

Notes about the driver:

I have been using this driver and configuration on my system for the past week or so since I could not find anything particularly helpful to set up this modem on the support board. I make no guarantees that this setup will work on your system, with your particular modem, or work exactly as you would want it to work. All I state is that it works for me and hopefully will work fine for you.

With that said, on to the good stuff!

The following is my stored modem settings. I'll try to describe the relevant settings for Hermes after the listing. Stored Profile #0 is the one which I have loaded when the modem is powered up. Stored Profile #1 is currently just the default settings for a Macintosh setup with hardware handshake.

```
ACTIVE PROFILE:          DTE:57600          DCE:2400          PARITY:NONE
B16 B1 E1 L1 M0 N1 P Q0 V1 W0 X4 Y0 &A0 &C1 &D0 &G0 &J0 &K3 &L0 &Q5 &R0 &S0 &T4
&U0 &X0 &Y0
S00:000 S01:000 S02:043 S03:013 S04:010 S05:008 S06:002 S07:040 S08:002 S09:006
S10:014 S11:055 S12:050 S18:000 S25:005 S26:001 S30:000 S36:007 S37:000 S38:020
S43:006 S46:002 S48:007 S63:000 S82:128 S86:004 S95:001 S97:030 S108:1 S109:062
S110:2 S118:001 S119:1
STORED PROFILE 0:
B16 B1 E1 L1 M0 N1 P Q0 V1 W0 X4 Y0 &A0 &C1 &D0 &G0 &J0 &K3 &L0 &Q5 &R0 &S0 &T4
S00:000 S02:043 S06:002 S07:040 S08:002 S09:006 S10:014 S11:055 S12:050 S18:000
S25:005 S26:001 S30:000 S36:007 S37:000 S38:020 S46:002 S48:007 S63:000 S82:128
S95:001 S97:030 S108:1 S109:062 S110:2 S118:001 S119:1
STORED PROFILE 1:
B16 B1 E1 L2 M1 N1 P Q0 V1 W0 X4 Y0 &A0 &C1 &D2 &G0 &J0 &K3 &L0 &Q5 &R0 &S0 &T4
S00:000 S02:043 S06:002 S07:050 S08:002 S09:006 S10:014 S11:095 S12:050 S18:000
S25:005 S26:001 S30:000 S36:007 S37:000 S38:020 S46:002 S48:007 S63:000 S82:128
S95:000 S97:030 S108:1 S109:062 S110:2 S118:001 S119:1
```

Note first that my DTE rate is set for 57600 baud. If you are going to use this speed, which would be absolute maximum throughput for this modem, then you should make your cable short (3 feet or shorter) to reduce electrical interference. Longer cables have a higher chance of inducing garbled characters. Note also that some older versions of multiport cards (old CSI cards prior to version 4.4) will not support this baud rate. Basically, if you copy profile 0 and write it to profile 0 with an AT&W0 and then do an AT&Y0, then your modem will start up with the same settings mine does. You could store a setting more suited to dialing out in profile 1 and access it with an init string of ATZ1.

Relevant settings:

&K3 sets up hardware flow control on the DTR/DSR/CTS pins of the modem. I have used this setting because hardware flow control should be your first choice using Hermes cable #3. This is basically the same cable shown in the back of your modem manual with pin 7 on the computer end soldered to pin 8 on the

modem end which connects DCD to the GPI input on the Macintosh to let you do carrier detect while using hardware handshake.

If you are going to use XON/XOFF flow control, use &K4. The modem driver will also make this setting automatically according to your choice in the Node Prefs dialog box.

&Q5 gives us standard error correcting operation with automatic speed buffering. This is used to allow for having a port rate higher than the modem's communication rate (19200, 38400, or 57600 baud) and allow higher throughput.

&D0 is used to ignore the DTR line while we are using hardware handshaking. If we didn't ignore the DTR, the first flow control signal would cause the modem to hang up. Obviously, we don't want this to happen. &D2 is used in the driver for XON/XOFF mode to allow for DTR hang-up.

The init string in the driver reads as follows:

```
ATHE0&C1S0=0M0S2=1X4V0
```

AT is the attention command, H forces the modem to hang up (used for returning from a Hold Off-line command), E0 turns off command echo(Hermes doesn't want to see any form of echoes), &C1 turns on carrier detect signals over the cable, S0=0 is used because Hermes will send an ATA when it detects a ring (we don't want the modem and Hermes to get confused over who wants to answer the phone!), M0 turns the speaker off, S2=1 makes the escape character to be Ctrl-@ which is the Hermes preference, X4 turns on result codes, and V0 returns numeric result codes for the connection type list.

There are probably some better ways to implement a driver for the PM14400FXSA, but this is a Q&D job which works on my system. I've had one complaint from a user not being able to connect with it, but connecting fine on my US Robotics Dual Standard. I'm not sure what the problem is with that, but I will correct this driver whenever I get some new data or find better settings. If you've got questions or suggestions, I can be reached at:

Mount Olympus as account #41, Matt Jannusch (the Hermes support BBS)
America Online as MJannusch
Desert Oasis as account #1 at 612-425-7669 and 612-425-0803 (my BBS)