SCRIPT INNOVATIONS INC. C- RAY PILL COUNTER OPERATORS MANUAL

VERSION 2.1





FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Industry Canada Statement

This Class (B) digital apparatus complies with Canadian ICES – 003.

Le Rapport d'Industrie Canada

Cet appareil nume:rique de la classe (B) est conforme a: la norme NMB – 003 du Canada.

EC Directive Statement

This device conforms with the provisions of the following EC Directives, including all amendments, and with national legislation implementing these directives:

Low Voltage Directive 73/23/EEC EMC Directive 89/336/EEC

And the following harmonized standards have been applied

EN 61010-1:2001

EN 61326-1997+amd. 1:1998

EN 55022:1998 Class B

EN 61000-3-2

EN 61000-3-3

EN 61000-4-2

EN 61000-4-3

EN 61000-4-4

EN 61000-4-5

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1. USE

The C-RAY PILL COUNTER is designed to count pills for pharmaceutical application, to fill prescriptions and assist in inventory counting.

You are **cautioned** that changes or modifications not expressly approved by the manufacturer may void the warrantee and possibly endanger the user.

2. Assembly

No Assembly Required

Please read the entire user's manual before operating the pill counter.

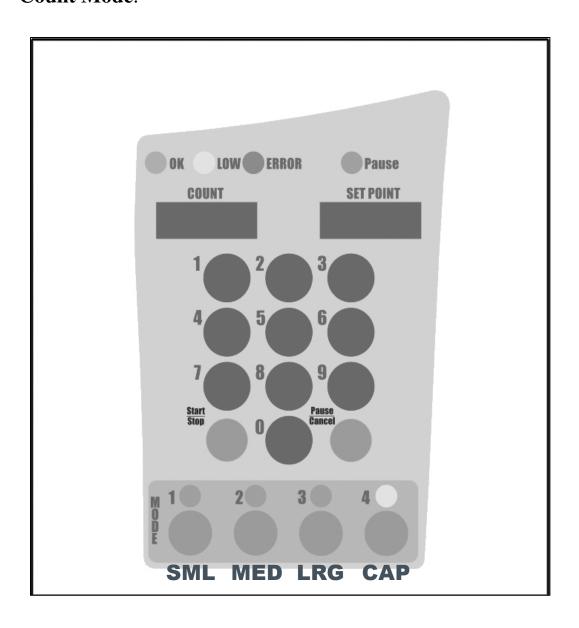
Remove the pill counter from the cardboard box, remove vinyl wrap, remove silica jell packs from the pill counter. Place the pill counter on a flat working surface.

Plug the AC Adaptor into a grounded 120Vac or 220Vac (as is labeled on the power supply) outlet. Fit the power connector to the power jack labeled at the rear of the appliance.

Remove the protective plastic coating from the keypad.

3. Pill Counter Operation

The Pill Counter can count in three different modes: the *Standard* and *Preprogrammed* Target Count Mode and an Inventory Count Mode.



a. Target Count Mode

Target Count Mode is used to count and separate a specific number of pills from the bulk supply. This can be completed in the **STANDARD** or **PREPROGRAMMED** mode. The **STANDARD** mode will count pills in a mode selected and customized by the user. The **PREPROGRAMMED** modes are preselected programs for counting Small, Medium, or Large Pills or Capsules.

For either mode the operator must dump the bulk supply of pills into the center of the bowl and then enter the target count number using the keypad. The target number will be displayed on the right-hand display labeled "Set Point". Pressing the Cancel/Pause button will cancel the number entry and reset it to 0. When the operator presses the "Start/Stop" button, the unit will begin counting, in the **STANDARD** mode, to the target number. If one of the x (1,2,3,4) mode buttons is pressed first the **PREPROGRAMMED** modes will be initiated.

In the **STANDARD** mode the Pill Counter always starts in mode 4. If after 15 seconds no pills are counted, the Pill Counter goes to mode 3. The system continues in this manner until mode 0. The appropriate LED indicator will illuminate to indicate which mode the counter is in. Note the mode number, in the **STANDARD** mode, represents the number of shakes (rotation reversals) that the bowl experiences.

In the **STANDARD** mode, once the bowl starts rotating, the speed and the number of shakes can be changed by pressing a different *x* mode button which will cause the pill counter to enter that mode.

In the **PREPROGRAMMED** mode the Mode Keys represent a program of speed/shakes based on pill size. They are Small, Medium, Large and Capsules. To initiate the **PREPROGRAMMED** mode press the desired Mode key (do not press the Start/Stop key) based on the size of pill to be counted. The counter will then enter a **PREPROGRAMMED** process that is designed to speed the counting selection process. **It is important when using the PREPROGRAMMED mode to dump pills, in the bowl, close to the amount that is required.**

In either mode, when the pill count is within 3 pills of the Target Count Number, the bowl slows down and all shaking stops. This ensures that there is only one pill in the chute at one time. This gives the flipper time to move from the count position to the dump position.

The pills in the right collection cup marked with the RX are the prescription fill.

After the Target Count number is reached, the system will go into dump mode. In this mode the pills are directed into the left collection cup and the bowl rotates at high speed. All the remaining pills are deposited in the left collection cup. During the dump Mode the bowl will go into a reverse/speed up mode to ensure the bowl empties. If the attendant is not available to check that the bowl is empty the reverse process will be repeated 5 times to ensure the bowl empties. If the attendant is available this process can be stopped at anytime by pressing the Stop button.

If the reversing process is allowed to reach completion and by chance a pill remains in the counter it will always be seen in the bottom of the bowl. If less than the desired pills are counted, the system goes into the "Wait for More Pills" state and the "Low" LED will be illuminated. The user can then add more pills to the center of the bowl and press the "Start/Stop" button.

