

Remote CW

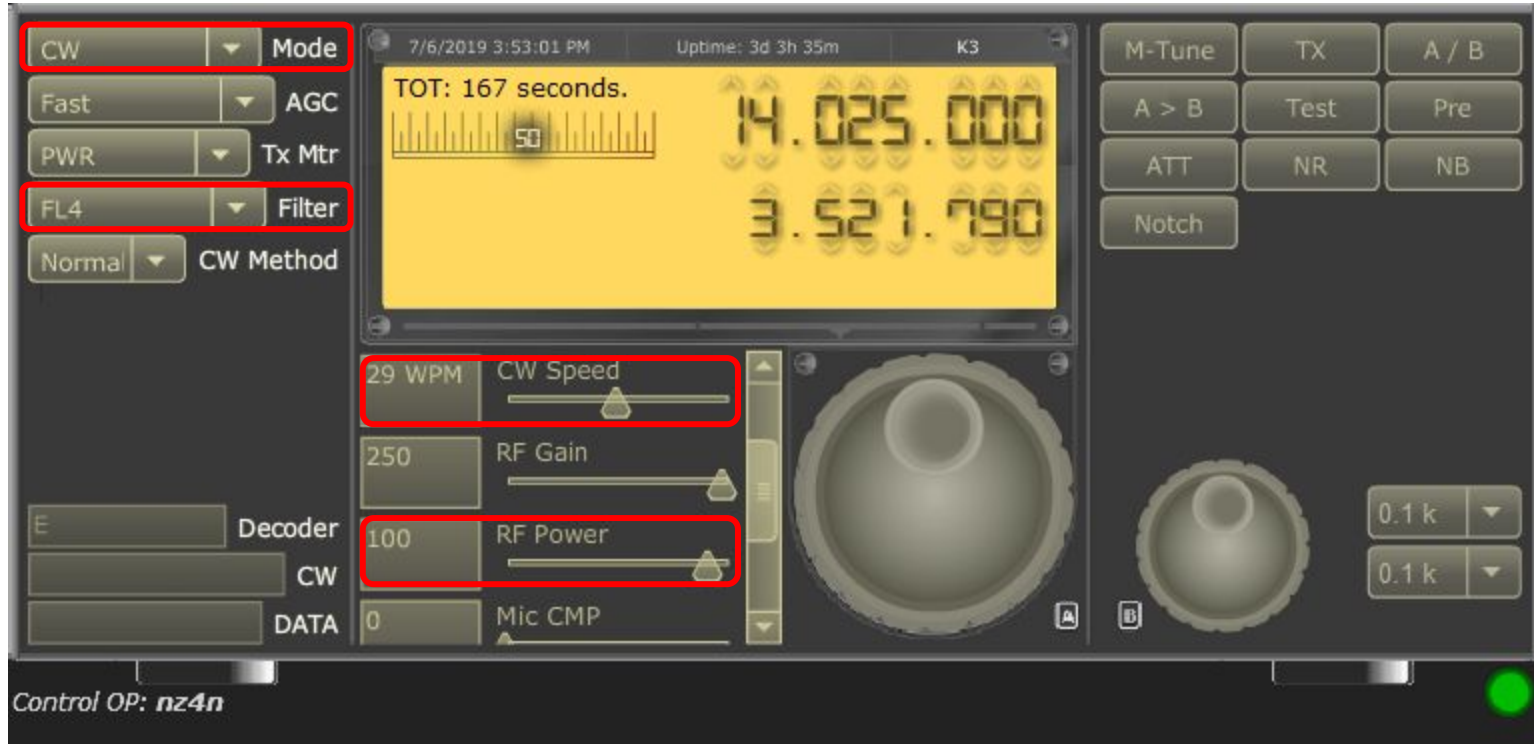
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Using RemoteHams software for CW

- 1) Set rig mode to CW
- 2) Check / Set power
- 3) Check / Set filter
- 4) Check / Set CW speed
- 5) Use test mode to ensure you can generate CW
- 6) Listen, listen, listen!
- 7) Make CW QSOs
- 8) Use N1MM+ for CW contests if you dare!

