Secure Electronic Timelocking

STB 134N

USER INSTRUCTIONS

Electronic Timelock Movement

Swiss Made Quality

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STB Microtechniques SA
STANDARD WARRANTY CONDITIONS

Unless otherwise specified, STB Microtechniques Time Lock/Time Delay movements are warranted for 2 years, to be free from manufacturing defect.
Any movement which proves to be defective during the time period should be returned to the place of purchase, freight paid, with the RGF (returned Goods Form) correctly filled out with as much information concerning the failure as possible.

At the discretion Manufacturer, the movement will be repaired or replaced (FOC) free of charge. STB is liable only for the replacement value of the failed STB product, it is neither liable for Work done, Freight, Personal Travel of the repairer, Transport or Travel incurred costs therein.

Warranty exception only in the case of customer abuse, neglect, unauthorised modification, repair, act of war, or natural disaster.
Consequential damages which may arise through the use of these products shall not be borne by the manufacturer or his agents.
Except as noted herein, there is no other warranty expressed or implied. The manufacturer reserves the right to amend, alter, extend or deny warranty coverage at his option without prior notice.

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Troubleshooting

This Section is intended as a first level reference to resolving operational issues that may occur with the unit. In the event that the problem cannot be resolved contact your nearest STB support center or STB Customer Support

LCD Remains blank	Check Battery Insulator has been removed Remove Battery and ground Battery contact to top plate, to reset movement electronics then re-install battery or replace battery Check battery retaining spring in cap is present
Movement won't arm	Replace battery as above Turn winding Key Anti clockwise, if no click is heard then problem is mechanical, the movement should be returned to an approved STB service center for repair
LCD is faint or Number	Check Battery Condition, Electronic board grounding issue
Icons are malformed or missing	Circuit Board ground failure, the movement should be returned to an approved STB service center for repair

Technical Support: **+41 (0) 32 756 10 30**
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NOTE:
The new 134N Movement will show a battery icon on first time power up and when the battery is approaching a change requirement.
When the battery level reaches the lowest operating level possible, the LCD will power down automatically and the movement will not arm, forcing an immediate battery change. If the battery is changed within a 10 second time span all programming data will be retained by the unit.
If the movement detects no activity after 5 minutes, it will power down to maximise battery life

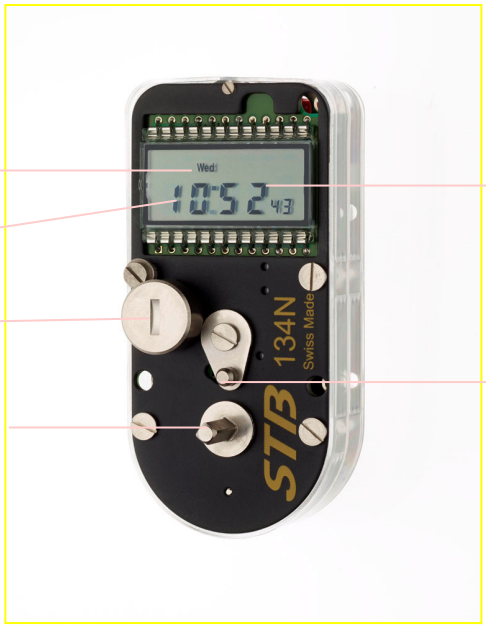
Product Introduction

STB the worlds only Electronic Timelock Movement Manufacturer is proud to present the 134N Electronic Movement.
In the development of this product we have listened to our customers from around the world and produced a product offering outstanding functionality, produced to the highest standards possible, bringing the user our most flexible, easy to use Electronic Timelock movement ever.
We see this product as the only solution for upgrading all of the worlds Mechanical Timelock products regardless of manufacturer.
The 134N incorporates several new features that enhance the value and versatility of this product:

- Day Time Changes can now be made without having to power down the Movement to re-program
- New P5 position, which allows the Movement to be programmed for long close periods simply by entering the total number of desired hours
- Next Opening time will be displayed automatically when the confirm signal sequence is completed
- Once the movement has completed the long close, the time is deleted automatically and the movement reverts back to the regular programmed schedule when the movement is re-armed
- New revised battery life threshold Battery life now exceeds 70'000 plus openings
- LCD powers down 10 MINUTES after the programming has been completed, or when there is no activity, powering up automatically at the next arming.

