METTLER TOLEDO

UWTV

VSU Software

User's Guide

JAGXTREME™ Vehicle Software

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(08/07).01

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PRECAUTIONS

- READ this manual BEFORE operating or servicing this equipment and FOLLOW these instructions carefully.
- SAVE this manual for future reference.

WARNING!

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

WARNING!

TO AVOID DAMAGE TO THE PCB OR LOAD CELL, REMOVE POWER FROM THE UWT TERMINAL AND WAIT AT LEAST 30 SECONDS BEFORE CONNECTING OR DISCONNECTING ANY HARNESS.

CAUTION

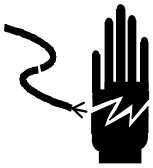
BEFORE CONNECTING/DISCONNECTING ANY INTERNAL ELECTRONIC COMPONENTS OR INTERCONNECTING WIRING BETWEEN ELECTRONIC EQUIPMENT ALWAYS REMOVE POWER AND WAIT AT LEAST THIRTY (30) SECONDS BEFORE ANY CONNECTIONS OR DISCONNECTIONS ARE MADE. FAILURE TO OBSERVE THESE PRECAUTIONS COULD RESULT IN DAMAGE TO OR DESTRUCTION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

CAUTION

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES.

WARNING!

THE UWT TERMINAL IS NOT INTRINSICALLY SAFE! DO NOT USE WITHIN AREAS CLASSIFIED AS HAZARDOUS DIVISION 1 OR ZONE 0/1 BECAUSE OF COMBUSTIBLE OR EXPLOSIVE ATMOSPHERES.



WARNING!

WHEN THIS EQUIPMENT IS INCLUDED AS A COMPONENT PART OF A SYSTEM, THE RESULTING DESIGN MUST BE REVIEWED BY QUALIFIED PERSONNEL WHO ARE FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF ALL COMPONENTS IN THE SYSTEM AND THE POTENTIAL HAZARDS INVOLVED. FAILURE TO OBSERVE THIS PRECAUTION COULD RESULT IN BODILY HARM AND/OR PROPERTY DAMAGE.

Contents

Chapter 1.0

Introduction

Software Description

VSU software is a JagBasic program that processes inbound and outbound vehicles on a single platform full length scale in unattended applications. It is designed for use with the Mettler Toledo UWT unattended scale terminals.

Software Features:

- Current gross weight displayed when vehicle is on the scale.
- 16 character alpha numeric display for operator prompting.
- Manually assignable inbound ID or swipe proximity badge ID entry.
- Reprint last ticket with “Duplicate” printed on ticket.
- Print reports. (Outbound transactions, Permanent Vehicles, Inbound Queue)
- Supports RFID proximity badge reader.
- Monitors loops and controls lights for either pre-zero or non-pre-zero operation.
- User adjustable weight threshold for scale activation.
- Comment field for inbound and outbound transactions.
- User adjustable maximum weight threshold allowed for transaction/ticket.
- Photo eye input for truck position verification.
- Zero scale push button can be remotely mounted away from terminal.
- All files in comma delimited text format for entry into spreadsheet or text application.
- Storage of up to 10,000 outbound transactions.
- User adjustable scale zero tolerance that is checked after each weighing to ensure the scale is at/near zero for the next transaction.
- User adjustable selection table for commodities or other information.
- Assignable tare for each permanent vehicle allows for one pass weighing.
- Sign corrected gross weight function.

File Structure

The following files are used during various inbound and outbound operations.

- The **Inbound** file stores manually or badge assigned vehicles by ID number, until they are retrieved during an outbound operation. (process1.txt)
- The **Permanent** table stores vehicles by their predefined ID with their associated tare weight, and badge data. This file may contain up to 200 vehicles. (perm.dat)
- The **Transaction** file stores outbound transactions, after 10,000 records a new file is started and the old records are deleted. (records should be copied/cleared by the operator before this limit is reached) (ScaleLog.csv)

Setup Mode Password Protection

The VSU Software provides security to protect against unauthorized people modifying application critical settings. The setup password allows authorized personnel to enter setup mode to configure the application critical settings and print reports. The default setup password is: **865336.**

JagXTREME Display

Cursors are used to indicate which legends are currently active. JagXTREME terminals feature the following legends:

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.
- **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.

Consult the JAGXTREME technical manual, (*)15896200A, for further details.

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 and the four alpha characters indicate which internal scale is currently selected.
- **Sum**
  The “SUM” enunciator indicates that the current display is the sum of the internal scales.
- **W_1,W_2,W_3**
  These three enunciators indicate which weighing range the indicator is currently operating in.

Keypad/Keyboard Operation

The JagXTREME Terminal VSU software is intended for use with a metal 62 key QWERTY keyboard. The keyboard has a mini din connector connected to the JagXTREME scale instrument mounted on the UWTV terminal door.

Consult the JagXTREME technical manual, (*)15896200A, for further details.

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For your notes

Chapter 2.0

Software Installation

This chapter covers

- Downloading BAS Files
- Startup Procedure

Downloading BAS Files

VSU software consists of three JagBasic files. **File1.bas** is the main program that processes vehicles inbound and outbound. The file, **Perm.dat,** contains the truck ID, tare weight, and RF badge data for each truck. The file **UWTV.ini** is a text file that defines the software options and settings for the individual installation. All three files **MUST** be loaded into the JagXTREME ram disk prior to operation.

