

JAGXTREME®

Industrial Terminal

User's Guide

This manual describes the operation and functionality of the JAGXTREME terminal, A revision software. The software number is displayed during the power-up sequence.

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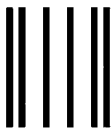
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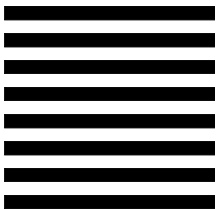
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Worthington, Ohio USA, May, 2000

Mettler-Toledo, Inc.

Darrell Flocken, Manager - Weights & Measures
Office of Weights and Measures

Original issue: July, 1995
Revised: October, 1996 added compliance to Low Voltage Directive
May, 2000added JagXtreme

Mettler-Toledo Inc.
Columbus, Ohio

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(Year of Declaration 2002)



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Model	Certificate and Number	Issued by
JagXtreme	CoC 94-096	NCWM

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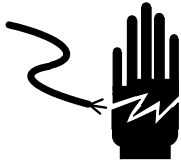

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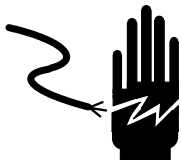

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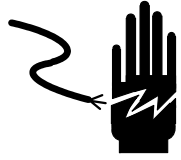

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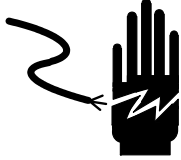
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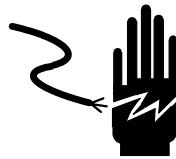
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IN ORDER TO INSTALL THE DIVISION 2 APPROVED JAGXTREME PANEL-MOUNT OR HARSH TERMINAL UTILIZING THE FACTORY MUTUAL APPROVAL, METTLER TOLEDO CONTROL DRAWING 157043R MUST BE FOLLOWED WITHOUT EXCEPTION. IN ORDER TO INSTALL THE CATEGORY 3 JAGXTREME PANEL-MOUNT OR HARSH TERMINAL UTILIZING THE KEMA APPROVAL THE KEMA APPROVAL CERTIFICATE 02ATEX1023X AND ALL LOCAL REGULATIONS MUST BE FOLLOWED WITHOUT EXCEPTION. FAILURE TO DO SO COULD RESULT IN BODILY HARM AND/OR PROPERTY DAMAGE. REFER TO THE JAGXTREME DIVISION 2 AND ZONE 2/22 INSTALLATION GUIDE, 16088600A FOR ADDITIONAL INFORMATION.



WARNING

EARLIER MODELS OF THE JAGXTREME TERMINAL THAT ARE NOT MARKED (FACTORY-LABELED) AS DIVISION 2 OR EUROPEAN CATEGORY 3 APPROVED MUST NOT BE INSTALLED IN A DIVISION 2 OR ZONE 2/22 ENVIRONMENT.



WARNING

IF THE KEYBOARD, DISPLAY LENS OR ENCLOSURE IS DAMAGED ON A DIVISION 2 APPROVED OR CATEGORY 3 MARKED JAGXTREME PANEL-MOUNT OR HARSH TERMINAL THAT IS USED IN A DIVISION 2 OR ZONE 2/22 AREA, THE DEFECTIVE COMPONENT MUST BE REPAIRED IMMEDIATELY. REMOVE AC POWER IMMEDIATELY AND DO NOT REAPPLY AC POWER UNTIL THE DISPLAY LENS, KEYBOARD OR ENCLOSURE HAS BEEN REPAIRED OR REPLACED BY QUALIFIED SERVICE PERSONNEL. FAILURE TO DO SO COULD RESULT IN BODILY HARM AND/OR PROPERTY DAMAGE.

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For your notes

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NOTE: Separate manuals are available for the JAGXTREME HMI (human machine interface).

Introduction

This manual provides basic operating instructions for the JAGXTREME industrial scale terminal. This flexible, high performance, highly adaptable terminal supports both proprietary and non-proprietary protocols, providing connectivity to METTLER TOLEDO devices and to devices from other vendors. Information on installing, programming, and servicing the JAGXTREME terminal can be found in the JAGXTREME Installation Guide and the JAGXTREME Terminal Technical Manual. Consult your authorized METTLER TOLEDO representative for information on advanced operations or for information on available options.

