

303-586-6510 | www.rtsystemsinc.com

WCS-2820 Programming Software for the Icom IC-2820

IC-2	820 Program	ner - IC-2820) Untitled1 *																			• ×
<u>F</u> ile	<u>E</u> dit <u>C</u> omm	unications	<u>S</u> ettings <u>D</u>	Star <u>W</u> ind	dow <u>H</u> elp																	
18	IC-2820 Unti	tled1 * ×																				
	Receive Frequency	Transmit Frequency	Offset Frequency	Offset Direction	Operating Mode	Name	Tone Mode	CTCSS	Rx CTCSS	DCS	DCS Polarity	Skip	Step	Digital Squelch	Digital Code	Your Callsign	Rpt-1 CallSign	Rpt-2 CallSign	Bank	Bank Channel Number	Com	nment
0	127.00	127.00000		Simplex	AM		None	88.5 Hz	88.5 Hz	023	Both N	Off	20 kHz	Off	0	CQCQCQ	e ano igri					>
1	146.01000	146.61000		+DUP	FM		None	88.5 Hz	88.5 Hz	023	Both N	Off	5 kHz	Off	0	CQCQCQ						
2	146.03500	146.63500	600 kHz	TOUP	FM		None	88.5 Hz	88.5 Hz	023	Both N	Off	5 kHz	Off	0							
3																					T	
4	375.00000	375.00000		Simplex	FM Narrow	_	None	88.5 Hz		M	emo	rv (Chai	nnel F	unct	tions				_		
5	375.01250 375.02500	375.01250 375.02500		Simplex	FM Narrow	-	None	98.5 Hz 88.5 Hz			cino				ance				-			
7	375.02500	375.02500				Ŧ		88.5 Hz					(left to	o right)								
8	375.05000	375.05000		Me	emory	lyp	es	88.5 Hz	Dee	airra	Frage			Chim								
9	010.00000	0.000000			(left to ri	ight)		00.0112	Rec	eive	Frequ	iency	у	Skip								
10	440.00000	445.00000	5.00 MHz		(ieit to fi	5110		88.5 Hz	Tron	cmit	Freq	uona		Stop								
11	440.01250	445.01250	5.00 MHz	Mem	ories			88.5 Hz	IIai	SIIII	Freq	uenc	, у	Step								
12	440.02500	445.02500		monn	101100			88.5 Hz	Offe	ot Er	equei			Digital	Saup	lch						
13	440.03750	445.03750	5.00 MHz	Limit	Memor	ies		88.5 Hz		etii	equei	icy		Digitai	Sque	ICH						
14									Offs	et Di	rectio	n		Digital	Code							
15	500.00000	500.00000		VFO.	A			88.5 Hz			locito			Digitui	oouc							
16 17	500.01250 500.02500	500.01250 500.02500			_			88.5 Hz 88.5 Hz	One	ratin	g Moo	le		Your C	allsig	n						
17	500.02500	500.02500		VFO	В			88.5 Hz	opo	iatiii	5 11100	10		rour c	anoibi							
19	500.05750	500.05750		0 11 0	~ .			88.5 Hz	Nan	ne				Rpt-1	Callsi	gn			-			
20	000.00000	000.00000		Call (Channel	S		00.0112								-						
21	900.00000	900.00000		0.00	N.4			88.5 Hz	Tone	e Mo	de			Rpt-2	Callsi	gn						
22	900.01250	900.01250		GPS	Memori	les		88.5 Hz								5						
23	900.02500	900.02500	l					88.5 Hz	CTC	SS				Bank								
24	900.03750	900.03750		Simplex	FM Narrow			88.5 Hz			~			-	~							
25	900.05000	900.05000		Simplex	FM Narrow		None	88.5 Hz	Rx(CICS	S			Bank	Chanr	nel Nu	mber					
26	900.06250	900.06250	/	Simplex	FM Narrow			88.5 Hz	DOG					~								
27	900.07500	900.07500		Simplex	FM Narrow	1 (0.00		88.5 Hz	DCS)				Comm	ents			-			<u> </u>	
• •	Memori Memori	es 🖉 Limit Mei	mories VFL	IA VEU B	Cail Channe	BIS GPS	Memories		DOC	Del	a utha a											►
_									DCS	POla	arity											

The WCS-2820 Programmer is designed to give you the ease and convenience of programming the memories and set menu options of your radio from your PC.

Memory Channels Include:

- 500 Memories with D-Star options*
- 20 Limit Memories (10 pair) with D-Star
- 7 VFO Channels (each A and B)
- 2 Call Channels with D-Star
- 100 GPS Memories

Other Menu Item Categories Include:

- Common
- DTMF

The Programmer Is for so Much More than Just Memory Management.

*Icom UT-123 required in radio for D-Star.

With the WCS-2820 Programmer you can begin a new "factory fresh" file into which frequencies and option settings are entered. Or, you can read from the radio, store these details on your computer and make changes. Then, with minimal button pushing, send the new configuration back to the radio.

The Programmer allows you to create and save as many files as you want for your radio. Files can even be shared between users via email or the Internet. Any RT Systems Version 4.50 program can open a file from any other RT Systems Version 4.50 programmer... even from a different radio.

