acaia

ORION BEAN DOSER™ OPERATION MANUAL

Contents

Chapter 1: Introduction

Orion Bean Doser™ is a professional weight-based coffee bean dosing system that offers exceptional speed, precision and control over bean portioning.

1.1 Features

The Orion Bean Doser™ is designed for dosing green bean or roasted bean based on weight.

Fast Weight-Based On-Demand Dosing
The Orion Bean Doser™ can dose 225g(1/2 lbs) in 12 second and 20g in 3 seconds within the error margin of 2-3 beans.

Full Automatic Mode
Designed with a fully automatic mode that continuous dosing multiple containers without pressing any buttons.

Intuitive Dial-In Interface
A new dial interface with three preset modes for storing different target weight and allows easy access by rotating the dial to access different functions.

Weighing Scale Mode
The Orion Bean Doser™ can function as a smart industrial weighing scale up to 3000g of capacity.
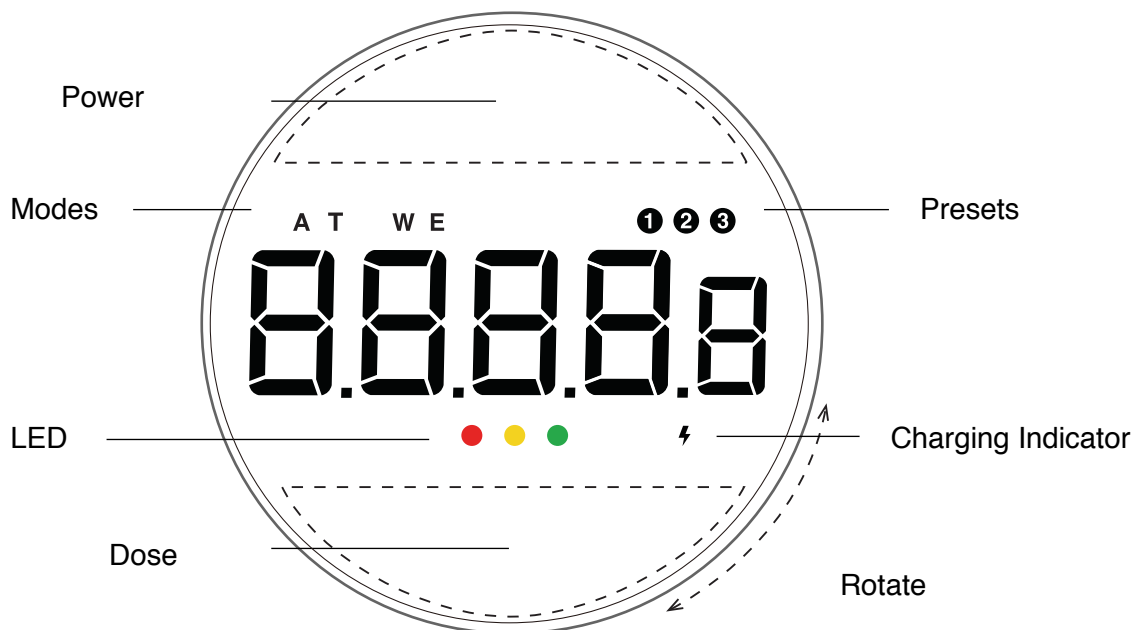
Statistic Tracking System
The Orion Bean Doser™ can tracks the statistical information. i.e. total number of dose or total weight of the dosing session.

1.2 Specification

Product Name	Acaia Orion Bean Doser
Model Number	AO101
Dimensions	33.5cm x 20cm x 36cm
Weight	3.24kg
Capacity	6.6lbs / 3000g
Max	3000g
Min	0.1g
Dosing Error Margin	~ 2 beans (+/- 0.5g)
Battery	Li-Ion 18650 7.4V 2600mAh

Measuring Units	g, oz
Display	LED
Connectivity	Bluetooth 4.0
Input	12 Vdc, 2.0 A
Warranty	1 Year

1.2 Interface & Buttons

1.3 LED Indicator

Green Light - Dosing progress indicator
When the green light is blinking, dosing is in progress. Once Dosing is completed, the indicator will show a solid green light.