Startup Procedure

Appling 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 **Metter Toledo** is displayed on the lower display.

The software part number and revision are displayed on the lower display briefly followed by

- - - JagBASIC - - -.

Starting VSU Software

At startup the lower display will display the settings read from the UWTV.ini file. This useful in diagnosing problems with the terminal settings. The lower display will then continuously scroll through the message "**Mettler-Toledo VSU, Waiting for Truck.....**"

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Chapter 3.0

Setup Mode

This chapter covers

- Accessing Setup
- Setup Menus
- Editing

Accessing Setup Mode

Setup mode is password protected to protect the application critical settings.

To enter in to Setup Mode perform the following steps:

From the scrolling message display press **ESC** then **ENTER**, then **ESC** again on the JagXTREME keyboard.

Use the SELECT key or any QWERTY key except ENTER to navigate the menu choices.

Key in the setup password (**865336**) on the QWERTY or JagXTREME keyboard followed by the ENTER key at the PASSWORD prompt.

Setup Mode Menus

Initialize Files

WARNING: All data in each file will be lost when it is initialized!

To clear the inbound or outbound truck data files perform the following:

1. At the "**Clear_In_File**", "**Clear_Out_File**", or "**Clear_Perm_File**" prompts, press the enter key. At the "**Password?**" prompt, enter the setup password. (**865336**)
2. To execute the procedure at the "**Clear_In_File**", "**Clear_Out_File**" or "**Clear_Perm_File**" prompt, press the ENTER key.
3. The display will prompt "**Want 2 clr File?**"
4. The lower display will then alternate "**Enter to confirm**" and "**ESC to abort**"
5. Pressing the ENTER key will clear the file; the ESC key will abort from this menu.
6. The JagXTREME will then resume the scrolling start up message.

Editing Permanent File (perm.dat)

The permanent truck file (perm.dat) can be used for storing tare weights of vehicles assigned a permanent ID and RFID badge data for each truck. If the trucks are all inbound and outbound and no RFID badges are used this file can be empty. If RFID badges are used and/or the trucks have pre-determined tare weights the perm.dat file must contain truck data.

To add a permanent vehicle:

1. Enter the setup mode and use the SELECT key to navigate to the "**Edit_Perm_File**" prompt.
2. Press the ENTER key and the "**Add_Perm**" sub menu will display.
3. Press the ENTER key followed by the setup password.
4. The message "**Add Permanet? N**" will display.
5. Use the SELECT key or any QWERTY keyboard key to change the prompt to "**Add Permanent? Y**" then press ENTER.
6. At the prompt "**PermID:** "use the QWERTY keyboard to enter a truck ID up to 8 characters. (VAR04)
7. At the display prompt "**Tare?** "enter the tare weight for that truck. (decimal point is allowed) (VAR11)
8. At the prompt "**Badge:?**" enter a name to associate to the badge. (VAR12)
9. If the badge reader is enabled the display will prompt "**Swipe Card**".
10. If this truck is to be assigned a card then pass the card in front of the reader.
11. If there is no badge for this truck, then press ESC.
12. The display will prompt "**Record Added!**"
13. Proceed with the next entry to step #4.

To delete a permanent vehicle:

1. Enter the setup mode and use the SELECT key to navigate to the "**Edit_Perm_File**" prompt.
2. Press the ENTER key and the "**Del_Perm**" sub menu will display.
3. Press the ENTER key followed by the setup password.
4. The message "**Del Permanent? N**" will display.
5. Use the SELECT key to change the prompt to "**Del Permanent? Y**" then press ENTER.
6. At the prompt "PermID: ", use the QWERTY keyboard to enter a truck ID up to 8 characters.
7. The display will prompt "**Record Deleted !**"
8. Proceed with the next delete to step #2.

Note: Another option for entering permanent truck data is to use a text editor (like Notepad) and add or delete records in the perm.dat file, then copy this file back to the JagXTREME via FTP.

Important !!!

Once the perm.dat file is setup properly, copy the file via FTP to a secure location. The file system on the JagXTREME is a RAM disk and system crashes may corrupt the files. The backup file can then be uploaded to the terminal via FTP.

Editing the UWTV.ini file

The UWTV.ini file contains the system settings for various options that may be used for a particular installation. The data order in this file is important, so keep a backup of this file for each installation. See Chapter 7 for additional details of the UWTV.ini file.

Set Time/Date

Allows for adjustment of the JagXTREME time and date.

Time format HH:MM

Date format MM-DD-YY

Change Time

The time can be changed via entering setup mode and then using the SELECT or space bar key until [**Change_Time**] is displayed. The time can then be entered using 24 hour format.

Change Date

The date can be changed via entering setup mode and then using the SELECT or space bar key until [**Change_DATE**] is displayed. Press ENTER to change the day, month, and year.

Exit JagBASIC.

This step is used to exit the JagBASIC Mode and return to the standard JagXTREME operation. This would be used to enter the normal JagXTREME operating screen to make changes to the system settings.

To exit JagBASIC mode:

- Enter into Setup Mode press the ENTER key until “Exit Program” is displayed.
- Press the ENTER key followed by the setup password (**865336**). To skip this procedure press the ESC key.

