

FLI 225 Forklift instrument





User Instructions

original instructions

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Daily operation quick reference

Below is a brief overview of how to use this system during a work shift. Complete instructions are covered in the body of this manual.

Classic Mode

Classic Mode simplifies lift truck weighing and keeps the display simple and easy to read.



Figure 1 FLI 225 Classic Mode Front Panel

- 1. Press (b) to turn the instrument on.
- 2. Lift the forks off the floor.
- 3. Press if not showing zero.
- 4. Lift a loaded pallet.
- 5. Press if required.
- 6. Repeat steps 3 through 5 until complete.

Expanded Mode

Expanded Mode allows the user to enter more information for record keeping purposes.



Figure 2 Expanded Mode Front Panel

- 1. Press (b) to turn the instrument on.
- 2. Key in or scan **OPER** number.
- 3. Key in or scan ID number.
- 4. Key in estimated number of pallets.



For information on how to key in alphanumeric characters, see <u>Data Entry Procedure</u> on page 15.

- Lift the forks off the floor.
- 6. Press if not showing zero.
- 7. Lift a loaded pallet.
- 8. Press of if required.
- 9. Repeat steps 6 through 8 until complete.



NOTE: The ID number, OPER number and estimated number of pallets will remain constant until changed.

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1 General information and warnings

1.1 About this manual

This manual is divided into chapters by the chapter number and the large text at the top of a page. Subsections are labeled as shown by the 1 and 1.1 headings shown above. The names of the chapter and the next subsection level appear at the top of alternating pages of the manual to remind you of where you are in the manual. The manual name and page numbers appear at the bottom of the pages.

This manual covers the general user instructions for the FLI 225 instrument for multiple regions worldwide.

1.1.1 Text conventions

Key names are shown in **bold** and reflect the case of the key being described. This applies to hard keys and onscreen or soft keys.

Displayed messages appear in **bold italic** type and reflect the case of the displayed message.

1.1.2 Special messages

Examples of special messages you will see in this manual are defined below. The signal words have specific meanings to alert you to additional information or the relative level of hazard.



ELECTRICAL WARNING!

THIS IS AN ELECTRICAL WARNING SYMBOL.
ELECTRICAL WARNINGS MEAN THAT FAILURE TO FOLLOW
SPECIFIC PRACTICES OR PROCEDURES MAY RESULT IN
ELECTROCUTION, ARC BURNS, EXPLOSIONS OR OTHER HAZARDS
THAT MAY CAUSE INJURY OR DEATH.



CAUTION!

This is a Caution symbol.

Cautions give information about procedures that, if not observed, could result in damage to equipment or corruption to and loss of data.



NOTE: This is a Note symbol. Notes give additional and important information, hints and tips that help you to use your product.

1.2 Installation



DANGER: RISK OF ELECTRICAL SHOCK. NO USER SERVICEABLE PARTS. REFER TO QUALIFIED SERVICE PERSONNEL FOR SERVICE.

1.2.1 Safe handling of equipment with batteries



CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

ATTENTION: Il y a danger d'explosion s'il y a remplacement incorrect de la batterie, remplacer uniquement avec une batterie du même type ou d'un type équivalent recommandé par le constructeur. Mettre au rebut les batteries usagées conformément aux instructions du fabricant.

1.3 Routine maintenance



IMPORTANT: This equipment must be routinely checked for proper operation and calibration. Application and usage will determine the frequency of calibration required for safe operation.

Always turn off the machine and isolate from the power supply before starting any routine maintenance to avoid the possibility of electric shock.

Make sure that it is placed securely on a flat and level surface.

1.4 Cleaning the machine

Table 1.1 Cleaning DOs and DON'Ts



DO	DO NOT
Wipe down the outside of standard products with a clean cloth, moistened with water and	Attempt to clean the inside of the machine
a small amount of mild detergent	Use harsh abrasives, solvents, scouring cleaners or alkaline cleaning solutions

1.5 Training

Do not attempt to operate or complete any procedure on a machine unless you have received the appropriate training or read the instruction books.

To avoid the risk of RSI (Repetitive Strain Injury), place the machine on a surface which is ergonomically satisfactory to the user. Take frequent breaks during prolonged usage.

1.6 Sharp objects

Do not use sharp objects such as screwdrivers or long fingernails to operate the keys.

1.7 FCC and EMC declarations of compliance

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

European Countries

WARNING: This is a Class A product. In a domestic environment, this product may cause radio interference in which the user may be required to take adequate measures.

