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# Product Manual





English

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Product Manual.



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#### Introduction.

9



We wish you quality time with your Oris.

Ulrich W. Herzog Executive Chairman

We congratulate you on the

but mechanics.

and aviation.

purchase of your new Oris watch

and extend a warm welcome to

the ranks of mechanical watch

devotees. You see, Oris' world is all about mechanics, and nothing

Your Oris watch sets itself firmly apart from mass market and fashion products, and instead embodies the true values of the Swiss art of watchmaking, with its fascinating micro-mechanical internal components and its stylishly seamless exterior. Oris

watches not only inherit a long

tradition dating back to 1904, but also all incorporate a refined 'High-Mech' system, imbued with the craftsmanship of our watchmakers and co-developed by well-known professionals from the worlds of Formula One. diving

Another very important feature in our modern times: Oris watches do not require any batteries because you supply your Oris watch with power via your own movements, or by winding it manually.

#### Explanation of instruction arrows:

Operating instructions

• = Useful information

#### Crown positions.

The positions described below are valid in most cases. Any deviations will be mentioned for the relevant type of movement.

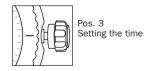


Pos. 0 Crown locked, for screw-down crowns and for crowns with Oris Quick Lock system









•None of the following operations must be performed in water.

#### Standard crown.

Oris standard crowns are highprecision components. They are equipped with seals to prevent any water penetration. About half of Oris watches are equipped with this kind of standard crown.

The crown is in position 1 and can be operated immediately, as described in the following chapters.

0

Screw-down crown.

- A few Oris watches, especially the divers' watches, are equipped with a screw-down crown. Before you can operate a crown of this kind, it must first be unscrewed.
- Turn the crown anti-clockwise until it is released from its thread.
   Now the crown is in position 1 and
- can be operated as described in the following chapters.
- After the setting, the crown must be tightened back down by pressing it against the case while turning it clockwise.
- Check from time to time to ensure that the crown is properly screwed down.

•The watch is only water-resistant to its specified depth if the crown has been screwed down.

# Crown with Oris Quick Lock system (QLC).

• The Quick Lock Crown (QLC) developed by Oris is simpler to release than the screw-down crown because it has a bayonet fastening instead of a thread.

- Press the crown gently against the case and turn it slightly anti-clock-wise until the crown releases.
   Now the crown is in position 1 and can be operated as described in the following chapters.
- After the setting, the crown must be relocked by pressing it against the case and, at the same time while turning it slightly clockwise until it locks in position.

•The watch is only water-resistant to its specified depth if the crown has been locked.



Some Oris models, especially diving watches, have screw-down pushers as well as screw-down crowns.

- Turn the crown which encloses the pusher anti-clockwise until you encounter resistance.
- Now the pusher can be operated, as described in the following chapters.
- After the setting, press the crown gently against the case and turn

- it clockwise until you encounter resistance.
- The watch is only water-resistant to its specified depth if the pusher has been screwed down.
   Ppushers must never be operated underwater.

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#### Automatic winding movement.

•An Oris watch that has started and is worn daily for about 12 hours, does not need manual winding. Instead, arm movements cause the red rotor to rotate, thereby tightening the barrel spring. Even if you take off your watch at night, it continues to run. It only stops working if it is not worn for approx. 40 hours.

If an automatic winding watch stops, it must be restarted as follows:

- Release the screw-down crown or QLC crown (if fitted) as per the instructions in chapter 1.
- With the crown in position 1, rotate it clockwise through 12 turns (it can also be turned forwards and backwards).
- Carry out the settings, as described below.
- Lock the screw-down crown or QLC crown (if fitted) as per the instructions in chapter 1.
- On the crystal case-back of certain Oris automatic winding watches,

you can see how the red rotor, the hallmark of Oris watches, rotates and winds the movement.

### Manual winding movement.

- On mechanical Oris watches with manual winding, the barrel spring is wound by hand. The power reserve of a fully wound watch is approximately 42 hours.
- Release the screw-down crown or QLC crown (if fitted) as per the instructions in chapter 1.
- Turn the crown clockwise in position 1. It can also be turned forwards and backwards.
- Stop as soon as you encounter resistance. The barrel spring is now fully wound.
- OIf more force is applied after the spring is fully wound, there is a risk of the end of the spring breaking. In such cases, the barrel needs to be replaced at the watch owner's expense.
- Wind the watch once a day.
- Lock the screw-down crown or QLC crown (if fitted) as per the instructions in chapter 1.

#### Date, day of the week and time.

●This instruction applies to most movements produced for Oris watches, with date and day of the week window display or date and day of the week hand indicators. Exceptions such as the Oris Complication or Oris Chronograph (movement 676) are described in the sections for the corresponding types of movement.



- Pos. o Crown locked, for screw-down crowns and for crowns with Oris Quick Lock system
   Pos. 1 Winding position
   Pos. 2 Date and day of the week setting
   Pos. 3 Setting the time
- Release the screw-down crown or QLC crown (if fitted) as per the instructions in chapter 1.
- Pull out the crown to position 3.Turn the hands forward until the
- date changes, and 05:00 the next day is indicated.The rapid date and day correction
- between 21:00 and 03:00 because the mechanism is meshed for the change and damage may occur.

- Push the crown back into position 2.
   Depending on the movement type, turn the crown clockwise or anti-clockwise and then set the current date.
- If a day of the week display is provided, turn the crown anti-clockwise and set the day.
- Pull out the crown to position 3.
   Set the time completing another full turn of the dial for an afternoon time.
  - The watch is stopped in this position and can for example be restarted at a time signal, by pressing the crown into position 1.
- Press the crown into position 1.
   Lock the screw-down crown or QLC crown (if fitted) as per the instructions in chapter 1.

#### Setting the date.

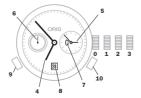
- After months with fewer than 31 days, the date must be set forward manually to the first day of the following month via rapid correction (crown in position 2).
- Release the screw-down crown or QLC crown (if fitted) as per the instructions in chapter 1.
- ▶ Pull out the crown to position 2.
- Depending on the movement type, turn the crown clockwise or anticlockwise and then set to the desired date.
- Press the crown into position 1.
   Lock the screw-down crown or QLC
- crown (if fitted) as per the instructions in chapter 1.

