

**CASIO®**

**CASIO®**

Moving Time Forward



## Moving Time Forward

CASIO's distinctive watch development philosophy calls for creating new user benefits by combining unique movements employing original electronic technologies with designs that realize the full potential of each movement.

As time unfolds, we will continue our pursuit of cutting-edge timepiece creation with a steadfast commitment to innovative, unique product development without limiting ourselves to fixed ideas of what a watch should be. We look forward to the endless challenges the future will bring.

## Smart Design

The exquisite designs that set CASIO watches apart reflect a far deeper meaning than the usual superficial styling. These are smart designs with an original beauty born from the pursuit of pure functionality.

CASIO's timepieces are designed to provide everything from unrivalled toughness to a variety of advanced functions requiring miniature sensors, motors, antennae, solar cells and other technologies. Their smart styling places a priority on users' needs for easy operation, clear indications, slimness, lightweight and other essential attributes. A closer look reveals that these masterpieces of human engineering contain more within their beautifully crafted exteriors than any other timepieces since time began.

## Intelligent Timing

CASIO watches employ intelligent, LSI (large-scale integration) based electronic technologies to achieve unsurpassed precision, and to provide a wide range of highly desirable features and functions no conventional mechanical watch can match.

The lineup includes watches equipped with MULTI-MISSION DRIVE, a technology made possible by a large-capacity LSI that uses up to five electronic motors to control various displays and gauges independently. With CASIO's robust Tough Solar technology, which provides ample solar power to operate timekeeping and various other functions year after year without a battery change. With our proprietary radio-control technologies such as Multi Band 6, which receives time calibration signals from any of the world's six transmission stations and uses them to reset the time display to official local time automatically several times a day. And with high-precision sensor technologies, which gather and display vital information about the surrounding environment.

## Unrivalled Brands

CASIO pursues a creative branding policy centered on the establishment of original brands offering new user benefits that have no rivals. Each brand represents a complex of targeted responses to the requirements of a specific user segment.

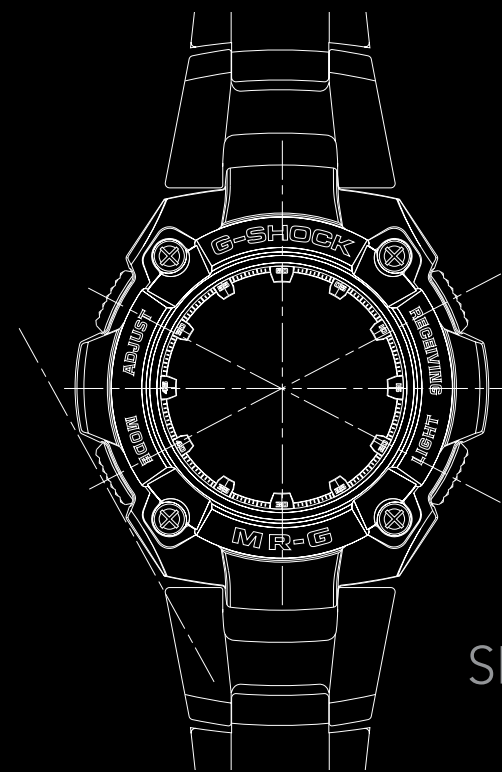
G-SHOCK, for example, born from our pursuit of unrivalled toughness, has evolved constantly throughout its 25-year history to meet user needs for increasing slimness, lighter weight and advanced sensor and other technologies. EDIFICE, designed for urban wear, now offers radio-controlled timekeeping and other attractive features in addition to elegant styling. OCEANUS packs an unrivalled array of functions for seafaring users into the most beautiful packages imaginable. And PROTREK, with its high-precision sensor and other unique technologies, serves outdoor adventurers as an intelligent guide and companion as well as a timepiece.

# Smart Design

CASIO's unique designs are born from the application of advanced technologies and the pursuit of superior operability and practicality. The intelligence of CASIO's unique technologies (Intelligent Timing) and the functional beauty they engender (Smart Design) embody the CASIO brand identity.

## A design realizing shock resistance

G-SHOCK's shock-resistant structure originated with an engineer's brief calling for creation of "an unbreakable watch." The structure is designed based on precise calculations of every detail to attain the ultimate level of strength. The rugged form and robust style were arrived at by trimming away all waste. Every aspect was created with an insistence on shock resistance.



SHOCK RESISTANCE



## A design stressing visibility

Colour variations and metal materials are employed in the design to distinguish the advanced, complex functions. An LED Illuminator is added, moreover, to ensure night-time visibility.

VISIBILITY



TECHNOLOGY  
&  
ELEGANCE



A fusion of cutting-edge technologies and high quality  
CASIO leads the way in technologies, such as our MULTI-MISSION DRIVE multiple chronograph operation system, our Multi Band radio-control system that can be used worldwide and our Tough Solar power system that operates various functions with energy from a limited light source. Even while installing these advanced technologies, moreover, we pursue unstinting efforts to ensure the beauty and sophisticated styling of our timepieces.

## Utilitarian designs achieved in pursuit of operability

Our utilitarian designs with their excellent operability realize the capabilities of CASIO's unique sensor technologies to the full, even in the most severe outdoor environments. We provide them with clear, high-visibility LCDs, large, easy-to-push dedicated buttons and other ergonomic features to make them highly practical tools. Every CASIO outdoor watch features an ingenious functional beauty that contributes to our products' reputation as genuine outdoor gear.

USABILITY



Every design has meaning.



# Intelligent Timing

CASIO deploys unique LSI and high-density mounting technologies to create unique watches featuring advanced technologies, such as the latest radio-control, solar system and sensor technologies, that no ordinary mechanical watch can offer.

## Multi Band 6, the world's first\* radio-control technology that can receive time calibration signals from all the world's six transmission stations

### Non-stop, Self-adjusting.

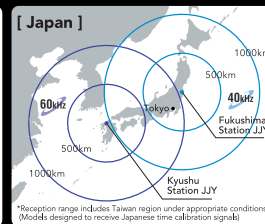
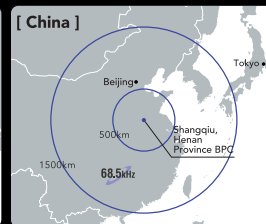
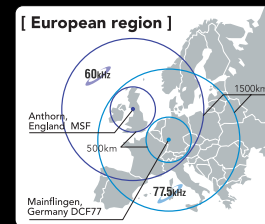


Receives time calibration signals and corrects the time automatically.

**Multi Band 6 radio-control technology featuring compatibility with all six transmission stations worldwide realized by applying advanced technologies.**

Multi Band 6 is the world's first\* radio-control system built to receive time calibration signals from six transmission stations: one each in Germany, the United Kingdom and North America and two in Japan, plus the new station in China.

<Compatible model: GW-9200>



\*The illustration gives a rough indication of the reception range. Signals may not be receivable even inside the range shown due to such conditions as the season, weather or time zone or interference by buildings.

\*Reception may become more difficult outside the inner circle as the signals weaken.

#### New heterodyne detection IC ( integrated circuit )

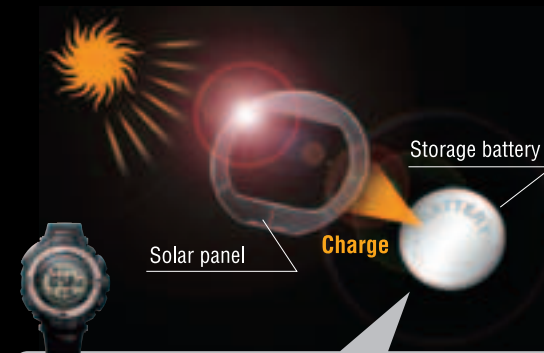
A heterodyne system was adopted for the detection IC. We also developed a new detection IC with an extended tuned circuit setting capable of receiving a wider range of frequencies than our Multi Band 5 models, which receive time calibration signals from five stations, to permit reception of radio waves from six stations, including the station in China.

\*As of March 2008. Source: CASIO investigation.



A powerful solar battery keeps your watch running with no battery change.

A solar panel converts even weak illumination from fluorescent lighting into electric power. A rechargeable battery with a large power storage capacity supports stable operation of various functions with high electricity consumption. You never have to worry about the battery running down because it's a solar battery.



This combination of a solar panel with a large-capacity rechargeable battery enables a variety of energy-hungry functions to operate smoothly.

**Watch Alarm Backlight Sensor**

## Relentless pursuit of basic technologies contributing to the ongoing evolution of CASIO's advanced technologies



#### ■ Reduced power-consumption technology

A unique, large-capacity LSI with reduced power consumption has been developed through the application of SOI <silicon on insulator> technology. The resulting reduction in power consumption throughout ensures stable operation of all the various functions, including multiple-frequency radio-wave reception and the EL backlight, with solar power alone.



