WEIGH-TRONIX

WI-127 Print Formatter Software

User's Manual

10/10/01 127FORMT_U.P65 PN 29728-0018A e4 Printed in USA

Table of Contents

Pages are numbered consecutively beginning with the cover page.

Introduction

This WI-127 Print Formatter software works with Rev. D of the WI-127 software, Rev. C of the GTN, and Rev. C of the In-Motion software.

The WI-127 Print Formatter software allows you to quickly format output styles which can be downloaded to the WI-127. This eliminates the necessity of keying in each alpha character's ASCII code when configuring layouts through the WI-127 front panel. However, you can still make layout changes through the front panel if you wish.

Installing the Software

® *Windows is a registered trademark of Microsoft.*

Insert the floppy disk into your PC's floppy drive. In Windows® 3.1 or Windows 95/98® run the setup.exe file. Follow the onscreen instructions for loading the files. The default location for the program files is a directory called "wt" which the installation creates automatically unless you direct the files to another location.

After installation, start the program by clicking the icon in the Weigh-Tronix group (Windows 3.1) or clicking on Start, Program, Weigh-Tronix and WI-127 Print Formatter. The program loads and an OK button appears. Click the button or press Enter and the program screen shown in Figure 1 appears.

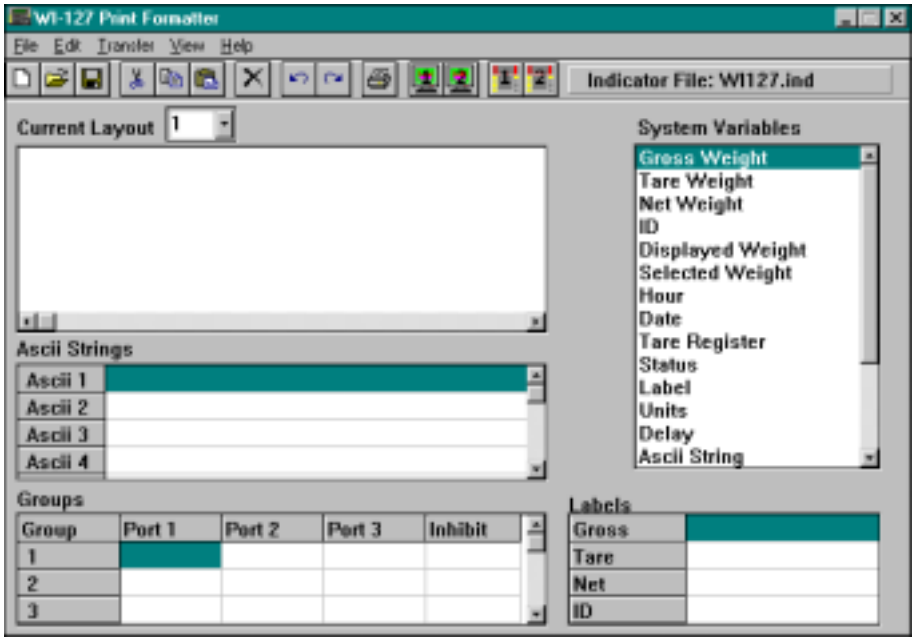


Figure 1
Print Formatter window

Each part of the window is explained in the next section.

Program Screen Descriptions

When Com1 or Com2 are mentioned they are in reference to your PC, not the WI-127.

The program screen consists of a command line, a toolbar and the editing window which is split into five areas labeled

- Current Layout Window
- System Variables List
- Ascii Strings List
- Groups Window
- Labels Window

Command Line

The command line has five commands. They are File, Edit, Transfer, View, and Help. Click on each command to see a drop down menu. Each menu is explained below.

See Appenix A: File Information Print Output *to see an example of what is printed when you click on* ***Print*** *under* ***File*** *or click on the* ***Print*** *button in the program window.*

File With this menu you can pick a new indicator type (ie., standard WI-127, GTN or In-motion) and start a new file for that indicator, open an existing file, save a file you are working on, save a file under a new name, print the format information, setup your default printer for the PC, or exit the Formatter program. The indicator file type must match the indicator software type.

Edit With this menu you can undo a previous action, redo an action, cut an object out and place it in the clipboard, copy an object to the clipboard, paste an object from the clipboard to the cursor location, delete a selected object, or select all text in the current layout window.

Transfer With this menu you can choose to upload format information from the WI-127 through your computer Com1 or Com2, download format information to the WI-127 through Com1 or Com 2, and choose the baud rate. It is **important** that the baud rate of the WI-127 (under *Serial* in the service menu) and the baud rate you choose under *Transfer* match before you download or upload. Also the baud rate of the WI-127 and the printer must match before printing.

View With this menu you can toggle the toolbar on and off and also toggle the popup hints on or off. When enabled, hints appear when the cursor rests above a command, button or an area of the window.

Help Use this to access the About screen and the help files for this program.

Attention

It is important that the baud rate of the WI-127 (under* Serial *in the service menu) and the baud rate you choose under* Transfer *match before you download or upload. Also the baud rate of the WI-127 and the printer must match before printing.

Toolbar

The toolbar consists of buttons which mirror functions available in the command line. The buttons are shown below along with their functions.

Select a new indicator type and new file type

Open a file

Save the file

Cut

Copy

Paste

Delete

Undo

Redo

Print (See App. A)

Upload thru Com1

Upload thru Com2

Download thru Com1

Download thru Com2

Using the Formatting Window

A layout is made up of items, up to a maximum of 16 items per layout. An item can be a space, a carriage return, a line feed, a label, a string of text, or any of the other items listed in the system variable list which appears on the right side of the formatting window. To make larger layouts possible you may imbed an existing layout within another layout. This is called nesting. You cannot nest a layout into itself.

You cannot nest a layout into itself. You must use other existing layouts.

Table 1 shows the specifications for layouts in different models of WI-127.

