

Device Under Test	Noise Floor (dBm)	AGC Thrshld (uV)	dB	100kHz Blocking (dB)	Sensitivity (uV)	LO Noise (dBc/Hz)	Spacing (kHz)	Front End Selectivity	Filter Ultimate (dB)	Dynamic Range Wide Spaced (dB)	kHz	Dynamic Range Narrow Spaced (dB)	kHz
Added 10/02/12 Hilberling PT-8000A Hardware Rev 2.00	-128 -141b	5.4 1.0b			0.45 0.11b	144 149	10 50	A Trk Presel					
			3	142					100	105	20	105 ^w	2
Added 08/10/12 Elecraft KX3	-123 -138b2	12 1.3b2			0.9 0.09b2			B Band Pass					
			3	138		144	10		110	105	20	104 ^t 96u 65v	2
Added 12/01/10 Yaesu FTdx-5000D	-123 -135b -141b1	4.6 1.2b 0.33b1			1.1 0.27b 0.13b1			B Band Pass					
			3	127s		135	10		90f	104	20	101f	2
Added 2/15/08 Elecraft K3	-130 -138b	2.1 0.6b			0.33 0.19b			B Band Pass					
			3	140s		138	10		105	104	20	101 ^{pf} 96qf 95r	2
Updated 7/2/09 Perseus	-123 -125b	0.15 0.1b			0.8 0.6b			B Band Pass					
			3	125		147	10		109f	99	20	99	2
Added 2/15/08 FlexRadio Systems FLEX-5000A	-123 -135b	2 0.5b			1.3 0.3b			B Band Pass					
			3	123s		123	10		98	96	20	96	2
Added 4/16/06 Ten-Tec Orion II	-125 -133b	2.7 0.65b			0.75 0.3b			B Band Pass					
			3	130		126	10		100f	95f	20	95j	2
Updated 4/17/06 Ten-Tec Orion	-127 -135b				0.6 0.25b			B Band Pass					
		0.8	3	137		130	10		100f	96	20	93	2
Added 06/22/13 Ten-Tec Argonaut VI	-125 -135b	3.2 0.75b			0.52 0.25b			B Band Pass					
			3	127		127 134	10 50				20	92f	2

Added 11/10/10 Ten-Tec Eagle	-124 -132b	2.5 0.6b	3	129	0.7 0.3b	131 143	10 50	B Band Pass	92f	93	20	90f	2
Added 8/20/09 FlexRadio Systems FLEX-3000	-123 -139b	2.1 0.13b	3	116s	1.35 0.16b	120	10	B Band Pass	90f	90f	20	90f	2
Added 12/30/10 Kenwood TS-590S on 20 meters Down- conversion Mode For Up- Conversion see Narrow Spaced at 76 dB	-128 -137b	1.8 0.5b	3	144s	0.43 0.15b	140	10	B Band Pass	92f	104	20	88f	2
Added 02/26/11 FlexRadio Systems FLEX-1500	-112to- 116 -120to- 129b -121to- 136b1	3.1 1.0b 0.4b1	3	108	2.8 1.4b 0.3b1	131	10	B Band Pass	95	88	20	88	2
Added 06/02/13 Kenwood TS-990S on 20 meters 30 meters is best band	-127 -138b -138	1.9 0.46b	3	145	0.75 0.17b 0.136	138 150	10 50	A Trk Preselec	90f	111	20	87x	2
Added 2/15/08 Icom R9500	-127 -130b -135b1	1.1 0.25b 0.16b1	3	119	0.7 0.2b 0.11b1	134	10	B Band Pass	80	110f	20	85f	2
Drake R-4C/CF- 600/6	-138	0.7	3	130	0.15	135	2.5	A- Preselecto r	130	85	20	84	2

