

Digital Communications - Made Simple for Cruisers

Overview

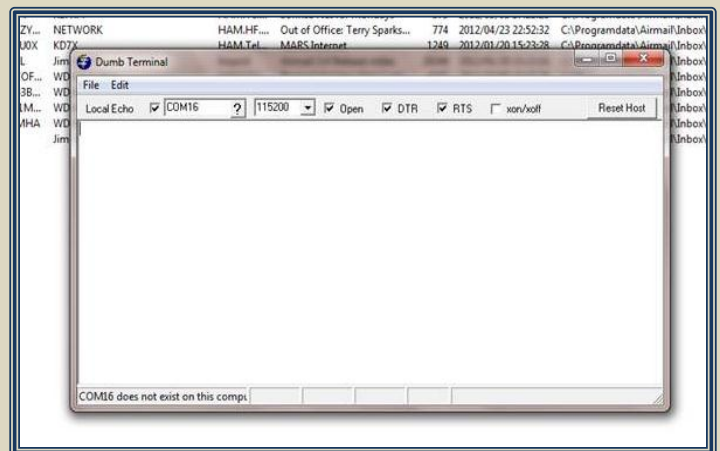
There are times when you just cannot talk to a fellow cruiser via voice. With voice we are trying to understand the words and inflections of the calling station and high levels of background noise levels can be very challenging.

When you need to get your message out or find out what the weather is going to be, the best alternative to voice communications is digital communications. Digital has a better chance than voice as it is really only looking for ones and zeros in a known format.

Most people are familiar with text messaging on your phone, but did you know that if you use Sailmail or Winlink you have the tools on board to basically text a fellow cruiser. The process is very simple with only a couple of added things to do to change from listening to sending. This procedure assumes your radio, modem, and Airmail are already set up for use on Sailmail and/or Winlink. While you could use any Dumb Terminal, let keep it simple and use Airmail.

The Process

1. Both the sending and receiving stations must be ready to receive messages.
2. Turn on your radio, Computer, and PACTOR modem.
3. Set the frequency to the desired frequency you are authorized to transmit on.
4. Start the Airmail program
 - a. The program you use to do Sailmail and/or Winlink.
 - b. Start just like if you were getting ready to send and receive email.
5. Using your computer's mouse device, click on "Tools" and then "Dumb Terminal".
 - a. This will open a window similar to the window you use for Sailmail and/or Winlink.
6. There will be no green start or red stop button.
7. Press "Esc" key to get the Command prompt, "cmd:"

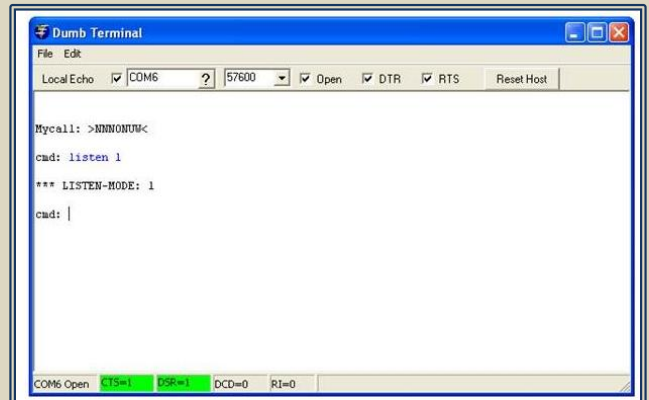


Airmail - Dumb Terminal Display

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8. Next start the digital text process communications with the modem. All station(s) wanting to hear and/or send digital information must initiate the process by:

- Type "TO 4" and press "Enter".
- Type "Listen 1" and press "Enter".
- Your computer may return with "*** LISTEN-MODE: 1" depending on where the modem was last set.
- Your modem is now listening.
- You will now hear any PACTOR modems sending messages on the selected frequency.
- Press "Esc" key to return to the "cmd:" prompt.



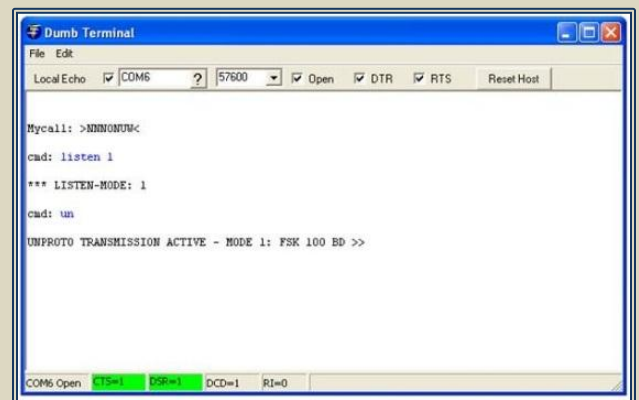
```
Dumb Terminal
File Edit
LocalEcho [x] COM6 [?] 57600 [v] Open [x] DTR [x] RTS Reset Host

Mycall: >NNNNUU<
cmd: listen 1
*** LISTEN-MODE: 1
cmd: |

COM6 Open CTS=1 DSR=1 DCD=0 RI=0
```