Pressing the "Start/Stop" button while the unit is counting will stop the count. Pressing the Cancel/Pause button while the unit is counting will pause the count. The "Pause" LED indicator will illuminate and pressing the Cancel/Pause button while the unit is paused will resume the counting from the paused number.

b. Inventory Count Mode

If the Target Count number is set to zero and the "Start/Stop" button is pressed, the system will go into Inventory Count Mode. All the pills will be dumped into the right collection cup and the unit will simply count all the pills and display the tally in the "Count" display.

4. Test and Calibration Mode

A built in test mode has been included in the Pill Counter. To start the built in test press any button then, while holding it down, turn the power on (plug in the power cord). The built in test works as follows:

- Pressing any number button causes that number to be displayed in all display digits, thus allowing each button to be tested as well as the display.
- Pressing the "Clear/Pause" button causes the pill guide to flip to the dump position.

- Pressing the "Start/Stop" button causes the bowl to ramp up to full speed in the CCW direction, flip the flipper to the dump position and then stop and ramp up to full speed in the CW direction, flip the flipper back and then stop.
- Pressing "Mode 1,2,3 &4" button illuminates the respective LED indicator.
- Pressing the "Mode 1&3" together button illuminates the mode 1 LED indicator and causes the system to display 123 456 and then count up from 0 to 9 using the entire display for each count. The status LEDS are turned on and off sequentially going from left to right.
- Pressing the "Mode 0" button illuminates the mode 0 LED and tests the photo detector system. When the button is pressed the number 100 is displayed in the "Set Point" display and the "Count" display counts up to 100. The system turns the light source off and on to make the system count. At the end of the count the set point display displays the number of times the source was turned on and off. If the count is interrupted by blocking the light path, then some counts will be missed and the set point display will display the number counts generated.

The number in the "Count" display is always 100. If the light path is blocked, or the sensor does not work then more than 100 counts are required for the machine to reach 100.

5. Status Indicator Lights

There are four Status Indicator LED's on the top of the Pill Counter display panel labeled "OK" "LOW" "ERROR" and "PAUSE". These lights are used to indicate different system status conditions.

The "OK" LED indicator will illuminate when the pill counter has counted the required number of pills.

The "LOW" LED indicator will come on if the supply of pills has run out before the target count number has been reached. If the "LOW" LED indicator comes on, the Pill Counter will go into "Waiting for Pills" mode. Add more pills to the hopper, press the "Start/Stop" button and the count will resume.

The "ERROR" LED indicator will illuminate if the count has been stopped because the "Start/Stop" button has been pushed during Target Count Mode.

The "PAUSE" LED indicator will illuminate if the operator has interrupted the automatic counting sequence. This interruption can be caused by pressing the "Clear/Pause" button.

6. Cleaning and Maintenance



In order to avoid errors in pill counting, problems with pills sliding on surfaces or contamination of pills being counted, the Pill Counter must be cleaned and maintained properly. Some pills can leave dust or residue on the unit, and this must be removed and cleaned daily or even more frequently, depending on the amount of use.

To avoid errors in pill counting, the optic sensors must be cleaned daily. The optic sensors are located at the bottom of the pill chute. A soft cloth should be used to wipe the sensors clean.

To remove dust and residue from the rest of the unit, a soft cloth and a mild disinfectant or Isopropyl Alcohol should be used. Remove the lid, spiral and pill hopper bowl. Clean all of these parts, and then clean the rest of the Pill Counter, with special attention to the pill chute.

7. Replacement parts

There are no user replaceable parts inside the pill counter DO NOT remove any of the screws holding the unit together.

The following parts are available from Script Innovations. Please specify both the part number and the description when ordering.

Part #	Description	Price
940-014	Bowl	\$79.95
94015-16	Spiral	\$82.50
940-022	Clear Cover	\$63.40
940-020	Right Collection Cup	\$35.00
940-221	Left Collection Cup	\$35.00
820-011	Package of Teflon washers	\$10.00
530-004	Power Supply	\$30.00

Orders may be placed by sending a check or money order to:

PARTS

Script Innovations Inc. #202 1439 17 Ave. SE Calgary, Canada, T2G 1J9

Or Contacting Script at parts@scriptinnovations.com or 1-866-2SCRIPT (1-800-272-7478)

8. Limited Warranty

Script Innovations Inc. warrants, the original purchaser, this product against defects in materials or workmanship for a period of one (1) year from the date of original purchase (proof of purchase required). During this period Script will repair or replace a defective unit or part, at their discretion, with a new or refurbished product without charge.

No warranty herein contained or set out shall apply when damage or repair is caused by any of the following:

- 1. Power failure
- 2. Damage in transit or when moving the appliance
- 3. Improper power supply such as low voltage, defective, wiring or inadequate fuses.
- 4. Accident, alteration, abuse or misuse of the appliance.
- 5. Use for Industrial purposes.
- 6. Fire, water, damage, theft, war, riot, hostility. Acts of God.

To receive warranty consideration, a Return Merchandise Authorization (RMA) number must be obtained by either phoning (403) 866 2SCRIPT or emailing warranty@scriptinnovations.com

The complete unit must be returned to:

WARRANTY Script Innovations Inc. #202 1439 17 Ave. SE Calgary, Canada, T2G 1J9

Mark with an RMA # RMA	
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All transportation and insurance costs to Script are the responsibility of the owner. Script will pay for the return costs.

Please include a brief description of the problem, a contact name and phone number, RMA number and complete return address.

9. TECHNICAL INFORMATION

Power Supply: 120Vac or 220Vac (Europe)

Equipment Supply Voltage: 12Vdc Maximum Equipment Current: 2.0Amps

Dimensions: 9.5" x15.7"x9"(24cmx40cmx23cm)

Weight: 6.6lb (3Kg)

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