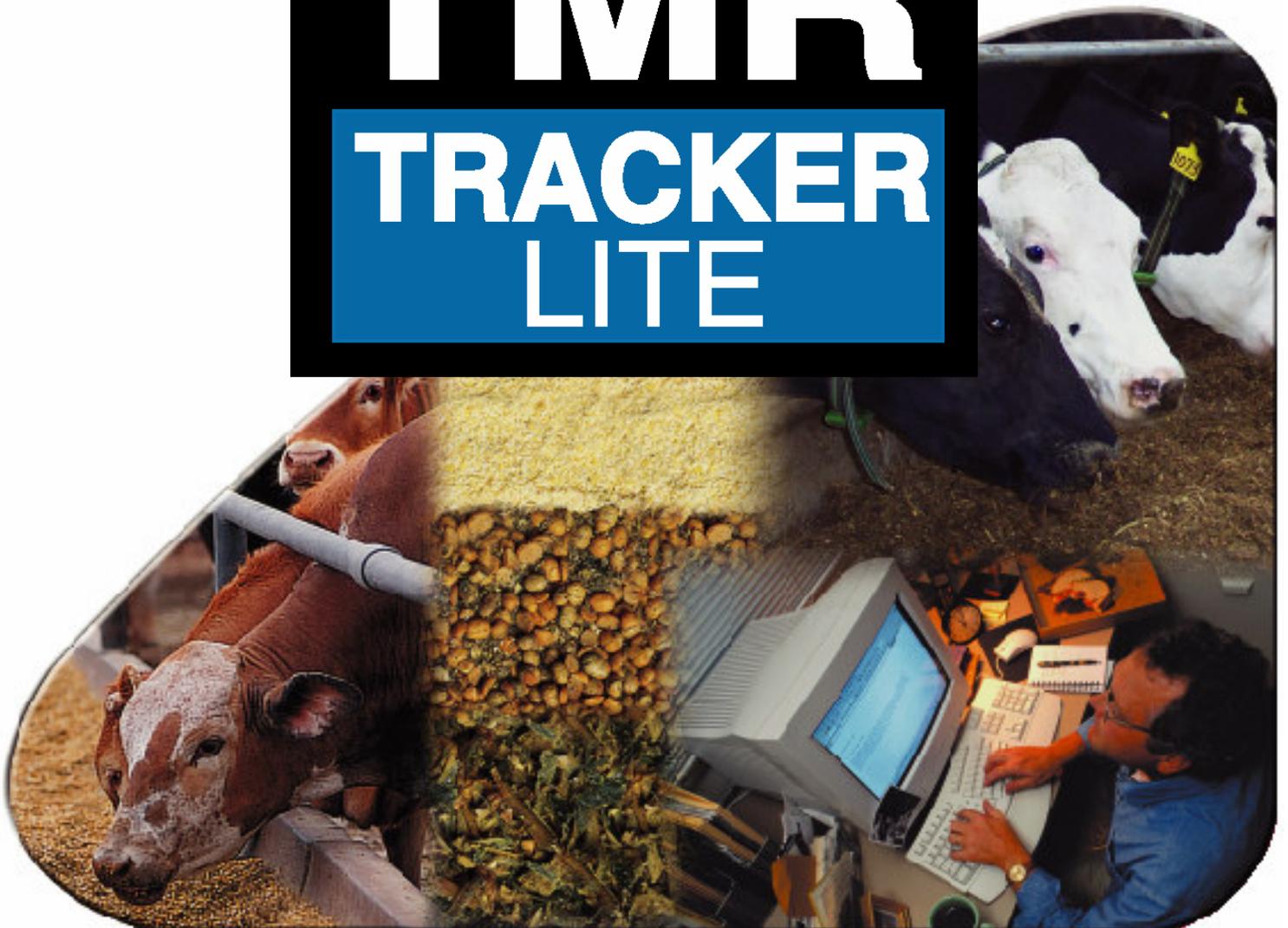




SET-UP AND USER GUIDE

TMRTM

TRACKER LITE



Welcome to TMR Tracker Lite by Digi-Star

Thank you for selecting the TMR Tracker Lite system by Digi-Star. In order to make the transition to this product as easy as possible, we have created this “Quick Start Guide”. This guide is not intended to replace the TMR Tracker User’s Manual, nor is it intended to setup all the features of the TMR Tracker Lite. Please refer to the full manual for detailed instructions.

Computer system minimum requirements:

1. Pentium 100 or better
2. 100 Meg free disk space
3. 28.8 modem
4. Microsoft Windows 98/2000/XP/ME or NT*
5. 32 Meg Ram
6. 1 free Serial Port*
7. Internet Access
8. CD Rom Drive
9. US date format (M/D/YYYY)

*Note: a RF Datalink system requires 2 free serial ports. A USB to serial adapter is recommended to add a communication port if your PC has USB connections. Microsoft Windows NT system requires a minimum of Service Pack 3.

The following information is required to setup TMR Tracker and should be obtained in advance:

1. A list of all ingredients; dry matter %, amount in inventory, cost per lb./ton and supplier
2. A list of all rations / premixes; either by load %, dry weight, or pounds per head and a pounds per cubic feet value for the ration / premix
3. A list of all pens, number of head, ration to be fed and number of feedings a day
4. Name, model, and size in cubic feet of all mixers
5. Name of all drivers and a User ID for each

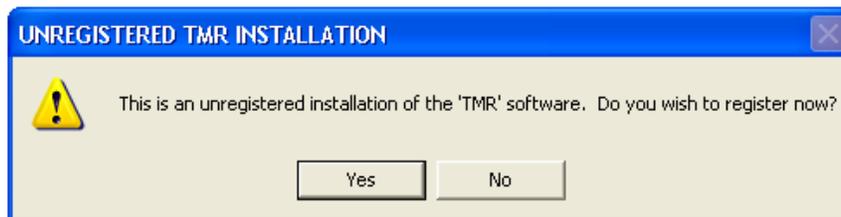
When you are ready to begin the software installation, connect the DataKey Docking Station to the serial port and ensure that power is connected to the device. Insert the DataKey. The power LED should be flashing.

