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TERM Plus™
Serial Terminal Program

Operation / Installation Manual

Manual Part Number: S8M5009
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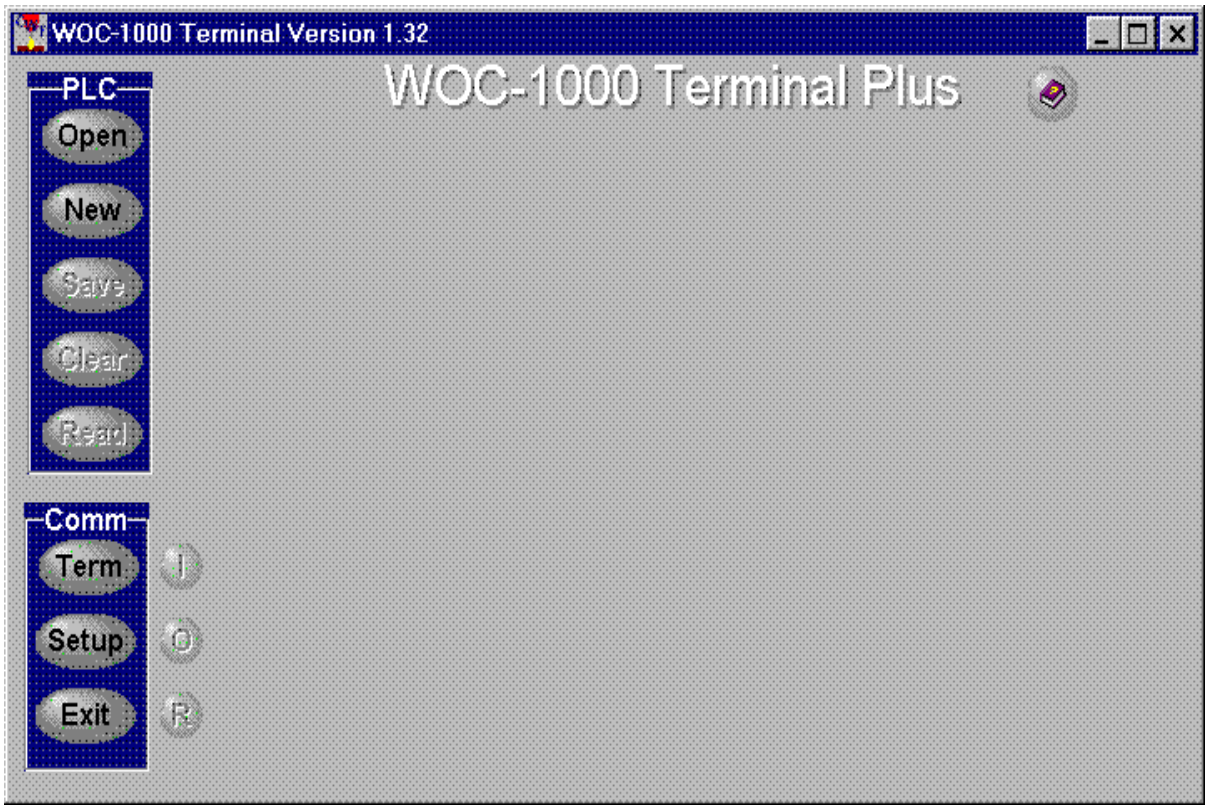

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1.0 OVERVIEW

The TERM Plus™ Program is a windows based Serial Terminal and page editor. The Program is designed for use with Computer Weld Technology, Inc.'s (CWT) Weld Controllers. It incorporates a Page Editor and an RS-232 serial terminal program. The Page Editor may be used to generate PLC or Script text files that can be used to program the various CWT Weld Controllers.

