

WS1EC Kenwood D710 Channel Frequency List

	MHz	Offset	PL Tone	Channel Name	County	
1	449.225	-	103.5	WS1EC	Cumberland	Windham, ME – WSSM-ECT Primary UHF Repeater
2	146.880	-	100.0	KQ1L	Oxford	Buckfield, ME – Primary SKYWARN Repeater
3	147.045	+	103.5	GRAY	Cumberland	Gray, ME – Secondary SKYWARN Repeater
4	147.090	+	100.0	FALMTH	Cumberland	Falmouth, ME – WSSM-ECT Primary VHF Repeater
5	147.345	+	103.5	ALFRED	York	Alfred, ME – YORK County ARES Primary Repeater
6	146.580			ECT 1		SIMPLEX – WSSM-ECT Primary
7	146.595			SKYWRN		SIMPLEX – SKYWARN Primary, WSSM-ECT Secondary
8	147.585			ECT 3		SIMPLEX – WSSM-ECT Tertiary
9	146.415			CBL 1		SIMPLEX – ARES Cumberland Primary
10	146.430			WAL 1		SIMPLEX – ARES Waldo Primary
11	146.445			YRK 2		SIMPLEX – ARES York Secondary
12	146.460			AND 1		SIMPLEX – ARES Androscoggin Primary
13	146.490			SAG 1		SIMPLEX – ARES Sagadahoc Primary
14	146.505			OXF 3		SIMPLEX – ARES Oxford Tertiary
15	146.520			2MCALL		SIMPLEX – ARES Maine Statewide / 2m Calling
16	146.535			CBL 3		SIMPLEX – ARES Cumberland Tertiary
17	146.550			OXF 1		SIMPLEX – ARES Oxford Primary
18	146.565			SAG 3		SIMPLEX – ARES Sagadahoc Tertiary
19	146.580			ECT 1		SIMPLEX – WSSM-ECT Primary
20	146.595			ECT 2		SIMPLEX – SKYWARN Primary, WSSM-ECT Secondary
21	147.420			SOM 1		SIMPLEX – ARES Somerset Primary
22	147.435			OXF 2		SIMPLEX – ARES Oxford Secondary
23	147.495			MWV 1		SIMPLEX – ARES Mt. Washington Valley Primary
24	147.510			NHARES		SIMPLEX – ARES NH Statewide
25	147.525			CBL 2		SIMPLEX – ARES Cumberland Secondary
26	147.540			KNX 1		SIMPLEX – ARES Knox Primary
27	147.555			SAG 1		SIMPLEX – ARES Sagadahoc Secondary
28	147.570		100.0	YRK 1		SIMPLEX – ARES York Primary – NG1P Echolink
29	147.585			ECT 3		SIMPLEX – WSSM-ECT Tertiary
30	145.130	-	107.2	GLOUCS	Essex	Gloucester, MA
31	145.150	-	100.0	BOLTON	Chittenden	Bolton, VT
32	145.150	-	127.3	KENSGTN	Rockingham	Kensington, NH
33	145.210	-	156.7	YORK	York	Cornish, ME

