

# Arlyn UpScale

## Parts Counting Manual



**ARLYN SCALES**

INDUSTRIAL, VETERINARY & CUSTOM SCALES —

*59 Second Street*

*East Rockaway, NY 11518*

*(516) 593-4465*

*[www.arlynscales.com](http://www.arlynscales.com)*

v9.0.2.050718

# CONTENTS

CONTENTS .....	2
1 INTRODUCTION .....	3
2 PARTS COUNTING: OVERVIEW .....	3
3 PARTS COUNTING: FRONT PANEL VIEW .....	4
3.1 Non-Interactive .....	4
3.2 Interactive .....	4
4 MAIN CONTROLS.....	5
5 PARTS COUNTING .....	5
6 COMMON OPTION CONTROLS.....	5
7 QUICK START: COUNTING PARTS BY QUICK SAMPLE .....	6
8 MINIMUM PIECE WEIGHTS .....	7
9 QUICK SAMPLE COUNTING – DETAILED DESCRIPTION .....	8
10 WORKING WITH SAMPLE DEFINITIONS .....	8
10.1 Creating a New Sample .....	9
10.1.1 The New Sample Dialog Box .....	10
10.1.2 Field Definitions .....	10
10.2 Acquire the Piece Weight from Sample .....	11
10.3 Activate a Saved Sample .....	13
10.4 Searching for a Sample .....	14
10.5 Editing a Sample .....	14
10.6 Deleting Samples.....	14
11 IMPORTING SAMPLE DEFINITIONS .....	15
12 TIPS AND RULES FOR ACQUIRING SAMPLES .....	16
12.1 Increasing Accuracy.....	16
13 ACCUMULATING TOTALS .....	17
13.1 Accumulation Process.....	17
13.1.1 Automatic Accumulation .....	17
13.1.2 Manual Accumulation .....	18
13.2 Advanced Menu .....	18
13.2.1 Counting Settings .....	18
13.2.2 Accumulate Settings.....	18
13.2.3 Clear Accumulation .....	19
14 MULTIPLE PLATFORM COUNTING.....	19
15 TROUBLESHOOTING .....	19
16 GLOSSARY.....	20
17 LIMITED WARRANTY .....	21

# 1 INTRODUCTION

Thank you for choosing one of Arlyn Scales' Flagship product line for your Parts Counting needs. This manual is meant as a supplement to the **Arlyn Upscale Instruction Manual**. Therefore it is important that you first familiarize yourself with the overall functionality of the scale using the Instruction Manual before starting to read this manual.

If this is your first time using parts counting with this scale, we suggest that you proceed with the section titled [Quick Start: Counting Parts by Quick Sample](#) near the end of this document. This will help familiarize you with the basic process. Then you can read the rest of this document to take advantage of some advanced features, and to increase overall accuracy.

## 2 PARTS COUNTING: OVERVIEW

The Arlyn Upscale has extensive Parts Counting capabilities. These capabilities are further enhanced by a touchscreen interface that greatly improves usability and user friendliness compared to other scales on the market.

Parts Counting is basically a four step process. First you must acquire a sample of the pieces being counted so that the scale can calculate the weight of each piece. Then, the new sample needs to be activated. Next, the platform is zeroed and then you can count the parts.

In summary,

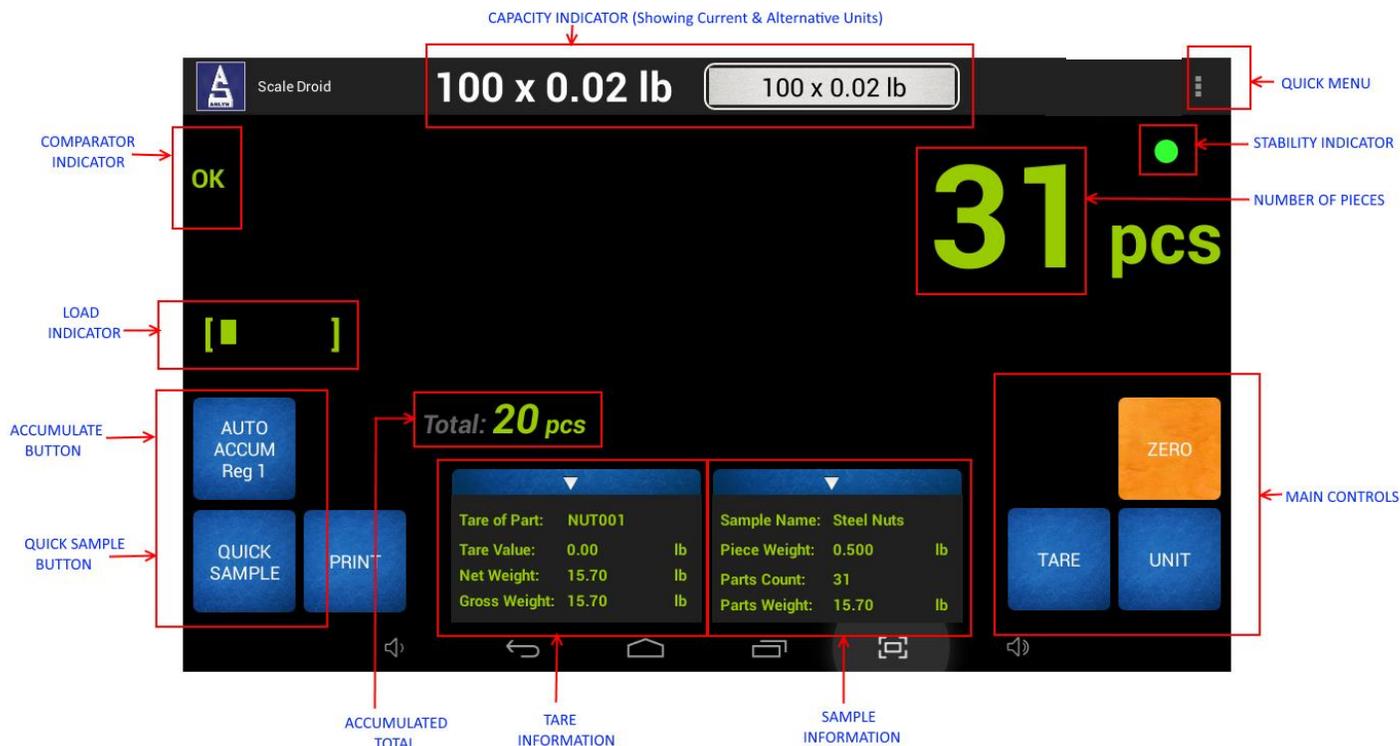
- Acquire the sample
- Activate the sample
- Zero the platform
- Count the parts

