

Charlestown Amateur Radio Club

April 11, 2023 Meeting

Ham Radio Office (HRO)

- Proposal for to re-establish use of HRO has been emailed to all
- All comments received thus far are positive
- Goal:
 - Clear space within the existing Ham Radio Office to accommodate two 100-watt high frequency (HF) transceivers and ancillary equipment (power supplies, antenna tuners and antenna switch);
 - Install multiband high frequency HF wire antenna on the roof of the Edgewood building;
 - Run needed coax cable between antenna and Ham Radio Office

Ham Radio Office

- Chance meeting with Kevin Crawford, Charlestown Maintenance Manager
- Is aware of potential conduits to run coax from roof to HRO but unsure of termination on the roof
- We looked at old elevator machinery room in Edgewood building for possible conduit
- He agreed to get key from HRO from Security so that we can look inside to determine whether conduit exists but he has not gotten back to me to schedule time to do so

Call with Ann's Choice Amateur Radio Club

- Erickson property in Warminster PA
- Spoke to Vince Pesacane
- Have about six members, some not interested in HF station
- Three antennas
 - 80 m dipole in attic
 - VHF/UHF vertical
 - Hygain AV-640 vertical non-working
 - Three radios: VHF, 10M, 80M
- Their issues:
 - No one allowed on roof or in attic
 - Required to obtain licensed and insured contractors

Grant Opportunity

- Provided to Charlestown clubs
- Emily Fowler in Philanthropy is POC
- Grant must benefit community
- Need to follow up to grant requirements and assess applicability to CARC – Volunteer to follow up?

Programming Your Hand Held Radio

Programming your handheld radio

- In order to communicate with your handheld radio, you need to tell it where to listen and transmit including:
 - Frequencies
 - CTCSS tones
 - Talkgroups for digital
- What you need:
 - Handheld radio
 - Programming cable
 - Computer
 - Programming software

Programming your handheld radio

- While most radios can be programmed from the front panel, its generally easier to use a computer to do so
- Many analog radios can be programmed with CHIRP, digital radios generally need proprietary software for programming
- Most programming software is written in Windows but CHIRP is also available for Mac and Linux
- QDMR is written for MacOS and can be used to program digital radios
- While various programming software is available, the programs are similar in use

CHIRP

CHIRP

Home Download Documentation Activity Roadmap Issues Repository

CHIRP is a free, open-source tool for programming your radio. It supports a large number of manufacturers and models, as well as provides a way to interface with multiple data sources and formats.

get it!

To get started:

1. Download CHIRP for your platform
2. Check out the "How to get help" page, and the rest of the Documentation.
3. Join the mailing list!
4. Be sure to review the FAQ.

In case you run into a problem with CHIRP:

1. Before you open a new ticket, please consult the Documentation.
2. Also, please perform a search through all open and closed issues. Maybe someone else had the same problem before, and a solution is already available.
3. If your problem is about how to use CHIRP with an already supported radio, then you should ask that question in the mailing list.
4. Once you have looked through the Wiki and searched all open/closed issues, you can open a new ticket (did you ask on the mailing list?). There, you may file a bug report, request a new feature, or request the implementation of a new radio. Please be detailed and follow the instructions in "How To Report Issues".

If you are a vendor and want to have your radio supported by CHIRP, please see [InformationForVendors](#)

Supported Radio Models

Abbree <ul style="list-style-type: none">• AR-518• AR-63• AR-F3 (use Baofeng UV-82III)• AR-F8 (use Wouxun KG-UV8D)	Baojie <ul style="list-style-type: none">• BJ-218• BJ-318• BJ-9900*• BJ-UV55*	LUITON <ul style="list-style-type: none">• LT-316• LT-580_UHF• LT-580_VHF• LT-588UV	TXQ <ul style="list-style-type: none">• G63 (use Abbree AR-63)
			TYT <ul style="list-style-type: none">• Q87-1 (use Explorer Q87-1)

Ad served by Google

Ad options Send feedback Why this ad? ↗

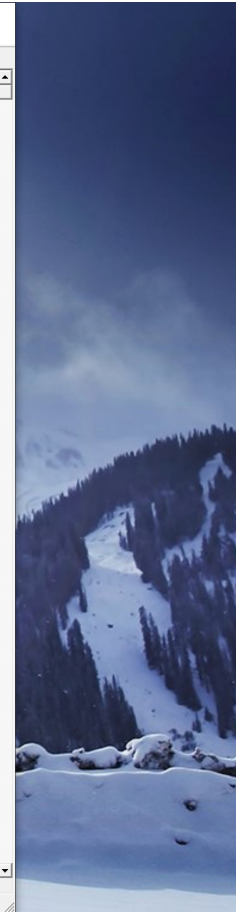
Anytone CPS

D868UVE[D868UVEUHF(400 - 480 MHz) VHF(136 - 174 MHz)][\MacHome\Desktop\KO3F.rdt]

File Model Set Program Tool View Help

No.	Receive Frequency	Transmit Frequency	Channel Type	Power	Band Width	TCSS/DC Decode	TCSS/DC Encode	Channel Name	Contact	Radio ID	Optional Signal
1	434.00000	439.00000	D-Digital	Low	12.5K	Off	Off	MS MD	MD 3124	KO3F	
2	147.07500	147.67500	A-Analog	Turbo	25K	Off	107.2	W3VPR-CB	TAC 310	KO3F	
3	146.80500	146.20500	A-Analog	Turbo	25K	Off	107.2	W3CU	TAC 310	KO3F	
4	434.00000	439.00000	D-Digital	Low	12.5K	Off	Off	Dscnctt Slt 1	Disconnect	KO3F	
5	434.00000	439.00000	D-Digital	Low	12.5K	Off	Off	Dscnctt Slt 2	Disconnect	KO3F	
6	434.00000	439.00000	D-Digital	Low	12.5K	Off	Off	MS 310	TAC 310	KO3F	
7	434.00000	439.00000	D-Digital	Low	12.5K	Off	Off	MS 311	TAC 311	KO3F	
8	434.00000	439.00000	D-Digital	Low	12.5K	Off	Off	MS 312	TAC 312	KO3F	
9	434.00000	439.00000	D-Digital	Low	12.5K	Off	Off	MS WW	WW 91	KO3F	
10	434.00000	439.00000	D-Digital	Low	12.5K	Off	Off	MS NA	North America	KO3F	
11	434.00000	439.00000	D-Digital	Low	12.5K	Off	Off	MS USA	USA 3100	KO3F	
12	147.13500	147.73500	A-Analog	Turbo	25K	156.7	156.7	K3CUJ	TAC 310	KO3F	
13	434.00000	439.00000	D-Digital	Low	12.5K	Off	Off	MS BM Parrot	BM Parrot	KO3F	
14	449.67500	444.67500	A-Analog	Turbo	25K	Off	167.9	N3ST	TAC 310	KO3F	
15	441.40000	446.40000	D-Digital	Turbo	12.5K	Off	Off	WR3IRS TG2	TG2	KO3F	
16	441.40000	446.40000	D-Digital	Turbo	12.5K	Off	Off	WR3IRS MD	MD 3124	KO3F	
17	442.71250	447.71250	D-Digital	Turbo	12.5K	Off	Off	KA3LAO TG2	TG2	KO3F	
18	442.71250	447.71250	D-Digital	Turbo	12.5K	Off	Off	KA3LAO MD	MD 3124	KO3F	
19	434.00000	439.00000	D-Digital	Low	12.5K	Off	Off	Reboot	Reboot	KO3F	
20	434.00000	439.00000	D-Digital	Low	12.5K	Off	Off	Shutdown	Shutdown	KO3F	
21	434.00000	439.00000	D-Digital	Low	12.5K	Off	Off	Hurricane Net	Hurricane Net	KO3F	
22	449.12500	444.12500	A-Analog	Turbo	25K	Off	107.2	W3CU-U	TAC 310	KO3F	
23	448.27500	443.27500	A-Analog	Turbo	25K	156.7	156.7	K3CUJ-U	TAC 310	KO3F	
24	156.45000	156.45000	A-Analog	High	25K	Off	Off	Ch 9	TAC 310	KO3F	
25	156.65000	156.65000	A-Analog	High	25K	Off	Off	Ch 13	TAC 310	KO3F	
26	156.80000	156.80000	A-Analog	High	25K	Off	Off	Ch 16	TAC 310	KO3F	
27	157.05000	157.05000	A-Analog	High	25K	Off	Off	Ch 21A	TAC 310	KO3F	
28	157.10000	157.10000	A-Analog	High	25K	Off	Off	Ch 22A	TAC 310	KO3F	
29	157.15000	157.15000	A-Analog	High	25K	Off	Off	Ch 23A	TAC 310	KO3F	
30	156.42500	156.42500	A-Analog	High	25K	Off	Off	Ch 68	TAC 310	KO3F	
31	162.40000	162.40000	A-Analog	High	25K	Off	Off	Weather 162.400	TAC 310	KO3F	
32	162.42500	162.42500	A-Analog	High	25K	Off	Off	Weather 162.425	TAC 310	KO3F	
33	162.45000	162.45000	A-Analog	High	25K	Off	Off	Weather 162.450	TAC 310	KO3F	
34	162.47500	162.47500	A-Analog	High	25K	Off	Off	Weather 162.475	TAC 310	KO3F	
35	162.50000	162.50000	A-Analog	High	25K	Off	Off	Weather 162.500	TAC 310	KO3F	
36	162.52500	162.52500	A-Analog	High	25K	Off	Off	Weather 162.525	TAC 310	KO3F	
37	162.55000	162.55000	A-Analog	High	25K	Off	Off	Weather 162.550	TAC 310	KO3F	
38	442.30000	447.30000	A-Analog	Turbo	25K	107.2	107.2	KB3CMA	TAC 310	KO3F	
39	146.76000	146.16000	A-Analog	Turbo	25K	107.2	107.2	WA3DZD	TAC 310	KO3F	
40	444.00000	449.00000	A-Analog	Turbo	25K	107.2	107.2	WA3DZD-U	TAC 310	KO3F	
41	156.47500	156.47500	A-Analog	High	25K	Off	Off	Ch 99	TAC 310	KO3F	
42	156.57500	156.57500	A-Analog	High	25K	Off	Off	Ch 71	TAC 310	KO3F	
43	157.17500	157.17500	A-Analog	High	25K	Off	Off	Ch 83A	TAC 310	KO3F	
44	434.00000	439.00000	D-Digital	High	12.5K	Off	Off	MD TAC	MD TAC	KO3F	
45	146.52000	146.52000	A-Analog	Turbo	25K	Off	Off	VHF Simplex	TAC 310	KO3F	
46	446.00000	446.00000	A-Analog	Turbo	25K	Off	Off	UHF Simplex	TAC 310	KO3F	
47	147.10500	147.70500	A-Analog	Turbo	25K	Off	107.2	W3VPR-DV	TAC 310	KO3F	