34	145.230	-	88.5 TSQ	BOSTON	Suffolk	Boston, MA
35	145.230	-	88.5	BOSTON	Suffolk	Boston, MA
36	145.250	-	114.8	LKGEOR	Warren	Lake George, NY
37	145.250	-	100.0	WASHNY	Orange	Washingtonville, NY
38	145.290	-	100.0	WALES	Androscoggin	Wales, ME – W1PIG Link
39	145.370	-	136.5	GARDNR	Worcester	Gardner, MA (Rt. 2)
40	145.390	-	100.0	W1PIG	Franklin	Wilton, ME – W1PIG Link
41	145.410	-	103.5	ALFRED	York	Alfred, ME
42	145.450	-	100.0	CONWAY	Carroll	North Conway, NH – Mt. Washington Valley ARES
43	145.470	-	100.0	WARREN	Addison	Warren, VT
44	145.490	-	100	NADAMS	Berkshire	North Adams, MA
45	145.490	-	91.5	WASH	Knox	Washington, ME
46	146.610	-	88.5	AUBURN	Androscoggin	Auburn, ME – Androscoggin County ARES
47	146.640	-	103.5	OXFORD	Oxford	Woodstock, ME
48	146.655	-	100.0	MTWASH	Coos	Mt. Washington, NH – Mt. Washington Valley ARES
49	146.670	-	100.0	AUGSTA	Kennebec	Augusta, ME – KQ1L Link System
50	146.685	-	100.0	BEDFRD	Hillsborough	Bedford, NH
51	146.700	-	88.5	NORTHW	Rockingham	Northwood, NH
52	146.730	-	100.0	FALMTH	Cumberland	Falmouth, ME
53	146.745	-	100.0	JAY PK	Orleans	Jay Peak, VT – Kingdom Weather Net
54	146.760	-	100.0	GRAY	Cumberland	Gray, ME
55	146.760	-	110.9	ASCTNY	Windsor	Mt. Ascutney, VT
56	146.790	-	88.5	PITTSF	Merrimack	Pittsfield, NH – N1IMO Net
57	146.805	-	103.5	SANFRD	York	Sanford, ME
58	146.820	-	100.0	CAMDEN	Knox	Camden, ME – KQ1L Link System
59	146.835	-	103.5	NAPLES	Cumberland	Naples, ME
60	146.850	-	85.4	DERRY	Rockingham	Derry, NH
61	146.850	-	100.0	DIXMNT	Penobscot	Dixmont, ME – KQ1L Link System
62	146.865	-	88.5	ALTON	Belknap	Alton, NH
63	146.880	-	100.0	KQ1L	Oxford	Buckfield, ME – KQ1L Link System
64	146.880	-	110.9	KILGTN	Rutland	Killington, VT
65	146.895	-	103.5	LEEDS	Androscoggin	Leeds, ME
66	146.910	-	162.2	GREYLK	Berkshire	Mt. Greylock, MA - NoBARC
67	146.910	-	151.4	ELSWTH	Hancock	Ellsworth, ME
68	146.910	-	100.0	RUMFD	Oxford	Rumford, ME
69	146.925	-	103.5	ARUNDL	York	Arundel, ME
70	146.940	-		YARMTH	Cumberland	Yarmouth, ME

71	146.940	-	127.3	MTTOM	Hampden	Holyoke, MA
72	146.955	-	74.4	WESTFRD	Middlesex	Westford, MA
73	146.970	-	100.0	SUGRLF	Franklin	Sugarloaf Mt., ME
74	146.970	-	114.8	PAXTON	Worcester	Paxton, MA
75	146.985	-	100.0	WISCAS	Lincoln	Wiscasset, ME
76	146.985	-	123.0	GILFOR	Belknap	Gilford, NH – Central NH ARES Primary
77	147.000	-	100.0	DEERFL	Rockingham	Deerfield, NH
78	147.015	+	103.5	HIRAM	Oxford	Hiram, ME
79	147.030	+	88.5	OSSIPE	Carroll	Ossipee, NH
80	147.045	+	103.5	GRAY	Cumberland	Gray, ME – WSSM ECT Secondary
81	147.060	+	91.5	WASHTN	Knox	Washington, ME
82	147.090	+	100.0	FALMTH	Cumberland	Falmouth, ME – WSSM-ECT Primary
83	147.135	+	103.5	BRUNSW	Cumberland	Brunswick, ME
84	147.165	+		SALEM	Rockingham	Salem, NH
85	147.180	+	123.0	FARMNG	Franklin	Farmington, ME
86	147.180	+	131.8	SANFRD	York	Sanford, ME – KQ1L Link System
87	147.210	+	100.0	PHIPPS	Cumberland	Brunswick, ME
88	147.210	+	107.2	DERRY	Rockingham	Derry, NH
89	147.225	+	100.0	PEMBRK	Merrimack	Pembroke, NH
90	147.225	+	123.0	LVFALL	Androscoggin	Livermore Falls, ME
91	147.240	+	110.9	HOPE	Knox	Hope, ME
92	147.255	+	114.8	GARDNR	Kennebec	Gardiner, ME
93	147.255	+	123.0	MILFRD	Hillsborough	Milford, NH
94	147.270	+	136.5	KNOX	Waldo	Knox, ME
95	147.270	+	103.5	WESTBR	Cumberland	Westbrook, ME
96	147.300	+	88.5	FRANKL	Merrimack	Franklin, NH
97	147.315	+	103.5	POLAND	Androscoggin	Poland Spring, ME
98	147.315	+	110.9	WSTRLY	Washington	Westerly, RI
99	147.330	+	100.0	CUMBLD	Cumberland	Brunswick, ME
100	147.345	+	123.0	ALFRED	York	Alfred, ME – York County ARES Primary
101	147.360	+	100.0	PORTLD	Cumberland	Portland, ME
102	147.390	+	123.0	MOULTN	Carroll	Moultonborough, NH
103	446.000			CALL		SIMPLEX – ARES Maine Statewide
104	446.075			NHARES		SIMPLEX – ARES NH Statewide
105	446.500			ECT XB		SIMPLEX – WSSM-ECT Cross-band
106	449.225	-	103.5	WS1EC	Cumberland	Windham, ME – WSSM-ECT Primary UHF Repeater
107	441.700	+	100.0	WQ2H	Cheshire	Dublin, NH