# Worldtimer.

 $( \mathbf{b} )$ 

●The Oris Worldtimer has two separate time zone displays: T1 local time and T2 home time. Both displays have their own hour and minute hands. The minute hands of T1 and T2 run simultaneously. The hour hand on T1 can be adjusted forward or backward an hour at a time or very rapidly by pressing the two pushers. In rapid adjustment, the date can be moved forward or backward between 23:00 and 03:00 (Oris patent filed). T2 also has a day/night indicator.

- Pos. 0 Crown locked with screw-down crown or crown with Oris Quick Lock system (QLC)
- Pos. 1 Winding position
- Pos. 2 Setting the date
- Pos. 3 Setting the time
  - 4 T1 (local time)
  - 5 T2 (home time)
  - 6 Small second
  - 7 Day/night indicator
  - s Date
- 9 pusher for T1
   10 + pusher for T1
- + pusher for 11



## Synchronising times, setting the time and date:

- Release the screw-down crown or QLC crown (if fitted) as per the
- instructions in chapter 1. Pull out the crown to position 3, turn it anti-clockwise and set T2 to 05:00. The day/night display appears dark.
- ▶ Using the + pusher, set T1 to 05:00 too, i.e. the date must change between 01:00 and 03:00.
- Press the crown into position 2, turn it anti-clockwise and set the date.
- Pull out the crown again to position 3 and set the current time, completing another full turn of the dial for an afternoon time.
- The watch is stopped in this position and can be restarted at any time, by pressing the crown into position 1.
- ▶ Press the crown into position 1.
- Lock the screw-down crown or QLC crown (if fitted) as per the instructions in chapter 1.
- OIt takes about 10 minutes until T1 and T2 start running simultaneously. The tolerance can be up to one minute.

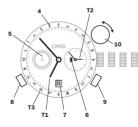
#### Setting T1 (local time):

- Press the + or pusher once for each hour's difference from T2
- (home time).
   The date can be corrected forwards or backwards (Oris patent filed) if setting the time with the + or -

# Worldtimer with 3<sup>rd</sup> time zone and compass.

pusher and passing midnight.

●As well as the functions described in the previous 'Oris Worldtimer' chapter, this watch has a separately adjustable inner rotating bezel for an additional time zone, and the cardinal points of a compass. This watch is ideal for people who need a constant display of 3 time zones, e.g. pilots, frequent flyers, international business people, etc.



- T1 Time at starting locationT2 Home time or GMT
- тз Time at destination location

- 4 Compass graduation
- 5 Small second
- 6 Day/night display
- 7 Date

 $(\mathbf{b})$ 

- s pusher T1
- 9 + pusher T1
- 10 Vertical crown for setting of T3 and compass
- On the figure above T1 indicates 06:53 or 18:53 T2 02:53 T3 09:53 or 21:53

## Synchronising T1 and T2, setting the time and date:

 Proceed as described in 'Worldtimer' chapter.

#### Setting T3:

- Determine T3 i.e. the time at destination and/or time difference from departure location.
- ▶ Pull the vertical crown (10) upwards.
- Turn the vertical crown (10) clockwise or anti-clockwise and set the corresponding + or – time difference, i.e. that between 12:00 in T3 (time at destination) and 12:00 in T1 (time at starting point).
- Press the vertical crown downwards to the neutral position.

#### Setting the compass:

- Remove watch from wrist.
- Pull the vertical crown upwards and set south on the compass rotating bezel on the bisector (i.e. mid-point) between the hour hand and 12 o'clock. (Between 18.00

and 06.00, take the bigger angle between the hour hand and 12 o'clock.)

- Press the vertical crown downwards to the neutral position.
- Align the hour hand with the sun and read off the cardinal points on the compass bezel.
- See figure in the chapter 'Watch as a Compass'.

## 2<sup>nd</sup> time zone on outer rotating bezel.

Turn the rotating bezel to the desired 2<sup>nd</sup> time zone



●In the above example, the 2<sup>nd</sup> time zone shows 08:53 or 20:53.

#### 2<sup>nd</sup> time zone indicator on inner rotating bezel with vertical crown.

- ▶ Pull the vertical crown (1) upwards.
- ► Turn the crown clockwise or anticlockwise and set the desired 2<sup>nd</sup> time (T2).
- Press the vertical crown downwards to the neutral position.



 Vertical crown
 T1 (local time)
 T2 on inner rotating bezel (e.g. home time)

O In the figure above, T1 indicates 06:53 or 18:53 and T2 to 03:53 or 15:53

### 2<sup>nd</sup> time zone with additional 24 hr hand.

- Release the screw-down crown or QLC crown (if fitted) as per the instructions in chapter 1.
- Pull out the crown to position 2, turn it anti-clockwise and set the desired time for T2 (e.g. home time).
- Press the crown into position 1.
   Lock the screw-down crown or QLC crown (if fitted) as per the instructions in chapter 1.



•In the above example, it is 11:53 in the 2<sup>nd</sup> time zone.

#### 2<sup>nd</sup> time zone with additional 24 hr hand and city markers on the rotating bezel.

- Release the screw-down crown or QLC crown (if fitted) as per the instructions in chapter 1.
- Pull out the crown to position 2, turn it clockwise and set the desired time for T2 (e.g. home time).
- Press the crown into position 1.
   Lock the screw-down crown or OLC
- Lock the screw-down crown or QLC crown (if fitted) as per the instructions in chapter 1.
- Turn the outer bezel with the city marker until the time in the desired city (home city) matches T2 (24 hour hand).
- Times in the cities listed on the rotating bezel can now be read off. This setting does not take into account daylight saving time.
- ➤ To read off the time in these cities on the rotating bezel again, assuming that T2 is showing 'home time', always align 'home city' on the rotating bezel with the T2 hand (updated).

#### Example:

Clocal time in London (GMT) is 13:20. The 24 hour hand points to 21:00, home time in Hong Kong. The rotating bezel was adjusted so that the 24 hour hand displays Hong Kong as the home city. The time in the cities listed on the rotating bezel can now be read off. New York 08:20, Cairo 15:20, Moscow 16:20, etc. This setting does not take into account davlight saving time.



#### Chronograph.

- •The Oris chronograph has a stop watch function as well as a time and date display. This is a very useful function for everyday use.
- Crown and pusher operation, see chapter: 'Starting the watch'
- Time and date setting, see chapter: 'Operating Oris watches' (exception: date setting on movement 676 – see below).

