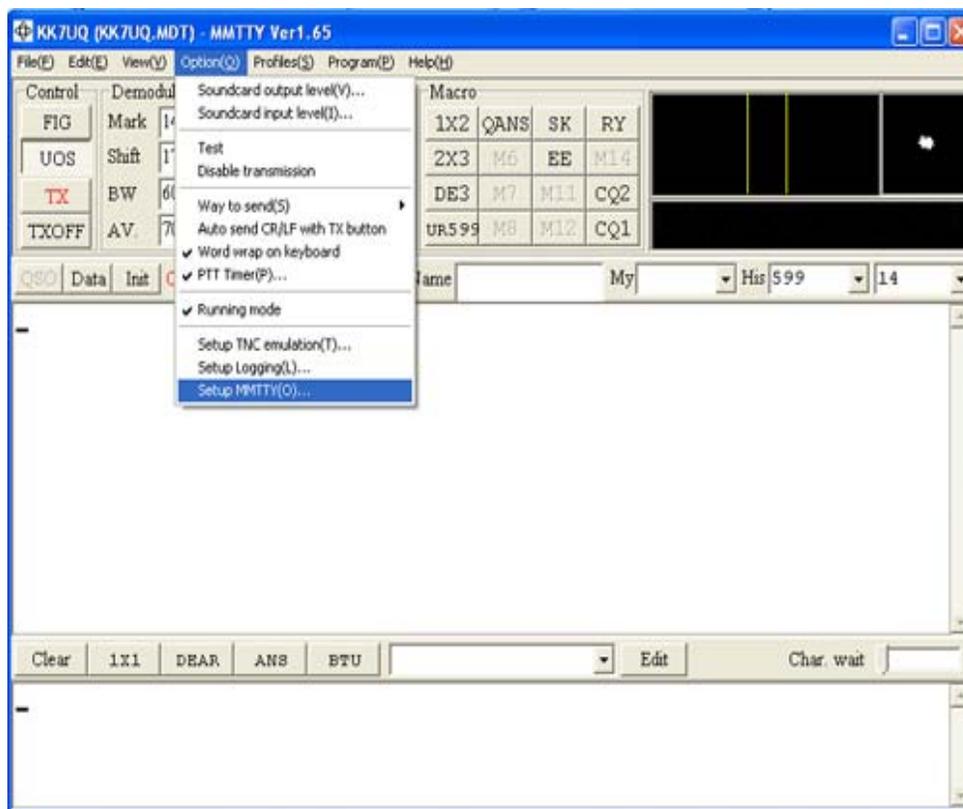


Navigator Installation

The popular MMTTY engine by JE3HHT is used many ham control software programs to provide excellent RTTY operation. To set up MMTTY with Navigator, go to Options(O) and select "Setup MMTTY(O)" as shown in the screen shot below.

