

# Communications Electronics, Inc. and Watkins Johnson Accessories and Components Guide

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This is an ongoing project. I'm always looking for more information, particularly on the variants denoted by the -x suffixes.  
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Model	Description
481A	plug-in receiver, 30-60MHz, AM/FM (CW opt), requires ext power from EF-180A or EF-182A equipment frame, component of RS-180 receiving system
482A	same as 481A except 60-120MHz
483A	same as 481A except 100-180MHz
484A	same as 481A except 180-300MHz
485A	same as 481A except 30-90MHz
486A	same as 481A except 80-250MHz
487A	same as 481A except 20-80MHz
488A	same as 481A except 220-440MHz
489A	same as 481A except 250-500MHz
490A	same as 481A except 500-1000MHz
AGC-BC	Box car AGC unit, plugs into DM-4
AGC-PS	Pulse stretching AGC, plugs into DM-4
ANT-101	antenna, 3.7-4.2GHz, 12dB gain, 25 degree beamwidth, component of TDS-100 system
APR-101	antenna/preamplifier, ANT-101 and PR-101 in single unit
AR7-15	antenna, log-periodic, 1-12.4GHz, 8dB gain, 15dB F-to-B
AR7-17	antenna, log-periodic, 0.5-12.4GHz, 8dB gain, 15dB F-to-B
AR12-18	antenna, log-periodic, 30-1100MHz, 8dB gain, 20dB F-to-B
AR12-19	antenna, log-periodic, 90-1100MHz, 8dB gain, 20dB F-to-B
AR12-20	antenna, log-periodic, 250-1100MHz, 8dB gain, 20dB F-to-B

AR12-22 antenna, log-periodic, 30-160MHz, 8dB gain, 20dB F-to-B

AR12-25 antenna, log-periodic, 30-76MHz, 8dB gain, 20dB F-to-B

AR12-29 antenna, log-periodic, 30-300MHz, 8dB gain, 20dB F-to-B

AR19-5 antenna, omnidirectional conical spiral, 1-11GHz, no gain, 5w power handling

AR19-6 antenna, omnidirectional conical spiral, 7-11GHz, no gain, 5w power handling

AR19-8 antenna, omnidirectional conical spiral, 150MHz-2GHz, no gain, 5w power handling

AR19-9 antenna, omnidirectional conical spiral, 0.2-1.4GHz, no gain, 5w power handling

AR19-10 antenna, omnidirectional conical spiral, 0.25-1.1GHz, no gain, 5w power handling

AR19-11 antenna, omnidirectional conical spiral, 0.3-1.3GHz, no gain, 5w power handling

AR23-4 antenna, loop, 2-30MHz, bi-directional figure eight

AR72-4 antenna, loop, 30-160MHz, bi-directional figure eight

AR122-1 antenna, compacted log-periodic, 150MHz-1GHz, 4.3dB gain, 10w power handling

AR132-1 antenna, compacted log-periodic, 20-300MHz, 5dB gain, 1kw power handling

AR272-1 antenna, dual polarization log-periodic, 1-4GHz, 8dB gain, 20dB F-to-B, 10w power handling

AR274-1 antenna, dual polarization log-periodic, 30MHz-1GHz, 8dB gain, 20dB F-to-B, 25w power handling

AR274-2 antenna, dual polarization log-periodic, 30-300MHz, 8dB gain, 20dB F-to-B, 25w power handling

AR274-3 antenna, dual polarization log-periodic, 250MHz-1GHz, 8dB gain, 20dB F-to-B, 25w power handling

CSU-160 tuner switching unit, works with 205, 205-2 or 215 Pan-Man receivers, manual or sequential scan of tuners, holds up to 7 tuners, part of RS-160, see RS-160 for details

DA-1 video distribution amplifier, 91ohms or high impedance, 1.5vrms out, 6 video, 1 oscilloscope & 2 audio out, 9lbs, cost \$1200 (1964)

DA-5 audio distribution amplifier, 10kohm in, 150/600ohm out, 150 Hz-10 kHz response, five outputs, cost \$595 (1966)

DM-4 demodulator, 21.4 MHz input, accepts 4 plug-ins, 6 MHz

bandwidth, BFO, squelch, tuning and signal strength meters, 3 audio outputs: 100mw into 600 ohm, built-in speaker, 3 video outputs: analysis, recorder & tracking