Insert the TMR Tracker CD into your CD drive and follow the installation instructions.

After installation, click on the TMR Tracker icon. The software will display the following message:



Click on OK. The following screen will be displayed:



To register the software, call Digi-Star, Monday through Friday between the hours of 8 AM and 5 PM Central time. You will need to provide us with the installation CD serial number and dairy contact information. When you click on YES, the following screen will be displayed:



After you have successfully registered the TMR Tracker program, the software will start at the main screen. An explanation of the program icons follows:



- | | | | |
|---|--------------|----|---------------------|
| 1 | Ingredients | 9 | View Data |
| 2 | Rations | 10 | Erase Memory Device |
| 3 | Pens | 11 | Feed Refusal |
| 4 | Pen Grid | 12 | Reports |
| 5 | Mixers | 13 | Receive email |
| 6 | Operators | 14 | Send email |
| 7 | Send Data | 15 | Help |
| 8 | Receive Data | | |

To begin using the TMR Tracker software, you must enter your data. Data is entered in the order shown by the icons.

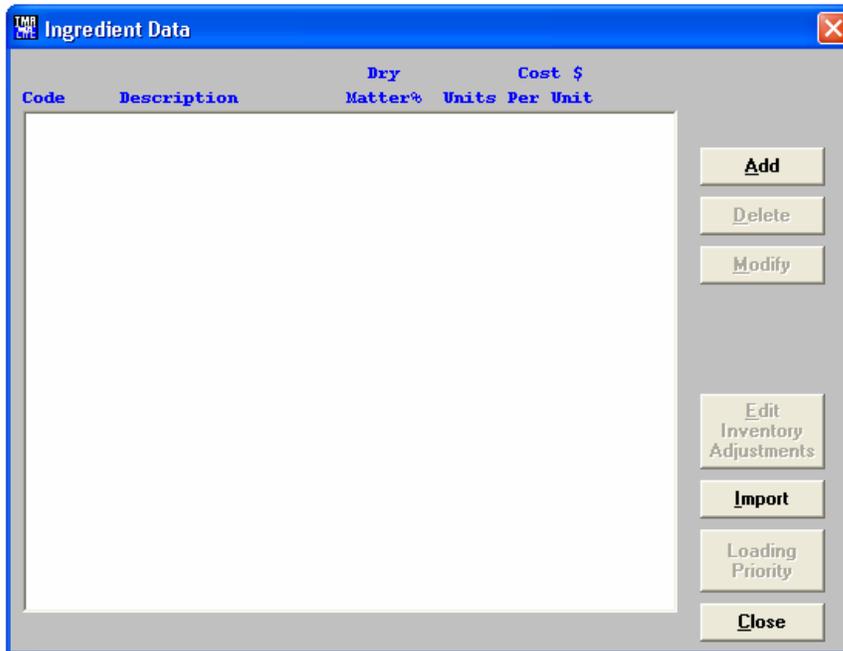
If TMR Tracker is used with RF Datalink, go to the System dropdown menu, Default Settings, Data Transfer tab, then select RF Datalink.

Your Send and Receive icons will appear.



Step 1

Enter your ingredients / inventory. Click on the ingredients icon.



This will display the Ingredient Data screen. Click on Add. The following screen will be displayed:



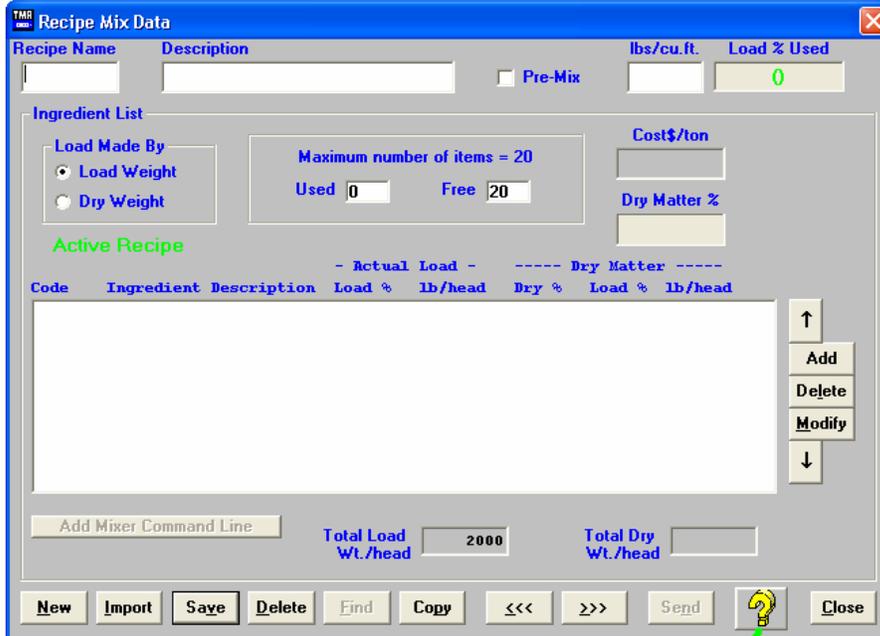
Each ingredient will be assigned an ingredient code. This code is displayed as an operator prompt on the scale and remote. Please limit the code to 6 characters. For example: Corn silage may have an ingredient code of SILAGE or CORNSI. Enter the ingredient description, weigh units, dry matter percentage and click Save.

