



Truck Load Out

MCR Technologies Group, Inc.

P.O. Box 1016

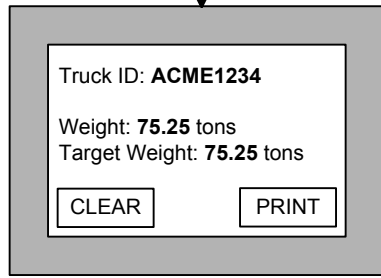
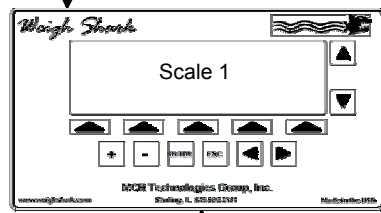
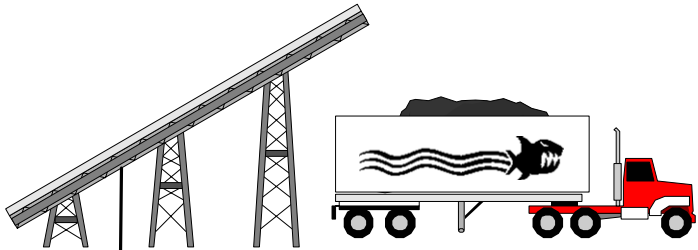
Sterling, IL. 61081

815.622.3181

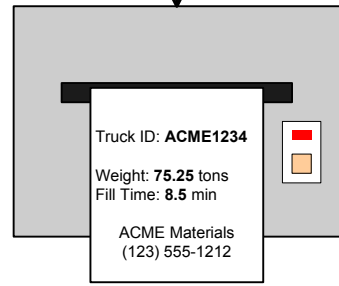
www.weighshark.com

sales@weighshark.com

12/17/2018



6" Mono-Chrome or Color Touch screen

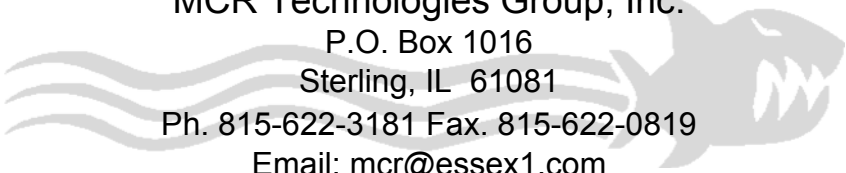


Ticket Printer

Basic Operation

- Step 1: Clear Weight.
- Step 2: Enter Target weight.
- Step 3: Enter Truck ID Number.
- Step 4: Start Conveyor.
- Step 5: Scale stops conveyor or Feeder when it reaches the Target weight.
- Step 6: Print Ticket which includes ID No.

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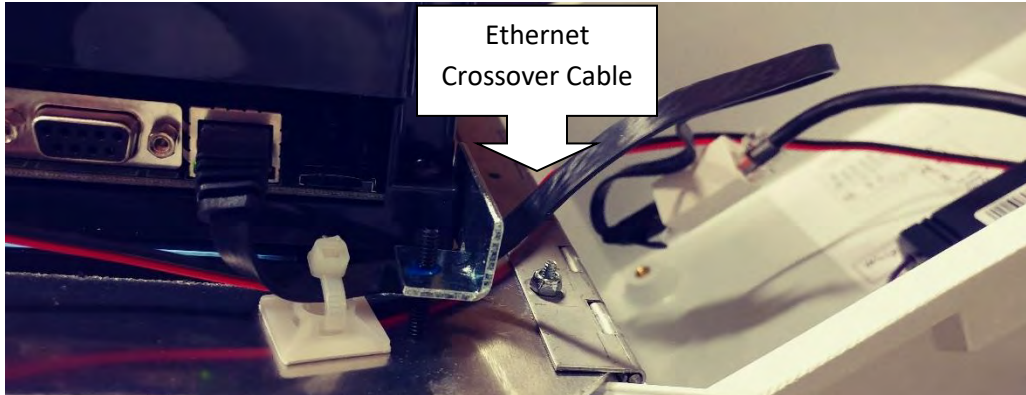
Weigh Shark Truck Load Out System

