FB 3000 Series Instrument with Intalogix Technology

Models: FB 3000

Amendment Record

**FB 3000 Series Indicators
with Intalogix Technology**

50743

Manufactured by Fairbanks Scales Inc.
821 Locust
Kansas City, Missouri 64106

Issue 1   05/05 New Product

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Section 1: General Information

A. Introduction

The Fairbanks FB 3000 Solutions Series instrument is a powerful, versatile, indicator which has flexibility, open architecture, and integrated capabilities of many PC functions. With these abilities, the FB 3000 can provide many connectivity and data acquisition capabilities via RS232, RS485, RS422 serial port, USB, parallel port, and PCI 10/100 Mbs Ethernet interfaces.

An integrated e-mail client is configurable to alert a service organization / individual of a problem prior to total failure. These error notifications include such warnings as load cell failure, low memory, calibration change, Flash memory error, and several other notifications to keep the proper individuals informed of the scale's operating condition.

The instrument is designed to function with Intalogix™ Technology, analog load cells, and Mettler Toledo DigiTol load cells. The instrument can control up to four (4) scales simultaneously and utilize the Gross Only, GTN, or Inbound / Outbound modes of operation. A multiscale viewing capability is also a standard feature.

B. Specifications

1. Instrument Specifications

Model(s)	Mild Steel (24737) Stainless Steel (24900)
CPU	VIA Ezra/Eden (ECBA package) 400Mhz processor
BIOS	Award® 256K Flash BIOS
Chipset	VIA VT8606 + VT82C686B
I/O Chipset	Built-in VT82C686B + Winbond 83977EF
Memory	One (1) 144-pin SDIMM socket support up to 512 MB SDRAM
Enhanced IDE	Support up to two (2) IDE devices (Ultra DMA 33/66/100)
FDD Interface	Supports up to two (2) floppy disk drives (34-pin header)
Parallel Port	One (1) Bi-directional parallel port. Supports SPP/ ECP/ EPP
Serial Port	Three (3) RS232 and one (1) RS232/ 422/ 485 serial ports
KB/ Mouse Connector	Supports PC/AT keyboard PS/2 mouse
Power Management	APM 1.1 Compliant
PC/104 Connector	One (1) PC/104 Connector
Digital I/O	Eight (8) digital inputs and outputs

Watchdog Timer	Can generate a system reset. Supports software selectable time-out interval.
Battery	Lithium battery for data retention up to ten (10) years under normal operating conditions.
Software Driver	Microsoft® XP Professional, Home, or Embedded
Ethernet Interface	PCI 100/10 Mbps Ethernet Controller
Chipset	Dual Intel® 82559ER
SDD Interface	One (1) 50-pin Compact Flash™ socket
Hard Drive	40 GB Industrial Hard drive backed by Compact Flash™.

2.   Flat Panel/ CRT Interface

Resolution	Flat panel display support up to 1024 x 768 @ 18bpp TFT panel and CRT monitors to 1024 x 768 16bpp or 120 x 1024 @ 8bpp.
Interface	4x AGP VGA/LCD interface, support for 9,12,15,18,24,36 bit TFT and optional 15 or 24 bit DSTN panels.
Display Memory	Shares system memory 8/ 16 / 32MB.
Chipset	VIA Twister chip with integrated Savage 4 2D/ 3D/ Video Accelerator

3.   Scale Specifications

Number of scales	Up to four (4) scales simultaneously utilizing Intalogix™ Technology. Maximum of two (2) scales with Analog Interface
Load cells	Up to 40 load cells maximum utilizing Intalogix™ Technology
Analog Interface	Maximum of 10 - 350 ohm load cells Maximum of 16 - 700 / 1000 ohm load cells
Excitation	10 Vdc @ 1A
Sense Requirement	> 25 feet
Analog Filter	Light to Heavy
Display	10.4" SVGA Color LCD-TFT with optional Touch Screen.
Display Resolution	640 x 480

Remote Configuration	Integrated Web Browser allows for configuration from a remote location.
Display Rate	0.1 to 10 seconds in 0.1 intervals
Zero	Disabled, 2% or 100%
Tare	Tare Enabled (AutoTare and Keyboard Tare), Disabled
Auto Clear Tare	Yes or No
Units	lb, lb/kg, lb/ton, lb/tonne, kg, kg/lb, kg/ton, kg/tonne, ton, ton/lb, ton/kg, ton/tonne, tonne, tonne/lb, tonne/kg, and tonne/ton.
Division Size	.001 through 100. Dual Range selection available.
Motion Band	0.5d, 1.0d, 2.0d, and 3.0d
Auto Zero Tracking	Off, 0.6d, 1.0d, 2.0d, and 3.0d
Filter Factor	Off, Light, Medium-Light, Medium, Heavy-Medium, and Heavy

4.   Environmental

Power Supply	+5 (4.75V to 5.25V), +12(11.4V to 12.6V)
Max Power Requirements	4A @ 5V, 200mA/ +12V (No Scale Attached)
Operating Temperature	-10 to 104 F (0 to 40 C) Fanless

C.   Accessories

1.   Acc 2001-1A   Pit Power Supply

2.   Acc 2000-1   Smart Sectional Controller

3.   Acc 2000-2   Digital / Analog Smart Sectional Controller

4.   Acc 2000-F   Smart Sectional Controller with Float Switch

5.   Touch Screen Kit (25544)

6.   Intalogix Kit (25542)

7.   Analog Kit (25543)

Section 2: Installation

A. General Service Policy

It is the customer / operator's responsibility to ensure the equipment provided by Fairbanks is operated within the parameters of the equipment's specifications and protected from accidental or malicious damage. Other than the procedures authorized in this Operating manual, no service, repair, or adjustments may be performed by unauthorized / untrained service personnel. Any unauthorized repairs will void any verbal, implied, or written warranties.

B. Overview

1. Absolutely no physical, electrical, or program modifications are to be made to this equipment. Electrical connections other than those specified may not be performed, and physical alterations (holes, etc.) are not allowed.

2. All electronic and mechanical calibrations and/or adjustments required to make this equipment perform to accuracy and operational specifications are to be completed by qualified service personnel.

3. The equipment, when installed by qualified service personnel, may be programmed to meet or exceed any applicable weights and measures requirements. Check with your service provider or local Weights and Measures Department as to the requirements for your area.

4. Do not remove power from this unit unless it is performed by the proper shut down method. Failure to comply with the proper shut down procedures can result in damage to the hard disk drives or data.

5. The AC receptacle / outlet shall be located near the instrument and easily accessible.

Note :
The equipment consists of printed circuit assemblies which must be handled using ESD handling procedures, and must be replaced as units. Replacement of individual components is not allowed. The assemblies must be properly packaged in ESD protective material and returned intact for replacement credit per normal procedures.

WARNING:
Failure to comply with the proper shut down procedures can result in damage to the hard disk drives or data.

C.   Unpacking

1.   Check that all components are on hand and agree with the equipment order.

2.   Remove all components from their packing material, checking to make certain that all parts are accounted for and no parts are damaged. Advise the shipper immediately if damage has occurred. Keep the shipping container and packing material for future use. Check the pack ing list.

3.   Collect all necessary installation manuals.

D.   Instrument Location

1.   The Instrument should be positioned away from direct sunlight.

2.   Avoid areas which have extreme variations in room temperatures. Temperatures outside the instrument's specifications will effect the weighing accuracy of this product.

