

BinMaxx User Guide



for Front End Loaders

Air-Weigh Customer Support: 888-459-3247

Table of Contents

BinMaxx Overview	1
Navigating the Scale Menu.....	1
Calibrating Your Scale	2
Equipment Needed.....	2
Determining Bin Weights for Calibration.....	2
Entering Empty and Heavy Weights.....	3
Calibrating Heavy Weights.....	4
Calibrating Empty Weights.....	5
Check-Weighing Your Scale.....	7
Using BinMaxx	7
Getting Accurate Weight Readings.....	7
Navigating the Weight Display.....	8
Reset Lifts Prompt.....	8
Weight Display.....	9
Resetting and Erasing Lift Data.....	10
Resetting Lift Data.....	10
Erasing Lift Data.....	11
Printing Lift Data.....	11
Setting Up Your Scale.....	12
Calibrating Your Scale.....	12
Setting Up Your Display.....	12
Turning the Default Reset Lifts Prompt Off or On...14	
Assigning a Truck Number.....	14
Setting a PIN.....	15
Configuring the Printer Port.....	15
Setting Your Calibration Weights.....	15
Setting Up Date and Time.....	16

Troubleshooting Your Scale	17
Navigating the Diagnostics Menu.....	17
Diagnostics Menu Options.....	18
Weight Readings Are Inaccurate.....	18
Scale Won't Turn On.....	20
Lift Data Was Not Recorded.....	21
What to Do if You Forget Your PIN.....	22
Identifying the Causes of Error Messages.....	23
Limited Warranty	25
Procedure for Warranty Claims	26
Notes	27

BinMaxx Overview

The BinMaxx scale calculates and displays the bin net (content) weight of any bin greater than 40 pounds and records the lift number associated with that bin. Users can record the date and time of each lift using the optional date and time printer; the printer allows you to print weights of individual lifts immediately, or all lift weights together at the end of the workday. Or, using the BinMaxx Cloud kit, users can send all weight data, including lift weight, date and time, GPS location, and any error messages, from the truck directly to an office PC .

Navigating the Scale Menu

To illuminate the display: press any key one time.

To go back: push the ESC key to revert to the previous screen. Any unsaved changes will be erased if you press ESC.

To select a menu item: use the up or down arrow keys ▲ or ▼ to highlight your chosen menu item. The item will flash when it is highlighted. Choose OK to select the flashing item.

To save a change: Press the OK key.

Main menu: Throughout this manual, the term “Main Menu” refers to the top menu. This menu shows PRINT, ERASE / SETUP / DIAGNOSTICS if you are using the BinMaxx RS 232 port to print, or ERASE / SETUP / DIAGNOSTICS otherwise.

Weight display: This term refers to the scale's default screen, which shows the bin net weight of the last bin lifted and the lift number.

Calibrating Your Scale

You must calibrate your scale before you begin weighing bins. If you do not, you will not see accurate weight readings.

Note: Do not calibrate until you have seated the sensors. See the BinMaxx Installation Guide for instructions.

Equipment Needed

- Access to an accurate ground scale
- Two refuse bins with similar dimensions and weight, or use one bin and empty after completing the heavy calibration.
- Calibration material to fill the bin. This material should be equal to the heavy calibration weight, which you will determine in Steps 2 or 3 below. Choose a material that will not shift much during calibration, such as gravel, sandbags, or tires. Avoid liquids. We recommend using sandbags placed on a pallet inside the bins, braced with a 2x4 to avoid movement during calibration. Make sure to store the sandbags inside, as retaining water can significantly change the weight of the bags.

Determining Bin Weights for Calibration

For calibration to be accurate, you must determine the average size and the average weight of the contents of the filled bins you encounter on route (referred to in the BinMaxx display as bin net weight).

1. Find the average bin size by using the median number of yards. If customers mostly have bins between 2 and 4 yards,

3 yards would be the average size. If customers' bins range from 2 to 8 yards, 4 yards would be average.

2. Find the average bin net weight for your route.
 - On a day when you consider your route to be average, record the number of bins emptied into your truck before you arrive at the transfer station.
 - Record the net weight of your truck's contents that the transfer station reports.
 - Divide the weight of the contents by the number of bins you emptied while on route. This number is your average bin weight.
3. Once you've determined the average bin content weight, add the weight of an average empty bin plus 100 pounds to that number. This total will be the heavy weight you will use for calibration. However, your total must not be less than 300 pounds. If you cannot find the average bin content weight from your route, then use 500 pounds for the heavy weight.

Entering Empty and Heavy Weights

1. Select two bins that are the same size and the same weight within 20 to 40 pounds of each other. Alternatively, you can use one bin and empty it after the heavy weight calibration, but this may be more time consuming.
2. Weigh one of the bins on the ground scale while it is empty.
3. Enter the empty weight of the bin, with no contents, into your BinMaxx scale. This weight will be subtracted from the weight the scale measures to give you the content weight of the bin.
 - Turn the vehicle on. Press ESC to access the main menu.