Date:	10/27/05	REV:	1.0	By:	SJK
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TLO Setup Guide

TLO Integrator Setup for Ethernet

1. Ensure **Crossover Cable** is installed to **TLO Ethernet port**



2. Verify IP Address on TLO is **192.168.0.99**. If not, it will **NOT** communicate with the Integrator.
3. On Integrator, scroll up to **Truck Load-Out Setup** > press **ENTER**
4. On 1st line, press (+) or (-) to turn TLO **ON**
5. Scroll down to **cutoff** > press **ENTER** then press **EDIT**
6. Set value to desired amount (ex: 0.25 Tons) > press **APPLY**
7. Scroll to **MIN TARGET** > press **ENTER** then press **EDIT**
8. Set to desired value (ex. 2.00 Tons) > press **APPLY**
9. Scroll to **MAX TARTGET** > press **ENTER** then press **EDIT**
10. Set to desired amount (ex: 10.00 Tons) > press **APPLY**
11. Press **EXIT**

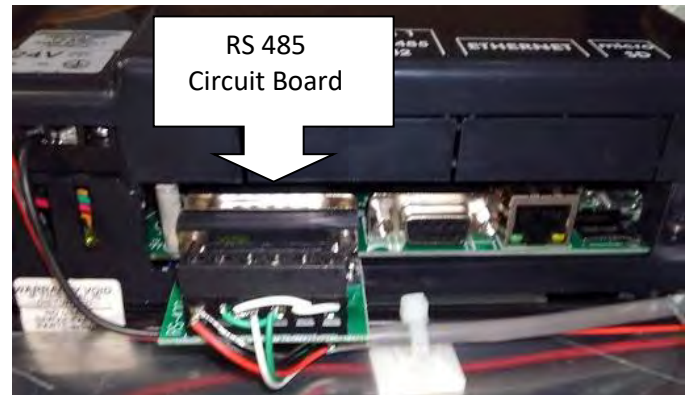
TLO Setup

1. Press **TARGET WEIGHT**
2. Set target weight (ex: 4.00 Tons) > press **ENTER**
3. Press **START**

TLO Setup Guide

TLO Integrator Setup for RS 485

1. Press **I/O**
2. Scroll down to **Serial Ports** > press **ENTER**
3. Go to **RS 485** > press **ENTER** then press **EDIT**
4. Press (+) to scroll to **MODBUS RTU** > press **APPLY**
5. Press **SETUP**
6. Scroll up to **Truck Load-Out Setup** > press **ENTER**
7. On 1st line, press (+) or (-) to turn TLO **ON**
8. Scroll down to **cutoff** > press **ENTER** then press **EDIT**
9. Set value to desired amount (ex: 0.25 Tons) > press **APPLY**
10. Scroll to **MIN TARGET** > press **ENTER** then press **EDIT**
11. Set to desired value (ex. 2.00 Tons) > press **APPLY**
12. Scroll to **MAX TARTGET** > press **ENTER** then press **EDIT**
13. Set to desired amount (ex: 10.00 Tons) > press **APPLY**
14. Press **EXIT**



TLO Setup

1. Press **TARGET WEIGHT**
2. Set target weight (ex: 4.00 Tons) > press **ENTER**
3. Press **START**

TLO Example

The following is an example Truck Load out set up. The system will do the following:

- Target Weight must be between 5 and 25 tons.
- A new Target Weight must be entered after every truck.
- The feeder will be shut off .25 tons before the Target Weight is reached.
- The Truck Fill Timer will accumulate until the loading is complete and the weight is cleared.
- Use an external push button, wired to Input 4, to Start the loading.
- Wire the feeder to Output 1.
- Touch screen will be used to control truck load out.

