

PLU Lite Software for the ZK830



Installation and Operation Instructions

AWT35-501790 Issue AC

Avery Weigh-Tronix is a trademark of the Illinois Tool Works group of companies whose ultimate parent company is Illinois Tool Works Inc ("Illinois Tool Works"). Copyright © 2018 Illinois Tool Works. All rights reserved.

No part of this publication may be reproduced by making a facsimile copy, by the making of a copy in three dimensions of a two-dimensional work and the making of a copy in two dimensions of a three-dimensional work, stored in any medium by electronic means, or transmitted in any form or by any means, including electronic, mechanical, broadcasting, recording or otherwise without the prior written consent of the copyright owner, under license, or as permitted by law.

This publication was correct at the time of going to print, however Avery Weigh-Tronix reserves the right to alter without notice the specification, design, price or conditions of supply of any product or service at any time.

Table of Contents

page

4
4
4
4
6
6
7
8
8
9
9
10
11
11
11
11
11
11
11
12
12
14
15
16

1 Introduction and Installation

This manual covers the installation and use of the PLU Lite software for communication and database management between your ZK830 and a PC. PLU Lite will provide basic Product Look Up (PLU) creation, maintenance, and archiving for the ZK830 database. The editor allows a user to add, subtract and save PLU information while you are not connected to the scale.

PLU lite allows you to automatically activate PLU's by using a scanner attached to the PC or by manually pressing a button to select the currently selected PLU.

1.1 System requirements

Windows 7, Windows 8 or Windows 10

One ZK830 only can operate with this software package via RS232 or Ethernet

Optional USB barcode scanner to connect through PC

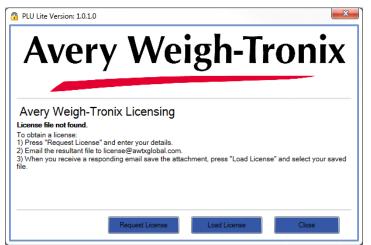
The ZK830 firmware version must be at least 1.1.3.0 or greater

1.2 Start Up

When the PLU Lite application is installed and first powered up, there will be no license found. The user will need to follow the onscreen instructions to request a license from Avery Weigh-Tronix. This license will lock the application to the PC on which the application is installed.

1.3 Licensing

After installation, when the product is run for the first time the following license screen will be shown:



Customer Deta	nils	×
Product Name:	PLU Lite	
Product Version:	1.0.6.0	
Sales Order No:		
Your Company:		
Contact Name:		
Contact Email:		
Address 1:		
Address 2:		
Address 3:		
Address 4:		
Postcode / ZIP:		
Note:		
Please complete a	I Il fields in red	
	Close	Save to Disk

Once completed filling in all the required fields, press **Save to disk** and save the *LicenseInformation.xml file* to the file system. Make sure you know where the file is stored as you will need to send that file to Avery Weigh-Tronix.

Email the file to license@awtxglobal.com

When you receive a license file back from Avery Weigh-Tronix press **Load License** and select the file from the local file system. If the email was sent to a different PC you must manually transfer the file between PCs. If the license file is correct, the PLU Lite program will then start automatically and you should not be prompted for a license file again.

Press Close to close the program.

2 Setup and Operation

PLU Lite allows Ethernet or Serial interfaces to be used with the ZK830. Depending on your application, the following ZK830 settings will need to be setup.

2.1 PLU Lite Ethernet setup

This screen is the first that appears after licensing the software. The **Setup** menu allows you to configure the filename and the communications settings.

Filename					
Comms Type					
Serial					
	Comm Port	COM1	-		
	Baud Rate	115200	Y		
	Data Bits	8	T		
	Stop Bits	1	T		
	Parity	None	Ŧ		
Ethernet		(Scale is the	server)		
	IP Address	192.168.1	.83		
	Port	10001			

The filename field will be non-editable when an active data filename has been selected.

2.2 ZK830 Ethernet setup

Below are example Ztools screenshots you use to configure the indicator's	Ethernet
settings.	

IP Address	192.168.1	.83		
Subnet Mask	255.255.2	255.0		
Gateway	0.0.0			
DHCP Enabled				
Connections (TCP	/IP Raw Socke	sts)		
Con. No.	#1		Port	10001
Гуре	Server	. *	Host Address	0.0.0.0

Protocols	Protocol 1			
#1 #2 #3	Type: SMA Name:			
	Settings			
	Binding	Enet1		•
	Print Format	1	Enquire Char	5
	Motion Inhibit	Off	*	
	Update Rate	2	*	
	Address	0		
Interlect Cattings				
Interlock Settings Auto Print		Retu	rn to Zero 🗖	
Interlock Settings Auto Print Auto Accum		Retu	rn to Zero 📃	

The ZK830 must be configured for SMA protocol on the connected port.