#### ■ Highly sensitive miniature amorphous antenna

The tiny reception antenna is made of an amorphous material that resists interference and permits highly sensitive, stable reception. We have optimised its reception characteristics to permit efficient reception of a wide range of frequencies.



#### ■ Small reception IC

Reception is controlled by a small reception IC that is compatible with the pulse widths of the three time calibration signal frequencies transmitted by five stations. The IC is designed to eliminate all signals other than those of the specified frequencies (noise) while maintaining its high receptivity characteristics.



#### ■ High-density mounting technology

The larger number of electronic parts required for multi-band reception are arranged in the limited available space by the application of CASIO's unique high-density mounting technology. Parts are positioned according to numerical values worked out by precision calculations to minimise noise emissions by the parts that can interfere with radio-wave reception.



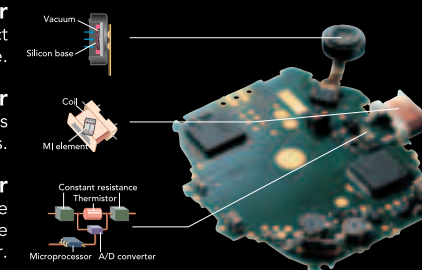
#### Triple Sensor for measuring directions, atmospheric pressure/temperature and altitude

Despite their small size and lightweight, these sensors employ highly advanced sensor technologies. CASIO's unique power-saving, large-capacity LSI and high-density mounting technologies have combined, moreover, to make Triple Sensor installation possible.

**Pressure sensor**  
Employs the piezoresistive effect to measure atmospheric pressure.

**Direction sensor**  
Detects the earth's magnetism and employs it to determine directions.

**Temperature sensor**  
Uses a semiconductor that detects temperature changes to measure the temperature of the surrounding air.



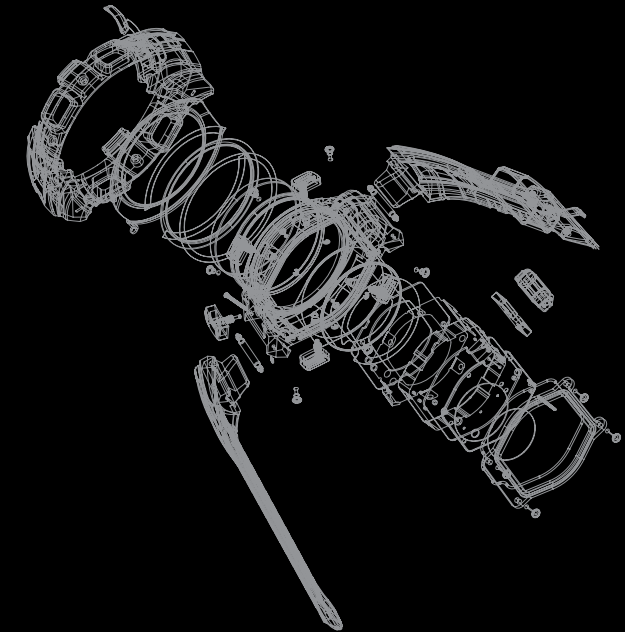
#### MULTI-MISSION DRIVE that operates multi-function chronographs

CASIO's unique, miniaturized, low power-consuming motors, each operating independently, easily handle the various functions and complicated hand movements required by multi-function chronographs.



#### Shock-resistant technology that overturned conventional thinking about watches

The world's only true shock-resistant structure was realized through the application of innovative advanced technologies, such as a case with a hollow structure that "floats" the module inside to protect it from shocks and all-directional enclosure by a urethane bezel that prevents the glass and buttons from receiving direct shocks.





# Unrivalled Brands

Combining the latest electronics technologies and original designs and building on CASIO's unique radio-control and solar-power technologies to create ingenious, unrivalled brands.

**G-SHOCK**  
THE TOUGHNESS



**EDIFICE**  
Speed & Intelligence



**OCEANUS**  
Where Cutting-edge  
Technology  
Meets High Quality



**PRO TREK**  
A "Genuine Tool"  
for Monitoring  
Nature's Moods.







## THE TOUGHNESS

G-SHOCK's shock-resistant structure was created in the pursuit of an "unbreakable watch," our definition of "toughness." This achievement required the discovery of the essential tough design.

Since its birth in 1983, G-SHOCK has continued the unrestrained evolution that began when it overturned the conventional idea that a watch is necessarily a breakable object. Everything in the design aspires to toughness . . . The G-SHOCK challenges continue beyond the limits of time and common sense.



A drop-testing case

## The passion

G-SHOCK was created based on a single brief: A directive to build a watch that never breaks. This idea fell outside the realm of common sense at a time when watches were considered to be breakable objects.

Nevertheless, CASIO organised Project Team "TOUGH" to take on the development. The team conducted trial after trial under the "Triple 10" development concept aimed at a 10-year battery life, 10-bar water resistance and 10m dropping shock resistance, producing over 200 experimental prototypes for performance tests. Two years were devoted to the development.

Finally, in 1983, the first G-SHOCK, the DW-5000C, was born from the passion and persistent, indefatigable efforts of the team members.

The world's one-and-only shock-resistant structure was realized through the application of revolutionary, groundbreaking ideas, such as the hollow structure that supports the module at just a few points to protect it from external shocks, the all-directional covering with urethane resin and the protection of important parts with cushioning material. This rugged styling led to a new concept of watch toughness.

In the years since, G-SHOCK has continued its insatiable challenging of new, unknown territory based on the confirmed belief in unbreakable watches it has inherited. This attitude of striving to evolve constantly in various directions with a shock-resistant structure as the starting point has brought many advanced technologies, including Wave Ceptor and Tough Solar, to fruition.

Today, G-SHOCK continues its pursuit of further evolution, considering every possibility open to watches.



DW-5000C

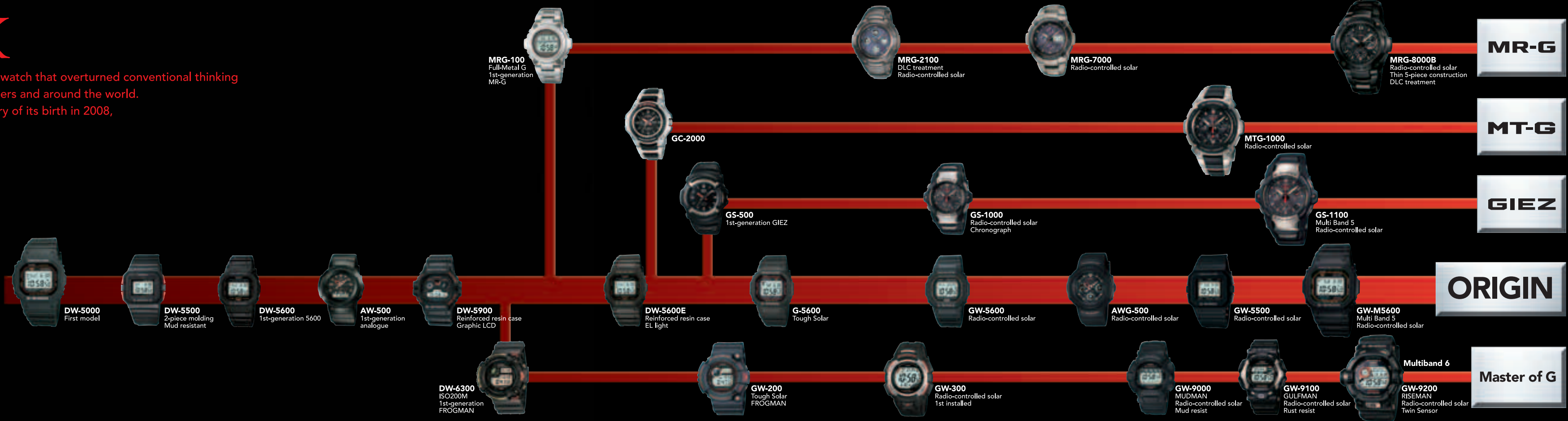


# History of G-SHOCK

G-SHOCK's reputation as the unrivalled tough watch that overturned conventional thinking about watches has spread across national borders and around the world. Even today, as it celebrates the 25th anniversary of its birth in 2008, G-SHOCK continues its unceasing evolution.

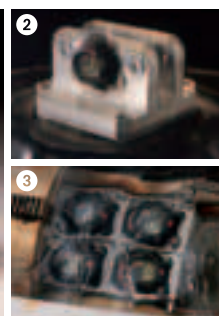
1983

2008



## The one-and-only shock-resistant structure

The case employs a hollow structure in which the module is "floated" to protect it from shocks. A full urethane bezel provides all-directional enclosure to prevent direct shocks from striking the glass and buttons. And cushioning material provides extra protection for key parts, such as the crystal oscillator inside the module. These and other shock-resistant technologies, exclusive to G-SHOCK, are spread generously throughout the body and the module interior to raise toughness to the highest levels.



