Communications Electronics, Inc. and Watkins Johnson Receivers and Tuners Guide

08/03/05

This is an ongoing project. I'm always looking for more information, particularly on the variants denoted by the -x suffixes. Copyright 2005 by Terry O'Laughlin. Contact me at watkins-johnson@terryo.org

Main web page http://watkins-johnson.terryo.org

All units are rack mount 3.5" high unless noted.

Model	Coverage	Bandwidths	Notes
112	1-18GHz TH-series drop-in tuners	100kHz/2/4/10/ 20MHz	receiver, AM/FM/pulse, filmstrip dial, AFC, DAFC, "aural enhancement", dual conversion, IFs: 160 & 21.4MHz, center tune and signal strength meters, solid-state, 231bs
112-1	1-18GHz	100/500kHz/1/ 10/20MHz	same as 112 except for BW
112-5	4-8GHz	1/2/4/10/20MHz	same as 112 except for BW and coverage
112R	1-18GHz		EMC version of 112
205	2-1000MHz HH-, VH- or UH- series tuners	10/50/300khz/ 1MHz	Pan-Man receiver, filmstrip dials, AM/FM/pulse, scans pan (full band) or sector (adjustable width centered on tuner frequency), center tune and signal strength meters, 21.4MHz IF, solid- state, 191bs
205-2	2-1000MHz	10/50/300khz/ 1MHz	similar to 205 except with additional scan mode of pan/sector (alternates traces), and remote tune
205-3		300kHz/1/3/5MHz	otherwise similar to 205-2
205-28		50/300kHz/1/2MHz	otherwise similar to 205-2
205-46		300kHz/1/2/3MHz	otherwise similar to 205-2
215	2-1000MHz	10/50/300khz/ 1MHz	similar to 205-2 except w/ TTL digital remote

interface

215-4		50/300kHz/1/5MHz	otherwise similar to 215
232-1	2-32MHz	6kHz	tunable filter, basically a triple conversion rcvr w/o demod, IFs=65MHz/10MHz and 15kHz, 6kHz BW filter, COR, DAFC input (from DRO-307-1), 1/2 rack width
232-2	2-32MHz	6kHz	same as 232-1 except with 25kHz final IF
301A	3-30kHz	200Hz	round dial, AM/CW, three band 3-6/6-14/14-30kHz, 45kHz IF, AGC, solid-state, 14lbs, cost \$1000 (1967)
301A-1	3-30kHz	200Hz	same as 301A but w/optional internal rechargeable batt, cost \$1200 (1967)
302	30-300kHz	2kHz	round dial, AM/CW, three band 30-60/60-140/140-300 kHz, 455kHz IF, AGC, solid- state, 13.5lbs, cost \$1000 (1967)
340A	1-900kHz	1/6/20/50kHz	5 digit LED counter, AM/FM/ CW, DAFC, ant attn, 50/600 ohm ant, remote control, solid-state
340A-4	1-900kHz	0.15/1/3/30kHz	same as 340A except for BW
340A-6	1-900kHz	0.15/1/20/75kHz	same as 340A except for BW
340A-7	1-900kHz	0.4/1/2/5/10kHz	same as 340A except for BW
340A-8	1-900kHz	0.3/1/3/20/50kHz	same as 340A except for BW
351	1-600kHz	0.15/1/3/6kHz	4 digit Nixie counter, decimal shift, DAFC, AM/ SSB/CW/FSK,BFO w/zero/ variable/1kHz/USB/LSB, ant attn, audio BW filters, solid-state, 20lbs, cost \$4000 (1967)
351-1	1-600kHz	1/6/20/50kHz	AM/FM/USB/LSB/CW/Pulse, filmstrip dial, solid- state, ant. atten., BFO w/var/5.5kHz/USB/LSB
354	1-600kHz	0.15/1/3/6kHz	filmstrip dial, AM/SSB/CW/ FSK, BFO w/zero/variable/