2.3 PLU Serial setup

C:\Users\awbr	_eng\Document	s\Avery Weigh-T	ronix\PLU	_ite\192.168	.1.83.csv	
Comms Type						
	Comm Port	COM3	~			
	Baud Rate	9600	~			
	Data Bits	8	~			
	Stop Bits	1	\sim			
	Parity	None	~			
C Ethernet		(Scale is the se	rver)			
	IP Address	192.168.1.83				
	Port	10001				

2.4 ZK830 Serial setup

	Serial Port	1 - PLU Lite				
#1 PLU Lite	Name		PLU Lite			
#2	Baud Rate		9600	-		
	Data Bits		8			
	Parity		None			
	Stop Bits		1			
	Flow Contro		None			
	Flow Contro	UL	None	*		
					-0	
Protocol Co	onfiguration					
	Protocol 1					
+1			_			
+1 +2	Protocol 1		-			
Protocols #1 #2 #3	Protocol 1 Type: SMA					
ŧ1 ŧ2	Protocol 1 Type: SMA Name:	Port1			•	
+1 +2	Protocol 1 Type: SMA Name: Settings	Port1 1	-	Enquire Char	-	
+1 +2	Protocol 1 Type: SMA Name: Settings Binding			Enquire Char		
+1 +2	Protocol 1 Type: SMA Name: Settings Binding Print Format	1		Enquire Char		

The ZK830 must be configured for SMA protocol on the connected port.

2.5 **Operation**

e S	etup Help							
urrent								
	Part Number				Ave	ry We	igh-Tr	onix
	Part Number	1			,	.,	· ·· ···	
		1						
	Description				Activate PLI	J Get live p	piece weight	Print
	Low Count Limit	Piece Weight (b)	High Count Limit		No Active	PLU		
	Tare Local (b)	Tare Remote (b)	Units			g	23	
				r			20	Pieces
							_	
1	New Сору	Delete	Save	Cancel		0.09	Ib Ne	et Weight
1	New Copy	Delete	Save	Cancel	Dhurst 1021		lb Ne	et Weight
	n by	Delete	Save PLU Cou		Ethemet - 192.1		lb Ne	
		Delete			Ethernet - 192.1 Connected		b Ne	
Search	n by	Delete Part Number					Ib Ne	et Weight Connect Units
iearch D	h by		PLU Cou	nt = 14	Connected	68.1.83:10001		Connect
iearch D Ca	n by Description Part Number escription	Part Number	PLU Cou PieceWeight	nt = 14 Tare Local	Connected Tare Remote	68.1.83:10001	HighCountLimit	Connect
iearch D Ca full	n by Description Part Number escription n hold 32 alpha-numeric digit	Part Number QWERTY -abc123	PLU Cou Piece Weight 0.002	nt = 14 Tare Local 0.0	Connected Tare Remote 0.0	68.1.83:10001	HighCountLimit	Connect Units b
iearch D Ca full Gla	h by Description Part Number escription h hold 32 alpha-numeric digit y flexible widgit	Part Number QWERTY -abc123 up to 20-digits	PLU Cou Piece Weight 0.002 0.005	nt = 14 Tare Local 0.0 0.0	Connected Tare Remote 0.0 0.0	68.1.83:10001 LowCountLimit 0 0	HighCountLimit 0 0	Units Ib Ib
iearch D Ca full Gla Wa	h by Description Rescription In hold 32 alpha-numeric digit y flexible widgit ass seal 1" dia number 8 kit	Part Number QWERTY -abc123 up to 20-digits AXT85-009777	PLU Cou PieceWeight 0.002 0.005 0.00234	nt = 14 Tare Local 0.0 0.0 0.0	Connected	68.1.83:10001 LowCountLimit 0 0 99	HighCountLimit 0 0 101	Units D D D D
iearch D Ga full Gla Sc	h by	Part Number QWERTY-abc123 up to 20-digits AXT85-009777 W1000298-ABX	PLU Cou Piece Weight 0.002 0.005 0.00234 0.00081	Tare Local 0.0 0.0 0.0 0.0 0.0	Connected Tare Remote 0.0 0.0 0.0 0.0 0.0	68.1.83:10001 LowCountLimit 0 99 1000	HighCountLimit 0 0 101 1010	Units L D D D L D L D L D
D Ca full Gla Sc Wa	n by	Part Number QWERTY-abc123 up to 20-digits AXT85-009777 W1000298-ABX U50110	PLU Cou Piece Weight 0.002 0.005 0.00234 0.000881 0.002	Tare Local 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Connected Tare Remote 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	68.1.83:10001 LowCountLimit 0 99 1000 5000	HighCountLimit 0 0 101 1010 5050	Units D D D D D D D D D D D D D D
D Ca full Gla Sc Sc	n by	Part Number QWERTY-abc123 up to 20-digits AXT85-009777 W1000298-ABX U50110 W8909870-ACX	PLU Cou Piece Weight 0.002 0.005 0.00234 0.000881 0.002 0.00281	Tare Local 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Connected Tare Remote 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	68.1.83:10001 LowCountLimit 0 99 1000 5000 1000	HighCountLimit 0 101 1010 5050 1010	Conned Units D D D D D D D D D D D D D D D D D D D
D Ca full Gla Sc Sc	n by	Part Number QWERTY-abc123 up to 20-digits AXT85-009777 W1000298-ABX U50110 W8909870-ACX U50092	PLU Cou Piece Weight 0.002 0.005 0.00234 0.000881 0.002 0.000581 0.001	Tare Local 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Connected Tare Remote 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	68.1.83:10001 68.1.83:10001 0 99 1000 5000 1000 5000	HighCountLimit 0 101 1010 5050 1010 5050	Conned Units D D D D D D D D D D D D D D D D D D D

