Subject: FT727 CAT programming question

Near as I can tell the CAT interface on the Yaesu FT-727 handheld duplicates keypushes. I can't find any way to push the keys to get it to go to a particular band. The u/d key toggles between bands, but that isn't much help when you're using it remotely and can't see the display.

Any ideas?

Yes I have the official 200,000th generation photocopy faxed from Yaesu support and this is what it reports:

1 - Wiring: The tip of the phone jack is the serial output from 0x0 to 0x0f to represent signal strenth. All data to and from this little beast is TTL levels 4800 baud two inverted stop bits and one inverted data bit. My, I would like to meet the engineer that came up with that one :-)

The ring of the phone jack is the serial data input. The body of the phone jack is +12 volts. You are supposed to get a ground from the body of the earphone jack. DO NOT SHORT the BODY of the CAT port to the EAR or MIC jacks. If you accidentally do this you let the smoke out of the IC's and everyone knows that IC's stop working if you let the smoke out!

2 - Software:

Control consists of duplicating the keystrokes that can me made on the xceiver keypad by sending the corresponding key codes to the CAT jack. The MSD (Most Significant four bits) select the key column and the LSD (not to be confused with C14H15N2CON(C2H5)2 lysergic acid diethelamide) forms the key row. The function key is simulated by setting bit 7. Serial output from the "S" meter is sent about every 100 ms

| FUNCTIO | 0x0e | 0x0d | 0x0c | 0x0b | | |
|------------------------------------|------------------------------|--------------------------|------------|-------------------------|-------------------------------|--|
| 0x0e 0x0d 0x0b 0x07 | +RPT SAVT SAVE LOCK | TDEC TENC | | PMS TXM MC DUP | PSET S/CH SHIFT STEP | |
| NORMAL | 0x0 | 07 0x0 | 6 0x05 | 0x04 | 4 0x03 | |
| 0x0e 0x0d 0x0b 0x07 | 1 4 7 * | 2 3 5 6 8 9 0 # | 6 M 9 C | ^ MR = D | | |

So to press in a direct frequency you would first press "D" then enter the frequency.

D = 0x0371 = 0x07e 4 = 0x07d 6 = 0x05d 5 = 0x06d 2 = 0x06e D = 0x037SIMP = 0x0ee

I do admit it seems a little awkward at first but it does work. To start always go to a known spot. If you are unsure of the current setting of the V/U status set it to a programmed frequency and then start. If you lose sync of the V/U switch I guess your beat!