

**Maguire Products Inc  
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**WEIGH SCALE BLENDER  
WITH  
“TWELVE” COMPONENT SOFTWARE  
  
OCTOBER 24, 2012  
  
TUTORIAL MANUAL**

**Tutorial Manual  
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## Safety Hazards



### **MIX BLADE HAZARD**

Mix Blades are driven with substantial Torque.

Never place your hand in the Mix Chamber while the blades are turning.

**SERIOUS INJURY WILL RESULT**



### **ADDITIONAL MIX BLADE HAZARD**

Over time, Mix Blades may become RAZOR SHARP.  
**ALWAYS** be careful when TOUCHING or CLEANING these blades.

Check for Sharp Edges frequently  
Replace Blades if a Hazard exists.



### **SLIDE VALVES**

Slide valves in hoppers SLAM CLOSED without warning.  
They WILL injure your fingers.

**ALWAYS** keep fingers clear of slide gate openings.  
**NEVER** use your fingers to clear an obstruction.

## Safety Features



### **SAFETY INTERLOCK SWITCH**

The ACCESS DOOR is equipped with a safety interlock switch that prevents the mix motor from running and the slide valves from opening.

**DO NOT** defeat this safety switch.

## EC Declaration of Conformity



Manufacturer: Maguire Products Inc.  
Address: 11 Crozerville Road, Aston, Pennsylvania, 19014, USA

Declares the following range of equipment described;

Make: Maguire Weigh Scale Blender  
Model: WSB

Conforms to the following CE directives;

EEC 89/392 Machinery Directive  
EEC 89/336 Electromagnetic Compatibility

Using the following CE standard references:

CEI EN 50081-1/2	CEI EN 55022	CEI EN 61000-4-5
CEI EN 55082-2	CEI EN 61000-4-2	CEI EN 61000-4-6
CEI EN 61000-4-3	CEI EN 61000-4-4	CEI EN 60204-1

And complies with the relevant Health and Safety requirements.

Responsible Person: Steve Maguire  
President, Maguire Products, Inc.

Please Note: All Maguire blenders shipped within Europe have an individual CE Certificate with the shipping documentation.

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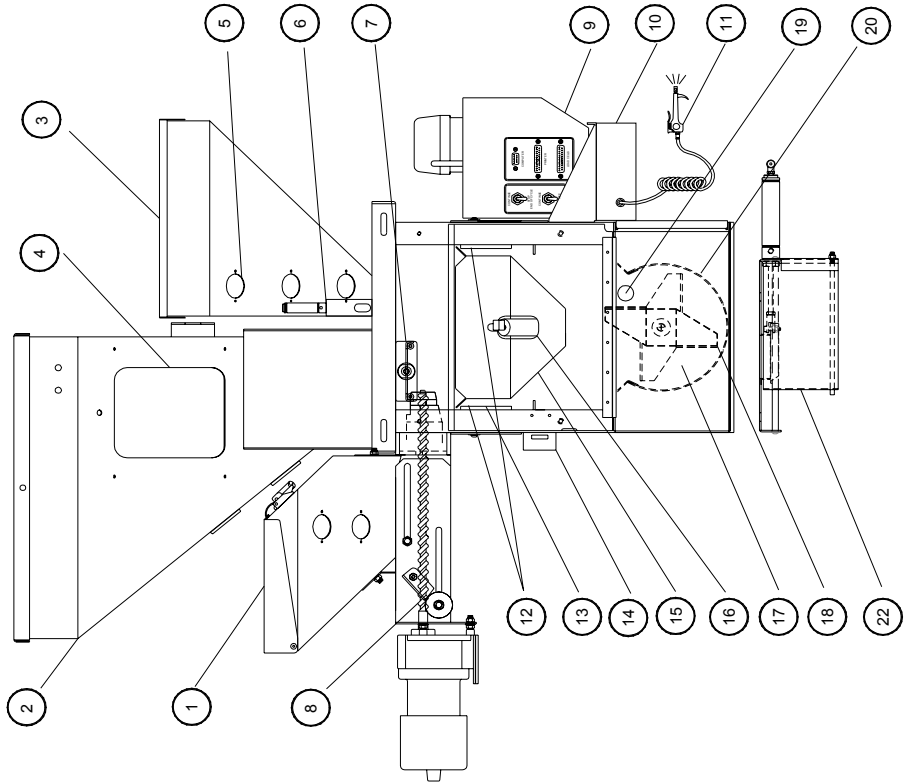
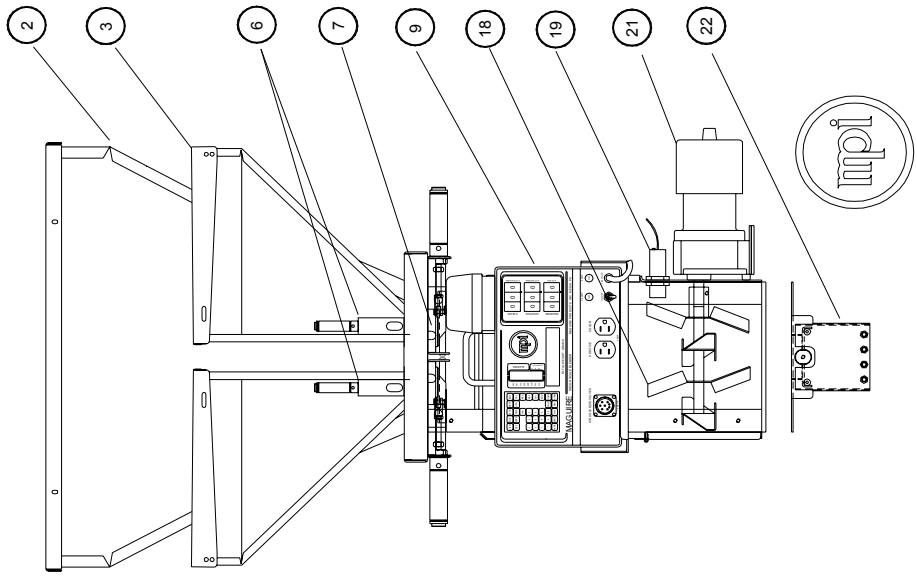
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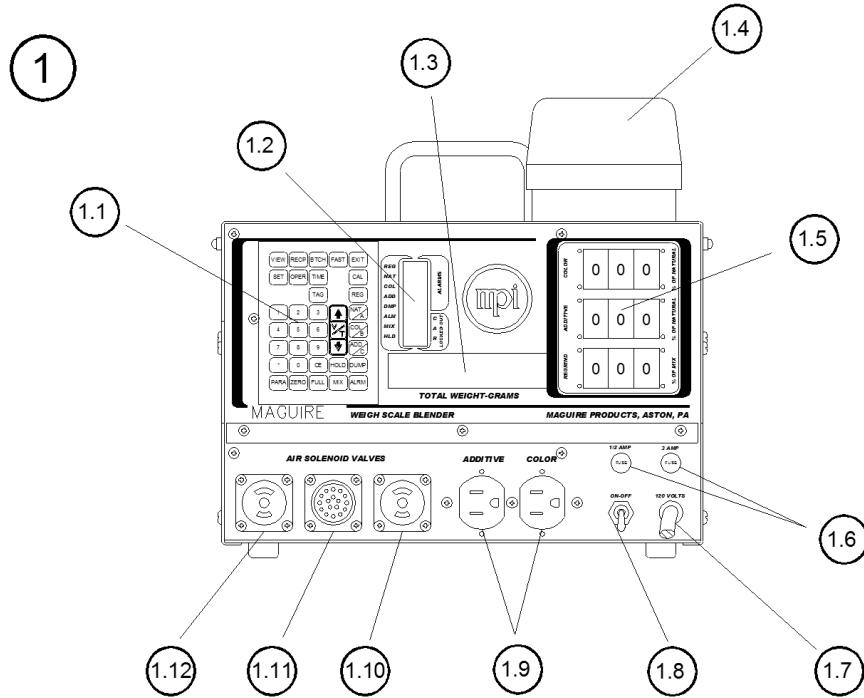
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## Blender Parts Key