9. To **Send** text to all stations in the listening mode:

- Type "UN" and press "Enter".
 - This is the abbreviated version of the UNPRO Command.
- The computer should display "UNPROTO TRANSMISSION ACTIVE - MODE 1: FSK 100 BD >>"
- The computer display will move to a blank line ready for typing.
- Type your message(s)



```
Dumb Terminal
File Edit
LocalEcho [x] COM6 [?] 57600 [v] Open [x] DTR [x] RTS Reset Host

Mycall: >NNNNUU<
cmd: listen 1
*** LISTEN-MODE: 1
cmd: un
UNPROTO TRANSMISSION ACTIVE - MODE 1: FSK 100 BD >>

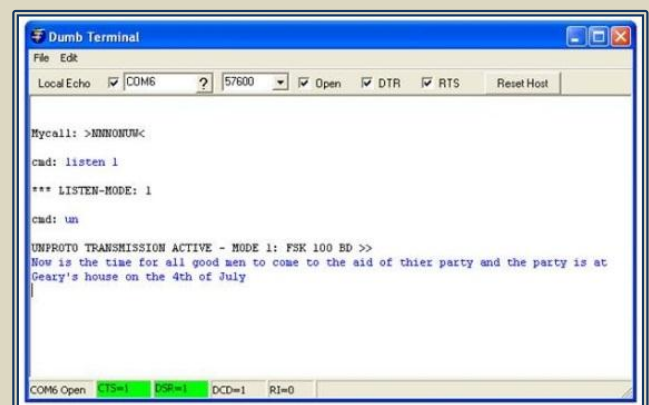
COM6 Open CTS=1 DSR=1 DCD=1 RI=0
```

10. I would suggest starting your message with your call sign and end it with your call sign if your message is more than 10 lines.

- a. Example:

Send a Short Message

XF1-AD7XL: Now is the time for all good men to come to the aid of their Party and that Party is at Geary's house on the 4th of July.



```
Dumb Terminal
File Edit
LocalEcho [x] COM6 [?] 57600 [v] Open [x] DTR [x] RTS Reset Host

Mycall: >NNNNUU<
cmd: listen 1
*** LISTEN-MODE: 1
cmd: un
UNPROTO TRANSMISSION ACTIVE - MODE 1: FSK 100 BD >>
Now is the time for all good men to come to the aid of thier party and the party is at
Geary's house on the 4th of July

COM6 Open CTS=1 DSR=1 DCD=1 RI=0
```

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For Long messages

XF1-AD7XL: Now is the time for all good men to come to the aid of their Party and that Party is at Geary's house on the 4th of July.

For directions of where to go etc.

and What to bring etc.

And on another subject etc.

Kind Regards, Terry: XF1-AD7XL

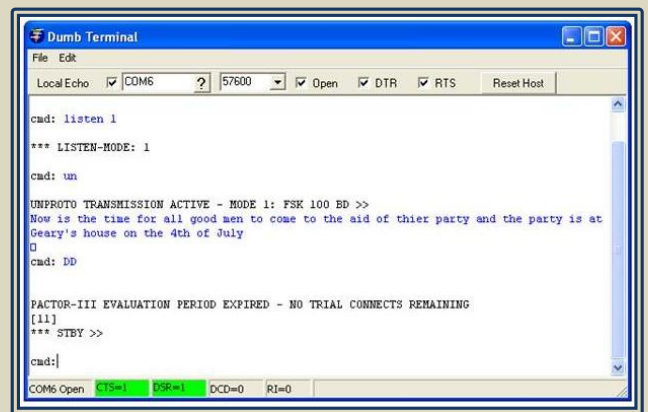
11. When you have completed sending, press and hold "Ctrl" and Press "d" to stop transmitting.

12. Press "Esc" to return to the "cmd:" prompt.

13. It is also possible to do a hard stop on the transmitter as an option. To do a hard stop press "Esc" and then type "DD" and Press "Enter". The Modem will return to the listen mode and display the "cmd:" prompt. (as an old CPM computer guy, I like the "Cntrl" "d" option best.)

14. Then press "Esc" to return to the "cmd:" prompt.

15. When complete, close the terminal window by using your Mouse Device and clicking on the red "X" in the upper right corner of the Dumb Terminal.



Digital Communications will allow us cruisers to get information more accurately and at a longer distance. Most importantly being able to ask those weather questions will increase cruiser overall **Safety at Sea**. [See "Quick Reference Guide" on the next page.]

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Quick Reference Guide

Receive a messages (Always do first):

1. Turn the Radio, Modem and PC on.
2. Make sure the equipment is connected as it would be connected for Sailmail or Winlink.
3. Start Airmail Program
4. Tune the radio to the frequency you intend to transmit and receive on.
5. With your mouse, click on "Tools" and then "Dumb Terminal".
6. Press "Esc" to see "cmd:" prompt
7. Type "TO 4" and press "Enter".
8. Type "Listen 1" and press "Enter".
9. Your computer may display "*** LISTEN-MODE: 1" indicating you are in fact in the listening mode."
10. You are now listening for messages from anyone.

Send a messages:

1. At the "cmd:" prompt type "**UN**" and press "Enter".
2. The transmitter will key on the selected frequency.
3. Type your message and press "Enter" at the end of each line.
4. Start your message with your call sign and end it with your call sign if it is a long message.

XF1-AD7XL: Now is the time for all good men to come to the aid of their party and that party is at Geary's house on the 4th of July for all Cruisers.

(Press "Enter" for next line)

5. After sending your message, press and hold "**Ctrl**" and then press "**d**" to stop transmitting.
6. Then press "**Esc**" to return to the "cmd:" prompt.
7. Close the terminal window by using your Mouse Device and clicking on the red bordered "X" in the upper right corner of the Dumb Terminal.