Initial Set-up Continued

134N
999 Hour Reset Electronic Timelock Movement



Programming Indicators.
Selection flashes x 2 Ready to accept Selection
Selection flashes x 3 Selection registered

Product Part Numbers

Movement.	10.0004
Mounting Screws.	40.0761
Battery Cap	40.6071
#4 One-Way Key.	40.0758
#4 Standard Multi-Key . . .	40.0758.A
Locking Ratchet	40.1530
Drive Train Field Repair Kit . . .	40.1499
Single Lithium Battery . . .	81.0003.B
Lithium Battery Bulk Box (10 batteries) . .	81.0003

NOTE: In some parts of the world Lithium batteries are not allowed to be imported , therefore please check with your local Customs Office before ordering.

STB uses a battery insulator when shipping, this has to be removed before operating the movement

STB will not be held responsible for any incurred charges due to shipments having to be returned to the sender because the shipment contains Lithium Batteries which maybe not be allowed to enter the country of final destination.

The general rule is that Lithium Batteries can be shipped installed in the complete Timelock movement. Individual movements can be shipped with a battery installed provided the battery is in a Transit condition I.E not powering the movement, in this case a transport strap is inserted between the battery and the movement Battery contact..

Programming The P5 Function Creating Day Change

1. Turn the Winding Key ANTI-CLOCKWISE until it CLICKS
2. After the movement CLICKS turn Winding Key CLOCK-WISE
3. several times until the "P5" is displayed in the LCD Screen
4. "P5" Flashes 2 times in the LCD Screen after which the DAY flashes 2 times
5. After the DAY flashes 2 times the days can be skipped by turning the Winding Key CLOCK-WISE
6. Once the desired day is selected, the HOUR will flash 2 times
7. After the Hour has flashed 2 times, enter the desired HOUR value after which the Hour will flash 3 times and move to the MINUTES display
8. After the MINUTES display has flashed 2 times enter the desired Minutes value.
9. After the MINUTES has flashed 3 times, the Days of the week the day being changed and the Black Icon over the changed day flash 3 times, indicating a successful opening time change, without having to power down the Movement.
10. The Movement will disarm and the current Day/Time will be displayed.

Note:

Any day change effected in this P 5 will change the original set-up schedules.
Even if you have programmed a P2 days to be deleted they will appear in this P function.
If a day is to be deleted completely from the original set-up schedule then a value of Zero must ne entered for the hours and minutes under the desired day

Initial Set-up Continued

1. Insert the top of the Winding Key into the slot in the top of battery cap, then turn Anti-clockwise to remove the battery cap
2. Carefully insert battery with the + facing Upwards

NOTE: Never hold battery between thumb and forefinger on the + and - poles of the battery simultaneously, as this will immediately discharge the battery

3. Replace cover by gently pushing down and turning Anti-clockwise until cap is securely fixed in position
4. All available icons on the LCD screen will be displayed as a self check, makes sure all icons are free from defect
5. Insert the winding key onto the winding Arbor and turn anti-clock-wise until a "click is heard, and continue to turn another 1/4 turn to make sure arming mechanism is fully engaged
6. At this point the **MON** will flash 2 times in the top left corner of the LCD screen. Immediately turn the key clockwise set up the local day if other than Monday
7. When you are on the desired day allow it to flash 3 times after which it will automatically enter into the Hour programming sequence
8. The Hour will flash 2 times, after which turn the key clock-wise to select the desired hour.
9. Once the desired hour is selected, it will flash 3 times indicating the hour has been registered after which the minutes display will flash twice
10. By turning the key Clockwise will allow the current minutes to be selected
11. Once the desired minutes have been selected the minutes will flash 3 times indicating the minutes have been registered.
12. The total selection will now flash Three Times Indicating the local time has been successfully completed

