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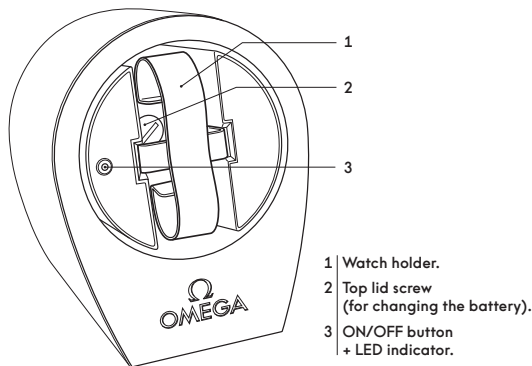
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## 1. THE PRODUCT

### 1.1 PRODUCT SNAPSHOT



### 1.2 OPERATION

The OMEGA Cylinder watch winder winds automatic watches, keeping them charged and showing the correct time. It can be turned on and off by simply pressing a button. When it is switched on, the white LED indicates the status of the batteries. The device then positions itself vertically.

The watch winder is equipped with an infrared sensor that detects the presence of a watch in the device. If there is no watch in the winder, it will remain in standby mode without draining its batteries.

A motor current control function stops the system if the movement jams. Once the device has detected a problem, it can only be restarted by pressing the button.

The number of rotations and the wait time can be configured using a computer interface that connects to the device via Bluetooth. There is even an advanced mode that also configures motor torque (which can influence rotation speed), torque limitation and the watch detection threshold.

## 2. INSTRUCTIONS FOR USE

### 2.1 SWITCHING THE OMEGA CYLINDER ON/OFF

To switch the OMEGA Cylinder on, press the ON/OFF button (number 3 in figure 1.1). The white LED lights up to confirm that the button has been pressed. The LED will remain lit while the button is being pressed. The device will not start until the button is released. Do not press the button for more than four seconds, as this will activate the Bluetooth configuration mode (see chapter 3).

The device's LED flashes to indicate the status of the batteries:

- 4 flashes: batteries 100% charged
- 3 flashes: batteries more than 60% charged
- 2 flashes: batteries more than 30% charged
- 1 flash: batteries nearly flat (<30% charged)

When the batteries are nearly flat, the LED may no longer light up. The motor will continue to turn, but can be expected to do so more slowly. The batteries should be replaced to ensure that the device functions correctly.

Once the battery level indicator has finished flashing, the watch winder will position itself vertically, whether it contains a watch or not. If the device is already vertical, it will not move.

The pre-programmed cycle will then begin. The watch winder will start the cycle by checking for the presence of a watch. If no watch is detected, it will go into standby mode for the wait time previously defined in the settings (see chapter 3.2) before checking once again whether a watch is present.

If a watch is detected, the device will rotate 12 turns in each direction (only at its start-up) and then perform the defined number of rotations. If the movement chosen includes both clockwise and anticlockwise rotations, the watch winder will begin by turning anticlockwise. Once it has completed the defined number of anticlockwise rotations, it will stop in a vertical position for one second, and will then start rotating clockwise the defined number of times.

Once all the programmed rotations have been completed, the device will stop in a vertical position and go into standby mode for the defined length of time.

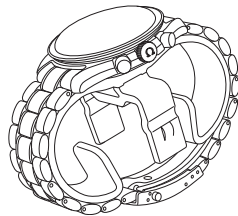
The OMEGA Cylinder only checks for the presence of a watch when it begins to rotate. If the watch is removed while it is rotating, the device will not detect this until it starts a new movement (new cycle or change of direction). If the watch winder is turning, we recommend turning it off before removing the watch.

To turn the device off, push the button briefly. If the device is moving, it will stop immediately.

It will not turn off completely until the button is released. (Until the button is released, the LED remains lit to indicate that it is being pressed.)

## 2.2 PUTTING A WATCH INTO THE OMEGA CYLINDER OR REMOVING IT

To put the watch into the OMEGA Cylinder, we recommend turning it off so that it does not rotate. To do so, press the button once. If it was already turned off, it will turn on again, showing the battery level. Turn the device off again.



Once the watch winder is turned off, pull on the watch holder to unclip it. Slide the watch onto the holder. It may be necessary to adjust the strap if it is set for a small wrist. Put the watch and the holder back into the device, ensuring that the watch is positioned with midday upwards (otherwise it will stop upside down).

Press the button to turn the winder on. The pre-programmed cycle will begin immediately.

If the device does not detect the watch correctly (it does not move despite the fact that there is a watch on the holder) the detection setting can be adjusted using the configuration tool's advanced mode (refer to chapter 3.3).