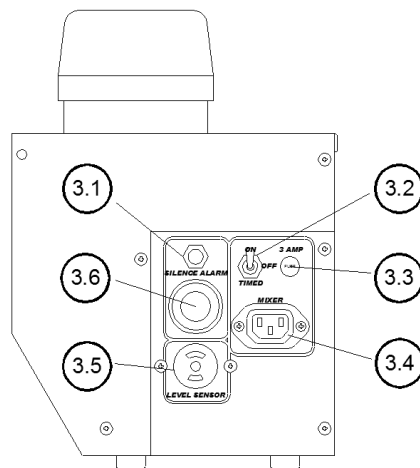
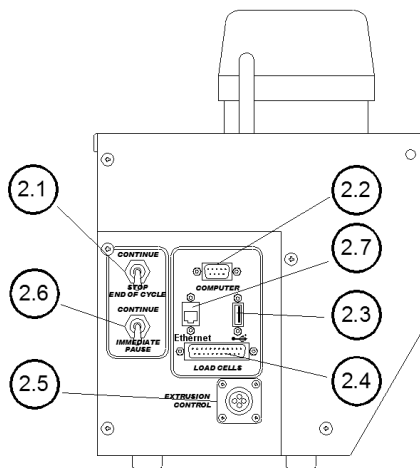
1. Auger Feeder – Screw Feeder for feeding in small percentage materials such as Colors and Additives
2. Fixed Material Hopper – Material Hopper for main materials to be dosed by the slide gates
3. Removable Hopper – Removable Material hopper for small percentage materials such as Colors and Additives
4. Hopper Access Door – Door to access inside of hopper for quick cleaning and materials changes
5. Sight Glass – Means to view current material level inside the hopper
6. Vertical Valve – Dispense Device mounted inside removable hopper for small percentages up to 10%
7. Slide Gate – Dispense Device mounted below fixed hoppers to dispense large percentages
8. Auger Screw – Dispense Device mounted inside removable hopper for small percentages up to 10%
9. Controller – Central Controller for all settings on the blender
10. Air Assembly & Solenoids – Pneumatic assembly for activating pneumatic parts automatically and manually
11. Cleaning Airline – Airline for quick and easy cleaning of blender during materials changes
12. Load Cells – Load Cells monitor continuously the weight in the Weigh Bin
13. Load Cell Bracket – Load Cell Bracket for mounting Weigh Bin onto the Load Cells
14. Safety Interlock – Pneumatic and Electrical Safety interlock – stops blender operating if door is opened
15. Weigh Bin – Weigh Bin holds materials as materials are dispensed during a batch and weighed
16. Dump Valve – Pneumatic Valve and Flap to release materials from Weigh Bin when a batch is complete
17. Mix Chamber – Area where materials are blended together after being weighed
18. Mix Blades – Removable Mix Blades to fold the materials together to achieve an effective blend
19. Level Sensor – Sensor to monitor material level in the Mix Chamber, pauses blender when covered and mix chamber is full, once uncovered signals Controller to begin a new batch of material.
20. Mix Chamber Insert – Stainless Steel removable insert to assist in quick materials cleaning and changes
21. Mix Motor – Electric Motor to drive Mix Blades – Note on WSB MB and WSB 100 Series blenders this motor is a pneumatic Mix Motor
22. Flow Control Valve – (Optional) – Additional pneumatic slide gate with finger guards to be used when blender is not mounted directly on the throat of a machine but instead a stand or surge hopper. The Flow Control Valve ensures material remains inside the Mix Chamber long enough to be mixed efficiently. Automatically controlled by the blender Controller.