- DM-22A demodulator, 21.4 MHz input, AM only, BW=1.5 MHz
- DM-112 demodulator, 160 MHz input, 100 kHz/2/4/10/20 MHz BWs, AM/FM/pulse, built in SDU, AFC and AGC outputs (to tuner), carrier and center-tune meters, typically paired with MT-112
- DM-160 demodulator, 160 MHz input, AM/FM/pulse, BW=0.35/1.5/4 MHz
- DM-161 demodulator, 160 MHz input, AM/FM/pulse, BW=1/5/10/20 MHz
- DM-212 demodulator, 160 MHz input, AM/FM/pulse, BW=10/20 MHz
- DM-235 demodulator, 160 MHz input, AM/FM/pulse, BW=30/50 MHz
- DMS-105 tunable demodulator, 1-1600 kHz, 5 digit Nixie readout, AM/FM/SSB/CW/MCW/FSK, IF BWs in two ranges: SSB - 2.4/3.5/4/8 kHz; other modes - 0.15/1/5/7/8/16 kHz, DAFC, rack mount 5.25" high
- DMS-105A same as DMS-105 except SSB BWs= 2.4/4/8 kHz and has translated IF predetection outputs at 15/50/100 kHz
- DMS-105R EMC version of DMS-105A, also has predetection IF outputs of 10/50/100 kHz
- DMS-107 tunable demodulator, 0.1-10 MHz, filmstrip dial, IF BWs: 20/50/100/300/500 kHz/1/2/3 MHz, DAFC w/DRO-302 or DRO-320, carrier and center tune meters
- DMS-107-1 same as DMS-107 except BW= 20/50/100/300/500 kHz/1/3/5.5 MHz
- DMS-109 tunable demodulator, 5 kHz-1 MHz, 5 digit Nixie display, USB/LSB, BW=2.8 kHz, DAFC
- DMS-201 tunable demodulator, 0.5-10 MHz, CW/FSK, BW=1/3kHz
- DRO-50 digital frequency display, 0.54-54 MHz, for use with 455kHz IF receivers, 6 digit Nixie display, included kit for modifying SP-600, cost \$2500 (1967) (variants were available for 500kHz, 3.9MHz and 21.4MHz IFs)
- DRO-270 digital frequency display, 20-80 MHz, for use with 10MHz IF receivers, 5 digit Nixie readout, DAFC for up to twelve receivers, part of RS-158 receiving system, rack mount 1.75" high
- DRO-280A digital frequency display, 20-1000 MHz, 6 digit LED display, DAFC, provides control of 12 receivers in 15 msec intervals, 12 position switch for selecting receiver whose frequency is to be displayed, part of RS-180 receiving system
- DRO-290 digital frequency display, 20-90MHz, for use with 10MHz IF

receivers like CEI 519 and 521A, DAFC, 6 digit Nixie display, rack mount 1.75" high, 10lbs, cost \$3100 (1967)