Status 4/6/2023 11:49 AM

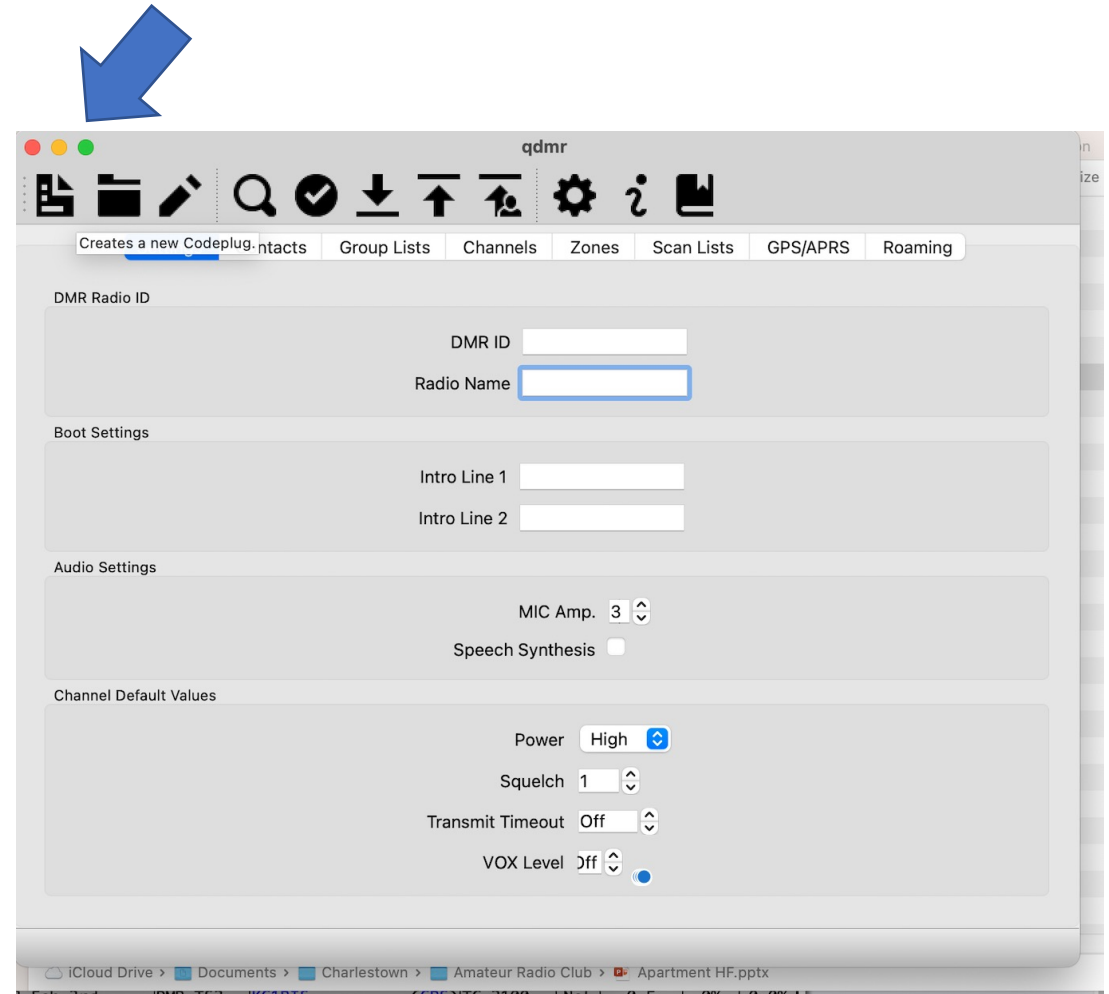
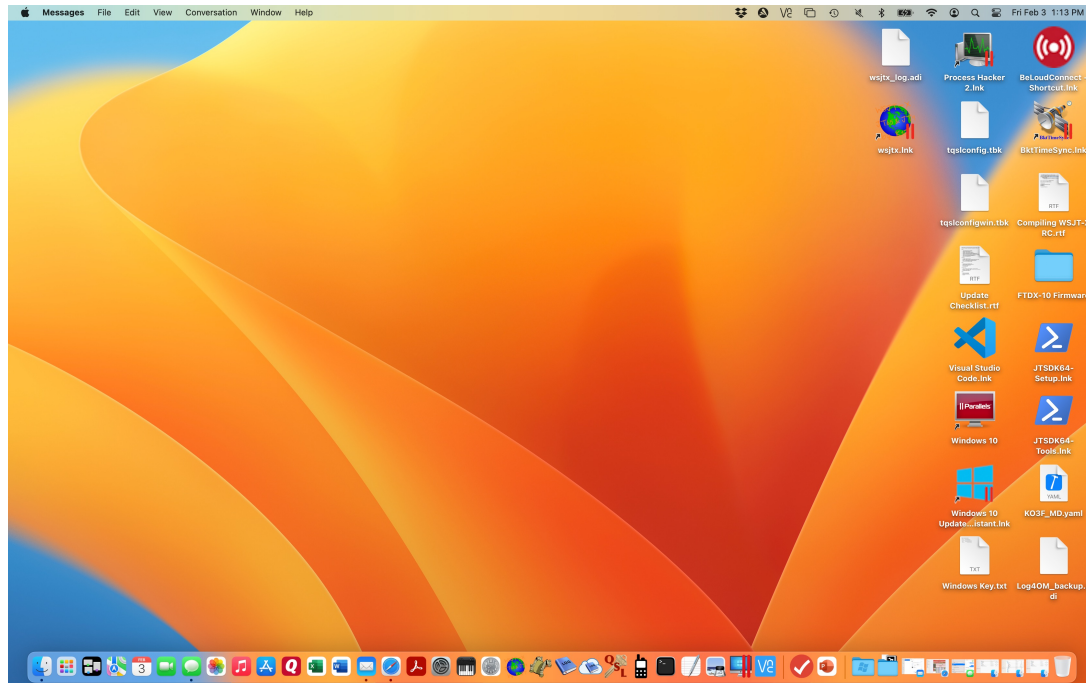


General programming steps

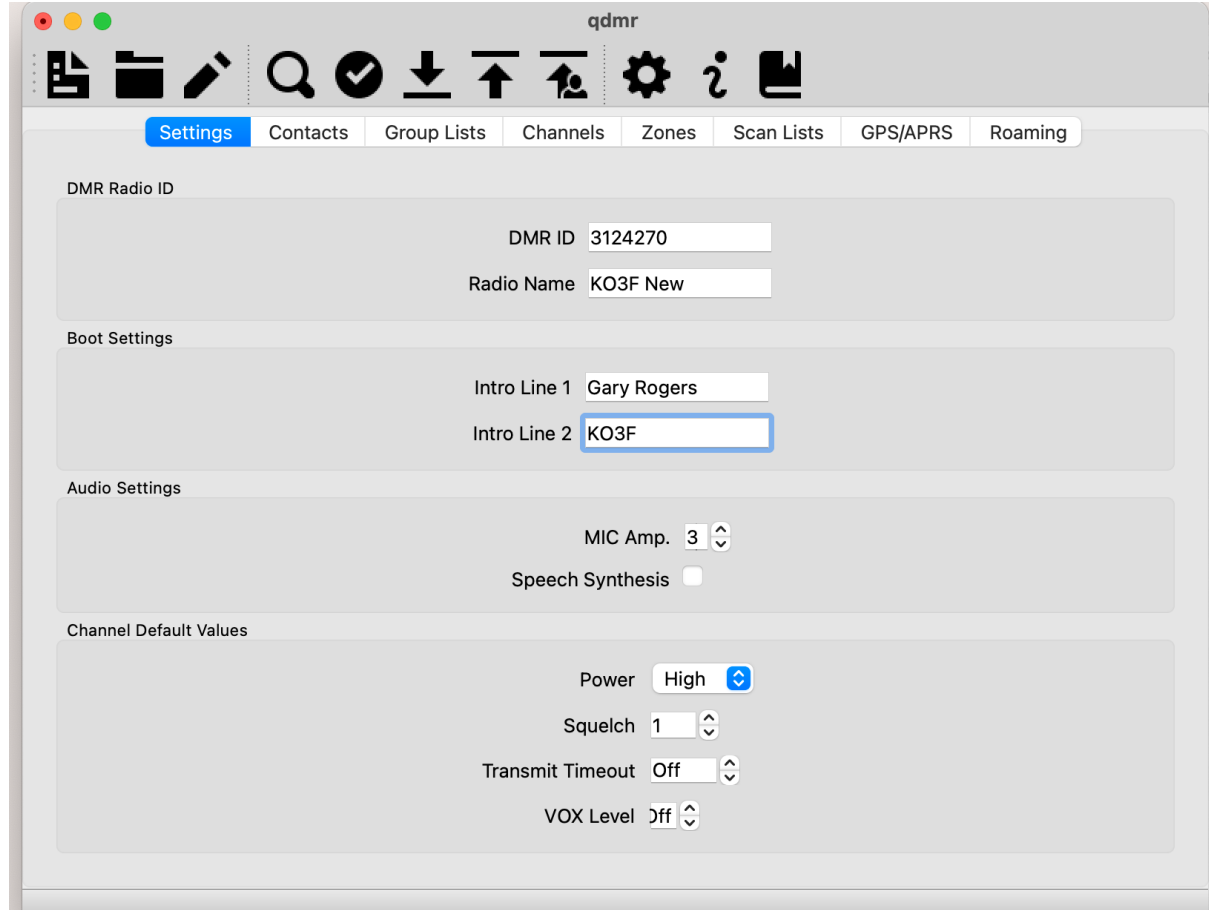
- Create talk groups – digital only
- Build channels including frequencies, CTCSS tones, color codes, time slots, talk groups, etc.
- Combine channels into zones – digital only
- Create scan lists – analog only
- Create receive groups – digital only
- Upload the digital contact database – digital only
- Save the codeplug to your computer
- Write the codeplug to the radio