3.   Work areas should be relatively free from drafts and vibrations.

4.   Do not locate near magnetic material or equipment/instruments which use magnets in their design.

E.   Safety

As is the case with any material handling equipment, certain safety precautions should be observed during operation:

1.   Never load the platform beyond its rated capacity. Refer to the rating on the serial number plate of the platform.

2.   Ensure that any structure which supports the platform is capable of withstanding the weight of the platform plus its rated capacity load.

3.   Do not load the platform if there is any evidence of damage to the platform or supporting structure.

4.   Use safety chains or other suitable restraining devices if there is any possibility of the load shifting, falling, or rolling from its position on the platform.

F. *System Verification*

When the wiring connections from the load cell(s) to the SSCs or DSSCs to the PPS and on to the instrument have been completed and inspected, the following verification checks should be made before continuing.

a.   Power up the instrument while observing the display. The bottom of the screen will display this legend: "CELLS FOUND" followed by the number of all cells it finds in the system. This verifies the communications to the Smart Sectional Controllers or Digital/Analog Smart Sectional Controllers to be correct. A "CELLS FOUND - NONE" display (failure) at this step typically identifies a wiring problem. Remove power on a failed test as soon as you have noted the "CELLS FOUND" sequence, and any cells that may be found are noted. Recheck all interface wiring.

b.   Unusual "CELLS FOUND" numbers, such as 1, 2, 3, 4, 7, 8, 31, 32, usually indicate an improper address setting in the SSCs or DSSCs that has the odd readings, in this case Section # 3. Check the dip switch addresses set in each SSC or DSSC that is not "found" or has unusual cell numbers.

A.   Menu Navigation

On Screen Keyboard	External Keyboard	Description
Arrows	**Arrows**	These keys move the cursor in the display in the direction indicated. They are also used for scrolling.
Menu	**Esc**	This key changes the display to the Operation Menu. This key can also be used to return the display to the last menu screen that was shown.
Zero	**Pause Break**	This key zeroes the scale.
Print	**Prt Sc**	When pressed, a ticket will be printed. In the Data Terminal mode, an Inbound or Outbound Gross ticket. A Gross, Tare, Net ticket may also be printed. In the Weigh Only mode, a Gross Weight ticket may be printed with a manually entered Tare and the Net will be calculated.
Units	**Scroll Lock**	Changes the units of weight displayed, depending on the selection made in the Calibration Menu.
0 to 9	**0 to 9**	Used to enter numeric data, such as tares and IDs.

OnScreen Keyboard	External Keyboard	Description
Enter	Enter	Used to store selections into memory during data entry or programming.
f1	F1	This key is used to toggle between the Scale No. which is to be viewed and operated.
f2	F2	Inbound*
f3	F3	Outbound*
f4	F4	Unassigned
f5	F5	Unassigned
f6	F6	Toggles between operational screen and multi-scale screen if more than one scale is being controlled..
	F7	Unassigned
	F8	Unassigned
	F9	Unassigned
	F10	Scale port/ parity settings. Allows manual changes of port assignment and parity.
	F11	Unassigned
	F12	Unassigned

Note:

The indicator can be set up to operate in one of three modes: GROSS weighing, GROSS, TARE, NET weighing or IN/OUT weighing dependent upon service programming. These keys are not functional unless IN/OUT weighing has been programmed.

B.   General Programming Instructions

The programming menus that contain all of the parameters for the system are listed below.

1. **Options Menu -** Accessible without a password by pressing the MENU key. This menu is used for general weighing operations and accessing further programming menus.

2. **Configuration Menu -** This menu is used to enter the parameters for the Keyboard Tare, AutoTare, Select Scale, Format Ticket, and view the Load Cell Diagnostics.

3. **Service Menu -** This menu is used to program the technical parameters of the system, such as scale capacity, span, and load cell data. <u>For qualified service personnel only.</u>

4. **Customer Password -** This provides a security password up to 10 characters in length. In order to enable or disable the password mode, the following must be performed.

    a. **Create the Password -** With the instrument in the main weigh screen, press [Left Arrow] [Right Arrow] [Enter] on the external keyboard or the FB 3000 display.

    b. Enter a password up to 10 alphanumeric characters in length and press [Enter].

    c. The password is saved and ready for use.

    d. **Delete the Password -** With the instrument in the main weigh screen, press [Left Arrow] [Right Arrow] [Enter] on the external keyboard or the FB 3000 display.

    e. Enter a blank password and press [Enter].

    f. The password is saved and ready for use.

C.   Options Menu Programming
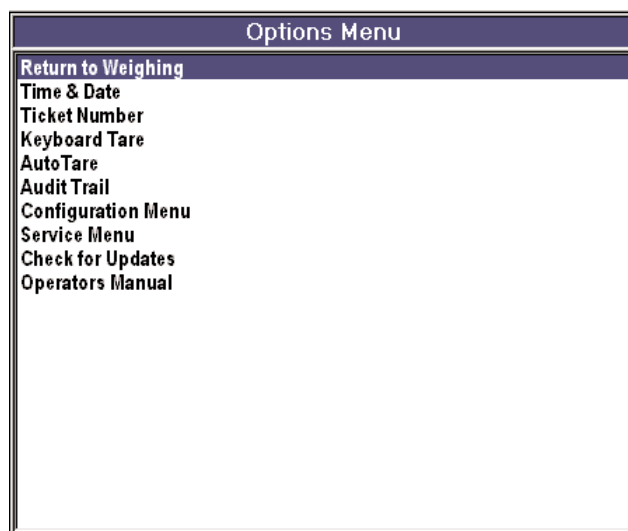
Return to Weighing   Returns the display to the normal weight processing display.

Time & Date   Highlight the desired date item (month, day or year), scroll or enter the desired value. The date may also be selected by scrolling to the desired month and year and select the day upon the calendar.

Select the desired date format from the drop down-box. Highlight the desired format and enter.

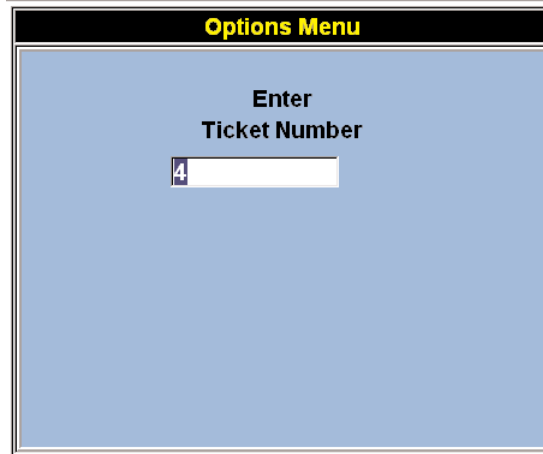Select the desired date separator.

Highlight the desired time item (hour, minutes, or seconds), scroll or enter the desired value.

Select the desired date format from the drop-down box. Highlight the desired format and enter.