Review all instructions and safety precautions carefully. Installation, programming, and service procedures should be performed only by authorized personnel.

JAGXTREME Display Area

The JAGXTREME terminal has two displays where scale data and operational messages are presented.

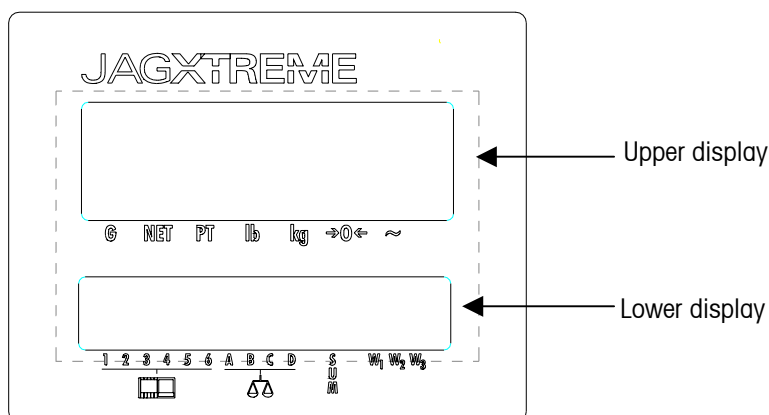
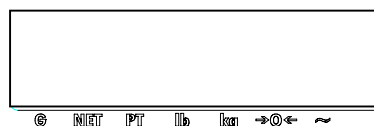


Figure 1-a: JAGXTREME Display

Upper Display

The upper display is a numeric display and normally indicates scale weight. It can display up to seven numbers with a decimal point, comma, and status annunciators. The upper display also indicates over-capacity and under-capacity conditions.



Over-capacity is indicated when the upper corner of the first and last digits and the top segment of all other digits are lit.

Under-capacity is indicated when the lower corner of the first and last digits and the bottom segment of all other digits are lit.

Over- and under-capacity display conditions are shown below:



Note: If a scale fails, the weight display will blank.

Annunciators point to labels in the legend directly below the display area to indicate:

Weighing Mode (Gross or NET)

Typically upon startup, the terminal will be in the Gross weight mode. Gross weight represents the weight of the object on the scale, including its container or package. The terminal will switch to Net mode when a tare is active. Tare can be entered as a Preset Tare value, or tare may be automatically acquired when the operator presses the **TARE** key. Tare can also be entered through an interface.

Preset Tare (PT)

Preset tare is the weight of the packaging vessel or transport container of the material being weighed. The preset tare annunciator indicates a preset tare is active. Preset tare is entered manually using the numeric keys on the terminal keypad. Preset tare is also referred to as keyboard tare or manual tare.

Unit of Measure (pound lb, or kilogram kg)

Unit of measure refers to the numerical determinations used for comparative purposes. The standard units of measure for the terminal are pounds (lb) and kilograms (kg). These legends indicate the current units. A label included with the JAGXTREE terminal may be placed over the kg legend if grams (g) or metric tons (t) are used.

Center-of-Zero (→0←)

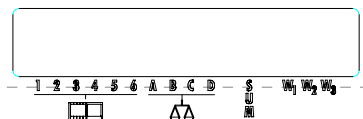
The center-of-zero annunciator indicates that the scale is within $\pm 1/4$ increment of gross zero.

Scale Instability (~)

The scale instability annunciator indicates that the scale is in motion. The annunciator will turn off when the scale is stable. The sensitivity of motion detection is adjustable in setup.

Lower Display

The lower display can present up to 16 alphanumeric characters. Each character can use a period, comma, decimal point, and annunciator. The display is used for various prompts and messages generated by the JAGXTREME terminal.



System Prompts

These prompts guide the user and technician through the navigation of the JAGXTREME terminal.

Error Messages

Error messages provide notification of system errors. (Detailed information is available in the technical manual.)