Declarations of Conformity 1.8

LW 100, FLP 100, LR100, RM 100 FL





Declaración UE Conformidad

þ

ES

di Conformità UE

Dichiarazione

Avery Weigh-Tronix

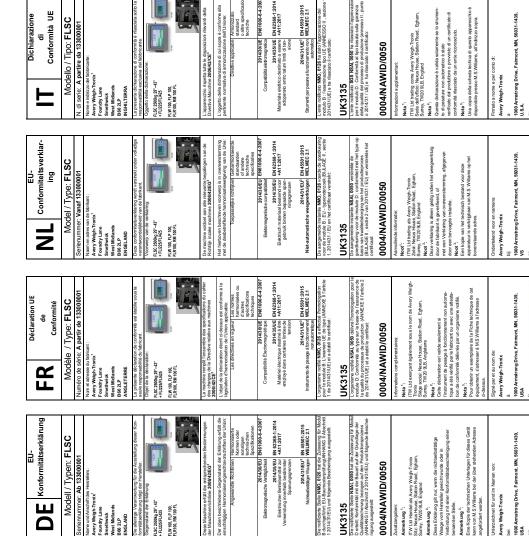
EU Declaration of Conformity

EN

/ Type: FLSC

FLSC 2500kg 29" 43" FFLI225/FLI425

Modelo / Tipo: FLSC



EN61000-6-4:200

2014/30/EU

2014/35/EU EN 62368-1:2014 equipment designed for use wiffin +A11:2017 centain voltage limits

2014/31/EU² EN 45501:2015 matic Weighing Instruments WELMEC 2.1

notified body NMO, 0126 performed the approval to tule B: EU-type examination (ANNEX II Section 1 of 4/31/EU) and issued the certificate.

Ltd trading as Avery Weigh-Tronix Office: Nexus House, Station Road, Egham, vy, TW20 9LB, England

0004/NAWID/0050

This decaration is only valid if the non-automatic weighing instrument was verified manufacturer or with a certificate of conformity issued by a notified body.

of the Technical File for this e e from M.S. Williams at the a

rmstrong Drive, Fairmont,

EN61000-6-4:200

2014/30/UE EN61000-6-4:2007

2014/35/UE | EN 62388-1:2014 | Material eléctrico desfinado a utiliz-arse con determinados limita- d- +A11:2017

EN 45501:2015 WELMEC 2.1

2014/31/UE² os de pesaje de funcionamiento

El organismo notificado NSAI, 0050 expúdió la aprobación marea el Modulo D: Conformada al tipo se base en la grara tera el proceso de producción (ANEXO II, Sección 2014/31 / UE) y expide el certificado:

0004/NAWID/0050

ulo B: tipo de examen UE (ANEXO II Sección 31 / UE) y expide el certificado:

JK3135

Nota': ITW Ltd trading as Avery Weigh-Tronix Officina registrada: Nexus House, Stalion Road, Egham Surrey, TW20 9LB, Angelerre

daración es válida solamente si el equipo to automático ha sido verificado por el

solicitarse a M.S.Williams

K.Detert Jefe Global de Investigación y Desarrollo

K.Detert / Responsabile Globale della Ricerca e Sviluppo

K.Deten / Wereldwijd Hoofd van Onderzoek en Ontwikkeling

KDetert ' Responsable Mondial de la Recherche et du Développement

K.Detert / Globaler Leiter von Forschung und Entwicklung

K.Detert Global Head of R&D

Avery Weigh-Tronix



UK **Declaration of** Conformity

Model / Type: FLSC

Serial Number: 133000001 Onwards

Name and address of the manufacturer

Avery Weigh-Tronix¹
Foundry Lane

Smethwick West Midlands

B66 2LP ENGLAND

This declaration of conformity is issued under the sole responsibility of the manufacturer

FLSC 2500kg 29"-43" + FLI225/FLI425

FLW 100, FLP 100, FLR100, RM 100 FL



The machinery fulfills all the relevant provisions of the Machinery Directive 2006/42/EC³

The object of the declaration described above is in conformity with the elevant statutory requirements applicable to the specific product:

Statutory Requirements	UK standards or other technical specifications
Electromagnetic Compatibility Regulations 2016	BS 61000-6-4:2007
Electrical Equipment (Safety) Regulations 2016	BS 62368-1:2014 +A11:2017
Non-automatic Weighing Instruments	BS 45501:2015

Regulations 2016

The notified body NMO, 0126 performed the approval for module B: EU-type examination (ANNEX II Section 1 of 2014/31/EU) and issued the certificate:

UK3135

The notified body SGS United Kingdom Ltd, 0120 issued the approval for module D: Conformity to type based on quality assurance of the production process (NAWI regulations 2016 Schedule 7 Section 2) and issued the certificate:

GB95/50915

Additional information:

Note 1:

TTW Ltd trading as Avery Weigh-Tronix Reg. Office: Nexus House, Station Road, Egham, Surrey, TW20 9LB, England

This declaration is only valid if the non-

automatic weighing instrument was verified by the manufac-turer or with a certificate of

conformity issued by a notified body.

A copy of the Technical File for this equipment is available from M.S. Williams at the address above.