Managing all the options of this great little radio becomes easy with the Programmer. The cut, copy, paste and insert features of the Programmer make channel management easier than ever.

Open more than one file at a time. Memory channel information can be copied from one file to another within the Programmer making it really easy to set up a new file.



Hardware Requirements:

A PC running Windows XP, Vista, Windows 7 (32 or 64 bit) or Windows 8 (desktop version). A CD drive (local or network) for installation. A free USB port. The RT Systems USB-29A or the USB-RTS05 interface cable. The USB-29A cable connects the radio to the computer from the USB port on the computer to the speaker jack on the radio. The USB-RTS05 cable connects to the data jack on the radio and can also be used for digital work with programs such as D-Rats.





WCS-2820 Programming Software **Memory Types**

IC-28	320 Progra	mmer - IC-282	0 Untitled1 *			-		1 . 1 .															
-		nmunications	<u>S</u> ettings <u>C</u>	OStar <u>W</u> ind	low <u>H</u> elp																		
× 1	IC-2820 U Scan	ntitled1 * × Receive	Transmit	Offset	Offset	Operating				Bx		DCS			Digital	Digital	Your	Bot-1	Bot-2		Bank Channel		
-	Names	Frequency	Frequency	Frequency	Direction	Mode	Name	Tone Mode	CTCSS	Rx CTCSS	DCS	DCS Polarity	Skip	Step	Digital Squelch		Your Callsign	Rpt-1 CallSign	Rpt-2 CallSign	Bank	Number		
OA DB	*	144.00000	144.00000		Simplex Simplex	FM FM		None 💌	88.5 Hz	88.5 Hz		Both N			Off					-	7		
1A		430.00009	430.00000		Simplex	FM		None	88.5 Hz	88.5 Hz		Both N		25 kHz	Off	0	CQCQCQ	_					
1B 2A		450.00000	450.00690	~	Simplex	C 14		Alama .	00.5.11-	00511-	1000	D-H-N	01.:-	or ullz	Off	0	CQCQCQ						
2A 2B					\sim		Lir	nit Me	emor	v Fui	nctio	ons			_								
3A									left to i						_								
3B 4A						<u> </u>				0													
4B						Scan I	vame	S	L	CS P	olarity	/											
5A 5B						Receiv	/e Fre	equency	S	ikip													
6A																							
6B						Iransr	nit Fr	equency	/ 5	tep													
7A 7B						Offset	Frea	uencv	Ľ	Digital	Saue	lch											
8A								-															
88 9A						Offset	Direc	tion	L)igital	Code												
98 98						Opera	ting N	/lode	Y	'our C	allsigi	า											
						Name																	
						Marrie			Г	(pt-1	Jansi	Su											
						Tone I	Node		F	(pt-2	Callsi	gn											
						CTCSS	3		E	Bank													
	Men	nories 🚽 Limit Ma	emories VEC	DA VED B	Call Char	Rx CT	CSS		E	Bank (Chanr	nel Nu	imbe	er 📙									
	, Mon	Link Int	Anones Tre		Con Cridi	DCS			C	comm	ents												

Limit Memories

Limit Memories are used by the radio for Program Scan. Program the same details for Limit Memories as for regular memory channels. Many of the Limit Memories are preprogrammed in the radio and while the frequency can be changed to another within the band, they cannot be left blank.

🔏 IC-2820 Untitled	d1* ×							
Frequency Fre 127 127.0006 12 136 136.00000 12 146 146.01000 14 222 222.00000 22 375 375.00000 3 440 440.00000 44	rammit Frequency 200000 s 36 00009 42 00000 0 75 00000 40 00000 00 00000	Simplex Simplex	Mode	• • • • • • • • • • • • • • • • • • •	igital Calisign Calision Calision Calision Calision Calico Caccoco cacco caco cac cac	I Rpk2 CallSign	Comment	

VFO A and VFO B

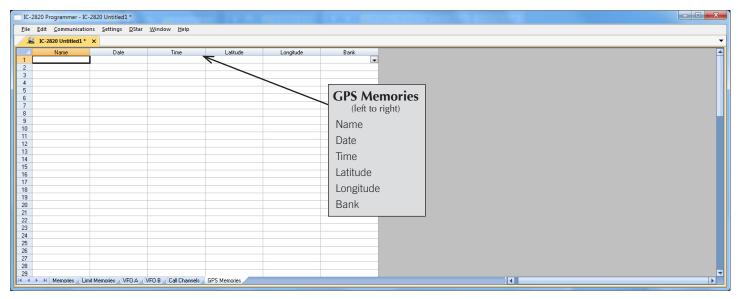
The program makes available the same VFO's as in the radio (usually one per band). Remember these are not real memory channels since the details are lost as soon as you tune the radio manually. There is no one button recall for these. You do not need to program into VFO before programming details into a memory channel. These channels are preprogrammed in the radio and while the frequency can be changed to another within the band, they cannot be left blank.



