# The C9 Harrison Jumping Hour

OWNER'S HANDBOOK

# Time on your side...

Your Christopher Ward watch has been designed and engineered by highly talented craftspeople to ensure not only accurate and precise timekeeping but also to bring a real pride of ownership that only luxury items of the highest quality can ever hope to deliver.

You have made an investment, a good one, and the aim of this handbook is to help you make the most of that investment during what I hope will be a lifetime of ownership.

Christopher Ward

# John Harrison Watchmaker

John Harrison was born in 1693 in Foulby, West Yorkshire and lived for most of his life in Barrow upon Humber. He became a carpenter, like his father, was a gifted musician and a self-taught watchmaker, creating his first timepieces entirely out of wood.

He moved to London in the 1750s, at the height of his development of his “sea watches” and died in the capital in 1776. The ship’s chronometers were rediscovered at the Royal Greenwich Observatory in the mid-20th century and restored.

Today the H1, H2, H3 and H4 are on display at the National Maritime Museum in Greenwich. The H5 is owned by the Worshipful Company of Clockmakers, and is displayed in the Clockmaker’s Museum in London’s Guildhall.

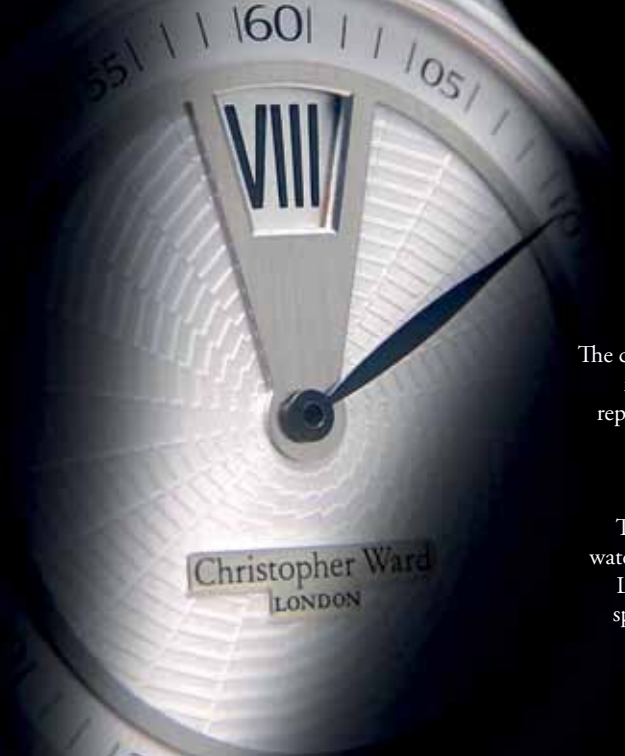
# The Longitude Solution

In 1760 horologist John Harrison took his 1735 invention of the Marine Chronometer to a higher level by making it portable in the form of a pocket watch - his H4 was effectively the first precision watch and the true ancester of the Christopher Ward collection.

Galileo, Cassini, Newton, Halley. Some of the greatest names in modern science history tried, and failed, to solve what was described for centuries as “the longitude problem”. It came down in the end to a self-taught horologist - a man who started out as a working class carpenter - to finally solve the problem in 1735, with the invention of the first ship’s chronometer. He refined and refined the design and mechanics until in 1760 he produced the first practical tool for ship’s navigation - a pocket watch sized device.

Now 250 years on it seems incredible that such a thing as the longitude problem ever existed. But exist it did: many sailors’ lives were still being lost decades into the 18th century - just as they had been lost during the earlier explorations in the 16th and 17th centuries - as a result of inaccurate navigation when ship’s travelled east or west.

Deriving much inspiration from the great John Harrison, Christopher Ward has designed and developed the new Jumping Hour calibre in conjunction with master watchmaker Johannes Jahnke, as the perfect addition to the C9 Harrison Collection.




