

Digilabtek



INSTRUCTION MANUAL

Columbus Egg

Digilabtek

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Ver. 1.0

Thank you!

Thank you for choosing a Digilabtek product, we are confident that this product, the Columbus Egg will be a tool that can help you in your work, an accessory for your computer that can streamline and speed up some operations, especially repetitive ones in the use of the keyboard and not only.

Assistance and Service

If you need technical support or after-sales services, do not hesitate to contact us, our main contact is the following, but we are also present with our products in the main social networks.

Email: info@digilabtek.it

Website: www.digilabtek.it

Digilabtek is at the complete disposal of users, we are also present for any distributors for customizations, in the case of orders for quantities it is possible to insert logos, QR Codes and other company information, contact us for any information on this matter.

Warranty

The product is guaranteed against any failures or malfunctions, for details consult the full warranty conditions. For any questions contact us, we are at your disposal.

The logo for Digilabtek, featuring the brand name in a bold, black, hand-drawn or brush-stroke style font.

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REVISION INDEX

REV	DATE	DESCRIPTION
1.0	08/07/2025	ISSUE

CHAPTER 1: PREMISES**1.1 Purpose of the Instruction Manual**

This instruction manual is an integral part of the device and is intended to provide all the information necessary to:

- Know the Columbus Egg, its operation, features and limits;
- Know how to connect to the computer via USB cable;
- Know the operating modes and the expected limits of use;
- Describe the methods of setting and customizing the device;
- Describe the methods of Backup and Restore of stored data;
- Know how to Reset or update the device;
- Carry out checks or solutions to any anomalies.

This document assumes that the Columbus Egg device is used at home or in work environments, offices where the regulations relating to safety at work are respected.

Recipients

The Manual in question is intended for all users of the device, the Columbus Egg is authorized for exclusively internal use, do not expose the product to direct sunlight, heat sources, rain, any type of liquid and extremely cold temperatures.

CHAPTER 2: SECURITY

Before using the Columbus Egg, carefully read the instructions in this Manual and follow the instructions given therein.

The Columbus Egg should not be used:

- For purposes other than those described in this manual;
- In an explosive, corrosive atmosphere or with a high concentration of flammable dust or gas;
- In an atmosphere at risk of fire;
- Exposed to the elements;
- Exposed to direct sunlight;
- Near heat sources;
- Exposed to particularly cold or humid temperatures.

IMPORTANT!



Digilabtek is exempt from any liability for damage caused by the device to people, animals or things in the event of:

- Improper use of the device;
- Incorrect installation;
- Unauthorized modifications or interventions;
- Use of non-original or non-specific spare parts for the model;
- Total or partial failure to comply with the instructions;
- Use contrary to specific national regulations;
- Any damage or loss of internal data or other connected devices;
- Calamities and exceptional events.

CHAPTER 3: GENERAL INFORMATION

3.1 Manufacturer Identification

Digilabtek

Viale San Sisto, 439

06132 Perugia – ITALY

AFTER-SALES SERVICE/SPARE PARTS

e-mail: info@digilabtek.it

Sito web: www.digilabtek.it

3.2 Device Identification

Name: Columbus Egg

PN: DIGI-CEA-01 Con cavo USB 2.0

PN: DIGI-CEC-01 Con cavo USB Type C

SN: 0001

For any communication with the manufacturer or the assistance centers always quote these references.

3.3 Warranty

Upon delivery, check that the Columbus Egg and any loose accessories have not suffered damage due to transport, handling and/or assembly. Any complaints must be sent in writing via email to Digilabtek within 8 (eight) days of the date of receipt, attaching a copy of the delivery documents and photographic documentation of the damage suffered. In the absence of such communication within the established deadline, the device is considered accepted and checked with a fully compliant outcome.

