

# DETECTO®



## **DL Series Price Computing Scale with Integral Printer Owner's Manual**



# INTRODUCTION

Thank you for purchasing DETECTO's DL Series Price Computing NTEP legal-for-trade certified, networkable price computing scale with an integral label printer. The DL series features a 30 lb or 60 lb capacity, stainless steel platform, 5,990 PLUs with inventory reporting by PLU, alphanumeric display (upper- and lower-case characters), 4 LED display windows and 1 dot matrix text screen, multiple connectivity ports (USB, Ethernet, and RS232 serial), and they are available with or without a tower pole display.

This manual will guide you through the setup and operation of your scale. Please read it thoroughly before attempting to operate this scale and keep it available for future reference.

This manual is for use with the following DL Series Price Computing Scale models:

DL1030, DL1030P, DL1060, and DL1060P

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While every precaution has been taken in the preparation of this manual, the Seller assumes no responsibility for errors or omissions. Neither is any liability assumed for damages resulting from the use of the information contained herein. All instructions and diagrams have been checked for accuracy and ease of application; however, success and safety in working with tools depend to a great extent upon individual accuracy, skill, and caution. For this reason, the Seller is not able to guarantee the result of any procedure contained herein. Nor can they assume responsibility for any damage to property or injury to persons occasioned from the procedures. Persons engaging in the procedures do so entirely at their own risk.

SERIAL NUMBER _____
DATE OF PURCHASE _____
PURCHASED FROM _____
_____
_____
RETAIN THIS INFORMATION FOR FUTURE USE

# PRECAUTIONS

Before using this product, read this manual and pay special attention to all "NOTIFICATION" symbols:



**IMPORTANT**



**ELECTRICAL  
WARNING**



**STATIC  
SENSITIVE**

## PROPER DISPOSAL

When this device reaches the end of its useful life, it must be properly disposed of. It must not be disposed of as unsorted municipal waste. Within the European Union, this device should be returned to the distributor from where it was purchased for proper disposal. This is in accordance with EU Directive 2002/96/EC. Within North America, the device should be disposed of in accordance with the local laws regarding the disposal of waste electrical and electronic equipment.

It is everyone's responsibility to help maintain the environment and to reduce the effects of hazardous substances contained in electrical and electronic equipment on human health. Please do your part by making certain that the device is properly disposed of. The symbol shown to the right indicates that this device must not be disposed of in unsorted municipal waste programs.



## FCC COMPLIANCE STATEMENT

This equipment generates, uses, and can radiate radio frequency and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been designed within the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC rules to provide reasonable protection against such interference when operated in a commercial environment. The operation of this equipment in a residential area may cause interference in which case the user will be responsible to take whatever measures necessary to correct the interference.

You may find the booklet "How to Identify and Resolve Radio-TV Interference Problems" prepared by the Federal Communications Commission helpful. It is available from the U.S. Government Printing Office, Washington, D.C. 20402. Request stock No. 001-000-00315-4.

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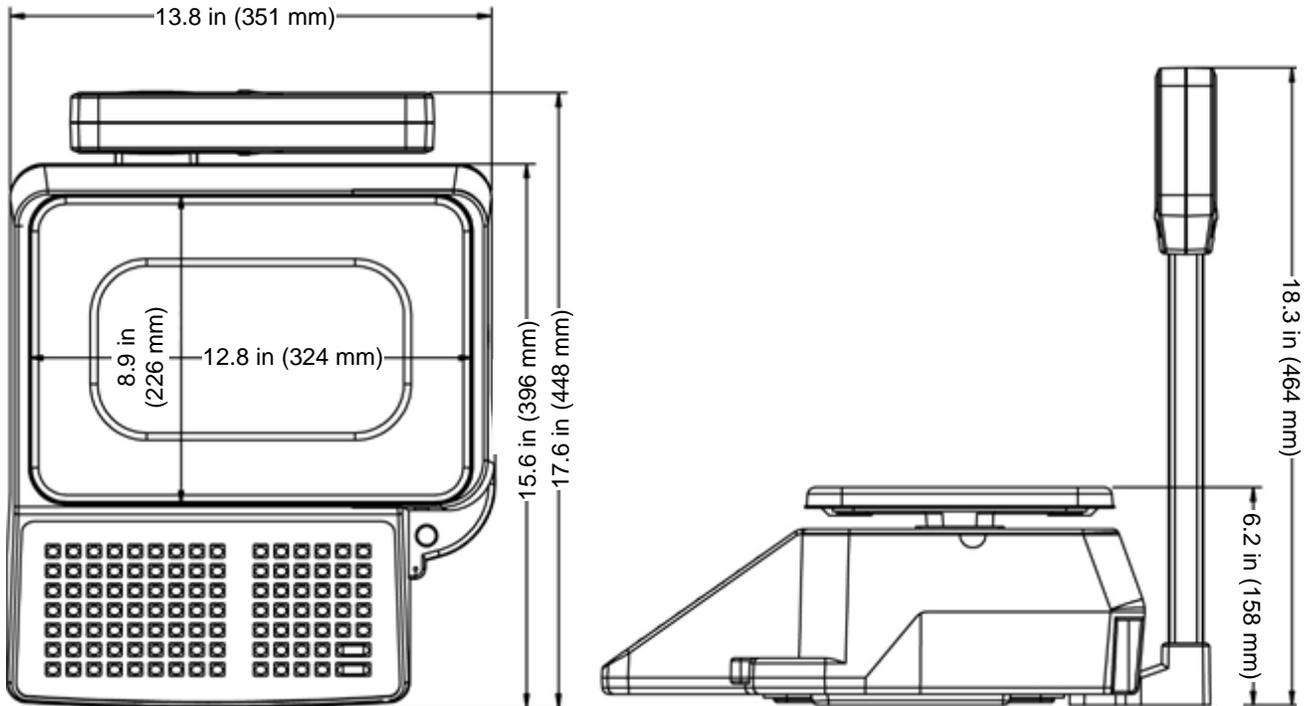
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# SPECIFICATIONS

Models:	DL1030	DL1060	DL1030P	DL1060P
Tower Pole Display:			•	•
Capacity:	30 lb x 0.01 lb	60 lb x 0.02 lb	30 lb x 0.01 lb	60 lb x 0.02 lb
Display:	Front: 4 seven-segment LED screens and 1 dot matrix text screen Rear: 4 seven-segment LED screens		4 seven-segment LED screens and 1 160 x 32 dot matrix screen 4 seven-segment LED screens and 1 160 x 32 dot matrix screen	
Display Digits:	4 digits Tare, 5 digits Weight, 6 digits Unit Price, 6 digits Total Price			
Minimum Weight:	0.2 lb per NTEP			
Max PLU:	5990			
Platform Size:	12.8 in W x 8.9 in D (324 mm W x 226 mm D)			
Overall Dimensions:				
Integrated Rear Display	15.6 in L x 13.8 in W x 6.2 in H (396 mm L x 351 mm W x 158 mm H)			
With Tower Pole Display	17.6 in L x 13.8 in W x 18.3 in H (448 mm L x 351 mm W x 464 mm H)			
Ports:	Ethernet, RS232 Serial, USB, and Cash Drawer			
Power Requirements:	120V AC, 50-60 Hz (AC power cord included)			
Operating Temperature:	32 to 104°F (0° to 40°C)			
Printer:	Thermal Print			
Labels:	6600-3001	Separate die-cut UPC (58 mm x 40mm, 700/roll)		
	6600-3002	Separate die-cut UPC (58mm x 60mm, 500/roll)		
	6600-3003	Separate die-cut UPC, Safe Handling Image, (58mm x 50mm, 500/roll)		
	6600-3004	Separate WPC blank label (58mm x 40 mm, 700/roll)		

## Dimensions



## ABBREVIATIONS AND GLOSSARY

PLU	Price or Product Look Up (e.g., Identification number affixed to produce and other products)
Weight PLU	By Weight PLU
Count PLU	By Count PLU
Dept.	Department
U. Price	Unit price
T. Price	Total Price
Prog	Program key or menu
F Prog	Fast program key or menu
Spec	Specification - A parameter that controls the behavior of the scale
T-Sale	Temporary Sale
Amount	The quantity of the goods, weight, or count. It means weight (lb) for weight PLU and count (pcs) for count PLU

# INSTALLATION

## Included in the carton:

- DL Series Price Computing NTEP legal-for-trade scale
- Tray - 2 pcs: plastic tray & metal top
- Display pole and screw pack (DL1030P/DL1060P only)
- Owner's Manual
- DLX50 DL Series Scale Utility CD\*
- Four (4) overlays for shortcut PLU
- Power Cord

## Attachment of Tower Display

Remove the cover tower bracket on the bottom of the base. Place the tower display close to the base. Connect the tower display cable to the circuit board in the base. Gently slide the tower post into the bracket. Fasten the tower to the base with two bolts provided. Replace bracket cover.

## Placement

Place the scale in an environment free of excessive dust and moisture and on a stable, vibration-free level surface away from direct sunlight and any rapidly moving air source (heating/cooling vents, fans, etc.). This will prevent sudden temperature changes and air currents that may result in unstable weight readings.



**WARNING! DO NOT** place the scale on an unstable cart, stand, or table. The scale may fall causing injury to the operator, and damage to the unit, or proper operation of the scale may be inhibited.

## Level Adjustment

Check to make certain the scale is level. The level indicator is located at the front of the scale. If the scale is not level (the bubble will not be centered), adjust the mounting feet as required to center the bubble, and attain a level scale.

## Power Connection

The scale uses an external AC power cord that is to be used in a standard 120 V AC 50/60Hz grounded wall outlet.