### ① [Drop test]

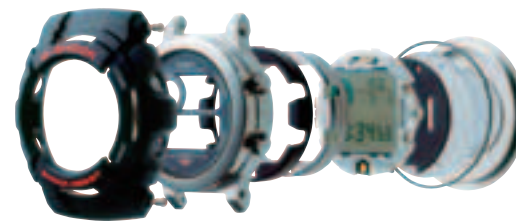
A free-fall drop test in which the watches are actually thrown by the human hand is conducted to test their ability to endure shocks under various conditions by giving them random shocks that are difficult to apply in machine tests.

### ② [Vibration test]

Vibration resistance is confirmed by conducting various tests, including a test in which they are subjected to severe vibrations by a testing machine.

### ③ [Water-resistance test]

Every G-SHOCK model must pass a water-resistance test at a pressure equivalent to that at a depth of 200m without difficulty.



### ■ Hollow-structure case

The module is arranged as if floating inside the hollow-structure case. Shocks transmitted from outside are dissipated by supporting the module at just a few points inside the case to reduce its contact points. We have also succeeded in adding shock resistance to the module itself through further technological innovations.

### ■ All-directional covering

Direct shocks to the buttons and glass surface are prevented by a projecting urethane-resin bezel design. Shock resistance has been ensured by inserting cushioning material between the bezel and case in metal models with lower shock-absorption capabilities.

### ■ Protection of important parts with cushioning material

The crystal oscillator and other important parts inside the module are individually protected with cushioning material. This prevents contact failures and improper operation due to distortions that could otherwise occur inside the module if the watch experienced a sudden strong shock.

## 20-bar water resistant

The outstanding water-resistance capable of withstanding water pressure equivalent to that at depths of 200m is suited to a watch designed for use in the harshest conditions.

### ■ Water-resistant structure

The addition of an O-ring to increase the water-resistance properties, injection of reinforced glass into the case, use of glass packing with excellent humidity resistance and airtightness characteristics and adoption of a double-packing structure for the button shaft are among other structural elements that contribute significantly to water resistance.







## GW-9200 RISEMAN

A Twin Sensor G-SHOCK with  
the World's First\* Multi Band 6  
Radio Control Technology

\*As of March 2008. Source: CASIO investigation.

## Smart Design

A new tough watch design incorporating twin sensors in a  
shock-resistant body



■ Specialty gear centre shaft design  
The pressure sensor and measurement button are  
positioned to the right and left of the case, and a centre  
shaft design is employed.

■ Large, dedicated altitude measurement button for fast,  
accurate operation  
A large button exclusively for altitude measurement permits  
instantaneous measurements.



■ ALTI/BARO display designed for visibility  
This display includes an altitude/atmospheric pressure tendency graph  
and a pace arrow indicating altitude and atmospheric pressure  
differences located inside a red circle to enhance visibility and enable  
the user to check conditions at a glance.



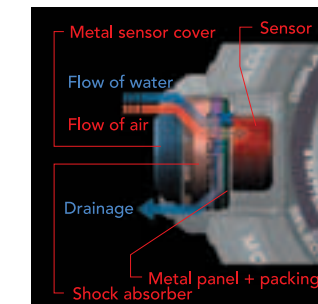
■ Case back design with a stress on smooth contact  
The case back is designed to minimize uneven contact with the wrist and reduce restrictive  
pressure resulting from muscular contractions. The band employs concavo-convex shaping to  
expel sweat and enhance comfort.

■ RISEMAN's new "dragon" emblem character  
RISEMAN is represented by the dragon, a mythical beast  
that sweeps across the heavens and is believed to govern  
the weather.



## Intelligent Timing

Newly developed Multi Band 6 shock-resistant pressure  
sensor structure



■ Shock-resistant sensor  
The GW-9200 has been equipped with pressure and  
temperature sensors without sacrificing G-SHOCK shock  
resistance. This is yet another example of G-SHOCK's  
constantly evolving toughness technology  
● 3-layer protective structure guarding the pressure sensor  
The pressure sensor, a delicate precision part, is perfectly  
protected by a 3-layer protective structure. CASIO has  
succeeded in installing this sensitive pressure sensor while  
maintaining 20-bar water resistance and shock resistance.

■ Slit structure developed for the shock-resistant  
pressure sensor  
We devised a special slit in the urethane bezel around the metal  
sensor cover to let air required for atmospheric pressure measurement  
into the pressure sensor. The front of the sensor is guarded by the  
protective structure to prevent physical damage.



■ Advanced measurement functionality  
● Stopwatch-linked altimeter that measures even high-speed altitude  
changes  
● Pace arrow display for at-a-glance confirmation of altitude changes

## Non-stop, Self-adjusting

**WAVE CEPTOR**  
RADIO CONTROLLED

Receives time calibration signals and corrects  
the time automatically.

**TOUGH SOLAR**  
SOLAR POWERED

A powerful solar battery keeps  
your watch running with no battery change.

■ Equipped with the world's first\* Multi Band 6  
Receives time calibration signals from all six transmission stations  
worldwide (one each in Germany, the UK, North America and  
China and two in Japan).

■ Miniaturized shock-resistant, high-sensitivity amorphous antenna

■ New heterodyne detection IC

■ Large-capacity, power-saving LSI controlling 2 sensors and 6-station radio-wave  
reception



\*As of March 2008. Source: CASIO investigation.

### Functions

- Shock resistant
- Radio-controlled (Multi Band 6)
- Tough Solar
- Full auto EL backlight
- Altimeter/Barometer/Thermometer
- 1/100-sec. stopwatch
- Countdown timer
- 5 daily alarms
- World Time
- 20-bar water resistant





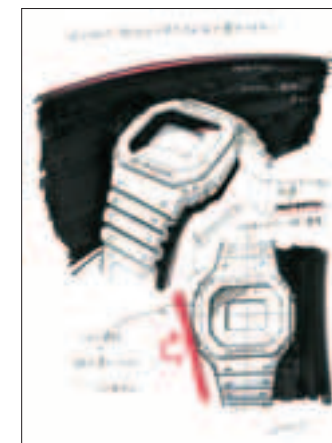
## GW-M5600

The Origin and Ongoing  
Evolution of G-SHOCK Toughness



## Smart Design

The ultimate in functional beauty expressed by  
a shock-resistant structure



■ The ultimate shock-resistant design with all waste trimmed away  
Functional beauty reaches a highpoint with the elimination of all waste in a watch with every detail designed to contribute to "unbreakability."

■ Button guard that protects the module from direct shocks  
A special shape has been adopted to guard the buttons and make sure that they are never struck directly if the watch is dropped, at no matter what angle.

■ Continually evolving square shape  
The square shape, the ultimate shock-resistant design, has been maintained since G-SHOCK's birth in 1983. But even though the shock-resistant shape remains the same, the details are constantly evolving.

■ Forged case back  
The case back is forged to give it greater strength than is possible with conventional press-moulded case backs. The high-quality impression is further enhanced by the large-scale modelling and precision engraving this process makes possible.

■ Band shape protecting the watch's back  
We employed a curved shape for the root of the band. The shape enables the band itself to play a role as a shock absorber to ensure that the back never receives a direct shock.



## Intelligent Timing

Successful incorporation of the latest technologies that were  
considered impossible to fit into the shock-resistant square form

■ Highly-evolved thinning and downsizing technologies surpassing the original design specifications  
As it evolved to incorporate more advanced functions, the shape of the GW-M5600 actually approached the original design more closely and achieved the slimmest profile of all the square models we have manufactured.



## Non-stop, Self-adjusting



Receives time calibration signals and corrects the time automatically.

### ■ Multi Band 5

Receives time calibration signals from five transmission stations worldwide (one each in Germany, the UK and North America and two in Japan).



- Miniaturized shock-resistant, high-sensitivity amorphous antenna
- Small reception IC compatible with three frequencies and five stations
- Large-capacity, power-saving LSI



A powerful solar battery keeps your watch running with no battery change.

### Functions

● Shock resistant ● Tough Solar ● Radio-controlled (Multi Band 5) ● Full auto EL backlight ● World Time ● 1/100-sec. stopwatch ● 5 daily alarms ● 20-bar water resistant





## GIEZ GS-1100

High-Quality  
Functional Beauty . . .  
and an Air of Sophistication.