# Maguire Controller



2

3



# Controller Nomenclature

## Front Panel

- 1.1 Keypad
- 1.2 LED Status Display
- 1.3 Main Display
- 1.4 Alarm Beacon
- 1.5 Materials Thumbwheels / Digital Thumbwheels
- 1.6 Fuses
- 1.7 Power Cord
- 1.8 On / Off Switch
- 1.9 Outputs for additional Feeders  
(**NOTE – Feeder Outputs** – These 2 outputs are not available on WSB MB and WSB 100 Series Blenders.)
- 1.10 Options - High Sensor Mount or Remote Alarm Output
- 1.11 Air Solenoid Connection
- 1.12 Optional – Low Sensor Mount

## Left Side Panel

- 2.1 Stop End of Cycle / Continue Switch
- 2.2 Computer Serial Connection / Optional Fieldbus Connection
- 2.3 Printer / text file USB Output (Earlier 6811 controllers have a parallel port, not USB)
- 2.4 Load Cell Port Input
- 2.5 Optional – Extrusion Control 2 Way Interface
- 2.6 Immediate Pause / Continue Switch
- 2.7 Ethernet Communications (MLAN Protocol / G2, port 9999, Modbus, port 502 (12-12 only))

## Right Side Panel

- 3.1 Silence Alarm Button
- 3.2 Electrical Mix Motor Operation Switch – Timed (Default), On or Off
- 3.3 Electrical Mixer Output Fuse
- 3.4 Electrical Mix Motor Power Plug  
(**NOTE – Mixing Controls** – These 3 features not available on WSB MB and WSB 100 Series Blenders – fitted instead with Pneumatic Mixers.)
- 3.5 Mix Chamber Level Sensor
- 3.6 Input Audible Alarm Loudspeaker



# 12 Software Tutorial Introduction

This *TUTORIAL BOOKLET* is designed to help FIRST TIME USERS understand and operate the CONTROLLER on the MAGUIRE WEIGH SCALE BLENDER.

We have written it for those who have never seen this unit before.

Follow the instructions, one page at a time, with the controller next to you.

Another booklet, our "OPERATION AND MAINTENANCE MANUAL", covers everything there is to know about this controller. Everything.

Here, in the "TUTORIAL", we only cover the important points, just enough to make it work for you, and to allow you to feel comfortable with the controls.

1. First, we cover the CONTROLS as follows:

TOGGLE SWITCHES

THUMBWHEEL SWITCHES

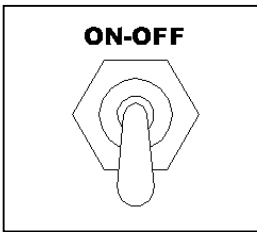
KEYPAD functions; including:

- a. Keys that work all the time
  - b. Keys that work only in the PROGRAM mode
2. Next, we explain the SETUP routine; required before startup to match your blender to your application. The unit WILL NOT OPERATE until this is done.
  3. Lastly, we cover the ALARMS, what they mean, and how to respond to them.

## Toggle Switches

### Power Switch

On the FRONT of the controller, there is a single toggle switch:



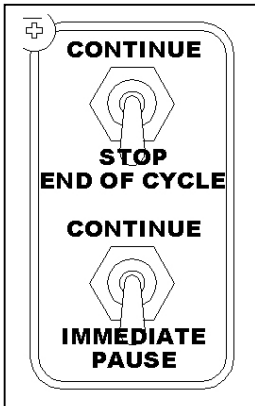
It controls all power to the controller and the weigh scale blender. Because the computer memory chip inside contains a small battery, all the information that the unit has learned while running will NOT be lost when you turn the unit off.

Turning power off in the middle of a cycle might cause one batch to be blended incorrectly, but it will not cause any other problems. Never be afraid to just turn the unit off at any time. When you turn it back on, it will work just fine.

## Continue / Stop End of Cycle / Immediate Pause Switches

On the LEFT SIDE of the controller:

There are two switches:



These provide two ways to STOP the blender.