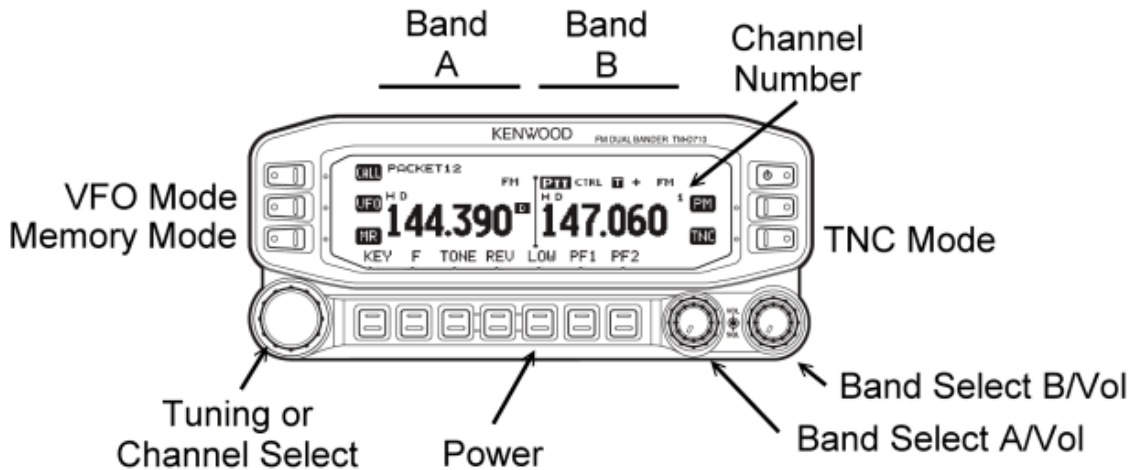
WSSM-ECT Frequencies for Kenwood D710

108	442.100	+	71.9	OSSIPE	Carroll	Ossipee, NH
109	442.200	+	82.5	HIRAM	Oxford	Hiram, ME
110	442.350	+	88.5	SUNAPE	Sullivan	Sunapee, NH
111	442.400	+	123.0	FARMNG	Franklin	Farmington, ME
112	443.200	+	88.5	KENTS	Kennebec	Kents Hill, ME
113	443.500	+	103.5	KNOX	Waldo	Knox, ME
114	443.650	+	131.8	PEMBRK	Merrimack	Pembroke, NH
115	444.050	+	88.5	ALTON	Belknap	Alton, NH
116	444.100	+	82.5	SCARBO	Cumberland	Scarborough, ME - OFF
117	444.400	+	88.5	TOPSHM	Cumberland	Brunswick, ME
118	444.600	+	82.5	WESTBR	Cumberland	Westbrook, ME
119	444.900	+	91.5	WASHTN	Knox	Washington, ME
120	444.950	+	146.2	WINDHAM	Cumberland	Windham, ME - Linked to 29.680
121	446.475	-	88.5	BARNST	Belknap	Center Barnstead, NH
122	447.775	-	123.0	W1JY	Belknap	Gilford, NH – W1JY Link System
123	447.825	-	88.5	DERRY	Rockingham	Derry, NH
124	448.225	-	88.5	MTWASH	Coos	Mt. Washington, NH
125	448.575	-	71.9	HIRAM	Oxford	Hiram, ME
126	448.675	-		BOW	Merrimack	Bow, NH
127	448.725	-	103.5	ALFRED	York	Alfred, ME
128	448.775	-	100.0	CONWAY	Carroll	North Conway, NH – W1MWV
129	448.975	-	141.3	MTWASH	Coos	Mt. Washington, NH
130	449.275	-	88.5	BELGRD	Kennebec	Belgrade Lakes, ME
131	449.425	-	162.2	MTGREY	Berkshire	Mt. Greylock, MA - NoBARC
132	449.450	-	123.0	DEERFL	Rockingham	Deerfield, NH
133	449.825	-	103.5	BIDDFRD	York	Biddeford, ME
134	151.820			MURS 1		MURS 1
135	151.880			MURS 2		MURS 2
136	151.940			MURS 3		MURS 3
137	154.570			BLUE D		Blue Dot
138	154.600			GREEN		Green Dot
139	156.450			MAR 9		Marine Channel 9
140	156.800			MAR 16		Marine Channel 16
141	144.390			APRS		APRS
142	144.390		100.0	APRS		APRS Voice Alert
143	445.925			APRS		APRS UHF
144	145.825			APRS		APRS ISS