THE WARRANTY IS NO LONGER VALID WHEN:

- The fault is due to operating errors;
- In the event of impacts or falls, even accidental;
- In the event of connections to devices other than computers or in any case not suitable for its operation;
- Non-original spare parts are used and in any case not previously authorised;
- The instructions contained in this manual have not been followed;
- It is evident that the device and/or part of its components have been used FOR PURPOSES AND IN WAYS OTHER THAN THE PERMITTED USE.

NOTE: THE WARRANTY OF ALL MACHINE PARTS, EXCLUDING COMPONENTS SUBJECT TO WEAR AND/OR CONSUMPTION, IS VALID FOR 12 (TWELVE) MONTHS STARTING FROM THE DATE INDICATED AND SIGNED IN THE TEST CERTIFICATE.

3.4 Technical data

The main technical data of the machine are given below:

Electricity

Power supply voltage:	5 V
Connection cable:	USB 2.0 for the Columbus Egg A model USB Type C for the Columbus Egg C model

Temperature and Humidity

Working temperature:	0°C to 45°C
Humidity:	10% to 90%

CHAPTER 4: Installation and connection to the computer

4.1 Contents of the box

Fig.4.1



With the purchase of the Columbus Egg in the package you will find the following items, a device, a USB-A cable for the Columbus Egg A version or a USB Type C cable for the Columbus Egg C version, a container bag, reference Fig.4.1

4.2 Connection to a computer with Windows or Linux

Fig.4.2



Connecting the Columbus Egg device to a computer with Windows or Linux installed is extremely simple, as a first step connect the cable provided from the part with the USB Type C end to the device and then connect the other end of the cable, whether it is the USB 2.0 connector or the USB Type C connector to the computer, as you can see from the figure Fig.4.2

4.3 Connecting to a computer with MacOS

Connecting the Columbus Egg device to an Apple computer with MacOS operating system is simple but requires a few more steps, once the device is connected to the computer as shown in Fig.4.2, if the desktop asks you to identify the keyboard, confirm as shown in Fig.4.3 and then as shown in Fig.4.4 follow the instructions below.

Fig.4.3

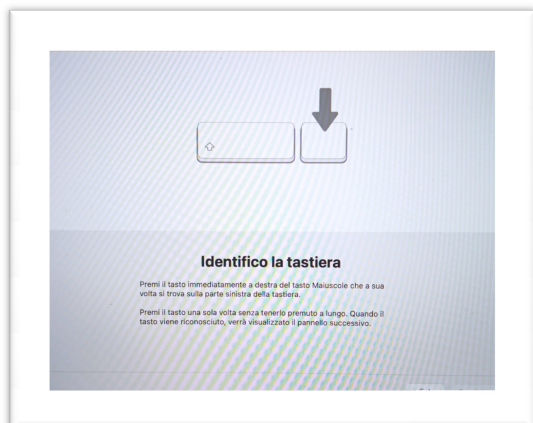
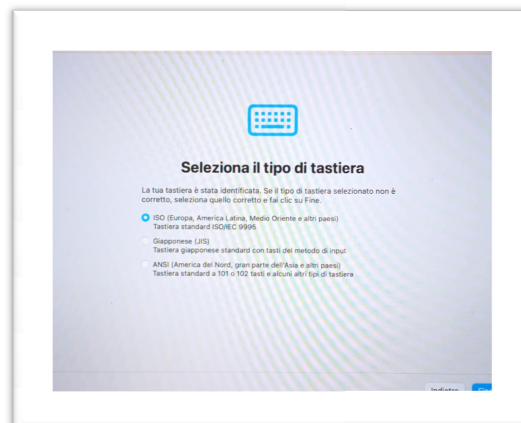


Fig.4.4



From this point to configure the keyboard follow the procedure indicated in chapter 5.2 and activate WiFi, now you need to connect from the computer via WiFi, log in as a user following the procedure indicated in chapter 5.3, once you have entered the Setup page select the **Config page**, inside it select the type of operating system in MacOS and if necessary change the user name, save the settings by clicking on the **“SAVE”** button.


