgos	7.0 Com news
1296:	Gbr	RNW/Onderweg/DW	500	Norwich, se	8-10 Onderweg (for Truck drivers), 20-22 R.Nederland W. (FS), 04-06
		BBC/Deutsche Welle in DRM			
	Spa	COPE Valencia	20	Valencia, e	8.0/4.8 Com
	&Gbr	Radio XL	6	Birmingham, wEng	Loc Asian
	&Bul	R.Christo Botev(2nd)	150	Kardzhli, e	NB
1305	Gbr	Premier Radio	1	London	Loc Com relg
	Spa	R.5 Todas Noticias	55	5 tx	NB
1314	Rom	Antena Satelor	21	2 tx	4.7 Com
	Rom	Romania Actualitata	-	Novaci	NB, also mn German
	Uae	Voice of America	2000	Dubai	FS
1323:	Ger	Stimme Russlands	1000	Erfurt , c	4.7 FS (VoRussia) + religious sces.
	&Rom	R.Cluj/R.Neumarkt	7	Targu Mures	PB + German minority service
	&Rus	Grand Petrov	10	St.Petersburg, nw	Com
	&Gbr	Capital Gold	0.5	Brighton, s	Com, day: South Coast Radio
	&Gbr	BBC Somerset Snd/R.5	0.6	Bristol, sw	NB / Loc, day: Sommerset Sound
1332	Cze	Cesky R.2/R.6	50	Domamil, se	5.2 NB / relays
	Rom	R.Romania Actualitati	50	Galati, e	NB
	&Gbr	Premier R	0.5	London	Com relg
	&Gbr	Classic Gold	0.5	Peterborough	Com old
1341	Gbr	BBC Radio Ulster	100	Belfast, nIrl	6.0/4.1 PB mix for NIrl,BBC World Sce at night, some Gaelic newscasts
1350	Fra	Radio Orient	10	Nice, se	13.0/10.5 Com arab
	Hng	Györi Reg.Studio/mn	5	Györ, nw	Loc, mn "Nemzetisegi Adasok" echoes
	Hng	Kossuth/Szolnok/mn	5	Szolnok, e	NB, Loc "Szolnoki Regionalis Studio", mn "Nemzetisegi Adasok"
	:Arm	TWR/NHK	1000	Gavar	FS evening Trans World Radio and NHK Japan, other relays possible

