1280 Truck In/Out

Standard Program

Operation Manual

RICE LAKE
WEIGHING SYSTEMS

Revision History

This section tracks and describes manual revisions for awareness of major updates.

Revision	Date	Description
A	November 12, 2018	Initial manual release with product launch
B	July 19, 2024	Print Tokens Added; Table and note about databases
C	March 9, 2026	Updated print format images

Table i. Revision Letter History

Contents

1.0   Introduction

The 1280 Truck In/Out application is included with the 1280 standard firmware and is loaded by importing the application from the configuration menu *Import from Files*.

Manuals are available from Rice Lake Weighing Systems at **www.ricelake.com/manuals**

Warranty information is available at **www.ricelake.com/warranties**

1.1   Loading Truck In/Out Program

1. Access configuration. See the 1280 Technical Manual (PN 167659) for more information.
2. Select *Import from File*. Ensure *Onboard File System* is selected on the left-hand side.
3. Select the *Truck_InOut_Program* folder.
4. Select the *.rev* file, with the requirements needed, to place a green check mark next to it.
5. Press **Done**. *The File was Imported Correctly* displays at the bottom of the screen.
6. Return to *Import from File*. Ensure *Onboard File System* is selected on the left-hand side.
7. Select the *iRite Program* at the top of the display.
8. Select the *Truck_InOut_Program* folder.
9. Select the *TruckInOut.cod* to place a green check mark next to it.
10. Press **Done**. *The File was Imported Correctly* displays at the bottom of the screen.
11. Select *Save and Exit* at the bottom left of the screen.

2.0   Operation

The 1280 Truck In/Out Program operation works with the truck scale to retrieve and record data in series of programmed databases.

Database	Record Limit	Information
Inbound	1000	Initial data collected at weigh-in; Table 5-1 on page 13
Product	100	Product specific information; Table 5-2 on page 13
Customer	100	Customer specific information; Table 5-3 on page 13
Transaction	5000	All data related to the transaction; See Table 5-4 on page 13

Table 2-1. Database Record Limits

NOTE: 25% of the transaction database is automatically deleted when it becomes full.

If Product and Customer tables become full unused IDs can be removed from the Setup Menu. Section 4.0 on page 12

2.1   Sequence of Operation

The icons on power up or after exiting configuration consist of **Inbound Trucks, Traffic Light,** and **Setup Menu**. The system streams the current weight to a **Stop&Go** remote display.

Toggle lights only change the lights if the traffic light is set to **Manual** in the **Setup** menu. If **Traffic Lights** are set to **Auto**, they change based on the sequence below and the toggle lights icons are for visibility only.
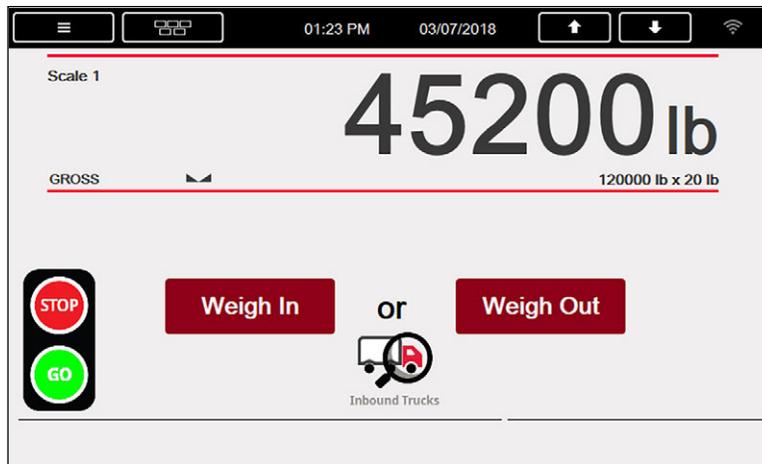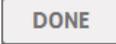

Figure 2-1. Weigh In/Out Display

System Displays

- *Traffic Light* icon:

    Green – indicates a truck can pull onto the scale to start a transaction

    Red – indicates the **Threshold Weight** (set value in setup menu) has been exceeded