IC-2820 Programmer - IC-2820 Untitled1 * File Edit Communications Settings DStar Window Help						
LC-2820 Untitled1 * ×						
Receive Transmit Offset Difset Derating 0 146.07562 146.01000 Image: Simplex FM Image: Simplex FM 440.00000 439-4000 Simplex FM FM Image: Simplex FM	Name Tone Mode CTCSS Rx CTCSS None ■ 88.5 Hz 88.5 Hz 88.5 Hz	DCS DCS Polarity Step Digit Squel 023 ■ Both N 5 kHz Off	H Digital Your code Callsign	Rpt-1 Rpt-2 CallSign CallSign	Comment	
	Call Channel (left to rig					
	Receive Frequency	DCS				
	Transmit Frequency	DCS Polarity				
	Offset Frequency	Step				
	Offset Direction	Digital Squelch				
	Operating Mode	Digital Code				
	Name	Your Callsign				
	Tone Mode	Rpt-1 Callsign				
	CTCSS	Rpt-2 Callsign				
	Rx CTCSS	Comments				
	L					
Call Channels	GPS Memories					•

Call Channel

Home/Call channels are special memories accessed through one button recall on the radio. These channels are preprogrammed in the radio and while the frequency can be changed to another within the band, they cannot be left blank.



GPS Memory

Once stored in the radio during GPS operations, these channels are read from the radio with the other details.



Want to Know Even More?

For additional details and tips, click here for the comprehensive WCS-2820 Programmer Help File.



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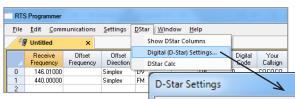
WCS-2820 Programming Software **D-Star Settings***

*Icom UT-123 required in radio for D-Star.

IC-2	2820 Program	mer - 2820 D	OStar																			• X
Eile	Edit Comm	unications	Settings I	DStar Window	w <u>H</u> elp																	
1	2820 DStar	×																				•
	Receive	Transmit	Offset	Offset	Operating				Du		DCC			Die	aut Di	- to the		Rpt-1	Rpt-2		Bank Channel	
		Frequency	Frequence		Mode	Name	Tone Mode	CTCSS	Rx CTCSS	DCS	DCS Polarity	Skip	Step	Digi Saue	al Dig alch Co		Your allsign	CallSign	CallSign	Bank	Number	
34	446 87500	440.87500			DV 👻	K2PUT B	None 👻	114.8 Hz 👻		023 🖵 B	loth N 🖵	Off 🖵 🤋	5 kHz	▼ Off	v 0	👻 CQI		K2PUT B		B: NY DStar	· ~	7
35	445.87500	440.87588	5.00 MHz	-DUP	DV	K2PUT BG	None	114.8 Hz	88.5 Hz	023 B	loth N	Skip 5	5 kHz	Off	0	CQ	CQCQ	K2PUT B	K2PUT G	B: NY DStar		8
36	445.87500	440.87500	5.00 MHz	DUP	DV	K2PUT BE	None	88.5 Hz	88.5 Hz	023 B	loth N	Skip 5	5 kHz	Off	0	K2F	PUTE	K2PUT B	K2PUT G	B: NY DStar		9
37	445.87500	440.87500	5.00 MHz	-DUP	DV_	K2PUT BI	None	114 0 Ша	00 E U -	022 B	loth N	Skin F	5 6 6 9	Off	0	K2F	PUTI	K2PUT 8	K2PUT G	B: NY DStar	1	0
38	448.18750	443.18750	5.00 MHz	-DUP	DV	PUT Uok					1.6				0	-	5	K2PUT B	K2PUT G	B: NY DStar	1	1
39	448.18750	443.18750	5.00 MHz	-DUP	DV	PUT R10C	N	лето	ry Ch	anne	l Fu	nctio	ons			REI	F010CL	K2PUT B	K2PUT G	B: NY DStar	1	2
40	448.18750	443.18750	5.00 MHz	-DUP	DV	PUT R20A				t to righ					0	REI	F020AL	K2PUT B	K2PUT G	B: NY DStar	1	3
41									(ici	t to figh	it)											
42	445.27500	440.27500	5.00 MHz	-DUP	DV	K2DIG B	Receive	Frequ	ency	Tx F	Powe	r			0	CQ	CQCQ	K2DIG B		B: NY DStar	1	4
43	445.27500	440.27500	5.00 MHz	-DUP	DV	K2DIG BG	Receive	ricqu	Chey	1/1	0000				0	CQ	CQCQ	K2DIG B	K2DIG G	B: NY DStar	1	5
44	445.27500	440.27500	5.00 MHz	-DUP	DV	K2DIG BE	Transm	it Freau	iency	Skir	า				0	K2E	DIGE	K2DIG B	K2DIG G	B: NY DStar	1	6
45	445.27500	440.27500	5.00 MHz	-DUP	DV	K2DIG BA	manorm	it i i oqi	aonoy	Onthe	<u> </u>				0	CQ	CQCQ	K2DIG B	K2DIG A	B: NY DStar	1	7
46	445.27500	440.27500	5.00 MHz	-DUP	DV	K2DIG BI	Offset F	requer	ICV	Step	n				0	KDI	DIG I	K2DIG B	K2DIG G	B: NY DStar	1	8
47	441.65000	446.65000	5.00 MHz	+DUP	DV	NJ2DG B	01100011	roquoi	109	otor	P				0	CQ	CQCQ	NJ2DG B		B: NY DStar	1	9
48	441.65000	446.65000	5.00 MHz	+DUP	DV	NJ2DG BG	Offset D	Directio	n	Digi	ital S	quelc	h		0	CQ	CQCQ	NJ2DG B	NJ2DG G	B: NY DStar	2	:0
49	441.65000	446.65000	5.00 MHz	+DUP	DV	NJ2DG BE	0001 2			8.		4			0	NJ2	2DG E	NJ2DG B	NJ2DG G	B: NY DStar	2	:1
50	441.65000	446.65000	5.00 MHz	+DUP	DV	NJ2DG BC	Operati	ng Mod	le	Digi	ital C	ode			0	CQ	CQCQ	NJ2DG B	NJ2DG C	B: NY DStar	2	2
51	441.65000	446.65000	5.00 MHz	+DUP	DV	NJ2DG BA	- 1			0					0	CQ	CQCQ	NJ2DG B	NJ2DG A	B: NY DStar	2	3
52	145.14000	144.54000	600 kHz	-DUP	DV	NJ2DG C	Name			You	r Cal	lsign			0	CQ	CQCQ	NJ2DG C		B: NY DStar	2	4
53	145.14000	144.54000	600 kHz	-DUP	DV	NJ2DG CG						0			0	CQ	CQCQ	NJ2DG C	NJ2DG G	B: NY DStar	2	5
54	145.14000	144.54000	600 kHz	-DUP	DV	NJ2DG CE	Tone M	ode		Rpt	-1 Ca	allsigr	1		0	NJ2	2DG E	NJ2DG C	NJ2DG G	B: NY DStar	2	6
55	145.14000	144.54000	600 kHz	-DUP	DV	NJ2DG CA						-			0	CQ	CQCQ	NJ2DG C	NJ2DG A	B: NY DStar	2	7
56	145.14000	144.54000	600 kHz	-DUP	DV	NJ2DG CB	CTCSS			Rpt	-2 Ca	allsigr	1		0	CQ	CQCQ	NJ2DG C	NJ2DG B	B: NY DStar	2	8
57	146.44500	147.44500	1.00 MHz	+DUP	DV	W2DGL C		~~				0			0	CQ	CQCQ	W2DGL C		B: NY DStar	2	9
58	146.44500	147.44500	1.00 MHz	+DUP	DV	W2DGL CG	Rx CTC	SS		Ban	۱k				0	CQ	CQCQ	W2DGL C	W2DGL G	B: NY DStar	3	0
59	146.44500	147.44500	1.00 MHz	+DUP	DV	W2DGL CE	DOO			-					0	W2	DGLE	W2DGL C	W2DGL G	B: NY DStar	3	1 🔽
14 4	Memori Memori	ies 🖉 Limit Me	emories / VFI	O A VFO B	Call Channels	GPS Memo	DCS			Ban	ik Ch	annel	Nun	nber								
							DCS Po	larity		Con	nmer	nts										