JagBASIC Prompts

These prompts guide the user through the navigation of a JAGXTREME application

Annunciators

The annunciators point to labels in the legend directly below the display area to indicate:

1 2 3 4 5 6 (Selected JAGXTREME)



The six left-handed annunciators indicate which JAGXTREME scale terminal is currently selected when a cluster of terminals is configured for use.

A, B, C, D (Alpha Annunciators)

The four middle alpha annunciators indicate which scale is currently selected for display.

S
U
M

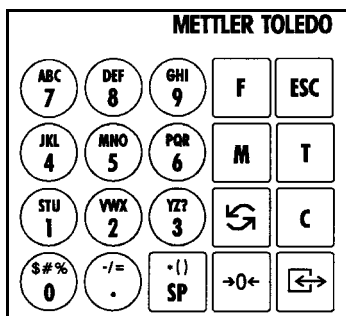
The "SUM" annunciator indicates that the current selected display is the logical sum of the scales, which have been set up to "add in sum".

W1, W2, W3

The three right-handed annunciators indicate the weighing interval the scale is currently operating in. These annunciators are only active if the selected scale is configured for more than one weighing range.

JAGXTREME Keypad

Each JAGXTREME terminal is equipped with a 20-key keypad as shown here:



1-b: JAGXTREME Keypad

The keypad consists of numeric keys 0 through 9, decimal point, space and eight function keys. The numeric keys also contain the alphabet characters and some special symbols. The keys perform the following functions:

NUMERIC keys (0-9) are used to input numbers. They are also used to enter alphabet characters and the symbols that appear on the specific keys.

DECIMAL POINT (.) inserts a decimal point as necessary. It is also used to enter the symbols "-" and "=".

SPACE (SP) inserts a space where necessary. It is also used to enter the symbols "*", "(", and ")".

FUNCTION (F) accesses various functions depending on the JAGXTREME terminal's setup configuration including:

Switch Units—If enabled, switch units allows for changing of the top weight display unit of measure.

Recall Tare—If the terminal is in the net mode, recall tare allows the tare value to be recalled on the top weight display.

Recall Gross—If the terminal is in the net mode, recall gross allows the gross weight value to be recalled on the weight display.

Enter Setup—Enter setup allows access to the program blocks in setup mode. The SW1 on the Controller board must be OFF to allow access.

MEMORY (M) accesses various memory functions depending on the JAGXTREME terminal's setup configuration including:

Prompt List—The prompt lists permit data entry into a user-defined prompt list created through the Configure Memory program block in setup.

Consecutive Number—This feature displays the current consecutive number. You can also reset the consecutive number.

Enter Setpoint—If accessed, this feature allows entry of the setpoint cutoff values that are assigned to the active scale.

Time—This feature displays the clock and allows adjustment of the time.

Date—The date feature displays and allows adjustment of the date.





SELECT (S) scrolls through and displays items in option lists. This key is also used to select a scale to be displayed for networked terminals or multi-scale JAGXTREME terminals. NOTE: This key is used to toggle the alphanumeric keys during an alphanumeric entry.



ZERO (O) zeroes the scale and allows you to exit to the previous level in setup mode.



ESCAPE (ESC) exits an operating mode, exits a sub-block programming level to the level above, or recalls previously stored data.



TARE (T) performs a pushbutton tare function if enabled in setup.



CLEAR (C) clears a tare value and returns the scale to gross mode. The **CLEAR** key also functions as a backspace/delete when entering data from the keypad.



ENTER acknowledges a prompt, opens program blocks and sub-blocks, and accepts data entered from the keypad. **ENTER** also initiates a demand print output.

Alphabetical and Special Character Entry

Only prompts allowing alphabet characters will accept alphabetical or special character entry.

The JAGXTREME terminal is capable of both numeric and alphanumeric entry. To access the alphabet characters:

- Press the numeric key with the desired letter. The number is displayed.
- Press **SELECT** until the desired letter appears.
- Continue to the key that contains the next character you wish to use and repeat steps 1 and 2.
- When you have finished entering your response, press **ENTER**. The data is accepted when **ENTER** is pressed.