Signed for and on behalf of:

Avery Weigh-Tronix

1000 Armstrong Drive, Fairmont, MN, 56031-1439, USA

gentella

2021-01-01

K.Detert

Global Head of R&D

76501-503UK Issue 1

General information and warnings

2 Introduction

2.1 About the FLI 225

The FLI 225 instrument is part of a system for weighing, storing and transmitting information to peripherals such as a computer system directly from the forklift.

Your instrument will have one of the following configurations:

Classic Mode with Print

Classic Mode with Print is the most general application available. It combines a powerful weighing and printing utility with ease of use.

Classic Mode with Accumulate

Classic Mode with Accumulate adds the ability to accumulate totals and generate reports to the easy-to-use interface and powerful weighing and printing functions.

For more information on either of the Classic Modes, see chapter 3, Classic Mode.

Expanded Mode

Expanded Mode adds features that set it apart from the two classic modes. These functions are explained in detail in chapter 4, *Expanded Mode*.

This manual explains the general operation of the **FLI 225**. Most of the functions are the same regardless of instrument configuration. When a function is not available to all modes, the appropriate mode is noted in parenthesis.

2.2 Front Panel and Keys

The FLI 225's high-contrast, backlit dot graphic display lets the operator quickly view large weight values in a variety of lighting conditions. The 5 hard keys and 4 softkeys on the front panel of the FLI 225 provide access to all the basic weighing functions as well as access to information, menus, instrument tests and settings. Each key has multiple functions and will be explained.



Figure 2.1 FLI 225 Classic Mode Front Panel

The softkeys (F1 - F4) are so called because their functions change as their labels change. Each of the hard keys has specific functions. This table details the functions of the hard keys.

Table 2.1 Key Definitions

Reference	Key Name	Key Function(s)
1	TARE	Tare the weight on the scale for net weighing. Factory default for this key is OFF and must be enabled for use.
2	STANDBY	Turn the instrument on. Put the instrument into standby mode.
3	SELECT	Toggle Gross, Tare, Net and Transaction views. Factory default for this function is OFF and must be enabled for use. Backspace (delete previous character) when in data entry mode.
4	PRINT	Send data to a printer or other connected device. Store (save) transactions for future download, depending on configuration. Access report menu in certain modes.
5	ZERO	Zero the instrument to compensate for minor weight changes. Move to the right in data entry mode.



Instrument configurations vary and some functions may not be enabled on your instrument. If a function that you require has not been enabled, please contact your Avery Weigh-Tronix distributor or service provider for assistance.

The following table shows the factory default settings for the FLI 225, for each region.

Table 2.2 Default Settings by Region

Setting	North America (NA) Default	Europe (EU) Defaults
Gravity Compensation	9.8043	9.8043
Calibration Unit	lb	kg
Enabled Unit(s)	lb	kg
Weight Capacity	5000 lb	2500 kg
Weight Division	5 lb	2 kg
Calibration Full Weight	4000 lb	2000 kg
Calibration Half Weight	2000 lb	1000 kg
Gross Zero Band	50 lb (10 divisions)	20 kg (10 divisions)
Over/Under range basis	percentage	divisions
Over range	105%	9 divisions (i.e. 2518 kg)
Under range	20%	250 divisions (i.e500 kg)
Zero range	100%	2%
Auto print range	0% (disabled)	0% (disabled)
Separator	decimal point	decimal point
Time format	12 hr (AM/PM)	24 hr (Military)
Date format	MM/DD/YYYY	DD/MM/YYYY

2.3 Display and Annunciators

The FLI 225 has several annunciators which provide the operator with information about the current application.

Throughout this manual, annunciators are typically shown in *italics* and in the case they appear. Therefore, *Gross* indicates the annunciator for gross weight, etc.

The most common annunciators are explained below.

Table 2.3 Definition of Annunciators

Annunciator	Description		
~	Indicates that the weight is in motion and is not stable.		
>0<	Gross Zero Band indicates that the instrument is within the zero range.		
lb	Indicates that the weight displayed is in pounds.		
kg	Indicates that the weight displayed is in kilograms.		
_	Indicates a negative weight.		
Gross	Indicates that the instrument is in gross weight mode. Weight displayed is the gross weight.		
Net	rates that the instrument is in net weight mode. Weight displayed is net weight.		
Tare	Weight displayed is the tare weight only.		
Underload	Indicates that the scale is outside the gross zero range (under weight).		
Overload	Indicates that the scale is overloaded.		
Over Angle	Indicates that the scale is tipped (right, left, forward or back) too far.		
(_Y)	Indicates that the instrument is set to FLSC Wireless and is communicating wirelessly with the carriage.		
Y	Indicates that the instrument is set to FLSC Wireless but wireless communications to the carriage has been interrupted.		
Indicates the approximate charge remaining on the battery use wireless communications from the scale carriage to the instrum			

2.4 Operator Messages

The area below the weight value can display a variety of operator messages such as:

Printing: Data is being transmitted to a peripheral.

Print Failed: RTZ Instrument must return to zero between printing.