			5.5kHz/USB/LSB, ant attn, audio BW filters, solid- state, 20lbs, cost \$2500 (1967)
355	1-600kHz	1/6/20/50kHz	filmstrip dial, AM/SSB/CW/ FSK, BFO w/zero/variable/ 5.5kHz/USB/LSB, ant attn, audio BW filter, solid- state, 20lbs, cost \$3000 (1967)
355-1	1-600kHz	1/6/20/50kHz	same as 355 w/addition of X-Y outputs to driver plotter, cost \$3200 (1967)
355-2	1-600kHz	1/6/20/50kHz	same as 355 w/addition of internal rechargeable batteries, cost \$3700 (1967)
357	1-600kHz	0.15/1/3/6kHz	4 digit Nixie counter, decimal shift, DAFC, AM/ SSB/CW/FSK, BFO w/zero/ variable/5.5kHz/USB/LSB, noise limiter, audio BW filter, 2MHz IF, solid- state, (have manual) (mil versions: R-1401 and R-1490A/G), 20lbs, cost \$4200 (1967)
371A	0.5-10MHz	6/20/100/400kHz	AM/FM/CW, filmstrip dial, dual conversion on 6&20kHz IF BWs (21.4MHz & 455kHz), LO out, SM out (21.4MHz), designed for RFI detection, solid-state, 25lbs, cost \$3000 (1968)
372A	0.5-30MHz	6/20/100/400kHz	AM/FM/CW, filmstrip dial, designed for RFI detection, solid-state
372A-2	0.5-30MHz	6/20/100/400kHz	same as 372A except has X-Y outputs for recording spectral
373A	0.5-30MHz	6/20/100/400kHz	AM/FM/CW, filmstrip dial, dual tuner version of 371A, 25lbs, cost \$3500 (1968)
373A-2	0.5-30MHz	6/20/100/400kHz	same as 373A except has X-Y outputs for recording spectral analysis
373A-6	0.5-30MHz	0.15/1/20/75kHz	same as 373A except for BW

373A-10	0.5-30MHz	2/20/100/400kHz	same as 373A except for BW
377A	0.5-10MHz	6/20/100/400kHz	AM/FM/CW, 6 digit Nixie counter display, DAFC, dual conversion on 6&20kHz IF BWs, SM output, solid- state, 25lbs, cost \$4500 (1967)
402-1	20-40MHz	10kHz	1 chan xtal controlled, AM/CW, 21.4MHz IF, 1/5 rack width, 5.25" high, 4.5lbs, cost \$995 (1965)
402-2	40-60MHz	10kHz	same as 402-1
402-3	60-90MHz	10kHz	same as 402-1
410	20-80MHz	10kHz	plug-in receiver, AM/FM, activity operated relay (AOR), DAFC input, mounts in EF-158 as part of RS-158
410-2	20-80MHz	20kHz	same as 410
410-3	20-80MHz	50MHz	same as 410
415-1	60-90MHz	50kHz (100kHz - special order)	4 chan xtal controlled, AM only, 21.4MHz IF, 1/4 rack width, 3.75" wide, 6.75" high, 6.5lbs, cost \$995 (1966)
415-2	75-110MHz	50kHz	same as 415-1
415-3	90-130MHz	50kHz	same as 415-1
415-4	110-150MHz	50kHz	same as 415-1
416-1	30-90MHz	2MHz	4 chan xtal controlled, pulse only, other specs like 415
416-2	75-110MHz	2MHz	4 chan xtal controlled, pulse only, other specs like 415
416-3	90-130MHz	2MHz	4 chan xtal controlled, pulse only, other specs like 415
416-4	110-150MHz	2MHz	4 chan xtal controlled, pulse only, other specs like 415
416-6	30-90MHz	unknown	4 chan xtal controlled, other specs unknown

416-12	60-260MHz	unknown	same as 416-6
440-1	30-48MHz	20/50/75 or 100 kHz	xtal control rcvr, AM only, 1/6 rack width, second suffix denotes bandwidth -1 =50kHz, -2 =20kHz, -3 =75kHz -4 =100kHz
440-2	45-72MHz		other specs same as 440-1
440-3	70-105MHz		other specs same as 440-1
440-4	100-160MHz		other specs same as 440-1
440-5	150-220MHz		other specs same as 440-1
440-6	210-260MHz		other specs same as 440-1
441-1	30-48MHz	20/50/75 or 100 kHz	xtal control rcvr, FM only, 1/6 rack width, second suffix denotes bandwidth -1 =50kHz, -2 =20kHz, -3 =75kHz -4 =100kHz fit EF-506B rack
441-2	45-72MHz		other specs same as 440-1
441-3	70-105MHz		other specs same as 440-1
441-4	100-160MHz		other specs same as 440-1
441-5	150-220MHz		other specs same as 440-1
441-6	210-260MHz		other specs same as 440-1
461-1	300-450MHz	see descrip	<pre>single xtal channel, AM/FM, BWs noted by 2nd suffix: -1 =50kHz, -2 =20kHz, -3 =75kHz -4 = 100kHz 1/6 rack width, fit EF-506 rack</pre>
461-2	450-550MHz		same as 461-1
480 serie	28		these tuners are listed under components as they require the supply in the EF-180A or EF-182A rack
501	54-260MHz	10/300kHz	round dial, AM/FM/CW, video BW filters, built-in speaker, center tune and signal strength meters, 21.4MHz IF, solid-state, nuvistors & 7077
501A	54-260MHz	10/300kHz	filmstrip dial, AM/FM/CW,

