

ABOUT YOUR WINDER



WHY YOU NEED AN EILUX WINDER

Wristwatches with mechanical movements rely on spring wound engines to operate. Traditionally, such watches are hand wound daily via a winding crown to ensure proper operation. An advanced version of the mechanical wristwatch contains an "Automatic" or self-winding" movement that employs a built-in rotor mechanism to wind the coiled mainspring. This winding motion generates from random wrist movements of the wearer as he or she engages in normal day-to-day activities while wearing the watch. Generally, the winding rotor mechanism swings through an arc of 30 to 60 degrees as the wearer works or walks or swings his or her arm. As long as the watch is being worn, it runs continuously and accurately. The watch's mainspring stores the required energy to power the watch and maintain its precision via the balance wheel oscillations. This means that a mechanical watch that is wound daily maintains its optimum operational and time-keeping qualities.

Many automatic watches not only display the time but also provide additional features or "complications" such as day and date or, in more sophisticated automatic timepieces, displays of month year, leaf-year, moon phase, tide durations elapsed time, world time zones, etc. With each additional complication, takes up more of a movement's power reserve between windings. Such watches, when unworn and with its mainspring unwound, must be reset in order to be functional again. The task of resetting the time, date and day, and other complications can be an annoying task. As the number of complications increases, the time and effort not only increases but risks



FREQUENTLY ASKED QUESTIONS

Q: What do the terms "mechanical", "self-winding" and "automatic" mean when they apply to a watch?

A: A "mechanical" watch is a timepiece that derives its power from a tightly coiled main spring housed in a drum or barrel inside the watch case. As this spring unwinds, it releases the energy to power the gear train escapement, balance wheel and other parts of the mechanical movement. The term "self-winding" is really a misnomer. This is because a mechanical watch cannot wind itself; it must be worn, wound by hand or placed on a watch winder in order to operate continuously. An "automatic" watch is a mechanical timepiece that is wound as a result of the wearer's wrist or body movements. Through the slightest motion, a rotor inside the watch case will rotate or oscillate and wind the mainspring.

Q: Why do EILUX watch winders rely on batteries rather than AC/DC wall outlets to operate?

A: One advantage of the battery-powered watch winder is its portability, safety, and ease of use. This means expensive automatic watches maintained on winders can be easily stored in safes or drawers without the hazards associated with electrical outlets. Furthermore, your expensive and luxury timepieces can be stored wisely in a battery-operated watch winder in a bank safe-deposit box as well. For the best performance of your watch winder, we recommend the use of alkaline batteries. Battery life is generally good for 10 to 12 months. Of course, for convenient usage or desired, a D/C (battery powered) winder can also be operated on A/C by using an AC/DC adapter, which plugs into a wall outlet.

damage to the movement as many complications have to be reset with the movement set under a particular setting, such as the hands being around the 3 to 9 o'clock areas.

Often, aficionados of automatic timepieces have more than one wristwatch in their collection. These watches all serve a purpose to their wearers either for function or aesthetics. One may have a stainless steel watch which serves well under sporting conditions such as scuba diving or yachting or for wearing to sport events. Or one may have platinum or gold dress watches for business activities or formal social functions. With many watches in one's possession, the task of keeping these timepieces wound daily can be tedious, thus many multiple watch owners employ one or more watch winder to accomplish the task of keeping their automatics constantly operational.

A watch winder is a powered unit that functions to keep an automatic watch fully wound, thereby eliminating the need for manual rewinding and resetting. When mounted on the winder, the watch rotates clockwise, counterclockwise, or in both directions with the rotation axis being the centerline of the watch. Therefore, the watch rotates in the same plane as the hands of the watch. A watch winder does the job for owners of multiple watches who want to maintain their automatics and complications in ready-to wear condition.

All **EILUX** Watch Winders employ a solid-state microprocessor that is programmed to control a D/C motor that intermittently drives a rotating compartment. This rotating unit carries the spring-loaded watch holder, which rotates inside the compartment to give maximum protection for all your fine automatic watches.