145	462.5625			GMRS1		
146	462.5875			GMRS2		
147	462.6125			GMRS3		
148	462.6375			GMRS4		
149	462.6625			GMRS5		
150	462.6875			GMRS6		
151	462.7125			GMRS7		
152	467.5625			GMRS8		
153	467.5875			GMRS9		
154	467.6125			GMRS10		
155	467.6375			GMRS11		
156	467.6625			GMRS12		
157	467.6875			GMRS13		
158	467.7125			GMRS14		
159	462.5500			GMRS15		
160	462.5750			GMRS16		
161	462.6000			GMRS17		
162	462.6250			GMRS18		
163	462.6500			GMRS19		
164	462.6750			GMRS20		
165	462.700			GMRS21		
166	462.7250			GMRS22		
167	467.5500	-		GMRSR1		
168	467.5750	-		GMRSR2		
169	467.6000	-		GMRSR3		
170	467.6250	-		GMRSR4		
171	462.6500	-		GMRSR5		
172	467.6750	-		GMRSR6		
173	467.7000	-		GMRSR7		
174	467.7250	-		GMRSR8		
175	155.760		192.8	EM CALL		
176	155.100		173.8	EM T1		
177	155.640		173.8	EM T2		
178	155.685		173.8	EM T3		
179	155.955		173.8	EM T4		
180	155.370		173.8	EM T5		
181	151.1600	+	162.2	Gray		Repeater TX: 155.970

182	159.780		156.7	YCEMA CALL		
183	465.450	-	110.9	YCEMA		Repeater TX: 460.450
184	145.010			PACKET		
185	145.070			PACKET		

Quick Start Guide for TM-D710 WS1EC - CCEMA Radios



D710 Panel Showing the Default Configuration

General

The two sides of the display are termed Band A (left) and Band B (right). These have nothing to do with the frequency bands. The D710 is set up so that packet (SARTrack and RMS Express) work with Band A. Voice as well as data signals from the Signalink use Band B. This provides the ability to quickly move from voice to digital data (e.g. NBEMS) without having to make any adjustments. If packet is not being used, Band A can also be used for voice but not for data. The radio can listen on both bands simultaneously but can only transmit on one band at a time.