- *Inbound Trucks* touch icon
- *Weigh In* or *Weigh Out* touch icon – when above threshold weight

2.1.1 Weigh In

📝 *NOTE: When instructed to press* **ENTER** *, pressing* **DONE** *performs the same function.*

1. Press **Weigh In** . ***Enter Truck ID*** displays.

2. Enter the truck ID and press **ENTER** or **DONE** .

    A. The system queries the inbound database table.

        i. If the truck ID is found, ***Truck Already Weighed In*** displays and indicator returns to ***Weigh In/Out*** display.

        ii. If the truck ID is not found, the program:

        • captures a stable gross weight from the scale

        • adds the inbound transaction to the truck register

        • prints a ***Weigh In*** ticket to Port 1 (reprint is available until the truck exits the scale)

        • if Truck Exit is set to ***Required***, the traffic light turns green and ***Weigh In Complete - Exit Scale*** displays; When weight drops below the ***Threshold Weight***, the system returns to Step 1

        • if Truck Exit is set to ***Disabled***, ***Weigh In Complete*** displays and indicator returns to ***Weigh In/Out*** display

    B. When the weight drops below the **Threshold Weight**, the system returns to Step 1.

2.1.2 Weigh Out

📝 *NOTE: When instructed to press* **ENTER** *, pressing* **DONE** *performs the same function.*

1. Press **Weigh Out** . ***Enter Truck ID*** displays.

2. Enter the truck ID and press **ENTER** or **DONE** . The system queries the inbound database table:

    A. If the truck ID is not found, there is NO KEYED TARE:

        i. ***Truck Not Found*** displays momentarily and the indicator returns to ***Weigh In/Out*** display.

    B. If the truck ID is found WITH A KEYED TARE, and there are products stored in the database, ***Enter Product ID*** displays:

        i. ***Enter Product ID*** displays, if there are products stored in the database. If only one product exists, the system automatically goes to the customer prompt.

        ii. Enter a stored ***PRODUCT ID*** and press **ENTER** , or press **ENTER** to skip.

    📝 *NOTE: If there are no product IDs entered in database, the prompt Enter Product ID is skipped.*

        iii. ***Enter Customer ID*** displays if there are customers stored in the database. If only one customer exists, the system will automatically use that customer and go to capturing gross weight.

        iv. Enter a stored ***CUSTOMER ID*** and press **ENTER** , or press **ENTER** to skip.

    📝 *NOTE: If there are no customer IDs entered in database, the prompt Enter Customer ID is skipped.*

        v. Captures a stable ***NET*** weight from the Total Scale.

        vi. Prints a Weigh Out Ticket.

        vii. Stores Transaction Record.

        viii. System turns the light ***Green***.

        ix. If **Truck Exit** required:

        • ***Weigh Out Complete – Exit Scale*** displays

        x. If **Truck Exit** disabled:

        • ***Weigh Out Complete*** displays and goes back to Step 1

C. If truck ID is found WITHOUT KEYED TARE:

    i. ***Enter Product ID*** displays, if there are products stored in the database. If only one product exists, the system automatically goes to the customer prompt.

    ii. Enter a stored ***PRODUCT ID*** and press (ENTER) , or press (ENTER) to skip.

    iii. ***Enter Customer ID*** displays if there are customers stored in the database. If only one customer exists system will automatically use that customer and go to capturing gross weight.

    iv. Enter a stored ***CUSTOMER ID*** and press (ENTER) , or press (ENTER) to skip.

    v. Captures a stable GROSS weight from the Total Scale.

    vi. Performs **Value Swapping** if enabled in the Setup Menu (Not with KEYED Tare).

    vii. Prints a Weigh Out Ticket.

    viii. Stores Transaction Record.

    ix. System turns the light ***Green***.

    x. Deletes inbound weight if **Stored Tares** is disabled in the Setup Menu (Not with KEYED Tare).

    xi. Deletes inbound weight if **Stored Tares** is enabled and Truck ID has a decimal in it.

    xii. If **Truck Exit** Required:

      • ***Weigh Out Complete – Exit Scale*** displays

    xiii. If **Truck Exit** Disabled:

      • ***Weigh Out Complete*** displays and goes back to Step 1.

    xiv. When the weight drops below the **Threshold Weight** system returns to Step 1.