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1359#Spa	RNE Radio 1	10	Madrid, c	NB info, reduced pwr at night?
Gbr	Classic Gold Breeze	0.3	Chelmsford, eEng	Com pop (night: Classic Gold network)
1368	Manx Radio	20	Isle of Man	PB sen, off at night
Gbr	BBC R.Lincolnshire	2	Lincoln, eEng + 2 stns	Loc sen
1377 Fra	France Info	300	Lille, n	4.7 NB
1386:Ltu	R.Bozy Glos	500	Sitkunai, c	4.7 and various relays
Spa	Euskadi Irratia	50	Bilbao, n	PB
&Grc	ERA 2	50	Athens, c	NB "Deftero Programma"
&Irn	IRIB Radio 1	400	Ahwaz, w	NB
&Gbr	Carilon R.	1W	Leicester, w	Loc
&Gbr	Anker R.	1W		
1395	Ned Radio Seagull		1 Harlingen, c	Com, only daytime
:Alb	R.Tirana	1000	Vlake, w	5.5 FS 1930-2200
1404 Rom	Radio Cluj	50	Sighet, n	PB 04-19, also mn German
Fra	France Info	350	5 tx	4.7 NB, Loc "France Bleu Armorique" in Brest
Fra	France Bleu/R.Corsa	70	Ajaccio, Corse Isl.	4.8 NB
1413	Oma BBC WS / Arabic	1000	Masirah Isl., e	FS
Gbr	Premier Radio	1	London (2 tx)	Com relg
Gbr	BBR R.5/Gloucetersh.	5	Glouceter, wWng	6.1 Loc
Spa	RNE R.5	20	Jaen,s/Girona,ne/Vigo,nw	NB/ Loc
1422 Ger	Deutschlandfunk	600	Saarbruecken, sw	4.7 NB info/cul
1431:Ukr	Voice of Russia	500	Kopani	FS in Russian, Arabic a.o.
Dji	Radio Sawa	600	Djibouti	FS arab-pop (USA)
&Gbr	Classic Gold Breeze	0.3	Essex, eEng	Com Loc (night: Classic Gold network)
&Ita	RAI Radio 1	2	Foggia	NB
1440 Lux	RTL Radio (German)	300	Luxembourg	5.3 Com pop (day+evening), DRM tests, also China Radio Int. (French and German) and religious sces. (German)
*Yug	Novi R.Beograd	10	Jagodinja, c	NB
*Sau	Al-Saudiyah 1	1600	Dammam, e	NB arab, also "Call Of Islam" 17-19 h
1449	Lby Sawt u Lib.al-Hurra	100	Misurata, n	4.7 NB
Ita	RAI Radio 1	62	11 tx	NB
&Gbr	BBC Radio 4 (LW)	2	Aberdeen, eSco	NB aff
1458:Alb	Radio Tirana	500	Vlake, w	6.0 FS
Rom	R.Rom.Actualitati	50	Constanza, e	NB
Gbr	Sunrise Radio	50	London	6.7 Com Asian Community
&Gbr	BBC Local Radio	2	Newcastle, neEng a.o.	Loc
1467 Fra	TWR	1000	near Monaco, se	4.2/5.2 Rel 20-24 UTC
Mco	Radio Maria	50	Monaco	8.0 Rel, daytime
Mda	VoRussia/China R.In.	100	Grigoriopol, e	FS 1430-2100 in var.languages
1476	Spa Euskadi Irratia	50	San Sebastian, n	PB
1485	Spa SER	16	5 tx	Com, R:Alcoy, R.Santander, R.Zamora, R.Vilanova, R.Antequera
Lva	Radio Mercurs	1	Riga, c	Com
&Gbr	BBC R.Humberside/R.5	2	Hull, neEng	Loc / NB
&Gbr	BBC R.Merseyside/R.5	1	Liverpool, nwEng	Loc / NB
&Gbr	BBC Southern Cty.R./5	1	Guildford, seEng	Loc / NB
&Gbr	Classic Gold 1485	1	Newbury, sEng	Loc (night: Classic Gold network)
&Ger	AFN Bavaria Big Gun	0.6	2 tx	American Forces, pop / Loc

KHz/Country / Programme / kW /next city near transmitter / Programme type and remarks