Now from the Columbus Egg, log in by entering your PIN and click on your user name, as shown in *Fig.4.5*, once the page of keys is visible as shown in *Fig.4.6*, press for about 4 seconds on the key , the keyboard will automatically be configured for your Apple computer, as a result the window visible in *Fig.4.4* will automatically disappear, on this occasion remember to also set the nationality from Config, i.e. the layout of your keyboard, for further instructions refer to chapter 5.6.

Fig.4.5



Fig.4.6



CHAPTER 5: User configuration

5.1 Device startup

Fig.5.1



Once the Columbus Egg is connected to an active USB port, it will start loading the internal operating system, as shown in *Fig.5.1*. During this operation, some information will be displayed, the logo of the device distributor, the distributor reference and a QR Code that can lead to the distributor's website or directly to some documents including the user manual.


At the bottom left, the current version of the Firmware loaded in the device will be readable..

5.2 Login page


Fig.5.2




Once the operating system has been loaded, the Columbus Egg will display the login page as shown in Fig.5.2. In this image, it is possible to view a series of icons. At the top right, we have the icon to activate or deactivate WiFi to allow connection to the WebServer for configuring the device. The black icon **WiFi ON** indicates that WiFi is not active, therefore unreachable. When pressed, the icon becomes red and indicates that the WebServer is active and the device is reachable and configurable.

 This icon allows the deletion of the PIN entered in case we have entered an incorrect PIN, after

pressing it is possible to enter a new PIN.

 This icon, if pressed, allows the display of the PIN entered to check that it has been entered correctly, when released the asterisks will be displayed again to mask the PIN entered.

 This light blue icon is one of the four present to allow access to one of the four expected users, the access icon must be pressed after entering your PIN, otherwise an error message **"ERROR PIN"** will be displayed, it is possible to deactivate the entry PIN by entering a PIN composed of at least 4 zeros **"0000"**, only in this case it is possible to access without entering the code, the PIN format is only numeric composed of 4 to 8 digits, for a new user not yet configured the default PIN is **"1234"**.

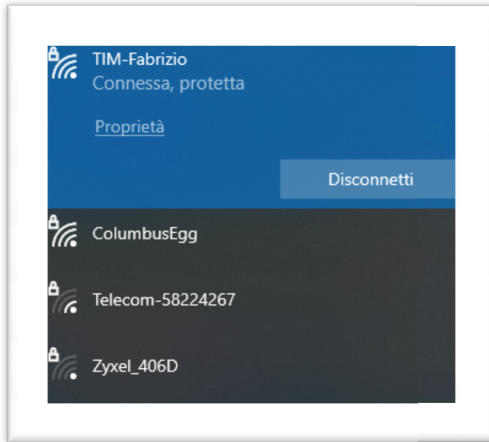
If the error **"Error USB not Connect"** appears, it means that the Columbus Egg has not been recognized by the computer. In this case, make sure that the computer is turned on or try to disconnect and reconnect the device..



This icon, in addition to being the Columbus Egg logo, also has a function. By repeatedly pressing it, you can change the brightness of the screen. This change is non-volatile, so the new setting will be restored even in subsequent power-ups.

5.3 Device Setup – Connecting to ColumbusEgg

Fig.5.3



In this chapter we will describe how to configure the device, this operation is usually performed when using the device for the first time or when it is necessary to configure a new user or change the setting. First we will activate the WiFi from the Columbus Egg by pressing the “WiFi OFF” icon, at this point the icon will turn red

WIFI ON.

