

INHALT

MODEL SERIES 103

INSTRUCTIONS FOR USE

USING THE CHRONOGRAPH TO MEASURE TIME
ADJUSTING THE LENGTH OF THE WATCH STRAPS
Ar-DEHUMIDIFYING TECHNOLOGY
TECHNICAL DETAILS
SERVICE

SINN SPEZIALUHREN ZU FRANKFURT AM MAIN

6-9

10 – 11



DEAR CUSTOMER.

we know from numerous conversations that the people who buy our watches do so out of conviction. This includes people with a pronounced affinity to technology who are fascinated, for example, by the solutions we have devised for magnetic field protection and scratch-resistance. Some of our customers, such as divers, pilots or the German GSG 9 special police unit, need to rely on their watch in their respective careers because their life depends on it.

They all swear by the high performance, resilience and durability, as well as the quality and precision of these timepieces. The water and pressure-resistance data are reviewed and authenticated at regular intervals, as is the case with our diving watches, for instance. We, for our part, give absolute priority to functionality, which ultimately determines the design. Our watches only feature technological attributes that really make sense. All the while, we remain committed to our guiding principle that products have to speak for themselves.

The basic question that we ask ourselves is: which innovative technologies and materials can be employed for our craft and provide solutions for rendering our watches even more practical for everyday use? It is often worth indulging in a little lateral thinking to see what is going on in other industrial sectors or fields of science. We repeatedly go to the limits of physical resources to upgrade our watches – with the aim of making what's good even better. Most of our best developments are yet to come!

I am delighted that you have decided to buy a SINN timepiece and hope that it will continue to give you pleasure for many years to come.

Yours sincerely, Lothar Schmidt

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SINN SPEZIALUHREN ZU FRANKFURT AM MAIN

It was back in 1961 that the pilot and blind-flying instructor Helmut Sinn founded the company. Since then, we have been committed to producing high-specification mechanical watches. In 1994, the graduate engineer Lothar Schmidt took control. This marked the beginning of a new era for the SINN brand, because the new owner took a decisive step towards more innovation. Under his leadership, new technologies and materials were introduced, thus providing the crucial incentives for our company's evolution and gradual emergence as an insiders' tip for lovers of fine watches. Today, our name stands for technical innovations, much to the delight of both the trade and our customers alike.



All developments thoroughly tested

Take, for instance, the absolutely condensationfree and anti-reflective diving watch made of stainless steel - designed with HYDRO Technology. Other examples include a chronometer chronograph fashioned from a 22-carat gold alloy, which is as hard as stainless steel, and a chronometer whose resistance to magnetic interference is 20 times greater than normal. Or those watches filled with protective gas and featuring an integrated dehumidifying capsule to counteract moisture infiltration and the gaeing of the watch movement. This list would not be complete without mentioning the development of so-called Einsatzzeitmesser (EZM) watches for special police units and border guards, and the Temperature Resistance Technology that allows mechanical watches to perform at temperatures ranging from -45°C to +80°C. The 303 KRISTALL model passed the fire and ice test during the 1998 Yukon Quest sledge dog race that crosses the icy wilderness of Canada and Alaska, where temperatures are known to plunge to -40 °C. The watch was strapped to the arm of some of the participants on top of their protective clothing. This was followed in 1999 by the 203 ARKTIS model. This diving chronograph passed its field test in the North Polar Sea with flying colours.



Innovations and authentications

One of our most important inventions is the oil-free DIAPAL Technology, based on low-friction materials for the key functional parts of the watch. enablina them to run without lubrication. This technology was first employed in our jubilee watch, the palladium alloy/white gold Frankfurt Financial District Watch, TEGIMENT Technology, with which SINN achieves a virtually scratch resistance surface for its watches, represents another milestone. Other innovations include diving watches made from original submarine steel, as used in the construction of the outer shell of German class 212 submarines. Germanischer Llovd, the world's biagest classification society providing marine safety services, has been testing the aspects of water and pressure resistance since 2005. Moreover, an official authentication process conducted by Germanischer Lloyd in 2006, SINN diving watches as diving gear for the very first time in the watch making sector and tested them in keeping with European diving equipment standards. The result: these timepieces passed the temperature resistance and functionality tests with a sensational success. All test results are authenticated with signature and seal.