The revision number at the top right of the screen is the program version number.
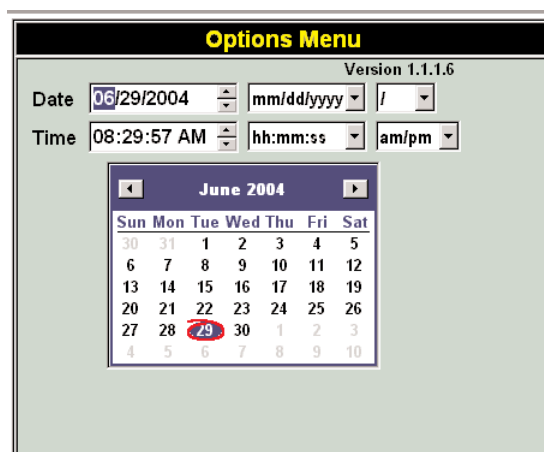
Ticket Number Enter the ticket number required via the indicator's numeric keypad or through an external keyboard accessory.

```
┌────────────────────────────────────────┐
│            Options Menu                 │
├────────────────────────────────────────┤
│                                         │
│                 Enter                   │
│             Ticket Number               │
│            ┌──────────────┐             │
│            │4             │             │
│            └──────────────┘             │
│                                         │
│                                         │
│                                         │
│                                         │
│                                         │
└────────────────────────────────────────┘
```

Keyboard Tare This feature allows a manually-entered tare. This feature is enabled through service programming.

AutoTare This feature will store the tare of the item on the scale when selected. This feature is enabled through service programming.

Audit Trail This display shows the time and date when the calibration or configuration programs were changed. The first column is the number of the platform, followed by the time and date the change was made. The Count column shows the number of times the platform has been calibrated or configured. cThis display is updated automatically with each calibration or configuration change. cIt cannot be changed manually.

```
┌──────────────────────────────────────────────────┐
│ CALIBRATION and CONFIGURATION RECORD  02:05:08 pm   01/24.│▲│
├──────────────────────────────────────────────────┤ │
│                                                  │ │
│                    CALIBRATION                   │ │
│  SCALE    TIME         DATE       COUNT          │ │
│    1    10:22:50 am  01/04/2005   00410          │ │
│                                                  │ │
│                   CONFIGURATION                  │ │
│  SCALE    TIME         DATE       COUNT          │ │
│    1    05:40:26 pm  12/09/2004   00408          │ │
│                                                  │ │
│                                                  │ │
│                                                  │ │
│                                                  │▼│
│ ◄                                              ► │ │
└──────────────────────────────────────────────────┘
```

Configuration Menu   This menu accesses general configuration functions of the indicator.

Service Menu   This menu accesses calibration and other metrological functions of the indicator. The Service menu is password protected and is restricted to *authorized service personnel only.*

Check for Updates   This feature allows the FB 3000 to obtain updated files when it is connected to the Internet.

Operators Manual   This accesses the PDF version of the operator's manual stored on the indicator for reference.

D. Configuration Menu Programming
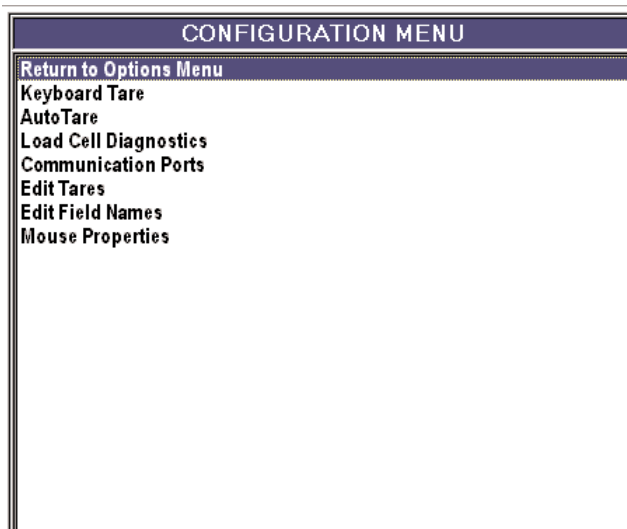
Return to Weighing   Returns the display to the normal weight processing display.

Keyboard Tare   This feature allows a manually entered tare. This feature is enabled through service programming.

AutoTare   This feature will store the tare of the item on the scale when selected. This feature is enabled through service programming.

Load Cell Diagnostics   This is a service diagnostic status display as to the functionality and programming of the load cell(s). This is a diagnostic status display as to the functionality and programming of the load cell(s). The ghosting feature is to allow a scale with a load cell problem to operate normally until qualified service personnel can repair the problem. F6 enables or disables this feature.
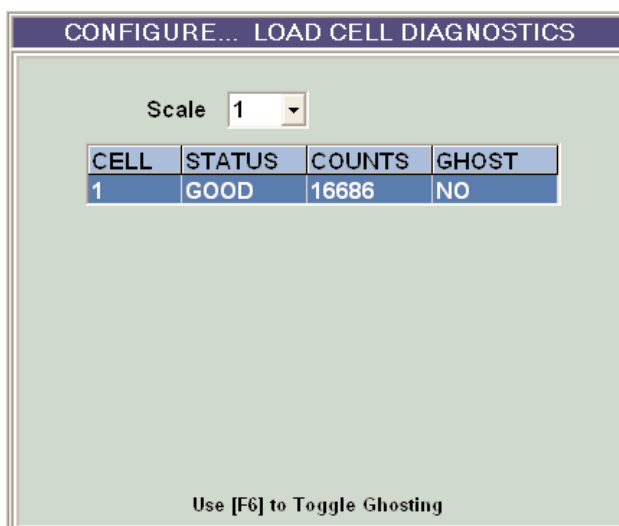
Communication Ports This menu accesses general communication functions of the indicator. See Communications Menu for more details.

View / Delete Tares This menu allows modifications to existing tares by changing the tare value or deleting a tare entry, one at a time.

| TARE ID	WEIGHT	TIME	DATE	MANUAL
	1200	08:49 am	12/21/2004	*
1	50000	02:20 pm	12/14/2004	*
11	30000	04:59 pm	12/07/2004	*
114	39980	03:46:54 pm	10/14/2004	*
12	30000	05:03 pm	12/07/2004	*
124	39980	03:46:54 pm	10/14/2004	*
13	30000	05:05 pm	12/07/2004	*
14	30000	05:09 pm	12/07/2004	*
15	30000	05:10 pm	12/07/2004	*
16	30000	05:12 pm	12/07/2004	*
17	30000	05:15 pm	12/07/2004	*
33	10000	04:48 pm	12/15/2004	*
4	39980	03:46:54 pm	10/14/2004	*

Delete   Previous   Next

Edit Loop Prompt The Loop ID prompt may be changed or customized for a application. The prompting text may be changed by entering up to a maximum of 10 characters. i.e. Truck ID, Railcar ID, License No, and etc.
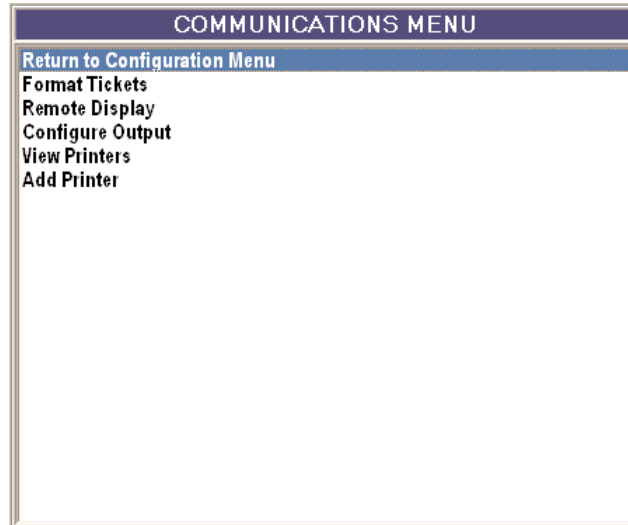
CONFIGURATION... LOOP ID PROMPT

