

The following are the USR Dual Standard settings I use on my modems. The first set are those used on the BBS. These settings allow Tele-Mac to properly answer both V.32 and HST callers. The following is the display when sending ATZ followed by ATI4 to the BBS modem.

#### USRobotics Courier 9600 HST Dual Standard Settings...

```
B0 C1 E0 F1 M0 Q0 V1 X1
BAUD=19200 PARITY=N WORDLEN=8
DIAL=TONE  ON HOOK  TIMER
```

```
&A2 &B0 &C1 &D2 &G0 &H2 &I0 &J0 &K0
&L0 &M4 &N0 &P0 &R1 &S1 &X1 &Y1
```

```
S00=000 S01=000 S02=043 S03=013
S04=010 S05=008 S06=002 S07=060
S08=002 S09=006 S10=007 S11=070
S12=050 S13=000 S14=000 S15=000
S16=000 S17=000 S18=000 S19=000
S20=000 S21=010 S22=017 S23=019
S24=025 S25=000 S26=000 S27=000
S28=008 S38=000
```

B0 sends the V.32 answer sequence and if an HST calls it will fall back to HST mode.

&A2 allows me to tell exactly what type of connection has been made when I'm monitoring the board.

&B0 tells the modem to shift its DTE rate to match the DCE rate. This is necessary with the current version of RRH which isn't configurable to a fixed DTE rate. The USR modem properly reports the DCE-DCE rate in its CONNECT message rather than the DTE-DCE rate. This allows a BBS program to properly calculate download times even if the DTE-DCE rate is higher. I'm currently working on a patch to RRH's code to allow a fixed DTE-DCE rate.

&H2 sets software transmit flow control preventing possible buffer overflow, this isn't necessary since the DTE-DCE rate follows.

&I0 turns off input flow control so XMODEM protocols will work properly

&K0 turns off MNP-5 compression since almost all files are stuffed

&M4 allows proper detection and control of high speed modes

&S1 helps overcome 'stupid' wiring of some modem cables.

These are my BBS switch settings:

```
 1  2  3  4  5  6  7  8  9 10
Up x  x      x  x  x      x
Dn      x  x      x  x
```

----- Caller's terminal settings -----

The following settings should be used by those using Dual Standard modems with Red Ryder 10.3. Communication between terminal program and modem always occurs at 19200 bps regardless of modem to modem connection rate.

#### USRobotics Courier 9600 HST Dual Standard NRAM Settings...

```
DIAL=TONE B0 F1 M1 X3
BAUD=19200 PARITY=N WORDLEN=8
```

```
&A2 &B1 &G0 &H2 &I0 &J0 &K1 &L0
&M4 &N0 &P0 &R1 &S1 &X1 &Y1
```

```
S02=043 S03=013 S04=010 S05=008
```

S06=002 S07=060 S08=002 S09=006  
S10=007 S11=070 S12=050 S13=000  
S15=000 S19=000 S21=010 S22=017  
S23=019 S24=025 S26=000 S27=000  
S28=008 S38=000

These are my terminal switch settings:

	1	2	3	4	5	6	7	8	9	10
Up		x		x		x	x			x
Dn	x		x		x			x	x	

Note: switch settings are different for the auto-answering BBS modem.

Pay particular attention to the differences between my setup and USR's default settings. Your manual explains how to change the NRAM settings using the &W command.

By using this setup my modem is forced to connect V.32 mode which is more efficient than HST mode.

When everything is setup properly, if you send the modem ATZ followed by AT14 you should get the following:

USRobotics Courier 9600 HST Dual Standard Settings...

B0 C1 E1 F1 M1 Q0 V1 X3  
BAUD=19200 PARITY=N WORDLEN=8  
DIAL=HUNT OFF HOOK TIMER

&A2 &B1 &C1 &D0 &G0 &H2 &I0 &J0 &K1  
&L0 &M4 &N0 &P0 &R1 &S1 &X1 &Y1

S00=000 S01=000 S02=043 S03=013  
S04=010 S05=008 S06=002 S07=060  
S08=002 S09=006 S10=007 S11=070  
S12=050 S13=000 S14=000 S15=000  
S16=000 S17=000 S18=000 S19=000  
S20=000 S21=010 S22=017 S23=019  
S24=025 S25=000 S26=000 S27=000  
S28=008 S38=000

I hope the above information is useful.

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