&Ned	Haagstad R.	1.1	Den Haag, w	Com
&	several low power stations		all over Europe	
1494:Rus	Voice of Russia	1200	St.Petersburg, nw	FS (Eng+Scand.), Russkoye Meshdunarodnoye R.
Fra	France Info	25	Cle-F/Bayonne/Besancon	NB/Loc
Fra	France Bleu/R.Corsa	20	Bastia	4.8 PB Reg: "Radio Corsa Frequenza Mora"
&Mda	Radio Luceafarul	60	2 tx	NB, Moldova channel 2, one transmitter with drifting frequency
1503 Irn	IRIB	100	Bushehr, sw	NB arab
&Bih	R.Zavidovici/RFE-RL	1	Zavidovici, c	Loc / NB R.BiH 1 / RFE-RL
&Egy	R.Matruh/S.Sainaal	25	Al Arish, ne	Loc "Shamaal Sainaal"=North Sinai Radio
&Gbr	BBC R.Stoke/BBC5live	1	Stoke-on-Trent, wEng	6.5 Loc / NB
&Scg	Beograd 202	10	Beograd, n	NB pop
1512*Grc	ERA 2	100	Chania, Crete, s	NB
1521 Sau	Al-Saudiyah 1	2000	Duba, nw	NB arab
Spa	SER	2	Castellon	Com info
Chn	China R.Int.	500	Xingjiang, w	10.0 FS in Russian 11-20 / 00-02 UTC
1530 Vat	Radio Vatican	300	Vatican	4.8 FS relg only evening
Rom	Radio Cluj	14	Mhaileni, c	PB mix, 04-19
Rom	Radio Actualitati	14	Mahmudia, se	NB
*Gbr	Classic Gold	0.7	Yorkshire	Com Loc
1539 Spa	SER	4	Elche-Elx / Manresa	Com info
*Irn	IRIB Radio 1	?	Arbat, w?	NB
1548:Mol	VoRussia/China R.I.1000		Maiac, c	5.5 FS
Gbr	Capital Gold	100	London	6.5 Com old
&Gbr	Max AM	2.2	Edinburgh, cSco	Com Loc + other local stns
1557 Fra	France Info	300	Nice, se	4.8 NB
Cro	Hrvatskil/R.Osijek	20	Osijek, e	NB mix/ Loc
Ned	Magic Jazz	5W	Amsterdam, c	Com
&Gbr	Capital Gold	1.2	North/Southampton	Com
1566 Gbr	County Sound Gold	0.7	Guildford, se	Com old
Gbr	BBC R.Somerset/5live	0.6	Bristol area, sw	Loc / NB
*Irn	IRIB Radio 1	100	Bandar Abbas, s	NB
*Ind	AIR	1000	Nagpur	PB, weak and only in the late afternoon, one of the stronger far distance
stations				
1575 Ita	RAI Radio 1	56	Genova, nw + 2 tx	10.0 NB mix
Spa	SER Radio Pamplona	10	Pamplona, n	Com, also: Radio Cordoba a.o.
Kuw	Radio Farda	800	Kuwait	7.5 FS(USA for Iran)
1584&Gbr	BBC R.Nottingham/R5	1	Clipstone, cEng	Loc
&Ned	Radio Paradijs	0.6	Utrecht, c	6.5 Loc Com
&Cze	Country Radio	1	Brno	Com
&Gbr	BBC R.Hereford&Worces.	0.3	Wooferton, wEng	Loc
&Gbr	London Turkish R.	0.2	London	Com
&Gbr	Tay AM	0.2	Perth, eSco	Com
&Rom	R.Micul Samaritean	5	5tx	Com rel?
&Ita	Studio X	10	Momigno, n	9.5 Com
	several low power stns		all over EU	
1593 Rom	Radio Cluj	9	Sibiu, s + Oradea, nw	04-19 /Antena Siuliu (only Sibiu)/ mn in Hungarian, German and Ukrainian
Rom	R.Targu Mures/mn	14	Harghita, c	04-19 /mn "Neumarktner Rundfunk" in German

KHz/Country / Programme / kW /next city near transmitter / Programme type and remarks

Kuw	VoA/R.Free Iraq	150	Kuwait	8.0 FS (by USA in Farsi)
Rom	R.Actualitati	14	Calarasi, se	weaker than Cluj/Targu Mures
1602&Spa	Radio Vitoria	25	Bilbao, n	PB in Basque
&Spa	SER / Loc	20	Linares/Segovia/Cartagena/Ontinyent Com	
&Gbr	BBC R.Kent	0.2	Rusthall, se	Loc / NB
&Ned	R.Waddenzee/Seagull	1	Harlingen, ne	5.5 Com
	several low power stns		all over EU	
1611&Vat	Radio Vatican	100	Vatican	4.0 FS, only some hours, also DRM

1600 - 1700 pirate stations from the Netherlands

1600 - 1800 pirate stations from Greece and the Balcan (some also operate in the regular MW range)

(powers reach from Milliwatts up to 25 KW. a Greek radio amateur told me that there are at least 10 stations with more than 5 kW)