The Signalink cable connects to the data port at the back of the RF deck. This is the mini-DIN socket beside the power leads. There is another mini-DIN socket beside this one. This is only for programming the radio. The serial cable (PG-5G) for packet connects to the rear-left of the radio's control head.

The standard APRS frequency is 144.390. The 1200 baud Maine packet frequency is 145.010.

Pressing the round knob at the lower right of the control head sets the active voice channel. This places the PTT on Band B. This is the default position.

Pressing the TNC button activates the internal TNC. This is to the right of the screen. Repeated pressing will cycle through several other modes. If no mode display appears in the window, the TNC is disabled and Band A may be used for voice.

The following sections describe the most commonly used adjustments. When ever the radio is programmed to settings other than the default shown in the figure, the radio must be returned to the default settings prior to shut down.

Change Frequency Band

Press [F] [Band Sel]. Each cycle will make one step through the series of bands.

Select Tone Frequency

Turn on Tone function by pressing TONE. Each press will step through the tone modes.

Press [F] [TONE].

Rotate Tuning control to select correct tone frequency.

Press any control other than [F] or [ESC] to set the frequency

To escape the selection function press [F] [ESC]

Store in Memory

Set up in VFO mode

Press [F]

Rotate tuning control to select desired channel

Press [MR] to save

To enter the Menu mode, press [F] followed by pressing the Tuning Knob.

To change the frequency step size, first get into the band on which you want to change the step. press the left of right Band Select knob to select Band A or Band B, then press [VFO]. Enter the Menu mode and access Menu 101. Rotate the tuning knob to select the desired step.

Packet/APRS Set Up (Band A) – 1200 Baud

To activate the internal TNC, press the Band A Band Select Knob to make Band A active.

Press [TNC] until you see PACKET12 in the Band A display. This is 1200 baud packet. Enter VFO mode on Band A by pressing [VFO]. Set the frequency to 144.390 for APRS, 145.010 for the Maine packet frequency.

Data Operation (Band B): Sound Card Modes

When FIDigi or other sound card programs are used, the active Band will be Band B. This is set up as the default.

Frequencies

Please refer to the Maine ARES frequency guide for updated county Simplex frequencies.

WS1EC is assigned the following simplex frequencies:

Primary: 146.580

Secondary (shared with SKYWARN): 146.595

Tertiary: 147.585

Kenwood TH-D710A Digipeater Setup

WB2LUA - 4/19/11

Secondary Station Identifiers

- 0 Home station, or a home station running IGate.
- 1 Digipeater, home station running a relay Digipeater and/or WX Digipeater (I use this one WB2LUA-1)
- 2 Digipeater on 70 cm
- 3 Digipeater
- 4 HF to VHF gateway
- 5 IGate (not home station)
- 6 Operations via satellite
- 7 Handheld radios (Kenwood TH-D7, Yaesu VX-8R, ICOM D-Star, etc)
- 8 Boats, sailboats and ships (maybe 802.11 in the future)
- 9 Mobiles
- 10 APRS-IS only - APRS with no radio
- 11 APRStouch-tone users (and the occasional balloon)
- 12 Portable units such as laptops, camp sites, etc.
- 13 *Not defined*
- 14 Truckers
- 15 HF stations

To Enter the Menu

1. Press the [F] key
2. Press the Tuning button
3. Esc to return to normal mode

Enable Repeater Tone

1. Press [TONE] until the "T" icon appears
2. Press [F] [T.SEL] and rotate tuning control to select tone frequency

Memory Storage

1. Press [VFO] to enter VFO mode and select the frequency of 144.390 MHz.
2. Press [F] and a memory channel appears, rotate tuning control to select
3. Press [M.IN] to store in memory.