Software settings:

- Setup>Truck Load Out Setup menu
 - Truck Load Out = ON.
 - Require Truck ID = NO
 - Clear ID on Complete = NO
 - Require Input = NO
 - Auto Print Ticket = NO
 - Auto Clear Target = YES
 - Stop Time On = Clear
 - Cutoff = .25
 - Min. Target = 5
 - Max. Target = 25
- I/O>Inputs>Input 4
 - Function = Truck Load Out Start
 - When Input is: = ON
 - Filter Preset = 50ms
- I/O>Outputs>Output 1
 - Function = Truck Cutoff
 - Action = ON

Hardware Settings:

- Wire push button to Input 4
- Wire feeder relay to Output 1

Operation

1. Enter Target Weight.
2. Press Start push button or Start on touch screen. Truck accumulator will clear to 0.00 and Output 1 will turn ON.
3. When the Truck accumulator is .25tons from Target Weight Output 1 will turn Off.
4. Press Clear to complete load. This will also clear the Target weight to 0.00.

Truck Load Out (TLO)

The TLO software can be configured to work with the scale keypad, **external touch screen**, external push buttons or a combination of the above. The TLO uses its own accumulator so there is no conflict with any of the 4 main totalizers.

Programming Setup at the Belt Scale Integrator

Settings for the TLO system can be found at Setup>Truck Load Out Setup menu.

SETUP>Truck Load Out Setup Menu

Setting	Description	
Truck Load Out	On/Off – Enables the Truck Load Out system.	
Require Truck ID	On/Off – Requires a Truck ID to be entered before the load can begin.	
Clear ID on Complete	On/Off – Clears Truck ID at completion of load.	
Require Input	On/Off – Requires a digital input to be activated before the load can begin. The input and configured in the I/O menu.	
Auto Print Ticket	On/Off – Automatically print a truck ticket on completion of load. Requires optional ticket printer.	
Auto Clear Target	On/Off – Clear Target weight at completion of load.	
Stop Timer On	Controls Truck fill timer.	
	Output	Truck fill timer is stopped when the Truck Output turns off.
	Clear	Truck fill timer is stopped when the load is complete and the operator Clears the weight.
Min. Rate	Truck fill timer accumulates time only when the Rate is above the Minimum Rate setting found in the SETUP>Calibration Setup menu.	
Cutoff	The amount to subtract from the Target weight to turn off the Cutoff output.	
Min. Target	Minimum allowable Target weight	
Max. Target	Maximum allowable Target weight	

TLO Inputs

Any of the 4 digital Inputs can be configured for the following functions. Inputs can be configured under I/O>Inputs menu.

I/O>Inputs

Function	Description
Truck Load Out Clear	Clears Truck accumulator when the load is complete.
Truck Load Out Stop	Stops the truck load out process and turn off outputs. (This should NOT be used as an E-Stop.)
Truck Load Out Start	Starts the Truck load out process
Truck Load Out Enable	If setting Require Input = ON then this input needs to be ON for truck load out to start.

