

UWT™

**Weighing Terminal
Software Guide**

NOTICE

The information in this manual is specifically for use with UWT weighing terminals

TRADEMARKS

METTLER TOLEDO® and JAGXTREME are registered trademarks of Mettler-Toledo, Inc. UWT is a trademark of Mettler-Toledo, Inc. All other brand or product names are trademarks or registered trademarks of their respective companies.

COPYRIGHTS

Copyright 2003 Mettler-Toledo, Inc. This documentation contains proprietary information of Mettler-Toledo, Inc. It may not be copied in whole or in part without the express written consent of Mettler-Toledo, Inc.

METTLER TOLEDO reserves the right to make refinements or changes to the product or manual without notice.
U.S. Government Restricted Rights: This documentation is furnished with Restricted Rights.

U.S. Government Restricted Rights Legend: This software is furnished with Restricted Rights. Use, duplication, or disclosure of the Software by the U.S. Government is subject to the restrictions as set forth in subparagraph (C) (1) (ii) of the Rights in Technical Data and Computer Software clause at 40 C.F.R. Sec. 252.227-7013 or in subparagraphs (c) (1) and (2) of the Commercial Computer Software-Restricted Rights clause at 40 C.F.R. Sec. 52-227-19, as applicable.

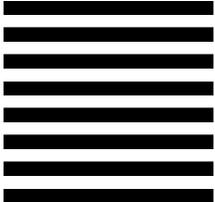
METTLER TOLEDO RESERVES THE RIGHT TO MAKE REFINEMENTS OR CHANGES WITHOUT NOTICE.

FOLD THIS FLAP FIRST



NO POSTAGE
NECESSARY IF
MAILED IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 414 COLUMBUS, OH



POSTAGE WILL BE PAID BY ADDRESSEE

Mettler-Toledo, Inc.
Quality Manager - MTWT
P.O. Box 1705
Columbus, OH 43216
USA



Please seal with tape.

PRECAUTIONS

READ this manual BEFORE operating or servicing this equipment.

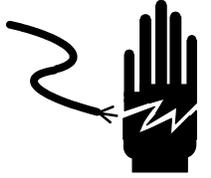
FOLLOW these instructions carefully.

SAVE this manual for future reference.

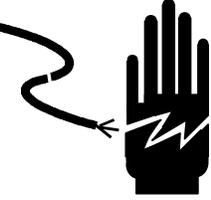
DO NOT allow untrained personnel to operate, clean, inspect, maintain, service, or tamper with this equipment.

ALWAYS DISCONNECT this equipment from the power source before cleaning or performing maintenance.

CALL METTLER TOLEDO for parts, information, and service.

	 WARNING
	DISCONNECT ALL POWER TO THIS UNIT BEFORE INSTALLING, SERVICING, CLEANING, OR REMOVING THE FUSE. FAILURE TO DO SO COULD RESULT IN BODILY HARM AND/OR PROPERTY DAMAGE.

	 CAUTION
	OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES.

	 WARNING
	PERMIT ONLY QUALIFIED PERSONNEL TO SERVICE THIS EQUIPMENT. EXERCISE CARE WHEN MAKING CHECKS, TESTS AND ADJUSTMENTS THAT MUST BE MADE WITH POWER ON. FAILING TO OBSERVE THESE PRECAUTIONS CAN RESULT IN BODILY HARM And/OR EQUIPMENT DAMAGE.

	 WARNING
	FOR CONTINUED PROTECTION AGAINST SHOCK HAZARD, CONNECT TO PROPERLY GROUNDED OUTLET ONLY. DO NOT REMOVE THE GROUND PRONG.

 CAUTION
BEFORE CONNECTING OR DISCONNECTING ANY INTERNAL ELECTRONIC COMPONENTS OR INTERCONNECTING WIRING BETWEEN ELECTRONIC EQUIPMENT, ALWAYS REMOVE POWER AND WAIT AT LEAST THIRTY (30) SECONDS BEFORE ANY CONNECTIONS OR DISCONNECTION'S ARE MADE. FAILURE TO OBSERVE THESE PRECAUTIONS COULD RESULT IN DAMAGE TO OR DESTRUCTION OF THE EQUIPMENT, OR BODILY HARM.

CONTENTS

1	Software Overview	1-7
	Software Description	1-7
	Concept of Customizable Tables.....	1-8
	Supervisor Password Protection	1-9
	JAGXTREME Display	1-9
	Keypad/Keyboard Operation	1-10
2	Installation of VSX Software	2-1
	BAS Files	2-1
	Startup Procedure	2-1
3	Supervisor Mode/System Configuration.....	3-1
	Accessing Supervisor Mode	3-1
	Supervisor Mode Tree Structure	3-2
	Initialize Tables	3-2
	Clear Accumulators	3-3
	Deleting Stored Records	3-4
	Editing Permanent Tables	3-5
	Editing Commodity Registers	3-6
4	Operating VSX Software	4-1
	General Operating Instructions	4-1
	Units of Operation	4-1
	Inbound/Outbound Weighing	4-1
	Loops and Lights	4-4
5	Configuring Tickets	5-1
	JAGXTREME OS Setup.....	5-1

1

Software Overview

Software Description

The UWT unattended weighing terminal includes a JAGXTREME scale instrument mounted to the enclosure door and pre-loaded with METTLER TOLEDO VSX vehicle weighing software. The VSX UWT version software is a JAGBASIC-based program for weighing inbound and outbound vehicles on a single-platform, full-length scale. The software allows the scale owner to enter commonly accessed information such as vehicle ID numbers, vehicle tare weights, and commodity types.

When trucks drive onto the scale, the JAGXTREME terminal's display prompts the user to enter the appropriate information in order to begin the weighing process. After weighing is completed, a ticket can be automatically printed, a prompt on the display advises the driver to leave the scale, and optional traffic lights or gates are triggered. Transactions are stored within the JAGXTREME terminal and recalled during outbound weighing. Reports can be printed at the UWT, or communicated remotely via an Ethernet connection. See the UWT user manual, part number (*)16672300A, for more information on operating the UWT system.

Software Features

- Current gross weight displayed when vehicle is on the selected scale.
- 16-character alphanumeric display for operator prompting.
- Configurable table sizes dependent on memory availability (Inbound, quick print commodity, permanent vehicle, completed transaction).
- Automatic or manual scale selection when vehicle pulls on scale. (Multiple scale applications only.)
- Auto-assign, manually assign inbound ID or proximity badge reader.
- Reprint last ticket with "Duplicate" printed on ticket.
- Print reports. (Inbound, Permanent vehicle, Badge, Outbound transaction, Commodity and Scale accumulator).
- Unattended mode.
- Controls loops and lights for either pre-zero or non-pre-zero operation.
- Up to five comment fields available for outbound operation.
- Communication of reports to a remote PC via FTP using an Ethernet connection.
- Software utilizes operator and supervisor levels of security as well as a backdoor password for calibration access by authorized personnel.

