## Modem cables- MUBBS

Page 1

Modem cables have been a big pain for Sysops for years. The Mac pinouts don't make things any easier, but we all know that there is limited space behind the Mac to put a full size connector. The Mac doesn't supply all the normal "RS-232" connections so it's a bit confusing.

You should only get a new cable if your current one doesn't work correctly. Most standard Macintosh modem cables aren't designed correctly for BBS usage, so it's likely you don't have the right cable.

Your modem needs to be Hayes "AT" command set compatible.

The current "serial" and "modems" module is set up to work on a Hayes compatible modem up to 9600 baud. IT NEEDS A CABLE THAT SUPPLIES "CARRIER DETECT" BACK TO THE MAC! There is no "hardware" handshaking available, but other people could write a serial driver that handles that on Mac computers that have the extra pin for it. Mac Plus' and 512's and some others don't have the pin for hardware handshaking.

TO USE HARDWARE HANDSHAKING (for faster then 9600 type modems) YOU MUST HAVE THE PROPER CABLE AND "SERIAL" & "MODEM" MODULES!

The reason you would want "Hardware Handshaking" as an example is when you want the Mac to send to the modem at 19200, but it's only a 2400 baud modem (that allows you to connect to it at 19200, it buffers the data inside). When the Mac sends to the modem at 19200, the modem signals back to the Mac that it's buffer is FULL. It would do this with a "Hardware" line called "Clear To Send, CTS".

For this reason, if you are transferring at 9600, just set the maximum baud at 9600 and you wont have to use "Hardware Handshaking".

The "modems" and "serial" module may allow you to turn off the carrier detect checking, please read the module instructions.

PLEASE DON'T BE A LAZY SYSOP! Build a cable or get a friend to make one for you. It only requires a four wire cable. If someone hangs up and you are NOT detecting Carrier Loss, your system will remain "BUSY" till MUBBS times out. Also, when someone calls in, the modem will send a few characters to indicate "RING" and guess what ????? MUBBS thinks there's still a user ONLINE and typing!!

If you don't detect carrier loss, your system will look real "sloppy" (and be busy all the time for no reason) from a user's point of view! Believe me, I've called these types of systems, and you can tell (get accidentally disconnected and then call right back and it's busy).

(c) 1991 N. Hawthorn, for MUBBS

Page 2

Here's the cable that works for me:

"Mac Plus" (and other Mac's)

DIN-8 Male "RS-232c" DB-25 Male

(Hsk out) 1 (Not Connected, N.C.)

(Hsk in) 2 8 (Data Carrier Detect, DCD) <-THIS IS THE CARRIER DETECT

(Tx-) 3 2 (Transmit Data, TXD)

(GND,Rx+) 4 and 8 7 (Ground, GND)

(Rx-) 5 3 (Receive Data, RXD)

(N.C.) 6 (Not Connected, N.C.)

(Tx+) 7 (Not Connected, N.C.)

(N.C.) NONE 4 and 5 and 20 (RTS, CTS, DTR)

NOTE: Pin 8 (Rx+) on the DIN-8 side is jumpered to pin 4 (GND) on the DIN-8 side and pins 6 & 7 are Not Connected, N.C.

On the DB-25 end, 4 and 5 and 20 (Ready To Send, RTS) and (Clear To Send, CTS) and (Data Terminal Ready, DTR) are connected together (and to nothing else). This tells the modem that you are ready by feeding it's "ready" signal right back to itself!

This makes for a real nice 4 wire connection.

Most "pre made" cables will connect Mac pin 7 to RS-232 pin 20 and 4. This is another way of doing it, but the extra wire is not necessary.

Telebit modems and some other handshaking modems need to do this: (ONLY IF YOU HAVE A "SERIAL" MODULE AND A MAC THAT HANDLES THIS!) You MUST send the proper modem strings to the modem to enable this!

"Mac Plus" (and other Mac's)

DIN-8 Male "RS-232c" DB-25 Male

(Hsk out) 1 20, and 4 (DTR,RTS)

(Hsk in) 2 5 (CTS)

(Tx-) 3 2 (Transmit Data, TXD)

(GND,Rx+) 4 and 8 7 (Ground, GND)

(Rx-) 5 3 (Receive Data, RXD)

(N.C.) 6 (Not Connected, N.C.)

(Tx+) 7 8 (Data Carrier Detect, DCD) <-THIS IS THE CARRIER DETECT

NOTE: Pin 8 (Rx+) on the DIN-8 side is jumpered to pin 4 (GND) on the DIN-8 side, pin 6 is Not Connected, N.C.

THIS WILL \*NOT\* WORK ON A MAC PLUS, LC or Classic! (Check your Mac's Manual)

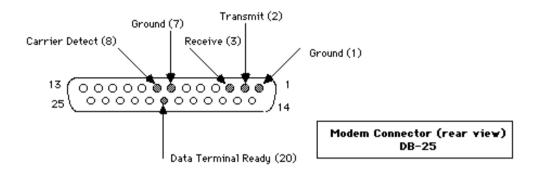
You could try these companies for special cables:

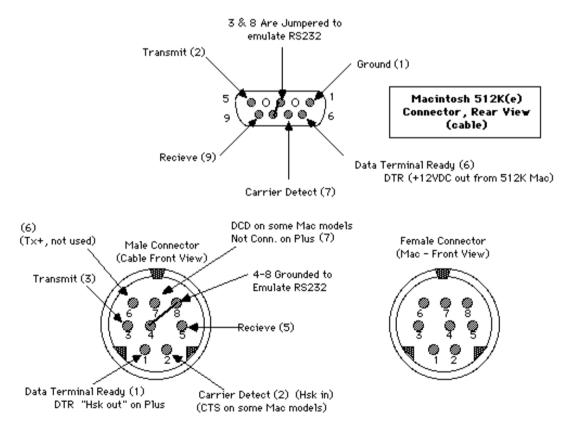
Mac Dataflow (301) 612-0314

Electro Products (800) 423-0646, in Seattle (206) 859-0574

I'm sure there are other companies around too...

(Try doing this on a IBM PC and then release it so that ANYONE can read it with a STANDARD word processing program! This is another reason why the PC sucks so bad. Too bad those people are so IGNORE-ANT of what the Mac can do. They live in their own little VOID.)





More info available on SSci BBS (space BBS) 805-259-6407