Print Failed: OverloadInstrument could not print. Excessive weight.Print Failed: UnderloadInstrument could not print. Insufficient weight.

Print Failed: Motion Instrument could not print. Weight was unstable

or the scale was in motion.

Accum Failed: RTZ Instrument must return to gross zero between

accumulations.

Accum Failed: Overload Instrument could not accumulate. Excessive

weight.

Accum Failed: Underload Instrument could not accumulate. Insufficient

weight.

Accum Failed: Motion Instrument could not accumulate because the

weight was unstable or the scale was in motion.

Accum Failed: Negative Wt. Instrument could not accumulate because a

negative weight was displayed.

FLJ 100 Init Failure! Instrument could not communicate with the digital

junction box on startup.

FLJ 100 Comm Failure There is no communication between the digital

carriage and the instrument.

Analog Option Init Failure! Instrument could not communicate with the

analog option card on startup.

No Analog Option Installed! Instrument is set to QTLTSC or QTLTS but the

analog option card has not been installed.

Calibration Required! Contact distributor or service provider.

2.5 Data Entry Procedure

Some screens require you to key in alphanumeric information. In those cases, you will be presented with four softkeys: **Esc, Up Arrow**, **Down Arrow**, **Enter**.

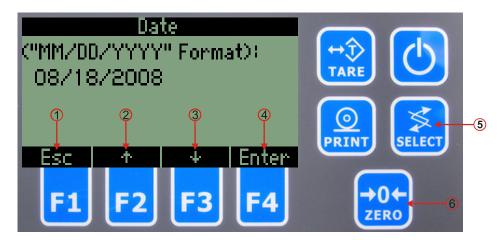


Figure 2.2 Common Data Entry Keys

You can key in: 0-9, A-Z, a-z and space. Follow these instructions for data entry. The table below provides a detailed description of Figure 2.2

Ref#	Key Name	Key Details
1	Esc softkey	Press F1 to use the Esc softkey. Press the Esc softkey to abort.
2	Up Arrow softkey	Press F2 to use the Up Arrow softkey. Press the Up Arrow softkey to scroll up from zero.
3	Down Arrow softkey	Press F3 to use the Down Arrow softkey. Press the Down Arrow softkey to scroll backwards.
4	Enter softkey	Press F4 to use the Enter softkey. Press the Enter softkey to accept an entry.
5	SELECT key	In data entry mode, press the SELECT key to backspace and delete the previous character
6	ZERO key	In data entry mode, press the ZERO key to move the cursor to the next position (move right).

Table 2.4 Data Entry Keys Explained

3 Classic Mode

3.1 Overview

Classic with Print and Classic with Accumulate provide powerful tools for weighing and printing while keeping the display easy to read. This section explains the general operation for both classic modes.

3.2 Powering the Instrument

If the instrument has been put into standby mode (instrument appears to be off), press and hold the **STANDBY** (1) key for approximately one second to restore full power.

The instrument will show an informational screen similar to the one below while completing the boot sequence and will then start in standard operating mode.



Figure 3.1 Information Screen

If there is no activity for four hours, the FLI 225 will automatically enter standby mode. Press and hold the **STANDBY** key for approximately one second to restore full power.



Please contact your Avery Weigh-Tronix distributor or service provider to change your timeout settings.

You can manually place the instrument into standby mode. Press and hold the **STANDBY** key for approximately one second. Release the key and the instrument will enter standby mode.



The instrument must be in normal weigh mode for the STANDBY key to work.

3.3 Weighing

3.3.1 Gross Weighing

Gross weighing is the simplest form of weighing. It is the combined weight of the pallet and its load. The weight is displayed in the selected unit of measure.

- 1. Begin with the instrument powered on and the forks off the ground and level.
- 2. Press the **ZERO** key if the instrument does not show zero.
- 3. Lift the load with the forks.

The gross weight is displayed on the instrument until the load is removed.

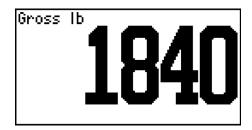


Figure 3.2 Gross Weight Display

3.3.2 Tares and Net Weighing

Net weighing lets you tare off (subtract) the weight of the pallet so that the weight you see is the weight of the product only. There are two parts to net weighing:

- setting the tare
- o performing the net weighment

This section details both of these items.

Setting a Tare

The FLI 225 allows you to subtract the weight of the pallet with the push of a button.



Instrument configurations vary. If there is no change in the display when you press the **TARE** key, this function has not been enabled. Contact your Avery Weigh-Tronix distributor or service provider if you need this function.

- 1. Begin with the instrument on and the forks off the ground and level.
- 2. Press **ZERO** if the scale does not return to zero.
- 3. Lift the empty pallet off the ground.

The gross weight of the pallet will be displayed.

4. Once the weight is stable, press the **TARE** key.

The instrument returns to zero and the annunciator changes from **Gross** to **Net**. This tare will remain active until it is cleared.