Ongoing advancement in technology and quality

Our top priority is always to develop watches which offer superior performance - both in daily and in professional use. Which is why our engineers are working continually to identify which innovative methods, materials and technologies are best suited for optimising our watches. Each new development first has to undergo rigorous practical tests before being incorporated. And no watch leaves our workshops before it has been subjected to thorough checking and fine adjustment by our master watchmakers.

Workshop modifications and hand-engraving

From the robust case and the polished crystal through to elaborate refinements: we make sure that each and every detail in our watches is fit for purpose. The same applies to our workshop modifications. Only the perfect interaction of all components and technologies ensures that our watches can meets all its design specifications in full. For example: the SZ02 calibre of our U1000 diving chronograph. The 60 minute scale of the stop-minute counter is much simpler and more intuitive to read than the 30 minute scale commonly found in other watches. The hand engraving represents a highly personal form of refinement. If required, our specially trained master engraver can etch a name, initials, monograms or symbols onto the rotor, movement bridge and case back.





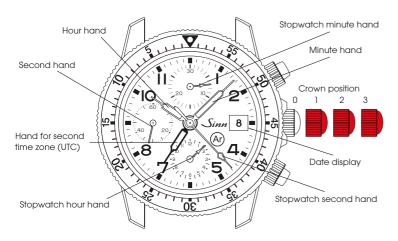
MODEL SERIES 103

It's obvious at a glance what the 103 model series was created for: uncompromising functionality. They are designed to resemble cockpit instruments, in keeping with our company tradition. After all, the first watches we produced were mechanical aviation clocks for professional use. The patented technologies we have developed over the years are now also part of these classic Sinn watches.

The patented technologies developed over the course of time under the leadership of owner Lothar Schmidt have since also been made manifest in the technical features of selected models from this traditional series. For example, DIAPAL technology for a lubricant-free escapement and Ar dehumidifying technology for enhanced freedom from fogging, each of which is indicated respectively in the name of the model ("DIAPAL" or "Ar"). Thus you will find traditional models in the 103 series that are also equipped with additional special features, such as the 103 Ti DIAPAL and 103 St DIAPAL with DIAPAL technology and Ar dehumidifying technology.

INSTRUCTIONS FOR USE

Models: 103 St DIAPAL, 103 Ti DIAPAL, 103 St Sa Ar UTC, 103 Ti Ar UTC



To wind the watch (crown position 1)

The crown is screwable (crown position 0). To loosen the crown, turn it counterclockwise. The movement is wound by turning the crown clockwise. About 40 winds of the crown are generally enough to ensure its reliable functioning. Under normal circumstances, simply wearing the watch every day should suffice to keep the self-winding mechanism wound. The power reserve allows you to take off your watch overnight without having to rewind it.

Time adjustment (crown position 3)

In crown position 3, the motion is paused. This helps you to set the watch precisely. For accurate time setting, we recommend moving the hand past the desired minute marker and then adjusting it counter-clockwise. Please make sure that the date changes at midnight and not at midday when adjusting the time. Move the hand forward until the date changes before you attempt to set the time. The movement restarts as soon as you leave crown position 3.

Quickset date adjustment (crown position 2)

Do not use this function between 9 p.m. and 3 a.m. Set the crown in the position 2 and turn it *clockwise* until the correct date appears in the date display window. Please do not use the date setting function between 9 p.m. and 3 a.m. Between these times, the gear wheels used for changing the date are engaged, and the movement could become damaged.

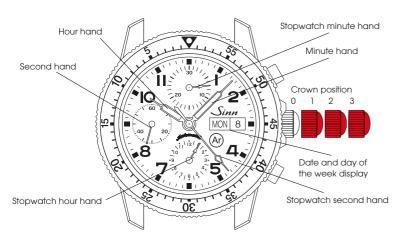
Time adjustment of the second time zone (crown position 2)

Set the crown in the position 2 and turn it counter-clockwise until the correct time appears. The arrow hand for the second time zone stops at hourly intervals. Please do not use the date setting function between 9 p.m. and 3 a.m. Between these times, the gear wheels used for changing the date are engaged, and the movement could become damaged.

Please take care to fasten the crown after making adjustments.

INSTRUCTIONS FOR USE

Models: 103 St Sa Ar, 103 Ti Ar, 103 St Sa, 103 St, 103 St Ty



To wind the watch (crown position 1)

The crown is screwable (crown position 0). To loosen the crown, turn it counterclockwise. The movement is wound by turning the crown clockwise. About 40 winds of the crown are generally enough to ensure its reliable functioning. Under normal circumstances, simply wearing the watch every day should suffice to keep the self-winding mechanism wound. The power reserve allows you to take off your watch overnight without having to rewind it.