Repeat for all ingredients.

Note: H₂O is automatically assigned by the TMR Tracker program and cannot be deleted.

Step 2

Enter your Rations / Premixes. Click on the Rations icon.



CLICK ON THE QUESTION MARK
FOR AN INSTRUCTION VIDEO

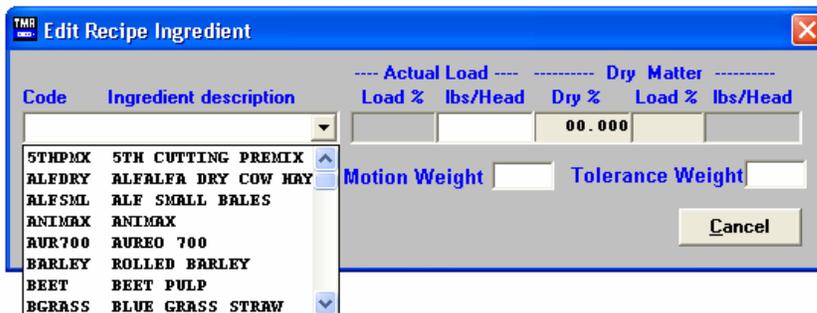
This will display the Ration Data screen. The following screen will be displayed:

Rations may be entered based on Dry Matter Weight or Actual Load Weight.

When recipes are saved as Dry Weight, an ingredient dry matter change will automatically adjust the recipes.

Each Ration will be assigned a ration code. This code is displayed as an operator prompt on the scale. You are limited to 6 characters for the ration code.

Enter a full description and pounds per cubic feet. The pounds per cubic feet determines the maximum amount that the mixer can hold of that ration (lbs/cu.ft x mixer cu.ft size). To add ingredients to the ration, click Add. The following screen will be displayed:



Click the down arrow under the Code / Description box. This will display a drop down menu of your ingredient selections. Click on the ingredient you wish to add, enter the load percentage, lbs/head or dry matter pounds. Click OK to save and repeat for all ingredients in the ration. You are limited to 20 ingredients per ration.

Motion Weight – This setting prevents the ingredient or pen to advance if the weight is unstable or moving. The motion weight is the amount of weight the display changes by for the “Motion” Arrow to begin flashing. This allows the "Motion Weight Value" to be adjusted for each feedline. The indicator uses the motion weight value to determine when the weight on the scale is changing rapidly. Motion detection will activate when the weight displayed has moved more than "Motion Weight" (ex. 20lbs) in less than "2 seconds".

This is different than the standard motion detection which activates when the weight displayed has moved more than "2 display counts" in less than "2 seconds". The standard motion detection is selected whenever the indicator is first turned ON or the "Motion Weight" value is set to "0". The "Motion Weight Value" has a range from 000(OFF) to 999. The weight value is either lb or kg depending on setting for Display Units in Long Form Setup.

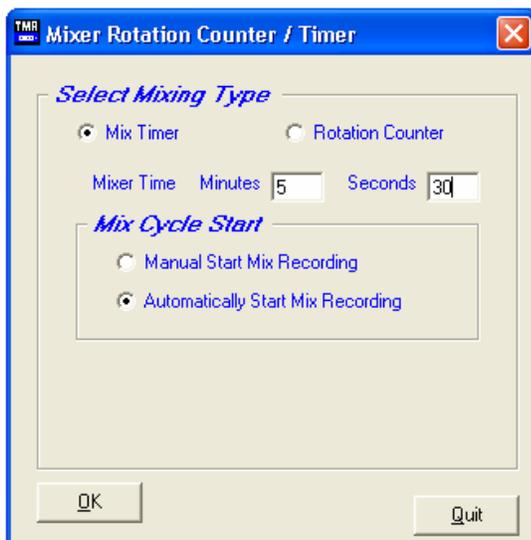
To access this option: Enter short cut number 103 and press the [Select] key. Press [Select] key to toggle on/off. Press the [On] key to save.

Tolerance Weight – This option is useful if you need to set different tolerance weights for individual ingredients. The tolerance weight determines when the delay timer will begin. For example: if your tolerance weight is 100 lbs/Kgs on corn silage, when you reach 100 remaining to load the “delay time” will begin to count down.

This tolerance weight will over ride the tolerance set at the indicator for only ingredients that have a tolerance weight entered from the software.

The auto-advance resets the "delay time" counter every time the weight moves out of the tolerance window. If enabled, "motion detection" also resets the "delay time" counter

Add Mixer Command Line – This option allows you to enter an mix time or number of rotations in the recipe.



Select either mix time or rotation counter. You must have a rotation counter installed in the indicator for the rotation counter to function. Enter the value and select how the timer/counter to start.

Manually: The Timer/Counter key or the print key is required to start.

Automatically: When the ingredient is advanced the Timer/Counter will start.

Then click OK.

When done entering ingredients, click Save. Click New to add a new ration and repeat the above steps.

Premixes

A premix is designed to be added as an ingredient within a ration. To create a premix, click on the premix check box. This will automatically add this "ration" as an ingredient to your ingredient list.

Step 4

Enter Pen Feeding Data. Click on the Pen Feeding icon.



This will display the Pen Feeding Data screen:

Feeding	Recipe	lbs./Head	Total Wt.	Dry Wt.	Feeding Factor %
1			Change		0.00
2			Change		0.00
3			Change		0.00
4			Change		0.00
5			Change		0.00
6			Change		0.00
7			Change		0.00
8			Change		0.00
9			Change		0.00
Total			0	0	0.00

CLICK ON THE QUESTION MARK FOR AN INSTRUCTION VIDEO

The pen number is displayed at the scale as a user prompt and is limited to 6 characters. Enter a description and number of head. Select the ration to be fed by clicking on the down arrow and selecting the ration from the drop down menu. You can feed each pen up to 9 times per day.