## Smart Design

### Unlimited strength & superior refinement



■ **GIEZ's unique shock-resistant case design**  
We reshaped the stainless-steel case, implanting a urethane bezel into it to achieve a design with sophisticated appeal that not only allows for sufficient urethane thickness but also permits smoother shaping of the case.

■ **Beautiful dial unblemished by the inclusion of a solar panel**



■ **Exterior parts attachment**  
All the exterior parts are attached by a set of six long and short stainless-steel screws.

### ■ Soft urethane band providing excellent wear performance

The soft urethane material employed for the band requires a higher formation technology than ordinary urethane materials. Key characteristics include soft, flexible wear performance resembling that of natural rubber as well as high tensile strength and environmental resistance, including variable weather (temperature/UV) resistance and chemical (cosmetics) resistance.

### ■ Highly textured screw-lock case back

The case with its solid screw-lock back is not only airtight but also water resistant to 20 bar.



### [GIEZ]

The origin of GIEZ is "G-ESSENCE," a concept combining three ideals: "simple," "sophisticated" and "standard."

### Functions

● Shock resistant ● Radio-controlled (Multi Band 5) ● Tough Solar ● World Time ● 1/20-sec. stopwatch ● Daily alarm ● Perpetual calendar ● 20-bar water resistant



## Intelligent Timing

### Shock resistance combined with MULTI-MISSION DRIVE

#### Shock-resistant MULTI-MISSION DRIVE supporting multi-functionality

##### ■ Shock-resistant 5-motor chronograph module

A wide range of functions, including World Time, which displays the times in 27 cities (29 time zones) around the world, a 1/20-second stopwatch with hands that reset promptly and date and day-of-the-week displays, are realized in a full-analogue model.

[ High-sensitivity miniature antenna ]  
● Time calibration wave compatibility: 5 transmission stations

[ Motor 2 ]  
● Stopwatch second hand  
● World Time city indicator  
● Alarm ON/OFF indicator

[ Motor 5 ]  
● Date display



[ Motor 4 ]  
● Day of week indicator  
● World Time ON/OFF indicator  
● 60-minute Stopwatch hand  
● Alarm mode indicator

[ Motor 3 ]  
● Hour/minute hand  
● 24-hour hand

[ Motor 1 ]  
● Second hand  
● World Time second hand  
● 1/20-second Stopwatch hand

## Non-stop, Self-adjusting



Receives time calibration signals and corrects the time automatically.

### ■ Multi Band 5

Receives time calibration signals from five transmission stations worldwide (one each in Germany, the UK and North America and two in Japan).



■ Miniaturized shock-resistant, high-sensitivity amorphous antenna  
■ Small reception IC compatible with three frequencies and five stations  
■ Large-capacity, power-saving LSI



A powerful solar battery keeps your watch running with no battery change.



## MT-G MTG-1000

An Innovative G-SHOCK Created by  
Combining Contrasting Materials



## Smart Design

### Toughness balancing strength with beauty

■ **Contrasting material combination design**  
Stainless steel is known for its hardness and resin for its toughness. Taking advantage of both these characteristics enabled us to realize a design in which two completely different materials intertwine beautifully and unite with one another.

■ **Forged stainless bezel**  
Forged modelling provides a surface structure that makes the most of cutting work and polished finishing to realize a sharp-edged quality look.

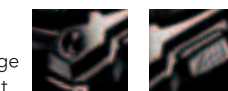
■ **2-piece shock-dispersing bezel construction**  
The shock-resistant bezel structure features a stainless-steel bezel that receives and disperses external shocks and an internal urethane bezel that absorbs and reduces the shocks further.

■ **Stainless / urethane combination band**  
Convex urethane band links installed to reduce damage to the stainless-steel links also play a role in protecting the watch.

■ **Face design that communicates a sense of exquisite functionality**  
Dyeing treatment applied to the hands gives a sharp look. Radial concavo-convex shaping of the back surface of the solar dial adds to its expression of profundity.

■ **Buckle restating the combination toughness**  
The buckle features a sharply defined, high-quality brand mark with etching processing applied and a urethane guard added to protect the mark.

■ **Parts with a stress on details**  
Four shaved-off screws grace the top surface of the bezel, and forged side buttons with an engraved G-mark add further emphasis to the image of solidity. We focused on every aspect of every part in our commitment to the highest quality.



## Intelligent Timing

### Adding a new dimension to the shock-resistant structure through a fusion of metal and resin materials

■ Shock-resistant MULTI-MISSION DRIVE supporting multi-functionality

● **Shock-resistant 5-motor chronograph module**  
A wide range of functions, including World Time, which displays the times in 27 cities (29 time zones) around the world, a 1/20-second stopwatch with hands that reset instantaneously and date and day-of-the-week displays, are realized in a full-analogue model.



### Non-stop, Self-adjusting

#### WAVE CEPTOR RADIO CONTROLLED

Receives time calibration signals and corrects the time automatically.

#### ■ Multi Band 5

Receives time calibration signals from five transmission stations worldwide (one each in Germany, the UK and North America and two in Japan).



- Miniaturized shock-resistant, high-sensitivity amorphous antenna
- Small reception IC compatible with three frequencies and five stations
- Large-capacity, power-saving LSI

#### TOUGH SOLAR SOLAR POWERED

A powerful solar battery keeps your watch running with no battery change.

#### Functions

● Shock resistant ● Radio-controlled (Multi Band 5) ● Tough Solar ● World Time ● 1/20-sec. stopwatch ● Daily alarm ● Perpetual calendar ● 20-bar water resistant





## MR-G MRG-8000RG

The Proud Head of the "G-SHOCK" Family  
on the Top Tier of Toughness.

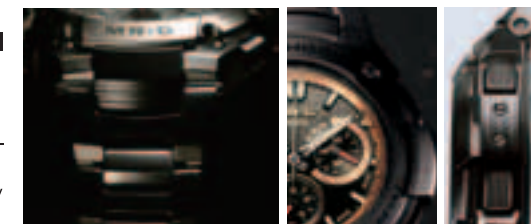


## Smart Design

The top G-SHOCK model, designed  
with an insistence on exclusive specifications

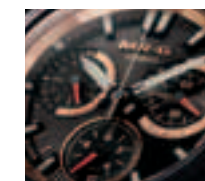
### ■ Toughness built in through the use of masterful techniques

The watch body comprises the  
case, case back, protectors on  
both sides and a total of five tita-  
nium parts, and the texture is en-  
hanced by polish finishing of every  
surface of every part.



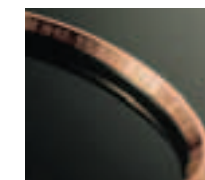
### ■ Face design with exquisite expressiveness

Tasteful NEOBright light-accumulating 3D time indications, gray plat-  
ing and ground line processing applied to the metal parts, and a pol-  
ished half-matt finish coating the full dial provide both excellent visibil-  
ity and a luxury appearance.



### ■ 18-carat gold city pink-gold ring

An exquisite expressiveness is produced by engraving directly on the  
mirror surface of the 18-carat gold city code ring.



### ■ Full-metal, double-hardened titanium

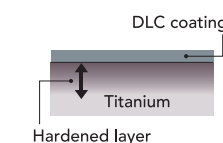
We have applied deep-hardening treatment to the titanium material used for key parts and a  
DLC coating to improve their hardness and abrasion resistance dramatically. This has resulted in  
an astonishing level of strength appropriate to the top model in the G-SHOCK collection.

#### ● Deep hardening treatment

Four to five times as hard as pure titanium, this layer is the result of  
hardening of the material itself.

#### ● DLC (diamond-like carbon) treatment

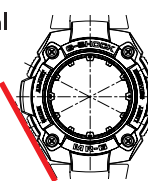
DLC treatment involves coating with an amorphous hard carbon film  
consisting of carbon and hydrogen and excelling in abrasion resis-  
tance. This coating technology boasts an HV (Vickers hardness) second  
only to diamonds.



New structure  
featuring shock-  
resistant side  
protectors



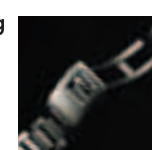
All-directional  
protection  
metal bezel



Flathead screws  
tightened by  
craftsmen



Tight-locking  
buckle



H-piece band  
for superior  
wearability



## Intelligent Timing

Cutting-edge technologies adding support to G-SHOCK's  
incomparable toughness

Shock-resistant MULTI-MISSION DRIVE supporting multi-functionality

### ■ Shock-resistant 5-motor chronograph module

A wide range of functions, including World Time, which displays the  
times in 27 cities (29 time zones) around the world, a 1/20-second  
stopwatch with hands that reset instantaneously and date and day-  
of-the-week displays, are realized in a full-analogue model.



## Non-stop, Self-adjusting



Receives time calibration signals and corrects  
the time automatically.

