

## WHY DO YOU NEED A WATCH WINDER

Wristwatches with mechanical movements rely on spring-winding engines to operate. Traditionally, watches are hand wound daily via a winding crown to ensure proper operations. 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 daily 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-accuracy.

Many automatic watches displays the time as well as providing additional features or “complications” such as day and date or, in more sophisticated automatic timepieces, displays of month, year, leap-year, moon phase, tide durations, elapsed time, world time zones, etc. With each additional complication there is a corresponding mechanism within the watch that also consumes energy from the mainspring and takes up more of a movement's power reserve between windings. Such watches, when unworn and with its mainspring being 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 increase, not only it takes longer time & efforts to regain its proper settings, but might also cause damages to the movement itself.

Nowadays, any timepieces owners may have more than one wristwatch in their collections. These watches all provide their wearers for time functions and/ or with aesthetics. Athletes may have stainless steel watches which serve well for various sporting events. Others may have platinum or gold dress watches for business activities or formal social functions. The task of these watches being wound on a daily basis can be tedious, as a result, watch winders can definitely serve the purposes of keeping these multiple watch owners to have their automatic timepieces be constantly operational.

A watch winder is an electric powered instrument that keeps the watch rotating in the same manner as wearing the watch in your wrist. That way your watches will always be fully wound and in “ready-to wear” condition. Of course, the convenience of not having to hand wind and reset your automatic watch isn't the only reason to use a watch winder. A perfect watch winder can also help prevent the problem of oil “pooling” when a watch winds down. All mechanical watches use oil to reduce friction in the myriad moving parts contained in the movement. When the watch is running, the lubricant is naturally and evenly distributed throughout the movement. The lubricant begins to disrupt its even distribution or “pool” once the watch stops. When the next time the watch begins running again, many of the moving parts will have little to no lubricant present. This will not only affect the watch's accuracy, but will also damage the movement and cut short the service life of the watch.

**EILUX** Watch Winder employs a solid-state microprocessor that controls the super-metal conductor engine 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.



## EILUX WATCH WINDING SYSTEM

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-directionally and generally require between 550 and 750 Turns Per Day (TPD) whether worn on your wrist or while running on your watch winder. With this in mind, EILUX Watch Winding System are preset at the factory for 950 TPD on 2-hour cycle mode and provide automatic reversing, that is the best mode for most automatic watches. Bi-directional winding distributes 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 time it winds clockwise whereas the last five percent time it winds 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 and when used in conjunction with watches with a PRI, will indicate anywhere from 1/4 to full reserve on the PRI scale. This is perfectly normal. If the PRI always shows full reserve, this means that your mainspring always in high tension and it will eventually damage your watch. This will conserve battery power and prevent winding your watch unnecessary.