PANFRAI SPECIAL **EDITIONS** ISTRUZIONI/INSTRUCTIONS

| Caro cliente, ci congratuliamo con Lei per l'acquisto dell'orologio Panerai Radiomir Tourbillon GMT. In questo libretto troverà le istruzioni per l'uso nonché tutti i dettagli circa la manutenzione.  Qualora avesse necessità di ulteriori informazioni, non esiti a contattarci al seguente numero telefonico: +39 02 363138 oppure alla seguente casella di posta elettronica: officinepanerai@panerai.com |
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Dear client,
We congratulate you on the purchase of the Panerai Radiomir Tourbillon GMT.
In this booklet you will find the instructions for use as well as all the information about servicing your watch. Should you have any need for further information, do not hesitate to contact us by telephone on the following number: +39 02 363138 or by e-mail at the following address: officinepanerai@panerai.com

Nome/name



The Panerai boutique in Florence in the early 1900s.

# OFFICINE PANERAL HISTORY

Since 1860, Guido Panerai & Figlio in Florence has been producing precision instruments with a high level of technical content, becoming a supplier to the Royal Italian Navy. These instruments have indissolubly associated the name Panerai with marine exploration, time measurement and the development of a particular standard of quality and safety, a fundamental requirement for supplying the armed forces.

Officine Panerai began to produce watches in March 1938 with the Radiomir, a model which played a part in the exploits of the commandos of the Italian Navy who wore it on their wrists. The Panerai Luminor has been recognised as a historically important watch by virtue of the robustness and originality of its design; the small number of examples produced, together with the first Radiomir watches, are some of the rarities most sought-after by collectors in the field.

Since 1993, Officine Panerai has offered updated Luminor and Radiomir models on the international market, thus becoming one of the undisputed leaders in the haute horlogerie sports sector.

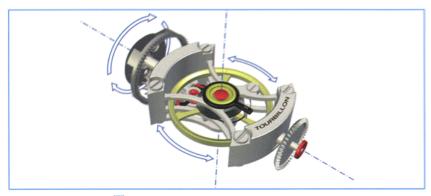
Making good use of the resources of the Panerai manufacture, highly reliable, technologically avant-garde watches are being created; these are watches made to the criteria of craftsmanship inherited from the traditions of the past, tested to resist extremely strong adverse influences.

Panerai watches are distributed through a highly selective international network of watch specialists as well as through the Panerai boutiques. The addresses are available on our website www.panerai.com.

# THE PANERAI RADIOMIR TOURBILLON GMT WATCH

The Panerai Radiomir Tourbillon GMT watch is equipped with the Panerai P.2005 manufacture calibre. This movement has a tourbillon escapement, the greatest technical expression of mechanical horology: a complication notable for the difficulty of its construction.

The special feature of the regulating organ developed by Panerai lies in the fact that the Tourbillon cage rotates on an axis at right angles to the axis of the balance wheel and that it makes two rotations per minute: this rotation, ensures great accuracy, providing the best compensation for the irregular rate caused by the effect of the force of gravity. The fascinating motion of the tourbillon (F) can be admired from the back of the watch, while on the dial side there is a little circular indicator (C), within the seconds counter at 9 o'clock, which travels twice as quickly as the seconds hand because it moves at the speed of the tourbillon cage.



## TOURBILLON MOTION (F)

#### THE HISTORY OF TOURBILLON

The Tourbillon is undoubtedly one of the most fascinating inventions in mechanics applied to watchmaking. Its birth is to be attributed to Abraham-Louis Breguet, who designed it in 1795 and patented it in 1801.

This device was invented with the purpose of eliminating errors in rate (that is, faster or slower deviations in the indication of time) caused by changes in the effect of gravity on the balance, imperfections of workmanship, thickening of lubricating oil and the consequent varying friction in the different positions of the watch. To make it, Breguet constructed a cage containing the balance. escapement and relative pivots which itself rotates continuously. In this way any variation in rate which may occur when the balance is located in a particular position will be cancelled out when the balance is in the opposite position. For over two centuries the tourbillon has been synonymous with extreme constructional difficulty, demanding the greatest precision in manufacture, and for only a few years has it been used in wristwatches which are inevitably of the highest quality. The tourbillon escapement has fascinated generations of enthusiasts and it has always been recognised as a substantial technical challenge. Officine Panerai has taken up this challenge and it has even managed to make innovations in a horological speciality which has been substantially unchanged since it was first invented.

