QuickStart Guide to Using RigSync with CW Skimmer

RigSync is a freeware application written by Ed Russell, W2RF, to facilitate interoperation between CW Skimmer and station transceivers. He felt (and I agree) that the most effective way to use Skimmer is with a separate SDR, but if you do that, there's no way to click on a station on the Skimmer bandmap and move your radio there. RigSync fills that gap.

This is RigSync in its startup condition.

🖼 W2RF RigSync 1.0 beta					
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RIG > ₩ 1 ₩ 2 ₩ 3 ₩ 4 W2RF RigSync ActiveX Pa	VF0 SPLIT Rx>Tx Rx⇔Tx Rx <tx anel Status Monit</tx 	MODE C CW C AM C LSB C FM C USB C FSK			

Before we go any farther, let me clarify one point. When Ed uses the term "Rig", he is referring either to a traditional transceiver or to a software application controlling an SDR. When he says "Radio", he means a traditional transceiver.

Now that we have that clear ... ahem ... let's turn to setting up RigSync for your station. I'm assuming that you have one transceiver and CW Skimmer controlling an SDR, providing spots for you via Telnet.

Click the Options button, and let's go first to the Radio tab.

W2RF RigSync Options	C
Sync Skim Radio	
OmniRig Radio 1: Off 💌 Radio 2: Off 💌	
Configure	
Applications	
SpectraVue: Off	
Skimmer: Rig 2 💌	
WinRad: Off	
OK Cancel Apply	

Click the down arrow for the dropdown list, and select Rig 1. Now Click Configure. The Rig 1 tab will be on top. Run down through the various rig choices and select yours.

Omni-Rig Sett	ings	×				
RIG 1 RIG 2 About						
Rig type	FT-1000 MP	•				
Port	COM 8	•				
Baud rate	4800	•				
Data bits	8	•				
Parity	None	•				
Stop bits	2	•				
RTS	High	•				
DTR	High	•				
Poll int., ms	200	\$				
Timeout, ms	4000	\$				
Cancel						

This screen will be familiar if you have used OmniRig. Note that because Ed has used VE3NEA's whole rig control engine, there are some terminology problems – on this screen, and this screen only, "rig" means "transceiver".

Anyway, your first task is to find your radio, and then check the suggested communication parameters to make sure they fit your understanding of what your radio needs. Generally they do – OmniRig is pretty well debugged.

W2RF RigSync Options	×
Sunc Skim Badio	
Radio 2: Off 🗨	
Configure	
Applications	
SpectraVue: Off	
Skimmer: Rig 2 💌	
WinBad: Off	
OK Cancel Apply	

Set your radio up as Radio 1 and then OK out of the "configure" dialog.

Assuming you're going to run CW Skimmer with RigSync and a single radio, define Skimmer as Rig 2. The only other software program RigSync works with currently is SpectraVue; the interface to WinRad is a future project.

Now click on the Skim tab.

W2RF RigSync Options	×
Sync Skim Radio	
Setup	П
Host: localhost	
Port: 7300	
Call: N4ZR	
Skim Spots To	
Click-Tune Callsign to: Rig 1	
OK Cancel Apply	

These are the default settings. For someone just getting started, I'd leave them all alone, except to insert your own call, of course.

Now yo	ou're ready	y to go.	Get back to	o the mair	panel	and click	the S	ync button.
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14,033.045	7,014.055
RIG SYNC > ▼ 1 SYNC ▼ 2 SKIM □ 3 OPTIONS □ 4 HELP W2RF RigSync ActiveX Panel	O SPLIT Rx > Tx Rx <> Tx Rx < Tx el Status Monitor

You'll see that RigSync has picked up your VFO A and VFO B frequencies from your radio. Click the Status tab, and you get more confirmation of that fact.

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1	4,033.0	45	7,	014.	055	5	
RIG > ▼ 1 ▼ 2 □ 3	SYNC SKIM OPTIONS	Rig Sync Ty 1 PRI OF 2 ACT Sk 3 OFF OFF 4 OFF Image: Skipping	pe Rx Freq tig 14033.05 tim g 1 tuned to	Tx Freq 7014.06	Split No	Mode CW	
W2RF Rig	Sync ActiveX	Panel Statu	s Monitor				

Now finally, click the Monitor tab, and you'll see things happen in real time.