3. Truck exits the scale once the light turns ***Green***.

    • If the Truck Exit is required, ***Weigh Out Complete - Exit Scale*** displays. Once the weight drops below the threshold weight system returns to ***Weigh In/Out*** display.

    • If the Truck Exit is disabled, ***Weigh Out Complete*** displays and indicator goes back to ***Weigh In/Out*** display.

2.1.3 Inbound Trucks

This icon allows the user to delete one record or all records.
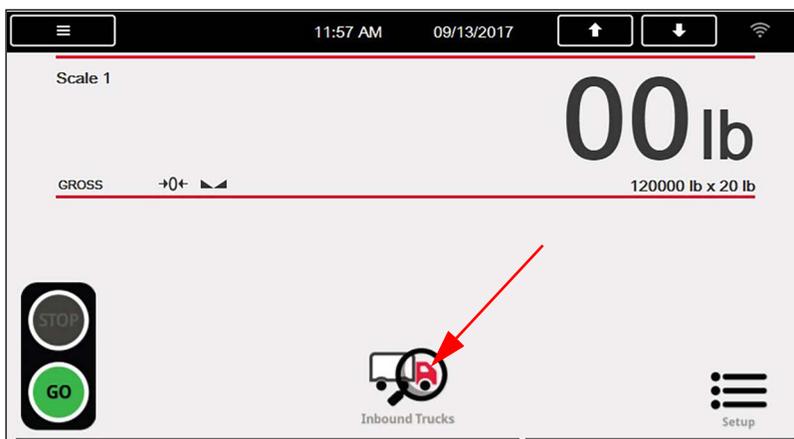
Figure 2-2. Weigh In Screen

1. Press the **Inbound Trucks** icon. If a password is in place, the system prompts **Enter Password**.

2. Enter the password if required. Figure 2-3 displays.

Figure 2-3. Inbound Trucks

3. Touch a record to select it, the record color changes from black to red. Use **Page Up** or **Page Down** icons to scroll through pages of eight records at once.

4. To delete a single record, select the record and press the **Delete Entry** icon. *Are You Sure* displays. Press the **Yes** icon to delete or press the **No** icon to cancel.

   To delete all records, press the **Delete All** icon. *Are You Sure* displays. Press the **Yes** icon to delete all or press the **No** icon to cancel delete.

3.0   Serial Communications – Tickets, PC

Weigh In Ticket (Auxfmt1)

The program uses Auxiliary Print Format #1 so the dealer may modify the print format through the 1280 front panel or by using Revolution® PC software.

Figure 3-1. Auxiliary Print Format #1 – Default

Print Token	Output
User String 1 <US1>	Truck ID
User String 2 <US2>	Gross Weight
User String 3 <US3>	Time
User String 4 <US4>	Date

Table 3-1. Weigh-In Ticket Auxfmt1 User Strings

Weigh Out Ticket (Auxfmt2)

The program uses Auxiliary Print Format #2 so the dealer may modify the print format through the 1280 front panel or by using Revolution® PC software.

Figure 3-2. Auxiliary Print Format #2 – Default

Print Token	Output	Print Token	Output
User String 1 <US1>	Truck ID	User String 10 <US10>	Product ID
User String 2 <US2>	Gross Weight	User String 11 <US11>	Product Name
User String 3 <US3>	Blank/Recalled	User String 12 <US12>	"Customer"
User String 4 <US4>	Tare Weight	User String 13 <US13>	Customer ID
User String 5 <US5>	Recalled/Keyed	User String 14 <US14>	Customer Name
User String 6 <US6>	Net Weight	User String 15 <US15>	Net Tons
User String 7 <US7>	Time	User String 16 <US16>	Net Tons Units
User String 8 <US8>	Date	User String 17 <US17>	Ticket Number
User String 9 <US9>	"Product"		