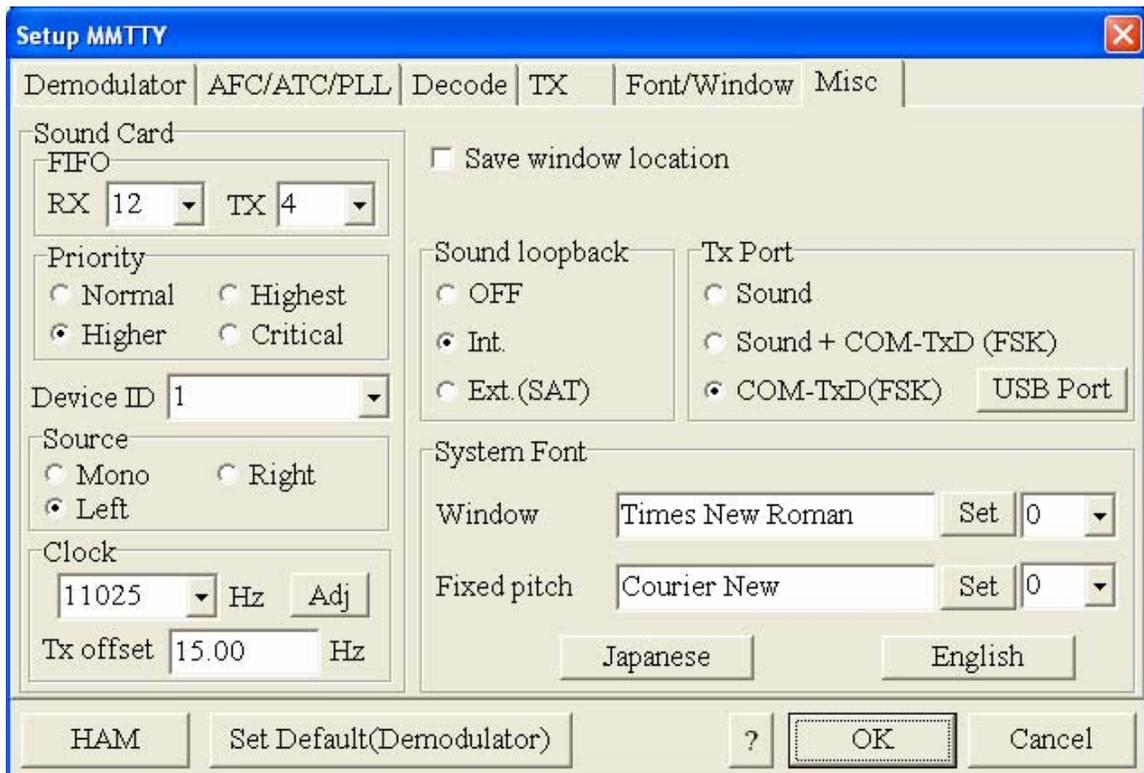


Navigator Installation

This will bring up tabbed options setup for MMTTY. Click on “Misc” as shown below, and set up the Device ID for the USB Audio Codec. If your “preferred soundcard” is the internal sound card of your PC, then select “1” to represent the 1st audio device after the preferred sound device (0). If you have set up your PC to have the Navigator Audio Codec be the preferred sound device, then enter 0 there instead.

Note: Normally the internal sound card is left as the “preferred” so you can hear normal Windows sounds on your speakers.

Next click the radio button “COM-TxD(FSK)” under TxPort. This means that you will be sending digital FSK signals to the transceiver instead of audio.



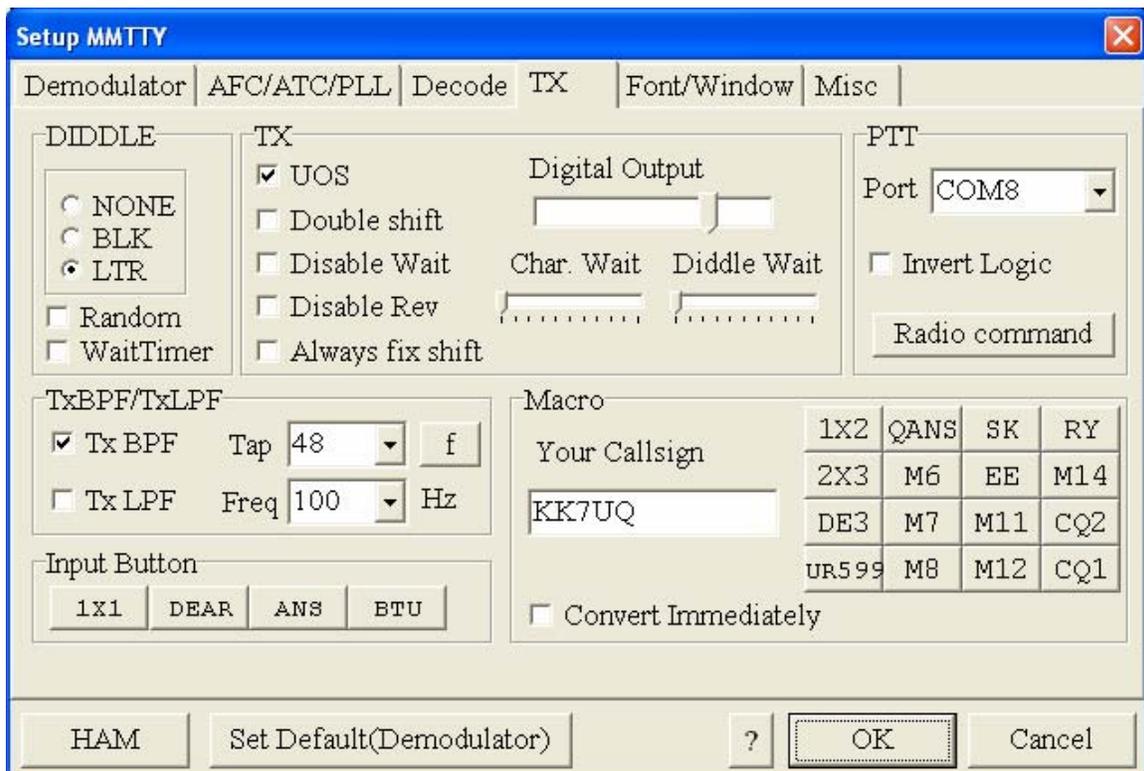
Next click on “USB Port”. See next page.