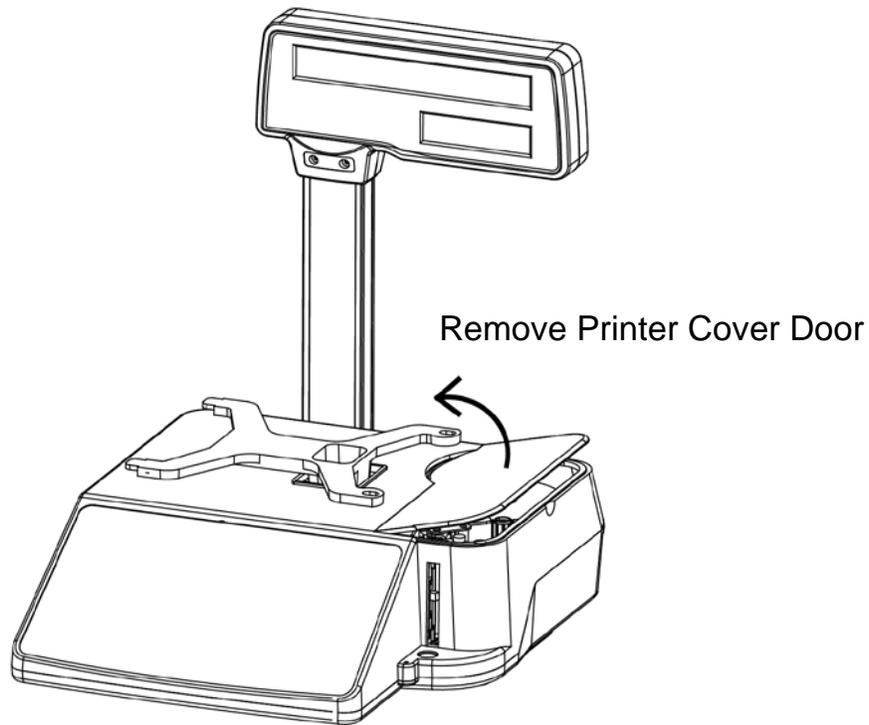
\* **NOTE:** The DLX50 DL Series Scale Utility is available for download for users without a CD drive on their computer. Download the utility from **Detecto.com** at:

<https://detecto.com/resources/software/detail/dlx50-dl-series-scale-pc-utility>

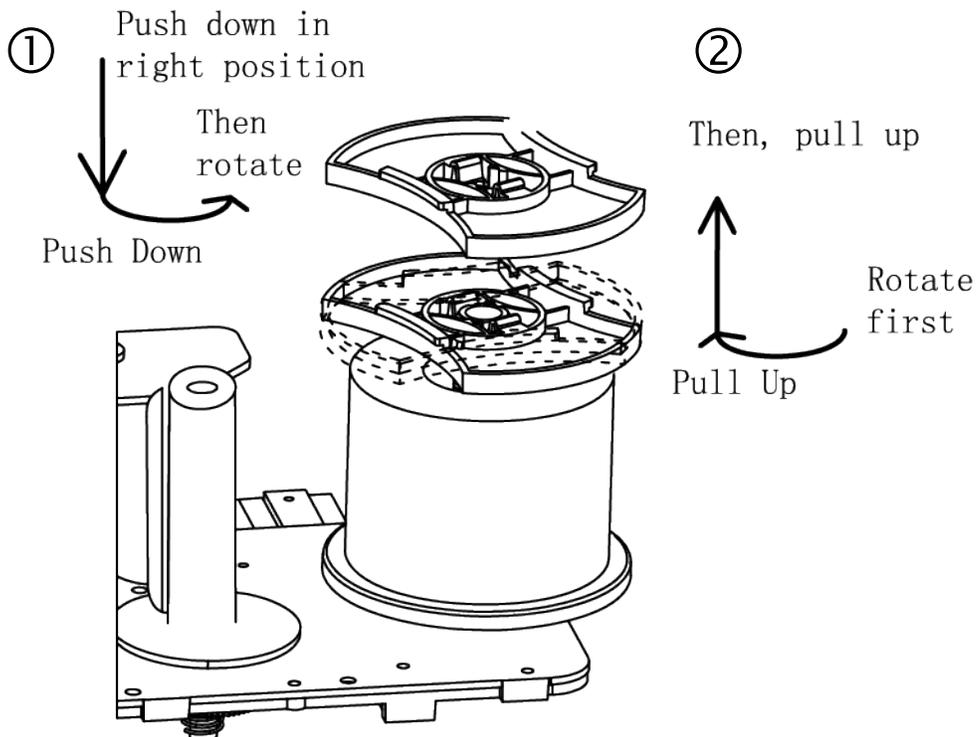
# PRINTER

## Install Gap Labels

### Step 1 – Remove Weighing Platform and Printer Cover Door



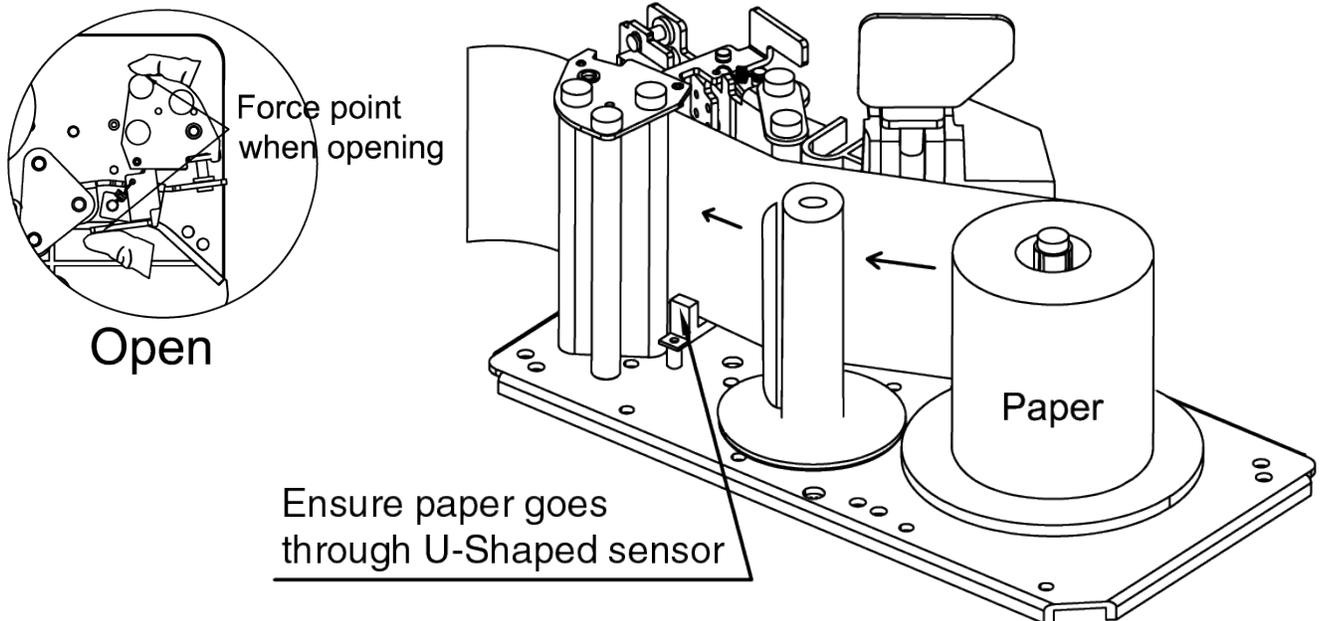
### Step 2 - Remove Main Paper Spool Retainer



## PRINTER, CONT.

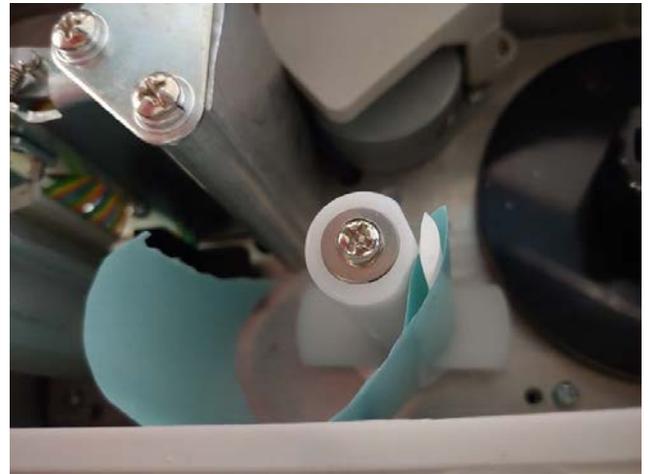
### Step 3 – Install Paper Ensuring It Is Through Sensor

Open the printhead. Peel off some labels so that there is about 12" (30 cm) of blank paper. Install the roll and loosely run the paper around the printhead and then around the thin chrome bar in front of the printhead and finally back toward the return spool shaft.



### Step 4 – Attach Paper to Return Spool Shaft

Make a loop at the end of the paper, tape it together, and then slide the loop over the finger of the return spool.



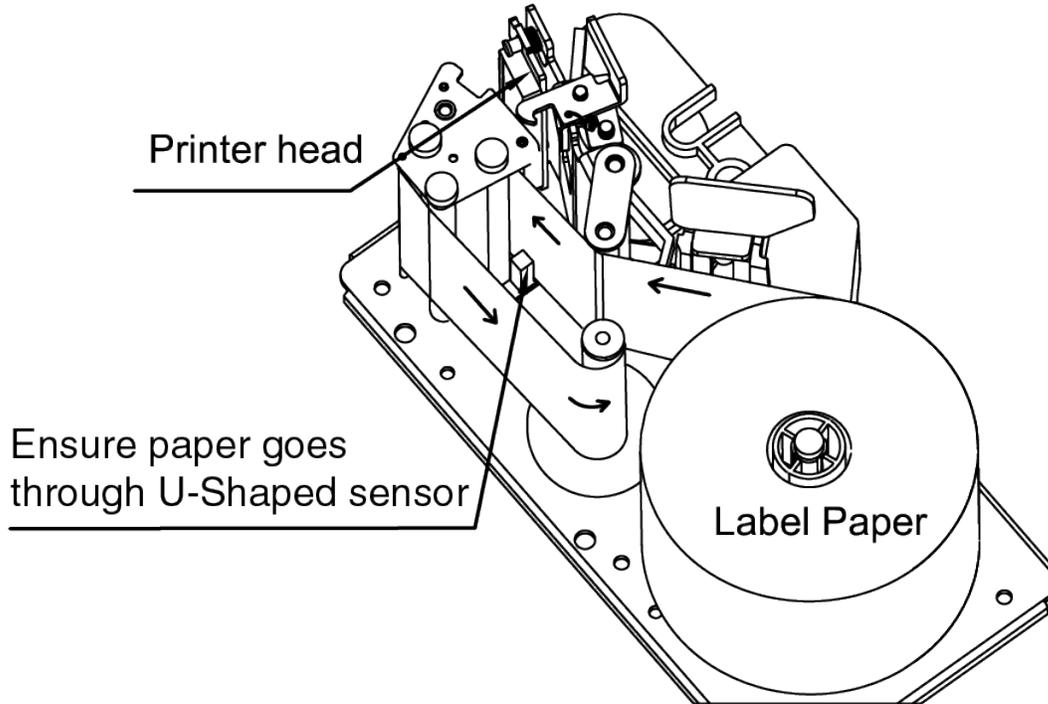
Now manually turn the return spool shaft *counter-clockwise* until it wraps around a time or two.