Table 3-2. Weigh-Out Ticket Auxfmt2 User Strings

Customer by Product Report

The report is not editable without an iRite program modification.

```
Customer by Product Report
Printed @ 12:17 PM 12/02/2017


1 XYZ Trucking
   Tin                40000 lb
   Gold               20000 lb
   Bismuth            20000 lb
2 ABC Trucking
   Tin                20000 lb
   Gold               60000 lb
3 Rice Lake Weigh
   Tin                20000 lb
   Platinum           40000 lb
   Bismuth            20000 lb
4 Intruder
   Tin                20000 lb
   Platinum           20000 lb
   Lead               40000 lb
5 Mattson
   Platinum           20000 lb
```

Figure 3-3. Customer by Product Report – Default

Customer by Truck Report

The report is not editable without an iRite program modification.

```
Customer by Truck Report
Printed @ 12:18 PM 12/02/2017


1 XYZ Trucking
   F1                 40000 lb
   S1                 40000 lb
2 ABC Trucking
   F1                 40000 lb
   S1                 40000 lb
3 Rice Lake Weigh
   C1                 20000 lb
   F1                 20000 lb
   S1                 40000 lb
```

Figure 3-4. Customer by Truck Report – Default

Rice Lake Stop&Go Green Light (AuxFmt19)

The message is transmitted (defaulted to Port 2). The format can be modified through the 1280 front panel or using a PC application called Revolution.

Rice Lake Stop&Go Red Light (AuxFmt20)

The message is transmitted (defaulted to Port 2). The format can be modified through the 1280 front panel or using a PC application called Revolution.

4.0   Application Setup and Configuration

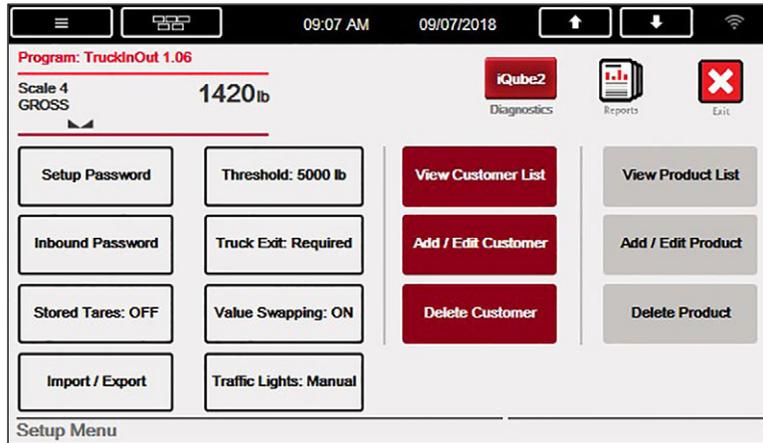The **Setup** menu can be password-protected and offers access to the following:

Figure 4-1. Setup Menu

Parameter /Icon	Default	Description
Setup Password	""	Create a password that is required to enter the setup menu
Inbound Password	""	Create a password that is required to enter the inbound trucks menu
Stored Tares	**ON**	Set to **ON**, stores the inbound weight after weighing out; Set to OFF, deletes the inbound record after weighing out
Import/Export	--	Allows operator to import products into the database table from a USB flash drive using a .DB file type; Allows operator to save transactions to a USB flash drive or an SD card; Reference the 1280 technical manual (PN 167659) Importing/Exporting section for more details
Threshold	**5000 lb**	Weight that triggers the optional traffic light and that the scale must go above or below before weighments are allowed
Truck Exit	**Required**	Allows truck to go below the threshold in between weighments; Settings: **Required**, Disabled
Value Swapping	**ON**	Set to **ON**, the gross weight is always the larger of the gross and tare values, whether the outbound weight was larger or smaller than the inbound weight; set to OFF, the gross is always the outbound weight
Traffic Lights	**Auto**	Allows the traffic lights to be controlled by the program sequence (Auto) or by the icon (Manual).
View Customer List	--	View customers currently in the database table
Add/Edit Customer	--	Add/Edit customers to the database table
Delete Customer	--	Delete customers in the database table
View Product List	--	View products currently in the database table
Add/Edit Product	--	Add/Edit products in the database table
Delete Product	--	Delete products in the database table
Reports	--	Print two total reports (totals only); Settings: Customer by Product, Customer by Truck
iQUBE[2]	--	Displays 1280 built in iQUBE[2] Diagnostics softkey. An iQUBE[2] cannot be configured to Port 1. If configured to Port 2 make sure streaming is OFF, Auxiliary Formats #19 and #20 are set to Port 0.