Cross Band Repeater Operation

1. Set the transceiver for dual band mode with 440 on the left and make sure the TNC is off
2. Enter Menu 403
3. Set to Cross Band
4. Turn transceiver off
5. Press [TONE] + [Power On], the PTT icon blinks
6. To return to normal operation, repeat step 5.

Setting Time

1. Enter menu 525 and set time
2. Enter menu 526 to set the time zone UTC Offset (New York: EDT=-4.00 hrs, EST=-5.00 hrs)

Monitoring Packets

Press [PMON] to monitor individual packets

Basic Settings

1. Enter menu 600 and enter your station call sign, eg: WB2LUA-1
2. Beacon type should be APRS in the USA.

Setting the Internal TNC

1. Enter menu 601 and set as follows:
 - Data Band: A-Band
 - Packet Transfer Rate: 1200 BPS
 - DCD Sense: D or RxD Band
 - Tx Delay: 200 ms

Setting GPS Port

1. Enter menu 602
2. If you don't have a GPS receiver or weather connected, set the input and output to OFF
If this is set to on, the My Position data will not be used.
3. To set for an external Byonics GPS:
 - Baud Rate: 4800
 - Input: GPS (the Kenwood manual has this backwards)
 - Output: Off

Setting Way Point

1. Enter menu 603
2. Format: NMEA
3. Name: 67-Char
4. Output: All

Com Port On/Off

1. Enter menu 604
2. Leave this off if not connected to a computer or have other output use .

Programming Position Data

1. Enter menu 605
2. Enter name such as WB2LUA-1
3. Enter Longitude
4. Enter Latitude

Set Beacons Information

1. Enter menu 606
2. Speed: On
3. Altitude: Off, unless you have a GPS receiver connected.
4. Position Ambiguity: Off, unless you want to suppress part of your coordinates.

Setting a Position Comment

1. Enter menu 607
2. Enter "In Service" or anything else you would like.

Setting Packet Filter

1. Enter menu 609
2. You can limit of distance of received packets if you are receiving too many packets from outside of your area.
3. You can also limit the types of stations received. In my area, we have weather stations as close as 1 mile apart. So, I suppressed receiving weather stations.

Selecting Your Station Icon

1. Enter menu 610
2. Select the icon that is appropriate for you station. In this case, select the Digipeater Star

Setting Beacon TX Algorithm

1. Enter menu 611
2. Packet Transmit Method: Auto
3. Initial Interval: 30 min

Programming a Packet Path

1. Enter menu 612
2. Type: *New-N Paradigm
3. Wide1-1: On
4. Total Hops: 2
5. Path is Via: Wide1-1, Wide2-1

Network

1. Enter menu 613
2. Select *APRS

Weather Station Data Output

1. Enter menu 515
2. TX: off or on if you have a weather station connected.
3. TX Interval: 30 minutes

Setting as a Digipeater (My Call)

1. Enter menu 616
2. Adds your call sign to the path if you are the first to receive the beacon
3. Digipeat: On

UICheck

1. Enter menu 617
2. Leave it set to the default 28 sec

UIDigi

1. Enter menu 618
2. Unidigi: On
3. Alias: Wide1-1

UIFlood

1. Enter menu 619
2. When activated, it keeps the beacons within a specified geographical area
3. I set mine to off

UITrace

1. Enter menu 620
2. To view special messages. I set mine to off

Setting Sound

1. Enter menu 624
2. If you don't want to hear beeps for each receive, switch RX Beep: Off

Enable APRS12 Beacons

1. Press [TNC] on the right side of the panel to enable APRS12
2. Press [Beacon] on the bottom of the screen
3. Decay Algorithm: On
4. Proportional Pathing: On

Setting Screen Brightness Level

1. Aux, Enter Menu 501
1. If the rig is on 24/7, set the brightness level to 1.

Be sure to set the squelch high enough to block the background noise, but not too high to block beacons.

Note: in an emergency, the airwaves may be so saturated with beacons, it may be difficult to impossible to track a vehicle. In this case, you may want to try an alternate frequency and UI View to track them.