Added 12/13/2012 Yaesu FTdx-3000	-127 -138b -142b1	3.8 1 0.36	3	132	0.57 0.15 0.11	127	10	B 0.5 Octave	80	105f	20	82f	2
AOR AR-7030	-122 -128b	2.2	3	130	0.5 0.22	130	10	D Hi/Lo Pass	90	100	20	82	2
Added 4/16/06 Icom IC-765	-134 -140b	5 1.7b	3	143	0.26	130	10	B Band Pass	95f	102	20	81f j m	2
Atlas 350-XL	-131	1	11	117	0.2	125	4	C Band Pass	95	81	20	81	2
Kenwood TS-830/YK88	-129	1.5	3	122	0.1	114	2	C Preselecto	85f	84	20	81	2
Added 4/23/07 Ten-Tec Omni VII	-130 -140^b	0.8 0.2 ^b	3	130	0.45 0.17 ^b	124	10	B 0.5 Octave	100f	92	20	80	2
Added 10/3/04 Icom IC-7800	-126 -136b -139b1	4.5 1.2b 0.6b1	3	>135	0.6 0.15b 0.10b1	130	10	A Trk Presel	100f	102	20	80f	2
Added 10/3/04 Elecraft K2 s/n:3170	-129 -136g	10 1.7b	15	123 134h	0.35 0.2	123	10	B Band Pass	80f	98	20	80f	2
Added 2/27/04 Ten-Tec Omni VI+	-135	0.7	3	145	0.2	137	20	B Band Pass	80	97	20	80	2
Yaesu 901-DM	-135	1.6	3	124	0.15	109	2	C Preselecto r	85	87	20	80f	3
Added 8/10/12 Yaesu FT-950	-120 -132b -138b1	4.5 1.2b 0.5b1	3	125	1.1 0.31b 0.15b1	125	10	B	80f	105	20	79f	2
Collins R-390A	-137	N.A.		130	0.2	130	2	A+ Trk Presel	85	81	20	79	2
Ten-Tec Corsair	-131a	0.1	14	130	0.2	132	5	C Band Pass	90	93	20	79	3

Added 12/13/2012 Icom IC-7700	-127 -140b -143b1	6.5 1.6 0.8	3	140	0.69 0.15 0.1	129	10	A Trk Presel	90	105	20	78f	2
Added 9/3/09 Icom IC-7600	-130 -138b -141b1	5.3 2.35b 1.13b1	3	126	0.43 0.16b 0.11b1	121	10	B	78f	100	20	78f	2
Added 8/25/11 Icom IC-7410	-135 -142b -144b1	2.9 1.35b 0.5b1	3	135	0.3 0.12b 0.1b1	121	10	B	75f	102	20	78f	2
Icom IC-720A	-137	1.6	3	138	0.15	117	10	C 0.5 Octave	80	93	50	78	3
Kenwood TS-820S	-137	0.4	3	115	0.2	125	10	C Preselecto r	80	79	20	78	3
Updated 4/17/06 Kenwood TS- 850 Inrad-400s	-128 -138b	2.2 0.5b	3	128	0.45 0.15b					90	20	77	2
JRC NRD-515	-138	3.5	4	103	0.1	118	10	C 0.8 Octave	80	95	20	77f	2
Added 12/30/10 Kenwood Up- conversion TS-590S on 17 meters	-132 -139b	1.4 0.42b	3	133s	0.28 0.13b	N.A.	10	B Band Pass	N.A.f	102	20	76f	2
Ten-Tec Omni V	-134	1.2	6	135	0.18	134	10	C Band Pass	100	89	20	76	2
Atlas 210/215X	-120a	N.A.		123	0.5	N.A.		C Band Pass	95	76	20	76	2
Corrected 4/7/06 Icom 756 Pro III	-132 -140b -142b1	2.3 0.7 0.3	3	142	0.35 0.14 0.11	126	10	B 0.5 Octave	80	99	20	75	2
Added 4/7/06 Icom	-133 -138b	2.1 0.65	3	138	0.32 0.15	124	10	B 0.5 Octave	80	98	20	75	2