Feeding Factors

The Global Feeding Factor % affects all feedings. To increase the amount to be fed to the pen by 5%, change the Global Feeding Factor % by 5%.

As an example – to increase a total call weight from 5000 lbs to 5250 lbs, change the Global Feeding Factor % from 100% to 105%.

The Feeding Factor % affects only that feeding.

As an example – a pen fed two times per day could have the morning (1st feeding), set to 60% and the afternoon (2nd feeding), set to 40%.

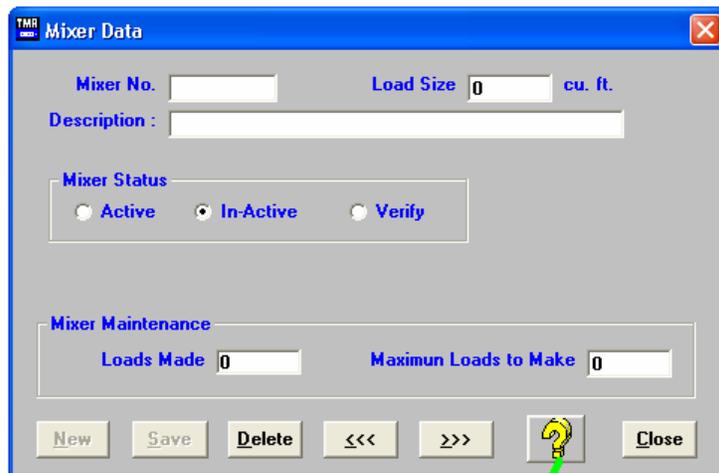
Select a Pen Type and click Save. Click New to add additional pens.

Step 5

Enter mixer data. Click on the Mixer icon.



This will display the Mixer Data screen:

A screenshot of a software window titled "Mixer Data". The window has a blue title bar with a close button. Inside, there are several input fields: "Mixer No." (empty), "Load Size" (0) with "cu. ft." next to it, and "Description:" (empty). Below these is a "Mixer Status" section with three radio buttons: "Active", "In-Active" (selected), and "Verify". At the bottom is a "Mixer Maintenance" section with "Loads Made" (0) and "Maximun Loads to Make" (0). At the very bottom are several buttons: "New", "Save", "Delete", "<<<", ">>>", a question mark icon, and "Close". A green arrow points to the question mark icon.

**CLICK ON THE QUESTION MARK
FOR AN INSTRUCTION VIDEO**

Enter a mixer number. Load size in cubic feet is used in conjunction with the ration pounds per cubic feet to calculate the maximum amount of ration that can be loaded into the mixer. Add a description. The mixer status refers to whether the mixer is in use (Active), not used (In-Active) or spare (Verify). Click Save when done.

Click New to add additional mixers.

Step 6

Enter Driver Data. Click on the Driver icon.



This will display the Driver Data screen:



**CLICK ON THE QUESTION MARK
FOR AN INSTRUCTION VIDEO**

Enter the operator's full name. Assign that operator a User Code. Please use a single number as the User Code as this is the easiest to enter at the scale. When done, click Save. Click New to add additional operators.

Step 7

There are two ways to process the pen feeding data: Loads mode (Standard) and List Mode (Advanced)

To select this option, go to the Systems dropdown menu, Default Settings, Data Transfer Tab and select between Loads or List mode.

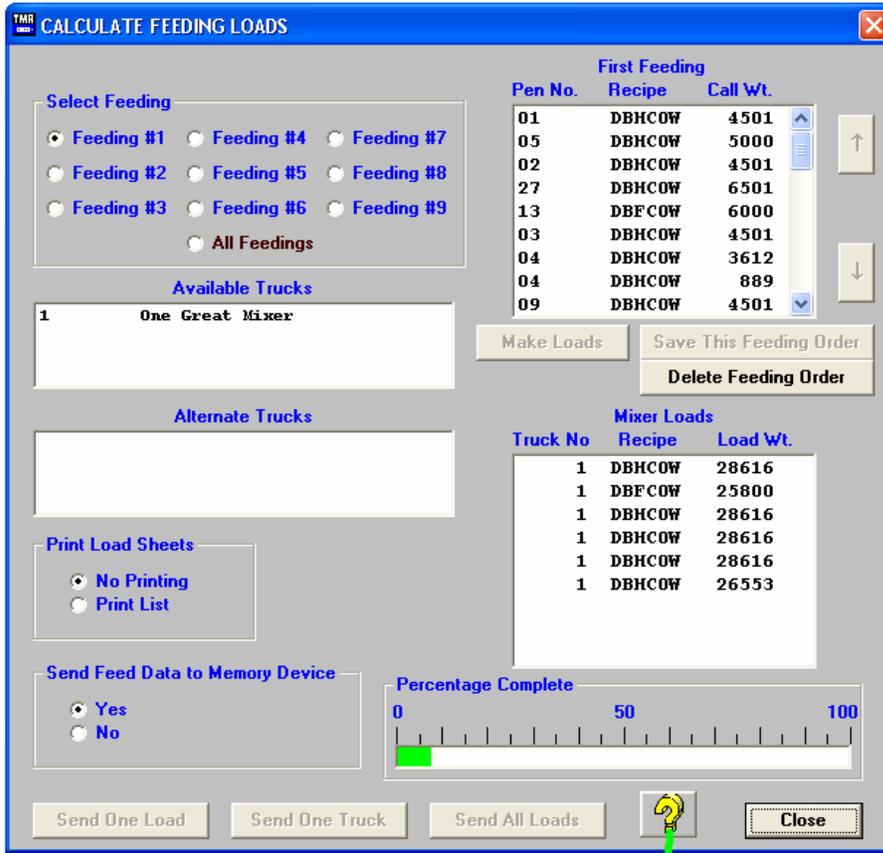
Step 7.1 Loads Mode

Loads mode functions by TMR Tracker combining pens with the same recipe to make a complete load. Then at the EZ3500 or EZ4300 the operator select the group of pens in a load to build.