Table 1
Layout specifications

	Layouts	Strings	Groups	Items/ Layout	Char./ String	Char./ Label
WI-127	16	16	9	16	32	16
GTN	32	16	9	16	32	16
In-Motion	16	16	9	16	32	16

*The number of layouts available depends on the version of WI-127 you pick in the **Open Settings** item under **File**. See Table 1.*

The Basics

To illustrate the basics of creating a layout for your model of WI-127, we'll create the following simple layout:

```
My Company
G 1000 lb
```

This layout consists of an Ascii string, a carriage return and line feed, the label for gross (G), a space, the gross weight, a space, the units name, and six line feeds to advance the paper tape.

Example shown at right is a WI-127 connected to a WP233/ 234 printer.

1. Select the model of indicator you are using from the list under *File/New*. Select from WI-127, GTN or In-Motion versions. This will setup the window with the information in Table 1. Open file DEFAULT.127 or DEFAULT.gtn or DEFAULT.ims (depending on the software in your indicator). See note at left.
2. Select the first blank layout as the Current Layout number you want to work on. See Figure 2. Use the scroll bar on the right side of the drop down list to see the rest of the list. We'll select #10 in this example.

We suggest using the default file as a starting point to save time by making use of the default layouts that have already been created and exist in these files.

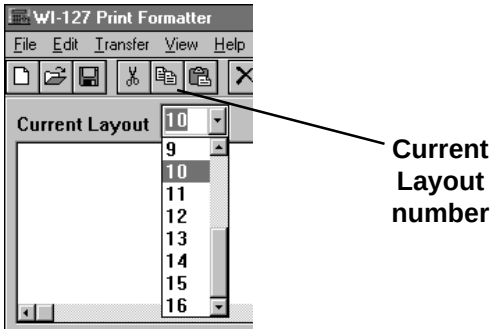


Figure 2
Choosing Current Layout

Single click on a variable in the system variables list to select it. Double click it to either bring up a popup list of value choices or insert the variable in the layout window. Press F1 for context sensitive help while a variable is selected.

3. To create the line of text, “My Company”, click on the Ascii String number you want to use. In this example click on #2. Now you need to enter the text you want in Ascii String #2 in the Ascii String window. In this example, type in the words “My Company” next to Ascii 2. The screen should look like Figure 4.

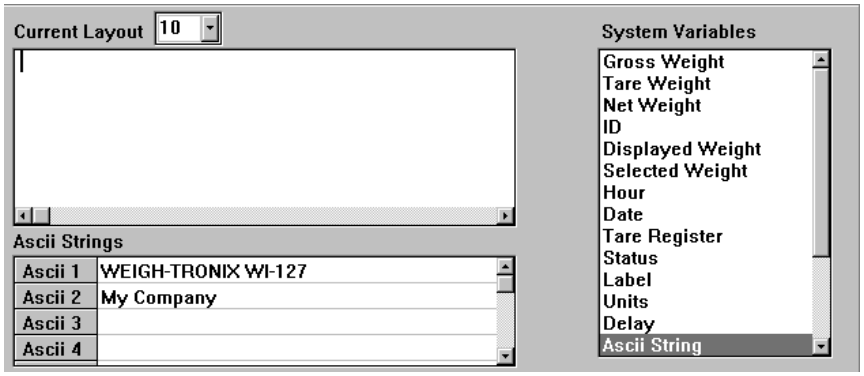


Figure 3
Ascii String drop down list

4. To select the item ASCII-02**,** you need to double click on Ascii String in the System Variable list. This item, like several others in the list, have a popup screen from which you need to choose a value associated with that item. Again you can scroll to unseen numbers using the scroll bar, then select 2 by clicking on 2.

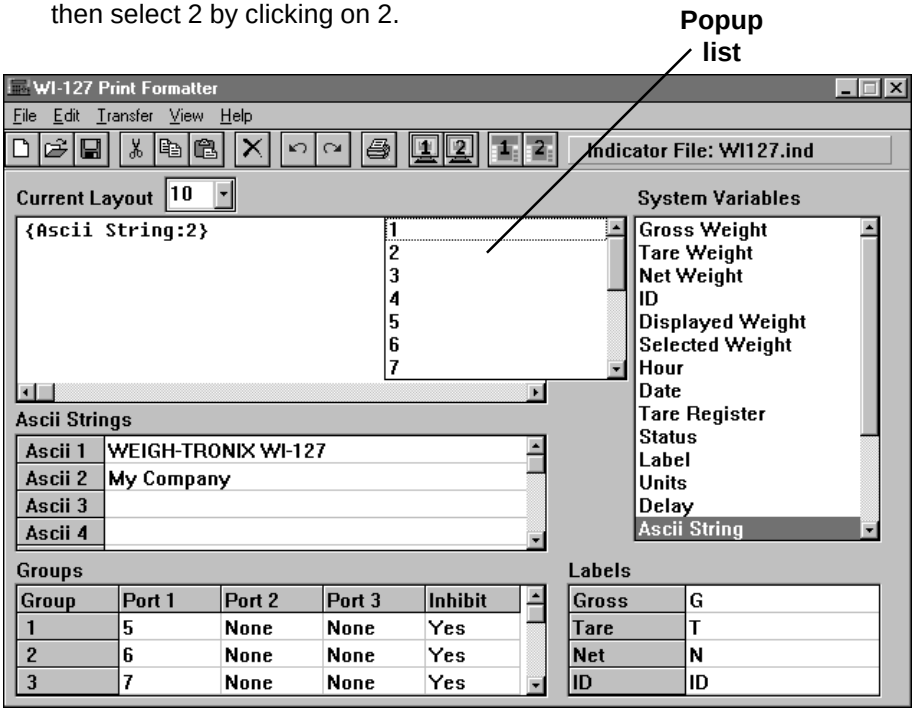


Figure 4
Ascii string entry

The maximum number of characters or spaces in an Ascii string is 32. For more characters, create more Ascii strings and select one Ascii item followed by the next Ascii item in your layout.