Time adjustment (crown position 3)

In crown position 3, the motion is paused. This helps you to set the watch precisely. For accurate time setting, we recommend moving the hand past the desired minute marker and then adjusting it counter-clockwise. Please make sure that the date changes at midnight and not at midday when adjusting the time. Move the hand forward until the date changes before you attempt to set the time. The movement restarts as soon as you leave crown position 3.

Quickset date and day of the week adjustment of the week (crown position 2)

Do not use this function between 9 p.m. and 3 a.m. Crown position 2 can
be used to change the date and day of the week quickly and simply. To set
the date, pull the crown to the second position and turn it clockwise until the
current date appears in the display window. To set the day of the week, turn
the crown counter-clockwise until the desired day of the week is indicated.
Please do not use the date setting function between 9 p.m. and 3 a.m.
Between these times, the gear wheels used for changing the date are
engaged, and the movement could become damaged.

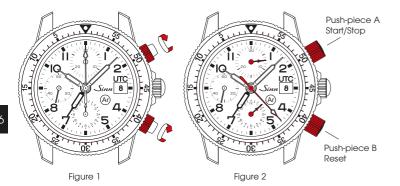
Please take care to fasten the crown after making adjustments.

USING THE CHRONOGRAPH TO MEASURE TIME

Models: 103 St DIAPAL, 103 St Sa Ar UTC, 103 St Sa Ar, 103 St Sa, 103 A Sa

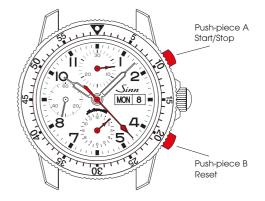
The chronograph is operated by means of buttons "A" and "B". The push-pieces are screwable. To loosen the push-pieces, turn them counter-clockwise (fig. 1). The measurement starts when button "A" is pressed once. Pressing this button again stops the measurement. The measurement is resumed by pressing button "A" once more. This allows you to add up and record the cumulative time. Button "B" resets the hands of the chronograph to zero (fig. 2).

Please take care to fasten the push-pieces after using the chronograph.



Models: 103 St, 103 St Ty, 103 Ti DIAPAL, 103 Ti Ar UTC, 103 Ti Ar

The chronograph is operated by means of buttons "A" and "B". The measurement starts when button "A" is pressed once. Pressing this button again stops the measurement. The measurement is resumed by pressing button "A" once more. This allows you to add up and record the cumulative time. Button "B" resets the hands of the chronograph to zero.



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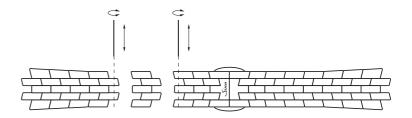
ADJUSTING THE LENGTH OF THE WATCH STRAPS

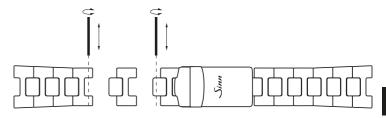
If you don't know how to shorten or lengthen the solid bracelet, please contact your SINN dealer or the watchmakers in our customer service department in Frankfurt am Main. Our customer service employees are also happy to help you on the telephone.

Adjusting the length of the solid bracelet

For optimal comfort, each side of the watchband should contain the same number of links. If you choose to remove an uneven number of links, the upper portion of the watchband (on the 12 o'clock side) should be longer. For example: If you want to shorten the bracelet by removing a total of three links, you should remove two from the 6 o'clock side and just one from the 12 o'clock side. When they leave the factory, the solid bracelets have the same number of links on the 12 o'clock side and the 6 o'clock side. If you have requested a shorter length, please be sure to check the number of links on each side before making any additional changes.

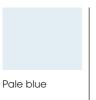
- Remove the screws on the side of the link you wish to remove, or at the point where you wish to add a link.
- 2. Remove the excess link or insert the new one.
- 3. Before replacing the screw, add a small drop (not too much!) of the threadlock (AN 302-42 medium-strenght) adhesive to the screw thread.





-DEHUMIDIFYING TECHNOLOGY

Indication colours of the drying capsule





saturation





up to 75 % saturation

up to 100 % saturation



Drvina capsule saturated



up to 25 %

saturation

Initial condition

The colour scale for the Ar-Dehumidifying Technology: the capsule continues to absorb moisture until the darkest colouration is reached.