Programming Anytone D868UV
with QDMR on Macbook Pro

From desktop - open QDMR then click on create a new codeplug



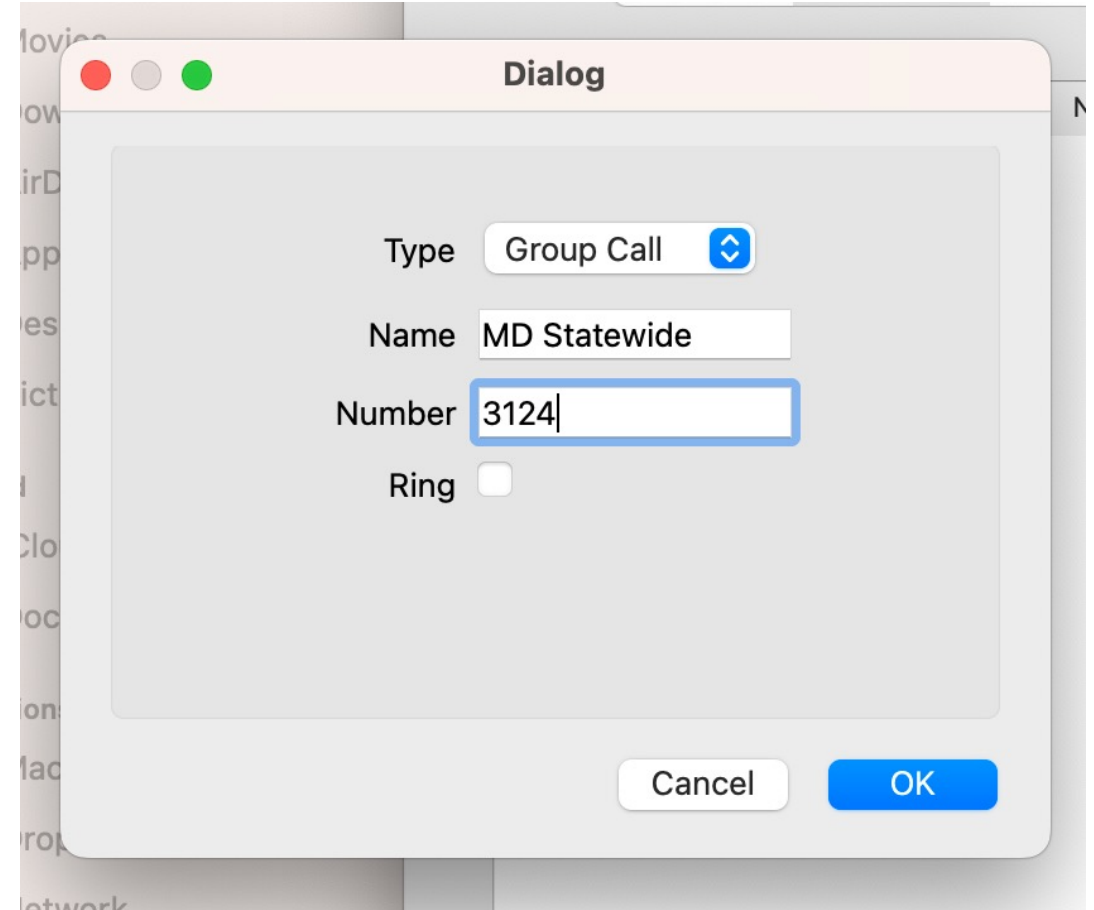
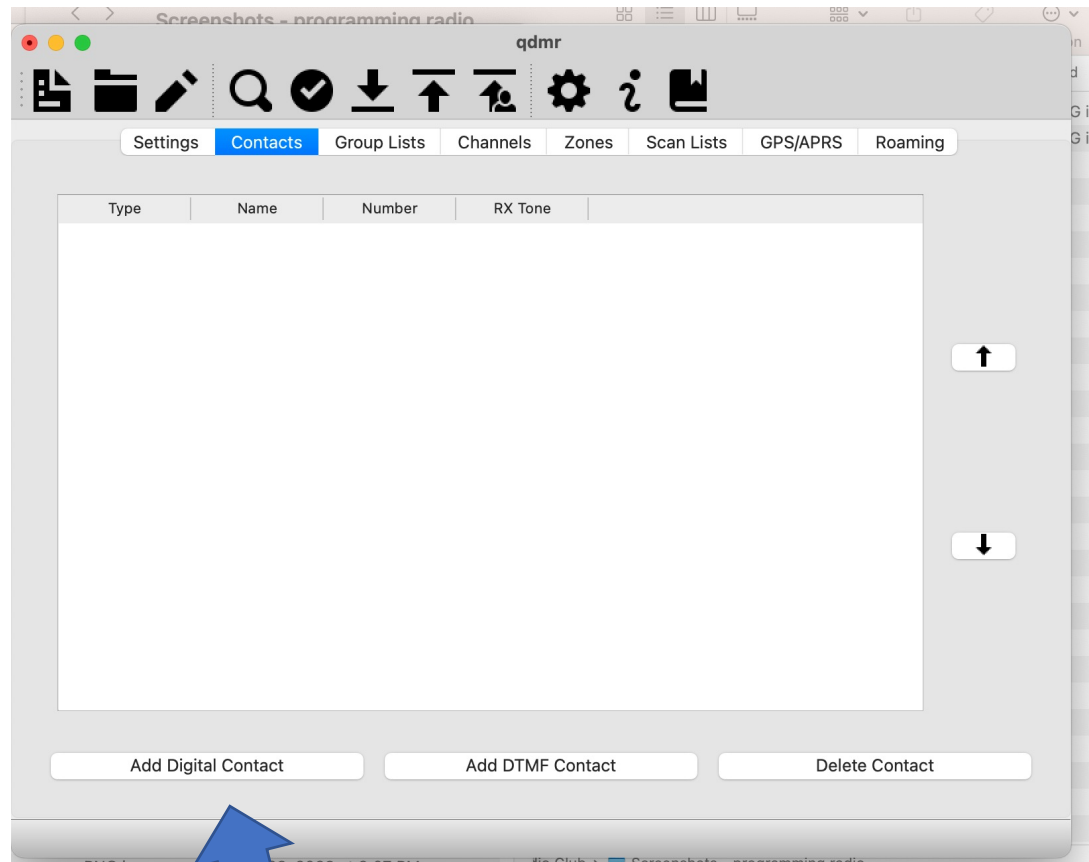
Complete basic info in Settings tab



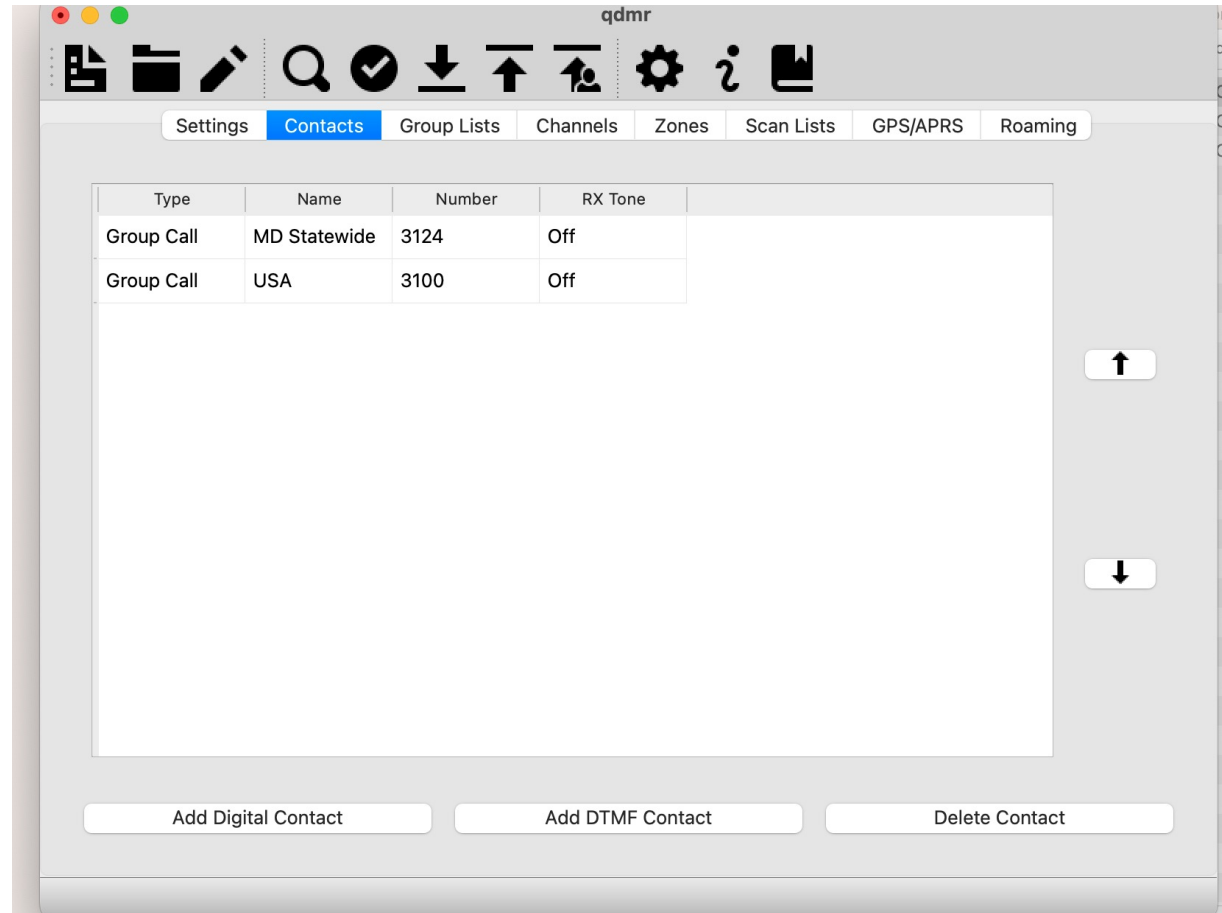
The screenshot shows the 'Settings' tab of the 'qdmr' application. The interface includes a top toolbar with icons for file operations, search, and settings. Below the toolbar is a navigation bar with tabs for 'Settings', 'Contacts', 'Group Lists', 'Channels', 'Zones', 'Scan Lists', 'GPS/APRS', and 'Roaming'. The 'Settings' tab is active and displays several sections of configuration options:

- DMR Radio ID:** DMR ID: 3124270, Radio Name: KO3F New
- Boot Settings:** Intro Line 1: Gary Rogers, Intro Line 2: KO3F
- Audio Settings:** MIC Amp.: 3, Speech Synthesis:
- Channel Default Values:** Power: High, Squelch: 1, Transmit Timeout: Off, VOX Level: Off

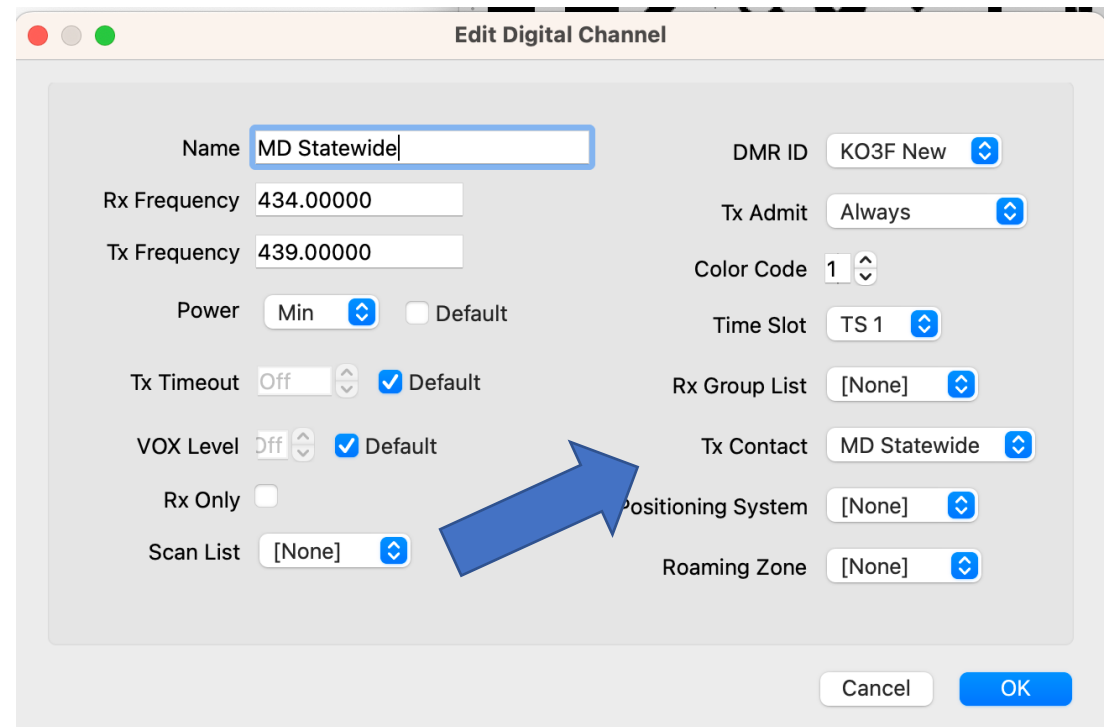
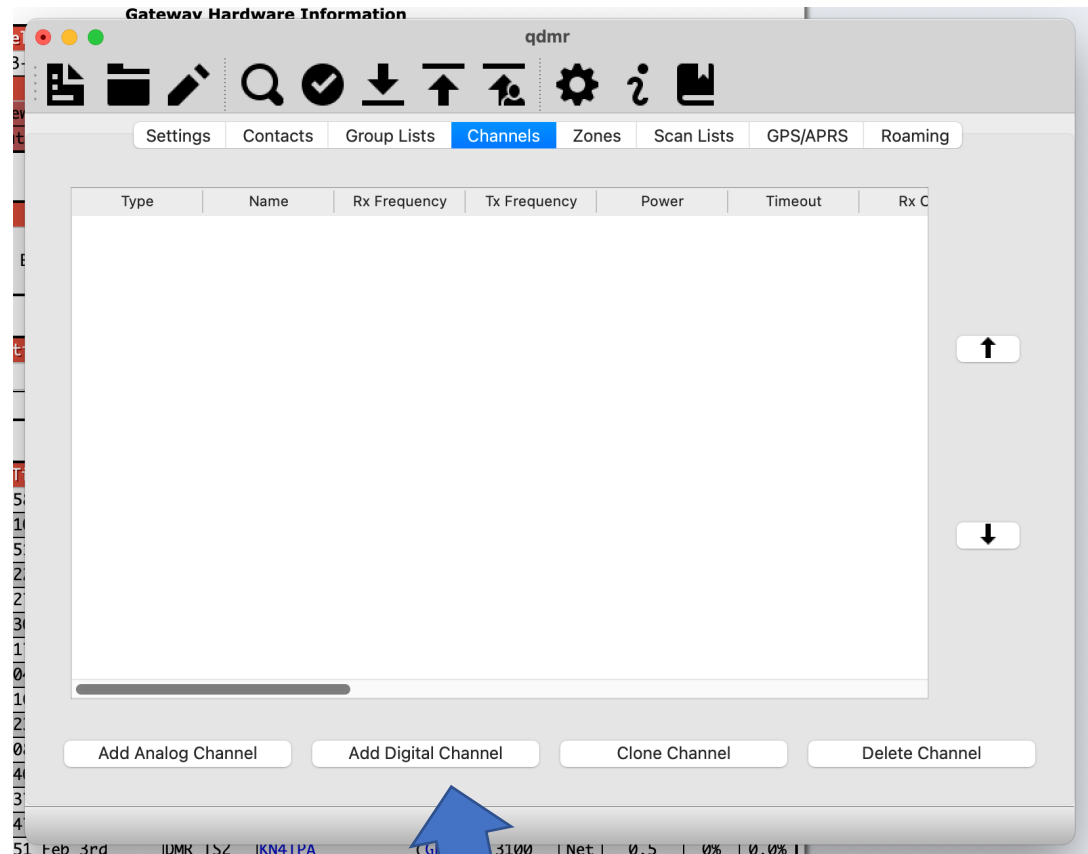
Go to contact screen – add contacts