Table 4-1. Truck In/Out Application Setup and Configuration

5.0 Database Tables

Report Database is used for Reporting in the iRite program.

Field	Type	Description
ID	String	Alphanumeric ID – 15 Characters
InPWgt	Real	Primary Inbound weight stored
InSWgt	Real	Secondary Inbound weight stored
InTWgt	Real	Tertiary Inbound weight stored
DT	Datetime	Time and Date of transaction

Table 5-1. Inbound Database (1000 Records)

Field	Type	Description
ID	String	Alphanumeric ID – 15 Characters
Name	String	Product Name – 15 Characters
CUnits	String	What to print for converted units
CMult	Real	Convert to second units (tn or bushels)

Table 5-2. Product Database (100 Records)

Field	Type	Description
ID	String	Alphanumeric ID - 15 Characters
Name	String	Customer Name - 15 Characters

Table 5-3. Customer Database (100 Records)

Field	Type	Description
TruckID	String	Truck ID – 15 Characters
ProdID	String	Product ID – 15 Characters
ProdName	String	Product Name tied to ID
CustID	String	Customer ID – 15 Characters
CustName	String	Customer Name tied to ID
Gross	Real	Gross Weight
Tare	Real	Tare Weight
Net	Real	Net Weight
ConNet	Real	Converted units based on product conversion value
OutUnits	String	Outbound Unit String
InDT	Datetime	Date and Time of Inbound
OutDT	DateTime	Date and Time of Outbound

Table 5-4. Transaction Database (5000 Records)

6.0   Hardware Setup

6.1   Option Card Location

Slot	Type
1	Single Channel A/D Card
2	Dual Channel A/D Card (optional)

Table 6-1. Option Card Locations

6.2   1280 Screen Size/Type

NIT	1280 Screen Size/Type (12 in or 7.5 in)
500	7.5 in
	12 in

Table 6-2. 1280 Screen Size/Type

6.3   Digital I/O

Slot	Bit	Type	Function
0	1	Output	Green Light
0	2	Output	Red Light
0	3-8	Off	Currently Not Used

Table 6-3. Digital I/O

6.4   Serial Ports

Port	Type	Description	Setup
1	CMD	Ticket Printer (optional)	9600, 8, N, 1
2	CMD	Rice Lake Stop and Go Remote (optional) Default for Legal for Trade Streaming	9600, 8, N, 1

Table 6-4. Serial Ports

6.5   Ethernet TCP/IP Port

Port	Type	Description	Setup
10001	CMD	Waits for connection from software/device i.e. Revolution or Interchange	TCP Server
10001	CMD	Currently Not Used	TCP Client1
10002	CMD	Currently Not Used	TCP Client 2
3000	CMD	Web Server	Web Server

Table 6-5. Ethernet TCP/IP Port

6.6   USB Port

Port	Type	Description	Setup
3	CMD	Currently Not Used	-

Table 6-6. USB Device Port

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6.7   USB Type-A Port

Port	Type	Description	Setup
-	CMD	Currently Not Used	-
-	CMD	Currently Not Used	-

Table 6-7. USB Type-A Port

6.8   SD Card Slot

Port	Type	Description	Setup
-	CMD	8GB Micro SD Card	Images
-	CMD	Currently Not Used	-

Table 6-8. SD Card Slot

6.9   Bluetooth Port

Port	Type	Description	Setup
4	CMD	Currently Not Used	-

Table 6-9. Bluetooth Port