In normal operation, you may choose to use either Quick Sample Counting, or save the sample permanently in memory. Quick Sampling only takes a few keystrokes. It acquires a sample, activates it, and switches you into counting mode automatically. For higher flexibility and accuracy, you can define a sample and store it permanently in memory. This process is suggested if you have a number of different parts that you count repeatedly.

There are a few advantages to saving parts in memory:

- This is ideal for hardware manufacturers and the like because virtually unlimited number of parts may be saved in memory along with their descriptions, piece weight and other relevant information.
- The part needs only to be sampled one time, not every time you go to count the part.
- You can easily activate a part by selecting it from the list.
- Any sample size may be used while acquiring the sample. You are not restricted to 10, 25, 50 and 100 pieces as in Quick Sampling. Higher sample sizes increases counting accuracy.
- The part's description will be shown on the display while counting.
- If your scale has a Communication Option (RS232, USB, Wireless Ethernet, etc.), the part's description may be printed on tags and labels, or transmitted to a computer or a label printer.

### 3 PARTS COUNTING: FRONT PANEL VIEW



#### 3.1 Non-Interactive

##### GENERAL ITEMS

- CAPACITY INDICATORS
- STABILITY INDICATOR
- LOAD INDICATOR
- TARE INFORMATION

- Shows the capacity of the scale based on the current and all units
- Shows the stability of the weight, based on automatic and user defined filters
- Shows how much load is on the platform relative to its maximum capacity
- Shows the information of the current tared weight, if any.

##### PARTS COUNTING ITEMS

- NUMBER OF PIECES
- SAMPLE INFORMATION
- ACCUMULATED TOTAL
- COMPARATOR INDICATOR

- Number of pieces on the platform based on the activated sample weight
- Collapsible panel showing the activated sample information including sample name, piece weight, number of parts counted and the current parts weight
- Shows the total accumulated number over the course of a cycle
- Shows whether the current parts weight is within the comparator window specified by the user.

#### 3.2 Interactive

- QUICK MENU
- MAIN CONTROLS
- OPTION CONTROLS

- For Settings and other options
- Shows the Main Control panel. Use this panel to perform main operations on the scale.
- Shows controls based on the options available on the scale

## 4 MAIN CONTROLS



- TARE** - Touching this key will tare any weight on the platform and switch the scale to the net mode. Holding this key down will clear any active tare weight.
- UNITS** - Touching this key allows you to step through the various conversions. By default, the conversions available are pounds, kilograms, grams and ounces. There are four other conversions available that can be activated in the setup menu. This will add troy ounces, pennyweights, grains and a user defined conversion to the list.
- ZERO** - Will zero the indicator.

## 5 PARTS COUNTING



- QUICK SAMPLE** - Used to start your counting process without creating a sample in the definitions screen. Holding this key down should clear any active or quick sampled weight.
- ACCUMULATE** - Used to accumulate totals for parts being counted. If the key shows "AUTO", it means the accumulation happens automatically after the scale has gone back to 0 count. If you Touch and hold this key for a few seconds it will clear the accumulated total.

## 6 COMMON OPTION CONTROLS

- PRINT** - Touching this button will send a weight print in ASCII format through any Print Option available. This works for RS232, USB, Ethernet, Wireless Ethernet and Bluetooth.

## 7 QUICK START: COUNTING PARTS BY QUICK SAMPLE

### Important Note:

Before proceeding with these steps, place one piece of your sample on the platform to measure the weight of the piece. If the platform shows some weight, it means the Parts Counting process will be adequately accurate. This is because the weight of that one piece is within the resolution of your scale.

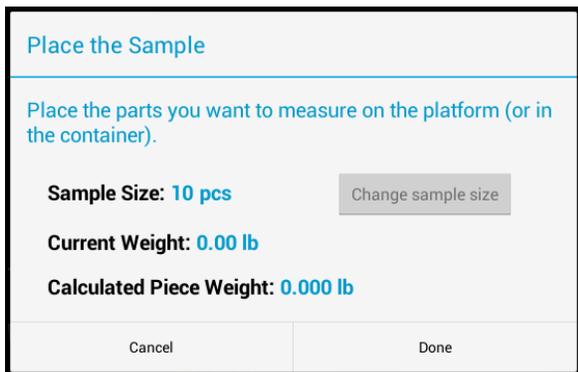
If you don't see any weight at all, it means that the piece weight is smaller than the resolution of the scale. The scale software will implement some guess work to measure the weight of the piece and the counting process may not be as accurate.

You have two options at this point:

- If the parts count is not critical and you can afford to miscount one or two parts, then you can proceed with this scale.
- If the parts count is critical and you want the scale to accurately count your parts with no error, then you will need to exchange this scale with a higher resolution unit. If you would like to measure high volumes of tiny pieces, you may need to purchase our Ultra Precision line of scales to accommodate the capacity specifications.

Please see the [Minimum Piece Weights Table](#) for further information.

- 1) Count out 10 pieces of the part that you wish to count by hand.
- 2) Touch the QUICK SAMPLE key on the Front Panel. The Quick Sample dialog will pop up.