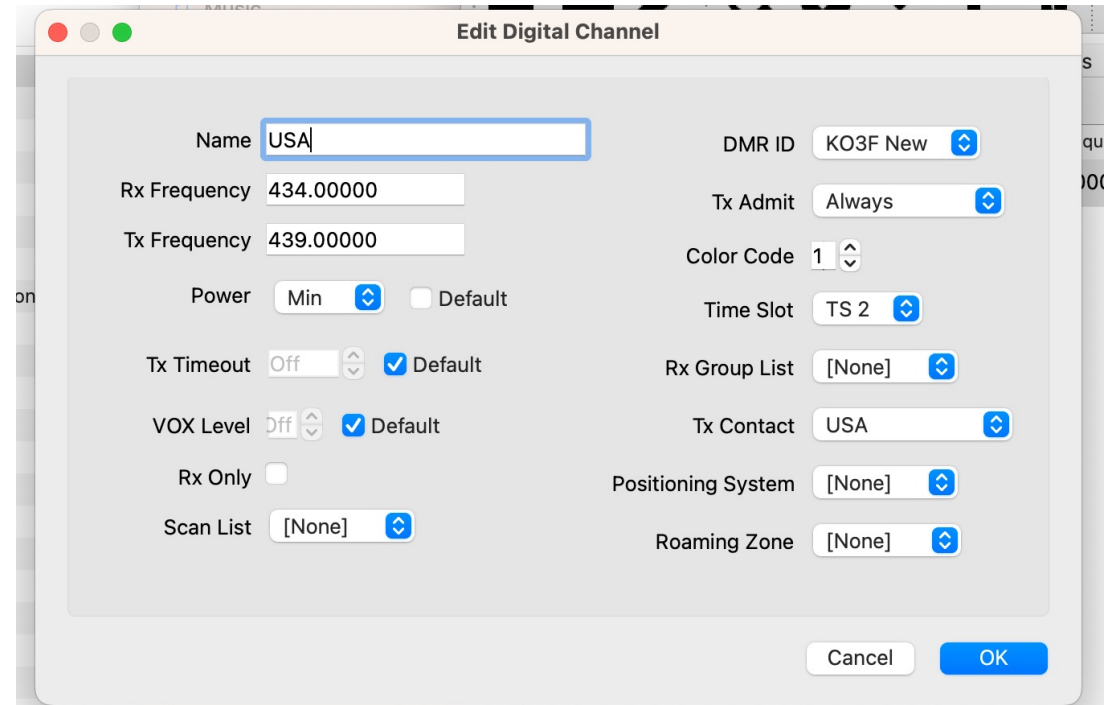
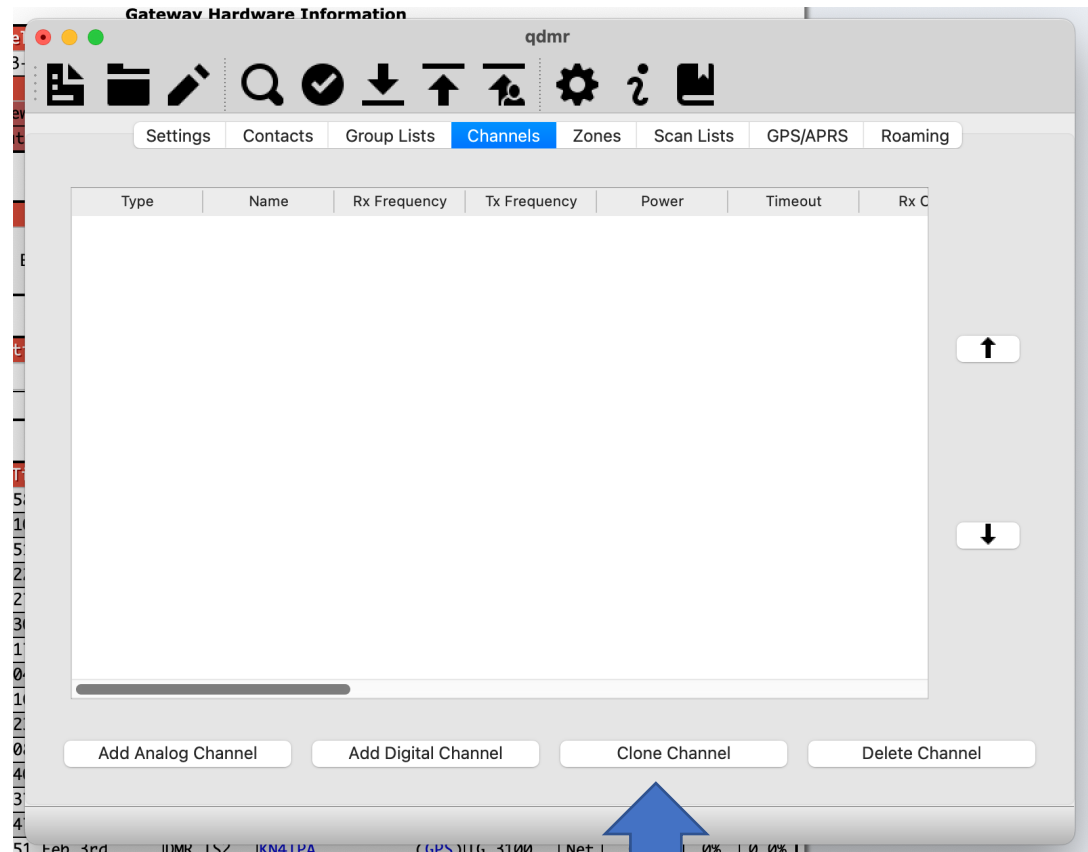
Use Add Digital Contact button to add all desired talkgroups



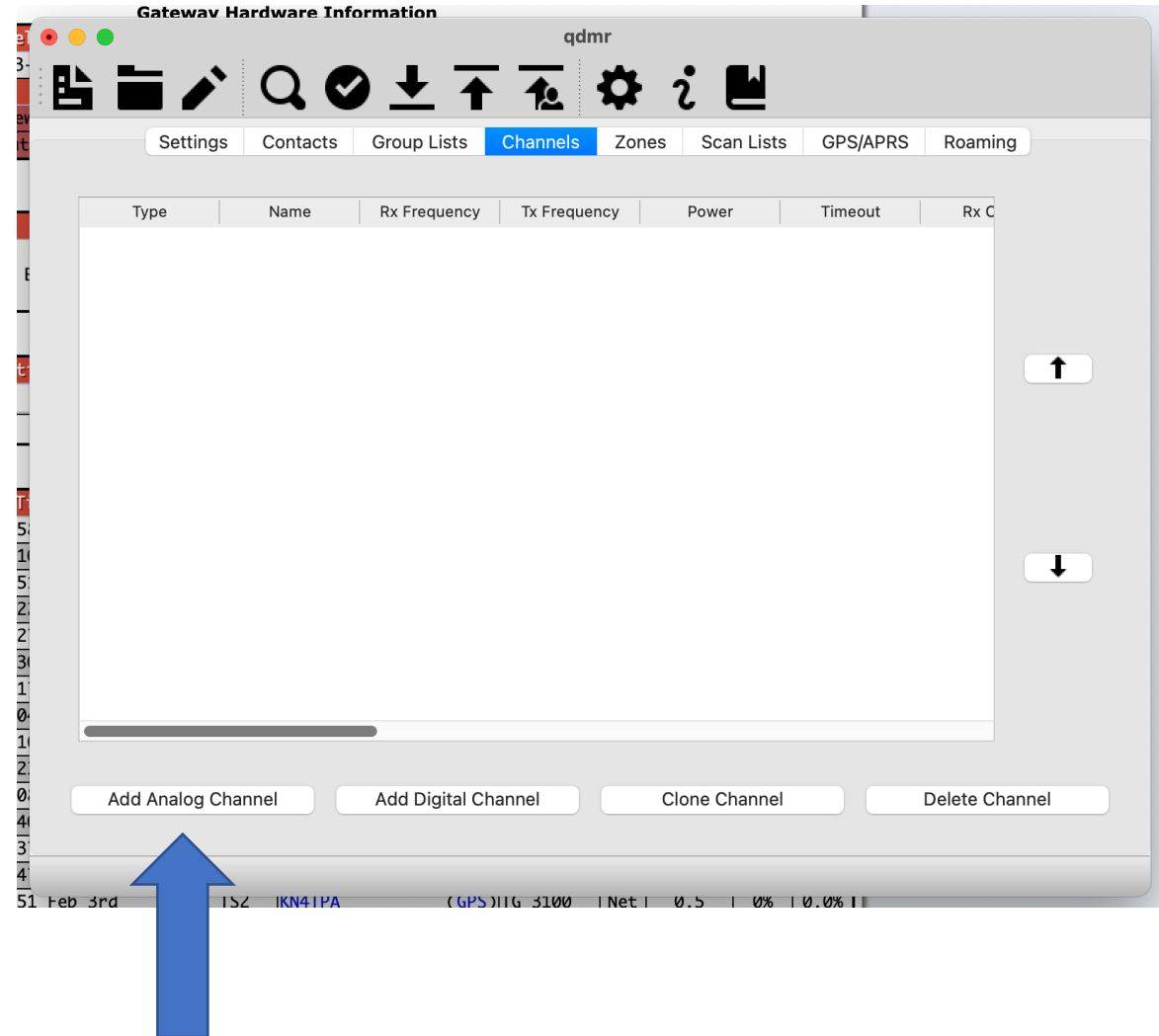
Go to channels tab – add digital channel



Use clone channel button for repetitive entries



For analog channels, use Add Analog Channel button



Analog – freq, power, CTCSS and bandwidth

Edit Analog Channel

Name	W3VPR	Tx Admit	Always
Rx Frequency	147.075	Squelch	1 <input checked="" type="checkbox"/> Default
Tx Frequency	147.675	Rx Tone	[None]
Power	Max <input type="checkbox"/> Default	Tx Tone	CTCSS 107.2H
Tx Timeout	Off <input checked="" type="checkbox"/> Default	Bandwidth	Wide (25 kHz)
VOX Level	ff <input checked="" type="checkbox"/> Default	APRS	[None]
Rx Only	<input type="checkbox"/>		
Scan List	[None]		

Cancel OK

Safari browser window showing the RepeaterBook website. The page displays search results for "Curtis Bay Amateur Radio Repeaters".