Prompt Text   Loop Id

Mouse Properties   The mouse settings may be adjusted to personal preferences of operation.
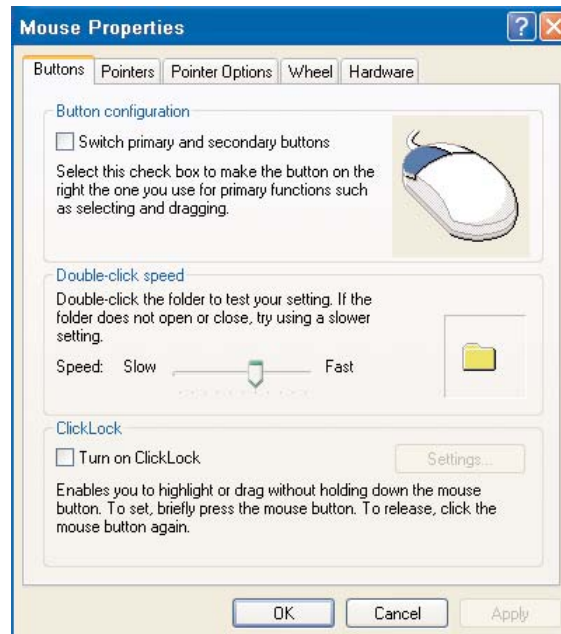
E.   Communication Menu Programming

```
COMMUNICATIONS MENU
Return to Configuration Menu
Format Tickets
Remote Display
Configure Output
View Printers
Add Printer
```

Return to Configuration Menu   Returns the display to the Configuration Menu.

Format Tickets   This selection allows the user to create and edit all available ticket formats.

```
Format Scale Tickets
Select Printer
HP Color LaserJet 5500 PCL6 on \\HULK\color
Okidata ML 520-IBM on LPT1:
TMU 295  Printer on COM3:
TMU 590  Printer on COM4:

F1-Inbound Format    F2-Outbound Format    F3-GTN Format

Format Ticket [F5]    Delete Format [F6]
```
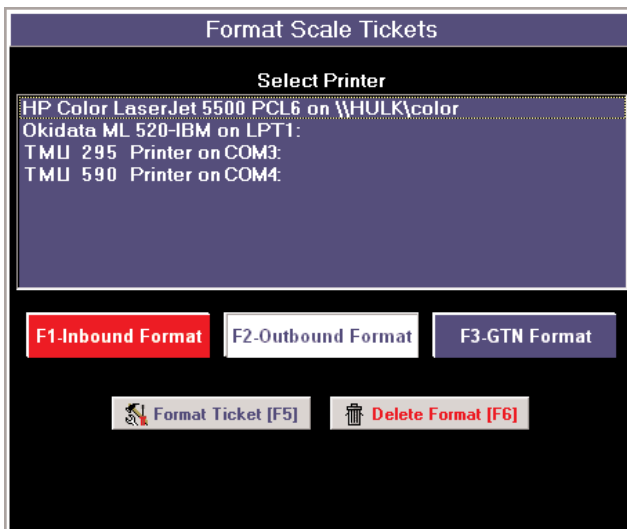
Note:
*The printer drivers **must** be available and displayed in the Select Printer Window before the tickets can be formatted.*

1. Ticket Layout

The ticket layout screen is comprised of a grid which is eight (8") inches wide by eleven (11") inches long. The ticket is referenced from the top left corner for normal printing. Each major grid line is marked by a numeric value representing an inch. Each major grid block is comprised of 16 smaller grid lines both horizontally and vertically. This will allow the data to be located to the nearest sixteenth of an inch.

The ticket layout screen is comprised of a grid which is eight (8") inches wide by eleven (11") inches long. The ticket is referenced from the top left corner for normal printing. Each major grid line is marked by a numeric value representing an inch. Each major grid block is comprised of 16 smaller grid lines both horizontally and vertically. This will allow the data to be located to the nearest sixteenth of an inch.

The actual data items to be printed are identified with greater than and less than brackets. Example: <Gross> represents the actual Gross weight value to be printed. Each item within these brackets, <   >, will print the actual data. The other items without the brackets are simply text items or legends for the data items.
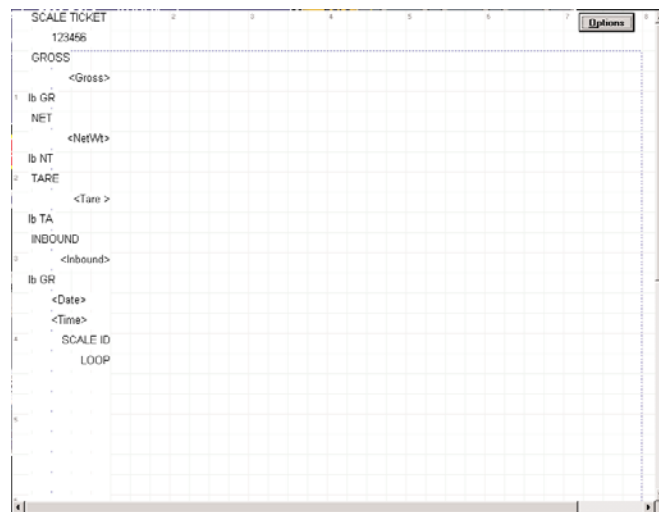
2. Options Button

a. Options\ Edit Properties

A Properties window for each data item may be accessed by right clicking the data item or pressing the [Options] button and selecting Edit properties. The properties for each field may be individually set, i.e. Coordinate settings top and left, Alignment, Borders, Color, and Font size and type. There is a maximum of 40 report fields available for each ticket. This includes the first 18 report fields which are pre-defined system fields.

1. This displays the field to be added or changed.

2. This provides access to a drop down list to change items to edit.

3. The visible check box, if checked, allows the item to be displayed and printed. Otherwise the item is hidden from viewing and will not print.

4. The Auto Size feature allows the field to grow as needed.

5. The Top data item is the data field placement value on the display in pixels. It is measured from the top of the display down.
   Definition: 97 pixels = ~1 inch

6. The Left data item is the data field placement value on the display in pixels. It is measured and increases from the left of the display towards the right.
   Definition: 97 pixels = ~1 inch

7. The Height value is measured in pixels and is determined by the font selected. If this value is manually changed, the display will not show it unless the item is selected by a left mouse click and the box surrounding the data item will be either larger or smaller.

8. The Alignment box allows for the selection of whether the data item selected is Left Justified, Center Justified, or Right Justified.
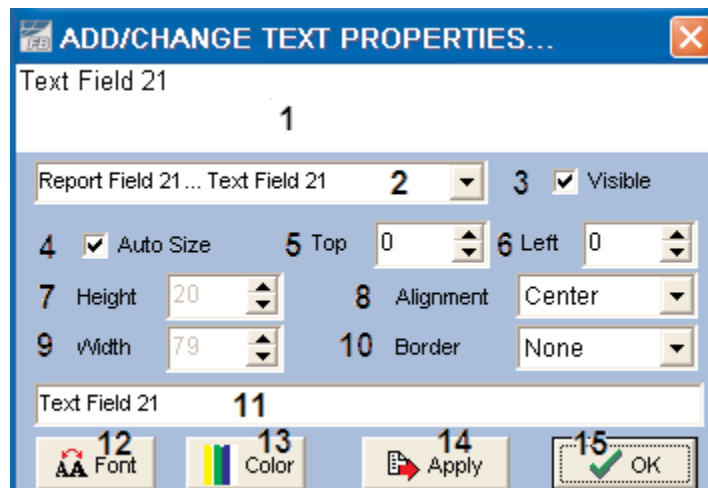
9.   The Width value is measured in pixels and is determined by the font selected. If this value is manually changed, the display will not show it unless the item is selected by a left mouse click and the box surrounding the data item will be either larger or smaller.