### Stop timer and reset all chronograph indicators to their starting positions:

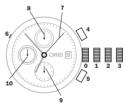
- Press pusher 4 the chronograph hand starts running
- Press pusher 4 again this stops the chronograph hand and freezes timing.
- Press pusher 4 again the chronograph hand restarts running from the previous stop point.
- ▶ Press pusher 4 once again this

stops the chronograph hand once again and freezes timing. ► Press pusher 5 – the stopped

chronograph hand and the minute and hour counters are reset to their starting positions.

#### **Reading chronograph timing:**

- •With the chronograph second hand (7), the elapsed time can be read on the dial scale, between 1/4 second and 60 seconds maximum.
- •With the chronograph minute hand (8), you can read the elapsed minutes, up to 30 minutes maximum
- •With the chronograph hour hand (9), you can read the elapsed halfhours and hours, up to 12 hours maximum.



- Pos. 0 Crown locked, for screw-down crown or QLC crown
- ${\tt Pos.\,1}$  Winding position
- Pos. 2 Date setting
- Pos. 3 Time setting
  - 4 Start and stop pusher
  - 5 Reset pusher
  - Vertical pusher for setting date on movement 676

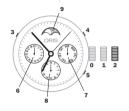
Press the pusher in using an appropriate tool or a wooden toothpick to set the date

- 7 Chronograph second hand
- 8 Chronograph minute hand
- 9 Chronograph hour hand
- Second hand for normal time display, running constantly
   On some models, the second hand is deliberately omitted. In this case, the chronograph second hand (7) can be left in motion permanently, for use as a second hand for normal time
- Complication.

display.

- Release the screw-down crown or QLC crown (if fitted) as per the instructions in chapter 1.
- ▶ Pull out the crown to position 2.
- ▶ Turn the hand forwards. The moon phase indicator moves its position 1/28<sup>th</sup> of a month right between 22:00 and 23:00.
- One day before the current moon position is reached, take account of the date change, then set the time to 05:00.
- Press pusher 3 with the special tool provided, or with a wooden toothpick, until the desired date is set.
- Press pusher 4 and set the day of the week.
- Set the current time with the crown – completing another full turn of the dial for an afternoon time.

- The watch is stopped in this position and can be restarted at any time, by pressing the crown into position 1.
- Press the crown into position 1.
   Lock the screw-down crown or QLC crown (if fitted) as per the instructions in chapter 1.



- Pos. 0 Crown locked, for screw-down crown or QLC crown
- ${\tt Pos.\,1}$  Winding position
- Pos. 2 Time and moon phase setting
  - 3 pusher for date setting
  - 4 pusher for day of the week setting
  - pusher for 2<sup>nd</sup> time zone indicator setting
  - 6 Date indicator
  - 7 Day of the week indicator
  - 8 2<sup>nd</sup> time zone indicator
  - 9 Moon phase indicator

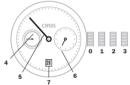
#### Setting the 2<sup>nd</sup> time zone

- •This setting can be made at any time.
- Press pusher 5 (2<sup>nd</sup> time zone) with the special tool provided, or with a wooden toothpick, and set the desired time.

### Regulator.

Originally, the regulator was an extremely accurate clock which was used to test and adjust (set) small clocks. To prevent the hands from overlapping, they were separated. On a regulator, only the minute hand turns in the centre, whereas the seconds and hour are indicated in small separate sub-dials.

 Crown operation, time and date setting as per instructions in chapter 1.



- Pos. 0 Crown locked, for screw-down crowns and for crowns with Oris Quick Lock system Pos. 1 Winding position
- Pos. 2 Date and day of the week setting
- Pos. 3 Time setting 4 Second hand
  - Second hand
    Minute hand
    Hour hand
  - 7 Date indicator

#### Pointer calendar.

●The launch of the first Oris movement with pointer calendar in 1938 was a milestone in company history. The Oris Pointer offers the advantage of indicating not only the time or day of the week spatially on the relevant scale on the dial. Since the introduction of this typical Oris movement, various models with this type of indicator have been made. Naturally, the movement has changed several times since its introduction to meet the latest technological requirements.

 Crown operation, time and date setting as per instructions in chapter 1.



#### Alarm with automatic winding.

●In 1988, the first Oris alarm watch with manual winding appeared on the market. The alarm watch launched in 2008 has a movement with automatic winding. It is cha-

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racterised by a special alarm chime created by a sound spring. This product is perpetuating a long tradition, and one which reached a high point with the Oris alarm clock with 8-day movement back in 1949.

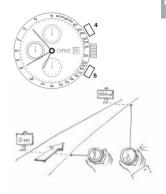
- Crown A: Movement winding, time and date setting as per instructions in chapter 1.
- Turn crown B clockwise to position 1 and, if necessary, tighten alarm movement (e.g. if used several times a day, or if the watch is being restarted) by turning the crown 12 times.
- OIn normal use of an automatic winding alarm, the movement and alarm springs are constantly wound.
- Pull out crown B to position 2, turn it anti-clockwise and set the desired alarm time.
- In this crown position, the alarm function is enabled, and the alarm will sound at the set time within the next 12 hours.
- Press crown B into position 1.
   OThe alarm function is disabled.



Crown A, Pos. 1 movement spring winding position Crown A, Pos. 2 date setting Crown B, Pos. 1 alarm spring winding position, Alarm not activated Crown B, Pos. 2 alarm time setting, alarm activated

#### Tachymeter scale – Measuring speeds.

- •The tachymeter scale on the ring or dial of the Oris chronograph is used to measure speed, e.g. of a car travelling a measured distance of 1 km (or 1 mile).
- If a rotating tachymeter ring is fitted, position the 60 of the tachymeter to 12 o'clock. Start the chronograph function by pressing pusher 4 as soon as the vehicle passes the start line.
- Press pusher 4 again as soon as the vehicle crosses the finish line.
- The chronograph hand will indicate the average speed in km (or miles) per hour on the tachymeter.
  In the following example, the vehicle required 40 seconds to cover the measured distance, which equates to an average speed of 90 km/h (or 90 mph).
  Average speeds of less than 60 km/h (60 mph) cannot be
- 60 km/h (60 mph) cannot be measured.
  Press pusher 5 to reset all the
- Press pusher 5 to reset all th counters.