756 Pro II	-141b1	0.26			0.11									
Drake R-7	-135 -140b	1 0.4b	3	145	0.28 0.15b	114	10	B 0.5 Octave	85	97	100	75	2	
Drake TR-7	-134	1.3	3	146	0.5	116	10	B 0.5 Octave	90	99	100	75	2	
Heath SB-104	-123	<i>N.A.</i>		92	0.5	<i>N.A.</i>		C Band Pass	75	79	20	75	4	
WJ HF-1000	-129 -136b	0.11	3	123	0.23 0.13b	115	10	D Wideband	80	99	20	75	5	
Added 4/7/06 Icom 706MkIIIG	-135 -140b	1.9 0.6	3	126	0.23 0.12	127	10	C Octave	80	87	20	74	2	
Ten-Tec Omni-B	-136	0.2	25	129	0.15	130	10	C Preselector	80	87	20	74	2	
Icom IC-730	-140	1.5	3	135	0.1	118	10	C 0.5 Octave	80	92	50	74	3	
Kenwood R-820S	-125	4	3	125	0.35	123	10	C Preselector	75	74	20	74	4	
Collins 75-S3B	-146	1.1	15	122	0.1	120	4	B+ Preselector	85	88	20	74	2	
Icom IC-781	-127 -138b	2 0.5b	3		0.5 0.18b	129	10	B 0.5 Octave	90f	94	20	73	2	
Updated 4/18/06 Stock 781	-128 -135b	2.4 0.7b	3	131	0.5 0.22b			B 0.5 Octave	90	98	20	78	2	
Updated 4/18/06 781 with Pin Diodes	-126 -134b	3.6 1.15b	3	134	0.54 0.21b			B 0.5 Octave	90	98	20	72	2	
Kenwood TS-930S	-135	2	3	143	0.15	115	10	B- 0.5 Octave	80f	86	20	73	3	
Icom IC-701	-129	5.5	6	130	0.3	125	10	C Band Pass	75	81	50	73	4	
Collins 75S-3C	-141	1.3	12	121	0.14	120	4	B+ Preselector	95	85d	20	72	2	
Kenwood TS-480HX	-135	3			0.28									

MP MKV Field	-133b	3.0b	3	135	0.2b	128	10	B 0.5 Octave	90f	88	20	69	2
Added 10/3/04 Yaesu FT-1000 D	-128b1	6.0b1	3	>131	0.3b1	121	10	B 0.5 Octave	90f	90	20	69	2
Lowe HF-150	-126a	0.7	3	126	0.3	113	10	F No Bandpass	75	84	20	69	5
Kenwood TS-430S	-136a	0.6	3	134	0.1	102	10	C 0.5 Octave	70	78	20	69	5
Added 10/3/04 Yaesu FT-1000 MP	-125 -134b	3.8 1.1b	3	>135	0.48 0.18b	128	10	B 0.5 Octave	90f	97	20	68	2
JRC NRD-545	-130a	2	6	127	0.2	118	10	B 0.5 Octave	65	96	100	68	5
Signal/One CX-11A	-122a	0.6	17	109	0.6	119	50	C 0.5 Octave	105	90	50	68	5f
Kenwood TS-180S	-139	0.9	3	115	0.15	120	10	C Preselector	80	70	20	68	3
Drake TR-4C	-124a	1.2	3	105	0.4	130	10	C Preselector	80	74	20	68	2
Icom IC-735	-126 -133b	1.5	12	135	0.35 0.18b	123	10	C 0.5 Octave	90f	83	20	68	2
Added 1/21/04 Icom IC-R75	-123a -130b	3.5 1.3b	3	119	0.5 0.2b	109	10	B 0.5 Octave	80	95	50	67	5
Drake SW8	-127a	0.9	3	125	0.32	113	10	N.A.	70	92	20	67	5
Racal 6790 GM	-128	0.3	1	145	0.7	130	10	D Broadband	85	95	20	66	2
Lowe HF-235	-126a	0.8	3	129	0.35	117	10	D Octave	80	71	20	66	5
AOR AR3030	-131a	2	10	130	0.16	117	10	C 0.5 Octave	85	90	20	66	5
Yaesu FRG-100	-133a	0.9	3	127	0.13	112	10	C 0.5 Octave	70	99	50	65	5
Kenwood R-5000	-131a	0.4	3	134	0.2	120	10	C 0.5 Octave	80f	86	20	65	5