- DRO-290B similar to DRO-290 except with LED display
- DRO-300 digital frequency display, 30-300MHz, for use with 21.4MHz IF receivers, 6 digit Nixie display, variants avail for 455/500kHz and 3.9MHz IFs, cost \$2800 (1967)
- DRO-302A digital frequency display, 30-300MHz, for use with 21.4MHz IF receivers, 6 digit Nixie display, DAFC output, 1/2 rack width, cost \$3200 (1968)
- DRO-302A-2 digital frequency counter, same specs as DRO-302A except with BCD outputs
- DRO-302B digital frequency display, 0.1-500MHz, 6 digit LED readout, 21.4 & 60MHz IF presets (modifiable to any IF preset in increments of 0.1 MHz), solid-state, DAFC, half rack width (have manual)
- DRO-307 digital frequency display, 30-300MHz, 6 digit Nixie readout, 21.4MHz IF preset, DAFC control of four rcvrs w/ last two digits independently selectable for each rcvr, BCD outputs for all four receivers
- DRO-307-1 digital frequency display, 0.5-30MHz, 65MHz IF preset, otherwise similar to DRO-307, used w/232 tunable filters
- DRO-308 digital frequency display, 2-300MHz, 21.4MHz offset, 6 digit Nixie display, DAFC, component of RS-160 Pan-Man receiving system, mounts in SM-7301 frame 5.25" high
- DRO-309A digital frequency display, 0.1-1060MHz, same specs as DRO-302B (have manual)
- DRO-309B same specs as 309A, newer IC counter circuitry
- DRO-310 digital frequency display, 0.1-300MHz (4GHz w/plug-in mixers), 6 digit, 21.4MHz presets, multiple inputs, (mil CP-943/GLA-21), has accessory slot for mixers, SDU, ACL tuning heads.
- DRO-311 digital frequency display, 20-500MHz, automatic IF offset when used with 565 or WJ-8730 series, time-shares control of four receivers, drives up to four RD-105 remote displays
- DRO-312 digital frequency display, 0.01-1000MHz
- DRO-315 digital frequency display, 0.1-500MHz, identical to DRO-302B except full rack width, 1-3/4" high (have manual)
- DRO-333 digital frequency display, 0.1-1060MHz, identical to DRO-309A except full rack width, 1-3/4" high (have manual)
- DRO-333A same as DRO-333 except with ICs instead of discrete

components in the counter section

DRX-308 frequency extender for DRO-308, 300-1000MHz, rack mount  
1.75" high

DRX-1000 frequency extender for DRO-300 and DRO-302 counters,  
235-1000MHz, also extends DAFC operation, half rack width

DTF-101 test module for DM-4 demodulator, test DM-4 by plugging  
into any of the four module slots, cost \$225 (1965)

EC-101 extender cable for DM-4 module, allows for testing of IFD  
units outside of DM-4, cost \$150 (1965)

EF-101 equipment frame, single unit rack mount for 1/2 rack  
width units with front panels 3.25"h X 8.0"w

EF-158 equipment frame for RS-158 receiving system, contains an  
RF multicoupler for 12 receivers w/ 50 ohm and 5dB max  
noise figure and an RF test signal generator

EF-160 cabinet for RS-160 Pan-Man receiving system

EF-201 equipment frame, dual unit rack mount for 1/2 rack width  
units with front panels 3.25"h X 8.0"w

EF-301 equipment frame, single unit rack mount for 1/3 rack  
width units with front panels 5.0"h X 4.5"w

EF-302 equipment frame, dual unit rack mount for 1/3 rack width  
units with front panels 5.0"h X 4.5"w

EF-303 equipment frame, triple unit rack mount for 1/3 rack  
width units with front panels 5.0"h X 4.5"w

EF-401 equipment frame, single unit rack mount for 1/4 rack  
width units with front panels 6.75"h X 3.75"w

EF-402 equipment frame, dual unit rack mount for 1/4 rack  
width units with front panels 6.75"h X 3.75"w

EF-403 equipment frame, triple unit rack mount for 1/4 rack  
width units with front panels 6.75"h X 3.75"w

EF-404 equipment frame, quad unit rack mount for 1/4 rack  
width units with front panels 6.75"h X 3.75"w

EF-501 equipment frame, single unit rack mount for 1/5 rack  
width units with front panels 5.0"h X 3.0"w

EF-502 equipment frame, dual unit rack mount for 1/5 rack  
width units with front panels 5.0"h X 3.0"w

EF-503 equipment frame, triple unit rack mount for 1/5 rack  
width units with front panels 5.0"h X 3.0"w

EF-504 equipment frame, quad unit rack mount for 1/5 rack  
width units with front panels 5.0"h X 3.0"w

EF-505 equipment frame, five unit rack mount for 1/5 rack width units with front panels 5.0"h X 3.0"w

EF-506B equipment frame, rack mount for 440 series receivers

EF-602 equipment frame for RS-112 receiving system

FC-103 3 ch. xtal controlled converter

FT-101A IF to tape converter, 21.4MHz input, 750kHz center output, 6lbs

FT-201A half rack unit of FT-101A

FT-207 wideband IF to tape converter, 21.4MHz input, 2.15MHz center output, 300kHz or 4MHz BW output to recorder

FT-210 IF-tape converter, 21.4MHz input, 1.075MHz output, data bandwidth of 150kHz-2MHz, half rack width