- 3) Place the ten pieces on the platform. Give it a second to stabilize. Pay special attention to the calculated piece weight. If you do not see anything on this field and the current weight is not 0, then please refer to the [Important Note](#) above.
- 4) If everything is in order, touch the "Done" button on the dialog.
- 5) The scale will calculate the piece weight and return back to the main screen.
- 6) The screen will update the Sample Info panel.
- 7) Remove the parts from the platform and then Touch the ZERO key.
- 8) You are now ready to count. Place some parts on the platform and the count will be shown on the screen.

## 8 MINIMUM PIECE WEIGHTS

The parts you are trying to count must be heavy enough to be detectable by the scale. The minimum piece weight for any given scale is dependent on its maximum capacity and displayed resolution.

The general rule is that the minimum piece weight must be greater than or equal to the scale's displayed resolution. You may go down as low as one half the scale's resolution if you take accurate (large sample size) samples and your parts are of a consistent weight from piece to piece.

An easy way to determine the weight of your part is to count 100 of them by hand and then weight them on the scale. Take that weight and divide it by 100. This will give you the piece weight.

Below is a table of current models with their capacity and displayed resolution.

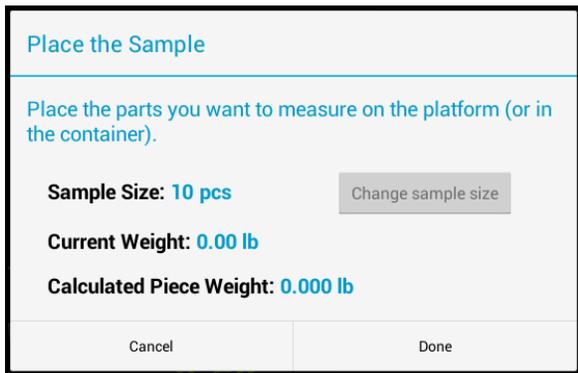
<b>Model</b>	<b>Capacity (lb)</b>	<b>Resolution (lb/kg)</b>	<b>Minimum Piece Weight (lb)</b>
820-V	5	0.001/0.0005	0.001
820-X	10	0.002/0.001	0.002
820-T	25	0.005/0.002	0.005
820-L	50	0.01/0.005	0.01
820-C	100	0.02/0.01	0.02
320-D	500	0.1/0.05	0.1
320-M	1000	0.2/0.1	0.2
<b>ULTRA HIGH PRECISION</b>			
SAW-X	10	0.0001/0.00005	0.0001
SAW-T	25	0.0002/0.0001	0.0002
SAW-L	50	0.0005/0.0002	0.0005
SAW-C	100	0.001/0.0005	0.001
SAW-H	200	0.002/0.001	0.002
SAW-JL	300	0.002/0.001	0.002
SAW-KL	500	0.005/0.002	0.005

## 9 QUICK SAMPLE COUNTING – DETAILED DESCRIPTION

This is a slightly more detailed description of Quick Sample Counting than that given in the [Quick Start Section](#) above. This function is a quick method of acquiring a sample and activating counting mode at the same time. The sample size can be changed on the fly during this process.

The procedure for acquiring a quick sample is as follows:

- 1) Decide on a sample size. The default is 10 pieces. The higher the sample size, the more accurate the counting will be. Count these parts out by hand.
- 2) You may choose to use a box or other type of container to help manage the parts. Remove all weight (or place an empty container) on the platform.
- 3) Touch the QUICK SAMPLE key on the Front Panel. The Quick Sample dialog will pop up.



- 4) Notice that the “Current Weight” field is reading 0 lbs. This is because the container you placed on the platform has been automatically Tared out.
- 5) If you chose to sample 10 pieces, then proceed to Step 5. If your sample has more (or less) pieces, then
  - a. Touch the “Change Sample Size” button.
  - b. Enter the desired weight of the sample size.
- 6) Place the sampling pieces on the platform. Give it a second to stabilize. Pay special attention to the calculated piece weight. If you do not see anything on this field and the current weight is not 0, then please refer to the [Important Note](#) in the [Quick Start Section](#) above.
- 7) If everything is in order, touch the “Done” button on the dialog.
- 8) The scale will calculate the piece weight and return back to the main screen.
- 9) The screen will update the Sample Info panel.
- 10) Remove the parts from the platform and then Touch the ZERO key.
- 11) You are now ready to count. Place some parts on the platform and the count will be shown on the screen.

This sample will remain active until either the power is removed from the scale or a new sample is activated.

## 10 WORKING WITH SAMPLE DEFINITIONS

A more accurate and convenient way to sample parts is to define and store them in memory. You may define as many samples as you like within the scale's memory capacity. Your scale has up to 4GB of storage available, providing virtually unlimited space for saving samples and other data.

Once you have a list of samples saved in memory, you may activate any one you like, zero the platform and begin counting. These samples remain permanently in memory even when the power is removed.

If you have **multiple platforms**, then you can activate one sample per platform, allowing you to perform parts counting across all connected platforms concurrently.

There are a number of functions used when working with samples in memory. They are:

- Creating a new, default sample.
- Editing its value (piece weight).
- Changing its description.
- Activating it.
- Deleting unneeded samples.

## 10.1 Creating a New Sample

To create and save a sample in memory, use the following procedure:

- 1) Touch the QUICK MENU button and go to “Settings” to enter the scale's Setup Menu.
- 2) Touch and Drag the left panel downwards to show the **Parts Counting** section. Then touch the “Sample Definitions” selection.
- 3) You will be shown a list of all samples that are currently saved in memory. If there are none then "None Defined" will be shown. See below.

All Platforms						
ID	P/N	Desc.	Val (lb):	Loc	Lot	Ta
NUTS	NUT001	Steel Nuts	0.500	Building A	1	0.
BTS1	BOLTS001	Gen. Bolts	0.020	Building B	2	0.

- 4) To add a new sample to the list, Touching the “+” icon on the top right corner of the Screen to open the *New Sample Definition* dialog box.

### 10.1.1 The New Sample Dialog Box

The New Sample Dialog Box will show a set of fields that need to be filled to create a new sample in memory.