2.0 SYSTEM REQUIREMENTS

Processor:	150mhz Pentium™ or higher microprocessor
Memory:	24 Megs minimum for Windows 95/98®, 32 Megs for Windows NT®
Hard Drive:	25 Megs of available hard drive space
Graphics:	Minimum SVGA color graphics. XVGA recommended
Serial Port:	RS-232-C compatible serial port

3.0 OPERATING SYSTEM

The TERM Plus™ program is designed for use with Windows 95/98® or Windows NT® 3.51 or later platforms. The program has been tested with Windows 95®, Windows 98® and Windows NT® 4.0.

4.0 INSTALLATION

The following steps will guide you through the installation process.

1. Power on your computer and start Windows.
2. Insert Disk 1 of TERM Plus™ into the computer's floppy drive.
3. From the **START** Button, choose **RUN**.
4. In the **OPEN** field, type **A:Setup.exe** and press **Enter** or click **OK**.
5. Follow the instructions on screen.
6. If the system requires you to restart Windows, remove the floppy diskette and restart the system. Once Windows has restarted repeat the installation procedures for this program starting with **Step 2**.
7. Once installation is complete you may start the **TERM Plus** Program by clicking the **START** button on the Windows screen then selecting the **PROGRAMS** folder, **Computer Weld Tech** folder, and then the **TERM Plus** file.

5.0 TERM Plus™ MAIN WINDOW

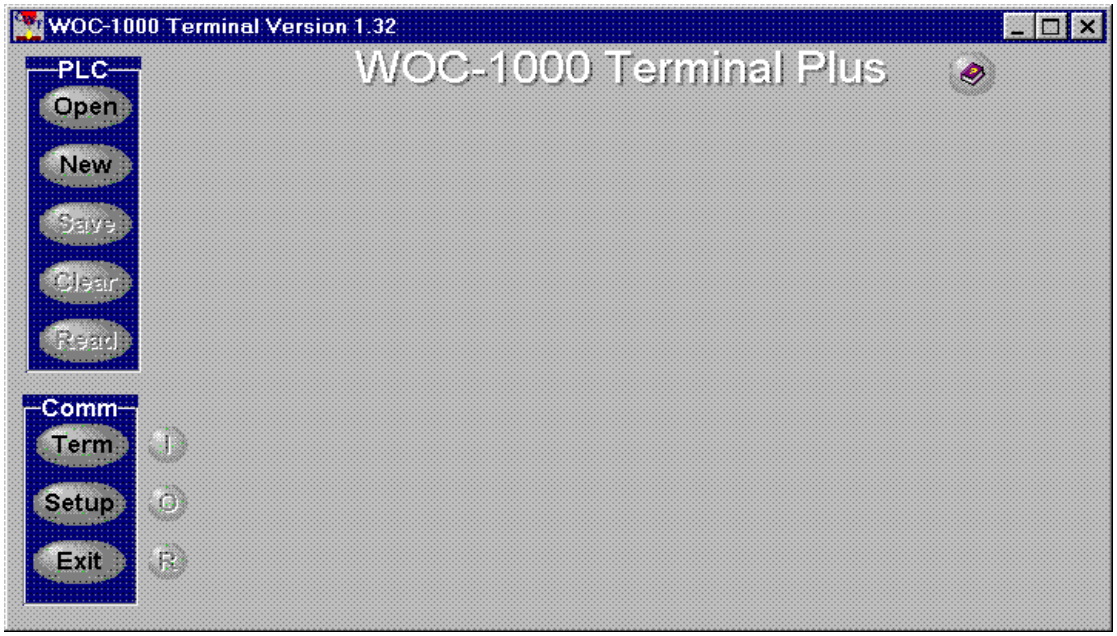


Fig 1 – Main Term Plus Window

All of the TERM Plus™ features are controlled from the Main Window. There are eleven Speed Buttons located on the left side of the screen, which are used to invoke the various program functions. A twelfth button is located on the top right of the Window. This is the Help Button and is used to invoke the TERM Plus™ help window. To activate a specific function, move the mouse over the desired speed button and press the left mouse button. To Exit the TERM Plus™ Window, press the "**Exit**" speed button. When the mouse cursor is moved over the speed buttons a brief description of the Speed Button function will appear.