Navigator Installation

Click on “A:Normal”. Then click “OK”.



When you return to the previous screen, click on the “TX” tab to bring up the screen below. Under “PTT”, select the port number of the Navigator FSK port. In our examples earlier, this is port “COM8”. Yours may vary – check using device manager to find the COM port assigned to FSK. After you have selected the COM port, click on “Radio Command”.



Navigator Installation

If you are running MMTTY as a stand alone program, then use this screen to set up CAT control using MMTTY. If you are using MMTTY as an “Engine” under another program, then check your documentation for that program to see if CAT is done here, or if it is done in the main program.

If you do CAT in MMTTY, then specify Port as the Navigator CAT function COM port. In our example, this was COM5. Check Windows Device Manager to find the COM port assigned to Navigator CAT. The rest of the screen is specific to your rig. Check the MMTTY documentation to set up for your rig. Click OK to return to the previous screen.

Radio command

Port definition

Port: COM5 Baud: 19200 Char. wait: 0 ms

Data length: 7bits 8bits

Stop: 1bit 2bits

Parity: None Even Odd

flow control: XON/XOFF CTS

DTR/RTS: PTT

Commands

Init: [] xx= 04

Rx: \\$FEFExxE01C0000FD

Tx: \\$FEFExxE01C0001FD\w10

VFO polling: NONE

Frequency offset: OFF LSB USB

Polling interval: 1 s

ICOM xx=addr 01-7F [] Load Save ? OK Cancel

When you have returned to the tabbed options screen, select “Decode” and see the next page for the Decode screen.

Navigator Installation

This screen defines the FSK options. The setup below is the standard MMTTY HAM screen. Note that Rx=1bit, Tx=1.5bit is selected. If you select another Stop Length than 1.5, be sure and change the stop length in NavOptions to match this. See the next page for more information.

The screenshot shows the 'Setup MMTTY' dialog box with the 'TX' tab selected. The 'BaudRate' is set to 45.45. The 'Majority Logic' checkbox is checked, and 'Ignore framing error' is unchecked. Under 'BitLength', '5bit' is selected. Under 'StopLength', 'Rx=1bit, Tx=1.5bit' is selected. Under 'Parity', 'NONE' is selected. Under 'Default RxStop bit', 'Rx=1bit, Tx=1.5bit' is selected. The 'BAUDOT Codeset' has 'S-BELL' selected. At the bottom, there are buttons for 'HAM', 'Set Default(Demodulator)', a help button '?', 'OK', and 'Cancel'.

Demodulator	AFC/ATC/PLL	Decode	TX	Font/Window	Misc
BaudRate: 45.45					
<input checked="" type="checkbox"/> Majority Logic					
<input type="checkbox"/> Ignore framing error					
BitLength		StopLength		Parity	
<input checked="" type="radio"/> 5bit		<input type="radio"/> 1bit		<input checked="" type="radio"/> NONE <input type="radio"/> 1	
<input type="radio"/> 6bit		<input type="radio"/> 1.5bit		<input type="radio"/> Even <input type="radio"/> 0	
<input type="radio"/> 7bit		<input type="radio"/> 2bit		<input type="radio"/> Odd	
<input type="radio"/> 8bit		<input checked="" type="radio"/> Rx=1bit, Tx=1.5bit		Default RxStop bit	
		<input type="radio"/> Rx=1.42bit, Tx=1.5bit		<input checked="" type="radio"/> Rx=1bit, Tx=1.5bit	
				<input type="radio"/> Rx=1.42bit, Tx=1.5bit	
BAUDOT Codeset					
<input checked="" type="radio"/> S-BELL <input type="radio"/> J-BELL					
HAM		Set Default(Demodulator)		? OK Cancel	

Navigator Installation

The Navigator Options screen from the NavOptions program is represented below. Select FSK Stop to be 1.5, then click “Save to Default” to make this your default setting. Note that the MixW program uses 2 bits as the FSK Stop, so you will have to change it back if you use that program.

