

NewBalance User Guide v1.1

By Anthony Arrott

NewBalance User Guide Change Log

Version	Description	Author
1.0	Creation of the original manual	Anthony Arrott
1.1	Added information on Freezing Columns and Hot Keys	Anthony Arrott

Contents

Installing NewBalance	4
.NET Dependencies	4
NewBalance Installer	4
Default Installation Directory.....	4
Running NewBalance for the First Time	5
Initial Setup	5
Single Serial Port Connection.....	6
Multiple Serial Port Connections	6
Configuring the Color Meter's Connection Info.....	7
Explanation of Preferences	8
Default .APP Folder	8
COM	8
Baud Rate, Parity, Stop Bits, Data Bits, RTS (Checkbox)	8
Balance SICS Command	8
Save and Close	8

Installing NewBalance

To install NewBalance it will require administrator privileges, be sure you have an administrator available, or you have elevated privileges on your Windows user account. You will also need .NET 4.5 Dependencies, if you have Windows 7 or later those dependencies should already be included on your computer and you can skip the following steps for installing the .NET Dependencies.

.NET Dependencies

If the following URL changes, search for “Microsoft .NET 4.5 Download” on Google. The first option that shows up from Microsoft should take you to download page necessary.

Current Link: <http://www.microsoft.com/en-us/download/details.aspx?id=30653>

Once you have downloaded “dotNetFx45_Full_setup.exe”, double click the file and follow the step by step instructions on screen.

NewBalance Installer

Double click NewBalanceInstaller.msi, follow the step by step instructions to install the program.

Default Installation Directory

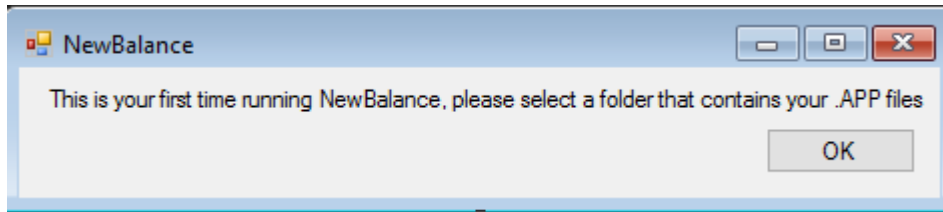
The default directory is C:\Program Files(x86)\Washington State University\NewBalance

The file that you want to run is NewBalance.exe, NewBalance.exe.config is a file that the program reads from to load any default settings within the program. Double clicking this file will not open NewBalance.

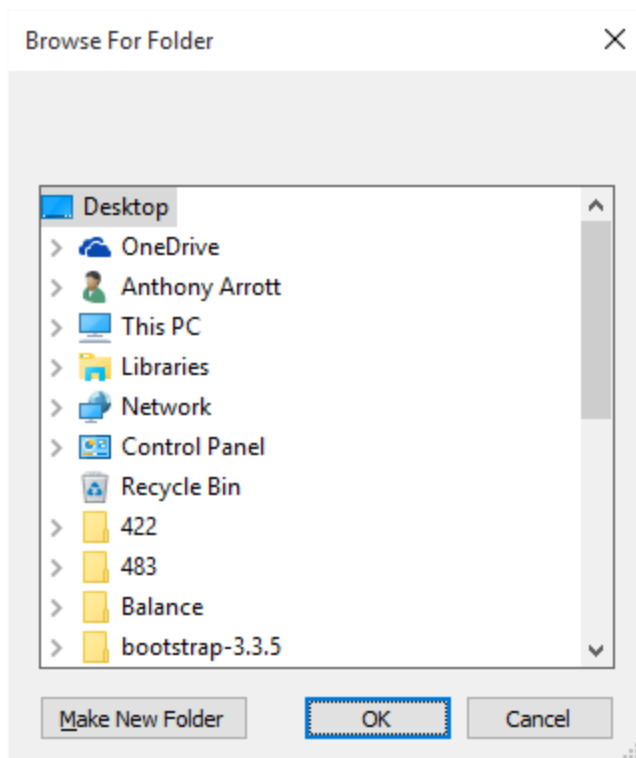
Running NewBalance for the First Time

Initial Setup

When you initially run NewBalance the following popup will show up:



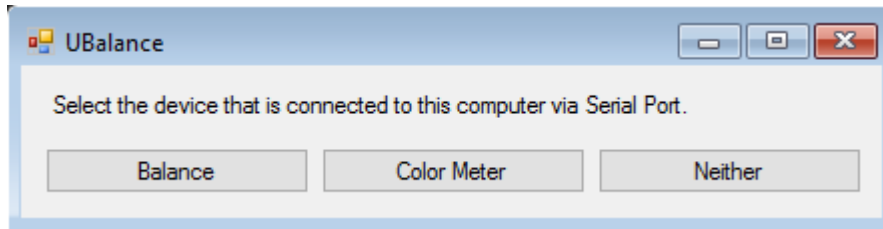
Press OK, then the following Folder selection will pop up, you want to select the folder that contains any UBalance .APP files.



