ETT

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USER MANUAL

World Timer Chronograph Multi-Band, Solar Radio Clockwork W342M / W346M

No. W342M / W346M 08/12

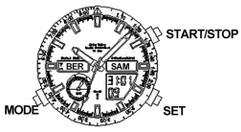
Product Features:

- **Multi-band solar radio clockwork- the following time signals can be received:**
  - **DCF 77, Mainflingen near Frankfurt/Main, Germany (GER)**
  - **MSF, Anthorn, Great Britain (UK)**
  - **WWVB, Fort Collins, USA**
  - **JJY (J40 / J60), Japan (JP)**
- **Radio-controlled automatic time setting** and time change for **Daylight Savings Time and standard time**
- With **rechargeable storage cell** and **overcharge protection**
- **Selectable languages: German (GER), English (ENG), French (FRE), Spanish (SPA), Italian (ITA)**
- **State of charge indication / power reserve**
- **Perpetual calendar**
- **Transmitter call** daily automatically and manually possible
- **Worldwide manual time zone adjustment, world time display of 38 cities**
- **Chronograph, stopwatch 1/100 second**
- Display in the lower right LCD display: day, date, month, year, time in foreign time zone, stopwatch mode
- Display in the lower left LCD display: state of charge of the battery (power reserve)
- Display in the left LCD display: time zone
- Display in the right LCD display:
- ***Power reserve*** 1-8 months depending on the state of charge. If fully charged, 8 months.
- ***Sleep function***, for energy saving, is activated, if the watch is stored in the dark for 3 days. The hands stop on 12. If the watch comes into light again, the stored time is displayed. In the case of longer dark phases, the watch is activated again by pressing any button.

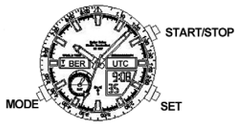
Important, using the solar radio-controlled watch for the first time!
Usually the watch runs without problems without requiring any further adjustments, unless it was exposed to strong vibrations or magnetic fields. Thus, please observe the following:

1. Charging the solar cell
Please ensure that the rechargeable storage cell is sufficiently charged, see state of charge indicator (point 9).
The watch should be stored at a location with light incidence. The power reserve indicator should not drop below the orange state of charge (level 3) to ensure full watch functionality. Attention! If the storage cell is fully discharged for an extended period of time, risk of damage exists (exclusion of warranty)!

2. Functions via mode button (winding button (if available) without function):
The following modes can be selected by pressing the **MODE** button:

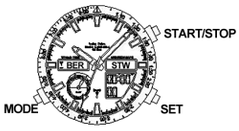


Mode 1
Analog time zone and digital date

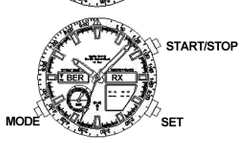


Mode 2
Analog time zone, digital time zone and digital time (hour, minute, and second)

Mode 3
Analog time zone and stopwatch



3. Transmitter call manual / automatic + change of time signal
If Mode 1 or Mode 2 is displayed, press on the **Start/Stop** button for approx. 3 seconds for the transmitter call. The second hand stops, the transmitter call starts. This process takes approx. 3 to 8 minutes. If the transmitter call was successful, the antenna symbol is shown in the upper left LCD display. (The automatic transmitter call takes place every night between 3 and 4 am.) For changing the time signal (s. ,,Product Features''), press Start/Stop again after Transmitter call begins. Transmitter call is now following the time signal shown on Display in the left.

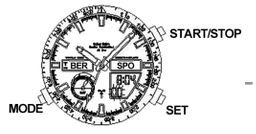


4. Manual programming of analog time and date, and the language
If Mode 1 is displayed, press the **SET** button for approx. 3 seconds. The watch switches into program mode. The analog time zone flashes and „T1“ is displayed in the upper right LCD display. Press the **Start/Stop** button for changes. Press **MODE** to apply your changes and enter the DST (Daylight Savings Time) setting for the analog time. Press **Start/Stop** to activate/deactivate this function. If Daylight Savings Time is set, a small DST is shown in the upper left LCD display. Now, press **MODE** to respectively enter hour, minute, year, date and month. Use the **Start/Stop** button for changes, and the **MODE** button to skip to the next setting. After you changed time and date, you enter the language setting by pressing the **MODE** button. The language abbreviation is shown in the left LCD display (see „Product Features“), the day of the week is displayed in the respective language in the upper right LCD display. By pressing **Start/Stop**, you can change the language. Subsequent pressing of **MODE** returns to the program start, the analog world time setting. In order to finish the settings and exit programming, press the **SET** button. Hands and LCD display adjust according to your settings.

5. Setting the digital world time with DST (Daylight Savings Time)
If Mode 2 is displayed (the right LCD display shows any time zone), press **SET** for approx. 3 seconds. The world time zone flashes and „T2“ is displayed in the upper right LCD display. Press **Start/Stop** to change this setting. Next, press **MODE** to enter the next setting (DST - Daylight Savings Time). Press **Start/Stop** to change this setting. Confirm with **SET** and the world time is automatically updated.