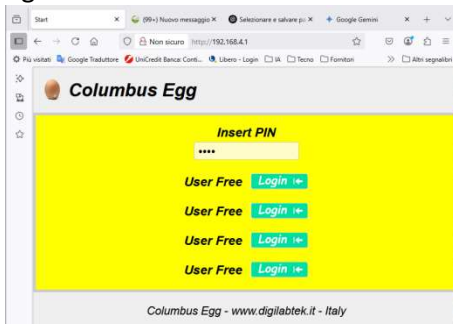
Now the WiFi is activated, if you browse the existing WiFi networks you will find a network with the name “**ColumbusEgg**” this is the name set by default, during the Setup phase it is possible to change it, connect to this network and enter the access key, the default key to

access is “**12345678**” this too during the Setup phase it is possible and recommended to change it and enter a personal one.

Once connected correctly, it is very likely that the note “internet not available” is associated with the connection, this is completely normal, once connected to the device the internet connection will be temporarily unavailable, the connection will only be between the computer and Columbus Egg, once the configuration is finished it will be possible to connect to the previous network and resume normal operation.

5.4 Device Configuration – WebServer Connection and Login

Fig.5.4



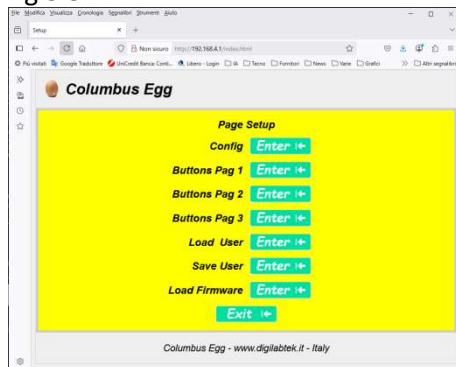
Open your favorite browser, such as Firefox, Chrome, etc. and set the URL bar, where the internet address is normally displayed, to the following address **http://192.168.4.1** or **http://CEgg.local** By pressing enter, you should see a page like the one in Fig.5.4. To the left of our address just entered, the text “Not secure” may appear. There is absolutely no need to worry. This note appears because it is a local connection to a device not connected to a public or internal network. There is no security risk. You can continue with the

configuration.

To configure our user, it is now necessary to enter the PIN. For a new user who has not yet been configured, the default PIN is “**1234**”, otherwise if the PIN has already been configured and has an updated PIN, enter your own PIN. If the PIN has been removed, this is possible if a PIN with at least 4 zeros “**0000**” has been entered, in which case it is possible to click directly on the Login button of the relevant user to access the **Setup menu**.

5.5 Device Configuration – Setup Page

Fig.5.5



In this **Setup** page you can click on the relevant Enter button on the respective menus:

Config: User configuration page

Button Page 1: Page with the first group of 16 icons

Button Page 2: Page with the second group of 16 icons

Button Page 3: Page with the third group of 16 icons

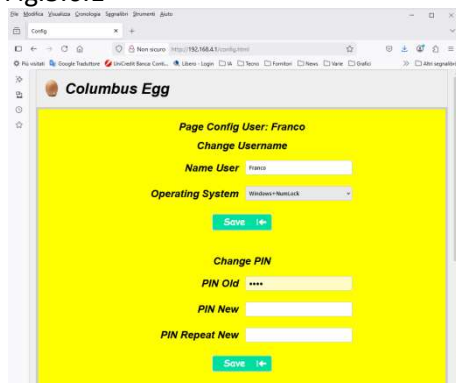
Load User: Page for Restore user data

Save User: Page for Backup user data

Load Firmware: Page for device updates.

5.6 Device Configuration – Config Page

Fig.5.6.1



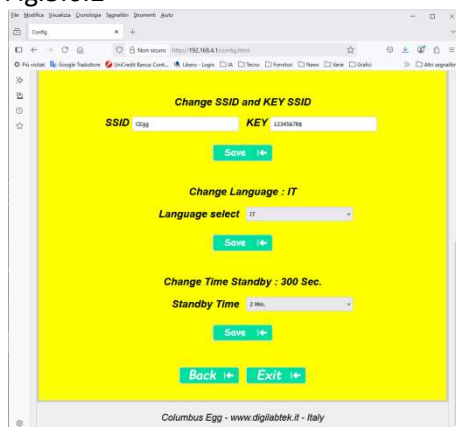
In this page you can configure some settings related to the user who logged in, as a first step you need to set the username, you can change it in the **Name User** text box and enter the new name, at the same time you need to select the operating system with which you will select the Columbus Egg, you can select Windows, MacOS, Linux-Ubuntu, for Windows there are two options, the first one is basic and can work if our computer does not have the "NumLock" key active, this is possible on some laptops where it is not possible to activate the numeric keypad, with