WINDING PROGRAM SELECTION

In recognition of the growing use of watch winders to maintain automatic timepieces, some watch manufacturers are beginning to publish data on the winding requirements of their watches as a convenience to their customers. About eighty-five percent (85%) of all fine automatic watches wind bi-directional and generally require between 650 and 850 Turns Per Day (TPD) whether worn on your wrist or while running on your watch winder. With this in mind, **EILUX** Watch Winders are preset at the factory for around 1000 TPD on 2-hour cycle mode and provide automatic reversing. That is the best mode for most automatic watches. Bi-directional winding distributed wear over all components of the watch's internal winding mechanism and is the most efficient mode of winding operation. Of the remaining fifteen percent of watches are winding clockwise, and the remaining five percent of watches are winding counter clockwise only.

POWER RESERVE INDICATION

Some automatic watches utilize a Power Reserve Indicator (PRI) on the dial face. The PRI indicates how many hours the watch will operate if left unworn. Basically, the PRI indicates the tension of the mainspring. **EILUX** Watch Winders are designed to keep your watch running continuously. PRI will indicate anywhere from 1/4 to full and when used in conjunction with watches with a reserve on the PRI scale. This is perfectly normal to prevent winding your watch more than necessary.

Q: Why should we use a watch winder?

A: As a precise mechanical instrument, automatic watch movements are designed to be in constant motion. Leaving a mechanical watch unused in a drawer for a long period of time will cause lubricants to clot up in complex and critical areas which will hinder watch movements. This dry up process creates accelerated wear on the movement parts when the watch is occasionally worn thereby affecting accuracy and, in some cases, causing damage to the fine mechanic. In order to "exercise" your automatic watch when not being worn, you would require a watch winder. A well-designed watch winder helps maintain proper lubrication and constant running of your fine timepiece. It also minimizes the resetting or adjusting of the watch when left unworn, a convenience especially when it comes to automatic watches with various complications such as perpetual calendars and moon-phases.

Q: Why do **EILUX** watch winders have only one watch for each rotor?

A: All professional watch winders are made just to keep one watch on each rotor. This is because unbalanced rotors would damage or affect the performance of the motor. Many people who own more than one time-piece usually have various models or styles of watches, which usually have different weights. It is rare for a user to have multiple watches that have exactly the same weight. The motor shaft, rotor bushing and gearing system will be damaged if the motor has to take on different weights, the watch may be greatly damaged as well. Therefore, we do not agree with the idea of having more than one watch on each rotor.

Q: What is the meaning of "cycle" in the winding modes?

A: **EILUX** watch winder is equipped with 4-hour cycle winding modes. Let's assume your particular watch needs 600 TPD to keep it fully wound. A low quality watch - winder will simply rotate continuously for several hours and turn off for the rest of the day. However, our superior winder operates for 24 minutes per cycle in every 4-hour program, and repeat the same cycle all day long. Both watch winders will keep your automatic watches fully wound but ours is proven to be better for maintaining watch accuracy. This is due to the mainspring attaining its greatest torque when fully wound. As it slowly unwinds over the day, torque decreases and this torque reduction has a negative effect on the running accuracy of the watch. So, periodical rewinding all day long translates into more constant torque, a constant running rate, and therefore, a more accurate watch.

Q: Why does my watch not work properly even when being wound by the watch winder?

A: For automatic watches to operate properly when using a watch winder, it is important to always ensure that the watch is fully wound prior to placing the watch on the winder for winding. This is because watch winders are programmed to operate most efficiently, with the most regulated results, when the watch is containing at least 50% of power reserve prior to being placed on a winder. This is similar to watch manufacturers recommending you to manually wind daily-worn mechanical watches before wearing it as this gives the mainspring its maximum torque for highest precision.

