2022 Roe Egg Counter

User Manual

Version β

04/05/2022

Table of Contents

List of Figures

No table of figures entries found.

List of Tables

1.   Introduction

Instructions: Provide full identifying information for the automated system, application, or situation for which the User Manual applies, including as applicable, identifications number(s), title(s)/name(s), abbreviation(s)/acronym(s), part number(s), version number(s), and release number(s). Summarize the purpose of the document, the scope of activities that resulted in its development, the intended audience for the document, and expected evolution of the document. Also describe any security or privacy considerations associated with use of the User Manual.

This User Manual provides the information necessary for device operators to effectively use the 2022 Roe Egg Counter. Throughout this document the device as a whole will be referred to simply as the Counter as a shorthand title. The Counter consists of a variety of components that are grouped by the overall function for categorizations based on their overall purpose: Stand, Power System, Water System, User Interface (UI), Circuitry System. Expect components within a category to directly affect others within the same category.

1.1   Overview

Instructions: Briefly describe in general terms the system/application and the purpose for which it is intended, written in non-technical terminology. Consider including a high-level, business context diagram(s) for the system. The description should include, but is not limited to, the following:

- *Key features or major functions performed by the system/application*
- *Architecture of the system in non-technical terms (e.g., client server, Web-based, etc.)*
- *User access mode (e.g., graphical user interface)*
- *System environment or special conditions*

The main purpose of the 2022 Roe Egg Counter is to speedily and accurately count the fish eggs deposited into its hopper and then expunge the counted eggs. In addition to this the Counter records photos of the fish eggs during operation which can be extracted and reviewed. The Counter is composed of larger series of components such as:

- The Stand which consists of static components that hold all other components.
- The Power System that safely connects and converts battery power to the Circuitry System.
- The Water System that guides the eggs out of The Counter.
- The User Interface which allows the user to control The Counter
- The Circuitry System consisting of the processor, motor, and sensors that allow autonomous function once activated through the UI

The 2022 Roe Egg Counter is ready to be used in wet and dry environments as long as an active hosed water source is available. Extreme heat or cold has not been tested for this model.

2. Getting Started

Instructions: Provide a general walkthrough of the system from initiation through exit. The logical arrangement of the information should enable the user to understand the sequence and flow of the system. Use screen prints to depict examples of text under each heading. All screen prints must have a caption and an associated tag providing appropriate alternative text for Section 508 compliance.

2.1 Cautions & Warnings

Instructions: If applicable, identify any cautions or warnings that the user should know about before using the system (e.g., noted prohibitions, penalties for unauthorized access, etc.). If waiver use or copy permissions need to be obtained, describe the process.

Improper use of the 2022 Roe Egg Counter may result in electrocution, physical harm, and/or potential water damage. To prevent such outcomes, please follow the following instructions.

2.2 Set-up Considerations

Instructions: Briefly describe and graphically depict as appropriate the equipment, communications, and network configuration of the system in a way that a non-technical user can understand. Include the type of computer input and output devices. Describe any set-up considerations.

To ensure safe usage of the 2022 Roe Egg Counter inspect the device for any cracks in it's support or along the body. Physical damage to the device's stand may create instances of improper expulsion of roe causing damage to the product. Next, inspect that all wires are fully sealed and free of damage to prevent risk of degeneration from corrosion which can cause a risk of malfunction or worse, electrocution. Also inspect that the battery is properly inserted into its slot on The Counter and is dry upon doing so or else risk electrocution. Next, ensure the water hose is firmly attached to the connector on The Counter to prevent leakage, poor volume, poor pressure, as well as workplace hazards as results of loose water. Finally, ensure The Counter's rotating disk is unimpeded to avoid malfunction upon activation.

2.3 User Access Considerations

Instructions: Describe the different users and/or user groups and the restrictions placed on system accessibility or use for each.

The 2022 Roe Egg Counter is equipment meant for use by employees to count fish eggs of size _____ and smaller. Use of the 2022 Roe Egg Counter outside of this field is discouraged and prohibited.

2.4   Accessing the System

Instructions: Provide detailed information and describe the procedures necessary to access the system. If applicable, include how to get a user ID and log on to the system, as well as the actions a user must take to change and/or reset a password.

To activate the system, a user must have a 18V _____ battery to power The Counter and an active water hose to allow for egg ejection. No account is needed to access the machine's most basic functions, but details on batching may be enforced by your management.

2.5   System Organization & Navigation

Instructions: Describe in general terms the organization of the system (e.g., the system menu or home page) and the navigation paths to the main functions/features. Each system function/feature should be described under a separate sub-section header, as appropriate.

