

Comparisons of AM Reception - August 24, 2024

Frequency	Station	HD	Location	DX-286	AR-1780	PL-320	PL-380	PL-310ET	C Crane	Grundig G8
560	KLZ	HD	Denver	5	5	5	5	5	5	5
590	KCSJ		Pueblo	2	3	2	2	1	1	1
600	KCOL		Wellington	3	3	3	3	3	3	3
630	KHOW		Denver	5	5	5	5	5	5	5
650	KGAB		Cheyenne, WY	4	4	4	4	4	4	4
670	KLTT	HD	Commerce City	5	5	5	5	5	5	5
710	KNUS		Denver	5	5	5	5	5	5	5
730	KLOE		Goodland, KS	1	2	2	0.5	0.5	1	0
740	KVOR		Colorado Springs	3	4	4	3	3	3	3
760	KDFD		Thornton (Denver)	5	5	5	5	5	5	5
780	KJME		Fountain (C.S.)	1	1	1	0.5	0.5	1	0.5
790	KXXX		Colby, KS	0.5	0.5	1	0.5	0.5	1	0.5
810	KLVZ	HD	Brighton (Denver)	5	5	5	5	5	5	5
830	spurious									
850	KOA		Denver (old I-A)	5	5	5	5	5	5	5
870	KJMP		Pierce (Greeley)	2	2	3	2	2	2	1
910	KPOF	HD	Denver	5	5	5	5	5	5	5
930	KRKY		Granby (Grand Co.)	0	0	0.5	0	0	0	0
950	KKSE		Parker-Denver	5	5	5	5	5	5	5
990	KRKS		Denver	5	5	5	5	5	5	5
1010	KSIR		Brush (Ft. Morgan)	2	3	3	1	1	2	1
1040	KPPF		Monument (C.S.)	2	2	2	1	1	2	2
1060	KRCN		Longmont	4	5	5	4	4	5	5
1090	KMXA		Aurora	5	5	5	5	5	5	5
1120	KCRN		Limon	4	4	4	4	4	4	4
1150	KNRV		Englewood (Denver)	5	5	5	5	5	5	5
1170	KJJD		Windsor (Longmont)	3	3	3	3	3	3	3
1190	KVCU		Boulder	3	3	3	3	3	4	3
1220	KLDC	HD	Denver	5	5	5	5	5	5	5
1240	KRDO/KFBC		Colorado Springs+Cheyenne,WY	0.5	1	1	0.5	0	0.5	0.5
1280	KBNO		Denver	5	5	5	5	5	5	5
1300	KCSF		Colorado Springs	0.5	1	0.5	0.5	0.5	0.5	0.5
1310	KFKA		Greeley	3	3	3	3	3	3	3
1340	KDCO		Denver	5	5	5	5	5	5	5
1360	KHNC		Johnstown (Loveland)	3	3	3	3	3	3	3
1390	KGNU		Denver	5	5	5	5	5	5	5
1430	KAMP		Aurora	5	5	5	5	5	5	5
1450	KGRE		Greeley	0.5	0.5	0.5	0.5	0	0	0
1460	KZNT		Colorado Springs	0	1	0.5	0	0.5	0.5	0
1490	KCFC		Boulder	3	3	3	2	2	2	2
1510	KPLS		Littleton (Denver)	5	5	5	5	5	5	5
1530	KQSC		Colorado Springs	1	1	1	0.5	0.5	0.5	0.5
1550	KKCL		Golden (on STA)	0	0	0	0	0	0	0
1570	KXJJ		Loveland	0.5	0.5	1	0.5	0.5	0.5	0.5
1580	KFCS		Colorado Springs	0.5	0.5	0.5	0.5	0.5	0.5	0.5
1600	KEPN		Lakewood (Denver)	4	4	4	4	4	4	4
1630	KVAM		Fox Farm (Cheyenne), WY	0	0	0.5	0	0	0	0
1650	KBJD		Denver	5	5	5	5	5	5	5
1690	KDMT		Arvada (Denver)	4	4	4	4	4	4	4
			Total (est. error ± 3)	150	157	158	145.5	144	150	144.5

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		Average	3.1	3.3	3.3	3.0	3.0	3.1	3.0
	Quality is ranked on a scale of 1..5. "0.5" means there was a trace of a signal but nothing that would be considered truly audible.								
Quality Scale									
1	Very noisy but readable		A lower average may be better, indicating that the unit is picking up more faint signals. On the other hand, a lower average may also indicate that the unit is not picking up some stations as well as other units are doing. Ultimately, the "average" may either have contradictory meanings, or not mean very much at all. I'm leaving the average figure in but the "Total" may mean the most.						
2	A little less noisy								
3	Readable with some noise								
4	A small amount of noise, otherwise strong								
5	Quiet, strong local signal								
Additional Notes:									
Audio bandwidth of 3 kHz used, except for the Tecsun PL-320, where a 3.5 kHz bandwidth was used.									
Internal antennas ("barefoot" operation) was used for all radios.									
Readings were taken from 1 to 3 pm on August 24, 2024. There were no thunderstorms in the area at the time.									
The Digitech AR-1780 was the receiver with the least noise on empty channels. The Qodosen DX-286 had more noise on empty channels, but this could be due to more aggressive AGC or other factors.									
The DX-286 makes a ticking noise with signals of quality <= 3. This goes away if you turn the display off by pressing 1 and 3 at the same time. (Repeat to turn display back on.)									
The PL-310ET's headphone jack wasn't entirely compatible with a TRRS plug. I could get it to work but the plug was then not seated firmly.									
Observed variability in signal evaluation may have several causes:									
1. Changes in atmospheric conditions from minute to minute, especially for fringe signals.									
2. Changes in antenna orientation. I could be more consistent about this.									
3. Perception: ultimately I'm attaching a number to an opinion, which tries to convert a qualitative approach into a quantitative one. Such an approach is not perfect. Lacking more sophisticated equipment for measurement, it's the best I can do and still may have some value.									