this choice some special characters such as those used in mathematical functions cannot be reproduced, if instead in your computer with Windows it is possible to select and keep the numeric keypad active with "NumLock" active then the "Windows+NumLock" solution is preferable, in this configuration all characters, even special ones, can be reproduced, to save the change in the username and the selection of the operating system you need to click on the **"SAVE"** button relating to the section in which we have operated.

As can be seen from Fig.5.6.1 and it is possible to change the entry PIN, to perform this operation in the **Change PIN** section, it is necessary to enter the previous PIN, remember that the default PIN if it has not been changed is "1234", it is then necessary to enter the new PIN and confirm it in the third entry box and confirm by clicking on the **"SAVE"** button, if everything is entered correctly the new password will be saved on the device, the usable PINs must be composed of only numbers from a minimum of 4 to a maximum of 8.

To deactivate the entry PIN it is possible to enter a PIN composed of only zeros, for example "0000", in this case it will no longer be necessary to enter the PIN to access, just click directly on the user, in case you want to enter an access PIN again and simply repeat the same operation by entering the 4 zeros "0000" as the previous PIN.

Fig.5.6.2



In this second figure *Fig.5.6.2* it is possible to change the name of the WiFi SSID network and the access key KEY in the **Change SSD and Key** section, by clicking on the **“SAVE”** button at the next activation of the WiFi, when you browse the available WiFi from your computer you will try the name of the WiFi of your device changed.

These two fields relating to SSID are variable by any user and the changes will be valid for all users.

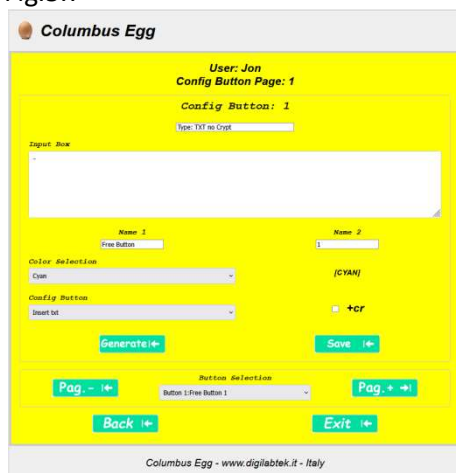
Another very important field to set is the Keyboard Layout, you can find it in the **Change Language** section, 7 languages can be selected, American (US), Italian (IT), Spanish (SP),

Portuguese (PT), French (FR), German (DE) and English (UK), it is very important that the selection is identical to the language of your keyboard, otherwise some special characters may not correspond during emulation, the choice of language is independent for each user, so different users can have a different language selection, to save the setting the procedure is always the same, click on the **“SAVE”** button.

The last setting is related to the Standby time setting, in the **Change Time Standby** section, the selected time indicates the time of inactivity of the device for which it goes into a low consumption condition, in particular the reduction of the display brightness, to reactivate the normal brightness a small touch on the display is sufficient to reactivate the operation and the normal brightness, to save the setting it is always necessary to click on the **“SAVE”** button.