Memories and D-Star Columns

The IC-2820 handles D-Star and FM memories in the general memories. It is here in the Programmer that the D-Star specifics for each channel are found. The D-Star columns become active once Operating Mode is set to DV.



D-Star Settings

Set "My Callsign" to your FCC issued callsign.

The lists of Your Callsigns and Rpt Callsigns are just storage. The callsigns used during a transmission are programmed in the memory channel. These lists are available to make a selection from; however, the callsign does not need to be entered here first.

Tx messages, name/location/equipment details, etc., scroll on the radio receiving your call.

	🔽 Autor	natically in:	sert calls	igns entered in mer	nory c	hannels						
	My Callsigns	Note	- 4	Your Callsigns		- 4	Rpt Callsigns					
M01	N2FMC	2820	U01	K2DIG E		R01	K2DIG A	_				
M02	N2FMC		U02	NJ2DG E		R02	K2DIG B					
M03			U03	K2KJI E		R03	K2DIG G					
M04			U04	KDDIG I		R04	NJ2DG A					
M05			U05	K2PUT		R05	NJ2DG B					
M06			U06	K2PUT E		R06	NJ2DG C					
Selecte	Selected My Callsign U07 B08 W2DGL A											
M01	MOT N2FMC72820 + 600											
D-PH												
	Use Calc U11 AA1HD E R11 WK3SS B											
	Tx	D		Tx Messag	je							
1	At Home	Road Agai	n									
2												
3	In Servic											
4												
5		⊇WECA.or	-									
GPS	MV UN	ROAD AG	AIN^7A									
OK Cancel												



D-Star Calculator Advanced

dvanced DSTAR Calculator Source Source Source Repeater Country United States State Colorado City Broomfield Callsign KD0LUX Callsign KD0LUX Frequency 146.55000 Frequency 146.55000 Frequency 147.3750 +0.6000 Frequency 147.3750 +0.6000	Destination Name Talk KDOLUX T Echo KDOLUX E Status KDOLUX I UIIInk KDOLUX U Repeater Channel Name Callsign Location (City) Callsign Routing	Link to Repeaters Artica Asia Asia Asia Canada Europe Central Europe Eastern Europe North-West Europe Northern Europe Southern Europe Western Europe Western Europe Western Europe Western Europe Kaska New Zealand USA Northeast USA Southeast USA Northeast USA Northeast </th
RPT1 (Source) RPT2 (Destination) KDOLUX C KDOLUX G		Starting Channel Number 0 🗸 AutoIncrement Apply Close

Source and Destination:

The D-STAR Calculator automatically sets up the Talk, Echo, Info and Unlink channels for your "Source" repeater. The "Source" is the repeater you access to begin your adventures. Just like with analog repeaters, you must be able to hit the "Source" repeater.