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Chapter 4.0

Software Operation

General Operating Instructions

This section provides general information that you will need to operate the JagXTREME industrial terminal with VSU software. Including step-by-step instructions on how to perform the following basic tasks:

Process Vehicles:

- Process Inbound/Outbound transactions
- Process one pass transactions using a stored tare weight

Print Reports:

- Print Inbound vehicles that have not been recalled from the Inbound table.
- Print transaction database.
- Print the vehicle data in the perm.dat file

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 VSU 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 sign corrected gross weight. The lower weight value becomes the tare weight and the difference between the two is a positive net weight. The sign corrected gross weight is stored at VAR08 and the tare weight is stored in VAR13. These are in addition to the inbound weight (VAR02) and outbound weight (VAR01). The net weight is always stored in VAR03.

Idle display of the VSU software

Basic Inbound (no loops):

1. Drive the inbound vehicle onto the scale.
2. Once the threshold is reached, the JagXTREME lower display will prompt "**EnterID:**". If the badge reader is enabled the display will also toggle: "**Or Swipe Badge**"
3. Once the ID is typed in or the badge is read, the "perm.dat" file will be searched for the ID or badge entered. If the ID is found the tare value for that truck will be checked. For a tare set to zero the VSU software will designate this truck for both inbound and outbound weighing (any truck that has a tare weight in the "perm.dat" file that is not zero will be designated an outbound truck). If the truck ID is not already in the Inbound record, the display will shown "**Process Inbound**"
4. If the "Driver Comments" are enabled in the "UWTV.ini" file, the display will prompt "**Notes:**" and the driver can enter a brief note that can be printed on the ticket.
5. If the "Printer Prompts" are enabled in the "UWTV.ini" file, the display will prompt: "**Prs ENT 4 Ticket**". When the enter key is pressed the template 3 print flag is set and the display will prompt: ""**Is Ticket OK:Y**". If the driver needs a duplicate ticket he can change the Y to N with the SELECT key or any key on a QWERTY keyboard and press enter. The template 3 print flag will be set again to initiate the duplicate ticket print.
6. If comments and print prompt options are not enabled the template number 3 flag will be set to activate the inbound ticket print with no driver intervention.
7. The display will scroll "**Inbound Complete Exit Scale….**" after the inbound ticket is printed.
8. Once the truck leaves the scale the JagXTREME will return to the scrolling 'Waiting' prompt.

Basic Outbound (no loops):

1. Drive the outbound vehicle onto the scale.
2. Once the threshold is reached, the JagXTREME lower display will prompt: "**EnterID:**" If the badge reader is enabled, the display will alternate "**Or Swipe Badge**".
3. Once the ID is typed in or the badge is read, the perm.dat file will be searched for the ID or badge entered. If the ID is found the tare value for that truck will be checked. For a tare set to anything but zero the VSU software will designate this truck for outbound weighing and subtract the tare weight from the outbound weight for the net weight. (any truck that has a tare weight in the perm.dat file that is not zero will be designated an outbound truck) The display will shown "**Process Outbound**"
4. If the "Driver Comments" are enabled in the UWTV.ini file the display will prompt: "**Notes:**", the driver can enter a brief note that can be printed on the outbound ticket as well as stored in the transaction file.
5. If the "Printer Prompts" are enabled in the UWTV.ini file the display will prompt: "**Prs ENT 4 Ticket**". When the enter key is pressed the template 4 print flag is set and the display will prompt: "**Is Ticket OK:Y**". If the driver needs a duplicate ticket he can change the Y to N with the SELECT key and press enter. The template 4 print flag will be set again to initiate the duplicate ticket print.
6. If comments and print prompt options are not enabled the template number 4 flag will be set to activate the outbound ticket print with no driver intervention.
7. The display will scroll "**Outbound Complete Exit Scale….**" after the outbound ticket is printed.
8. Once the truck leaves the scale the JagXTREME will return to the scrolling 'Waiting' prompt.

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 Setup Mode.

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

In1 = Inbound Loop	Out1 = Inbound Green Light
In2 = Outbound Loop	Out2 = Inbound Red Light

In3 = Zero Scale ButtonOut3 = Outbound Green Light

In4 = Photo Eye Out4 = Outbound Red Light

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

Below is a description of the various capabilities of loops and lights using VSU software.

Loops Enabled:

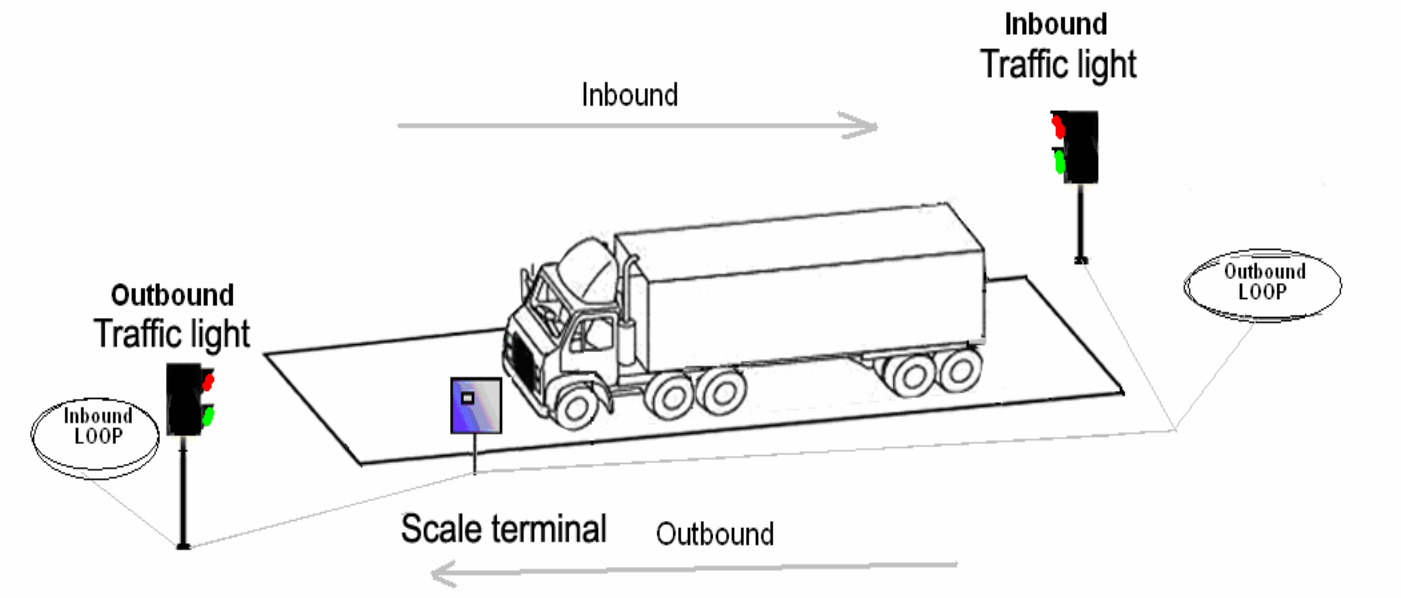
Single or bi-directional and scale is pre-zeroed, all lights enabled

Inbound

1. Scale empty, inbound/outbound red lights on
2. Truck pulls on inbound loop, zero scale, inbound green light on, red off
3. Truck starts on scale, inbound green light off, inbound red on
4. Motion stops, weight is logged
5. After all vehicle data is processed, inbound red off, green flashing
6. Truck off scale, inbound red light on, green off.

Outbound

1. Scale empty, Lights set to red
2. Truck pulls on outbound loop, zero scale, outbound light turns green
3. Truck starts on scale, outbound light turns red
4. Motion stops, weight is logged.
5. Process vehicle, outbound light flashes green
6. Truck off scale, outbound light turns red



Chapter 5.0

Print Reports

JagXTREME VSU terminals provide printed reports to help manage data stored in memory: inbound, permanent vehicle, and transaction reports.

Inbound Report

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

To print the Inbound report:

- Enter the Setup mode (**ESC, ENTER**, then **ESC** key)
- Use the SELECT key to navigate to the "**Print_In_File**" prompt.
- Enter the setup password (**865336**).
- The report showing all trucks in the inbound queue will print on the terminal printer connected to the first DEMAND serial port. (normally COM2)

Permanent Vehicle Report

The Permanent vehicle report prints all permanent vehicle records programmed in the permanent truck data file. (perm.dat)

To print the permanent vehicle report:

- Enter the Setup mode (**ESC, ENTER**, then **ESC** key).
- Use the SELECT key to navigate to the "**Edit_Perm_File**" prompt and press ENTER.
- Use the SELECT key to navigate to the "**Print_Perm**" prompt.
- Press ENTER followed by the setup password (**865336**).
- The report showing all trucks that are currently programmed will print on the terminal printer on the first DEMAND serial port. (normally COM2)

Transaction Report

The transaction report prints the transaction data stored in the transaction table.

To print the transaction report:

- Enter the Setup mode (**ESC, ENTER**, then **ESC** key).
- Use the SELECT key to navigate to the "**Print_Out_File**" prompt.
- Enter the setup password (**865336**). **Template 2 will be triggered.**
- The report will print on the terminal printer port assigned to 'Cust Prt 2'

Retrieving Truck Transaction Reports and Deleting Transaction Table

The following procedure is recommended for downloading the transaction report to a PC.

The file can be retrieved via ftp as follows:

- Exit the VSU JagBASIC Software program
- Connect a PC to the JagXTREME Ethernet port via a crossover cable or via a network HUB or switch.
- Using any FTP program, establish an FTP connection to the JagXTREME (default IP address = 111.111.111.111).
- Import the ScaleLog.csv file to a spreadsheet or other program.

When the data has been retrieved, send an empty ScaleLog.csv file back to the JagXTREME. This will overwrite the ScaleLog.csv file on the JagXTREME and prepare the terminal for more transactions.

Chapter 6.0

Configure Tickets

JagXTREME OS Setup

VSU software uses all five custom print templates to print Inbound, Outbound and Gross Weight tickets. Custom print templates can be assigned to any com port adding templates under the serial interface of the JagXTREME operating software.

Ticket assignments

The custom prints will be initiated for each associated action.
Custom Print 1 = Header for transaction report print.
Custom Print 2 = Transaction report printing (repeated for each record)
Custom Print 3 = Inbound Ticket (default ticket pre-programmed by MT)
Custom Print 4 = Outbound Ticket (default ticket pre-programmed by MT)
Custom Print 5 = Footer for the transaction report print.