1 REPEATER FOUND IN CURTIS BAY COUNTY

Legend: ● = On-Air ● = Off-Air ● = Testing ○ = Unknown

Click on the frequency for additional details.
Click on a header to sort. **Note:** Sorting does not carry through to exports!

Frequency	Offset	Tone Up / Down	Location	County	Call	Use	Modes	
147.0750	+0.6 MHz	107.2 / CSQ	Curtis Bay	Anne Arundel	W3VPR	OPEN	FM	+

The Repeaterbook administrator(s) for Maryland: WG3K

If you have an iPhone/iPod/iPad or Android device, please download the FREE official RepeaterBook app!

Download on the App Store | GET IT ON Google Play

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Some repeaters will require both TX and RX CTCSS

Edit Analog Channel

Name Tx Admit

Rx Frequency Squelch Default

Tx Frequency Rx Tone


Power Default Tx Tone

Tx Timeout Default Bandwidth

VOX Level Default APRS

Rx Only

Scan List



Safari

repeaterbook.com

Coupon codes found! Capital One Shopping applies codes in seconds.

ADD REPEATER MAP RESULTS EXPORT SEARCH SPECIAL MODES REPORT ISSUE

RepeaterBook
Help keep us "on-the-air"

PayPal Donate Now

Columbia, Maryland Amateur Radio Repeaters

3 REPEATERS FOUND AT OR NEAR COLUMBIA

On-Air Off-Air Testing Unknown

Click on the frequency for additional details.
Click on a header to sort. Note: Sorting does not carry through to exports!

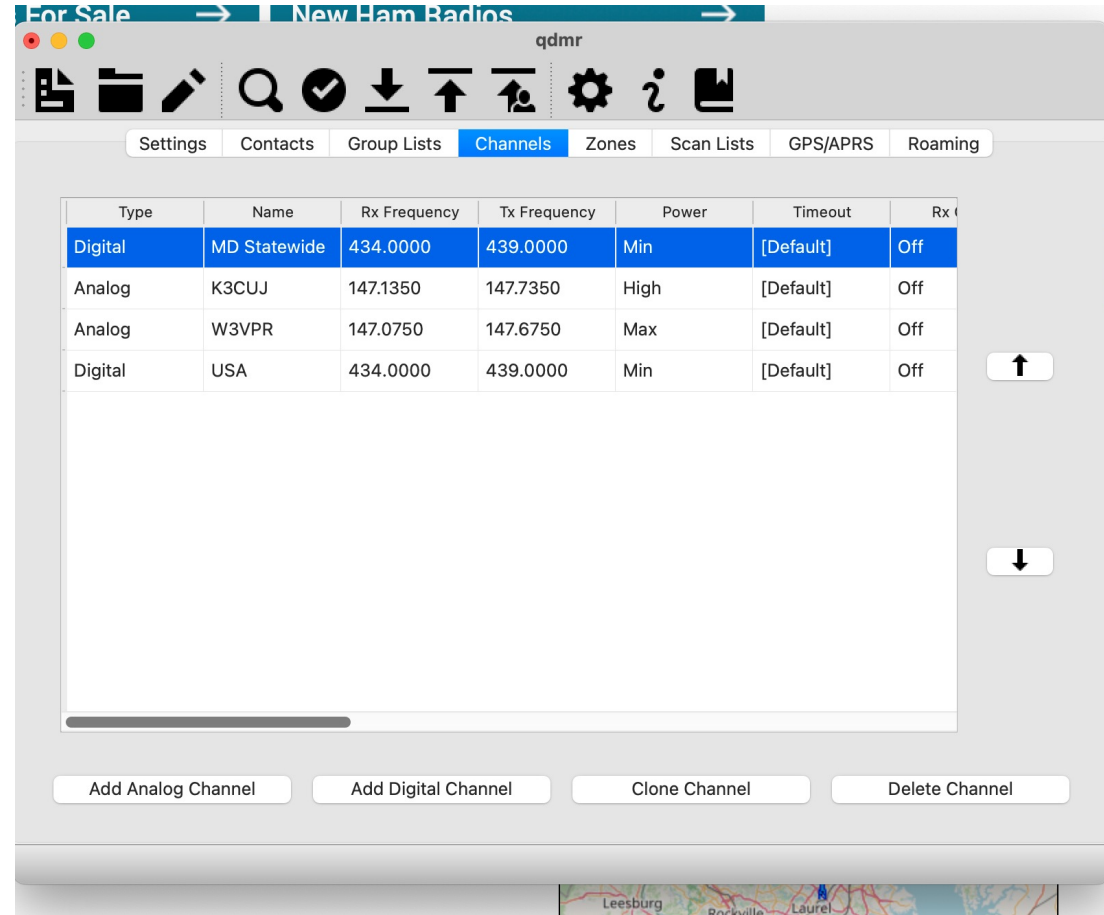
Frequency	Offset	Tone Up / Down	Location	County	Call	Use	Modes	
147.1350	+0.6 Mhz	156.7 / 156.7	Columbia	Howard	K3CUJ	OPEN	FM Fusion	On-Air
224.8600	-1.6 Mhz		Columbia	Howard	W3CAM	OPEN	FM	Off-Air
449.4750	-5 Mhz	156.7	Columbia	Howard	K3CUJ	OPEN	FM Fusion WIRES-X	On-Air

The Repeaterbook administrator(s) for Maryland: WG3K

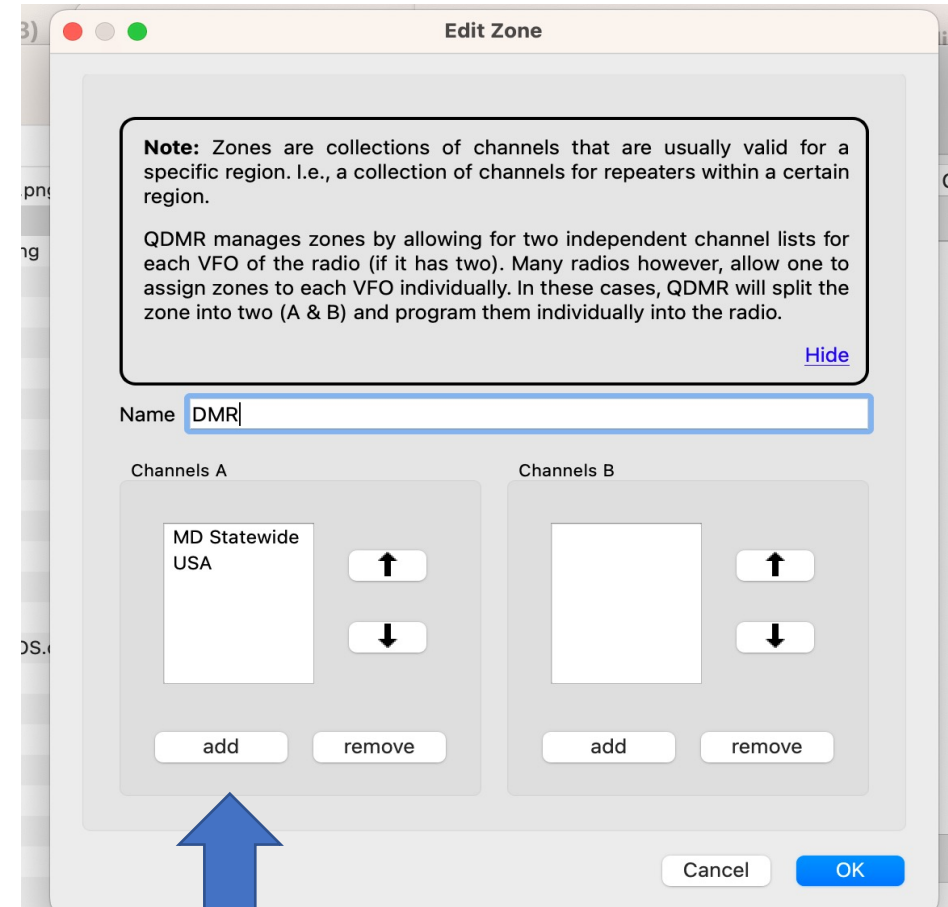
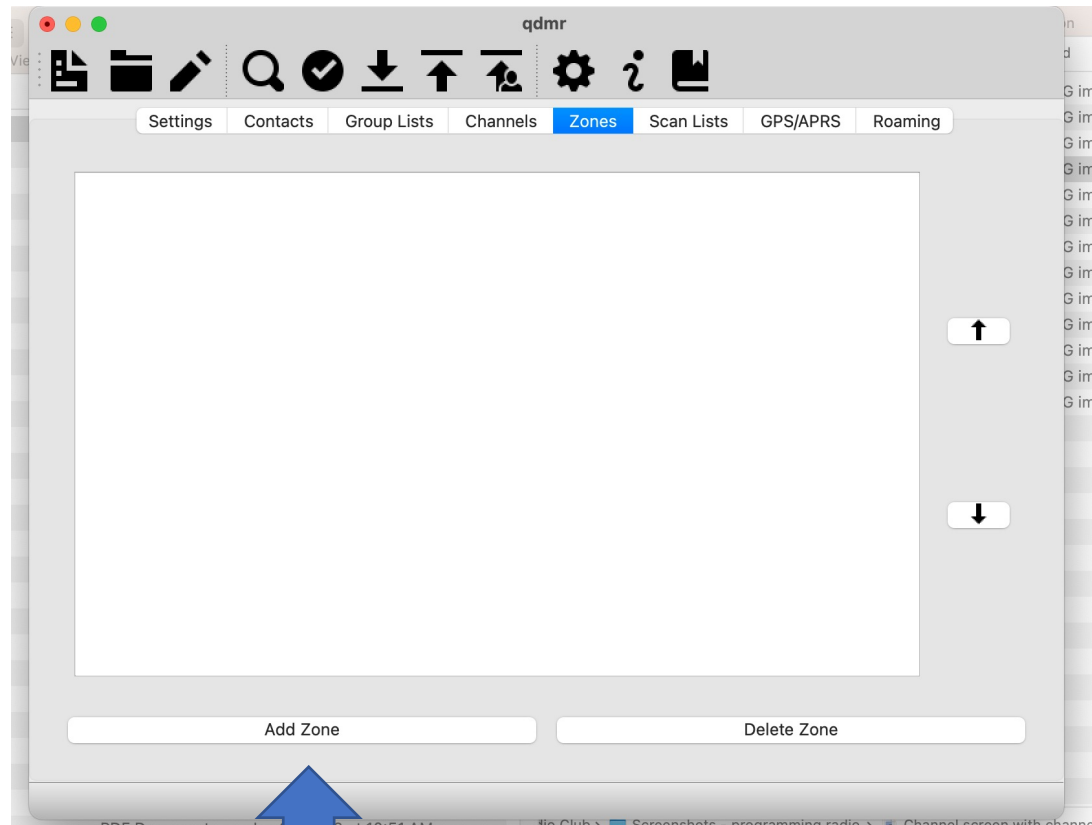
If you have an iPhone/iPod/iPad or Android device, please download the FREE official RepeaterBook app!