**NOTE:** The paper should wrap around the return spool shaft enough times so it won't slip.

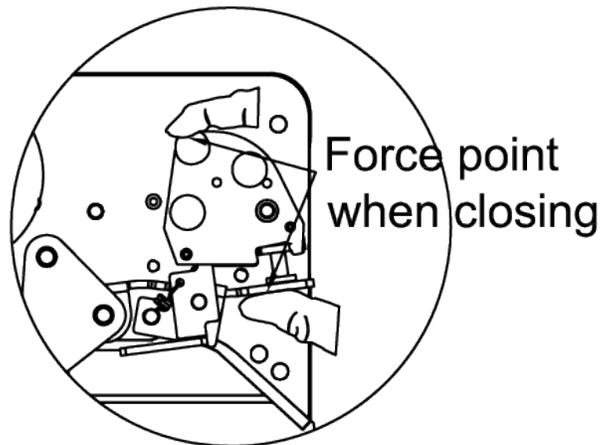
## PRINTER, CONT.

### Step 5 – Completed Paper Path

Rotate the main spool *clockwise* until everything gets tight, making sure the paper is still through the U-shaped sensor.



Now clamp down the printhead closed.



## Close

Installation of the gap paper is now complete.

**NOTE:** After installing the gap paper, it is recommended to perform a gap calibration. Refer to Step 6 on the next page for the procedure to perform a gap calibration.

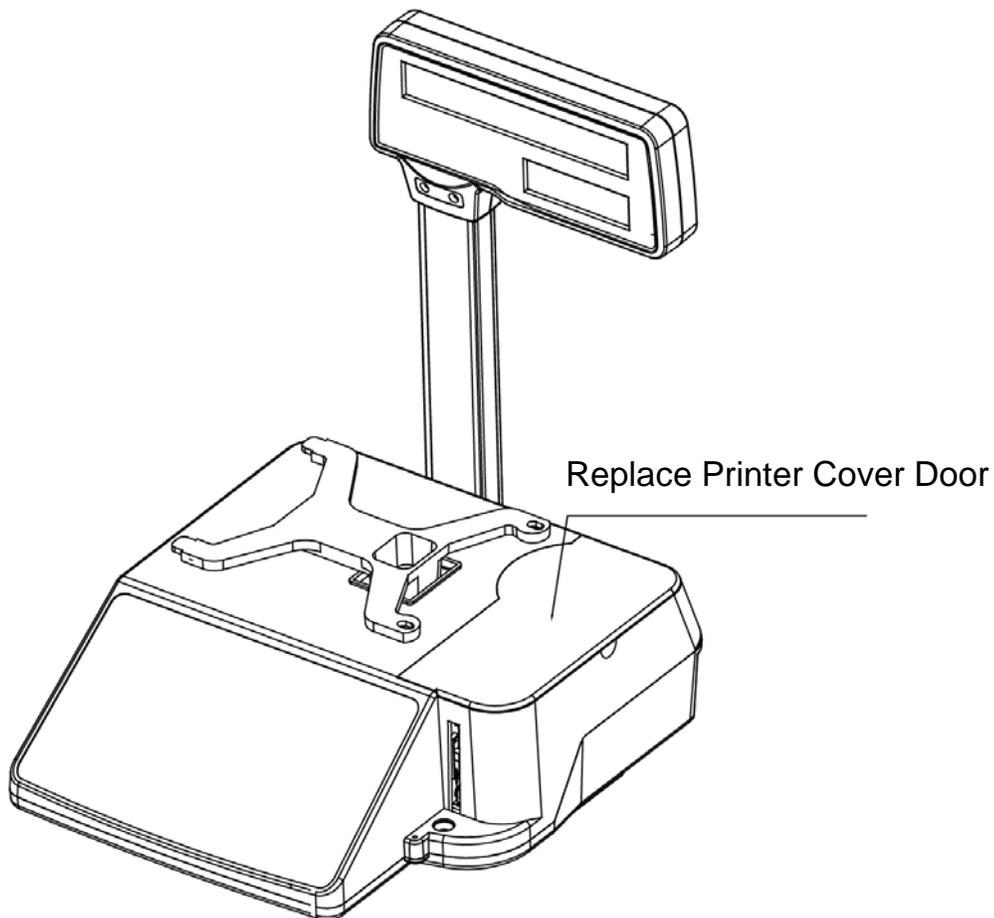
## PRINTER, CONT.

### Step 6 – Perform Gap Calibration

1. Turn the scale OFF.
2. Press and hold the **Feed** key, then turn the scale ON.
3. Continue to hold the **Feed** key until the self-checking is finished, and the scale goes into normal operation mode.
  - 3a. The printer will roll out the paper at a length of approximately 50mm.
  - 3b. After the paper is rolled out, the problem should have been eliminated. If there is an error code (E7.10), it means there is still a gap calibration issue. Please try the procedure again after confirming the correct paper has been used.
4. Press the **Feed** key to print the test page.
5. Turn the scale OFF.

### Step 7 – Replace Printer Cover Door

1. Replace the printer cover door and re-install the weighing platform.
2. The scale is ready for normal operation mode.



# PRINTER, CONT.

## Install Plain Paper

Different from the way in installing the gap paper shown. All you need to do is to put the paper into the paper sensor and let the torn part be outside.

## Operations Concerning Paper

### PAPER TYPE

**NOTE:** The **Paper Type** key is only available on the DL1030P/DL1060P. The DL1030/1060 must change the paper type in Spec021. (0 = Plain Paper, 1 = Gap Paper).

Make sure the type of paper set is the same as the type of paper used. When the Gap Paper annunciator on the display is turned on, you should change the setting to use gap paper. Otherwise, you should use plain paper. Note that if the type of paper you set to use is different from the type currently used, press and hold (for about 3 seconds) the **Paper Type** key to change the setting.

### FEED

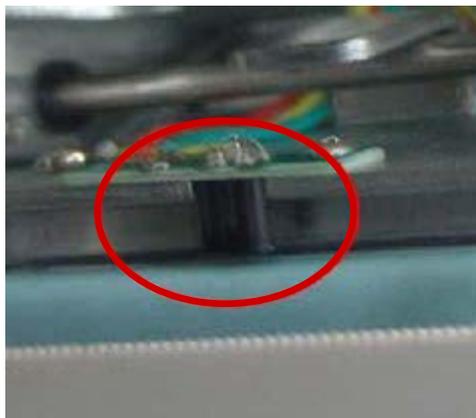
After installing the paper, press the **Feed** key. You can also press the **Feed** key to clear issues with the printer and to make the paper roll for a certain length.

## Gap Paper Print Problems

**NOTE:** There are no gap adjustments required for using plain paper.

Problems may happen when the gap paper prints are abnormal, the paper goes out continuously, or the printer won't work after one label is printed.

- Check to make sure the paper is the right type.
- Referring to the previous section, **INSTALL GAP LABELS, Step 6 – Perform Gap Calibration**, perform the Gap Calibration to eliminate the malfunction.
- When installing gap paper, make sure the edge of the gap paper does not exceed the print head. (*Do Not Block the Paper-Out Sensor!*)



**Paper-Out sensor**

# SETTING OF PRINT FORMAT

**PAPER TYPE:** Press and hold the **Paper Type** key for about 3 seconds to switch between gap paper and plain paper. **NOTE:** The **Paper Type** key is only available on the DL1030P/DL1060P. The DL1030/1060 must change the paper type in Spec021. (0 = Plain Paper, 1 = Gap Paper).

**FORMAT:** There are 9 kinds of default print formats.

**LABEL SIZE:** 58mm x 40mm, 40mm x 30mm gap paper, and 58mm and 40mm width plain paper are available in default print formats. When using a different type of paper, please adjust the corresponding Spec shown in the table below.

Paper type	Print type	Spec			Instructions
		000	005	027	
58mm x 40mm gap paper	Label print	1	4	50	Default
	Receipt print	7	7	50	Not recommended
40mm x 30mm gap paper	Label print	2	5	36	
	Receipt print	8	8	36	Not recommended
58mm width plain paper	Label print	1	4	50	
	Receipt print	7	7	50	
40mm width plain paper	Label print	2	5	36	
	Receipt print	8	8	36	

- A. Print formats include label print and receipt print. If the user needs a custom print format, use the DLX50 DL Series Scale Utility or contact your service representative. Note that the DLX50 DL Series Scale Utility can be downloaded at: <https://detecto.com/resources/software/detail/dlx50-dl-series-scale-pc-utility>
- A. Don't print bills while selling: amend Spec003 and Spec008 to 0. If some specific deals need to print bills, press the **Reprint** key.
- B. To print a few copies of one bill, input the amount into Spec003 and Spec008.
- C. To print two different kinds of bills: set the type of bill 1 in Spec000~Spec009, and bill 2 in Spec010~Spec019. It is recommended users contact their appointed service center.
- D. Set Gray Level of gap thermal paper in Spec022.
- E. Set Gray Level of plain thermal paper in Spec023. 

0 is the lightest, 9 is the darkest
-------------------------------------
- F. Set the Plain Thermal Paper Cut-Off Position in Spec 025. Note that the position for the paper cut-off should not be less than 30.
- G. You can set different kinds of print formats and barcode types for each PLU. You can check the details in PLU parameters for print formats and barcode types. Set the value of these parameters to 0 if you choose the system type.
- H. The procedures to confirm print format: take bill 1 as an example. If two or more goods are sold, print the sum bill and use Spec005 as print format. If only one good is sold, print the item bill. If sale PLU has been set for a specific print format (not 0), the system would use the print format. If no specific print format has been set to sale PLU (the setting number is 0.), the print format would be Spec000.

## BARCODE PRINTING AND SCANNING

- A. The scale can print various types of bar codes. Note that there are nine (9) types of default barcode settings.
- B. Can scan inner code and external code.
- C. Barcodes can be divided by use into item barcodes and total barcodes, which are printed in item labels and total labels respectively.
- D. The factory default barcodes support 5-digits total price and 6-digits total price. Please select the barcode compatible with the POS.

Goods Code	Digits of Price	Spec				Suggestion
		001	006	002	007	
		001	006	002	007	
Flag Code Using PLU No.	5 Default	1	7	xx	xx00000	x... is the flag code that is reserved for scale in the POS system. Users could define 0 as a MISC code for a PLU Number never equal to 0.
	6	4	8	xx	xx0000	
Flag Code Using PLU Item-Code	5	2	7	xx	xyyyyyy	x... is the flag code that is reserved for scale in the POS system. y... is a MISC code for the total label. PLU's Item-Code is code in the POS system.
	6	5	8	xx	xyyyyyy	
No Flag Code Using PLU Item-Code	5	3	7		yyyyyyy	No flag code is defined. y... is a MISC code for the total label. PLU's Item-Code is code in the POS system.
	6	6	8		yyyyyyy	

- E. If a special bar code format is needed, please use the DLX50 DL Series Scale Utility or contact your service representative.