Added 2/27/04 Palstar R-30	-123	2.6	3	130	0.35	116	10	C Octave	90	88	20	64	5
Yaesu FRG-7700	-130a	1.3	3	123	0.2	100	10	D Octave	65	83	50	64f	5c
Kenwood R-1000	-130a	0.9	3	119	0.2	107	10	D Octave	70	76	20	64f	3c
Heath SB-303	-134	<i>N.A.</i>		104	0.5	<i>N.A.</i>		C Preselector	70	66	20	64	4
Collins KWM-380	-127a	1.1	5	123	0.3	99	10	B 0.5 Octave	70f	94	50	64f	2
Icom IC-751	-127 -133b	6.3	3	138	0.4 0.2b	127	10	B- 0.5 Octave	90f	84	20	64	2
Added 3/27/06 Icom 7000	-129 -139b	4.5 1	3	119	0.45 0.13	122	10	C Octave	65	90	20	63	2
Added 9/22/07 Yaesu FT- 2000	-122 -132b -140b1	5 1.3b 0.5b1	3	120	1 0.3b 0.14b1	122	10	B+ Bandpass + Trk	80f	81n 90o	20	63n 61o	2
Kenwood TS-520	-139	<i>N.A.</i>		116	0.15	<i>N.A.</i>		C Preselector	70	63	20	63	3
Yaesu FT-One	-135	1	3	130	0.2	99	10	C 0.5 Octave	80f	91	50	63f	2
Collins 75-S3 Wing	-145	1	14	105	0.1	<i>N.A.</i>		B Preselector	75	75	20	63	3
JRC NRD-93	-141	1.6	3	128	0.15	133	10	A+ Trk Presel	80	94	20	63	2
Yaesu FT-980	-136	1.8	3	140	0.12	106	10	C 0.5 Octave	62f	96	50	63	2
Icom IC-R70/R-71A	-129 -135b	3.1 1.4b	3	132	0.4 0.2b	128	10	B- 0.5 Octave	90f	86	20	62	3
Grundig Satellite 700	-127a	1.6	3	106	0.3	118	10	<i>N.A.</i>	85	76	20	62	5
KWZ-30	-130	1	3	120	0.8	118	10	d	80	100	20	60	5
Collins								A Trk					

51S1	-134	1	7	117	0.13	146	10	Presel	100	84e	100	60	5
Icom R-8500	-135a	0.45	3	132	0.11	131	10	B 0.5 Octave	75	81	20	59	5
Yaesu FT-101E	-141	<i>N.A.</i>		102	0.15	<i>N.A.</i>		C Preselector	70	60	20	59	3
Drake R-4C Stock	-139	0.7	3	130	0.15	144	5	A- Preselector	70	85	20	58	2
Yaesu FT-757	-120 -134b	1.6	3	130	0.15b	109	10	C 0.5 Octave	70f	86	20	56	3
Ten-Tec 340	-123 -133b	0.5 0.13	3	109	0.4 0.14	113	10	B 0.5 Octave	70	93	100	46	5
Kenwood R-2000	-130a	1.4	3	115	0.15	105	10	D Octave	70	71	20	45	5
Kenwood R-600	-130a	0.8	3	109	0.2	99	10	D Octave	65	68	20	F.L.	5
Yaesu FRG-8800	-132a	0.6	3	122	0.18	<i>N.A.</i>		D Octave	70	87	20	F.L.	5
AOR 5000	-124 -130ab	0.9 1.8	3	118	0.2 0.35	103	10	B 0.5 Octave	60	58	50	f	5

Receiver Table Legend:

1 dB blocking (gain compression) test done at 100 kHz to eliminate phase noise interaction

<i>F.L.</i>	Filter limited, no measurement was possible due to signal leakage around filter	<i>N.A.</i>	Data not available
<i>a</i>	Measured with SSB filter	<i>j</i>	At 1 kHz, noise limited to 68 dB
<i>b</i>	Built-in Preamp actuated	<i>k</i>	At 1 kHz dynamic range was 66 dB
<i>b1</i>	Built-in Preamp 2 actuated	<i>l</i>	(lowercase L) Reserved
<i>c</i>	Readings would have been lower if 2-kHz spacing had	<i>m</i>	Receiver was optimized by Malcom Technical Support
<i>d</i>	Dynamic Range is 90-dB at 100-kHz spacing	<i>n</i>	Measured with 3 kHz roofing filter
<i>e</i>	20-kHz Dynamic Range is 66-dB	<i>o</i>	Measured with 6 kHz roofing filter
<i>f</i>	Measurement was Phase-Noise Limited	<i>p</i>	with 200 Hz 5-pole filter
<i>g</i>	Audio DSP Enabled	<i>q</i>	with 400 Hz 8-pole filter
<i>h</i>	AGC Off	<i>r</i>	with 500 Hz 5-pole filter
<i>i</i>	At 1 kHz dynamic also 95 dB but with 300 Hz roofing	<i>s</i>	Using ARRL 3-Hz bandwidth blocking method