5.7 Device Configuration – Button Page

Fig.5.7



In the page represented in *Fig.5.7* it is possible to set the function of each individual button, remember that there are 48 programmable buttons distributed over three pages, 16 for each page, it is possible to directly enter one of the three pages from the **Setup** page, see paragraph 5.5, or move from one page to another using the **Page+** and **Page-** buttons, the following information is shown at the top, the user with whom we are logged in, the page on which we are operating and the icon (Button) in which we are reading or modifying the data, the box under **“Config Button”** displays the information with the type of function that has been associated with the button, this field cannot be modified and

is read-only, the content will be modified automatically if we change the use of the button.

The operating modes can be selected from the **“Function Selector”** drop-down menu shown in *Fig.5.7*, the possible selections are the following:

Insert txt: in the **“Input Box”** box you can insert any type of text, recurring tests, Login texts, emails, special characters and much more.

Pass w/o spec char: By selecting this choice it is possible to automatically generate in the **“Input Box”** a 12-character medium protection password that we can use for our registrations, to generate the password after the selection press the **“Generate”** button.

Pass w/ spec char: This is like the previous one but includes the presence of special characters to increase the protection, also in this case to generate the password press the **“Generate”** button.

Strong Pass: This is like the previous one but includes 16 characters including special ones to significantly increase the protection, also in this case to generate the password press the **"Generate"** button.

Very Strong Pass: This is like the previous one but includes 32 characters including special ones, an extreme level of protection to ensure maximum inviolability, also in this case to generate the password press the **"Generate"** button.

Ctrl+: With this selection you can set the key to activate all those copy, paste, delete, print, save and many other commands, those that in Windows and Linux environments are used with the combination of the **"CTRL"** key or in MacOS environments in combination with the **"CMD"** keys, for its operation just enter the letter relating to the command, for example **"C"** for the **"Copy"** command in the **"Input Box"**.

Run+: With this selection you can start applications or programs by pressing the icon, in the **"Input Box"** field you just need to write the name of the executable or the command you want to start, for example **"firefox"** if you want to start the browser, **"winword"** if you want to start Word, in these cases it is always necessary to check the **+cr** box to start the application.

The two boxes **"Name 1"** and **"Name 2"** under the input box allow you to identify the button on the Columbus Egg, the two texts that can be inserted will then be displayed on the device button, so that its function can be easily identified, furthermore these two insertable texts are then useful in identifying the button to be changed in the **"Button Selection"** menu.

The **"Color Selection"** box allows you to change the color of the button out of 7 available, this function can be useful for grouping buttons with similar or related functions into groups of the same color.

The **"Button Selection"** selector allows you to select one of the 16 buttons on the page, each button in addition to the number is identified by **"Name 1"** and **"Name 2"**, after the selection the button setting is loaded and it is possible to modify and confirm the changes.

The **"SAVE"** button is used to confirm and save all the changes we have made on the button,

The **"+cr"** box is useful when we want to add a **"return"** to our text or password at the end, useful when the command we are going to use serves as an insertion of a login or password box or automatic execution.

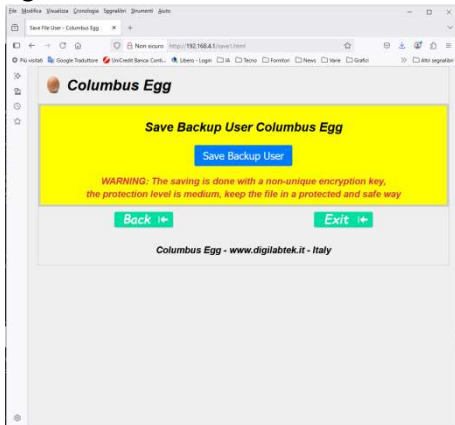
The **"Back"** and **"Exit"** buttons are used respectively to return to the previous menu or to Logout the user and return to the Login screen.

ATTENTION: After any saving operation, all the information entered in the **"Input Box"** is encrypted in the memory with a unique double key for each device to ensure maximum storage security for both texts and passwords.

CHAPTER 6: Backup, Restore, Firmware Update Operations.