			video BW filters, built-in speaker, center tune and signal strength meters, 21.4MHz IF, solid-state, 15lbs, cost \$1600 (1967)
501A-1	54-260MHz	10/300kHz	same as 501A except w/AFC
504A	54-260MHz	10/300kHz	same as 501A w/addition of 1 & 5MHz marker generator, cost \$1750 (1967)
519	20-70MHz	10/50/300kHz	filmstrip dial, AM/FM/CW, squelch, built-in SDU, dual conversion, 10MHz & 455kHz IFs, DAFC input (for DRO-290A), solid-state, 18lbs, cost \$3100 (1967) (have manual)
521A	20-70MHz	4/10/50kHz	filmstrip dial, AM/FM/CW, COR, built-in SDU, dual conversion, 10MHz & 455kHz IFs, DAFC input (for DRO-209A), solid-state, 18lbs, cost \$3200 (1967)
521A-1	20-80MHz	4/10/50kHz	other specs same as 521A
555	90-180MHz	10/20/50kHz	other specs similar to 521A
555-1	90-180MHz	4/10/50kHz	other specs similar to 521A
565	20-1000MHz (VH- & UH- plug-in tuners)	10/50/100kHz/ 3MHz	AM/FM/CW/pulse, built-in SDU, DAFC input
565A	20-1000MHz	opt w/ WJ-9930 modules	same as 565 except uses drop-in IF/BW/demod units
595	220-440MHz	10/20/50kHz	other specs similar to 521A
601A	54-260MHz	50/100kHz	round dial, AM/CW, squelch, dual conversion, 21.4MHz & 2.5MHz IFs, two separate IF strips, 50 & 100kHz BWs avail. simultaneously, solid-state & nuvistor, 12lbs, (1964)
701	235-1000MHz	300kHz/2MHz	round dials, AM/FM/CW, two tuners: 235-500/490- 1000MHz, COR, dual conv., 60MHz & 21.4MHz IFs, two separate IF strips, 300kHz & 2MHz BWs avail. simult., solid-state, nuvistor,

			7077s & 7486, 211bs
701A	235-1000MHz	300kHz/2MHz	same as 701 except 7077s & 7486 replaced by nuvistors, cost \$3000 (1965)
702	235-1000MHz	50/300kHz/2MHz	same as 701 except w/50kHz bandwidth
702A	235-1000MHz	50/300kHz/2MHz	same as 702 except 7077s & 7486 replaced by nuvistors, cost \$3500 (1965)
770	235-1000MHz	100/500kHz/4MHz	round dials, AM/FM/CW/ pulse, two tuners: 235-500/ 490-1000MHz, IFs: 60, 21.4MHz (all BWs), 2.5MHz (100kHz only), nuvistors, several 7077s & 7486, solid-state
770A	235-1000MHz	100/500kHz/4MHz	same as 770 except 7077s and 7486 replaced by nuvistors
775	235-1000MHz	100/500kHz/4MHz	same as 770A except w/COR
775-3	235-1000MHz	100/500kHz/4MHz	same as 775 except w/115/ 230VAC supply, cost \$3700 (1967)
775-9	235-1000MHz	100/500kHz/4MHz	difference unknown
901B	30-300MHz	20/300kHz	filmstrip dials, AM/FM/CW, two tuners: 30-90/60-300 MHz, nuvistor and solid- state, 18lbs, cost \$1925 (1966)
901-5	30-300MHz	20/30/300kHz	same specs as 905A except for additional IF BW
903B	30-300MHz	50/300kHz	round dial, AM/FM/CW, ANL, COR, two tuners: 30-60/60- 300MHz, 21.4MHz IF, nuvistors (8058, 7587 & 6CW4) & solid-state, 20lbs, cost \$2400 (have partial schematic)
904A	30-300MHz	20/300kHz	same as 901B except with 1MHz & 5MHz xtal marker osc, cost \$2075 (1966)
905A	30-300MHz	20/300kHz	same as 901B except with COR, cost \$2025 (1966)