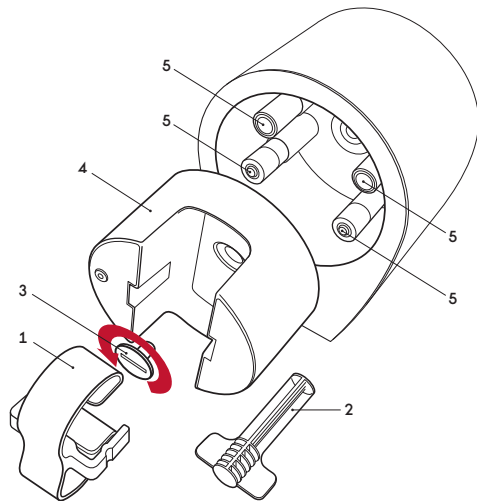
### 2.3 TORQUE LIMITER (protection against jamming)

The OMEGA Cylinder has a motor current controller that protects against jamming. If the motor current exceeds a predefined value (see chapter 3.3), it will turn off completely to protect the mechanism and avoid draining the batteries.

The current is measured every two seconds, meaning that the device can take up to two seconds to detect a jam. It will not start up again until the user presses the button, after having ensured that nothing is stopping the mechanism from moving freely.

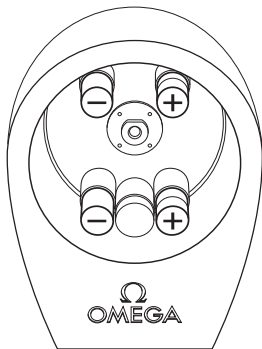
### 2.4 CHANGING THE BATTERIES

The batteries need to be replaced when they are no longer capable of turning the OMEGA Cylinder (once every two years with average use). To avoid reaching the point where the batteries are no longer able to turn the device on, they should be replaced once there is less than 30% charge remaining (one single flash on start-up). To replace the batteries, proceed as follows:



- a Remove the watch holder (1) by unclipping it and pulling it straight from the device.
- b Using the special tool provided (2), unscrew the central screw (3) as shown.
- c Remove the cover (4).
- d Insert 4 AA lithium/alkaline 1.5V (LR6) batteries into the housings (5), ensuring that they are the right way round. (Check the markings on the battery housings.)
- e Replace the lid carefully.
- f Tighten the central screw using the special tool.
- g Ensure that the cover turns freely.
- h Press the button on the front to ensure that the device is charged and start the cycle. (N.B. The cycle will only begin if there is a watch in the watch holder.)

## 2.5 BATTERY POLARITY



## 3. BLUETOOTH CONFIGURATION

### 3.1 ACTIVATING BLUETOOTH MODE

Before activating the Bluetooth mode on the rotating watch winder, download the application "OMEGA LE CYLINDER" to your computer. It can be found at: [www.omegawatches.com/omega-lecylinder](http://www.omegawatches.com/omega-lecylinder).

By default, the Bluetooth mode of the rotating winder is deactivated, making it invisible to other Bluetooth devices. To activate the Bluetooth mode, hold down the ON/OFF button for more than four seconds. Activation can only be done when the winder is switched off.

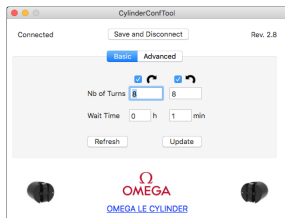
The white LED will indicate that Bluetooth mode has been activated. When the button is held down, it will initially be lit, then will go out before starting to flash after four seconds. The button can then be released. The rotating winder can now be detected with a Bluetooth device. It will remain in this mode for one minute. If no computer has connected to it within this time (Bluetooth connection established and interface paired), the winder will revert to standard mode and resume its cycle.

Connecting to the rotating winder requires a computer (PC or Mac) with an installed Bluetooth peripheral (dongle or integrated module). The access code to establish the connection is: 1234 (requested at the first connection only). Launch the application and a window will appear: "Welcome to Cylinder Configuration Tool".

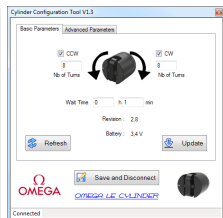
Then press the "Open" button to launch the detection of the rotating winder. This will only succeed if the winder is properly connected to the computer. Once the application has been located and connected, the winder will remain in Bluetooth mode as long as the application stays open. If the application is closed, or if the winder is disconnected, it will revert to its normal mode. If the ON/OFF button is pressed while the Bluetooth mode is active, the rotating winder will switch off immediately, whether the application is connected or not.