### ■ Multi Band 5

Receives time calibration signals from five transmission stations  
worldwide (one each in Germany, the UK and North America and  
two in Japan).



- Miniaturized shock-resistant, high-sensitivity amorphous antenna
- Small reception IC compatible with three frequencies and five stations
- Large-capacity, power-saving LSI



A powerful solar battery keeps  
your watch running with no battery change.

### Functions

● Shock resistant ● Radio-controlled (Multi Band 5) ● Tough Solar ● World Time ● 1/20-sec. stopwatch ● Perpetual calendar ● Titanium case and band ● 20-bar water resistant





**EDIFICE**

## Speed and Intelligence

An edging line communicating a sense of speed.

A metal body with a proud, cool texture.

And an exquisite face design with excellent visibility.

This bold form even determines the style of those who wear it.

This is EDIFICE, a watch for intelligent people who find value in every second.





# EQW-500

Fast-Action Twin Chronograph



## Smart Design

### Two-colour indications for easy operation and clear visibility

#### Face design facilitating operation of two independent stopwatches

Clear visibility is assured by the use of distinctly different colours, red and blue, on the dial to display measurements by the two stopwatches. A fan-shaped minute timer and round LCD add further to the appealing face design.



#### ■ Full display of most World Time city names

Most of the World Time city names are displayed fully to enhance recognition.



#### ■ Red and blue 30-minute timer hand design

Switching between red and blue hand measurement is button controlled. The colour coding contributes to clear visibility.

### Exterior design reflecting the pursuit of ease of use and functional beauty



■ Large start/stop button  
An enlarged button ensuring accurate operation of the stopwatch and set off with a circular engraving is a major feature of this model.



■ Implanted screws  
Four screws are employed to tighten down the case, giving it a mechanical image.

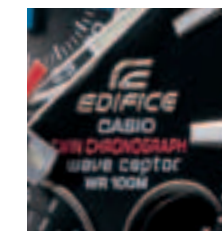


■ Button guard  
A button guard is installed to prevent the button from being pressed accidentally if the watch is dropped during stopwatch operation. The button guard also helps to protect the case itself from shocks.



■ Case foot piece  
A foot piece comprising a sharply inclined surface extending from the inclined surface of the button guard and the sturdy circular conical surface contributes to the case's strong, streamlined appearance.

■ Band design  
The powerful image projected by the case is carried over to the band by adding greater volume to the centre links and conducting mirror finish processing along both sides.



■ Emblem  
A three-dimensional logo expresses EDIFICE's intelligence and speed.

#### Functions

• Radio-controlled (Germany / UK compatibility) • 2 stopwatches • Auto LED light • World Time • Perpetual calendar • Daily alarm • Stainless-steel case • Solid stainless-steel band • 10-bar water resistant





## ECW-M100

A Balanced Fusion of Analogue & Digital

## Smart Design

### A high-performance combination chronograph with sporty styling

#### Analogue & digital face design

Circular graphics attract the eye to two locations at the top and bottom of the face. Practical functionality is enhanced further, moreover, by the use of easily readable digital displays, such as the fan-shaped graphic display that lets users check mode-switching conditions with just a quick glance at the dial.



#### ■ Face design

A face design projecting an image at once sporty and elegant is achieved by metallic printing of the bar-shaped time indications and dial.

#### ■ Four graphics

The LCD employs four graphics to convey large amounts of information simultaneously.



#### ■ Hand design

The hands are shaped to enhance both their own visibility and the readability of the LCD.



#### Exterior design reflecting the pursuit of ease of use and functional beauty

#### ■ Large start/stop button

A distinctive circular inscription on the start/stop button has added to the case's stylish appearance while improving the stopwatch function's ease of use. Operability has been further enhanced as well by increasing the button size.



#### ■ Button guard

A button guard is installed to prevent the button from being pressed accidentally if the watch is dropped during stopwatch operation.



#### ■ Implanted screws

Four screws are employed to tighten down the case, giving it a mechanical image.



#### ■ Case foot piece

A foot piece comprising a sharply inclined surface extending from the inclined surface of the button guard and the sturdy circular conical surface contributes to the case's strong, streamlined appearance.



#### ■ Band design

The powerful image projected by the case is carried over to the band by adding greater volume to the centre links and conducting mirror finishing along both sides.

#### Functions

• Radio-controlled (Multi Band 5) • LED light • World Time • 1/100-sec. stopwatch • 5 daily alarms • Stainless-steel case • Solid stainless-steel band • 10-bar water resistant





## Self-adjusting



Receives time calibration signals and corrects the time automatically.

- Receives time calibration signals from two European transmission stations (in Germany and the UK).
  - Miniaturized shock-resistant, high-sensitivity amorphous antenna
  - Small, straight receptor IC
- The small, straight IC that controls the radio wave reception function achieves stable reception, overcoming the difficulties involved in signal reception inside a full-metal case.
- Large-capacity, power-saving LSI

# Intelligent Timing

## EQW-500 A sporty twin chronograph with two stopwatches

### A twin chronograph powered by MULTI-MISSION DRIVE

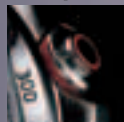
Four independently operating motors are installed in this multi-function chronograph, with multiple motors operating together to control the complex movements of hands on two stopwatches.

#### Twin stopwatches

Armed with two 1/100-second stopwatches (referred to as "stopwatch A/B" below) enabling users to time two competitors simultaneously.

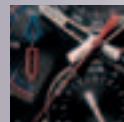
#### [ Stopwatch A/B control button ]

Start / Stop / Reset

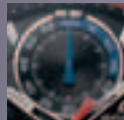


#### [ Stopwatch A second hand ]

Displays seconds in the basic watch mode.

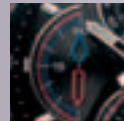


#### [ Stopwatch B second hand ]



#### [ Switching minute hand for stopwatch A/B (30-minute measurement) ]

Uses both the head and tail of the hand to take separate measurements for stopwatches A and B.



#### [ Switching button ]

Switches between stopwatch A and stopwatch B.



#### [ Information window ]

Displays the date in the basic watch mode. Measures times recorded with stopwatches A and B down to 1/100 second. Function switching mode display



#### [ World Time (29 cities) ]

World Time alternates between the user's home time and the current local time with simple operation of the switching mode. It's also useful for checking the times in 29 of the world's major cities, most of whose names are displayed in full.

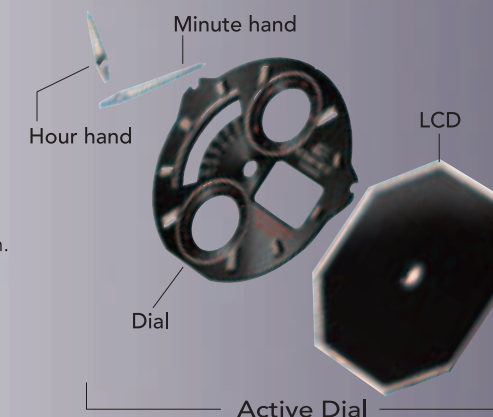
#### [ Auto LED light ]

The dial is brightly illuminated when the wrist is tilted about 40 degrees from the horizontal position.



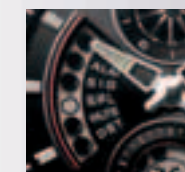
Tilt switch

## ECW-M100 A radio-controlled metal sports watch featuring Active Dial



#### [ Active Dial ]

The combination analogue/digital full LCD panel features high-visibility communication of abundant information.



#### [ Function setting display ]

A graphic display reveals the current function settings, such as alarm ON/OFF, at a glance.



#### [ Day-of-the-week display ]

The day-of-the-week display offers compatibility with five languages: English, Spanish, French, German and Italian.

#### [ World Time ]

The World Time function enables the wearer to check the time in various cities around the world on the LCD.



EDIFICE

## Self-adjusting



Receives time calibration signals and corrects the time automatically.

- Multi Band 5
- Receives time calibration signals from five transmission stations worldwide (one each in Germany, the UK and North America and two in Japan).
- Miniaturized shock-resistant, high-sensitivity amorphous antenna
  - Small reception IC compatible with three frequencies and five stations
  - 2-chip mounting

Two LSIs, an IC for watch operation and another for time calibration signal reception, are mounted in a single potting area using CASIO's high-density mounting technology.







  
OCEANUS



## Where Cutting-edge Technology Meets High Quality

OCEANUS, an advanced-technology watch named for the ancient God of the Sea. With unrivalled performance achieved through innovative technologies. Beautiful modelling of details elaborated in pursuit of higher quality. And an insistence on quality appropriate to people like you who know where value lies.



# OCW-P500

Bold. Advanced.  
And Beautifully Styled with an Uplifting Feel.