UNIQUE FEATURES OF EILUX WINDERS



All **EILUX** watch winders have several unique features that protect and maintain the value of your watches:

- **Super-quiet operation** - Absolutely bedrooms accessible!
- **User-friendly design** - Equipped with our smart integrated circuit for winding control system allows you to set the best winding mode individually for each of your valuable watches.
- Natural and smooth winding motions programmed to imitate the real human body movements as wearing the watch in your wrist.
- **Auto-stop Function** - the most advanced technology in watch winder control system. With this user-friendly function, the winder will cease its operation automatically when opened in order to protect your valuable watch and the winder itself.
- **"Super-metal conductor"** motor is being employed for **EILUX** winder - Super-metal conductor is the most advanced technology in motor manufacturing that provides the best winding performances and durable services for the winder.
- **Safety** - Our "insert-type" watch mounting system ensures the adequate - mounted watch will never detach your valuable watch from the winder during its operation.
- **Universal spring-loaded watch holder** - it provides adjustment-free to mount all size of your timepieces.
- **Contemporary and stylish design** - it is a precision winding piece as well as a unique design for home and/or office decorations.

- **Double-Injection Technology** - the soft-surface spring-loaded watch holder with rubber skin is produced by "Double-Injection Technology" that ensures the best protections to your valuable watch. We are keeping your valuable watch mounted on soft rubber at all times.
- **Professional grade construction** - Solid & precision construction provide high performances of shock-resistance, stable winding motions and long-lasting services. This laser calibrated rotor alignments provide you the best winding angles for your watch.
- **Extremely Long battery service life** - Special design "Power Conserved Circuits" extend battery life by three times compared to conventional designs. Two batteries will last the winder for approximately 12 months.
- **Compact size** - allows you to keep your watch winder even inside a regular-sized safe deposit box without problem on size & power supply.
- **"Metal-to-metal contact-free" design** - Maximize protection for your watches.
- **Smart pilot light indication** - always indicate the operation status with this special design pilot beam-light. Super narrow beam light is designed to avoid the disturbances in your bedroom and/or den.
- **Silver-ion anti-bacterial technology** - world's first anti-bacterial watch mounting system prevents build-up of harmful moisture and mould in watch's inner workings and straps - also helps to maintain color and shine on fine surface.

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Q: How much winding time is right for my watch?

A: When using a watch winder, proper winding time for your automatic can be referred to as Turns per Day or TPD. TPD is the number of turns of the automatic's rotor required daily to keep the watch properly wound. Most automatic watches need between 500 to 850 TPD. For example, Rolex movements require about 650 TPD. Now, Rolex watches and many other brands have movements designed to wind bi-directionally or in either directions. However, some watches wind uni-directionally or in one direction only, either clockwise or counterclockwise. For example, many Patek-Phillipe watches only wind counterclockwise while some IWC chronographs have movements that wind clockwise only. Thus to accommodate the various winding directions of all automatics, the best-engineered watch winders are programmable for dual-rotation directions with separate programs for clockwise or counterclockwise applications.

Q: Can automatic watches be damage by the magnetic motor inside a watch winder?

A: No, automatic watches and their movements are not affected by the magnetic fields generated by the watch winder motor. This magnetic field is so small that it has no bearing on the watch and its movement. Furthermore, all modern automatic watches are made of non-magnetic material such as titanium, brass, stainless, etc. Consequently, they are non-magnetic and unaffected by close proximity to magnetic fields.

Q: Can an automatic watch ever be over-wound?

A: No, automatic watches can never be over-wound since automatic movements have a build-in slipping mechanism that prevents over winding. However, this safety device should not be overstressed; simply because such device will eventually set in as with all mechanical instruments. This, all high-quality watch winders come equipped with a time control program to regulate the actual winding time cycles of various automatic movements. Here is the discussion that is presented by ROLEX in a booklet that accompanies with their Rolex Oyster watches.
"The perpetual rotor is an innovation... patented by Rolex in 1931... a semi-circular rotor... winds the main spring. Once the optimum tension is reached, a special slip clutch prevents over winding... and has been generally adopted throughout the watch making industry."

Q: How long does an automatic watch run when left unworn?

A: Depending on the watch movement, most automatic timepieces have a power reserve of 40 to 60 hours when fully wound. Automatic with complications such as chronographs tend to remain autonomous for slightly shorter periods when these special functions are activated for the duration of its power reserve.

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