(mil R-1420/URR)

			(IIII R-1420/ORR)
906A	30-300MHz	20/300kHz	same as 901B except with 1MHz & 5MHz xtal marker osc and COR, cost \$2175 (1966)
906A-4	30-300MHz	20/300kHz	same as 906A except with narrow band FM demod
907	30-300MHz	20/300kHz	round dial, AM/FM/CW, two tuners: 30-100/60-300 MHz, special DC outputs from detectors, 21.4MHz IF, nuvistor & solid-state, 15lbs, cost \$1975 (1965)
952	30-300MHz	50/300kHz	filmstrip dial, AM/FM/CW, two tuners: 30-90/60-300 MHz or six xtal controlled chan between 100-150MHz, COR, 21.4MHz IF, 18lbs, cost \$2400 (1967)
960	30-300MHz	20/200kHz	round dials, AM/FM/CW, two tuners: 30-90/60-300 MHz, 21.4MHz IF, nuvistors, 7077 & solid-state, 16lbs
960B	30-300MHz	20/200kHz	same as 960 except 7077s replaced by nuvistors, cost \$2550 (1966)
960B-2	30-300MHz	20/300kHz	same as 906B except with wider IF BW
965	10-90MHz	10/50/200kHz	round dials, AM/FM/CW, two tuners: 30-90/10-30MHz, 21.4MHz IF, 17lbs, cost \$2900
970A	30-300MHz	60/300kHz/3MHz	round dials, FM/AM/CW/ pulse, special AGC for pulse, dual conversion (60kHz BW only) 21.4MHz & 2.5MHz IFs, cost \$2700 (1965)
975	30-300MHz	60/300kHz/3MHz	same as 970A except with COR, cost \$2800 (1965)
975-2	30-300MHz	60/300kHz/3MHz	newer version of 975, cost \$2700 (1967)
977	30-300MHz	60/300khz/3MHz	filmstrip dials, AM/FM/CW/ pulse, solid-state, DAFC w/DRO-300A or DRO-302A-2, cost \$2700 (1968)

977-1	30-300MHz	10/300kHz/3MHz	other specs same as 977
CT-4080	4-8GHz	8MHz minimum	tuner, one 160MHz output, two 21.4MHz output, 18dB max noise figure, AGC & DAFC inputs, 25lbs, used in RS-125, cost \$6250 (1968)
CV-1750	235-1000MHz	2MHz minimum	military version of FE-25-1
FE-1-2A	0.95-2.05GHz	8MHz minimum	converter, filmstrip dial, 160MHz IF out, 18dB max noise figure, four section YIG preselector, LO out, 20lbs, cost \$4000 (1965)
FE-1-2B	0.99-2.0GHz	8MHz minimum	same as FE-1-2A except DAFC in, AGC in, slightly wider frequency range, 25lbs, cost \$4000 (1967)
FE-1-4.5	0.95-4.5GHz	8MHz minimum	converter, consists of the tuner sections of FE-1-2B and FE-2-4.5 in one box, cost \$8500 (1967)
FE-2-4	2.0-4.0GHz	8MHz minimum	converter, round dial, 160MHz IF out, 18dB max noise figure, tunable YIG preselector, AGC in, rack mount 5.25" high, 20lbs, cost \$4000 (1965)
FE-2-4.5	1.95-4.5GHz	8MHz minimum	same specs as FE-1-2B except freq coverage
FE-4-8	4-8GHz	8MHz minimum	converter, filmstrip dial, 160MHz IF out, 18dB max noise figure, four section YIG preselector, DAFC in, AGC in, LO out, 25lbs, cost \$6500 (1967)
FE-8-12	8-12GHz	8MHz minimum	converter, filmstrip dial, 160MHz IF out, 18dB max noise figure, four section YIG preselector, DAFC in, AGC in, LO out, 25lbs, cost \$6500 (1967)
FE-25-1	235-1000MHz	2MHz minimum	converter, round dials, two tuners: 235-500/490- 1000MHz, 60 MHz IF out, 10 dB noise figure, 7077s, 7486 & nuvistors, 18lbs, cost \$1400 (1967) (mil