Concept of Customizable Tables

During the initial power up sequence, the VSX software creates six tables for use during various inbound and outbound operations.

The **Inbound** table stores auto-assign and manually assigned vehicles by ID number, until they are retrieved during an outbound operation.

The **Permanent** table stores vehicles by their predefined ID with their associated tare weight, number of loads and accumulated weight value.

The **Commodity** table stores commodities with number of loads and the accumulated weight.

The **Quick Print** table stores vehicles until they are retrieved during an outbound operation. (No accumulation)

The **Transaction (Outbound)** table is a circular file that stores a predefined number of transactions. Once this table is full, the oldest transactions are over written.

The Badge table stores the badge ID and associated owner.

The size of each table can be customized to suit each customers needs. For example:

- Customer facility holds 20 trucks inbound
- Customer owns 30 trucks.
- 5 commodities
- Processes 50 trucks per day
- Needs to store 1 weeks worth of transactions

The inbound table can be customized to hold 50 trucks to allow for operator errors, or future expansion of the facility. The permanent table can be customized to hold 50 trucks to allow for current vehicles and future expansion of the customer fleet. The commodity table can be customized to hold 10 commodities to allow entry of current products and future expansion of customer products. The transaction table can be customized to store 400 transactions to allow for seven days of records plus 50 extra transactions. This example would require approx 35K of memory. With 50K of total memory available, this would leave 15K available for expansion.

Here is a quick formula to determine if the VSX software can handle a customer's requirements.

I=Number of inbound records required.

P=Number of permanent vehicle records required.

C=Number of commodities required.

Q=Number of quick print inbound records required.

T=Number of outbound stored records required.

B=Number of badge ID records required.

If $(I \times 36) + (P \times 29) + (C \times 43) + (Q \times 13) + (T \times 77) + (B \times 46) > 50,000$, then the standard VSX software is not capable of handling this application.

Supervisor Password Protection

The VSX software provides password protection to protect against unauthorized people modifying application-critical settings. The supervisor password allows the supervisor to enter setup mode to configure the application-critical settings. Passwords can be changed in the setup mode. See the JAGXTREME user manual, part number (*)15894100A.

JAGXTREME Display

Cursors are used to indicate which legends are currently active

Upper Display

The top display is a numeric display for weight only. Cursors are used to indicate which legends are currently active. JAGXTREME terminals feature the following legends:

Gross (G): The Gross cursor lights up to indicate that a gross weight value is being displayed.

Net (NET): The Net cursor lights up to indicate that a tare has been entered and that a net weight value is being displayed.

Preset Tare (PT): The Preset Tare cursor lights up to indicate that a preset tare weight value is being displayed.

Pounds (lb): The lb cursor lights up to indicate that pound weight units are being used and that the weight on the scale is stable. (Factory default setting)

Kilograms (kg): The kg cursor lights up to indicate that kilogram weight units are being used and that the weight on the scale is stable.

Zero (>0<): The Zero cursor lights up to indicate that the weight on the scale is within ± 0.25 increments of gross zero and that the JAGXTREME terminal is in the gross weight mode. If the net zero cursor is enabled during setup, the zero cursor indicates when the weight on the weighbridge is within ± 0.25 increments of gross or net zero.

Scale instability (~): The scale instability enunciator indicates that the scale is in motion. The enunciator will turn off when the scale becomes stable.

Lower Display

The current time and date are displayed on the lower display in the standby mode. During Vehicle processing the lower display shows the status of the transaction or it prompts the operator to take action.

Selected JAGXTREME (1 2 3 4 5 6)(A B C D): The six numeric enunciators indicate which JAGXTREME is selected (if multiple scale terminals are networked together) and the four alpha characters indicate which scale is currently selected (if multiple scales are connected to one JAGXTREME).

Sum: The "SUM" enunciator indicates that the current display is the sum of the internal scales.

W1, W2, W3: These three enunciators indicate which weighing range the indicator is currently operating in.

Keypad/Keyboard Operation

The JAGXTREME terminal VSX software is intended for use with an 81-key QWERTY keyboard with a mini-DIN connector connected to the JAGXTREME terminal. The JAGXTREME keypad can be used when the JAGXTREME terminal is not connected to a keyboard.

The following keys can be accessed by the driver without any password entry.

- Z - Zero Scale** – Zeros the currently selected scale.
- S - Select Scale** – Selects the next sequential scale.
- P - Repeat Print** – Reprints the last ticket.

Keys that are password protected are:

- V - Enter Supervisor** – Enter Supervisor Mode to configure VSX operation. (Refer to the section on Supervisor Mode.)
- M - Check Memory** – Checks the Inbound and Outbound memory for available locations.
- R - Print Reports** – Prints Inbound, Permanent vehicle, transaction, commodity and scale accumulator reports.
- E - Exit Program** – Exit VSX program in order to access JAGXTREME OS settings and perform calibration.

2

Installation of VSX Software

BAS Files

The VSX software consists of four JAGBASIC files. These files are preloaded into the JAGXTREME terminal at the factory.

- *File1.bas* is the main program that processes inbound and outbound vehicles.
- *Super.bas* prompts the supervisor through the application specific settings in Supervisor Mode.
- *Report.bas* allows the operator to print various reports.
- *Initial.bas* performs an initialization routine when *File1.bas* is run for the first time.

All four BAS files MUST be loaded into the JAGXTREME RAM disk prior to operation. Refer to the JAGXTREME user manual, part number (*)15894100A, for more details on operating the JAGXTREME terminal.

Startup Procedure

Applying Power

The JAGXTREME terminal executes a series of self-tests when it is turned on. These tests confirm that the terminal is operating properly. The power up sequence is as follows:

- All segments of the upper and lower display digits are tested briefly.
- The upper display briefly shows [- - - - -], while [METTLER TOLEDO] is displayed on the lower display.
- The software part number and revision are displayed on the lower display briefly followed by [- - - JagBASIC - - -] [- - - VSX Rev 4.0.0 - - -].

Starting VSX Software

- The default factory setting is "auto start is enabled" and the display is set to "[JAGUAR]" in the JAGXTREME OS settings. File1 will automatically start and display the time and date on the lower display.
- For example: [10:30 02-21-03].
- If auto start is disabled and manual start is enabled, then the prompt [BASIC:] will appear. Type, run "file1.bas". Press ENTER.

The first time the VSX software is started, all six data tables will be created. Each table will be initialized to default values. (Inbound=100, Permanent=100, Transaction=100, Commodity=10, Badge=100 and Quick Print=100) These tables can be re-initialized in the Supervisor Mode (refer to the next chapter) to meet the customer's specific requirements.



For your notes

3

Supervisor Mode/System Configuration

Accessing Supervisor Mode

Prior to weighing vehicles, you can configure your system to meet user-specific requirements. Configuration is done via the password-protected setup mode.