## Smart Design

A dynamic, sporty design with bold styling achieved through titanium metal construction



### Case design

■ **2-piece construction bezel**  
Constructed of two pieces and employing a mechanism to prevent inverse rotation, the anti-reverse bezel offers both functional operation and a quality appearance. The two-piece construction with the lower piece seemingly tucked under the upper piece with claws produces a powerful face design with bezel rotation taken fully into account. IP treatment in different colours is applied to the two respective pieces, enhancing the high-quality impression.

■ **Buttons & button guard**  
The OCEANUS mark is engraved on the chronograph operation button in the 2 o'clock position. We also applied IP treatment, moreover, to differentiate this button from the others and express the brand identity. We made the button guard in the 9 o'clock position larger than that in the 3 o'clock position. This asymmetrical design protects the buttons and makes them easier to push while adding further to this model's powerful presence.

■ **Case back design**  
Constructed of two pieces and employing a mechanism to prevent inverse rotation, the anti-reverse bezel offers both functional operation and a quality appearance.

■ **Band & buckle**  
The four surfaces of the band links are finished with polishing processing to provide a 3D image. The 3-fold buckle employs a two-sided push clasp and locking cover.

■ **Titanium-carbide treatment**  
The titanium-carbide treatment employed to harden the surface of the case, case back and band brings out the beautiful metal colouring while protecting the metal surfaces from dents and scratches with its excellent abrasion resistance.



### Face design

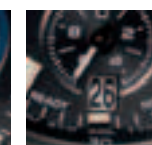
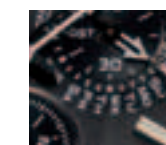
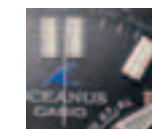
■ **Sapphire glass**  
The face is protected by scratch-resistant spherical sapphire glass with a non-reflective coating.

■ **Dial design**  
A design created with yacht racing in mind is employed for the inset dial in the 2 o'clock position. The meter-look scales suggest marine sports while providing a high degree of visibility. A 3D pattern reminiscent of waves is also arranged on the dial.

■ **Highly visible 3D time indications**  
A bold concave shape is employed for the time indications and high-visibility light-accumulation painting is applied to the concave areas.

■ **Hour and minute hands**  
Light-accumulation painting and white printing are applied to the hour and minute hands with their oversized heads, contributing to the powerful face design and ensuring clear visibility.

■ **Day/date display**



### Functions

■ **Yacht racing-compatible timer**  
The timer is equipped with measurement functions that can be used for yacht racing in addition to ordinary timer functions. It conducts measurements up to 30 minutes and includes an advanced alarm function and halfway reset function.

■ **20-bar water resistance**

### Functions

● Radio-controlled (Multi Band 5) ● Tough Solar ● World Time ● Perpetual calendar ● 1/20-sec. stopwatch ● Daily alarm ● Titanium case ● Solid titanium band





## OCW-S1000

Premium-Quality Finishing  
& Elegant, Slim-lined Design

## Smart Design

An ultra-thin chronograph constructed of lightweight titanium and designed to the highest levels of quality and finished modelling.

### Case design

#### ■ Slim design

With the case reduced to a remarkably thin 10.2mm through miniaturization and concentrated layout of the radio-wave reception antenna and other parts, the slim-lined styling presents a strong but gentle appearance.



#### ■ Sallaz polishing

This advanced technique is used to polish the case by pressing it on a rotating plate at a prescribed angle. A clear mirror surface with less distortion is realized through hand polishing by craftsmen.



#### ■ 2-piece bezel construction



#### ■ Band design reflecting superior quality

#### ■ Titanium-carbide treatment

The titanium-carbide treatment employed to harden the surface of the case, case back and band brings out the beautiful metal colouring while protecting the metal surfaces from dents and scratches with its excellent abrasion resistance.



#### ■ Buckle

### Functions

● Radio-controlled (Multi Band 5) ● Tough Solar ● World Time ● Perpetual calendar ● 1/20-sec. stopwatch ● 5-bar water resistant ● Titanium case and band

### Face design

Minimalist dial printing and arrangement of the hands are employed to assure excellent visibility. A beautiful dial is achieved, despite the presence of a solar panel.

#### ■ Sapphire glass

The face is protected by scratch-resistant spherical sapphire glass with a non-reflective coating.



#### ■ 3D time indications

The ridge-shaped time indications employing a simple typeface are given a sharp brilliance by the application of mirror finishing. Both visibility and the impression of quality are enhanced as a result.



#### ■ Second display

The display at the 6 o'clock position employed to count seconds has been enlarged compared to the others to enhance its visibility.



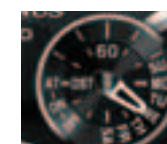
#### ■ Metal parts

The circular metal parts feature patterned indented surfaces that enhance the quality appearance further with delicate reflections.



#### ■ Hand shapes

The hour and minute hands are diamond-shaped to enlarge their light storage panels, and the tapered shape of the small hand also contributes to improved visibility.



#### ■ Day-of-week display



# Intelligent Timing



## Non-stop, Self-adjusting.



Receives time calibration signals and corrects the time automatically.

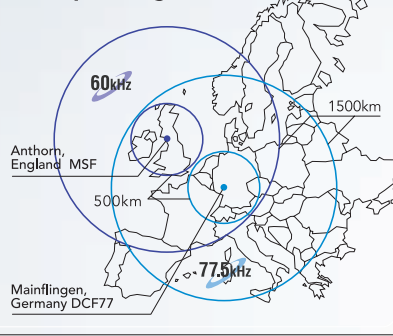


**Multi Band 5 radio-control technology, tuned to receive signals from 5 transmission stations worldwide, mounted in a full-metal case**

Receives time calibration signals from five transmission stations worldwide (one each in Germany, the UK and North America and two in Japan).

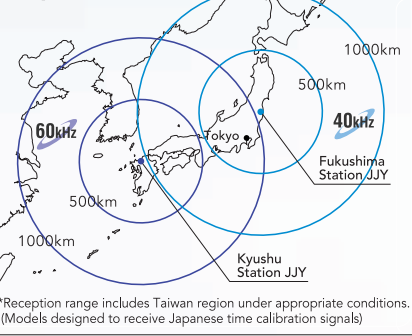
### Radio-wave reception areas

#### [ European region ]



\*The illustration gives a rough indication of the reception range. Signals may not be receivable even inside the range shown due to such conditions as the season, weather or time zone or interference by buildings.  
\*Reception may become more difficult outside the inner circle as the signals weaken.

#### [ Japan ]



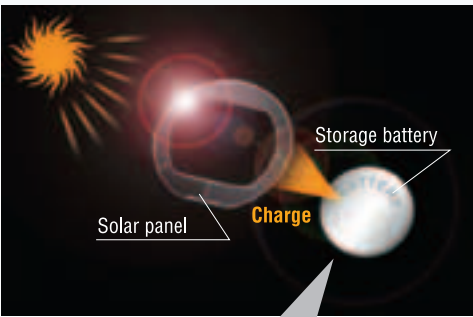
\*Reception range includes Taiwan region under appropriate conditions.  
\*(Models designed to receive Japanese time calibration signals)

#### [ North American region ]



A powerful solar battery keeps your watch running with no battery change.

A solar panel converts even weak illumination from fluorescent lighting into electric power. A rechargeable battery with a large power storage capacity supports stable operation of various functions with high electricity consumption. You never have to worry about the battery running down because it's a solar battery.



This combination of a solar panel with a large-capacity rechargeable battery enables a variety of energy-hungry functions to operate smoothly.

**Watch Alarm Backlight Stopwatch**

## MULTI-MISSION DRIVE, operating a multi-function chronograph

The MULTI-MISSION DRIVE operation system is made possible by CASIO's unique, ultra-small, low power-consumption motors. Multi-function operation that conventional chronograph models could not offer is enabled by five motors operating independently.

### Motor 4

- Day of week indicator
- World Time ON/OFF indicator
- 60-minute Stopwatch hand

### Motor 2

- Stopwatch second hand
- World Time city indicator

### Motor 3

- Hour/minute hand
- 24-hour hand

### Motor 1

- Second hand
- World Time second hand
- 1/20-second Stopwatch hand

### Motor 5

- Date display

### 1/20-sec. stopwatch

Both hands on the 1/20-second stopwatch can be reset instantaneously. 24-hour analogue stopwatch function.

### World Time

Simultaneous display of home time and World Time. World Time shows the time in 27 cities (29 time zones) around the world with a city indicator function featuring a display switching capability.

### Alarm (OCW-P500)

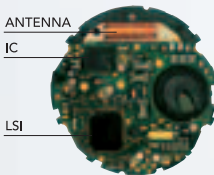
Displays the current time and the set alarm time simultaneously and allows checking of time alarm ON/OFF on the dial.