### 3.2 CONFIGURING STANDARD SETTINGS

Once the application is launched, click the "Open" button. The interface will automatically retrieve the settings saved in the rotating winder and display them in the appropriate fields. If these fields remain empty, press the "Refresh" button. If an error message appears, check that the winder is still in Bluetooth mode (LED flashing every two seconds). If the winder has reverted to normal mode (because the connection was not established within one minute), switch it off with a short press of the button. The Bluetooth mode can then be reactivated by holding the button down for four seconds.



MAC APPLICATION



WINDOWS APPLICATION

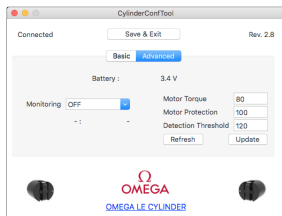
This window can be used to select the direction of rotation (clockwise, "CW", anti-clockwise "CCW", or both) as well as the number of rotations. If only one direction is selected, the corresponding box for the opposite direction will be greyed out. Otherwise, both settings can be edited. The number of clockwise turns and the number of anti-clockwise turns are entirely independent of each other. For example, the rotating winder can be set to 500 clockwise turns and 200 anti-clockwise turns. The maximum number of turns in either direction is 65,535.

The final setting "Wait Time" is used to define the length of time between the two cycles. This is measured from the end of one set of revolutions to the start of the next. If the turn cycle lasts 1 hour and the wait time is 23 hours, the complete cycle will be repeated once every 24 hours. The maximum wait time is 1,092 hours and 15 minutes.

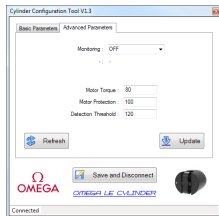
When the desired settings have been configured, press the "Update" button to transfer them to the rotating winder. Once the transfer is complete, click on "Save and Disconnect". The settings will not be saved by the rotating winder until this has been done. This action will deactivate Bluetooth mode and return the winder to normal mode. The rotating winder will start operating with an initial series of 12 clockwise rotations and 12 anti-clockwise rotations. Then it will follow the new settings for the wait time and the number of rotations. If the ON/OFF button is pressed before the interface is disconnected, the new settings will not be saved.

### 3.3 CONFIGURING ADVANCED SETTINGS

The advanced settings mode can be used to adapt the rotating watch winder to specific situations (e.g. the watch not being detected due to a special strap or bracelet, insufficient torque to drive the winder, torque limit too low, etc.). To access this mode, click on the advanced settings tab and enter the password: 9876. The current settings for the winder are shown in the appropriate fields. It is recommended to write down these factory settings on paper so as not to lose them before making any changes. In the same way as for standard settings, changes are sent to the rotating winder by using the "Update" button. They are only saved once the interface has been disconnected. If the winder is turned off manually (using the ON/OFF button) the changes will not be saved.



MAC APPLICATION



WINDOWS APPLICATION

### Monitoring

The "Monitoring" field allows continuous checking of certain settings read by the rotating winder. "Motor current" indicates the motor current during 2 clockwise and anti-clockwise rotations. "Position Sensor" indicates the position of the moving part of the winder. "IR Sensor" relates to the watch-detection sensor, indicating the presence or absence of the watch.

### Motor Torque

This setting adjusts the motor torque by acting on the motor's PWM. This value can be configured between 30 (minimum value) and 100 (maximum value). The higher the value, the more torque the motor will have, but the more power it will use. If the rotating winder has difficulty turning (heavy watch, etc.), the torque setting can be increased. To do this, press "Update" and disconnect the winder in order to check if the increase is sufficient.

### Motor Protection

This setting shows the level of current above which the motor goes into auto-protection. Do not change this factory setting – it can indicate if the motor is damaged.

### Detection Threshold

This final setting is used to alter the level at which the watch is detected in the rotating winder. If the sensor does not detect the watch, this setting can be lowered. Select "Monitoring" then "IR Sensor", place the watch in the winder and read the value shown. Then

select a “Detection Threshold” value about 20% lower. For example, if you read “100” reduce it to “80”. Then press “Update” and disconnect the winder.

## 4. SPECIFICATIONS

|                 |  |
|-----------------|--|
| Power supply    | Four AALR6 lithium/alkaline 1.5V batteries |
| Battery life    | Around 2 years (at 700 turns per day)      |
| Rotation speed  | 10 turns per minute                        |
| Configuration   | By Bluetooth connection                    |
| Protection      | Motor torque limiter                       |
| Watch detection | By IR sensor                               |