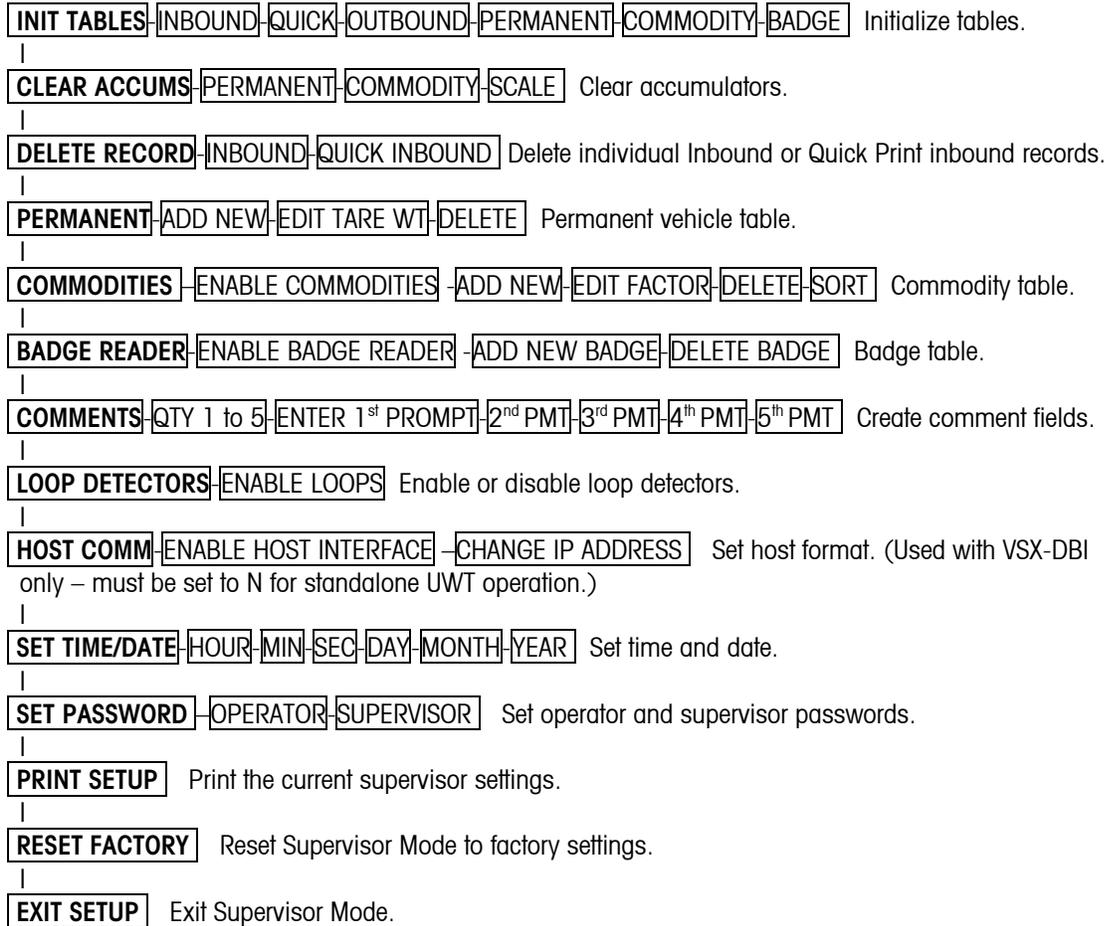
The Supervisor Mode is password protected to protect the application-critical settings. The password can be changed once you enter Supervisor Mode. Upon power up, the JAGXTREME terminal's lower display will read the time and date.

To enter Supervisor Mode, perform the following steps:

- From the time and date display, press "V" on the QWERTY keyboard.
- At the [SUPERVISOR? N] prompt, press the "Y" key followed by the ENTER key.
- Key in the supervisor password followed by the ENTER key at the [ENTER PASSWORD] prompt. Initially, the password will be blank and the ENTER key can be used without a password.

Supervisor Mode Tree Structure

Below are the various program blocks that can be accessed. The block names appear on the lower display. By pressing 'Y' followed by ENTER, the sub-blocks can be edited. To exit setup, advance through the program blocks using the ENTER key until the [Exit Setup] prompt is displayed.



Initialize Tables

Note: All data in each table will be lost when the table is initialized.

To modify table sizes from their default values perform the following:

- Press the "Y" key followed by ENTER at the [INIT TABLES N] prompt.
- To skip this procedure, at the [INIT TABLES N] prompt, press the ENTER key.
- You will then be prompted to initialize each table followed by the [Are You Sure? N] prompt.
- At the [Enter Table Size] prompt, enter the new table size. (This value is specific to each customer's needs.)
- The percent of memory available will be displayed on the lower display [Free Memory XX%]. Once this value reaches 0%, you are out of memory.

EXAMPLE: To initialize the permanent vehicle table:

- Enter into Supervisor Mode.
- At the [INIT TABLES? N] prompt, press the "Y" key followed by the ENTER key.
- Press ENTER until [INIT PERM? N] is displayed.
- Press the "Y" key followed by the ENTER key.
- At the [ARE YOU SURE? N] prompt, press the "Y" key followed by the ENTER key.
- Enter the new table size at the [Enter Table Size] prompt. (For example, if you have 20 trucks in your fleet of vehicles, you may want to enter a table size of 30.)
- The lower display will display the percent of free memory and then it will initialize the table.

Clear Accumulators

There are three tables that store accumulated net weight (Permanent vehicle, Commodity and Scale accumulator). These accumulators can be cleared by performing the following procedure on each table.

To clear the permanent accumulators:

- Enter into Supervisor Mode.
- Press the ENTER key until [CLEAR ACCUMS? N] is displayed.
- Press the "Y" key followed by the ENTER key or, to skip this procedure, press ENTER.
- To clear the permanent vehicle accumulator press the "Y" key followed by the ENTER key at the [CLEAR PERM? N] prompt or to skip this procedure at the [CLEAR PERM?] N prompt press ENTER.
- At the [ARE YOU SURE? N] prompt press the "Y" key followed by the ENTER key.
- The lower display will display [Clearing...] while the permanent vehicle table is cleared.
- To clear the commodity table, press the "Y" key followed by the ENTER key at the [CLEAR COMMOD? N] prompt or to skip this procedure, press ENTER.
- At the [ARE YOU SURE? N] prompt, press the "Y" key followed by the ENTER key.
- The lower display will display [Clearing...] while the commodity accumulator table is cleared.
- To clear the scale accumulator, press the "Y" key followed by the ENTER key at the [CLEAR SCALE? N] prompt or, to skip this procedure, press ENTER.
- At the [ARE YOU SURE? N] prompt, press the "Y" key followed by the ENTER key.
- The lower display will display [Clearing...] while the scale accumulator table is cleared.

Deleting Stored Records

To maintain the inbound tables, unwanted entries should be deleted on occasion. The Inbound and Quick Print inbound records can be deleted individually with the following procedures.

