

Date: Aug 16, 2000 Subject: USR Courier V.Everything Modem
Bulletin # : TB991211P1

The US Robotics Courier V.Everything modem has been tested and approved for dial up use connecting to Continental Instruments designed security access panels. The modem was tested primarily with the CardAccess software but will most likely work with all Continental software products in applications where a dial up, dedicated or short haul modem is needed. Please call for recommendations not detailed here.

This modem is considered a "business class" modem and has proven very useful on telephone lines that have noise problems. However, the modem does not need to be used exclusively to solve communications line problems, it is a very good general purpose modem. We at Continental feel that this modem is worth the investment long term, as it runs unattended quite well, with virtually no connection failures. The modem is outfitted with a fairly sophisticated line error correction circuitry, thus it is especially useful where lines are questionable.

Typically, there are 2 major sub-assemblies to a Continental dial out security installation; The panel cluster, and the dial out computer (there may be more than one computer, but only one will be doing dialing chores. There also may be more than one panel cluster to dial). The panel side modem is set up differently than the computer side modem, the details are listed below.

Where as other brand modems make necessary the use of numerous initialization strings, the Courier has switches to hard set some of the initialization options. All the options that are required for Continental Instruments use, but one, are available from the switch block. It is only necessary to program one software initialization strings for this modem. That initialization command will set the modem speed to 9600 and store it in the modems set up memory. The command syntax is "AT&N6&W".

Further, Continental Instruments has developed a specialized cable for use with the panel side modem. This cable is required for connection to Continental panels. The cable provides hardware jumpers for key handshake signals not provided by the panels. The cable also assures Cic that the correct cable configuration is provided to the modem. The modem will not function properly if the hardware jumpers are not installed.

By far the computer side is much easier to set up. Just take the modem out of the box, attach a suitable serial cable and connect to an available com port. The panel side requires more set up. Set the switches, attach the Continental provided cable, and you are ready to communicate. Leave the switches as standard for the computer side and set the panel side switches as detailed on the next page.

Date: Aug 16, 2000
Bulletin # : TB991211

Subject: USR Courier V.Everything Modem

Switches for Panel Side Only

| Switch | Off | On | Function |
|--------|-----|----|-------------------------------|
| 1 | x | | Normal DTR |
| 2 | | x | Numeric Result Codes |
| 3 | | x | Display Result Codes |
| 4 | | x | Don't Echo Offline Commands |
| 5 | x | | Auto Answer |
| 6 | x | | Normal Carrier Detect |
| 7 | x | | Display All Result Codes |
| 8 | | x | Accept AT Commands |
| 9 | | x | Enter Command Mode With + + + |
| 10 | x | | Load NV Ram |

Special Notes on Setting Up the Panel Side USR Modem

It is important to note that you will need to "set up" the modem, and we must be careful to set the modem up to ignore any changes that other devices might send to it, so that the set up will stay the same after we leave.

Use the following process to set up the panel side modem:

- 1) Set switch 10 to ON. This will restore the factory settings to the modem working memory.
- 2) Connect the modem to Com 1 of a computer (desktop or laptop) with a standard serial cable.
- 3) Start HyperTerminal on the computer. When HyperTerminal starts, it asks you for a "name". Type any name and hit enter.
- 4) Then a screen comes up that allows you to fill in a phone number. Don't fill in a number, but drop down the "Connect Using" box and choose "Com 1" (or what ever com port you have used to connect to the modem). Then HyperTerminal connects to the modem.
- 5) Now that you are connected directly to the modem, you can "talk" to it. In order to talk to the modem, you must know the special language that the modem uses. It is called the "AT" command set.

Technical Bulletin

Date: Aug 16, 2000
Bulletin # : TB991211P3

Subject: USR Courier V.Everything Modem

- 6) Type `AT` then hit the enter key. The modem should respond to the command by typing a zero. (the number 0). If that happens then you have a connection to the modem. If that does not work correctly, then you have to fix the problem before we can proceed. Every time you type; `AT` and hit the Enter key, the modem should respond by typing a zero. If the modem responds with the word `OK` then you have switch 2 set incorrectly. Fix that switch before proceeding to the next step. Always turn the modem off then on after setting switches.
- 7) Type the following command string into the modem; `AT&N6&W`
This string says to the modem "Attention, set the connect speed to 9600 (&N6) and save the setting in your memory (&W). This will mean that this setting will be loaded every time we reset the modem.
- 8) Set switch 10 to off. This will allow the modem to load it's configuration from the memory we just programmed.
- 9) You are done setting the modem up and you can now connect it to the panel cable and attempt a dial up. Make sure to set up all com ports to 9600 in the CardAccess product.. Be sure to use the approved Continental Instruments constructed cables. The modem set up assumes that there is this cable attached between the panel and the modem. The cable has special jumpers on the modem side and special shielding to prevent noise from disturbing communications.

Our goal is to make the set up of our products as convenient as possible and to provide our customers with reliability and technology that is the best in the industry.

Please report any difficulties experienced with this written procedure or the modem operation immediately to cic@cicaccess.com or call our tech support line. Thank you for using Continental Instruments products.