The "IMMEDIATE PAUSE" switch stops the unit IMMEDIATELY.

The "STOP - END OF CYCLE" lets the blender finish a full cycle before stopping.

BOTH must be UP for your blender to run.

The PAUSE switch is only used if you want to make an adjustment in the middle of a cycle. But usually you want the cycle to end first.

When you use the "STOP - END OF CYCLE" switch, the blender will complete the batch it is currently blending and then stop at the end of that cycle.

SO.....

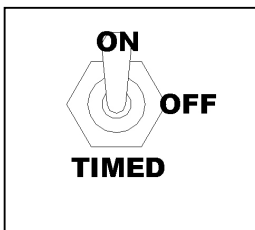
**Use "STOP - END OF CYCLE" to start and stop the blender**

Leave the PAUSE switch "UP" in the "CONTINUE" position.

## Mixing Time Selection Switch

On the RIGHT SIDE of the controller:

The one switch on this side controls the MIXER motor.



In the up (ON) position, the MIX motor will run ALL THE TIME.

Only under unusual mixing conditions would you run the mix motor continuously.

In the middle (OFF) position, the MIX motor will NOT run.

In the down (TIMED) position, the mix motor will only run for a short time (10 seconds) at the end of each blend cycle.

Running for only a short time is usually BETTER.

**Leave the MIX MOTOR switch DOWN in the TIMED position**

The unit is set to MIX for fifteen (15) seconds at the end of each cycle. When the Mix Chamber is FULL and the level sensor is covered the default setting is to turn the mix blade once to level the pile in the mix chamber and to ensure there is not a false reading from the Material Level Sensor.

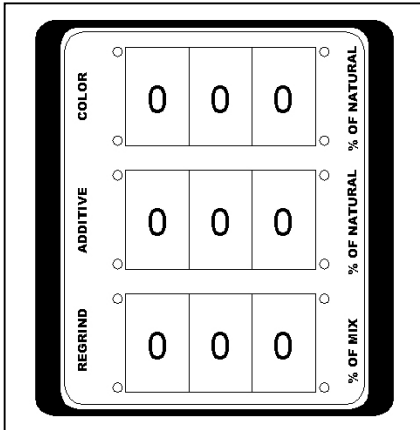
You can change these times later if you want, but for most customers, these times are correct.

## Thumbwheel Switches (Digital Thumbwheel 2012 and later)

There are three. Controllers that use our standard FOUR software use these switches for entering settings. But TWELVE component software may have to control up to twelve materials.

SO.... since there are only three switches, we do not use them for entering settings. Instead, we use the SET key on the KEYPAD.

The THUMBWHEEL SWITCHES normally do NOTHING and you can ignore them.



However, these switches can be assigned to particular components allowing you to enter settings this more convenient way.

There are TWO cases where you might do this.

If your application uses only four components, then three switch settings are enough. As with FOUR software, the fourth component setting can be figured out by the computer based on the other 3.

If you wish to more easily control a few of the components so that operators can make changes during production, then you might feel the thumbwheel switches are easier to deal with.

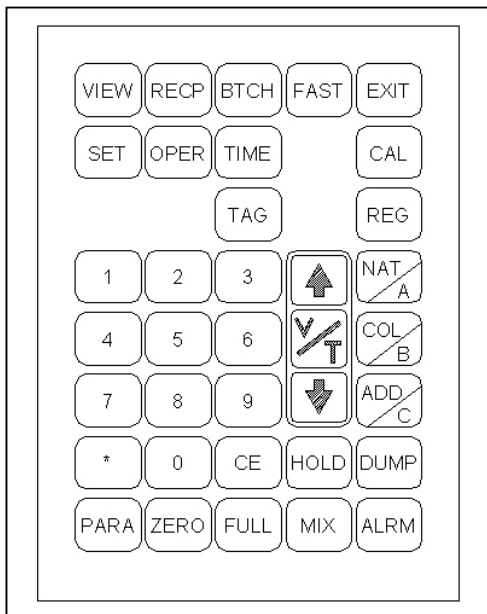
In either case, you can assign the switches to the components you want. The OPERATION AND MAINTENANCE MANUAL covers this in detail:

For case 1, above, see KEYPAD section - STAR FUNCTION (\*04) for making this software operate like FOUR software.

For case 2, above, see ENTERING SETTINGS - THUMBWHEEL ASSIGNMENTS.

Since you probably won't do this, we won't cover these options.

## Controller Keypad



### Using the Keypad

The system MUST be between cycles, which is at the end of a cycle, for any keypad entries to be made. For this reason;

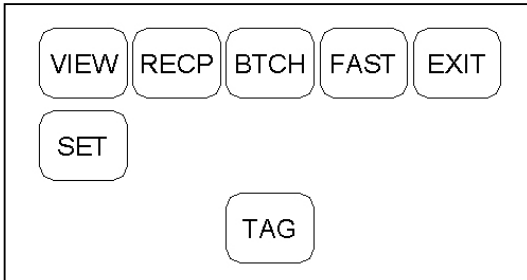
**Switch the "Continue / Stop End of Cycle Switch  
To  
Stop End of Cycle"**

# Keypad Functions

Now, as we talk about the keypad, you can try some things out.

On power up, and during normal operation, your BLENDER is always in the AUTOMATIC mode. Only a FEW keys operate in this mode.