To delete an Inbound record:

- Enter into Supervisor Mode.
- Press the ENTER key until [DELETE RECORD? N] is displayed.
- Press the "Y" key followed by the ENTER key at the [DELETE RECORD? N] prompt or, to skip this procedure, press the ENTER key.
- To delete an inbound record press the "Y" key followed by the ENTER key at the [DELETE INBOUND? N] prompt or to skip this procedure, press ENTER.
- At the [ARE YOU SURE? N] prompt, press the "Y" key followed by the ENTER key.
- Key in the ID to be deleted at the [ENTER ID] prompt.
- [Searching...] will be briefly displayed on the lower display while the VSX software searches the Inbound table for the entered ID.
- The lower display will briefly display [RECORD DELETED] and then [DELETE MORE? N].
- If the record is not found in the table, the lower display will briefly display [Record not found] and then [DELETE MORE? N].
- Press ENTER if you are done deleting records, or press the "Y" key followed by the ENTER key to continue deleting records.

To delete a Quick Print inbound record:

- Enter into Supervisor Mode.
- Press the ENTER key until [DELETE RECORD? N] is displayed.
- At the [DELETE INBOUND? N] prompt press ENTER.
- Press the "Y" key followed by the ENTER key at the [DELETE QUICK? N] prompt or, to skip this procedure, press ENTER.
- At the [ARE YOU SURE? N] prompt ,press the "Y" key followed by the ENTER key.
- Key in the ID to be deleted at the [ENTER ID] prompt.
- [Searching...] will be briefly displayed on the lower display while VSX software searches the Quick Print inbound table for the entered ID.
- The lower display will briefly display [RECORD DELETED] and then [DELETE MORE? N].
- If the record is not found in the table the lower display will briefly display [Record not found] and then [DELETE MORE? N].
- Press ENTER if you are done deleting records, or press the "Y" key followed by the ENTER key to continue deleting records.

Editing Permanent Tables

Permanent tables can be used for storing tare weights of vehicles assigned a permanent ID. This will allow for one pass weighing when the outbound vehicle ID is recalled.

- Enter into Supervisor Mode.
- Press the ENTER key until [PERMANENT? N] is displayed.
- Press the "Y" key followed by the ENTER key at the [PERMANENT? N] prompt or to skip this procedure press the ENTER key.

To add a permanent vehicle:

- Press the "Y" key followed by the ENTER key at the [ADD PERMANENT? N] prompt or, to skip this procedure, press the ENTER key.
- Key in the ID to be stored at the [ENTER ID] prompt. (It must start with a capital alpha character.)
- [Searching...] will be briefly displayed on the lower display while the VSX software searches the permanent table for an open register.
- If the weight on scale A is above threshold, you will be given the option to use scale A weight as the tare value. To use scale A weight press the "Y" key followed by the ENTER key at the [TARE ON SCL A? N] prompt or to skip scale A, press ENTER.
- If the weight on scale B is above threshold, you will be given the option to use scale B weight as the tare value. To use scale B weight press the "Y" key followed by the ENTER key at the [TARE ON SCL B? N] prompt or to skip scale B, press ENTER.
- If you wish to hand enter the tare, key in the tare weight at the [ENTER TARE WT] prompt.
- To add more permanent vehicles to the permanent vehicle registers, press the "Y" key followed by the ENTER key at the [ADD MORE? N] prompt. If you are finished entering permanent vehicles, at the [ADD MORE? N] prompt, press ENTER.

To edit a permanent tare weight:

- Press the "Y" key followed by the ENTER key at the [EDIT TARE WT? N] prompt or to skip this procedure press the ENTER key.
- At the [ENTER ID] prompt, key in the ID to be edited.
- [Searching...] will be briefly displayed on the lower display while the VSX software searches the permanent table for the existing ID.
- If the weight on scale A is above threshold, you will be given the option to use scale A weight as the tare value. To use scale A weight press the "Y" key followed by the ENTER key at the [TARE ON SCL A? N] prompt or to skip scale A press ENTER.
- If the weight on scale B is above threshold, you will be given the option to use scale B weight as the tare value. To use scale B weight press the "Y" key followed by the ENTER key at the [TARE ON SCL B? N] prompt or to skip scale B press ENTER.
- If you wish to hand enter the tare, key in the tare weight at the ENTER TARE WT prompt.

- If you wish to edit more vehicles tare weights press the “Y” key followed by the ENTER key at the [EDIT MORE? N] prompt. If you are finished editing permanent vehicles, at the [EDIT MORE? N] prompt, press ENTER.

To delete a permanent vehicle:

- Press the “Y” key followed by the ENTER key at the [DEL PERMANENT? N] prompt or to skip this procedure, press the ENTER key.
- At the [ENTER ID] prompt, key in the ID to be deleted.
- [Searching...] will be briefly displayed on the lower display while the VSX software searches the permanent table for the existing ID.
- The lower display will briefly display [RECORD DELETED] and then [DELETE MORE? N].
- If the record is not found in the permanent vehicle table, the lower display will briefly display [Record not found] and then [DELETE MORE? N].
- If you wish to delete more vehicles press the “Y” key followed by the ENTER key at the [DELETE MORE? N] prompt. If you are finished editing permanent vehicles, press the ENTER key.

Editing Commodity Registers

Commodities are used to calculate the value of each product in it's associated unit of measure. The Commodity register then accumulates this value and stores it for inventory control. Each commodity provides a conversion factor for converting net weight to user-defined units of measurement. The commodity registers provide a 16-character description field. Commodity registers are updated after the Inbound/Outbound, auto assign or permanent vehicle transaction is complete. **Note: If no commodities are entered then the commodities must be disabled in the program configuration – see below.**

- Enter into Supervisor Mode.
- Press ENTER until [COMMODITIES? N] is displayed.
- Press the “Y” key followed by the ENTER key at the [COMMODITIES? N] prompt or, to skip this procedure, press the ENTER key.
- To enable commodities, press the “Y” key at the [ENABLE COMOD? N] followed by the ENTER key or to disable commodities press the ENTER key.

To add a new commodity

- Press the “Y” key followed by the ENTER key at the [NEW COMMOD? N] prompt or, to skip this procedure, press the ENTER key.
- At the [ENTER NAME] prompt, key in the name of the new commodity.
- [Searching...] will be briefly displayed on the lower display while the VSX software searches the commodity table for an open register.
- Key in the factor of the new commodity at the [ENTER FACTOR] prompt. (This is a divide by value.)
- At the [ENTER UNITS] prompt key in the name of the converted units. (For example, BSHLS.)

- If you wish to enter more commodities press the "Y" key followed by the ENTER key at the [ENTER ANOTHER? N] prompt. If you are finished entering commodities, press ENTER.

To edit a commodity factor:

- Press the "Y" key followed by the ENTER key at the [EDIT FACTORS? N] prompt or to skip this procedure, press ENTER.
- At the [ENTER ID] prompt key in the name of the commodity to be edited.
- [Searching...] will be briefly displayed on the lower display while the VSX software searches for the commodity.
- At the [ENTER NEW FACTOR] prompt, key in the new factor and press ENTER.
- If you wish to edit more factors press the "Y" key at the [EDIT ANOTHER? N] prompt followed by the ENTER key. If you are finished editing factors, press ENTER.