- Press ▼ until SETUP is flashing. Press OK.
 - Press ▼ until CAL WT SETUP is flashing. Press OK.
 - Press ▼ until EMPTY WEIGHT is flashing. Press OK.
 - Use ▲ or ▼ to enter the empty weight recorded above. Press OK. The screen will read ACCEPTED.
4. Remove the empty bin from the ground scale.
 5. Add the weight of the empty bin to the average weight of your bin contents (see Determining Bin Weights for Calibration). Add 100 pounds to this total to find the heavy weight.
 6. Enter the heavy weight into your BinMaxx scale.
 - Press ESC to return to the CAL WT SETUP screen.
 - Press ▼ until HEAVY WEIGHT is flashing. Press OK.
 - Use ▲ or ▼ to enter the heavy weight. Press OK. The screen will read ACCEPTED.
 7. Remove the heavy bin from the ground scale.
 8. Place the empty and heavy bins near the vehicle.

Calibrating Heavy Weights

1. Turn the vehicle on and wait for the scale to power up.
2. Place the heavy bin on the forks.
3. Follow the instructions below on the display menu:
 - From the weight display, press ESC to reach the main menu.
 - Press ▼ until SETUP is flashing. Press OK.
 - Press ▼ until CALIBRATION is flashing. Press OK.
 - Press ▼ until HEAVY WEIGHT is flashing. Press OK.

4. In a few seconds, the screen should read USE FILLED AIR-WEIGH CAL WEIGHT. Wait a few seconds longer. The display will then show RAISE WEIGHT UNTIL DISPLAY FLASHES.
5. Begin lifting the bin. During the lift, the display will show LIFT #1. Lift the heavy bin until the display flashes.
6. Wait until the display stops flashing and reads LOWER WEIGHT UNTIL DISPLAY FLASHES. Lower the calibration weight again in one slow, smooth motion. While lowering the weight, the display will show DROP #1.
7. When you reach the height of the low-proximity sensor location, the display will flash. Immediately stop lowering the weight, being careful not to touch the ground.
8. If you stop or pause at any time while raising or lowering the bin before the display flashes, you may receive a LIFT ERROR. The error message will instruct you to restart the calibration process.
9. Repeat lifting and lowering the bin until the heavy calibration is complete - five successful lifts and drops in total. The scale will repeat the instructions and show the count of lifts and drops completed.
10. After five successful lifts and drops, you have completed the heavy calibration. The scale will show HEAVY WEIGHT CALIBRATION DONE... After a few seconds, the display will show EMPTY CALIB REQUIRED BEFORE USE.

Calibrating Empty Weights

1. Remove the heavy bin from the forks and replace with the empty bin.
2. Follow the instructions below on the display:
 - From the weight display, press ESC to reach the main menu.
 - Press ▼ until SETUP is flashing. Press OK.
 - Press ▼ until CALIBRATION is flashing. Press OK.
 - Press ▼ until EMPTY WEIGHT is flashing. Press OK.
3. Wait a few seconds after the USE EMPTY AIR-WEIGH CAL WEIGHT screen appears. The display will then show RAISE WEIGHT UNTIL DISPLAY FLASHES.
4. Repeat the above instructions to lift and lower the empty bin five times. As above, the display will show the completed LIFT and DROP numbers, and will flash when it is time to reverse the arm direction from lift to lower and lower to lift.
5. If you stop or pause at any time while raising or lowering the calibration weight, before the display flashes, you may see LIFT ERROR. Restart the calibration process.
6. When you have completed five empty lifts and drops without an error, calibration is complete. The display will show EMPTY WEIGHT CALIBRATION DONE. After a few seconds, the display will show the weight display.

Note: You can change the empty calibration weight after it has been entered. Once you enter a new empty calibration weight, the scale will automatically recalculate the empty ratio and offset. You cannot change the heavy weight unless you recalibrate.

Check-Weighing Your Scale

Once you've calibrated your scale, perform a check-weigh to ensure the calibration is accurate. It's also a good idea to check-weigh your BinMaxx scale periodically to ensure continued accuracy.

1. Gather between six and eight old tires. Place them on a certified scale to obtain their weights. Record this data.
2. Place between two and eight tires into an empty bin.
3. Use your vehicle to lift the bin and empty the tires into the vehicle.
4. Record the weight shown on the display.
5. Compare the displayed weight to the weight of the tires, which you recorded earlier. The two weights should be within 40 pounds of each other.

Note: With the proper calibration, BinMaxx will provide net weight readings to within 20 pounds of any size bin with a net weight of at least 100 pounds. A net weight less than 40 pounds in a bin will display a net weight of 0 pounds.