Instructions on how to customize print formats are in the DLX50 DL Series Scale Utility manual, 8529-0638-0M. Refer to the **SCALE PARAMETERS, Custom Print Formatting** section for details. The manual can be downloaded at:

[https://detecto.com/themes/ee/site/default/asset/img/resources/resources\\_brochures/DLX-PC-Utility-Manual.pdf](https://detecto.com/themes/ee/site/default/asset/img/resources/resources_brochures/DLX-PC-Utility-Manual.pdf)

The DLX50 DL Series Scale Utility can be downloaded at:

<https://detecto.com/resources/software/detail/dlx50-dl-series-scale-pc-utility>

# KEYPAD FUNCTIONS

## DL1030 Keypad and Front Display

**Tare (lb)**      **Weight (lb)/Pcs**      **Change (\$)/Unit Price \$/lb**      **Total Price (\$)**

Auto Mode   Gap Paper   Lock Tare   Lock PLU   → ← Manual Weight   ▲ ▼ NET Shift   Sale   Prog   Account   Change   Unit Price   V1   V2   V3   V4   Discount   Single   Sum

**DL1030 30 lb x 0.01 lb**

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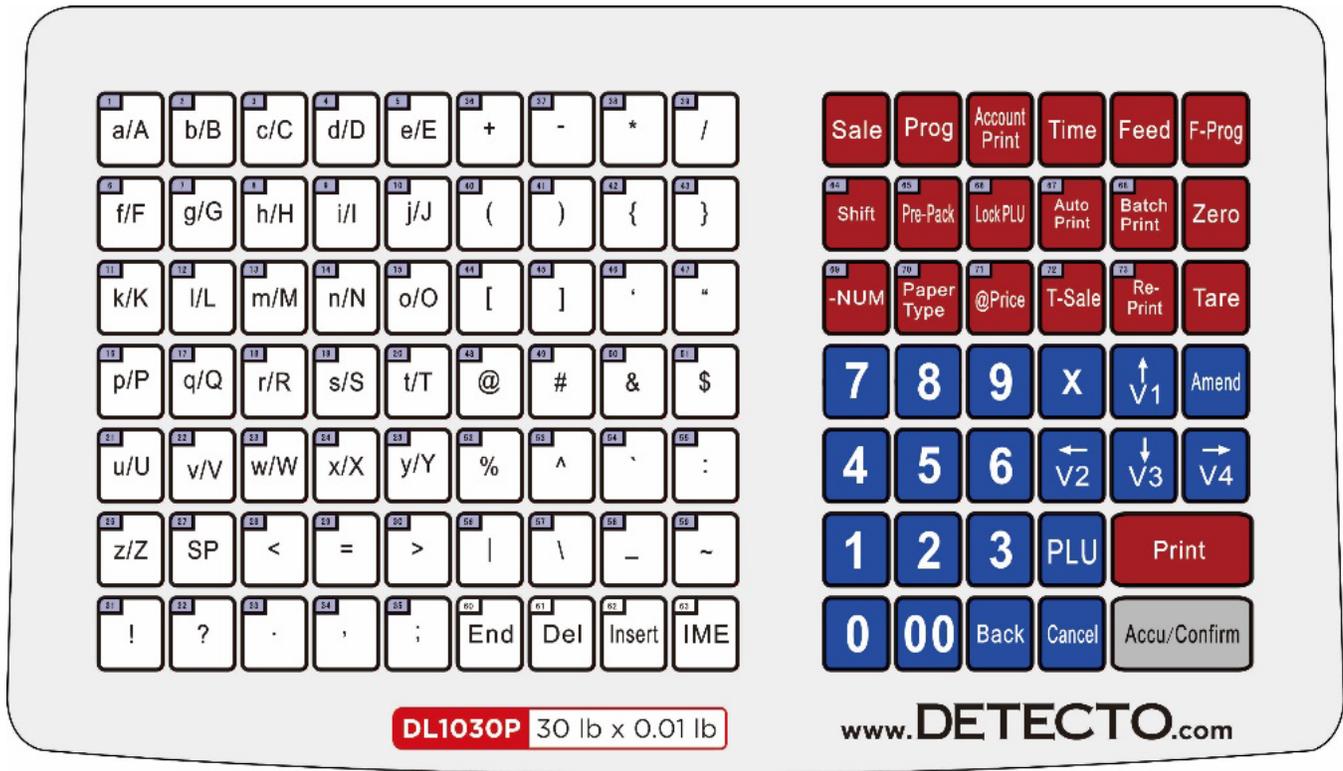
## DL1030 Rear Display

**Tare (lb)**      **Weight (lb)/Pcs**      **Change (\$)/Unit Price \$/lb**      **Total Price (\$)**

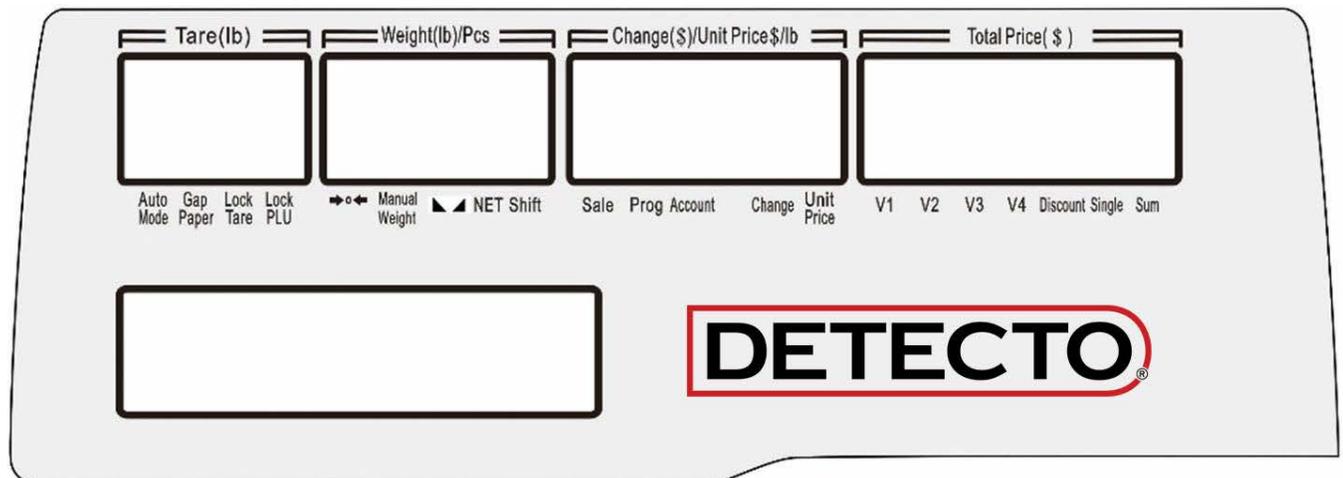
Auto Mode   Gap Paper   Lock Tare   Lock PLU   → ← Manual Weight   ▲ ▼ NET Shift   Sale   Prog   Account   Change   Unit Price   V1   V2   V3   V4   Discount   Single   Sum

# KEYPAD FUNCTIONS, CONT.

## DL1030P Keypad



## DL1030P Display



## KEYPAD FUNCTIONS, CONT.

KEY	FUNCTION
<b>Sale</b>	Enter sale mode and execute the operation of goods sale.
<b>Prog</b>	Enter program mode to program parameters, PLU, print formats, time, etc.
<b>Account Print</b>	Enter Account mode to inquire about transaction data or print reports.
<b>Time</b>	Display the current time and return to the previous interface when you press the Time key again.
<b>Feed</b>	Press this key to feed gap thermal paper and plain thermal paper through the printer. Unprinted buffer data will be cleared in the process of feed.
<b>F-Prog</b>	Quick access to changing settings and values of PLUs in sales mode. It is always used with a combination of keys, which is similar to the F keys of a PC keyboard. Please refer to process instructions to understand the use of combination keys.
<b>Shift</b>	Used for extending the PLU shortcut key, and switching case sensitivity in the text input interface.
<b>Pre-Pack</b>	These keys allow you to switch between other sales modes. If the current sale buffer is empty, the user can long-press these keys to re-enter the sales mode selected.
<b>Lock PLU</b>	
<b>Auto Print</b>	
<b>Batch Print</b>	
<b>Zero</b>	Clear current weight and reset to zero within the allowed range.
<b>-NUM</b>	Discount in subtraction.
<b>Paper Type</b>	Press for 4 seconds to switch between gap thermal and plain thermal paper.
<b>@ Price</b>	Used to override the unit price of the PLU. When Spec083 is active, the modified price will be saved.
<b>T-Sale</b>	This is the Temporary Sale key. Pressing it will set the numbers entered as the Unit Price and create a temporary weight PLU. You can amend the temporary weight PLU's unit in Spec.
<b>Re-print</b>	Repeat the last print in the current buffer (Repeated print data would not be stored in deal records as sale records.). This function can be forbidden in Spec.
<b>Tare</b>	Manually enter and remove Tare.

## KEYPAD FUNCTIONS, CONT.

KEY	FUNCTION
<b>0 – 9, 00</b>	Numeric keys to input corresponding numbers.
<b>X</b>	Multiply key. Input count amount in count sale or do temporary count goods sale according to input U. Price.
<b>Amend</b>	Amend transaction data in the sale interface and store amended data in the program interface.
<b>V1-V4</b> ↑←↓→ <b>(Arrows)</b>	Activate corresponding sale buffers. Switch among sequential steps and numbers in the program and account interfaces.
<b>PLU</b>	When you type a PLU number and press this key, it will call up that PLU.
<b>Print</b>	Print labels or receipts according to a setting.
<b>Back</b>	Delete the last input data. Return to the previous step without saving.
<b>Cancel</b>	Clear data, cancel operations, or go back to the previous step.
<b>Accu</b> <b>/Confirm</b>	Save accumulative transaction data into activated sale buffer and other confirmation operations.

KEY	FUNCTION
<b>SP</b>	Input a Space when entering characters.
<b>End</b>	End character, all characters after cursor are deleted.
<b>Del</b>	Delete the character at the position of the cursor.
<b>Insert</b>	Enter into insert mode. Insert mode is activated when the cursor is flashing.
<b>IME</b>	Input method editor. Switch the input languages: En-1(in small letters), En-2 (in big letters), and press accumulate to confirm.

### White Lettered (Alpha) Keys

The white lettered (alpha) keys are used to enter text when programming the Store Name and the PLU (Price Look Up) name. The **SP** (space) key is used to enter a blank space during text input.

During normal operations, the white lettered (alpha) keys, including the **SP** (space) key, are used for the PLU Quick-Keys. Pressing the Quick-Key will output its assigned PLU.