To delete a commodity:

- Press the "Y" key followed by the ENTER key at the [DEL COMMOD? N] prompt or to skip this procedure, press ENTER.
- Key in the name of the commodity to be deleted at the [ENTER NAME] prompt.
- [Searching...] and then [Deleted...] will be briefly displayed while the VSX software searches for and deletes the commodity.
- If you wish to delete more commodities, press the "Y" key followed by the ENTER key at the [DELETE ANOTHER? N] prompt. If you are finished deleting commodities, press ENTER.

To sort commodities alphabetically:

- Press the "Y" key followed by the ENTER key at the [SORT COMMOD? N] prompt or, to skip this procedure, press the ENTER key.
- [Sorting...] will be briefly displayed on the lower display while VSX software sorts the commodities.

Badge Reader

An optional AWID proximity badge reader may be purchased to allow in/outbound processing using a designated badge associated to an ID number for security purposes. In Supervisor Mode you can enable the reader, add badges to the badge table, or delete badges from the badge table.

NOTE: A multifunction card is required with the badge reader option.

To enable badge reader:

- Enter into Supervisor Mode.
- Press the ENTER key until [BADGE READER? N] is displayed.
- Press the "Y" key followed by the ENTER key at the [BADGE READER? N] prompt or to skip this procedure, press the ENTER key.
- To enable the badge reader, press the "Y" key followed by the ENTER key at the [ENABLE READER? N] prompt or to disable the badge reader, press the ENTER key.

To add a badge:

- Enter into Supervisor Mode and enable the badge reader.
- Press the "Y" key followed by the ENTER key at the [ADD BADGE? N] prompt or to skip this procedure, press the ENTER key.
- Swipe the badge to be stored in the badge table at the [SWIPE CARD] prompt.
- If the badge is currently stored, [BADGE EXIST] will be displayed on the lower display momentarily followed by the [ADD MORE? N] prompt.
- At the [ENTER ID] prompt, enter the ID to be associated with the badge. For one-pass outbound weighing using known tare values enter the same ID number that was assigned to the permanent vehicle record on the previous page.
- At the [ENTER USER NAME] prompt, enter the current owner of the badge.
- To add more badges to the badge table, press the "Y" key followed by the ENTER key at the [ADD MORE? N] prompt. If you are finished entering badges, press the ENTER key.

To delete a badge:

- Enter into Supervisor Mode.
- Enable the badge reader. (See above.)
- Press ENTER key at the [ADD BADGE? N] prompt.
- Press "Y" at the [DELETE BADGE? N] and then press the ENTER key.
- Enter the ID to be deleted at the [ENTER ID] prompt, followed by the ENTER key.
- Swipe the badge to be stored in the badge table at the [SWIPE CARD] prompt.
- If the ID does not exist, [BADGE NOT FOUND] will be displayed on the lower display momentarily followed by the [DELETE MORE? N] prompt.
- [BADGE DELETED] will be momentarily displayed followed by the [DELETE MORE? N] prompt. If you are finished deleting badges press the ENTER key.

Entering Comments

The VSX software provides up to 5 comment fields on the outbound ticket. The number of comments and the comment prompts are configured here. Comments are not stored in any transaction files and are only used for the driver to see on the outbound ticket.

Note: Comments are prompts and require the user to press enter to advance the transaction to the next step. When adding comment fields it is recommended that "press enter" be included at the end of the comment string.

To configure comments:

- Enter into Supervisor Mode.
- Press the ENTER key until [COMMENTS? N] is displayed.
- Press the "Y" key followed by the ENTER key at the [COMMENTS? N] prompt or to skip this procedure press the ENTER key.
- To enable comments, press the "Y" key followed by the ENTER key at the [ENABLE COMNTS? N] prompt or to disable comments press the ENTER key.
- At the [ENTER QTY 1 TO 5] prompt, key in the number of comment fields.

- Enter the first operator prompt at the [ENTER 1st PROMPT] display.
- Continue keying in the operator prompts for the number of prompts selected above.

Loop Detectors

Loop detectors are used in conjunction with traffic lights to sequence vehicle onto and off of the scale during an Inbound/Outbound operation. Loops are required for pre-zeroing the scale and bi-directional operation. (Refer to Chapter 4 for sequence of operation.)

- Enter into Supervisor Mode.
- Press the ENTER key until [LOOP DETECTORS? N] is displayed.
- Press the "Y" key followed by the ENTER key at the [LOOP DETECTORS? N] prompt or, to skip this procedure, press the ENTER key.
- At the [ARE YOU SURE? N] prompt, press the "Y" key followed by the ENTER key.
- To enable loop detectors, press the "Y" key followed by the ENTER key at the [ENABLE LOOPS? N] prompt or to disable loops press the ENTER key.

Remote Communication

The JAGXTREME's Ethernet port can be connected to a remote PC's Ethernet port via 10BASET RJ-45 Category 5 cabling (up to 100 meters) or other network connections such as wireless Ethernet, or fiber optic connection. Using FTP (file transfer protocol) transaction report files can be downloaded from the JAGXTREME to the remote PC (see shareware ftp program on UWT documentation CD). This information can then be imported into programs such as Excel or Access for further processing. The default IP address for the JAGXTREME terminal is 111.111.111.111. This address should be changed before installation into a functioning network. See the JAGXTREME technical manual, B15896200A, for further information on changing IP settings, and enabling FTP communication.

Set Time/Date

This feature allows for adjustment of the JAGXTREME time and date.

Time format HH:MM

Date format MM-DD-YY

- Enter into Supervisor Mode.
- Press the ENTER key until [SET TIME/DATE? N] is displayed.
- Press the "Y" key followed by the ENTER key at the [SET TIME/DATE? N] prompt or to skip this procedure press the ENTER key.
- At the [ARE YOU SURE? N] prompt, press the "Y" key followed by the ENTER key.
- At the [HOUR]? prompt, key in the current hour in 24-hour format.
Example: 1 PM = 13
- At the [MINUTES?] prompt, key in the current minutes.
- At the [SECONDS?] prompt, key in the current seconds.
- At the [DAY?] prompt, key in the day of the month.

- At the [MONTH?] prompt, key in the current numeric month value.
Example: November = 11
- At the [YEAR?] prompt, key in the current numeric year value.
Example: 2001 or 01

Set Password

This function allows the supervisor to change the Supervisor and Operator passwords. The supervisor password allows entry into Supervisor Mode. The operator password allows the operator to exit the program. After changing the password, the backdoor password will still be active.