Using BinMaxx

Getting Accurate Weight Readings

BinMaxx measures weight while the bin is in motion, during a window of time we refer to here as the measurement zone. The measurement zone is the time and distance between when the bin leaves the ground and when it reaches its highest point before it is emptied into the truck. It usually begins when the forks are about 50 inches from the ground and ends when they are about 100 inches from the ground. However, the measurement zone can vary by 10

to 15 inches on either end. See the BinMaxx Installation Guide for more information on determining your measurement zone. When you are using BinMaxx, you should be aware of the measurement zone to get the most accurate readings. Refer to the following list to use BinMaxx accurately.

Do

- Provide as smooth and consistent a lift and drop as possible while the bin is travelling through the measurement zone.

Do Not

- Pause during a lift or drop.
- Try to arrange or shift the bin load while the bin is in motion.

BinMaxx will update the lift number and net weight soon after the bin has dropped below the low proximity switch measurement area.

Navigating the Weight Display

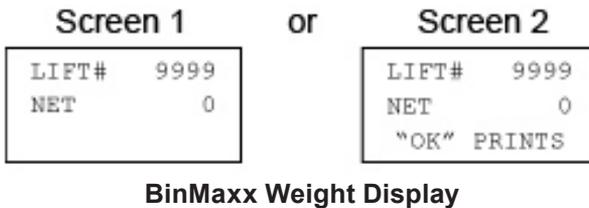
Reset Lifts Prompt

The default factory setting for BinMaxx is to display the Reset Lifts/Weight prompt before allowing you to view the weight display. This screen gives you the option to reset the number of lifts and/or the weight of the last bin displayed on the main screen so it will show only the current day's totals. Resetting the lifts or weight does NOT delete lift information from the ComLink - it only clears it from the display. To erase lift data, see *Resetting and Erasing Lift Data*, p. 12. If you would rather reset lifts manually instead of seeing this screen before the weight display, see *Turning the Default Reset Lifts Prompt Off or On*.

Weight Display

When BinMaxx is on and the truck is in use, BinMaxx will show the weight display. This is the screen that provides information on lift number and bin net weight. The weight display shows the most recent lift number and bin net weight.

Note: If your scale displays a warning message stating CALIBRATION REQUIRED BEFORE USE instead of the weight display, see the p. 4 for calibration instructions.



If Screen 1 appears, the printer is not connected or is not turned on, or you have chosen to use BinMaxx's RS 232 port for data stream output rather than printing. The ComLink will record all data, which can be printed or transferred at a later time. For data stream output rather than printing, reference the document BinMaxx, Output Data Stream on RS232 Port.

If Screen 2 appears, BinMaxx recognizes the printer and it is turned on. Note that you must turn on the printer manually; it will not automatically turn on when BinMaxx does. If you would like to print lift data, see the section entitled Printing Lift Data.

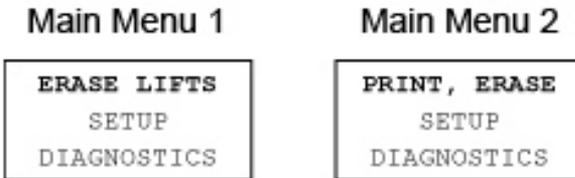
Note: Air-Weigh's date and time printer must be connected to the scale and turned on in order to record the current date and time. If the ComLink does not detect a printer, it will record an elapsed time but not a current time.

Resetting and Erasing Lift Data

Resetting Lift Data

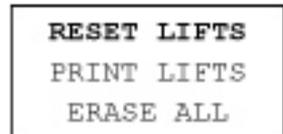
As noted in the previous section, BinMaxx is set to display the Reset Lift prompt by factory default. The following instructions are for manual reset.

1. From the weight display, press ESC to reach the main menu. ERASE LIFTS or PRINT, ERASE will flash. Main Menu 2 will display if you have installed that date/time printer and it is turned on.

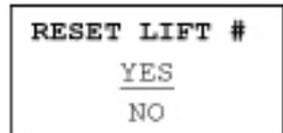


BinMaxx Main Menu Screens

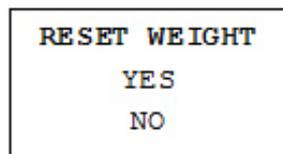
2. Press OK to select ERASE. The menu shown in Fig. 3 will appear. RESET LIFTS will flash. Note that the option PRINT LIFTS will not appear if a printer is not installed and turned on.
3. Press OK to select RESET LIFTS. The screen shown to the right will appear. YES will flash.
4. Press OK to reset lift number. The screen will read ACCEPTED, then switch to the screen shown to the right. YES will flash.
5. Press OK to select RESET WEIGHT. The screen will read ACCEPTED,



Erase/Reset Menu



Reset Lift Number



Reset Weight

then switch to the display menu. The lift number and net weight will now read 0.