6.0 PROGRAM SETUP

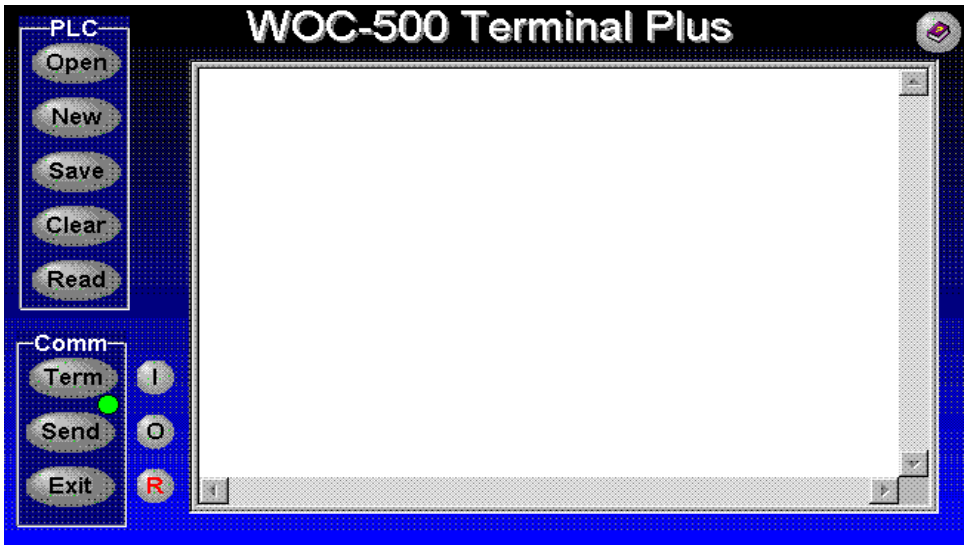


Fig 2 – System Setup Dialog

To configure the TERM Plus™ press the "**Setup**" speed button. The System Setup dialog window will appear. The user may select the serial port, baud rate and product type that will be used with the program. The user can also specify what parameters will be read from the controller during a "**Read**" command. To enable a specific group of read parameters check the box associated with the desired parameters.

It is important to select the correct product type as the TERM Plus™ performs some automatic functions which require special commands for the different products. After the desired changes are made, press the "Setup" speed button to exit the System Setup dialog window. When the setup function is closed the TERM Plus™ window Titles will be set to the selected Product Type name.

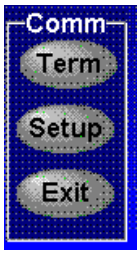
To change a particular option, move the mouse cursor over the down arrow on the selected parameter. Press the left mouse button and an option list will appear. Highlight the desired option and press the left mouse button. The following is an explanation of the System Setup Options:

- **Comm Port** – Allows the users to set the serial communications port that will be used. The default Port is COM1. Refer to your computer's users manual for possible Comm Port options.

- **Baud Rate** - Allows the user to set the serial communications baud rate. The default value is 9600 baud. This is the default serial baud rate for the various weld controllers.

- **Product Type** – Allows the user to select the product being used with the program. This option selects the special serial commands required for the Save, Clear and Read options.

7.0 COMM SPEED BUTTONS



The three speed buttons grouped below the “Comm” label are used to control the serial terminal program. To activate a specific function, move the mouse over the desired speed button and press the left mouse button. To Exit the TERM Plus™ Window, press the “Exit” speed button. When the mouse cursor is moved over the speed buttons a brief description of the Speed Button function will appear. To enter the terminal mode press the “Term” button. A communications window will appear. To exit the Terminal mode press the “Term” button and the communications window will close. When the communications window is open type the desired command on the keyboard and the data will be sent to the connected controller. The following is a description of the “Comm” speed buttons:

- **Term –** This button will Open/Close the serial communications window. To open the window, press the “**Term**” button. If a valid Comm Port has been selected the window will appear and a green status LED will appear next to the “**Term**” button. The status LED will be green unless a serial communications problem occurs. If a problem occurs an error message will be displayed and the LED will be red. To clear the Error message, press the OK button on the message window. To reset the Status LED send a new command to the controller. To exit the communications window press the “**Term**” button.