6.1 Backup Operation

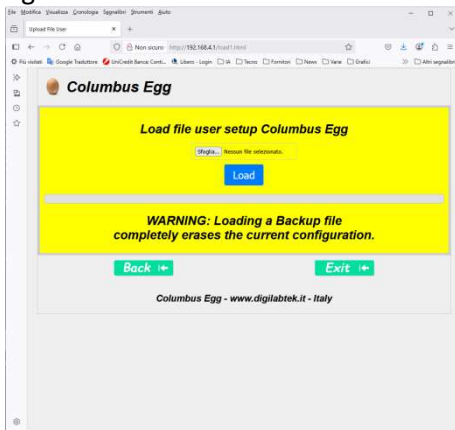
Fig.6.1



On the **“Save User”** page, you can back up all the data saved for each individual user, the extracted data is then saved in a file on the computer or device that performed the operation, this data can then be restored on the same device in case of occasional deletions or after a Columbus Egg restore, the Backup file can also be used to migrate data from one Columbus Egg to another, the data saved in a file is encrypted and unreadable, but unlike those stored in the device memory, the key is common, so for security it is recommended to keep the backup files in a safe place and not accessible to strangers.

6.2 Restore Operation

Fig.6.2

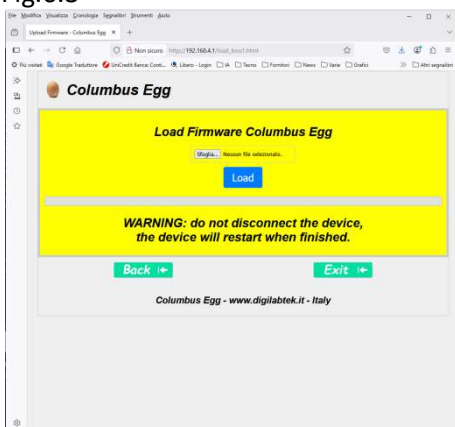


On the **“Load User”** page, you can reload the file previously saved from a **“Backup”** operation, simply press the **“Browse”** button and select the saved file, then by pressing the **“Load”** button the file is loaded, if the operation is successful, a message will appear indicating that the data has been loaded correctly, to access the new configuration you must log in again from the device.

ATTENTION: restoring the data completely deletes the previous configuration of the selected user, once the operation is complete it is no longer possible to cancel the update..

6.3 Firmware Update Operation

Fig.6.3



On the **“Load Firmware”** page you can load software update files or pages and files internal to the device, the files are specific to the Columbus Egg, update files from other devices are not accepted, the procedure is similar to that relating to the **“Load User”** page, select the file from your computer and press the **“Load”** button, at the end of the loading the result of the operation appears, in case of a positive outcome some updates may cause the device to restart, even if not necessary, unless otherwise indicated, it is always necessary to perform the **“Backup”** of the data before any update.

CHAPTER 7: Login and use of the device.

7.1 Login

Fig.7.1



Once the device is connected to the computer, after the operating system loading time has passed, the user can log in. For this phase, you can refer to chapter 5.2 where the procedure has already been described.




A maximum of three attempts to enter the PIN are allowed. If three incorrect entries are made, the device will need to be restarted to attempt further entries.

7.2 Use of icons.

Fig.7.2



In this phase, we move on to our device. Once logged in with one of our 4 users, you can directly access the first page containing the first 16 icons. When you press one of these, the Columbus Egg device, emulating the keyboard, sends the sequence of characters or commands set directly to the computer.

With the keys   you can move forward or backward through the pages and therefore access the next groups of icons, with the key  you can log out and possibly log in with another user, holding down this key allows the installation of the

device in a MacOS environment, as better described in chapter 4.3.