#### THE CASE

The case of the Panerai Radiomir Tourbillon GMT has a diameter of 48 mm. In the construction of the case, Panerai has made use of techniques involving many complex working operations, which ensure an exceptional aesthetic finish and the best resistance in terms of absorbing shocks. The screw-down crown is conical in shape and personalised Panerai. The crystal is of synthetic sapphire, obtained from corundum, a very hard material (second only to diamond), free of impurities, transparent, resistant to abrasion, and with anti-reflective treatment.

On the back of the case are engraved the identification number of the case, the individual sequential number and the number of the edition. The screw-in back has a sapphire crystal window, enabling the mechanism to be admired as well as the haute horlogerie finish of the bridges and plate. On it are engraved the material and the maximum depth of use. The water-resistance of your watch is guaranteed to a pressure of 10 bar which correspond to the hydrostatic pressure exerted by a column of water on 1 square centimetre at a depth of 100 metres under normal conditions. In these circumstances your watch is therefore water-resistant to a depth of 100 metres.

#### THE DIAL

The dial is the characteristic Panerai "sandwich" type consisting of two superimposed plates, the upper with perforated numerals and hour markers, while the lower one is covered with a layer of luminous material. The small seconds and tourbillon indicator are at 9 o'clock, the second time zone is indicated by the central hand and by the small 24-hour dial at 3 o'clock.

#### THE STRAP

The alligator strap is made from selected skins using the central part of the animal where the smoothest and most evenly shaped scales are found.

### THE MOVEMENT

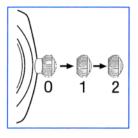
Hand-wound mechanical, Panerai calibre P.2005, completely created by Panerai, diameter 161/4 lignes, thickness 9.1 mm, 31 jewels, power reserve 6 days, 3 spring barrels in series, Glucydur® balance, 28,800 vibrations/hour (equivalent to 4 Hz). KIF Parechoc® anti-shock device, 239 components. Functions: hours, minutes, seconds, second time zone, 24h indicator, power reserve indicator visible on the back, tourbillon.

Officine Panerai is not the owner of the Trademarks Glucydur® and KIF Parechoc®.

#### P.2005 MOVEMENT



# INSTRUCTIONS FOR USE RADIOMIR TOURBILLON GMT







#### WINDING THE WATCH

- 1. Unscrew the winding crown (A) without pulling it out and turn it clockwise so that the power reserve indicator (G) on the back reaches the fully-wound position indicated by the number 6.
- 2. Screw the winding crown (A) down again.

#### SETTING THE TIME

- 1. Unscrew the winding crown (A) and pull it out to the second click (position 2).
- 2. Ensure that the hour hand of local time (B) is superimposed on the hand of the second time zone (D). If this is not the case, return the winding crown (A) to the first click (position 1). In this position the hour hand (B) can be moved in clicks of one hour. Make the hour hand (B) coincide with that of the second time zone (D). Then return it to position 2 to complete the operation of setting the time.
- 3. Set the correct time. Check the hand **(E)**, so as to set the time before or after midday. If, for example, it is 3 o'clock in the afternoon, check that the hand **(E)** is in the left part of the small dial.

4. Return the winding crown (A) to the initial position (0) and and screw it down again.

#### THE GMT FUNCTION

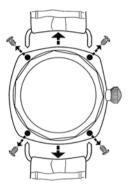
The GMT (Greenwich Mean Time) system, also known as universal time and adopted throughout the world, divides the terrestrial globe into 24 one-hour sections (time zones), each equivalent to 15° of longitude. The Greenwich meridian was taken as the fundamental reference meridian for the localisation of time zones by the international conferences held in Rome in 1883 and in Washington in 1884. Starting from meridian zero (or Greenwich meridian), 24 time zones have been defined, from 0 to +12 towards the east, and from 0 to -12 towards the west. The zero meridian has a very important function for sailors: the time at Greenwich is the reference for the calculations which enable the longitude at sea to be determined, and thus the establishment of the ship's exact position. The GMT function of the Panerai Radiomir Tourbillon GMT enables the local time and the time in another country (home time) to be read at the same time.

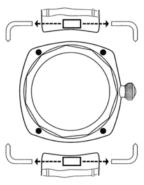
#### SETTING THE SECOND TIME ZONE

- 1. Unscrew the winding crown (A) and pull it out to the first click (position 1).
- 2. Set the required time. The hour hand **(B)** will move at intervals of one hour and will indicate the local time, that is, the time in the place where it is located at that moment.
- 3. The hand of the second time zone **(D)** will indicate the home time, that is, the time in the country of origin. This hand moves at the same rate as the local time hand **(B)**, carrying out a complete revolution in 12 hours. At the 3 o'clock position a further hand **(E)** displays the GMT time divided into 24 hours, to avoid possible confusion between morning and afternoon.