Perfect freedom from fogging

All watches in this series are water-resistant as per DIN 8310. But even with watertight instruments, the air enclosed in the case contains water in a gaseous state. And air can also penetrate the seals and acrylic glasses. When the water vapour in the case condenses into liquid, the instruments are impossible to read. To prevent this from happening, we have developed the Ar-Dehumidifying Technology. The combination of a special drying capsule, EDR seals (extreme diffusion reduction) and a filling of protective gas guarantee that the crystal remains free from fogging, even in difficult conditions.

Longer service intervals

The sophisticated Ar-Dehumidifying Technology considerably retards the aging process of the watch's inner workings and keeps the movement functioning properly for longer. That is why we issue a three year warranty on all our watches featuring Ar-Dehumidifying Technology. When the drying capsule is saturated indicated by a deep blue colour, refer to picture on the left side), we recommend you have it exchanged so you can continue to eniov all the advantages of the Ar-Dehumidifying Technology (enhanced reliability, longer maintenance intervals).

TECHNICAL DETAILS 103 ST DIAPAL

Mechanical Movement

- Calibre Valjoux 7750 UTC
- Self-winding mechanism
- DIAPAL Technology
- Functionally from -45°C to +80°C
- 25 bearing jewels
- 28,800 semi-oscillations per hour
- Shock-resistant as per DIN 8308
- Anti-magnetic as per DIN 8309

Watch Case

- Stainless steel polished
- Sapphire crystal on front, anti-reflective both sides
- Transparent back made of sapphire crystal glass, antireflective on the interior
- Screw-fastened case back
- Crown and push-pieces screwable
- Ar-Dehumidifying Technology
- Water-resistant as per DIN 8310
 - Water-resistant and pressure resistant up to 20 bar (= 200 m underwater depth)
 - Resistant to low pressure at high flight altitudes

- Band lug width 20 mm
- Case diameter 41 mm

Functions

- · Hours, minutes, subsidiary seconds
- Second time zone (UTC)
- Chronograph
- · Date display
- Pilot's bezel with luminous sign
- Hands, numbers and indices coated with luminescent colour



TECHNICAL DETAILS 103 TI DIAPAL

Mechanical Movement

- Calibre Valjoux 7750 UTC
- · Self-winding mechanism
- DIAPAL Technology
- Functionally from -45°C to +80°C
- 25 bearing jewels
- 28,800 semi-oscillations per hour
- Shock-resistant as per DIN 8308
- Anti-magnetic as per DIN 8309

Watch Case

- Titanium bead-blasted
- Sapphire crystal on front, anti-reflective both sides
- Transparent back made of sapphire crystal glass, antireflective on the interior
- Screw-fastened case back
- Crown screwable
- Ar-Dehumidifying Technology
- Water-resistant as per DIN 8310
- Water-resistant and pressure resistant up to 20 bar (= 200 m underwater depth)
- Resistant to low pressure at high flight altitudes

- Band lug width 20 mm
- Case diameter 41 mm

- · Hours, minutes, subsidiary seconds
- Second time zone (UTC)
- Chronograph
- Date display
- Pilot's bezel with luminous sign
- Hands, numbers and indices coated with luminescent colour



TECHNICAL DETAILS 103 ST SA Ar UTC

Mechanical Movement

- Calibre Valjoux 7750 UTC
- Self-winding mechanism
- 25 bearing jewels
- 28,800 semi-oscillations per hour
- Shock-resistant as per DIN 8308
- Anti-magnetic as per DIN 8309

Watch Case

- Stainless steel polished
- Sapphire crystal on front, anti-reflective both sides
- Transparent back made of sapphire crystal glass, antireflective on the interior
- Screw-fastened case back
- Crown and push-pieces screwable
- Ar-Dehumidifying Technology
- Water-resistant as per DIN 8310
- Water-resistant and pressure resistant up to 20 bar (= 200 m underwater depth)
- Resistant to low pressure at high flight altitudes
- · Band lua width 20 mm
- Case diameter 41 mm

Functions

- Hours, minutes, subsidiary seconds
- Second time zone (UTC)
- Chronograph
- Date display
- Pilot's bezel with luminous sign
- Hands and numbers coated with luminescent colour



TECHNICAL DETAILS 103 TI Ar UTC

Mechanical Movement

- Calibre Valjoux 7750 UTC
- Self-winding mechanism
- 25 bearing jewels
- 28,800 semi-oscillations per hour
- Shock-resistant as per DIN 8308
- Anti-magnetic as per DIN 8309