Initial Set-up Continued

14. At this point if any errors have been made they can be easily corrected by going back through the previous programming procedure.
15. After Flashing 3 times the movement will disarm (Trigger Pin moves to the Open position) if there is no further activity LCD will power down automatically after approximately 10 Minutes to economise the battery

P4 Programming A Long Close Time

10. After which the next opening time and the opening day will be flashed
11. Then the display will revert back to the current time

Example:
We want to set 240 Hours closing:
First we set the far left display to 2 indicating a value of 200 Hrs. After it will Flash 3 times confirming the entry and move to the next level
Where it will flash 2 times indicating it is ready to accept the next hour value. in this case 40 hours. Turn the key clockwise until 40 hours appears.

2	**0**	**0**

The display will now flash 3 times confirming the value of 40 Hours has been con-

2	**4**	**0**

firmed
After which the next opening time after the 240 hours has expired will be displayed and the day of the next opening
The unit will then disarm.
NOTE:
If the first 100's hour value is not required enter no value after the 100's hour value flashes 2 times, then allow the 100's hour to flash 3 times, after which it will move automatically to the 10's hour display and flash 2 times
The long close will start from the previously programmed opening time.

P4 Programming A Long Close Time

1. Turn the Winding Key ANTI-CLOCKWISE until it CLICKS
2. After the movement CLICKS turn Winding Key CLOCK-WISE several times until the "P4" is displayed in the LCD Screen.
3. "P4" Flashes 2 times in the LCD Screen after which the MONDAY flashes 2 times.
4. When the MONDAY Flashes turn the Winding Key CLOCK-WISE, the Day Cursor will skip to the desired Start Day
5. At the desired Start Day allow to flash 2 times and now enter a value of 1-9 by turning the key Clockwise or Anti Clockwise (remember this value is in 100's) I.E the value of 1 equals 100 Hours
6. After the 100 HOUR value has been entered it will flash 3 times and move to the next value window and flash 2 times
7. Once the LCD flashes 2 times enter a value of 1-99 by turning the key clockwise
8. A value of 1 equals 1 hour, while a value of 44 would be 44 Hours
9. Once the desired value has been entered the display will flash 3 times

NOTE:

It is strongly advised that this sectioned be thoroughly understood before starting to program the movement.

NEVER SHUT THE CONTAINER DOOR BRFORE THE PROGRAMMING HAS BEEN VERIFIED 100%..

An error in the desired number of hours will secure the container until the count-down has completed, creating a possibility of a premature or seriously delayed opening, either way compromising normal operation.

LCD Value Hours shows 100	**Closed Hours**
100	100
200	200
300	300
400	400
Maximum 900	900
In the second column it's 1-99 Hrs	
1	1
2	2
99	99

Setting Up Daily Opening Times

1. Take the key and insert onto the Winding arbor and turn ant-clockwise until a "click is heard, turn another 1/4 turn to make sure the arming mechanism is fully engaged.
2. The Monday Icon will flash twice, (if you wish to skip to another day then turn the key clockwise until the desired day)
3. If the Monday is the desired day then wait until it flashes 3 times, after which the Hour will flash 2 times. Turn key clockwise until the desired hour
4. The Hour will now flash 3 times and move to the Minutes
5. Turn the key clockwise
6. To skip this day simply turn the key clockwise until the following days of the week are observed.
7. Stop on the day you wish to create a new opening, it will flash times followed by the
8. Hour and then the minutes, each successfully completed programming operation will flash 3 times
9. To program 7 days, Monday is always the default day in the programming sequence as its considered that most working weeks start on a Monday, although the week can be configured to local conditions with ease.
10. Once Monday has flashed three times you will be presented with the Hour opening display.
11. Once the Hour has flashed twice immediately turn the Winding Key clockwise to the desired Hour, after selection wait 3 seconds, after which the Hour will now flash 3 times indicating the Hour has been programmed successfully now, the minutes will flash 2 times.
12. Once the minutes have flashed 2 times, immediately turn the Winding Key Clockwise until the desired minutes. The minutes will now flash 3 times indicating a successful programming of the day.
13. Once the minutes have flashed 3 times, the curser will automatically move to the next day.
14. To complete the programming of the next day, simply re-run the above instruction information.
15. Once all the days have been programmed the programmed days will flash 3 times and the LCD will power down automatically.