Yellow Light - Dose warning indicator
When the yellow light is lit, it means that the current dose exceeds +/- 0.5g (2 beans), you may want to add some beans with pulse function or remove some.

Red Light - System Message Indictor

When red light is lit, there is a system error on the Orion. Restart the Orion, if the problem persists, please contact us at support@acaia.co.

Next, follow the instructions in the Preparation and Installation sections in the manual to get started. To take an advantage of its many features, carefully read through the operation manual containing step-by-step procedures, examples, and other information. *Warning: Incorrect handling of this product could possibly result in personal injury or physical damage.*

Chapter 2: Getting Started

2.1 Initial Setup

1. Prior to using your Orion for the first time you should rinse and clean the bean hopper in warm soapy water. Dry immediately after cleaning.
2. Attach the bean hopper on the top.
3. Place a container on the weighing platform to avoid accidental dispensing.
4. Connect the power cord to the Orion.
5. Put coffee bean into the hopper.

2.2 Getting Started

1. Turn on the Orion by pressing the power button. (See Chapter 1.2)
2. Set target weight by short pressing the power button. Adjust values with the dial then short press the power button to confirm.
3. Press the Dose button to start dosing.
4. When a dosing is complete, press the power button to return to dosing.

2.2 General Operation

The Orion is designed for dosing portions of beans from 5g to a maximum of 3000g per dose with an accuracy of +/- 2 beans (~0.5g).

There are two dosing mode in the Orion — manual mode and auto mode. To choose between modes, long press the power button and the display will show the current mode of operation. Rotate the dial to switch modes.

Manual Dosing Mode

This is the default mode of dosing.

1. Select a preset by rotating the dial. Adjust the preset value by short pressing the power button and rotate the dial. Short press power button to confirm.
2. Press the dose button, and the Orion will begin dosing until desired weight is reached within +/- 0.5g (Solid Green LED will lit to indicate a accurate dose).
3. At the end of dosing, you may press the dose button several times to 'Pulse'. Pulse will add a few more beans if needed.

4. Press the power button to start a new dosing.

'Pulse' in Manual dosing mode
Orion has a pulse function that adds a few beans to the dose manually at the end of each dose. To pulse(add) a few more beans at the end of each dose, simply press the dose button and the Orion will add the minimum beans if possible with each press. If one press doesn't drop any beans, you can press it multiple times until the desired weight is reached.

Automatic Dosing Mode

The auto dosing mode is designed to dose automatically whenever a container is placed on the Orion platform. When the display shows 'Ready', it means the Orion is in auto dosing mode, and any container place on top of the platform will auto dose to the target weight.

1.Switch into Automatic dosing mode by long press the power button and select the auto mode with the dial. Press power again to confirm the mode.
2. Select a preset or adjust a preset weight.
3. Press Dose button to start automatic dosing, the display will show [READY].
4. To start the first dosing, press Dose button again to start automatic dosing.
5. Remove the completed dose, and wait for the display shows [READY] again.
6. Place another container on top of the platform and it will dispense another dose.
7. Press the power button to set a different dose and leave the current auto dosing session.

'Pulse' in Auto dosing mode

The pulse function also works in the auto dosing mode. To pulse(add) a few more beans at the end of each dose, simply press the dose button and the Orion will add the minimum beans if possible with each press. If one press doesn't drop any beans, you can press it multiple times until the desired weight is reached.

Weighing Mode

The weighing mode is Orion's smart scale mode. It will function like a industrial weighing scale. To switch to weighing mode, long press the power button and rotate the dial until it display [SCALE], then press power button to confirm mode.

The weight of the object on the platform will be displayed on the display.

The power button and the dose button will function as 'Zero' and 'Tare'.

Chapter 3: Operations

3.1 Basic Operations

Action	Operation
Turn On Scale	Short Press **Power**
Turn Off Scale	Double Press **Power**
Toggle Presets	Rotate **Dial**
Set Preset Weight	Short Press **Power,** rotate **Dial,** then short Press **Power/Dose**
Switch Mode	Long Press **Power,** rotate **Dial,** then short Press **Power/Dose**
Start Dosing	Short Press **Dose**
Reset Mode	Short Press **Power**
Empty Hopper	Long Press **Dose**
Stop Empting Hopper	Short Press **Dose**

In the main display menu, you may use the controls above to choose between presets, enter different dosing modes, or start dosing with the current mode.