Send Data. Click on the Send Data icon.



This will display the Calculate Feeding Loads screen:



CLICK ON THE QUESTION MARK
FOR AN INSTRUCTION VIDEO

Select the feeding you want to send by clicking on the feeding number. This will display the pens and call weights to be fed for that feeding in the upper right hand window. You can adjust the order to be fed by highlighting a pen and clicking the up or down arrow to move the pen up or down in the order. Click Save Feeding Order to save the order. When done, click Make Loads. This will combine the loads of like rations to the maximum capacity of the mixer. Click Send All Loads to send the loads to the DataKey.

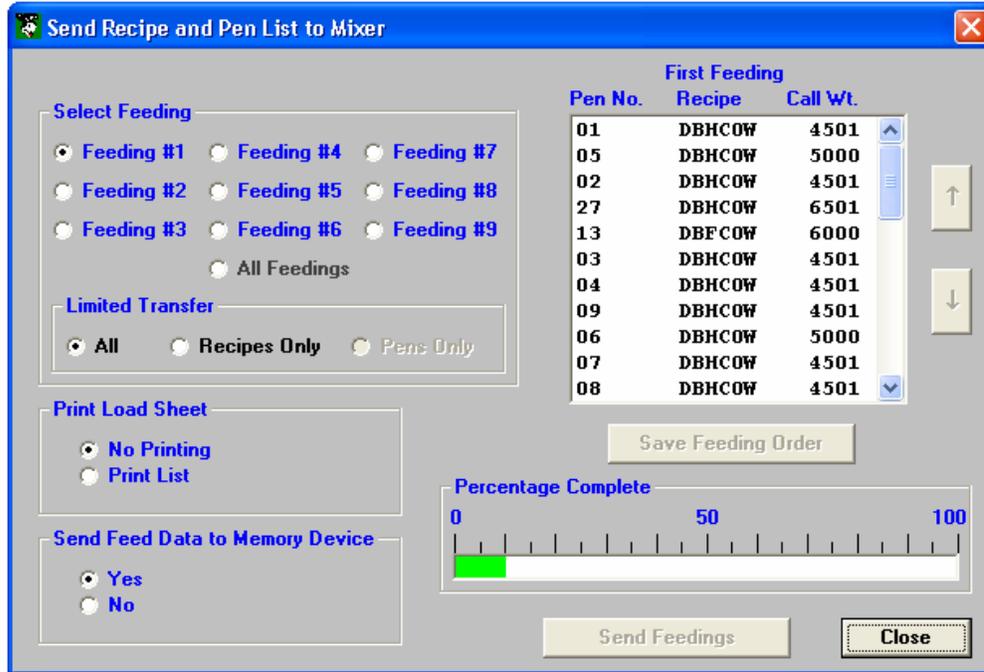
You print a feed / load sheet by clicking on the Print List under Print Load Sheet.

Step 7.2 List Mode

List mode functions by building any recipe and then selecting the pens to unload to at the EZ3500 or EZ4300.



Send Data. Click on the Send Data icon.



Select the feeding you want to send by clicking on the feeding number. This will display the pens and call weights to be fed for that feeding. You can adjust the order to be fed by highlighting a pen and clicking the up or down arrow to move the pen up or down in the order. Click Save Feeding Order to save the order. When done, click Send Feedings. This will send the pen feedings to the Datakey.

You print a feed / load sheet by clicking on the Print List under Print Load Sheet.

Step 8

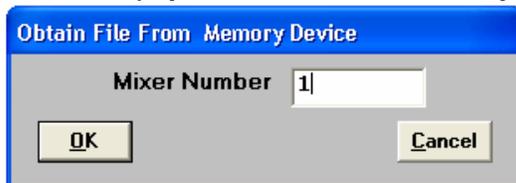
Please follow the operating instructions for the EZ3500/EZ4300 to load and feed.

Step 9

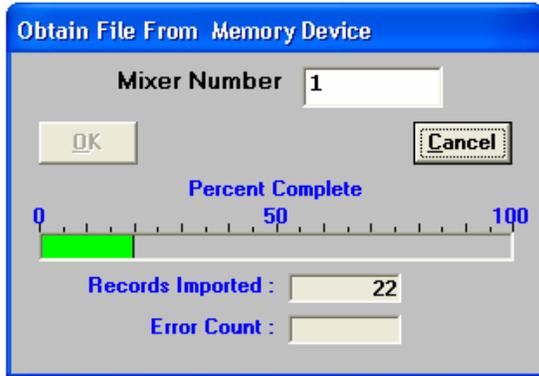


Receive Data. Click on the Receive Data icon.