#### Telemeter scale – Measuring distances.

- •The telemeter scale on the ring or dial of Oris chronographs is used to measure the distance between an immediately visible and subsequently audible event (thunder and lightning, burst and sound from fireworks, etc.). The graduation on this telemeter scale is based on the speed of sound, i.e. 343 m/s in air at 20 °C.
- ▶ With a rotating telemeter ring, position the zero to 12:00.



- Start the chronograph function using pusher 4 as soon as a visible event occurs.
- Press pusher 4 again as soon as you hear the sound.
   OIn the above example, the
- thunderstorm is still at a distance of 3 kilometres.

# Rotating bezel for diving watches with a 60 minute graduation.

- The rotating bezel on all Oris diving watches can only be adjusted in an anti-clockwise direction. This prevents the measured or set time from being extended if the bezel is turned accidentally. This ensures that the diver has enough time left to decompress properly.
- The rotating bezel on a diving watch can also be used as a timer or for any kind of time indication to the nearest minute or hour, e.g. parking, cooking, game time, etc.

### Rotating bezel for measuring time to the nearest minute:

- Position the marker on the rotating bezel opposite the current minute hand position, or to the desired minute hand end position.
- •The minutes elapsed, or the minutes past the preset end time can be read on the bezel.



In the above example, 33 minutes have elapsed since the start of measurement.

# Rotating bezel for measuring time to the nearest hour:

- Position the marker on the rotating bezel opposite the hour hand, or to the desired hour end position.
- The hours elapsed, or the hours past the preset end time can be read on the bezel.



•Watches with a helium valve are intended for divers who spend extended periods on board a diving bell, or in any other chamber with a helium-enriched atmosphere.

The inert gas helium has one of the smallest molecules, meaning that it can penetrate the seals on watches and enter the case. Once inside the case, this gas is unable to escape rapidly enough unless a special valve is fitted, i.e. the helium valve. Opening this valve prevents any excess pressure on the watch glass from inside after the ascent. The helium valve is identified on Oris diving watches by a coloured spot on the crown.

- Before a dive, turn the helium valve crown clockwise to its limit stop and close the valve.
- Before leaving the diving station, turn the crown on the helium valve anti-clockwise as far as it will go (to open).
- Even if the valve remains open, the watch would still be water-resistant for normal purposes. But for diving operations of any kind, the valve must be closed, as described above.

#### Watch as a compass.

- •Watches with an analogue hour and minute display can be used as compass, using the position of the sun as a guide. This depends on the sun's position being clearly visible, and on the watch showing the correct time.
- If the watch has a graduated bezel, this can be used to find the bisector (mid-point).
- Remove the watch from your wrist and turn it until the hour hand is pointing at the sun.
- Determine the bisector (mid-point) between the hour hand and 12 o'clock. (Between 18.00 and

06.00, take the bigger angle between the hour hand and 12 o'clock.) This equates to South. ► Once you have established where

 Once you have established where South lies, the other cardinal points can be extrapolated from that.



- If the watch has a rotating bezel with compass graduation, it is easier to identify all the cardinal points other than South. With a watch of this kind, proceed as follows:
- Remove the watch from your wrist and determine South using the compass bezel by calculating the bisector (mid-point) between the hour hand and 12 o'clock.
- Point hour hand at the sun and determine the cardinal points using the compass bezel.

OInstructions about the kinds of leather, rubber, metals used, etc. can found in the 'Technical Information and Summary Tables' chapter.

#### Watches with leather straps.

- Fasten the buckle around the wrist over a table, ensuring that the watch cannot fall to the ground if the process goes wrong.
- Straps with a folding clasp are easier to work with and offer greater security against theft. Also, if the process goes wrong the watch will not drop to the floor because it will be held by the folding clasp.
- Remove watch from wrist.
- Adjust the strap to your wrist size using the preformed holes.
- Once the strap is adjusted, press the buckle firmly into the correct hole to prevent the strap from detaching.
- Some older folding clasps are hard to adjust. Do not hesitate to contact your approved retailer if you have any questions.
- Straps with continuously adjustable folding clasp: this is a new folding clasp design, developed and patented by Oris and based on the principle of seat belts in aircraft. The strap length can be adjusted to any desired length:



Fig. 1

- Remove watch from wrist and place on a soft surface with its buckle open.
- Hold the buckle end of the strap and pull the watch end of strap upwards (Fig. 1).
- Shorten the strap by pulling the loose end, or tighten it by pulling the watch end.
- Press the clamp until a 'click' is heard.
- •The folding clasp cannot be closed if the clamp is not properly engaged.

#### Watches with rubber straps.

•All Oris rubber straps are equipped with folding clasps.

## Straps which need to be cut to length:

- Consult an approved retailer to have the strap adjusted to suit your wrist size.
- If the strap buckle has fine adjustment, you can adjust the length yourself to a certain degree

(see 'Fine adjustment of folding clasps').

# Straps with folding clasp and one-sided holes in the strap:

- ▶ Remove watch from wrist.
- Adjust strap to your wrist size using the holes.
- Once the strap is adjusted, press the buckle firmly into the correct hole to prevent the strap from detaching.
- •On rubber straps with fold-out extension for diving suits, fine adjustment is not possible.

#### Watches with metal bracelets.

- Metal bracelets must be adjusted to suit your wrist by an approved retailer. This involves removing or adding link elements.
- If the bracelet buckle has fine adjustment, you can adjust the length yourself to a certain degree (see 'Fine adjustment of folding clasps').

#### Fine adjustment of folding clasps.

Provided that the buckle on the metal bracelet or rubber strap has a fine adjustment feature, the length can be adjusted to a limited extent as follows:

- On rubber straps with fold-out extension for diving suits, fine adjustment is not possible.
- Wear protective goggles to prevent injury from the tool.
- Open the folding clasp and place the watch and strap (crown facing upwards) on a piece of cardboard.
- Using a wooden toothpick, insert the fine adjustment metal pin into the strap buckle (Fig. 1).
- Carefully unfasten the strap and remove it.
- Place the lower part of the pin in the new position then press the strap outer obliquely against the new, upper pin position (Fig. 2).
- Press the pin down carefully using a nail file or screwdriver (Fig. 3) and slide it under the buckle opening until the pin clicks in.
- Check that the strap again holds firmly.