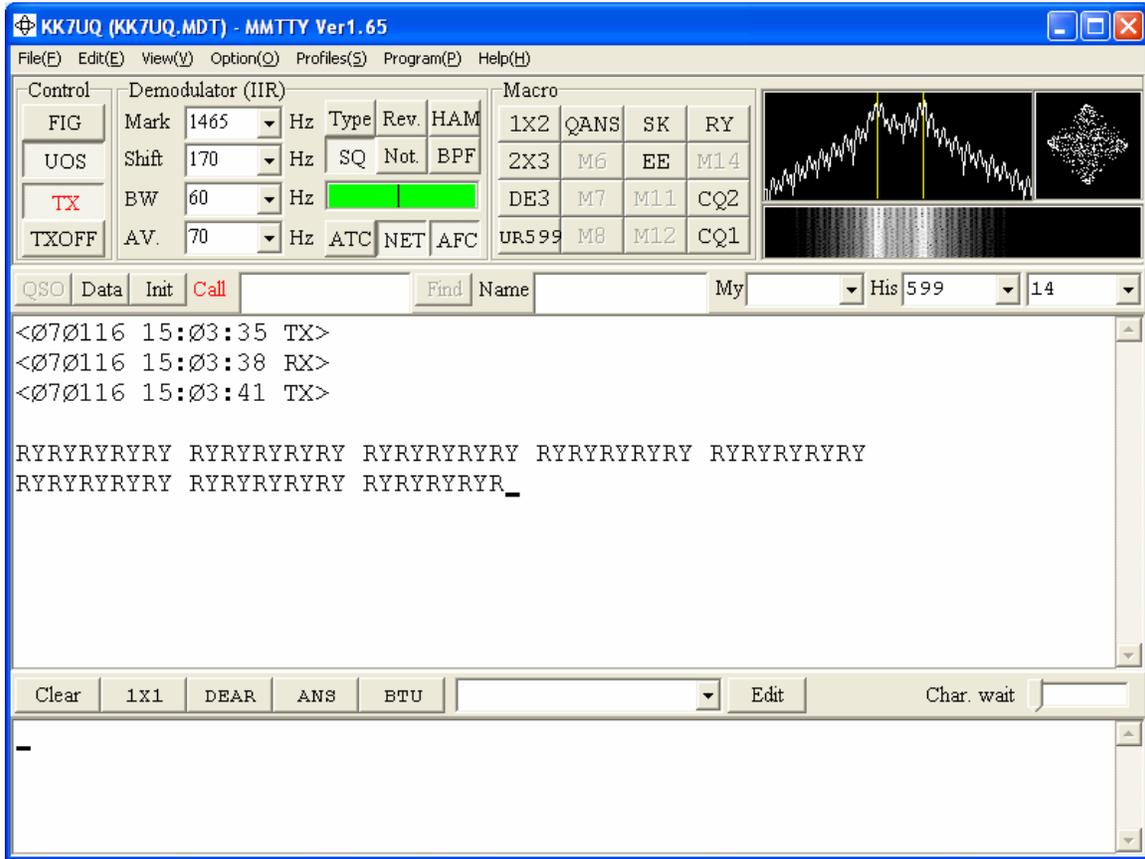
Other FSK related items on the NavOptions screen are the FSK Polarity. Most rigs use the Normal. Kenwood rigs use the Reverse polarity, so if you are using Kenwood, you will probably have to select “Reverse”. If your rig generates a side tone for FSK operations, set FSK Side Tone to “Off”, so that you only listen to the one from your rig, instead of Navigator. Leave FSK PTT “On”. Set FSK Baud to 45.45.



If you haven't already done so, on the MMTTY setup screen, click “OK” to return to the main MMTTY screen, shown on the next page.

Navigator Installation

Normal operation of MMTTY is now done from this screen, or a similar screen if you are using the MMTTY engine with a control program.



This completes the setup for the MMTTY engine.