Note: If you do not want to reset lift or weight data, select NO on either menu or hit ESC until you see the main menu.

Erasing Lift Data

BinMaxx can store up to 1000 lifts and associated data. You can print or transfer the data at any time. If the ComLink has stored 1000 lifts without being cleared, new lifts will not be recorded and the operator will see an error message reading MEMORY FULL, NO RECORDINGS. It is a good idea to periodically erase lift data to avoid this error.

1. From the weight display, press ESC to reach the main menu.
2. ERASE LIFTS or PRINT, ERASE will flash. Press OK to select.
3. The ERASE/RESET menu will appear. Press ▼ until ERASE ALL is flashing. Press OK to select ERASE ALL.
4. The screen will read USE CAUTION! PUSH "OK" TO ERASE ALL. Press OK again to delete all lift and weight data from the BinMaxx scale.

+ - Printing Lift Data

Make sure your printer is plugged in and turned on before attempting to print. Reference the document entitled Installing the Printer Kit for setup instructions.

1. From the weight display, press ESC to reach the main menu.
2. Press ▼ until PRINT, ERASE is flashing. Press OK. If the menu instead reads ERASE LIFTS, the printer is not plugged in or turned on.

3. From the ERASE/RESET menu, press ▼ until PRINT LIFTS is flashing. Press OK.
4. If the print request is successful, the screen will display PRINTING ALL LIFTS...ESC CANCELS. If the error message NO PRINTER is displayed, the ComLink does not detect a printer. Press ESC at any time during the printing process to cancel printing.

Setting Up Your Scale

The setup menu allows you to calibrate and set parameters for your scale. To reach the setup menu, select SETUP from the main menu and press OK.

Calibrating Your Scale

To calibrate your scale, select CALIBRATION from the setup menu and press OK. Follow the instructions on pp. 4-8.

Setting Up Your Display

The display setup menu allows you to choose whether the scale displays weight in pounds or kilograms; the brightness of the screen; and the amount of time elapsed before the scale's backlight turns off.

To select units of weight:

1. From the weight display, press ESC to reach the main menu.
2. Press ▼ until SETUP is flashing. Press OK.
3. Press ▼ until DISPLY SETUP is flashing. Press OK.
4. Press ▼ until LBS/KGS is flashing. Press OK.
5. Use ▲ or ▼ to select either POUNDS or KILOGRAMS. Press OK. The screen will display POUNDS, (Now Lbs) or KILOGRAMS, (Now Kgs) respectively.

To select brightness:

1. From the weight display, press ESC to reach the main menu.
2. Press ▼ until SETUP is flashing. Press OK.
3. Press ▼ until DISPLY SETUP is flashing. Press OK.
4. Press ▼ until BRIGHTNESS is flashing. Press OK.
5. Use ▲ or ▼ to select either BRIGHT or DIM. Press OK. The screen will display either BRIGHT, (Now Bright) or DIM, (Now Dim), respectively.

To select light timeout:

1. From the weight display, press ESC to reach the main menu.
2. Press ▼ until SETUP is flashing. Press OK.
3. Press ▼ until DISPLY SETUP is flashing. Press OK.
4. Press ▼ until LITE TIMEOUT is flashing. Press OK.
5. The display shows BACKLIGHT TIMEOUT and a flashing number next to MINS. Use ▲ or ▼ to select the number of minutes you want the backlight to stay on after your last keypad use. Press OK to accept your changes.

To select Show or Hide Accumulated Net Weight:

1. From the weight display, press ESC to reach the main menu.
2. Press ▼ until SETUP is flashing. Press OK.
3. Press ▼ until DISPLAY SETUP is flashing. Press OK.
4. Press ▼ three times. You will see SHOW TOTAL and HIDE TOTAL. Use ▲ or ▼ to select SHOW TOTAL or HIDE TOTAL, whichever is appropriate for your use. Press OK to accept your changes. The screen will read ACCEPTED.

Turning the Default Reset Lifts Prompt Off or On

Under the menu heading Power-Up Mode, you can decide whether the scale asks you to reset the lift number and net weight each time it is turned on, or whether you need to go into the erase menu to do so. If you reset your lift information daily, using power-up mode may save you time.

1. From the weight display, press ESC to reach the main menu.
2. Press ▼ until SETUP is flashing. Press OK.
3. Press ▼ until PWR UP MODE is flashing. Press OK.
4. The screen will show PROMPT RESET (select to show reset prompts each time you turn on the scale) or DON'T PROMPT (select to hide prompts). Use ▲ or ▼ to select an option. Press OK to save changes.

Assigning a Truck Number

If you have multiple vehicles, you may use truck numbers to organize weight information. Truck number will display on documents printed with the date/time printer and in data streams to the onboard computer, as well as on spreadsheets generated with BinMaxx XL.