# DISPLAY ANNUNCIATORS

## Tare (lb) Window

ANNUNCIATOR	FUNCTION
Auto Mode	This is turned on to indicate auto mode. When in auto mode, the lock PLU will activate. In this mode, pre-pack or batch print is executed based on Spec078 and Spec079.
Gap Paper	This is turned on when the paper type is gap paper. It is off when the paper type is plain paper.
Lock Tare	This is turned on when the tare is locked. Pressing and holding the <b>Tare</b> key (for approximately four (4) seconds) would lock the tare. Under this condition, tare would not be cleared after the sale. Pressing and holding the <b>Tare</b> key again would exit the lock tare.
Lock PLU	This is turned on when the PLU is locked. Pressing and holding the <b>PLU</b> key (for approximately four (4) seconds) would lock the PLU. Under this condition, the former PLU sale state would remain the same after the sale and will last until a new PLU is transferred. Pressing and holding the <b>PLU</b> key again would exit the lock PLU.

## Weight (lb)/Pcs Window

ANNUNCIATOR	FUNCTION
→0←	This is the Zero weight annunciator. It is turned on when the weight is at zero and stable.
Manual Weight	This is turned on when manual weight is displayed.
▲▲	This is the Stable weight annunciator. It is turned on when the weight is stable.
NET	This is the Net weight annunciator. It is turned on when Net weight is displayed.
Shift	This is turned on when the <b>Shift</b> key is pressed.

## Change (\$)/Unit Price \$/lb Window

ANNUNCIATOR	FUNCTION
Sale	This is turned on when the scale is in Sale Mode.
Prog	This is turned on when the scale is in the Program Mode.
Account	This is turned on when the scale is in the Account Mode
Change	This is turned on when the data in the Change(\$)/Unit Price \$/lb window is displayed as change.
Unit Price	This is turned on when the data in the Change(\$)/Unit Price \$/lb window is displayed as goods.

## DISPLAY ANNUNCIATORS, CONT.

### Total Price (\$) Window

ANNUNCIATOR	FUNCTION
V1 ~ V4	These are turned on when there are buffers in the V1 ~ V4 records. They will be flashing when the scale is in edit mode.
Discount	To display single means that current goods have been discounted in U. Price; To display total means that the current accumulative total has been discounted in T. Price.
Single	This is turned on when the total price of current goods is displayed in the Total Price(\$) window.
Sum	This is turned on when the total price of the current sale buffers (V1 ~ V4) is displayed in the Total Price(\$) window.

### Dot Matrix Display

The DL Series Price Computing Scale has an additional 160 × 32 dot matrix text display. It is used to display the date, time and day, ad message, or accumulation records when in the idle mode; and will display the PLU name when in the PLU mode.

# OPERATION INDICATORS

## Key and Display Notations

**Bold Letters** denote a key (for example, press the **Prog** key).

A capitalized word or the first letter is capitalized denotes a Display Annunciator (for example, NET, Unit Price, or Single with the annunciator pointer turned on).

## Audible Signals

SOUND	MEANING
1 Short beep	This confirms a key has been pressed.
1 Long beep and 2 Short Beeps	This indicates an incorrect key has been pressed.
Repetitive short beeps	This indicates an error has occurred. The scale will display an error code. For example, E0.01 will be displayed if the weight is not stable when the scale is turned on.
2 Beeps (press key and hold)	This confirms a key has been pressed and held.

## Seven-Segment Display Character Reference

Number Characters 0 through 9

0 1 2 3 4 5 6 7 8 9

Characters A through M

A B C d E F G H I J K L M

Characters N through Z

n o P q r s t U v w x y z

Dash, underline, above the line, three lines of special symbols

- \_ ^ ~

## SETTING DATE AND TIME

1. With the scale in the normal operation mode (0.00 will be displayed on the four display windows, and the date, time, and day on the dot matrix window), press the **Prog** key, press the **1** key, and then press the **1** key again.
2. The display will change to show the date and time in the four display windows as well as the date, time, and day with a blinking cursor on the year of the dot matrix window.
3. Using the left arrow key (**V2**) and right arrow key (**V4**), move the blinking cursor to the appropriate position to be changed.
4. Use the numeric keys to enter the correct information.
5. Repeat steps 3 and 4 until all digits of the date and time have been entered.
6. Once the date and time are correct, press the **Amend** key to save the settings.
7. Press the **Sale** key to return to the normal operation mode.

## PROGRAMMING STORE NAME

1. With the scale in the normal operation mode (0.00 will be displayed on the four display windows, and the date, time, and day on the dot matrix window), press the **Prog** key, then press the **1** key, and then press the **3** key.
2. The display will change to show *P 13* in the Tare window and *Shop Name* on the dot matrix window.
3. Press the **Accu/Confirm** key to begin entering the desired text for the store name.

**NOTE:** Press the **End** key to clear (remove) the existing store name. If it is desired to edit the store name, use the **V2** and **V4** keys to move the blinking cursor to the desired position to change a letter of the name.

4. Use the white lettered (alpha) keys to enter the desired text for the store name.



**NOTE:** By default, all letters are lowercase. To enter an uppercase letter, press the red **Shift** key first, and then press the white letter key. To make all the letters uppercase, press the **IME** key. This is similar to using the “caps lock” of a PC keyboard. Note that the “space” key is labeled **SP** and is to the right of the **z/Z** key.

5. Once the store name has been entered, press the **Amend** key to save the setting.
6. Press the **Sale** key to return to the normal operation mode.

# FAST PLU PROGRAMMING

## To Begin Fast PLU Programming

1. With the scale in the normal operation mode (000 will be displayed on the four display windows, and the date, time, and day on the dot matrix window), press the F-Prog key and the **PLU** key at the same time.
2. The display will change to show *F23* in the Tare window, and *Step: 0 / PLU No.* on the dot matrix window.

## Step:0 / PLU No.

To create or modify a PLU number, use the numeric keys to enter the PLU number, and then press the **V4** key. The dot matrix window will change to *Step: 1 / Item Code*.

## Step:1 / Item Code

Item codes are used if a number different from the PLU number needs to be referenced in the barcode on the label.

**NOTE:** If an item code has been previously associated with the PLU, it will be shown in the Total Price window. If an item code has not been associated with the PLU, a 0 will be shown in the Total Price window.

1. With the Total Price window showing the current setting, press the **V4** key if the setting shown is acceptable.
2. Otherwise, use the numeric keys to enter the desired Item Code, and then press the **V4** key. The dot matrix window will change to *Step: 3 / Unit*.

## Step: 3 / Unit

There are two (2) applicable unit selections for the DL Series scale:

2 = Piece Count

6 = Weighable Items in lbs (*default setting*)

1. With the Total Price window showing the current setting, press the **V4** key if the setting shown is acceptable.
2. Otherwise, use the numeric keys to enter the desired setting for Unit, and then press the **V4** key. The dot matrix window will change to *Step: 4 / Unit Price*.

## Step: 4 / Unit Price

This is the price per unit selected from the previous prompt.

**NOTE:** Each PLU must have a Unit Price other than \$0.00.

1. With the Total Price window showing the current setting, press the **V4** key if the setting shown is acceptable.
2. Otherwise, use the numeric keys to enter the desired Unit Price, and then press the **V4** key. The dot matrix window will change to *Step: 6 / Tare*.

## FAST PLU PROGRAMMING, CONT.

### Step: 6 / Tare

**NOTE:** This step is only displayed when Step:3 / Unit is set to 6.

If a Tare weight (i.e., a container for a weighable item) is to be associated with the PLU, the weight of it can be entered here.

1. With the Total Price window showing the current setting, press the **V4** key if the setting shown is acceptable.
2. Otherwise, use the numeric keys to enter the desired Tare weight, and then press the **V4** key. The dot matrix window will change to `Step: 14 / PLU Name`.

### Step: 14 / PLU Name

The PLU name will be used on product labels and will be displayed on the scale display when weighing the item.

1. To view or modify the current PLU name, press the **Accu/Confirm** key.
2. Use the white lettered (alpha) and the numeric keys to enter the desired PLU name.



**NOTE:** By default, all letters are lowercase. To enter an uppercase letter, press the red **Shift** key first, and then press the white letter key. To make all the letters uppercase, press the **IME** key. This is similar to using the “caps lock” of a PC keyboard. Note that the “space” key is labeled **SP** and is to the right of the **z/Z** key.

3. Once the PLU name has been entered, press the **Amend** key to save the PLU name.
4. The dot matrix window will return to show `Step: 14 / PLU Name`. Press the **V4** key.
5. The dot matrix window will change to `Step: 26 / Print?Shelf Date`.

### Step:26 / Print?Shelf Date

This setting determines if a Shelf Date is to be used on the printed label. Note that the Total Price window will show the current setting. There are two (2) settings available:

0 = No, Do Not Print Shelf Date

1 = Yes, Print Shelf Date

- If the Total Price window is showing 0 and No on the dot matrix window, proceed to step 1.
  - If the Total Price window is showing 1 and Yes on the dot matrix window, proceed to step 4.
1. If the 0 = No setting is acceptable, press the Amend key. The display will change to show `Step: 0 / PLU No.` on the dot matrix window.
  2. If another PLU is to be entered or modified, repeat the above steps (Step:0 to Step:26).
  3. Otherwise, press the **Sale** key to return to the normal operation mode.
  4. If the 1 = Yes setting is acceptable, press the **V4** key.
  5. The dot matrix window will change to `Step: 31 / Shelf Date`.

## FAST PLU PROGRAMMING, CONT.

### Step:31/ Shelf Date

**NOTE: This step is only displayed when Step:26 / Print?Shelf Date is set to 1.**

The Shelf Date is the number of days past the packing date that will be used to determine the sell-by date.

1. With the Total Price window showing the current setting, press the **Amend** key if the setting shown is acceptable.
2. Otherwise, use the numeric keys to enter the desired setting for the Shelf Date, and then press the **Amend** key.
3. The display will change to show `Step: 0 / PLU No.` on the dot matrix window.
4. If another PLU is to be entered or modified, repeat the above steps (Step:0 to Step:26).
5. Otherwise, press the **Sale** key to return to the normal operation mode.

## QUICK KEY PROGRAMMING

**QK** denotes the white lettered (alpha) key to be programmed such as the **a/A** key.

1. With the scale in the normal operation mode (`0.00` will be displayed on the four display windows, and the date, time, and day on the dot matrix window), press and hold the **F-Prog** key, and then press the **QK** that is to be programmed.
2. The display will change to show `F 14` in the Tare window, and `Shortcut of PLU` on the dot matrix window.
3. Release both keys. (The **F-Prog** key and the **QK** were chosen).
4. Use the numeric keys to enter the PLU number to be assigned to the Quick Key.
5. Press the **Amend** key to save the setting.
6. Repeat the above steps for all PLU numbers to be assigned to a Quick Key.

# OPERATION



**NOTE:** Normal operation mode indicates the scale platform is empty and *0.00* is displayed on the four display windows. Note that the date, time, and day will be displayed on the dot matrix window.

## Basic PLU Transaction

### By Weight

1. With the scale in the normal operation mode, place the item on the scale platform.
2. Use the numeric keys to enter the PLU number, and then press the **PLU** key.
3. Press the **Print** key to print a label.
4. Remove the item from the scale platform.