Talk - the CQ channel for talking with others.

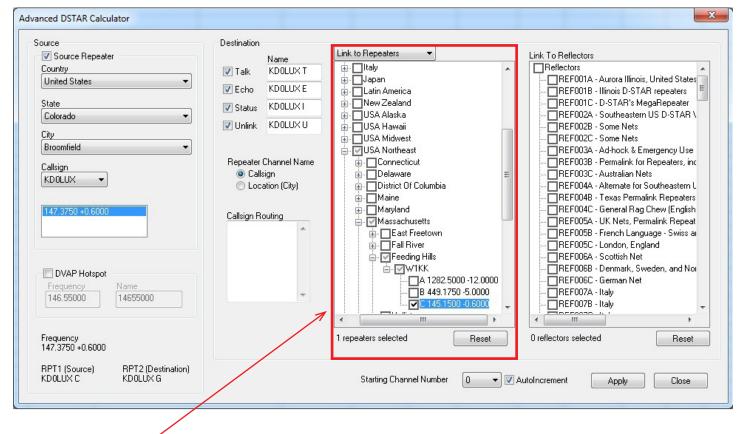
Echo - a test function that repeats your transmission back to you. Good for letting you know that you are, or are not, hitting the repeater.

Info - The function that triggers a status response from the repeater (i.e. linked to "where"... not linked)

Unlink - Disconnects the current link of the repeater (where allowed). More widely used to disconnect a link you establish. Remember... if you link, it's always polite to unlink (hang up the phone) when you're done unless someone has joined you locally. Then you might leave it to them to unlink.

The calculator sets up the same channels for a DVAP hotspot. You enter your frequency only once.

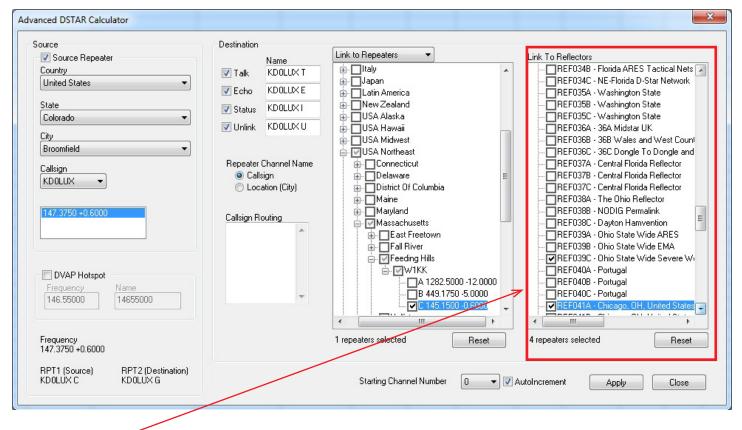




Route/Link to Repeaters: -

Now that you identified your "Source", let's set up your Destination. In D-STAR you can Link to Repeaters or Route to Repeaters. To set up channels that link or route, use the drop down at the top of the first tree to select your function, then select your repeaters by checking a country, region, state, city or individual repeater. A counter below the list keeps track of how many you have selected.





Link to Reflectors:

For even more fun, and a great way for a beginner to get started, Link to Reflectors. D-STAR reflectors are a special type of Internet connected gateway that rebroadcasts each signal to all the other linked nodes or repeaters. Remember... EVERYBODY is listening... but that's what makes it fun. You have a whole world to talk to through your local repeater, "Source", linked to a reflector. To set up a channel that links your repeater to a reflector, check the box for that reflector in the Link to Reflector tree.

Click **Apply** once to set up all these channels for the radio.