5. Double click on Carriage Return (1). Press the **ENTER** key on your PC keyboard to wrap the text on the screen. Otherwise the text runs off the screen to the right. Pressing **ENTER** will only wrap the text line, it will not cause any action when the layout is printed from the WI-127. Only items in curly brackets are acted upon.

Attention

Depending on the peripheral device (printer, pc,remote display, etc.) you are using, a Carriage Return may also produce an automatic Line Feed. Check the control codes for your particular device in the documentation from the manufacturer.

Note: Carriage returns and line feeds are control codes sent to the printer to make the printer respond in a specific manor. A carriage return command sends the print head of the printer back to column one. A line feed command will advance the paper one line.

You must put a Y (for YES) under Inhibit for most applications.

By default the WI-127 transmits Group 2, layout 6, from port 1 when you press the **PRINT** *key. To change the* **PRINT** *key action, see your* WI-127 Service Manual *for instructions.*

6. To create the next lines of information click on the following:

   Double click on LINE FEED (1) in the systems variable list to insert this item into the layout. Double click on LAYOUT (4) in the systems variable list to insert this item into the layout. Double click on LINE FEED (5) in the systems variable list to insert this item into the layout.

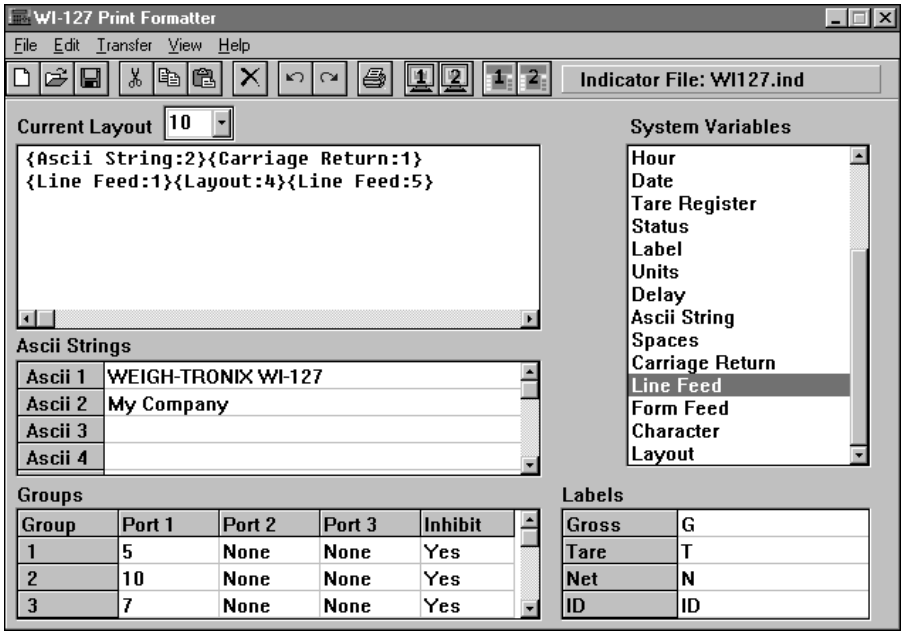


Figure 5
Nearly completed layout

7. The last thing you need to do is assign the layout to a group. A group is just a combination of a layout and a port. Port 1 is the standard serial output located on the main board. Ports 2 & 3 require optional serial cards.

   In the Groups section of the window you will see a grid consisting of Group numbers along the left side and Port 1-3 and Inhibit across the top. Type the layout number (10) in the box corresponding to the Group number (2) under Port 1. See note at left.

   Type a **Y** in the Inhibit box for that Group if you want to inhibit printing during scale motion. A **YES** will appear in the box. Type an **N** if you do not want to inhibit printing during motion. A **NO** will appear in the box.

8. Perform a Save As and name this file *mycom*.

```
My Company
G 250 lb
```

Status byte

Transmitted as a single character. The bits appear as follows: 011LEBM, where L is set to logic 1 when a Low voltage condition exists; logic 0 otherwise. E is set to 1 when an a-d Error condition exists; 0 otherwise. B is 1 when the weight is Beyond displayable range (over- or under-capacity); 0 otherwise. And M is set to logic 1 when an in Motion condition exists; set to logic 0 when the weight is stable. The upper four bits are set to 0011 to cause the value to be printed as a digit or symbol in row 3 of the ASCII character set.

Table 2
System Variables to build a layout

System Variables	What is transmitted
Gross Weight	Current gross weight.
Tare Weight	Current tare (general or numbered register).
Net Weight	Net weight.
ID	Identification number.
Displayed Weight	Current displayed live weight (gross or net), depending on the current display mode.
Selected Weight	Currently selected item from the select list (gross, tare or net).
Hour	Current time.
Date	Current date.
Tare Register	Current tare register number (a space is transmitted for the general tare register).
Status	Current status. See note at left.
Label*	Weight label. These choices are available: • Gross - your assigned gross label • Tare - your assigned tare label • Net - your assigned net label • ID- your assigned ID label • Displayed- current display weight • Selected- currently selected display
Units	Unit of measure label.
Delay*	Pauses serial port output by this many seconds (0-255).
Ascii String*	A configurable ASCII string.
Spaces*	A configurable number of spaces.
Carriage Return*	A configurable number of carriage returns.
Line Feed*	A configurable number of line feeds.
Form Feed	A form feed is transmitted.
Character*	A character (ASCII value).
Layout*	A predefined layout may be included within another layout. For example, Layout 6 includes Layouts 1, 2, & 3. **Note**: A “layout error” will occur if a layout uses its own layout within itself or if a “loop” of layouts is used (for example, Layout 1 cannot use Layout 2 if Layout 2 includes Layout 1)

* denotes items that have a drop down list which requires entry of more information. For example: if “LABEL” is inserted within a layout, you must specify the label to be printed; if “SP” is inserted, you must specify the number of spaces to be transmitted.

Nesting Layouts

Example shown at right is a WI-127 connected to a WP233/ 234 printer.