## A Leap in Time

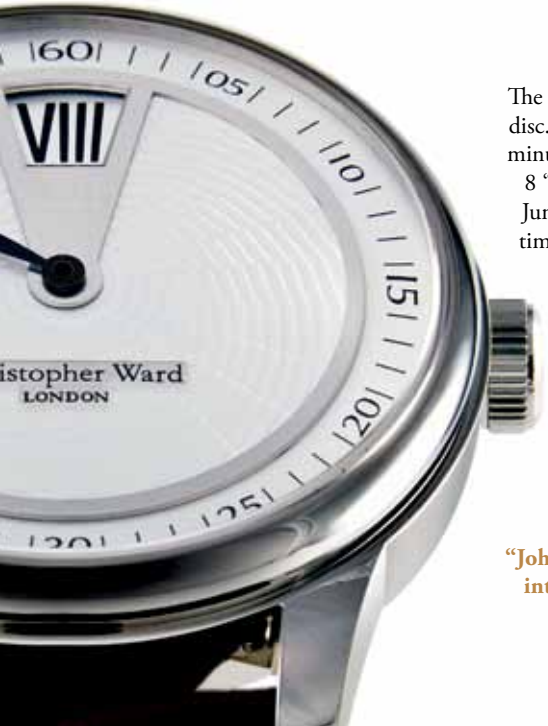
The creator of the calibre 2824-2-MOD-JJ01 in the Harrison Jumping Hour made his reputation at the tender age of just 22 years with a masterpiece of a watch that sells for about £70,000.

The magnificent "King Albert of Saxony" watch was made on behalf of Dresden based Lang & Heyne, whose Marco Heyne had spotted and encouraged the extraordinary talent of Johannes Jahnke.

This striking watch, which has just a minute hand and a window in which the hour numeral is displayed, joins a number of Jumping Hour models in the world of luxury timepieces. Patek Philippe, A. Lange & Söhne, Cartier, Bell & Ross, Baume & Mercier, DMH and Perrelet are among the brands that have added this distinctive option to their ranges in recent years. In keeping with Christopher Ward's dedication to providing the finest watches at the keenest price, the elegant C9 JH is one of the most efficient of any Swiss-made Jumping Hour watch. This watch truly represents our young British company's commitment to continually improving our offer.

The conception of the Christopher Ward Jumping Hour started with a beer and a pizza. Chris Ward was chatting to his Swiss watchmaking partner Jörg Bader about the lore and legends of the classic watchmakers and the legendary models that entrance and intrigue collectors. The talk, perhaps inevitably, came round to the historic Jumping Hour movements, which consistently appeal to real watch connoisseurs and master watchmakers.

Although the Jumping Hour concept has been around longer than many people realise, the pair agreed that it is still a rare watch and one that would enrich the Christopher Ward collection. But how to bring the Christopher Ward flavour to such a classic? Into the discussion came Johannes Jahnke, a 27-year-old German with a fast-growing reputation among the watchmaking elite of Europe. He has been working with Jörg and Chris for three years on various projects and he hit upon a way of adapting the ETA 2824-2 calibre to incorporate a Jumping Hour. The vital change was to the way that the hour is made to "jump".




The numerals for the hours are carried on a revolving disc. When 7.59, for example, changes to 8.00 as the minute hand reaches the end of the 59th minute, the 8 "jumps" into the window to succeed the 7. Many Jumping Hour watches do not keep especially good time as the surge of extra power the watch needs for the hour to change puts stress on the movement.

Johannes Jahnke's ingenious solution has been to create a movement that ensures the watch uses a consistent amount of power throughout the course of an entire hour, resulting in much greater accuracy and reliability.

**"Johannes' solution spreads the load over the hour interval with the result that the change or 'jump' is extremely precise and accurate."**

## Chris Explains...

"The Jumping Hour mechanism all operates between the base movement and an hour disc. In the case of the C9 Harrison Jumping Hour the base movement is an ETA 2824-2 and the addition of the module adds an extra 2.4mm to the height of the movement.

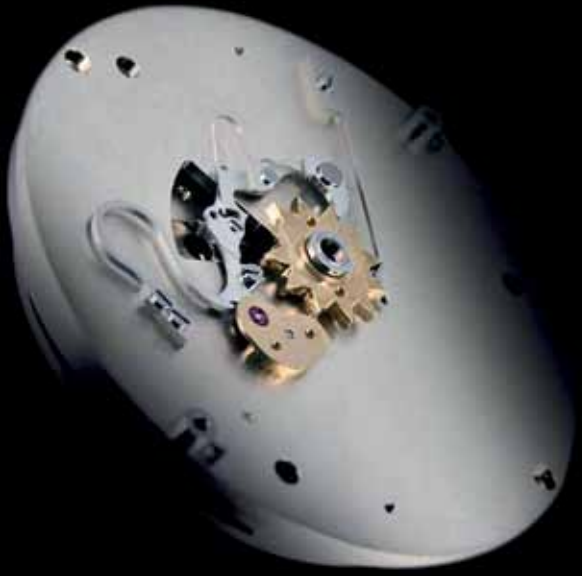
The hour disc is held by two screws onto a central star wheel which has 12 teeth (see page 9). On the central minute wheel is directly mounted a cam which therefore makes one rotation every hour. When the rotary cam turns it picks up a lever once per hour and with pressure exerted upon it form a spring forces the star wheel to move 30° or a one hour jump (360÷12).