Long Wave Radio

153 Ger	Deutschlandfunk	500	Heidelberg, sw	4.8 NB info/cul, +Sp, night: 250 kW towards N/S/W, 22 kW towards E/SE
Rou	Antena Satelor/RA	200	Bod	NB rural, 22-05 R.Romania Actualitati
162 Fra	France Inter	2000	Allouis, c	4.8 NB mix
171 Rus	R.Rossii	600	Kaliningrad, w	4.0/9.5 NB
*Rus	R.St.Chechenya Sv.	1200	Krasnodar, seEu	PB, "Radiostanzya Chechenya Svobodna", station reported to be pro-russian
*Mrc	Medi 1	2000	Nador, ne	9.0 Com
177 Ger	Deutschlandr.Kultur	500	Berlin-Oranienburg, e	5.7 NB mix, DRM tests at night
183 Ger	Europe 1	6325	Saarbruecken,sw	5.0 Com for France, transmitter power 2 MW beaming sw with 5 dB gain, ERP
to ne only 1 KW				
189*Isl	RAS 1	300	Gufuskalar, nw	9.8 NB
198 Gbr	BBC Radio 4 (LW)	600	Birmingham, wEng + 2 tx Sco	4.7 NB aff
Pol	R.Bis/Parlament	300	Warszawa	NB, also FS
207 Ger	Deutschlandfunk	500	Munich, s	NB info/cul, night: 250 kW N/S, 2.5 kW E/W
Isl	RAS 1	120	Eidar, e	NB
216 Fra	RMC Info	1400	Marseille, se	7.3/6.5 Com pop
225 Pol	Polskie Radio 1	600	Warszawa, e	6.0 NB mix
234 Lux	RTL (French)	2000	Luxembourg	5.3 Com pop
243 Den	DR Kalundborg	50	Kalundborg, e	shipping wx forecast, only a few 10min-blocks, other times off
252 Alg	RTA /3/4	1500	Alger, n	10.5 NB arab, Arabic, French and Int. Sces.
Irl	RTE	300	County Meath, e	5.7 NB
261 Rus	Radio Rossii	2500	Moscow, cEu	NB
*Bul	R.Horizont	40	Sofia, w	NB
270 Cze	R.Zurnal/Ces.Radio1	650	Brno, e	6.1 NB
279 Blr	Belaruskaye Radio 1	500	Mahiliou	9.0/3.0 NB

Abbreviations and Explanations

* = weak signal / some can only be picked up in the night when the other stations pause & = heavy interference / inferior signal unless you're close to the transmitter : = only a few hours on air # = digital modulation (DRM = Digital Radio Mondiale) - = currently not active / planned tx= transmitter (no of transmitter sites) px= programme // = parallel **audio bandwidth**: refers to the demodulated AM signal. Some stations reduce treble above an edge frequency. In these cases the first value refers to the full spectrum, the second one refers to the spectrum with full amplitude. All values are based my own spectrum analysis with free SpecLab software and/or the Perseus receiver. Errors and changes are possible. **power**: in Kilowatts. Powers of single frequency networks were just added together. I know that this is not mathmatically correct (should be about 30-50% less). I'll work it over as soon as I find the time.

Columns:

- 1. KHZ= Frequency in Kilohertz
- 2. Ctr= Country of the transmitter site (see below)
- 4. KW = Kilowatts (effective radiated power), sum of all transmitters
- 5. n-w-e-s etc. =Area=north/west/east/south/central within the country

Types of broadcasters:

- NB = nationwide broadcaster financed by licence-fees or taxes
- PB = provincial broadcaster financed by licence-fees or taxes (only for a part of the country)
- Com= Commercial
- FS = Foreign Service
- FW = Programmes for foreigners in the country, in various languages (also ARD FW)
- Loc= Local
- Mil= Military Forces Radio
- Nat= Nationwide
- Sh = Shipping Weather
- Sp = Special Purpose (parliamentary debates etc., shipping weather)

Formats:

- aff = current affairs
- arab= Arabian music and information
- cul = culture, classical music
- info= news
- mix = mix of news and magazines, music programmes and sports
- mn = minorities
- old = oldie format (hits of the 60ies and 70ies)

- sen = senior citizen format (50 up), a lot of national music

Countries:

Alb= Albania Alg= Algeria Arm= Armeniad Aus= Austria Bel= Belgium Bih= Bosnia and Hercegovina Blr= Belorussia Bul= Bulgaria Cro= Croatia Cze= Czech Republik Dnk= Denmark Egy= Egypt Est= Estonia Far= Faroe Islands Fin= Finland Fra= France Gbr= Great Britain & Northern Ireland Ger= Germany Grc= Greece Hng= Hungary Ind= India Irl= Ireland Irn= Iran Isl= Iceland Ita= Italy Lib= Libya Ltu= Lithuania Lux= Luxemburg Lva= Latvia Mco= Monaco Mda= Moldavia Mgo= Montenegro Mkd= Macedonia Ned= Netherlands Nor= Norway Oma= Oman Pol= Poland Por= Portugal Qua= Qatar Rom= Romania Rus= Russia Sau= Saudi-Arabia Scg= Yugoslavia (Serbia and Crne Gore=Montenegro) Spa= Spain Svk= Slovakia Svn= Slovenia Swe= Sweden Swi= Switzerland Syr= Syria Tur= Turkey Uae= United Arab. Emirates Ukr= Ukraine Vat= Vaticane
Local stations should be completely included for Germany, France, Austria, Switzerland, and the Benelux

Introduction

Surf the Medium Wave ! You can travel the world in front of your speaker. This list originally was for people who want to start exploring the medium wave. Actually it has become more and more comprehensive, also including some weaker stations. The strong ones you'll notice first are bold.