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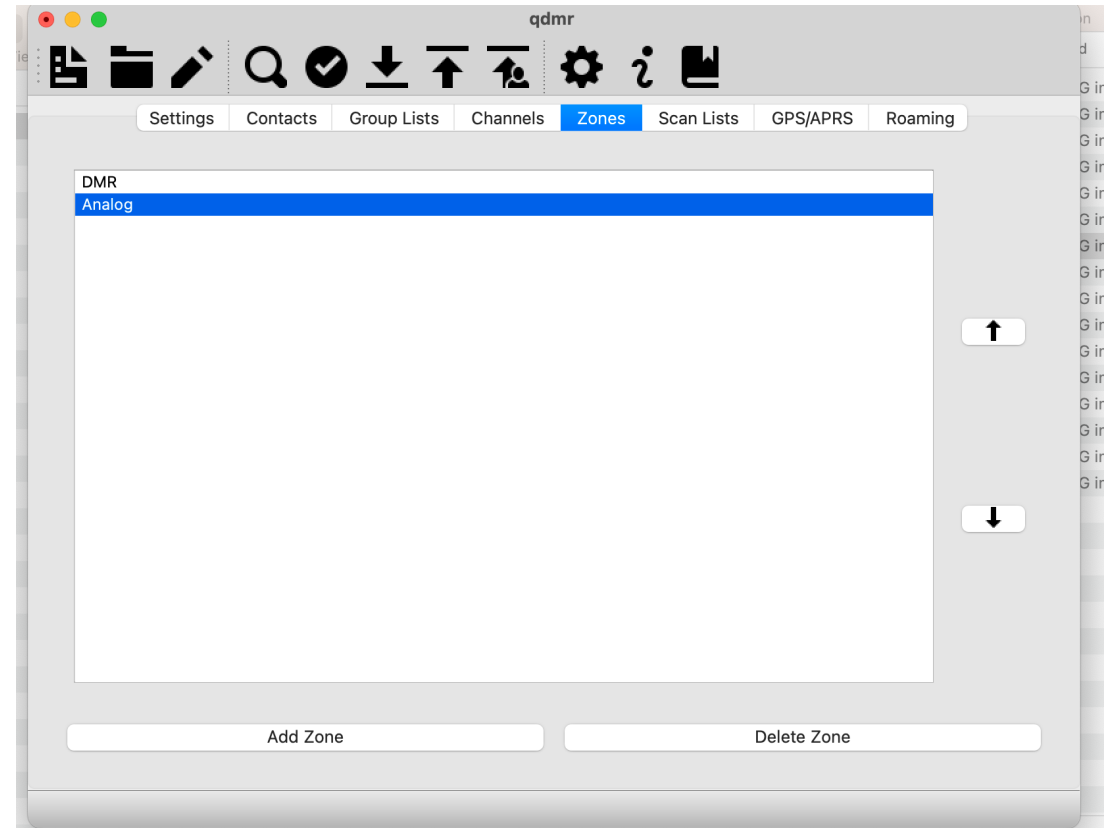
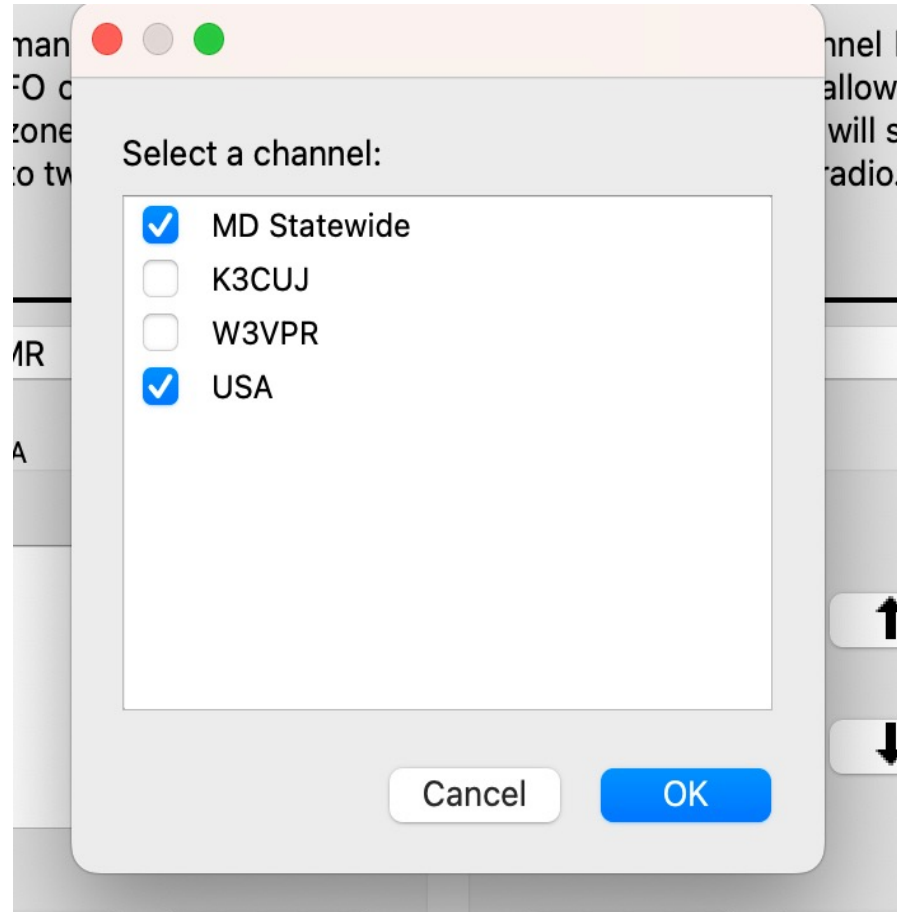
Channel entry complete



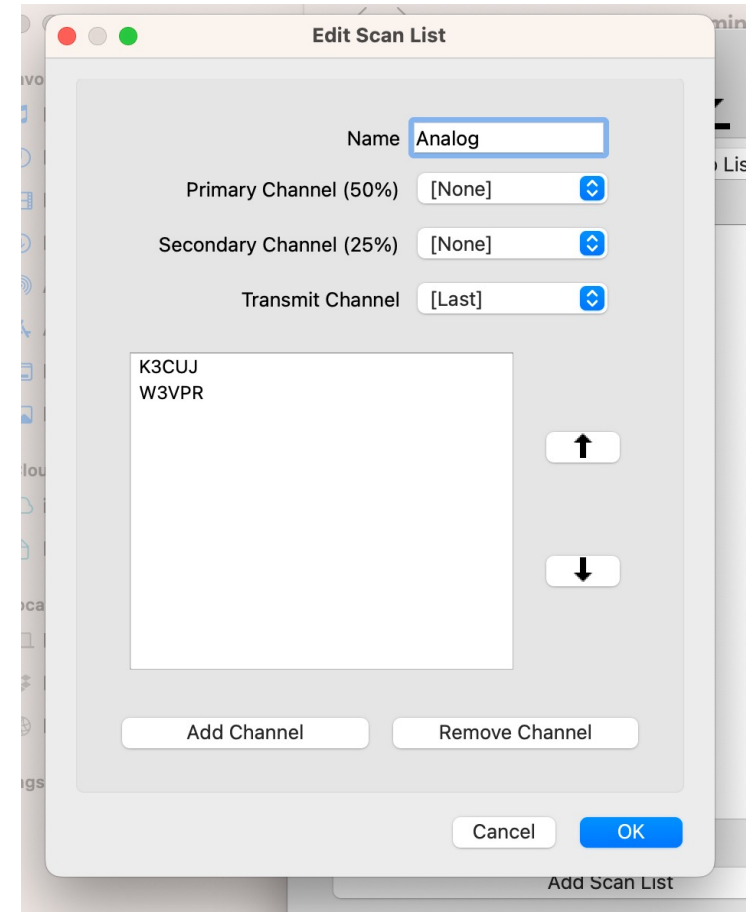
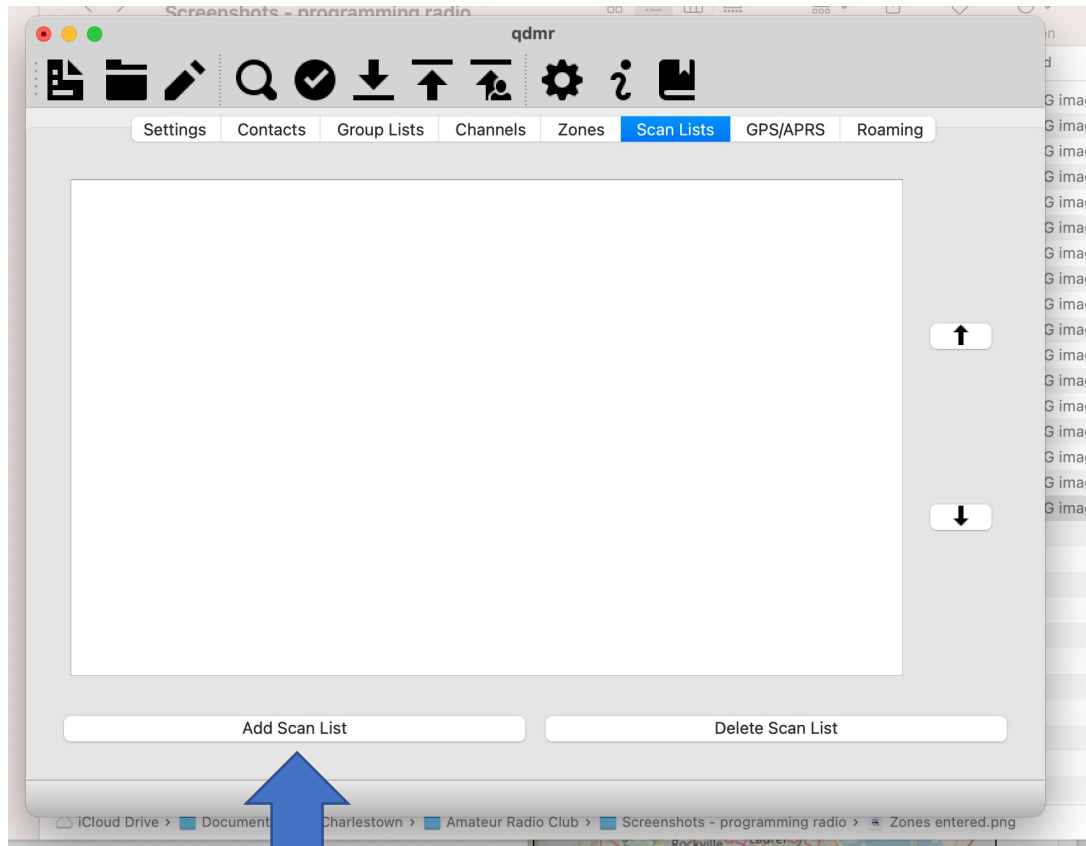
Create zones and add channels