10. The Border feature allows the selection of a single line border line to sur round the data item selected.

11. The Text field entries are changed or added by entering the text into this data entry box.

12. The Font button brings up a window which has a selection of font types, sizes, enhancements or attributes.

13. The Color button has a variety of colors to customize the colors of the data item selected.

14. The Apply button saves and applies the changes.

15. The OK button will save, apply the changes made, and exit the Add/ Change Text Properties.
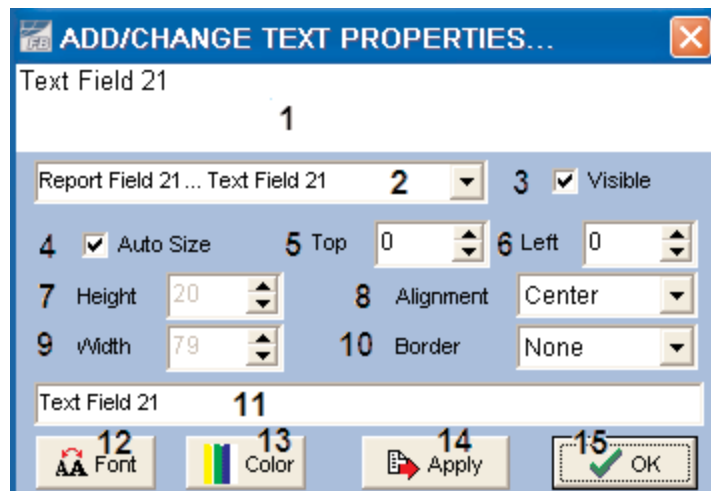
b.   Options\ Add Text Field
Selecting this option will open the Add/ Change Text Properties window and it will select the next available text field to be available to add to the ticket.

c.   Options\ Keep Fonts the Same
Selecting this option will make all data items the same font type and size.

d.   Options\ Properties on Top
Selecting this option will place the Add/ Change Text Properties on the top of the Ticket Layout screen. Each time a data item is selected the Add/ Change Text Properties will open.

e.   Options\ Snap to Grid

Selecting this option will cause the data item being moved to align itself to the nearest grid line position.

f.   Options\ Spacing = 10

Selecting this option opens the Enter Grid Spacing window. The grid spacing may be changed from the default value of 10. The grid spacing value is selectable by entering a value from 2-20.

g.   Options\ Edit Layout

h.   Options\ Close

This selection closes the Edit Ticket Layout and exits to the Format Ticket Menu.

3.   Ticket Format Procedure

a.   Select the printer desired from the Select Printer window. Choose and press the [F1-Inbound Format], [F2-Outbound Format], or [F3 -G-T-N Format] button to select the desired ticket to format.

b.   Choose and Press the [F1-Inbound Format], [F2-Outbound Format], or [F3 -G-T-N Format] button to select the desired ticket to format.

c.   Press the [Format Ticket [F5]] button to format the ticket.

d.   The format grid will appear on the display along with data items. The data items may be placed on the grid utilizing the drag and drop method.

Remote Display This selection allows the user to select the RS232 COM port and settings and the output mode for remote display operation.
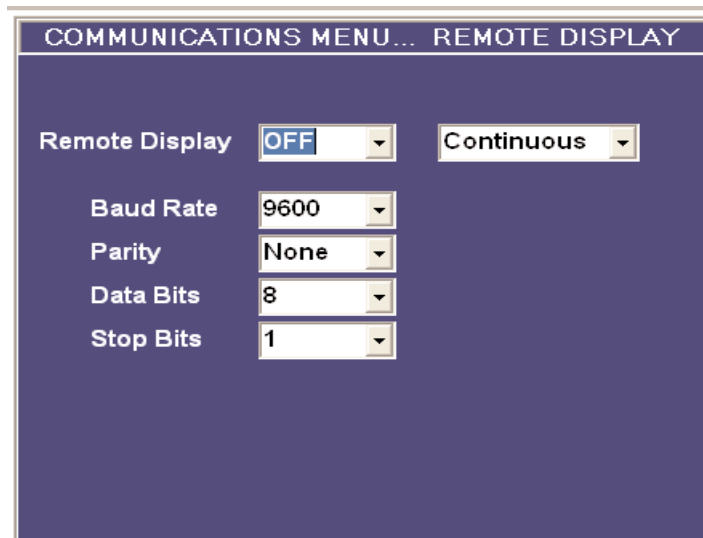

Configure Output

Port Settings Tab

This selection allows the user to select the RS232 COM port and settings and the output mode for a serial output operation. If the Delimited box is checked, the data will be transmitted in a comma delimited format. The Map View check box will allow viewing of the data in the memory mapped location when Testapp.exe program is running. The Testapp.exe is located in the NewScale folder.
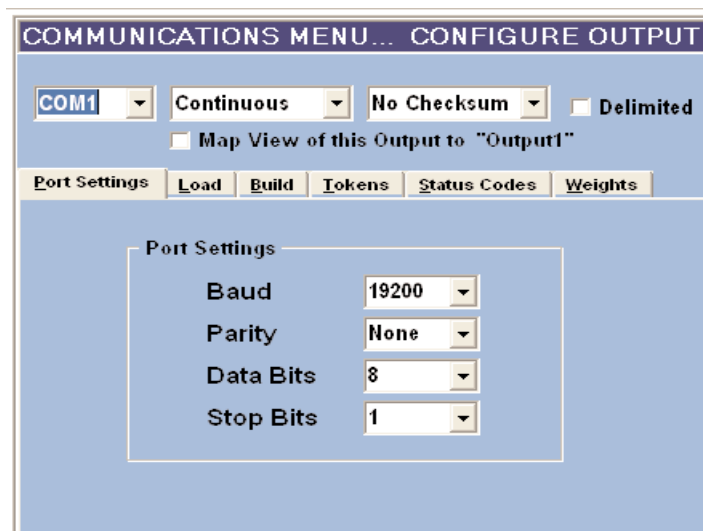
Load Tab
This selection will allow the user to select a preconfigured data protocol based on the scale manufacturer selected. This item should be selected first when configuring the output.
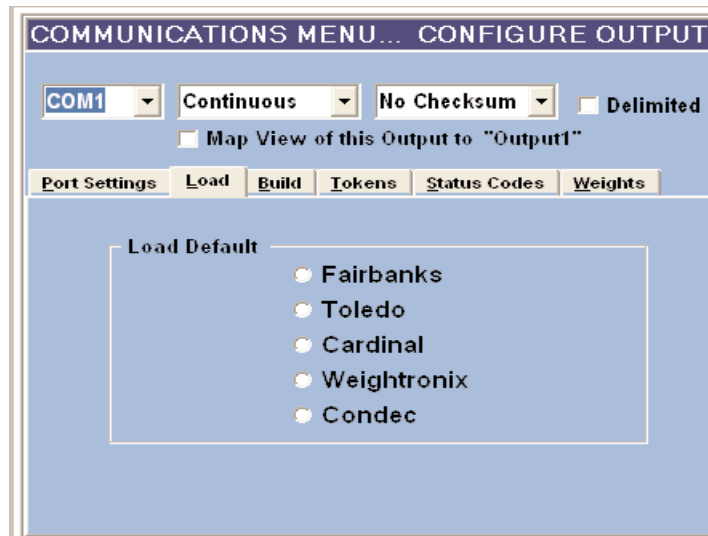
Build Tab
This tab allows the user to configure the data string protocol order and enter ASCII text. Select an item and a drop-down menu will allow the item to be changed or removed. Text may be added by clicking in the value area and entering the text or click into the data type box and choosing text from the drop down box.
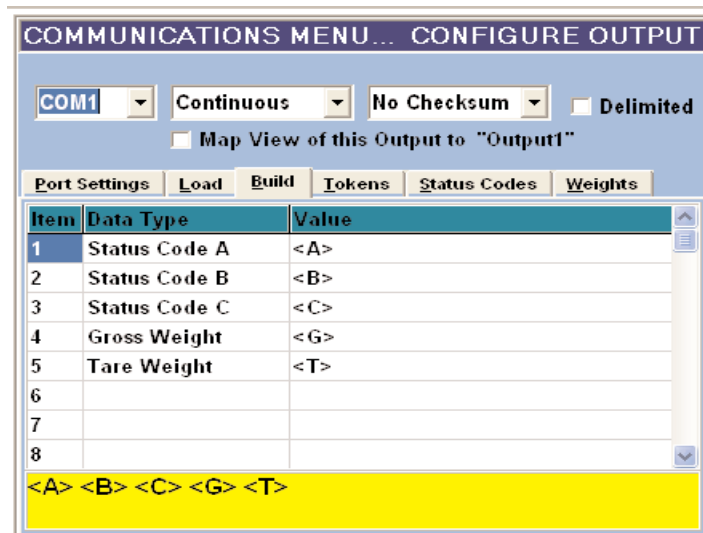
Tokens Tab