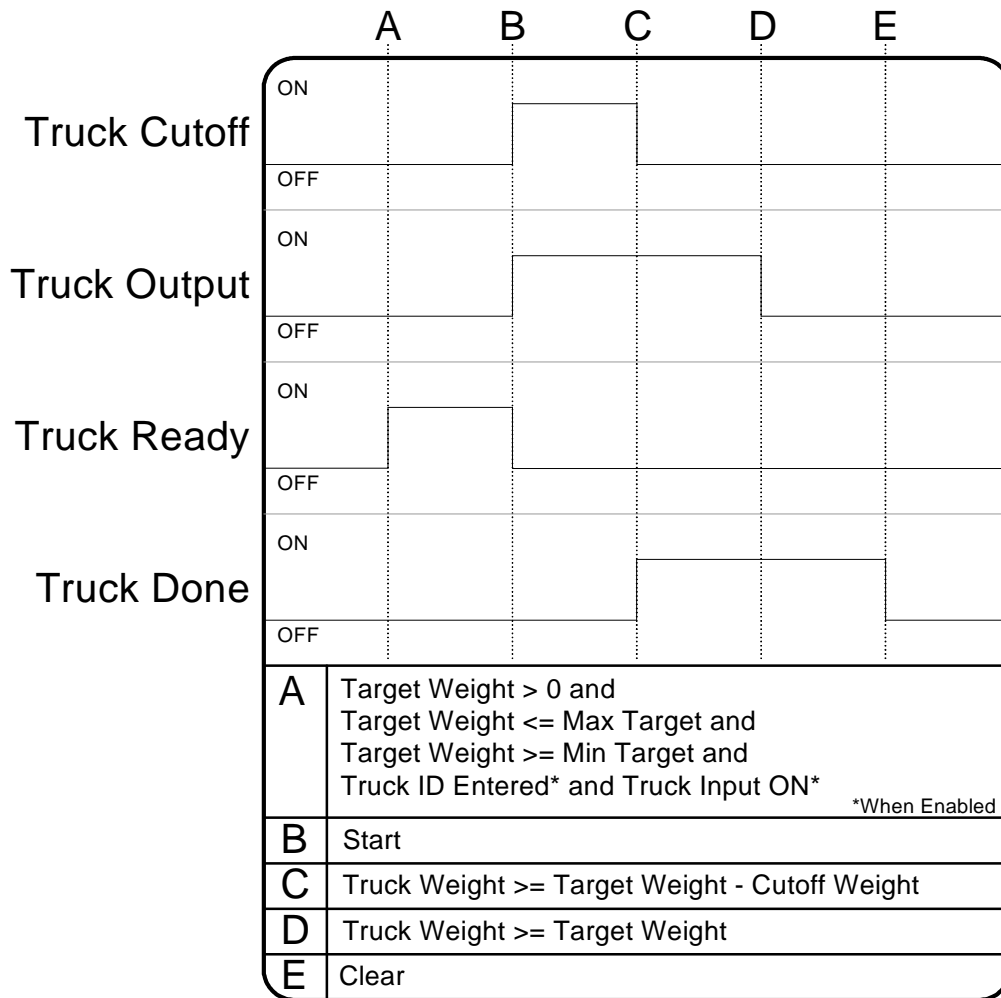
TLO Outputs

Any of the 4 digital Outputs can be configured for the following function. Outputs can be configured under I/O>Outputs menu.

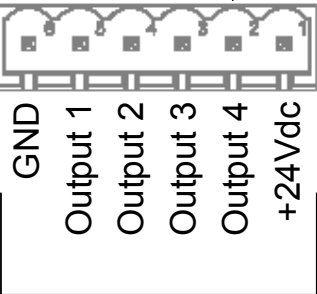
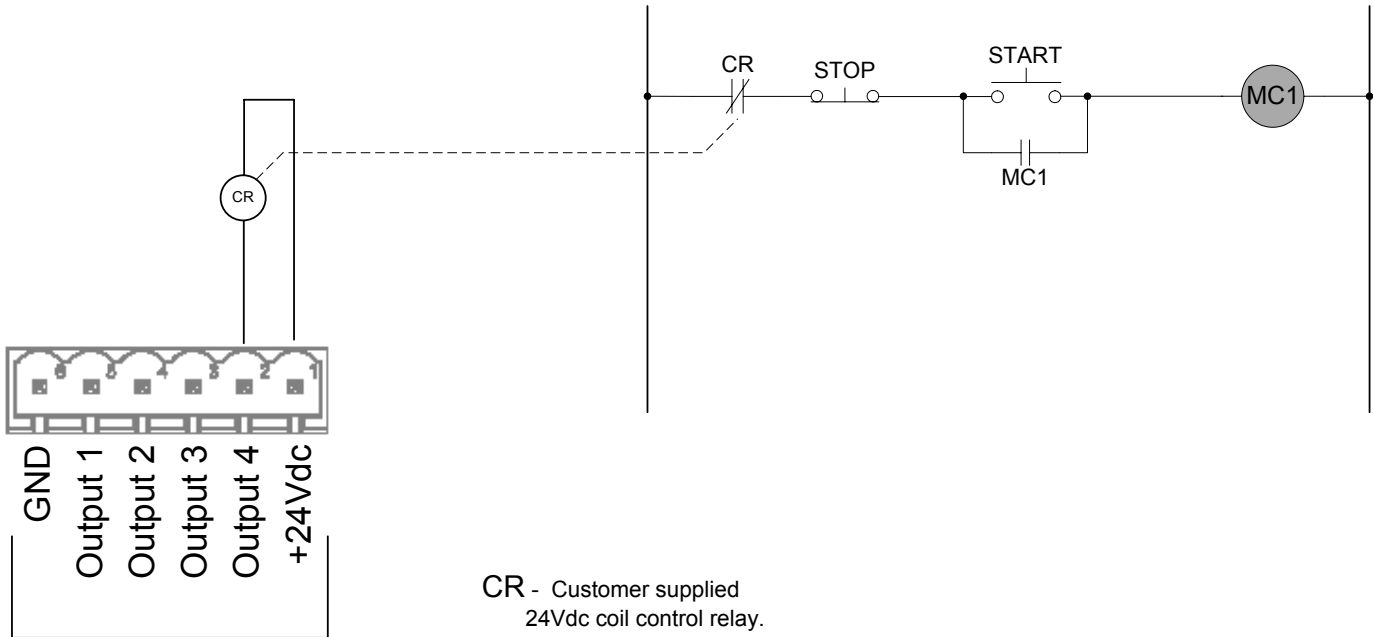
I/O>Outputs