FT-210E same as FT-210 except has equalizer for min group delay

FT-222 narrowband IF to tape converter, 21.4MHz input, 20 or 200kHz center frequency output, 500kHz BW

FT-4557 frequency translator, 455kHz input, staggers the IF outputs of up to six receivers between 580kHz and 1330kHz, 50kHz BW, cost \$2900 (1965)

HFM-8 antenna multicoupler, 2-30MHz, 75ohm impedance, 8 outputs, 10dB maximum noise figure, 8dB gain, quick change connector outputs on rear (like RCA video patch bays), 8lbs, cost \$400 (1964)

HFM-8-1 same specs as HFM-8 except connectors on front panel

HFM-8-2 same specs as HFM-8 except BNC on front panel

HFM-8-3 same specs as HFM-8 except BNC on rear panel

HH-11 tuning head, 2-30MHz, for use with 205 series and 215 Pan-Man receivers, low intermod design, dual conversion, 67.8 and 21.4MHz IFs, max noise figure 15dB

HH-11-1 tuning head, 0.9-30MHz, otherwise identical to HH-11

HPF-2 high pass filter accessory for HPM-8 series, attenuates below 2MHz

IFC-162 frequency converter, 160MHz IF input, 21.4MHz output

IFD4-300 dual wideband 21.4MHz IF demodulators

IFD-5 demodulator plug-in for DM-4, AM/FM/CW, 5kHz bandwidth

IFD-15 demodulator plug-in for DM-4, AM/FM/CW, 15kHz bandwidth

IFD-50 demodulator plug-in for DM-4, AM/FM/CW, 50kHz bandwidth

IFD-100 demodulator plug-in for DM-4, AM/FM/CW, 100kHz bandwidth

IFD-103 demodulator, 21.4MHz input, BW=10/50/100/300MHz, provides AM and FM output and predetection IF output for recording

IFD-200 demodulator plug-in for DM-4, AM/FM/CW, 200kHz bandwidth

IFD-201 demodulator, 21.4MHz input, BW=10/50/300/1000kHz, provides AM and FM output and predetection IF output for recording, half rack width

IFD-210 demodulator, 160MHz input, FM, BW=10/22MHz (8.5MHz video), component of TDS-100 system

IFD-500 demodulator plug-in for DM-4, AM/FM/CW, 500kHz bandwidth

IFD-1000 demodulator plug-in for DM-4, AM/FM/CW, 1MHz bandwidth

IFD-2000 demodulator plug-in for DM-4, AM/FM/CW, 2MHz bandwidth

IFD-4000 demodulator plug-in for DM-4, AM/FM/CW, 4MHz bandwidth

IFD-8000 demodulator plug-in for DM-4, AM/FM/CW, 8MHz bandwidth

LIF-107 Log IF demodulator, component of RS-112 receiving system

MC-103 master control, component of RS-112 receiving system

MD-50 autoscan motor tuning drive, adapts single tuner units to automatic tuning

MD-100 same specs as MD-50 except designed for dual tuner units

MD-104 same specs as MD-50 except designed for four tuner RS-111

MTF-100A microwave tuner frame, accepts two TH- series tuning heads, 160 and 21.4MHz outputs, AFC, AGC and DAFC inputs

MTF-101 microwave tuner frame, slave to MTF-100A, adds space for two additional TH- series tuning heads

MTF-102A microwave tuner frame, accepts one TH- series tuning head, 160 and 21.4MHz outputs, AFC, AGC and DAFC inputs

MP-101 carrier level meter panel, read peak or average, 21.4MHz IF input, contains IF strip and AM detector

MP-102 deviation and tuning meter panel, 21.4MHz IF input, contains IF strip and FM detector

MPP-101 microwave pan preselector, contains four YIG preselectors for each of 1-2/2-4/8/8-12GHz, requires PS-103, component of RS-112 receiving system

NS-101 noise silencer demodulator plug-in for DM-4, AM/CW, 2MHz pre-ANL BW, 15kHz overall BW, 2.75lbs, cost \$800 (1965)

PEC-401 portable equipment case, holds one 440 or 441 receiver, battery operation w/ built-in nicad charger, built-in speaker and whip antenna