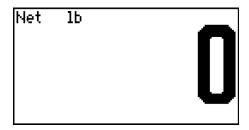


Figure 3.3 Zero Net Weight

Net Weighing

The instructions for net weighing continue from the previous section.

5. Once the tare has been set, lower the empty pallet to the ground and move the lift truck away from the pallet if necessary.

The display shows the value of the tare as a negative net weight.

- 6. Load the pallet as usual.
- 7. Raise the loaded pallet.

The display shows the net weight of the load.

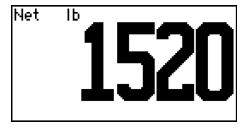


Figure 3.4 Net Weight Display



You can scroll through available display options using the **SELECT** key, if enabled. This allows you to easily change between the Gross, Tare, Net and Transactions displays. Transactions will only display when the displayed weight is zero and the instrument is configured to display them.

Clear a Tare

Clearing a tare sets an existing tare back to zero and returns the FLI 225 to gross weigh mode.

1. Lower the pallet to the floor and move the lift truck away from the pallet.

2. Make sure that the forks are not touching the floor.

The instrument displays a negative weight equal to the tare while displaying >0<.



Figure 3.5 Negative Net Weight with Zero Band Annunciator

3. Press the **TARE** key.

The display returns to gross weigh mode and shows zero.

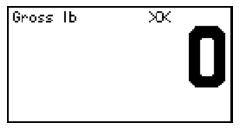


Figure 3.6 Zero Gross Weight

3.4 Print

You can use the **PRINT** key to print a transaction or a variety of information.

3.4.1 Print a Transaction

Depending on configuration, you can print a transaction or send the information to another device. The device must be connected to one of the available COM ports.

- 1. Perform a weighment.
- 2. Wait for the weight to stabilize.

3. Press the **PRINT** key.

The instrument sends the Gross, Tare, or Net information to the printer or other connected device. If the accumulator is active, the transaction is stored.



Figure 3.7 Sample Printed Transaction



The instrument must return to Gross Zero before printing the next transaction.

Default Print Format

The default print format (as shown in figure 3.7) uses the following string:

<SP>I<SP>WWWW.WW<SP><UU><SP><CR><LF>

where:

Table 3.1 Definition of print string variables

Variable	Definition		
=	weight type indentifier (G for Gross, T for Tare or N for Net)		
SP =	Space		
W =	Weight character		
U =	Units character		
CR =	Carriage Return		
LF =	Line Feed		

3.4.2 Print Accumulator Report (Classic w/Accumulate only)

If the accumulate function is active on the FLI 225, you can print the accumulator report and clear the totals.

1. Press and hold the **PRINT** key for approximately 5 seconds.

The screen will flash and the accumulator report will be sent to the printer or other connected device.

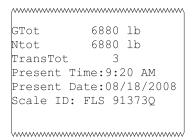


Figure 3.8 Sample Accumulator Report

2. Press the **Yes** softkey to clear the totals when prompted or press the **No** softkey to leave the totals.

The totals are cleared and the instrument returns to normal weighing mode.

4 Expanded Mode

When the FLI 225 is configured for "Expanded Mode," the instrument operates the same as in Classic Mode with the addition of a few features. For details on the standard functions, please refer to *Classic Mode* on page 16.

4.1 Overview

Expanded Mode provides the user the option to enter an identification number (ID), an estimated number of pallets (Pallet) and an operator number (Oper). With these options, you can store up to 350 transactions. Each transaction consists of the identification number (such as the PRO # or Bill of Lading #), time, date and net weight. By default, the ID number and Oper number are included when printing transactions.



If your instrument is configured for Classic Mode and you need the functions available in Expanded Mode, please contact your Avery Weigh-Tronix distributor or service provider.

ID

The **ID** number provides a reference for the weight and data collected. It can be any combination of letters and numbers up to 16 characters and can either be scanned in or manually keyed in.

Pallet

The **Pallet** function lets the user input the estimated number of pallets for a particular shipment.

Oper

The **Oper** softkey allows an employee or operator to log in to the instrument. It can be any combination of letters and numbers up to 16 characters and can either be scanned in or manually keyed in.



Regardless of how the information is entered into the instrument, it will stay active until it is changed.

4.2 Data Entry Procedure

Some screens require you to key in alphanumeric information. In those cases, you will be presented with four softkeys: **Esc, Up Arrow**, **Down Arrow**, **Enter**. You can key in: 0-9, A-Z, a-z and space. Follow these instructions for data entry.

1. Press the **Up Arrow** softkey to scroll up from zero.

or

- 1. Press the **Down Arrow** softkey to scroll backwards.
- When the character you need is displayed, press the ZERO key to move the cursor to the next position (move right) or press the SELECT key to backspace and delete the previous character.
- 3. After entering all the characters, press the **Enter** softkey to accept or press the **Esc** softkey to abort.

4.2.1 Scan in Data

If your system is equipped with a scanner, you can scan in the data for the **ID** and **Oper** fields instead of manually keying it in.