### 10.1.2 Field Definitions

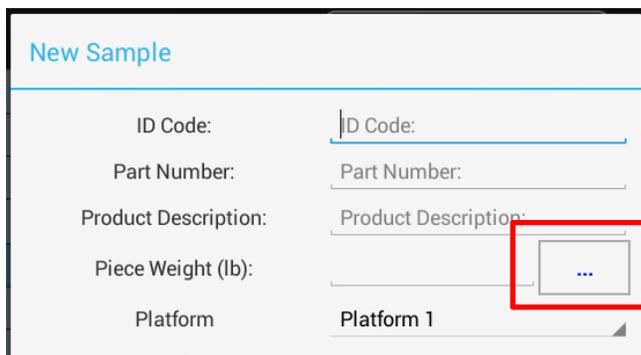
NAME	TYPE	DESCRIPTION
ID Code	Text ( <i>Required</i> )	Defines the ID number. This is most useful if a part has a barcode, the code will be placed in this field. It is also useful if two different parts have the same Part Number but are packaged differently.
Part Number	Text ( <i>Required</i> )	Defines the actual part number. This could be the same as ID Code, or not based on the above description.
Product Description	Text (Optional)	Describes what the part is such as “Steel Nuts”, “Aluminum Bolts”, etc.
Piece Weight	Decimal ( <i>Required</i> )	The weight of the part. This can be entered directly if you know the weight of the part, or you can acquire the weight of the part by going through the sampling process. Touch the button <b>...</b> to go through the <a href="#">Acquire the Piece Weight</a> Wizard.
Platform	Selection	<i>*For Multiplatform Scales Only*</i> . You can select for which platform this part is associated with. When this part is activated, it only activates this part for that platform. Please note that only one part can be activated per platform.

NAME	TYPE	DESCRIPTION
Location	Text (Optional)	You can define in what location the part resides. This could be the location in the warehouse where this product is stored. Example "Building 1" or "Area 51". This field is not shown anywhere, and is for informative purposes only.
Lot/Bin	Text (Optional)	You can define in what bin the parts reside in. – This could be the lot of parts it was manufactured from or the actual Bin number where it is stored. Example "Lot 5" or "Bin 7". This field is not shown anywhere, and is for informative purposes only.
Tare Weight	Decimal (Optional)	This is the weight of the container to be used when weighing the parts. If the weight of the container is constant (will never change from container to container, or if the same container is used), then fill in the weight of the container in this field. Then you do not need to Tare out a container first to weigh the parts.
Comparator	Selection	Enabled/Disabled. A comparator is used if you want to know the parts you are counting are within a certain range. If the Comparator is enabled, you need to define the High limit and the Low limit below. The scale will then determine if the number of parts you have on the platform is within the range you specified. The scale will respond with "Hi", "Lo" or "OK" during Parts Counting.
Hi Comparator	Decimal (Optional)	Define the High Limit of the comparator.
Low Comparator	Decimal (Optional)	Define the Low Limit of the comparator.
Inventory Count	Whole Number (Optional)	You can define the number of parts in your inventory. Example, "5000" or "1000". This field is not shown anywhere, and is for informative purposes only.  Future Expansion: This would be the value of all the parts counted for a specific item

## 10.2 Acquire the Piece Weight from Sample

Using a pre-counted sample, you can have the scale automatically calculate the piece weight for you. Please remember the [Minimum Piece Weight](#) requirements for your type of scale.

- 1) Decide on the number of parts you would like to use for a sample. Count them out on a surface in front of you.
- 2) Select a sample from the Samples Definition List to bring up the Edit Sample dialog box. Proceed to the next step if you are already in the New Sample/Edit Sample dialog box.
- 3) Touch the  besides the Piece Weight field to start the wizard.



- a. The following dialog box appears, prompting you to enter the number of pieces you have pre-counted in preparation for this sample. Then Touch “Begin”.

Acquire Piece Weight from Sample Step 1 of 4

Enter the number of pieces you want to use for this operation

Sample Size:

Quit Begin

- b. Before placing pre-counted sample, make sure to remove all weight from the platform (or place an empty container on it). Then Touch “Next”.

Prepare the Platform Step 2 of 4

Remove all weight (or place an empty container) on the platform. Touch "Next" to continue.

Previous Quit Next

- c. Wait for the platform to acquire the weight on the platform.

Please wait ...

 Weighing ...

Depending on your system, this process could be instantaneous and this dialog box will be very short lived or vice versa. It is possible that you might run into errors during this process. If so, just go back to the Front Panel, then come back again and start the process over.

- d. Now the next dialog box appears showing how many pieces need to be placed, what the current weight on the platform is, and what is the calculated piece weight based on the total weight on the platform.

Place the Sample		Step 3 of 4
Place the parts you want to measure on the platform (or in the container).		
<b>Sample Size: 50 pcs</b>		
<b>Current Weight: 2.96 lb</b>		
<b>Calculated Piece Weight: 0.059 lb</b>		
Previous	Quit	Next

Please note that the piece weight must be show greater than 0 for accurate count. If not, your scale has a higher resolution than your piece weight and it will not work for your application if you want absolutely accurate results. Touch the “Next” button.

- e. This step confirms the Piece weight and the Minimum Sample Size required.