### Yacht racing-compatible timer (OCW-P500)

The timer is equipped with measuring functions that can be used for yacht racing in addition to conventional timer functions. Features include a halfway reset function and advanced alarm function as well as measurement up to 30 minutes.



OCW-S1000



### 5-station reception IC installed in a full-metal case

Designed for compatibility with three transmission frequencies - 40kHz, 60kHz or 77.5kHz - the signal reception IC achieves stable radio-wave reception while mounted in a full-metal case.

### High-sensitivity miniature antenna

A high-sensitivity miniature antenna capable of receiving wide-frequency bands efficiently and stably enables Multi Band reception in the full-metal case.

### Multi Band radio control compatible full-metal case structure

The uniquely structured full-metal case permits highly efficient reception of radio waves in three frequencies transmitted from five stations.

### High-density mounting technology / 6-layer circuit board

We applied CASIO's unique high-density mounting technology to install a larger number of parts. We also installed a six-layer circuit board and shortened and downsized the circuitry to achieve an optimal parts layout.

### Large-capacity, low power-consumption LSI

A large-capacity LSI facilitates control of more programs, enabling three-frequency reception of time-calibration signals from five of the world's transmission stations and solar-power operation of five motors.





## A "Genuine Tool" for Monitoring Nature's Moods.

With advanced measurement functions sensing natural phenomena that change with the moment, a tool with the excellent operability required of outdoor gear, combined with the accuracy of a quality timepiece.

PROTREK explores every field, and pursues evolution without end.

[Guiana Highlands: Northern South America] The Guiana Highlands are a remote, seldom visited region crossing six countries of northern South America. The region is dotted with over 100 plateaus with sheer vertical cliffs. Angel Falls, a waterfall dropping 978 meters from Auyan-Tepui, the tallest mountain in the highlands, is the world's highest waterfall. It forms no basin because the water is diffused by its long drop before it reaches the bottom.



## PRW-1500 TRIPLE SENSOR

A 20-bar Water-resistant PROTREK  
with Full "Outdoor" Specs



## Smart Design

A tool designed for the ultimate multi-functionality



■ **Large LCD with excellent visibility**  
Adopting a large super twisted nematic LCD with a wide viewing angle made it possible to achieve a brighter, more easily readable display. This permitted development of a multi-function graphic display including such features as a Moon Graph and Tide Graph in addition to PROTREK's advanced Triple Sensor technology.

### ■ Dedicated buttons for superior operability

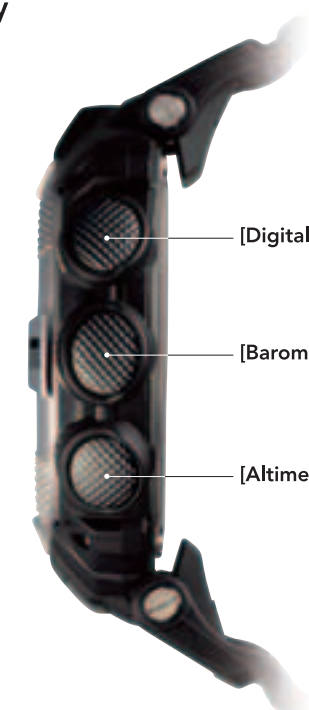
Dedicated buttons are allocated separately for independent control of the directional, atmospheric pressure/temperature and altitude measurements. Designed for quick measurement with a single push, the buttons are enlarged to assure accurate operation, even when wearing gloves.

### ■ Register ring

A stainless-steel register ring with a rotating mechanism is installed for direction memory. Knurling treatment applied to the ring produces an exquisite appearance possible only with a multi-function watch.

### ■ Stainless screws

A large, shock-resistant screw structure is used to connect the case lugs and band. This has improved the stiffness of the band for outdoor use.



[Digital Compass]

[Barometer/Thermometer]

[Altimeter]

### ■ Full auto EL backlight

The full auto EL backlight illuminates the digital display when the wrist is tilted approximately 40 degrees from the horizontal position. A sensor that senses brightness and darkness automatically prevents the backlight from turning on in well-lighted environments to conserve battery power.



### ■ 20-bar water resistant

The 20-bar water-resistant design provides a high degree of security, not only in sudden storms but also during vigorous activities on the water, such as rafting or yacht racing.

## Functions



Sensing of natural phenomena by three small sensors.

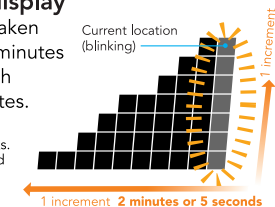
### TRIPLE SENSOR

- Digital Compass
- Barometer/Thermometer
- Altimeter

### Altitude tendency display

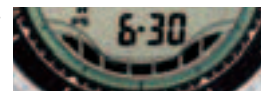
Altitude measurements taken automatically every two minutes are displayed in the graph continuously for 20 minutes.

\*The graph segment showing the current altitude measurement blinks.  
\*Measurement values are displayed graphically every 5 seconds during the first 3 minutes after switching modes.



### ■ Tide Graph

The Tide Graph presents a graphic display of such data related to the tides as flood and neap tides and the ebb and flow of the tides based on the moon age periodicity and the moon and lunital intervals.



### ■ Moon Graph

The exquisite Moon Graph displays the moon age and phases of the moon in graphic format.



### ■ Yacht racing-compatible timer

The 60-minute timer is equipped with measuring functions that suit it for yacht racing in addition to conventional timer functions. Features include a phased yacht race countdown timer alarm that sounds every minute beginning five minutes before race time and that enables users to monitor up to 10 countdowns as well as a dual-program yacht timer that is presettable for a main countdown and sub-countdown, with halfway switching possible.

## Functions

● Digital Compass/Barometer/Thermometer/Altimeter ● Radio-controlled (Multi Band 5) ● Tough Solar ● Countdown timer ● 1/100-sec. stopwatch ● World Time ● 5 daily alarms



## PRW-1300 TRIPLE SENSOR

A Thin, Lightweight PROTREK  
with Full "Outdoor" Specs



## Smart Design

Practical tool design achieved through maximal thinning, downsizing and weight reduction

Slim design ideal for light wear

We applied high-density mounting technology to optimise the layout of every part and employed a newly developed smaller antenna, an LSI downsized by the application of wafer label package technology and a thin solar cell to change the design entirely. The result was an 11.5mm slim case achieved by arranging the internal parts accurately on a comma basis board.



Aluminium bezel & case back reflecting concerted design efforts

We enhanced the precision look of the aluminium bezel by applying a mirror finishing that recalls a large-calibre lens along with checkering. Wearability and an appealing texture were achieved by thinning the case back to the absolute minimum (0.85mm at the thinnest point).



Band texture

The texturing applied to the outer surface of the band employs a chequered pattern, while that on the inner surface suggests a rope. The tactile appeal of this design strikes a chord with Alpinists and other outdoor enthusiasts.



■ Full auto EL backlight

The full auto EL backlight illuminates the digital display when the wrist is tilted approximately 40 degrees from the horizontal position. A sensor that senses brightness and darkness automatically prevents the backlight from turning on in well-lighted environments to conserve battery power.



### Functions

TRIPLE SENSOR

- Digital Compass
- Barometer/Thermometer
- Altimeter

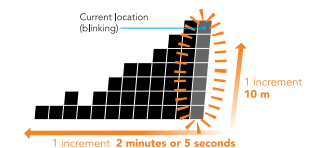


Sensing of natural phenomena by three small sensors.

Altitude tendency display

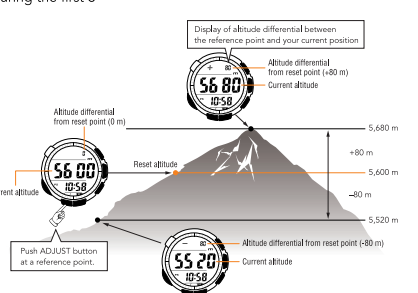
Displays altitude values measured automatically every 2 minutes (or 5 seconds) for 24 consecutive minutes (12 measurements) in graphic format.

\*The graph segment showing the current altitude measurement blinks.  
\*Measurement values are displayed graphically every 5 seconds during the first 3 minutes after switching modes.



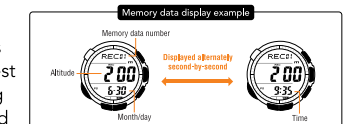
Altitude differential measurement

Conducts continuous measurement of the altitude differential with respect to a reference point, and displays the extent of your ascent/descent. Even when following a climbing route with no altitude indications, you can determine the difference in altitude between your current location and your destination by comparing the readings with the contour lines on a map.