To assemble more complex layouts you may nest one layout within another. Following is an example using Layout #10, which we just created, in Layout #11. We will create the layout for this output following the same steps just completed for Layout #10:

```
12-31-99 02:30 pm
My Company
G 250 lb
```

The date is printed, a space, the time, a carriage return and line feed, then Layout 10 is inserted.

Here is what the layout looks like if we send Group 2 out of Port #1:

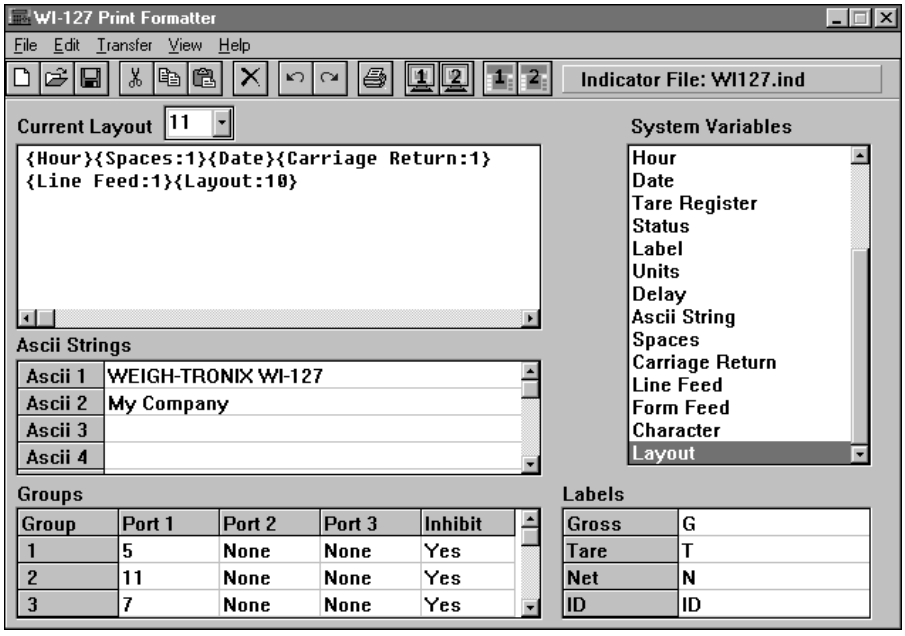


Figure 6

Downloading Files

*You may also press the seal switch to display **About**.*

Be sure baud rates of your computer and WI-127 match before downloading.

Double check your layout if you have a problem.

Your printer may require specific control codes in the print format. Check your printer manual.

"Format mismatch error" means your file type does not match your indicator type.

After you have finished creating the layouts you want in your WI-127, save the file and connect your PC to the WI-127 serial port. Place the WI-127 in transfer mode by following these steps:

1.	Key in **127**, press and hold the **ESCAPE** key. . .	***About*** is displayed.
2.	Press the **Left Arrow** key. . .	***SETup*** is displayed.
3.	Press the **ENTER** key. . .	***127*** is displayed.
4.	Press the **ENTER** key. .	***AdJUSt*** is displayed.
5.	Press the **Left Arrow** key. . .	***trANSFEr*** is displayed.
6.	Press the **ENTER** key. . .	***PC---127*** is displayed.

The WI-127 is now ready to receive the file from your computer. Connect a cable between the WI-127 serial port and your computer.

Click on the Download (1 or 2) button in the Formatter program to begin downloading through COM1 or 2 of your PC. A progress window appears and shows the file is downloading. When complete, a dialog box informs you how many seconds the transfer lasted. Click OK. Return the WI-127 to normal weigh mode by pressing **SELECT** twice.Your WI-127 should now be ready to print according to your programming.

If the download fails, check the baud rate, the cable connections between your PC Com Port and Port #1 of the WI-127 and be sure the WI-127 is in Transfer mode. Also, check that the **PRINT** key is configured correctly to transmit the correct Group #. Try again. If the download is successful but your data is not being transmitted, check your Group, Layout, and Serial Port settings.

Uploading Files

Be sure baud rates of your computer and WI-127 match before uploading.

"Format mismatch error" means your file type does not match your indicator type.

The Formatter program can also upload the current layouts in a WI-127. Place the WI-127 in Transfer mode just as you did in steps 1-6 above. Be sure your WI-127 is connected to your PC. Click the Upload (1 or 2) button to upload through COM1 or 2 of your PC.

The program is now visible on your formatter. You can edit it or add to it, save the file under a new name and download it again or transfer the file to another WI-127. If a port is not assigned in a group, NONE is shown by default when uploaded to the Editor program.

Factory Supplied Files

The Rd125-1.127 file also works with RD4000/6000 models equipped with the appropriate software version.

Several files are included with the Format Editor when the program is installed. Three of these files replicate the default settings for the standard WI-127, the GTN version and the In-motion version. The other eight files give sample formats for eight different printer setups for the standard WI-127. They are as follows:

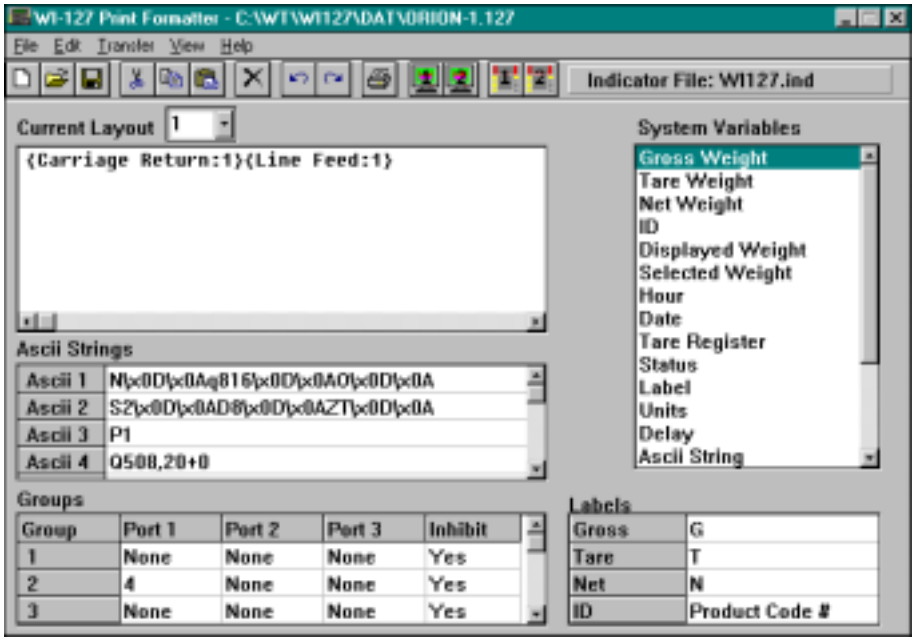
- Orion-1.127
- Orion-2.127
- Orion-3.127
- Orion-4.127
- Orion-5.127
- Rd125-1.127
- TM295-1.127
- WP250-1.127