Assignable Variables

Each ticket can be designed to meet customer requirements by creating or modifying templates. The templates can then be associated with the custom print template 2, 3 and 4 connection. Use the following variables to create your templates.

VARIABLE	Length
VAR01 = Outbound Gross Wt.	8
VAR02 = Inbound Gross Wt.	8
VAR03 = Outbound Net Wt	8
VAR04 = Truck ID	8
VAR05 = Outbound Time	8
VAR06 = Outbound Date VAR07 = Transaction Number VAR08 = Sign Corrected Gross VAR09 = Driver Select (commodity)	11 8 8 16
VAR10 = Weight Units	3
VAR11 = Manual Perm Tare = * VAR12 = Badge Name VAR13 = Sign Corrected Tare	8 10 8
VAR14 = Inbound Time	8
VAR15 = Inbound Date	11
VAR16 = Net Weight in Tons	8
VAR17 = Outbound Notes	8

Default Inbound Template (custom print 3)

```
Mettler-Toledo
Unattended
Note:
DATE:08 Oct 2004

TIME:  12:03
ID:    TELMAR21

Wt:    26354 lb
```

Default Outbound Template (custom print 4)

```
Mettler-Toledo
Unattended
Note:
TIME:  12:15
DATE:08 Oct 2004

ID:     TELMAR21
OUT WT  75143 lb
IN WT   26354 lb
NET     48789 lb
```

Print Templates

To configure tickets (gross weight) the setup mode of the JAGXTREME must be accessed. (Web browser interface to the JagXTREME is a good way to make templates)

- Exit the VSU Software program (ESC – ENTER – ESC)
- Select 'EXIT PROGRAM' (pass code 865336)
- The Keyboard or Web Browser JagXTREME setup can now be accessed.

Note: If using the Fenix TK41 kiosk printer included in unattended stations, you will need to add a series of three characters at the end of the template to cut the paper. These characters are GS V SOH (ASCII GS character, followed by upper case letter “V”, followed by ASCII SOH character). A sufficient number of line feeds should be added at the end of the ticket before and after the cutoff characters to make sure that the entire ticket is past the cutter before the cut command is issued and the paper feeds one half inch into the paper guide after the cut off. **This prevents paper jams!**

To increase the print size of the text the control characters ESC M SOH set the 8x16 bit font. To scale the text to a larger size send the characters GS ! * this will double the size of the characters. For more information on adjusting fonts and other print features review the Fenix TK41 operator’s manual.

The default templates 1, 2, 3 ,4 and 5 are pre-programmed with sample templates for the VSU program. Template1, 2 and 5ares used for the ‘Print Output File’ function, template 3 is used for the inbound ticket, and template 4 is used for the outbound ticket.

These templates are very flexible and should be modified for each application to make the tickets and reports match the users needs.

Important !

After the VSU application is setup and operating properly copy all the files from the JagXTREME RAM disk via FTP to a secure location. If the RAM disk becomes corrupted you can perform a MASTER RESET on the JagXTREME and restore the RAM disk files via FTP. This will restore the ticket and report templates without tedious re-entry of the data.

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For your notes

Chapter 7.0

File Formats

ScaleLog.csv

The ScaleLog.csv file is stored in a plain text format called **C**omma **S**eparated **V**ariable. The data in the file is separated by commas and each data field is enclosed by quotation marks.

Example ScaleLog.csv file:

TRUCK ID, IN WT, IN DATE, IN TIME, OUT WT, OUT DATE, OUT TIME, NET WT, NOTES, SELECTION

"MR. ED"," 3019","24 Sep 2004","14:15"," 10174","24 Sep 2004","14:16"," “155",”YODERS”,”CORN”
"BUDW"," 2686","24 Sep 2004","14:27"," 5142","24 Sep 2004","14:29"," 2456",”SMITHS”,”PEACHES”
"BUBBA1"," 1200.4"," NONE "," NONE "," 3239","24 Sep 2004","14:39","
2038.6",”WILSO”,”APPLES”
"ABCFGH"," 4218","24 Sep 2004","14:48"," 10940","24 Sep 2004","14:49","
6722",”JOHNSONS”,”CORN”
"STANLEY"," 2982","24 Sep 2004","15:17"," 16345","24 Sep 2004","15:18","
13363",”NSET”,”BANANAS”
"BUBBA3"," 1400.7"," NONE "," NONE "," 6734","24 Sep 2004","15:20"," 5333.3",”BIN
FULL”,”CORN”
"GOGOGOGO"," 3694","24 Sep 2004","15:22"," 18058","24 Sep 2004","15:24","
14364",”ROTED”,”PEAS”
"BUBBA2"," 4057","24 Sep 2004","14:03"," 8647","24 Sep 2004","15:37","
4590",”BAKERS”,”APPLES”

Note: The IN DATE “NONE” and IN TIME “NONE” indicates outbound weighing only.

Perm.dat File

The perm.dat file is also stored in the CSV format. This file will be generated by the VSU program when the “Edit_Perm_File” menu is used. This file may also be generated using a text editor. The RF card data is stored just as it was received by the card reader.