This selection allows programming of various data string tokens such as the motion flag. The tokens are set as required for the data protocol requirements.

Status Codes Tab

This selection allows for the programming of data bits for status words within the data stream. The Status code is 8 bits in length. The data may be entered in the blank data entry position and the loaded by pressing the [Loaded] button.

Configure
Output
continued

Weights Tab
This selection allows programming of the specific values for the weight tokens. tokens. The selection of weight digits is available from 5 to a maximum of 7 digits. The decimal point allows for the placement of a decimal point. The drop-down box lists None, Floating, Fixed, and Trailing. The polarity may also be selected and included in the data string.
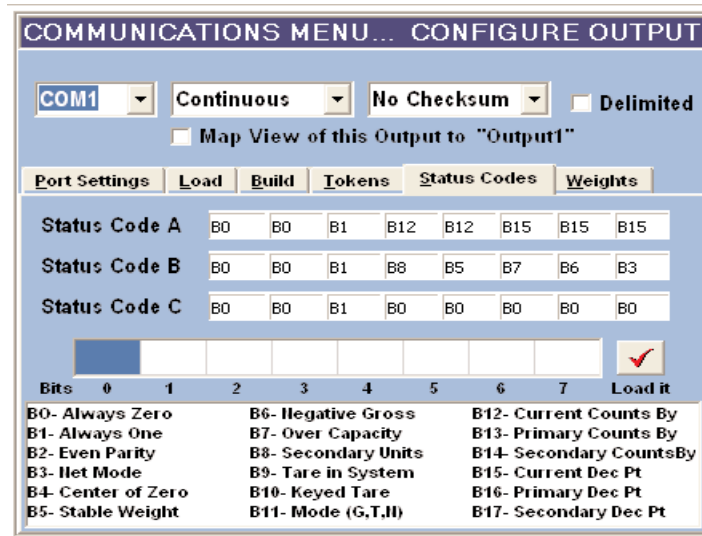
View Printers
This selection allows the user to see a list of available printers.
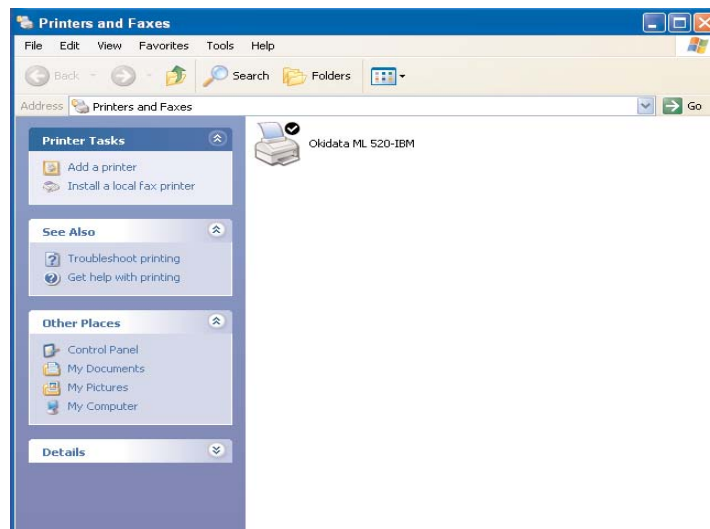
Add a Printer   This selection will allow the user to add a printer driver from the list of available printers or use another source if required. This utilizes the Windows XP Add a Printer functions and wizards.

Section 4: Operation

A. Basic Operations Summary

There are three modes of operations available, Gross Weighing, Gross-Tare-Net Weighing and Inbound - Outbound Weighing. The operating mode is a service-programmable item only.

1. Gross Weighing

    a. Press the [ZERO] key to zero the scale.

    b. Place the object to be weighed on the platform. At a stable display, press the [PRINT] key and a Gross Weight Ticket will be printed.

2. Gross-Tare-Net Weighing

    a. Press the [ZERO] key to zero the scale.

    b. Place the empty container on the platform.

    c. Choose TARE or AUTO TARE at the menu.

        1. If TARE is selected, enter the known Tare Weight through the keypad.

        2. If AUTO TARE is selected, when the display is stable, press the [ENTER] key. The weight will be stored as a Tare Weight.

    d. Remove the container from the platform and fill it with the product to be weighed.

    e. Place the filled container back onto the platform.

    f. Press the [PRINT] key and a Gross-Tare-Net Ticket will be printed.

    g. **Mode Change -** When a TARE or AUTO TARE is entered, the scale automatically switches from the Gross Weighing Mode to the Gross-Tare-Net Mode. To change the scale from the Gross-Tare-Net Mode back to the Gross Weighing Mode, enter a zero (0) Tare from the keypad.

Note:
If the display shows load cell(s) bad, this indicates the weight on the platform has changed from the calibration zero. Check the platform for equipment, debris, or other materials and remove them. Press the ZERO key a second time to return to the WEIGH MODE.