1 440.00000 440.00000 Simplex PM None 98.5 Hz 88.5 Hz 023 Both N Off 25 2 - <td< th=""><th>SkHz M 25 kHz M 5 kHz 0ff 5 kHz 0ff</th><th>Squelch C</th><th>COCOCO E I U WIKK CL</th><th>Rpt-1 CallSign KD0LUX C KD0LUX C KD0LUX C KD0LUX C KD0LUX C</th><th>KDOLUX G KDOLUX G KDOLUX G KDOLUX G</th><th>Bank</th><th>Bank Chann, Number</th></td<>	SkHz M 25 kHz M 5 kHz 0ff 5 kHz 0ff	Squelch C	COCOCO E I U WIKK CL	Rpt-1 CallSign KD0LUX C KD0LUX C KD0LUX C KD0LUX C KD0LUX C	KDOLUX G KDOLUX G KDOLUX G KDOLUX G	Bank	Bank Chann, Number
1 440.00000 440.00000 Simplex FM None 88.5 Hz 88.5 Hz 0.23 Both N Off 25 2 - <t< th=""><th>25 kHz Off 5 kHz Off</th><th>Cff 0 Off 0 Off 0 Off 0 Off 0 Off 0 Off 0</th><th>Cacaca E I U WIKK CL</th><th>KDOLUXIC KDOLUXIC KDOLUXIC</th><th>KDOLUX G KDOLUX G KDOLUX G</th><th></th><th></th></t<>	25 kHz Off 5 kHz Off	Cff 0 Off 0 Off 0 Off 0 Off 0 Off 0 Off 0	Cacaca E I U WIKK CL	KDOLUXIC KDOLUXIC KDOLUXIC	KDOLUX G KDOLUX G KDOLUX G		
2 3 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4	5 kHz Off 5 kHz Off	Off 0 Off 0	E I U W1KK CL	KDOLUXIC KDOLUXIC KDOLUXIC	KDOLUX G KDOLUX G KDOLUX G		
3	5 kHz Off	Off 0 Off 0	E I U W1KK CL	KDOLUXIC KDOLUXIC KDOLUXIC	KDOLUX G KDOLUX G KDOLUX G		
I I	5 kHz Off	Off 0 Off 0	E I U W1KK CL	KDOLUXIC KDOLUXIC KDOLUXIC	KDOLUX G KDOLUX G KDOLUX G		
5 147.37500 147.97	5 kHz Off	Off 0 Off 0	E I U W1KK CL	KDOLUXIC KDOLUXIC KDOLUXIC	KDOLUX G KDOLUX G KDOLUX G		
i 147.37500 147.97500 (500 kHz +DUP DV KD0LLXE None 94.8 Hz 94.8 Hz 023 Boh N Off 5 k 147.37500 147.97500 (500 kHz +DUP DV KD0LLXI None 94.8 Hz 94.8 Hz 023 Boh N Off 5 k 147.37500 147.97500 (500 kHz +DUP DV KD0LLXI None 94.8 Hz 94.8 Hz 023 Boh N Off 5 k 147.37500 147.97500 (500 kHz +DUP DV WKR CL None 94.8 Hz 94.8 Hz 023 Boh N Off 5 k 147.37500 147.97500 (500 kHz +DUP DV PKEP05CL None 94.8 Hz 94.8 Hz 023 Boh N Off 5 k 147.37500 147.97500 (500 kHz +DUP DV REF005CL None 94.8 Hz 94.8 Hz 023 Boh N Off 5 k 147.37500 147.97500 (600 kHz +DUP DV REF003CL None 94.8 Hz<	5 kHz Off	Off 0 Off 0	E I U W1KK CL	KDOLUXIC KDOLUXIC KDOLUXIC	KDOLUX G KDOLUX G KDOLUX G		
1 1	5 kHz Off	0ff 0 0ff 0 0ff 0 0ff 0 0ff 0	U W1KK CL	KDOLUXIC KDOLUXIC	KDOLUX G KDOLUX G		
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13 147.37500 147.37500 600 kHz +DUP DV REF041AL None 94.8 Hz 94.8 Hz 0.23 Both N Off \$ 4 -				KD0LUX C	KD0LUX G		
4				KD0LUX C	KD0LUX G		
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9 O O O O O O O O O O O O O O O O O O O							
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	-						

The resulting channels are set up and ready to go.

Your callsign, Rpt 1 Callsign and Rpt 2 Callsign are set automatically... No wondering which suffix goes where, or if it is positioned correctly. That is all done for you.

Name can be edited here to better identify the station. Name is what you see on the radio. It is not part of the D-STAR commands for use of the system. It may be all you have to identify the function of a channel. (Notice the frequency is the same for ALL these channels although they each do something different on the D-STAR network.) Make the Name something you understand.

Note: Be sure to turn ON the name display for the radio to use what you enter in the name field.

e <u>T</u> abs <u>H</u> elp						
mmon DTMF						
	Common	ı (F1		F2	
Set Mode						
ALC	Г		Г		Г	
Auto Power Off	Off	-	Off	-	Off	-
Auto Attenuator			₹	_		
Auto Repeater	Rpt1	-	Rpt1	-	Rpt1	-
Busy Channel Lockout						
Diversity		1				
Fan Control	Auto	-	Auto	-	Auto	-
Packet Band	Main	-	Main	-	Main	+ + +
Packet Baudrate	1200	• • •	1200	• • •	1200	-
Squeich Delay	Short	-	Short	-	Short	•
Time Out Timer	Off	-	Off	-	Off	-
Display						
Auto Dimmer	Off	-	Off	-	Off	-
Backlight	0	-	0	▼ ▼	0	-
Channel Name Ma	mory Name		Frequency	• •	Frequency	• • •
Dimmer Of			8 : Bright	-	8 : Bright	-
LCD Contrast	equency		6	-	6	•
Opening Logo	emory Name		V		~	
Scan Name	V		V		v	
Language	English	-	English	-	English	-
Sounds						
Beep Level	9	-	9	•	9	•
Key Touch Beep	•		v	_	•	
Scope AF Output	7		7		7	
Sub Band Beep	Г		Г		Г	
Sub Band Mute						
vic Function						
Mic Sensitivity Level	Low	-	Low	-	Low	-

To Use these Settings for D-STAR Fun:

• Save and send the file to the radio.