			Verbion: ev 17507
FE-26	235-1000MHz		other specs unknown
FE-103	10-30MHz	2MHz minimum	converter, 60 MHz IF out, filmstrip dial, 6dB max noise figure, solid-state, 12lbs, cost \$1000 (1965) (mil version available, number unknown)
FE-3442	3.7-4.2GHz	20MHz	converter, 160MHz IF out, 20MHz BW, 15dB noise figure compnent of TDS-100 system
HF-1000	0.005-30MHz	58 digital filters	AM/FM/CW/USB/LSB/ISB/ synchronous AM, fully synthesized, green LED digital readouts, 3 scanning modes, notch filter, bandpass tuning, RS-232 or CSMA remote control, rack mount 5.5" high, 97-253VAC, 47-440Hz, current issue commercial version of WJ-8711
HT-10	0.5-10MHz	400kHz	converter, 21.4MHz out, 7dB noise figure, input attn, 15lbs, cost \$2000 (1967) used in RS-125
LT-1-2	1.0-2.0GHz	8MHz minimum	converter, round dial, 21.4MHz IF out, 18dB max noise figure, four section YIG preselector, solid- state except for ceramic triode LO, rack mount 5.25" high, 20lbs, cost \$4500 (1965)
LT-1020A	0.95-2.05GHz	8MHz minimum	converter, 21.4MHz out, filmstrip dial, 18dB max noise figure, four section YIG preselector, dual conversion, 160MHz and 21.4MHz IFs, DAFC in, AGC in, 251bs, cost \$4200 (1967)
MT-112	1-18GHz*		microwave tuner frame, uses up to four TH- series tuning heads, 160MHz IF out, rack mount 5.25" high
R-1279	30-300MHz	20/300kHz	round dials, nuvistor & solid-state (mil)

version: CV-1750)

R-1401	military version of 357
R-1420	military version of 905A
R-1490A/G	military version of 357
RS-111-1B 30-1000MHz 20/75/300kHz/ 2MHz	round dials, AM/FM/CW, four tuners: 30-60/60-300/ 235-500/490-1000MHz, built-in SDU, separate 2MHz IF w/AM and FM continuously available, seperate antenna inputs for VHF and UHF, nuvistors, 7077s, 7486 and solid-state, rack mount 5.25" high, 351bs, cost \$6250 (1967) (have manual) (mil URR-52B)
RS-111-1B-7 30-1000MHz 20/75/300kHz/ 2MHz	same specs as RS-111-1B except has single antenna input switched to all tuners internally and video output switched between AM & FM by front panel mode control, cost \$6250 (1968)
RS-111-1B-12 30-1000MHz 20/75/300kHz /2MHz	same specs as RS-111-1B except contains a 21.4MHz marker oscillator for SDU cost \$6250 (1968)
RS-111-1B-12B 30-1000MHz 20/75/300kHz /2MHz	same specs as RS-111-1B except contains a 21.4MHz marker oscillator for SDU and DAFC input, cost \$6250 (1969)
S302 30-300kHz 2kHz	scanning version of 302
SCT-4080 4-8GHz 8MHz minimum	scanning version of CT-4080, 30lbs, cost \$7250 (1968)
SHT-10 0.5-10MHz	scanning version of HT-10
SLT-1-2 1.0-2.0GHz 8MHz minimum	scanning version of LT-1-2, 23lbs, cost \$5000 (1965) specs unknown
SLT-1020A 0.95-2.05GHz 8MHz minimum	same as LT-1020A except w/ motorized automatic tuning, 30lbs, cost \$5600 (1967)
SST-1045 0.95-4.5GHz 8MHz minimum	same as ST-1045 except w/ motorized automatic tuning, 30lbs, cost \$10500 (1967)

ST-1045	0.95-4.5GHz	8MHz minimum	converter, 21.4MHz out, filmstrip dials, two tuners: 0.95-2.05/1.95-4.5 GHz, 18dB max noise figure, four section YIG tuned preselector, dual conversion, 160MHz & 21.4MHz IFs, AGC in, DAFC in, 251bs, cost \$8700 (1967)
SST-2045	1.95-4.5MHz	8MHz minimum	sames specs as ST-2045 except with motorized automatic tuning, 30lbs, cost \$5600 (1967)
ST-2045	1.95-4.5GHz	8MHz minimum	same specs as ST-1045 except with one tuner, cost \$4200 (1967)
SUT-1000	235-1000MHz	6MHz minimum	same specs as UT-1000 except with motorized automatic tuning, 25lbs, cost \$3250 (1967)
SVT-10	10-90MHz	2MHz minimum	same specs as VT-10 except with motorized automatic tuning, 22lbs, cost \$2550 (1967)
SVT-11	10-30MHz	2MHz minimum	same specs as VT-11 except with motorized automatic tuning, 20lbs, cost \$1500 (1967)
SVT-30	30-260MHz	3MHz minimum	same specs as VT-30 except with motorized automatic tuning, 21.5lbs, cost \$2750 (1967)
SXT-8012	8-12MHz		scanning version of XT-8012
URR-52B			military version of RS-111
URR-74			military version of WJ-8718
UT-1000	235-1000MHz	6MHz minimum	converter, 21.4 MHz out, round dials, two tuners: 235-500/490-1000MHz, 14dB max noise figure, LO out, AGC in, 18.5lbs, cost \$2500 (1967)
VT-10	10-90MHz	2MHz minimum	converter, 21.4MHz out, filmstrip dials, two tuners: 10-30/30-90MHz, 7dB max noise figure, 16lbs, cost \$1800 (1967)