Using a PC Keyboard

You can attach an optional PS/2 compatible keyboard to the JAGXTREME terminal for quicker alphanumeric data entry and access to other characters and lowercase letters. (A keyboard is also required for using the optional JAGMAX application software, which allows the JAGXTREME terminal to be used in truck scale operations). The JAGXTREME Controller board has a PC keyboard controller and plug-in connector to support a keyboard.

The PC keyboard and JAGXTREME keypad send the same data to the terminal and operate concurrently. For example, the numeric keys on the keyboard and keypad have the same ASCII value and send the same numeric data.

The table below gives other keystroke equivalents for keyboard and keypad.

Keyboard	Keypad
F5	ZERO
F6	FUNCTION
F7	SELECT
F8	CLEAR
F9	TARE
F10	MEMORY
ESC	ESCAPE
ENTER	ENTER

The backspace key on the PC keyboard functions as a backspace/delete key when entering data. The keyboard supports NUM LOCK and CAPS LOCK.

Normal Operating Mode

The JAGXTREME terminal goes through a power-up sequence when it is first turned on. The power-up sequence may include a countdown timer that gives the terminal sufficient warm-up time before advancing to normal operating mode. After power up, the normal operating mode is active.

The JAGXTREME terminal's top weight display shows the current gross or net weight values. The top display annunciators indicate the status of the display and the weighing mode (NET or GROSS).

The bottom display shows the current unit of measure in the normal operation mode. If enabled, the lower display also shows tare value or auxiliary units when in net mode.

The following table illustrates the JAGXTREME terminal's display conditions.

Normal Weight Display		
Condition	Top Display Data Bottom Display Data	Display Example
GROSS mode	gross weight units Gross	189.8 lb GROSS
NET mode Pushbutton tare active Display tare enabled	net weight tare units TARE	100.2 189.8 lb TARE
NET mode Preset tare active Display tare enabled	net weight tare units PT	190.0 100.0 lb PT
NET mode Display tare disabled	net weight units NET	100.2 lb NET

2

Basic Operator Functions

This section discusses the normal operating mode and the following basic functions:

- Zero the scale
- Perform tare operations
- Initiate print operations
- Use the **MEMORY** key operations
- Use the **FUNCTION** operations
- Select a scale

For information about advanced operations, contact your authorized METTLER TOLEDO representative or consult the JAGXTREME Terminal Technical Manual.

Zero the Scale

If Pushbutton Zero is enabled, you can press **ZERO** to establish a new zero center of reference for the scale when in gross mode. Zero operations are enabled or disabled in setup through the Application Environment Block. This is done as follows:

Press the **ZERO** key. One of the following situations occurs:

- If Pushbutton Zero is disabled, the lower display reads **[ZERO INHIBITED]**, and returns to normal operating mode.
- If Pushbutton Zero is enabled and the scale is in net mode, the lower display reads **[ZERO REQ FAILED]**, and returns to normal operating mode.
- If Pushbutton Zero is enabled and residual weight on the scale is greater than the Pushbutton Zero range as determined in the Application Environment program block, the lower display reads **[ZERO REQ FAILED]**. In this case, a new zero value cannot be established using the **ZERO** key, and the terminal returns to normal operating mode.
- If Pushbutton Zero is enabled and residual weight on the scale is within the Pushbutton Zero range, the lower display reads **[SCALE ZEROED]**, and the JAGXTREME terminal returns to normal operating mode.

Tare Operations

The JAGXTREME terminal supports three tare operations:

- Pushbutton Tare
- Preset (Keyboard) Tare
- Auto Tare

The following tare-related features are also supported:

- Auto Clear Tare
- Recall Tare
- Recall Gross
- Tare Interlock
- Tare Display
- Net Sign Correction

Tare operations are enabled or disabled in setup through the Application Environment program block. Only authorized personnel should attempt to enable or disable tare operations.

Pushbutton Tare

Pushbutton tare compensates for weight (usually an unknown quantity such as an empty box or other container) on the weighing platform with a single keystroke and switches the terminal to net mode.