Your calculated Piece Weight is...		Step 4 of 4
Quick Sampled Piece Weight: <b>0.069 lb</b>		
Minimum Sample Size: <b>1</b>		
Quit	Finish	

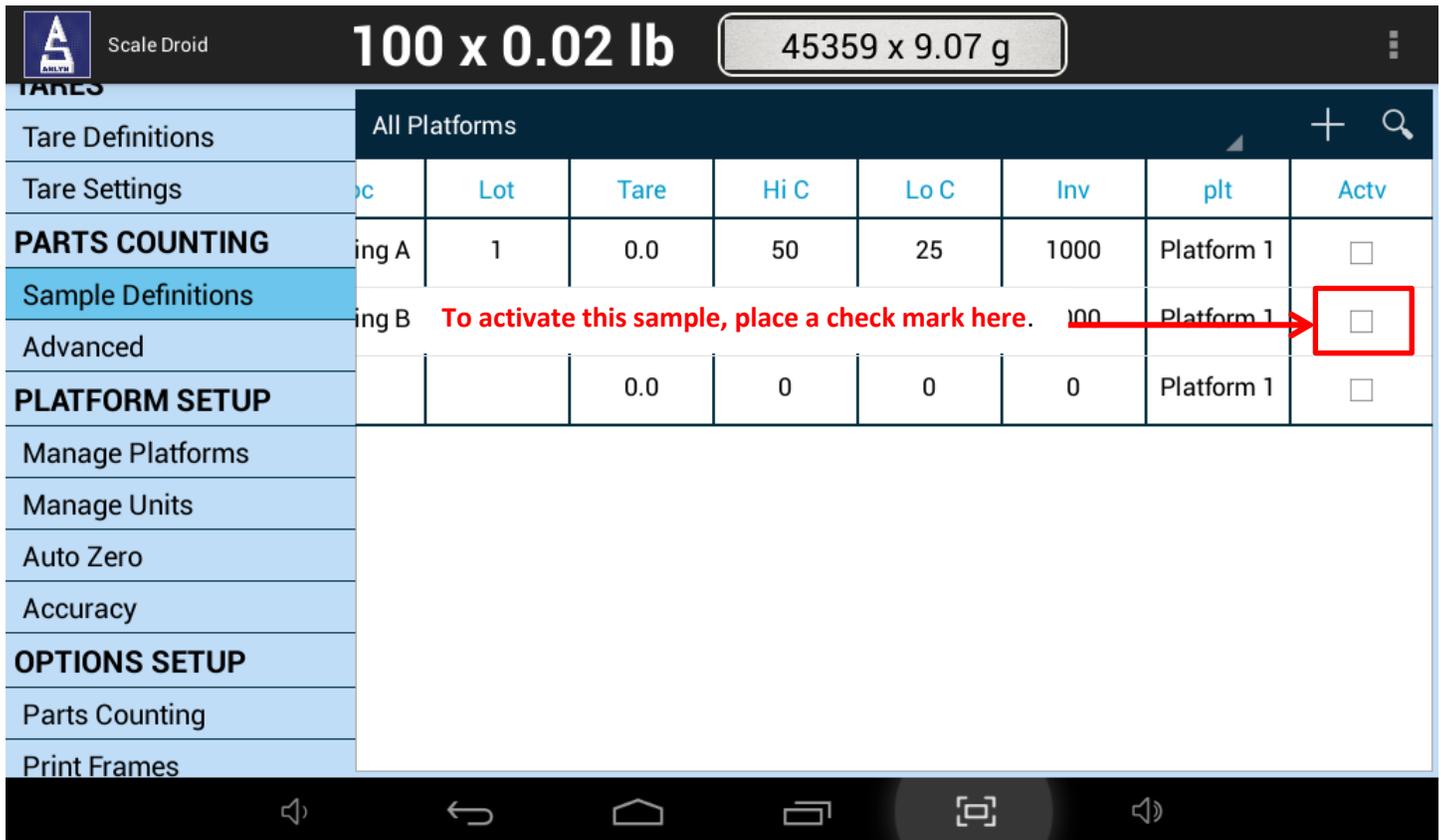
If the Minimum Sample Size equals 1, then the scale will measure the weight of the piece accurately. If the Minimum Sample Size is greater than 1, then the scale will employ some algorithms to best guess the number of pieces you have on the platform, which may not be as accurate.

Touch “Finish” to complete the wizard. The calculated Piece Weight is now automatically entered into the Piece Weight field.

### 10.3 Activate a Saved Sample

Now that you have created a new sample, how do you use it? You will need to “activate” the sample in the Sample Definitions List to start using that part for counting.

In the Sample Definitions list, look at the sample record you want to activate and look for the “Actv” field. You may have to scroll the table horizontally to find the field. See example below.



That's it. Your sample has now been activated. Use the QUICK MENU to get back to the Front Panel screen. You are now ready to do some Parts Counting.

## 10.4 Searching for a Sample

If you have too many samples defined in the Samples Definition List, it is going to be difficult to scroll through hundreds of records to look for the sample you are trying to activate. The Arlyn Upscale User Interface framework implements a **Search** system that allows you to search through the records using ID Code, Part Number or Description. To begin your search, click on the Search Icon  and text field will open up to begin your search. The searching mechanism is instantaneous, meaning, as soon as you start typing, on the third letter the system will start filtering out your results.

## 10.5 Editing a Sample

You can edit a sample by simply touching the associated sample record. A dialog box equivalent to the [New Sample](#) will appear, except with all the fields filled in.