Once you have selected the folder, press OK.

Single Serial Port Connection

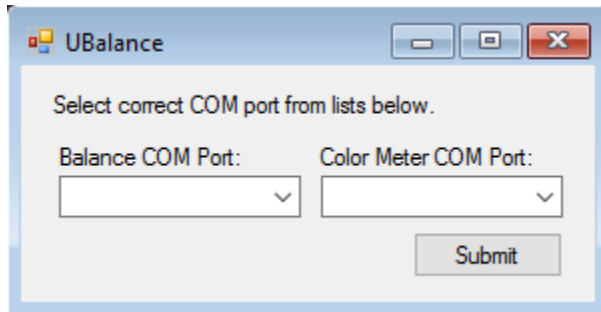
If you have a balance or color meter connected to your computer you will be shown this screen:



You can select Balance or Neither in this version of the program, the Color Meter framework is there, but not currently working with the program.

Multiple Serial Port Connections

If you have multiple serial port connections on your computer, you want to make sure to differentiate them for the program. The following screen will be displayed:



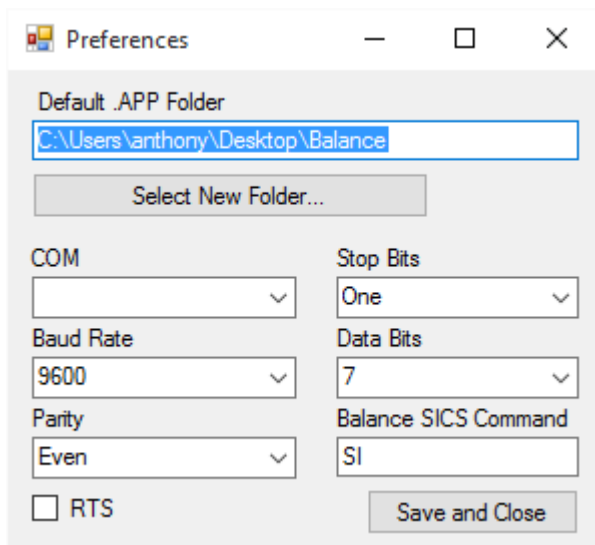
Again, in the current version of the program the Color Meter is not working yet, select the correct port for the Balance and press submit.

Configuring the Color Meter's Connection Info

From the main screen of UBalance click on Properties in the menu bar:



Once you click Preferences this screen will display:



Explanation of Preferences

Default .APP Folder

Shows the directory in which the .APP files are being located from. If you want to change this folder click "Select New Folder..." and choose the correct folder.

COM

This is the COM port for serial communications that the program will read from, if nothing is connected to your computer, no items will show up in the COM drop down list

Baud Rate, Parity, Stop Bits, Data Bits, RTS (Checkbox)

These are all options for your balance, if you know the specifications of your current balance change them to the necessary values populated in the drop down lists. The default settings are for Mettler-Toledo Balances.

Balance SICS Command

SICS is a Mettler-Toledo term for the command to send to your balance, the default value is "SI" which is "Send Immediate", it does not wait for the scale to have no wavering in values before it sends the value. For more of these commands consult the Mettler-Toledo Guide.

As of right now the program does not support other types of balances, and the output may vary if you try to connect a different scale with different ASCII commands. The program sends <COMMAND><CR><LF> to the balance if you want to try a different piece of hardware.

Save and Close

Use this command to ensure that your settings are saved within the program. If you click the 'X' at the top right, the settings will not be saved.