### By Count

**NOTE:** This operation requires the PLU to be programmed as a “2 = Piece Count” PLU. Refer to **Step:3 / Unit** in the FAST PLU PROGRAMMING section.

1. With the scale in the normal operation mode, use the numeric keys to enter the PLU number, and then press the **PLU** key.
2. Press the **X** (multiply key), and then use the numeric keys to enter the quantity.
3. The Weight/Pcs window will change to show the quantity, and the Total Price window will change to show the total price (the PLU price multiplied by the quantity entered).
4. Press the **Print** key to print a label.

## Tare

### Weight Tare

1. With the scale in the normal operation mode, place the container on the scale platform.
2. Press the **Tare** key.
3. The Tare window will change to show the weight of the container, the Weight window will change to show *0.00*, with the NET annunciator turned on.

**NOTE:** If the container is removed from the scale platform, the Weight window will change to show a negative weight (the weight of the container).

4. To clear the Tare weight, remove the container from the scale platform, and then press the **Tare** key again.

## OPERATION, CONT.

### Keypad Tare (Entering Known Container Weight)

1. With the scale in the normal operation mode, enter the known weight of the container using the numeric keys, and then press the **Tare** key.
2. The Tare window will change to show the weight of the container, the Weight window will change to show `0.00`, with the NET annunciator turned on.  
**NOTE:** If the container is removed from the scale platform, the Weight window will change to show a negative weight (the weight of the container).
3. To clear the Tare weight, remove the container from the scale platform, and then press the **Tare** key again.

### Lock and Unlock Tare

#### Lock Tare

1. With the scale in the normal operation mode, place the container on the scale platform, or enter the known weight of the container using the numeric keys.
2. Press and hold the **Tare** key.
3. The scale will beep once when the key is pressed, and beep again (after approximately four (4) seconds) when the tare is locked. Note that the Lock Tare annunciator in the Tare window will turn on.
4. Release the **Tare** key.
5. Proceed with normal weighing operations.

#### Unlock Tare

1. With a tare locked in the scale, press and hold the **Tare** key.
2. The scale will beep once when the key is pressed, and beep again (after approximately four (4) seconds) when the tare is unlocked. Note that the Lock Tare annunciator in the Tare window will turn off.
3. Proceed with normal weighing operations.

**Note 1** Once a tare is locked, it cannot be changed or cleared automatically.

**Note 2** Only entering a manual tare can change the tare. If a PLU has PLU Tare, Lock Tare cannot overwrite the PLU tare.

**Note 3** A locked tare locked must be manually unlocked.

## OPERATION, CONT.

### Batch Print Mode (only for Piece Count PLU)

**NOTE:** This operation requires the PLU to be programmed as a “2 = Piece Count” PLU. Refer to **Step:3 / Unit** in the FAST PLU PROGRAMMING section.

1. With the scale in the normal operation mode, press the **Batch Print** key.
2. The scale will beep once, and the Auto Mode annunciator in the Tare window will turn on.
3. Use the numeric keys to enter the PLU number, and then press the **PLU** key.
4. The Unit Price annunciator in the Change/Unit Price window and the Single annunciator in the Tare window will turn on.
5. Press the **X** (multiply key), and then use the numeric keys to enter the PLU quantity.  
**NOTE:** If the PLU quantity is one (1), skip this step and proceed to step 6.
6. Press the **Print** key to confirm the PLU quantity.
7. Use the numeric keys to enter the number of labels desired, and then press the **Accu/Confirm** key to confirm the number.
8. The number of labels entered will begin printing.  
**NOTE:** To cancel once printing has started, press the **Cancel** key.
9. When the last label has been removed from the printer, the scale will exit the Batch Print Mode, and the Auto Mode annunciator will turn off in the Tare window.

### Pre-Pack Mode (only for weight PLU)

1. With the scale in the normal operation mode, press the **Pre-Pack** key.
2. The scale will beep once, and the Auto Mode and Lock PLU annunciators in the Tare window will turn on.
3. Use the numeric keys to enter the PLU number, and then press the **PLU** key.
4. Place the items on the scale platform.
5. After the weight is stable, a label will automatically print.
6. Remove the item from the scale platform.
7. Repeat steps 4, 5, and 6 to print labels for the remainder of the items.
8. Press the **Cancel** key when finished printing the desired PLU labels.
9. Press the **Pre-Pack** key to exit the Pre-Pack Mode.

## OPERATION, CONT.

### Temporary-Sale by Weight

1. With the scale in the normal operation mode, enter the Unit Price using the numeric keys.
2. Press the **T-Sale** key to create a temporary weight PLU.  
**NOTE:** To clear the current temporary PLU and return to the normal operation mode, press the **Cancel** key, otherwise proceed to step 3.
3. Place the item on the scale platform, and then press the **Print** key to print a label.
4. Remove the item from the scale platform to return to the normal operation mode.

### Temporary-Sale by Count

1. With the scale in the normal operation mode, enter the Unit Price using the numeric keys.
2. Press the **X** (multiply key), and then use the numeric keys to enter the quantity.
3. This will create a temporary weight PLU.  
**NOTE:** To clear the current temporary PLU and return to the normal operation mode, press the **Cancel** key, otherwise proceed to step 4.
4. Press the **Print** key to print a label.
5. The scale will return to the normal operation mode.

### Price Discount by Subtraction

**NOTE:** This operation requires the PLU to be programmed as a “2 = *Piece Count*” PLU. Refer to **Step:3 / Unit** in the FAST PLU PROGRAMMING section.

1. With the scale in the normal operation mode, use the numeric keys to enter the PLU number, and then press the **PLU** key.
2. Using the numeric keys, enter the discount amount, and then press the **-Num** key.
3. The Change/Unit Price and Total Price windows will change to show the discounted price, and the Discount annunciator will turn on in the Total price window.  
**NOTE:** To clear the current temporary PLU and return to the normal operation mode, press the **Cancel** key, otherwise proceed to step 4.
4. Press the **Print** key to print a label.
5. The scale will return to the normal operation mode.

# REPORT PRINTING OPERATION

## Total Reports

Total reports are divided into a total daily report, total monthly report, total quarterly report, and total manual report. Each report has 32 buffer zones (0 to 31).

Take Total Daily Report as an example: Buffer zone 0 stores the total daily report of the current day; buffer zone 1 stores the total daily report of the last day. The rest may be deduced similarly. So, buffer zone 31 stores the total daily report of the day dating back to 31 days ago.

Total Monthly Report and Total Quarterly Report work in the same way, storing the total report of the last X months or quarters (where X = 0 to 31).

Total Manual Report would take operation A51 as the time point to divide the storage. The buffer zone delays a position automatically when a report is cleared. That means: Buffer 31 records the information which was stored in buffer 30. Similarly, buffer 1 records the information which was stored in buffer 0, and information stored in buffer 0 is cleared. Then the information will start accumulating in buffer 0.

When printing a total report, the system will prompt to input two (2) numbers. The scale will print the total buffer which is combined with the buffers whose numbers are between the two (2) input numbers.

**Note 1** If there is no data stored in the buffers, those buffers will be skipped when printing.

**Note 2** If the number input for the end buffer is 0, the system will only print the buffer data for the number input for the start number.

**Note 3** If the number input for the end buffer is not 0 but is less than the number input for the start number, no buffer data will be printed.

**Note 4** The display windows may momentarily show the currently printed items while the system is printing.

## REPORT PRINTING OPERATION, CONT.

### Print Total Report

1. With the scale in the normal operation mode, press the **Account Print** key.
2. The display will change to show *R 1* in the Tare window, *t o t a l* in the Weight window, *Total / Account* on the dot matrix window and the Account annunciator in the Change/Unit Price window will turn on.
3. Press the **1** key to select the Total Report.
4. The display will change to show *R 1 1* in the Tare window, *t o t a l* in the Weight window, *d a i l y* in the Weight window, and *Total Daily / Account* on the dot matrix window. Note that the Account annunciator will still be on.
5. Use the numeric keys to enter the desired report number.
  - Press the **1** key to select the Daily Report.
  - Press the **2** key to select the Monthly Report.
  - Press the **3** key to select the Quarterly Report.
  - Press the **4** key to select the Manual Report.
6. The display will change to show *i n P u t* in the Weight window, *2 - 1* in the Change/Unit Price window, *0* in the Total price window, and *Input 2-1* in the dot matrix window. Note that the Account annunciator will turn off.
7. Press the **0** key and then the **Accu/Confirm** key. The display will change to show *2 - 2* in the Change/Unit Price window, and *Input 2-2* on the dot matrix window.
8. Press the **1** key and then the **Accu/Confirm** key to print the daily report of today. (Refer to Note 4).
9. Press the **Sale** key to return to the normal operation mode.

## REPORT PRINTING OPERATION, CONT.

### Print Dept. Report

1. With the scale in the normal operation mode, press the **Account Print** key.
2. The display will change to show *R 1* in the Tare window, *totRL* in the Weight window, *Total / Account* on the dot matrix window and the Account annunciator in the Change/Unit Price window will turn on.
3. Press the **2** key to select the Dept. Report.
4. The display will change to show *R 2 1* in the Tare window, *dept* in the Weight window, *daily* in the Weight window, and *dept Daily / Account* on the dot matrix window. Note that the Account annunciator will still be on.
5. Use the numeric keys to enter the desired report number.
  - Press the **1** key to select the Daily Report.
  - Press the **2** key to select the Monthly Report.
  - Press the **3** key to select the Quarterly Report.
  - Press the **4** key to select the Manual Report.
6. The display will change to show *input* in the Weight window, *2 - 1* in the Change/Unit Price window, *0* in the Total price window, and *Input 2-1* in the dot matrix window. Note that the Account annunciator will turn off.
7. Press the **0** key and then the **Accu/Confirm** key. The display will change to show *2 - 2* in the Change/Unit Price window, and *Input 2-2* on the dot matrix window.
8. Press the **1** key and then the **Accu/Confirm** key to print the daily report of today. (Refer to Note 4).
9. Press the **Sale** key to return to the normal operation mode.

## REPORT PRINTING OPERATION, CONT.

### Print Class Report

1. With the scale in the normal operation mode, press the **Account Print** key.
2. The display will change to show *R 1* in the Tare window, *LOEL* in the Weight window, *Total / Account* on the dot matrix window and the Account annunciator in the Change/Unit Price window will turn on.
3. Press the **3** key to select the Class Report.
4. The display will change to show *R 3 1* in the Tare window, *CLASS* in the Weight window, *daily* in the Weight window, and *dept Class / Account* on the dot matrix window. Note that the Account annunciator will still be on.
5. Use the numeric keys to enter the desired report number.
  - Press the **1** key to select the Daily Report.
  - Press the **2** key to select the Monthly Report.
  - Press the **3** key to select the Quarterly Report.
  - Press the **4** key to select the Manual Report.
6. The display will change to show *input* in the Weight window, *2 - 1* in the Change/Unit Price window, *0* in the Total price window, and *Input 2-1* in the dot matrix window. Note that the Account annunciator will turn off.
7. Press the **0** key and then the **Accu/Confirm** key. The display will change to show *2 - 2* in the Change/Unit Price window, and *Input 2-2* on the dot matrix window.
8. Press the **1** key and then the **Accu/Confirm** key to print the daily report of today. (Refer to Note 4).
9. Press the **Sale** key to return to the normal operation mode.