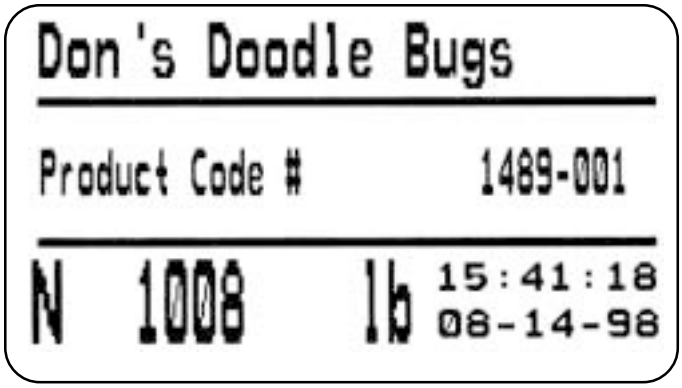
The appearance of the Format Editor window and a sample printout (with fictitious information) for each of these printers appears below.

Orion-1.127

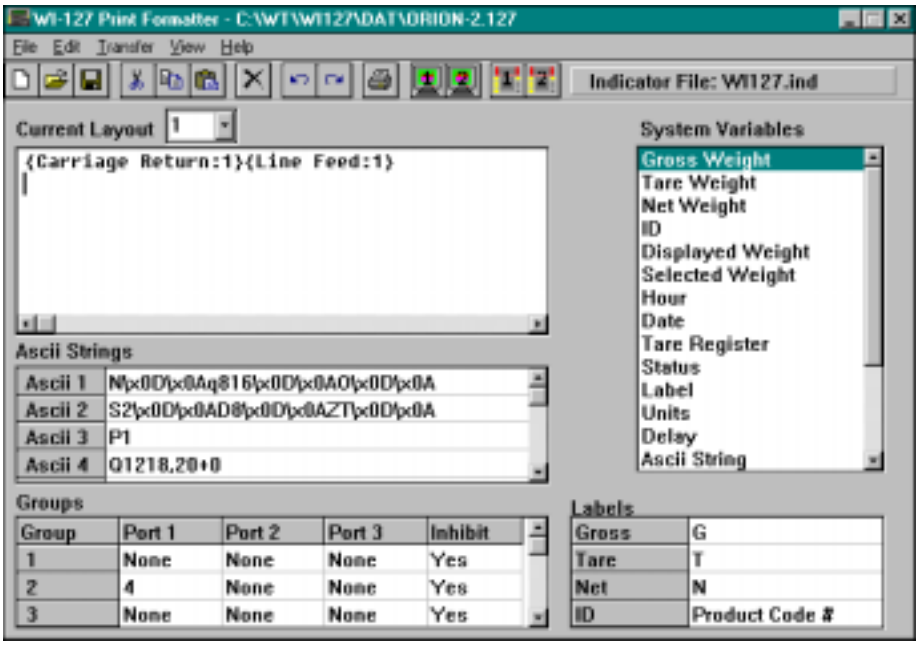
Control Codes in an ASCII string are entered as a hexa-decimal (base 16) value.

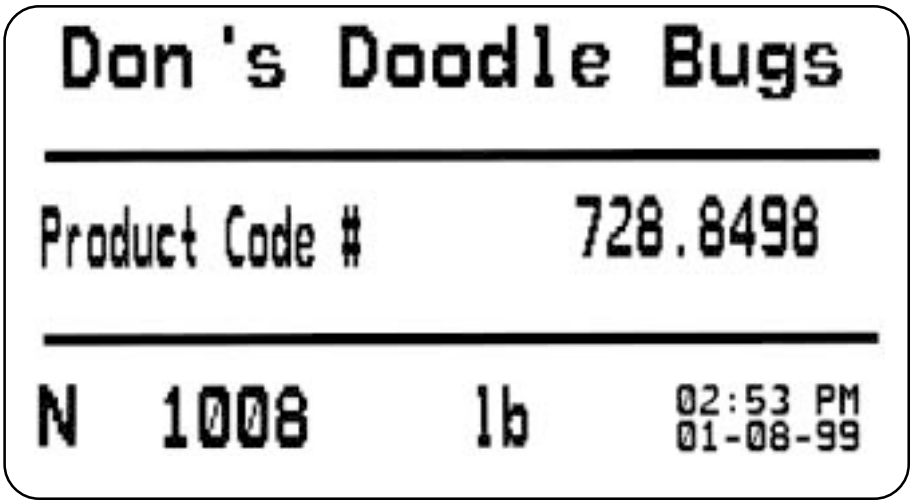
For example, a line feed is an ASCII number 10. Shown in ASCII string 2 it is entered as hex constant (x\0A).