### REPLACING THE STRAP

The wire strap attachments are a feature of the Panerai Radiomir. An exclusive patented system allows the strap to be replaced easily: the screws at the corners of the case are unscrewed, releasing the attachments which can then be unthreaded from the old strap and reinserted in the new one.





#### MAINTENANCE ADVICE

Panerai watches are made to very high standards of quality. It is worth remembering that the mechanical parts run 24 hours a day when used, so the watch must undergo regular maintenance to ensure long life and good operation.

#### WATER-RESISTANCE

Have your watch checked periodically for water-resistance by an Authorized Panerai Service Centre and restore it every two years with regular servicing, or whenever the watch has to be opened.

The restoration of water-resistance necessarily involves replacing the seals so as to ensure the maximum water-resistance and security.

Where the watch is used in underwater sports activities, it is recommended that it should be checked every year before the underwater activities begin.

#### THE MOVEMENT

Have the movement of your watch checked periodically by an Authorized Panerai Service Centre so as to preserve its perfect operation.

If the watch has a tendency to gain or lose time to a significant degree, the movement may need to be overhauled.

The movements are designed to withstand temperature variations between -10°C and +60°C (14°F and 140°F). Outside this range of temperatures, operational variations exceeding those set out in the specifications of the movement may be noticed. In addition, there is a risk that the lubricants contained in the movement may deteriorate, resulting in damage to some of its parts.

### **CLEANING THE EXTERIOR**

To keep the exterior in perfect condition, we recommend washing your Panerai watch with soap and warm water, using a soft brush. After this operation, and also after bathing in the sea or a swimming pool, carefully rinse the watch with clean water. All Panerai watches can be polished with a soft, dry cloth.

#### THE STRAP

Panerai straps must be washed in warm water and left to dry. It is important not to dry them on a hot surface or exposed to direct sunlight, because the rapid evaporation of the water could damage their shape and quality. After each bathe in the sea or a swimming pool, carefully rinse the strap with clean water. To replace the strap, it is recommended that you should go to an Authorized Retailer or a Panerai Service Centre. In this way the inconvenience caused by incorrect replacement can be avoided.

Only an Authorized Retailer or Panerai Service Centre can guarantee the use of genuine Panerai straps, properly designed to fit the dimensions of the case and manufactured according to the quality standards of the brand.

#### **ATTENTION**

Do not use the watch at a depth greater than that indicated.

The presentation case of your Panerai Radiomir Tourbillon GMT contains:

- Instruction booklet
- Certificates booklet
- Numbered edition certificate

## PANERAI AFTER-SALES SERVICE

To guarantee the high quality of its watches over time, Panerai offers four different kinds of services:

- COMPLETE SERVICE
- RATE AND WATER-RESISTANCE CONTROLS
- POLISHING
- EXTERNAL INTERVENTION

#### COMPLETE SERVICE

- Diagnosis of the movement:
- Control of the aestheticism and cleanliness
- Control of the average rate
- Control of the functions
- Control of the dial and the hands
- Control of the case, the bracelet, the crystal and the non reflective coat
- Dismantling of the movement
- If necessary, exchange of the defective components of the movement
- · Ultrasonic cleaning of the components of the movement
- · Complete reassembly of the movement
- Reassembly of the dial and the hands, control of the holding and the parallelism
- Polishing and ultrasonic cleaning of the case and the bracelet metal (if available)
- Change of gaskets
- Control of the water-resistance at the watch maximal depth + 25%
- Demagnetization
- Setting up the bracelet
- · Aesthetic control of the product
- Control of the rate, power reserve and functions of the movement (minimum 3 days)

## RATE AND WATER-RESISTANCE CONTROLS

- Diagnosis of the movement:
- Control of the aestheticism and cleanliness
- Control of the average rate - Control of the functions
- Adjustment of the movement's running
- Control of the dial and the hands
- Control of the case, the bracelet, the crystal and the non reflective coat
- Ultrasonic cleaning of the case and the bracelet metal (if available) Change of gaskets
- Control of the water-resistance at the watch maximal depth + 25%
- Demagnetization
- Setting up the bracelet
- Aesthetic control of the product
- Control of the rate, power reserve and functions of the movement (minimum 3 days)

## POLISHING



It is executed together with the Rate and Water-resistance control

- Decasing/Encasing
- Case polishing (and bracelet if in metal)

### **EXTERNAL INTERVENTION**

- Bracelet or strap replacement
- Adjusting the length of the bracelet
- Intervention on the clasp
- Crown bridge (screw) intervention