💐 W2RF RigSync	1.0 beta	_ 🗆 ×
14,03	3.045	7,014.055
RIG SYN > ▼ 1 SYN ▼ 2 SKI □ 3 OPTIC □ 4 HEL	IC 12:28:27 Tu Sync'd 12:28:47 Ri Sync'd	ning rigs to 0.00 g 1 tuned to 14033.05
W2RF RigSync A	ctiveX Panel State	JS Monitor

The light background of Rig 1 tells you that it's active Typically you'll probably want to stay in the Panel view, so the changes in the Rig list give you a quick reminder of what is going on.

Now let's get Skimmer started. Because of the way that RigSync communicates with Skimmer, you must start Skimmer first, and then start RigSync. Ready?



This is Skimmer at mid-day during the CQWW160 contest – boring, right? So now re-start RigSync, click on both Sync and Skim, and here we are.

💐 W2RF R	tigSync 1.0 be	ta		
1	4,033.04	45	7,014	.055
RIG > ▼ 1 ▼ 2 □ 3 □ 4	SYNC SKIM OPTIONS	12:36:59 SK 12:37:18 SK 12:37:28 Tur Sync'd 12:38:21 SK	N4ZR Logged in 1823.4 K2TTT ing rigs to 14033.05 1826.5 K3CB	
W2RF Rig	Sync ActiveX	Panel Statu	IS Monitor	

Now suppose you want to tune your radio quickly to one of the stations spotted by Skimmer, like N4BCB, Just click on the callsign on the Skimmer bandmap, and shazam – RigSync tunes your radio to the right band and mode.

Here's how it looks on the monitor tab.

, W2RF RigSync 1.0 b	eta	
1,836.0	00	7,014.055
RIG > ▼ 1 SYNC SKIM C SKIM C SKIM C SKIM HELP W2RF RigSync ActiveX	12:39:04 SK , 12:40:23 S N12:40:26 S 12:40:39 Tu 1> 1> Sync 12:40:41 SK Panel Stat	1825.0 N2UL SK 1821.8 VE 3KP K 1820.5 VE 3CU I Click N45CB @ 1836.0 id 1819.4 W3TDF

That's pretty much the basics. Now let's look quickly at some of the additional features.

In the Panel view again, with Sync on, if you click the Split button your transceiver will go into Split mode. Unclick it and you're back in one-VFO mode.

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RIG SYNC > ▼ 1 SYNC ▼ 2 SKIM □ 3 OPTIONS □ 4 HELP	VF0 SPLIT Rx⇔Tx	Rx > Tx Rx < Tx	MODE © CW C AM C LSB C FM C USB C FSK		
W2RF RigSync ActiveX Panel Status Monitor					

Do the same on the transceiver's front panel and you'll see the button go on and off on the RigSync panel. Everything works this way, to keep your transceiver and RigSync in sync. Try it with the mode buttons. Cute, huh?

Click the RX>TX button and it makes your Transceiver's TX frequency the same as your RX frequency.

, W2RF RigSync 1.0 be	ta			
7,014.060		7,014.060		
RIG > ▼ 1 SYNC SKIM SKIM G	VFO SPLIT Rx ⇔ Tx Panel Statu	Rx > Tx Rx < Tx Is Monitor	MODE CW CAM CLSB CFM CUSB CFSK	

Click the RX<TX button and the transceiver's RX frequency will become the same as the TX frequency. Finally, click the RX<>TX button and the two frequencies are swapped.

🐂 W2RF RigSync 1.0 beta				
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RIG > ₩ 1 ₩ 2 ₩ 3 ₩ 4 HELP W2RF RigSync ActiveX	VFO SPLIT Rx \Leftrightarrow Tx Panel Statu	Rx > Tx Rx < Tx Is Monitor	MODE © CW © AM © LSB © FM © USB © FSK	

Now let's get a little fancier. Start CW Skimmer, and then click RigSync's Skim button. Now click on a callsign, or just on a frequency in the waterfall. RigSync moves your RX VFO to the frequency you clicked on, but leaves your TX VFO where it was set.

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RIG SYNC > ▼ 1 SYNC ▼ 2 SKIM □ 3 OPTIONS □ 4 HELP	VF0 SPLIT Rx \diamond Tx	Rx > Tx Rx < Tx	MODE CW CAM CLSB CFM CUSB CFSK		
W2RF RigSync ActiveX Panel Status Monitor					

Of course, if the Split button wasn't pressed then only the RX VFO would be active (for both transmit and receive),

Finally, here's an exotic option for SO2R ops, just to give you some sense of the flexibility available.