7.3 Password Generator

Fig.7.3



Continued pressing of one of the 48 available buttons allows you to enter a **“Password Generator”** menu, as you can see from *Fig.7.2*, it is possible to generate a password with 4 security levels, the description of these levels is visible in chapter 5.7, once a password has been generated, you can decide with the **“+cr”** button if you want to add a Return at the end of the sending, to save the generated password, simply press the **“SAVE”** button or the **“EXIT”** button if you want to cancel the operation, the button will be saved with the name **“Random Password”** with a white icon, this

configuration can always be changed later from the Button Page, see chapter 5.7.

CHAPTER 8: Setup Button

8.1 Device Use Setup Button

Fig.8.1



The Columbus Egg device has a small hidden button, as shown in the photo, it is possible to access a menu for some reserved operations, a small needle is sufficient to press it, by inserting this into the hole near the USB-C, a micro button is pressed, which allows access to a reserved menu, if this operation is carried out during the login window, as shown in *Fig.8.1*, two operations can be carried out, the **RESET DEVICE** resets the user data to the factory setting, this operation, if confirmed, completely deletes all user data, so if necessary, remember to make a Backup of the data of each

individual user before doing this operation, ATTENTION: the reset is not reversible, once it is carried out, it will no longer be possible to recover the data previously present for all users.

The second possible operation **SETUP TOUCH** allows you to calibrate the Touch, this calibration is already present in the factory, but if you notice a misalignment it is possible to do it, just follow the procedure by clicking on the blue circles that follow one another and save the setting..

8.2 User Setup Button.

By clicking with a needle on the same side button described in the previous paragraph but after logging in you can do two operations the first is the **RESET USER**, this operation if confirmed deletes the user data bringing the user configuration to the factory setting, this operation does not affect the data of the other three users present, so if necessary remember to do a Backup of your user before doing this operation, ATTENTION: the reset is not reversible, once done it will no longer be possible to recover the data previously present of the user who did this operation.

The second operation **BEEP ON/OFF** is the possibility of deactivating or activating the Beep for pressing the keys.

8.3 General reset Setup button.

By clicking with a needle on the same side button described in the previous paragraph and holding it down before connecting the device, it is possible to reset the system to the factory settings. This differs from the **RESET DEVICE** operation in that the Firmware is also reset to the factory version. This operation can be useful if you encounter software problems with the device or if an update has caused startup problems. After this operation, any system updates may be lost and may need to be restored.

When you start this operation, a countdown will begin. Hold down the button until the end of the countdown. If the button is released before the end of the operation, the reset procedure will be cancelled.

CHAPTER 9: Disposal

Before proceeding with dismantling, the Machine must be disconnected from the power supply lines.

Proceed with the complete dismantling of the Machine, dividing the pieces according to the materials they are made of and complying with the regulations in force regarding waste disposal.

CHAPTER 10: TROUBLESHOOTING

The main problems that the Machine may present and the suggested solutions are listed below.

SYMPTOM	POSSIBLE CAUSE	SUGGESTED REMEDY
The device does not turn on	No power supply	Try replacing the USB cable.
	Corrupted firmware	Try the GENERAL DEVICE RESET procedure, chapter 8.3.
Error USB not Connect	The device has not been recognized	Disconnect and reconnect the USB.
		Try replacing the USB cable.
The device starts up but does not reach the login page	Corrupted firmware	Try the GENERAL DEVICE RESET procedure, chapter 8.3.
The device logs in but the settings are not displayed correctly	User data corrupted	Try the USER RESET procedure, chapter 8.2.
Some characters are not displayed correctly	Possible incorrect keyboard layout selected	Enter the user configuration and check the keyboard layout setting and operating system setting, chapter 5.6.
	Possible incorrect operating system selected	
Low display brightness	Low brightness configuration	Repeatedly press the egg icon in the top right until the brightness returns to normal, see chapter 5.2.
The touch is very misaligned with the position of the icons	Touch calibration error	Enter the RESET DEVICE procedure and select the calibration procedure, chapter 8.1.
The Beep is not heard when the keys are pressed	Beep flag error	Enter the RESET USER procedure and select BEEP ON , chapter 8.2.