- Listen on the talk channel.
- Be sure your call sign is registered on the system.
- Check repeater status on info channel.
- Check your connection to repeater on Echo channel.
- Link repeater to a connection of your choice.
- Talk on Talk channel.



<u>T</u> abs <u>H</u> elp						
mmon DTMF	Common	_	F1		F2	
Set Mode						
ALC Auto Power Off	Off		Off	-	Off	_
Auto Attenuator		-		-		•
Auto Repeater	Rpt1	-	Rpt1	-	Rpt1	-
Busy Channel Lockout		_		_		_
Diversity						
Fan Control	Auto	-	Auto	-	Auto	-
Packet Band	Main	-	Main	-	Main	-
Packet Baudrate	1200	-	1200	-	1200	-
Squeich Delay	Short	-	Short	-	Short	-
Time Out Timer	Off	•	Off	•	Off	-
)isplay						
Auto Dimmer	Off	-	Off	-	Off	-
Backlight	0	-		-		-
Channel Name	Frequency	-	Frequency	-	Frequency	-
Dimmer LCD Contrast	8 : Bright 6	- -	8 : Bright 6	<u>_</u>	8 : Bright 6	-
	•	_	•	_	•	_
Opening Logo	V V				~	
Scan Name Language	English	-	English	-	English	-
	English	-	English	<u> </u>	English	-
Gounds	0		0	- 1	0	T
Beep Level	9	-	9	-	9	•
Key Touch Beep	V V		V V		V V	
Scope AF Output Sub Band Beep	, C					
Sub Band Mute		-		-		
Aic Function	I		I		1	
Mic Sensitivity Level	Low	-	Low	-	Low	-
PTT Lock	LOW	_	LOW	_	LOW	•
Mic Up	Mic Up	-	Mic Up	-	Mic Up	-1
Mic Op Mic Down	Mic Down	-	Mic Down	-	Mic Down	• •
eft Band Settings	MIC DOWN	-	MIC DOWN	-	MIC DOWN	-
Scan Edge	All	•	All	*	All	-
Scan Euge Scan Timer	T-15	-	T-15		T-15	÷
Program Skip Scan	V 10	-	V		I-15	_
RF Power	High	-	High	-	High	-
Weather Alert						<u> </u>
Weather Channel	0	-	0	-	0	-
Right Band Settings						_
Scan Edge	All	•	Al	-	A	Ŧ
Scan Eage Scan Timer	T-15	-	T-15	-	T-15	•
Program Skip Scan	V					
RF Power	High	-	High	-	High	-
Weather Alert		_		_		
Weather Channel	0	-	0	-	0	-
)igital Settings (requi	ires UT-123)					
Auto Replay	Off	-	Off	-	Off	-
Callsign Edit Record	Auto	-	Auto	-	Auto	-
DV Data Tx	PTT	-	PTT	-	PTT	-
DV Mode Auto Detect	_		Г			
DV MODE AUTO D'ELECT						
DV Wolce Track Size	15 Sec / 2 Track	-	15 Sec / 2 Track	-	15 Sec / 2 Track	-
	15 Sec / 2 Track Auto	- -	15 Sec / 2 Track Auto	• •		• •
DV Voice Track Size Digital Monitor Digital Repeater Set	Auto	-	Auto	•	15 Sec / 2 Track Auto	_
DV Voice Track Size Digital Monitor Digital Repeater Set GPS Auto Tx Timer	Auto Off		Auto Off		15 Sec / 2 Track Auto Off	_
DV Voice Track Size Digital Monitor Digital Repeater Set GPS Auto Tx Timer GPS Sentence Formatter	Auto	-	Auto	•	15 Sec / 2 Track Auto	◄
DV Voice Track Size Digital Monitor Digital Repeater Set GPS Auto Tx Timer GPS Sentence Formatter GPS Data	Auto Off GGA	• •	Auto Off GGA	•	15 Sec / 2 Track Auto Off GGA	•
DV Voice Track Size Digital Monitor Digital Repeater Set GPS Auto Tx Timer GPS Sentence Formatter GPS Data GPS Tx	Auto Off GGA Disable	-	Auto Off	•	15 Sec / 2 Track Auto Off GGA Disable	◄
DV Voice Track Size Digital Monitor Digital Repeater Set GPS Auto Tx Timer GPS Data GPS Data GPS Tx Opening Callsign	Auto Off GGA	• •	Auto Off GGA	•	15 Sec / 2 Track Auto Off GGA	•
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WCS-2820 Programming Software **Radio Option Setting Screens**

Common, F1 Common and F2 Common

Use these screens to customize other set menu features of the radio. Check boxes toggle features on or off, drop down menus list all selections and blank boxes for personalized entry add to the ease of setting up your radio exactly like you want it.

The entries on the Settings screens are made for you to "Set and Forget". Once settings are customized, you are prompted to save before exiting. The saved settings will be there every time you create a new frequency file.

Menu Settings for IC-2820	- Untitled.rsf		×
<u>F</u> ile <u>T</u> abs <u>H</u> elp			
Common DTMF			
	DTMF		
1			
2			
3		Speed	
5		Common 100 ms - F1 100 ms -	
6		F2 100 ms	
7			
8			
9			
10			
12			
13			
14			
15			
16]	

DTMF

Enter DTMF memory details and customize options for this function of the radio.