1. Press the appropriate softkey (*ID*, *Pallet*, *Oper*).



Scanned in data is automatically assigned to the ID field if no softkey is pressed before scanning.

2. Scan in the data using an attached scanner.

A screen similar to the example below appears.



Figure 4.1 Sample ID number

- Press the Enter softkey if necessary.
- 4. Begin weighing.

4.2.2 Key in Data

If no scanner is available, follow these instructions to key in the data for these fields.

1. Press the appropriate softkey (*ID*, *Pallet*, *Oper*)

A data entry screen similar to the example below appears.



Figure 4.2 Sample Data Entry Screen



If the information is not entered within 15 seconds, the display will return to the normal operating view.

- 2. Use the **Up** or **Down Arrow** softkeys to scroll in the data. Depending on the field, you can enter 0-9, A-Z or a-z.
- Press the ZERO key to advance one position to the right or press the SELECT key to backspace and delete one character.
- 4. After entering the information, press the **Enter** softkey to accept and save or the **Esc** softkey to exit without saving.



A dash (-) or a decimal point (.) may appear when keying in the pallet information, however it is not possible to enter a negative or decimal value in this field. A blank space is available for the ID and Oper fields.

.



Figure 4.3 Sample Completed Data Entry Screen

4.3 Report Printing

When the FLI 225 is configured for Expanded Mode, it can transmit a variety of reports. The details of these reports are explained in this section.

4.3.1 Access Report Menu

In order to print the reports, you must enter the **Report Menu**.

- 1. Press and hold the **PRINT** key for approximately five seconds.
 - The screen flashes.
- 2. Release the **PRINT** key.

The Report Menu is displayed.



Figure 4.4 Report Menu

3. Press the **Esc** softkey to return to operator mode when finished.

4.3.2 Print Accumulator Report

The accumulator report lets you see valuable information associated with multiple transactions. Instructions for printing the accumulator report follow.

- From the Report Menu, press the Up or Down Arrow softkey to highlight Print Accumulator Report.
- Press the Enter softkey to send the accumulator report to the printer or other connected device.

Figure 4.5 Sample Accumulator Report

4.3.3 Print Transaction Report

The transaction report gives you a summary of all transactions at a glance. Unlike the accumulator report, the transactions are not totalized.



In Expanded Mode, the FLI 225 can store up to 350 total transactions. This is dependent on the number of IDs stored. Therefore, if there are two stored IDs, the maximum number of transactions is 175.

- From the Report Menu, press the Up or Down Arrow softkey to highlight Print Transaction Report.
- 2. Press the **Enter** softkey to send the transaction report to the printer or other connected device.

Present Time: 9:33 AM
Present Date: 12/14/07
Scale ID: FLS 91373Q
ID: 1A6Z097755
Oper: 1yG44
Transaction Time

Transaction Time : 9:22 AM
Transaction Date : 12/14/07
Transaction Weight : 715 lb

ID: 1A6Z097755 Oper: 1yG44

Transaction Time : 9:32 AM
Transaction Date : 12/14/07
Transaction Weight : 2140 lb

Figure 4.6 Sample Transaction Report.



You can print both reports on one ticket by selecting the **Print Both Reports** option from the Report Menu.

4.3.4 Clear Totals

Clearing the totals resets the accumulator and transactions to zero.

- 1. From the *Report Menu* screen, use the **Up** or **Down** arrow key to highlight the *Clear Totals* option.
- 2. Press the **Enter** softkey.
- Press the **Yes** softkey to confirm deletion of totals or **No** to exit without clearing totals.

The totals are cleared and the instrument returns to the *Report Menu*.

5 User Management

User Management User Settings About FLI 225 Audit Trail Viewer Time Date Display Contrast Control

Figure 5.1 User Management

5.1 Overview of User Management

Entering password 111 provides access to the set of menus known as *User Management* and is divided into three modules.

User Settings

The *User Settings* module lets you set the *Time*, *Date* and the *Display Contrast*. For more information, see *User Settings* on page 29.

About FLI 225

This module shows you the revision and part number of the firmware. For more information, see *View Part Number and Firmware Data* on page 32.

Audit Trail Viewer

This module displays a list of items that have been changed on the instrument and the dates and times of the changes. This list cannot be changed or deleted but it can be printed if necessary. For more information, see *Audit Trail Viewer* on page 32.

Audit Trail Counter

This module shows the number of times the calibration information has changed.

5.2 Access User Management

1. From normal operating mode, press and hold the **SELECT** key for approximately five seconds.

The screen will flash to indicate when to release the key.

2. Release the **SELECT** key.

The screen prompts you for a password.



Figure 5.2 Password Screen



If a password is not entered within 15 seconds, the display will return to the normal operating view.

3. Key in the password 111.



When entering the password, the numbers will be visible as you scroll through them but will change to asterisks (*) once you move to the next space



Figure 5.3 Password Entry in Progress

4. Press the **Enter** softkey.

The display shows the *User Management* main menu and available modules.



