tam

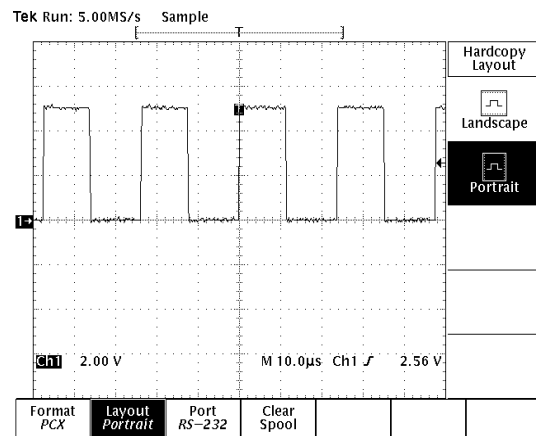**Application Note**
TDS Screen Capture
via the RS-232 option

Adapted for SFU Engineering Science by Fred Heep, Lab Technologist, 23 Nov. 1999

This screen image was captured from a TDS

This screen image was captured from a TDS oscilloscope over the RS-232 port using the Windows Hyper Terminal Private Edition V5.0 program.

(***Note:** The TDS scopes communicate properly with the Win3.1 Terminal program but not with the supplied version of HyperTerminal in Win95/NT. The bug fix is implemented in P.E.

V5.0)

To transfer the screen image follow the procedure outlined below.

1. From the TDS scope **Utility IO** menu set the port to **RS-232**.
Hardware Setup: **9600,1,none,on**.

Flow Control = **Hardware Flagging**

2. Set the TDS scope's hard copy format. **Utility>Options>Hard Copy Setup**. (BMP, PCX, EPS …This image was produced using the PCX format).

3. Start the Terminal program. If you happen to get a registration error screen, ignore/cancel it. In WIN NT **Start>Programs>Accessories>HyperTerminal> HyperTerminal**. Startup screen should display HyperTerminal 5 Private Edition.

On entry to *New Connection* screen, select **Cancel**. Ensure software indicates *Disconnected* mode at bottom left window status bar. Use telephone icons on tool bar if not. **File>Open>TDS220**. Once loaded, communications status should indicate *Connected*.

 If the TDS220 setup data has not been previously created, you can do this by going to **File>New Connection>select the atom icon and enter name as TDS220.** On *Connect To* screen, set COM2 (other stuff is irrelevant). In the *Port Settings* window, set the communications settings in Windows Hyper Terminal to match those of the oscilloscope. **9600,8,None,1,Hardware**. Save setup data **File>Save**.

(**Note:** Lab workstations equipped with the TDS scopes c/w communications modules are hardwired to COM2 of the computer).

4) In HyperTerminal, select **Transfer>Capture Text** and enter your destination file directory/name & appropriate file extension (BMP, PCX, EPS …). (We suggest that you use a floppy disc in A: drive to store you data. The computer administrators are not keen on your junk files cluttering the hard drive). Click **Start**. This will enable the Terminal program to receive binary screen images.

5. Once you have the image you want on the oscilloscope display, press the **HARD COPY** button. (HyperTerminal's screen should scroll with jibberish text within a second or two).

6. When the transfer is complete (screen dump stops/flashing cursor), go to the **Transfer>Capture Text>Stop** in the HyperTerminal program. With a little luck, you'll now have saved a screen image which you can import into another application like Microsoft Word.

★ You may wish to check your captured file by going to **Windows Start>Programs>Windows NT Explorer**, locate your file and double click it. This should automatically launch a viewer program like Paint.

★★ If you wish to recapture another image using the same file name, be sure to first delete the original file using MS Windows Explorer. HyperTerminal doesn't appear to overwrite existing files although it happily goes through the whole download process without complaining.

7. In MS Word, select **INSERT PICTURE** and enter the filename of the screen image. The file will be converted and displayed in your document. If you used the EPS hard copy format the screen image will not appear in your document, but an EPS block will appear. When the document is printed the screen image will be printed.

8. Our installations use the LinHaw NM220 cable assembly, but for your reference the following diagrams should be used to build the appropriate cable if necessary.

TDS		PC
1	NC	1
2	————	2
3	————	3
4		4
5		5
6		6
7		7
8		8
9	NC	9 - 19 NC
		20
		21 - 25 NC

TDS		PC
1	NC	1
2		2
3		3
4		4
5		5
6		6
7	————	7
8		8
9	NC	9