Brief Description Of The “P” Functions

The “P” function positions in the programming are considered as the utility parts of the program setup, allowing the user to modify fundamental functionality of the product so as to be able to respond closer to the user and local operating conditions.

It is strongly advised that the “P” functions be read carefully and fully understood before using these functions

It should be noted that the “P” positions can only be accessed once the Movement has been armed.

Care must be taken when setting up any of the time lock functions, especially the long close function.
Once programmed and the door of the container is shut, the container cannot be opened until the program has completed its run time.

P1 Allows the Movement to be “Short Closed” 1-9 Hours. Once programmed no further Hour changes can be made until the Hour has passed.

P2 Allows the user to remove previously programmed days during a 7 day roll over period. After 7 days, the original set-up days and time will be re-instated automatically without having to power down the Movement

P3 Allows the user to change local Summer/Winter Time (this is a manual not automatic function)

P4 Allows the user to program a long close accurately by the desired number of hours. Once the run down is completed the Movement reverts automatically back to the pre-programmed opening schedule, no need to power down the movement

P5 Allows the creation /deletion/change of daily openings without having to power down the Movement. This is a Master change operation. It will alter the original programmed Schedules, and reset the P2 entered changes

P3 Programming Function Programming Summer/ Winter Time

1. Take the key and insert onto the Winding arbor and turn anti-clockwise until a “click” is heard, then turn another 1/4 turn to make sure the arming mechanism is fully engaged.
2. After the movement “clicks” turn winding key clock-wise several times until the P3 is displayed in the LCD Screen
3. “P3” Flashes 2 times in the LCD Screen after which the Hour flashes 2 times
4. After the Hour has flashed 2 times, turn the key either 1 hour forward or 1 hour back of the current local time
6. The new current time will now flash 3 times after which the Movement will disarm

P2 Programming Function, Deleting An Opening Day

1. Take the key and insert onto the Winding arbor and turn anti-clockwise until a "click" is heard, then turn another 1/4 turn to make sure the arming mechanism is fully engaged.
2. After the movement "clicks" turn Winding Key clock-wise several times until the "P2" is displayed in the LCD Screen.
3. After the "P2" is displayed, it will flash 2 Times followed by the day of the week value with a black bar icon at the top of the LCD Screen.
4. If you wish to delete the day turn the key clockwise, the black icon will be deleted , after which the day curser will move to the next programmed black bar icon. A maximum of 6 days can be deleted, but never 7
5. If the next opening Day is to remain unchanged, then allow the day curser to move to the subsequent day opening automatically, do not turn the key.
6. Once the desired changes have been made the days will flash 3 times as confirmation, and the movement will disarm
7. Each day will flash until Sunday, Once the desired days have been removed, the program will flash the 7 days of the week as verification of the changes made, then return to the current day
8. Once this cycle is completed the LCD will then flash 3 times all the days of the week simultaneously, showing active and non-active days, after which the movement will disarm

NOTE:

It is impossible to delete all the programmed openings, one valid opening will always remain, in order to prevent a total container Lockout.

Programming With The P1 Short Close Function

1. Take the key and insert onto the Winding arbor and turn anti-clockwise until a "click is heard, then turn another 1/4 turn to make sure the arming mechanism is fully engaged.
2. After the movement "clicks" turn Winding Key clock-wise several times until the "P1" is displayed in the LCD Screen
3. After the "P1" is displayed, it will flash 2 Times followed by 2 flashes of the hour position
4. Enter a new Hour value, after which the Hour will flash 3 Times and the Minutes value will be displayed and flash 2 times.
5. Enter the required minutes after which the minutes will flash 3 times, and the movement will disarm
6. Re-arming the movement will start the time delay

NOTE:

The minimum value that can be entered is 1 Hour more than the current time displayed