Figure 5.4 "111 Menu"

- 5. Use the **Up** or **Down Arrow** softkeys to scroll through the available options.
- 6. Press the **Enter** softkey to select a highlighted option.
- 7. Press the **Esc** softkey to exit *User Management* and return to normal operating mode.

5.2.1 User Settings

The *User Settings* menu allows the operator to change the time, date and contrast as explained in the following sections.

- 1. From the *User Management* heading, press the **Up** or **Down Arrow** softkeys as necessary to highlight *User Settings*.
- 2. Press the **Enter** softkey.

The configurable options are displayed.

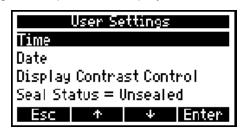


Figure 5.5 User Settings

- 3. Press the **Up** or **Down Arrow** softkey to highlight an option.
- 4. Press the **Enter** softkey to select the highlighted option.
- 5. Press the **Esc** softkey to exit *User Settings* and return to *User Management*.

Set the time

Regardless of the format that the time is displayed, you must enter the time in 24 hour format. So for 5:05 p.m., enter the time as 17:05.

1. From the *User Settings* module, press the *Up* or *Down Arrow* softkey as necessary to highlight *Time*.

2. Press the **Enter** softkey.

The time is displayed in real time, 24 hour format.



Figure 5.6 Time Menu

3. Repeatedly press the **Up** or **Down Arrow** softkey until the first digit of the hour is displayed. (In the example above, the number one.)



The current time will no longer be visible once you begin scrolling in the new value. If you make a mistake, press SELECT to backspace and delete one character or press the Esc softkey to exit without saving.

- 4. Press the **ZERO** key to move to the next position.
- 5. Repeatedly press the **Up** or **Down Arrow** softkey until the second digit of the hour is displayed. (In the example above, the number one.)

The hour is set.

6. Repeat steps <blue>3 through <blue>5 until the time is complete.



If you do not know the seconds value, you can go to step 7 after entering the minutes. The seconds value will continue from when you started.

- 7. Press the **Enter** softkey to save the changes and return to the **User Settings** screen.
- 8. Press the **Esc** softkey to exit and return to **User Management**.
- 9. Press the **Esc** softkey to exit **User Management**.

The instrument saves the changes, powers off and restarts in normal operating mode.

Set the date

1. From the *User Settings* module, press the *Up* or *Down Arrow* softkey as necessary to highlight *Date*.

2. Press the **Enter** softkey.

The stored date is displayed.



Figure 5.7 Edit Date Screen



The current date will no longer be visible once you begin scrolling in the new value. If you make a mistake, press SELECT to backspace and delete one character or press the Esc softkey to exit without saving.

- 3. Repeatedly press the **Up** or **Down Arrow** softkey until the first digit of the month is displayed. (In the example above, the number zero.)
- 4. Press the **ZERO** key to move to the next position.
- 5. Repeatedly press the **Up** or **Down Arrow** softkey until the second digit of the month is displayed. (In the example above, the number eight.)

The month is set.

- 6. Repeat steps 3 through 5 until the date is complete.
- 7. Press the **Enter** softkey to save the changes and return to the **User Settings** screen.
- 8. Press the **Esc** softkey to exit *User Settings*.
- 9. Press the **Esc** softkey to exit *User Management*.

The instrument saves the changes, powers off and restarts in normal operating mode.

Change Display Contrast

To allow for various lighting environments, you can adjust the display contrast settings.

- 1. From the *User Settings* module, press the *Up* or *Down Arrow* softkey as necessary to highlight *Display Contrast*.
- 2. Press the **Enter** softkey.

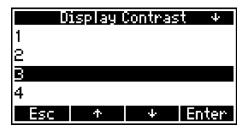


Figure 5.8 Sample Display Contrast Screen

- 3. Select a value between 1 and 5 using the **Up** or **Down Arrow** softkeys. (Default setting is 3.)
- 4. Press the **Enter** softkey to accept and save the change.

The value is changed and the display returns to the *User Settings* screen.

- 5. Exit *User Settings*.
- 6. Exit **User Management**.

The instrument saves the changes, powers off and restarts in normal operating mode.

View Part Number and Firmware Data

When you select the **About FLI 225** option, the instrument briefly shows the current firmware version and then the part number for the instrument. This information may be useful for support personnel.

- 1. From the *User Management* heading, press the *Up* or *Down Arrow* softkey as necessary to highlight *About FLI 225*.
- 2. Press the **Enter** softkey.

After displaying this information, the FLI 225 returns to the *User Management* screen.

3. Press the **Esc** softkey to return to normal operating mode.

Audit Trail Viewer

The **Audit Trail Viewer** lets you view details about the number of times the scale has been configured and the details of these configurations. This information may be useful when communicating with authorized service personnel or weighing certification inspectors. You can view the dates and times of these changes or select an entry to view more details for that entry.