To set passwords:

- Enter into Supervisor Mode.
- Press the ENTER key until [SET PASSWORD? N] is displayed.
- Press the "Y" key followed by the ENTER key at the SET PASSWORD? N] prompt or to skip this procedure press the ENTER key.
- At the [OPERATOR? N] prompt, press the "Y" key followed by the ENTER key to enter a new operator password or to skip this procedure press the ENTER key.
- At the [NEW PASSWORD] prompt, key in the new operator password.
- After the new operator password is entered you will be asked to confirm the operator password.
- At the [CONFIRM PASSWORD] prompt, re-type the new operator password.
- At the [SUPERVISOR? N] prompt, press the "Y" key followed by the ENTER key to enter a new supervisor password or to skip this procedure, press the ENTER key.
- At the [NEW PASSWORD] prompt, key in the new supervisor password.
- After the new supervisor password is entered, you will be asked to confirm the password.
- At the [CONFIRM PASSWORD] prompt re-type the new supervisor password.

Print Setup

This option allows the supervisor to print the current application settings out of Com port 2.

To print the supervisor settings:

- Enter into Supervisor Mode. (See Supervisor Mode above.)
- Press the ENTER key until [PRINT SETUP? N] is displayed.
- Press the "Y" key followed by the ENTER key at the [PRINT SETUP? N] prompt or to skip this procedure press the ENTER key.

INBOUND TABLE SIZE	n registers
QUICK TABLE SIZE	n registers
OUTBOUND TABLE SIZE	n registers
PERMANENT TABLE SIZE	n registers
COMMODITY TABLE SIZE	n registers
AVAILABLE MEMORY	n%
COMMODITIES ENABLED	Y/N
BADGE ENABLED	Y/N
COMMENTS ENABLED	Y/N
NUMBER OF COMMENTS	1,2,3,4 or 5
PROMPT 1	PROMPT
PROMPT 2	PROMPT
PROMPT 3	PROMPT
PROMPT 4	PROMPT
PROMPT 5	PROMPT
LOOPS ENABLED	Y/N
HOST ENABLED	Y/N
HOST IP ADDRESS	XXX.XXX.XXX.XXX

Reset to Factory

This feature resets the Supervisor Mode settings back to factory default.

To reset the supervisor settings to factory defaults:

- Enter into Supervisor Mode.
- Press the ENTER key until [RESET FACTORY? N] is displayed.
- Press the "Y" key followed by the ENTER key at the [RESET FACTORY? N] prompt or to skip this procedure press the ENTER key.
- At the [ARE YOU SURE? N] prompt press the "Y" key followed by the ENTER key.
- RESETTING followed [O FACTORY!] will be displayed while the settings are reset to factory.

METTLER TOLEDO UWT Weighing Terminal Software Guide

The following are the current factory settings:

METTLER TOLEDO SOFTWARE VSX REV. 4.0.0

```
=====
INBOUND TABLE SIZE      100
QUICK TABLE SIZE        100
OUTBOUND TABLE SIZE     100
PERMANENT TABLE SIZE    100
COMMODITY TABLE SIZE    10
AVAILABLE MEMORY         68%
COMMODITIES ENABLED      N
BADGE ENABLED            N
COMMENTS ENABLED        N
NUMBER OF COMMENTS
PROMPT 1                 ""
PROPMT 2                 ""
PROMPT 3                 ""
PROMPT 4                 ""
PROMPT 5                 ""
LOOPS ENABLED            N
HOST ENABLED             N
HOST IP ADDRESS          111.111.111.111
```

Exit Setup

This step is used to exit the Supervisor Mode and return to the Time and Date (stand-by mode) display.

To exit supervisor setup:

- Enter into Supervisor Mode.
- Press the ENTER key until [EXIT SETUP? N] is displayed.
- Press the "Y" key followed by the ENTER key at the [EXIT SETUP? N] prompt or to skip this procedure press the ENTER key.
- [PLEASE WAIT...] will be displayed while the settings are saved upon exiting.

4

Operating VSX Software

General Operating Instructions

This section provides general information needed to operate the UWT and JAGXTREME terminal using VSX software, including step-by-step instructions on how to perform the following basic tasks:

- Process vehicles.
- Process Inbound/Outbound transactions.
- Print reports.
- Print Inbound vehicles that have not been recalled from the Inbound table.
- Print Permanent vehicle accumulator.
- Print transaction (outbound vehicle) database.
- Print commodity accumulation data.
- Print total scale accumulators.

Units of Operation

The factory default unit setting is lb. If the desired unit of measure is kg then the program needs to be exited (via pressing E), then the unit of measured changed via pressing the Function and Select keys, and selecting the Switch Units mode. Refer to the JAGXTREME user manual, (*)15894100A. **Units must be set to lb or kg for proper VSX program operation! The print template literal for units must be changed to "kg, otherwise "lb" will print after the kg weight value. See Chapter 5 for further details.**

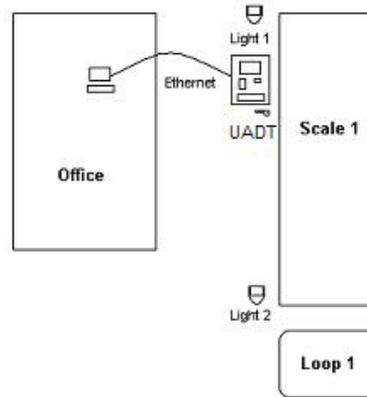
Inbound/Outbound Weighing

The Inbound/Outbound weighing mode is most commonly used with random, over-the-road haulers that are delivering or picking up product. The vehicle is weighed twice, once inbound and once outbound. The inbound weight is stored in a temporary register along with the user ID, inbound time and date. When the outbound vehicle is weighed, the stored inbound weight is recalled from memory and used to calculate the net weight of the vehicle.

Net sign correction permits a temporary memory register to be used for both shipping and receiving. When the inbound weight is recalled from memory, the VSX software will automatically select the higher value of the two weights (the current weight on the scale or the inbound weight recalled from memory) as the gross weight. The lower weight value becomes the tare weight and the difference between the two is a positive net weight.

Unattended Operation

The JAGXTREME terminal is configured for unattended operation and mounted through the UWT enclosure door. A QWERTY keyboard is connected to the JAGXTREME terminal and mounted to the enclosure door below the terminal. An optional thermal printer and proximity card reader may be included. The thermal printer prints a ticket through a slot in the door. The scale load cell cabling, along with optional loops, lights and gates are connected to the terminal. Refer to the example configuration shown here:



Inbound:

- Drive the inbound vehicle onto the scale. Once the 2000 lb or 2000 kg threshold is reached, the JAGXTREME lower display will toggle between [INBOUND PRESS 1] and [OUTBOUND PRESS 2]. If Badge Enable is set to "Y" in the Supervisor Mode, the display will also toggle [SWIPE BADGE].
- If the driver has been assigned a badge, hold the badge 6" from the front of the reader (3" x 5" dark gray with red LED). The reader will beep, and the LED will briefly change to amber. The [PROCEED INBOUND] followed by [EXIT SCALE NOW] prompt will appear on the lower display. An inbound ticket is printed.
Note: An inbound ticket print template must be created in order to print a ticket. See chapter 5.
- If no badge has been assigned, then Press 1, and the VSX software will then assign an ID number (100 to 999) and briefly display it on the lower display. [Auto ID = 102].
- The [EXIT SCALE NOW] prompt is displayed while the inbound ticket is printed.