These are the following keys as displayed:



Of these keys, most customers never use RECIPE, BATCH, FAST, TAG Keys, so these are "turned OFF". They will NOT work unless you intentionally turn them on by changing a parameter in the PROGRAM mode. The OPERATION AND MAINTENANCE MANUAL covers this.

Since you probably will not use them, we will not discuss them here. Read the OPERATION AND MAINTENANCE MANUAL if you want information about these four keys.

## VIEW Key



The VIEW key simply displays some information for you. You can press it at any time. You don't need this information to operate the machine, but you should know how to retrieve it.

Try it now. Each time you press the VIEW key, a new piece of information is displayed.

First the current DATE, then the TIME, then the date and time when all totals were last cleared to zero. Then you will see the number of cycles run, followed by the total material used, in pounds, for each component that is turned on. A grand total follows this and then the message (00=CLEAR) is displayed for 5 seconds. If you want, press 00 within 5 seconds to clear all fields.

## EXIT Key



This is IMPORTANT. EXIT always works, in all modes.

It is always the key to press to GET OUT of whatever it is you are doing. It's a good key to know.

## SET Key



You will use this key all the time to enter settings.

If you press the SET key now, the display may say (SET TYPES). Setting TYPES is part of the SETUP routine, explained later.

For now just be aware that the SET key is used for entering settings.

Remember; use the  key to get out of this mode.

Now.... for the rest of the KEYS.

**ALL the OTHER KEYS are only used and available in the PROGRAM mode**






## Program Mode

### Entering the Program Mode

To enter the PROGRAM mode:

Press  - The display will say (PASSWORD) asking for the password to be entered.

The Password is 22222. You can change it later if you want, but most customers never do.

Press      (the "2" key 5 times).

The display will show "PROGRAM" on the bottom right. (On earlier "red display" controllers, the display will now show a "P" on the left). This is your indication that you are in the PROGRAM mode.

In the PROGRAM mode you can do these four things:

- Calibrate the LOAD CELLS
- Change PARAMETERS settings
- Change the STAR (\*) functions
- Do MANUAL TESTING

## Calibrate Load Cells

You must first be in the PROGRAM mode.


The  and  keys are used for this.

We already calibrated the blender Load Cells in the factory. You may have to recalibrate them in the future. We recommend Zero and Full weight calibration once every 6 months. This is especially important for data collection of totals.

The OPERATION AND MAINTENANCE MANUAL explains this in detail, but since we already did this.... you can forget about this for now.

## Parameters

Parameters control the way your blender works. You don't need to know them all, but you may need to alter a few of them.

The  key is used to change PARAMETERS.

Try it. Each time you press it, the next parameter is displayed.

There is one group of GENERAL parameters followed by 12 groups of COMPONENT parameters, each with parameters that pertain to that component only.

While the PARA key moves you forward through the list, the \* key allows you to back up if you pass the one you want.

The SET key allows you to skip forward in the list, jumping directly from one component list to the identical parameter in the next component list. The VIEW key allows you to skip backward.

Notice that every parameter has a 3-letter identification code followed by a 5-digit number. The number keys are used to enter or change a parameter.

The OPERATION AND MAINTENANCE MANUAL explains all parameters in DETAIL. If you want to change one, READ THE MANUAL first.

## Parameter Example

A typical parameter looks like this on the display:

MIX MOTOR TIME  
SECONDS: MIX 00015

40-character display (2007 and later)

MIX00015

8-character display (pre-2007)

This particular parameter tells us the MIX motor will run for 15 seconds at the end of a cycle.

Later, you may need to adjust a parameter for some special circumstance. But for now, you can leave all of them alone.

**IF YOU ARE NOT SURE WHAT YOU ARE DOING WITH PARAMETERS  
then PLEASE leave them alone**

**Before you change any, READ THE OPERATION AND MAINTENANCE MANUAL.**

Remember; use the  key to get out of this mode.

## Star (\*) Functions

Star functions allow access to certain setup routines.


As with parameters, you must first be in the PROGRAM mode.

The  key followed by a two-digit number (from 00 to 99) allows access to the STAR functions.

Popular STAR (\*) functions are listed on the LABEL on the under side of the hinged controller door. Lift it up to read the list of \* functions.

Each function is different. You may be required to enter the change you want or to press the \* key again to display various options.

See the OPERATION AND MAINTENANCE MANUAL for complete information.

Again the  key to get out of this mode.

## Star (\*) Functions Examples

The most important STAR function is the one you will use to SETUP your system. This is explained later.

A few other important STAR functions are:



Correct the DATE, or the TIME if you are running reports and care about having the correct time shown on these reports. Your Weigh Scale Blender doesn't need the correct date, but you might.



Change the weight unit from pounds to kilograms for customers who are on the metric system (everyone except the U.S.) and who want to be able to print reports in kilograms.



The blender does all blending in grams and converts to pounds or kilos for reports only. Turn the Printer flag on (if you have a printer) so you can see exactly what your blender is doing every cycle; in other words, see that it is as accurate as we say it is.



To print a copy of all parameters. A printer must be connected. Up to 13 lists will print, a General list and 12 component lists. Only components that are turned "on" will print.