This is the main screen of the PLU Lite software:

Live piece weights can be read from the indicator and saved in the database in real time. If you have an active PLU displayed in the Database editor, press **Get live Piece Weight** to transfer the scales piece weight to the displayed PLU's Piece Weight value. Press the **Save** button to store the piece weight.

Press the **Print** button to print the live data from the indicator on a suitable printer once correctly configured and connected to the PC. The print data can be programmed via a single print format which is built up using flexible print tokens and free text.

2.5.1 Connect/Disconnect button

Once the ethernet or serial setup configurations are complete, see sections 2.1 through 2.4, you need to connect the software to the scale by pressing the **Connect** button. The button will change to a **Disconnect** button. Use this to disconnect the scale from the software, if necessary.

2.5.2 Adding a PLU

After the file has been created and a ZK830 system has been configured, select the **NEW** button on the database screen to create a new PLU number.

Database				
	Part Number			
	AWT05-XXXX			
	Description			
	SREWS			
	Low Count Limit	Piece Weight (lb) 0.0035958340	High Count Limit	
	Tare Local (lb)	Tare Remote (Ib)	Units	1
	99999	99999	lb ~	
No	Conv	Delete	Save	Cancel
Nev	Copy	Delete	Save	Cancer



The default tare value of 99999 disables the tare for the current product and when activated uses the tare of the previous product.



After you have validated that Part number, Description, Unit, Local scale and Remote scale tares have been entered properly, select the **Save** key.

A part number can also be added by scanning its barcode. If the part number already exists it will automatically be activated but, if it's a new part number, the option of creating a new record in the database will be given. See the window below. Add the details as described above, then press **Save**.

LU Lite		in the second se
Scanned Part Number 041107001200	not found. Would you like	to create it ?
	Ves	No

2.5.3 Using the 'Search by' function

Once PLUs are created, you can search for a particular PLU by Part Number or Description. Use the **Search by** function on the main screen. First, select if you want to search by Part Number or Description then begin to type in a Part Number or Description. The database will show any entries that match your search requirements.



You can put the cursor in the **Search by** box and use the scanner to scan in a part number or description to speed up your search.

2.5.4 Activating a PLU

Scan the barcode of the required part to activate a PLU on the indicator, or press the **Activate PLU** button once you have selected the part from the main view.

2.5.5 Get Live Piece Weight

Once a PLU is active, press the **Get Live piece weight** button to read the piece weight from the scale and put it in the currently selected PLU's value. You can then elect to Save or Cancel the PLU.

2.5.6 Print

Once a PLU has been activated pressing the **Print** key will send the programmed text to the configured printer or to the screen depending on the printer setup.