The hour disc therefore moves on 30° also under the main dial. The main dial has an aperture cut out at 12 o'clock to display the hour underneath. The cam solution means that immediately after the hour has jumped the cam starts to pick up the lever again, gradually moving it closer to the star wheel ready for the next jump. The beauty of this is that the power consumption is consistent over the 60 minutes giving a much higher degree of accuracy than a lot of other jumping hour complications in the market, which usually will only use power in the last 15 minutes, and therefore during the course of an hour there is terrific variation in both power consumption and therefore accuracy.

It also means that a much more stable amplitude is achieved over the hour and in the long term is much better for the life of the watch. Regulation is also that much easier due to the consistent power consumption.

This is more complicated than other jumping hour movements granted, but then reliability is that much better. And this reliability didn't just fall in our laps. We insisted that all the parts be Swiss-made, and we made the bold move to make some of the parts outside of the watch industry using state of the art Laser cutting technology only found in the medical sector. This means cutting is unbelievably precise and we benefit too from greater anti-corrosion properties and we can see this module being applied to all kinds of calibres in the future years and is a great step...or is that jump forward for the company. As this is such an important development for the company, we have really pulled the stops out on every detail of the C9 JH. We have raised the bar even higher on our attention to detail, our decorative finishes and our components. We know the Jumping Hour appeals to our most sophisticated and most knowledgeable customers, but we are overwhelmed by the very positive reactions we have received for this limited edition of just 200 pieces worldwide."

To emphasise the 360° rotation of the minute hand, the design of this new classic is based on concentric circles and a highly innovative guilloche geometric pattern. The refined and highly polished 43mm case has a 38mm dial opening beneath a high-grade sapphire crystal. The crown, which is stamped with the CW logo, is a perfectly proportioned 7mm. The dial comprises an exquisite combination of a galvanic light silver outer ring that carries the Arabic minute numerals and minute markers, a narrow circular mirrorpolished decorative frame, and a central circle of galvanic light silver with a fine sunbrushed finish on the striking guilloche geometric design.



# The history of the Jumping Hour

The origins of the Jumping Hour (or Jump Hour) watch have been traced to French and Swiss pocket watches and clocks from as far back as the 1830s and 1840s. The great Swiss-based Austrian watchmaker Josef Pallweber did exemplary work with Jumping Hour pocket watch models for IWC in the 1880s and so is regarded by some as the father of the digital watch. Despite the modern connection with electronic displays, the strict definition of a digital watch is one "that displays time in the form of numbers, rather than by a dial and hands".

So a Jumping Hour watch can be seen as a fascinating hybrid of analogue and digital. The analogue minute hand passes round the dial and gives the impetus at the climax of the rotation for the "jump" of the hour numeral, which brings in the digital element.

Watch aficionados like Jumping Hour watches for several reasons: their historical curiosity; their unusual good looks (the watch dial always looks clean); their mix of analogue and digital elements; and, in the case of the Christopher Ward C9 JH, the advanced and highly accurate modified movement.

Another supreme selling point is the Jumping Hour's convenient simplicity and ease of use. The prominent digit in the hour window and the position of the minute hand enable you to tell the time very quickly. And isn't that what a watch is for?

Chris Ward says: "The C9 JH will be a welcome arrival as the interest in Jumping Hours is on the rise again. Cartier made some beautiful jump hour watches in the 1930s, and some sought after Rolex

Prince and Alpina-Gruen versions date from the same era. Some specialist collectors look out for the American models from the 1950s and 1960s such as the Benrus Dial O Rama, Hoga Chevron and Elgin Golf Ball. In 1989 Patek Philippe released its 3969 model in limited editions in rolled gold and in platinum to celebrate the 150th anniversary of the company.

Our C9 JH is an excellent modern addition to this stellar line-up and our own Harrison collection."