Save process information for future recovery if the software gets zapped. You will notice, on the left side of the controller, an INSTRUCTION LABEL. It tells about this very useful Star function. Read it. You may need it.

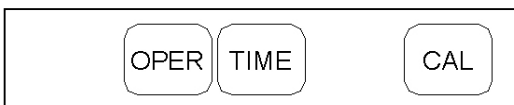
For a complete listing of all Star Functions please refer to the OPERATION & MAINTENANCE Manual.



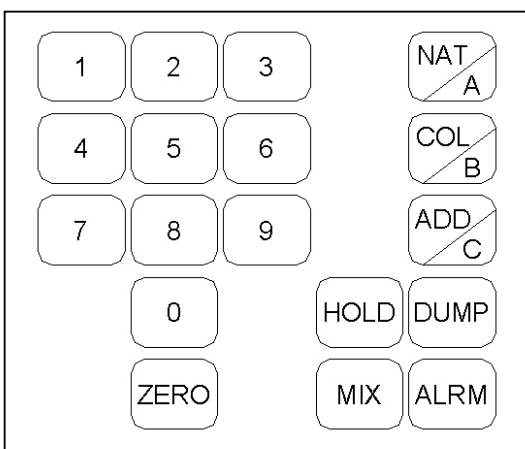
## Manual Testing & Operation

These keys allow manual operations using the keypad. Again, be sure you are in the PROGRAM mode.

Look at the following keys:



OPERATE, TIME and CALIBRATE work only when followed by a Material Hopper number or "Device" key. Material Hopper or "Device" keys are the shown here:



For Example: Press, "OPERATE" followed by "1" and the slide gate for hopper one will open (#1 LED will light).

The OPERATE key is good for testing that all the devices work.


This is part of the CHECK OUT procedure, detailed in the INSTALATION Manual for each new blender.

The other keys have little use in normal operation.

If you want to know more about them, see the INSTRUCTION MANUAL.

For now, you can forget them.

This ends our brief description about the PROGRAM mode and the KEYPAD.

Remember: press the  key to get out of the PROGRAM mode.

# Materials Settings Setup

You now know about the PROGRAM mode and using the KEYPAD.  
The FIRST thing you will use the KEYPAD for is the SETUP.

TWELVE software WILL NOT WORK until SETUP is complete.

Our standard FOUR software was designed for the mix of materials used by most injection and blow molders; that is, NATURAL, COLOR, REGRIND, and sometimes an ADDITIVE. FOUR software is already programmed, or "set up", to handle this blend.

But many customers have complex requirements that FOUR software can't handle. TWELVE component software works for these customers.

## Settings - the meaning of the numbers

All Gravimetric blenders require SETTINGS for each material, generally a PERCENTAGE, or a RATIO, or a WEIGHT. Unfortunately, for us, the SETTINGS that customers want to enter have different meanings to different customers.

Settings can be very CONFUSING.

For example: You want to blend of the following;

TWO NATURALS at a RATIO of 50 / 50,  
Plus REGRIND at 20 percent,  
Plus COLOR at 4 percent.

What will 100 pounds of blend look like?

The NATURALS will NOT be 50 pounds each.  
The COLOR will NOT be 4 pounds.  
The REGRIND, however, will be 20 pounds.

Of the remaining 80 pounds, the NATURALS will NOT be 40 pounds each because some of this space is for color.

The NATURALS will, in fact, be 38.46 pounds.  
Together, they will total 76.92 pounds.  
The COLOR will be 3.08 pounds, which is 4 percent of the NATURALS, or 4 percent of 76.92.  
All totaled, the blend will then be 100 pounds.

It is VERY CONFUSING and you need a calculator to do this.

Most blenders require that you enter settings as percentages of the blend, BUT... we give you another option.

Using the example above:

	On other blenders:	On MAGUIRE blenders:
Natural 1:	is set to 38.46	is set to 50
Natural 2:	is set to 38.46	is set to 50
Regrind:	is set to 20.00	is set to 20
Color:	is set to 03.08	is set to 4

Our settings relate more directly to how many customers think of the blend. So some customers prefer these simpler numbers.

SO...

1. First, you must decide what you want each setting to mean...  
A percentage of the entire blend (like Regrind at 20%)  
A percentage of the Natural material only (like Additive at 4%)  
A ratio number to other components (like 2 Naturals at 50/50).

2. Then, for each component you are going to meter...

You will designate each material and the hopper it feeds from as one of these three TYPES:

**REGRIND    NATURAL    ADDITIVE**

3. Last, when you enter SETTINGS, each setting will be handled one of three ways, depending on the TYPE you have selected for that component.

If the type is REGRIND, the setting will be read as a PERCENT of the TOTAL BLEND.

If the type is NATURAL, the setting will be read as a RATIO number that will be compared to OTHER NATURAL settings, to determine the ratio this particular NATURAL should be to all the other NATURALS. (With only one NATURAL, there is no "ratio", so any number will work.)

If the type is ADDITIVE, the setting will be read as a PERCENTAGE of all the NATURALS added together. REGRINDS will be ignored when figuring the additive amount.

Please follow the Material Settings examples on the next page.

## Materials Settings Examples

Here is an example:

You are blending SIX materials.