If Pushbutton Tare is Enabled:

- Place a load to be tared on the scale platform and press **TARE**. The upper display area reads **[0.0]** with the net annunciator illuminated. The tare weight is displayed on the lower display if Display Tare is enabled.
- Place the load to be weighed on the platform. The net weight of the load is displayed in the upper display area.
- Press **CLEAR**. The terminal returns to gross mode, displays the weight on the platform in the upper display area, and clears tare weight from the lower display if Display Tare is enabled.

Example: Pushbutton Tare and Display Tare Enabled

The operator places an empty container on the scale platform and presses **TARE**. The terminal records the weight (25 pounds) in the lower display as 25.0 lb TARE. The operator fills the container with 50 pounds of material. The terminal displays the net weight of the load in the container in the upper display area as 50.0 with the NET annunciator lit. When the filled container is removed from the platform, the operator presses **CLEAR**. The terminal returns to gross mode.

Preset (Keyboard) Tare

Preset tare (keyboard tare) compensates for a known tare weight on the scale. Preset tare is used when the net weight of contents in a filled container must be determined and the tare weight is known.

If Preset (KB) Tare is Enabled:

- Place a load on the platform. The upper display shows the gross weight. Know the weight of the portion to be compensated for by preset tare.
- Use the numeric keys to enter the known tare weight, then press **ENTER**. The net weight of the load is displayed in the upper area with an annunciator indicating NET. The tare weight will be displayed on the lower display if Display Tare is enabled.
- Clear tare by pressing **CLEAR**. The terminal returns to gross mode, displays the gross weight on the platform in the upper display area, and clears the tare weight from the lower display if Display Tare is enabled.

Example: Preset Tare and Display Tare Enabled

A loaded truck (80,000 pounds) is driven on to a weigh station platform. The operator enters the known weight of the truck (17,500 pounds). The terminal displays the tare weight in the lower display as 17500 lb PT. The net weight of the truck's contents is shown in the upper display area (62,500 pounds) with the NET annunciator lit. When the truck is driven off the platform, the operator presses **CLEAR** to clear the tare value and return the terminal to gross mode.

Auto Tare

Auto tare automatically tares the terminal when a stable load on the platform exceeds a preset gross weight threshold value. A gross weight reset value is also entered to determine when the terminal will be "rearmed" to do another auto tare. The threshold values are configured through the Application Environment program block. If enabled in the program block, the JAGXTREME terminal checks the stability of the load before rearming auto tare. You may want to disable motion check if the load will not become stable, as when rapidly weighing one item after another.

If Auto Tare is Enabled:

The operator does not have to press any key to perform tare if Auto Tare is enabled, but must press **CLEAR** to return the terminal to gross mode.

- Place a load on the scale platform that exceeds the tare threshold value. When the scale is stable, the terminal automatically tares the scale to net zero and displays the actual tare weight in the lower display if Display Tare is enabled.
- Place the load to be weighed on the platform. The JAGXTREME terminal displays the net weight in the top display area with an annunciator indicating NET.
- Clear tare and return to gross mode by pressing **CLEAR**. When the weight is removed and the reset threshold passed, the scale rearms for the next sequence.

Example: Auto Tare and Display Tare Enabled

The auto tare threshold value has been set to 100 pounds through the Application Environment program block. The operator places on the platform an empty container known to weigh more than 100 pounds. The JAGXTREME terminal tares the scale and displays the container's actual weight in the lower display area (125 lb TARE). The operator then fills the container and records the net weight of the load.

When the filled container is removed and the weight on the platform falls below the reset threshold value, the JAGXTREME terminal re-arms and is ready for the next container. If check motion is enabled, the terminal will not rearm unless the weight on the scale settles below the reset threshold value.

Auto Clear Tare

Auto clear tare can be used in conjunction with any of the tare options described above. This feature automatically clears the tare and returns the terminal to gross mode when weight on the platform has exceeded, then fallen below a preset gross weight threshold value. The check motion parameter can be enabled to ensure the scale weight is stable before automatically clearing tare.