VT-11	10-30MHz	2MHz minimum	same specs as VT-10 except single tuner, 15lbs, cost \$1000, (1967)
VT-30	30-260MHz	3MHz minimum	converter, 21.4 MHz out, round dials, two tuners; 30-60/54-260MHz, 6.5dB max noise figure, LO out, AGC in, 7077s & nuvistors, 15lbs, cost \$2000 (1967)
WJ-1033-1	500-100MHz	20MHz	tuner, 160MHz IF output, 18dB noise figure
WJ-1034	1-2GHz	30MHz	tuner, 160MHz IF output, 15dB noise figure
WJ-1035	2-4GHz	30MHz	tuner, 160MHz IF, 15db NF
WJ-1036	4-8GHz	35MHz	tuner, 160MHz IF, 20db NF
WJ-1037	8-12GHz	25MHz	tuner, 160MHz IF, 20db NF
WJ-1038	12-18GHz	30MHz	tuner, 160MHz IF, 20db NF
WJ-1091	30-50MHz	300kHz	tuner, 21.4MHz IF output, 6dB noise figure
WJ-1092	50-100MHz	300kHz	tuner, 21.4MHz IF, 7dB NF
WJ-1093	100-170MHz	300kHz	tuner, 21.4MHz IF, 7.5dB NF
WJ-1094	170-250MHz	300kHz	tuner, 21.4MHz IF, 9dB NF
WJ-1095	250-500MHz	300kHz	tuner, 21.4MHz IF, 10dB NF
WJ-1096	500-1000MHz	300kHz	tuner, 60MHz IF, 12dB NF
WJ-8604	20-512MHz		same specs as WJ-8607 except smaller package and quick disconnect connector
WJ-8607	20-512MHz	10/20/50/250kHz/ 4MHz standard (6.4kHz-8MHz available)	<pre>miniceptor, AM/FM/CW/Pulse (SSB opt), microprocessor control, 100Hz resolution, HPIL/RS-232 remote interface, scan, step, can be used with WJ-9902 and WJ-9908 equip frames or WJ-9605 and WJ-9607 front panels, 1.5"h x 6.5"w x 10.5d, 51bs</pre>
WJ-8607fe	2-2000MHz		same specs as WJ-8607
WJ-8609A	20-512MHz	0.25-40MHz avail	same specs as WJ-8607 except AM/FM/Pulse only

WJ-8609A-	1 0.235-18G	Hz 5 from 0.25- 40MHz (SAW fils)	wideband version of WJ-8609A, uses WJ-9290 block downconverter, AM/FM/ Pulse, RF preselection, 100Hz resolution, scan, step, remote control: HPIL, RS-232 or RS-422
WJ-8615D	20-500MHz	10/20/50/100/ 300kHz	AM/FM/CW/USB/LSB/pulse, synthesized, micropro- cessor controlled w/100Hz steps, LED readout, COR, IEEE-488 interface, 1/2 rack width 3.25"h, opts: coverage to 4.5GHz, IF BWs from 3.2kHz to 4MHz
WJ-8615P	20-500MHz	3 std from 3.2kHz -8MHz (5 as opt)	AM/FM/CW/Pulse, SSB opt, microprocessor control, step, scan, lockout, clock, calendar, integral battery backup, logs signal acquisition w/ date & time to RS-232, printer or audio interface, options include tracking preselector, selected audio, wideband outputs, 3.5"h x 8.25"w x 20"d, 251bs
WJ-8616	20-500MHz		synthesized, 7 digit LED readout
WJ-8617	20-500MHz (0.5-1100 MHz opt, down to 10kHz on special request)	10/20/100/500khz 2MHz	AM/FM/CW/SSB/pulse, synthesized, micropro- cessor controlled w/100Hz steps, 7 digit LED readout, 48 programmable search bands, 96 memory channels, search/scan for user-defined processing or signal acquisition, built-in SDU, master/slave operation of up to 29 receivers, rack mount 5.25" high, 50 lbs Wide variety of options (see 8618 configuration list and 8617/8618 option list)
WJ-8618			EMI hardened version on 8617 Wide variety of options (see 8618 configuration list and 8617/8618 option list)