Fig. 3

- Mechanical watches measure time accurately and reliably. However, in circumstances where optimum accuracy timekeeping is required at all times, the mechanical watch is not the best instrument for the job. Time is important to the wearer of a mechanical watch, but accuracy to the nearest second is not something the wearer is likely to lose sleep about.
- The accuracy rate of a mechanical watch depends on the type of movement used, on the wearer's personal habits and on fluctuations in the ambient temperature.
- Oris watches are checked and set in the workshop, so daily rate variation is within a tolerance range of − 5 to + 20 seconds per day. Chronometers are set and tested to tighter tolerance ranges than this (see Chapter on 'Oris Chronometers').
- Olf a watch is not keeping to time within these limits, it can be set by an approved retailer or at the Oris service centre in your country. During the guarantee period, this service is free of charge.

### Chronometer.

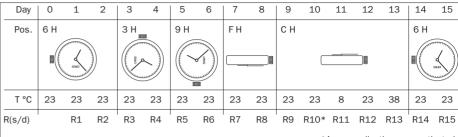
OA Swiss watch can only be designated as a chronometer if its Swiss watch movement has satisfied a test as per the standards NIHS 95-11/ISO 3159 and conducted by the independent Swiss Observatory's Contrôle Officiel Suisse des Chronomètres (COSC).

COSC

• The chronometer test at the COSC takes 15 days. All tests are conducted at an ambient humidity of 24 %. Every 24 hours, the variance is measured, then the movements wound and reset. On the tenth day of this test, any complications on the watch, such as the chronograph, are switched on to determine the movement's operating rate accuracy. The movement rate is determined in five different positions and at three different temperatures, as shown opposite.

• If the movement passes the test, it receives a certificate confirming its rate accuracy and its status as a chronometer. Every movement is identified with an engraved number and a COSC certification number.





\*Any complications are activated.

Test criteria All figures in seconds (s) per day (d)	Abbrev.	Ø (mov.) > 20 mm	Ø (mov.) < 20 mm
Average daily rate (in 5 different positions)	Mmoy	-4 to +6	-5 to +8
Average rate variation (average daily rate difference in 5 positions)	Vmoy	max. 2	max. 3.4
Largest rate variation (difference between two rates in the same position)	Vmax	max. 5	max. 7
Flat-suspended difference (between horizontal and vertical position)	D	-6/+8	-8/+10
Largest difference (between average daily rate and rate in one of the 5 positions)	Р	max. 10	max. 15
Thermal difference (variation per °C of temperature difference)	С	±0.6	±0.7
Rate reproduction (difference between average variation on day 15 and average variation on the first two days of the test)	R	±5	±6

- Oris tests all its watches to ensure that they comply with the specified figure for waterresistance. All Oris watches are water-resistant to at least 3 bar or 30 metres. The actual figure on individual models is either shown on the case back and/or on the dial.
- Oris watches designated with less than 10 bar or 100 m (328 ft.) water-resistance must not be worn in the water (see graph below).
- Oris watches designated as 10 bar (100 m) or more can be worn in water.

- Over time, everyday wear and ageing of seals in particular adversely affect the water-resistance of a watch. Oris therefore recommends having the water-resistance of your watch tested once a year by an approved Oris retailer.
- Standard crowns must always be pressed into position 1 to ensure that they satisfy the specified water-resistance levels.
- Screw-down crowns, crowns with the Oris Quick Lock system (QLC) and screw-down pushers must always be locked in order to satisfy the specified water-resistance levels.
- Crowns and pushers must not be operated underwater.

#### Use and maintenance.

- Clean watches, metal bracelets and rubber straps regularly, and whenever they have been immersed in salt water, using a toothbrush and lukewarm soapy water, then dry with a soft cloth.
- Avoid getting the watch and strap into direct contact with solvents and cleaning agents, cosmetics, perfumes, etc. These products can damage the case, the strap and the seals.
- •Protect leather and fabric straps from grease, water and humidity and avoid excessive exposure to sunlight.

Bar (bar)	Feet (ft)	( Metres) (m)	Ĵ	<b>Î</b>	i.	<b></b>	**		~~~
3	98.5	(30)	1	-	-	-	-	-	
5	164	(50)	1	1	1	-	-	_	- 44
10	328	(100)	1	1	1	1	1	-	-
30	984	(300)	1	1	1	1	1	1	1
100	3281	(1000)	1	1	1	1	1	1	1
200	6562	(2000)	1	1	1	1	1	1	1

- Do not place the watch on equipment emitting strong magnetic fields (e.g. radio alarms, refrigerators, speakers, etc.)
- OIf possible, avoid exposing your watch to extreme temperatures, i.e. in excess of 60 °C and less than −5 °C. While the watch is being worn, body heat protects the watch from any such extreme fluctuations in temperature.
- •Protect your watch against sudden temperature shocks, e.g. do not take it into the sauna with you.
- Oris watches, like any other device with mechanical components, needs maintenance from time to time. However, the need for maintenance depends heavily on personal usage, the climate and how the watch is looked after. For normal, careful use, Oris recommends general maintenance every 4 – 5 years.

Hand in your watch to an official Oris retailer or send it to the Oris service centre in your country. You can find a directory listing all approved retailers and service centres in the attached document, or the latest updated version can be viewed at *www.oris.ch* 

OIf you have any further questions, do not hesitate to consult an approved Oris retailer or the site *www.oris.ch* 

#### Pictograms.

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COSC

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Luminous hands with

superluminova

3					
Automatic winding	dial	Dial with diamonds			
Oris own development (Automatic winding)	steel	Stainless steel			
Manual winding	(steel 18K	Stainless steel/18 carat gold			
manaan miname	(18K)	18 carat gold			
Worldtimer	Gold	5 microns			
Chronometer	$\bigcirc$	Diamond			
Alarm					
2 <sup>nd</sup> time zone indication	DLC	DLC coating (Diamond like carbon)			
Screw down safety crown	PVD	PVD coating (Physical Vapour Deposition)			
Screw down safety	_	Deposition)			
pusher	titan	Titanium			
'Quick Lock' Crown	CTR	Ceramic Top Ring			
Helium valve	Ø	Skeleton back with			
Sapphire crystal		mineral glass			
	۲	Flexible lugs			
Mineral glass		Distance between horns			
Plexi glass	~	Distance between norms			
Anti reflective secting (incide)		Distance outside horns			
Anti-reflective coating (inside)		Genuine calf skin			
Luminous dial	٢	Rubber			
Luminous indices	ullet	Rubbei			
and luminous hands		Fabric			
with superluminova		Genuine crocodile			

- anium
- ramic Top Ring
- eleton back with neral glass
- xible lugs
- tance between horns
- tance outside horns
- nuine calf skin
- ober
- oric

bar

- Genuine crocodile
- Water-resistant to XX bar

Metals for cases and straps.