Watch Case

- Titanium bead-blasted
- Sapphire crystal on front, antireflective both sides
- Transparent back made of sapphire crystal glass, antireflective on the interior
- Screw-fastened case back
- Crown screwable
- Ar-Dehumidifying Technology
- Water-resistant as per DIN 8310
- Water-resistant and pressure resistant up to 20 bar (= 200 m underwater depth)
- Resistant to low pressure at highflight altitudes

- Band lug width 20 mm
- Case diameter 41 mm

- Hours, minutes, subsidiary seconds
- Second time zone (UTC)
- Chronograph
- Date display
- Pilot's bezel with luminous sign
- Hands and numbers coated with luminescent colour



TECHNICAL DETAILS 103 ST SA Ar

Mechanical Movement

- Calibre Valioux 7750
- Self-winding mechanism
- 25 bearing jewels
- 28,800 semi-oscillations per hour
- Shock-resistant as per DIN 8308
- Anti-magnetic as per DIN 8309

Watch Case

- · Stainless steel polished
- Sapphire crystal on front, anti-reflective both sides
- Transparent back made of sapphire crystal glass, anti-reflective on the interior
- Screw-fastened case back
- Crown and push-pieces screwable
- Ar-Dehumidifying Technology
- Water-resistant as per DIN 8310
- Water-resistant and pressure resistant up to 20 bar (= 200 m underwater depth)
- Resistant to low pressure at high flight altitudes
- Band lua width 20 mm
- Case diameter 41 mm

Functions

- · Hours, minutes, subsidiary seconds
- Chronograph
- Date display
- Day of the week display
- Pilot's bezel with luminous sign
- Hands and numbers coated with luminescent colour



TECHNICAL DETAILS 103 TI Ar

Mechanical Movement

- Calibre Valjoux 7750
- Self-winding mechanism
- 25 bearing jewels
- 28,800 semi-oscillations per hour
- Shock-resistant as per DIN 8308
- Anti-magnetic as per DIN 8309

Watch Case

- Titanium bead blasted
- Sapphire crystal on front, antireflective both sides
- Transparent back made of sapphire crystal glass, antireflective on the interior
- Screw-fastened case back
- Crown screwable
- Ar-Dehumidifying Technology
- Water-resistant as per DIN 8310
- Water-resistant and pressure resistant up to 20 bar (= 200 m underwater depth)
- Resistant to low pressure at high flight altitudes

- Band lug width 20 mm
- Case diameter 41 mm

- Hours, minutes, subsidiary seconds
- Chronograph
- Date display
- Day of the week display
- Pilot's bezel with luminous sign
- Hands and numbers coated with luminescent colour



TECHNICAL DETAILS 103 ST SA

Mechanical Movement

- Calibre Valjoux 7750
- Self-winding mechanism
- 25 bearing jewels
- 28,800 semi-oscillations per hour
- Shock-resistant as per DIN 8308
- Anti-magnetic as per DIN 8309

Watch Case

- Stainless steel polished
- Sapphire crystal on front, anti-reflective both sides
- Transparent back made of sapphire crystal glass, antireflective on the interior
- Screw-fastened case back
- Crown and push-pieces screwable
- Ar-Dehumidifying Technology (optionally)
- Water-resistant as per DIN 8310
- Water-resistant and pressure resistant up to 20 bar (= 200 m underwater depth)
- Resistant to low pressure at high flight altitudes

- Band lug width 20 mm
- Case diameter 41 mm

Functions

- · Hours, minutes, subsidiary seconds
- Chronograph
- Date display
- Day of the week display
- Pilot's bezel with luminous sign
- Hands and numbers coated with luminescent colour



TECHNICAL DETAILS 103 A SA

Mechanical Movement

- Calibre Valjoux 7750
- Self-winding mechanism
- 25 bearing jewels
- 28,800 semi-oscillations per hour
- Shock-resistant as per DIN 8308
- Anti-magnetic as per DIN 8309

Watch Case

- · Stainless steel polished
- Sapphire crystal on front, anti-reflective both sides
- Transparent back made of sapphire crystal glass, antireflective on the interior
- Screw-fastened case back
- Crown and push-pieces screwable
- Ar-Dehumidifying Technology (optionally)
- Water-resistant as per DIN 8310
- Water-resistant and pressure resistant up to 20 bar (= 200 m underwater depth)
- Resistant to low pressure at high flight altitudes