Function	Description
Truck Output	On when loading starts, off when Target weigh is reached.
Truck Ready	All the requirements are met for the loading to start.
Truck Done	On when accumulator reaches Target Weight – Truck Cutoff weight.
Truck Cutoff	On when loading starts, off when Target Weight – Truck Cutoff Weight is reached.

TLO output function table.



Existing Conveyor or Feeder
Start/Stop Circuit

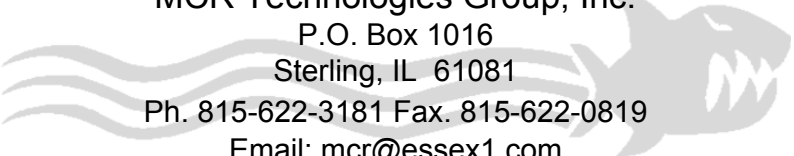


General Purpose
Outputs
100mA Sinking Max
at 24Vdc*

CR - Customer supplied
24Vdc coil control relay.

* 100mA Max
current draw on all
24Vdc sources
combined

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Truck Load Out Control Wiring

Date:	6/23/05	REV:	1.0	By:	SJK
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TLO Operation with Scale Screen (Weigh Shark integrator)

When the TLO system is Enabled there are 2 extra options under the VIEW menu, Truck Total and Trucks. Use the ▲ and ▼ keys to move the cursor to the Truck Total option and press ENTER. This will open the Truck Load out screen.

Truck Loadout			
>Truck I D: ACME01			
Target :	15.00t ons		
Tot al :	0.00t ons	Rat e:	0.00t ph
Ready - Press Start			
Start		EXIT	

▲ ▲ ▲ ▲ ▲

1. Enter Truck ID. Use the ▲ and ▼ keys to move the cursor to Truck ID. Press ENTER to open the Truck ID edit screen. Press button under EDIT to begin editing the Truck ID. Use the + and – keys to change the value. Use the ◀ and ▶ keys to move between each column. Press APPLY to apply settings and exit.
2. Enter Target weight. Use the ▲ and ▼ keys to move the cursor to Target. Press ENTER to open the Target edit screen. Press button under EDIT to begin editing the Target weight. Use the + and – keys to change the value. Use the ◀ and ▶ keys to move between each column. Press APPLY to apply settings and exit.

If Target weight is between the Maximum and Minimum settings then the screen will display “Ready – Press Start”. If setting, Require Truck ID, is set to ON then a Truck ID will be required before load can begin. If setting, Require Input, is set to ON then the input configure as Truck Load Out Enabled must be ON before the load can begin.

3. Press button under Start to clear the accumulator and begin loading truck. Press Stop at anytime to stop the loading process.

Truck Loadout			
>Truck I D: ACME01			
Target :	15.00t ons		
Tot al :	3.40t ons	Rat e:	325.23t ph
Loadi ng. . .			
Stop		EXIT	

▲ ▲ ▲ ▲ ▲

- When Loading is completed press Clear to complete load. If setting, Clear Truck ID, is set to ON the Truck ID will be cleared. If setting, Auto Clear Target, is set to ON then the Target weight will also be cleared.