3. INBOUND / OUTBOUND Weighing Mode Summary

INBOUND / OUTBOUND weighing consists of weighing an item, inbound, either full or empty, then weighing the same item outbound, full or empty, and printing a ticket with the two weights shown. The two weights for the same container, an inbound weighment with a stored tare, or an outbound weighment with a stored tare, are called a complete transaction. An inbound weighment with NO outbound weighment is an incomplete transaction.

a. Basic In/Out Weighing

i. With the indicator powered up, press the [ZERO] key.

ii. Place the item to be weighed on the platform. This will be the INBOUND weighment.

iii. Press the [F2] INBOUND key.

iv. The display will prompt the operator for a LOOP ID. This is the identification number that will be used to identify the complete transaction. Enter the ID number to be used through the keypad and press the [ENTER] key. This LOOP ID number will be used again to recall the outbound weighment.

v. An INBOUND ticket will be printed if an INBOUND ticket format is programmed. The data for this partial transaction will be stored in the indicator with the LOOP ID number as the transaction recall label.

vi. Remove the container from the platform. Material can be added or removed from the container.

To complete the transaction:

vii. Move the container back onto the platform. Press the [F3] OUTBOUND key.

viii. The display will prompt the operator for the LOOP ID that was entered for this transaction on the inbound weighment. Enter the same LOOP ID through the keypad and press the [ENTER] key. Press the [PRINT] key.

ix. The indicator will retrieve the inbound data from memory and combine it with the new outbound data and an INBOUND / OUTBOUND ticket will be printed. The data is stored as a complete transaction.

4. System Shutdown Procedure

a. Using the external keyboard, press and hold the [CTRL] [ESC] keys at the same time.
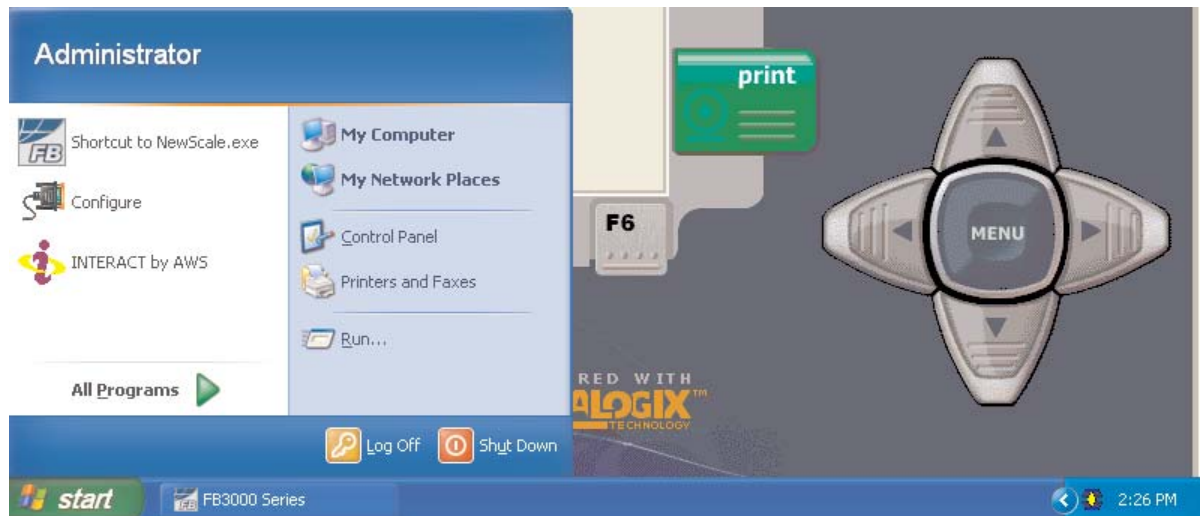
b. The Task Bar will appear at the bottom of the display. Using the mouse, right click on the FB 3000 icon in the lower Task Bar and select CLOSE or [ALT] [F4]. The FB 3000 will close down properly.

c. Select the [START] button, select SHUT DOWN. A window will appear and show Shut Down. Select the [OK] button and the instrument will turn off.
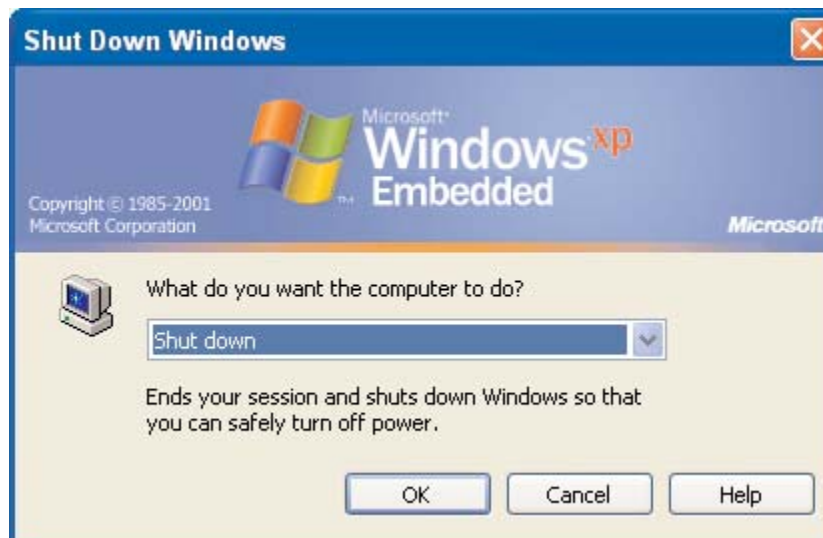
d. Upon shut down, the display will remain illuminated. Turn the power switch off which is located on the bottom left side of the instrument.

e. The indicator has been properly turned off.

WARNING!
Improper shutdown of this instrument can cause damage to hard drive and loss of data.

Section 5: InterAct Inside

A.   Introduction

InterAct Inside is a database scale transaction software application. InterAct Inside software installation files are loaded on every FB 3000 instrument as part of the standard FB 3000 instrumentation. It is also available in several different versions offering different features and as standalone software for a desktop or laptop computer. Only InterAct Inside is included with the FB 3000 indicator. Other versions of InterAct must be purchased separately.

InterAct Inside is designed for use in the collection, storage, and reporting of weight-related data. The software is intended for truck scale applications, but is flexible enough to be used for railroad track scale and floor scale applications.

The differences between the different versions of InterAct are provided in some key points for clarification:

InterAct Inside – is loaded on every FB 3000 instrument as part of the standard FB 3000 at no additional charge. It has tables for vehicles, material and pricing, and customers. InterAct steps the operator through a sequence of events to process a transaction, including printing a ticket, if required. It can be upgraded to Standard or Professional after the initial installation if the customer's needs evolve. Contact your local Fairbanks Service Center for more details regarding installation.

InterAct Limited – In PC applications, InterAct offers customers the flexibility of a computer running Windows with the ability to configure data tracking operations to meet their present needs. InterAct gives the customer file storage capabilities that can only be achieved outside a conventional scale instrument. Basically the same version as InterAct Inside except in a version to be installed on a desktop or laptop computer. It can be upgraded Standard or Professional after the initial installation if the customer's needs evolve.

InterAct Standard – Offers job tracking, tax tables for managing tax rates, more flexible reporting and multiple product/material configuration options. It can be upgraded in the future to Professional after the initial installation, for additional fees, if the customer's needs evolve.

InterAct Professional – Offers all of the features of InterAct Standard plus detailed invoicing and statement functions. This can be installed after the initial installation, for additional fees, if the customer's needs evolve.

All versions of InterAct are Windows XP compatible software applications.