Bank Na	ames and Linking							
								1
	Bank	Left	Right	Left	Right	Left	Right	1
	Name	Lor	mon	F	V	- F.	2	
A	NY DStar		V		v		V	
B	NJ DStar	V	V	V	V	V	v V	Active Bank Selection
	CT DStar	V	V	V	V	V	v V	Common
E	PA DStar		V	V	V	V	v V	
F	DSIMPLEX	V	V	V	V	V	v V	Left All memories 🔻
G	Analog	v	V	V	V		v V	Right All memories 🔻
H	Chulog	v	v		V		v	
		V	V		v		v	
J		V	V		v		v	_F1
ĸ		V	V		V	V	V	Left All memories 🔻
L		V	V	V	V	V	V	
M		1	V		V	V	V	Right All memories 🔻
N		V	V		V	V	V	
0		1	V		V	V	1	F2
P		V	V	V	V	V	V	
Q		V	V	V	V	V	v	Left All memories 🔻
B		V	V	V	V	V	V	Right All memories 🔻
S		1	V	V	1	V	V	
T		1	V	V	V	V	V	L
U		V	V	V	V	V	V	
V		V	V	V	V	V	1	
W		V	V	V	V	V	1	
X	FM RPTR	V	V	V	V	V	V	
Y		V	V	V	V	V	V	
Z	EMS	V	V	V	V	V	V	
	Band Link Scan							
				ОК	Ca	ancel		

Bank Names and Linking

Set up Name for bank selection on radio, scanning links, and Active Bank. Use F1 and F2 for different configurations for separate activities.



WCS-2820 Programming Software **Preferences – Version 4.50**

Grid Display Memory Defaults Font	Other	
Freeze 1 📩	Mark the columns to	
	Column	Hide 📤
Alternate row	Transmit Frequency	
Alternate row	Offset Frequency	
	Offset Direction	
1 Row 1 2 Row 2	Name	
	Tone Mode	
	CTCSS	
4 Row 4	Rx CTCSS	
Fore Back	DCS	
	TxPower	
	Busy Channel Lockout	
Use Combo for Check box	Skip	
	Clock Shift	
Language:	Battery Save	
	Comment	
English 👻		
		T
	ОК	Cancel Apply

Grid Display

- RT Systems now available in English, French, German, Italian, Spanish, Portuguese and Japanese.
- Set colors for text (Fore) or background (Back) of alternate rows for easier viewing across the columns.
- Freeze columns to keep information on the screen as you scroll to the right of the page.
- Hide columns you don't use. Customize your printout: hidden columns do not print.
- Use Combo for Check boxes changes the grid to eliminate check box selections that are disabled on some systems.

Preferences			
Grid Display Memory Defaults Font Other			
	Offset Freque	ency Defaults	
Open last file when starting programmer.	HF	100 kHz 👻	
Check ShowName Automatically Convert Split offsets to standand Plus or	6m	500 kHz 🗸	
Minus when avaliable.	2m	600 kHz 👻	
Disable CTCSS, DCS and other Tone columns according to the Tone Mode	1.25m	1.60 MHz 🗸	
selection.	70cm	5.00 MHz 👻	
Add and Remove Offsets			S
Offset Pick an offset frequence remove to delete it from			
1 100 kHz	in the list		
2 500 kHz Remove			
3 600 KHz To add an offset 4 1.00 MHz double click "END OF LIST."			
	LIST."		
	ОК	Cancel	Apply

Memory Defaults

• Set options to control auto fill information for memory channel entries.



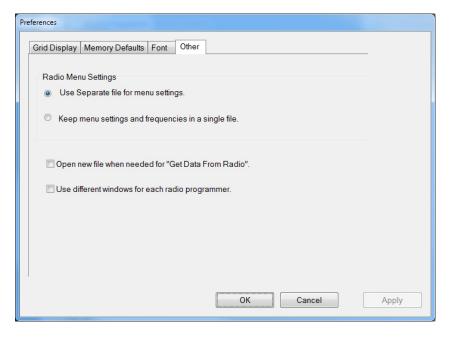
Preferences	and the second
Grid Display N	Memory Defaults Font Other
MS Se MS UI T MT Ex O MV Bo O Mvriac O Mvriac O Mvriac O Mvriac O Nvriac	ans Serif erif I Gothic ktra oli d Pro d Pro Cond d Pro Cond d Pro Linht d Web Pro sim ara Enoraved ara Solid
	OK Cancel Apply

Font

• Set options to control the font in the column headers of the channel entry screens. Select any font and font size available on your computer.

Other

- Set options to control how the programmer handles the global Radio Menu Settings file.
 - Separate (default) handles the global settings of the radio in a "set and forget" fashion. Once you set these up and save the file you won't have to reset them for a new frequency file.
 - Together as one gives you the ability to create files that are complete with frequencies and customized global settings. In this mode, each file begins with factory defaults for every option of the radio.
- Check "Get data from Radio" new file option to prevent data loss when you read from your radio into the programmer.
- Check "different window" option to make the programmer for a different radio run in completely separate window rather than in a separate tab of the same window.





Click here to learn more about using Preferences to customize your radio programming experience.