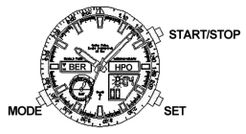
6. Stopwatch
By pressing the **MODE** button, you activate the stopwatch (**STW** is shown in the display). Press on **Start/Stop** to start the stopwatch and to stop it again. If you press **SET,** the stopwatch is reset to zero.

7. Manual calibration / basic setting
The second hand may lose synchronization with the digital time. This may be caused by external electromagnetic sources or strong vibrations. In the case of manual calibration / basic setting, your watch is aligned with the radio signal of the adjusted time zone (if mentioned under „Product Features“ / receive signal available in sufficient quality).

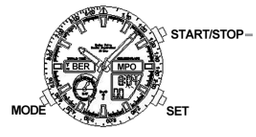


Press **Start/Stop** and **SET** at the same time for approx. 5 seconds to perform the calibration. The left LCD display shows „CAL“ and „SPO“ (second position) is shown in the upper right display. The seconds field flashes. By pressing the Start/Stop button step by step, you can rotate the second hand exactly onto 12 o‘clock. Next, press MODE to confirm.

Now, the right LCD display switches to „HPO“ (hour position) and the digital hour is flashing. Press **Start/Stop** to set the digital hour to the analog hour. Now, press **MODE** to confirm and skip to the next setting.



Now, the right LCD display switches to „MPO“ (minute position) and the digital minute is flashing. Press **Start/Stop** to match the minute to the analog minute. Next, exit calibration by shortly pressing **SET** so that „RX“ is shown in the upper right LCD display. In the left LCD display, the currently adjusted radio frequency is displayed during the transmitter search. Reception starts and the hands start rotating (transmitter call). If reception is successful, the antenna symbol is shown in the upper left LCD display.



ATTENTION:
Make sure that your Multi-Band World Timer is programmed to a radio frequency with sufficient reception strength during manual calibration and programming. Otherwise, no radio signal can be received!

8. World time: 38 cities

SAM	SAMOA	**AUC**	AUCKLAND	**ROM**	ROME
HNL	HONOLULU	**NOU**	NOUMEA	**MAD**	MADRID
ANC	ANCHORAGE	**UTC**	koordinierte Weltzeit	**LON**	LONDON
BER	BERLIN	**AZO**	AZORES	**GUM**	GUAM
CAI	CAIRO	**LAX**	LOS ANGELES	**JNB**	JOHANNESBURG
SAN	SAN DIEGO	**MOS**	MOSCOW	**DEN**	DENVER
DXB	DUBAI	**CHI**	CHICAGO	**KHI**	KARACHI
DAL	DALLAS	**DEL**	DELHI	**MEX**	MEXICO
DAC	DHAKA	**NYC**	NEW YORK	**BKK**	BANGKOK
CCS	CARACAS	**HKG**	HONG KONG	**RIO**	RIO DE JANEIRO
BJN	BEIJING	**SAO**	SAO PAULO	**SIN**	SINGAPORE
BUE	B. AIRES	**TYO**	TOKYO	**MID**	MID ATLANTIC
SYD	SYDNEY	**PAR**	PARIS		

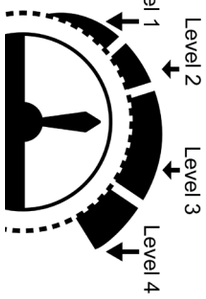
9. State of charge indication / power reserve
Level 1 (white):
The battery is discharged and/or its capacity is insufficient to operate the watch. Charging duration - at least 8 hours under sunlight. The battery should be charged up to the orange range (level 3) of the scale. After charging, the watch must be newly calibrated (see point 7).

Level 2 (yellow):
The battery charge is weak. Under these conditions, the availability of some functions may be limited or not be given. The battery must be charged.

Level 3 (orange):
The battery's state of charge is normal and this offers a runtime of 6 to 8 months. This state if charge is recommended for daily use.

Level 4 (red):
The battery's state of charge is above normal and the battery is fully charged. The runtime amounts to approx. 8 months. Damage to the storage cell caused by overcharging is excluded by means of the integrated overcharging protection.

The illustration of the state of charge indicator may vary by model; scale may be illustrated in color.



10. Declaration of Conformity
We hereby declare that this wristwatch complies with the fundamental requirements and further relevant regulations of Directive 1999/4/EC. The Declaration of Conformity can be obtained under www.ecotechtime.de.

11. Information regarding environmental protection
Disposal of used devices. At the end of its service life, this product must not be disposed of with your normal waste, but instead must be returned to a recycling facility for electric devices. This is indicated by the symbol on the product or in the user manual. The materials are recyclable in accordance with their marking. By reuse, recycling or other forms of utilizing old devices you are assisting considerably in the preservation of the environment. Please contact your local authorities to retrieve the addresses of your nearest disposal facility. Disposal of packaging materials. Packaging materials are raw materials and can thus be recycled. In the interest of environmental protection, please recycle them properly. Your local authorities will gladly inform you.

12. This product complies with the EMC Directives of the EU.