# REPORT PRINTING OPERATION, CONT.

## Print PLU Report

The scale can print PLU reports whose number is less than 1000.

When printing PLU reports, the system will print those PLU reports whose numbers are between the 2 input numbers (including the 2 input numbers).

### Example: Print PLU Reports with the Numbers from 10 to 20

1. With the scale in the normal operation mode, press the **Account Print** key.
2. The display will change to show *R 1* in the Tare window, *total* in the Weight window, *Total / Account* on the dot matrix window and the Account annunciator in the Change/Unit Price window will turn on.
3. Press the **4** key to select the PLU Report.
4. The display will change to show *R 4 1* in the Tare window, *PLU* in the Weight window, *daily* in the Weight window, and *dept Class / Account* on the dot matrix window. Note that the Account annunciator will still be on.
5. Use the numeric keys to enter the desired report number.
  - Press the **1** key to select the Daily Report.
  - Press the **2** key to select the Monthly Report.
  - Press the **3** key to select the Quarterly Report.
  - Press the **4** key to select the Manual Report.
6. The display will change to show *input* in the Weight window, *2 - 1* in the Change/Unit Price window, *0* in the Total price window, and *Input 2-1* in the dot matrix window. Note that the Account annunciator will turn off.
7. Use the numeric keys to enter **10** (start PLU), and then press the **Accu/Confirm** key.
8. The display will change to show *2 - 2* in the Change/Unit Price window, and *Input 2-2* on the dot matrix window.
9. Use the numeric keys to enter **20** (end PLU), and then press the **Accu/Confirm** key.
10. Press the **Sale** key to return to the normal operation mode.

## REPORT PRINTING OPERATION, CONT.

### Clear Report Information Manually

The information in manual reports will not be cleared automatically unless the user enters the A51 interface (clear current manual report) to clear it. After this operation, manual reports of all departments, classes, and PLUs will be cleared, and a total manual report would display its serial number.

1. With the scale in the normal operation mode, press the **Account Print** key.
2. The display will change to show *R 1* in the Tare window, *tot RL* in the Weight window, *Total / Account* on the dot matrix window and the Account annunciator in the Change/Unit Price window will turn on.
3. Press the **5** key to select Enter Clear Report.
4. The display will change to show *RS 1* in the Tare window, *CLEAR* in the Weight window, *nrnly* in the Weight window, and *Clear Manual Report / Account* on the dot matrix window. Note that the Account annunciator will still be on and the Lock Tare annunciator will be flashing.
5. Using the numeric keys, enter **1** key to select Clear Manual Report.
6. The display will change to show *----* (dashes) in the Tare, Weight, Change/Unit Price, and Total price windows, and *Please Wait* on the dot matrix window. Note that the Account annunciator will turn off.
7. When completed, the display will change back to show *RS 1* in the Tare window, *CLEAR* in the Weight window, *nrnly* in the Weight window, and *Clear Manual Report / Account* on the dot matrix window. Note that the Account annunciator will still be on and the Lock Tare annunciator will be flashing.
8. Press the **Sale** key to return to the normal operation mode.

# REPORT PRINTING OPERATION, CONT.

## Clear All Reports and Records Information



**WARNING!** This operation will clear all reports and records and is irreversible. Please verify clearing all reports and records is desired before proceeding with this operation.

1. With the scale in the normal operation mode, press the **Account Print** key.
2. The display will change to show *R 1* in the Tare window, *totRL* in the Weight window, *Total / Account* on the dot matrix window and the Account annunciator in the Change/Unit Price window will turn on.
3. Press the **5** key to select Enter Clear Report.
4. The display will change to show *RS 1* in the Tare window, *CLEAR* in the Weight window, *ONLY* in the Weight window, and *Clear Manual Report / Account* on the dot matrix window. Note that the Account annunciator will still be on and the Lock Tare annunciator will be flashing.
5. Press the **2** key to select “input code”.
6. The display will change to show *input* in the Weight window, *Code* in the Change/Unit Price window, *0* in the Total price window, and *Code* on the dot matrix window. Note that the Account annunciator will turn off.
7. Using the numeric keys, enter 9, 9, 5, 8 (the validate code), and then press the **Accu/Confirm** key.
8. The display will change to show *- - - -* (dashes) in the Tare, Weight, Change/Unit Price, and Total price windows, and *Please Wait* on the dot matrix window. Note that the Account annunciator will turn off.
9. When completed, the display will change to show *RS 2* in the Tare window, *CLEAR* in the Weight window, *ALL* in the Weight window, and *Clear All Report / Account* on the dot matrix window. Note that the Account annunciator will still be on and the Lock Tare annunciator will be flashing.
10. Press the **Sale** key to return to the normal operation mode.

## ERROR CODES

Number	Alarm Instructions	Methods to Handle
E0.01	Weight is not stable when the scale start-up	Make sure there are no goods on the tray and the tray is stable
E0.02	Exceed the allowed start-up zero range	Make sure there are no goods on the tray and the tray is on the bracket
E1.01	Prog data is invalid	Input valid data again
E1.03	The selected print format does not exist	Set print format again
E1.10	Sale at 0 prices is forbidden	The sale whose sell price is 0 is forbidden Refer to Spec070
E1.11	Exceed the largest sale price	The total price or grand total price of sold goods exceeds the largest sale price
E1.12	Need to return to zero point	Return to weight zero before the sale Refer to Spec069
E1.13	Exceed accumulative limit	The accumulative times are over the buffer accumulate limit
E1.14	There is data in the buffer and cannot print in single	Print the data in buffers first. Then print this sale or switch to other buffers
E1.18	The system cannot execute accumulative operations while locking PLU	Before accumulative operations, the system needs to exit lock PLU (or auto mode) first
E1.19	The system cannot switch buffers into the buffer with accumulation while locking PLU	Operate in the current buffer, or exit lock PLU (or auto mode)
E1.21	Less than the smallest sale weight	Weight needs to be larger than the smallest sale weight
E1.22	Larger than the largest sale weight	Weight needs to be smaller than the largest sales weight
E1.23	Discounted Unit Price has to be less than the discount lower limit	Discounted in allowed range, or amend the allowed range
E1.24	Discounted Unit Price has to be higher than the discount upper limit	
E1.30	Cannot enter special sale mode	Selected PLU has a conflict with special sale mode, select again
E1.39	Weight unit recognized	When creating PLUs in the DLX50 PC Utility, use Unit option '6-lb' for all weighable items.

## ERROR CODES, CONT.

Number	Alarm Instructions	Methods to Handle
E7.01	Some keys are pressed when the scale starts	Please confirm that no keys are pressed. The last window displays pressed keys. 8-5 means the key in the 8th column from the left and 5th row from the top is pressed.
E7.11	Gap paper is not taken away	Take away the printed label paper. If there is still a problem, refer to the <b>Gap Paper Print Problems</b> section
E7.12	The printhead is not closed tight	Re-install the paper and make sure the printhead is closed tight
E7.13	The printer is working	Please wait for a few seconds and try again
E7.14	Lack of plain paper	Re-install plain paper or the paper type does not match
E7.15	Lack of gap paper	Reinstall label paper or paper type cannot match. If there is still a problem, refer to the <b>Gap Paper Print Problems</b> section
E7.16	The scale cannot find the gap intervals	The paper type does not match. Change the type to plain paper or reinstall the gap label paper. If there is still a problem, refer to the <b>Gap Paper Print Problems</b> section
E7.17	The scale cannot find gap alignment positions	Label paper is used up or paper type does not match with set paper type, reinstall the label paper
E7.18	The printer is overheated and it needs to cool down	Please wait for a few seconds and try again
E7.19	There is no response from the printer	The printer may not be connected or in a state that the printer could not print
E7.30	Alarm for full storage of deal records	Enter the Account interface Calculate reports and then clear the reports

# TROUBLESHOOTING GUIDE

The following guide will assist you in determining problems, errors, and operational questions you may encounter with your Detecto® DL Series Price Computing scale.

## Problem

The scale will not power on.

## Possible Solution

- A. Make sure the AC power cord is **FIRMLY** pressed up into the socket on the scale.
- B. Is the AC power cord fully inserted into the wall receptacle?
- C. Check the wall receptacle for proper AC power by trying another electrical appliance in the same receptacle. Does it work?
- D. Check the circuit breaker.
- E. Has there been a power failure?
- F. Contact your service representative. An internal fuse or component may have failed.

## Problem

The scale will not power on, but the display is showing “Key hold while boot strap”?

## Possible Solution

Refer to the **ERROR CODES** section of this manual, error E7.01 to find the stuck key.

## Problem

The incorrect weight is displayed.

## Possible Solution

- A. Has the scale been calibrated?
- B. Ensure that the scale platform isn't touching an adjacent object.
- C. Have proper operation procedures been followed?

## Problem

The scale will not display weight.

## Possible Solution

- A. There may be an error code displayed on the Tare window. Refer to the **ERROR CODES** section of this manual.
- B. On the DL1030P and DL1060P, check to make sure the connection between the tower display cable and the main circuit board has been properly made. Refer to the **INSTALLATION, Attachment of Tower Display** section of this manual.

# TROUBLESHOOTING GUIDE, CONT.

## Problem

Labels are not printing after pressing the **Print** key?

## Possible Solution

- A. Verify labels are the correct type (direct thermal).
- B. Check to see if there is an error code displayed in the Tare window of the display. Refer to the **ERROR CODES** section of this manual.
- C. If the printer is moving and labels are not coming out, check to see if your labels are properly loaded and clear of obstructions. Refer to the **PRINTER** section of this manual.

## Problem

The printer only prints a partial label or a blank label.

## Possible Solution

Check to make sure a label is not caught on the printhead or rubber roller. Clean the print head or rubber roller. *ONLY use soft plastic tools* to scrape the label from the printhead or rubber roller. **DO NOT USE METAL TOOLS!** The printhead or rubber roller may be permanently damaged. Refer to the **PRINTER** section of this manual.

## Problem

The printer is ejecting extra labels or is skipping labels.