Outbound:

- Drive the outbound vehicle onto the scale.
- Once the 2000 lb or kg threshold is reached, the JAGXTREME lower display will toggle between [INBOUND PRESS 1] and [OUTBOUND PRESS 2]. If [BADGE ENABLE] is set to "Y" in Supervisor Mode, the display also toggle [SWIPE BADGE].
- If the driver has been assigned a badge, hold it 6" from the front of the reader (3" x 5" dark gray with red LED). The reader will beep, and the LED will briefly change to amber. [PROCEED OUTBOUND] followed by [EXIT SCALE NOW] will appear on the lower display. An outbound ticket will be printed.
- If no badge has been assigned, press 2. The VSX software will display [ENTER ID]. Enter the ID number exactly as it was printed on the inbound ticket, and then press ENTER.
- If commodities are enabled, the [SELECT COMMODITY] prompt is briefly displayed and then the first commodity name is displayed. To select the

Chapter 4: Operating VSX Software Inbound/Outbound Weighing

commodity, press ENTER. To display the next commodity, press the space bar, or press a character to search for the first character in the name. When the appropriate commodity is displayed, press the ENTER key. The outbound ticket is then printed. **Note: An outbound ticket print template must be created in order to print a ticket.**

- If you do not wish to use a commodity for all transactions, you must enter a commodity named NONE with a conversion factor of 1 in Supervisor Mode.
- The [EXIT SCALE NOW] prompt is displayed while the outbound ticket is printed.
- NOTE: This also indicates the current scale with either A or B when two platform scales are used.

Loops and Lights

The loops and lights are used to notify the driver when to pull on and off of the scale. The lights are controlled by the 5vdc TTL outputs on the JAGXTREME controller PCB. These outputs are always active. They operate differently, depending on whether or not the loops were enabled in Supervisor Mode.

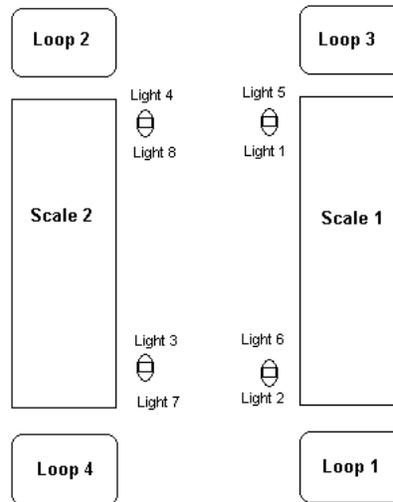
Loops and lights must be wired to the following inputs and outputs. Disregard any unused loops or lights in your application.

In1 = Unattended	Out1 = Light 1
In2 = Loop 1	Out2 = Light 2
In3 = Loop 2	Out3 = Light 3
In4 = Loop 3	Out4 = Light 4
In5 = Loop 4	Out5 = Light 5
In6 = Inbound Button	Out6 = Light 6
In7 = Outbound Button	Out7 = Light 7
Out8 = Light	

NOTE 2: Loops are required for pre-zeroing the scale and bi-directional operation.

NOTE 3: Loops and lights used with multiple scales or bi-directional lights require a multifunction card.

The following diagram illustrates how loops and lights should be laid out for maximum usage. Disregard any unused loops or lights in your application.



NOTE 4: Direction 1 Δ Direction 2 ∇

Loops Disabled

1 or 2 scales, single direction only and no pre-zeroing, lights 5-8 disabled.

Scale 1

Scales empty, Lights 1 through 4 set to green

Truck starts on scale 1, Lights 2, 3 and 4 turn red

Motion stops, Light 1 turns red

Process vehicle, Light 1 turns green

Truck starts off scale, Light 1 turns red, lights 3 and 4 turn green

Truck off scale 1

Scale 2

Scales empty, Lights 1 through 8 set to green

Truck starts on scale 2, Lights 1, 2 and 4 turn red

Motion stops, Light 3 turns red

Process vehicle, Light 3 turns green

Truck starts off scale, Light 3 turns red, lights 1 and 2 turn green

Truck off scale 2

Loops Enabled

1 or 2 scales, single or bi-directional and scale is pre-zeroed, all lights enabled.

Scale 1 direction 1

Scales empty, Lights 1 through 8 set to red

Truck pulls on loop 1, zero scale 1, Lights 1 and 2 turn green

Truck starts on scale, Light 2 turns red

Motion stops, Light 1 turns red

Process vehicle, Light 1 turns green

Truck starts off scale, Light 1 turns red

Truck off scale 1

Scale 1 direction 2

Scales empty, Lights 1 through 8 set to red

Truck pulls on loop 3; zero scale 1, Lights 5 and 6 turn green

Truck starts on scale, Light 5 turns red

Motion stops, Light 6 turns red

Process vehicle, Light 6 turns green

Truck starts off scale, Light 6 turns red

Truck off scale 1

Scale 2 direction 1

Scales empty, Lights 1 through 8 set to red

Truck pulls on loop 4; zero scale 2, Lights 7 and 8 turn green

Truck starts on scale, Light 7 turns red

Motion stops, Light 8 turns red

Process vehicle, Light 8 turns green

Truck starts off scale, Light 8 turns red

Truck off scale 2

Scale 2 direction 2

Scales empty, Lights 1 through 8 set to red

Truck pulls on loop 2, zero scale 2, Lights 3 and 4 turn green

Truck starts on scale, Light 4 turns red

Motion stops, Light 3 turns red

Process vehicle, Light 3 turns green

Truck starts off scale, Light 3 turns red

Truck off scale 2

Repeat Print

This allows the operator to print a duplicate ticket of the last process. If literal 21 is placed on the ticket format, the word "DUPLICATE" will be printed on the duplicate ticket only.

- Press the "P" key to print a duplicate ticket.
- [Printing...] will be displayed while the duplicate ticket is printed.

Check Memory

- The VSX software is capable of storing a user-defined number of inbound vehicles and transactions. From the [TIME AND DATE] display, the following procedure will display the number of available registers for both inbound and transaction memory.
- Press "M" to check the memory for available locations. After [Checking Memory] is displayed, the number of remaining inbound memory locations will be displayed followed by the number of remaining transaction memory locations.

Printing Reports

The VSX software allows the supervisor to print out various reports. JAGXTREME VSX terminals provide five printed reports to help manage data stored in memory: inbound, permanent vehicle, transaction, commodity and scale accumulator reports. Reports can be printed locally via the optional ticket printer, or can be remotely communicated via FTP transfer of report files to another PC, connected to the JAGXTREME. A Windows PC FTP utility can be used to transfer files. See the UWT user manual (part number 16672300A) for further details.