3.1.1 Set Preset Weight

Action	Operation
Enter Preset Weight Setting	Short Press **Power**
Change Value	Rotate **Dial**
Save Preset Value	Short Press **Power/Dose**

There are 3 presets in Orion that you can store a desired weight. For example, you can set preset 1 at 20.0g for dosing, preset 2 at 30.0g and preset 3 at 225.0g. You may adjust the preset value with the controls above.

3.1.2 Switch Mode

Action	Operation
Enter Mode Setting	Long Press **Power**
Switch Mode	Rotate **Dial**
Set Mode	Short Press **Power/Dose**

There are 2 different modes in Orion for operation — Manual dosing mode, Auto dosing mode. You may set different modes by the controls above.

3.1.3 Empty Hopper

Action	Operation
Empty Hopper	Long Press **Dose**
Stop Emptying process	Short Press **Dose**
Back to Preset	Short Press **Power**

To empty the bean hopper, you can long press the dose button. The Orion will continuously dispense the beans until you press the dose button again to stop. Make sure you place a big container on the platform for this operation.
There will be an 'E' indicator on the top left corner of the display when emptying the hopper.

3.2 Modes

3.2.1 Manual Dosing Mode

Action	Operation
Start Dosing	Short Press **Dose**
Stop Dosing	Short Press **Dose**
Pulse Beans	Short Press **Dose**
Reset Mode	Short Press **Power**

Manual dosing mode can dose on demand with a selected preset. At the end of manual dosing, you may short press the dose button to 'Pulse' a few more coffee beans if required.

3.2.2 Auto Dosing Mode

Action	Operation
Enter Ready State	Short Press **Dose**
Start Dosing	Short Press **Dose**
Stop Dosing	Short Press **Dose**
Pulse Beans	Short Press **Dose,** can perform this action several times
Reset Mode	Short Press **Power,** return to preset selection state

Display	Action/Description
⌐EADY	Place container on the platform and dosing will start when weight detected

Auto dosing mode can dose automatically whenever a container is placed on the platform. There will be an 'A' indicator on the top left corner of the display when in auto mode.

At the end of auto dosing, you may short press the dose button to 'Pulse' a few more coffee beans if required. A [READY] message will show on the display when auto dosing mode is in action. To leave the [READY] state, short press the power button. You will be able to return to the preset selection state.

3.2.3 Weighing Mode

Action	Operation
Tare	Short Press **Dose**
Reset Mode/Zero	Short Press **Power**

Weighing mode is a scale mode in the Orion that performs as a industrial weighing scale. The dose button will work as Tare.
There will be an 'W' indicator on the top left corner of the display when in weighing mode.

Chapter 4: Settings

4.1 Speed Settings

Action	Operation
Switch to Speed Settings	Long Press **Power** to Switch Mode and Rotate **Dial** to display '*SPEEd*'
Enter Speed Settings	Short Press **Power**
Toggle Speed Options	Rotate **Dial**

Setting	Display	Options	Default
Speed	*SPEEd*	1, 2, 3, 4	2

It is possible to adjust the dosing speed to increase accuracy or speed of dosing. There are four speed settings in the Orion:

1 — **Accuracy Priority**: Default speed, high accuracy.
2 — **Default**: Faster speed, default accuracy
3 — **Speed Priority**: Faster than 3, Optimize speed over accuracy.
4 — **Full Speed**:Speed dosing for larger bags of coffee like 225g.

Chapter 5: Calibration

5.1 Calibrating the Orion

Press the Dose button 5 times in the weighing mode to enter the user calibration mode. Place the 500g calibration weight and allow the Orion to calibrate.

1. While the Orion is in Weighing Mode and the weighing unit is in gram, press Dose button quickly multiple times until LED display shows [CAL] and then [500].
2. Place a 500g calibration weight on platform and wait for the scale to execute calibration procedure.
3. The Display shows [-End-] when the calibration procedure is completed.
4. You may unload the calibration weight when completed.
   * Note: Calibration weight of 100g, 1000g, 1500g, 2000g, 3000g can also be used