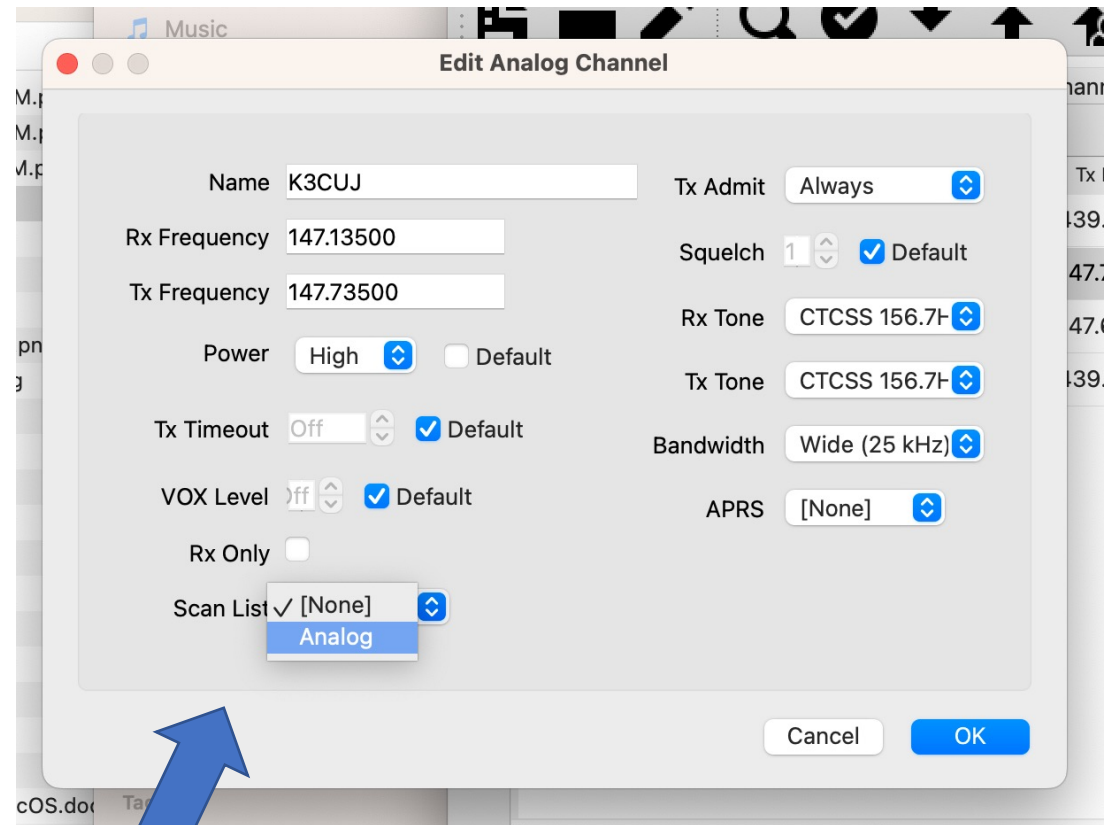
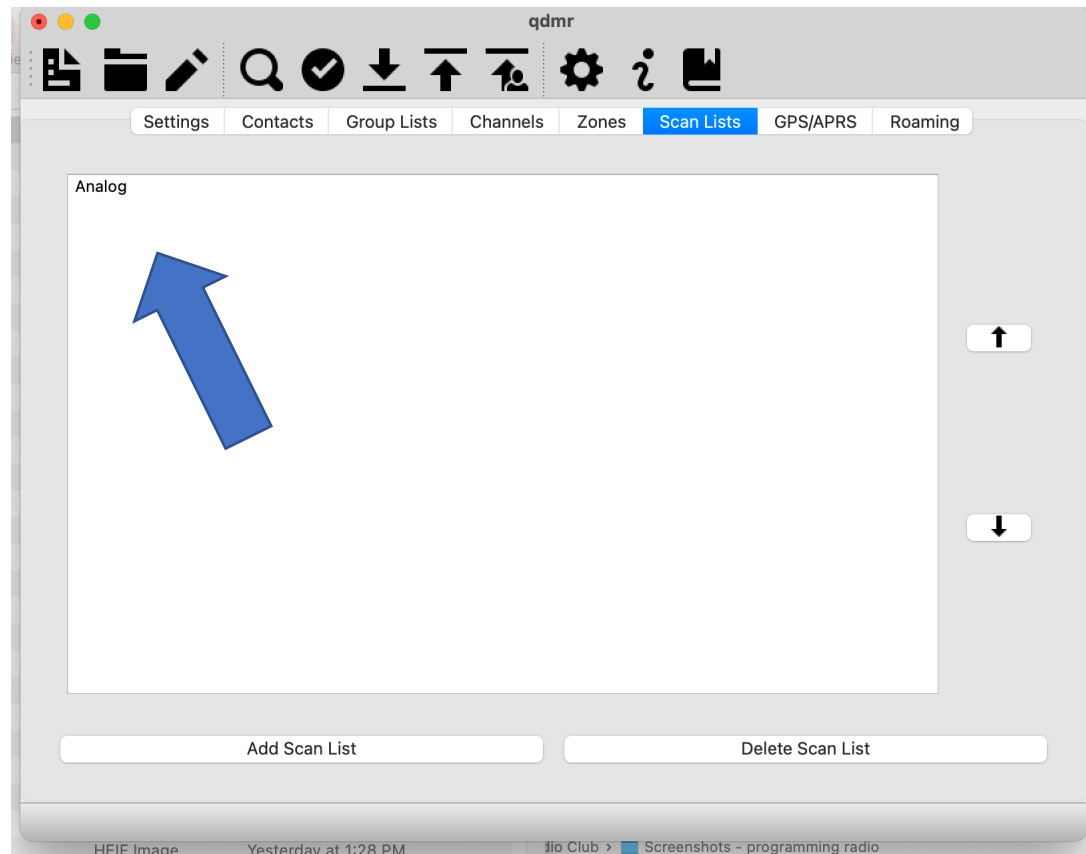
Select channel to zone



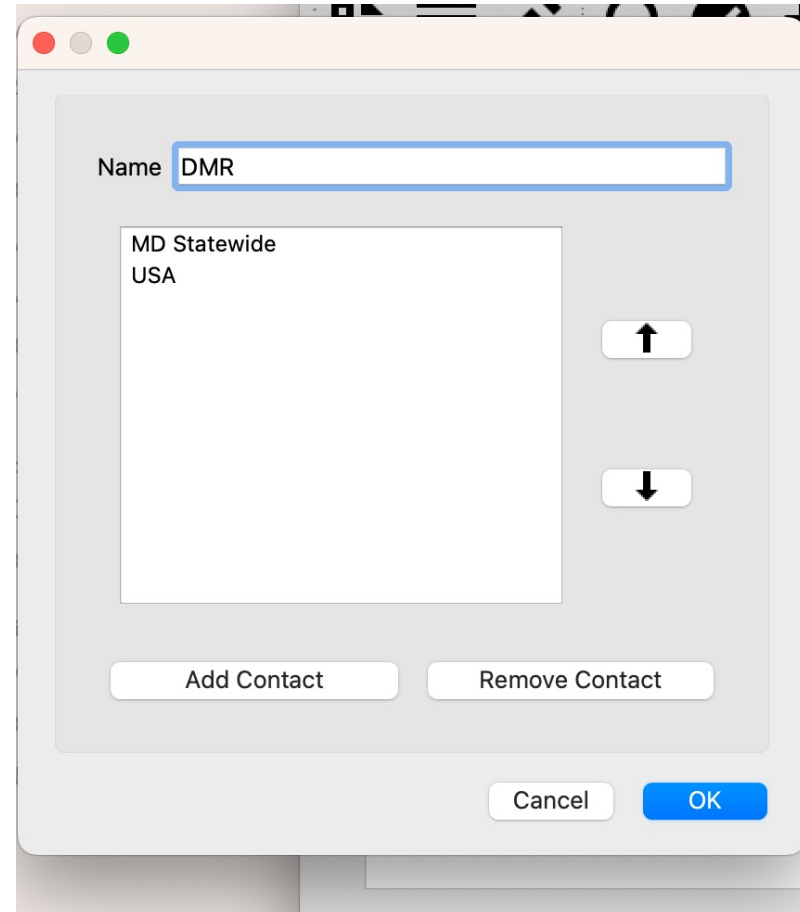
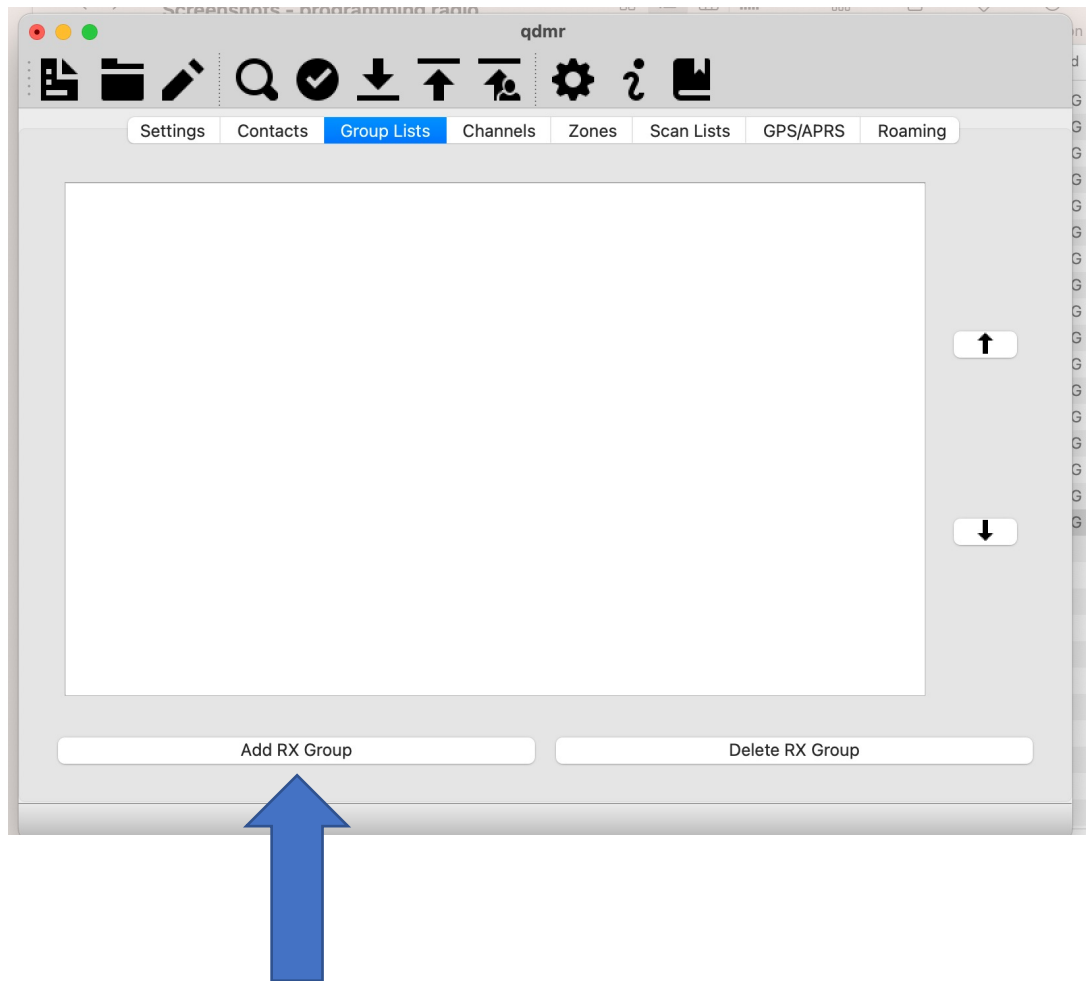
Analog - create scan lists