Receivers

Modern hifi tuners usually dissappoint as far as AM is concerned. Walkmen are not bad. Very good are old radios from the 70ies or older ones with valves. Maybe your grandma has got one in the attic.

The best thing you can get are communications receivers. For portable use, I decided for the the Grundig Yacht Boy 400. In a short test it beat the Sony ICF7600 (similar). The Grundig had better results on MW and a better sound quality. They both include SSB, two filters and full shortwave range. In Germany the YB400 was available for about 150 in the late 90ies. The Sangean PR3L (90 without shortwave) wasn't tested too bad too. In the USA the solid "GE Super Radio" seems to have a good reputation (about 40 \$).

The best thing you can get are communications receivers. Good receivers usually cost at least about \$ 500 or Euro. Overseas reception on MW will become only possible with the expensive ones, in combination with an outdoor antenna.

The latest thing on the market is the concept of Software Defined Receivers (SDR) in combination with a PC or notebook. They offer features serious MW listers must have dreamt about in all these years. My choice is the Perseus receiver with superior audio. You can adjust to any bandwidth and play with sidebands to optimize the results. No filter hardware can reach the capability and flexibility of digital signal processing. Sensitivity can be driven to extremes to detect the

weakest carriers from the other side of the world. It is even possible to record the whole MW at once (creating a WAV file with 2 MHz bandwidth). Enthusiasts exchange their files via the internet. So you can get an impression what it is like to listen to MW in America or Australia.

Antennas

Walkmen and transistor radios often have **built-in antennas**. You can focus the reception directions by **turning the whole receiver**. If your receiver has an AM antenna plug, connect it with a wire (5 m is good, 100 m is better). If possible, lead that wire through a window to the outside. Sometimes **radiators** are amazingly good antennas. Put the receiver close to it or connect the wire with it.

If you want to go further I recommend magnetic loop antennas. They cope with noisy environments because they de-emphasize signals which are only a few metres away. And they do not require too much space. The **Wellbrook ALA1530** is a loop with 1 m diameter. The results are excellent. Pricing is about 300 Euro. If the ALA1530 is too large for your indoor setup, AOR has a tinier magnetic loop out: the **LA380**. Haven't tested it yet. There are many alternatives.

Avoid electric interference

Switch off the PC, the TV and the cell phone, and plug off external power supplies because they cause heavy interference. The **sound quality** on MW practically never reaches FM-sound (though this was theoretically possible). When two or more AM-stations (standing for Amplitude Modulation) occupy the same channel, they will be heard simultaneously. So listen for the background. This is one major difference to FM where only the superior signal will be heard. Many stations pause with their transmissions in the night. Listening to the clear frequencies can be really exciting then because weaker stations can get through suddenly.

Evening and Nighttime Reception

Darkness leads to strong signals up to 1500 km. So in the night all Europe can be heard. On some channels up to 4 stations appear all at once. Very interesting are the hours around sundown and sunrise.

- Sunrise: stations from the west can be heard better.
- Sunset: stations from the east can be heard better. sometimes it is amazing how strong stations from one direction suddenly are.
- in the winter season it remains rather dark daytime reception improves because it remains rather dark all the time
- about half of the stations listed here have a break of transmission in the night. Then, the weaker stations suddenly appear
- with very good equipment distances of up to 10.000 km can be taken, but too often it is impossible because of interference.

The local stations in a destination up to 50 km remain the strongest ones anyway. Between 50 and 200 km there is a "skip zone" with weaker signals.

Daytime reception

In the daytime, only local reception is possible.

Transmitter coverage in accordance to power (kw) during light hours with an average receiver, built-in antenna or 1 m wire in the summer

kW	Long Wave	700	1500	KHz
0.1	60	30	20	kilometres
1	100	50	30	
10	200	100	70	
100	500	300	150	
1000	1000	500	300	

Over the sea reception is much better.