OThe 316 L stainless steel used by Oris is robust, durable and complies with the stringent dermatological requirements for preventing nickel allergies. The nickel directive applicable in many countries states that objects which are in direct, prolonged contact with the skin are only allowed to release 0.5 µg of nickel per cm<sup>2</sup> skin/week. The nickel content in an alloy is not the crucial factor. The rate of nickel release on the skin is much more important. Altough 316 L stainless steel is not entirely nickelfree it does not release nickel.

OThe grade 2 titanium used by Oris is a pure grade of titanium that can also be used in implants and which possesses an excellent resistance/expansion ratio. Titanium is 45 % lighter than steel, and is also corrosion-resistant. skin-friendly and has a warm feel.

### PVD coatings.

Physical Vapour Deposition (PVD) is a process where an exceptionally pure, solid coating material is used to generate an ionized metal vapour which forms a coating mixture with inert gases. Through condensation, a thin layer is deposited onto the surface of the watch. The PVD process is carried

out under a forced vacuum in a coating chamber. This procedure is one of the most modern and ecologically sustainable coating technologies.

PVD coatings are highly adhesive. hard and abrasion-resistant. They are extremely smooth and particularly suited to coating watch parts. These coatings can be single-laver, multi-laver or can be applied in graduated lavers. The laver thickness ranges from 1 to 5 microns, although in some cases, just 0.5 microns or 15 microns and more can be applied. Depending on the initial material and the inert gas employed, a wide range of PVD coatings can be applied. Essentially, these fall into four main groups: nitrides. carbides, oxides and carbons (Diamond like carbon).

#### Diamond Like Carbon (DLC) DLC Coating.

•As mentioned above, the DLC coating process is a PVD coating process using diamond like carbons. This durable and friction-reducing coating with an anthracite-coloured appearance essentially comprises diamonds measuring just a few nanometres across, coated in graphite. This structure is commonly referred to as Diamond-Like Carbon (DLC). Thanks to its diamond-like layered structure, DLC layers possess exceptionally

hard surface properties. They are substantially harder and more wear-resistant than ultra-hardened grades of steel, and are exceptionally corrosion-resistant, as well as being skin-friendly.

#### Sapphire crystal.

- Most Oris watches are now equipped with sapphire crystal on the dial face. This fact is noted on the case back.
- With a Moh hardness of 9. sapphire crystal is the hardest of all grades of crystal. It comprises a synthetic sapphire and is exceptionally scratch-resistant. Only diamond, with a Moh hardness of 10. is harder than this. In addition a sapphire crystal is much more impact-resistant than mineral glass.
- To improve dial readability, the internal faces of most Oris sapphire crystal have anti-reflective coating.
- To obtain even clearer dial readability, a few Oris models have sapphire crystal which has anti-reflective coating on both sides. This outer layer can become scratched in the course of wearing the watch. This constitutes normal wear and tear is not covered by the guarantee.

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### Mineral glass.

OThe mineral glass provides unblemished, clear readability, but is not as scratch-resistant. It is therefore only used by Oris for case backs.

### Plexi glass.

- OPlexi glass or acrylic glass is a tried and tested material. It delivers clear readability, it is highly impact-resistant and feels warm to the touch. It is very prone to scratching, especially in comparison with sapphire crystal.
- OScratched Plexi glass can be repolished on a polishing machine.
- Oris uses Plexi glass primarily on its traditional Oris Big Crown models as this was used for the original models.

#### Luminescent dials and hands.

On most Oris watches, the hands and hour indices on the dials Super-LumiNova luminescent colour is applied. This luminescent paint is charged by sunlight, or even by artificial light, and is absolutely free of any radioactive additives. The phosphorescent pigments retain their properties

and can therefore be recharged as often as necessary.

- OThis phosphorescent property is at its most powerful during the early stages of darkness, and diminishes fairly rapidly during the first 60 minutes. After this initial period, the loss of light intensity is much lower, and it is possible to read the time clearly even after 5 – 6 hours of darkness.
- ► To achieve the highest possible level of phosphorescence, the watch must not be continuously obscured from sunlight or artificial light (e.g. by being covered by a shirt sleeve).

Metal bracelets. leather and rubber straps.

•All genuine Oris straps bear the Oris inscription on the reverse of the straps and on the buckle.

Metal bracelets are made of 316 stainless steel or from Grade 2 titanium. (See 'Metals used for cases and straps').

Oris sources all of its genuine crocodile, alligator, ostrich, ray and lizard leather from animal species not subject to protected status. This is backed up by CITES certification (Convention on International Trade in Endangered Species of Wild Fauna or Flora).

Oris rubber straps are robust. durable and water resistant. The rubber mixture used is non-toxic and does not contain any potential allergens.



New moon

2018

 $O_{2/31}$ 

2019

• 6

2017

O 12

Lunar calendar.

January

• 8 • 1/30  $\bigcirc 6$ • 20 O 23 O 16 O 16  $O_{5}$ • 8 • 30 • 19  $\bigcirc 23$  $O_{14}$  $\mathbf{O}4$ • 6 • 29 O 22 • 18 O 13 0.3 • 5 • 28 • 17 O 21 O 12 O 1/31 • 4 • 27 • 16  $O_{19}$  $O_{10}$ • 15 • 3 • 25 0.29 O 18 • 14 • 2 0.9• 25 0.28 O 17 0.8 • 13 • 1 • 23 0 27 O 15 • 4 O 8 O 3 • 7 O 12 • 14 • 12 • 1/30 December • 18 O 22 • 26 O 30 O 19 • 23 0.27 O 15