Truck Loadout			
>Truck I D: ACME01			
Target :	15.00t ons		
Tot al :	15.00t ons	Rat e:	0.00t ph
Truck Full - Press Clear			
Clear		EXIT	

▲

▲

▲

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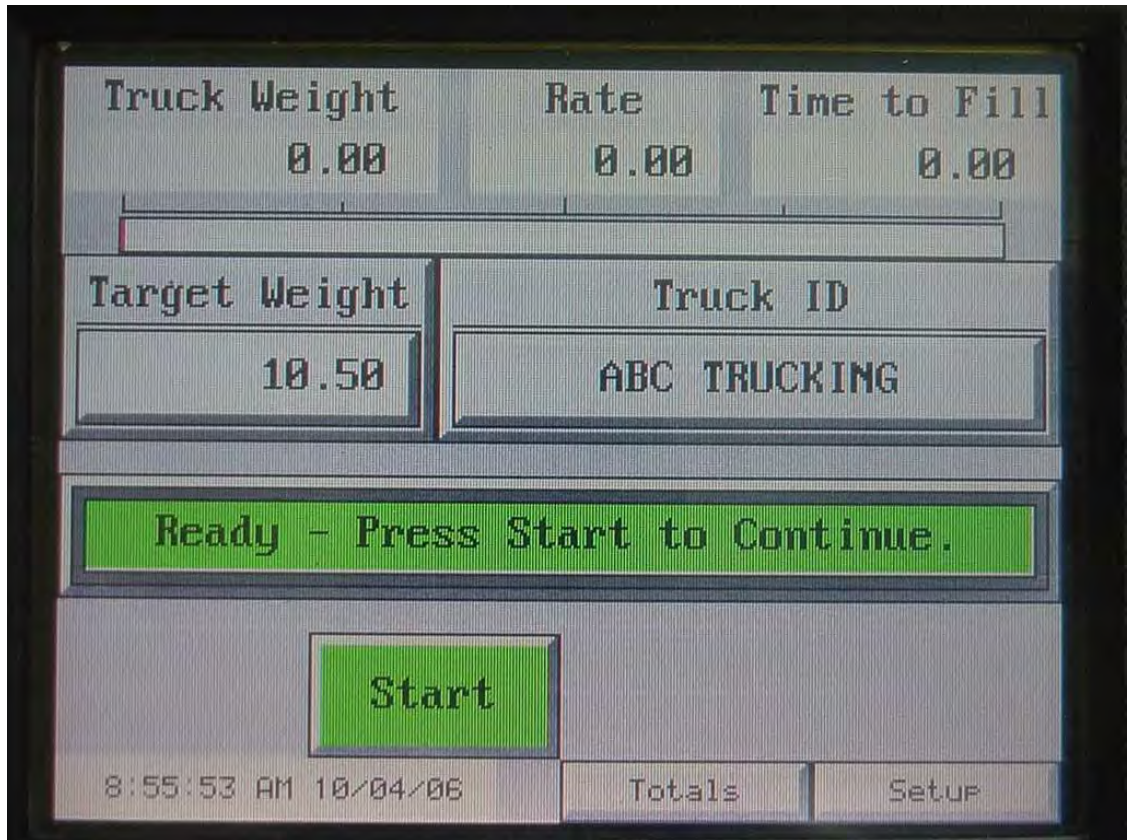
- Truck Load out is complete; the system is ready for the next truck.