Example perm.dat file for 10 trucks:

Truck ID Tare RF Card Data Badge Name

"YORK012","4380.1","1F082BC00000000000",”Bill”
"YORK031","0.0","1F089E000000000000",”Jim”
"YORK089","5407.8","1F089DC00000000000",”Bob”
"YORK032","6201.4","1F084CC00000000000",”Steve”
"YORK061","8789.0","1F089EE00000000000",”Mike”
"YORK077","4402.7","1F087DC00000000000",”Burns”
"YORK112","5255.4","1F081BC00000000000",”Smith”
"YORK231","0.0","1F089E100000000000",”TRW”
"YORK069","3940.5","1F039DC00000000000",”IBM”
"YORK039","6260.4","1F064CC00000000000",”Toledo”

If the tare value is set to zero the truck will be assigned as inbound and outbound.
Tares set to non-zero will be considered “outbound only” trucks.

Process1.txt File

The inbound file temporarily stores the truck data while the truck is dropping or receiving it’s load at the facility. This file is also stored in the CSV format. This file should be cleared periodically to eliminate unused or invalid inbound transactions. This is done by copying a blank (empty) file via FTP back to the JagXTREME.

Example process1.txt:

TRUCK ID, In Wt, In Date, In Time, Comment

"BUD55"," 10280","18 Oct 2004","15:31","#6GRAVEL"
"BUD77"," 5334","18 Oct 2004","15:36","ROCK4524"
"BUD99"," 10504","18 Oct 2004","15:51","HAY60941"
"BUD25"," 10280","18 Oct 2004","15:31","#6GRAVEL"
"BUD76"," 5334","18 Oct 2004","15:36","ROCK6624"
"BUD97"," 10504","18 Oct 2004","15:51","HAY60895"

Selects.dat File

This file contains simple ASCII characters that will be displayed when the “Selection List” software option is enabled. This file is generated and maintained by the scale operator for driver data entry. The first prompt in the file will appear as the selection prompt. All items after will scroll as selections when a keyboard key is pressed. (except the ENTER key which confirms the selection) The maximum length of any prompt is 16 characters. The maximum number of selections is 20.

Example Selects.dat

“Select Commodity”
“PEACHES”
“APPLES”
“WATERMELLON”
“BANANAS”
“PEARS”
“CORN”
“SOYBEANS”
“STRAWBERRIES”
“BLUE BERRIES”

UWTV.ini File

The UWTV.ini file is also stored in the CSV format. This file is read by the VSU software on power up to configure options used in each individual application. This file must be changed by a standard text editor and sent via FTP to the JagXTREME when the system is configured. It is a very good idea to store a copy of this file in a secure location in case the of unexpected system failure. This file is used during system setup and should only be modified by qualified personnel.

Default UWTV.ini file:

"Scale Weight Threshold","1000"
"History File Name","ScaleLog.CSV"
"Badge Reader Type","1"
"Loops Installed","NO"
"Maximum Weight","80000"
"Printer Prompts","NO"
"Zero Tolerance","100"
"Driver Comment","NO"
“Selection List”,”NO”
“Setup Password”,”865336”

Clearing of system RAM disk

At least once per year, the scale operator must clear the JagXTREME RAM disk to ensure proper operation of the terminal software. This is similar to the defrag of a fixed disk on a PC. Before clearing the RAM disk, back up the following files via FTP:

- File1.bas
- Jaglit.dmt
- perm.dat
- UWTV.ini
- selects.dat
- ScaleLog.csv

The RAM disk is cleared by Exiting JagBASIC (see section 3.1.5) and entering the JagXTREME setup mode. Navigate to the "**Config JagBASIC**" menu and select "**Init RAM Disk?**". Confirm the selection "**Are You Sure? Y**". The JagXTREME will reboot after this selection.

Next copy the above saved files back to the JagXTREME using FTP. Power the scale terminal off and then power on to resume normal terminal operation.

Consult the JAGXTREME technical manual, (*)15896200A, for further details.

Chapter 8.0

Software Options

This chapter covers

- Various Software Options
- Password Setup
- Thresholds

Scale activation threshold

The first line in the UWTV.ini contains the weight threshold to activate the scale weighing process. This weight setting can be used to eliminate activating a transaction when a small vehicle drives over the scale.

Scale Log File Name

The file name for the outbound transaction report can be changed to any DOS compatible file name. The default file name is ScaleLog.csv

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. The badger reader is connected to the JagXTREME COM1 port. To enable the badge reader functions the UWTV.ini file must contain “Badger Type” ,“1”. For the TransCore SmartPass RF reader the UWTV.ini contains “Badge Type”,”5”. If no badge reader is installed the UWTV.ini will contain “Badge Type”,”0”

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. To enable the loop functions the UWTV.ini file will contain “Loops Installed”,”YES”. When loops are used the traffic lights will be red when the truck approaches the scale. When the truck stops at the loop, the VSU software will automatically zero the scale before turning the traffic light to green.

Maximum weight threshold

If the truck weight is above this setting the transaction will not continue. No ticket will be printed and no log will be made of the transaction. The default value for this is 80000 lbs (kg). The UWTV.ini file contains this setting as “Maximum Weight”,”80000”.

Printer Prompts

This option forces the driver to press the enter key to print a ticket (“**Prs ENT 4 Ticket**”) after the weight is logged. This also prompts for duplicate tickets (“**Is Ticket OK:Y**”) Changing the Y to N followed by ENTER will print a duplicate ticket.