## 10.6 Deleting Samples

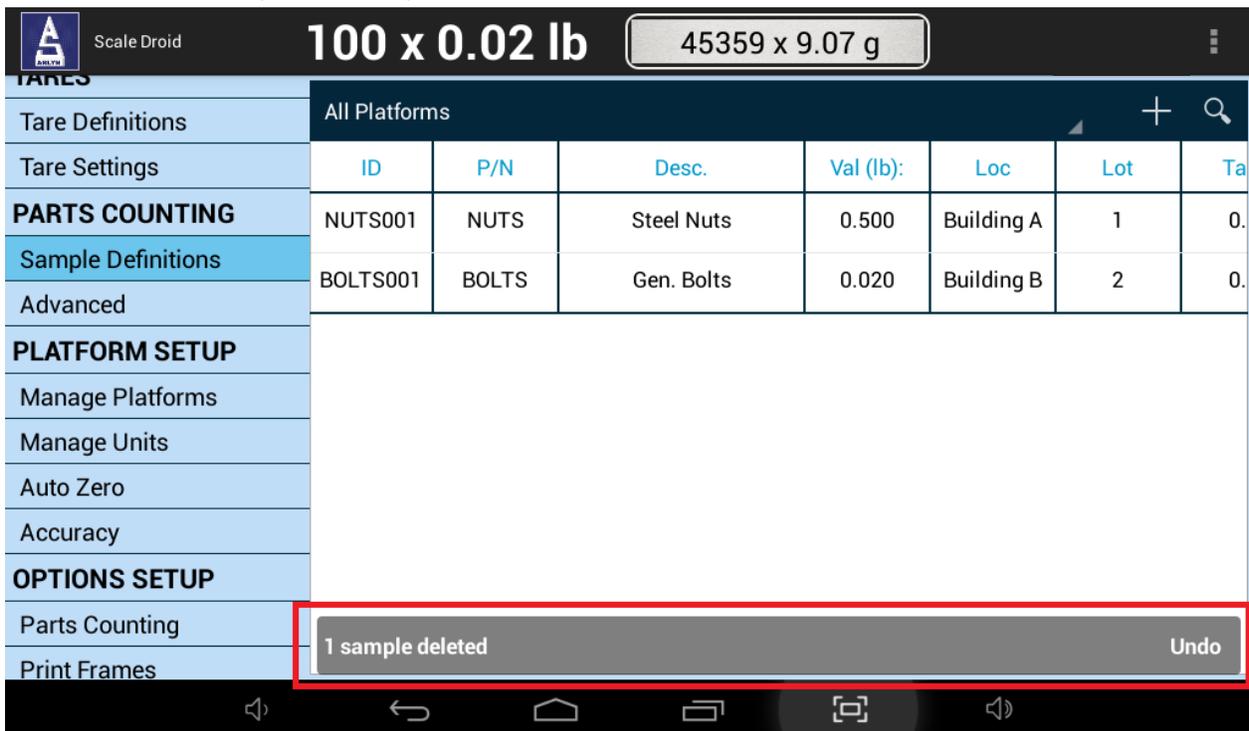
To delete an unneeded sample from the Samples Definitions List,

- 1) **Touch and Hold** the sample record you would like to delete. The sample now is permanently selected. At this point, you can also select more Sample records you wish to delete.

- 2) Take a look at the top right corner of the screen, a new set of icons have appeared. Notice the “Trash Can” icon. That is the delete button.



- 3) Touch the “Trash Can” icon to delete the sample from the list. The following message is displayed at the bottom of the screen. “1 Sample Deleted | Undo”



- 4) What if you made a mistake deleting a Sample or Samples? The Scale gives you one last chance to get them back again. Touch the Undo button to restore all your records back to your Sample Definitions List. This can only be done if you have not moved away from this screen.

## 11 IMPORTING SAMPLE DEFINITIONS

The Arlyn UpScale can be equipped to allow import and export of Tares, Samples or Setpoint Definitions. This is only available for scales with Arlyn UpScale indicator equipped with USB Data Logging Option. For further information, please see the addendum for “Arlyn UpScale - Import/Export Function Addendum” [on Arlyn Scale’s Product Manuals and Specifications Sheets page](#).

## 12 TIPS AND RULES FOR ACQUIRING SAMPLES

Before a part can be counted, the scale needs to know how much each piece weighs. This process is known as Sample Acquisition. Samples can be taken quickly through a few key presses ([Quick Sample](#)) or [they may be defined, named and stored in memory](#).

Acquiring an accurate sample is essential for parts counting and there are a few basic rules that should be followed.

- 1) ***The parts being counted must be the same weight from piece to piece.*** The scale calculates the number of parts on the platform by simply reading the total weight and dividing it by the weight of each piece. If there were variations in weight from one part to another it would be impossible to make an accurate calculation.
- 2) ***A single part must be heavy enough to be detectable by the scale.*** Parts counting scales come in all capacities. The smaller capacity scales (10 and 25 lb capacities) usually have no trouble detecting a light weight, single piece. That same piece would be undetectable on larger scales, say 50lb capacities or greater. The general rule is that the minimum piece weight must be greater than or equal to the scale's displayed resolution. You may go down as low as one half the scale's resolution if you take accurate (high number) samples and your parts are of a consistent weight from piece to piece. Consult the section titled "[Minimum Piece Weights](#)" for exact values for each capacity.
- 3) ***The scale must be sitting on a stable surface.*** If the scale is sitting on a surface that is either vibrating, located in a drafty area, or in any area that causes the scale to be unstable, it will not count accurately. This is especially true when acquiring samples.
- 4) ***The scale must be accurately calibrated if you are using samples stored in memory.*** If you are using a sample that was previously saved in memory, the scale must be accurately calibrated. This is due to the fact that when a sample is saved in memory, its piece weight (value) in pounds is saved with it. When this sample is activated on an un-calibrated scale, the count will not be correct.

This does not apply to a quick sample because the quick sample function calculates the piece weight using the scale's current calibration, even if incorrect.

### 12.1 Increasing Accuracy

In general, the more pieces that you use during acquiring a piece weight, the more accurate the parts counting will be. If you use a small sample, say 50 pieces or less, you may experience errors that will increase as larger loads are applied to the scale.

The most ideal way to acquire a sample is to use a sample size near the expected number of parts that you count regularly. For example, if you are counting 1000 #6 washers into each box, then acquire your piece weight using a 1000 piece sample size..

A far better way to acquire the sample is to store it in memory. When defining samples to be saved in memory any sample size may be used. Consult the section titled "[Working with Sample Definitions](#)" for details.

## 13 ACCUMULATING TOTALS

Your scale has the capability of keeping running totals. This will allow you to perform Batch counting, and keep track of all the total counts performed for the part.

Accumulation is also helpful because you don't have to weigh a huge load of parts to get it counted. Let's say you want to count and add 10,000 pieces to a crate. It is sometimes not feasible to place a set of 10,000 pieces onto the platform, make sure it counts to 10,000 pieces and then load the entire batch into the crate. This may be too heavy for the scale. You might risk overloading the load cells. It is also difficult to manage that large of a set. So the idea is to split this batch into manageable quantities.