View the Audit Trail

- Access the *User Management* screen. See *Access User Management* on page 28 for details.
- Press the Down Arrow softkey two times to highlight Audit Trail Viewer.
- 3. Press the Enter softkey.

A list of dates and times is displayed. This is the general view of the audit trail.

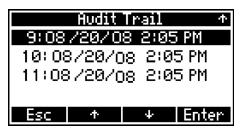


Figure 5.9 Sample Audit Trail

Print the Audit Trail

While viewing the audit trail, press the **PRINT** key to send the report to a printer, PC running HyperTerminal or other connected device.

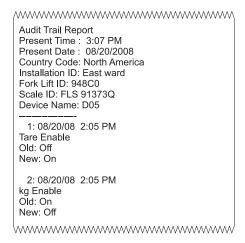


Figure 5.10 Sample Audit Trail Report

View Audit Trail Record

To view a specific record or entry in the audit trail, continue with the following instructions.

- 4. From the *Audit Trail Viewer*, press the **Up** or **Down Arrow** softkeys to select the record.
- 5. With the correct entry highlighted, press the **Enter** softkey.

The details for that record display.



Figure 5.11 Sample Audit Trail Record

 Press the Enter or Esc softkey to return to the Audit Trail Viewer when finished.

Exit Audit Trail Viewer

7. From the **Audit Trail Viewer**, press the **Esc** softkey.

The instrument returns to the *User Management* options.

8. Press **Esc** to exit to normal operating mode.

Audit Trail Counter

When you select the *Audit Trail Counter* option, the instrument shows the number of times the system has been calibrated. This information may be useful for support personnel. This information can not be altered.

- 1. From the *User Management* heading, press the **Up** or **Down Arrow** softkey as necessary to highlight *Audit Trail Counter*.
- 2. Press the **Enter** softkey.

The FLI 225 displays the current audit count.

3. Press the **Enter** or **Esc** softkey to return to the **User Management** screen.

6 Available Options

Figure 6.1 shows the available options for the FLI 425. Following is a brief description of each.



Figure 6.1 Available options for the FLI 425

6.1 FLW 100 Wireless Carriage

The FLW 100 wireless carriage option eliminates the interface cable between the carriage and the FLI 425 instrument. The component parts are shown in Figure 6.2.



Figure 6.2 FLW 100 Wireless carriage components



If your system uses the FLW 100 option, be sure to charge the battery pack for 8-10 hours before using.

6.2 RM 100 FL Bluetooth® interface

The RM 100 FL Bluetooth interface connects to one of the serial ports and allows wireless communication to a peripheral serial device. The unit is shown in Figure 6.3.



Figure 6.3 RM 100 FL Bluetooth interface

6.3 RM 310 Radio

The RM 310 radio allows wireless download of stored data to a host PC. The unit is shown in Figure 6.4. It attaches by a bracket to the FLI 425.



Figure 6.4 RM 310 radio

6.4 FLP 100 Power Conditioner

The FLP 100 power conditioner takes voltages between 24 and 72 volts, usually found on battery powered forklifts, and brings the voltage down to a level usable by the FLI 425, between 9 and 36 volts. See Figure 6.5.



Figure 6.5 FLP 100 power conditioner

Daily Inspection Checklist for Forklift Scale

This list covers digital (wired and wireless) and analog carriages.

wecnanicai		
		Check scale carriage for loose, worn, bent, broken or missing components.
		Inspect forks for damage.
		Check locking pins on forks for proper function.
		Make sure wire egress and junction box guards are fastened properly.
		Make sure junction box cover on analog scale is in place with all fasteners.
		Check center pin located on top of back carriage for wear. Replace if edges are worn, bent, broken or missing.
		Check that the fastener(s) for the center pin is in place.
		Check clamp fasteners at the bottom of scale carriage.
		Check Weigh Bar fasteners on back of scale carriage.
		Make sure instrument mounting is secure.
		Check instrument isolation mounts are not loose or cracked.
		Check and adjust the forklift chain so the heels of the forks have 1/2" to 1" of clearance from the floor when the carriage is down and the mast is vertical.
Electrical		
		Make sure the power cable to the instrument is routed and fastened out of harms way.
		Tighten all cable connections at the instrument.
		Inspect that all cable clamps and cable ties are secure.
		Inspect the power cable to the instrument for nicks, cuts or wear.
		If the coiled cable between the scale carriage and instrument is stretched, readjust its attachment to remove any drooping.
		Check the instrument is active with applied power.
		Make sure cable connections from attached peripheral devices are tight.
Scale Syste	m	
•		Check battery pack charge for wireless scale carriage to instrument.
		Make sure the instrument will show zero weight with forks raised, empty and upon pressing the ZERO key.
		Apply a load to the scale to make sure the instrument is receiving a weight value from the scale carriage.

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.wtxweb.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