Zero tolerance setting

The scale will be checked after every transaction to confirm that the scale is returning to zero with this weight tolerance value. The default setting is 100 which would allow weighing if the scale returns to between -100 lb and +100 lb (or KG) after a transaction. If the reading at zero is outside this tolerance the green traffic light will not be turned on for the next truck. The lower display will also flash “**Press 0 Button**”

Entering Comments.

VSU provides a comment field on the inbound and outbound ticket. To enable this function the UWTV.ini file will contain “Driver Comments”,”YES” The comment field is free form, so the message can be setup to appear anywhere on the ticket by programming the printer templates. The display will prompt “**Notes:**” after the Truck ID is entered.

Selection Prompts

If a driver is required to scroll through a list there is an option for prompting the driver to do so. The VSU software will read the file (Selects.dat) for the list of items that will be displayed. When enabled this prompt will be displayed after the driver comments prompt. The driver uses the keyboard to scroll through a list. When the driver selects the entry (with the ENTER key) that entry will be added to the transaction file. The Selects.dat file is a simple ASCII file in the CSV format. This file is generated when the system is setup by a standard text editor (Notepad) on the PC and is transferred to the JagXTREME via FTP. This file can be modified at any time (when the scale is offline) and uploaded to the JagXTREME via FTP. The UWTV.ini file will contain “SELECTION LIST”,”YES”. This function can be useful for simplifying driver data entry.

Setup Password

This field can be up to 7 characters in length. The factory default password is **865336**.

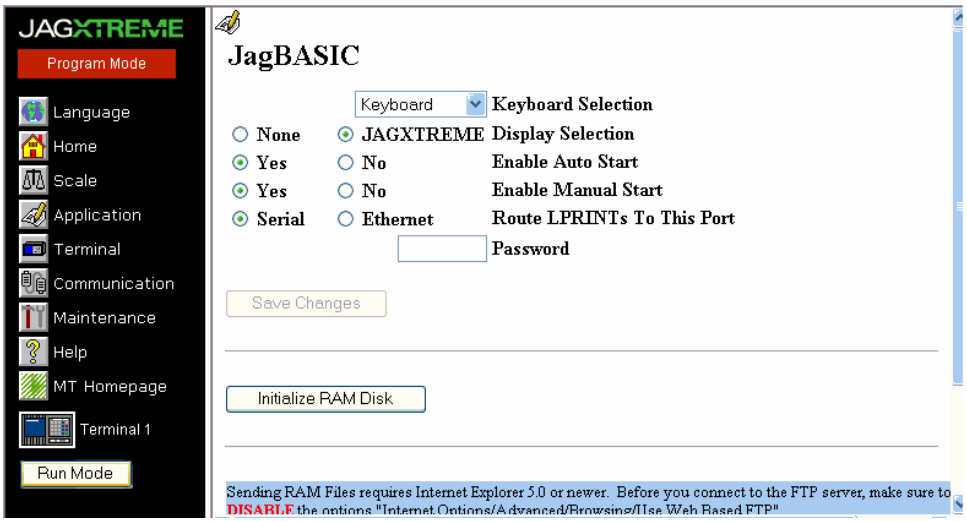
Photo eye truck position detection input

This single input can be used with photo eye sensors at the ends of the scale to verify the truck is completely on the scale. Several photo eye outputs can be used in parallel for position verification. If this input is true the display will indicate a photo eye is blocked and the truck must be re-positioned to print a ticket or log the transaction. If this input is left unconnected it has no effect on the system.

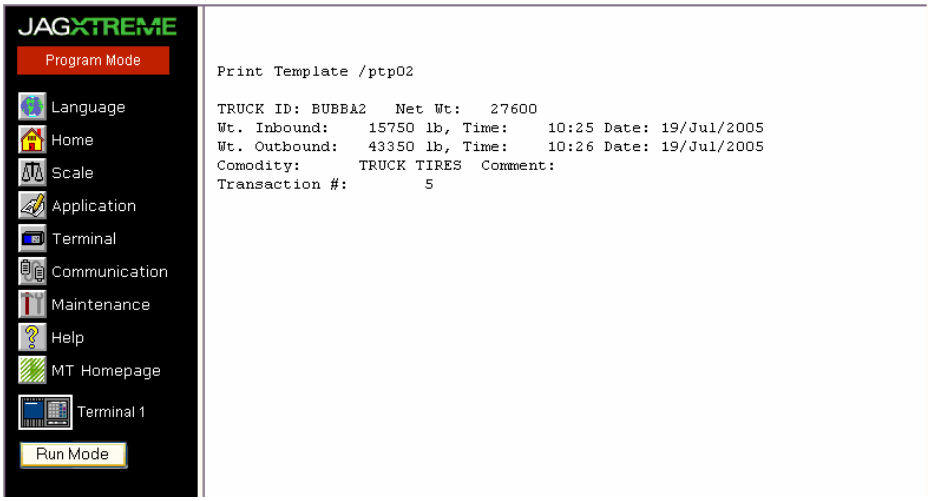
Serial Port Setup

The setup of the serial ports, connections, and templates for the JagX are very flexible to make field customization possible. The following illustrations define how the JagX should be set for the VSU truck terminal.