## Possible Solution

The Label Sensor is missing the gap between the labels due to one of the following reasons:

- A. Verify the labels are the correct type (direct thermal).
- B. Check to make sure the print format size matches the labels you are using.
- C. Check to see if your labels are properly loaded and clear of obstructions. Refer to the **PRINTER** section of this manual.
- D. A gap calibration is required. To calibrate the gap between the labels, perform the following steps:
  - Turn the scale OFF.
  - Press and hold the **Feed** key, then turn the scale ON.
  - Continue to hold the **Feed** key until the self-checking is finished, and the scale goes into normal operation mode.
    - 3a. The printer will roll out the paper at a length of approximately 2 in (50 mm).
    - 3b. After the paper is rolled out, the problem should have been eliminated. If there is an error code (E7.10), it means there is still a gap calibration issue. Please try the procedure again after confirming the correct paper has been used.
  - Press the **Feed** key to print the test page.
  - Go to the normal operation mode.

# FREQUENTLY ASKED QUESTIONS

## Question

How do I change the format of my labels?

## Answer

Instructions on how to customize print formats are in the DLX50 DL Series Scale Utility manual, 8529-0638-0M. Refer to the **SCALE PARAMETERS, Custom Print Formatting** section for details. The manual can be downloaded at:

[https://detecto.com/themes/ee/site/default/asset/img/resources/resources\\_brochures/DLX-PC-Utility-Manual.pdf](https://detecto.com/themes/ee/site/default/asset/img/resources/resources_brochures/DLX-PC-Utility-Manual.pdf)

The DLX50 DL Series Scale Utility can be downloaded at:

<https://detecto.com/resources/software/detail/dlx50-dl-series-scale-pc-utility>

## Question

Why is the scale making two fast beeps and not responding?

## Answer

- A. The function you are trying to perform may not be allowed. This could be because the function you are trying to perform has not been configured on the scale. For example, entering a PLU number that has not been saved on the scale.
- B. Check to see if there is an error code displayed in the Tare window of the display. Refer to the **ERROR CODES** section of this manual.

## Question

Why is the USB drive not connecting to the scale?

## Answer

Make sure the USB drive has been formatted using FAT32.

Refer to the DLX50 DL Series Scale Utility manual, 8529-0638-0M for instructions on how to use a USB drive for file transfers. The manual can be downloaded at:

[https://detecto.com/themes/ee/site/default/asset/img/resources/resources\\_brochures/DLX-PC-Utility-Manual.pdf](https://detecto.com/themes/ee/site/default/asset/img/resources/resources_brochures/DLX-PC-Utility-Manual.pdf)

The DLX50 DL Series Scale Utility can be downloaded at:

<https://detecto.com/resources/software/detail/dlx50-dl-series-scale-pc-utility>

## Question

Why won't the scale save the PLUs created on the scale?

## Answer

When creating PLUs, make sure you follow all steps in the **FAST PLU PROGRAMMING** section of this manual, and that you press the **Amend** key when finished to save the PLU you just created.

## FREQUENTLY ASKED QUESTIONS, CONT.

### Question

Why does my scale display **Less than minimal weight** when I try to print a label and will not allow a label to be printed when the weight is under 0.2 lbs (on the DL1030/1030P) or 0.4 lb (on the DL1060/1060P)?

### Answer

The factory default setting for minimum weight on the DL1030/1030P is 0.2 lbs and 0.4 lbs on the DL1060/1060P. The setting can be changed using the DLX50 DL Series Scale Utility and then exported to the scale using a USB flash drive.

You will need to change Spec217 to **0** to remove the limit.

Refer to the DLX50 DL Series Scale Utility manual, 8529-0638-0M for instructions on how to export a file using a USB drive. The manual can be downloaded at:

[https://detecto.com/themes/ee/site/default/asset/img/resources/resources\\_brochures/DLX-PC-Utility-Manual.pdf](https://detecto.com/themes/ee/site/default/asset/img/resources/resources_brochures/DLX-PC-Utility-Manual.pdf)

The DLX50 DL Series Scale Utility can be downloaded at:

<https://detecto.com/resources/software/detail/dlx50-dl-series-scale-pc-utility>

### Question

How can I set my scale back to the factory default settings?

### Answer



**WARNING! This operation is *IRREVERSIBLE*. It will erase all setup parameters (Date and Time, Store Name), all PLU data, and Quick Keys programming, and then return the scale to the factory default settings. Before proceeding with this operation, please verify that returning the scale to the factory default setting is desired.**

1. Press the **Prog** key.
2. Press the **5** key.
3. Using the numeric keys, enter 200806, and then press the **Accu/Confirm** key.
4. Press the **2** key.
5. Press the **4** key.
6. Using the numeric keys, enter 9958, and then press the **Accu/Confirm** key.
7. Press the **Sale** key to return to the normal operation mode.

## **CARE AND MAINTENANCE**

- DO NOT** submerge, pour or spray water directly on the scale base or weight display.
- DO NOT** expose the scale base or display to direct sunlight or temperature extremes.
- DO NOT** place the scale base or display in front of heating/cooling vents.
- DO NOT** use acetone, thinner, or other volatile solvents for cleaning.
- DO** clean the scale base or display with a damp soft cloth and mild non-abrasive detergent.
- DO** remove power before cleaning with a damp cloth.
- DO** provide clean AC power and adequate protection against lightning damage.
- DO** keep the surroundings clear to provide clean and adequate air circulation.

# CALIBRATION

This scale was calibrated at the factory and should not require adjustment. In the event that the scale should need calibration, the following describes the calibration of the DL Series Price Computing NTEP legal-for-trade scale. A qualified technician should perform this function to maintain the instrument's high degree of accuracy.



**WARNING! PERFORMING THE FOLLOWING PROCEDURE, INVALIDATES THE LEGAL-FOR-TRADE STATUS OF THE SCALE.**

Before beginning calibration, the following equipment is required:

- Calibrated test weights (30 lb for DL1030/DL1030P and 60 lb for DL1060/DL1060P)
- 6mm socket or nut driver (to remove sealing screws)
- Phillips screwdriver

## To Enter Privilege Mode

1. Calibration requires placing the scale in Privilege Mode. To get into Privilege Mode, with the scale OFF, break the wire seal on the bottom of the scale and remove the sealing screws and all the Phillips screws securing the large plastic cover to the bottom of the scale.
2. Locate the blue calibration push button inside. The blue switch is a 2-way switch, press it once and release it. It will stay in the "out" position allowing you to proceed.

**NOTE:** Some scales require a jumper to be removed, to allow Privilege Mode. If your scale will not go into Privilege Mode, you must remove the screws securing the main circuit board, lower the main circuit board, and then remove the jumper marked 'J2' on the main circuit board.

3. Turn the scale back ON. The display should show "Privilege Mode" and have some lines across it.
4. Press the **Confirm** key and the display will change to show *P509*.
5. Press the **Confirm** key again and the display will change to show:



6. The '2' in the Tare window indicates the number of times the scale has been calibrated.

The values shown in the Weight/Pcs and Change/Unit Price windows are the acceleration of gravity settings. **NOTE:** *If gravity correction is not desired, do not change these values.*

Note that the triangle under the '6' in the Weight/Pcs window indicates the window that is being edited.

Pressing the **Confirm** key will switch to the next window with the triangle following the next window to indicate that window is being edited.

## CALIBRATION, CONT.

7. Press the **Confirm** key until you get to the Total Price window. The value shown in the Total Price window is the Capacity/Weight to be used to calibrate the scale. Referring to the list below, select the weight to use for calibration, and then press the **Confirm** key.

0 = 30 kg / 60 lb	2 = 6 kg / 12 lb	4 = 150 kg / 300 lb	6 = 3 kg / 6 lb
1 = 15 kg / 30 lb	3 = 300 kg / 600 lb	5 = 60 kg / 120 lb	

8. The scale will automatically calibrate 'ZERO' at this point.
- NOTE:** Calibration is performed in lbs (pounds) and any weight can be used. However, please use at least 1/3 of the scale's full capacity to ensure precision accuracy.
9. Place the weight on the scale and then enter the weight being applied (the weight will be shown in the Change/Unit Price window).
10. Press the **Confirm** key to calibrate the scale.
11. Press the **Sale** key to return, and turn the scale OFF.
12. Push the calibration button back into the "in" position.
13. If your scale required you to remove the J2 jumper to allow Privilege Mode, re-install the jumper on the main circuit board.
14. Position the main circuit board back into the scale and secure it with the screws removed earlier in step 2.
15. Turn the scale back ON and test for accuracy.
16. Re-install the large plastic cover on the bottom of the scale with the Phillips screws and 2 sealing screws removed earlier.

# STATEMENT OF LIMITED WARRANTY

DETECTO warrants its equipment to be free from defects in material and workmanship as follows: DETECTO warrants to the original purchaser only that it will repair or replace any part of equipment which is defective in material or workmanship for a period of **two (2) years from date of shipment**. Detecto shall be the sole judge of what constitutes a defect.

During the **first ninety (90) days** DETECTO may choose to replace the product at no charge to the buyer upon inspection of the returned item.

**After the first ninety (90) days**, upon inspection of the returned item, DETECTO will repair or replace it with a remanufactured product. The customer is responsible for paying for the freight both ways.

This warranty does not apply to peripheral equipment not manufactured by DETECTO; this equipment will be covered by certain manufacturer's warranty only.

This warranty does not include replacement of expendable or consumable parts. This does not apply to any item which has deteriorated or damaged due to wear, accident, misuse, abuse, improper line voltage, overloading, theft, lightning, fire, water or acts of God, or due to extended storage or exposure while in purchaser's possession. This warranty does not apply to maintenance service. Purchased parts will have a ninety (90) day repair or replacement warranty only.

DETECTO may require the product to be returned to the factory; item(s) must be properly packed and shipping charges prepaid. A return authorization number must be obtained for all returns and marked on the outside of all returned packages. DETECTO accepts no responsibility for items lost or damaged in transit.

## Conditions Which Void Limited Warranty

This warranty shall not apply to equipment which:

- A.) Has been tampered with, defaced, mishandled or has had repairs and modifications not authorized by DETECTO.
- B.) Has had serial number altered, defaced, or removed.
- C.) Has not been properly grounded according to Detecto's recommended procedure.

## Freight Carrier Damage

Claims for equipment damaged in transit must be referred to the freight carrier in accordance with freight carrier regulations.

This warranty sets forth the extent of our liability for breach of any warranty or deficiency in connection with the sale or use of the product. DETECTO will not be liable for consequential damages of any nature, including but not limited to, loss of profit, delays or expenses, whether based on tort or contract. Detecto reserves the right to incorporate improvements in material and design without notice and is not obligated to incorporate improvements in equipment previously manufactured.

The foregoing is in lieu of all other warranties, express or implied including any warranty that extends beyond the description of the product including any warranty of merchantability or fitness for a particular purpose. This warranty covers only those DETECTO products installed in the forty-eight (48) contiguous continental United States.



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