PR-101 preamplifier, 23dB gain, 4.5dB noise figure, component of TDS-100 system

PS-103 power supply, component of RS-112 receiving system

PTM-101 pan tuner module, contains mixers, LO and IF preamps, component of RS-112 receiving system

RD-105 remote frequency display, for use with DRO-311

S-9203A speaker panel, half rack version of S-9903D

S-9901A speaker panel, 2.5"x10" speaker, 600ohm, headphone jack, cost \$75 (1965)

S-9902A same as S-9901A except with 7 input selector switch cost \$100 (1965)

S-9903D amplified speaker panel, 2.5"x10" speaker, 5 watt audio amp, 10k input impedance, 7 input selector switch, headphone jack, cost \$160 (1965)

S-9908B same specs as S-9903D except with eighth input position for microphone and BNC monitor output, cost \$225 (1965)

SFM-1 standard frequency multiplier, 1MHz standard input, 50/100/500/1000MHz output, 1vrms output

SOR-1A signal operated relay, controls up to two devices with contact closure on voice, positive-going or negative-going DC, self-contained 6"w X 3.5"h X 7.75"d

SP-101 storage panel for modules used with DM-4, cost \$125 (1965)

SWP-101 RF/IF switch panel, 3 inputs, 4 outputs, used in RS-125

SWP-104 RF/IF switch panel, 4 inputs, 4 outputs, used in RS-125

SWP-602 IF switch panel, 6 position, used with SDU to monitor several receivers, 1/2 rack width unit

TDM-101 demodulator, 60-108kHz, SSB, twelve outputs 300-3500Hz, component of TDS-100

TDM-102 demodulator, 12-60kHz, SSB, twelve outputs 300-3500Hz, component of TDS-100

TDM-110 demodulator, ten 60-108kHz inputs, SSB, ten outputs 300-3500Hz, component of TDS-100

TF-101 Tape to IF converter, converts tape recorder output centered at 750kHz into standard 21.4MHz

TF-102 similar to TF-101 except with adjustable output freq



TF-103 tape to IF converter, converts video signals in 40kHz to 4MHz range to 21.4MHz IF output, companion to IFD-103

TF-201 half rack unit of TF-101

TF-202 half rack version of TF-102

TF-210 tape to IF converter, 1.075MHz input center frequency, 21.4MHz output, digital thumbwheel frequency control

TFC-101 converter, 60kHz-4MHz input, twelve outputs in 312-552kHz range (CCITT supergroups 1-10), component of TDS-100 system

TFC-105 converter, 2548-4028kHz input, six outputs in 312-552kHz range (CCITT supergroups 11-16), component of TDS-100 system

TFC-212 converter, 312-552kHz input, five 60-108kHz outputs, component of TDS-100 system

TH-120 1-2GHz drop-in tuner for 112 receiver and MTF-series microwave tuning frames, filmstrip dial, 11dB max noise figure, four section YIG preselector, 160MHz IF out, BW=22MHz @ -3dB, 3.15"h x 7.75"w x 14.9"d, 8lbs

TH-120R-5 wideband version of TH-120, 50MHz @ -3dB, otherwise same

TH-145R 1-4.5GHz, 16dB noise figure, 4 digit LED readout, electronically tuned, otherwise same as TH-120

TH-240 2-4GHz, 18dB max noise figure, otherwise same as TH-120

TH-245 2-4.5GHz, 20dB max noise figure, otherwise same as TH-120

TH-245R-5 wideband version of TH-245, 50MHz @ -3dB, otherwise same

TH-480 4-8GHz, otherwise same as TH-240

TH-480R-5 wideband version of TH-480, 50MHz @ -3dB, otherwise same

TH-812 8-12GHz, otherwise same as TH-240

TH-812R-5 wideband version of TH-812, 50MHz @ -3dB, otherwise same

TH-1218R 12-18GHz, BW=50MHz @ -3dB, otherwise same as TH-240

TSU-103B tuner switching unit, works with 205, 205-2 or 215 Pan-Man receivers, manual selection of tuners, holds up to 3 tuners, part of RS-160, see RS-160 for details

TSU-160 tuner switching unit, works with 205, 205-2 or 215 Pan-Man receivers, manual selection of tuners, holds up to 7 tuners, part of RS-160, see RS-160 for details