Recall Tare

The terminal allows you to recall and display the tare value in the upper display area while in net mode. This may be useful if Display Tare is disabled or if auxiliary units are enabled. Tare recall is accessed through the **FUNCTION** key.

Recall Gross

The JAGXTREME terminal allows you to recall and display the gross weight value in the upper display area while in net mode. This may be useful if you need to see the gross weight but do not wish to clear the current tare value. Gross weight recall is accessed through the **FUNCTION** key.

Tare Interlock

Tare interlock imposes some restrictions on tare operations. If tare interlock is enabled, tare may be cleared only at gross zero, and multiple tares are prohibited.

Tare Display

In each of the tare operations described above, the tare weight has been displayed in the lower display area on the JAGXTREME terminal. It is possible to disable the tare display through the Application Environment program block. If disabled, tare is not displayed.

Net Sign Correction

Net Sign Correction delays the decision of which weighment is the gross weight and which weighment is the tare weight until the operator prints the ticket. At that time, the JAGXTREME terminal compares the two weighments and takes the lower weight as the tare weight. Then, the net weight is always a positive value.

Print Operations

The JAGXTREME terminal supports the following print operations:

- Demand Print
- Minimum Print
- Print Interlock
- Auto Print
- Continuous Output

Print operations are enabled or disabled in setup through the Configure Serial program block. Only authorized personnel may enable or disable print operations.

The print output format and destination port are also determined through the Configure Serial program block. Output can be directed through one or more local serial ports (COM1 or COM2), or directed to remote terminals on an Ethernet network.

Demand Print

If a demand mode connection is configured, demand printing is initiated when an operator presses **ENTER** in normal operating mode or through an external interface such as a discrete input port or optional Allen-Bradley interface. If no conditions exist to inhibit printing, output will be sent to the connected printer and the terminal will display the message **[PRINTING]** in the lower display area.

If a demand mode connection is not configured, the terminal displays **[PRINT INHIBITED]** in the lower display area. This error message is also displayed if demand printing is requested while weight on the scale is unstable.

Minimum Print

The minimum print parameter prohibits data output if gross weight on the scale is below a threshold value configured in setup. If you press **ENTER** to initiate printing with the scale weight below the threshold value, the terminal displays **[PRINT INHIBITED]** on the lower display.

Print Interlock

Print interlock prevents multiple print requests for a single weighing transaction. Print threshold and reset values determine operation of print interlock. Additionally, a check motion before reset parameter can be enabled. These parameters are configured through the Configure Serial program block. If print interlock is enabled and conditions of print interlock are not satisfied, the terminal displays **[PRINT INHIBITED]**.

Auto Print

Auto print enabled in conjunction with print interlock allows printing to occur without operator action. The terminal automatically initiates data output when gross weight on the scale settles above the print threshold value. Auto print is rearmed when the weight falls below the reset threshold value. A check motion before reset parameter can also be configured for auto print.

Continuous Output

Serial ports can be configured to output data continuously. In continuous mode, weight data is transmitted at the following rates:

17 times per second in Process Application High mode*

10 times per second in Process Application Mid mode*

5 time per second in Process Application Low mode

* Unless A/D update rate of scale type is slower. In that case, the continuous output will be at the A/D update rate.

A status bit in the fixed format changes state when a print request is received.

MEMORY Key Operations

You can press **SELECT** to advance to any of the **MEMORY** key operations, then press **ENTER** to access the desired operation.

When stepping through the prompt list, previous step data is shown in the lower display area. Press **ENTER** to accept the previous entry or begin entering new data using the numeric keys.

The JAGXTREME terminal supports five **MEMORY** key operations including:

- Prompt list
- Consecutive numbers
- Setpoints
- Time
- Date

Memory operations are enabled or disabled in setup through the Configure Memory and Application Environment program blocks.

Prompt List

The JAGXTREME terminal's prompt list feature is an interactive means of facilitating specific data input from the operator. A prompt list is configured in setup in the Configure Memory program block. Each prompt can be configured to accept numeric, alphanumeric, or tare input. A prompt list can contain up to 20 steps.