TLO with COLOR Touch Screen

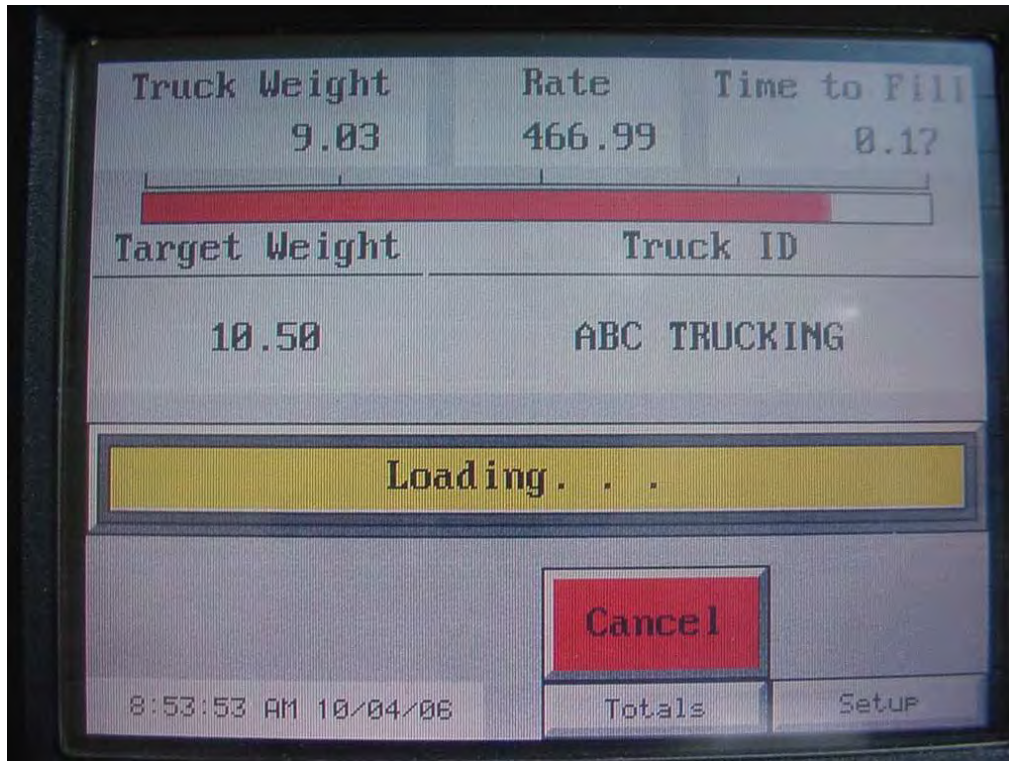
- Enter Truck ID. Press the Truck ID Button on touch screen to edit the Truck ID. Press ENT in the top left corner of the screen to accept changes. If you are not tracking by Truck # go to next step.
- Enter Target Weight. Press the Target Weight button to edit the Target Weight. Press Enter to accept changes.

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; text-align: center;">7</td> <td style="width: 33%; text-align: center;">8</td> <td style="width: 33%; text-align: center;">9</td> </tr> <tr> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> <td style="text-align: center;">6</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">0</td> <td colspan="2" style="text-align: center;">Clear</td> </tr> </table>	7	8	9	4	5	6	1	2	3	0	Clear		<div style="text-align: center; font-weight: bold; font-size: 1.2em;">Target Weight</div> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="text-align: center; padding: 5px;">12.50</td> </tr> <tr> <td style="text-align: center; padding: 5px;">MINIMUM 0.00</td> </tr> <tr> <td style="text-align: center; padding: 5px;">MAXIMUM 99999.99</td> </tr> <tr> <td style="text-align: center; padding: 5px;">CURRENT 10.50</td> </tr> </table> <div style="margin-top: 20px; display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; width: 45%;">Cancel</div> <div style="border: 1px solid black; padding: 5px; width: 45%;">Enter</div> </div>	12.50	MINIMUM 0.00	MAXIMUM 99999.99	CURRENT 10.50
7	8	9															
4	5	6															
1	2	3															
0	Clear																
12.50																	
MINIMUM 0.00																	
MAXIMUM 99999.99																	
CURRENT 10.50																	

If Target weight is between the Maximum and Minimum settings then the screen will display “Ready – Press Start to continue”. If setting, Require Truck ID, is set to ON then a Truck ID will be required before load can begin. If setting, Require Input, is set to ON then the input configure as Truck Load Out Enabled must be ON before the load can begin.