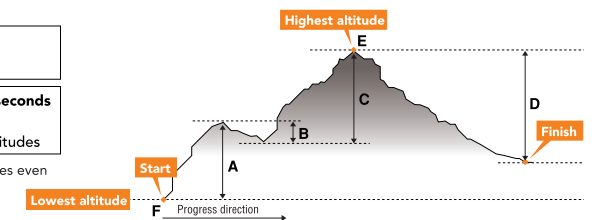
Altitude memory

Records 40 altitude, month/day and time measurements taken automatically every 15 minutes. Your highest/lowest altitudes and cumulative ascent/descent altitudes during the measurement period are also measured and updated (every 2 minutes or 5 seconds).



- Recorded every 15 minutes
  - Altitude • Month/day
- Updated every 2 minutes or 5 seconds
  - Highest/lowest altitudes
  - Cumulative ascent/descent altitudes

\*Altitude memory operation continues even when you switch to another mode.



- **Highest altitude (MAX):** Altitude measured at the highest point during memory measurement (E)
- **Lowest altitude (MIN):** Altitude measured at the lowest point during memory measurement (F)
- **Cumulative ascent altitude (ASC):** Total of altitudes ascended (A+C)
- **Cumulative descent altitude (DSC):** Total of altitudes descended (B+D)
- **Past memory data:** Displays the highest value ever recorded, the lowest value ever recorded and the historical accumulated total of the cumulative ascent/descent altitudes recorded.

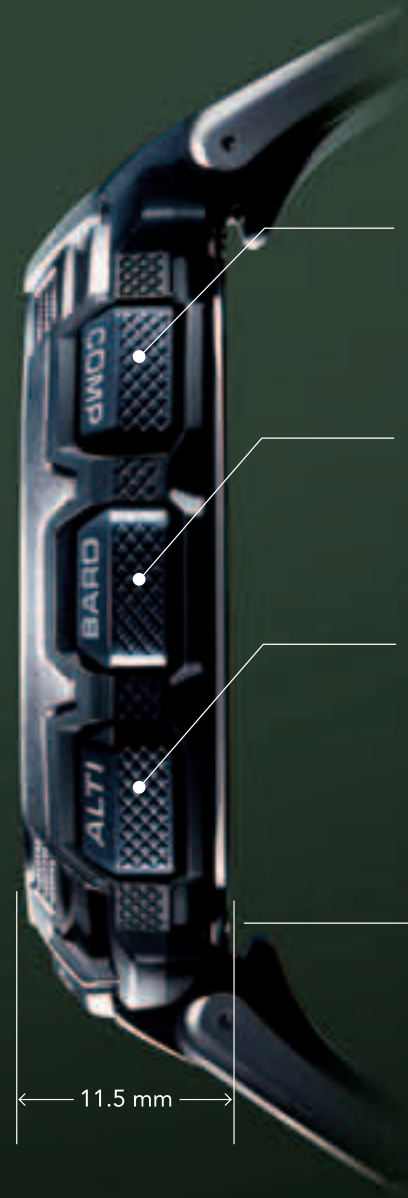
\*The accumulated total of ascent/descent altitudes is recorded successively from 0~99,995 meters.

### Functions

- Digital Compass/Barometer/Thermometer/Altimeter
- Radio-controlled (Multi Band 5)
- Tough Solar
- 1/100-sec. stopwatch
- Countdown timer
- World Time
- 5 daily alarms



# Intelligent Timing [ PRW-1500/PRW-1300 ]



## Digital Compass

Employs a direction sensor to measure directions by sensing the Earth's magnetic forces and provide vital information concerning your current location and destination.

## Barometer/Thermometer

Combines a pressure sensor to measure atmospheric pressure with a temperature sensor to monitor temperatures, and helps you predict and prepare for upcoming changes in the weather.

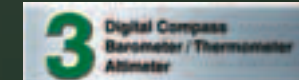
## Altimeter

Calculates altitudes based on changes in the atmospheric pressure measured with a pressure sensor, and stores several altitude measurements in memory for easy review.

## Ultra-slim technology\*

Innovative miniaturisation/thinning technologies and a high-density mounting technology have been effectively applied to achieve a slim-lined case just 11.5 mm thin for greater wearing comfort. <PRW-1300>

\*Available only with PRG-1300

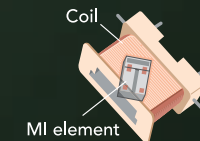


## TRIPLE SENSOR

### Sensor 1

#### [ Direction sensor ]

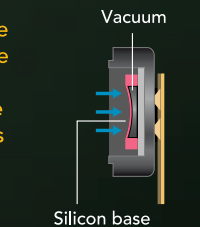
Measures directions by sensing the Earth's magnetism. This sensor employing an MI element achieves dramatically reduced power consumption and solar operation.



### Sensor 2

#### [ Pressure sensor ]

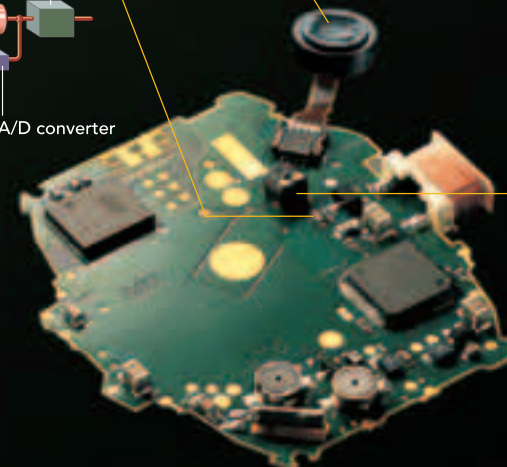
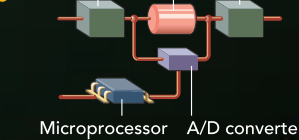
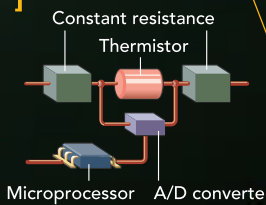
Measures atmospheric pressure by calculating the piezoresistive effect — a change in electrical resistance values occurring due to changes in mechanical stress on a silicon chip.



### Sensor 3

#### [ Temperature sensor ]

Measures temperatures with a temperature-sensitive fine ceramic semiconductor called a "thermistor."

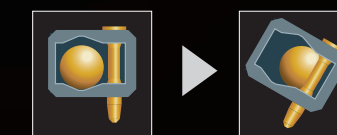


<Photo : PRW-1300>



## [ Tilt switch ]

Inclining the watch about 40° brings a conductive bulb into contact with an electrode and illuminates the backlight. The tilt switch is the key to the Auto Light function.



## Non-stop, Self-adjusting.



Receives time calibration signals and corrects the time automatically.



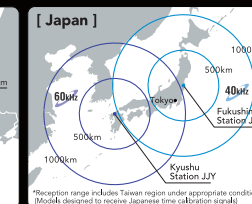
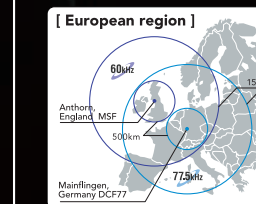
### ■ Multi Band 5

Receives time calibration signals from five transmission stations worldwide (one each in Germany, the UK and North America and two in Japan).

### ■ Miniaturized shock-resistant, high-sensitivity amorphous antenna

### ■ Small reception IC compatible with three frequencies and five stations

### ■ Large-capacity, power-saving LSI

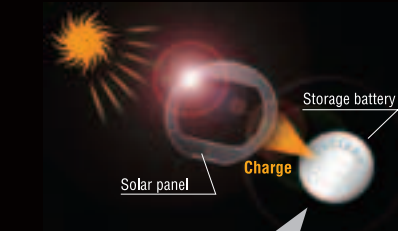


\*The illustration gives a rough indication of the reception range. Signals may not be receivable even inside the range shown due to such conditions as the season, weather or time zone or interference by buildings.  
\*Reception may become more difficult outside the inner circle as the signals weaken.



A powerful solar battery keeps your watch running with no battery change.

A solar panel converts even weak illumination from fluorescent lighting into electric power. A rechargeable battery with a large power storage capacity supports stable operation of various functions with high electricity consumption. You never have to worry about the battery running down because it's a solar battery.



This combination of a solar panel with a large-capacity rechargeable battery enables a variety of energy-hungry functions to operate smoothly.

Watch Alarm Backlight Sensor

## Sensor structure offering 20-bar water resistance <PRW-1500>

- ① A 3-layer protective structure is employed for the pressure sensor.
- ② A metal sensor cover with black IP processing applied prevents physical damage from outside.
- ③ A fine-mesh sensor cover in the middle layer prevents fine dust, etc., from getting inside.
- ④ A metal panel and packing in the innermost layer both maintain airtightness to prevent intrusion by water and improve drainage.