WJ-8619 20-500MHz	5 BWs, 11 avail from 10kHz-4MHz	AM/FM/CW/Pulse std, SSB & var BFO opt, digital remote controlled by IEEE-488 bus or WJ8617B receiver, 100Hz steps, COR, scan module w/X-Y-Z display out
WJ-8619fe 20-1100MHz	as above	same as WJ-8619 except for expanded frequency range
WJ-8625-1 0.2-1.5MHz		AM/FM/CW/USB/LSB, LCD display
WJ-8626A-1		same as A-4 but no front panel, controlled from A-4
WJ-8626A-4 5kHz-30MHz	any 3 from 0.2/ 0.5/1/2/3/4/6/8/ 12/16kHz	AM/FM/CW/USB/LSB, synthesized, micropro- cessor controlled, LCD display, 1/2 rack width 5.25" high
WJ-8628A-1		same as A-4 but no front panel, controlled from A-4
WJ-8628A-4 20-512MHz	four from range of 10khz to 4MHz	AM/FM/CW/SSB/pulse, synthesized, micropro- cessor controlled w/100Hz steps, LCD display, tuned preselection, synth. BFO, 10mS tuning speed, opt: coverage to 1.4GHz, 1/2 rack width 5.25" high
WJ-8640-1 plug-in 0.5-500MHz	10/50/200kHz 5/20kHz optional	AM/FM/CW/USB/LSB, port- able manpack, LED counter w/DAFC, 10 D cell or BA- 4386 detachable battery pack or vehicular supply, 4.2"h X 11.4"w X 11.7"d, 18lbs, (mil AN/GRR-8V)
WJ-8650 105-175MHz	5/15kHz	minature receiver, AM/FM, 10 chan, scan, step, tracking preselector, 10-14VDC, 4W, 4.25"dia x 0.6"high, 10oz
WJ-8650-1 200-270MHz	15kHz	same specs as WJ-8650 except 0.8" high
WJ-8652 210-350MHz	100kHz/1/2MHz	minature receiver, AM/FM, 5 chan, scan, step, tracking preselector, 10-14VDC, 2.5W, 0.75"h x 3.25"w x 7.12"d, 1lb

WJ-8653A	400-500MHz or 0.8-1.0GH		minature receiver, FM, scan, step, 10-14VDC, 5W, 0.8"h x 3.5"w x 8.75"d, 11b
WJ-8654	20-1000MHz	6.4-100kHz	<pre>miniceptor, AM/FM/SSB/CW, 100 chan, scan, step, tracking preselector, HPIL &RS-232 remote interface, 9-16VDC, 5W, 1.65"h x 3.0"w x 7.75" d, 2.5lbs</pre>
WJ-8700	0.5-32MHz		dual receiver, AM/FM/CW/ USB/LSB, microprocessor control, 8 line by 40 char LCD display, scan, step, lockout, 100 memory channels, suboctave pre- selector, many options, 3.5"h x 8.25"w x 20"d, 18lbs
WJ-8709	5kHz-30MHz	0.3/1/3.2/6/16kHz	AM/FM/CW/MCW/USB/LSB, 7 digit yellow LED display, synthesized: 10Hz steps, 1/2 rack width 5.25" h
WJ-8711	0.005-30MHz	58 digital filters	AM/FM/CW/USB/LSB/ISB/ synchronous AM, fully synthesized, green LED digital readouts, 3 scanning modes, notch filter, bandpass tuning, RS-232 or CSMA remote control, rack mount 5.5" high, 97-253VAC, 47-440Hz, current issue,
WJ-8712	5kHz-30MHz	58 digital filters	remote control version of WJ-8711, half rack 3.5" high, blank front panel, RS-232 or CSMA control
WJ-8718A	5kHz-30MHz	0.3/1/3.2/6/16kHz	AM/FM/CW/ISB/USB/LSB, synthesized, micropro- cessor controlled w/10Hz steps, 7 digit LED readout (yellow), synthesized BFO, many options notably including /MFP - micropro- cessor front panel which allows front panel which allows front panel control of scanning and memory, rack mount 5.25" high, 35lbs