2021

• 13

2020

 $O_{10}$ 

2022

• 2

• 1

O 16

• 2

O 18

O 17

2023

0.6

0.5

 $\mathbf{O}$  7

• 21

• 20

• 21

O Full moon

29

2024

• 11

O 25

• 9

 $\bigcirc 24$ 

• 10

 $\bigcirc 25$ 

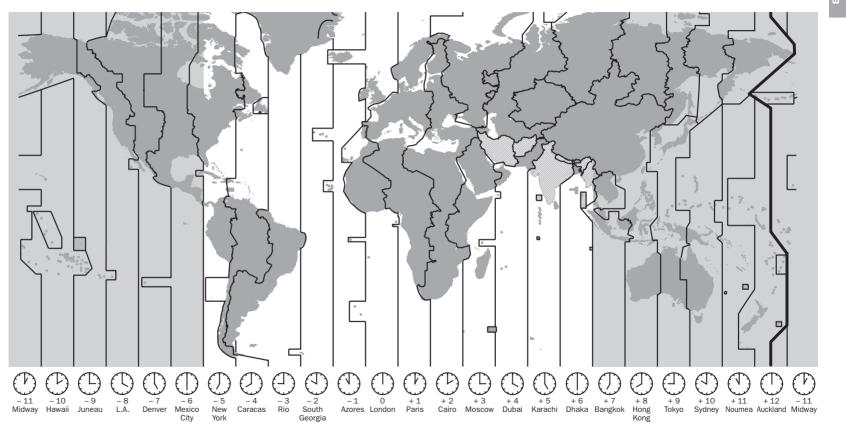
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#### Time zones.

OThe times in the various time zones are based on UTC (Universal Coordinated Time). UTC has taken over the function formerly performed by Greenwich Mean Time (GMT). UTC and GMT are both based on longitude zero which runs through Greenwich near London. In most cases, the times in other zones are calculated by adding or subtracting whole hours, depending on their respective distances from the zero meridian. In a few countries, e.g. Iran, Afghanistan, India and certain regions of Australia, there are also time differences from UTC of 31/2, 41/2, 51/2 or 91/2 hours.

#### Movements.

•Detailed specifications can be viewed at *www.oris.ch*.



#### Guarantee.

Oris SA provides a guarantee for the first twenty four (24) months following the date of purchase on the attached and numbered 'Guarantee Card', in accordance with the following terms and conditions:

This guarantee covers material and manufacturing defects, as well as flaws existing when this Oris watch was delivered to the owner. This guarantee is only applicable if the guarantee card has been filled in completely and correctly, and stamped by an official Oris retailer, and if the serial number on the guarantee card matches the number on the watch.

During this guarantee period, and on presentation of the valid guarantee card, the owner of the watch has the right to a repair free of charge. If Oris deems the repair to be unsuitable, the watch shall be replaced with an identical or similar Oris watch within the aforementioned guarantee period.

#### This guarantee excludes:

Normal wear and tear resulting from wearing the watch and ageing, e.g. scratched glass, discolouration and/or material alteration with leather, fabrics, rubber etc.

- •Damage resulting from failure to observe the instructions for use issued by Oris.
- Damage such as knock, dents, crashing, broken crystal etc. resulting from improper, abnormal or careless handling, neglect, accident, collision impact, etc.
   Damage resulting from improper work performed by service centres not authorised by Oris.
   Watches modified without Oris supervision.
- Additional form of guarantee granted by a direct outlet e.g. retailer etc.
- Indirect damage and/or secondary damage, of any kind e.g. due to watch stoppage or inaccuracy. etc.

This guarantee does not affect your statutory rights.

The guarantee services described here and the recommended maintenance work shall be performed by an authorised Oris retailer and/or by the national representatives of Oris. A list is attached, accurate at date of issue. The current version of the list is published at *www.oris.ch*.

### Guarantee supplement for watches bought in the USA.

All applicable implied warranties. incl, the implied guarantee of merchantability and of fitness for a particular purpose given to you by law are hereby limited to the duration of this guarantee. Some states in the USA do not allow time limitations of warranties. or exclusions or limitations of incidental or consequential damages, so exclusions or limitations mentioned may not apply to the owner. This guarantee gives the owner specific legal rights and he may also have other rights which may vary from state to state.

Oris' obligation is strictly limited to repair or replacement as stated herein. Your Oris dealer carries sole responsibility for any other guarantees.

#### Proof of ownership.

•This list is supplied for information only and does not form part of the guarantee terms and conditions.

#### First owner

Date

Name und address

#### Comments

#### Second owner

Date

Name und address

Comments

#### Third owner

Date

Name und address

#### Comments

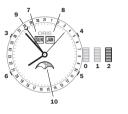
Product Manual Supplement.

Movement 915.



#### Complication (movement 915).

- The quick date and day adjustment must not be used between
   3 p.m. and 1 a.m., because the wheels for the change are active during this time and may be damaged.
- Where fitted, open the screw-down crown or QLC crown in accordance with the instructions in Chapter 1.
- ▶ Pull out the crown to position 2.
- Turn the hand forwards past 12 o'clock until the date changes. Turn the hand further until quarter past three.
- Press pusher 3 with the special tool provided, or with a wooden toothpick, until the desired day of the week is set.
- ▶ Press pusher 4 and set the month.
- ▶ Press pusher 5 and set the date.
- Press pusher 6 and set the moon display.
- Since the moon moves a relatively small distance within a 24 hour period, it is best to set the moon setting when there is a new moon or a full moon.
- ► Use the crown to set the current time - if it is in the afternoon, turn it a further 12 hours.
- The watch remains stopped when it is in this crown position and it can, for example, be started on a time signal or the crown can be pushed to position 1.
- Push the crown to position 1.
- Where fitted, close the screw-down crown or QLC crown in accordance with the instructions in Chapter 1.



- Pos. 0 Crown is closed if it is a screw-down crown or a QLC crown
- Pos. 1 Winding position
- Pos. 2 Time and moon phase setting
  - 3 Pusher for day of the week setting
  - 4 Pusher for month setting
  - 5 Pusher for date setting
  - 6 Pusher for the moon phase indicator
  - 7 Day of the week indicator
  - 8 Month indicator
  - 9 Date indicator
- 10 Moon phase indicator

Product Manual Supplement.

Oris Aquis Depth Gauge.



#### Guidelines

Each Oris Aquis Depth Gauge has been tested and found to comply with the Oris testing standards. It is possible that due to physical damage, inadequate handling or uncontrollable influence, the depth indication may not function properly. These guidelines will help to make the Oris Aguis Depth Gauge the best possible dive companion.