Inbound Report

The Inbound report prints all inbound stored vehicles that have not yet been recalled.

To print the Inbound report:

- At the [Time and Date] display, press the "P" key
- At the [PRINT REPORTS? N] prompt, press "Y" key.
- Press "Y" and then ENTER at the [INBOUND? N] prompt. The Inbound report will be printed.

Permanent Vehicle Report

The Permanent vehicle report prints all permanent vehicle records programmed in permanent memory along with the accumulated weight and number of loads.

To print the permanent vehicle report:

- At the [Time and Date] display, press the "P" key
- At the [PRINT REPORTS? N] prompt, press "Y" key.
- Press ENTER until [PERMANENT? N] is displayed.
- Press "Y" and then ENTER, and the permanent vehicle report will be printed.

Transaction/Outbound Report

The transaction report prints the transaction data stored in the transaction table. Note, a column is included for commodity weight * commodity factor. (ie. to assign \$ value)

To print the transaction report:

- At the [Time and Date] display, press the "P" key
- At the [PRINT REPORTS? N] prompt, press "Y" key.
- Press ENTER until [TRANSACTION? N] is displayed.
- Press "Y" and then ENTER. The transaction report will be printed.

Commodity Table Report

The commodity table report will print the commodity name, number of loads, accumulated weight, conversion factor and total value.

To print the commodity report:

- At the [Time and Date] display, press the "P" key
- At the [PRINT REPORTS? N] prompt, press "Y" key.
- Press ENTER until [COMMODITY? N] is displayed.
- Press "Y" then ENTER and the commodity report will be printed.

Scale Accumulator Report

The scale accumulator accumulates the total weight across the scale. The scale accumulation report prints the total weight stored in the scale accumulator. (The accumulators do not get updated during Quick Print or Gross Weight operations)

To print the scale accumulator report:

- At the [Time and Date] display, press the "P" key
- At the [PRINT REPORTS?] N prompt, press "Y" key.
- Press ENTER until [SCALE ACCUMS? N] is displayed.
- Press "Y" then ENTER and the scale accumulator report will be printed.

5

Configuring Tickets

JAGXTREME OS Setup

To configure tickets (inbound/outbound/gross weight) the setup mode of the JAGXTREME must be accessed.

- From the time and date display, press "E" on the QWERTY keyboard.
- At the [EXIT PROGRAM?] prompt, enter "Y".
- Enter the supervisor password.
- Press "F" followed by SELECT "→←" and scroll to the message [Enter Setup].
- Press the green ENTER key.
- Scroll to the "Configure Serial" program block and press ENTER.
- Scroll to the "Configure Template" and press ENTER.

The VSX software uses custom print connections to print Inbound and Outbound tickets. Configuration of outbound tickets, with user-specific information such as company name, address, etc. can be made via entering comments. Further modification to tickets and reports requires the user to edit the Serial Interface Program Block. Consult the JAGXTREME technical manual, (*)15896200A, for further details. The information below is provided for customizing printed tickets.

Ticket Assignments

The following custom prints will be initiated for each associated action.

Custom Print 3 = Inbound Ticket

Custom Print 4 = Outbound Ticket

Assignable Variables

Each ticket can be designed to meet the customer's requirements by creating templates. The templates can then be associated with the appropriate custom print connection. Use the following variables to create your templates.

<u>VARIABLE</u>	<u>Length</u>	<u>VARIABLE</u>	<u>Length</u>
VAR01 = Gross Wt.	8	VAR17 = Comment 2	16
VAR02 = Tare Wt	8	VAR18 = Comment 3	16
VAR03 = Net Wt	8	VAR19 = Comment 4	16
VAR04 = ID	8	VAR20 = Comment 5	16
VAR05 = Time	8	LIT12=Prompt for comment 1	16
VAR06 = Date	10	LIT13=Prompt for comment 2	16
VAR07 = Commodity	16	LIT14=Prompt for comment 3	16
VAR08 = Factor	8	LIT15=Prompt for comment 4	16
VAR09 = Value	8	LIT16=Prompt for comment 5	16
VAR10 = Units	6	LIT21=Duplicate Ticket	16
VAR11 = Perm Tare Wt	8		
VAR12 = Perm Accum	8		
VAR13 = Perm Loads	3		
VAR14 = Inbound Time	8		
VAR15 = Inbound Date	10		
VAR16 = Comment 1	16		

Typical Inbound Template (custom print 3)

E001 – lit01	literal1 = "METTLER TOLEDO"	METTLER TOLEDO
E002 – lf/cr		1900 Polaris Parkway
E003 – lit02	literal2 = "1900 Polaris Parkway"	Columbus, OH 43240
E004 – lf/cr		
E005 – lit03	literal3 = "Columbus, OH 43240"	21 Aug 2000 13:57:00
E006 – lf/cr	02	ID number 234
E007 – jag19 L 12	date field	32,000 lbs
E008 – jag20 R 12	time field	
E009 – lf/cr		
E010 – lit04	literal4 = "ID number"	
E011 – var04	id field	
E012 – lf/cr		
E013 – var01 R 10	gross weight field	
E014 – wt103 R 3	weight units field	
E015 – lf/cr		

Typical Outbound Template (custom print 4)

E001 – lit01	literal1 = "METTLER TOLEDO"	METTLER TOLEDO
E002 – lf/cr		1900 Polaris Parkway
E003 – lit02	literal2 = "1900 Polaris Parkway"	Columbus, OH 43240
E004 – lf/cr		
E005 – lit03	literal3 = "Columbus, OH 43240"	21 Aug 2000 13:57:00
E006 – lf/cr	02	Jones Concrete
E007 – jag19 L 12	date field	#2 Gravel
E008 – jag20 R 12	time field	64,300 lbs Gross
E009 – lf/cr		32,000 lbs Tare
E010 – var14	1 st comment	32,300 lbs Net
E011 – lf/cr		
E012 – var07	commodity	
E013 – lf/cr		
E014 – var01 R 10	gross weight field	
E015 – wt103 R 3	weight units field	
E016 – lit05	literal5 = "Gross"	
E017 – lf/cr		
E018 – var02 R 10	tare weight field	
E019 – wt103 R 3	weight units field	
E020 – lit06	literal6 = "Tare"	
E021 – lf/cr		
E022 – var03 R 10	net weight field	
E023 – wt103 R 3	weight units field	
E024 – lit07	literal7 = "Net"	
E025 – lf/cr		



METTLER TOLEDO

1900 Polaris Parkway
Columbus, Ohio 43240

Phone: (US and Canada) (800) 786-0038

(614) 438-4511

(All Other Countries)

(614) 438-4888

www.mt.com

16841500A

(6/03)

METTLER TOLEDO® and JAGXTREME are registered trademarks of Mettler-Toledo, Inc.

UWT is a trademark of Mettler-Toledo, Inc. All other brand or product names are trademarks or registered trademarks of their respective companies.

©2003 Mettler-Toledo, Inc.

Printed in U.S.A.



16841500A