2.6 Menus

2.6.1 FILE

The following menu items can be found under the *File* command:

New	Allows you to create a new database.
-----	--------------------------------------

- **Open** Allows you to Open an existing CSV file.
- **Save** Saves the current configuration and data to the hard drive of the PC
- **Save As** Allows you to save the Database's PLU data as a CSV file.
- *Exit* Terminates the application

2.6.2 SETUP

The following menu items can be found under the **Setup** command:

Indicator Allows you to view or change the settings like IP address, com port of the PC, etc..

Scanner	Allows you to view or change the scanner settings
Printer	Allows you to view or change the printer settings
Print Format	Allows you to program a single print format to be printed when the Print button is pressed
Print Tokens	Allows you to change the print tokens used by the print format

2.6.3 HELP

About Lists the version and End User License Agreement information about the application.

The Screen will look similar to below once you have saved at least 1 PLU:

le Setup He Database	elp							
Part Nu	umber				Ave	ry We	igh-Tr	onix
Descrip	otion				Activate PLU	J Get live	piece weight	Print
Low Co	unt Limit	Piece Weight (b)	High Count Limit		No Active F	PLU		
Tare Lo	ocal (b)	Tare Remote (b)	Units			9	23	Pieces
							_	
	Copy Description Part Number	Delete	Save PLU Cou	Cancel nt = 14	Ethemet - 192.1 Connected	0.09) ID Ne	et Weight
Search by	Description	Delete Part Number					B Ib Ne	
Search by Earch by Description	Description		PLU Cou	nt = 14	Connected	68.1.83:10001		Conne
Search by Earch by Description	Description Part Number	Part Number	PLU Cou PieceWeight	nt = 14 Tare Local	Connected Tare Remote	68.1.83:10001 LowCountLimit	HighCountLimit	Conne
Search by	Description Part Number	Part Number QWERTY -abc 123	PLU Cour PieceWeight 0.002	nt = 14 Tare Local 0.0	Connected Tare Remote 0.0	68.1.83:10001	HighCountLimit 0	Conne Units b
Search by Description Can hold 32 al fully flexible wil Glass seal 1" of Washer MS St	Description Part Number phanumeric digit dgit dia number 8 kit ainless	Part Number QWERTY-abc123 up to 20-digits AXT85-009777 W1000298-ABX	PLU Cour PieceWeight 0.002 0.005 0.00234 0.000881	Tare Local 0.0 0.0 0.0 0.0 0.0	Connected Tare Remote 0.0 0.0 0.0 0.0 0.0	68.1.83:10001	HighCountLimit 0 0 101 1010	Units b b b b b
Search by Can hold 32 al Fully flexible will Glass seal 1" c Washer M8 St Screw socket	Description art Number phanumerio digit dgit dia number 8 kit ainless M16 x 20mm long	Part Number QWERTY-abc 123 up to 20-digits AXT85-009777 W1000298-ABX U50110	PLU Cour PleceWeight 0.002 0.005 0.00234 0.000881 0.002	nt = 14 Tare Local 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Connected Tare Remote 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	68.1.83.10001	HighCountLimt 0 101 1010 5050	Conne Units b b b b b b b b b
Search by	Description art Number phanumerio digit dia number 8 kit ainless M16 x 20mm long ainless	Part Number GWERTY valce123 up to 20-sligits AXT85-009777 W1000298-ABX U50110 W8909970-ACX	PLU Cou PieceWeight 0.002 0.005 0.00234 0.000881 0.002 0.000581	nt = 14 Tare Local 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Tare Remote 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	68.1.83:10001 LowCourtLimit 0 99 1000 5000 1000	HighCountLimit 0 101 1010 5050 1010	Conne Units b b b b b b b b b b b b
Search by E F Description Can hold 32 al fully flexble with Glass seal 1" c Washer M8 St Screw socket Washer M6 St Screw socket	Description Part Number dgit dia number 8 kit ainless M16 x 20mm long ainless M4 x 50mm long	Part Number QWERTY ebc 123 up to 20-digits AXT85-009777 W100028-ABX U50110 W9909970-ACX U50092	PLU Cou PleceWeight 0.005 0.00234 0.00081 0.002 0.000581 0.01	nt = 14 Tare Local 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Connected Tare Remote 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	68.1.83:10001 LowCourtLimt 0 0 99 1000 5000 5000	HighCountLimt 0 0 101 101 1010 5050 1010 5050	Units b b b b b b b b b b b b b b b b
Search by C I Can hold 22 al fully flexible wir Glass seal 1" c Washer M8 St Screw socket Screw socket Screw socket	Description art Number phanumerio digit dia number 8 kit ainless M16 x 20mm long ainless	Part Number GW/ERTY slsc 123 up to 20 digits AXT85-003777 W1000298-88X US0110 W8909870-ACX US012 US0120 US0100	PLU Cour PleceWeight 0.002 0.005 0.00234 0.000881 0.002 0.000581 0.01 0.01	nt = 14 Tare Local 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Connected 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	68.1.83:10001 68.1.83:10001 0 0 99 1000 5000 1000 5000 0 0	HighCourtLimt 0 0 101 101 1010 5050 0 0 0 0 0 0 0 0 0	Conne Units b b b b b b b b b b b
Search by E C Search by Search by Search by Search bid 22 al fully flexible with Glass seal 1" of Washer M8 St Screw socket Washer M6 Screw socket Screw socket Washer M10	Description Part Number dgit dia number 8 kit ainless M16 x 20mm long ainless M4 x 50mm long	Part Number QWERTY slbc123 up to 20 digits AXT85-009777 W1002298-ABX U50110 W8909970-ACX U50100 U50092 U50100 W8908760-ZDG	PLU Cou PleceWeight 0.005 0.00234 0.00081 0.002 0.000581 0.01	nt = 14 Tare Local 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Connected Tare Remote 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	68.1.83:10001 LowCourtLimt 0 0 99 1000 5000 5000	HighCountLimt 0 0 101 101 1010 5050 1010 5050	Units b b b b b b b b b b b b b b b b