#### Accuracy of the Depth Gauge

The following parameters interact with the physical functionality of the Oris Aguis Depth Gauge and may slightly influence the accuracy of depth indication:

- Change of ambient air pressure due to different temperature. weather conditions and height above sea level
- ► Temperature difference of ambient air/water. particularly the difference in temperature between the watch and the water ► Salinity of the water

#### Safety Precautions Prior to Dive

- Check there is no water residue (dark grev colour spots) in the gauging channel. If there is, clean the channel as explained under 'How to Use the Cleaning Kit' Ascertain that the Oris Aguis Depth Gauge has ambient temperature.
- i.e. that it has not been exposed to extreme sunlight or other heat or cold before the dive
- ▶ Use the Oris Aguis Depth Gauge

only as a supplemental mechanical depth gauge, in addition to the usual diving instruments

Oris declines any responsibility if these instructions are not followed. The international guaran- 4. If necessary, repeat steps 2 and 3 tee applies as stated in the Oris Product Manual supplied with each Oris watch and available on www.oris.ch

#### **Cleaning Kit Components**

The cleaning kit for the Oris Aquis Depth Gauge contains the following parts:

- ▶ 1 x syringe 5 ml (1)
- ▶ 5 x cannula ②
- ▶ 5 x flexible tube ③ (mounted to cannula)



#### How to Use the Cleaning Kit The kit is designed to clean the

gauging channel and to remove residual water. Proceed as follows:

1. Feed the flexible tube transversely towards the channel into the opening of the sapphire crystal and push the tube until it reaches the end of the channel. (Fig. A) 2. Fill the syringe with water

Note: Do not use any aggressive

cleaning agents or solvents. as this may damage the gasket of the sapphire crystal.

- 3. Plug the syringe on the cannula and inject the water to rinse the channel. (Fig. B)
- 5. Withdraw the tube with the mounted syringe slowly out of the channel and, at the same time. pull the piston of the syringe in order to remove the water from the channel
- 6. To remove residual water from the channel apply step 1 & 5 only







(Fig. B)

PRODUCT MANUAL SUPPLEMENT

ORIS BIG CROWN PROPILOT ALTIMETER



#### GUIDELINES

Each Oris Big Crown ProPilot Altimeter has been tested and found to comply with the Oris testing standards. It is possible that due to physical damage, inadequate handling or uncontrollable influence, the altitude and air pressure indication may not function properly. These guidelines will help to make the Oris Big Crown ProPilot Altimeter the best possible companion.

#### Accuracy of the Altimeter

The following parameters interact with the functional principle and the barometric functionality of the Oris Big Crown ProPilot Altimeter and may slightly influence the accuracy of the altitude indication: b Change of atmospheric pressure

- due to different temperatures
- Change of atmospheric pressure due to different temperature gradients at different locations of reading the altitude
- Changing weather conditions, such as high pressure systems/ low pressure systems
- Weather dynamics in general

#### Safety Precautions Prior to Use

Ascertain that the Oris Big Crown ProPilot Altimeter has ambient temperature, i.e. that it has not been exposed to extreme sunlight or other heat or cold before the use.

- Make sure that the crown at 4 o'clock is unscrewed and in position 1 as described in the section «How to use the Oris Big Crown ProPilot Altimeter». The red ring on the crown shaft must be clearly visible. The altimeter does not work if the crown is screwed in to the case.
- Prevent the watch from getting in contact with water once the crown at 4 o'clock is unscrewed. The case is open and not water resistant when the crown at 4 o'clock is not tightly screwed into position 0. The special PTFE membrane only ensures a protection against water-vapour and humidity entering into the watch. The membrane does not ensure any water-resistance.
- Avoid dirt from coming into contact with the watch. Dirt might block the PTFE membrane and the case openings and as a consequence disable any free circulation of air into/out of the case. The display of the altitude will then be delayed or completely out of operation.
   Always tickle with your fingertips on the watch before reading the correct altitude. The smooth tickling allows the aneroid cell and the mechanism of the barometric altimeter to work smoothly.

- Always adjust the altimeter before using according to the instructions given in the section «How to use the Oris Big Crown ProPilot Altimeter/setting the altimeter».
- meter frequently, whenever having a reference point indicating its altitude or a given reference pressure in order to compensate for changing ambient and weather conditions.
- For safety reasons: Use the Oris Big Crown ProPilot Altimeter in flight operations or on expeditions only as a secondary instrument in addition to any other device indicating altitude, e.g. on-board instruments of a plane.

Note: Pressurized aircraft cabins simulate an environment of a lower altitude than the airplane is actually flying. Every barometric altimeter, be it electronic or mechanical as the Oris Big Crown ProPilot Altimeter, indicates the current air pressure in the cabin when flying with air carriers. The altimeter instruments in such airplanes have a pressure connection on the exterior of the plane in order to measure pressure and altitude.

Oris declines any responsibility if these instructions are not followed. The international guarantee applies as stated in the Oris Product Manual supplied with each Oris watch and available on www.oris.ch.

#### How to use the Oris Big Crown ProPilot Altimeter

The dial is split into three zones – in the centre is a traditional watch dial showing the time; around that is a gauge showing atmospheric air pressure, read using the red indicator; and an outer ring displays altitude up to 15'000 feet or 4'500 metres, shown by the yellow indicator.

1. NEUTRAL MODE

(Crown position 0): With both crowns screwed down securely, the Big Crown ProPilot Altimeter performs like a regular automatic watch. The central dial and hands tell the time and date (adjusted by the crown at 2 o'clock) and the watch is water-resistant to 100 metres/10 bar.

 ACTIVATING THE ALTIMETER (Crown position 1): Unscrew the crown at 4 o'clock into position 1 to activate the altimeter. A red ring appears, indicating that the altimeter is in use.



#### 3. SETTING THE ALTIMETER

(Crown position 2): Pull the crown out to position 2 and set the altimeter by rotating the crown. There are different modes of settings. such as rotating the crown until the reference air pressure ONH/ OFE/ONE (e.g. supplied by an airport control tower) aligns with the red triangle at 6 o'clock on the central dial, or rotating the crown to adjust the vellow indicator to vour known altitude. The watch now displays the present altitude. vellow indicator, and the actual atmospheric pressure, red indicator.



4. MEASURING ALTITUDE (Crown position 1): Once the altimeter has been set, push the crown into position 1. Changes in altitude are shown by the yellow indicator against the outer dial ring, on a scale from 0 – 15'000 feet, or from 0 – 4'500 metres.



 RETURNING TO NEUTRAL (Crown position 0): To deactivate the altimeter and return it to neutral, screw the crown back into position 0. This also re-seals the watch so that it is once again water-resistant to 100 metres/ 10 bar.