The 2022 Roe Egg Counter is operated through both a user interface, operated through buttons and switches which interact with a LCD screen display, as well as physical components set during initialization of The Counter. Physical components that you will navigate include the water hose insert and it's valve that control the water pressure for expelling counted eggs. The other physical components are the inserted battery, which powers The Counter's electrical components, and the container placed under the slide located behind the rotating disk to collect counted eggs. The switches located towards the top of The Counter control the activation and deactivation of the electrical components. The buttons located near the LCD screen control settings and respond to prompts shown on the LCD display. The LCD display relays information on The Counter such as settings and total count of fish eggs. The final interactable component is the USB-A port which can be used to extract pictures of the counted eggs.

2.6   Exiting the System

Instructions: Describe the actions necessary to properly exit the system.

There is no special procedure to exist the 2022 Roe Egg Counter. Simply power down the machine using its switch, then disconnect the battery to ensure the device is safely deactivated.

3.   Using the System

Instructions: Provide a detailed description of each user function and/or feature, explaining in detail the characteristics of the required input and system-produced output. Each function/feature should be described under a separate sub-section header, 4.1-4.x, and should correspond sequentially to the system functions (e.g., menu items) and/or features listed in certain sub-sections found in this document. Include screen prints as needed to depict examples. This section of the User Manual may also be tailored or customized based on defined user roles, if appropriate.

If applicable, include sub-sections that describe the pre-programmed and/or ad hoc query and retrieval capabilities of the system and associated user procedures (e.g., sequenced control instructions to extract query requests from the database). Include the query name or code the user would invoke to execute the query and any query parameters.

If applicable, include sub-sections to describe and depict all standard and/or ad hoc report capabilities available to the end user and any associated user procedures. Include formats for each available report and the meaning of each field shown on the report. Also describe any special formats associated with ad hoc reports that the user may be able to create. Provide detailed instructions for executing and printing the different reports that are available. Include descriptions of output procedures, identifying output formats and specifying the output's purpose, frequency, options, media, and location.

The following sub-sections provide detailed, step-by-step instructions on how to use the various functions or features of the 2022 Roe Egg Counter.

3.1   Fish Egg Counting

Instructions: Describe the specific system function or feature in detail and depict graphically by including screen prints and descriptive narrative as appropriate. Ensure each screen print is captioned and has an associated tag providing appropriate alternative text for Section 508 compliance. Describe, in detail, active links on any screen print illustrated so that the user knows what options are available. Provide information on menus and functionalities that the user must master, expected output/results, and any special instructions. Identify any caveats and exceptions that the user may encounter specific to the system function.

To perform the main feature of the 2022 Roe Egg Counter, follow the following steps:

1. Double check that The Counter is ready to be used
   a. Ensure that the 18V ____ battery pack is inserted into it's port located ____
   b. Ensure that a working water hose is attached to the valve located at the base of The Counter.
   c. Examine The Counters for any damage before use.
2. Set up the additional equipment for best performance

      a. Place a receiving receptacle behind The Counter, below it's slide, and preferably in the rounded groove in the base of it's Stand.

      b. Turn the valve to allow the hose water to flow through the Water System's hose and into the receiving receptacle.

3. Add the fish eggs into the hopper that you wish to be counted.

4. Activate The Counter by flipping the power switch located by it's circuitry box, at the top of the machine, on the backside of the backboard.

5. Input your desired settings using the buttons and LCD screen located besides each other.

      a. One button is able to transition positively through numbers, while the other transitions negatively.

      b. First select the batching number.

      c. Then select the size of each batch

      d. Finalize these settings and proceed.

6. Once the settings are selected: press the activation button to activate The Counter. Active counting can be determined by the large wheel's rotation.

7. Proceed to replenish new fish eggs in the hopper until finished with the counting batch.

      a. Also tend to the receiving receptacle to ensure workplace spillage is avoided.

8. Once the batch is finished, press the activation button again to stop the counter. This is seen by the stopping of the wheel.

9. Once finished with operating the 2022 Roe Egg Counter, it is advised to toggle the power switch in order to reduce wasted draining of the battery.

10. It is also advised to safely remove the hose and battery to prevent damage to these components and The Counter.

3.1.1   Saving Fish Egg Pictures

Instructions: Include additional sub-sections as necessary for system sub-functions or sub-features, if they exist.

1. Once a batch is completed and the wheel has stopped, you have the option to extract photos of the counted fish eggs.

2. Simply attach a USB-A external hard drive in any form to the female port located on the Circuitry box on the back of the Backboard.

      a. Other names for external hard drives are "flash drive", "jump drive", "thumb drive", "data stick", or actual hard drives with USB conversion.

      b. Please note that the data storage device used must have a minimum available space of ____ in order to properly receive the photos

3. Once inserted, The Counter should automatically begin transferring the photos to your data storage device.

4. Please wait 5 minutes for the transfer to complete

5. Once done, remove the data storage device from The Counter

3.1.2   Continual Batching

Instructions: Include additional sub-sections as necessary for system sub-functions or sub-features, if they exist.

