

9/29/2006

### **Installation and Operation.**

0.) Expand scantool4.zip in your chosen empty directory.

1.) As delivered scantool uses COM PORT 1.

This can be changed to another COM PORT #.

Look for a text file called "scantool.ini" It's likely in c:\windows if you're running XP.

Add the following to the file if you want to override the default com port. Assign port= to whatever com port you want:

```
[Comm Settings]
```

```
port=COM1
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2.) Replace scantool.cfg with the 993 version, change name from scantool.txt to scantool.cfg. Replace Trouble Codes.txt with the 993 version. Both in your chosen directory. The 964 scantool.cfg will not talk to 993 DME and visa versa. scantool.cfg can be read with Notepad. 964 is 8800 and 993 is 9600 baud among other differences.

3.) The following assumes your using Rays interface circuit with LEDs. But generally works for any interface.

4.) Connect the RS232 port of interface to the PC serial port assigned to COM PORT 1.

5.) Connect the OBD connector to the 993 OBD connector.

6.) The power LED should be lite. The other 2 LEDs maybe dimly lite.

7.) You can skip this step. But if the next step doesn't work, come back to this step.

Test the COM 1 port and interface pcb with a PC application like HyperTerminal.

Available free on the internet. To setup HyperTerminal to test COM 1:

Open HyperTerminal, File, New Connection, Name= Interface test, OK, Connect using=

COM 1, OK, Restore Defaults, OK. You'll know you've configured HyperTerminal

correctly by shorting RS232 pins 2 & 3 together, typing & seeing the type on the monitor.

Remove the short and the display shows no typing. When this works, plug interface pcb

into COM port 1. Toggle SW1 to the "NOT SRS" position. SW2 can be in either

position. Apply power, by connecting OBD connector or use a +9 to 14 Volt source.

LED2 the WAKEUP LED and LED3 the POWER LED will light. Typing will show up

on the display verifying that RS232 send is going out to OBD K and the OBD K is being

monitored by RS232 receive. Toggle SW1 to SRS. LED2 goes off and LED1 goes on.

This checks out all functions on the Interface.

8.) Double click on the scantool.exe. It starts polling the Motronic (DME). This causes the Wakeup LED2 to flash.. The Interface pcb program switches; toggle SW2 to DME and SW1 to "NOT SRS". Scantool polls the DME at 5 baud on the L line. Scantool uses the RS232 pin 7 RTS line for this function.

9.) Turn on the ignition. The DME should now respond. This causes the K LED to flash. Depending on your Alarm version, you may need to disable the alarm with the key FOB to allow the DME to respond. The K line data is at 9600 baud for DME. Scantool uses the RS232 Send line to send and the Receive line to receive. The OBD K line is a bidirectional send/receive line. The power/receive LED is at the RS232 receive pin. However the levels are such that data flashing is not visible to the eye and the LED looks constantly lite.

10.) The scantool should show "connected" to the DME and report fault codes. You can CLEAR the fault codes out of the DME and/or REFRESH the display. If no connection; set switch opposite DME and try an accessory. If any respond you have a problem with either the alarm not disabled or the OBD K connection wire/pin. If no accessory responds did you try HyperTerminal to determine the port and interface are functioning, step 7?

11.) You have a choice of DME INPUTS and ACTUAL VALUES to display. There are value ranges listed such as Battery +9V to +14V. Porsche doesn't provide much information, these are not bible. The small box next to each output if selected will cause constant update of that item. A few items are not reported correctly, and have a ?.

12.) Without the engine running, you can select **TEST OUTPUTS**. You want to lift the engine lid and listen for the click sound of each test to verify that function. The first six are the fuel injectors in firing order. #7 is the IACV. This has 2 clicks. An open and a close click.. The next test is EVAP. And finally the Resonance Flap.

13.) Adaption is not a 993 feature. It applies to 964. LAMBDA TRIM, as of scantool 4 is not working for 993. The 2 SW reports in the INPUT display are for 964.

14.) The ALARM, connects without the key switched on, usually. All others require ignition to be on. The INPUTS, ACTUAL VALUES and the other items for the accessories do not work. The CLEAR and REFRESH for faults do function. My CCU quits operating when connected but reports fault codes. The ABS when connected causes the dash lamp to light as well as reporting faults.

15.) Want to use USB.

- USB-serial converter issues: Doug found a USB converter that works with the 964s ECU's funky 8800 baud rate. It's made by SIIG and uses the FT8U232AM chip. Doug had to install the latest drivers from [here](#) to get it to work properly as the drivers included were outdated. Doug expects any usb converter that uses the ftdi chip will work. The 993 uses 9600 BPS so other USB to serial may work for 993.

16.) PCMCIA card with serial port is also a possibility.

17.) Scantool occasionally locks up for me. I use the WINDOWS Task Manager to end Scan Tool. Then reselect. Also I've had it not start because the last time I quit it it didn't release COM PORT 1 and thinks it isn't available. Log out/in fixes it.

18.) A link to retrieve the scantool.zip file [HERE](#)

If you don't see what you want here I don't know either.