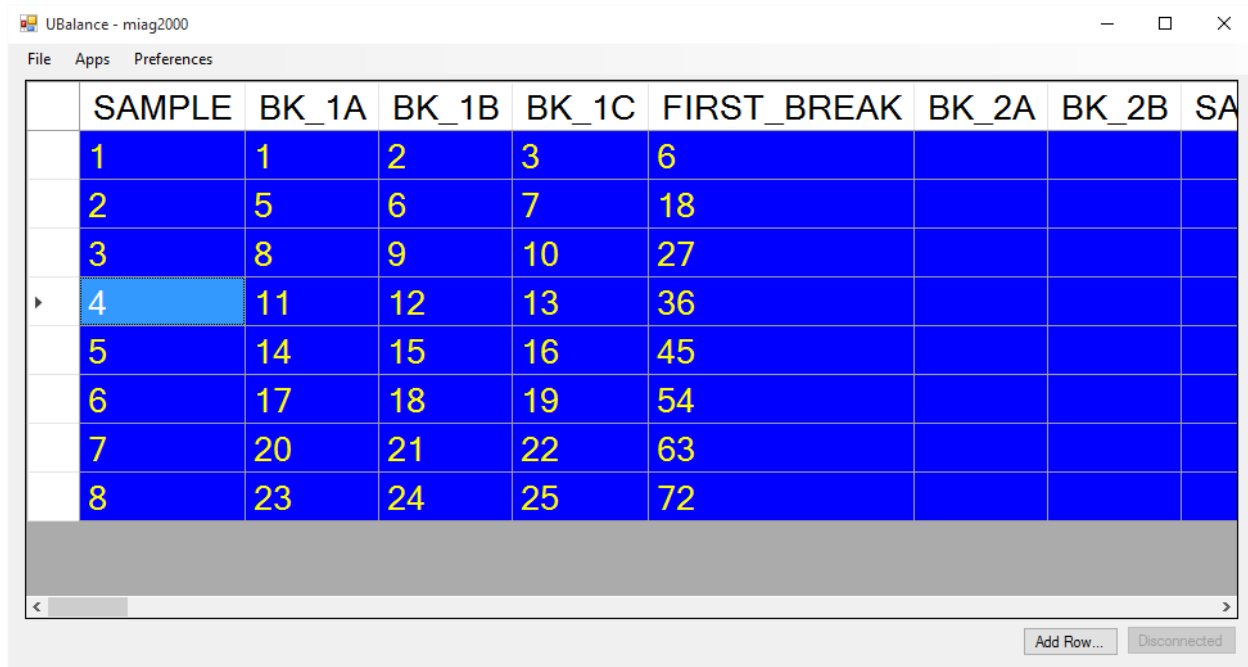
Freezing Columns in NewBalance

To freeze a column in NewBalance select a cell within the column you want to have visible and hit the F4 key. You will be able to scroll through other columns and see the frozen data on the left of the screen and the other more pertinent data as you scroll through.

To unfreeze a column, select a cell within the frozen column and press F4, it will be placed back relative to where it would be in the spreadsheet normally.

Example:

You want to always see "SAMPLE" and "FIRST_BREAK" as you navigate through a large .APP file such as miag 2000. Select any cell in the "SAMPLE" column and press F4.



The screenshot shows a window titled "UBalance - miag2000" with a menu bar (File, Apps, Preferences) and a spreadsheet. The spreadsheet has columns labeled SAMPLE, BK_1A, BK_1B, BK_1C, FIRST_BREAK, BK_2A, BK_2B, and SA. The first four columns (SAMPLE, BK_1A, BK_1B, BK_1C) are frozen, as evidenced by the vertical scrollbar being positioned to the left of the FIRST_BREAK column. The data in the first four columns is visible even when scrolling horizontally. The cell A4 (row 4, column SAMPLE) is selected and highlighted in blue. The data in the first four columns is as follows:

	SAMPLE	BK_1A	BK_1B	BK_1C
1	1	1	2	3
2	2	5	6	7
3	3	8	9	10
4	4	11	12	13
5	5	14	15	16
6	6	17	18	19
7	7	20	21	22
8	8	23	24	25

The FIRST_BREAK column contains values 6, 18, 27, 36, 45, 54, 63, and 72 for rows 1 through 8 respectively. The BK_2A, BK_2B, and SA columns are empty. The window also features a horizontal scrollbar at the bottom and buttons for "Add Row..." and "Disconnected".

You will not notice anything change. Select any cell in the “FIRST_BREAK” column and press F4, you will notice that the “FIRST_BREAK” column is now in the front of the “SAMPLE” column.

UBalance - miag2000

File Apps Preferences

	SAMPLE	FIRST_BREAK	BK_1A	BK_1B	BK_1C	BK_2A	BK_2B	SA
1		6	1	2	3			
2		18	5	6	7			
3		27	8	9	10			
4		36	11	12	13			
5		45	14	15	16			
6		54	17	18	19			
7		63	20	21	22			
8		72	23	24	25			

Add Row... Disconnected

When you scroll, those columns will stay in place.

UBalance - miag2000

File Apps Preferences

	SAMPLE	FIRST_BREAK	MILL_LOSS_HARD	%RECOVERY_HARD
1		6		
2		18		
3		27		
4		36		
5		45		
6		54		
7		63		
8		72		

Add Row... Disconnected

To revert these changes select a cell in “SAMPLE” or “FIRST_BREAK” and press F4. If you do “SAMPLE” first “FIRST_BREAK” will move to the left and stay frozen on the screen while you can scroll left and right without having “SAMPLE” frozen on the screen anymore.

	FIRST_BREAK	SAMPLE	BK_1A	BK_1B	BK_1C	BK_2A	BK_2B	SA
6		1	1	2	3			
18		2	5	6	7			
27		3	8	9	10			
36		4	11	12	13			
45		5	14	15	16			
54		6	17	18	19			
63		7	20	21	22			
72		8	23	24	25			

The order you decide to freeze the columns do matter, so plan ahead when you are freezing columns, the first one you freeze will always be leftmost on the screen. If you make a mistake you can always unfreeze the columns and start over.

In this version the frozen columns will not be saved in the save file, so when you reload the file you will have to freeze your columns again.

Hot Keys

F1 – Save

F2 – Load

F3 – Add Row

F4 – Freeze Row to front of spreadsheet

Space – Read from Balance