Instead of counting all 10,000 pieces at once, you can count batches of 1000 pieces. You can weigh 1000 pieces and add it to the crate. Take another set of pieces and count them to 1000, then add it again to the crate. Each time you weigh 1000 pieces, the scale will add that to a running total (accumulated total) until you reach the fabled 10,000. Then you can reset the total and start batching another set of 10,000 pieces.



The screenshot above shows the Accumulation information

**Total** – Number of pieces counted since the accumulation process began. This will increment with additional count whenever the [Accumulation Process](#) is completed.

**Weight** – The current weight on the platform

**Piece Weight** – The activated sample's Piece Weight.

### 13.1 Accumulation Process

There are two ways the scale performs accumulation; 1) Automatic Accumulation and 2) Manual Accumulation.

#### 13.1.1 Automatic Accumulation

This is enabled by default. You don't have to do anything for this to be enabled. Here is how it works:

- 1) Make sure the platform is empty. Then **touch and hold** the AUTO ACCUM button to clear the current Accumulated total from the register.
- 2) Then place your batch of parts on the platform. For this example, let's say you are weighing 100 parts. Wait for the scale to stabilize.
- 3) When the weight has stabilized, the Accumulation Total will update showing 100 parts.
- 4) Remove all the parts from the Platform. The count should go back to 0. **[This is important. If the count does not go back to 0, the next batch will NOT be accumulated.]**
- 5) Now place a new batch of parts, let's say another 100 parts. Wait for the scale to stabilize.
- 6) When the weight has stabilized, the Accumulation Total will update, now showing 200 parts.
- 7) Continue doing this until you have reached the target total.

### 13.1.2 Manual Accumulation

If you wish to only accumulate on demand, then you need to set the Accumulation Settings to **Manual Accumulation**. To do this:

#### Setup

- 1) Touch the QUICK MENU and then go to SETTINGS->PARTS COUNTING: ADVANCED
- 2) Touch the "Accumulate Settings" option.
- 3) Set the "Accumulate Type" to **Manual**.
- 4) Touch Save.
- 5) Then go back to the Front Panel again.
- 6) Notice the ACCUM button does not show "AUTO" anymore.

The Manual Accumulation process works the same way as the Automatic Accumulation. The only difference is that instead of the scale automatically accumulating totals for you after weight stabilization, you will need to press the ACCUM button to add the current part count to the Accumulation Register.

## 13.2 Advanced Menu

Besides the basic operation of the accumulation process, there are a few other items that you might be interested in the Advanced Menu. The "Advanced" Menu is available under the Parts Counting Category in Settings.

### 13.2.1 Counting Settings

This menu is not functional at the moment so none of the settings in this menu is effective. Leave it as it is.

### 13.2.2 Accumulate Settings

The paragraphs below explain the settings found in this menu.

#### 13.2.2.1 Accumulation Registers

The Accumulated totals are held in what are called **accumulation registers**. There are two registers available for holding accumulation totals. Each works independently from the other. By default, Accumulation Register 1 is selected for totaling. You can switch to Accumulation Register 2 if you wish to accumulate two parts together at the same time without resetting the register back to 0.

#### 13.2.2.2 Accumulation Type

You are provided with two ways to perform accumulation; Automatic Accumulation and Manual Accumulation. Both of these processes are explained under [Accumulation Process](#). You can use the selection in this menu to switch between Automatic and Manual Accumulation.

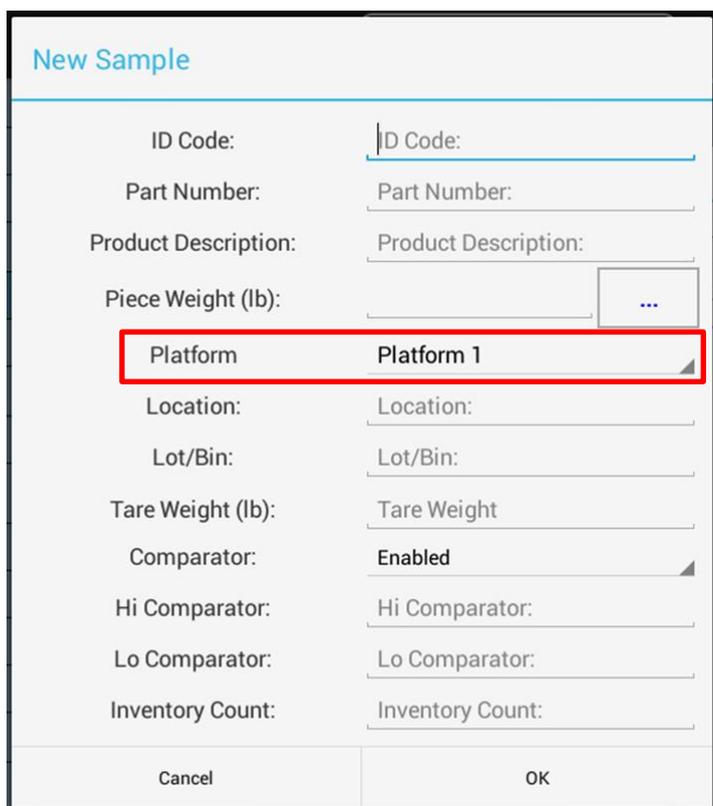
### 13.2.3 Clear Accumulation

You can choose to clear the Accumulation Total on this screen instead of using the Long Touch button method.

## 14 MULTIPLE PLATFORM COUNTING

If your scale is equipped with two or more platforms, then you can assign a Sample Definition to a particular platform. If you have two distinct platforms (one is a larger capacity than the other, or one of them is an Ultra Precision platform) then assign the Sample to the smaller capacity (or higher resolution) platform first to get the maximum accuracy, before assigning it back to the larger one if necessary. However, you can still use either one.