1. From the weight display, press ESC to reach the main menu.
2. Press ▼ until SETUP is flashing. Press OK.
3. Press ▼ until TRUCK NUMBER is flashing. It is not immediately visible on the setup menu. Press OK.
4. The screen will display TRUCK NUMBER and below this, a flashing number. Use ▲ or ▼ arrows to select a number between 0 and 9999. Press OK to accept the selection.

Setting a PIN

If you would like to protect your setup and calibration information from tampering, you may set a PIN. Once a PIN is set, the scale will require users to enter the PIN any time they try to access options in the setup menu.

1. From the weight display, press ESC to reach the main menu.
2. Press ▼ until SETUP is flashing. Press OK.
3. Press ▼ until SET PIN# is flashing. Press OK.
4. The screen will display PERSONAL ID# and, below this, a flashing number. Use ▲ or ▼ to select the PIN number you want to use.
5. Once you have selected the correct PIN, press OK to accept changes.

Configuring the Printer Port

This setup option allows you to choose whether you will use the printer port to print data using the Air-Weigh date/time printer, or to stream data to an on-board computer.

1. From the weight display, press ESC to reach the main menu.
2. Press ▼ until SETUP is flashing. Press OK.
3. Press ▼ until PRINTER PORT is flashing. Press OK.
4. The display shows two or three options: LIFTS REPORT (allows you to use the port with the date/time printer); DATA STREAM (allows you to stream data to an on-board computer); and SPREADSHEET, which will only appear with BinMaxx XL kits. Use ▲ or ▼ to select an option. Press OK to save your selection. The screen will read ACCEPTED.

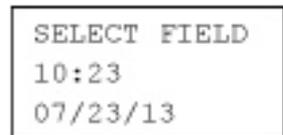
Setting Your Calibration Weights

Since setting up your empty and heavy calibration weights is part of the calibration process, see the Calibration section, p. 2, for more information.

Setting Up Date and Time

Use this setup option to set correct date and time information, which will display on documents printed with the Air-Weigh date/time printer. This option is only for use with the printer.

1. From the weight display, press ESC to reach the main menu.
2. Press ▼ until SETUP is flashing. Press OK.
3. Press ▼ until DATE / TIME is flashing. Press OK.
4. If the printer is connected and turned on, the display will appear as in the example to the right. Use ▲ or ▼ to select the time or the date. Use ◀ or ▶ to set the correct time and date. When you have set them correctly, press OK.



Date/Time Setup

Note: If BinMaxx does not sense a printer, the screen will show an error message reading **DATE / TIME REQUIRES PRINTER ON.**

Troubleshooting Your Scale

If your scale is not working correctly, the information in this section can help you identify the problem. If you are experiencing difficulties, call Air-Weigh Support at 1-888-459-3247 between 7 am and 5 pm PST for help troubleshooting your BinMaxx scale.

Navigating the Diagnostics Menu

The diagnostics menu provides information about the scale that can help you identify potential problems. If you are experiencing problems, call Air-Weigh Support. Our staff will guide you in troubleshooting your scale.

To reach and use the diagnostics menu, follow the instructions below.

1. From the weight display, press ESC to reach the main menu.
2. Press ▼ until DIAGNOSTICS is flashing. Press OK.
3. You will see two options: DISPLAY and ECU. DISPLAY contains information about scale such as the serial number, the model number, and the software version. ECU contains diagnostics information. Press ▼ until ECU is flashing and press OK.
4. The display will show two options: SENSOR DATA and CALIB DATA. See Diagnostics Menu Options below for a description of the information available under these menu options.

Diagnostics Menu Options

SENSOR DATA shows the scale's A/D, or analog-to-digital, readings, which indicate whether the scale is reading weight. In general, an A/D reading of 409 indicates 0 pounds of weight; an A/D reading of 750-1250 is about normal for an empty bin in the lift zone; and an A/D reading of at least 200 points higher than your empty bin in the lift zone is about normal for a full bin in the lift zone. **SENSOR DATA** also shows the current low and high prox sensor values (press ▼ once to access prox sensor values once you reach **SENSOR DATA**). When the prox sensor target is not engaged, as when the arms of the scale are completely lowered, the value will be 0. When the target is engaged, the value will be three to four digits.

CALIB DATA shows the A/D readings for the scale at the time of calibration. It also shows weight, ratio and offset for empty and heavy weights at the time of calibration. This can help you tell whether you calibrated the scale incorrectly.

Weight Readings Are Inaccurate

Inaccurate weight readings could indicate a variety of problems, including incorrect calibration, a problem with your cables, or incorrectly adjusted targets. Follow the steps below to troubleshoot for potential causes of inaccurate weight readings.