2.7 Scanner Setup

The Scanner Setup menu allows you to configure the serial parameters for the scanner.

Serial Comm				
Enable)			
	Comm Port	COM3	\sim	
	Baud Rate	9600	\sim	
	Data Bits	8	\sim	
	Stop Bits	1	~	
	Parity	None	\sim	

The scanner output format is the **Part Number** followed by a CR

2.8 Printer Setup

The Printer Setup menu allows you to configure the printer.

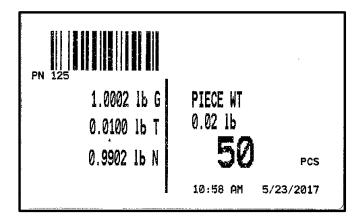
PLU Lite	- Setup Printer	-		×
Enabled	(Disable for on s	creen prir	nt preview	only)
Serial				
	Comm Port	COM3	~	
	Baud Rate	9600	~]
	Data Bits	8	~]
	Stop Bits	1	~	
	Parity	None	~]
	Can	cel	Sav	е

2.9 Print Format Setup

The Print Format Setup menu allows you to program the print format. The example below is for a Zebra GX420t printer.

Print Format			×		Π
N OD q816 Q457,24+0 ZT B743,441,2,1,4,4,101,B,"{A.71.1}" A790,336,2,4,1,1,N,"PN" A386,233,2,4,1,2,N,"PIECE WT" A386,233,2,4,1,2,N,"T.PCEL } {T.UT A641,282,2,4,1,2,N,"{T.SWT.1} {T.UT A644,219,2,4,1,2,N,"{T.SWT.1} {T.UT A644,219,2,4,1,2,N,"{T.SWT.1} {T.UT A644,61,40,2,4,1,2,N,"{T.SWT.1} {T.UT A644,219,2,4,3,4,N,"{T.SWT.1} {T.UT A644,32,7,287 P1	INIT.1) NIT.1} INIT.1]	}G" T"		*	The second se
Cancel		Sav	/e]	

An example label is shown below.



2.10 Print Tokens Setup

The Print tokens setup allows you to configure the print token names that can be used in the print format. The defaults are shown below.

Print Token	s		
Current Date	{T.DAT.1}	Count	{T.CNT.1}
Current Time	{T.TIM.1}	Net Weight	{T.NWT.1}
Part Number	{A.71.1}	Gross Weight	{T.GWT.1}
Description	{DESC}	Tare	{T.SAT.1}
Piece Weight	{T.PCE.1}	Units	{T.UNIT.1}
		Cancel	Save

Avery Weigh-Tronix

Avery Weigh-Tronix USA

1000 Armstrong Dr. Fairmont MN 56031 USA Tel:507-238-4461 Fax:507-238-4195 Email: usinfo@awtxglobal.com www.averyweigh-tronix.com

Avery Weigh-Tronix UK

Foundry Lane, Smethwick, West Midlands, England B66 2LP Tel:+44 (0) 8453 66 77 88 Fax:+44 (0)121 224 8183 Email: info@awtxglobal.com www.averyweigh-tronix.com