# The C9 Watch Wunderkind

**German watchmaking wunderkind Johannes Jahnke has created an exclusive and highly accurate movement adaption for Christopher Ward's extraordinary C9 Harrison Jumping Hour watch. Even before it's release, this instant classic has become a sought-after collector's item.**

Born in East Germany, Johannes first dismantled and repaired a broken clock at the age of 12. Championed by Marco Heyne of Lang & Heyne, he first made a functional escapement model by building the wheels and cogs by hand. The "King Albert of Saxony" is a column-wheel chronograph with a central minute counter. The necessity for a vertical clutch, together with the position of the chronograph, makes this construction extremely challenging. With some assistance from Lang & Heyne, in 2006 Johannes finished his watch.

"When 'King Albert of Saxony' went on sale there was a lot of buzz about me being so young but I don't think I am particularly special," says Johannes. "A hundred years ago there were several watch-makers in their early twenties making wonderful watches – there just aren't any now."

In 2008 Johannes, eager to produce watches that were not merely the preserve of monied collectors, was asked to join Jörg Bader, Christopher Ward's Swiss partner. The partnership with Christopher Ward that produced the exciting C9 JH suits Johannes particularly well as the relationship allows him to bring luxury watches within the reach of more people. He also appreciates the very close relationship the company has with its customers.

"There are a lot of barriers between watchmakers and their customers and that is a shame. Creating a watch for someone you don't know and never hear from isn't that rewarding."

Christopher Ward not only sells directly to its customers, it also engages with them on an independent forum, by email and over the 'phone. The company really listens to what they say and several of our designs have been changed or even inspired because of what customers have said."

Johannes is an ideal collaborator for a UK based design company like Christopher Ward because he loves all things British. He owns and runs immaculate, original examples of the Series I Jaguar XJ6 and a Norton bike. "I am hoping that one day I will get my hands on a historic aircraft!" says this softly spoken mechanical wizard.


Christopher Ward
London

# Caring for your Christopher Ward Jumping Hour watch

Your C9 Harrison Jumping Hour is constructed from the finest components and materials available including one of Switzerland's finest automatic movements. As with all mechanical watches of this quality, with just a little care, it has the potential to become an heirloom piece giving further joy to future generations.

Here are a few hints to help keep your watch working perfectly over the years:

- Never fully wind your watch if it stops, 10-15 revolutions should suffice to have it restart.
- Try and wear your watch everyday, if possible, as this will both enable it to keep better time as well as preventing the lubricants in the movement from solidifying.
- Your watch is fitted with the finest Incabloc™ anti-shock system which should protect it if dropped onto a carpeted surface. However, it is best to avoid hard surfaces or sharp knocks. You may not want to wear your watch whilst playing racquet sports, for instance.
- There are many differing views about the right frequency for servicing your watch, ranging from 2 to 7 years! A modern mechanical watch like yours shouldn't need servicing more than every 3 years but we wouldn't recommend leaving it longer than this as, just like a car, the oil needs topping up from time to time.
- Always use a reputable watch repairer to clean and lubricate your watch, and keep any documentation you receive. You can always use the Christopher Ward after-sales service programme too. See the website for details.

Should you need a replacement part - don't worry, we keep stocks of spare parts for years, even for discontinued models. It's all part of the Christopher Ward service.

Finally, don't forget our CW360° Care Programme allows you to return your watch absolutely free, for any reason, and with no quibbles, for up to 60 days after purchase and we also guarantee your movement for up to 60 months, so long as it is regularly serviced. After all, why shouldn't you enjoy peace of mind as much as you enjoy your watch?

# About automatic accuracy

If you are new to automatic watches you may not be aware that generally speaking automatic watches are not as accurate as their quartz counterparts. Whilst it is possible to fine tune an automatic watch to within a few seconds per day, the accuracy is largely dependent upon the power reserve in the watch at any given time. As you will appreciate the power reserve is dictated largely by the amount of wear and the amount of movement given to each individual watch.

When you first receive your watch it is quite possible that the balance may have been upset during its' journey to you, and then may require a settling down period of a few days or so. After a few weeks of wear you should be in a position to determine how your wearing habits affect the accuracy of the watch and whether it is within the tolerances specified by ETA and CWL on subsequent pages of this manual.