This will display the Obtain Data from Memory Device screen:



The Truck number will be read from the DataKey. Click OK. The following screen will be displayed:

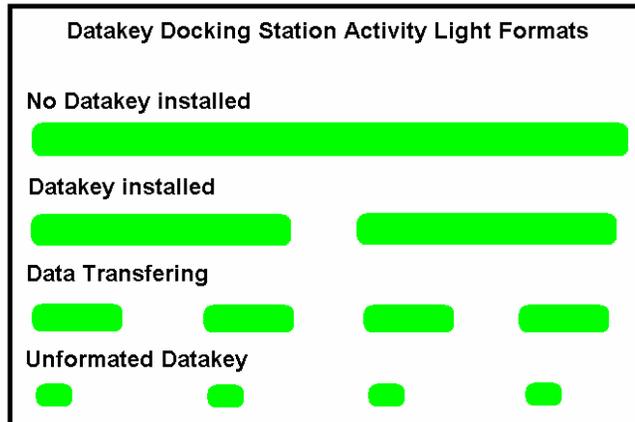


As the data is read from the DataKey, a green progress bar will display the read status. When the transfer is complete, the Cancel button will change to Done. Click on Done. The following screen will be displayed:

The DataKey should be cleared whenever the data is read into the TMR Tracker program.

Datakey Docking Station Activity Light Formats

This shows how the activity light would behave: (Green) On, (Blank) Off



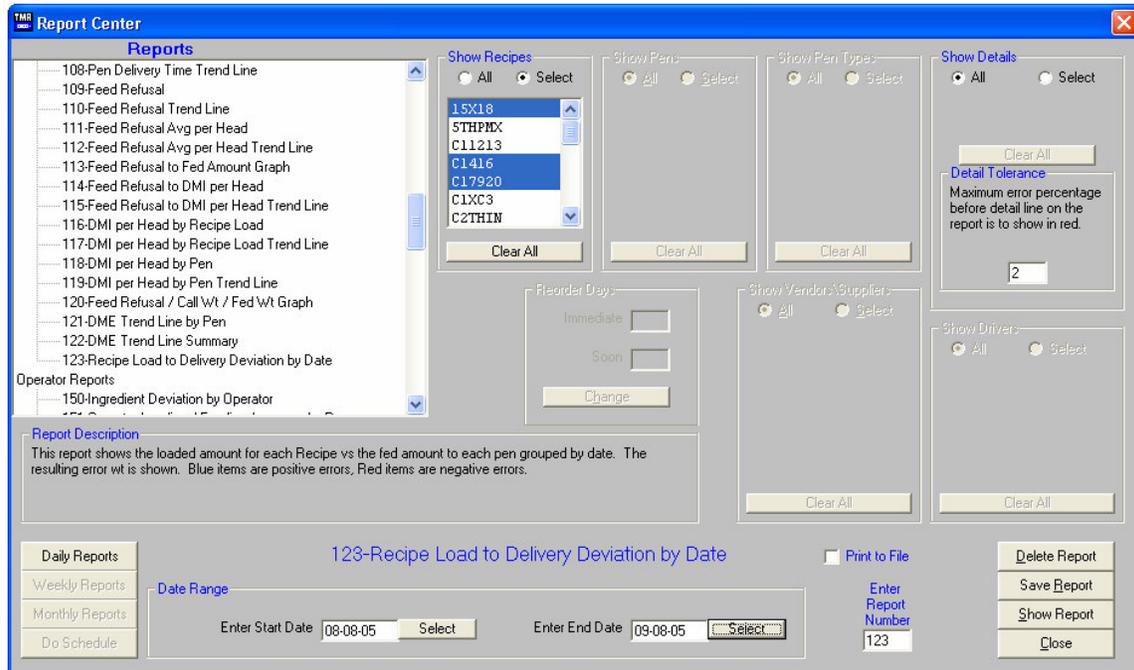
Step 10

Report Center. To run reports, click on the Report icon.



The Report Center screen will be displayed.

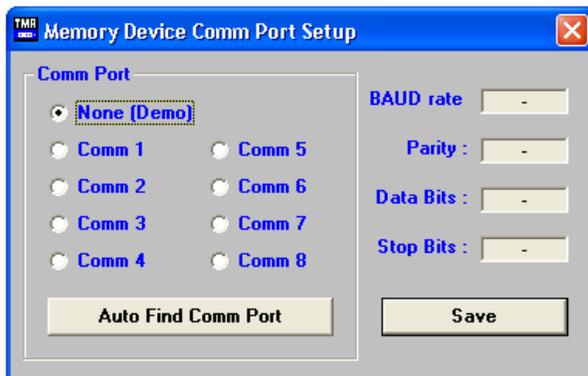
Report options are displayed when the report is selected. Options include selection of specific rations, pens, user's and tolerance settings. You may use these settings to customize a report for your specific needs. Once this report has been created, you can save this report under the User Defined Reports, please refer to the manual for detailed explanations of each report.