UH-11 plug-in tuner, 250-500MHz, for 205, 205-2 or 215 receivers

UH-12 plug-in tuner, 0.5-1GHz, for 205, 205-2 or 215 receivers

UH-13 plug-in tuner, 220-440MHz, for 205, 205-2 or 215 receivers

UH-101 plug-in tuner for 565 series receivers, 235-500MHz

UH-102 plug-in tuner for 565 series receivers, 500-1000MHz

UH-104 plug-in tuner for 565 series receivers, 490-1000MHz

VDA-4 video distribution amplifier, four outputs, up to 20dB gain, meters four each output, 75ohm impedance, 1.5MHz bandwidth

VH-11 plug-in tuner, 30-60MHz, for 205, 205-2 or 215 receivers

VH-12 plug-in tuner, 60-120MHz, for 205, 205-2 or 215 receivers

VH-13 plug-in tuner, 100-180MHz, for 205, 205-2 or 215 receivers

VH-14 plug-in tuner, 180-300MHz, for 205, 205-2 or 215 receivers

VH-15 plug-in tuner, 20-40MHz, for 205, 205-2 or 215 receivers

VH-16 plug-in tuner, 40-80MHz, for 205, 205-2 or 215 receivers

VH-17 plug-in tuner, 50-100MHz, for 205, 205-2 or 215 receivers

VH-101 plug-in tuner for 565 series receivers, 20-90MHz

VH-103 plug-in tuner for 565 series receivers, 90-260MHz

VH-105 plug-in tuner for 565 series receivers, 200-425MHz

VH-107 plug-in tuner for 565 series receivers, 100-400MHz

VOR-1A voice operated relay, single channel unit, half rack

VOR-2 voice operated relay, twelve channel unit, audio or COR detection, recorder interface for end of tape indication, rack mount 5.25" high, modular

VOR-6 voice operated relay, 6 channel unit, individual delay and threshold controls, 20lbs, cost \$815 (1964)

WJ-1234 System interface unit, multi-functional, microprocessor-based operator/receiver interface, flexible command structure, 48 programmable scan strategies, 3000 emitter mode library file, 500MHz instantaneous bandwidth display.

WJ-8610A-1 Multiple receiver system control hub, up to 14 receivers and a variety of surveillance equipment, software programmable, can be remote controlled by computer

WJ-8610A-5 Similar to WJ-8610A-1 but adds ability to control tape recorders and other equipment

WJ-8610A-7 Similar to WJ-8610A-1 but designed to control demodulators like the WJ-9477 instead of receivers

WJ-8610A-10 Differences from WJ-8610A-1 unknown

WJ-8971A DF processor, interfaces with 21.4MHz wideband IF output, usable with receivers from 20MHz to 1GHz, pseudo-doppler operation using synchronised antenna commutation and signal handling circuitry, LED compass rosette and three digit LED bearing readout, IEEE-488 controllable, 3 degree accuracy, selectable integration times, requires special antenna: WJ-9872A, WJ-9880(-1), WJ-9871A or WJ-9873, rack mount 5.25" high

WJ-8971A mobile DF antenna for use with WJ-8971A or WJ-8975A, 20-235MHz and 150-1000MHz

WJ-8971A-5 DF processor, same as WJ-8971A except with multiple IF BWs, bearing offset correction and remote control of IF BWs and integration times

WJ-8971A-6 DF processor, same as WJ-8971A-5 except all functions are remote controllable through an IEEE-488 interface

WJ-8971A-7 DF processor, same as WJ-8971A except with IEEE-488 remote control interface

WJ-8971/AS DF antenna simulator, for alignment of WJ-8971A system

WJ-8972A fixed site DF antenna for use with WJ-8971A or WJ-8975A, 20-150MHz and 150-1000MHz

WJ-8973 ruggedized DF antenna for use with WJ-8971A or WJ-8975A, 20-235MHz and 150-1000MHz

WJ-8975A manpack DF processor, line of bearing information for signals in the 20-500MHz range, LED compass rosette and three digit LED bearing readout, battery powered (internal 10 D cell or magnesium BA-4386 pack) or vehicular supply, used with WJ8640-1 receiver, (mil C-11495/PRD-11)