1. Check for incorrect calibration.
 - From the weight display, press ESC to reach the main menu.
 - Press ▼ until DIAGNOSTICS is flashing. Press OK.
 - Press ▼ until ECU is flashing. Press OK.
 - Press ▼ until CALIB DATA is flashing. Press OK.

- Check the empty and heavy sensor calibration data for the left and right sensors. Use ▼ to see all information. Empty calibration data should be between 750 and 1200; heavy data should be at least 200 points greater than the empty calibration data for each sensor. Data for the left and right sensors should be within 100 points of each other.
 - If your calibration data does not fall within these parameters, re-calibrate your scale.
2. Test your targets for inaccurate placement.
- Make sure your vehicle's arms are completely down.
 - From the weight display, press ESC to reach the main menu.
 - Press ▼ until DIAGNOSTICS is flashing. Press OK.
 - Press ▼ until ECU is flashing. Press OK.
 - Press ▼ until SENSOR DATA is flashing. Press OK.
 - Press ▼ once. You should see PROX SWITCH.
 - Lift your scale arms until the value for LO PROX changes from 0 to a 3- or 4-digit number. Immediately stop the arms.
 - Measure the height from the ground to the arms. This height should usually be around 50 inches, but see your BinMaxx Installation Guide for an exact height for your model.
 - If the distance is much lower or higher than this, adjust your target until it engages at the correct height.
 - Raise the vehicle's arms again until the value for HI PROX on the display changes from 0 to a 3- or 4-digit number. Immediately stop the arms.

- Measure the height from the ground to the arms as before. This height should be around 100 inches, but see the BinMaxx Installation Guide for an exact height.
 - If the distance is much lower or higher than this, adjust your target until it engages at the correct height. Make sure you tighten your targets completely after adjusting them.
3. If you have a date/time printer, print your lifts. Any errors present will show an error code. If you see the codes BAD LEFT DEFLECTION SENSOR or BAD RIGHT DEFLECTION SENSOR, you may have a loose cable or, rarely, a bad sensor. Check all cables to see if there is a break or corrosion. Check each connection to the ComLink, the display, and the sensors. If you do not have a printer, check all cables to rule out this issue.
 4. If you have not identified the problem or if there is a problem with the power supply, call Air-Weigh Support for further assistance.

Scale Won't Turn On

If your scale won't turn on, this could be a problem with the power supply. Follow the steps below to troubleshoot for potential causes.

1. Check your power supply. Open the dash and find the ComLink. Check to make sure the wire harness leading to Power is securely plugged in and all wires are unbroken.
2. Check the back of your display to make sure the wire harness is securely plugged in and all wires are unbroken.
3. Test the power and ground circuits using a voltmeter. There should be at least 9.5 volts of power entering your system.
4. If you identify a break in the circuits or there is a lack of power, or if there is full power but the scale still will not turn on, call Air-Weigh Support for further assistance.

Lift Data Was Not Recorded

BinMaxx may not record lift data if the targets are incorrectly placed, if the bin is too light, or if the lift operator does not follow lift procedure necessary for BinMaxx to operate.

1. If a lift is not recorded, an error message should show on the main screen of your BinMaxx display. See p. 23 to find the reason for the error. In most cases, lift data will not be recorded because of either an operator error or because the bin content weight was less than 40 pounds. If the error code is an operator error, consult p. 9 for instructions on lifting smoothly to allow lift data to be recorded.
2. If no error message displays, your targets may be incorrectly placed. Test your vehicle for inaccurate placement.
 - Make sure your vehicle's arms are completely down.
 - From the weight display, press ESC to reach the main menu.
 - Press ▼ until DIAGNOSTICS is flashing. Press OK.
 - Press ▼ until ECU is flashing. Press OK.
 - Press ▼ until SENSOR DATA is flashing. Press OK.
 - Press ▼ once. You should see PROX SWITCH.
 - Lift your scale arms until the value for LO PROX changes from 0 to a 3 or 4-digit number. Immediately stop the arms.
 - Measure the height from the ground to the arms. This height should usually be around 50 inches, but see your BinMaxx Installation Guide for an exact height for your model.
 - If the distance is much lower or higher than this, adjust your target until it engages at the correct height.

- Now raise the vehicle's arms again until the value for HI PROX on the display changes from 0 to a 3- or 4-digit number. Immediately stop the arms.
 - Measure the height from the ground to the arms as before. This height should be around 100 inches, but see the BinMaxx Installation Guide for an exact height.
 - If the distance is much lower or higher than this, adjust your target until it engages at the correct height. Make sure you tighten your targets completely after adjusting them.
3. If lift data is still not being recorded, call Air-Weigh Support for further assistance.

What to Do if you Forget Your PIN

If you forget your PIN, call Air-Weigh Support at 888-459-3247. All scales are programmed with a manufacturer's PIN that Support can access to help you unlock your scale.