1. A CRYSTAL natural material
2. A HI-IMPACT natural material
3. A PCR (Post Consumer Regrind) that needs color added.
4. COLOR
5. Some "in house" REGRIND, that already has color in it.
6. Some REPROCESSED material that is already colored.

Components 1, 2, and 3 are all considered NATURALS because they all need the COLOR added.

Component 4, COLOR, is considered an ADDITIVE, because it is to be added to the "NATURALS" only.

Component 5, the REGRIND, is considered a REGRIND because it does not get any COLOR added to it.

Component 6, the REPROCESSED material, is also considered a REGRIND because it, too, does not need any COLOR added.

So.... in the blend above:

Let's say that the three NATURALS are to be blended in EQUAL parts.

The "in house" regrind is to be 10 percent.

The Reprocessed regrind is to be 15 percent.

The Color is to be added at the rate of four pounds color for each 100 pounds of natural.

The TYPES and SETTINGS are entered like this:

<b>Component</b>	<b>Setting Type</b>	<b>Setting</b>
1. Crystal Natural	Natural	001
2. Hi Impact Natural	Natural	001
3. PCR Regrind – needs color	Natural	001
4. Color	Additive	04.0
5. In House Regrind – already colored	Regrind	10.0
6. Reprocessed Material – already colored	Regrind	15.0

This is explained further on the next page.

For the NATURALS, components 1, 2, and 3, you want equal parts of each, so the important thing is that all three settings are equal. In this way the computer knows to meter each one equally. You could have set them all to 10, or 100, or 33, or any number for that matter, as long as the RATIO between their settings was the ratio you wanted.

If you wanted a 20, 40, 40 blend, you can use settings of 20, 40, 40; or 2, 4, 4; or 1, 2, 2; since all these RATIOS are the same.

For the COLOR, component 4, your entry is the percent of the Natural blend, 4 percent; or 4 pounds color to 100 pounds natural.

For the REGRINDS, components 5 and 6, your entries are the percentages you want, 10 and 15 percent.

In the example above, with the TYPES selected and SETTINGS entered as shown; when you blend 1000 pounds, you will get the following amounts of each component:

Component	Setting Type	Setting	Weight
1. Crystal Natural	Natural	001	240.38
2. Hi Impact Natural	Natural	001	240.38
3. PCR Regrind – needs color	Natural	001	240.38
4. Color	Additive	04.0	28.86
5. In House Regrind – already colored	Regrind	10.0	100
6. Reprocessed Material – already colored	Regrind	15.0	150
<b>Total:</b>			<b>1000.00</b>

### Alternate Materials Setting Setup Example

Now.... some customers would rather just enter PERCENTAGES. They already have recipes figured out, and these recipes are given as percentages of the blend.

So.... these customers will SIMPLY call ALL materials REGRINDS, and every SETTING will be a percentage of the entire blend. Types and settings will look like this:

Component	Setting Type	Setting	Weight
1. Crystal Natural	Regrind	24.0	240
2. Hi Impact Natural	Regrind	24.0	240
3. PCR Regrind – needs color	Regrind	24.0	240
4. Color	Regrind	02.9	29
5. In House Regrind – already colored	Regrind	10.0	100
6. Reprocessed Material – already colored	Regrind	15.0	150
<b>Total:</b>			<b>1000.00</b>

This blend is the same, except for fractional errors due to rounding.

**PLEASE NOTE: When ALL types are set to REGRIND, all the settings must add up to 99, or 100, or in between.**

## Additional Settings Setup Information

By the way...

- The software can handle 12 components but you will TURN ON only the ones you want to use, only the ones that you have hardware for. For example: If you have 4 dispense valves and 2 feeders, you will turn on components 1 through 6.
- When setting the TYPES, the options are REG, NAT, ADD, and OFF.
- For the valves and feeders you intend to use, set these components to either REG, NAT, or ADD.
- If you don't have any hardware in place for a particular component, leave it set to OFF.
- If you have an extra dispense valve that you NEVER EVER intend to use, leave it set to OFF. For instance, in the example we have been using above: Components 7, 8, 9, A, B, and C are left set to OFF.
- If you CHANGE component types frequently, it may be simpler for you to set all component types to REGRIND and just figure out all percentages yourself for every blend you run.
- BUT... if your application is always a blend of known materials, then you may find it simpler to set up with proper TYPES specified for each material. In this way the job of figuring out settings and percentages is made simpler for those without math degrees (and without calculators).

So... this might be a good time to decide what TYPE you are going to assign to each component... and then enter them.

# Setting Material Types

Here is the proper keystroke sequence to assign TYPES:

## Set Material Types Keypad Sequence:

Press	<input type="button" value="*"/>	Display will say: (PASSWORD)
Press	<input type="button" value="2"/> <input type="button" value="2"/> <input type="button" value="2"/> <input type="button" value="2"/> <input type="button" value="2"/>	Display will say: (P      x)
Press	<input type="button" value="*"/>	Display will say: (INSTR _ _)
Press	<input type="button" value="1"/> <input type="button" value="4"/>	Display will say: (1TY = OFF) The "1" is the component (device) number. This is component 1. It will control Hopper 1.
Press	<input type="button" value="CE"/>	Press CE repeatedly to make selection: Display will say: (1TY = REG) REGRIND (1TY = NAT) NATURAL (1TY = ADD) ADDITIVE (1TY = OFF) OUTPUT TURNED OFF

When the selection you want is displayed, move on to NEXT component:

Press	<input type="button" value="*"/>	Display will say: (2TY = OFF)
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REPEAT the "\*\* CE" sequence for ALL components you use.  
The \* key will walk you through all components.  
The CE key will change the TYPE for a component.