WJ-8986/AU-3 DF antenna system, consists of 3,4 or 5 vertically polarized 15' monopoles spaced 14' apart, 2-30MHz, can be used with WJ-8986 with WJ-8986/AAU-1 option

WJ-8986/AU-5 triple interferometer DF antenna bay, 20-1200MHz, ruggedized, 12.7'h, 75lbs

WJ-8992 UHF psuedo doppler DF antenna, 500-1000MHz, used w/WJ-8990

WJ-9061 tuning head, drop-in, 20-90MHz, used in WJ-8730 series

WJ-9062 tuning head, drop-in, 90-300MHz, used in WJ-8730 series

WJ-9063 tuning head, drop-in, 200-425MHz, used in WJ-8730 series

WJ-9064 tuning head, drop-in, 250-500MHz, used in WJ-8730 series

WJ-9066 tuning head, drop-in, 30-90MHz, used in WJ-8730 series

WJ-9068 tuning head, drop-in, 490-1000MHz, used in WJ-8730 series

WJ-9150 tuner series, five units covering 1-18GHz, for use with the WJ-9450 demodulator/control unit

WJ-9203A speaker panel, 7 audio inputs, high-Z in, 5W output, half rack 3.5" high

WJ-9222 1.75" high version of FT-210

WJ-9222E 1.75" high version of FT-210E

WJ-9230 upconverter/demodulator for WJ-8640 (GRR-8), converts 0.5-30 MHz to 100.5-130 MHz, built into extra tall cover for the receiver

WJ-9240 1.75" high version of IFC-162

WJ-9290 microwave block downconverter, extends WJ-8609A-1 minicceptor to microwave range, tailored to specific communication bands, 10-14VDC, 4W, 0.75"h x 3.5"w x 6.0"d, 15oz

WJ-9310 antenna multicoupler, twelve outputs, 20-1000MHz, 2dB gain, noise figure: 6.5dB (20-300MHz); 8.5dB (300-1000MHz), used in RS-180 system

WJ-9311 antenna multicoupler, twelve outputs, 0.5-30MHz, 2dB gain, max noise figure 7dB

WJ-9314 antenna multicoupler, four outputs, 20-1100MHz

WJ-9315 antenna multicoupler, twelve outputs, 20-1100MHz, multiple antenna inputs

WJ-9395 tunable demod, 1-900kHz, AM/FM/SSB, five digit LED readout, DAFC, BWs: 2/4/8/16kHz (AM/FM); 1/2/4/6kHz (USB/LSB), portable packaging 10"w x 12"d x 4"h

WJ-9424 voice grade channel demodulator, up to 30 demods in single half rack case, demodulates VFT, modem & FAX voice grade signals, upgradeable through firmware, 3.5"h x 8.25"w x 22"d, 20lbs

WJ-9450 demodulator/control unit, 160MHz IF input, AM/FM/pulse, 5 digit LED frequency display, 3 independent IFDs w/ 6 BWs per IFD, AFC, works with WJ-9150 series tuners

WJ-9470 FSK/OOK demod system, handoff version of WJ-9472

WJ-9471 VFT FSK demodulator system, up to 24 independent demods, 200Hz-9.999kHz, phase-locked-loop demodulation, built-in diversity operation

WJ-9472 two channel FSK demodulator system, FSK or OOK, digital control to 1Hz of mark and space frequencies from 200-9999 kHz, multipole matched baud rate filters for 10-4000 baud

WJ-9477 precision tunable demodulator, AM/FM/SSB, 0.001-30MHz,

10Hz steps, provision for 9 BW filters (3kHz to 5MHz),  
microprocessor controlled