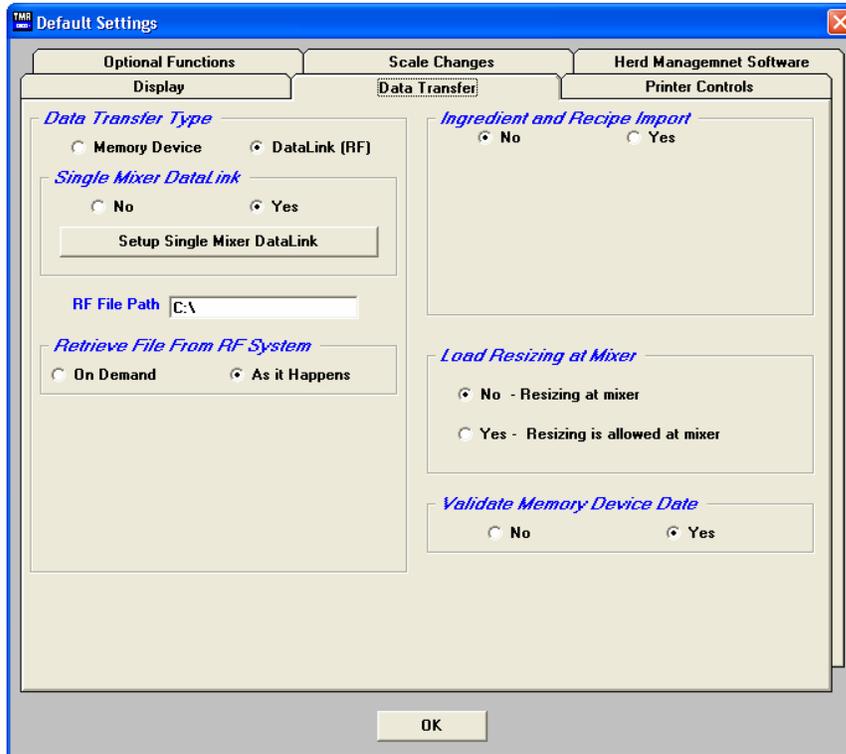
RF Datalink Setup

To setup TMR Tracker for RF Datalink. Select the System dropdown menu and select Memory Device Comm Port Setup.

Switch the comm port to None (Demo) and select Save.

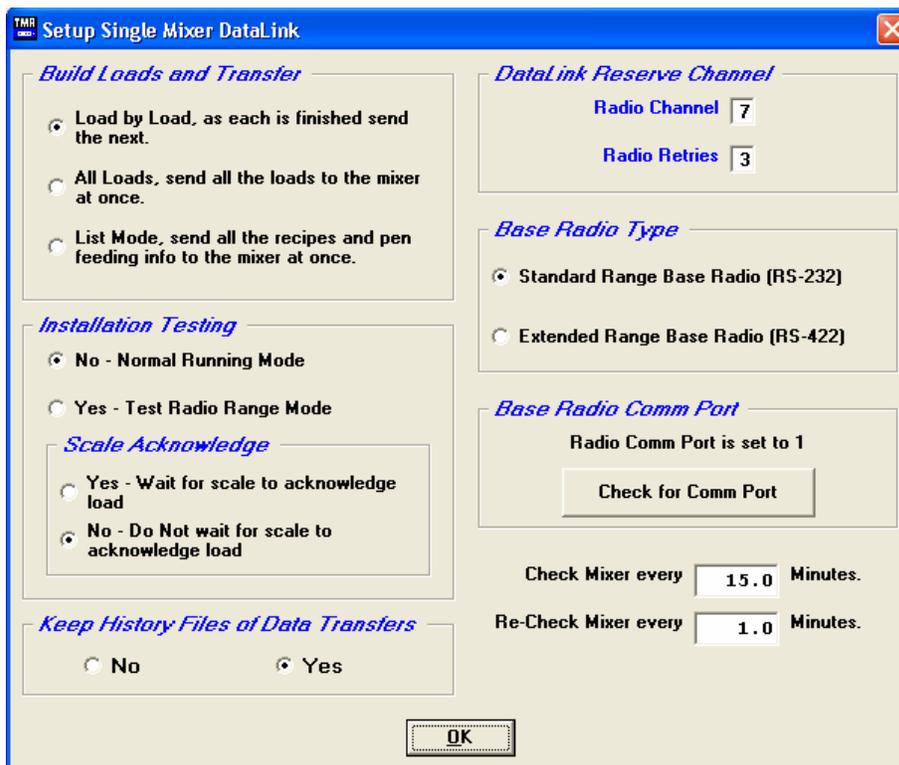


Select the System dropdown menu and select Default Settings.
Select the Data Transfer Tab.



Select Datalink (RF)

If you are operating your system with one feed mixer select Yes under Single Mixer Datalink. Select Setup Single Mixer Datalink, the following screen will appear:



Build Loads and Transfer

Determine how you would like the data sent to the scale indicator:

- Load by Load. This will send one load at a time to the scale indicator.
- All Loads. This will send an entire feeding or the whole day to the scale indicator.
- List Mode. This will send an entire feeding or the whole day and the operator determines the load sizes and the amount to unload to the pens.

Installation Testing

This option should be set to No. Call Digi-Star to setup your site to do radio range testing.

Scale Acknowledge

This option should be set to Yes.

Keep History Files of Data Transfer

This option will keep history information of data sent and received for Digi-Star to determine any radio problems.

Datalink Reserve Channel

The radio channel should be left to 7 unless you are interfering with a neighboring RF Datalink site.

Radio retries helps when you receive interference when sending data to the scale indicator. The default number is 3, increase this number to 4 to 5 when you have problems sending data.

Base Radio Type

This option is set to standard range radio unless you are using the “Black Box” RS-422 converter.

Base Radio Comm Port

Connect the base radio to the PC and 12V power and select Check for Comm Port. The software will now search the comm ports for communications with the base radio.

If you are having problems, please call Digi-Star.

Radio Communications Cycle

This option is used to limit the amount of radio communications between the PC and the scale indicator.

Enter the amount of time it would take from when the feeding data is sent to the scale indicator and when the operator would complete 1 load. Example: 15 minutes. Next how often the PC should recheck the scale indicator after the first cycle of 15 minutes. Example: 1 minute.

This option is used if you are using the Load by Load option.

Select the OK button when complete.