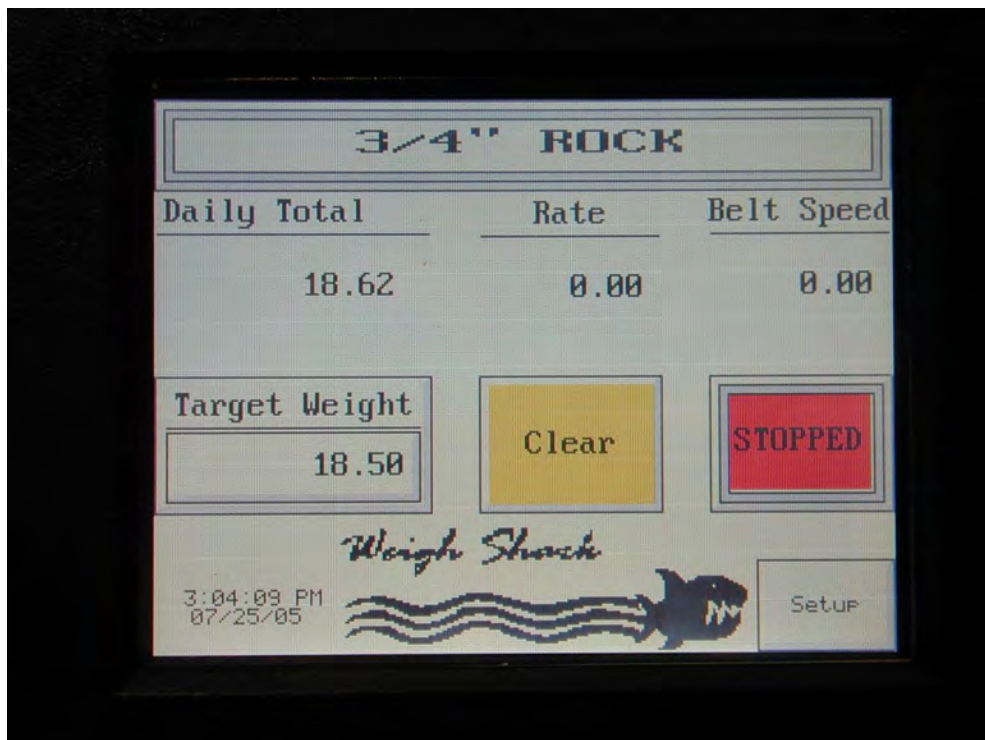


3. Press Start button to clear accumulator and begin loading truck. Press Stop at anytime to stop the loading process.



Display will now show the loading process.

- When Loading is completed press Clear to complete load. If setting, Clear Truck ID, is set to ON the Truck ID will be cleared. If setting, Auto Clear Target, is set to ON then the Target weight will also be cleared.



5. Truck Load out is complete; the system is ready for the next truck.

6. Addition Screens show history for the loading.



Truck Totals		
Trucks	3	
Total Weight	38.61	tons
Fill Time	0.07	Hours
Trucks / Hr	42.35	
Avg Weight	12.87	tons
Avg Fill Time	1.42	minutes
Avg Target Error	1.870	tons
Avg Rate	545.082	te/h
← Back		Clear

TLO Truck Summary Screen at scale integrator.

Under the VIEW menu of the scale integrator use the ▲ and ▼ keys to move the cursor to the Trucks option and press ENTER. This will open the Trucks Summary screen.

Page 1

>Trucks:	13
Total Weight:	194.25t ons
Total Fill Time:	1.34hrs
Avg Trucks/Hour:	9.70
Clear	EXIT

▲ ▲ ▲ ▲ ▲

Page 2

>Avg Truck Weight:	14.94t ons
Avg Fill Time:	6.18min.
Avg Target Error:	0.06t ons
Avg Rate:	145.05t ph
Clear	EXIT

▲ ▲ ▲ ▲ ▲

Page 3

>Last Clear	03:35 11/10/2005
Clear	EXIT

▲ ▲ ▲ ▲ ▲

Pressing Clear will clear the Truck summary and change the Last Clear value to the current time and date. The information will update at the completion of every truck load.