- Band lug width 20 mm
- Case diameter 41 mm

- Hours, minutes, subsidiary seconds
- Chronograph
- Date display
- Day of the week display
- Pilot's bezel with luminous sign
- Hands and indices coated with luminescent colour



TECHNICAL DETAILS 103 ST

Mechanical Movement

- Calibre Valjoux 7750
- Self-winding mechanism
- 25 bearing jewels
- 28,800 semi-oscillations per hour
- Shock-resistant as per DIN 8308
- Anti-magnetic as per DIN 8309

Watch Case

- Stainless steel polished
- Shock-proof acrylic glass on front (Sapphire crystal optionally)
- Stainless steel back, screw-fastened
- Crown screwable
- Water-resistant as per DIN 8310
- Water-resistant and pressure resistant up to 20 bar (= 200 m underwater depth)
- Resistant to low pressure at high flight altitudes
- Band lug width 20 mm
- Case diameter 41 mm

Functions

- Hours, minutes, subsidiary seconds
- Chronograph
- · Date display
- Day of the week display
- Pilot's bezel with luminous sign
- Hands and numbers coated with luminescent colour



TECHNICAL DETAILS 103 ST TY

Mechanical Movement

- Calibre Valjoux 7750
- Self-winding mechanism
- 25 bearing jewels
- 28,800 semi-oscillations per hour
- Shock-resistant as per DIN 8308
- Anti-magnetic as per DIN 8309

Watch Case

- · Stainless steel polished
- Shock-proof acrylic glass on front (Sapphire crystal optionally)
- Stainless steel back, screw-fastened
- Crown screwable
- Water-resistant as per DIN 8310
- Water-resistant and pressure resistant up to 20 bar (= 200 m underwater depth)
- Resistant to low pressure at high flight altitudes
- Band lug width 20 mm
- Case diameter 40 mm

- Hours, minutes, subsidiary seconds
- Chronograph
- Date display
- Day of the week display
- Tachmyeter-and pulsometer scale
- Hands and numbers coated with luminescent colour



3

SERVICE

General advice

To preserve the water resistance for as long as possible, the watch should be rinsed whenever it has been in contact with seawater, chemicals, etc. If your watch is frequently worn in/under water, we recommend having its water resistance checked at yearly intervals.

The watch is designed to withstand high levels of mechanical wear and tear and is shock resistant as per DIN 8308. Nevertheless, it goes without saying that continual mechanical stress in the form of impacts or vibration will affect its durability. Care should therefore be taken to protect your watch from unnecessary wear and tear. It is only possible to judge how well the watch keeps time after it has been in operation for approximately eight weeks, since it takes that long for the working mechanism to become adjusted, especially in view of the fact that everybody has different lifestyles and habits. In the event of any excessive deviation, please keep a day-to-day record of its timekeeping over a period of about one week, for example.



Do you have any questions?

Our employees will be pleased to advise you. Simply get in contact with us. We look forward to talking to you.

Telephone: + 49 (0) 69 / 97 84 14 - 400
Telefax: + 49 (0) 69 / 97 84 14 - 401
E-mail: kundendienst@sinn.de

Should you send your watch in to customer service, we need to ensure the process goes smoothly, the following information:

- Name, address, e-mail address and fax number (where applicable) and a daytime telephone number.
- A detailed description of the problem: Exact nature of the defect? At what time does the problem arise? How often does the problem occur?
- Wherever possible, please state the date of purchase and your customer no. (indicated on the invoice) or enclose a copy of the invoice.

For information about the process, please refer to the section entitled "Repairs" in our "General Terms and Conditions of Business". You'll find our "General Terms and Conditions of Business" on our website www.sinn.de/en. We will be pleased to send you a copy of the "General Terms and Conditions," or you can contact our customer service department directly. For insurance reasons, we strongly recommend sending us any return goods by registered parcel post. As an alternative for customers in Germany, there is also the option of a collection service covered by transport insurance, on request. To ensure your request is dealt with smoothly, please call our customer service department! We regret that we are unable to accept deliveries with unpaid postage!

Please send your watch to the following address:

Sinn Spezialuhren GmbH Kundendienst Im Füldchen 5–7 60489 Frankfurt am Main Germany

You can also find comprehensive information about SINN, our watches and technologies at www.sinn.de/en.