Check / Configure Rig Settings



Mode (CW), Power (100 W), Filter (FL4 / 400 Hz), CW speed (for you)

Verify CW Generation

The main software interface displays various controls for CW mode. On the left, there are dropdown menus for Mode (set to CW), AGC (set to Fast), Tx Mtr, Filter (set to FL4), and CW Method (set to Normal). The central display shows a frequency of 14.025.000 MHz and a CW speed of 29 WPM. A yellow 'Test' button is highlighted with a red box. Below the display are several sliders for Filter Width (0.4 kHz), FC Shift (0.5 kHz), CW Speed (29 WPM), and RF Gain (250). On the right, there are buttons for M-Tune, TX, A/B, A > B, ATT, NR, NB, and Notch.

The Keyboard configuration window shows settings for keyboard operation. The 'Send On Keypress' option is selected. The 'Enable Sidetone' checkbox is highlighted with a red box. Below it are sliders for Sidetone Volume (VOL 50%) and Pitch (960 Hz). The Paddle section shows Mode set to Iambic A, 29 WPM, and Weight (1). The 'High Accuracy Timing (Use More CPU %)' checkbox is checked. A 'CONFIG' dropdown menu is highlighted with a red box at the bottom of the window.

The Chats window shows a message from 'nz4n' with the text 'Welcome to the W4NC Remote Station'. The CW window shows a macro list with 'CONFIG' highlighted in a red box. The macro text is 'VVV TEST DE NZ4N K|'. Below the macro list, there is a display of the generated CW signal: 'TETETEE *E *TEEEETTTEEEEEEE'.

Use Test mode, no sidetone & type text in the CW window. You should hear CW (with a delay).

Be Aware Of.....

1) Sidetone

- a) You will always get a sidetone from the rig if you're correctly generating CW.
- b) You can also use a local sidetone from the RemoteHams client.
- c) There is a time lag so you'll need to find what works for you as you'll probably get an echo
- d) I set the local pitch very different from the rig pitch - the delay is too long for the speed I send CW so I get an echo and can't tell what I'm sending. Setting the pitch differently allows me to detect the difference enough to use CW.

2) Time lag

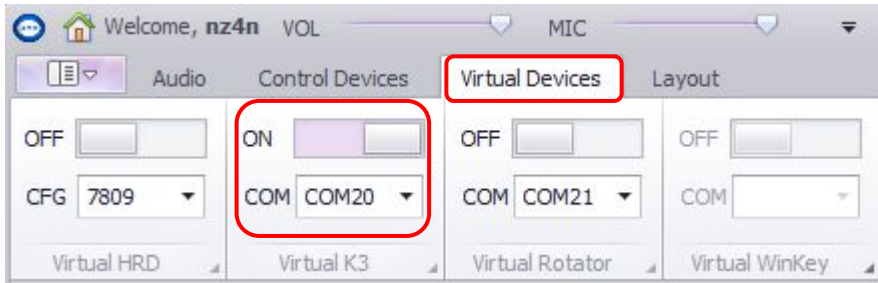
3) CW speed is always what the rig says it is (different than some local setups with a winkeyer or other local keying device)

4) Other devices (the RemoteHams.com ORB device, homebrew circuits) can be used to generate CW - setup may be challenging but great for a paddle. Research this on your own starting at RemoteHams.com.

5) N1MM+ generated CW may be tricky

Basic N1MM+ Setup

Using the remotehams client, setup a virtual K3 serial emulation port:



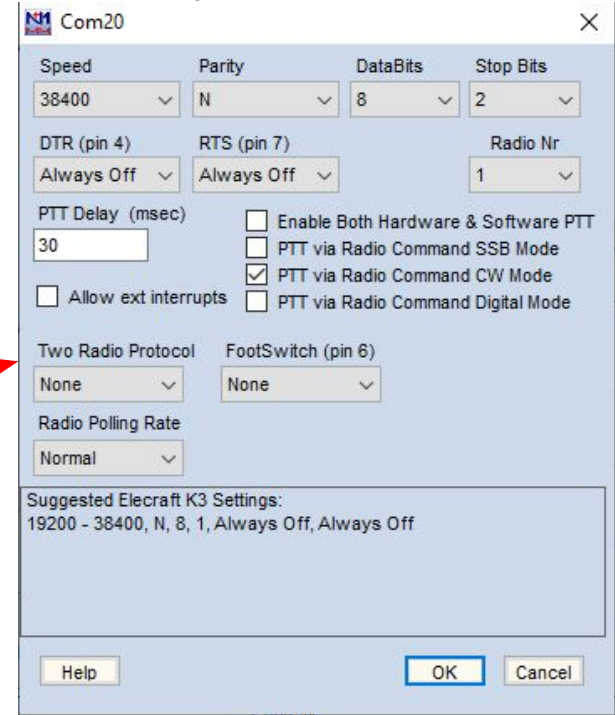
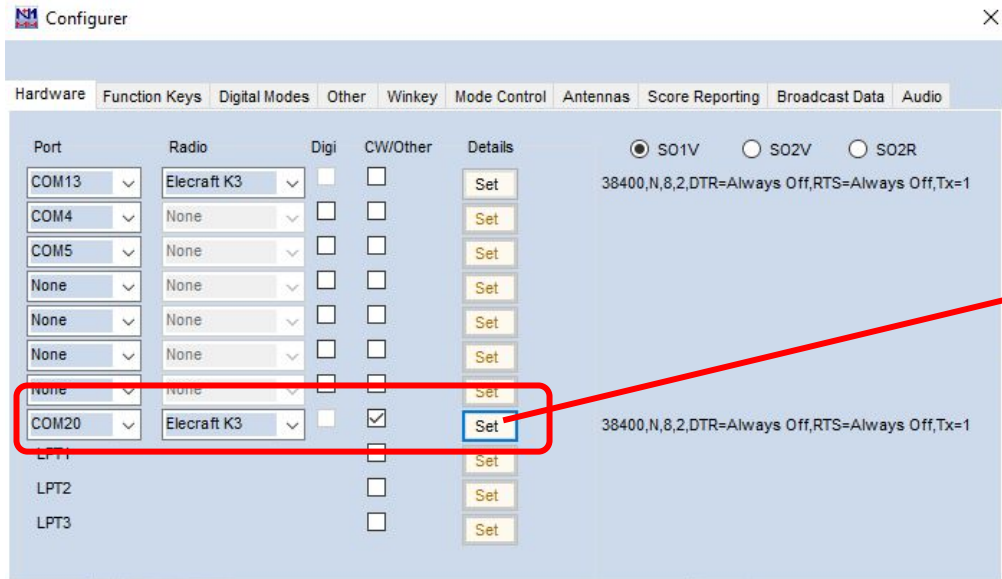
Choose an unused COM port on your computer

Then configure N1MM+ to use it as an Elecraft K3 (next slide)

Configure N1MM+ to use the virtual COM port

Configure N1MM to use the virtual port you just setup as an Elecraft K3

38400 baud, no parity, 8 data bits, 2 stop bits, DTR & RTS always off, PTT via radio command



Use Macros to send CW via N1MM+

Beware: Serial port based CW does not work (for me!) & once it starts sending you can't stop until it's done.

Use macros, N1MM+'s CATA1ASC command and the K3's KY command:

Example remote Field Day CW macro file

```
F1 CQ, {CATA1ASC KYWCQ FD {MYCALL} {MYCALL}};  
F2 Exch, {CATA1ASC KYW ;}{CATA1ASC KYW{EXCH}};}{SPACE}  
F3 TU, {CATA1ASC RC;}{CATA1ASC KYWTU {MYCALL}};  
F4 {MYCALL}, {CATA1ASC KYW{MYCALL}};  
F5 His Call, {CATA1ASC KYW!};
```

CATA1ASC tells N1MM+ to send an ASCII command to radio 1

KY is the K3 command for Keying from Text. The W tells the rig to wait before processing other commands, CQ FD {MYCALL} {MYCALL} is the text to send (N1MM+ replaces {MYCALL} with the station's callsign)

Q&A

This is my experience with RemoteHams.com software, CW, and N1MM+. Your mileage may vary, but I hope this helps.

If you have questions after tonight, please feel free to contact me on the repeater or via email at nz4n@arrl.net.

Any Questions?