- WJ-9477G tunable demodulator, AM/FM (SSB opt), 0-31MHz, 10Hz steps, provision for 9 BW filters (3.2kHz-6MHz), microprocessor controlled, 3.5"h x 8.5"w x 21"d, 20lbs
- 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
- WJ-9518A FDM demodulator, six independent SSB demodulators tunable from 0-15MHz, local or IEEE-488 control, preprogrammed tuning for standard CCITT 960 or 2700 channels, scanning available in increments of 1kHz to 1MHz or discrete frequency tuning. Single control and readout for all six tuners. Rack mount 3U high (5-1/4")
- WJ-9518AE same as WJ-9518A except with delay equalized demodulators
- WJ-9518B FDM demodulator, six independent SSB demodulators tunable from 0-15MHz, local or IEEE-488 control, preprogrammed tuning for standard CCITT 960 or 2700 channels, scanning available in increments of 1kHz to 1MHz or discrete frequency tuning. Individual control and readout for each tuner. Rack mount 2U high (3-1/2")
- WJ-9525 FDM demodulator, consists of four /DU demodulator units, one /CU control unit and one /CRF controller rack frame
- WJ-9546 digital FDM demultiplexer, 6 channel tunable LSB/USB demods in a single half rack case, channels tune 0-20MHz in 1Hz steps, 2 analog baseband inputs, RS-232 remote control, 3.5"h x 8.25"w x 20"d
- WJ-9548 digital FDM demultiplexer, up to 24 tunable FDM channel demods in a single half rack case, channels tune 0-20MHz in 1Hz steps, 4 analog baseband inputs, 8 line by 40 char LCD display, 3.5"h x 8.25"w x 20"d, 20lbs
- WJ-9605 receiver front panel, provides local control for 1 or 2 WJ-8607 miniceptors, or remote control of WJ-8700 receiver, 3.5"h x 8.3"w x 3.1"d, 2.2lbs
- WJ-9607 multi-receiver front panel, provides for local control of up to 29 HPIL interfaced WJ-8607s, WJ-8609s or WJ-8809s, 3.5"h x 8.3"w x 4.4"d, 3.0lbs
- WJ-9644A receiver controller, can operate up to 32 WJ-8718 receivers through RS-232 interface
- WJ-9773-1 voice operated relay, two channels, rack mount 1.75" high

WJ-9773-2 voice operated relay, four channels, rack mount 1.75" high

WJ-9880 DF antenna, manpack, for use with WJ-8971A or WJ-8975A, 20-175MHz

WJ-9880-1 DF antenna, manpack, for use with WJ-8971A or WJ-8975A, 20-175MHz and 150-850MHz

WJ-9881 DF antenna, 20-512MHz, used w/WJ-8990 system

WJ-9886-1 DF antenna, 20-1000MHz, 2 bays of vertically polarized elements, used w/WJ-8986 system

WJ-9886-1A DF antenna, 20-2000MHz, 3 bays of vertically polarized elements, used w/WJ-8986 system

WJ-9886-2 DF antenna, 20-1200MHz, similar to WJ-9886-1 except in a smaller package, used w/WJ-8986 system

WJ-9902 equipment frame, houses 1 or 2 WJ-8706 or WJ-8609A miniceptors, intergral AC supply, optional host interface, can be fitted with WJ-9605 front panel, 3.5"h x 8.5"w x 20"d, 10lbs

WJ-9903E speaker panel, 7 audio inputs, high-Z in, 5W output, full rack 3.5" high

WJ-9908 equipment frame, houses up to 8 WJ-8706 or 8709A miniceptors, integral AC supply, optional host interface, 8.75"h x 19"w x 21"d, 20lbs

WJ-9930-10 IF amplifier w/ 10kHz BW and limiter discriminator, used in WJ-9028, WJ-8730 series and 565A

WJ-9930-20 same as WJ-9930-10 except 20kHz BW

WJ-9930-50 same as WJ-9930-10 except 50kHz BW

WJ-9930-100 same as WJ-9930-10 except 100kHz BW

WJ-9930-200 same as WJ-9930-10 except 200kHz BW

WJ-9930-300 same as WJ-9930-10 except 300kHz BW

WJ-9930-500 same as WJ-9930-10 except 500kHz BW

WJ-9930-1M same as WJ-9930-10 except 1MHz BW

WJ-9930-2M same as WJ-9930-10 except 2MHz BW

WJ-9930-3M same as WJ-9930-10 except 3MHz BW

WJ-9948 blower module, for cooling a rack, 3,6 or 9 blowers, rack mount 1.75" high

WJ-9949 speaker panel, five input, 1 watt output, half rack

WJ-9950 speaker panel, on/off switch, unamplified

WJ-9951 equipment frame, similar to EF-201

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Additions, corrections, suggestions to:

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