Components NOT CONNECTED, or NEVER USED, set to OFF.

When complete:

Press	<input type="button" value="EXIT"/>	Display will say: (P      x)
Press	<input type="button" value="EXIT"/>	Display will say: (      x)

After EXIT, if display says (NEED NAT) then you have specified an ADDITIVE without specifying a NATURAL.  
This is unacceptable.

# Entering Materials Settings

## Material Settings Keypad Sequence:

To Checkout Materials Settings Setup:

Press



The first component that you have turned on will be displayed with a letter to tell you its TYPE.  
For example: (1 R 00.0) or (2 N 000).

Each time you press SET the next component will be displayed. SCAN the entire list. Check which ones are turned on and their types. If the list is not what you expected, go back and do it again. Once the SCAN of components looks right, we can move on to actually entering the SETTINGS.

To ENTER SETTINGS:

You DO NOT have to be in the PROGRAM mode.

Press



The first component that you have turned on will be displayed with a letter to tell you its TYPE.  
For example: (1 R 00.0) or (2 N 000).

Display will say : (1 R xx.x) (Regrind)  
or (1 N xxx) (Natural)  
or (1 A xx.x) (Additive)

1 is Component number.  
R, N, A is Material Type.  
xx.x is Setting.

Enter a 3 digit setting:

Regrind settings = PERCENTAGE of the ENTIRE MIX  
Natural settings = RATIO to OTHER NATURAL SETTINGS  
Additive settings = PERCENTAGE of ALL the NATURALS

For example: Component 1 reads (1 R 00.0).

To enter a setting of 20 percent, press



Display will say: (1 R 20.0)

Press



For the NEXT setting.  
Repeat this sequence for all components.

Press

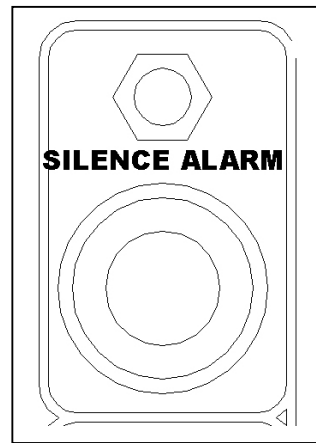
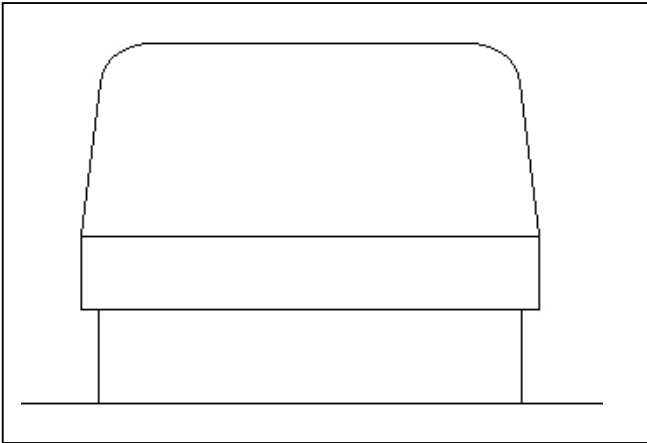


Display will say: ( x) when settings are complete.



# Alarms

The ALARMS are: the STROBE light flashing, the BEEPER sounding.



There are only a few things that can cause an ALARM:

1. If a component runs out of material, or for any other reason is not feeding correctly.
2. If you try to operate the unit with the weigh bin removed.
3. If you try to operate the unit with material stuck in the weigh bin.

## Running out of Material

Running out of material, will cause the display to flash with a number in the first position.

The number indicates which material is not feeding.

Just add material and the unit will recover by itself. The blender never stops trying to meter it.

So.... you must add material.

## Incorrect Weight Reading too Low

This is caused by the TARE weight being too low (below -50). If the bin is not in its place, then the display will show minus about 1200 grams. The blender will not start with this low tare weight.

So.... you must replace the weigh bin.

## Incorrect Weight Reading too High

This is caused by the TARE weight being too high (above 100). There may be something stuck in the bin.

So.... check the bin to see what the problem is.


Please turn to the next page for the CONCLUSION.

## Conclusion


This completes our brief outline of ALL the CONTROLS.

As you read through the INSTRUCTION MANUAL, you will now have a better idea how all the software parts fit together and how you can make changes and add features.

A few points to remember to help you feel comfortable:

- The  key always gets you OUT.
- As with any computer, turning power off also gets you out.
- Turning power off will never hurt.
- Except for entering settings, pressing keys on the keypad will never change anything as long as you are NOT in the program mode.
- Parameters DO effect operation. Do not change them unless you understand them.
- If you are confused or have questions, call us. 610 459 4300. Ask for service.

Thank you for taking the time to complete this booklet.

Remember: press the  key to get out of the PROGRAM mode.

We hope your MAGUIRE Weigh Scale Blender serves you well.