WJ-8718A -14			special wideband unit with bandwidths of 40 & 100 kHz
WJ-8718A -15			Special E-Systems unit with green front panel, other differences unknown
WJ-8718A -19/FE	5kHz-100MHz	0.3/1/3.2/6/50kHz	AM/FM/CW/ISB/USB/LSB, synthesized, micropro- cessor controlled w/10Hz steps, MFP - micropro- cessor front panel which allows front panel control of scanning and memory, built-in remote control, 7 digit LED readout(yellow), synthesized BFO, special DF mode with IF optimized for DF work, many options available, rack mount 5.25" high, 35 lbs
WJ-8721	5kHz-30MHz	digital	VXI card version of WJ-8711, 1/12 rack width, BITE, 5lbs
WJ-8730A	plug-in 20-1000MHz (WJ-9060 series)	plug-in 10kHz-3MHz (WJ-9930 series)	uses two WJ9060 tuning heads (filmstrip dial), solid-state, built-in SDU
WJ-8731A			same specs as WJ8730A except with tuning meter instead of SDU
WJ-8732A			same specs as WJ8730A except only one WJ9060 tuning head
WJ-8733A			same specs as WJ8730A except only one WJ9060 tuning head and tuning meter instead of SDU
WJ-8770	5kHz-20MHz	1/4/8/16kHz std, 0.5/2/6/12kHz opt	AM/FM/CW/LSB/USB, synth- esized: 10Hz steps, red LED display, ruggidized, military vehicular radio 22-32VDC, internal AC or battery packs opt
WJ-8809	0.1-18.5GHz	5 from 0.5-40MHz	consists of two units, WJ-8809/RX receiver and WJ-8809/MC microwave converter, AM/FM/Pulse, 100Hz resolution, RF preselection,

WJ-8880	0.5-30MHz	six, opt config	AM/FM/CW/USB/LSB/ISB, synthesized, micropro- cessor control, rack mount 5.25" high
WJ-8888A	0.5-30MHz	six, opt config	AM/FM/CW/ISB/LSB/USB, synthesized, 10Hz steps, digitally remote control- able, rack mount 5.25" high
WJ-8888B	0.5-30MHz	six, opt config	same as WJ-8888A except improved circuit board design
WJ-8922	1kHz-3GHz		AM/FM/CW/SSB, scans pan/ sector or manual, compact unit fits in a suitcase
WJ-8969	0.5-18GHz		70MHz IF, synthesized, 1kHz steps
WJ-8972	20-500MHz		receiver/DF controller, part of WJ8990 system
WJ-9080	30-1000MHz	n/a	converter, tunes all in one band
WJ-9477	0.001-30 MHz	3 kHz-5 MHz	precision tunable demodulator but sensitivity adequate for receiver use, AM/FM/SSB, 10Hz tuning steps, provision for 9 IF BW filters, microprocessor controlled, 3.5"h x 8.5"w x 21"d, 20lbs
WJ-9477G	0-31MHz	3.2kHz-6MHz	tunable demodulator, AM/FM(SSB opt), 10Hz tuning steps, provision for 9 IF BW filters microprocessor controlled,
		3.5"h x 8.5"w x 21	l"d, 201bs
WJ-9478	0.001-30 MHz	100/150/300/1000 2400 kHz	baseband receiver but sensitivity adequate for receiver use, detector modes, unknown, microprocessor controlled, 3.5"h x 8.5"w x 21"d
WJ-9480	tunable demodulator system, consists of 2 units; tuner/IF amp and demod, 0.1-30MHz, 100Hz steps, simultaneous AM/FM/PM detection, 13 IF BWs (3kHz-20MHz), IEEE-488 remote, 21.4 & 160MHz inputs, 21.4/70/160MHz outputs, each section is 5.25"h x 19"w x 22"d, tuner: 44lbs, demod: 54lbs		

WJ-9497 tunable demodulator, 0-90MHz or 160MHz IF, 1Hz steps, AM/FM/SSB, programmable bandwidth from 100Hz-20MHz, BITE, 3.5"h x 8.5"w x 21"d, 20lbs

converter, one 160MHz IF output, two 21.4MHz outputs, 18dB max noise figure, four section YIG preselector, DAFC in, AGC in, LO out, 25lbs, cost \$6500 (1968)

Edited by Terry O'Laughlin, WB9GVB

Additions, corrections, suggestions to: e-mail - watkins-johnson@terryo.org snail mail - P.O. Box 3247, Madison, WI, 53704