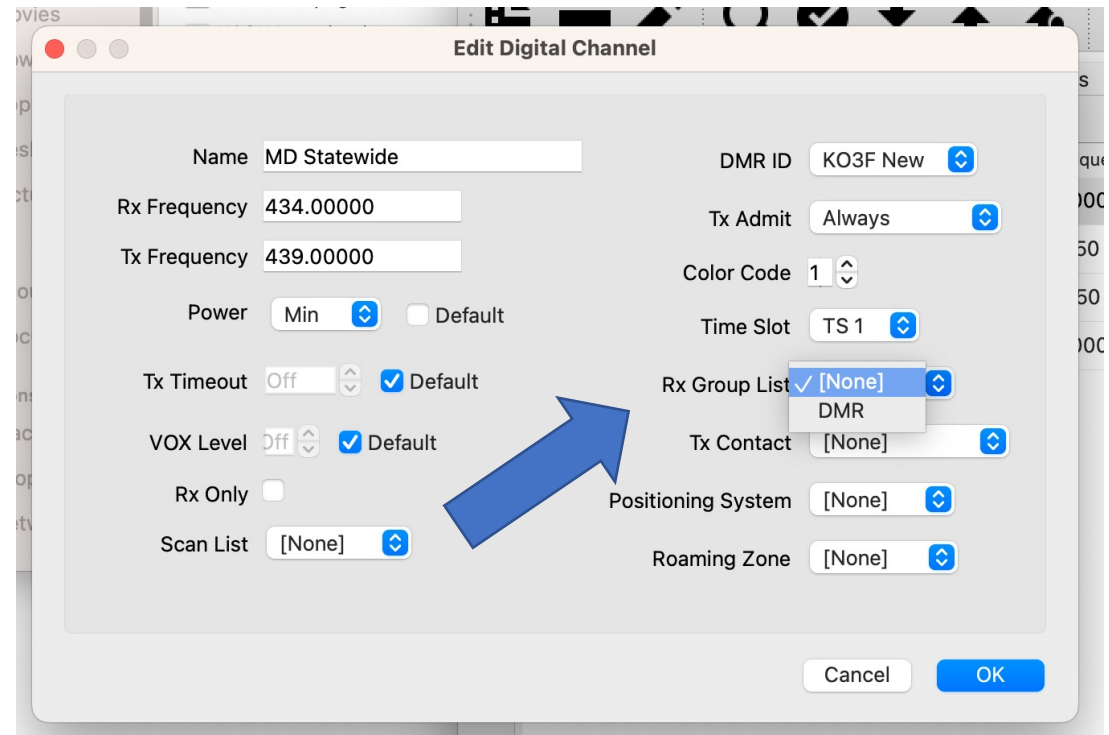
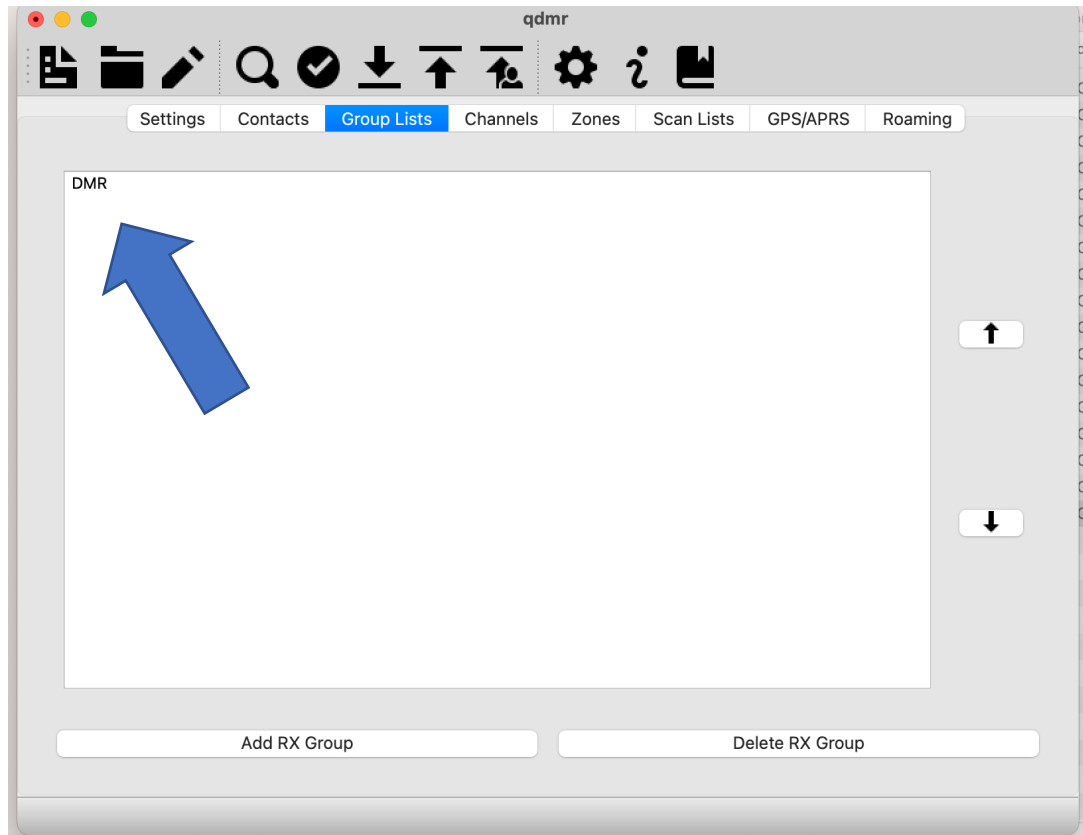
Scan list complete – edit channel to include scan list



Digital – create receive groups



Receive group complete – edit channel to include receive group



Save codeplug



Saves the codeplug in a "conf" file.

Settings Group Lists Channels Zones Scan Lists GPS/APRS Roaming

Type	Name	Rx Frequency	Tx Frequency	Power	Timeout	Rx
Digital	MD Statewide	434.0000	439.0000	Min	[Default]	Off
Analog	K3CUJ	147.1350	147.7350	High	[Default]	Off
Analog	W3VPR	147.0750	147.6750	Max	[Default]	Off
Digital	USA	434.0000	439.0000	Min	[Default]	Off

Add Analog Channel Add Digital Channel Clone Channel Delete Channel

Save codeplug

Save As: KO3F New.yaml

Tags:

Desktop — iCloud

Yesterday

- wsjtx_log.adi

Previous 30 Days

- BeLoudCo...ortcut.lnk
- KO3F_MD.yaml
- tqslconfigwin.tbk

2022

New Folder Cancel Save

Search for radio



qdmr

Settings ColDetect connected radios. Channels Zones Scan Lists GPS/APRS Roaming

DMR Radio ID

DMR ID 3124270

Radio Name KO3F New

Boot Settings

Intro Line 1 Gary Rogers

Intro Line 2 KO3F

Audio Settings

MIC Amp. 3

Speech Synthesis

Channel Default Values

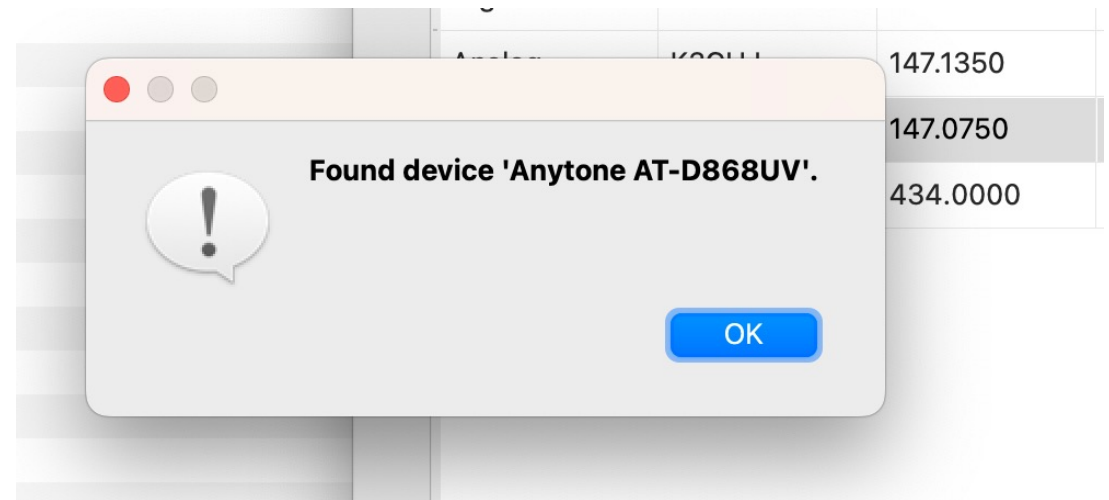
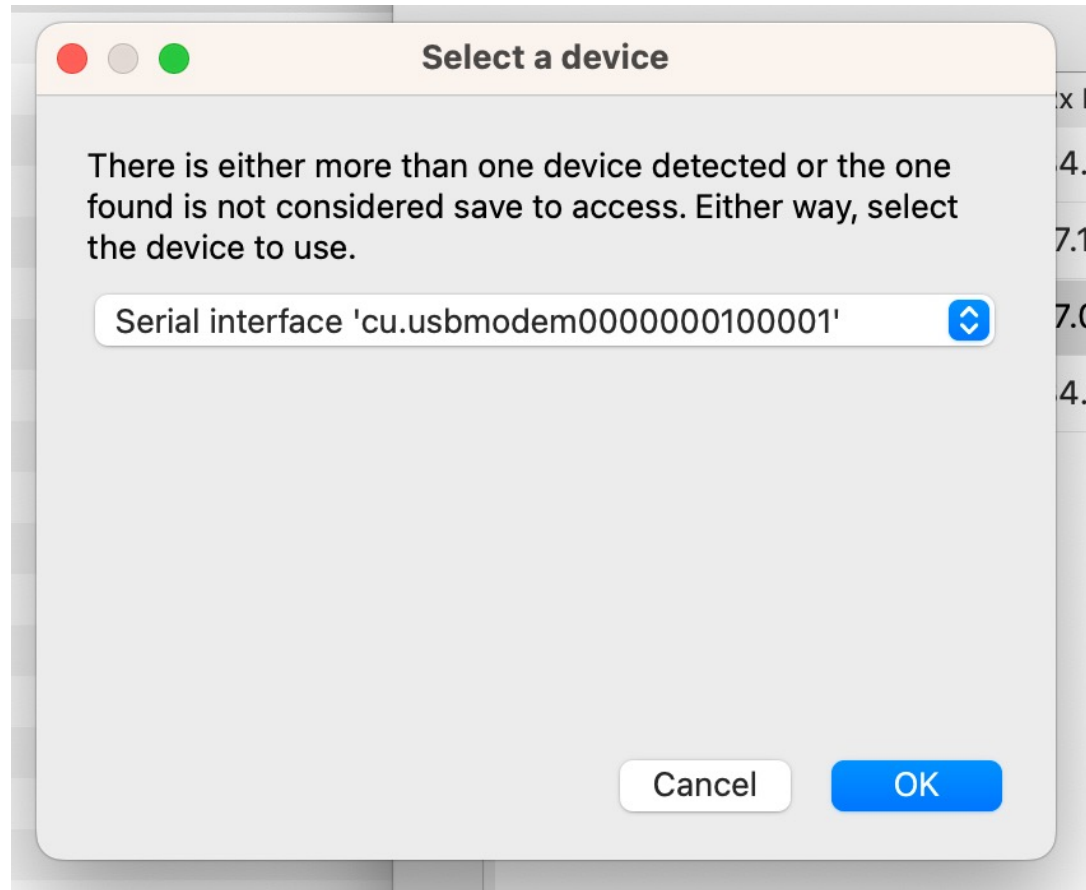
Power High

Squelch 1

Transmit Timeout Off

VOX Level Off

Connect radio to QDMR



Upload codeplug and digital contact database to radio

Writes the codeplug to the connected radio.

Settings Contacts Group Lists **Channels** Zones Scan Lists GPS/APRS Roaming

Type	Name	Rx Frequency	Tx Frequency	Power	Timeout	Rx
Digital	MD Statewide	434.0000	439.0000	Min	[Default]	Off
Analog	K3CUJ	147.1350	147.7350	High	[Default]	Off
Analog	W3VPR	147.0750	147.6750	Max	[Default]	Off
Digital	USA	434.0000	439.0000	Min	[Default]	Off

↑

↓

Add Analog Channel Add Digital Channel Clone Channel Delete Channel

Writes call-sign DB to radio.

Settings Contacts Group Lists **Channels** Zones Scan Lists GPS/APRS Roaming

Type	Name	Rx Frequency	Tx Frequency	Power	Timeout	Rx
Digital	MD Statewide	434.0000	439.0000	Min	[Default]	Off
Analog	K3CUJ	147.1350	147.7350	High	[Default]	Off
Analog	W3VPR	147.0750	147.6750	Max	[Default]	Off
Digital	USA	434.0000	439.0000	Min	[Default]	Off

↑

↓

Add Analog Channel Add Digital Channel Clone Channel Delete Channel

Final thoughts

- Using a computer to program your handheld radio is repetitive, tedious and prone to fat finger errors. Patience and attention to detail is required
- Try to find out from the radio manufacturer which software can be used to program the radio
- Alternatively, find out which radios are supported by the desired programming software i.e. CHIRP
- Ensure that the software will run on your computer i.e. Windows based programming software on a Windows computer