Identifying the Causes of Error Messages

If your scale displays an error message, use the chart below to determine their possible cause and solution. If you encounter an error message and are not able to resolve it, contact Air-Weigh Support at 888-459-3247.

ERROR MESSAGE	DESCRIPTION	POSSIBLE CAUSE
SYSTEM ERROR	Deflection sensor value at 0.	Bad/damaged deflection sensor; broken/disconnected cable.
MEMORY FULL, NO RECORDING! PUSH "ESC"	The BinMaxx Comlink data buffer is full; no new lift information will be saved.	Lift data is at maximum capacity – ERASE ALL to clear.
CALIBRATION REQUIRED BEFORE USE	The BinMaxx scale must be calibrated.	The scale needs to be calibrated.
EMPTY CALIB REQUIRED BEFORE USE	The HEAVY calibration has been completed, but not the EMPTY.	The EMPTY calibration needs to be completed.
BAD CALIB RUN! PUSH "ESC"	This error can occur during the calibration lift or drop (empty or heavy).	The operator took too much time during the lift/drop; the lift did not pass the low/high prox switch; the user took too much time before lift/drop started after the display flashed; erratic lift/drop.
BAD LIFT! PUSH "ESC"!	The scale did not determine an accurate weight from the lift. "ESC" will return you to the last lift number.	Lift did not go past high prox sensor; lift did not go past low prox sensor; lift was delayed between high prox and low prox switches; failed to lower elevated bin below low prox switch prior to lift.
NO PRINTER	Print Lift command issued, no printer detected.	Printer not connected or not powered.

EMPTY BIN LIFTED & EMPTIED	Net weight was less than 40 lbs, gross bin weight was less than 1000 pounds.	BinMaxx does not record content weights less than 40 pounds.
BIN CONTENTS NOT EMPTIED	Net weight was less than 40 lbs, gross bin weight exceeded 1000 pounds. Recorded as zero net weight.	BinMaxx does not record content weights less than 40 pounds. This error is caused when the scale thinks the weight of the bin itself is so great that the contents must not have been emptied. Check to see if the contents were emptied.
LIFT STALL BETWEEN SWITCHES	Gross weight exceeded 100 lbs and lift was hung between switches for over ten seconds. No lift data will be recorded.	The operator took too much time in the measurement zone during the lift.
LIFT SKIPPED LOW SWITCH	BinMaxx was turned on when forks were already in the lift zone, then were lifted above the lift zone. No lift data will be recorded.	The ComLink was powered on when the forks were already in the lift zone.
BAD LEFT DEFLECTION SENSOR	Left deflection sensor is not reading correct weights.	Bad or damaged deflection sensor; broken or disconnected deflection sensor cable.
BAD RIGHT DEFLECTION SENSOR	Right deflection sensor is not reading correct weights.	Bad or damaged deflection sensor; broken or disconnected deflection sensor cable.
NO PRINTER COMMUNICATION	No date/time acquired from printer for ten seconds. (ComLink tries to acquire date/time every 0.5 seconds.)	Printer not connected; need to set date/time.
NO NET DATA RECORDED	Error displayed when printed or via BinMaxx XL spreadsheet - BinMaxx did not record any data.	Forks too high when in travel mode; adjust prox target or lower travel mode height.

Limited Warranty

For product failures due to material or manufacturing defects, Air-Weigh will replace or repair all components for up to three years from shipment date to the end-user Air-Weigh customer. These three-year components include: displays, ComLinks, sensors, power cables, sensor assemblies, sensor harnesses, and all other associated external components. Air-Weigh assumes no responsibility for administering warranty claims directly with any third-party end users.

The responsibility of Air-Weigh under this warranty is limited to the repair, replacement, or credit of the defective part or assembly.

This warranty does not cover incidental or consequential damage to persons or property caused by use, abuse, misuse, or failure to comply with installation or operating instructions. This limited warranty does not apply to any product that has failed due to accident, abuse, alteration, installation not consistent with printed installation instructions, improper maintenance, or improper operation or as a result of system integration or installation not explicitly approved in writing by Air-Weigh.

Air-Weigh and its resellers shall have no responsibility or liability for damages if the purchaser or any other person alters the vehicle incorporating Air-Weigh products. This limited warranty shall not apply to any product that has been repaired or altered by anyone not employed by Air-Weigh or not operated in accordance with the manufacturer's printed material delivered with this product.

Air-Weigh hereby expressly disclaims any and all implied warranties of any type, kind, or nature whatsoever, and particularly any implied warranty of merchantability or fitness for a particular purpose not expressly stated by Air-Weigh in its printed material delivered with its products. Some states do not allow the exclusion or limitation of incidental or consequential damages. If such laws apply, the limitations or exclusions contained in the terms and conditions of this warranty may not apply. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

May be covered by U.S. Patent Nos. 5780782, 7478001
Foreign Patent No. 2122766

Copyright © 2004, 2006, 2007, 2010, 2012, 2014 by Hi-Tech Transport Electronics, Inc.