To use a prompt list:

- In normal operating mode, press the **MEMORY** key, then press **ENTER** at the **[Prompt List?]** prompt to access your list.
- Respond to the prompt step shown in the lower display area by entering the required data or press **ENTER** to continue to the next step. You must press **ENTER** after data entry to continue.
- Press **ENTER** after the final prompt step to return to normal operating mode. You can press **ESCAPE** at any time to exit from a prompt list.

Consecutive Numbering

The JAGXTREME terminal maintains a consecutive number (CN) and can assign a unique number to each transaction. The CN automatically increments by one upon print initiation through a specified port. Consecutive numbering is configured in setup through the Configure Memory program block. This should be performed only by authorized personnel.

To view the current CN:

- Press the **MEMORY** key.
- Press **SELECT** until the current CN is displayed as **[CnNbr = XX.]**

To reset the CN:

- With the current CN displayed (steps 1 and 2 above), press **ENTER**.
- At the **[Reset ConNbr?]** prompt, press **SELECT** to choose **Y(es)** or **N(o)**, then press **ENTER**. If **Y(es)**, confirm your decision at the **[Are You Sure?]** prompt by selecting **Y(es)** again. The consecutive number will be returned to the reset value configured in setup.

Setpoints

The JAGXTREME terminal can control up to 12 setpoints, which can be assigned to any of the discrete output ports. Status of Setpoints 1 through 8 is available through the serial, Ethernet, and native PLC interfaces.

For a JAGXTREME terminal connected to a single scale, all setpoints are related to the displayed scale weight, net or gross weight, or rate depending on the scale mode. If setpoints are required for gross weight only, it is recommended that tare be disabled.

For a JAGXTREME terminal connected to more than one scale, setpoints can be assigned to scale A, B, C, D or E in the Configure Discrete program block.

To enter setpoint values:

- Press **SELECT** and choose the appropriate scale (if more than one scale is connected).
- Press **MEMORY**, then press **SELECT** until the prompt **[Enter Setpoint?]** is displayed, then press **ENTER** to access setpoints.
- Press **ENTER** at the **[Select? SP1]** prompt to access setpoint 1, or press **SELECT** to access another setpoint. Press **ENTER**.
- Enter the setpoint value, then press **ENTER**.
- At the **[Preac?]** prompt, enter the preact value. The preact value compensates for material that may come onto the scale after the setpoint is reached.
- At the **[Dribl?]** prompt, enter the dribble value. Dribble marks the point where a dual speed setpoint switches from fast-feed to slow-feed.
- At the **[Tol?]** prompt, enter the setpoint tolerance value.
- Repeat steps 3 and 4 to enter another setpoint or press **ESCAPE** to exit setpoints.

Preact, dribble, and tolerance values are relative to the setpoint. They are not absolute values. The dribble value is equal to the target value minus the dribble and preact values.

Time

The JAGXTREME terminal's internal battery-backed time can be viewed or set using the MEMORY key. Configuration of the time format is done in setup through the Application Environment program block. This should be performed only by authorized personnel. You can disable the time format through the same program block.

To view or reset the time:

- Press MEMORY, and then press SELECT until the time is displayed.
- Press ESCAPE to accept the current time and exit, or press ENTER to set the clock. If you are setting the clock:
 - At the [Hour?] prompt, type the correct hour of day according to the selected time format. Press ENTER.
 - At the [Minute?] prompt, type the correct minutes, then press ENTER.
 - If the selected format supports seconds, type the correct value at the [Seconds?] prompt. Press ENTER.
 - If a 12-hour format is selected, press SELECT at the [AM/PM?] prompt followed by ENTER when the desired designation is displayed.

Date

The terminal also has a battery-backed date function. The date format is configured in setup through the Application Environment program block. The date function can also be disabled through the same program block.

To view or reset the current date:

- Press MEMORY, and then press SELECT until the date is displayed.
- Press ESCAPE to accept the current date and exit, or press ENTER to set the date. If you are setting, complete the date fields as prompted. You must press ENTER after each field to continue. The order of prompting is determined by the selected date format.
- Press ENTER after the last date prompt to exit.