Setting the Scale Indicator Radio Number



Select the Mixer Data button:

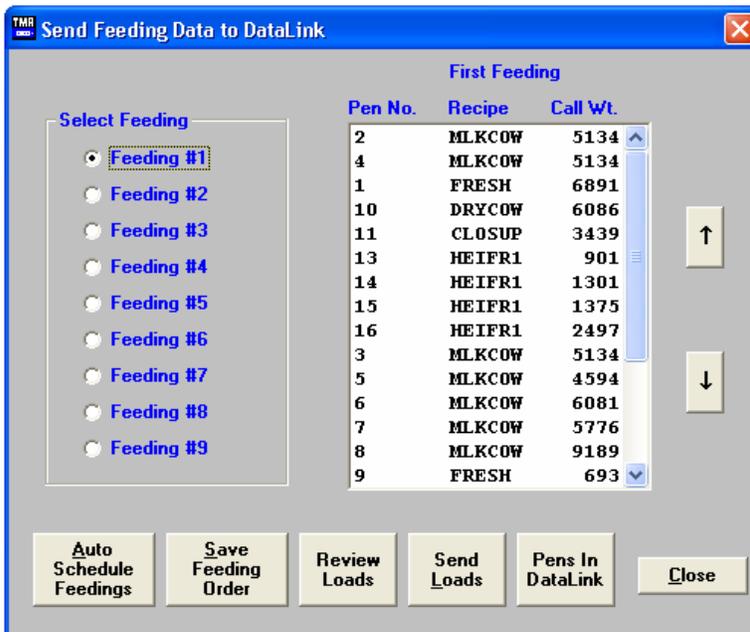
You must select what radio number the scale indicator is using. To verify what number the scale indicator is using, at the scale: enter number 231 and press the [Select] key, it will now display the scale number. To change the number press the [Select] key. Press the [On] key to save.

Sending Data

When you are ready to begin sending data, select the Send Data to RF icon.



In this screen select the feeding number to send to the scale indicator. To change the feeding order, select the pen to move and use the up and down arrows to change and select the Save Feeding Order when complete. Then select the Send loads button.



If you are sending more than one feeding, select the next feeding number and select the Send Loads button. To view what pens are in the “To Do” list, select the Pens In Datalink button.

This screen will display the available pens.

Pen	Feeding	Recipe	Call Wt.	Head Count	Status
2	1	MLKCOW	5134	112	OK
4	1	MLKCOW	5134	112	OK
1	1	FRESH	6891	117	OK
10	1	DRYCOW	6086	109	OK
11	1	CLOSUP	3439	77	OK
13	1	HEIFR1	901	76	OK
14	1	HEIFR1	1301	61	OK
15	1	HEIFR1	1375	58	OK
16	1	HEIFR1	2497	81	OK
3	1	MLKCOW	5134	112	OK
5	1	MLKCOW	4594	112	OK
6	1	MLKCOW	6081	126	OK
7	1	MLKCOW	5776	126	OK
8	1	MLKCOW	9189	112	OK
9	1	FRESH	693	10	OK
0	1	HEIFR1	23	2	OK
17	1	HEIFR2	3402	86	OK
18	1	HEIFR2	4431	92	OK
19	1	HEIFR2	3530	76	OK
20	1	HEIFR3	2673	62	OK
21	1	HEIFR3	1495	39	OK
23	1	HEIFR3	838	35	OK

& = Pen in Process * = Split left

When a pen has been sent to the scale indicator, there will be an & symbol in front of the call weight. If there is an * symbol, the pen was split into 2 loads.



To start sending the data to the scale indicator, select:
 This will now start to communicate with the scale indicator and begin sending data. Once the scale indicator has received the load, the cycle timer will begin to count down. When the original cycle timer has expired, the recheck timer will begin if the scale indicator was not ready to send data back to the PC.

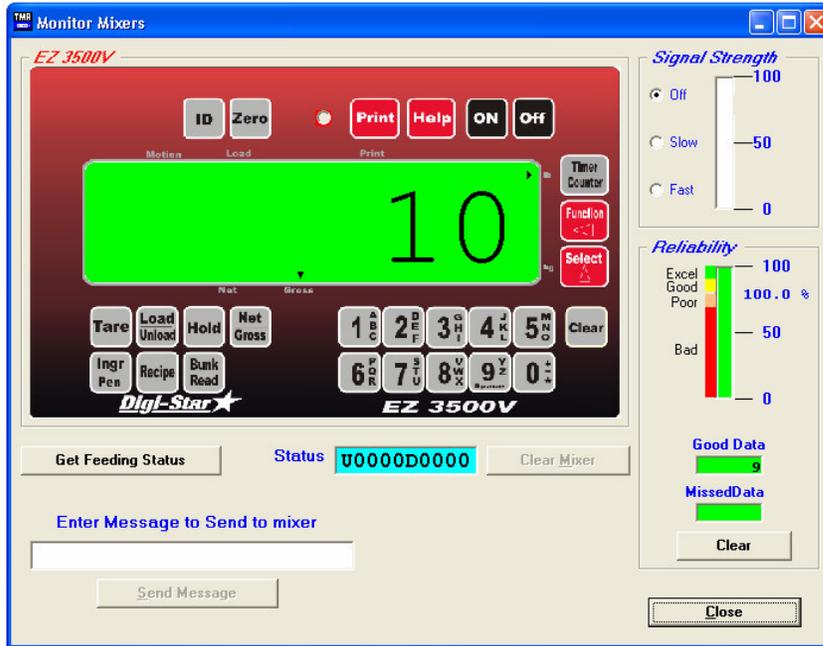
Once the feed mixer operator has completed a load (when using Load by Load mode) The scale indicator will then send back the completed data and Datalink will then send the next load. If using (Send all loads) the scale indicator will send back the data when all the feeding information is complete.



To stop the cycle timer select:

Note: The scale indicator's memory must be clear in order to send new data. To clear the scale indicator's memory, select the Utilities dropdown menu and select Test Communications.

The following screen will appear:



The Status must be: U0000D0000. This means there is no undone information or done information at the scale indicator. If the status screen has undone information, select the Get Feeding Status button and then select the Clear Mixer button. When the status screen displays U0000D0000 you may close the screen.

If you have any further question on how the Datalink system works, please call Digi-Star. 1-800-225-7695