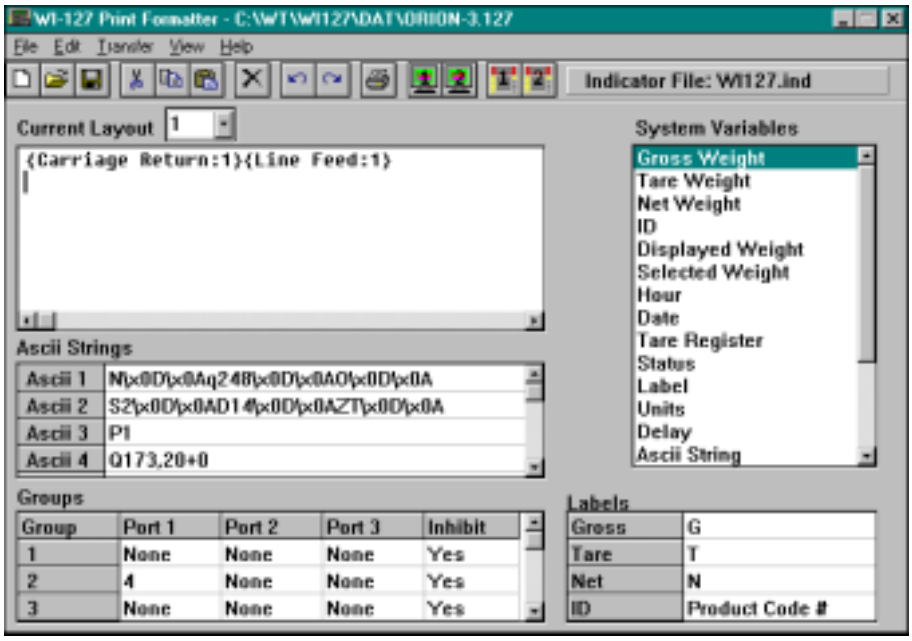


Orion-2.127


WI-127 Print Formatter - C:\WT\WI127\DAT\ORION-2.127
File Edit Transfer View Help
Indicator File: WI127.ind
Current Layout 1
{Carriage Return:1}{Line Feed:1}
System Variables
Gross Weight
Tare Weight
Net Weight
ID
Displayed Weight
Selected Weight
Hour
Date
Tare Register
Status
Label
Units
Delay
Ascii String
Ascii Strings
Ascii 1 N\x0D\x0Aq816\x0D\x0AO\x0D\x0A
Ascii 2 S2\x0D\x0AD8\x0D\x0AZT\x0D\x0A
Ascii 3 P1
Ascii 4 Q1218,20+0
Groups
Group Port 1 Port 2 Port 3 Inhibit
1 None None None Yes
2 4 None None Yes
3 None None None Yes
Labels
Gross G
Tare T
Net N
ID Product Code #


Don's Doodle Bugs
Product Code # 728.8498
N 1008 lb
02:53 PM
01-08-99

Orion-3.127



The data shown to the right is the Orion-3.127 file as seen in a text editor such as Notepad. The information is compiled by Create A Label software for the Orion printer. If you examine the ASCII strings in the screen capture at the top of this page, you can see some of this data in use along with ASCII hex values for CR and LF. This allows us to maximize the string space available.

N	**Clear image buffer**
O	Orion Printer
q248	Label size
Q173,20+0	Label size
S2	**Print Head Speed**
D14	Print Density
ZT	**Label orientation**
A37,0,0,1,1,2,N,"Don's Doodle Bugs"	Data- company name
B47,35,0,3,1,2,69,B,"12340000"	Data- displayed weight
A18,106,0,1,2,2,N,"G"	Data- label for displayed weight
A177,106,0,1,2,2,N,"LB"	Data- units for displayed weight
LO10,28,218,4	Data- box
LO10,132,218,4	Data- box
LO10,31,5,102	Data- box
LO223,31,5,102	Data- box
A12,138,0,1,1,2,N,"12:00 pm"	Data- time
A142,138,0,1,1,2,N,"12/21/98"	Data- date
P1	Number of labels to be printed

This line is shown as ASCII strings #13 and #15 which are shown as items contained in the current layout below as well as the system variable for date.

ASCII String 13 looks like this: “

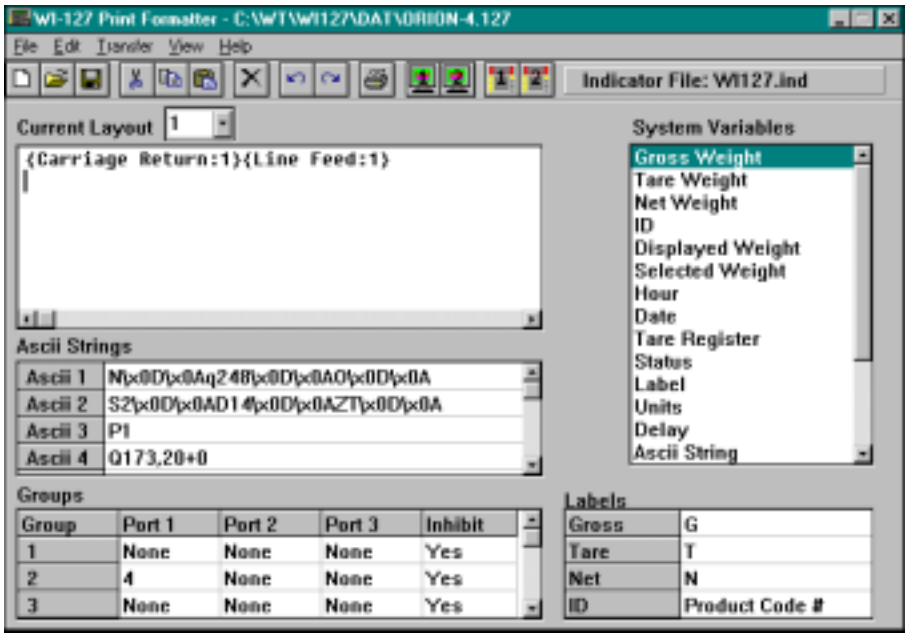
ASCII String 15 looks like this A142,138,0,1,1,2,N,”

In the current layout this line would appear as follows:

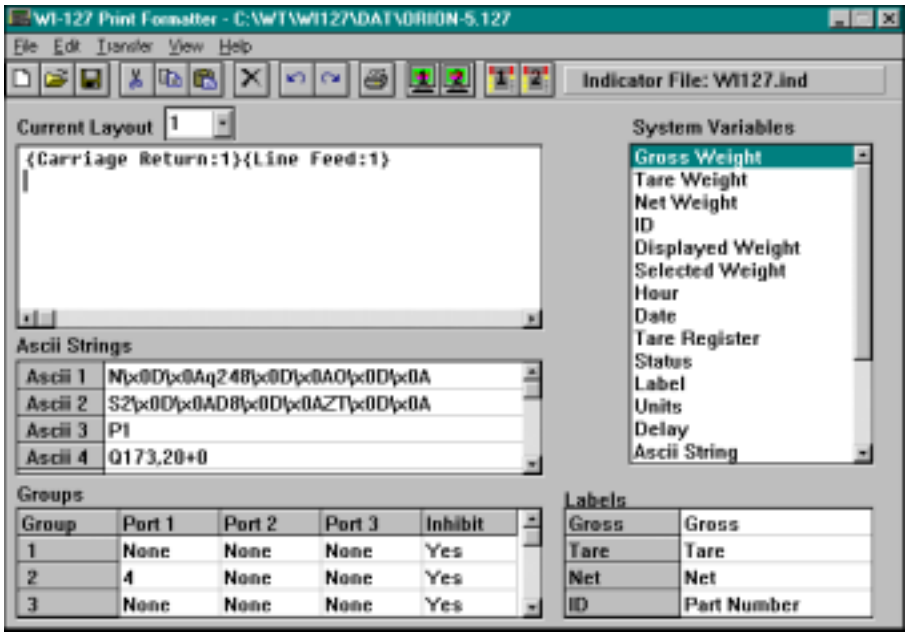
{Ascii String:15}{date}{Ascii String:13}{Layout:1}

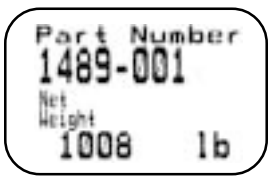
System Variable for date

Orion-4.127



Orion-5.127





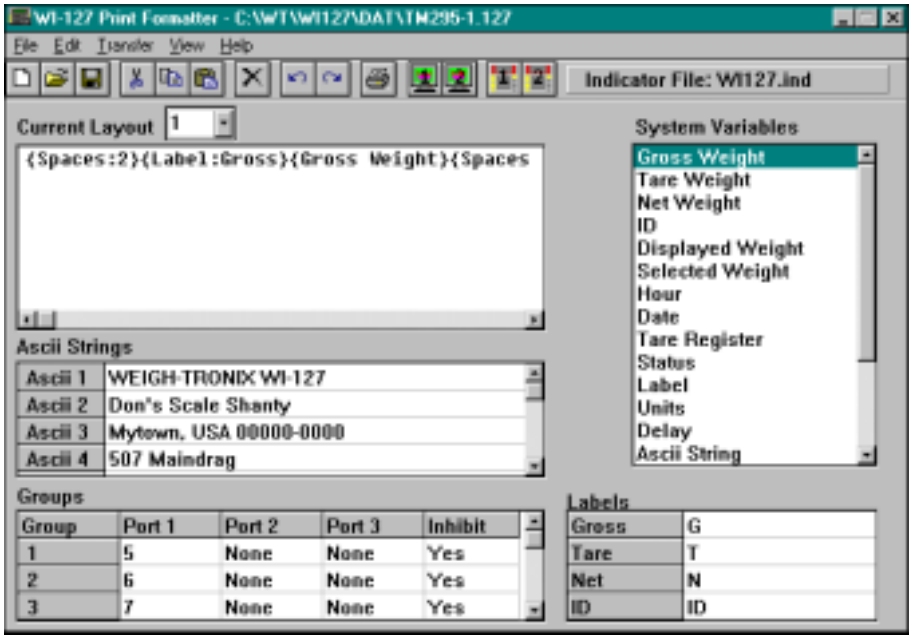
Rd125-1.127

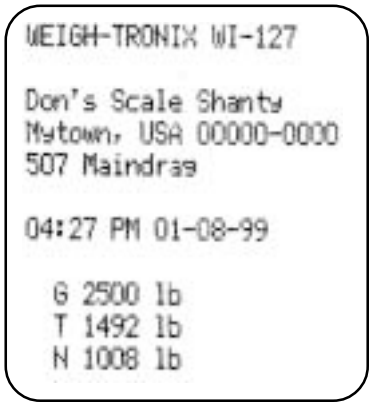
Default layouts 4 or 5 will also work with remote displays RD-125, RD-4000 and RD-6000.

The remote display will show the displayed weight in this format:

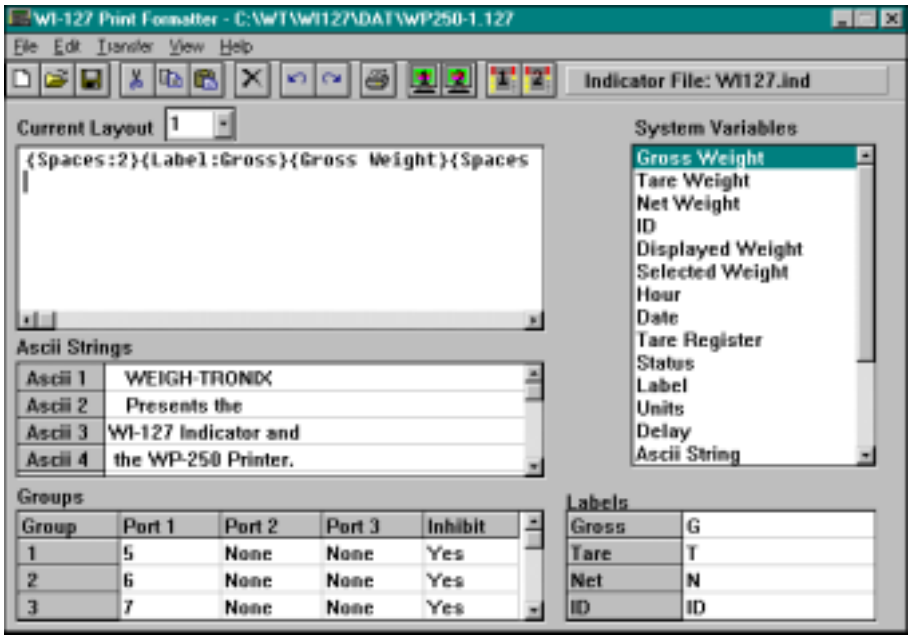
G 5000.5 LB

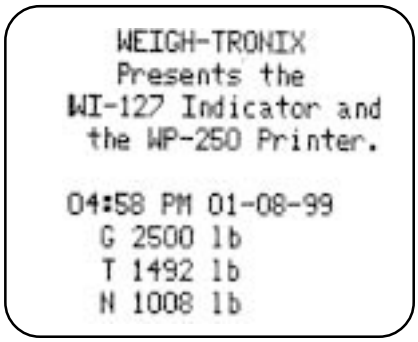
TM295-1.127





WP250-1.127


WI-127 Print Formatter - C:\WT\WI127\DAT\WP250-1.127
File Edit Transfer View Help
Indicator File: WI127.ind
Current Layout 1
{Spaces:2}{Label:Gross}{Gross Weight}{Spaces
System Variables
Gross Weight
Tare Weight
Net Weight
ID
Displayed Weight
Selected Weight
Hour
Date
Tare Register
Status
Label
Units
Delay
Ascii String
Ascii Strings
Ascii 1 WEIGH-TRONIX
Ascii 2 Presents the
Ascii 3 WI-127 Indicator and
Ascii 4 the WP-250 Printer.
Groups
Group Port 1 Port 2 Port 3 Inhibit
1 5 None None Yes
2 6 None None Yes
3 7 None None Yes
Labels
Gross G
Tare T
Net N
ID ID


WEIGH-TRONIX
Presents the
WI-127 Indicator and
the WP-250 Printer.
04:58 PM 01-08-99
G 2500 lb
T 1492 lb
N 1008 lb

Appendix A: File Information Print Output

Following is an example of what is printed when you click the print button on the program window or select Print under File. This example is for the Default.127 file.

```
Weigh-Tronix Wl-127 Print Formatter Report
File Name: C:\SOURCE\WI127\DAT\DEFAULT.127
Indicator File: WI127.ind
Wl-127 Firmware Revision: 0019C
Current Time and Date: 2/10/99 10:08:43 AM

ASCII Strings:

ASCII 01
WEIGH-TRONIX WI-127

File Name: C:\SOURCE\WI127\DAT\DEFAULT.127
Labels:
Gross Label
G
Tare Label
T
Net Label
N
ID Label
ID

File Name; C:\SOURCE\WI127\DAT\DEFAULT.127
Groups:
Group# 1
Port#1: Layout# 5
Port#2: Layout# None
Port#3: Layout# None
Inhibit: Yes

Group# 2
Port#1: Layout# 6
Port#2: Layout# None
Port#3: Layout# None
Inhibit: Yes

Group# 3
Port#1: Layout# 7
Port#2: Layout# None
Port#3: Layout# None
Inhibit: Yes

Group# 4
Port#1: Layout# 8
Port#2: Layout# None
Port#3: Layout# None
Inhibit: Yes
```

```
Group# 5
Port#1: Layout# None
Port#2: Layout# None
Port#3: Layout# None
Inhibit: Yes

Group# 6
Port#1: Layout# None
Port#2: Layout# None
Port#3: Layout# None
Inhibit: Yes

Group# 7
Port#1: Layout# None
Port#2: Layout# None
Port#3: Layout# None
Inhibit: Yes

Group# 8
Port#1: Layout# None
Port#2: Layout# None
Port#3: Layout# None
Inhibit: Yes

Group# 9
Port#1: Layout# None
Port#2: Layout# None
Port#3: Layout# None
Inhibit: Yes

File Name: C:\SOURCE\WI127\DAT\DEFAULT.127
Layouts:

Layout# 1
{Spaces:2}{Label:Gross}{Gross
Weight}{Spaces:1}{Units}{Carriage Return:1}{Line Feed:1}

Layout# 2
{Tare Register}{Spaces:1}{Label: Tare}fTare
Weight}{Spaces:1}{Units}{Carriage Return:1}{Line Feed:1}

Layout# 3
{Spaces:2}{Label: Net}{Net
Weight}{Spaces:1}{Units}{Carriage Return:1}{Line Feed:1}

Layout# 4
{Spaces:1}{Label:Displayed}{Displayed
Weight}{Spaces:1}{Units}{Carriage Return:1}{Line Feed:1}

Layout# 5
{Layout:4}{Form Feed}

Layout# 6
{Layout:1}{Layout:2}{Layout:3}{Form Feed}
```

```
Layout# 7
 {Layout:1}{Layout:3}{Form Feed}

Layout# 8
{Layout:3}{Layout:2}{Form Feed}

Layout# 9
{Label:Displayed}{Displayed
Weight}{Spaces:1}{Units}{Spaces:1}{Hour}{Spaces:1}{Date}{Carriage
Return:1}{Line Feed:1}
```

Weigh-Tronix
1000 Armstrong Dr.
Fairmont, MN 56031 USA
Telephone: 507-238-4461
Facsimile: 507-238-4195
e-mail: industrial@weigh-tronix.com
www.wtxweb.com

Weigh-Tronix Canada, ULC
217 Brunswick Blvd.
Pointe Claire, QC H9R 4R7 Canada
Telephone: 514-695-0380
Facsimile: 514-695-6820

WEIGH-TRONIX
Weighing Products & Systems