The Platform can be assigned when creating a New Sample, or editing an Existing Sample. The Platform Selection is on the dialog box for both of these cases.



The screenshot shows a 'New Sample' dialog box with various input fields. The 'Platform' dropdown menu is highlighted with a red box and is currently set to 'Platform 1'. The other fields include ID Code, Part Number, Product Description, Piece Weight (lb), Location, Lot/Bin, Tare Weight (lb), Comparator (set to 'Enabled'), Hi Comparator, Lo Comparator, and Inventory Count. The dialog box has 'Cancel' and 'OK' buttons at the bottom.

## 15 TROUBLESHOOTING

If you aren't getting the results you are expecting, please consult the list below for a possible remedy. If you are still having difficulties, please contact our Service Department and one of our technicians will be happy to walk you through it.

### ***The indicated parts count is unstable or drifting.***

- The weight of the piece you are trying to count is below the scale's capability. Consult the section titled "[Minimum Piece Weights](#)" for details.
- The scale is on a vibrating, or otherwise non-stable surface.

- c) The reading is being affected by an external force. Common examples are a draft, something mechanical rubbing against the platform, high levels of static electricity, or RF radiation emitted by portable or cell phones or some other sort of transmitter nearby.

***The count is not accurate.***

- a) You didn't press the ZERO key on an empty platform just prior to counting (most common).
- b) The weight of the piece you are trying to count is below the scale's capability. Consult the section titled "[Minimum Piece Weights](#)" for details.
- c) You may need to acquire a better sample by using a larger sample size. This is especially true if counting a large number of parts.
- d) Check your calibration. Put a known test weight on the platform and make sure it is reading correctly.

***The piece count display is stuck on zero***

- a) Make sure the weight of the piece is also not stuck on zero. If it is, then that needs to be taken care of first.
- b) You didn't press the ZERO key on an empty platform just prior to counting (most common).
- c) There is no sample activated.
- d) For saved samples, the value may not have been entered (set at 0.00 lb). Go back and acquire the value. You can see the sample's description and value on top of the count display.

***I can't seem to find the parts counting screen***

This screen should pop up automatically upon activating a sample.

***There are no entries for parts counting in any menu***

Your counting mode may not be enabled. There is a software switch that must be enabled. It may have been shut down by accident while working with a technician over the phone or was accidentally switched off during recent service at our factory. Call our Service Department with your serial number and we will enable it for you.

## 16 GLOSSARY

***Accumulate Function:*** Is used to maintain a running total of counts.

***Capacity:*** The maximum weight, in pounds, that the scale platform is designed to handle during normal use.

***Minimum Piece Weight:*** Is the lightest piece weight that is detectable by the scale.

***Piece Weight:*** This is the actual weight, in pounds, of a single piece. It is also called Value.

***Resolution:*** The minimum weight increment that is discernable on the display.

***Sample Size:*** This is the number of pieces that you will use to acquire a sample on the scale. Once the scale knows the sample size it can calculate the piece weight by taking the total weight and dividing it by the sample size.

***Value:*** Same as piece weight, the actual weight of each piece in pounds.

## 17 LIMITED WARRANTY

Arlyn Scales warrants that your Arlyn Scales' equipment and systems, when properly installed will operate per written specifications. All systems and components are warranted against defects in materials and workmanship for a period of one year.

Arlyn Scales warrants that the equipment sold hereunder will conform to the written specifications authorized by Arlyn Scales. Arlyn Scales warrants the equipment against faulty workmanship and defective materials. If any equipment fails to conform to these warranties, Arlyn Scales will, at their option, repair or replace such goods returned within the warranty period subject to the following conditions:

1. Upon discovery by Buyer of such nonconformity, Arlyn Scales will be given prompt written notice with a detailed explanation of the alleged deficiencies.
2. Return Materials Authorization Number (RMA#) must be obtained from Arlyn Scales Technical Support department for any equipment to be returned to Arlyn Scales for warranty replacement or repair. Failure to do so will result in delay for repair or replacement, or could result in equipment lost in shipment, at the expense of the Buyer.
3. RMA# must be obtained by calling Arlyn Scales Technical Support at (800) 645-4301 ext. 101.
4. Individual electronic components returned to Arlyn Scales for warranty purposes must be packaged to prevent electrostatic discharge (ESD) damage in shipment.
5. Examination of such equipment by Arlyn Scales confirms that the nonconformity actually exists, and was not caused by accident, misuse, neglect, alteration, improper installation, improper repair or improper testing; Arlyn Scales will be the sole judge of all alleged non-conformities.
6. Such equipment has not been modified, altered or changed by any person other than Arlyn Scales.
7. Arlyn Scales will have reasonable time to repair or replace the defective equipment. The buyer is responsible for shipping both ways.
8. In no event will Arlyn Scales be responsible for travel time, or on-location repairs, including assembly or disassembly of equipment, nor will Arlyn Scales be liable for the cost of any repairs made by others.

THESE WARRANTIES EXCLUDE ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ARLYN SCALES WILL NOT, IN ANY EVENT, BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

ARLYN SCALES AND BUYER AGREE THAT ARLYN SCALES SOLE AND EXCLUSIVE LIABILITY HEREUNDER IS LIMITED TO REPAIR OR REPLACEMENT OF SUCH GOODS. IN ACCEPTING THIS WARRANTY, THE BUYER WAIVES ANY AND ALL OTHER CLAIMS TO WARRANTY.

SHOULD THE SELLER BE OTHER THAN ARLYN SCALES, THE BUYER AGREES TO LOOK ONLY TO THE SELLER FOR WARRANTY CLAIMS.

NO TERMS, CONDITIONS OR UNDERSTANDING, OR AGREEMENTS PURPORTING TO MODIFY THE TERMS OF THIS WARRANTY SHALL HAVE ANY LEGAL EFFECT UNLESS MADE IN WRITING AND SIGNED BY A CORPORATE OFFICER OF ARLYN SCALES AND THE BUYER.