# The C9 Harrison Jumping Hour

## Features

ETA 2824-2 with modified Jumping Hour Complication JJ001

Swiss made

Limited Edition of 200 pieces

25 jewels Automatic

Galvanic guilloche dial with JH aperture

43mm hand-finished case

Sapphire Crystal

Louisiana alligator strap

Deployment clasp

Exhibition window

Water resistant to 50m (5 atm)

## Technical Data

| | |
|---|---|
| Diameter: | 43mm |
| Height: | 13mm |
| Weight: | 103g |
| Case: | 316L Stainless steel |
| Calibre: | ETA 2824-2 - Mod - JJ01 |
| Vibrations: | 28,800 per hour (4 Hz) |
| Accuracy: | +10 / -5 seconds per day |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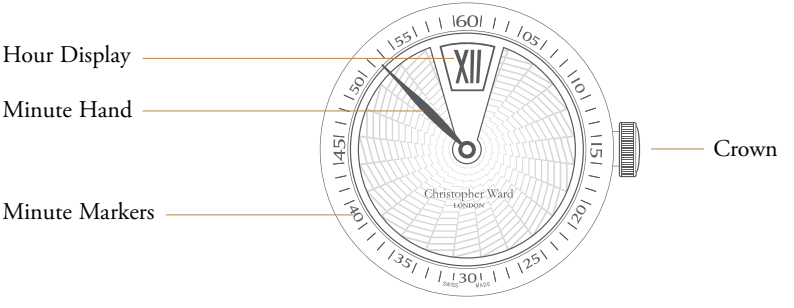
VIII
Christopher Ward
LONDON
SWISS MADE

# Description of the display and control buttons

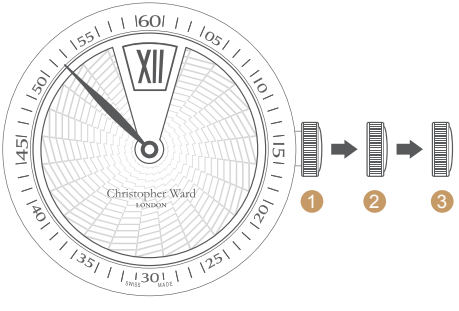
The C9 Harrison Jumping Hour has a maximum power reserve of 38 hours when fully wound. To re-power the watch after a period of non-use, simply wind the crown in a clockwise direction approximately 10-15 revolutions. Normal wearing will very quickly allow the rotor to start re-powering the watch over time after putting it on your wrist.

**Display elements**

**Control buttons**



# Setting the time




- Position 1 is for winding in power. Wind in a clockwise direction to re-power the watch.
- Pull gently into position 3. For rapid hour correction, turn in a clockwise direction.

# The quick-release butterfly clasp

The strap versions of the C9 Harrison Jumping Hour use quick-release butterfly clasps. If you are unfamiliar with the butterfly clasp system just follow our 8 step guide below.

**Step 1** Locate the clasp

**Step 2** Click quick-release

**Step 3** Pull open clasp

**Step 4** Prise cover open

**Step 5** Thread strap through

**Step 6** Snap back

**Step 7** Close clasp

**Step 8** Complete

# Water resistance

**Please note.** these are only guidelines but we strongly urge you to adhere to them to retain the integrity of your watch. If you have any queries regarding this please contact us direct.

**1 ATM**
(10 Metres)

Safe to wear your watch while washing your hands with tap water.

**3 ATM**
(30 Metres)

Washing your car and or general hosepipe usage.

**5 ATM**
(50 Metres)

Water resistant to most household shower units.

**10 ATM**
(100 Metres)

Safe to use while snorkelling in open water, it is not advisable to dive with your watch.

**30 ATM**
(300 Metres)

Ideal for experienced divers and, in general, anybody practising scuba-diving.

**50 ATM**
(500 Metres)

Professional divers, experienced prolonged exposure underwater.

**NB. To safeguard watch movement please ensure the crown is, at all times, secured correctly.**

# Keeping in touch with Christopher Ward...

From small beginnings just a few short years ago (our first workshop was actually a refurbished chicken shed!), Christopher Ward has won a worldwide following for his eponymous watch brand and can justifiably claim to manufacture the most affordable luxury watches in the world.

For many, the philosophy behind the brand, trying to put luxury watches within the reach of everyone, is as attractive as the watches themselves as is the very open approach of the business which means that Chris and the team spend a lot of time communicating personally with our customers - many of whom have become friends.

As the owner of a Christopher Ward watch, if ever you need to get hold of us we are at your service. We have listed some useful contact details on the back cover.

There is also always something new going on at our website at **www.christopherward.co.uk** and, if you haven't already discovered the independent forum dedicated to our brand at **www.christopherwardforum.com** we would recommend a visit. Informative and fun, it's a great place to hear the unexpurgated view of Christopher Ward of London!