- **Setup/Send –** This button has two control functions. When the Communications window is closed the “**Setup**” button will invoke the system setup dialog window. To exit this dialog, press the “**Setup**” button. When the Communications window is open the “**Setup**” button is replaced with the “**Send**” button. This button allows the user to send a stored PLC or Text file to the connected controller. Press the “Send” button and an Open File Dialog window will appear. Select the desired file and press the “Open” button on the dialog window. A Progress bar will appear on the left side of the Communications window and the commands in the selected file are sent to the connected controller. After the data has been sent the progress bar will disappear and the Communications window is now active. The Send functions will remove all text data following a space or semicolon character.

- **Exit –** This button is used to exit the TERM Plus program.

8.0 PLC SPEED BUTTONS

The Five speed buttons grouped below the "**PLC**" label are used to open existing files for editing, creating new PLC or Script files and to provide specialized serial commands when the communications window is active. To activate a specific function move the mouse over the desired speed button and press the left mouse button. When the mouse cursor is moved over the speed buttons a brief description of the Speed Button function will appear. When the communications window is closed the "**Save**", "**Reset**" and "**Read**" buttons are disabled. To open an existing PLC or Script file for editing press the "Open" button. An Open File Dialog window will appear. Select the desired file then press the "**Open**" button on the dialog window. The Page Editor window will appear. The following is a description of the PLC command buttons:

- **Open -** This button allows the user to open an existing file and load it into the Page Editor. To open an existing PLC or script file for editing press the "**Open**" button. An Open File Dialog window will appear. Select the desired file then press the "**Open**" button on the dialog window. The Page Editor window will appear. To close the edit session, close the Page Editor window by using the Pull-Down "File – Exit" options.

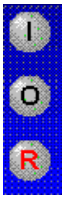
- **New –** This button allows the user to open a new edit session. Press the "New" button and the Page Editor window will appear with a blank page loaded. To close the edit session, close the Page Editor window by using the Pull-Down "File – Exit" options.

- **Save –** This button is only enabled when the communications window is active. This button will send the save PLC program command (**^W**). This function will write the currently loaded PLC to the attached controller's EEPROM memory.

- **Reset -** This button is only enabled when the communications window is active. This button will clear the internal PLC program in the attached controller and reset the PLC. ***Warning* –** The controller PLC program has been removed and the internal PLC is disabled at the end of this command.

- **Read –** This button is only active when the communications window is active. This button will read the parameters enabled in the setup dialog window from the attached controller. A progress bar will be displayed indicating the status of the read operation. After reading the enabled parameters the Save File Dialog window will be displayed. Enter the Log file name that will be used to store the parameter data. Press the "**Save**" button to store the data. Press the "**Cancel**" button to abort the process.

9.0 TERMINAL COMMAND SPEED BUTTONS



The Three Command Speed Buttons located next to the Comm Command Panel can be used to send specific command strings to the attached controller. The Command Speed buttons are enabled only when the communications window is active. To send a specific Command move the mouse over the desired speed button and press the left mouse button. When the mouse cursor is moved over the speed buttons a brief description of the Speed Button function will appear. When the communications window is closed the "**I**", "**O**" and "**R**" buttons are disabled. The following is a brief description of the Command Speed Buttons:

- **I** – This command button will send the read Input status command (***M1?***). The current input status will be displayed.

- **O** – This command button will read the current output relay status (***M2?***). The current status of the output relays will be displayed.

- **R** – This command button will reset the controllers internal PLC (***M0=0***). Make sure the controller and associate devices can be reinitialized.