1. Once a batch is completed and the wheel has stopped, you have the option to continue to begin counting a separate batch.
2. Input the new batch settings on the LCD display in the same manner as the original batch.
3. Don't forget to place the new batch of fish eggs into the hopper.
4. Once ready, press the activation button to begin the new batch.
5. Then continue the instruction of 3.1 from step 7.

3.2   <Given Function/Feature>

Instructions: Describe the specific system function or feature in detail and depict graphically by including screen prints and descriptive narrative as appropriate. Ensure each screen print is captioned and has an associated tag providing appropriate alternative text for Section 508 compliance. Describe, in detail, active links on any screen print illustrated so that the user knows what options are available. Provide information on menus and functionalities that the user must master, expected output/results, and any special instructions. Identify any caveats and exceptions that the user may encounter specific to the system function.

3.2.1   <Given Sub-Function/Sub-Feature>

Instructions: Include additional sub-sections as necessary for system sub-functions or sub-features, if they exist.

4. Troubleshooting & Support

Instructions: Describe all recovery and error correction procedures, including error conditions that may be generated and corrective actions that may need to be taken. Organize the information in sub-sections as appropriate. The following are common sub-sections that may be included as appropriate.

4.1 Error Messages

Instructions: Identify the error messages that a user may receive and the likely cause(s) and/or possible corrective actions for the error. If the list is extensive, this information may be best provided in an appendix to the document that is referenced here.

Common error signs are found on the LCD display screen.

- If the Screen remains unlit after activation, this is a sign the battery is lacking charge, dislocated, or there is a break in the wiring.
- If the Screen is lit, but refuses to display words or produces unintelligible lettering, then the wires connecting the display may be compromised due to fissure or exposure leading to corrosion. Another possible cause is with use of a dysfunctional battery.

4.2 Special Considerations

Instructions: If applicable, describe any special circumstances, actions, caveats, exceptions, etc., that should be considered for troubleshooting.

If a crack in any of the Stand or hard plastic materials appears, it is suggested that the model be labeled inoperable and replaced. The inoperable model may then be disassembled for parts for possible use elsewhere, but this action is not recommended nor is the action of mending the inoperable model's cracks with strong water-proof adhesive in order to continue unhindered use.

4.3 Support

Instructions: Provide information on how the user can get emergency assistance and system support (e.g., help desk support, production support, etc.). Include the names of the responsible personnel and organization(s), telephone numbers, and email addresses of the staff who serve as points of contact for system support. The following table is provided as an example and may be modified as needed. Also provide instructions for how identified problems with the system are to be reported. Include instructions for security incident handling, as appropriate.

Table 1 - Support Points of Contact

Contact	Organization	Phone	Email	Role	Responsibility
<Contact Name>	*<Organization>*	*<Phone>*	*<Email>*	*<Role>*	*<Responsibility>*

Appendix A: Record of Changes

Instructions: Provide information on how the development and distribution of the User Manual will be controlled and tracked. Use the table below to provide the version number, the date of the version, the author/owner of the version, and a brief description of the reason for creating the revised version.

Table 2 - Record of Changes

Version Number	Date	Author/Owner	Description of Change
1.0	00/00/2022		First edition released.
<X.X>	*<MM/DD/YYYY>*		*<Description of Change>*
<X.X>	*<MM/DD/YYYY>*		*<Description of Change>*

Appendix B: Glossary

Instructions: Provide clear and concise definitions for terms used in this document that may be unfamiliar to readers of the document. Terms are to be listed in alphabetical order.

Table 3 - Glossary

Term	Acronym	Definition
User Manual	UM	This document that you are reading.
<Term>	*<Acronym>*	*<Definition>*
<Term>	*<Acronym>*	*<Definition>*

Appendix C: Referenced Documents

Instructions: Summarize the relationship of this document to other relevant documents. Provide identifying information for all documents used to arrive at and/or referenced within this document (e.g., related and/or companion documents, prerequisite documents, relevant technical documentation, etc.).

Table 4 - Referenced Documents

Document Name	Document Location and/or URL	Issuance Date
<Document Name>	*<Document Location and/or URL>*	*<MM/DD/YYYY>*
<Document Name>	*<Document Location and/or URL>*	*<MM/DD/YYYY>*
<Document Name>	*<Document Location and/or URL>*	*<MM/DD/YYYY>*

Appendix D: Approvals

The undersigned acknowledge that they have reviewed the User Manual and agree with the information presented within this document. Changes to this User Manual will be coordinated with, and approved by, the undersigned, or their designated representatives.

Instructions: List the individuals whose signatures are desired. Examples of such individuals are Business Owner, Project Manager (if identified), and any appropriate stakeholders. Add additional lines for signature as necessary.

Table 5 - Approvals

Document Approved By	Date Approved
-- Name: \<Name>, \<Job Title> - \<Company>	------------- Date
-- Name: \<Name>, \<Job Title> - \<Company>	------------- Date
-- Name: \<Name>, \<Job Title> - \<Company>	------------- Date
-- Name: \<Name>, \<Job Title> - \<Company>	------------- Date