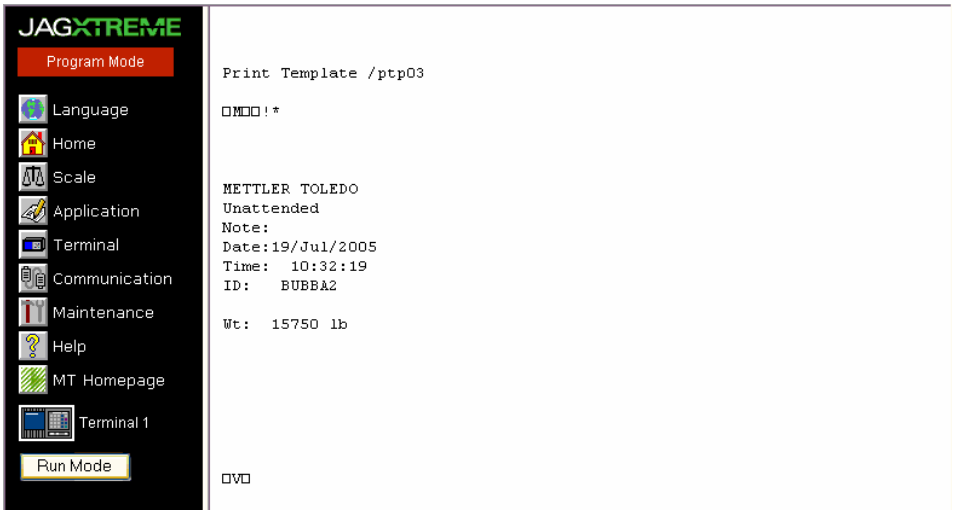
JagBASIC Settings



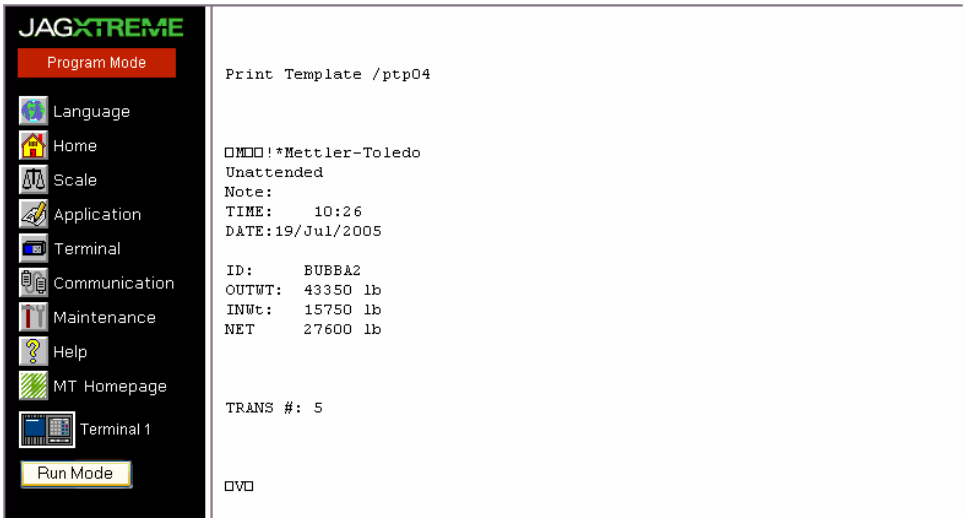
Template 2 (Print Output File)



Template 3 (Inbound Ticket)



Template 4 (Outbound Ticket)



Chapter 9.0

Master / Slave UWTV

This setup is for the badge reader COM1 and printer (outbound tickets) COM2 at the master and only a badge reader COM1 and printer (inbound tickets) COM2 at the slave. Other configurations are possible, consult Mettler Toledo.

Master Setup

If the JagXTREME is factory configured for Master/Slave operation the following procedures are not needed. However, if a 'Master Reset' is performed on the JagX this procedure should be followed. The JagX should be calibrated and tested prior to installing the VSU software application. The master JagX can also print the transaction log reports.

1. Set the master JagX IP address and Subnet Mask for the network.
2. Configure the Serial local COM1 -> **Delete all connections**. Port 9600,N,8,1
3. Configure COM2 add connections 'Cust Prt 1', 'Cust Prt 2', 'Cust Prt 4' and 'Cust Prt 5', then add connection 'Scale A', 'DEMAND'. (5 connections for local COM2)
4. Configure the Serial remote (slave) COM2 port. Set node to 2 and 'Cust Prt 3' (template 3).
5. Set the 'Network Settings'->Network Cluster, NET Consol 'Y', IP Term2 'Y', set IP = Slave JagX address
6. Configure the JagBASIC DISP 'JagX', Autostart 'Y'
7. Copy all files in the \master and \template directories to the VSU Master via FTP. (no folders, just files!)

Slave Setup

1. Set the slave JagX IP address and Subnet Mask for the network
2. Configure the Serial COM1 -> **Delete all connections**, Port 9600,N,8,1
3. Configure the Serial COM2 -> **Delete all connections**, Port 9600,N,8,1
4. Set the Cluster IP NET Consol 'Y', This Term? '2', Term#1 'Y'. Enter the IP address of the Master JagX.
5. Configure the JagBASIC DISP 'JagX', Autostart 'Y'
6. Set the Application Envr 'Power-Up' Timer 10
7. Copy the file1.bas from \slave directory to the VSU Slave via FTP.

METTLER TOLEDO

For your notes

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