FUNCTION Key Operations

The JAGXTREME terminal supports several **FUNCTION** key operations including:

- Unit switching
- Tare weight recall
- Gross weight recall
- Access to setup
- JagBASIC program manual operation

Switch Units

Unit switching is enabled or disabled through the Application Environment program block, and allows an operator to change between main and secondary units of measure. This should be performed only by authorized personnel. Refer to the JAGXTREME Terminal Technical Manual for more information.

To switch units:

- Press **FUNCTION** then press **ENTER** at the **[Switch Units?]** prompt. The unit automatically switches to the alternate selection and displays the current unit of measure in the upper display area.

Recall Tare

The recalled tare value is a "snapshot" of the actual weight. It is not an active weight.

Recall Tare allows the current tare value to be shown in the upper display area. You must be in net mode.

To recall tare:

- Press **FUNCTION** then press **SELECT** until the **[Recall Tare?]** prompt is displayed.
- Press **ENTER**. The JAGXTREME terminal displays the recalled tare value in the upper display area.
- Press **ESCAPE** to return the display to net weight.

Recall Gross

The recalled gross value is a "snapshot" of the actual weight. It is not an active weight.

Recall Gross allows you to view a snap-shot of the current gross weight in situations in which it is undesirable to clear the tare value. You must be in net mode.

To recall gross:

- Press **FUNCTION** then press **SELECT** until the **[Recall Gross?]** prompt is displayed.
- Press **ENTER**. The JAGXTREME terminal displays the recalled gross weight value.
- Press **ESCAPE** to return the display to net weight.

Enter Setup

You can access the JAGXTREME terminal's setup programming blocks only if the terminal is used in non legal-for-trade applications and SW2-1 on the Controller board is OFF.

To enter setup:

- Press **FUNCTION** then press **SELECT** until the **[Enter Setup?]** prompt is displayed.
- Press **ENTER** to access the program blocks.

JagBASIC Program Manual Operation

If enabled in setup and if SW2-2 on the controller board is off, JagBASIC programs can be started manually using the **FUNCTION** key. Please refer to the JagBASIC Programmer's Guide for information on using JagBASIC.

Scale Selection

Scale ID is programmed in the Application Environment program block and should clearly identify the associated scale. Refer to the JAGXTREME Terminal Technical Manual.

If the JAGXTREME terminal's keypad does not respond when keys are pressed, it may have been selected by another JAGXTREME terminal in the network. To "free" this unit, locate the JAGXTREME terminal that is controlling the keypad, press **ESC**, and then select some other JAGXTREME terminal in the network.

The JAGXTREME terminal can interact with more than one scale. You can connect up to four scales to each JAGXTREME unit, a summing scale, and additional scales which may be accessed over an Ethernet network.

If the JAGXTREME terminal is configured as a single-scale unit that does not have access to other scales, the terminal displays **[SELECT INHIBITED]** when the **SELECT** key is pressed while in normal operating mode.

If multiple scales are connected and the JAGXTREME terminal is in normal operating mode, select another scale as follows:

- Press **SELECT**. The upper display reads **[-----]** and the lower display reads **[Scale?]**
- Press **SELECT** to view the available scales, then press **ENTER** to accept the desired scale.

The JAGXTREME terminal is now "connected" to that scale and its scale-number annunciator is lit. The selected scale remains "connected" until another scale is chosen from the list of scale IDs.

- To select another scale, press **SELECT** and repeat step 2 above.

Error Messages

If error messages are displayed on the JAGXTREME terminal front panel, do not attempt to correct the problems yourself. Information on error messages and troubleshooting is located in the JAGXTREME Terminal Technical Manual.

**METTLER TOLEDO**

1900 Polaris Parkway
Columbus, Ohio 43240
Phone: (US and Canada)

(800) 786-0038
(614) 438-4511
(614) 438-4888

(All Other Countries)

www.mt.com

P/N: A15894100A

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