All rights reserved. Air-Weigh®, ComLink™, and Hi-Tech Transport Electronics are trademarks or registered trademarks of Hi-Tech Transport Electronics, Incorporated. Other brand, product, or service names listed in this document are the trademarks or registered trademarks of their respective holders. Information contained in this literature was accurate at time of publication. Product changes may have been made after copyright dates that are not reflected in this document.

Notes

Limited Warranty

For product failures due to material or manufacturing defects, Air-Weigh will replace or repair all components for up to 3 years from shipment date to the end-user Air-Weigh customer. These three-year components include: Displays, ComLinks, Sensors, Power Cables, Sensor Assemblies, Sensor Harnesses, and all other associated external components. Air-Weigh assumes no responsibility for administering warranty claims directly with any third party end users.

The responsibility of Air-Weigh under this warranty is limited to the repair, replacement, or credit of the defective part or assembly.

This warranty does not cover incidental or consequential damage to persons or property caused by use, abuse, misuse, or failure to comply with installation or operating instructions. This limited warranty does not apply to any product that has failed due to accident, abuse, alteration, installation not consistent with printed installation instructions, improper maintenance, improper operation, or as a result of system integration or installation not explicitly approved in writing by Air-Weigh.

Air-Weigh and its resellers shall have no responsibility or liability for damages if the purchaser or any other person alters the vehicle incorporating Air-Weigh products. This limited warranty shall not apply to any product that has been repaired or altered by anyone not employed by Air-Weigh or not operated in accordance with the manufacturer's printed material delivered with this product.

Air-Weigh hereby expressly disclaims any and all implied warranties of any type, kind of nature whatsoever, and particularly any implied warranty of merchantability or fitness for a particular purpose not expressly stated by Air-Weigh in its printed material delivered with its products.

Some states do not allow the exclusion or limitation of incidental or consequential damages. If such laws apply, the limitations or exclusions contained in the terms and conditions of this Warranty may not apply. This warranty gives you specific legal rights and you may also have other rights, which vary state to state.

May be covered by U.S. Patent Nos. 5478974, 5780782, 7478001
Foreign Patent Nos. 260494, 677998, 2122766

Copyright © 2004, 2006, 2007, 2010, 2011, 2012, 2013 by Hi-Tech Transport Electronics, Inc. All rights reserved. Air-Weigh®, ComLink™, and Hi-Tech Transport Electronics are trademarks or registered trademarks of Hi-Tech Transport Electronics, Incorporated. Other brand, product, or service names listed in this document are the trademarks or registered trademarks of their respective holders. Information contained in this literature was accurate at time of publication. Product changes may have been made after copyright dates that are not reflected in this document.

Procedure For Warranty Claims

ALL customers should first contact Air-Weigh Customer Support Department at (888) 459-3247 for questions regarding the use, operation, repair or return of any Air-Weigh product.

In the event Air-Weigh requests to examine the product prior to disposition OR for repair or replacement, Air-Weigh requires a Return Material Authorization (RMA) number be issued before the item is returned. Customer Support will issue the RMA number. Please reference this RMA number in all correspondence.

Claimed items shall be shipped freight pre-paid to:

Air-Weigh
Customer Support Department
1730 Willow Creek Circle, Suite 100
Eugene, Oregon 97402, USA

The Air-Weigh RMA number must appear on the outside of the return packaging. Air-Weigh shall examine returned material within 30 days after receipt, or sooner if mutually agreed upon. If Air-Weigh determines that the part or assembly was defective in material or workmanship and within the warranty period, Air-Weigh will repair or replace the part or assembly and return freight pre-paid. In the event Air-Weigh determines that the part or assembly cannot be repaired or replaced and is within the warranty period, a credit not to exceed the purchase price will be issued to the Air-Weigh customer.

For our customers using purchase orders Air-Weigh will process a credit memo and notify the customer by email or fax. The customer will process a corresponding debit memo and notify Air-Weigh accordingly.

If the part or assembly received by Air-Weigh does meet the requirements of the warranty program set forth above, at the Air-Weigh customer's request the part or assembly will either be discarded, returned freight collect, or repaired or replaced at Air-Weigh customer's expense and returned freight collect.

Air Weigh

1730 Willow Creek Circle • Eugene, OR 97402-9152 USA
P.O. Box 24308 • Eugene, OR 97402-0437 USA

Telephone (541) 343-7884 • Order Desk (888) 459-3444
Customer Support (888) 459-3247 • Fax (541) 431-3121

Hours of Operation: Monday - Friday, 7 a.m. - 5 p.m., PST
www.Air-Weigh.com