B.   Specifications

Hardware Requirements for InterAct Software

Requirements	**Recommendations** **
Pentium compatible 100 MHz	Pentium compatible 400 MHz or Higher
Windows 95,	Windows XP
Windows 98,	
Windows NT,	
Windows 2000	
Windows XP	
64 MB RAM	128 MB RAM or Higher
*Phone Modem	
Network EtherNet Connection	Network EtherNet Connection
Serial port for scale connected	Serial port for scale connected

*   Support Plan is required
** FB 3000 instrument meets all requirements.

A. Remote Service and Diagnostics

The FB 3000 has the ability to be serviced and have diagnostics performed from a remote location such as the nearest authorized Fairbanks Service Center. <u>The instrument must be connected to a network with internet access.</u> The scale operator simply presses two keys to enable the remote servicing feature and one key to disable. The procedure to enable / disable is listed below.

1. **Enable Remote VNC Connection**

a. Left click on the [Fairbanks Globe] then press and release the [Menu] key.

b. The display will indicate the following window.

2. Disable Remote VNC Connection

a. Left click on the [Satellite with the red medical cross] key.

b. The display will indicate the following window.

c. The remote diagnostic box will close and be removed from the display. The indicator has returned back to normal operations.

B. Errors

Error Condition	Solution
Check that scale is empty, If Scale is empty, Call for Service, Load Cell(s) bad.	This error will occur if a large amount of weight is zeroed. This is normal. Press OK and continue weighing.
	Possible load cell damage, Call for Service.
Load Cell Failure(s) Flashing and display shows " - - - - - ".	Possible damaged load cell cable, Call for Service.
	Possible load cell failure. Access the Load Cell Diagnostics Menu to verify the load cell status and count stability or change of counts. Contact your local service for further trouble-shooting.
SC Cells Found None	Possible damaged load cell cable.
	Load cell shorted.
	Defective Pit Power Supply.
	Defective Smart Sectional Controller(s).
	Defective Analog assembly.
Display shows " - - - - - "~ lb GROSS	Communication error to load cells. Check settings by pressing F10. Settings should be COM2, Even.

Section 7: Parts

A.   Recommended Spare Parts

Part Number	Description
25241	Hard Disk Drive
24885	Power supply pcb
24886	Embedded SBC pcb
15056	Communication pcb*
22610	Analog interface pcb*
24888	Touchscreen controller pcb
24713	Cover assembly includes display (Mild Steel)*
24899	Cover assembly includes display (Stainless Steel)*
25316	Fuse
25424	Fuse Assembly
15745	Knob
25369	Rocker switch
25548	Cable Kit Assembly includes:

	25215	*I/O cable assembly*
	24890	*Keyboard extension cable*
	24892	*LVDS Data cable assembly*
	24894	*LPT cable assembly*
	24895	*LCD Backlight cable assembly*
	25404	*PS2 Keyboard- Mouse cable assembly*
	25470	*USB cable assembly*
	25388	*IDE cable assembly*

* May vary based on model and indicator configuration.

Appendix I: Data Output

A.   *Remote Display Output*

1.   Data Format

   <STX><4><0><SP/-><XXXXXX><ETX>

Note(s):

1. Characters denoted by "X" are characters 0-9.

2. Leading zeroes are suppressed.

3. Polarity indication for a positive value is a space (SP). Negative values are not transmitted.

4. Identifier code <4><0> = Gross weight. Transmission is Gross Only.

5. Transmission for the DEMAND mode will occur when a carriage return (CR) Hex 0D is received.

B.   *Configure Output*

1.   Fairbanks Data Format

   <STX><A><B><C><GGGGGG><TTTTTT><CR>

Note(s):

1. Characters denoted by "G" and "T" are characters 0-9.

2. Leading zeroes are suppressed.

3. Gross Weight data = G
   Tare Weight data   = T

Status Code (Word) A

Bit #	Decimal Point or Zero Location							
	x00	x0	x	x.x	x.xx	x.xxx	x.xxxx	x.xxxxx
0	0	1	0	1	0	1	0	1
1	0	0	1	1	0	0	1	1
2	0	0	0	0	1	1	1	1

	Increment Size		
	Count by 1	Count by 2	Count by 5
3	1	0	1
4	0	1	1
5		Always Logic 1	
6		Always Logic 0	
7		Parity Bit	

Status Code (Word) B

Bit #	Description	
0	Gross = 0	Net = 1
1	Positive = 0	Negative = 1
2	In Range = 0	Overcapacity = 1
3	No Motion = 0	Motion = 1
4	lb = 0	kg = 1
5	Always Logic 1	
6	Normal = 0	Power Up = 1
7	Parity Bit	

Status Code (Word) C

Bit #	Description	
0	Always Logic 0	
1	Always Logic 0	
2	Always Logic 0	
3	Normal = 0	Print Switch Pushed = 1
4	Always Logic 0	
5	Always Logic 1	
6	Normal = 0	Keyboard Tare = 1
7	Parity Bit	

2. Toledo Data Format

<STX><A><B><C><GGGGGG><TTTTTT><CR>

Note(s):

1. Characters denoted by "G" and "T" are characters 0-9.

2. Leading zeroes are not suppressed.

3. Gross Weight data = G
   Tare Weight data   = T

Status Code (Word) A

Bit #	Decimal Point or Zero Location							
	x00	**x0**	**x**	**x.x**	**x.xx**	**x.xxx**	**x.xxxx**	**x.xxxxx**
0	0	1	0	1	0	1	0	1
1	0	0	1	1	0	0	1	1
2	0	0	0	0	1	1	1	1

	Increment Size		
	Count by 1	**Count by 2**	**Count by 5**
3	1	0	1
4	0	1	1
5		Always Logic 1	
6		Always Logic 0	
7		Parity Bit	

Status Code (Word) B

Bit #	Description	
0	Gross = 0	Net = 1
1	Positive = 0	Negative = 1
2	In Range = 0	Overcapacity = 1
3	No Motion = 0	Motion = 1
4	lb = 0	kg = 1
5	Always Logic 1	
6	Normal = 0	Power Up = 1
7	Parity Bit	

Status Code (Word) C

Bit #	Description	
0	Always Logic 0	
1	Always Logic 0	
2	Always Logic 0	
3	Normal = 0	Print Switch Pushed = 1
4	Always Logic 0	
5	Always Logic 1	
6	Normal = 0	Keyboard Tare = 1
7	Parity Bit	

3.   Cardinal 738 Continuous Scoreboard Data Format

<CR><P><WWWWWW><m><SP><U><SP><g><SP><SP><ETX>

Note(s):

      1.   W = Displayed weight
                    P = Polarity
                        + = Positive weight
                        - = Negative weight
                    U = Units
                    lb = pounds
                    kg = kilograms
                    m = Motion or o = Overload
                    g = Gross; n = Net
                    SP = Space
      2.   Leading zeros are not suppressed.

4.   Weightronix Data Format

< ><M><WWWWWW>< ><U><CR><LF>

Note(s):

      1.   < > = Space
                    M = Mode
                        G =Gross
                        T=Tare
                        N=Net
                    W = Displayed weight
                    U = Units
                    m= Motion
                    o = Overload

      2.   Leading zeros are suppressed.

5.   Condec Continuous Data Format

\<STX\>\<P\>\<WWWWWWW\>\<U\>\<G\>\<M\>\<CR\>

Note(s):
1.   P = Polarity
     space = positive weight
     - = negative weight
     W = Displayed weight
     U = Units
     L = pounds
     K = kilograms
     G = Gross; N = Net
     M = Motion
2.   Leading zeros are suppressed.